YEIP
2007
-001
Vol. 1

File 2007-1

YMIP 2007

Final Report

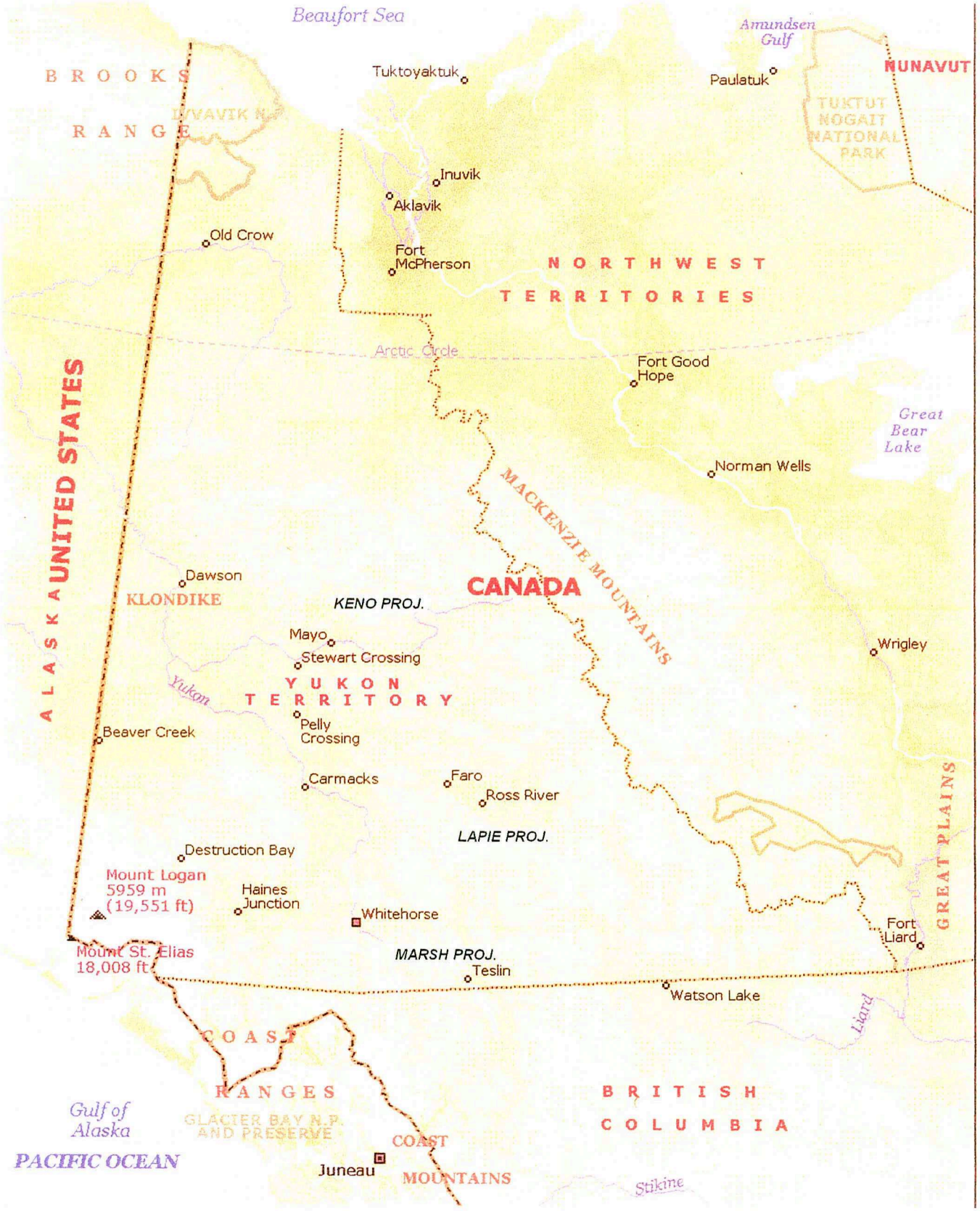
Grassroots Prospecting Programme

Map sheets NTS 105D01 and 08, NTS 105 F11, and 105M14 and 106D03

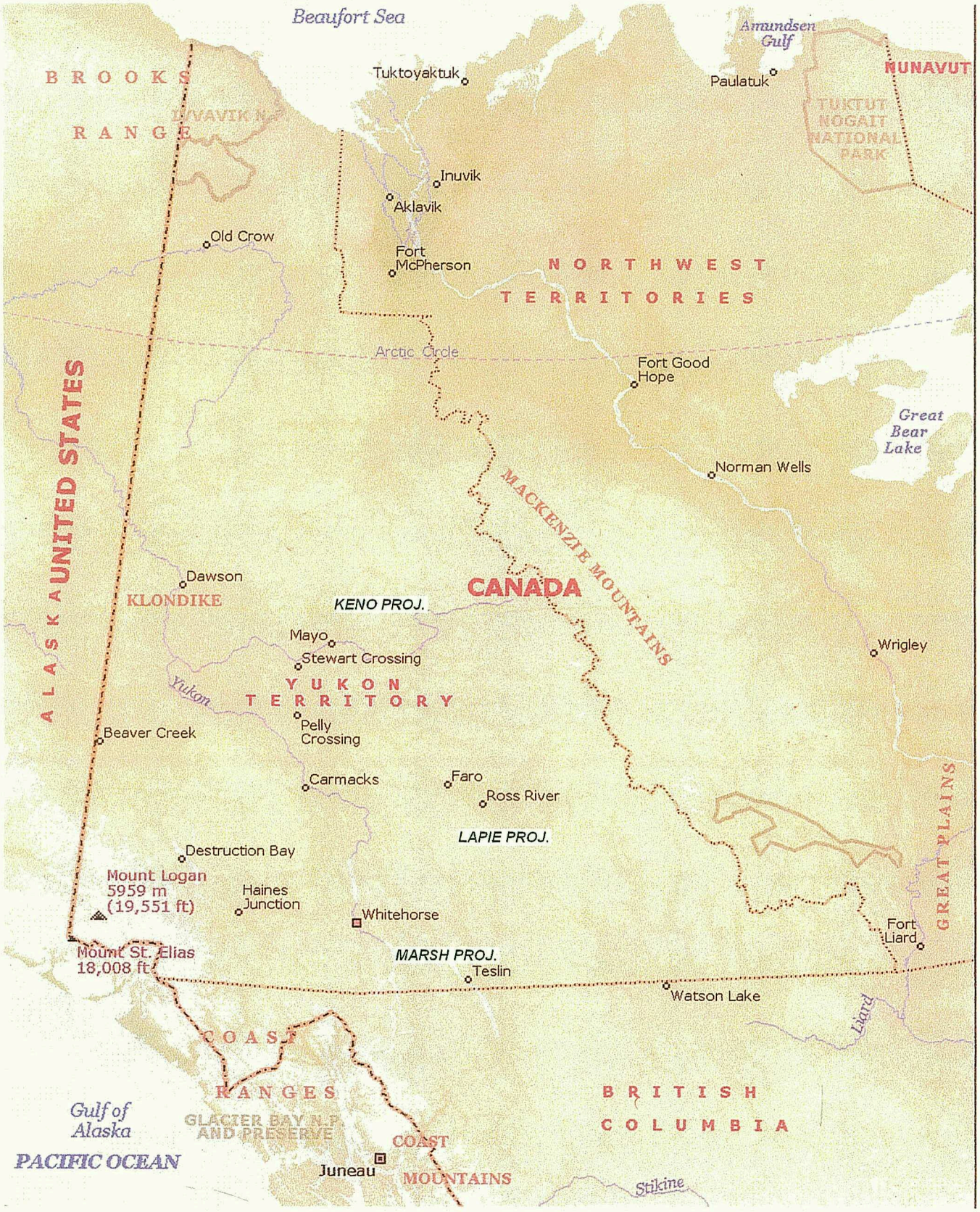
By

Dirk Moraal

V.1



Location map, 2007 YMIP projects



Location map, 2007 YMIP projects

Abstract

Most of the accessible exposed geology in the Yukon has been investigated or at least given a cursory overview at some time during the last one hundred years. Most of these exposures occur in the mountainous, alpine areas of the Territory. This leaves a huge amount of overburden covered ground which has either been passed over due to the difficulty in picking prospecting targets or, for the prospector, is too costly to explore for sulphide targets using standard coverage geophysical or geochemical surveys.

A relatively inexpensive method is available which can help define mineralized areas in overburden covered terrain by defining areas of potential blind or buried deposits, and can lower the cost of geochemical analysis by separating barren areas from more promising geochemical targets. This would allow the prospector to drastically cut down the number of soil samples initially submitted for analysis, and increase the success ratio by targeting the most promising locations.

On this basis a proposal was made to test the concept in three separate areas in the Yukon, as part of a YMIP grass roots prospecting grant. Prospecting and early target definition is thought to be where the method might be put to best use.

The use of pH and the Hydrogen + mole for prospecting and exploration is uncommon in the mining industry but wide spread in many other disciplines. For prospecting applications, the technique is simple, the equipment is not expensive and tests can be performed in the field, if so desired. Prospectors can be trained in an evening, and with a seasons' experience, can become adept at interpreting the results.

This YMIP project relied heavily on pH and the Hydrogen+ mole. The results suggest that pH and the Hydrogen+ mole does have a place in prospecting for sulphide and sulphide related deposits. Targets were discovered in three separate geological settings, and were confirmed with industry standard geochemical analysis. Interpretation guidelines are being developed to aid in the interpretation of the results, as applicable to the type areas explored.

INDEX

Location Map
Abstract page 3

Part 1, Marsh Project 4
Access and location 4
Work described 5
Prospecting and geology 5
Regional geological legend 6
Soil; and silt sampling, magnetometer profiles 7
Soil Line Locations (2 maps) after p.7
Results 9
Statistical determinations 10
Table: pH values min soils 12
Analytical certificates after p. 12
Graphs
ML1 H+ Mole
ML1 Geochemistry
ML1 Smoothed magnetic profile
ML1 raw magnetic data
ML2 H+ Mole
ML2 Geochemistry
ML2 Raw magnetic data
ML3 H+ Mole
ML3 Geochemistry
ML4 H+ Mole
ML4 Geochemistry
ML5 H+ Mole
ML5 Geochemistry
ML6 H+ Mole
ML6 Geochemistry
ML8 H+ Mole
ML8 Geochemistry
ML9 H+ Mole
ML9 Geochemistry
ML 10 H+ Mole
ML 11 H+ Mole
ML12 H+ Mole

Part 2
Keno Project
Introduction 1
Access and location 1
Work Described 1
Location map after p. 1

Map of O NO property	after location map
Map of DOH property	
Prospecting and geology	2
Regional geological legend	2
Geology of O NO Fr	2
Geology of DOH Fr.	3
Streams and silts	3
Soil sampling	3
Results	4
Statistical determinations	5
Table Keno Project soil pH	6
Analytical certificates	after p. 7
Graphs	after certificates
O NO Fr H+ Mole	
O NO Fr. G3eochemistry "Keno suite elements"	
O NO Fr. Spider plot of Keno suite elements	
DOH Fr. H+ mole	
DOH Fr. L200 geochemistry	
DOH Fr. L150 Geochemistry	
DOH Fr. L100 Geochemistry	
DOH Fr. Ag	
DOH Fr. As	
DOH Fr. Pb	
DOH Fr. Sb	
DOH Fr. Zn	

Part 3

Lapie Project	
Introduction	1
Access and location	1
Work described	1
Project area location map	after p. 1
pH stream water samples points	
Prospecting and Geology	2
Lapie project geological legend	2
Stream pH and silts	3
Results	3
pH statistical determinations	4
Silt sample analysis	
Table: Lapie water pH data	7
Analytical certificates	after p. 7
Graphs	
Stream water pH	
Anomalous stream water pH	
Base metals in silts	
U, Th in silts	

Gangue minerals
REE + U, Th in silts
U, Th, Sc in seeps
REE in seeps
Analytical certificate, rock sample LR-001

Statement of expenses
Spreadsheet

File:2007-01

MARSH PROJECT

Portions of NTS 105D-01 and 105D-08

Latitude 60° 18' Longitude 134° 10'

Introduction

The Marsh Project portion of the 2007 YMIP grassroots prospecting programme, was selected because of the potential for discovering PGE occurrences, and to gather data on the potential source of the placer gold in Pennycook Creek. The idea of a blind, mother load deposit as the origin of the Pennycook placers is strengthened by the existence of aeromagnetic anomalies in the headwater area of the Pennycook drainage, and specifically one aeromagnetic feature that parallels the northernmost fork of Pennycook Cr. The difficulty resides in the almost total lack of surface geology or flowing streams. Pennycook Creek even in the lower portions has been at best an intermittent creek.

The possibility of ultramafic bodies being associated with these aeromagnetic features is strengthened by the existence of several alpine type ultramafics on the flanks of nearby Jubilee Mountain. A method exists which has been very successful in identifying blind sulphide deposits under significant overburden, which works well even when sulphide deposits lie under many meters of varved clays, and also in arid gypsum rich desert terrains. It has been proven elsewhere that metal ions do not migrate through more than a meter or so of clay material. That is why MMI, Regoleach and enzyme leach were developed. They detect the most insignificant quantities of elements, which hopefully have made their way to the surface. The Hydrogen cations reliably make their way through thick overburden. The use of Hydrogen+ mole in a Yukon setting, should it prove successful over a period of time, would be of immense value to Yukon prospectors, who traditionally have been restricted to alpine, glacial deposit free areas. The writer has permitted himself to think of this method by the rather euphemistic name of Mobile Hydrogen Ion, in deference to the increasingly popular MMI analytical services available.

Access and location

Access to the project area is from the Carcross to Jake's Corner Highway, (Hwy 8) from a point 9 km east of the Tagish bridge to a pullout beside the highway suitable for parking, thence across the highway in a northerly direction to the northern portion of the project lines. Access to the southern half of the project area is from 5 km east of the Tagish bridge to an access road which leads to a communication tower on a ridge

overlooking Tagish and the Six Mile river, from where access is had to the southern portion of the project at the headwaters of Pennycook Creek, a distance of 15 km from camp. From here, it is necessary to climb down into the Pennycook watershed. Elevations range from 3000 to 4200 ft feet over a distance of 1.5 km. While steep, the slopes offer footing and handholds. A moderately dense cover of slope alder and black spruce gives way to a more open spruce forest. The ground is covered in a thin layer of moss and root mass.

Work described

The project called for prospecting and mapping in two main areas, the first being north of the highway and adjacent a contact between lower Jurassic sandstones and other metasediments and Cache Creek volcanics. This area is roughly midway between two known mineral occurrences, one of which is located on the south flank of Judas mountain and the other on the North flank of Jubilee mountain. Numerous traverses failed to find much outcrop. The regolith consists of a variable mantle of glacial debris ranging from fine silty clay to coarse sand and gravel to rounded cobbles

Work consisted of prospecting traverses, and collection of soil samples along lines situated across aeromagnetic features for the purpose of testing for soil pH. These pH values were then converted to Hydrogen+ mole taking the inverse log of the negative pH number to remove the logarithmic scale before plotting .

While it is sometimes desirable to field test the samples for pH on the lines, it was found that more consistent results as well having material to send in for geochemical analysis, can be had by returning to camp with the samples and testing them there in a field lab.

A silt sampling and panning programme was to be carried out on the headwaters of Pennycook Creek in the southern portion of the project area but target streams marked on the topographic map turned out not to be watercourses at all, instead, were dry grassy or organic filled steeply incised outwash channels with thick walls of glacial gravels. In place of the silt and panning, perhaps a different approach, such as sampling the glacial gravels would be necessary.

More time was spent on this part of the YMIP project because of the difficulty in finding outcrop that would explain the aeromagnetic anomalies. Soil sampling was arduous due to the permafrost, and often stoney ground. Some samples took anywhere from 20 minutes to half an hour to collect.

Prospecting and Geology

The prospecting area covers a contact between Jurassic Laberge group metasediments and Triassic to Cretaceous Cache Creek volcanics A number of small scattered

ultramafic bodies are believed to occur about the area and most likely are the origin of a number of aeromagnetic anomalies.

Geological mapping was not very successful in the project area due to the almost universal presence of glacial cover. Rock exposures in the project area are limited to a small area at the north end, consisting of non mineralized spherulitic basalt, a few rock exposures along road cuts, at the very tops of hills and a few outcrops on steep slopes.

Glacial gravels consisted a thick mantle of well rounded coarse sand and cobbles, overlain in places by a grey clay rich soil horizon that extended up to the 400o ft. of elevation. No mineralized material was seen in the gravels or at the few outcrop locations. A few pans samples of glacial gravels did not contain any appreciable amount of heavy minerals

Many days were employed doing contour traverses throughout the project area, often hampered by dense brush and thick moss cover, fairly typical of the Yukon bush. This difficult terrain would be ideal for testing the H+ method.

Few outcrops were found during traverses in the southern section of the project area. Geographic features such as ridges and gullies appear to be of glacial origin. It was finally decided that to get some information, the prospector would have to resort to soil sampling and pH testing, coupled with geochemical analysis.

Eleven soil lines were established, two to cover the middle of an area of red soils in the northern section of the project area, four in the southern section to test the opposite ends of an aeromagnetic feature that follows the upper fork of the Pennycook drainage. Five more lines were located over aeromagnetic features elsewhere on the property. Samples were first collected at 20 m intervals, but it became quite apparent that a 10 meter sampling interval was much more effective in outlining the anomalies. The 20 m interval missed several H+ mole double peaks, but none the less, the single peak obtained at these sample intervals did cause the prospector to go back and collect fill in samples .

Marsh Project Geology (from Yukon Geological Survey)

MKdW: Whitehorse suite, Mid Cretaceous.
Hornblende diorite, qtz. Diorite and mesocratic often strongly magnetic hypersthene-hornblende diorite, quartz diorite and gabbro (coast intrusions)

JL: Laberge gp, Lower to Mid Jurassic
Poorly sorted, medium bedded arkosic sandstone and minor shale with interbeds of thick members of heterolythic pebble and boulder conglomerate, recessive dark brown weathering thin bedded dark brown to greenish silty shale.

CTrC1: rusty, magnetic, variably tectonized serpentinized and chloritized ultramafic

rocks including medium to coarse hornblende-pyroxene diorite-gabbro, peridotite, dunite, serpentinite and pyroxinite.

CTrC2: Cache Creek, Carboniferous to Jurassic
Andesitic to basaltic spherulitic greenstone, locally pillowed, aphanitic tuffaceous greenstone, with clasts of LST and chert, altered volcanics, rocks with numerous serpentine bodies, fine grained meta-basite and hornblende diorite (C.C. and Nakina)

CTrC3: Cache Creek, Carboniferous to Jurassic
Massive, finely crystalline, locally crinoidal and fusiline grey LST, LST breccia, massive to poorly bedded, medium grained, recrystallized, white to pale yellow LST and crinoidal bioclasticLST, rare dolostone

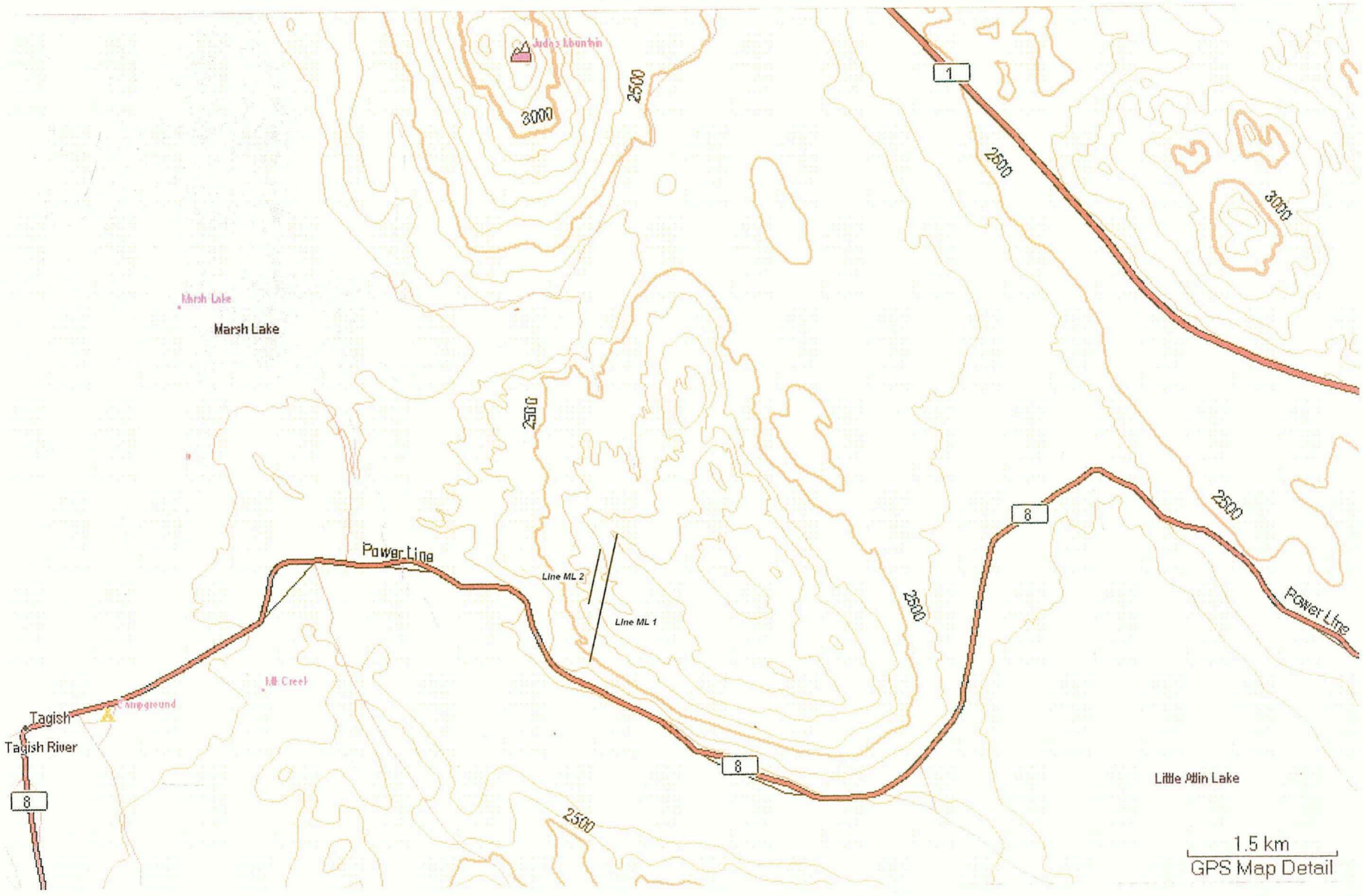
Soil and silt sampling, magnetic profiles

Soils and silt samples were intended for a two-fold purpose. Firstly, for field lab testing of soil pH, which when converted to Hydrogen + mole would give a first indication of the presence of an oxidizing sulphide mineralization target. Since targets for this part of the project were PGE, related to Ni, Cr, Co, Cu and Fe sulphides, a response to sulphides would help make decisions whether the sample itself was sent off for geochemical analysis. The original plan called for follow up magnetometer surveys over pH anomalies. It is unfortunate that the instrument suffered a failure mid project.

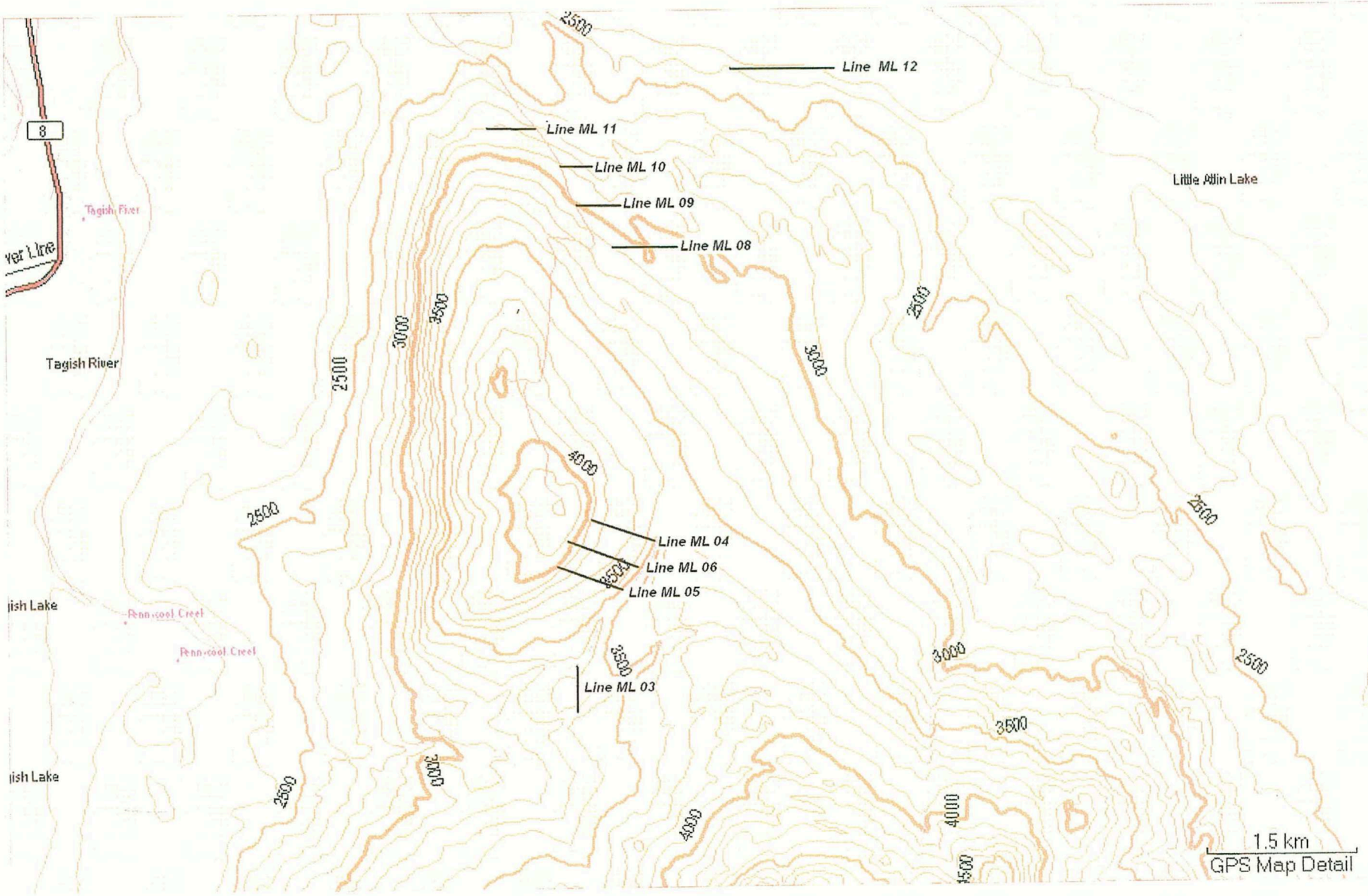
Correlation of pH and geochemical results would give a strong indication of the validity of the first method, and lay out some ground rules for future work.

The nature of the regolith is quite varied. Thus there are no reliably developed consistent soil horizons. Samples 10 metres apart may contain coarse sandy soil, then a fine ash or rusty silt, followed by gravel rich organic material. At some sample sites, a layer of white material under the A horizon and partly mixed in with B horizon material was determined to be wood ash from an ancient forest fire. It is not known how much this affects the pH but for the duration of the programme, anomalies were quite obvious, and it did not seem to matter much if the soil was silt, organic rich, or mixed with the wood ash layer. In fact, some soils that looked promising were not at all anomalous while doubtful material gave satisfactory results.

The northern portion of the project was prospected closely as there is very little outcrop to be found. The prospector resorted to digging random holes to see if it were possible to map geology from float. This disclosed only transported material. In the course of this work, it was noted that some B horizon soils were of a reddish colour. It was hoped that this might be an indicator useful for prospecting. To test this notion, a 1.5 km. long soil sample line (ML1) was established close to and parallel the mapped position of the contact between Laberge and Cache Creek rocks, with samples taken at 20 meter



Soil line locations, Marsh project, north half



Soil line locations, Marsh project, south half

intervals and later fill in samples at 10 meters over a portion of the soil line which appeared to be anomalous in pH. A second shorter soil line (ML2) was established parallel to and 100 m west of the first line, bracketing the anomalous pH section of the first line. Soils were collected at 10 m intervals along this line. Samples were tested for pH and both lines showed apparently anomalous pH for that series. The anomalous pH is located along the south flank, but removed from, an east-west linear depression that is noted in air photographs and which is significant enough to also be marked on the local topographic map.
Whether the linear is a recessive zone or simply a gravel filled gully cannot be ascertained with the present state of the data. In any case, soil colour did not always correlate with pH anomalies.

The single peak pH anomaly on line ML1 has a wide flank on the south side which coincides with elevated geochem values. It may be that the second peak is attenuated or hidden but fully represented by the flank.

Magnetometer work over both these lines shows a magnetic dipole on the south flank of the depression, coinciding with the pH anomaly. The magnetic data has a relief of only 150 gammas. This has the effect of enhancing electromagnetic noise which on the day of the survey was in the order of 10 to 20 gammas. Readings were noisy, but once corrected for diurnal drift, the data was treated with a simple three point running average to smooth the profile.

The soil lines over the Pennycook magnetic anomaly were spaced about 500 m apart crossing the aeromag feature at 90 degrees. Initial sampling on the lines was done at 20 m intervals and was later re-sampled at 10 m over anomalous sections. No outcrop was noted but angular to sub angular fragments on the steepest part of the slopes were deemed to represent local bedrock.

LineML3 is a short line on a wide ridge between two branches of the Pennycook upper drainage. This line was sampled to see if there was buried outcrop or just glacial gravels underlying the ridge. Weak H+ was thought to be associated with vegetation changes, but geochemistry indicates there are weak Ni Cu values in the soil.

Line ML4 crosses the NE end of the aeromagnetic feature, and was sampled at 20 m intervals. A moderate H+ anomaly is loosely associated with elevated geochem, and a "peak and a half" H+ anomaly is associated with weakly elevated geochem. This appears to coincide with the edge of the aeromagnetic anomaly.

Lines ML5 and ML6 present much stronger response to pH and geochemistry.
Plotting of data for three of the four lines above the Pennycook shows an H+ linear anomaly midline, roughly coincident with the aeromagnetic feature.

Lines ML8, ML9, ML10, ML11 and ML 12 were situated over smaller aeromagnetic anomalies and have single peak pH anomalies of moderate strength that may be half of the double peak H+ anomaly, but with broad troughs between them

Results

It is held that a double peak with a 10 fold or better increase in H+ mole over background constitutes an anomaly. This is a jump of one pH unit. Buried sulphide targets are located between H+ peaks, and close to or directly below the trough between the peaks. This is exactly the response expected from MMI, Regoleach and other proprietary enzyme leach methods where one looks for "rabbit ears" flanking the position of the sulphides. How wide the trough is seems to depend on the size of the sulphide body.

pH data was submitted to a simple statistical determination which included calculation of background, for each individual line. Data were plotted in an x-y format and are presented at the end of this report.

Not all samples were submitted for geochemical analysis. Soils were selected from areas of the soil lines with the strongest H+ anomalies, except from lines ML4, ML5, and ML6 where it was apparent from pH that an anomalous condition might be developing.

Soil lines ML1 and ML2 in the north portion of the prospecting area returned single peak H+ anomalies at 20 m sampling intervals. 10 m sampling did not show the double peak at these locations but merely a wider single peak with a wide flank to the south. Anomaly amplitude is less than 10 fold, but anomalous for the population. Both lines have anomalous geochemistry associate with H+ single peak anomalies. This suggests a narrow target, where the other peak was missed. ML1 has anomalous Cr Ni V at 1050 m and a weaker Cr Ni Cu V Co anomaly at 1240 m. Line ML2 has Ni Cu Cr 1060, and lesser anomalies at 1010 (Cu Ni). Elevated Cr occurs at 1230 and 1270. Overall, vanadium follows Ni and Cr.

The three soil lines above the headwaters of Pennycook Cr. Showed anomalous H+ mole in the form of single and multiple peaks. Lines sampled at 10 m intervals showed much more clearly the double peaks expected, and anomalies exceeded the 10 fold rule. The problem with interpretation of these anomalies stems from the fact that H+ mole detects buried sulphides that often cannot be detected by geochemistry.
Deep penetration geophysical methods, such as magnetics, gravity, or spectral IP and other tools would be invaluable as follow-up
Line ML3 has an H+ trough and coincident Cr, Ni Cu anomaly at station 200 m. Cr and Ni have a high background values however.
Line ML4 was tested at 20 meter intervals, and two weak H+ anomalies were located. Soil geochemistry shows weak anomalies at several points along the soil line, with an acceptable but not strong coincidence with H+ troughs. Line 6 shows one of the best H+ anomalies but a rather erratic geochemical response that suggests to the writer that there may be a wide mineralized zone. A very anomalous V (130ppm) occurs at 500 m on ML6 without the benefit of a H+ anomaly. Line 5, has an H+ anomaly which is not as strong as line 6, but here the correlation of H+ and geochemistry approaches textbook quality. A well defined multi element geochemical (Ni Cr with Cu As) anomaly sits directly between H+ peaks.

Coincidental H+ and geochemical anomalies on these three soil lines suggest a target of a linear nature over at least 1000m, open at the west end, and several tens of meters wide.

Soil lines ML8, ML9, ML10, ML11 and ML12 (there is no line ML7: this line was planned for, but re-sampling lines ML5 and ML6 became priorities), are shorter lines established to test other aeromagnetic anomalies located about midway between Pennycook Cr. and the work done at the north end of the prospecting area. Most of these lines were sampled at 20 m intervals as a first pass. Line ML 11 was sampled at 10 m intervals. All these lines showed varying degrees of H+ activity, but were not as strong and clearly defined as lines 5 and 6. It would have been unusual indeed if all the lines had been established over strongly anomalous ground. These lines all showed single peak anomalies that now are thought might be half of a double H+ peak. In other words, the lines needed to be extended a couple of hundred meters either end and re-sampled at 10 m intervals. Samples from these lines have not been submitted yet, due to budgetary constraints. ML9 has a wide H+ trough from 200 to 280, and geochemistry indicate the presence of elevated values of V, Cr, and to a lesser degree, Ni and Cu, at 200 m, with a smaller anomaly at 60 m. Line 8 presents a rather incoherent geochemical pattern, with a single peak H+ at 150m, a minor geochemical response at 60m, non coincidental V and CR at 160 and 180 m, but with a large increase in the V, Cr, and Ni past 330m where the line ended in organic bottom land. Line 8 was not long enough. This suggests that soil lines for H+ should be a km long, and a 10m sampling interval should be employed. This is no fault of the sampling method. The line itself was started too far west because the starting point on the road was marked wrong on the topographic map. Road position should have been checked with the available GPS.

It was noted that the target aeromagnetic anomalies that gave strongest H+ numbers were the magnetic first derivative anomalies. However, residual total field anomalies also had a H+ response and these are much more obvious and numerous on the aeromagnetic maps for this area than the first derivative anomalies. This leads to the existence of many more targets that can be tested with H+ mole in this area.

Statistical determinations

Soil lines were grouped by location. Thus, lines ML1 and ML2 were grouped together, ML4 to ML6, and ML8, ML9.

Anomaly categories for selected elements are as follows:

Negative	=	0 to x
Possibly anomalous	=	x to $x+1\sigma$
Probably anomalous	=	$x+1\sigma$ to $x+2\sigma$
Definitely anomalous	=	> $x+2\sigma$

ML1 and ML2

ppm	Ni	Co	Cr	Cu	Pb	V	Mg %
n	86	84	87	83	72	87	85
σ	6.93	1.45	6.82	5.35	2.4	8.45	0.0643
x	31.45	6.58	38.11	8.79	3.76	39.25	0.3302
x+1σ	38.34	7.95	44.93	14.14	6.16	44.93	0.3945
x+2σ	45.31	9.40	51.75	19.49	8.56	56.12	0.7588

Mg not plotted.

ML4 to ML6

ppm	Ni	Co	Cr	Cu	Pb	V	Mg %
n	135	135	135	135	135	134	135
σ	12.15	3.19	8.54	8.04	2.57	7.75	0.107
x	35.16	9.581	44.93	17.90	7.10	48.99	0.529
x+1σ	47.31	12.77	53.47	25.94	9.67	56.74	0.636
x+2σ	59.46	15.96	62.01	33.98	12.30	64.49	0.743

Mg not plotted.

ML8 and ML9

ppm	Ni	Co	Cr	Cu	Pb	V	Mg %
n	37	37	37	37	37	37	37
σ	8.9	1.85	11.80	5.30	1.22	13.75	0.124
x	27.3	8.40	43.60	15.29	5.19	53.90	0.550
x+1σ	36.2	15.52	55.40	20.58	6.41	67.65	0.764
x+2σ	45.1	17.37	67.20	25.89	7.63	81.30	0.798

Mg not plotted.

pH statistics for Marsh Project soil lines

	ML1	ML2	ML3	ML4	ML5	ML6
n	77	51	23	25	36	40
σ	.438	0.3039	.415	.975	.758	.466
x	.412	6.32	5.635	5.67	7.69	6.46
x - 1σ	.597	6.01	5.92	4.69	6.93	5.99
x - 2σ	.553	5.71	4.80	3.72	6.17	5.52
range	7.20-5.63	7.20-5.92	6.45-4.90	8.40-4.62	8.68-5.37	7.40-5.13
background	6.75	6.72	5.56	6.60	8.13	7.07

(cont.)

	(blank)	ML8	ML9	ML10	ML11	ML12
N		26	19	15	19	25
Σ		5.18	.348	.84	.423	4.34
X		7.49	7.89	7.64	8.40	8.43
x - 1σ		6.97	7.54	6.80	7.97	8.0
x - 2σ		6.45	7.19	5.96	7.55	7.56

Range		8.12-6.28	8.54-7.18	8.94-6.48	9.13-7.80	9.01-7.07
background		7.99	8.23	7.78	8.85	8.71

Marsh
Project
pH in soils

Line ML1		Line ML2		Line ML3	
400	6.63	800	6.3	100	6.45
420	6.61	810	6.3	110	5.81
440	6.4	820	6.22	120	5.47
460	6.71	830	6.35	130	4.99
480	6.52	840	6.2	140	5.23
500	6.4	850	6.23	150	5.49
520	6.64	860	6.14	160	4.96
540	6.26	870	6.02	170	5.93
560	6.46	880	6.17	180	6.25
580	6.21	890	6	190	5.67
600	6.73	900	6.21	200	5.85
620	6.89	910	6.23	210	5.81
640	6.77	920	615	220	5.7
660	7.2	930	6.13	230	5.71
680	7	940	6.38	240	5.06
700	6.8	950	6.25	250	5.26
720	6.57	960	6.34	260	5.93
740	6.57	970	6.3	270	6.16
760	6.9	980	6.22	280	6.36
780	6.68	990	6.34	290	5.68
800	6.34	1000	6.37	300	5.58
810	6.57	1010	7.14	310	5.65
820	6.04	1020	5.96	320	4.9
830	6.57	1030	5.92		
840	6.16	1040	5.79		
850	6.34	1050	7.04		
860	6.18	1060	7.06		
870	6.21	1070	7.2		
880	6.31	1080	6.96		
890	6.48	1090	6.45		
900	6.09	1100	6.37		
910	6.56	1110	6.17		
920	6.14	1120	6.02		
930	6.09	1130	6.32		
940	5.9	1140	6.37		
950	5.63	1150	6.39		
960	5.96	1160	6.15		
970	6.32	1170	6.35		
980	6.45	1180	5.98		
990	6.54	1190	5.98		
1000	6.48	1200	6.15		
1020	6.65	1210	6.3		

1040	6.63	1220	6.14
1060	6.15	1230	6.17
1080	6.65	1240	6.21
1100	6.17	1250	6.25
1120	6.5	1260	6.22
1140	6.9	1270	6.55
1160	6.61	1280	6.82
1180	6.23	1290	6.39
1200	6.42	1300	6.55
1220	6.48		
1240	6.53		
1260	6.89		
1280	6.43		
1300	6.33		
1320	6.79		
1340	0		
1360	6.66		
1380	6.41		
1400	6.53		

Line ML4		Line ML5		Line ML6	
0	8.07	100	8.68	100	5.98
20	6.3	120	8.18	120	7.18
40	6.9	140	6.53	140	6.8
60	8.4	130	8.53	160	6096
80	6.1	180	8.46	180	6.73
100	5.8	200	7.91	200	6.54
120	6.02	220	8.08	220	6.42
140	5.78	240	8.19	240	6.42
160	6.23	260	8.1	260	6.46
180	6.46	280	6.81	270	5.36
200	5.68	300	8.01	280	6.61
220	5.29	310		290	5.76
240	5.41	320	7.84	300	6.33
260	4.81	330	5.58	310	5.45
280	4.62	340	6.5	320	5.5
300	4.9	350	6.44	330	5.71
320	4.74	360	7.12	340	6.11
340	5.14	370	7.12	350	6.18
360	5.26	380	7.11	360	6.33
380	4.65	390	7.11	380	6.17
400	5.14	400	5.63	400	6.66
420	5.09	410	7.43	410	6.3
440	5.1	420	5.41	430	5.13
460	5.65	430	7.35	440	6.95
480	4.96	440	6.39	460	6.3
500	4.91	450	7.64	480	6.61
		460	7.5	500	6.65
		480	7.7	520	7.2
		500	7.6	540	7.05
		520	8	560	6.86
		540	7.94	580	7.18
		560	8.03	600	6.21

580	7.55
600	8.31
620	8.06
640	7.81
660	7.88
680	7.95
700	8.1
720	8.3
740	8.21
760	8.28
780	7.92
800	7.76

620	6.89
640	6.63
660	5.79
680	6.66
700	6.68
720	6.59
740	6.11
750	6.74
760	6.44
770	6.3
780	6.03
790	5.71
800	5.4
810	5.74
820	6.28
830	6.38
840	6.26
860	6.72
880	6.77
900	6.45

	Line ML8
0	7.36
20	7.29
40	7.21
60	7.69
80	7.18
100	6.66
120	6.84
140	6.28
160	6.42
180	7.08
200	7.32
220	7.29
240	7.72
260	7.83
280	7.95
300	7.08
320	8.12
340	8.09
360	7.76
380	7.68
400	7.82
420	7.88
440	8
560	7.92
480	7.47
500	7.92

	Line ML9
0	n/s
20	8.3
40	8.14
60	8.12
80	7.86
100	7.94
120	7.8
140	7.71
160	7.41
180	7.43
200	7.62
220	8.54
240	8.4
260	8.06
280	7.83
300	8.19
320	7.18
340	7.78
360	7.74
380	7.84
400	n/s

	Line ML10
0	6.65
20	6.48
40	6.54
60	6.59
80	6.83
100	6.95
120	7.99
140	8.15
160	8.94
200	8.46
220	8.09
240	8.3
260	8.65
280	8.45
300	8.35

	Line ML11
200	8.25

	Line ML12
0	7.07

210		7.85	20		7.99
220		8.14	40		8.37
230		8.09	60		8.47
240		8.08	80		8.18
250		7.99	100		8.37
260		7.8	120		8.48
270		8.46	140		8.27
280		8.8	160		8.27
290		8.54	180		9.01
300		7.96	200		8.47
310		8.24	220	n/s	
320		8.43	240		8.43
330		8.73	260		8.78
340		9.13	280		8.79
350		8.81	300		8.72
360		8.78	320		8.63
370		8.68	340		7.43
380		9	360		8.22
390	n/s		380		8.62
400	n/s		400		8.61
			420		8.52
			440		8.8
			460		8.89
			480		8.67
			500		8.79

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
This copy reported on 14-SEP-2007
Account: DIRMOR

CERTIFICATE VA07094305

Project:

P.O. No.:

This report is for 131 Soil samples submitted to our lab in Vancouver, BC, Canada on 9-AUG-2007.

The following have access to data associated with this certificate:

DIRK MORAAL		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ML1-800		0.44	<0.2	0.78	<2	<10	140	<0.5	<2	0.35	<0.5	5	39	7	1.46	<10
ML1-810		0.40	<0.2	0.83	<2	<10	200	<0.5	<2	0.38	<0.5	6	40	9	1.59	<10
ML1-820		0.38	<0.2	1.08	<2	<10	200	<0.5	<2	0.30	<0.5	8	36	8	1.80	<10
ML1-830		0.34	<0.2	1.04	<2	<10	250	<0.5	<2	0.41	<0.5	8	40	9	1.87	<10
ML1-840		0.40	<0.2	0.81	3	<10	160	<0.5	<2	0.31	<0.5	6	40	7	1.53	<10
ML1-850		0.48	<0.2	0.73	3	<10	110	<0.5	<2	0.29	<0.5	5	38	6	1.40	<10
ML1-860		0.38	<0.2	1.07	<2	<10	260	<0.5	<2	0.32	<0.5	7	37	8	1.74	<10
ML1-870		0.30	<0.2	0.97	2	<10	260	<0.5	<2	0.29	<0.5	9	38	14	1.55	<10
ML1-880		0.44	<0.2	1.13	<2	<10	220	<0.5	<2	0.38	<0.5	6	45	7	1.90	<10
ML1-890		0.30	<0.2	0.87	<2	<10	250	<0.5	<2	0.36	<0.5	5	29	5	1.41	<10
ML1-900		0.36	<0.2	0.96	<2	<10	260	<0.5	<2	0.33	<0.5	6	36	6	1.54	<10
ML1-910		0.32	0.2	1.15	<2	<10	340	<0.5	<2	0.41	<0.5	9	37	8	1.84	<10
ML1-920		0.40	<0.2	1.14	<2	<10	240	<0.5	<2	0.38	<0.5	8	39	10	2.00	<10
ML1-930		0.28	<0.2	0.96	<2	<10	290	<0.5	<2	0.33	<0.5	6	38	7	1.77	<10
ML1-940		0.32	<0.2	1.14	<2	<10	270	<0.5	2	0.31	<0.5	7	40	8	1.97	<10
ML1-950		0.26	<0.2	1.05	2	<10	210	<0.5	<2	0.32	<0.5	7	45	8	1.87	<10
ML1-960		0.44	<0.2	1.11	<2	<10	210	<0.5	<2	0.31	<0.5	7	34	7	1.89	<10
ML1-970		0.28	<0.2	1.10	<2	<10	250	<0.5	<2	0.39	<0.5	7	44	9	1.72	<10
ML1-980		0.26	<0.2	0.92	<2	<10	280	<0.5	<2	0.67	<0.5	5	44	18	1.48	<10
ML1-990		0.24	0.2	1.10	<2	<10	300	<0.5	<2	1.06	<0.5	6	48	24	1.54	<10
ML1-1000		0.36	<0.2	0.82	2	<10	190	<0.5	2	0.52	<0.5	7	42	17	1.59	<10
ML1-1020		0.46	<0.2	0.94	2	<10	190	<0.5	<2	0.48	<0.5	8	49	9	2.02	<10
ML1-1040		0.68	<0.2	1.38	<2	<10	280	<0.5	<2	0.42	<0.5	10	57	9	2.32	<10
ML1-1060		0.28	<0.2	0.94	2	<10	190	<0.5	2	0.28	<0.5	6	32	5	1.52	<10
ML1-1080		0.38	<0.2	0.79	<2	<10	190	<0.5	<2	0.29	<0.5	6	31	6	1.46	<10
ML1-1100		0.30	<0.2	0.98	<2	<10	170	<0.5	<2	0.31	<0.5	6	28	5	1.65	<10
ML1-1120		0.24	<0.2	0.87	2	<10	170	<0.5	<2	1.00	<0.5	5	33	9	1.52	<10
ML1-1140		0.34	<0.2	1.00	5	<10	220	<0.5	<2	0.53	<0.5	6	38	8	1.78	<10
ML1-1160		0.24	<0.2	1.00	3	<10	220	<0.5	<2	0.69	<0.5	5	40	13	1.82	<10
ML1-1180		0.28	<0.2	1.27	3	<10	240	<0.5	<2	0.34	<0.5	8	36	7	1.96	<10
ML1-1200		0.26	<0.2	1.30	<2	<10	230	<0.5	<2	0.34	<0.5	7	37	6	1.95	<10
ML1-1220		0.28	<0.2	1.10	<2	<10	210	<0.5	<2	0.40	<0.5	6	33	6	1.60	<10
ML1-1240		0.24	0.3	1.09	<2	<10	670	<0.5	2	0.50	<0.5	18	44	25	2.84	<10
ML1-1260		0.30	<0.2	0.85	<2	<10	200	<0.5	<2	0.33	<0.5	6	28	5	1.55	<10
ML1-1280		0.30	<0.2	0.82	2	<10	170	<0.5	<2	0.32	<0.5	5	36	10	1.63	<10
ML1-1300		0.32	<0.2	1.00	<2	<10	260	<0.5	2	0.29	<0.5	6	27	6	1.68	<10
ML2-800		0.34	<0.2	0.89	<2	<10	150	<0.5	<2	0.36	<0.5	5	38	6	1.62	<10
ML2-810		0.34	<0.2	0.96	<2	<10	220	<0.5	<2	0.38	<0.5	7	31	7	1.61	<10
ML2-820		0.30	<0.2	0.96	<2	<10	280	<0.5	<2	0.37	<0.5	7	29	6	1.55	<10
ML2-830		0.24	<0.2	0.92	<2	<10	200	<0.5	<2	0.38	<0.5	7	29	5	1.51	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ML1-800		<1	0.07	10	0.33	150	<1	0.02	28	470	2	<0.01	<2	2	15	<20
ML1-810		<1	0.10	10	0.33	157	<1	0.02	26	290	<2	<0.01	<2	3	15	<20
ML1-820		<1	0.05	10	0.35	181	1	0.01	35	660	2	<0.01	<2	2	12	<20
ML1-830		<1	0.07	10	0.36	218	1	0.02	36	890	3	<0.01	<2	2	15	<20
ML1-840		<1	0.05	10	0.32	128	1	0.02	28	240	<2	<0.01	<2	2	13	<20
ML1-850		<1	0.06	<10	0.32	117	1	0.01	25	240	2	<0.01	<2	2	13	<20
ML1-860		<1	0.06	10	0.34	244	1	0.02	31	610	<2	<0.01	<2	2	14	<20
ML1-870		<1	0.06	10	0.27	327	1	0.02	44	810	3	<0.01	<2	3	14	<20
ML1-880		<1	0.06	10	0.41	162	1	0.02	31	460	2	<0.01	<2	3	15	<20
ML1-890		<1	0.05	<10	0.27	272	1	0.01	27	750	3	<0.01	<2	2	13	<20
ML1-900		<1	0.05	10	0.31	249	1	0.02	30	490	3	<0.01	<2	2	14	<20
ML1-910		<1	0.06	<10	0.31	296	1	0.02	36	750	2	<0.01	<2	3	17	<20
ML1-920		<1	0.06	10	0.40	274	1	0.02	37	850	3	<0.01	<2	2	15	<20
ML1-930		<1	0.05	10	0.31	176	1	0.01	28	1250	3	<0.01	<2	2	17	<20
ML1-940		<1	0.05	10	0.37	293	1	0.01	32	620	2	<0.01	<2	2	14	<20
ML1-950		<1	0.05	10	0.37	167	1	0.02	35	390	4	<0.01	<2	2	14	<20
ML1-960		<1	0.05	<10	0.30	175	1	0.01	31	450	2	<0.01	<2	2	12	<20
ML1-970		<1	0.06	10	0.51	296	1	<0.01	31	480	5	<0.01	<2	3	17	<20
ML1-980		<1	0.03	10	0.33	127	1	<0.01	44	240	2	<0.01	<2	2	23	<20
ML1-990		<1	0.04	10	0.47	138	<1	0.01	41	550	3	0.03	<2	2	41	<20
ML1-1000		<1	0.03	10	0.39	169	1	0.01	46	160	3	<0.01	<2	3	23	<20
ML1-1020		<1	0.05	10	0.44	190	1	<0.01	40	440	<2	<0.01	<2	3	21	<20
ML1-1040		<1	0.09	10	0.52	182	1	<0.01	53	1090	3	<0.01	<2	3	21	<20
ML1-1060		<1	0.05	10	0.26	122	1	<0.01	25	280	<2	<0.01	<2	2	13	<20
ML1-1080		<1	0.05	10	0.24	166	1	<0.01	25	460	<2	<0.01	<2	2	15	<20
ML1-1100		<1	0.04	<10	0.34	168	1	<0.01	17	160	2	<0.01	<2	2	18	<20
ML1-1120		<1	0.05	<10	0.33	105	1	<0.01	26	190	2	<0.01	<2	2	40	<20
ML1-1140		<1	0.04	10	0.34	108	1	0.01	26	110	3	<0.01	<2	4	26	<20
ML1-1160		<1	0.04	10	0.34	109	<1	0.01	30	170	<2	<0.01	<2	4	29	<20
ML1-1180		<1	0.05	10	0.38	308	1	<0.01	31	260	2	<0.01	<2	2	16	<20
ML1-1200		<1	0.04	10	0.38	173	1	<0.01	21	280	6	<0.01	<2	2	18	<20
ML1-1220		<1	0.04	<10	0.34	159	1	<0.01	27	320	4	<0.01	<2	2	20	<20
ML1-1240		<1	0.05	10	0.24	1640	1	<0.01	41	2120	2	<0.01	<2	4	28	<20
ML1-1260		<1	0.08	10	0.25	173	1	<0.01	23	230	2	<0.01	<2	2	15	<20
ML1-1280		<1	0.08	10	0.29	139	1	<0.01	26	330	<2	<0.01	<2	3	15	<20
ML1-1300		<1	0.06	10	0.30	201	1	<0.01	23	550	2	<0.01	<2	2	14	<20
ML2-800		<1	0.08	10	0.31	142	1	<0.01	27	370	<2	<0.01	<2	3	15	<20
ML2-810		<1	0.07	10	0.30	228	1	<0.01	30	760	3	<0.01	<2	2	19	<20
ML2-820		<1	0.06	10	0.28	353	1	<0.01	27	1150	<2	<0.01	<2	2	17	<20
ML2-830		<1	0.08	10	0.26	213	<1	<0.01	29	670	4	<0.01	<2	2	15	<20

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
ML1-800		0.07	<10	<10	32	<10	21
ML1-810		0.08	<10	<10	36	<10	26
ML1-820		0.08	<10	<10	37	<10	55
ML1-830		0.09	<10	<10	39	<10	55
ML1-840		0.08	<10	<10	37	<10	21
ML1-850		0.07	<10	<10	35	<10	17
ML1-860		0.09	<10	<10	36	<10	55
ML1-870		0.07	<10	<10	31	<10	45
ML1-880		0.09	<10	<10	42	<10	44
ML1-890		0.06	<10	<10	31	<10	51
ML1-900		0.08	<10	<10	33	<10	42
ML1-910		0.09	<10	<10	35	<10	84
ML1-920		0.10	<10	<10	41	<10	81
ML1-930		0.07	<10	<10	39	<10	45
ML1-940		0.09	<10	<10	42	<10	70
ML1-950		0.08	<10	<10	45	<10	35
ML1-960		0.08	<10	<10	42	<10	40
ML1-970		0.10	<10	<10	39	<10	32
ML1-980		0.05	<10	<10	35	<10	20
ML1-990		0.08	<10	<10	33	<10	53
ML1-1000		0.07	<10	<10	38	<10	18
ML1-1020		0.08	<10	<10	49	<10	29
ML1-1040		0.09	<10	<10	55	<10	47
ML1-1060		0.08	<10	<10	36	<10	25
ML1-1080		0.07	<10	<10	34	<10	21
ML1-1100		0.09	<10	<10	42	<10	21
ML1-1120		0.07	<10	<10	37	<10	14
ML1-1140		0.08	<10	<10	40	<10	18
ML1-1160		0.08	<10	<10	40	<10	18
ML1-1180		0.11	<10	<10	47	<10	32
ML1-1200		0.12	<10	<10	52	<10	47
ML1-1220		0.08	<10	<10	40	<10	32
ML1-1240		0.06	<10	<10	46	<10	114
ML1-1260		0.08	<10	<10	35	<10	26
ML1-1280		0.08	<10	<10	38	<10	22
ML1-1300		0.09	<10	<10	34	<10	36
ML2-800		0.09	<10	<10	38	<10	32
ML2-810		0.09	<10	<10	34	<10	49
ML2-820		0.07	<10	<10	31	<10	50
ML2-830		0.08	<10	<10	32	<10	51

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ML2-840		0.30	<0.2	0.91	<2	<10	180	<0.5	<2	0.40	<0.5	5	35	5	1.56	<10
ML2-850		0.30	<0.2	0.90	<2	<10	170	<0.5	<2	0.37	<0.5	5	37	6	1.62	<10
ML2-860		0.40	<0.2	0.83	<2	<10	150	<0.5	<2	0.32	<0.5	5	34	5	1.45	<10
ML2-870		0.28	<0.2	0.84	<2	<10	230	<0.5	<2	0.32	<0.5	6	31	5	1.48	<10
ML2-880		0.34	<0.2	0.85	<2	<10	160	<0.5	2	0.31	<0.5	6	30	5	1.39	<10
ML2-890		0.30	<0.2	0.91	<2	<10	180	<0.5	<2	0.34	<0.5	5	33	8	1.47	<10
ML2-900		0.26	<0.2	0.99	<2	<10	300	<0.5	<2	0.33	<0.5	9	25	6	1.54	<10
ML2-910		0.30	<0.2	0.79	<2	<10	150	<0.5	<2	0.31	<0.5	4	31	5	1.38	<10
ML2-920		0.16	<0.2	1.00	<2	<10	210	<0.5	<2	0.33	<0.5	6	39	6	1.68	<10
ML2-930		0.36	<0.2	0.98	<2	<10	200	<0.5	<2	0.31	<0.5	6	34	5	1.58	<10
ML2-940		0.32	<0.2	0.91	<2	<10	210	<0.5	<2	0.34	<0.5	5	31	5	1.50	<10
ML2-950		0.28	<0.2	0.91	<2	<10	190	<0.5	<2	0.31	<0.5	5	39	6	1.54	<10
ML2-960		0.30	<0.2	0.85	<2	<10	170	<0.5	<2	0.32	<0.5	5	38	6	1.51	<10
ML2-970		0.30	0.2	0.86	5	<10	210	<0.5	<2	0.28	<0.5	8	39	13	1.37	<10
ML2-980		0.24	0.2	1.06	<2	<10	290	<0.5	<2	0.30	<0.5	7	40	11	1.63	<10
ML2-990		0.36	0.2	0.95	2	<10	210	<0.5	<2	0.31	<0.5	6	36	8	1.49	<10
ML2-1000		0.28	<0.2	1.00	<2	<10	210	<0.5	<2	0.32	<0.5	5	39	8	1.50	<10
ML2-1010		0.28	0.2	0.70	4	<10	230	<0.5	<2	2.96	<0.5	6	38	27	1.25	<10
ML2-1020		0.22	0.2	1.33	2	<10	330	<0.5	<2	0.33	<0.5	8	40	10	2.11	<10
ML2-1030		0.26	<0.2	1.19	3	<10	270	<0.5	<2	0.32	<0.5	6	44	8	1.74	<10
ML2-1040		0.24	<0.2	1.33	4	<10	270	<0.5	<2	0.29	<0.5	11	40	9	2.17	10
ML2-1050		0.14	0.3	0.72	<2	<10	370	<0.5	<2	1.29	1.4	6	24	42	0.88	<10
ML2-1060		0.26	0.2	1.25	6	<10	480	<0.5	<2	0.76	<0.5	12	51	47	1.95	<10
ML2-1070		0.34	<0.2	0.92	3	<10	230	<0.5	<2	0.89	<0.5	5	38	13	1.46	<10
ML2-1080		0.28	<0.2	0.95	2	<10	250	<0.5	<2	0.61	<0.5	6	38	8	1.59	<10
ML2-1090		0.34	<0.2	0.77	8	<10	160	<0.5	<2	0.37	<0.5	6	43	11	1.63	<10
ML2-1100		0.02	<0.2	1.01	<2	<10	320	<0.5	<2	0.31	<0.5	5	33	11	1.52	<10
ML2-1110		0.46	<0.2	1.14	5	<10	290	<0.5	<2	0.33	<0.5	6	44	9	1.84	<10
ML2-1120		0.44	<0.2	1.06	<2	<10	280	<0.5	<2	0.28	<0.5	7	35	8	1.71	<10
ML2-1130		0.12	<0.2	0.87	5	<10	250	<0.5	<2	0.30	<0.5	6	32	8	1.46	<10
ML2-1140		0.28	<0.2	1.15	7	<10	190	<0.5	<2	0.31	<0.5	8	45	9	1.93	<10
ML2-1150		0.52	0.2	1.35	4	<10	260	<0.5	<2	0.32	<0.5	8	44	8	2.10	<10
ML2-1160		0.24	<0.2	1.32	4	<10	260	<0.5	<2	0.38	<0.5	10	37	10	2.10	<10
ML2-1170		0.34	0.2	1.19	3	<10	210	<0.5	<2	0.35	<0.5	6	37	10	2.01	<10
ML2-1180		0.32	<0.2	0.74	2	<10	140	<0.5	<2	0.23	<0.5	5	26	5	1.26	<10
ML2-1190		0.32	<0.2	1.56	5	<10	270	<0.5	<2	0.34	<0.5	10	43	9	2.21	10
ML2-1200		0.28	<0.2	1.04	3	<10	210	<0.5	<2	0.29	<0.5	7	28	11	1.56	<10
ML2-1210		0.32	<0.2	1.31	6	<10	240	<0.5	<2	0.41	<0.5	8	47	11	2.06	<10
ML2-1220		0.24	<0.2	1.45	7	<10	210	<0.5	<2	0.38	<0.5	10	49	7	2.37	10
ML2-1230		0.34	0.2	1.31	9	<10	260	<0.5	<2	0.46	<0.5	9	53	12	2.26	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ML2-840		<1	0.06	10	0.32	129	1	<0.01	27	930	<2	<0.01	<2	2	17	<20
ML2-850		<1	0.07	10	0.33	125	1	<0.01	26	490	2	<0.01	<2	2	15	<20
ML2-860		<1	0.06	10	0.29	101	1	<0.01	25	350	2	<0.01	<2	2	14	<20
ML2-870		<1	0.05	10	0.28	202	1	<0.01	27	560	3	<0.01	<2	2	13	<20
ML2-880		<1	0.06	10	0.27	232	1	<0.01	30	430	2	<0.01	<2	2	13	<20
ML2-890		<1	0.05	10	0.29	120	<1	<0.01	27	520	<2	<0.01	<2	2	15	<20
ML2-900		<1	0.06	<10	0.25	479	1	<0.01	25	1250	3	<0.01	<2	2	16	<20
ML2-910		<1	0.05	10	0.29	132	1	<0.01	25	490	2	<0.01	<2	2	14	<20
ML2-920		<1	0.06	10	0.32	177	1	<0.01	31	550	<2	<0.01	<2	3	15	<20
ML2-930		<1	0.05	<10	0.30	151	<1	<0.01	30	530	<2	<0.01	<2	2	14	<20
ML2-940		1	0.06	10	0.30	145	1	<0.01	27	370	2	<0.01	<2	2	15	<20
ML2-950		<1	0.05	10	0.31	103	1	<0.01	29	280	2	<0.01	<2	2	13	<20
ML2-960		<1	0.05	10	0.30	106	1	<0.01	26	260	2	<0.01	<2	2	14	<20
ML2-970		<1	0.05	10	0.26	142	2	<0.01	32	310	19	<0.01	<2	2	13	<20
ML2-980		<1	0.05	10	0.30	178	1	<0.01	37	920	10	<0.01	<2	2	15	<20
ML2-990		<1	0.04	10	0.29	211	<1	<0.01	28	490	6	<0.01	<2	2	16	<20
ML2-1000		<1	0.05	10	0.32	174	<1	<0.01	31	640	4	<0.01	<2	2	16	<20
ML2-1010		<1	0.06	10	0.47	217	<1	0.01	49	700	3	0.01	<2	3	48	<20
ML2-1020		<1	0.05	10	0.37	278	<1	<0.01	30	570	6	<0.01	<2	3	17	<20
ML2-1030		<1	0.04	10	0.35	212	<1	<0.01	28	350	3	<0.01	<2	2	16	<20
ML2-1040		<1	0.04	10	0.28	589	<1	<0.01	38	490	6	<0.01	<2	3	14	<20
ML2-1050		<1	0.03	<10	0.20	568	<1	0.01	45	720	<2	0.04	<2	1	42	<20
ML2-1060		<1	0.06	10	0.41	299	<1	0.01	66	260	6	0.01	<2	3	35	<20
ML2-1070		<1	0.04	10	0.36	159	<1	0.01	30	260	3	0.02	<2	2	38	<20
ML2-1080		<1	0.04	10	0.33	143	<1	0.01	31	130	3	0.01	<2	2	33	<20
ML2-1090		<1	0.03	10	0.34	109	<1	0.01	42	180	3	<0.01	<2	3	20	<20
ML2-1100		<1	0.04	10	0.22	324	<1	0.01	32	140	4	<0.01	<2	2	15	<20
ML2-1110		<1	0.05	10	0.32	116	<1	0.01	35	190	2	<0.01	<2	3	15	<20
ML2-1120		<1	0.05	10	0.24	320	<1	0.01	35	710	4	<0.01	<2	2	13	<20
ML2-1130		<1	0.04	10	0.25	301	<1	0.01	30	700	3	<0.01	<2	2	14	<20
ML2-1140		<1	0.04	10	0.35	162	<1	0.01	44	500	4	<0.01	<2	2	13	<20
ML2-1150		<1	0.06	10	0.40	218	<1	0.01	42	650	5	<0.01	<2	2	14	<20
ML2-1160		<1	0.09	10	0.32	674	1	0.01	39	470	6	<0.01	2	2	16	<20
ML2-1170		<1	0.07	10	0.31	148	1	0.01	29	260	4	<0.01	2	2	16	<20
ML2-1180		<1	0.04	<10	0.21	127	<1	0.01	21	210	2	<0.01	<2	2	11	<20
ML2-1190		<1	0.05	10	0.41	195	1	0.01	39	290	6	<0.01	<2	2	16	<20
ML2-1200		<1	0.05	10	0.23	516	2	0.02	27	320	5	<0.01	<2	2	14	<20
ML2-1210		<1	0.07	10	0.43	260	1	0.02	34	250	4	<0.01	2	3	27	<20
ML2-1220		<1	0.06	10	0.49	323	1	0.01	34	210	7	<0.01	<2	3	26	<20
ML2-1230		<1	0.06	10	0.50	341	<1	0.02	35	120	5	<0.01	<2	4	36	<20

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ti	Tl	U	V	W	Zn
	Units	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	10	10	1	10	2
ML2-840		0.08	<10	<10	34	<10	27
ML2-850		0.08	<10	<10	34	<10	29
ML2-860		0.08	<10	<10	34	<10	16
ML2-870		0.07	<10	<10	31	<10	36
ML2-880		0.08	<10	<10	29	<10	39
ML2-890		0.07	<10	<10	32	<10	24
ML2-900		0.09	<10	<10	30	<10	68
ML2-910		0.07	<10	<10	31	<10	23
ML2-920		0.09	<10	<10	38	<10	38
ML2-930		0.08	<10	<10	35	<10	25
ML2-940		0.08	<10	<10	33	<10	26
ML2-950		0.08	<10	<10	37	<10	18
ML2-960		0.08	<10	<10	37	<10	20
ML2-970		0.07	<10	<10	35	<10	40
ML2-980		0.08	<10	<10	38	<10	51
ML2-990		0.08	<10	<10	36	<10	52
ML2-1000		0.07	<10	<10	37	<10	36
ML2-1010		0.05	<10	<10	31	<10	24
ML2-1020		0.11	<10	<10	50	<10	63
ML2-1030		0.07	<10	<10	45	<10	34
ML2-1040		0.11	<10	<10	53	<10	100
ML2-1050		0.04	<10	<10	24	<10	72
ML2-1060		0.11	<10	<10	45	<10	51
ML2-1070		0.06	<10	<10	33	<10	19
ML2-1080		0.06	<10	<10	39	<10	15
ML2-1090		0.06	<10	<10	41	<10	13
ML2-1100		0.07	<10	<10	35	<10	20
ML2-1110		0.07	<10	<10	46	<10	21
ML2-1120		0.08	<10	<10	35	<10	42
ML2-1130		0.06	<10	<10	35	<10	39
ML2-1140		0.07	<10	<10	48	<10	33
ML2-1150		0.09	<10	<10	51	<10	59
ML2-1160		0.11	<10	<10	47	<10	60
ML2-1170		0.09	<10	<10	48	<10	32
ML2-1180		0.06	<10	<10	31	<10	19
ML2-1190		0.12	<10	<10	57	<10	73
ML2-1200		0.07	<10	<10	35	<10	28
ML2-1210		0.09	<10	<10	50	<10	30
ML2-1220		0.13	<10	<10	58	<10	45
ML2-1230		0.11	<10	<10	53	<10	30

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
ML2-1240		0.28	<0.2	1.01	3	<10	140	<0.5	<2	0.32	<0.5	6	36	6	1.83	<10
ML2-1250		0.28	<0.2	1.18	7	<10	190	<0.5	<2	0.40	<0.5	7	50	10	2.13	<10
ML2-1260		0.24	<0.2	1.08	8	<10	190	<0.5	<2	0.38	<0.5	7	41	7	1.99	<10
ML2-1270		0.26	<0.2	1.27	8	<10	190	<0.5	<2	0.48	<0.5	8	58	9	2.24	<10
ML2-1280		0.24	<0.2	1.12	3	<10	240	<0.5	<2	0.50	<0.5	8	40	10	1.90	<10
ML2-1290		0.02	<0.2	1.41	6	<10	260	<0.5	<2	0.41	<0.5	10	44	10	2.25	<10
ML2-1300		0.24	<0.2	0.97	4	<10	240	<0.5	<2	0.36	<0.5	5	32	8	1.63	<10
ML3-100		0.04	<0.2	1.42	8	<10	180	<0.5	<2	0.37	<0.5	7	45	15	2.04	<10
ML3-110		0.24	0.2	2.14	16	<10	190	<0.5	<2	0.36	<0.5	14	56	27	2.69	10
ML3-120		0.26	<0.2	1.44	12	<10	230	<0.5	<2	0.34	<0.5	7	44	15	1.87	<10
ML3-130		0.22	0.2	1.74	8	<10	210	<0.5	<2	0.32	<0.5	9	53	19	2.19	10
ML3-140		0.28	<0.2	1.64	6	<10	240	<0.5	<2	0.29	<0.5	9	45	13	2.22	10
ML3-150		0.26	<0.2	1.52	6	<10	250	<0.5	<2	0.32	<0.5	7	39	13	1.83	10
ML3-160		0.24	<0.2	1.68	14	<10	150	<0.5	<2	0.30	<0.5	9	48	20	2.12	10
ML3-170		0.36	<0.2	1.85	7	<10	220	<0.5	<2	0.37	<0.5	9	56	16	2.23	10
ML3-180		0.24	0.2	1.75	10	<10	260	<0.5	<2	0.41	<0.5	7	48	19	2.01	10
ML3-190		0.32	<0.2	1.61	8	<10	210	<0.5	<2	0.38	<0.5	8	50	22	2.05	<10
ML3-200		0.28	0.2	2.07	9	<10	330	0.5	<2	0.49	<0.5	12	69	46	2.52	10
ML3-210		0.28	0.2	1.72	6	<10	240	<0.5	<2	0.35	<0.5	8	52	17	2.21	10
ML3-220		0.30	<0.2	1.54	6	<10	250	<0.5	<2	0.32	<0.5	7	46	12	2.02	10
ML3-230		0.30	<0.2	1.76	9	<10	220	<0.5	<2	0.33	<0.5	9	53	18	2.25	10
ML3-240		0.04	0.2	1.75	5	<10	190	<0.5	<2	0.31	<0.5	9	55	13	2.39	10
ML3-250		0.30	<0.2	1.66	9	<10	200	<0.5	<2	0.34	<0.5	9	51	14	2.35	10
ML3-260		0.26	<0.2	1.34	6	<10	180	<0.5	<2	0.32	<0.5	6	41	11	1.81	<10
ML3-270		0.30	<0.2	1.82	8	<10	250	<0.5	<2	0.35	<0.5	9	55	20	2.19	<10
ML3-280		0.24	<0.2	1.85	9	<10	210	<0.5	<2	0.40	<0.5	9	63	21	2.46	10
ML3-290		0.26	<0.2	1.62	10	<10	240	<0.5	<2	0.34	<0.5	8	48	17	1.93	<10
ML3-300		0.26	<0.2	1.82	6	<10	220	<0.5	<2	0.36	<0.5	9	60	19	2.29	10
ML3-310		0.24	<0.2	1.63	8	<10	260	<0.5	<2	0.38	<0.5	9	61	14	2.29	10
ML3-320		0.20	<0.2	1.63	2	<10	180	<0.5	<2	0.38	<0.5	8	53	12	2.29	10
ML4-100		0.28	<0.2	1.68	5	<10	170	<0.5	<2	0.41	<0.5	8	44	12	2.44	10
ML4-120		0.26	<0.2	1.46	4	<10	200	<0.5	<2	0.41	<0.5	8	39	12	2.24	10
ML4-140		0.24	<0.2	1.52	3	<10	180	<0.5	<2	0.37	<0.5	7	38	11	2.32	<10
ML4-160		0.30	0.2	1.62	5	<10	240	<0.5	<2	0.52	<0.5	9	41	16	2.35	10
ML4-180		0.22	0.2	1.79	5	<10	240	<0.5	<2	0.46	<0.5	9	46	17	2.58	10
ML4-200		0.26	0.2	1.54	3	<10	190	<0.5	<2	0.38	<0.5	10	45	13	2.43	10
ML4-220		0.20	0.3	1.33	3	<10	150	<0.5	<2	0.33	<0.5	8	35	15	1.85	<10
ML4-240		0.28	<0.2	1.70	3	<10	180	<0.5	<2	0.35	<0.5	10	47	11	2.44	10
ML4-260		0.28	<0.2	1.60	4	<10	180	<0.5	<2	0.34	0.7	9	45	12	2.49	10
ML4-280		0.24	0.2	1.52	5	<10	250	<0.5	<2	0.30	1.3	15	43	15	2.43	10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ML2-1240		<1	0.04	10	0.36	156	<1	0.01	20	80	4	<0.01	<2	2	24	<20
ML2-1250		<1	0.08	10	0.41	154	1	0.02	31	110	4	<0.01	<2	3	29	<20
ML2-1260		1	0.06	10	0.37	233	<1	0.02	27	110	4	<0.01	<2	3	29	<20
ML2-1270		<1	0.05	10	0.49	153	1	0.02	39	120	5	<0.01	<2	3	37	<20
ML2-1280		<1	0.06	10	0.38	394	<1	0.02	26	180	6	<0.01	<2	3	43	<20
ML2-1290		<1	0.06	10	0.38	368	1	0.01	32	140	5	<0.01	2	3	30	<20
ML2-1300		<1	0.06	10	0.26	217	1	0.02	21	170	4	<0.01	<2	2	25	<20
ML3-100		1	0.06	10	0.59	183	<1	0.01	36	270	5	<0.01	<2	3	19	<20
ML3-110		<1	0.06	10	0.96	275	<1	0.02	65	570	7	<0.01	2	4	17	<20
ML3-120		1	0.05	10	0.54	218	<1	0.01	38	280	7	<0.01	2	3	18	<20
ML3-130		<1	0.05	10	0.57	249	<1	0.02	44	250	6	<0.01	<2	3	15	<20
ML3-140		<1	0.05	10	0.51	296	<1	0.01	29	190	6	<0.01	<2	3	16	<20
ML3-150		<1	0.04	10	0.47	170	<1	0.01	30	170	7	<0.01	<2	3	16	<20
ML3-160		<1	0.05	10	0.66	181	<1	0.01	46	200	7	<0.01	<2	3	15	<20
ML3-170		<1	0.05	10	0.68	195	<1	0.01	42	180	5	<0.01	<2	4	17	<20
ML3-180		<1	0.04	10	0.52	148	<1	0.01	35	190	6	<0.01	<2	4	20	<20
ML3-190		<1	0.05	10	0.63	199	<1	0.01	47	260	5	<0.01	<2	4	19	<20
ML3-200		<1	0.06	10	0.75	290	<1	0.01	56	470	7	<0.01	<2	6	24	<20
ML3-210		<1	0.06	10	0.60	236	<1	0.01	39	250	7	<0.01	<2	4	18	<20
ML3-220		<1	0.04	10	0.51	267	<1	0.01	32	160	7	<0.01	<2	3	16	<20
ML3-230		<1	0.06	10	0.66	221	<1	0.01	44	270	6	<0.01	<2	4	18	<20
ML3-240		<1	0.05	10	0.55	218	<1	0.01	36	210	8	<0.01	2	3	16	<20
ML3-250		1	0.06	10	0.58	221	1	0.01	36	280	4	<0.01	<2	3	17	<20
ML3-260		<1	0.05	10	0.49	169	<1	0.01	33	220	7	<0.01	<2	3	17	<20
ML3-270		1	0.06	10	0.62	199	<1	0.01	50	260	6	<0.01	<2	4	17	<20
ML3-280		<1	0.06	10	0.70	271	<1	0.01	54	340	7	<0.01	<2	4	19	<20
ML3-290		<1	0.06	10	0.57	188	<1	0.01	47	410	5	<0.01	<2	3	17	<20
ML3-300		<1	0.07	10	0.72	211	<1	0.01	51	410	5	<0.01	<2	4	18	<20
ML3-310		<1	0.06	10	0.58	356	1	0.01	45	420	6	<0.01	<2	3	19	<20
ML3-320		<1	0.05	10	0.53	279	<1	0.01	36	550	7	<0.01	<2	3	18	<20
ML4-100		<1	0.12	10	0.60	274	<1	0.02	29	180	6	<0.01	<2	4	23	<20
ML4-120		<1	0.11	10	0.45	409	<1	0.02	25	280	7	<0.01	2	3	20	<20
ML4-140		1	0.07	10	0.51	229	<1	0.01	23	210	7	<0.01	2	3	18	<20
ML4-160		<1	0.13	10	0.46	459	<1	0.02	31	310	8	0.01	2	4	21	<20
ML4-180		<1	0.09	10	0.55	255	<1	0.01	40	860	8	<0.01	<2	4	20	<20
ML4-200		1	0.07	10	0.51	537	<1	0.01	30	450	8	<0.01	<2	3	17	<20
ML4-220		<1	0.06	10	0.40	438	<1	0.02	28	670	6	0.01	2	2	15	<20
ML4-240		1	0.05	10	0.47	381	<1	0.01	34	540	7	<0.01	<2	3	16	<20
ML4-260		<1	0.07	10	0.52	352	<1	0.01	33	630	8	<0.01	<2	3	17	<20
ML4-280		<1	0.07	10	0.42	1220	<1	0.01	33	660	8	<0.01	<2	3	16	<20

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
ML2-1240		0.09	<10	<10	47	<10	26
ML2-1250		0.10	<10	<10	51	<10	25
ML2-1260		0.09	<10	<10	48	<10	24
ML2-1270		0.10	<10	<10	54	<10	27
ML2-1280		0.09	<10	<10	44	<10	25
ML2-1290		0.11	<10	<10	52	<10	33
ML2-1300		0.08	<10	<10	40	<10	17
ML3-100		0.11	<10	<10	53	<10	38
ML3-110		0.14	<10	<10	72	<10	52
ML3-120		0.10	<10	<10	49	<10	35
ML3-130		0.12	<10	<10	57	<10	34
ML3-140		0.12	<10	<10	57	<10	39
ML3-150		0.11	<10	<10	47	<10	31
ML3-160		0.12	<10	<10	56	<10	38
ML3-170		0.14	<10	<10	61	<10	38
ML3-180		0.11	<10	<10	57	<10	29
ML3-190		0.10	<10	<10	51	<10	33
ML3-200		0.13	<10	<10	64	<10	39
ML3-210		0.12	<10	<10	57	<10	40
ML3-220		0.13	<10	<10	55	<10	38
ML3-230		0.12	<10	<10	61	<10	35
ML3-240		0.15	<10	<10	65	<10	43
ML3-250		0.13	<10	<10	63	<10	39
ML3-260		0.11	<10	<10	49	<10	32
ML3-270		0.11	<10	<10	58	<10	35
ML3-280		0.13	<10	<10	63	<10	54
ML3-290		0.09	<10	<10	49	<10	33
ML3-300		0.12	<10	<10	58	<10	38
ML3-310		0.13	<10	<10	56	<10	37
ML3-320		0.13	<10	<10	57	<10	36
ML4-100		0.15	<10	<10	58	<10	43
ML4-120		0.12	<10	<10	52	<10	61
ML4-140		0.13	<10	<10	58	<10	72
ML4-160		0.11	<10	<10	55	<10	64
ML4-180		0.12	<10	<10	57	<10	60
ML4-200		0.13	<10	<10	54	<10	69
ML4-220		0.09	<10	<10	38	<10	53
ML4-240		0.12	<10	<10	57	<10	62
ML4-260		0.14	<10	<10	57	<10	85
ML4-280		0.12	<10	<10	51	<10	80

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
ML4-300		0.30	<0.2	0.94	3	<10	140	<0.5	<2	0.30	<0.5	5	31	9	1.35	<10
ML4-320		0.30	<0.2	1.43	4	<10	170	<0.5	<2	0.37	<0.5	8	49	14	1.89	10
ML4-340		0.24	<0.2	1.65	5	<10	190	<0.5	<2	0.47	<0.5	9	54	16	2.15	10
ML4-360		0.32	<0.2	1.43	6	<10	210	<0.5	<2	0.36	<0.5	7	41	13	1.90	10
ML4-380		0.32	<0.2	1.52	7	<10	180	<0.5	<2	0.30	<0.5	8	46	15	2.12	10
ML4-400		0.30	0.2	1.48	4	<10	120	<0.5	<2	0.36	<0.5	11	50	24	2.25	<10
ML4-420		0.28	<0.2	1.22	3	<10	140	<0.5	<2	0.27	<0.5	8	40	15	1.89	<10
ML4-440		0.30	<0.2	1.28	3	<10	150	<0.5	<2	0.43	0.5	8	42	15	1.85	<10
ML4-460		0.30	<0.2	1.31	7	<10	160	<0.5	<2	0.37	<0.5	7	40	15	1.93	<10
ML4-480		0.28	<0.2	1.21	<2	<10	140	<0.5	2	0.28	0.5	6	36	11	1.90	10
ML4-500		0.30	<0.2	1.44	5	<10	150	<0.5	<2	0.30	<0.5	8	49	17	2.04	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: DIRK MORAAL EXPL.
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ML4-300		<1	0.05	10	0.33	254	<1	0.02	20	490	5	<0.01	<2	2	14	<20
ML4-320		<1	0.06	10	0.63	203	<1	0.01	34	270	6	<0.01	<2	3	17	<20
ML4-340		1	0.05	10	0.71	224	<1	0.02	41	340	5	0.01	<2	3	18	<20
ML4-360		<1	0.05	10	0.54	206	<1	0.01	28	220	4	<0.01	<2	3	16	<20
ML4-380		<1	0.05	10	0.60	208	<1	0.01	34	190	5	<0.01	2	3	14	<20
ML4-400		<1	0.04	10	0.70	194	2	<0.01	40	290	19	<0.01	<2	3	16	<20
ML4-420		<1	0.03	10	0.48	291	1	<0.01	27	200	9	<0.01	<2	3	13	<20
ML4-440		<1	0.04	10	0.57	227	1	0.02	30	280	3	0.01	2	3	17	<20
ML4-460		1	0.03	10	0.48	178	1	<0.01	30	220	7	<0.01	<2	3	17	<20
ML4-480		<1	0.03	10	0.41	285	<1	<0.01	21	240	6	<0.01	<2	3	14	<20
ML4-500		<1	0.04	10	0.55	240	<1	<0.01	39	250	5	<0.01	<2	3	14	<20

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 9-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07094305

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
ML4-300		0.08	<10	<10	31	<10	40
ML4-320		0.14	<10	<10	52	<10	47
ML4-340		0.13	<10	<10	56	<10	56
ML4-360		0.13	<10	<10	54	<10	52
ML4-380		0.12	<10	<10	59	<10	41
ML4-400		0.15	<10	<10	67	<10	50
ML4-420		0.10	<10	<10	52	<10	55
ML4-440		0.10	<10	<10	48	<10	39
ML4-460		0.10	<10	<10	53	<10	42
ML4-480		0.11	<10	<10	53	<10	50
ML4-500		0.11	<10	<10	58	<10	42

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE VA07104558

Project:

P.O. No.:

This report is for 97 Soil samples submitted to our lab in Vancouver, BC, Canada on 7-SEP-2007.

The following have access to data associated with this certificate:

DIRK MORAAL		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS41	51 anal. aqua regia ICPMS

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Method	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Sample Description LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
ML5-330	0.14	0.11	1.46	5.4	<0.2	<10	170	0.39	0.19	0.33	0.7	15.7	10.5	44	1.25
ML5-350	0.14	0.17	1.14	3.3	<0.2	<10	170	0.26	0.13	0.26	0.26	9.75	7.5	40	0.92
ML5-370	0.18	0.15	1.56	6.1	<0.2	<10	200	0.34	0.19	0.41	0.4	14.45	10.4	56	0.92
ML5-390	0.16	0.11	1.71	15.9	<0.2	<10	190	0.39	0.19	0.4	0.34	19.3	10.2	55	1.34
ML5-410	0.18	0.12	1.27	5.4	<0.2	<10	200	0.28	0.14	0.43	0.24	14.45	7.5	47	0.96
ML5-430	0.24	0.2	1.38	7	<0.2	<10	180	0.33	0.15	0.41	0.4	16.6	8.2	51	1.1
ML5-450	0.18	0.1	1.55	10.3	<0.2	<10	150	0.32	0.15	0.39	0.32	18.2	9.3	51	1.17
ML6-100	0.20	0.05	1.1	4.3	<0.2	<10	160	0.23	0.11	0.37	0.2	14.2	6.6	41	0.7
ML6-120	0.14	0.09	1.07	2.7	<0.2	<10	150	0.21	0.13	0.31	0.28	12.6	6.2	30	1.01
ML6-140	0.20	0.06	1.32	3.4	<0.2	<10	190	0.25	0.13	0.33	0.31	11.85	8	37	0.92
ML6-160	0.16	0.03	0.96	3	<0.2	<10	120	0.2	0.13	0.27	0.2	12.5	7	43	0.74
ML6-180	0.22	0.1	1.5	5.9	<0.2	<10	180	0.39	0.11	0.31	0.2	14.65	7.7	42	1.15
ML6-200	0.22	0.1	1.18	3	<0.2	<10	180	0.24	0.12	0.31	0.26	12.15	7.2	34	1.03
ML6-220	0.20	0.08	1.16	2.1	<0.2	<10	180	0.21	0.14	0.3	0.54	13.85	6.4	31	0.63
ML6-240	0.22	0.07	1.1	3	<0.2	<10	150	0.23	0.13	0.36	0.28	12.3	6.2	32	0.78
ML6-260	0.20	0.1	1.3	4.6	<0.2	<10	160	0.28	0.11	0.33	0.17	13.6	6.6	41	1.06
ML6-270	0.14	0.11	1.11	2.5	<0.2	<10	160	0.22	0.15	0.26	0.36	10.9	6	31	0.78
ML6-280	0.20	0.11	1.29	3.4	<0.2	<10	220	0.29	0.14	0.35	0.43	14	8.6	34	0.99
ML6-290	0.16	0.06	1.08	3.1	<0.2	<10	130	0.2	0.12	0.24	0.31	10.75	6.6	31	0.95
ML6-300	0.16	0.06	1.33	6.5	<0.2	<10	150	0.19	0.14	0.3	0.38	11.7	7.1	40	1.04
ML6-310	0.20	0.05	1.16	4	<0.2	<10	120	0.23	0.13	0.26	0.32	11.3	6.4	35	0.61
ML6-320	0.20	0.07	1.61	4.4	<0.2	<10	180	0.34	0.15	0.28	0.51	12.65	8.7	43	1.09
ML6-330	0.20	0.04	1.2	4.7	<0.2	<10	90	0.25	0.13	0.27	0.5	12.25	6.8	41	0.97
ML6-340	0.24	0.02	1.06	6.5	<0.2	<10	100	0.25	0.11	0.45	0.28	17.55	7.5	44	0.63
ML6-350	0.22	0.04	0.99	5.6	<0.2	<10	140	0.23	0.09	0.55	0.14	18	6.1	38	0.51
ML6-360	0.22	0.13	1.16	3.8	<0.2	<10	130	0.34	0.13	0.43	0.61	14.8	9.8	34	1.33
ML6-380	0.24	0.07	1.54	6.3	<0.2	<10	160	0.28	0.18	0.46	0.56	12.85	9.7	47	1.28
ML6-400	0.24	0.14	1.61	5.8	<0.2	<10	180	0.32	0.15	0.58	0.32	12.4	11.1	55	1.42
ML6-410	0.18	0.12	1.4	5.7	<0.2	<10	170	0.32	0.15	0.53	0.45	15	8.1	42	1.16
ML6-420	0.20	0.14	1.5	7.3	<0.2	<10	170	0.51	0.18	0.34	0.41	20.2	8.2	46	1.56
ML6-430	0.18	0.05	1.55	5.7	<0.2	<10	160	0.4	0.18	0.44	0.68	12.85	9.3	48	1.16
ML6-440	0.26	0.13	1.29	7.5	<0.2	<10	190	0.34	0.15	0.72	0.24	17.15	6.6	42	0.91
ML6-460	0.20	0.04	1.48	6.9	<0.2	<10	180	0.28	0.14	0.43	0.33	12.05	8.1	44	1.04
ML6-480	0.22	0.14	1.58	10	<0.2	<10	200	0.4	0.18	0.57	0.44	14.75	9.9	62	1.34
ML6-500	0.22	0.07	1.77	9.6	<0.2	<10	210	0.37	0.21	0.56	0.67	15.4	10.6	61	1.7
ML6-520	0.20	0.08	1.42	6.9	<0.2	<10	130	0.3	0.16	0.4	0.36	15.65	8.1	49	1.2
ML6-540	0.20	0.19	1.27	7.4	<0.2	<10	140	0.31	0.17	0.42	0.53	15.9	9	43	1.27
ML6-560	0.22	0.07	1.24	6	<0.2	<10	140	0.25	0.15	0.35	0.31	12.8	8.5	44	1.01
ML6-580	0.20	0.14	1.38	8.9	<0.2	<10	890	0.22	0.15	0.54	0.17	13.45	7.8	53	0.9
ML6-600	0.26	0.1	1.19	6.6	<0.2	<10	160	0.23	0.17	0.32	0.39	14.5	8.1	46	0.91

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
ML5-330		15	2.16	4.92	0.05	0.07	0.01	0.023	0.05	7.4	7.8	0.44	548	0.72	0.03	2.06
ML5-350		9	1.64	3.99	0.05	0.05	0.01	0.015	0.04	4.8	5.2	0.37	295	0.55	0.04	1.55
ML5-370		15.3	2.23	4.85	0.05	0.1	0.01	0.024	0.05	6.9	9	0.56	441	0.79	0.03	1.75
ML5-390		25.1	2.25	4.75	0.06	0.15	0.01	0.023	0.07	9.9	10.1	0.62	384	0.7	0.04	1.8
ML5-410		14.9	2.1	4.44	0.06	0.09	0.01	0.022	0.05	8.2	7.8	0.56	176	0.76	0.03	1.65
ML5-430		14.8	2.15	4.24	0.05	0.06	0.02	0.02	0.06	8.2	8.4	0.57	221	0.99	0.03	1.65
ML5-450		18	2.31	4.71	0.05	0.09	0.01	0.022	0.06	8.5	9.1	0.63	179	0.94	0.03	1.84
ML6-100		12.3	1.79	3.39	0.05	0.14	0.01	0.016	0.07	7.6	6	0.5	160	0.54	0.02	0.92
ML6-120		7.1	1.61	3.59	<0.05	0.09	0.01	0.016	0.04	6.3	5	0.35	368	0.52	0.02	1.18
ML6-140		10.5	1.9	4.46	<0.05	0.08	0.01	0.018	0.05	6.3	8.1	0.43	357	0.8	0.03	1.44
ML6-160		9.7	1.73	3.42	<0.05	0.06	<0.01	0.013	0.05	6.8	7.1	0.44	206	0.56	0.03	1.17
ML6-180		13.7	2.13	4.48	0.05	0.12	0.01	0.02	0.04	7.4	7.3	0.51	219	0.81	0.03	1.29
ML6-200		8.4	1.92	4.27	<0.05	0.08	0.01	0.016	0.03	6.4	7	0.4	388	0.73	0.02	1.33
ML6-220		8.1	2.06	5.15	<0.05	0.05	0.01	0.015	0.06	7.6	9.1	0.39	235	0.84	0.03	1.51
ML6-240		8.5	1.66	4.06	<0.05	0.08	0.01	0.015	0.04	6.7	6.8	0.38	294	0.54	0.03	1.57
ML6-260		12.5	1.97	4.25	<0.05	0.04	0.01	0.017	0.05	7.6	7.7	0.52	201	0.63	0.03	1.5
ML6-270		7.5	1.75	4.63	<0.05	0.13	0.01	0.014	0.03	5.9	6.5	0.32	144	0.81	0.02	1.54
ML6-280		10.1	2.06	4.78	<0.05	0.03	0.02	0.018	0.03	7.2	7.3	0.4	643	0.87	0.03	1.54
ML6-290		8.5	1.76	4.29	<0.05	0.03	0.01	0.016	0.03	5.8	6.8	0.35	228	0.78	0.02	1.69
ML6-300		9.1	2.19	4.48	<0.05	0.08	0.01	0.017	0.12	6.3	7.1	0.44	291	0.81	0.04	1.74
ML6-310		10	1.96	4.55	<0.05	0.09	0.01	0.016	0.06	6.1	7.7	0.38	169	0.76	0.02	1.69
ML6-320		11.4	2.58	5.79	<0.05	0.15	0.01	0.024	0.04	6.6	7.9	0.45	217	0.98	0.03	2
ML6-330		11.8	2.07	4.96	<0.05	0.12	0.01	0.018	0.04	6.8	8.9	0.47	148	0.89	0.02	1.75
ML6-340		15.4	1.77	3.27	0.05	0.03	0.01	0.016	0.04	8.4	6.8	0.54	210	0.57	0.03	1.01
ML6-350		17.4	1.73	2.96	<0.05	0.04	0.01	0.014	0.04	9.5	5.9	0.53	191	0.63	0.03	0.95
ML6-360		12.8	1.83	3.91	0.05	0.02	0.02	0.019	0.05	6.8	6.4	0.38	640	0.66	0.03	1.48
ML6-380		13.8	2.22	5.52	0.05	0.04	0.01	0.021	0.04	6.6	10.9	0.57	357	1.26	0.03	2.11
ML6-400		17.8	2.14	5.09	0.05	0.03	0.02	0.018	0.04	6.5	11.2	0.82	305	0.45	0.05	1.57
ML6-410		17.6	1.96	4.74	0.05	0.02	0.01	0.021	0.03	8	8.3	0.47	292	0.65	0.03	1.42
ML6-420		29.8	1.94	4.92	0.05	0.04	0.02	0.024	0.04	12	8.8	0.5	210	0.53	0.03	2.12
ML6-430		13.2	2.3	5.52	0.05	0.06	0.02	0.022	0.03	6.5	9.2	0.56	234	1.14	0.03	2.24
ML6-440		25.7	1.74	3.88	0.05	0.03	0.03	0.019	0.04	10	6.7	0.49	161	0.37	0.03	1.23
ML6-460		14.5	2.12	4.75	<0.05	0.04	0.01	0.021	0.03	6.1	8.6	0.56	229	0.71	0.03	1.8
ML6-480		21	2.29	5.19	<0.05	0.04	0.02	0.024	0.05	8.5	9.1	0.65	273	0.63	0.04	2.35
ML6-500		22.2	2.43	5.4	0.06	0.04	0.02	0.025	0.06	8.7	11.2	0.71	296	0.7	0.04	2.35
ML6-520		14.2	2.05	4.47	0.05	0.04	0.01	0.021	0.05	7.5	8.2	0.55	246	0.81	0.03	1.83
ML6-540		17.8	1.98	4.36	0.05	0.03	0.01	0.018	0.05	8	7.6	0.5	376	0.76	0.03	1.35
ML6-560		15.3	1.88	3.76	0.05	0.06	0.01	0.016	0.05	6.8	7.5	0.5	234	0.72	0.03	1.19
ML6-580		22.8	1.62	4.99	0.06	0.04	0.01	0.017	0.06	8	9.2	0.82	325	2.63	0.04	1.08
ML6-600		15.3	1.88	3.84	0.05	0.07	0.01	0.017	0.06	7.3	6.7	0.54	224	0.64	0.03	1.44

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
ML5-330		46.3	430	9.6	9.6	<0.001	0.01	0.35	3.1	0.3	0.6	13.8	0.01	0.02	2.2	0.106
ML5-350		32.3	440	6	11.9	<0.001	0.01	0.24	2.3	0.3	0.5	11	0.01	0.01	1.6	0.087
ML5-370		48.1	340	8.1	12.9	<0.001	<0.01	0.36	3.7	0.4	0.6	15.2	<0.01	0.02	2.7	0.11
ML5-390		69.3	260	7.3	15.6	<0.001	0.01	0.41	4.7	0.3	0.5	16.5	<0.01	0.02	3.3	0.119
ML5-410		33.8	1210	7.1	11.6	<0.001	0.01	0.42	3.6	0.4	0.5	14.1	<0.01	0.02	3.1	0.11
ML5-430		41.8	450	6.4	15.4	<0.001	0.01	0.42	3.2	0.4	0.5	14	<0.01	0.01	2.2	0.104
ML5-450		60.3	630	6.8	11.8	<0.001	0.01	0.4	3.5	0.4	0.5	13.2	<0.01	0.02	2.7	0.106
ML6-100		31.9	510	5.2	16.7	<0.001	<0.01	0.38	3.1	0.2	0.4	13.6	<0.01	0.01	2.6	0.087
ML6-120		18.5	250	5.1	14.8	<0.001	<0.01	0.26	2.4	0.2	0.4	13	<0.01	0.01	1.9	0.084
ML6-140		24.5	400	5.9	14.4	<0.001	0.01	0.3	2.8	0.2	0.5	12.3	<0.01	0.01	2.2	0.094
ML6-160		28.2	300	4.5	15.8	<0.001	0.01	0.31	2.5	0.2	0.5	10.3	<0.01	0.01	1.9	0.099
ML6-180		32.1	300	5.9	9.6	<0.001	0.01	0.37	3.1	0.2	0.5	13	<0.01	0.01	2.7	0.102
ML6-200		19.2	290	5.9	13	<0.001	0.01	0.33	2.6	0.2	0.5	12.5	<0.01	0.01	2.2	0.095
ML6-220		16	800	7.5	10.1	<0.001	0.01	0.41	2.7	0.2	0.5	13	<0.01	0.01	2.1	0.102
ML6-240		19.3	440	5.8	12.9	<0.001	0.01	0.29	2.5	0.2	0.5	14.1	<0.01	0.01	1.9	0.098
ML6-260		29	410	5.5	12.6	<0.001	0.01	0.36	2.8	0.3	0.5	12.8	<0.01	0.01	2.1	0.095
ML6-270		17.3	300	6.8	8.8	<0.001	<0.01	0.29	2.4	0.2	0.6	11.2	<0.01	0.01	1.7	0.1
ML6-280		20.8	430	6.3	8.9	<0.001	0.01	0.35	2.7	0.3	0.5	14.7	<0.01	0.01	1.4	0.103
ML6-290		18.7	280	5.5	8.5	<0.001	0.01	0.3	2.1	0.2	0.5	10.7	<0.01	0.01	1.2	0.098
ML6-300		22	520	5.8	22.2	<0.001	0.02	0.32	2.4	0.2	0.5	10.5	<0.01	0.01	1.9	0.117
ML6-310		19.9	290	6.5	8.2	<0.001	0.01	0.36	2.4	0.2	0.5	11.1	<0.01	0.01	2	0.108
ML6-320		27.9	360	7	9.8	<0.001	0.01	0.44	2.9	0.3	0.7	11.6	<0.01	0.02	2.1	0.14
ML6-330		27.4	470	5.9	8.1	<0.001	<0.01	0.4	2.8	0.3	0.6	10.4	<0.01	0.02	2.5	0.113
ML6-340		35.9	650	4.7	5.6	<0.001	0.01	0.42	2.7	0.3	0.4	15.1	<0.01	0.02	1	0.067
ML6-350		31.4	550	4.9	5.2	<0.001	0.01	0.47	3	0.4	0.3	18	<0.01	0.01	1.6	0.064
ML6-360		26.1	570	6.8	19.3	<0.001	0.01	0.29	2.7	0.4	0.4	15.4	<0.01	0.01	1.3	0.089
ML6-380		33.6	310	7.1	10.9	<0.001	0.01	0.38	3.1	0.3	0.6	15.3	<0.01	0.02	1.6	0.119
ML6-400		41.2	250	6.1	8.1	<0.001	0.01	0.26	3.1	0.5	0.5	18.4	<0.01	0.01	1.4	0.112
ML6-410		32.2	350	6.2	7.3	<0.001	0.02	0.3	2.6	0.5	0.6	17.2	<0.01	0.01	0.6	0.092
ML6-420		38.7	400	7.1	8.9	<0.001	0.01	0.29	4.5	0.5	0.6	16	<0.01	0.02	1.4	0.109
ML6-430		32.7	210	7.6	8.1	<0.001	0.01	0.37	3.3	0.3	0.6	14.7	<0.01	0.02	1.7	0.128
ML6-440		35.5	460	6.4	5.9	<0.001	0.03	0.27	2.7	0.7	0.5	19.1	<0.01	0.02	0.6	0.077
ML6-460		33	230	6.1	7.4	<0.001	0.01	0.33	2.8	0.3	0.5	14.7	<0.01	0.02	1.3	0.101
ML6-480		45.9	290	7.5	10.1	<0.001	0.01	0.34	3.6	0.6	0.6	19.6	<0.01	0.02	1.8	0.126
ML6-500		56	380	6.8	11.8	<0.001	0.02	0.4	4	0.5	0.6	18.5	<0.01	0.02	1.8	0.125
ML6-520		37.2	330	7	11.6	<0.001	0.01	0.34	3.2	0.4	0.5	13.8	<0.01	0.02	1.7	0.101
ML6-540		41.5	390	7.2	10.1	<0.001	0.01	0.35	3	0.3	0.5	15.7	<0.01	0.02	1	0.092
ML6-560		41.4	440	6.4	11.9	<0.001	<0.01	0.32	3	0.2	0.4	12.1	<0.01	0.01	2.1	0.089
ML6-580		46.4	370	5.9	6.6	<0.001	0.01	0.27	4.5	0.5	0.4	19.8	<0.01	0.02	1.4	0.075
ML6-600		41.8	380	5.9	12.5	<0.001	<0.01	0.36	3	0.2	0.5	11.9	<0.01	0.01	2.2	0.098

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Tl	U	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.05	1	0.05	0.05	2	0.5
ML5-330		0.09	0.41	46	0.91	4.08	71	1.9
ML5-350		0.07	0.25	36	0.37	2.26	33	1.4
ML5-370		0.09	0.46	49	0.56	3.58	45	2.8
ML5-390		0.15	0.58	52	0.55	7.24	52	4
ML5-410		0.06	0.54	47	0.36	4.35	37	2.7
ML5-430		0.07	0.42	48	0.34	3.65	47	1.9
ML5-450		0.07	0.47	56	0.39	4.06	46	2.4
ML6-100		0.06	0.41	39	0.25	3.72	31	3.6
ML6-120		0.07	0.31	37	0.27	2.68	37	2.5
ML6-140		0.08	0.34	45	0.45	2.68	39	2.3
ML6-160		0.06	0.32	38	0.41	3	30	1.9
ML6-180		0.08	0.42	53	0.74	3.12	41	3.6
ML6-200		0.07	0.34	45	1.09	2.71	35	2.3
ML6-220		0.06	0.35	42	1.02	2.75	51	1.6
ML6-240		0.04	0.32	40	0.3	2.78	34	2.5
ML6-260		0.05	0.35	46	0.27	2.96	36	1.3
ML6-270		0.05	0.28	44	0.35	2.51	33	3.4
ML6-280		0.05	0.35	47	0.44	2.8	47	0.8
ML6-290		0.05	0.27	42	0.31	2.36	32	0.9
ML6-300		0.06	0.28	49	0.43	2.43	46	2.4
ML6-310		0.05	0.3	49	0.36	2.42	36	2.7
ML6-320		0.06	0.33	61	0.37	2.81	50	4.5
ML6-330		0.05	0.37	54	0.44	2.83	52	3.4
ML6-340		0.05	0.43	42	0.45	4.43	33	0.6
ML6-350		0.06	0.48	40	0.3	5.74	29	1
ML6-360		0.06	0.43	38	0.37	3.06	43	0.6
ML6-380		0.07	0.48	55	0.83	3.23	53	1.1
ML6-400		0.09	0.75	45	0.32	3.99	45	0.9
ML6-410		0.07	0.93	48	0.4	4.34	45	0.6
ML6-420		0.09	1.5	48	0.58	7.8	50	0.9
ML6-430		0.08	0.5	60	0.51	3.62	44	1.7
ML6-440		0.1	1.48	41	1.06	7.24	45	0.6
ML6-460		0.07	0.42	53	1.54	3.14	35	1
ML6-480		0.12	1.03	54	0.32	5.19	59	1.2
ML6-500		0.11	0.74	55	0.4	5.72	61	1.2
ML6-520		0.08	0.63	50	0.39	3.99	39	1.1
ML6-540		0.07	0.74	45	0.3	5.03	49	0.7
ML6-560		0.06	0.47	41	0.66	3.52	39	1.5
ML6-580		0.08	2.08	130	0.51	5.19	34	0.9
ML6-600		0.05	0.35	42	0.31	3.41	41	2

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
ML6-620		0.16	0.15	1.01	4.3	<0.2	<10	130	0.28	0.12	0.37	0.55	12.8	8.4	30	1.15
ML6-640		0.20	0.1	1.12	4.9	<0.2	<10	120	0.23	0.11	0.31	0.24	12.5	7.2	39	0.97
ML6-660		0.22	0.2	1.24	4.9	<0.2	<10	100	0.34	0.14	0.34	0.47	15.5	9.6	42	1.25
ML6-680		0.24	0.25	1.49	6.3	<0.2	<10	100	0.51	0.17	0.47	0.37	17.55	14.1	40	3
ML6-700		0.16	0.35	1.31	3.5	<0.2	<10	160	0.46	0.18	0.56	1.04	17.65	11.6	31	2.5
ML6-720		0.22	0.28	1.33	3.9	<0.2	<10	90	0.58	0.14	0.55	0.18	19.3	8.7	34	1.3
ML6-740		0.24	0.23	1.3	2.8	<0.2	<10	110	0.55	0.12	0.4	0.21	20.2	10.6	26	1
ML6-750		0.16	0.09	1.25	3.9	<0.2	<10	120	0.29	0.12	0.47	0.24	15.35	9.5	38	1.05
ML6-760		0.20	0.12	1.49	6.1	<0.2	<10	130	0.38	0.16	0.38	0.23	14.95	9.5	47	1.04
ML6-770		0.20	0.16	1.54	3.8	<0.2	<10	190	0.51	0.17	0.33	0.54	21.6	13.1	41	1.32
ML6-780		0.18	0.2	1.7	5.5	<0.2	<10	180	0.61	0.23	0.38	0.69	23	17.6	39	1.71
ML6-790		0.18	0.23	1.73	5.9	<0.2	<10	210	0.68	0.16	0.31	1.01	34.2	14.1	33	1.25
ML6-800		0.20	0.08	1.35	4.8	<0.2	<10	110	0.36	0.16	0.29	0.4	13.55	8	43	0.84
ML6-810		0.16	0.15	1.7	4	<0.2	<10	170	0.41	0.13	0.31	0.48	15.85	9.6	35	1.01
ML6-820		0.18	0.1	1.61	4.8	<0.2	<10	100	0.43	0.13	0.35	0.28	16.05	8.3	40	1.01
ML6-830		0.18	0.1	1.39	4.1	<0.2	<10	120	0.36	0.13	0.33	0.25	14.7	8.3	36	1.06
ML6-840		0.24	0.11	1.83	3.8	<0.2	<10	140	0.37	0.16	0.45	0.26	14.9	10.3	36	1.25
ML6-860		0.20	0.18	1.84	3.7	<0.2	<10	300	0.49	0.17	0.45	0.66	17.8	12.3	46	1.34
ML6-880		0.18	0.12	1.48	6.3	<0.2	<10	190	0.29	0.13	0.38	0.18	11.7	7.4	48	0.7
ML6-900		0.18	0.1	1.19	2.5	<0.2	<10	220	0.24	0.14	0.33	0.36	12.05	8.4	37	1.09
ML8-00		0.30	0.13	1.3	4.6	<0.2	<10	230	0.32	0.1	0.75	0.23	20.5	7.5	39	0.95
ML8-20		0.26	0.08	0.91	3.1	<0.2	<10	170	0.21	0.08	0.71	0.22	12.3	5.8	26	0.68
ML8-40		0.34	0.03	1.51	4.3	<0.2	<10	110	0.31	0.12	0.32	0.37	12.3	8.4	39	1.08
ML8-60		0.36	0.09	1.66	7.7	<0.2	<10	230	0.35	0.1	1.55	0.34	17.2	9.3	55	1.31
ML8-80		0.38	0.08	1.55	4.5	<0.2	<10	320	0.31	0.16	0.95	0.52	12.45	9.2	39	1.22
ML8-100		0.22	0.03	1.22	2.9	<0.2	<10	180	0.32	0.15	0.5	0.46	11.15	5.7	33	0.77
ML8-120		0.22	0.04	1.33	3.3	<0.2	<10	240	0.17	0.13	0.46	0.31	10.55	6.7	48	0.87
ML8-140		0.28	0.04	1.58	4.4	<0.2	<10	230	0.32	0.13	0.4	0.38	12.3	8.9	41	0.93
ML8-160		0.38	0.13	1.11	6.3	<0.2	<10	160	0.28	0.06	0.69	0.1	20.1	7	40	0.6
ML8-180		0.34	0.14	1.25	5.1	<0.2	<10	190	0.23	0.05	1.01	0.11	15.8	8.4	72	0.55
ML8-200		0.22	0.17	1.44	5	<0.2	<10	240	0.31	0.14	1.06	0.69	13.65	7.7	39	1.16
ML8-220		0.30	0.1	1.01	5.5	<0.2	<10	160	0.27	0.1	0.78	0.17	22.3	6.8	36	0.84
ML8-240		0.20	0.05	1.22	6.3	<0.2	<10	230	0.38	0.14	0.94	0.37	26.8	9.6	38	0.91
ML8-260		0.22	0.04	1.1	4	<0.2	<10	180	0.27	0.1	0.53	0.36	19.15	7.8	33	0.75
ML8-280		0.26	0.05	1.55	3.3	<0.2	<10	230	0.39	0.09	0.48	0.5	15.4	10.5	47	0.72
ML8-300		0.26	0.08	1.76	5.8	<0.2	<10	240	0.43	0.09	0.53	0.16	19.35	10.8	57	0.72
ML8-320		0.30	0.05	1.88	6.4	<0.2	<10	280	0.37	0.1	0.61	0.11	15.05	12.4	69	0.85
ML8-340		0.24	0.07	1.93	7.5	<0.2	<10	290	0.39	0.1	0.63	0.13	11.55	13.1	75	1.23
ML9-20		0.28	0.05	0.9	3.8	<0.2	<10	130	0.21	0.04	1.51	0.14	15.6	6.4	36	0.49
ML9-40		0.28	0.05	0.83	3.3	<0.2	<10	120	0.2	0.05	1.03	0.09	16	5.8	35	0.45

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
ML6-620		15.2	1.64	3.66	<0.05	0.03	0.01	0.014	0.04	6	5.3	0.34	623	0.58	0.03	1.23
ML6-640		12.3	1.76	3.83	0.05	0.06	0.01	0.015	0.04	6.6	7.3	0.47	238	0.58	0.03	1.37
ML6-660		15	1.99	4.1	0.05	0.05	0.01	0.019	0.04	7.9	9.9	0.52	339	0.53	0.03	1.24
ML6-680		24.5	2.49	4.61	0.05	0.05	0.02	0.021	0.06	9.3	16	0.59	515	0.62	0.03	2.3
ML6-700		31.9	1.94	4.2	0.06	0.03	0.02	0.02	0.07	8.9	9.9	0.38	1070	0.75	0.03	0.9
ML6-720		44.7	1.8	4.14	0.06	0.03	0.03	0.02	0.05	14.4	17.7	0.44	337	0.28	0.03	0.87
ML6-740		38.5	1.75	4.36	0.05	0.03	0.02	0.017	0.06	10.4	12.6	0.37	463	0.32	0.03	0.92
ML6-750		17	1.9	4.35	0.05	0.02	0.01	0.019	0.12	8	9.3	0.47	285	0.48	0.03	1.01
ML6-760		16.6	2.21	4.63	0.05	0.06	0.01	0.023	0.07	7.7	8.3	0.57	274	0.49	0.03	1.12
ML6-770		27	2.2	4.98	0.06	0.04	0.01	0.023	0.06	11.6	10.3	0.48	939	0.66	0.02	1.17
ML6-780		33.6	2.81	6.12	0.05	0.03	0.01	0.028	0.08	13.6	11.5	0.52	916	0.53	0.02	0.95
ML6-790		39.3	2.63	5.45	0.06	0.05	0.03	0.027	0.07	16.9	10.9	0.45	1785	0.74	0.02	0.77
ML6-800		14.5	2.05	4.58	0.05	0.04	0.01	0.021	0.05	7.2	8.7	0.5	213	0.57	0.03	1.12
ML6-810		18.6	2.46	4.58	<0.05	0.03	0.01	0.02	0.06	7.9	9.2	0.48	1150	0.48	0.02	0.91
ML6-820		22.8	2.35	5.01	0.05	0.07	0.01	0.023	0.07	8.4	9.8	0.59	357	0.49	0.03	0.92
ML6-830		18.9	1.89	4.74	<0.05	0.02	0.01	0.018	0.05	7.9	9.3	0.48	442	0.49	0.02	0.83
ML6-840		24.8	2.73	5.93	0.06	0.03	0.01	0.026	0.09	7.6	15.4	0.73	360	0.46	0.02	1.16
ML6-860		15.3	2.88	5.61	0.05	0.02	0.01	0.027	0.1	8.6	9.7	0.56	849	0.68	0.03	0.95
ML6-880		14.9	2.02	4.55	<0.05	0.05	0.01	0.019	0.05	6.2	8.1	0.57	191	0.57	0.02	1.2
ML6-900		9.1	1.9	4.95	<0.05	0.05	0.01	0.017	0.04	6.5	8.9	0.46	492	0.52	0.03	1.47
ML8-00		15	1.73	4.36	0.06	0.04	0.03	0.021	0.03	12.1	8.2	0.46	504	0.55	0.03	1.25
ML8-20		9.4	1.37	3.23	<0.05	0.02	0.01	0.014	0.03	6.9	7.4	0.42	403	0.4	0.03	0.84
ML8-40		11.1	2.53	5.84	<0.05	0.14	0.01	0.02	0.04	6.7	10.3	0.46	129	1.72	0.02	2.06
ML8-60		26.2	2.07	4.56	0.06	0.05	0.03	0.022	0.06	9.8	24.1	0.71	263	0.63	0.04	1.6
ML8-80		10.8	2.26	5.53	0.06	0.03	0.01	0.023	0.05	5.9	11.6	0.44	823	0.89	0.03	1.78
ML8-100		7.3	1.94	5.08	<0.05	0.05	0.01	0.02	0.03	6	11.5	0.37	136	0.9	0.02	1.98
ML8-120		7.8	2.41	6.16	0.05	0.05	0.01	0.018	0.05	5.6	11.3	0.51	354	1.19	0.03	2.1
ML8-140		9.6	2.67	6.68	<0.05	0.07	0.01	0.021	0.04	6.5	10.8	0.47	244	1.52	0.02	2.46
ML8-160		19.5	1.83	3.44	0.06	0.06	0.03	0.016	0.03	10.7	7.9	0.54	198	0.48	0.04	1.07
ML8-180		22.9	1.84	3.68	0.06	0.06	0.04	0.013	0.03	9	10.5	0.77	171	0.42	0.05	1.25
ML8-200		14.4	2.4	5.58	<0.05	0.05	0.02	0.024	0.05	7.7	9.7	0.5	280	0.68	0.03	2.26
ML8-220		21.1	1.74	3.32	0.07	0.05	0.03	0.015	0.08	12.4	7.7	0.58	273	0.49	0.04	1.2
ML8-240		25.9	2.01	4.1	0.07	0.05	0.02	0.018	0.08	14.6	9.1	0.61	452	0.56	0.02	1.69
ML8-260		15.3	1.78	3.79	0.05	0.1	0.01	0.014	0.06	10.1	7.6	0.48	441	0.57	0.01	1.52
ML8-280		12.9	2.49	5.14	0.05	0.07	0.01	0.022	0.07	7.2	8	0.53	316	0.79	<0.01	1.36
ML8-300		14.2	2.53	5.3	0.05	0.21	0.02	0.023	0.1	8	8.1	0.53	309	0.83	<0.01	1.55
ML8-320		17.9	2.73	5.75	0.06	0.22	0.02	0.026	0.07	6.9	10.8	0.75	297	1.13	0.01	1.92
ML8-340		16.4	3.02	6.23	0.05	0.15	0.02	0.026	0.06	6.1	12	0.74	250	1.39	0.01	2.36
ML9-20		16.3	1.67	3.16	0.09	0.14	0.02	0.012	0.05	8.3	5.6	0.77	216	0.52	0.02	1.15
ML9-40		10.5	1.53	2.82	0.06	0.1	0.01	0.011	0.04	8.7	5.5	0.64	178	0.37	0.02	1.03

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
ML6-620		21.9	470	5.5	9.4	<0.001	0.01	0.28	2.4	0.2	0.4	16.5	<0.01	0.02	1.4	0.082
ML6-640		28.9	340	5.2	8.1	<0.001	0.01	0.37	3	0.2	0.4	14.5	<0.01	0.01	1.9	0.091
ML6-660		31.5	810	6.9	5.9	<0.001	0.01	0.36	3.2	0.3	0.5	15.1	<0.01	0.02	1.9	0.087
ML6-680		29.5	990	14.2	7.7	<0.001	0.01	0.55	3.8	0.4	0.5	25	<0.01	0.03	2.2	0.104
ML6-700		23	1330	10.3	11.4	<0.001	0.02	0.35	3	0.4	0.4	37.3	<0.01	0.02	0.6	0.063
ML6-720		26.2	860	7.8	5.8	<0.001	0.01	0.31	3.1	0.6	0.4	31	<0.01	0.01	0.5	0.066
ML6-740		23.6	810	8.7	6.9	<0.001	0.01	0.25	3.2	0.6	0.3	23.7	<0.01	0.02	0.9	0.054
ML6-750		25.5	800	7.1	13	<0.001	0.01	0.36	2.9	0.3	0.4	23.5	<0.01	0.02	0.7	0.069
ML6-760		31.7	1300	8.3	8.1	<0.001	0.01	0.41	4.1	0.2	0.5	15.6	<0.01	0.02	2.2	0.09
ML6-770		28.4	1090	10.7	10.3	<0.001	0.01	0.36	4.5	0.3	0.5	17.1	<0.01	0.02	1.5	0.078
ML6-780		24.1	1400	19.2	18.1	<0.001	0.01	0.74	4.3	0.3	0.5	20	<0.01	0.03	1.3	0.055
ML6-790		28.2	1090	12.9	13.2	<0.001	0.01	0.62	4.4	0.5	0.4	19.1	<0.01	0.03	0.9	0.045
ML6-800		30.4	900	7.1	7.1	<0.001	0.01	0.42	3.1	0.2	0.5	11.9	<0.01	0.02	1.6	0.089
ML6-810		20.6	1270	8.5	9.2	<0.001	0.01	0.42	2.8	0.2	0.4	15.5	<0.01	0.02	1.1	0.07
ML6-820		28	960	7.8	9.3	<0.001	0.01	0.51	3.6	0.2	0.4	15.4	<0.01	0.02	2.4	0.065
ML6-830		27.8	930	7.2	8.3	<0.001	0.01	0.35	2.7	0.2	0.4	18.1	<0.01	0.02	0.4	0.067
ML6-840		21.9	1260	10.3	18	<0.001	0.01	0.47	3.7	0.2	0.5	26	<0.01	0.03	1.5	0.063
ML6-860		25.4	1140	9.6	16.9	<0.001	0.02	0.46	3.3	0.3	0.5	17	<0.01	0.02	0.7	0.086
ML6-880		32.1	290	5.6	8.6	<0.001	0.01	0.4	3.6	0.2	0.4	16.3	<0.01	0.02	1.7	0.085
ML6-900		19.3	570	6.3	12.2	<0.001	<0.01	0.29	3.1	0.2	0.5	15.2	<0.01	0.01	2	0.112
ML8-00		23.7	260	4.9	7.7	<0.001	0.02	0.34	4.2	0.5	0.4	20.8	<0.01	0.02	1.2	0.1
ML8-20		17.1	400	4.4	6.4	<0.001	0.02	0.3	2.1	0.3	0.3	20.7	<0.01	0.01	0.7	0.058
ML8-40		26.8	160	5.9	9.2	<0.001	0.01	0.36	2.8	0.2	0.6	12.7	<0.01	0.02	1.8	0.136
ML8-60		38.2	440	5	14	<0.001	0.03	0.42	4.3	0.7	0.4	41.3	<0.01	0.03	1.8	0.107
ML8-80		23.1	330	8	14.1	<0.001	0.02	0.32	2.6	0.4	0.6	30.7	<0.01	0.02	0.8	0.118
ML8-100		16.7	300	6.7	7.3	<0.001	0.02	0.28	2.4	0.3	0.5	15.8	<0.01	0.02	1.4	0.115
ML8-120		20.5	310	5.9	15.7	<0.001	0.01	0.33	2.7	0.3	0.6	16	<0.01	0.02	1.4	0.158
ML8-140		22.8	270	6.5	10.2	<0.001	<0.01	0.37	2.8	0.2	0.7	14.1	<0.01	0.02	1.6	0.146
ML8-160		29.9	310	4	4.9	<0.001	0.01	0.33	4.8	0.4	0.3	20.6	<0.01	0.01	2	0.094
ML8-180		32.9	390	3.5	4.3	<0.001	0.02	0.31	3.9	0.5	0.3	23.3	<0.01	0.01	1.6	0.115
ML8-200		23	490	7	13.5	<0.001	0.03	0.42	3	0.5	0.6	21.1	<0.01	0.02	1	0.127
ML8-220		28.3	840	5.7	10.5	<0.001	0.02	0.44	3.8	0.3	0.3	26.9	<0.01	0.02	2.6	0.076
ML8-240		31.4	700	6.9	12	<0.001	<0.01	0.52	4.6	0.4	0.4	34.1	<0.01	0.02	3.6	0.094
ML8-260		23.8	750	5.3	9.9	<0.001	<0.01	0.36	3.7	0.2	0.4	21.6	<0.01	0.02	3.2	0.092
ML8-280		30.2	1570	4.8	9.8	<0.001	<0.01	0.32	5.2	0.2	0.5	13.6	<0.01	0.02	2.1	0.131
ML8-300		38.4	580	4.8	12.6	<0.001	<0.01	0.47	5.9	0.4	0.5	16.2	<0.01	0.02	2.7	0.138
ML8-320		55.9	210	5.1	11.6	<0.001	<0.01	0.43	5.7	0.4	0.5	17.8	<0.01	0.02	2.2	0.149
ML8-340		57.6	210	5	14.9	<0.001	<0.01	0.45	4.2	0.4	0.5	17.9	<0.01	0.03	1.5	0.156
ML9-20		23.5	660	3.1	4.9	<0.001	<0.01	0.35	3.4	0.3	0.3	28.2	<0.01	0.01	2	0.109
ML9-40		22.1	620	3.3	3.7	<0.001	<0.01	0.27	3	0.2	0.3	24.1	<0.01	0.01	2.2	0.084

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Tl	U	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.05	1	0.05	0.05	2	0.5
ML6-620		0.05	0.38	35	0.35	2.93	58	0.8
ML6-640		0.05	0.42	40	0.43	3.33	52	1.7
ML6-660		0.06	0.5	42	0.24	4.74	104	1.2
ML6-680		0.09	0.89	47	0.29	7.14	112	1.4
ML6-700		0.07	0.93	34	0.23	8.35	130	<0.5
ML6-720		0.06	1.5	36	0.18	14.65	61	<0.5
ML6-740		0.07	0.92	34	0.37	9.02	37	0.6
ML6-750		0.07	0.37	39	0.24	4.38	49	<0.5
ML6-760		0.07	0.46	47	1.45	4.44	57	1.6
ML6-770		0.08	0.64	44	0.28	8.1	95	0.8
ML6-780		0.1	0.58	47	0.18	9.75	122	0.5
ML6-790		0.12	0.9	46	0.24	15.1	117	0.6
ML6-800		0.05	0.39	46	0.5	3.7	70	0.9
ML6-810		0.07	0.43	49	0.23	4.81	104	0.6
ML6-820		0.07	0.46	47	0.21	4.74	59	1.9
ML6-830		0.07	0.49	40	0.2	4.16	50	<0.5
ML6-840		0.07	0.41	46	0.21	3.72	79	0.5
ML6-860		0.09	0.39	56	0.27	4.12	94	<0.5
ML6-880		0.08	0.36	51	0.27	3.48	30	1.4
ML6-900		0.06	0.37	43	0.32	3.12	65	1.6
ML8-00		0.07	0.46	47	0.21	9.59	36	1
ML8-20		0.05	0.42	34	0.16	3.87	30	0.5
ML8-40		0.06	0.52	64	0.26	2.76	39	3.9
ML8-60		0.12	0.89	51	0.24	7.33	48	1.3
ML8-80		0.08	0.44	54	0.32	2.55	55	0.8
ML8-100		0.05	0.66	46	0.25	2.83	39	1.7
ML8-120		0.08	0.43	71	0.29	2.1	41	1.6
ML8-140		0.07	0.32	73	0.27	2.51	53	2.2
ML8-160		0.11	0.43	48	0.19	8.87	23	1.7
ML8-180		0.07	0.39	51	0.17	7.38	25	1.6
ML8-200		0.07	0.45	53	0.23	3.94	92	1.6
ML8-220		0.09	0.55	39	0.22	7.95	38	1.3
ML8-240		0.09	0.59	44	0.28	9.27	49	1.4
ML8-260		0.07	0.51	40	0.21	5.94	59	3.1
ML8-280		0.07	0.37	63	0.32	4.52	80	2.5
ML8-300		0.1	0.4	70	0.26	5.1	46	6.5
ML8-320		0.11	0.41	77	0.26	5.24	38	6.3
ML8-340		0.11	0.33	90	0.32	3.82	44	4.8
ML9-20		0.05	0.58	47	0.17	6.23	30	4.1
ML9-40		0.04	0.44	39	0.16	5.39	25	3

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
ML9-60		0.24	0.06	1.83	8.8	<0.2	<10	240	0.33	0.09	0.6	0.14	14.35	10.2	64	1.17
ML9-80		0.16	0.03	0.89	3.8	<0.2	<10	130	0.22	0.06	0.74	0.09	18.1	6.2	34	0.53
ML9-100		0.16	0.06	0.95	5.2	<0.2	<10	120	0.24	0.06	1.07	0.22	16.9	7.5	37	0.59
ML9-120		0.18	0.06	0.92	3.4	<0.2	<10	160	0.19	0.06	1	0.11	15.95	6.2	37	0.47
ML9-150		0.18	0.06	1.47	4.3	<0.2	<10	190	0.25	0.12	0.4	0.36	12.45	8	39	1.17
ML9-160		0.18	0.09	1.16	2.1	<0.2	<10	170	0.21	0.12	0.47	0.37	11.4	7	36	0.8
ML9-180		0.20	0.08	1.62	4.9	<0.2	<10	270	0.44	0.13	0.48	0.26	15.2	8.7	41	0.95
ML9-200		0.30	0.07	2.17	6.7	<0.2	<10	210	0.45	0.09	0.63	0.16	11.75	10.8	66	1.07
ML9-220		0.20	0.14	1.69	6.6	<0.2	<10	260	0.41	0.11	1.81	0.37	20.2	11.4	44	1.02
ML9-230		0.22	0.17	1.39	4.5	<0.2	<10	240	0.34	0.09	1.73	0.26	16	8.5	39	0.52
ML9-260		0.22	0.2	1.51	4.1	<0.2	<10	200	0.38	0.14	0.45	0.26	12.9	9.4	40	1.07
ML9-280		0.24	0.11	1.31	6.3	<0.2	<10	200	0.33	0.09	0.44	0.16	13.4	8.8	39	0.86
ML9-300		0.22	0.21	1.35	3.1	<0.2	<10	260	0.37	0.11	1.24	0.36	15.9	8.3	45	0.76
ML9-320		0.16	0.07	1.71	3	<0.2	<10	240	0.28	0.11	1.03	0.22	13.75	9.4	34	1.13
ML9-340		0.24	0.11	1.45	5.8	<0.2	<10	210	0.34	0.12	0.57	0.23	13.35	8.8	37	1.17
ML9-360		0.28	0.13	1.09	4.5	<0.2	<10	220	0.27	0.05	0.95	0.1	17.75	6.4	43	0.5
ML9-380		0.14	0.1	1	4.8	<0.2	<10	190	0.24	0.06	1.75	0.2	17.1	7.6	42	0.7

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
ML9-60		16.7	2.62	5.17	<0.05	0.12	0.01	0.022	0.07	7.1	12.9	0.7	204	0.99	0.01	2.07
ML9-80		13.6	1.55	3.03	0.07	0.09	0.01	0.012	0.06	9.8	6	0.53	208	0.36	0.01	1.29
ML9-100		19.6	1.72	3.16	0.1	0.08	0.02	0.013	0.11	9	6.2	0.6	265	0.54	0.02	1.32
ML9-120		11.4	1.43	2.9	0.06	0.07	0.02	0.012	0.04	8.5	5.9	0.56	245	0.28	0.02	1.16
ML9-150		12.7	2.34	6.13	<0.05	0.11	0.01	0.017	0.05	6.7	11.7	0.44	155	1.31	<0.01	2.7
ML9-160		6.8	1.93	5.22	<0.05	0.07	0.01	0.013	0.04	6	8.6	0.36	146	1.02	<0.01	2.33
ML9-180		12	2.37	5.58	<0.05	0.05	0.01	0.022	0.04	7.9	9	0.45	357	0.93	<0.01	3.07
ML9-200		18.7	2.95	6.4	0.06	0.15	0.01	0.021	0.05	6.3	11.9	0.79	256	1.22	0.01	2.47
ML9-220		20.2	2.25	4.85	0.06	0.09	0.02	0.023	0.08	9.2	9.6	0.43	576	0.58	0.01	1.86
ML9-230		16.1	1.9	4.1	0.05	0.06	0.03	0.019	0.06	8.7	10.6	0.51	331	0.5	0.01	1.49
ML9-260		9.7	2.4	5.66	<0.05	0.08	0.01	0.021	0.05	6.8	9.7	0.39	182	1.21	<0.01	2.47
ML9-280		14	1.98	3.91	<0.05	0.02	0.01	0.017	0.05	6.2	8.6	0.45	252	0.86	<0.01	1.18
ML9-300		21.7	1.59	4.48	<0.05	0.05	0.03	0.018	0.05	7.9	15.6	0.49	367	0.62	0.01	1.56
ML9-320		13.3	1.98	5.79	<0.05	0.03	0.01	0.019	0.05	7.2	14	0.62	302	0.73	0.04	1.8
ML9-340		13.1	2.27	5.15	<0.05	0.13	0.01	0.019	0.05	7	11.4	0.45	155	1.65	<0.01	2.39
ML9-360		13.8	1.67	3.57	0.06	0.06	0.04	0.015	0.04	10.2	7.1	0.59	162	0.44	0.02	1.12
ML9-380		27.9	1.57	3.24	0.07	0.08	0.05	0.013	0.06	9.3	6.8	0.74	208	0.55	0.02	1.24

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
ML9-60		32.8	220	5.9	12.3	<0.001	<0.01	0.4	3.8	0.3	0.4	19.3	<0.01	0.02	2.5	0.127
ML9-80		22.4	630	3.9	5.9	<0.001	<0.01	0.31	3.3	0.3	0.3	24.6	<0.01	0.02	2.4	0.093
ML9-100		24.7	520	3.7	12.6	<0.001	<0.01	0.4	3.8	0.3	0.3	24.6	<0.01	0.02	2.1	0.102
ML9-120		23.7	640	3.8	4.9	<0.001	<0.01	0.24	3.2	0.3	0.3	27	<0.01	0.02	1.7	0.086
ML9-150		19.6	210	6.1	9.6	<0.001	<0.01	0.35	2.8	0.2	0.6	14.7	<0.01	0.02	1.9	0.159
ML9-160		17.3	170	6.1	8.6	<0.001	<0.01	0.23	2.3	0.2	0.6	14.6	<0.01	0.02	1.5	0.158
ML9-180		26.1	310	6.3	9.1	<0.001	<0.01	0.32	2.9	0.3	0.6	16.3	<0.01	0.02	1.7	0.126
ML9-200		33.5	290	4.3	7.5	<0.001	<0.01	0.37	4.1	0.3	0.6	18.5	0.01	0.03	2.4	0.17
ML9-220		29.2	230	6.4	13.9	<0.001	<0.01	0.37	5.3	0.4	0.4	29.4	0.01	0.02	2.3	0.121
ML9-230		23	350	5	6.9	<0.001	<0.01	0.41	4.4	0.7	0.3	34.3	<0.01	0.02	1.5	0.092
ML9-260		22.7	190	6	10.9	<0.001	<0.01	0.3	3	0.2	0.6	15.2	<0.01	0.03	1.7	0.155
ML9-280		27.9	370	4.3	8.9	<0.001	<0.01	0.38	2.7	0.2	0.4	15.5	<0.01	0.02	0.8	0.077
ML9-300		25.1	260	5.9	8.1	<0.001	0.01	0.43	4	0.8	0.4	29.6	<0.01	0.02	1.2	0.099
ML9-320		16.9	320	5.4	6.2	<0.001	<0.01	0.29	2.9	0.6	0.4	36.6	<0.01	0.01	1.1	0.133
ML9-340		24.9	110	6.5	13.8	<0.001	<0.01	0.52	2.9	0.2	0.6	17	0.01	0.02	2.1	0.139
ML9-360		25	400	3.5	4.1	<0.001	<0.01	0.3	4.2	0.6	0.3	27.1	<0.01	0.02	1.4	0.093
ML9-380		30.3	710	3.3	6.2	<0.001	<0.01	0.4	4	0.5	0.3	33.9	<0.01	0.02	1.8	0.097

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 1-OCT-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07104558

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Tl	U	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.05	1	0.05	0.05	2	0.5
ML9-60		0.09	0.4	66	0.29	3.99	36	3.4
ML9-80		0.05	0.44	40	0.18	6.24	28	2.9
ML9-100		0.08	0.43	45	0.26	6.32	34	2.5
ML9-120		0.05	0.5	36	0.16	5.29	32	1.8
ML9-150		0.07	0.37	67	0.34	2.73	51	3.5
ML9-160		0.05	0.31	60	0.28	2.55	49	2.4
ML9-180		0.08	0.37	58	0.26	3.57	58	1.7
ML9-200		0.06	0.71	84	0.29	3.93	46	4.4
ML9-220		0.1	0.44	58	0.28	6.89	47	2.7
ML9-230		0.07	0.63	45	0.22	6.83	27	1.8
ML9-260		0.07	0.38	67	0.32	3.69	50	3.1
ML9-280		0.07	0.36	50	0.35	3.06	28	0.5
ML9-300		0.08	0.74	43	0.17	5.99	31	1.5
ML9-320		0.08	0.77	52	0.32	3.44	61	1
ML9-340		0.08	0.49	60	0.43	3.54	37	3.9
ML9-360		0.07	0.65	46	0.15	7.26	24	1.6
ML9-380		0.09	0.62	41	0.18	7.34	33	2.4

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li
	Units	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1
KL2-05																
KL2-10																
KL2-15																
KL2-20																
KL2-25																
KL2-30																
KL2-35																
KL2-40																
KL2-45																
KL2-50																
KL2-55																
KL2-60																
KL2-65																
KL2-70																
KL2-75																
KL2-80																
KL2-85																
KL2-90																
KL2-95																
KL2-100																
KL2-105																
KL2-110																
KL2-115																
KL2-120																
KL2-125																
KL2-130																
KL2-135																
KL2-140																
ML5-100		0.26	22.7	8.8	37	0.78	24.6	1.8	3.62	0.07	0.07	0.03	0.018	0.12	12	9.4
ML5-120		0.15	16.25	7.6	36	0.57	16.1	1.61	3.86	0.06	0.11	0.01	0.016	0.1	8.1	8.2
ML5-140		0.1	12.9	7.2	34	0.66	15.1	1.72	4.11	0.05	0.09	0.01	0.014	0.05	7	9.2
ML5-160		0.47	15.45	11	43	0.91	12.8	1.86	4.61	0.05	0.09	0.01	0.017	0.08	7.3	8.2
ML5-180		0.24	17	9.2	40	1.22	16.2	1.81	4.78	0.06	0.04	0.01	0.019	0.07	8.4	10.7
ML5-200		0.61	20.3	14.9	43	1.53	16.4	2.33	5.96	0.06	0.03	0.01	0.025	0.06	8.8	9
ML5-220		0.53	19.95	10.7	36	1.13	21.2	1.79	4.79	0.06	0.03	0.02	0.018	0.05	9.5	8.1
ML5-240		0.44	15.35	10.2	50	1.2	17.1	2.08	5.22	0.06	0.03	0.01	0.024	0.06	7.6	10.5
ML5-260		0.56	24.2	13.8	45	1.43	21.4	2.22	5.44	0.07	0.04	0.02	0.026	0.06	9.5	10.4
ML5-280		0.49	16.15	12	45	1.03	16.5	2.06	5.12	0.06	0.06	0.01	0.021	0.05	7.8	10.1
ML5-300		0.36	16.4	10.3	49	1.05	17.1	1.92	4.73	0.06	0.05	0.01	0.019	0.06	8	10.4
ML5-320		0.62	17.85	14.4	46	1.33	16.5	2.12	5.13	0.06	0.04	0.02	0.022	0.05	9.2	9.5

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn
	Units	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
KL2-05																
KL2-10																
KL2-15																
KL2-20																
KL2-25																
KL2-30																
KL2-35																
KL2-40																
KL2-45																
KL2-50																
KL2-55																
KL2-60																
KL2-65																
KL2-70																
KL2-75																
KL2-80																
KL2-85																
KL2-90																
KL2-95																
KL2-100																
KL2-105																
KL2-110																
KL2-115																
KL2-120																
KL2-125																
KL2-130																
KL2-135																
KL2-140																
ML5-100		0.76	356	0.7	0.03	1.58	30.9	610	5.7	8.1	<0.001	0.01	0.67	4.8	0.5	0.4
ML5-120		0.36	152	0.69	0.01	1.52	31.6	240	4.8	10.2	<0.001	<0.01	0.36	4.2	0.3	0.4
ML5-140		0.43	164	0.79	0.01	1.46	28.4	260	5	6.3	<0.001	<0.01	0.42	3	0.2	0.4
ML5-160		0.46	450	0.74	0.02	1.84	38.5	370	6.7	23.4	<0.001	0.01	0.35	3.4	0.3	0.5
ML5-180		0.48	374	0.75	0.01	2.15	32.8	220	5.3	23.4	<0.001	0.01	0.31	4	0.3	0.7
ML5-200		0.44	861	1.01	0.02	2.38	40.7	420	7.6	19.7	<0.001	0.02	0.36	3.7	0.3	0.7
ML5-220		0.41	428	0.63	0.02	1.8	34	360	5.6	14.3	<0.001	0.02	0.29	3.9	0.4	0.5
ML5-240		0.54	291	0.65	0.02	2.02	49.5	420	6.8	17	<0.001	<0.01	0.35	3.9	0.3	0.6
ML5-260		0.5	561	0.73	0.02	2.25	52	410	7.3	15.5	<0.001	0.01	0.39	4.4	0.4	0.6
ML5-280		0.49	415	0.81	0.01	1.94	42.3	380	6.5	13.1	<0.001	<0.01	0.36	4	0.3	0.6
ML5-300		0.54	344	0.58	0.02	2.03	50.1	410	6.4	18.3	<0.001	<0.01	0.34	4.1	0.3	0.6
ML5-320		0.48	669	0.75	0.02	2.2	49.7	470	7	15.3	<0.001	0.01	0.34	3.9	0.4	0.6

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method / Analyte / Units / LOR	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005	ME-MS41 Tl ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5
KL2-05													
KL2-10													
KL2-15													
KL2-20													
KL2-25													
KL2-30													
KL2-35													
KL2-40													
KL2-45													
KL2-50													
KL2-55													
KL2-60													
KL2-65													
KL2-70													
KL2-75													
KL2-80													
KL2-85													
KL2-90													
KL2-95													
KL2-100													
KL2-105													
KL2-110													
KL2-115													
KL2-120													
KL2-125													
KL2-130													
KL2-135													
KL2-140													
ML5-100		46.2	<0.01	0.02	3.1	0.08	0.08	0.53	42	0.26	8.1	41	2
ML5-120		13.5	<0.01	0.01	2.6	0.088	0.08	0.31	43	0.31	4.69	23	3.7
ML5-140		11.7	<0.01	0.02	2.3	0.082	0.05	0.34	42	0.32	2.72	30	3
ML5-160		16.5	<0.01	0.01	2.1	0.105	0.09	0.46	42	0.65	3.83	40	3.2
ML5-180		15.6	<0.01	0.01	3	0.114	0.12	0.76	43	0.43	4.94	37	1.3
ML5-200		14.5	<0.01	0.02	2.1	0.131	0.15	0.58	56	0.82	5.14	75	1.3
ML5-220		16.8	<0.01	0.02	1.6	0.101	0.09	0.53	44	0.79	5.86	36	1
ML5-240		15.2	<0.01	0.01	2	0.115	0.11	0.49	48	0.47	4.13	47	1.2
ML5-260		15.5	<0.01	0.02	2.5	0.117	0.12	0.8	51	0.45	5.98	52	1.5
ML5-280		14	<0.01	0.02	2.4	0.117	0.1	0.48	49	0.44	4.03	48	2.1
ML5-300		15.1	<0.01	0.01	2.5	0.108	0.09	0.55	44	0.39	4.46	41	2
ML5-320		16.9	<0.01	0.02	2.4	0.113	0.1	0.52	49	0.6	5.33	52	1.4

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
ML5-340		0.20														
ML5-360		0.22														
ML5-380		0.20														
ML5-400		0.28														
ML5-420		0.08														
ML5-440		0.24														
ML5-460		0.26														
ML5-480		0.20														
ML5-500		0.24														
ML5-520		0.28														
ML5-540		0.22														
ML5-560		0.22														
ML5-580		0.24														
ML5-600		0.24														
ML5-620		0.24														
ML5-640		0.22														
ML5-660		0.20														
ML5-680		0.26														
ML5-700		0.20														

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
ML5-340																
ML5-360																
ML5-380																
ML5-400																
ML5-420																
ML5-440																
ML5-460																
ML5-480																
ML5-500																
ML5-520																
ML5-540																
ML5-560																
ML5-580																
ML5-600																
ML5-620																
ML5-640																
ML5-660																
ML5-680																
ML5-700																

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ti	Tl	U	V	W	Zn	Ag	Al	As	Au	B	Ba	Be	Bi	Ca
	Units	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.01	10	10	1	10	2	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01
ML5-340								0.06	1.39	5.4	<0.2	<10	170	0.29	0.14	0.31
ML5-360								0.1	1.55	6.2	<0.2	<10	220	0.37	0.19	0.36
ML5-380								0.23	2.17	15	<0.2	<10	300	0.59	0.22	0.48
ML5-400								0.08	1.63	11.6	<0.2	<10	160	0.38	0.17	0.34
ML5-420								0.04	1.57	7.7	<0.2	<10	150	0.31	0.18	0.27
ML5-440								0.1	1.53	6.9	<0.2	<10	170	0.42	0.16	0.35
ML5-460								0.11	1.71	7.1	<0.2	<10	240	0.34	0.18	0.49
ML5-480								0.12	1.57	7.1	<0.2	<10	170	0.4	0.16	0.37
ML5-500								0.12	1.4	6.4	<0.2	<10	170	0.33	0.14	0.4
ML5-520								0.12	1.62	6.9	<0.2	<10	190	0.43	0.17	0.44
ML5-540								0.17	1.53	5.4	<0.2	<10	240	0.39	0.15	0.44
ML5-560								0.15	1.26	4.9	<0.2	<10	180	0.26	0.13	0.38
ML5-580								0.07	1.3	3.7	<0.2	<10	190	0.31	0.14	0.36
ML5-600								0.11	1.79	11.6	<0.2	<10	230	0.41	0.17	0.42
ML5-620								0.05	1.64	6.9	<0.2	<10	160	0.38	0.15	0.38
ML5-640								0.07	2.08	7.2	<0.2	<10	250	0.64	0.17	0.58
ML5-660								0.25	1.84	9.1	<0.2	<10	210	0.57	0.17	0.57
ML5-680								0.1	1.79	6.5	<0.2	<10	210	0.64	0.17	0.52
ML5-700								0.28	1.59	9.1	<0.2	<10	240	0.49	0.16	0.84

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li
	Units	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.02	0.1	1	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1
ML5-340		0.2	14.35	9.8	51	0.94	16.1	1.79	4.81	0.05	0.04	0.01	0.016	0.04	6.5	10
ML5-360		0.4	18.1	12.7	57	1.16	17.7	2.14	5.12	0.06	0.05	0.02	0.021	0.05	8.5	10.1
ML5-380		0.49	30	15.3	70	1.4	31.3	2.67	6.65	0.08	0.07	0.02	0.029	0.07	12	13.3
ML5-400		0.24	14.45	11.2	55	1.07	20.4	2.26	5.48	0.07	0.1	0.01	0.02	0.07	7.5	11.3
ML5-420		0.23	13.1	11.2	56	0.88	19.7	1.99	5.61	0.07	0.07	0.01	0.019	0.05	6.8	12.6
ML5-440		0.39	15.3	11.3	49	1.25	20.1	2.22	5.44	0.07	0.1	0.01	0.023	0.07	7.8	12.7
ML5-460		0.28	15.9	12.3	59	1.51	22.2	2.26	5.82	0.07	0.08	0.02	0.023	0.07	8	15.5
ML5-480		0.41	20.3	11.1	46	1.19	18.5	2.21	5.36	0.06	0.07	0.02	0.021	0.06	8	10.8
ML5-500		0.34	14.8	9.7	48	1.01	16.4	2.02	4.98	0.07	0.08	0.01	0.019	0.06	7.6	10.8
ML5-520		0.32	17.2	10.7	55	1.03	16.3	2.23	5.26	0.07	0.18	0.01	0.023	0.06	8.3	10
ML5-540		0.47	20.9	12.4	55	1.13	16.1	2.1	5.01	0.07	0.14	0.01	0.02	0.08	8.9	10.2
ML5-560		0.24	14.2	9	43	0.91	16.5	1.74	4.33	0.06	0.1	0.01	0.015	0.06	7.2	9.6
ML5-580		0.38	14.4	11.6	40	1.24	13.5	1.74	4.84	0.06	0.09	0.01	0.017	0.06	6.6	10.6
ML5-600		0.16	20.8	14	64	1.59	33	2.31	5.6	0.08	0.08	0.01	0.022	0.11	10.8	11.6
ML5-620		0.19	18.5	11.2	59	1.07	17.8	2.19	5.21	0.07	0.06	0.01	0.019	0.15	7.4	10.4
ML5-640		0.89	23.2	28.4	51	2.41	38.2	2.89	6.76	0.09	0.04	0.01	0.024	0.14	10	14.2
ML5-660		1.02	19.75	22.8	47	2.67	44.3	2.61	6.02	0.08	0.02	0.02	0.025	0.09	8.9	13.5
ML5-680		0.43	24.6	14.4	38	1.32	34.5	3.01	5.86	0.07	0.04	0.02	0.031	0.17	9.8	14.2
ML5-700		0.94	26	20	42	1.63	50.5	2.67	4.84	0.09	0.03	0.02	0.027	0.14	11.1	14.3

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn
	Units	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.01	5	0.05	0.01	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2
ML5-340		0.5	258	0.7	0.02	1.75	46.9	270	5.4	8.3	<0.001	0.02	0.32	3.4	0.3	0.5
ML5-360		0.56	379	0.87	0.02	1.92	54.6	400	6.3	14.1	<0.001	0.02	0.4	3.9	0.3	0.6
ML5-380		0.66	882	1.01	0.02	2.39	88.1	400	9	17.3	<0.001	0.01	0.47	6.1	0.4	0.7
ML5-400		0.63	203	0.89	0.01	1.9	60.1	390	6	14.7	<0.001	0.02	0.4	4	0.3	0.6
ML5-420		0.62	225	1.08	0.02	2.31	55.5	360	6.5	9.2	<0.001	0.02	0.34	3.7	0.3	0.6
ML5-440		0.56	277	0.9	0.02	2.24	57	330	6.7	18.3	<0.001	0.01	0.38	3.9	0.3	0.6
ML5-460		0.7	297	0.88	0.03	2.59	58.7	800	6.9	16.9	<0.001	0.02	0.39	4.4	0.4	0.6
ML5-480		0.52	435	0.85	0.02	2.27	45.7	360	6.1	14.4	<0.001	0.02	0.4	3.9	0.3	0.6
ML5-500		0.54	256	0.87	0.02	2.03	45.7	470	5.7	14	<0.001	0.01	0.38	3.6	0.3	0.5
ML5-520		0.57	278	0.83	0.02	2.09	54.8	760	6.8	13.7	<0.001	0.02	0.37	4.1	0.3	0.7
ML5-540		0.57	499	0.78	0.02	1.88	51.2	560	6.4	21.6	<0.001	<0.01	0.37	4.7	0.3	0.6
ML5-560		0.49	308	0.69	0.02	1.61	38	730	5.3	16	<0.001	<0.01	0.36	3.5	0.3	0.5
ML5-580		0.44	704	0.74	0.01	1.66	33.5	690	6.6	15.4	<0.001	<0.01	0.35	3.3	0.2	0.6
ML5-600		0.64	380	0.67	0.02	1.87	52.1	420	8.6	11.3	<0.001	<0.01	0.58	5.9	0.4	0.6
ML5-620		0.53	342	0.57	0.02	1.39	43.7	690	6.6	14.8	<0.001	0.02	0.38	5.6	0.3	0.5
ML5-640		0.56	1365	0.82	0.01	1.53	39.5	950	15.7	14.6	<0.001	0.06	0.9	5.5	0.5	0.5
ML5-660		0.5	1110	0.85	0.02	1.43	38.5	850	12.6	12.6	<0.001	0.06	0.8	3.9	0.5	0.5
ML5-680		0.45	825	0.82	0.01	1.15	27.4	890	14.1	16.9	<0.001	0.04	1.05	6	0.4	0.5
ML5-700		0.49	890	1.36	0.02	1.13	36.3	1100	17.1	11.5	<0.001	0.06	1.06	3.9	0.8	0.4

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

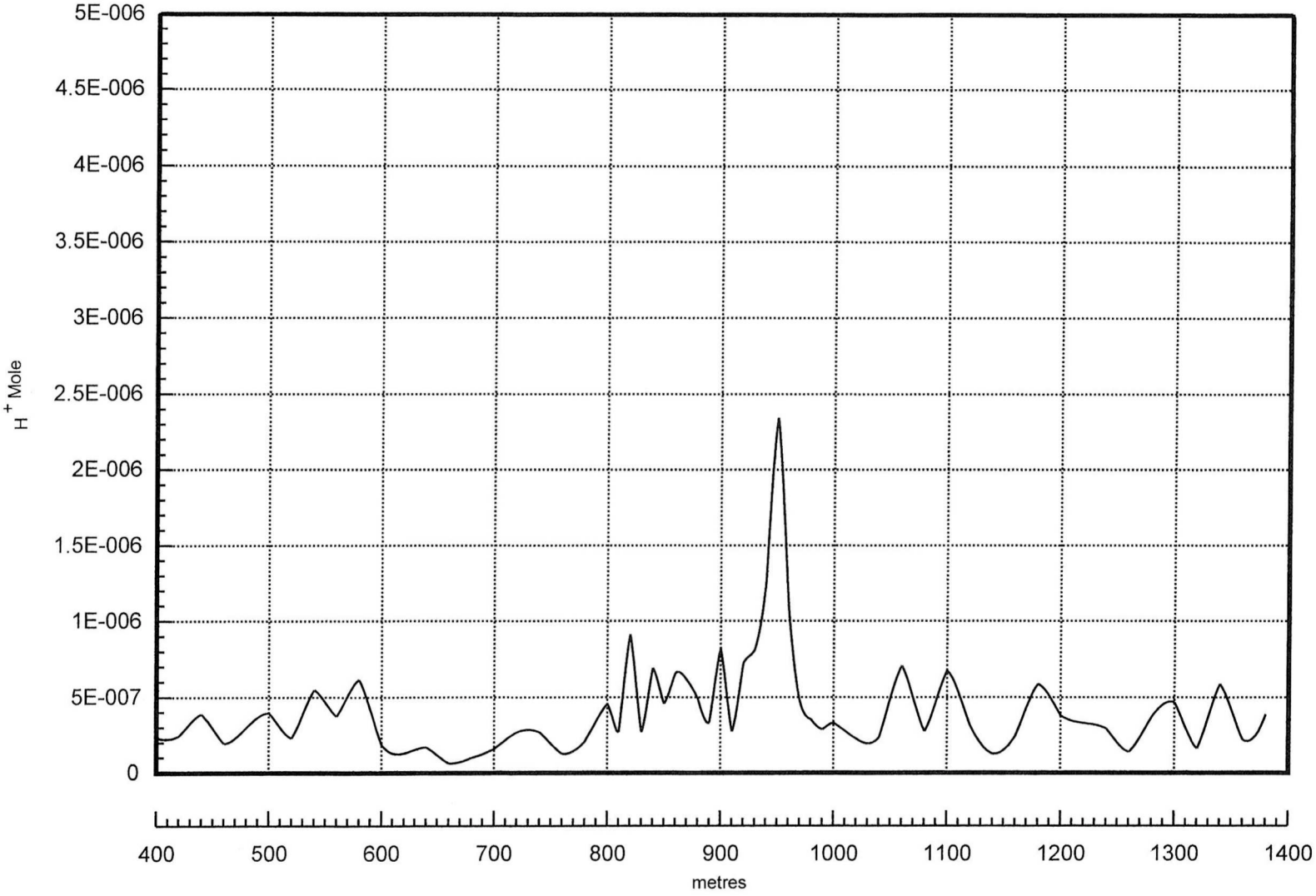
To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

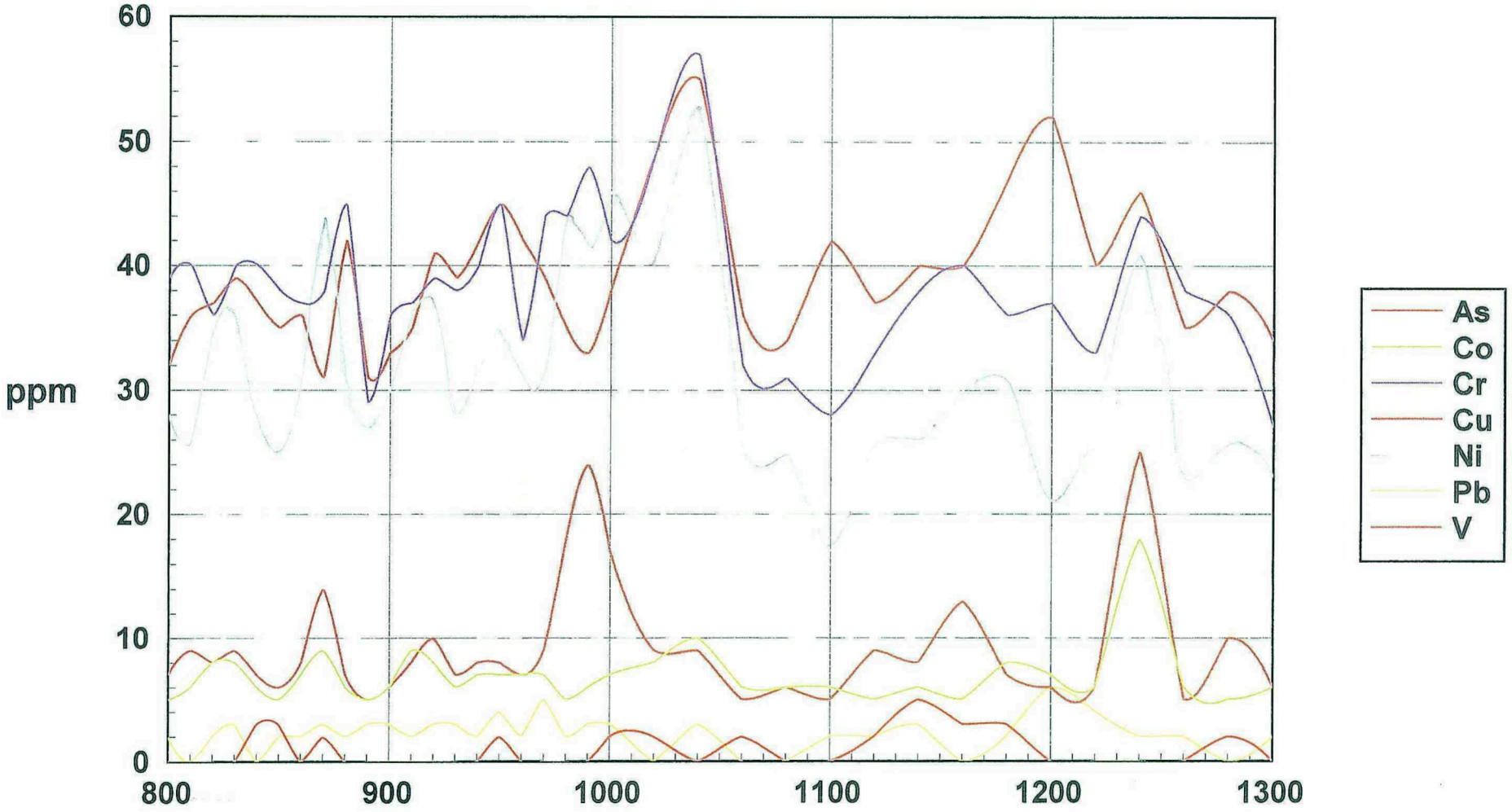
CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.2	0.01	0.01	0.2	0.005	0.02	0.05	1	0.05	0.05	2	0.5
ML5-340		14.7	<0.01	0.01	2	0.103	0.07	0.44	47	0.62	3.35	34	1.5
ML5-360		15.9	<0.01	0.02	2.3	0.113	0.1	0.5	52	0.52	4.63	51	1.8
ML5-380		19.8	<0.01	0.02	3.6	0.139	0.21	0.73	66	0.69	8.18	67	2.7
ML5-400		13.5	<0.01	0.02	2.4	0.138	0.08	0.41	58	0.36	3.87	41	3.6
ML5-420		13.1	<0.01	0.01	1.8	0.138	0.08	0.34	51	0.43	3.55	40	2.4
ML5-440		14.9	<0.01	0.01	3	0.142	0.1	0.54	54	0.52	4.02	53	4.1
ML5-460		18.2	<0.01	0.02	2.7	0.14	0.09	0.48	56	0.43	4.42	46	3.1
ML5-480		17.2	<0.01	0.02	2.4	0.135	0.08	0.42	54	0.43	4.12	53	2.4
ML5-500		15	<0.01	0.02	2.5	0.121	0.07	0.45	49	0.49	3.84	48	3.1
ML5-520		19.8	<0.01	0.02	3.2	0.14	0.07	0.4	51	0.35	3.93	53	5.8
ML5-540		18.2	<0.01	0.01	3.2	0.13	0.1	0.42	50	0.4	4.53	61	4.9
ML5-560		17.1	<0.01	0.01	2.3	0.102	0.06	0.4	41	0.36	3.81	40	3.9
ML5-580		16.5	<0.01	0.02	2.1	0.109	0.08	0.36	41	1.08	3.48	71	3.4
ML5-600		19.8	<0.01	0.02	2.9	0.128	0.11	0.7	58	0.36	8.58	56	2.4
ML5-620		16.2	<0.01	0.02	2.6	0.112	0.09	0.4	52	0.35	4.78	41	2
ML5-640		26.8	<0.01	0.03	1.8	0.095	0.11	0.59	55	0.31	7.33	102	1.4
ML5-660		27.7	<0.01	0.03	0.6	0.094	0.09	0.66	55	0.31	6.71	109	0.6
ML5-680		20.9	<0.01	0.03	1.6	0.063	0.1	0.43	57	0.26	7	92	1
ML5-700		36.9	<0.01	0.04	0.7	0.073	0.1	0.73	48	0.45	10.65	118	0.7

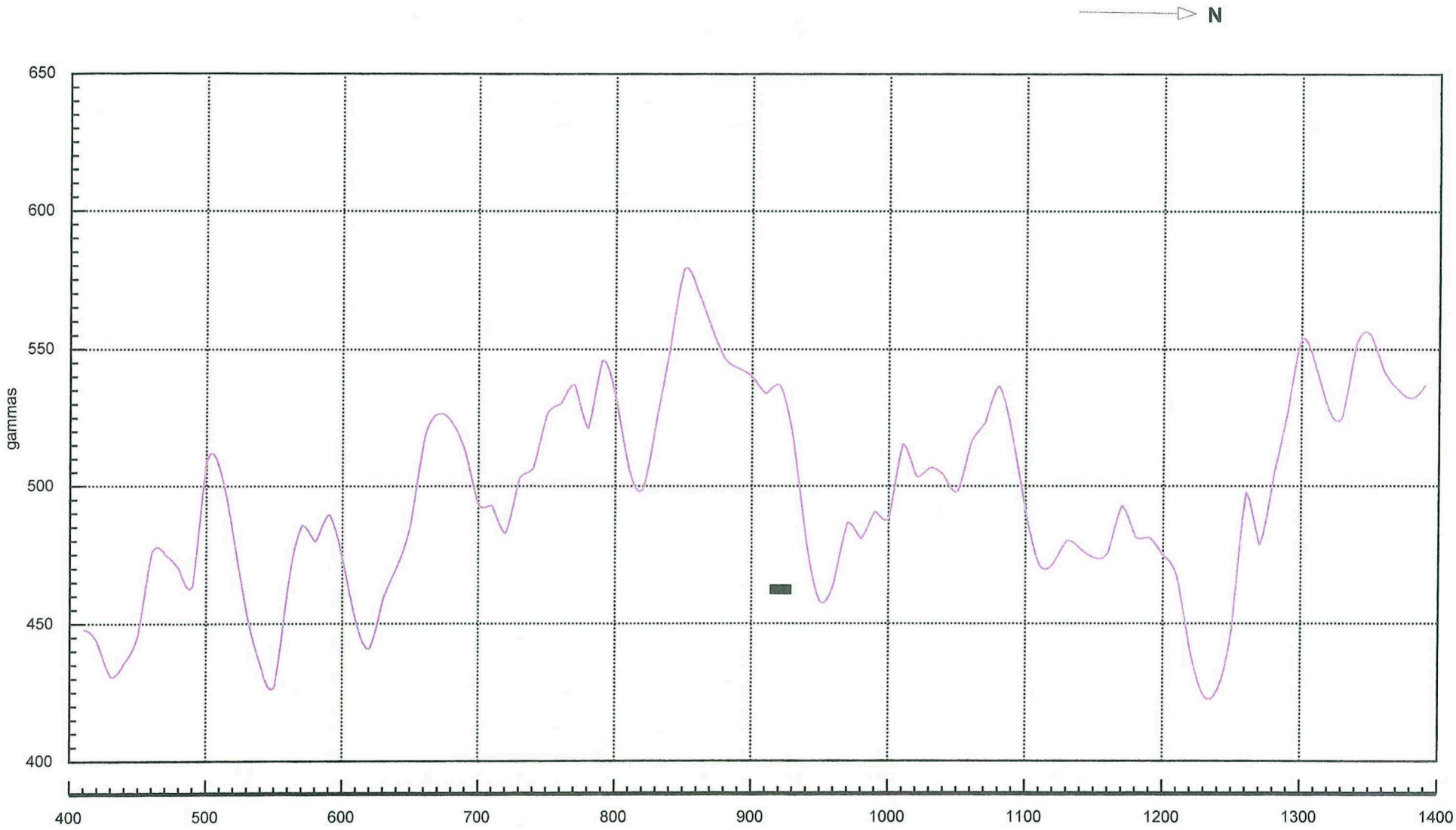
Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).



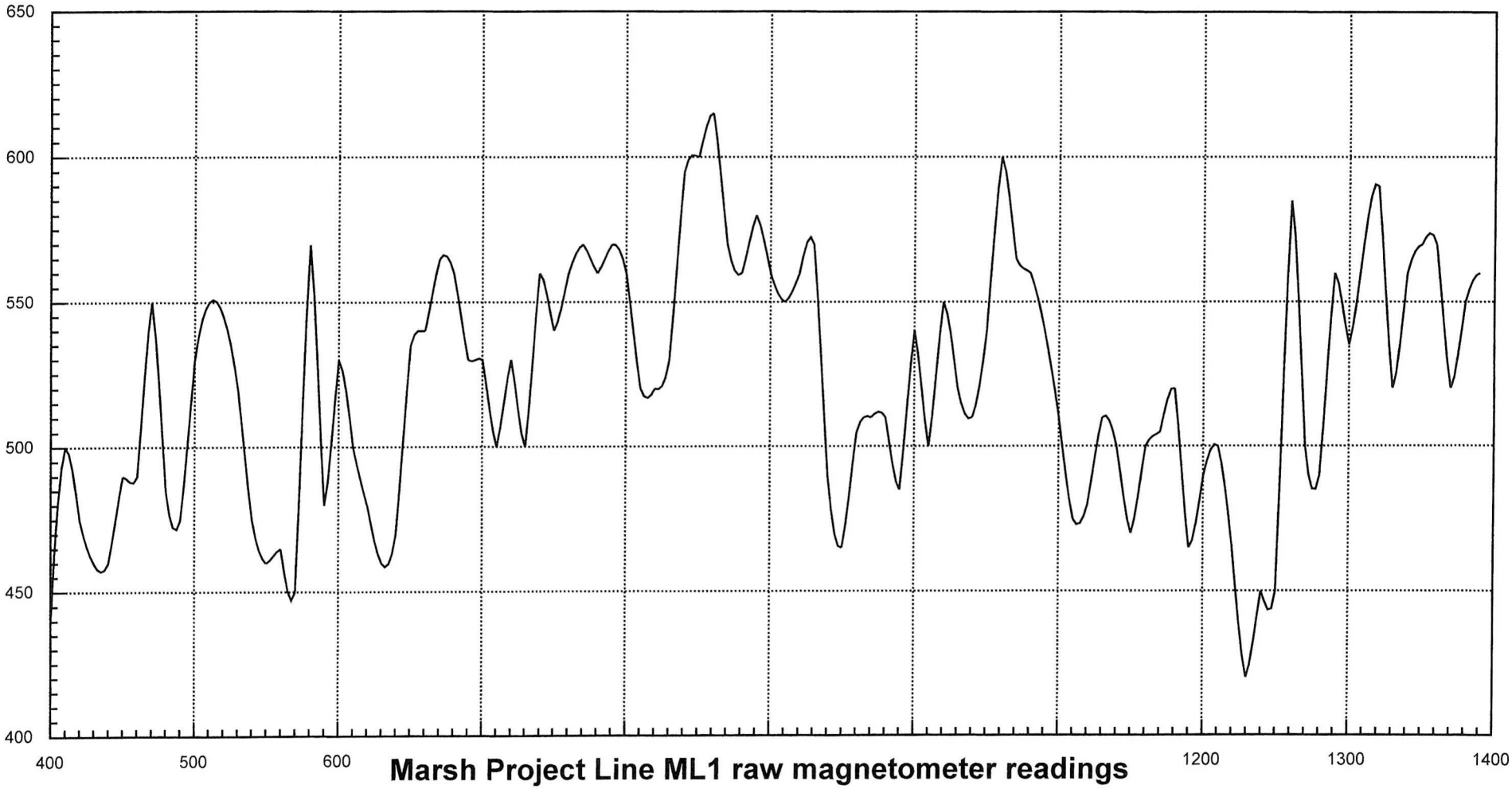
Marsh Project, H+ Mole, Line 1



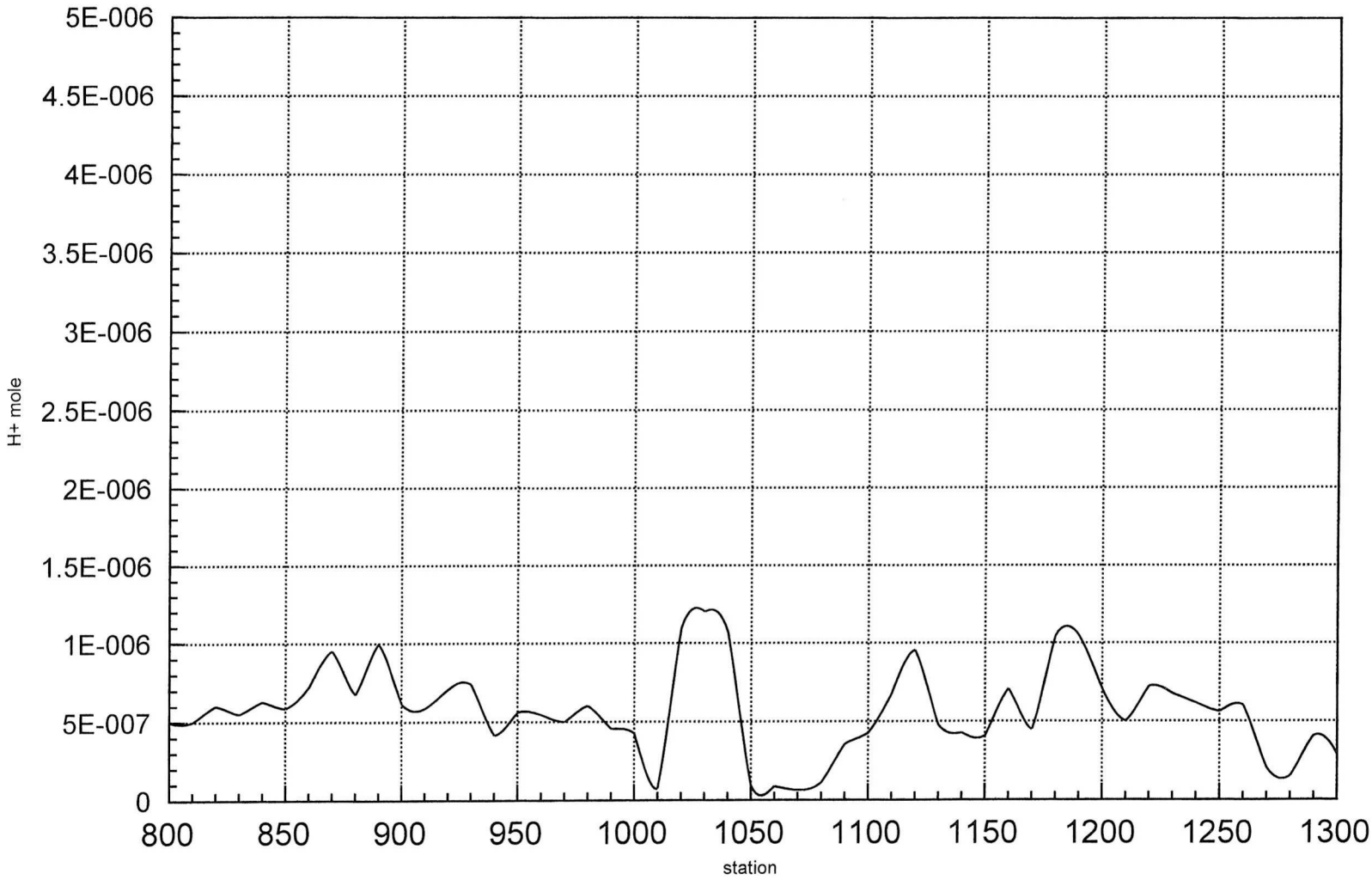
ML1 geochemistry



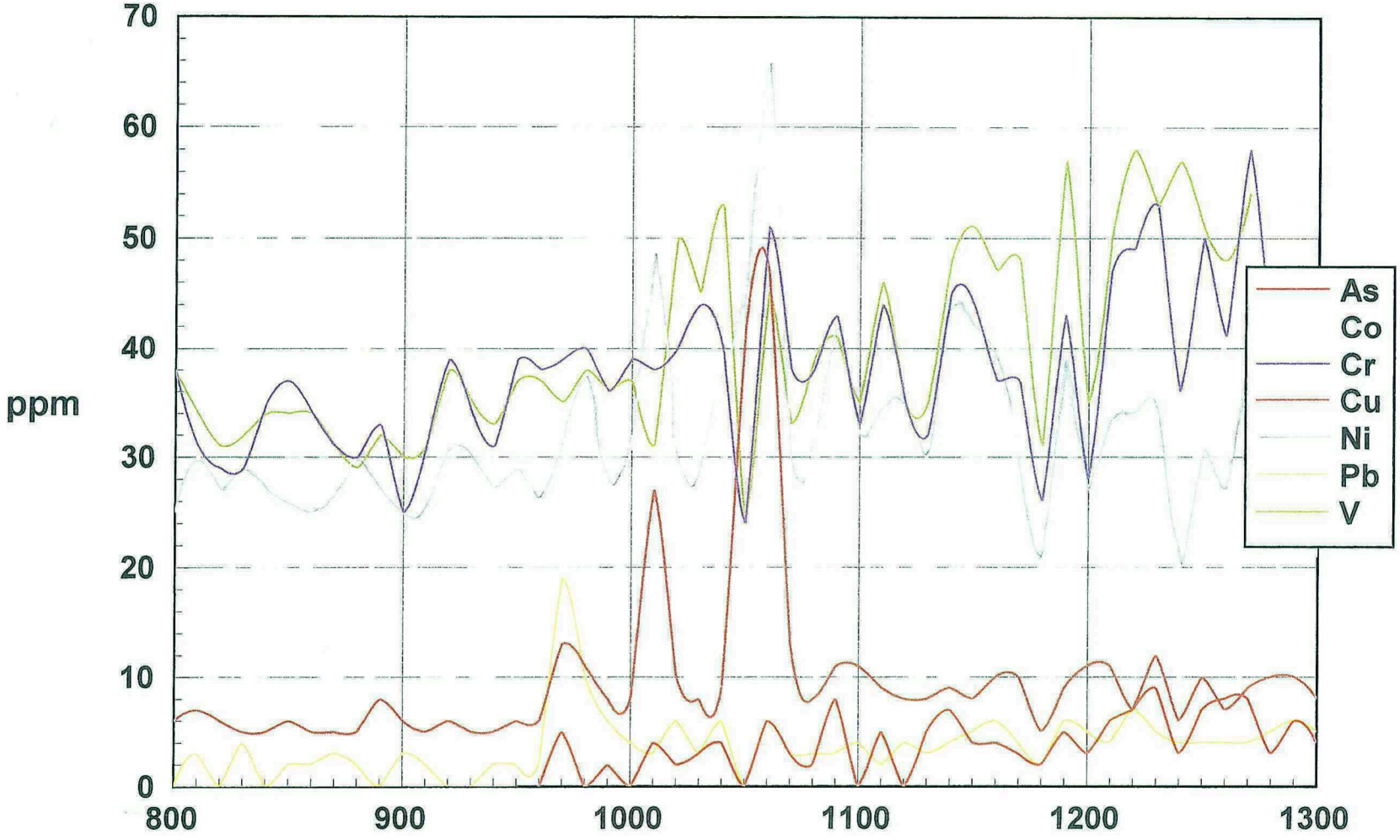
Marsh Project, Magnetometer line 1, 3 point running average



Marsh Project Line ML1 raw magnetometer readings



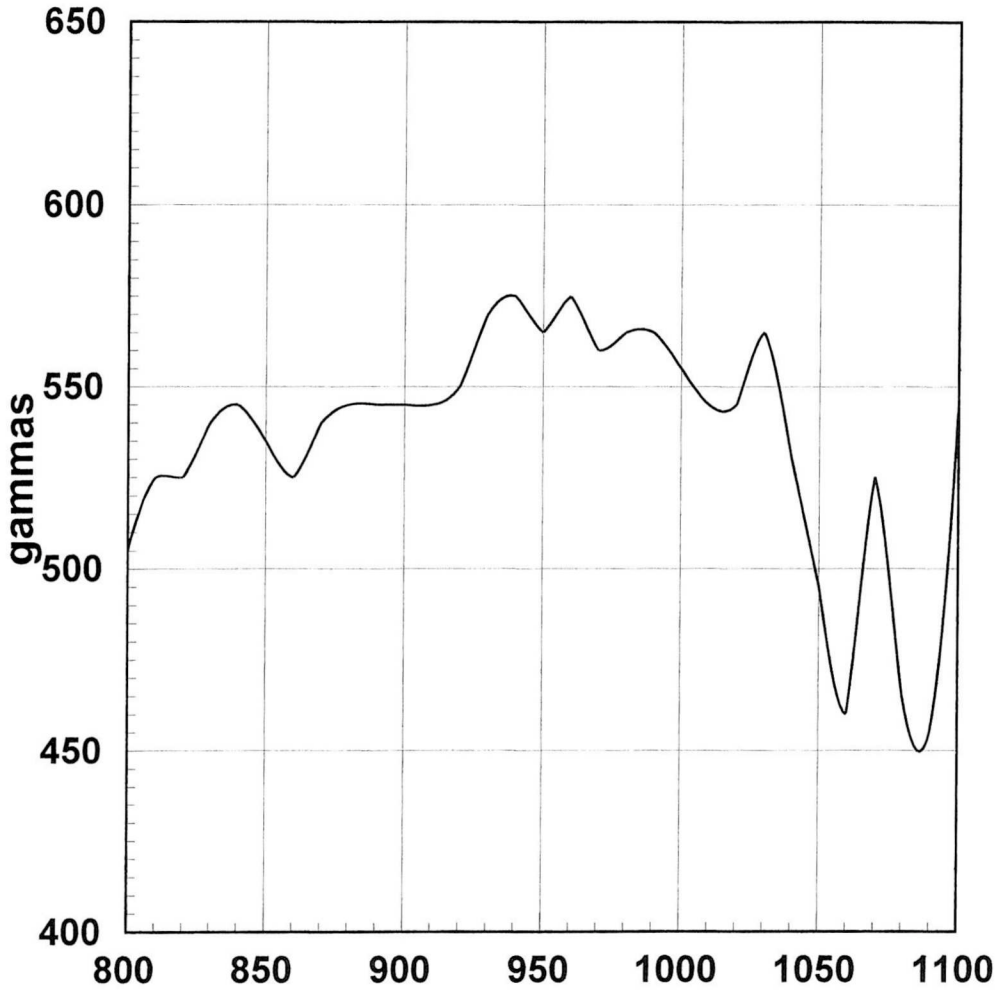
Marsh H+ line 2



ML2 geochemistry

S

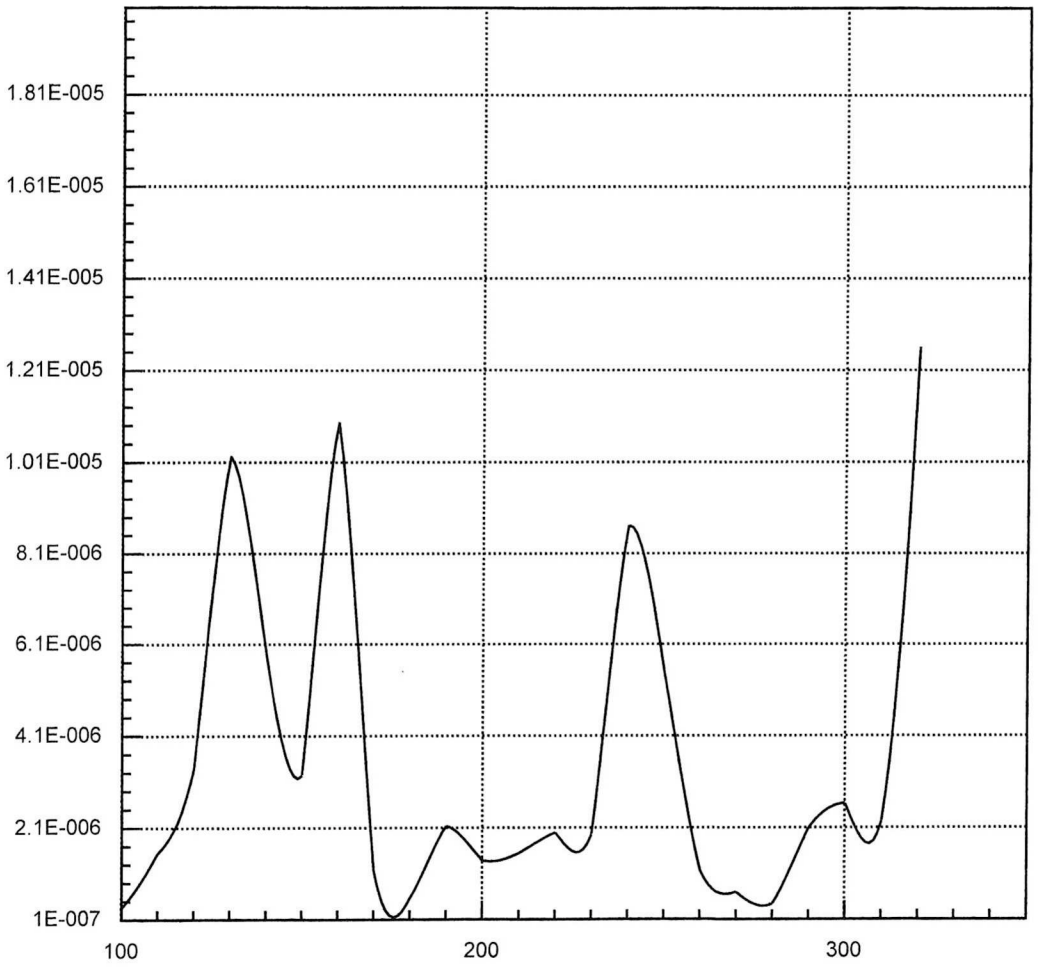
N



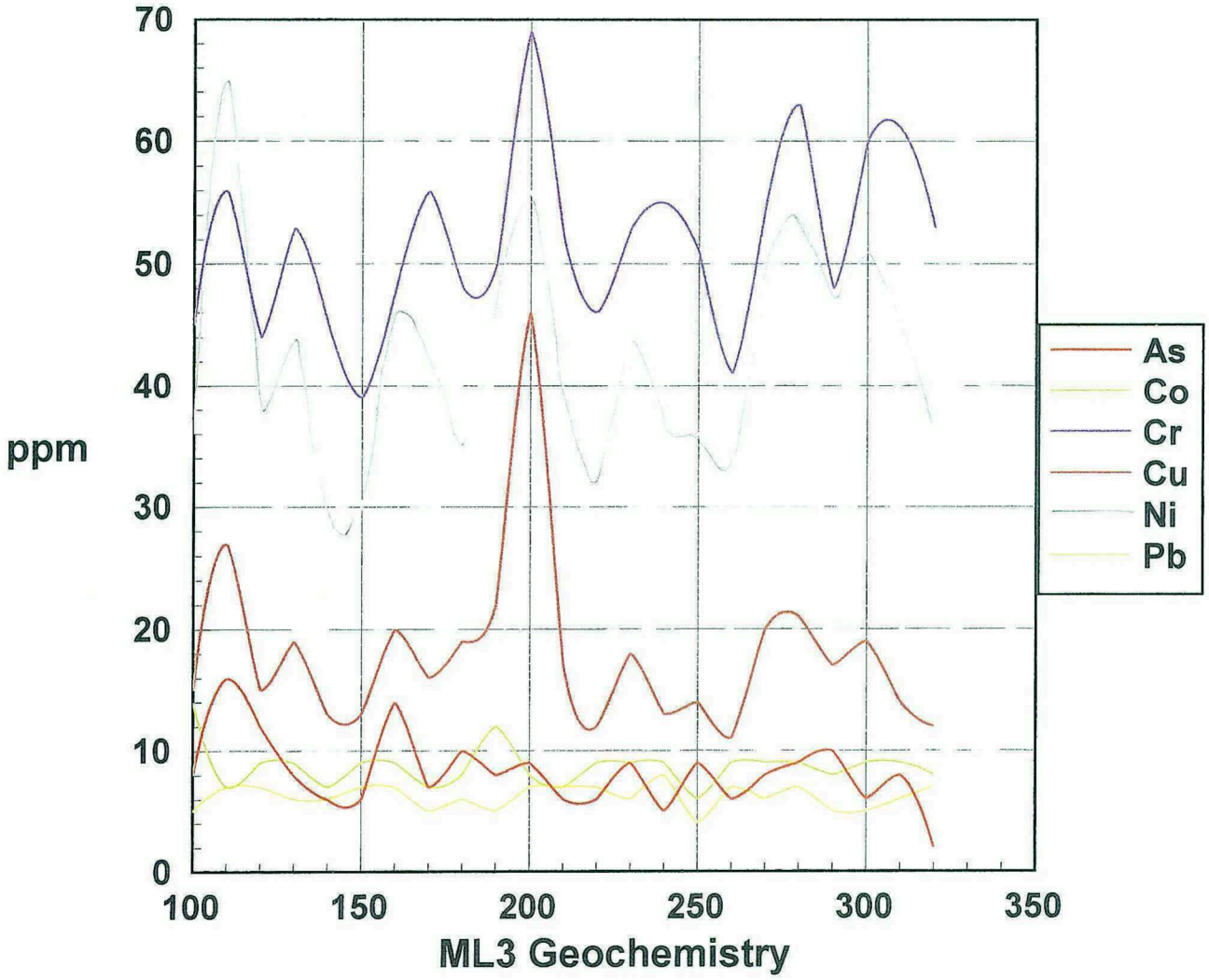
MarshProject Line ML2 Raw magnetometer readings

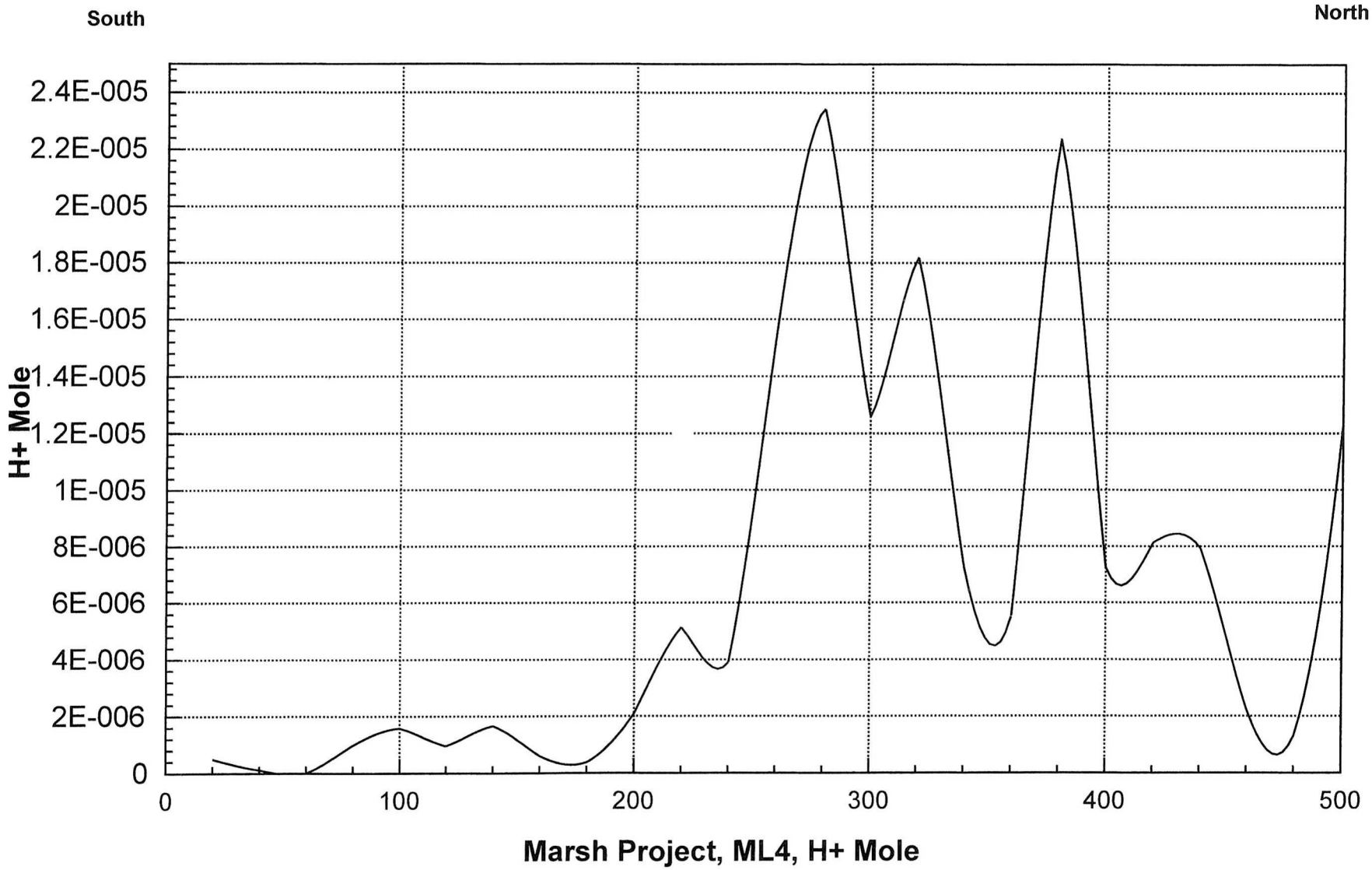
North

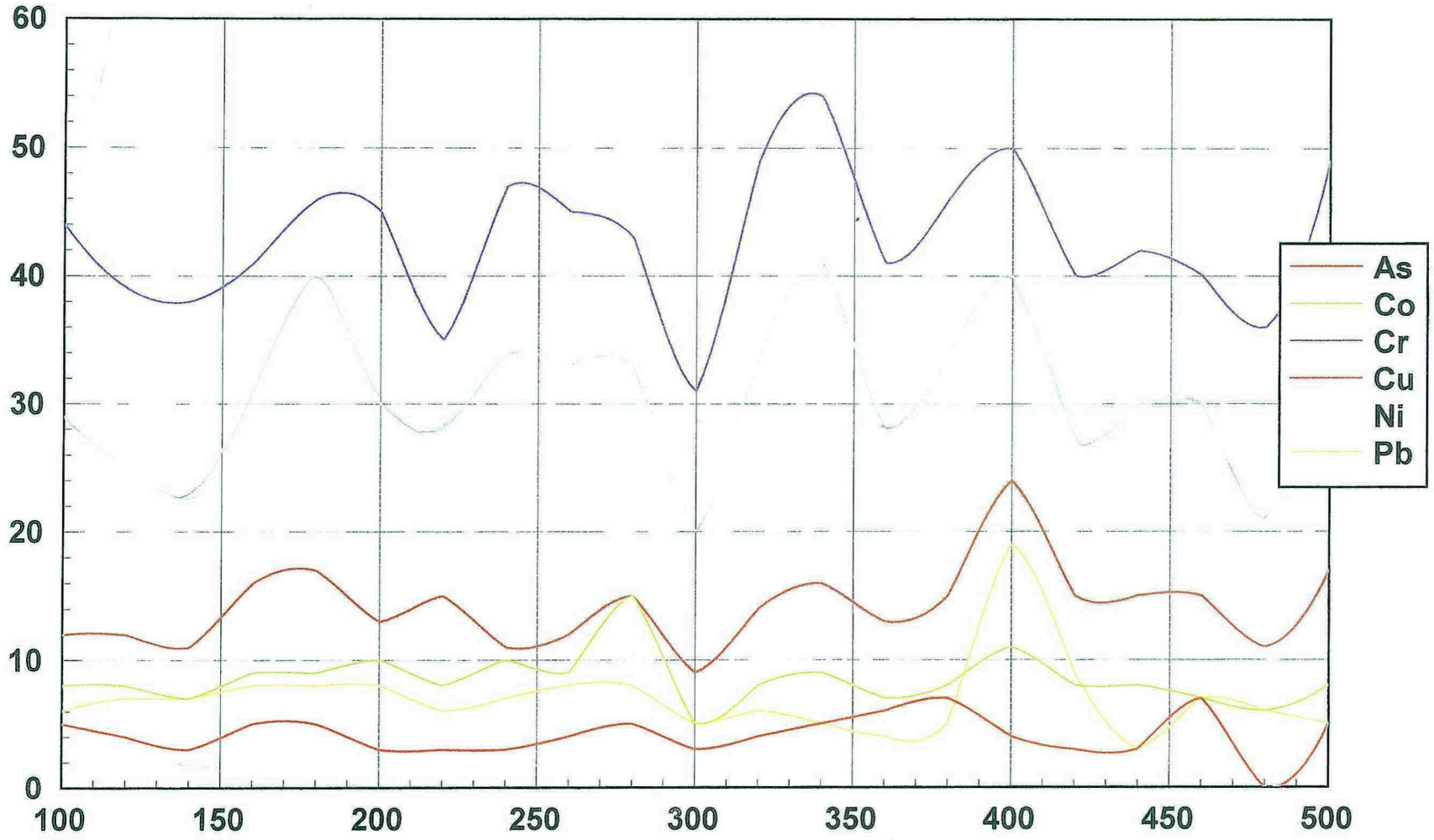
South



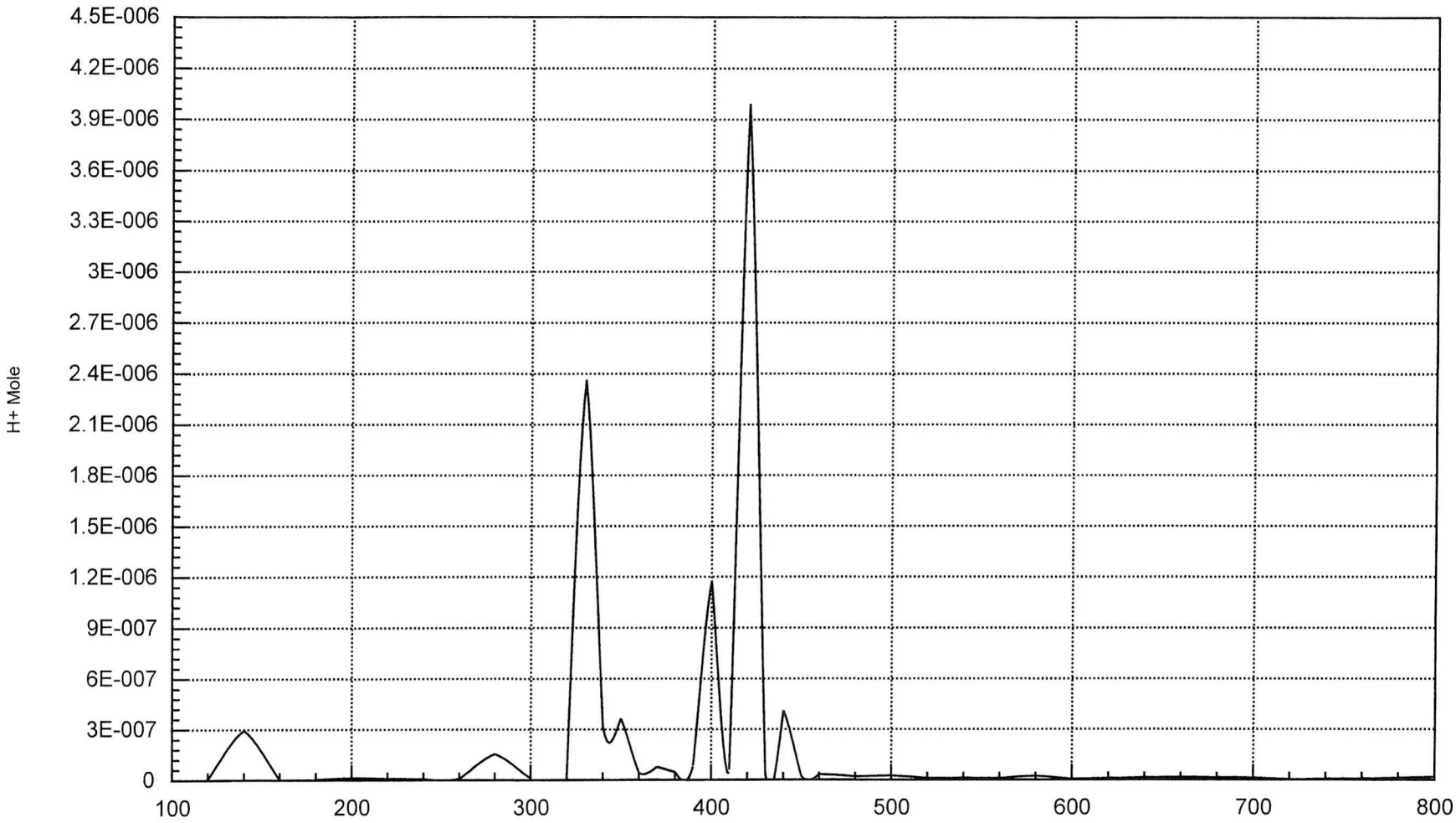
Marsh Project, H+ Mole line 3


70
60
50
40
30
20
10
0
ppm
100
150
200
250
300
350
ML3 Geochemistry
As
Co
Cr
Cu
Ni
Pb

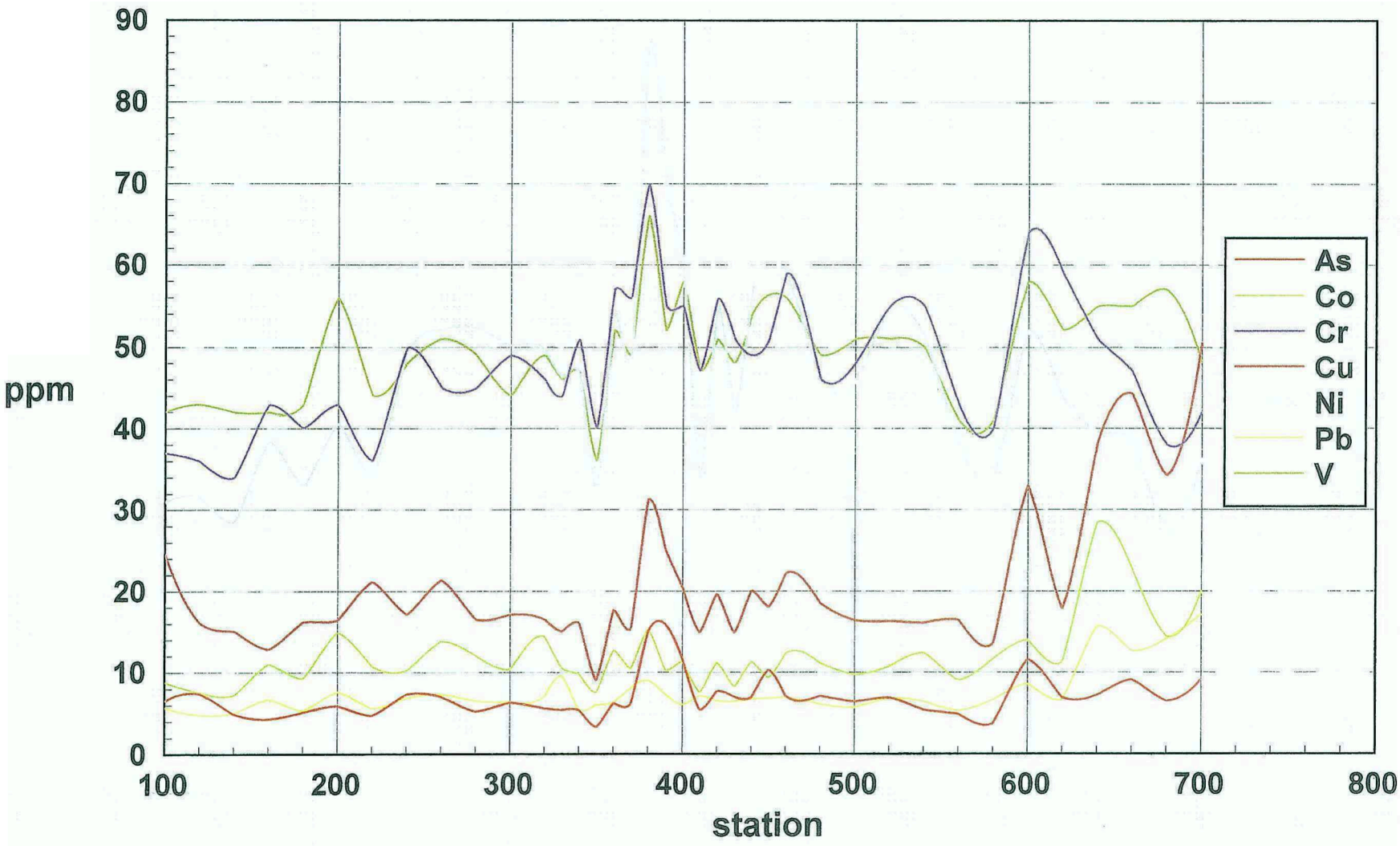

South
North
2.4E-005
2.2E-005
2E-005
1.8E-005
1.6E-005
1.4E-005
1.2E-005
1E-005
8E-006
6E-006
4E-006
2E-006
0
H+ Mole
0
100
200
300
400
500
Marsh Project, ML4, H+ Mole



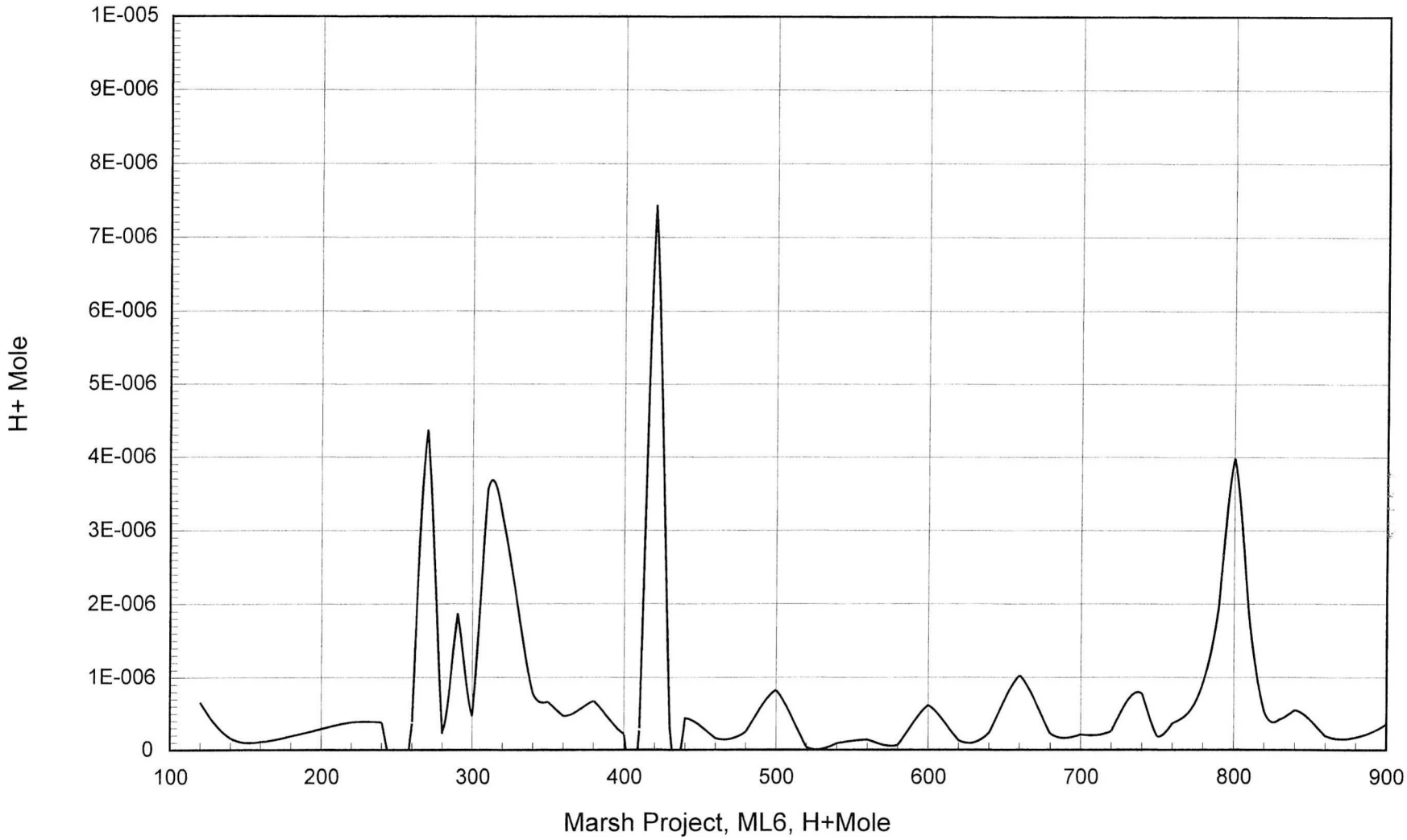
Line ML 4 Geochemistry

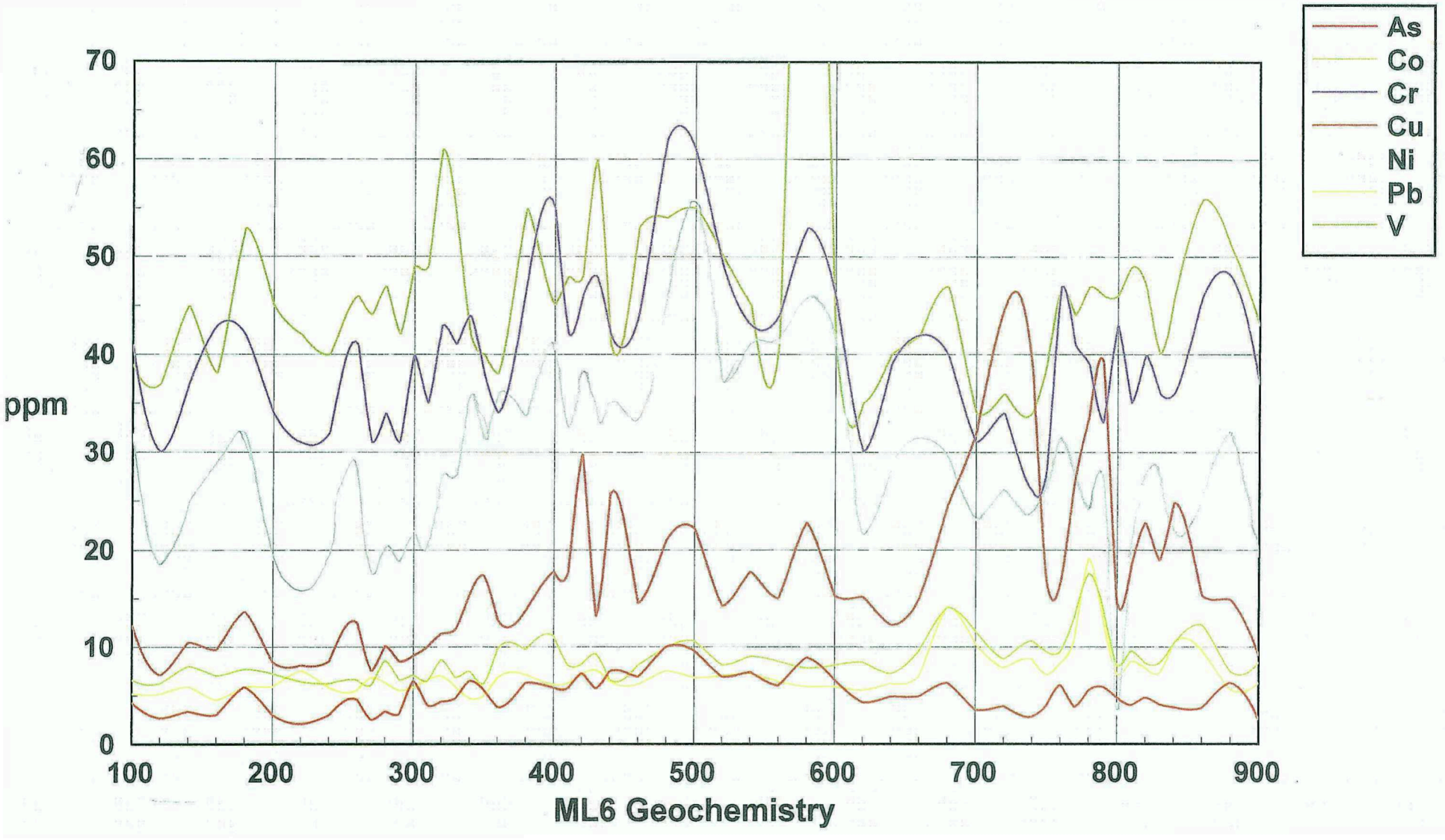


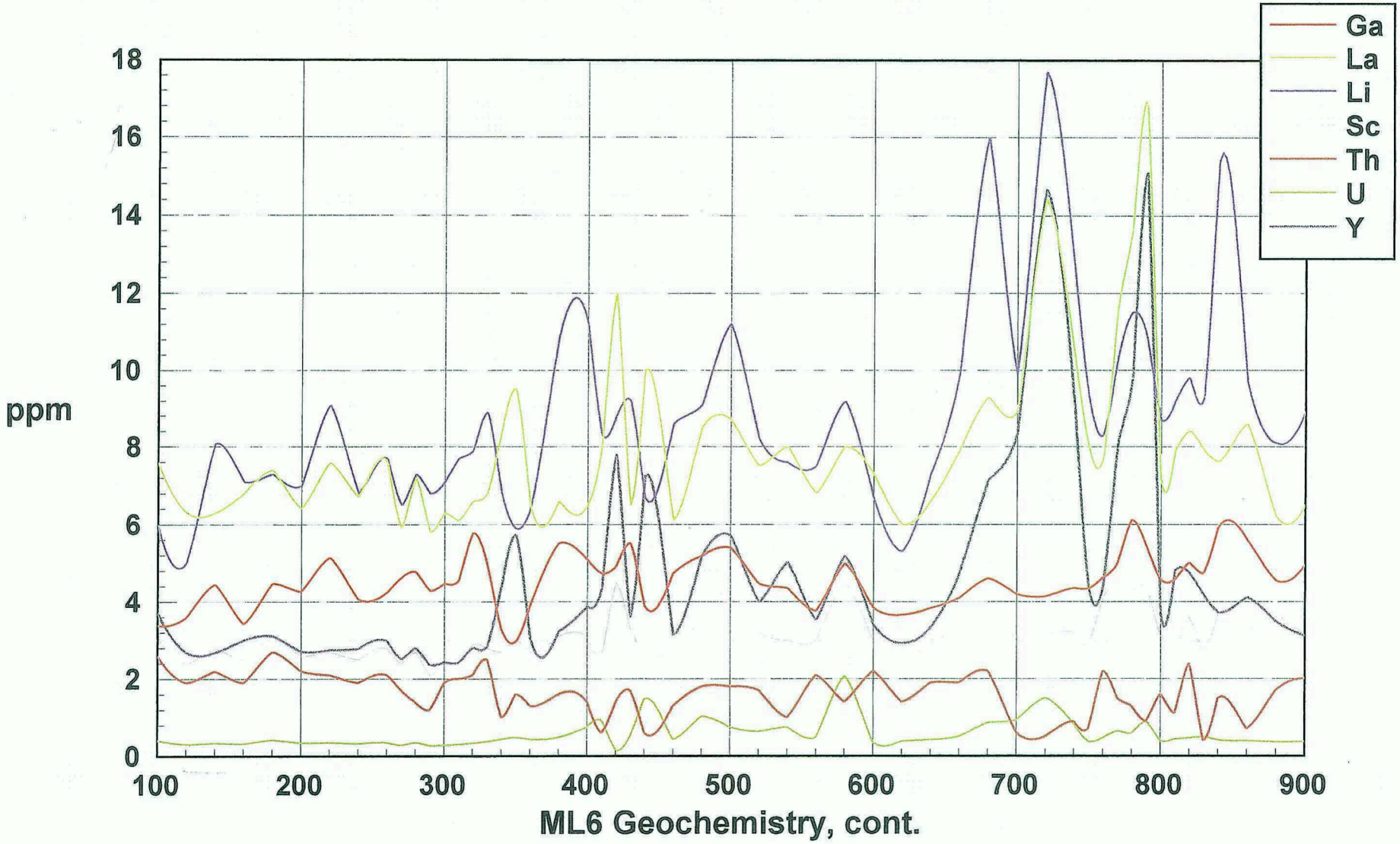
Marsh Project, ML5, Hydrogen mole anomaly

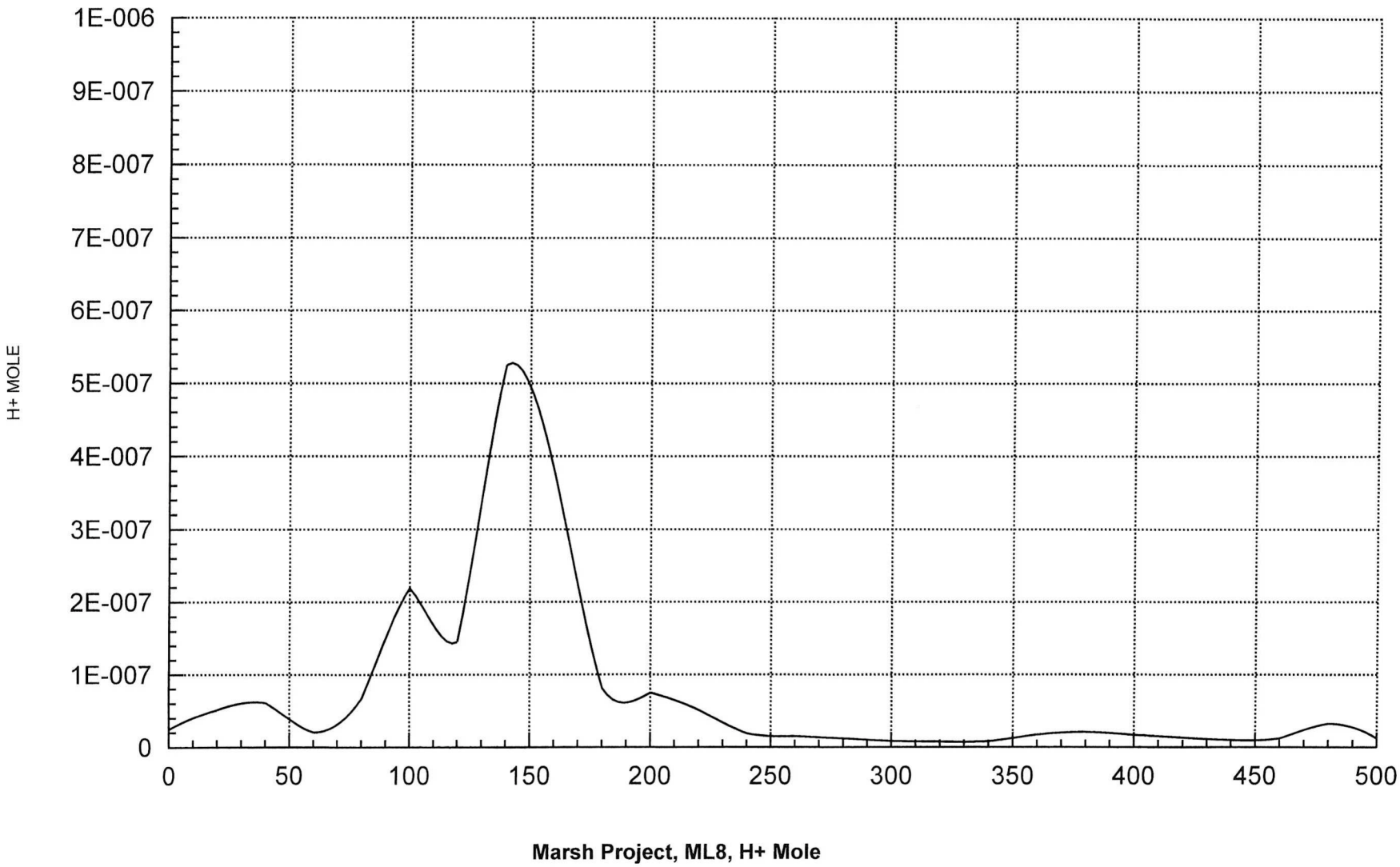


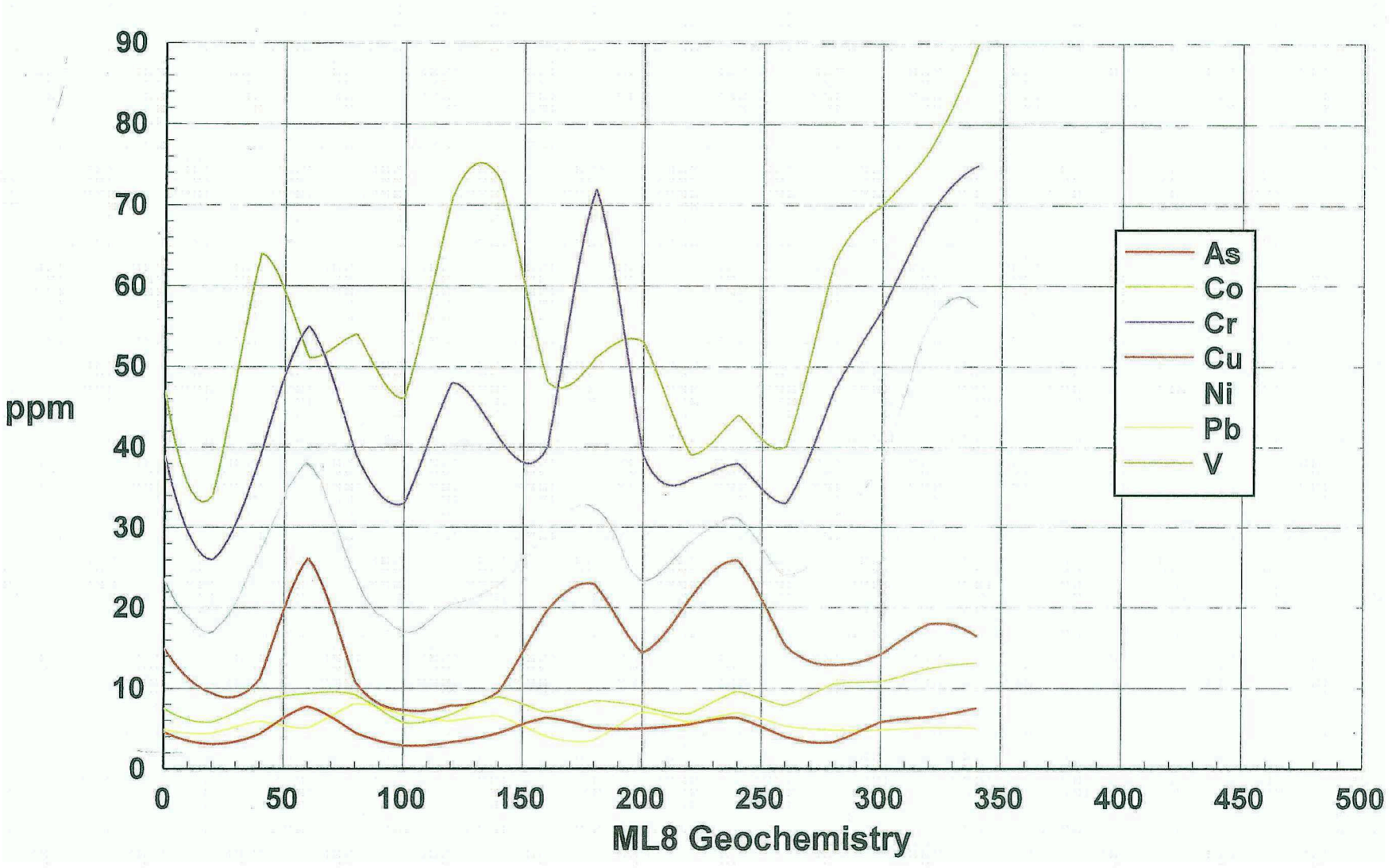
Marsh Project, line ML5 geochem.

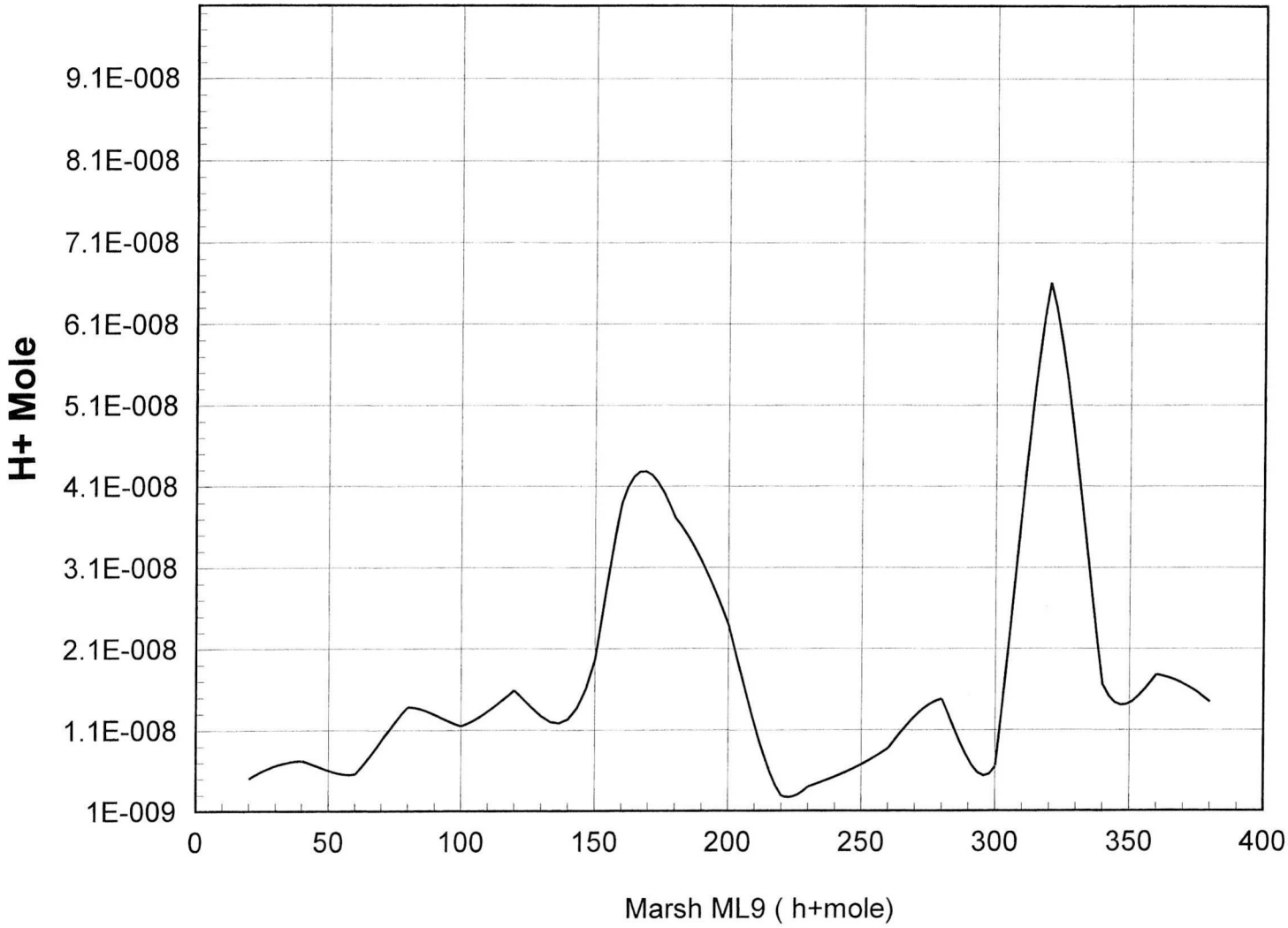

1E-005
9E-006
8E-006
7E-006
6E-006
5E-006
4E-006
3E-006
2E-006
1E-006
0
H+ Mole
100
200
300
400
500
600
700
800
900
Marsh Project, ML6, H+Mole


As
Co
Cr
Cu
Ni
Pb
V
70
60
50
40
30
20
10
0
ppm
100
200
300
400
500
600
700
800
900
ML6 Geochemistry

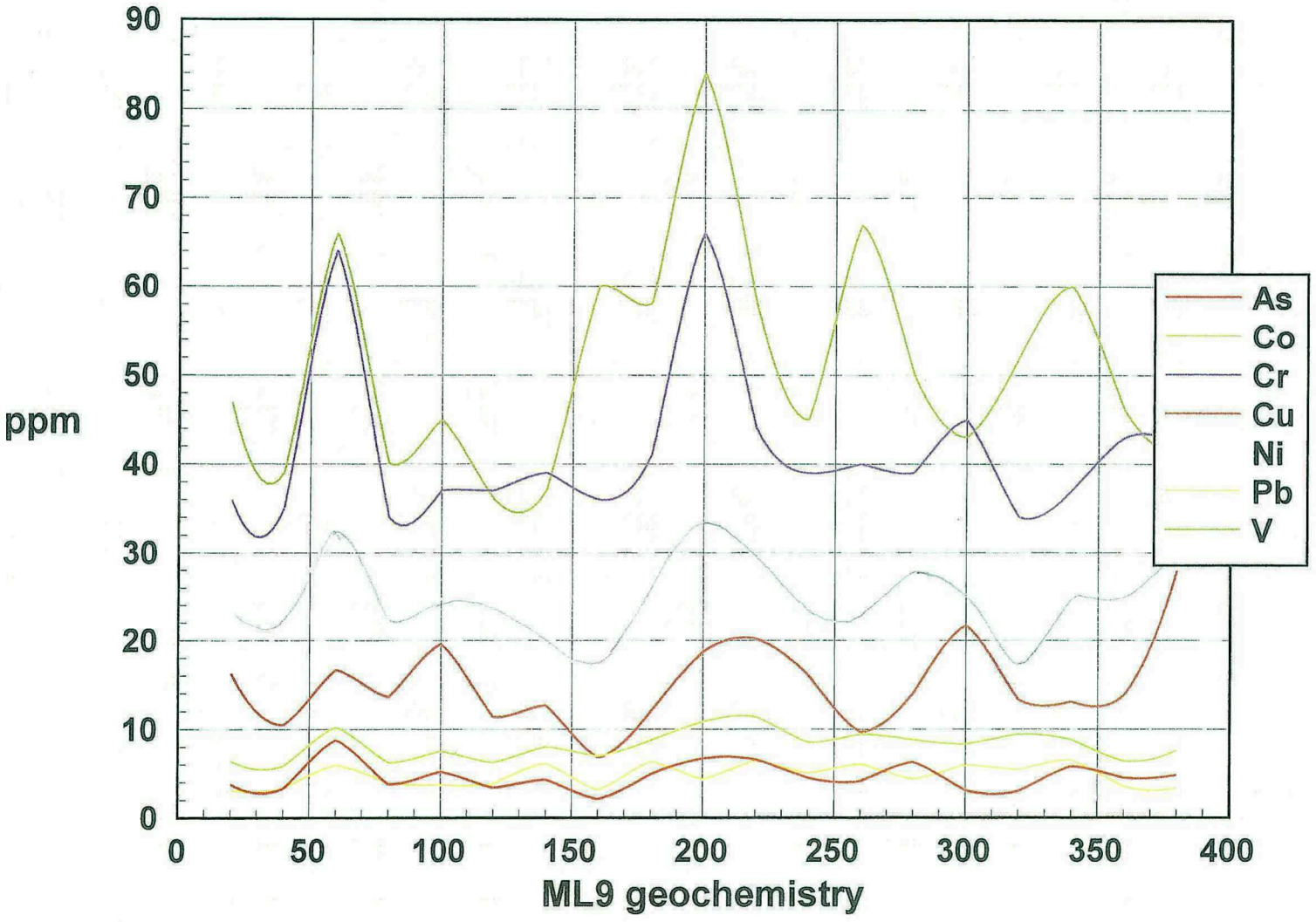

Ga
La
Li
Sc
Th
U
Y
ppm
0
2
4
6
8
10
12
14
16
18
100
200
300
400
500
600
700
800
900
ML6 Geochemistry, cont.

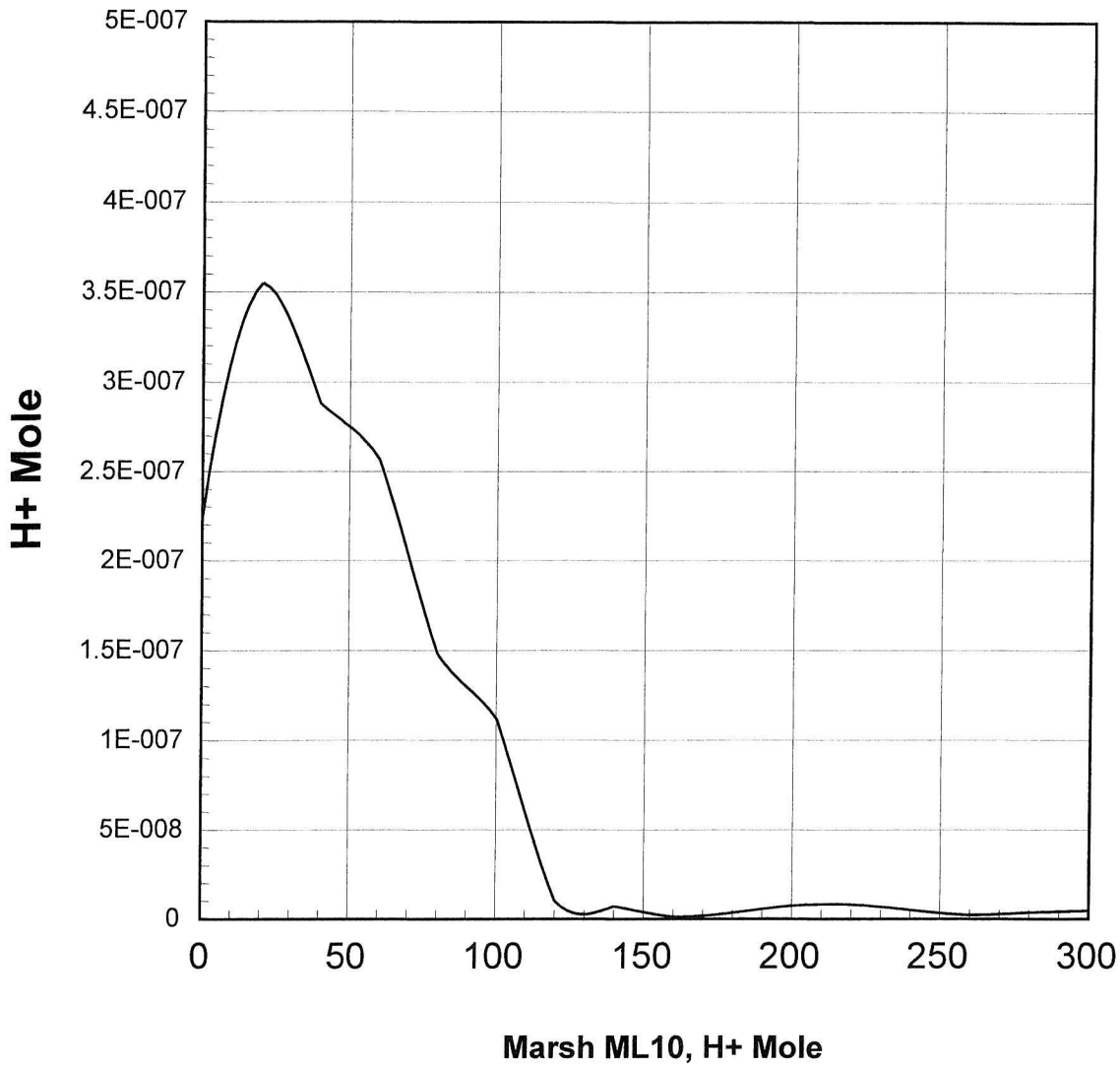

1E-006
9E-007
8E-007
7E-007
6E-007
5E-007
4E-007
3E-007
2E-007
1E-007
0
H+ MOLE
0
50
100
150
200
250
300
350
400
450
500
Marsh Project, ML8, H+ Mole

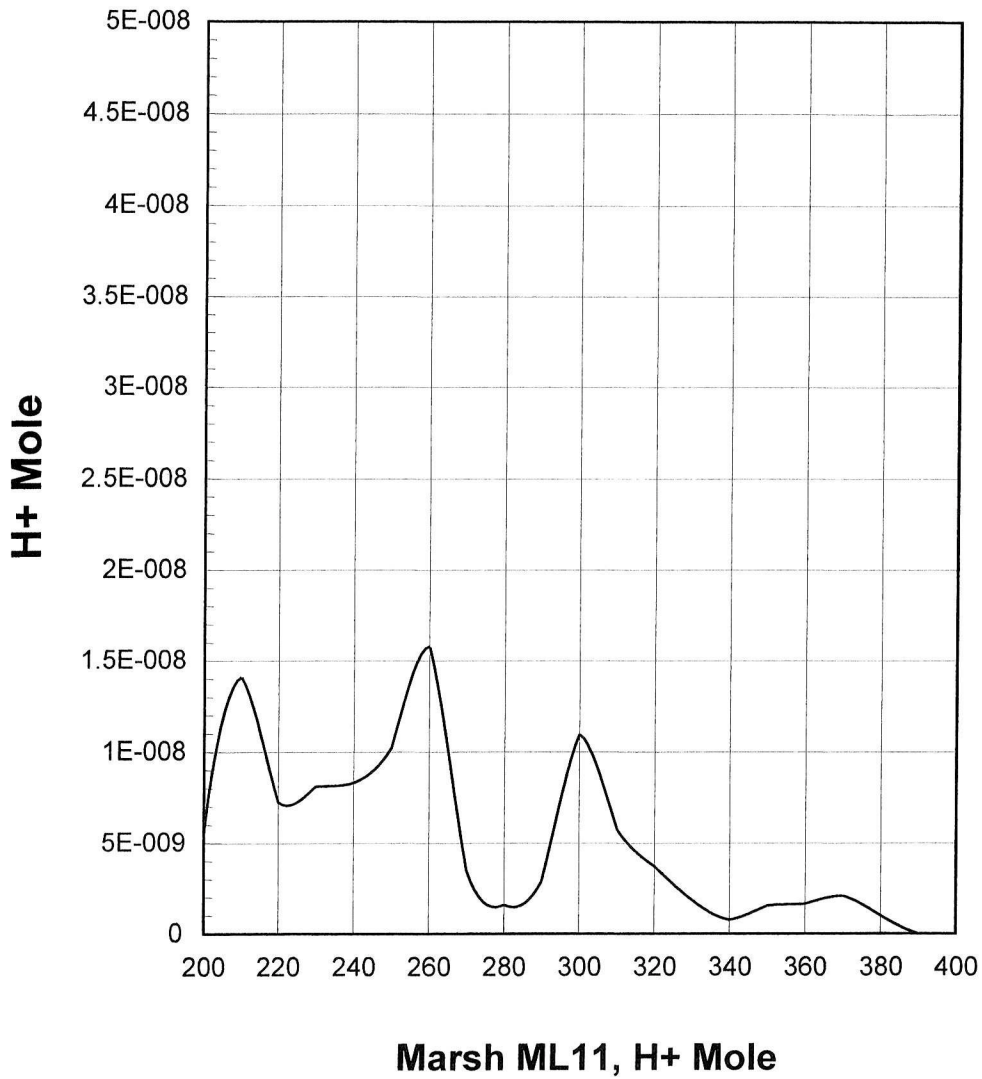

ppm
90
80
70
60
50
40
30
20
10
0
0
50
100
150
200
250
300
350
400
450
500
ML8 Geochemistry
As
Co
Cr
Cu
Ni
Pb
V

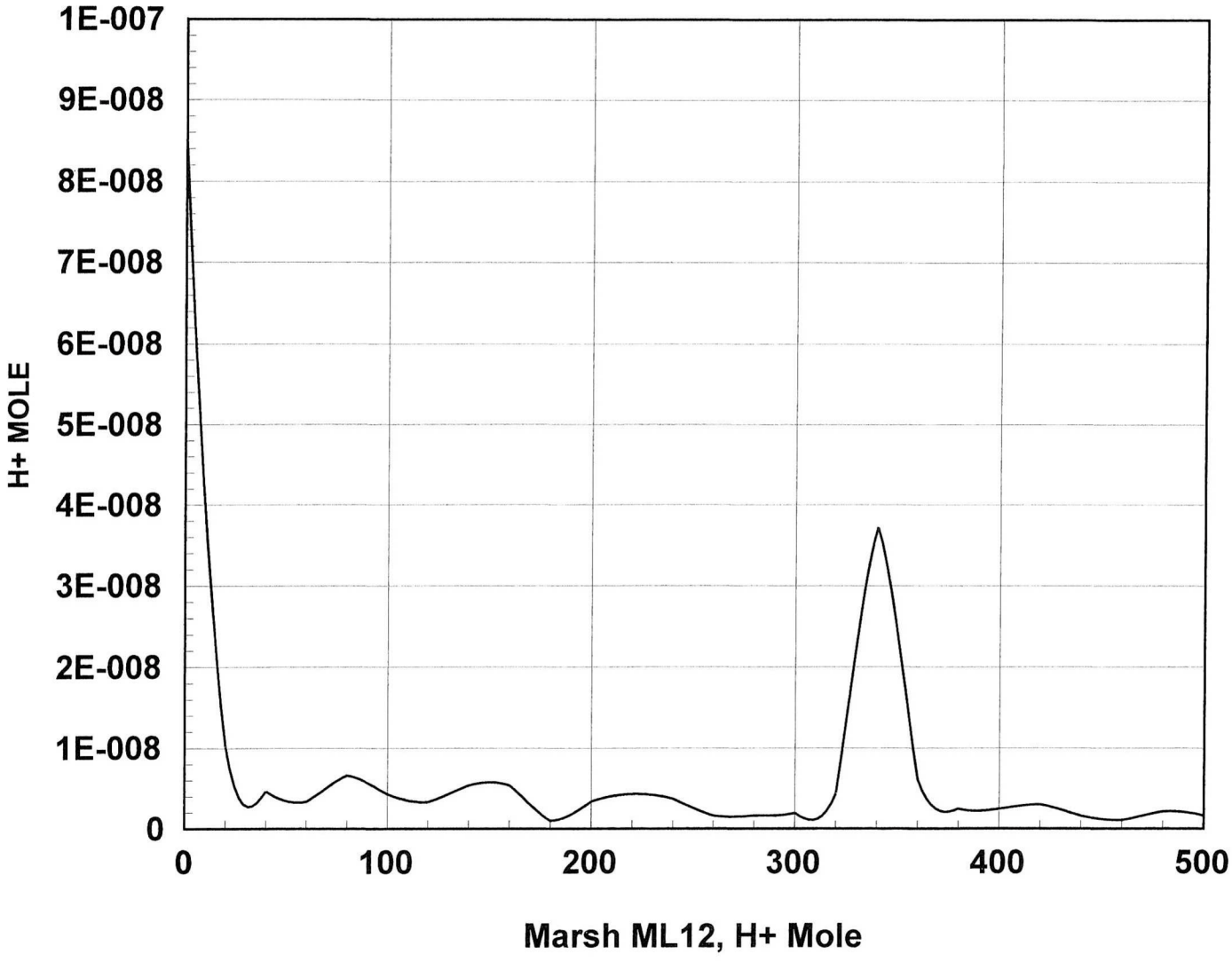

H+ Mole
9.1E-008
8.1E-008
7.1E-008
6.1E-008
5.1E-008
4.1E-008
3.1E-008
2.1E-008
1.1E-008
1E-009
0
50
100
150
200
250
300
350
400
Marsh ML9 (h+mole)

ML9 geochem


ppm
90
80
70
60
50
40
30
20
10
0
0
50
100
150
200
250
300
350
400
ML9 geochemistry
As
Co
Cr
Cu
Ni
Pb
V


5E-007
4.5E-007
4E-007
3.5E-007
3E-007
2.5E-007
2E-007
1.5E-007
1E-007
5E-008
0
H+ Mole
0
50
100
150
200
250
300
Marsh ML10, H+ Mole


5E-008
4.5E-008
4E-008
3.5E-008
3E-008
2.5E-008
2E-008
1.5E-008
1E-008
5E-009
0
H+ Mole
200
220
240
260
280
300
320
340
360
380
400
Marsh ML11, H+ Mole


1E-007
9E-008
8E-008
7E-008
6E-008
5E-008
4E-008
3E-008
2E-008
1E-008
0
H+ MOLE
0
100
200
300
400
500
Marsh ML12, H+ Mole

Keno Project

NTS 105M14 and 106D03

Latitude 63°56' Longitude 135°14'

Introduction

The Keno Project, part of the 2007 YMIP grant programme was designed to locate further silver lead vein deposits around the Keno–Elsa area. This part of the programme was not completed since the area selected has very recently been staked by Alexco, the company that took over the United Keno Hill holdings and is re-starting operations at Elsa. Alexco has an aggressive ongoing staking programme and has consolidated its property base.

This left only a few fractions of open ground available to work on. Two suitable fractions on Keno Hill were prospected and results prompted the prospector to stake the ground.

The pH and Hydrogen+ mole technique seems to be a viable if largely untested exploration method in this camp. A target selected can be treated to intensive (i.e. close spaced) sampling without excessive expenditure of exploration capital. Attention can be paid to areas where material is found to have a statistically high Hydrogen+ mole concentration.

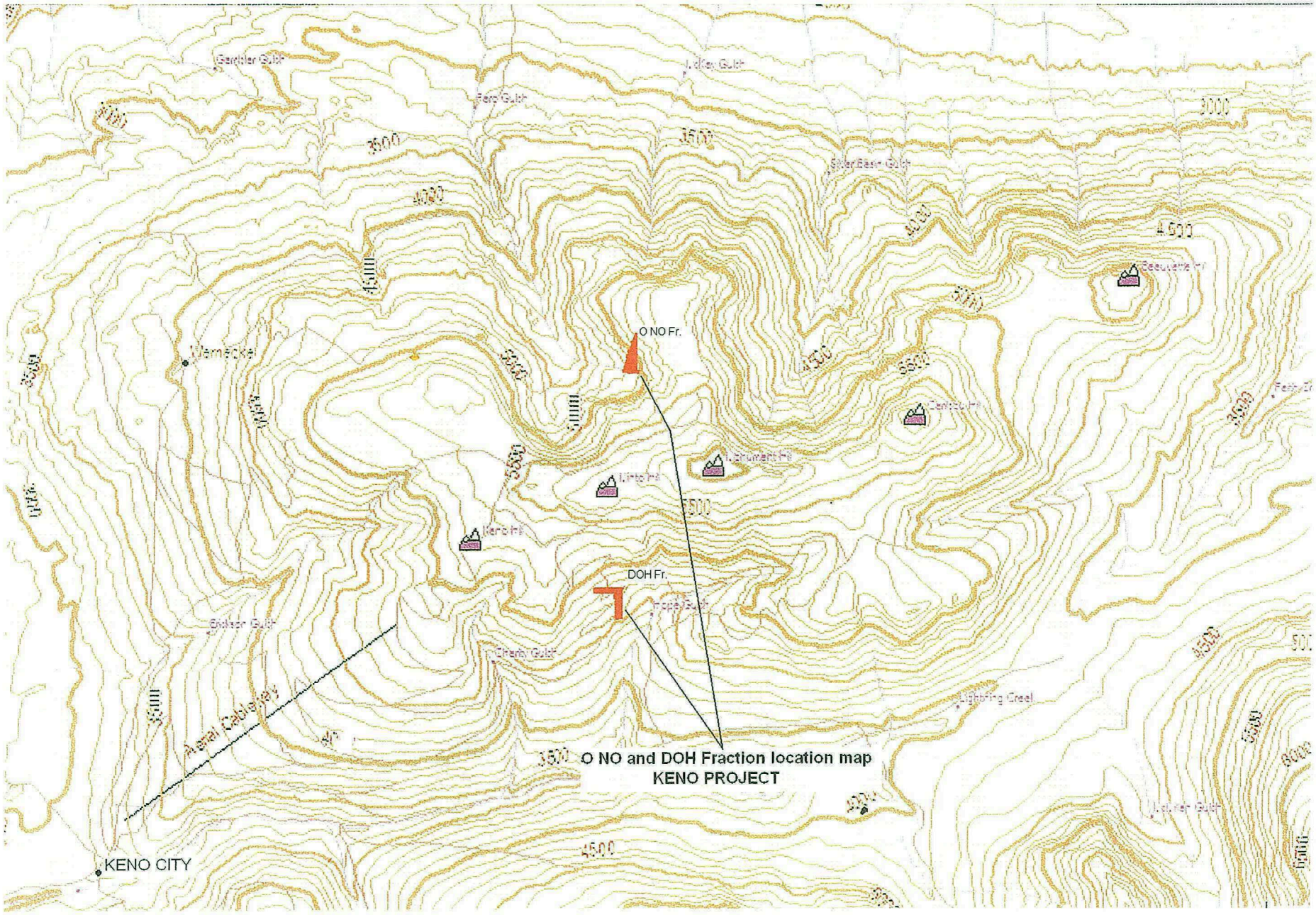
Access and location

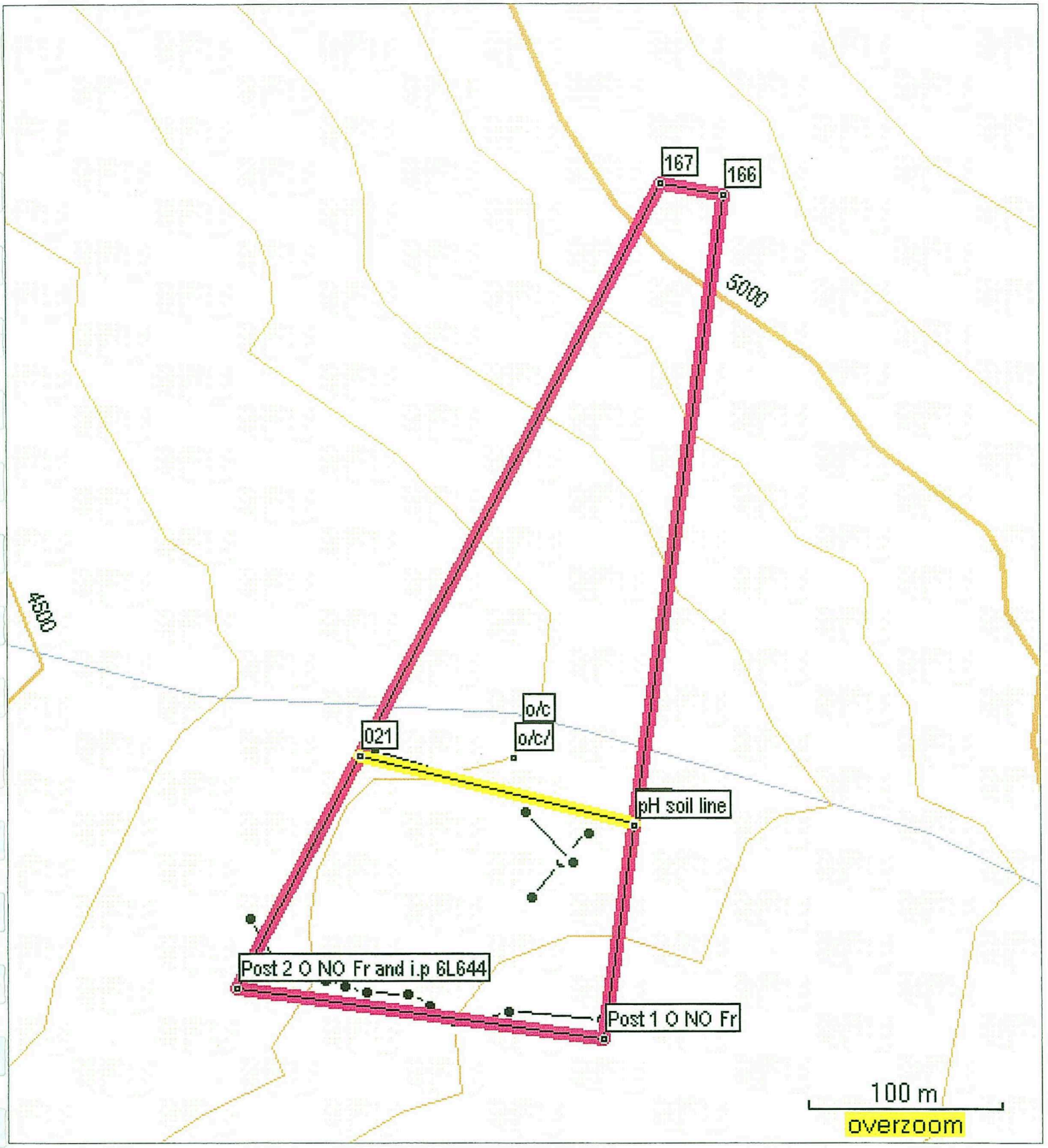
The Keno Hill-Elsa area is accessed by road. The visitor travels to Mayo, some 400 road km. from Whitehorse, and from there journeys north on the Silver Trail highway, past the village and mill site of Elsa, on to historic Keno City, pop. 18.

From Keno, it is necessary to ascent Mount Keno via the Keno Hill road, also called the "Sign Post" road. About one Km from Keno, a right handed fork leads on to the old Keno 700 mine acess road which leads to the DOH Fractuion. Adjacent SW of the mine the DOH Fractional mineral claim is bisected by the access road. Returning to the Sign Post road, and continuing up to the summit the visitor arrives at the headwaters of Faro Gulch. The O NO Fractional claim was staked in the valley of the headwaters of Faro Gulch.

Work described

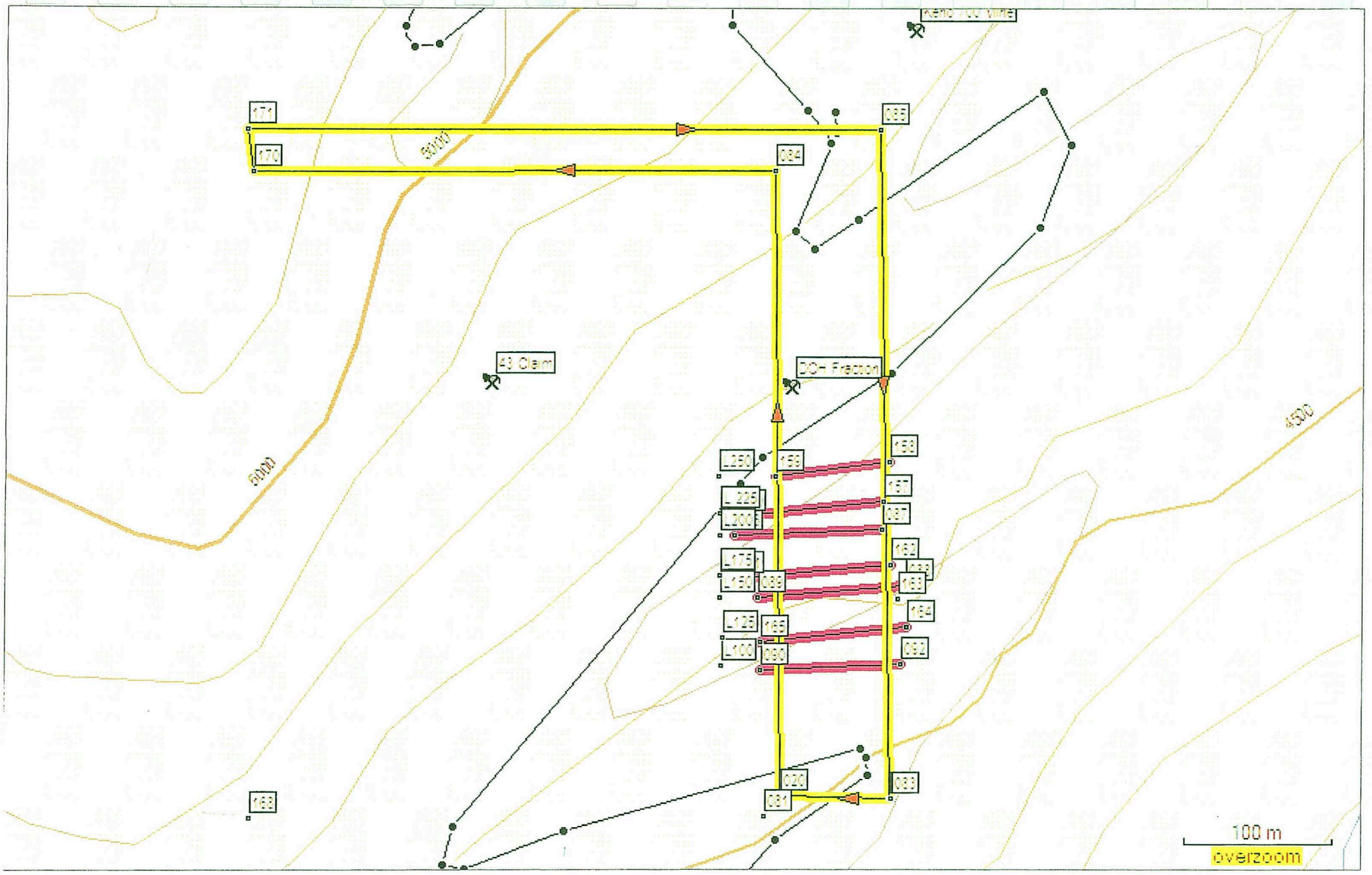
Prospecting was carried out on two fractions of unstaked ground on Keno Hill. As stated above all surrounding ground is now held by Alexco, and this includes previously open ground which was to have been explored as part of this grass-roots exploration project. Work performed consisted of locating boundaries of the open ground, prospecting


O NO Fr.
DOH Fr.
KENO CITY
Aerial Cableway
O NO and DOH Fraction location map
KENO PROJECT



O NO Fraction

CanMap®, DMTI Spatial and the DMTI Spatial logo are trademarks of DMTI Spatial Inc., Markham, Ontario. © Garmin Ltd. or its subsidiaries 1995-2004. ©2003 DMTI Spatial Inc.



DOH Fraction

CanMap®, DMTI Spatial and the DMTI Spatial logo are trademarks of DMTI Spatial Inc., Markham, Ontario. © Garmin Ltd. or its subsidiaries 1995-2004. ©2003 DMTI Spatial Inc.

traverses, mapping surficial geology and soil sampling exploratory lines for pH and geochemical determinations. This led to staking of the O NO and DOH fractional mineral claims.

Sampling was controlled by GPS rather than cutting lines, as were mapping of features and locations of old survey pins.

Prospecting and geology

Keno Project Geology (after Yukon geological Survey)

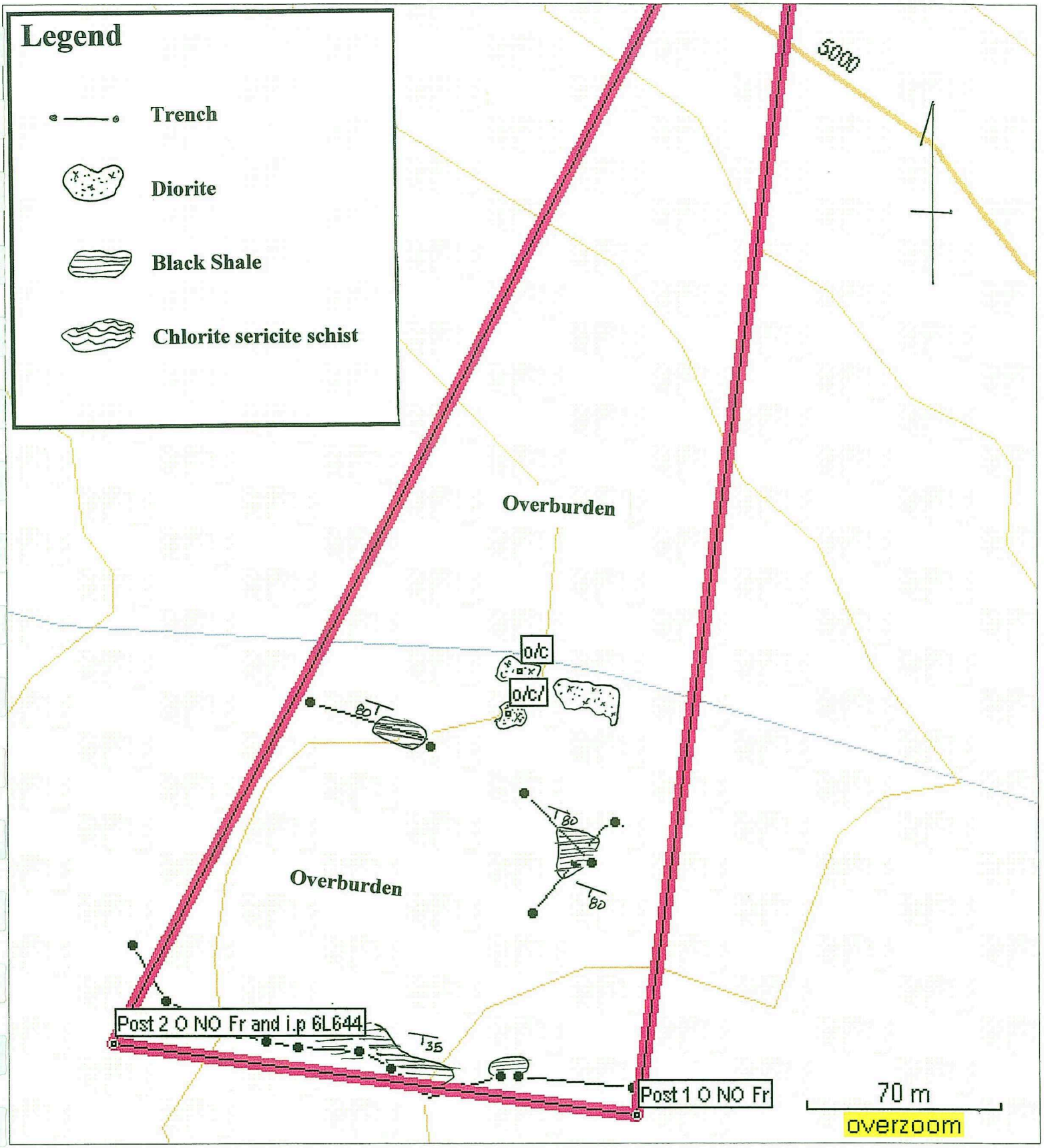
mKGS. Selwyn suite, mid Cretaceous
Resistant, blocky, fine to coarse grained, equigranular to porphyritic (K-feldspar) biotite quartz monzonite and granodiorite and minor quartz diorite, minor leuco quartz monzonite and syenite.

TrG. Galena suite. Triasssic
Massive, medium grained hornblende diorite and gabbro sills, massive chloritic and locally serpentinized greenstone, (diorite, gabbro, and altered equivalents) sills, minor occurrences of possibly mid to late Proterozoic age.

DME. Earn group, Devonian to Misssissipian
Complex assemblage of submarine fan and channel deposits, within black siliceous shale and chert, and including small occurrences of felsic volcanic rocks-barite common and numerous occurrences of shaliferous Pb and Zn
DME 1. Thin bed laminated slate with thin to thick interbedded fine to medium grained quartz arenite and wacke, thick members of chert pebble conglomerate, black siliceous siltstone, nodular and bedded barite, rare LST.
DME 2. Silver blue weathering black shale, argillite, cherty argillite, thin bedded chert, nodular and bedded barite, rare LST.
DME 3. Massive felsic to intermediate volcanic flows, tuffs and sub-volcanic plugs, locally highly altered, greenish chert, and minor black slate, quartz eye sericite chlorite phyllite, local vesicular and amygdaloidal basalt, locally pillowed.

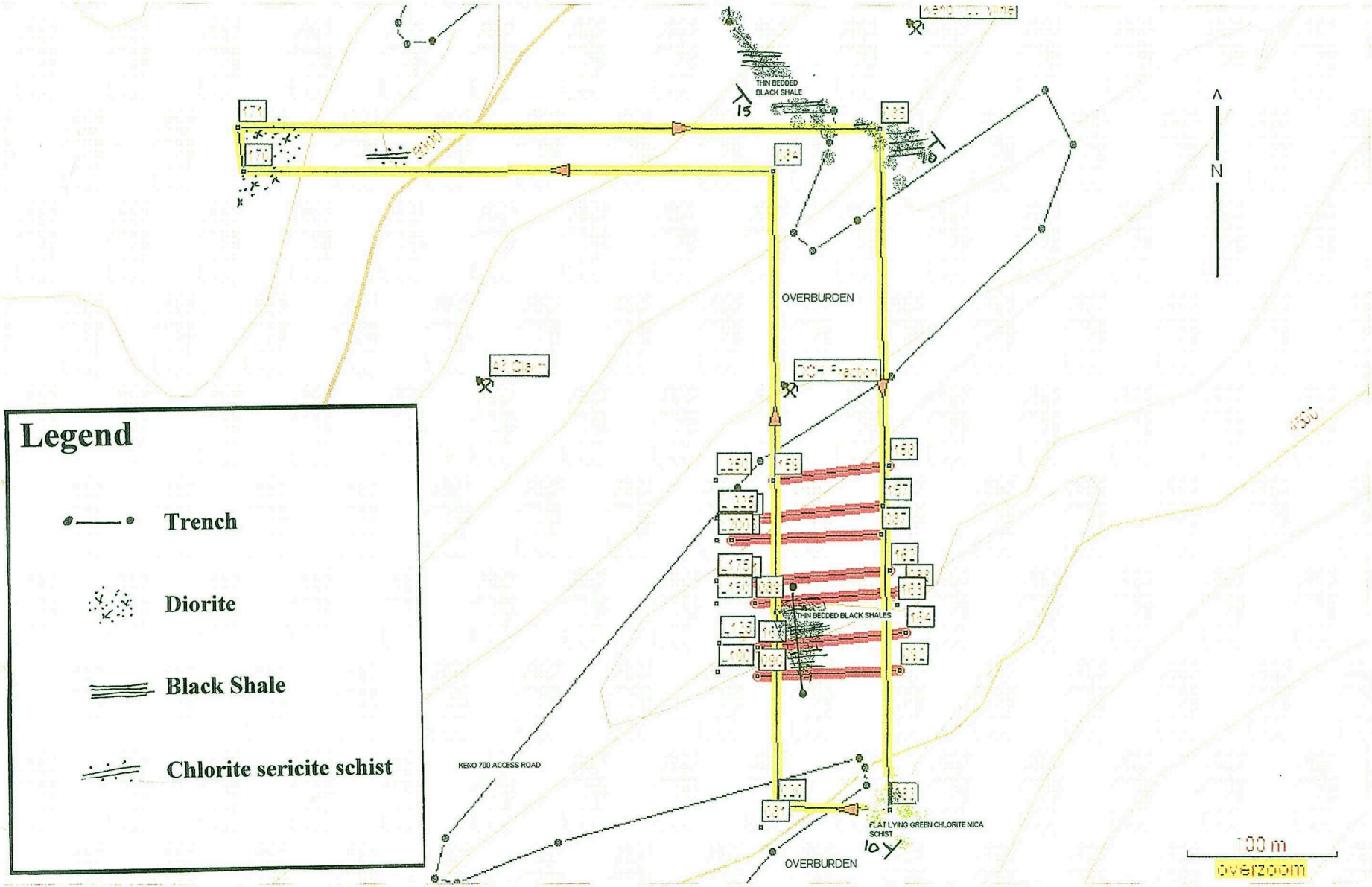
Geology of O NO Fr.

The O NO fraction is situated in the upper reaches of Faro Gulch, It is a triangular piece of ground with the apex to the north. The base of the fraction is in the bottom of the valley and the apex on the slope above. The valley is covered with a thin layer of mixed overburden, derived from surrounding slopes. It covers the bedrock to a depth of about 3 metres where exposed in creeks. The predominant rock type is a Mississipian siliceous black shale with a moderate SW dip. A fresh looking chlorite feldspar diorite lies in the central part of the lower half of the claim, where it contacts a flat lying silver weatheringblack shale. A thin band of brown mica rich schist lies along the contact between shale and diorite. There is no pervasive alteration. No sulphide mineralization was exposed.



O NO Fraction, surficial geology

CanMap®, DMTI Spatial and the DMTI Spatial logo are trademarks of DMTI Spatial Inc., Markham, Ontario. © Garmin Ltd. or its subsidiaries 1995-2004. ©2003 DMTI Spatial Inc.



DOH Fraction, surficial geology

Geology of the DOH Fr.

The DOH Fr. Lies between the Wolverine (Keno 700 mine) claim and the 43 claim. It covers unstaked ground which came to the attention of the prospector when the location of two previously undiscovered survey pins became known. This was due to the mis-plotting of the Keno 700 access road on the topographic maps. It consists of an L shaped 80 m wide by 457m long north-south strip of land with an east-west strip of land 25 m wide extension along the north side. It is covered by a thin mantle of soil, with a ground cover of willow and mosses. Only two small areas of outcrop were noted. A flat lying green quartz-chlorite muscovite schist at the extreme south of the fraction contacts a thin bedded, very fragmented black shale. Found 150 m. north. No dip was possible in the black shale. The northern end of the fraction covers a sequence, (east to west) of flat lying rusty black shale, chloritic green schist, and blocky quartzites. The fraction is mainly overburden covered. No sulphides were noted on surface.

Streams and silts

The lower half of the DOH Fraction is bisected by a north-south dry wash that only intermittently carries water. This wash, or intermittent creek, was not sampled due to possible contamination from the mine haul road above it.

The lower half of the O NO Fraction is crossed by two intermittent branches of the Faro Gulch headwaters, which are spaced about 150 m apart. The fraction is very narrow, hence the creeks crossing the claim are less than 200 m. long, and are filled with material from the headwall area of the gulch, and were deemed not suitable for sampling. A pool of moving water in one of the creeks returned a single water pH of 6.83

Soil sampling

On the O NO fraction, 35 soil samples were collected from the ridge between the two branches of the creek that cross the south end of the claim. Approximately 300 grams of soil was collected at each station using a mattock. The material was placed in a standard Kraft paper soil sample bag. Samples were tested for pH and results plotted in the field. All samples determined to lie within the boundaries opf open ground were sent to ALS Chemex for analysis using their treatment MS ICP-41. This treatment includes the "Keno Suite" of elements (Ag, As, Pb, Sb, Zn, and Cd, Mn) which usually indicate the presence of ore veins in the Keno area.

The O NO Fraction was sampled at a point midway between the two creeks that cross the lower portion of the claim. Samples were collected on a 140 m long line using a station interval of 5 m. All samples were also sent in for analysis.
A spider plot of the "Keno suite" elements on the O NO Fr. clearly shows the anomalous stations on the soil line.

Soil development is poor over mainly rocky ground. Samples were taken as close as possible to the B horizon, which in some areas was non existent. A minimum of organics were allowed in the samples.

The DOH Fraction is 80 meters across at its widest. The southern half of this strip of land was chosen for sampling due to its proximity to a silver anomaly on the adjacent (west) 43 Claim.

69 soil samples were collected at 10 m intervals on 7 lines spaced 25 m apart that were GPS'd and flagged through the brush. GPS proved not to be ideal for such close sample spacing due to the poor satellite geometry. More formal lines should be established for assessment work using traditional methods. These soil samples were tested for pH and plotted as H+ values. Of these lines, three (200, 150, 100) were selected to be sent for analysis to ALS Chemex for treatment using their ME-MS41. This method was chosen for economy and because the nature of the geochemical response in this area is straight forward. The "Keno suite" of elements clearly distinguishes the presence of Ag veins.

Results

The O NO Fraction was sampled at a point midway between the two creeks that cross the lower portion of the claim. Samples were collected on a 140 m long line using a station interval of 5 m. All samples were also sent in for analysis.

Soil development is poor over mainly rocky ground. Samples were taken as close as possible to the B horizon, which in some areas was non existent. A minimum of organics were allowed in the samples..

A spider plot of the "Keno suite" elements on the O NO Fr. clearly shows the anomalous stations on soil line.

Soil development is poor over mainly rocky ground. Samples were taken as close as possible to the poorly developed B horizon, which in some areas was almost non existent. A minimum of organics were allowed in the samples.

Soil samples from the DOH fraction were tested for pH and these values were converted to Hydrogen+ mole. The H+ mole showed a coherent pattern indicating a linear "low" feature running from line 200 sta. 20 to line 100 sta. 45, between higher peaks, consistent with the model for H+ mole anomalies, which is understood to be that there normally will be a double peak of high H+ readings, with the sulphide enrichment occurring in or close to the low between the peaks. This is confirmed by the geochemistry results. Ag, As, SB, Pb, and Zn with Cd, coincide with the depression between the H+ peaks. This is illustrated in the charts for H+ mole, and the plots of individual elements of the "Keno Suite".

An x-y plot of the "Keno suite" elements for line 200 is included which clearly indicates that there is a set of two thin parallel mineralized veins which are open to the north,

occurring at stations 30m and 50m. This is consistent with the often parallel, or sheeted, nature of the deposits at Keno.

NOTE: Chart plot locations for elements presented in the appendix may not correspond exactly to numbers mentioned in the text. This is due to the poor GPS capture of sample points. Charts were corrected spatially to represent true relationship between sample points.

Statistical determinations

Anomaly categories for selected elements. (the "Keno suite")

Negative	=	0 to x
Possibly anomalous	=	x to x+1σ
Probably anomalous	=	x+1σ to x+2σ
Definitely anomalous	=	> x+2σ

O NO Fraction

	Ag	As	Cu	Pb	Sb	Zn
N	27	23	26	24	28	26
Σ	1.84	19.11	22.59	19.25	7.78	57.25
X	1.38	41.18	50.23	38.91	10.29	112.76
x + 1σ	3.22	60.29	72.82	58.91	18.07	170.02
x +2σ	5.06	79.40	95.11	78.16	25.87	227.27

Cd anomalous at 5m, 55m, and 105m

Since the H+ method relies on oxidizing sulphides, it was thought possible that the geological setting at this location does not promote oxidation.

In an exercise, the large H+ peak was eliminated from the H+ plot, which had the effect of greatly enhancing the H+ anomalies mid line. Still, the magnitude of the change in H+ was unchanged. A 10 fold increase in H+ is held to be an anomalous occurrence, yet the peaks over the geochemical anomalies did not meet this criteria.

DOH Fraction

	Ag	As	Cu	Pb	Sb	Zn
N	24	27	27	25	27	23
Σ	.156	25.83	8.39	11.07	2.98	27.77
X	.340	37.74	30.70	18.84	4.56	87.8
x + 1σ	.496	63.57	39.09	29.91	7.75	113.57
x +2σ	.652	89.40	47.48	40.98	10.53	139.34

Highly anomalous values deleted from stats. Cd anomalous at Line 200, 30 m

pH statistics

	O NO		DOH				
n	35		77				
σ	.529		.483				
x	5.01		4.99				
x 1- 1σ	5.105		4.52				
x - 2 σ	4.75		4.03				
Range	6.07- 4.03		7.36- 4.33				
background	5.68		5.58				

Appendix

Keno
Project
Soil pH
O NO Fr.
line KL2

0	5.37
5	4.61
10	4.61
15	4.03
20	4.04
25	4.34
30	4.41
35	4.95
40	4.6
45	5.55
50	5.06
55	4.66
60	4.89
65	4.98
70	4.43
75	5.39
80	5.07
85	4.63
90	5.98
95	5.08
100	5.05
105	4.91
110	5.52
115	5.37
120	5.2
125	5.2
130	5.09
135	5.52
140	5.54

DOH FR

pH values

Station (m)	Line 100	line 125	line 150	line 175
0	5.02		4.85	4.37
10	5.11	4.64	5.21	5.01
20	5.34	4.63	5.2	5.18
30	5.36	4.96	4.91	5.28
40	5.02	4.86	4.64	4.99
50	5.22	5.01	4.52	4.7
60	5.1	4.86	4.36	4.91
70	4.96	466	4.48	5.17
80	5.03	4.77	4.8	4.8
90	5.22	4.62	4.93	4.49
100	5.32	4.33	4.87	4.76
110		464		

Line 200	line 225	line 250
4.7		
5.89	5.56	
5.2	6.58	
6.37	5.74	
4.63	4.73	7.36
5.3	4.7	5.49
4.61	4.81	5.09
4.64	4.8	5.14
4.98	4.6	5.18
4.7	4.77	5.2
4.57	4.76	4.59
4.63	5.22	5.11
	5.09	5.11

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
This copy reported on 24-SEP-2007
Account: DIRMOR

CERTIFICATE VA07099165

Project:

P.O. No.:

This report is for 59 Soil samples submitted to our lab in Vancouver, BC, Canada on 31-AUG-2007.

The following have access to data associated with this certificate:

DIRK MORAAL		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME-MS41	51 anal. aqua regia ICPMS	
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
KL2-05		0.42	0.6	1.10	94	<10	140	<0.5	<2	0.34	2.5	20	17	60	3.06	<10
KL2-10		0.18	0.3	0.78	43	<10	50	<0.5	<2	0.12	0.5	8	14	20	2.36	<10
KL2-15		0.14	0.2	0.35	19	<10	30	<0.5	<2	0.04	<0.5	3	7	11	0.93	<10
KL2-20		0.24	0.2	0.38	20	<10	20	<0.5	<2	0.04	<0.5	3	8	11	1.11	<10
KL2-25		0.26	0.2	0.40	18	<10	20	<0.5	<2	0.07	<0.5	3	8	13	1.13	<10
KL2-30		0.30	<0.2	0.57	30	<10	30	<0.5	<2	0.13	<0.5	6	11	25	1.91	<10
KL2-35		0.18	0.3	0.62	27	<10	40	<0.5	2	0.20	<0.5	5	12	25	1.85	<10
KL2-40		0.30	0.9	1.04	43	<10	60	<0.5	<2	0.30	0.7	13	15	66	2.85	<10
KL2-45		0.28	0.3	1.08	42	<10	70	<0.5	<2	0.32	0.6	15	15	89	3.04	<10
KL2-50		0.20	2.2	1.08	64	<10	60	<0.5	2	0.31	0.6	10	15	79	2.94	<10
KL2-55		0.22	2.5	0.90	179	<10	50	<0.5	<2	0.33	1.6	15	13	70	3.35	<10
KL2-60		0.24	3.9	1.24	127	<10	60	<0.5	<2	0.26	0.5	11	21	92	3.30	<10
KL2-65		0.26	2.3	1.27	139	<10	60	<0.5	2	0.27	0.8	13	21	97	3.88	<10
KL2-70		0.18	0.4	1.00	59	<10	50	<0.5	2	0.22	0.6	10	18	42	3.02	<10
KL2-75		0.28	1.5	1.16	43	<10	60	<0.5	<2	0.40	1.2	20	16	65	3.38	<10
KL2-80		0.26	0.3	0.88	42	<10	70	<0.5	<2	0.38	0.5	11	14	60	2.64	<10
KL2-85		0.22	0.7	1.16	60	<10	60	<0.5	<2	0.21	0.5	15	20	63	3.20	<10
KL2-90		0.30	0.7	1.10	44	<10	80	<0.5	2	0.35	1.0	22	15	85	3.72	<10
KL2-95		0.22	0.6	0.95	41	<10	80	<0.5	<2	0.29	<0.5	14	14	67	3.13	<10
KL2-100		0.24	5.4	0.98	236	<10	50	<0.5	<2	0.35	1.3	10	14	61	3.25	<10
KL2-105		0.18	8.3	1.13	171	<10	50	<0.5	<2	0.32	1.4	8	17	66	3.00	<10
KL2-110		0.24	1.2	1.12	72	<10	70	<0.5	2	0.32	1.0	11	17	60	3.32	<10
KL2-115		0.26	0.5	0.88	21	<10	60	<0.5	2	0.35	<0.5	9	13	40	2.53	<10
KL2-120		0.24	0.9	0.94	35	<10	70	<0.5	<2	0.34	0.9	14	13	57	3.01	<10
KL2-125		0.22	0.8	0.94	23	<10	60	<0.5	<2	0.37	0.7	9	14	37	2.61	<10
KL2-130		0.26	0.7	0.95	28	<10	70	<0.5	<2	0.36	0.5	10	15	47	2.55	<10
KL2-135		0.24	0.9	0.97	24	<10	60	<0.5	2	0.38	<0.5	9	15	39	2.52	<10
KL2-140		0.18	0.6	0.99	23	<10	60	<0.5	<2	0.35	0.5	8	16	46	2.30	<10
ML5-100		0.18														
ML5-120		0.26														
ML5-140		0.18														
ML5-160		0.22														
ML5-180		0.20														
ML5-200		0.22														
ML5-220		0.24														
ML5-240		0.20														
ML5-260		0.22														
ML5-280		0.22														
ML5-300		0.24														
ML5-320		0.22														

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
KL2-05		<1	0.03	10	0.52	1670	3	0.02	32	1320	49	0.04	6	2	15	<20
KL2-10		1	0.03	10	0.27	482	2	0.01	14	650	32	0.02	7	1	6	<20
KL2-15		1	0.03	10	0.11	79	1	0.01	8	640	11	0.03	2	<1	3	<20
KL2-20		<1	0.02	10	0.10	93	1	0.01	9	550	15	0.03	<2	<1	4	<20
KL2-25		1	0.02	10	0.16	79	1	0.01	10	640	10	0.03	3	<1	4	<20
KL2-30		<1	0.02	10	0.27	303	2	0.01	16	970	21	0.03	3	1	5	<20
KL2-35		<1	0.03	10	0.30	162	2	0.01	16	790	17	0.04	3	1	7	<20
KL2-40		<1	0.03	10	0.48	548	2	0.01	33	1460	38	0.02	5	2	9	<20
KL2-45		<1	0.03	10	0.57	620	1	0.01	37	1460	33	0.02	3	4	10	<20
KL2-50		1	0.03	10	0.58	416	2	0.01	33	1490	39	0.02	11	4	10	<20
KL2-55		<1	0.03	10	0.45	574	2	0.01	34	1560	182	0.04	41	3	9	<20
KL2-60		<1	0.03	10	0.65	480	1	0.01	35	1160	122	0.02	31	5	10	<20
KL2-65		<1	0.03	10	0.64	683	1	0.01	36	1240	71	0.02	23	7	10	<20
KL2-70		<1	0.03	10	0.52	428	2	0.01	24	1020	32	0.02	7	3	8	<20
KL2-75		<1	0.02	10	0.76	658	6	0.01	46	1800	67	0.02	10	2	9	<20
KL2-80		<1	0.03	10	0.48	496	3	0.01	30	1550	31	0.04	5	2	11	<20
KL2-85		<1	0.04	10	0.57	581	3	0.01	34	1080	49	0.03	10	3	8	<20
KL2-90		<1	0.03	10	0.52	1260	6	0.01	51	1350	41	0.06	8	2	18	<20
KL2-95		<1	0.02	10	0.45	760	5	0.01	34	1270	38	0.05	6	2	12	<20
KL2-100		<1	0.03	10	0.52	356	4	0.01	34	1650	321	0.02	90	2	10	<20
KL2-105		1	0.03	10	0.58	325	3	0.01	29	1500	505	0.02	124	4	10	<20
KL2-110		1	0.04	10	0.59	490	4	0.01	35	1320	95	0.02	27	3	11	<20
KL2-115		1	0.03	10	0.49	211	4	0.01	27	1450	38	0.02	18	2	11	<20
KL2-120		<1	0.03	10	0.51	570	4	0.01	41	1430	44	0.02	18	3	10	<20
KL2-125		<1	0.03	10	0.52	383	3	0.01	26	1450	34	0.03	11	3	11	<20
KL2-130		1	0.03	10	0.49	488	3	0.01	28	1400	50	0.02	11	3	11	<20
KL2-135		<1	0.03	10	0.51	247	3	0.01	27	1360	39	0.03	10	3	11	<20
KL2-140		1	0.03	10	0.51	220	3	0.01	25	1250	40	0.02	9	3	11	<20
ML5-100																
ML5-120																
ML5-140																
ML5-160																
ML5-180																
ML5-200																
ML5-220																
ML5-240																
ML5-260																
ML5-280																
ML5-300																
ML5-320																

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 23-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07099165

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ti	Tl	U	V	W	Zn	Ag	Al	As	Au	B	Ba	Be	Bi	Ca
	Units	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.01	10	10	1	10	2	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01
KL2-05		0.01	<10	<10	31	<10	124									
KL2-10		0.02	<10	<10	37	<10	54									
KL2-15		<0.01	<10	<10	16	<10	26									
KL2-20		0.01	<10	<10	26	<10	29									
KL2-25		0.01	<10	<10	19	<10	31									
KL2-30		0.01	<10	<10	21	<10	45									
KL2-35		0.02	<10	<10	26	<10	53									
KL2-40		0.02	<10	<10	23	<10	106									
KL2-45		0.01	<10	<10	26	<10	101									
KL2-50		0.01	<10	<10	26	<10	118									
KL2-55		0.01	<10	<10	20	<10	227									
KL2-60		0.02	<10	<10	40	<10	218									
KL2-65		0.02	<10	<10	41	<10	180									
KL2-70		0.02	<10	<10	37	<10	84									
KL2-75		0.01	<10	<10	18	<10	210									
KL2-80		0.01	<10	<10	20	<10	96									
KL2-85		0.02	<10	<10	31	<10	118									
KL2-90		0.01	<10	<10	17	<10	163									
KL2-95		0.01	<10	<10	17	<10	111									
KL2-100		0.01	<10	<10	17	<10	298									
KL2-105		0.01	<10	<10	28	<10	419									
KL2-110		0.01	<10	<10	24	<10	170									
KL2-115		0.01	<10	<10	17	<10	105									
KL2-120		0.01	<10	<10	17	<10	125									
KL2-125		0.01	<10	<10	20	<10	114									
KL2-130		0.01	<10	<10	21	<10	105									
KL2-135		0.01	<10	<10	22	<10	112									
KL2-140		0.01	<10	<10	23	<10	98									
ML5-100								0.08	1.15	6.5	<0.2	<10	210	0.34	0.11	3.53
ML5-120								0.02	1.14	7.4	<0.2	<10	120	0.34	0.09	0.34
ML5-140								0.02	1.15	4.9	<0.2	<10	120	0.27	0.1	0.24
ML5-160								0.18	1.37	4.3	<0.2	<10	160	0.31	0.16	0.36
ML5-180								0.05	1.29	5.1	<0.2	<10	160	0.32	0.13	0.36
ML5-200								0.23	1.54	5.9	<0.2	<10	150	0.47	0.19	0.31
ML5-220								0.12	1.31	4.7	<0.2	<10	140	0.37	0.14	0.37
ML5-240								0.11	1.52	7.3	<0.2	<10	150	0.38	0.17	0.33
ML5-260								0.15	1.61	7	<0.2	<10	180	0.52	0.18	0.32
ML5-280								0.11	1.45	5.2	<0.2	<10	150	0.36	0.14	0.3
ML5-300								0.11	1.37	6.3	<0.2	<10	160	0.34	0.17	0.37
ML5-320								0.22	1.4	5.6	<0.2	<10	180	0.48	0.18	0.42

Comments: Gold determinations by ME-MS41 are semi-quantitative due to the small sample weight used (0.5g).

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 18-SEP-2007
This copy reported on 19-SEP-2007
Account: DIRMOR

CERTIFICATE VA07088531

Project:

P.O. No.:

This report is for 27 Soil samples submitted to our lab in Vancouver, BC, Canada on 13-AUG-2007.

The following have access to data associated with this certificate:

DIRK MORAAL		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 18-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07088531

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
D100-10		0.32	0.5	1.17	14	<10	90	<0.5	<2	0.09	<0.5	6	19	26	2.35	<10
D100-20		0.32	0.4	1.16	21	<10	50	<0.5	<2	0.23	<0.5	15	18	31	3.52	<10
D100-30		0.20	0.3	1.11	26	<10	50	<0.5	<2	0.12	<0.5	13	18	29	3.72	<10
D100-40		0.32	0.5	1.19	34	<10	40	0.6	<2	0.20	1.0	35	16	52	4.86	<10
D100-50		0.48	0.3	1.33	29	<10	90	<0.5	<2	0.18	0.8	20	17	36	3.78	<10
D100-60		0.34	0.6	1.48	90	<10	70	<0.5	<2	0.08	<0.5	8	21	37	3.12	<10
D100-70		0.30	0.4	1.35	34	<10	80	<0.5	<2	0.14	0.6	11	20	31	3.20	<10
D100-80		0.28	0.3	1.07	23	<10	70	<0.5	<2	0.05	<0.5	6	18	26	2.51	<10
D100-90		0.34	0.2	1.23	32	<10	80	<0.5	<2	0.14	0.5	11	18	33	3.39	<10
D150-10		0.28	0.6	1.17	28	<10	130	<0.5	<2	0.10	0.8	10	20	33	3.21	<10
D150-20		0.28	0.3	1.33	27	<10	80	<0.5	<2	0.19	0.5	17	19	32	3.32	<10
D150-30		0.30	0.2	1.14	27	<10	80	<0.5	<2	0.15	1.0	15	17	31	3.20	<10
D150-40		0.30	0.6	1.27	93	<10	70	<0.5	<2	0.08	0.5	9	18	36	3.17	<10
D150-50		0.32	<0.2	1.30	48	<10	80	<0.5	<2	0.05	<0.5	7	19	27	2.75	<10
D150-60		0.14	0.2	1.60	27	<10	120	<0.5	<2	0.10	0.7	7	24	19	2.71	10
D150-70		0.30	0.2	1.16	10	<10	60	<0.5	<2	0.05	<0.5	5	18	14	2.09	<10
D150-80		0.28	0.2	1.27	23	<10	70	<0.5	<2	0.18	0.6	11	19	27	3.21	<10
D150-90		0.30	0.2	1.27	17	<10	70	<0.5	<2	0.08	0.5	6	20	21	2.63	<10
D200-20		0.32	0.2	1.57	22	<10	100	<0.5	<2	0.14	0.6	14	21	26	2.88	<10
D200-30		0.30	7.9	0.97	88	<10	70	<0.5	<2	0.35	5.3	18	13	47	3.92	<10
D200-40		0.34	0.6	1.40	93	<10	70	<0.5	<2	0.06	0.7	8	20	35	3.33	<10
D200-50		0.42	2.4	1.06	79	<10	80	<0.5	<2	0.27	2.0	19	15	46	3.99	<10
D200-60		0.16	0.3	1.25	18	<10	80	<0.5	<2	0.07	<0.5	7	20	21	2.67	<10
D200-70		0.34	<0.2	1.30	27	<10	70	<0.5	<2	0.14	<0.5	11	20	28	3.17	<10
D200-80		0.40	0.2	1.18	29	<10	60	<0.5	<2	0.11	0.5	10	19	24	3.00	<10
D200-90		0.24	0.2	1.44	26	<10	100	<0.5	<2	0.09	0.7	11	20	31	3.46	<10
D200-100		0.28	<0.2	1.13	34	<10	60	<0.5	<2	0.07	0.5	12	17	30	3.51	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 18-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07088531

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
D100-10		<1	0.03	10	0.31	195	3	0.01	18	1120	19	0.03	<2	<1	14	<20
D100-20		<1	0.02	20	0.46	711	8	0.01	35	1530	16	0.03	<2	1	18	<20
D100-30		<1	0.03	20	0.38	663	8	0.01	35	1040	26	0.03	4	1	17	<20
D100-40		<1	0.02	10	0.51	2270	16	0.01	74	1870	27	0.04	3	1	17	<20
D100-50		<1	0.03	20	0.46	1160	9	0.01	48	1420	17	0.02	<2	2	19	<20
D100-60		<1	0.03	20	0.43	340	6	0.01	27	1150	37	0.03	6	1	13	<20
D100-70		<1	0.03	10	0.41	490	6	0.01	32	1160	16	0.02	3	1	22	<20
D100-80		<1	0.03	10	0.28	169	6	0.01	25	1040	12	0.04	2	<1	18	<20
D100-90		<1	0.03	20	0.37	384	7	0.01	35	1230	14	0.03	4	1	26	<20
D150-10		<1	0.05	20	0.30	497	8	0.01	30	1650	22	0.04	<2	<1	30	<20
D150-20		<1	0.03	10	0.45	749	6	0.01	37	1340	13	0.02	2	1	16	<20
D150-30		<1	0.04	10	0.35	1005	6	0.01	35	1330	16	0.04	4	1	15	<20
D150-40		<1	0.03	10	0.40	431	7	0.01	29	1180	51	0.04	7	1	13	<20
D150-50		<1	0.03	10	0.40	227	6	0.01	25	840	23	0.03	3	1	11	<20
D150-60		<1	0.03	10	0.39	295	2	0.01	19	960	11	0.03	<2	1	14	<20
D150-70		<1	0.03	10	0.23	162	4	<0.01	14	1190	15	0.04	<2	<1	13	<20
D150-80		<1	0.03	10	0.40	391	5	0.01	33	1220	13	0.03	<2	1	28	<20
D150-90		<1	0.03	10	0.27	218	5	0.01	21	1250	13	0.03	<2	<1	17	<20
D200-20		<1	0.03	10	0.39	622	4	0.01	30	960	11	0.02	3	2	15	<20
D200-30		<1	0.03	10	0.38	1505	10	0.01	46	1840	414	0.04	13	1	22	<20
D200-40		<1	0.03	10	0.41	343	6	0.01	28	1250	44	0.05	7	1	13	<20
D200-50		<1	0.03	20	0.38	1190	10	0.01	46	1730	145	0.04	8	1	21	<20
D200-60		<1	0.03	10	0.34	235	4	0.01	24	880	14	0.04	<2	1	11	<20
D200-70		<1	0.03	10	0.38	338	6	0.01	31	980	11	0.02	<2	1	16	<20
D200-80		<1	0.03	10	0.33	397	7	0.01	27	950	11	0.01	2	1	11	<20
D200-90		<1	0.04	10	0.31	330	8	0.01	36	1790	18	0.05	2	1	33	<20
D200-100		<1	0.03	20	0.37	211	8	0.01	38	1270	18	0.05	<2	<1	33	<20

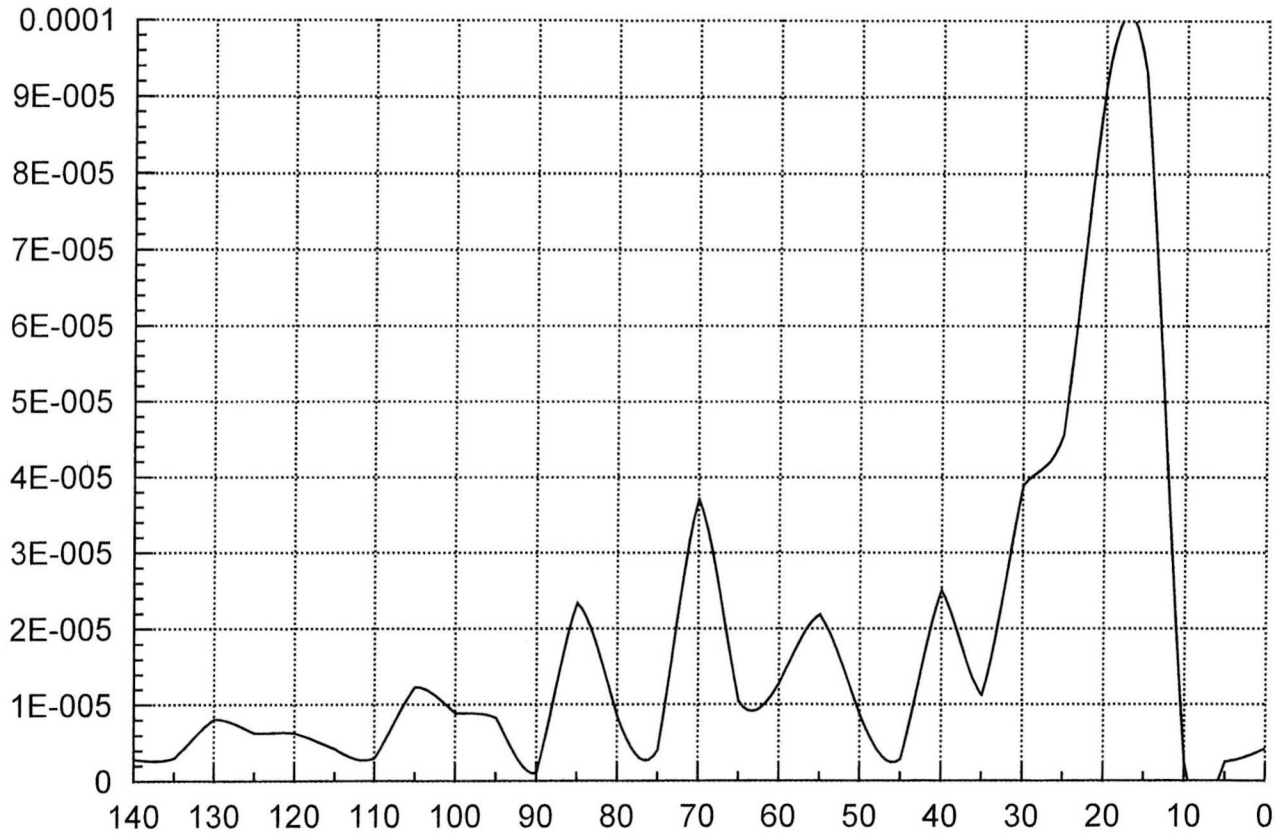
ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 18-SEP-2007
Account: DIRMOR

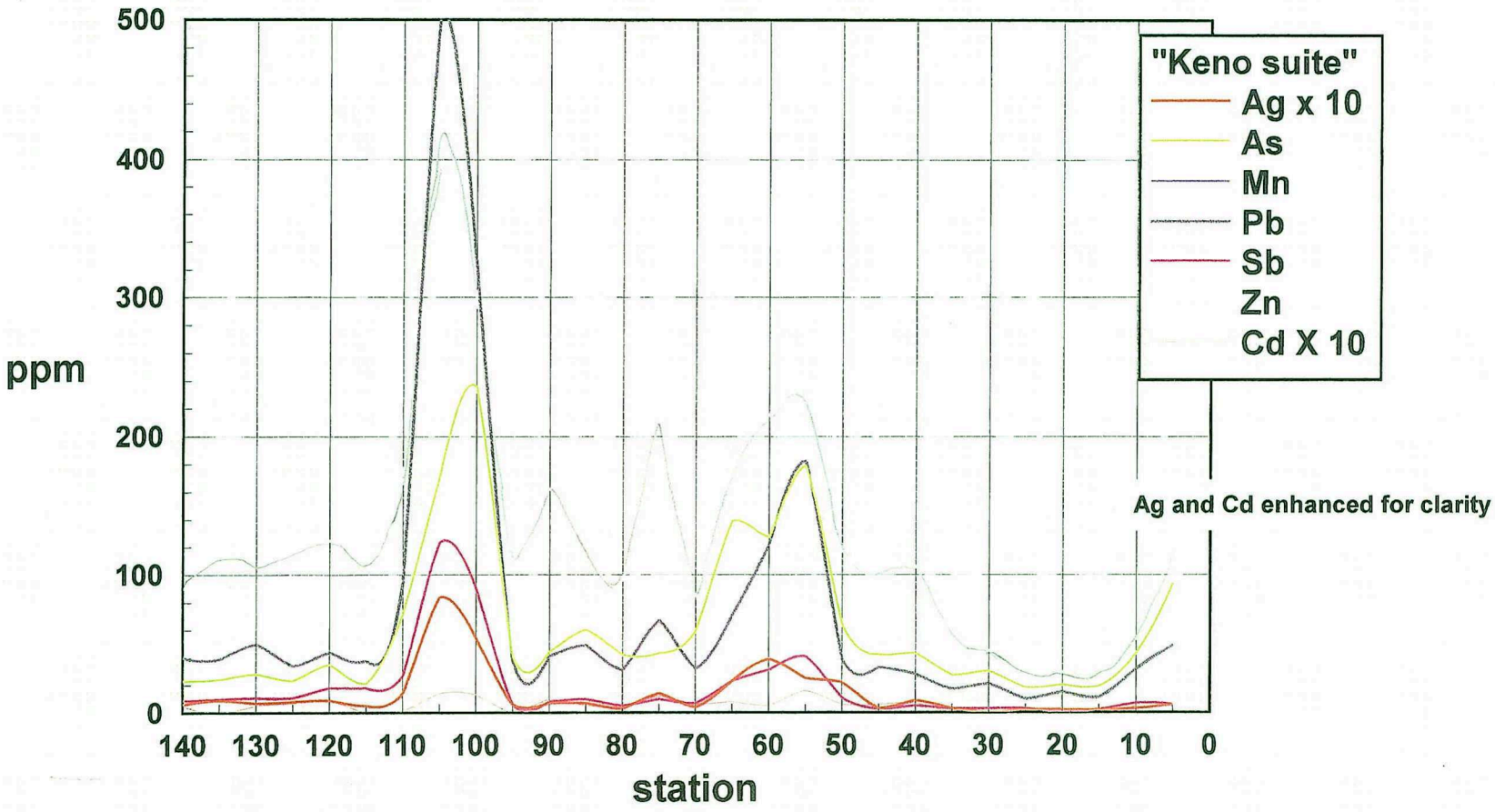
CERTIFICATE OF ANALYSIS VA07088531

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
D100-10		0.01	<10	<10	32	<10	53
D100-20		0.01	<10	<10	22	<10	103
D100-30		0.02	<10	<10	27	<10	97
D100-40		<0.01	<10	<10	14	<10	176
D100-50		0.02	<10	<10	23	<10	126
D100-60		0.02	<10	<10	32	<10	93
D100-70		0.02	<10	<10	31	<10	92
D100-80		0.01	<10	<10	30	<10	66
D100-90		0.02	<10	<10	28	<10	96
D150-10		0.01	<10	<10	41	<10	94
D150-20		0.02	<10	<10	29	<10	93
D150-30		0.01	<10	<10	27	<10	84
D150-40		0.01	<10	<10	28	<10	100
D150-50		0.01	<10	<10	32	<10	77
D150-60		0.02	<10	<10	43	<10	63
D150-70		0.01	<10	<10	33	<10	48
D150-80		0.02	<10	<10	30	<10	89
D150-90		0.01	<10	<10	34	<10	57
D200-20		0.03	<10	<10	33	<10	71
D200-30		0.01	<10	<10	18	<10	407
D200-40		0.01	<10	<10	31	<10	96
D200-50		0.02	<10	<10	23	<10	239
D200-60		0.01	<10	<10	36	<10	67
D200-70		0.02	<10	<10	35	<10	83
D200-80		0.02	<10	<10	34	<10	77
D200-90		0.01	<10	<10	36	<10	94
D200-100		0.01	<10	<10	30	<10	99

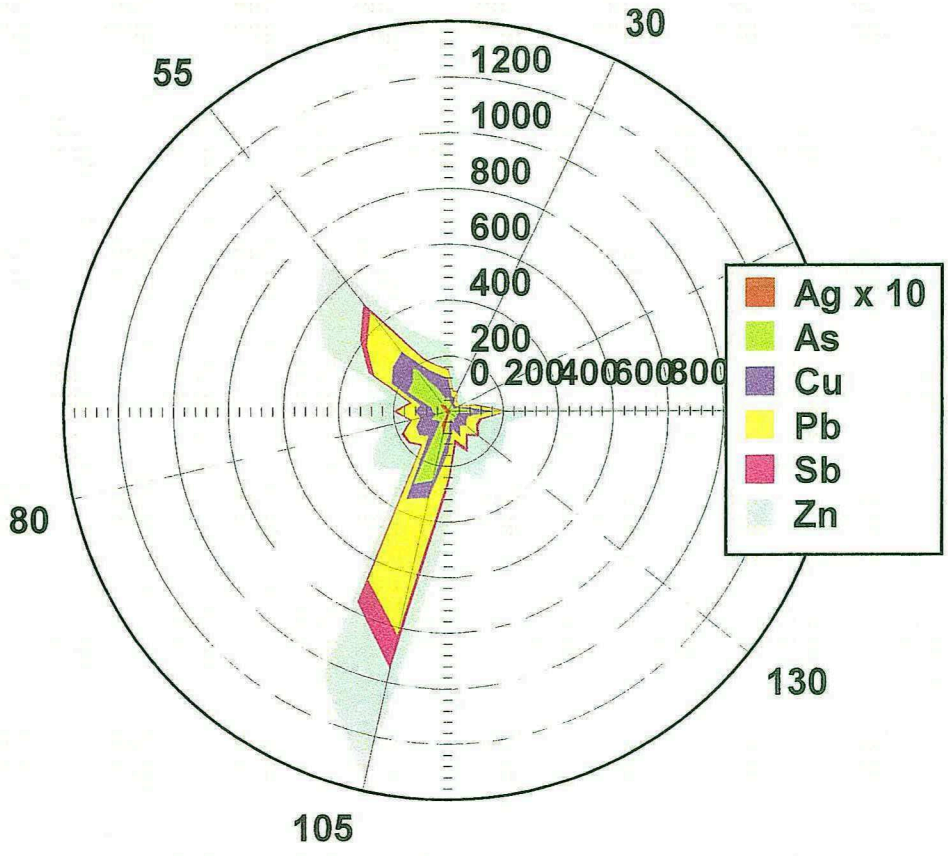


Keno Project, O NO Fraction, Line KL2, Hydrogen+ Mole

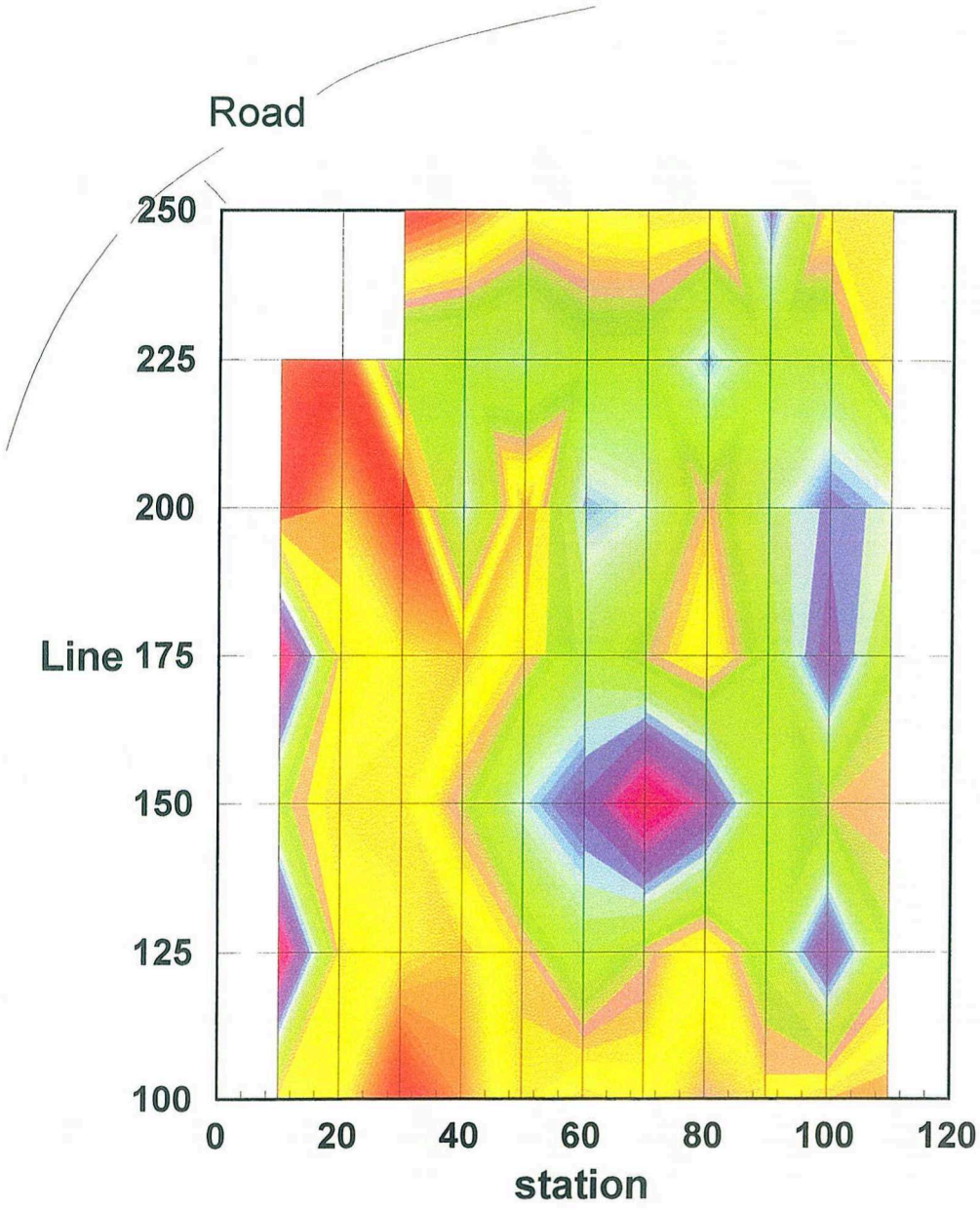
N



Keno Project O NO Fraction
Line KL2 Geochem values



O NO Frac. Line KL2

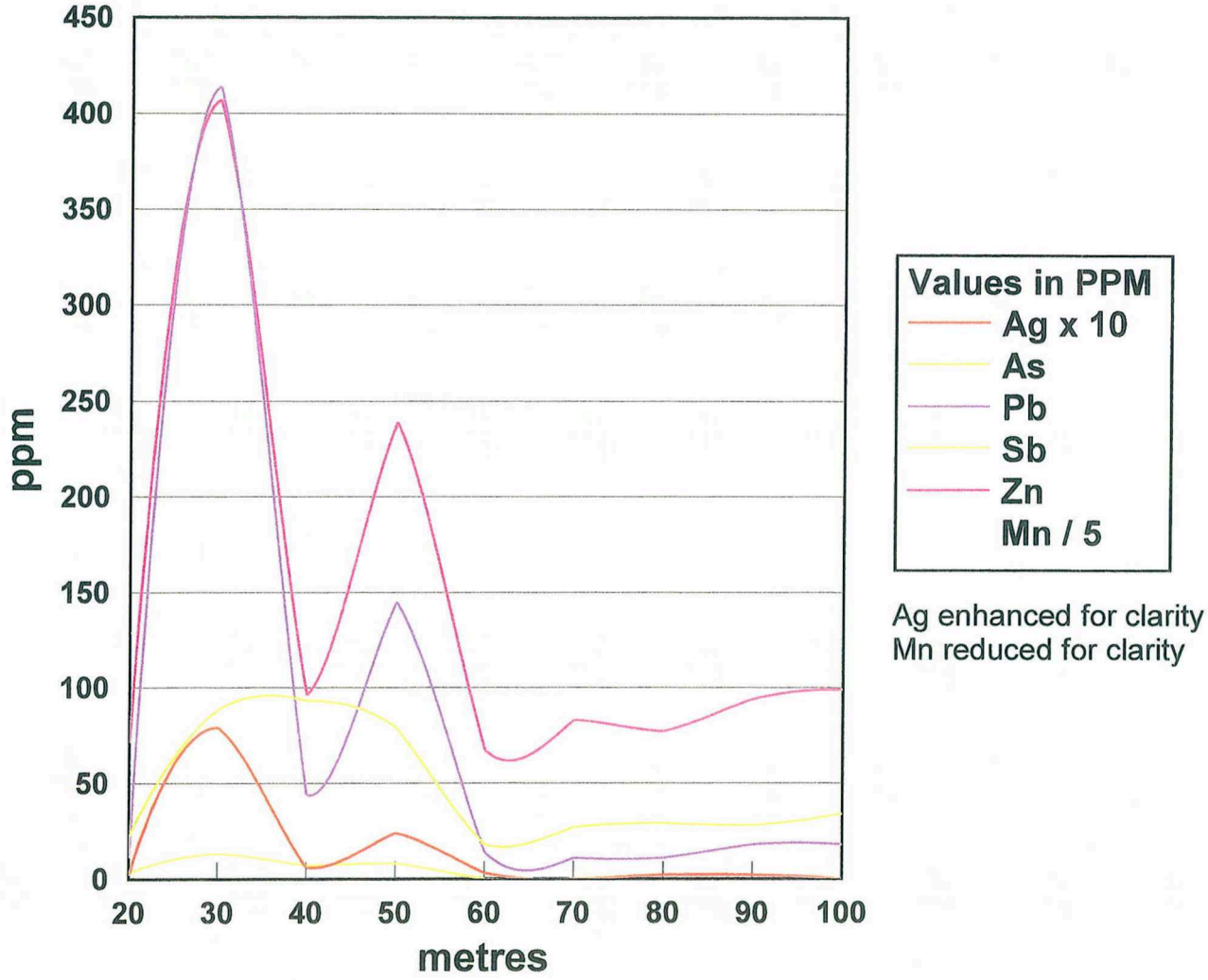


N

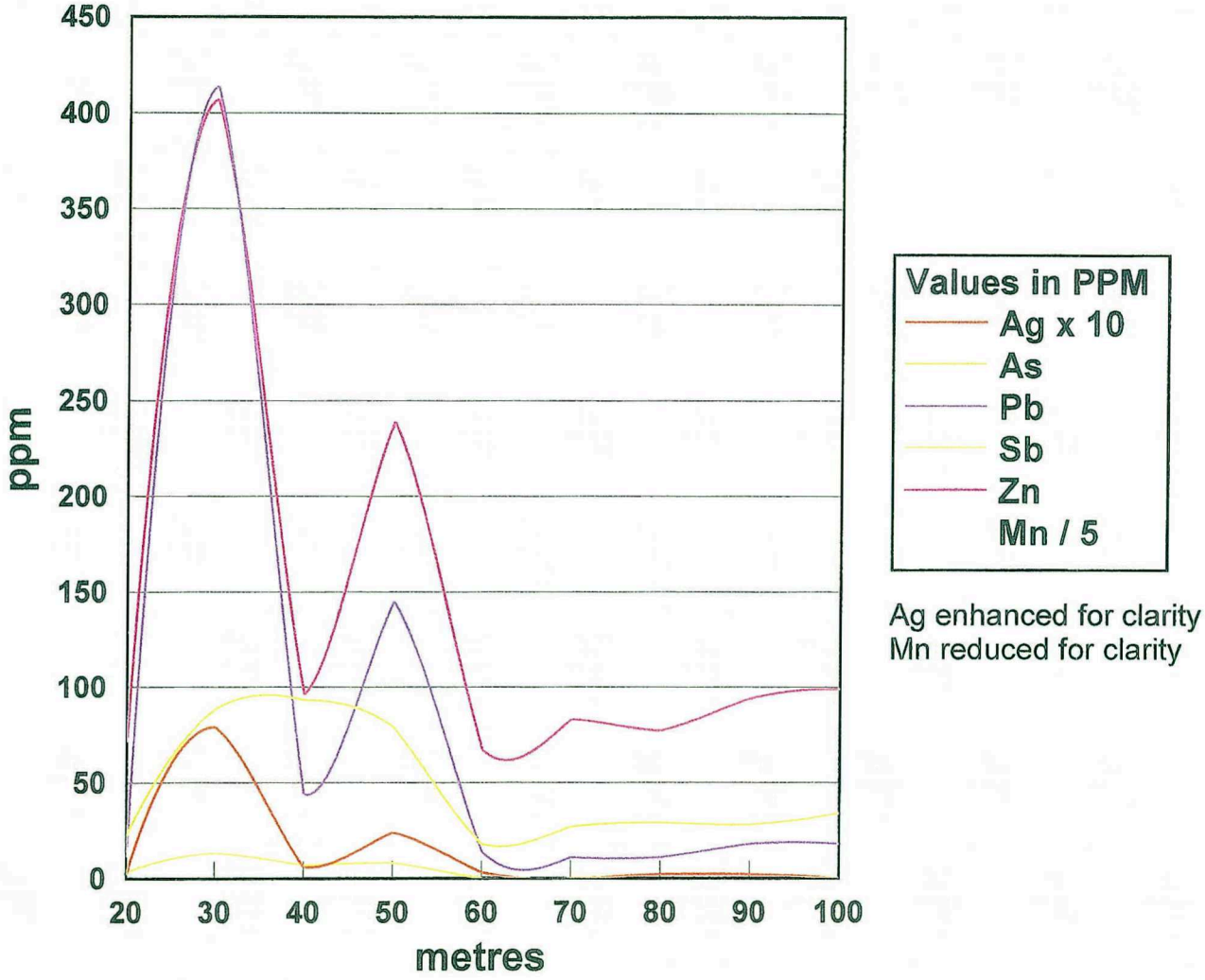
DOH Fr. Hydrogen Mole

- 4.00162E-005+
- 3.63823E-005 to 4.00162E-005
- 3.27485E-005 to 3.63823E-005
- 2.91147E-005 to 3.27485E-005
- 2.54808E-005 to 2.91147E-005
- 2.1847E-005 to 2.54808E-005
- 1.82132E-005 to 2.1847E-005
- 1.45793E-005 to 1.82132E-005
- 1.09455E-005 to 1.45793E-005
- 7.31167E-006 to 1.09455E-005
- 3.67783E-006 to 7.31167E-006
- 4.4E-008 to 3.67783E-006

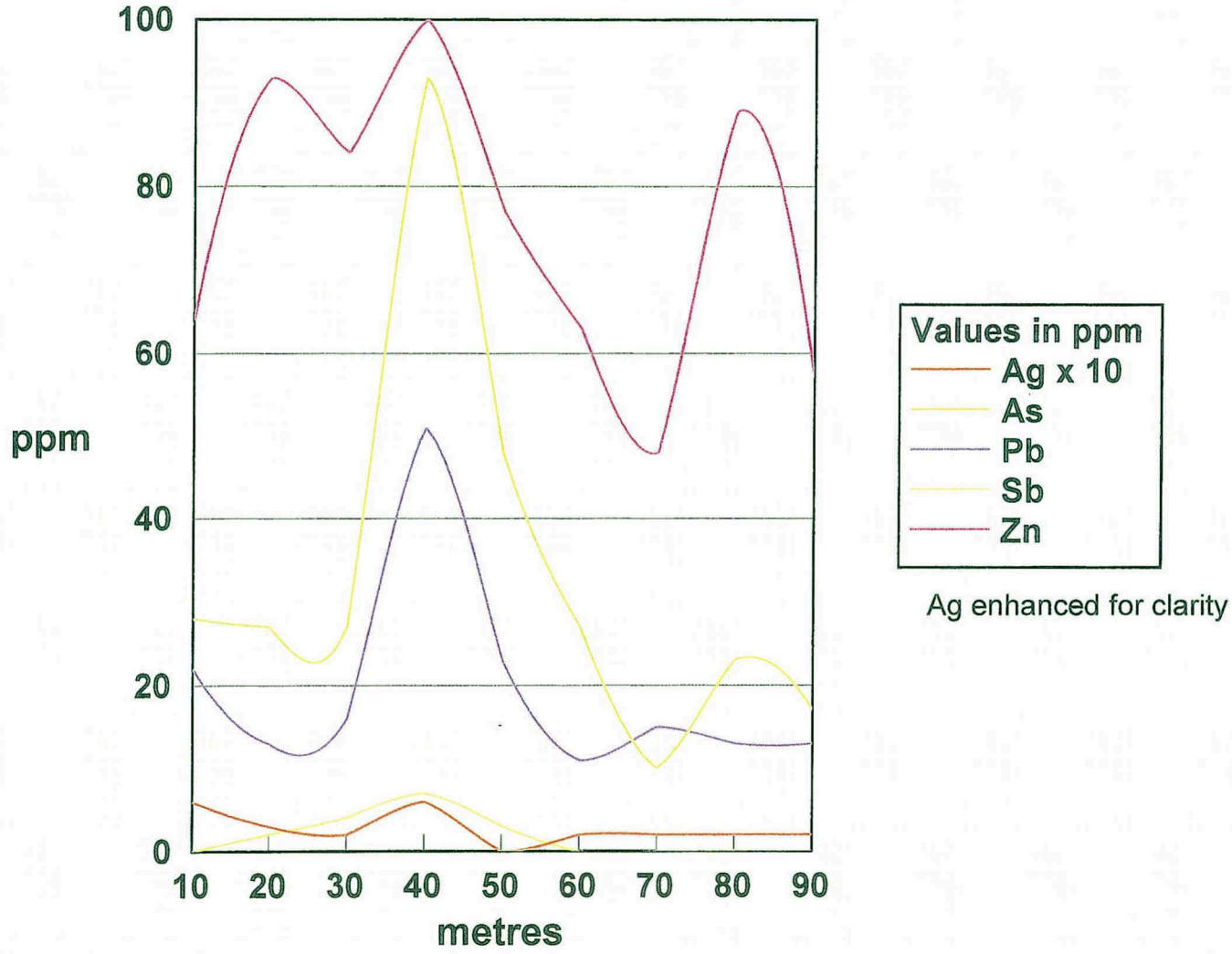
Sulphide enrichment normally expected in the low between peaks (red and Yellow tint in this example)



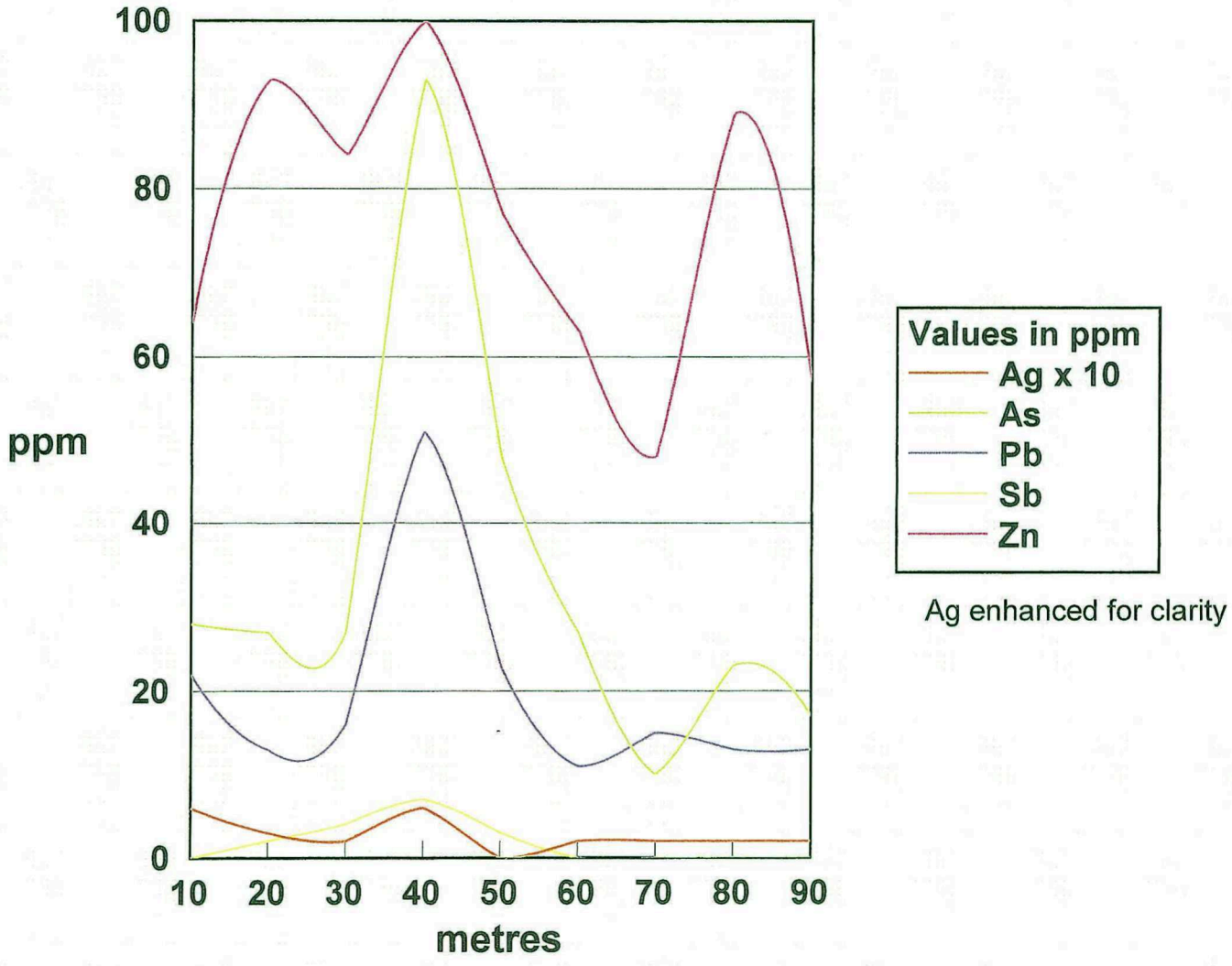
Line 200 DOH Fr. Geochemistry



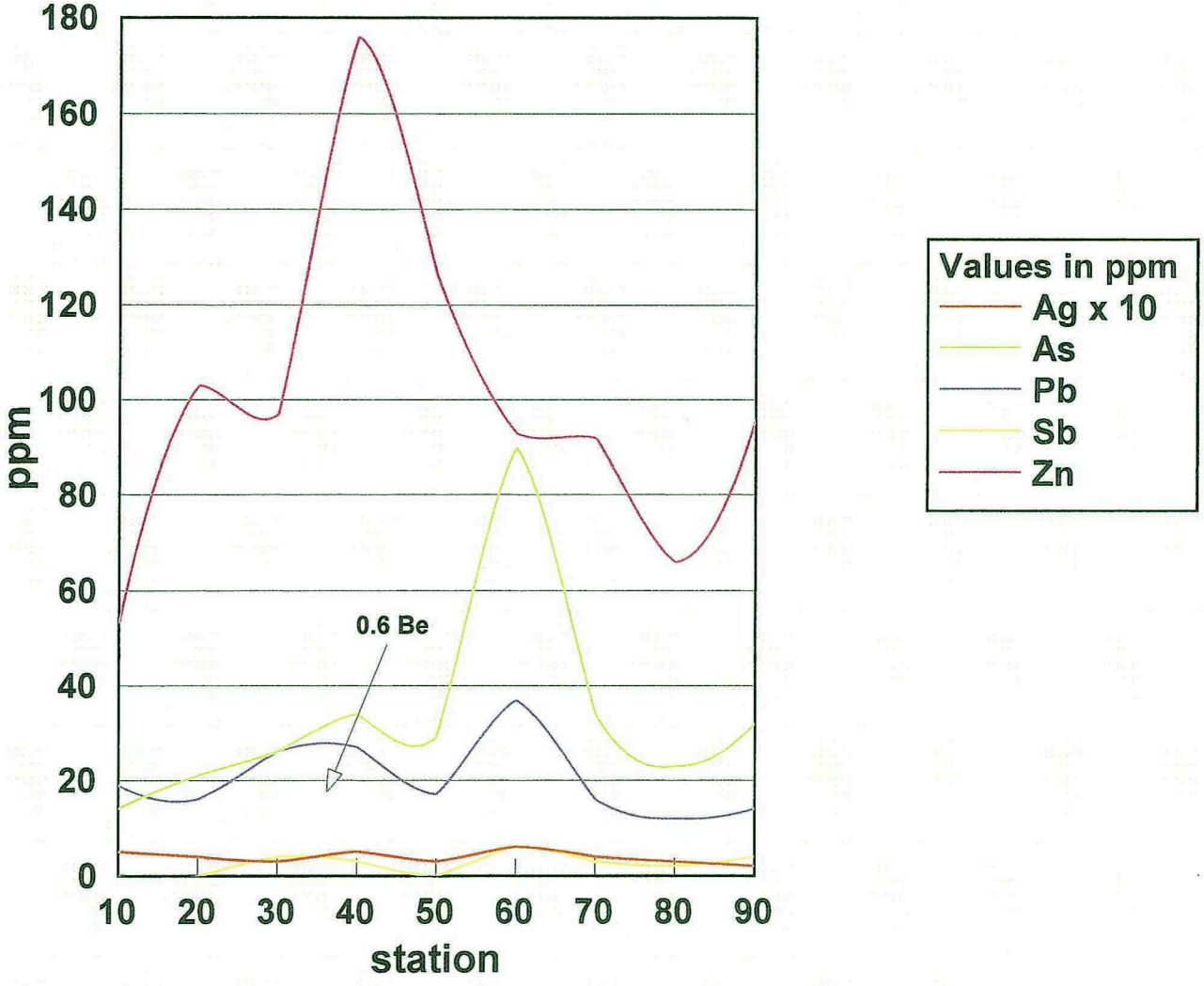
Line 200 DOH Fr. Geochemistry



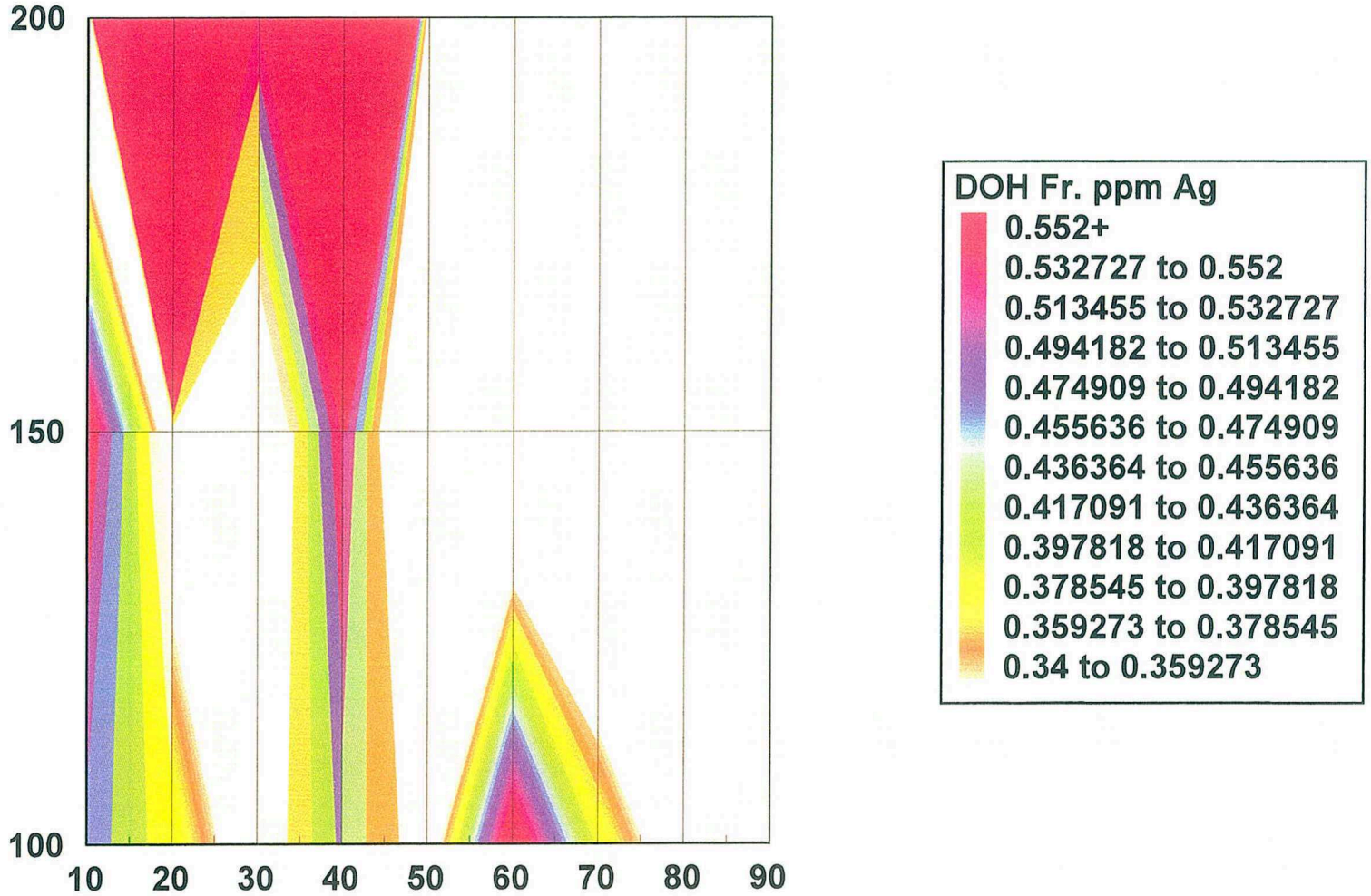
Line 150 DOH Fr. Geochemistry

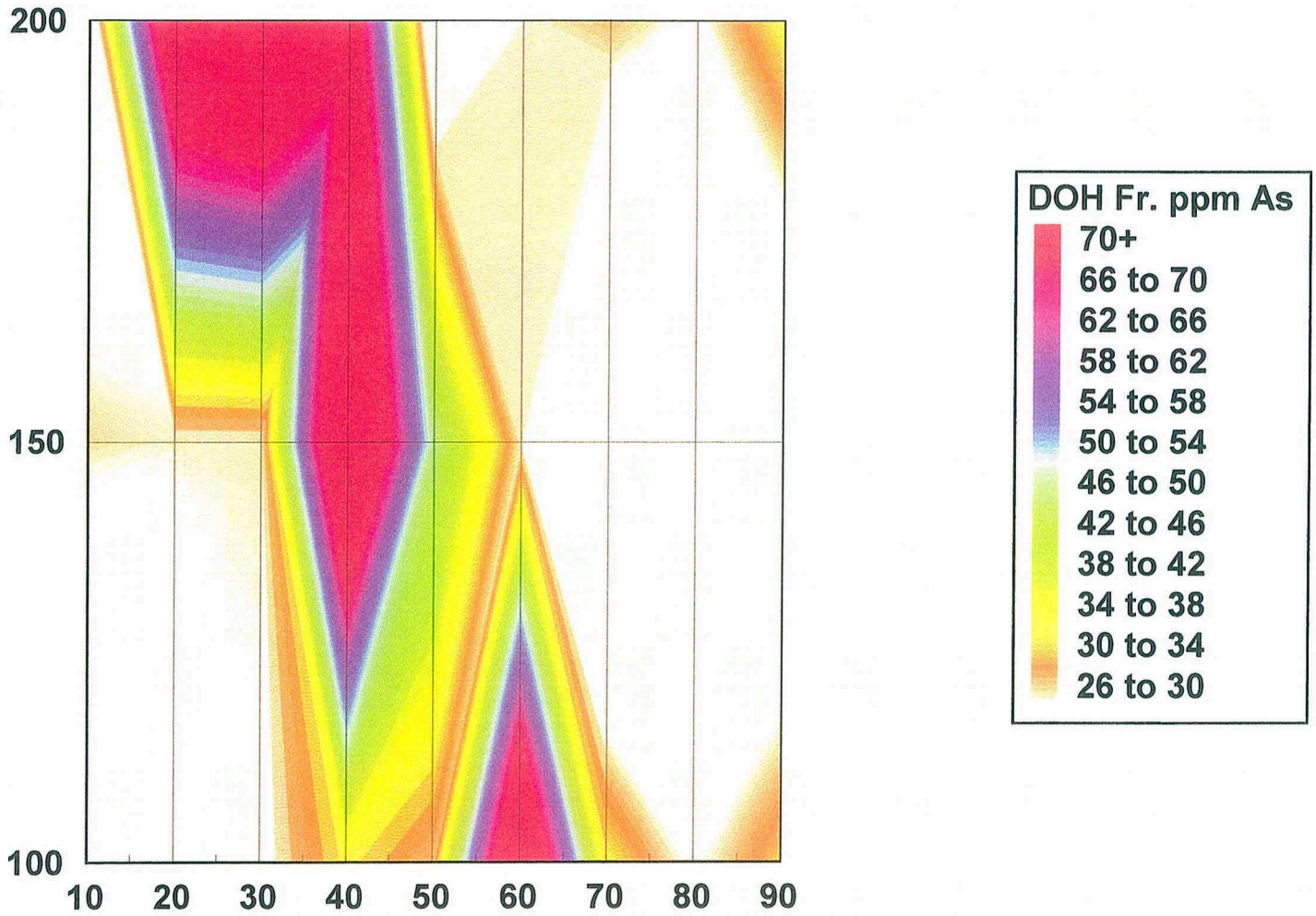


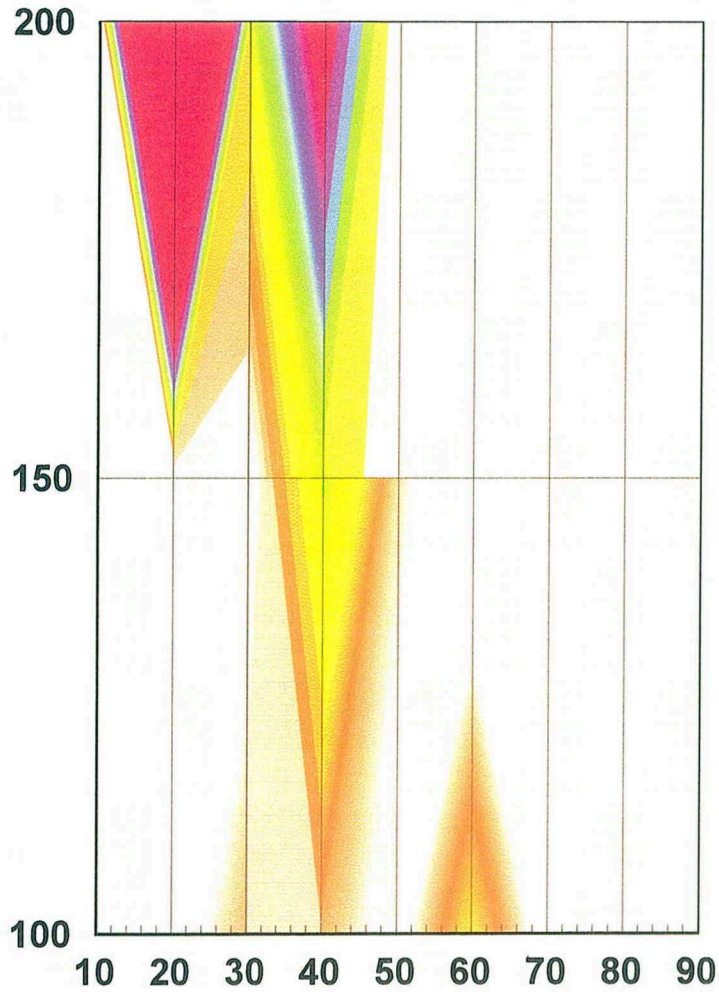
Line 150 DOH Fr. Geochemistry

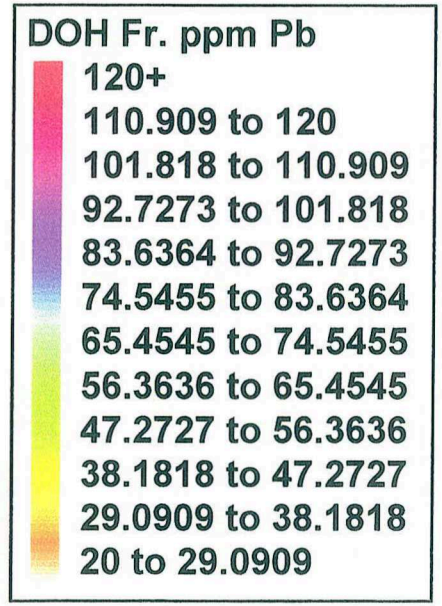


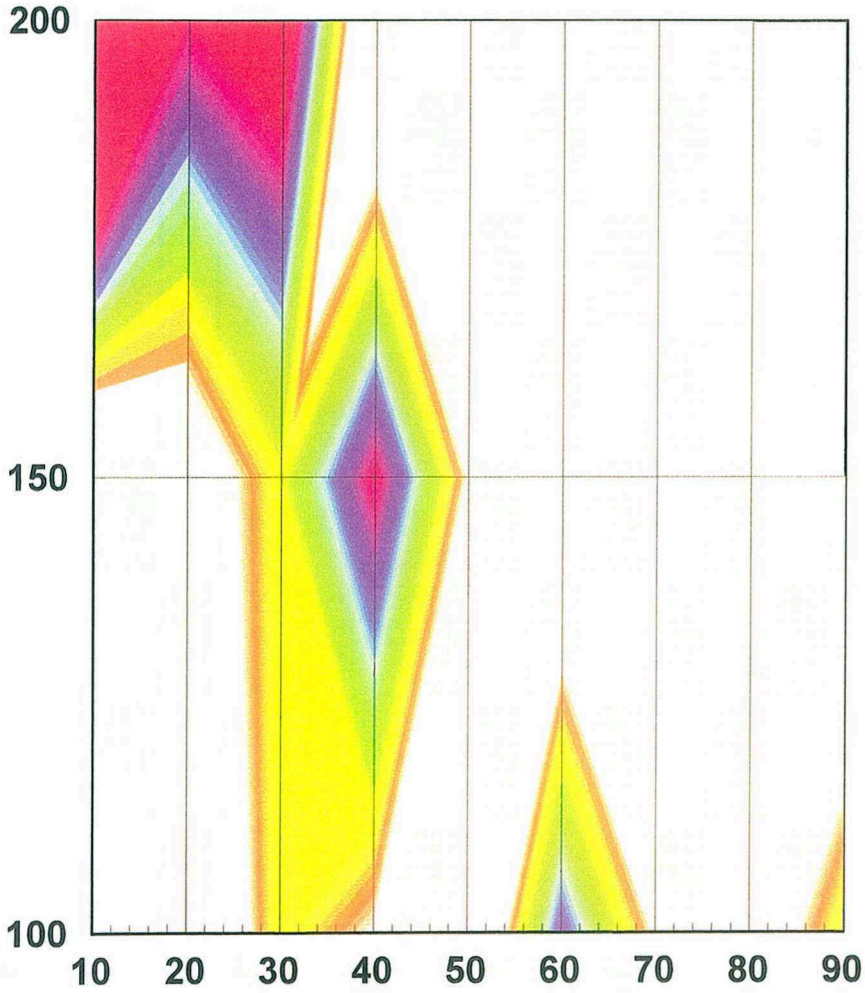
Line 100 DOH Fr.Geochemistry


200
150
100
10
20
30
40
50
60
70
80
90
DOH Fr. ppm Ag
0.552+
0.532727 to 0.552
0.513455 to 0.532727
0.494182 to 0.513455
0.474909 to 0.494182
0.455636 to 0.474909
0.436364 to 0.455636
0.417091 to 0.436364
0.397818 to 0.417091
0.378545 to 0.397818
0.359273 to 0.378545
0.34 to 0.359273


200
150
100
10
20
30
40
50
60
70
80
90
DOH Fr. ppm As
70+
66 to 70
62 to 66
58 to 62
54 to 58
50 to 54
46 to 50
42 to 46
38 to 42
34 to 38
30 to 34
26 to 30

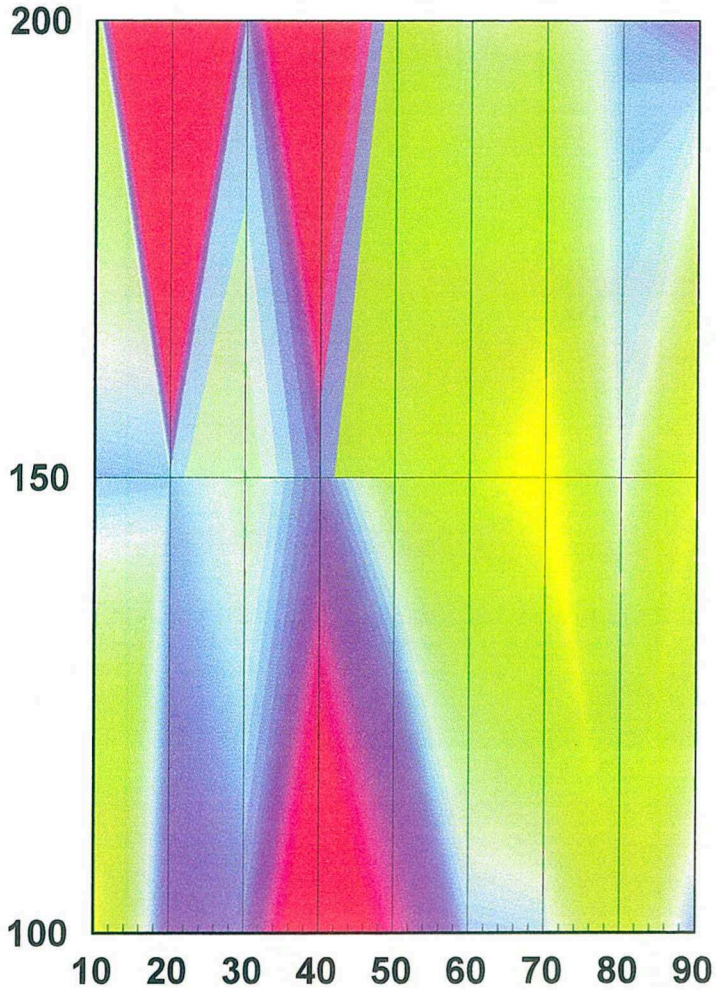

200
150
100
10
20
30
40
50
60
70
80
90


DOH Fr. ppm Pb
120+
110.909 to 120
101.818 to 110.909
92.7273 to 101.818
83.6364 to 92.7273
74.5455 to 83.6364
65.4545 to 74.5455
56.3636 to 65.4545
47.2727 to 56.3636
38.1818 to 47.2727
29.0909 to 38.1818
20 to 29.0909



DOH Fr. ppm Sb

- 7+
- 6.63636 to 7
- 6.27273 to 6.63636
- 5.90909 to 6.27273
- 5.54545 to 5.90909
- 5.18182 to 5.54545
- 4.81818 to 5.18182
- 4.45455 to 4.81818
- 4.09091 to 4.45455
- 3.72727 to 4.09091
- 3.36364 to 3.72727
- 3 to 3.36364



DOH Fr. ppm Zn

- 139+
- 128.636 to 139
- 118.273 to 128.636
- 107.909 to 118.273
- 97.5455 to 107.909
- 87.1818 to 97.5455
- 76.8182 to 87.1818
- 66.4545 to 76.8182
- 56.0909 to 66.4545
- 45.7273 to 56.0909
- 35.3636 to 45.7273
- 25 to 35.3636

LAPIE PROJECT

NTS 105F-11

Lat 61° 43' Long 133° 03'

Introduction

The Lapie project is part three of the 2007 YMIP Grassroots Prospecting programme. Several years ago an anomalous pH value in silt was collected about a km above the valley bottom, but was never followed up. This part of the programme consisted of collecting stream water pH data at intervals of 100 m. along the stream, stream silts each 200 m. along the stream, and prospecting.

During the visit, the stream was flowing quite fast due to the general extreme wetness of the year. The stream bed consists mainly of large boulders and contains little in the way of fines. Sampling is an arduous affair. The riparian zone has a dense cover of willow and deadfall which generally impedes progress, but near the headwater area the forest opens up and above 5000 ft in elevation, transitions to alpine meadow.

From the Canol road, the elevation changes by 2800 feet. The area of interest lies at about 5000 ft ASL, just at the vegetation change.

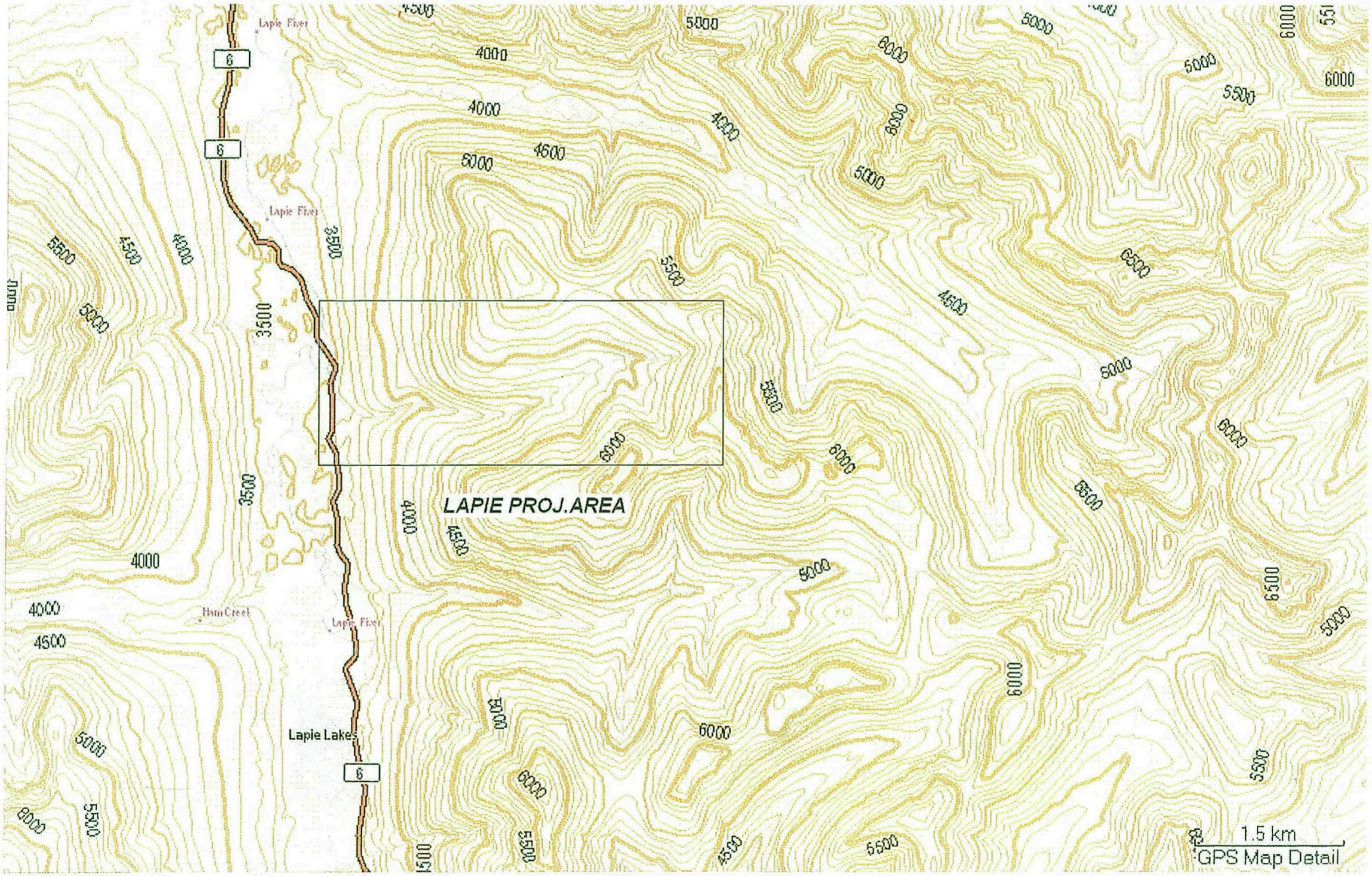
Access and location

Access to the work area is via the South Canol Road from Johnson's Crossing on the Alcan Highway. The visitor travels North to a point 2.5 km north of the upper Lapie Lake. The creek in question crosses the Canol road at UTM 601800e-6844750n (NAD 83). Parking is available some 300m south of the creek, where a wide berm permits stopping off the active roadway.

Work described

The work programme consisted of prospecting, silt sampling, and collecting stream water pH data at 100 m. intervals along the creek. These were obtained with a modern temperature compensated pH meter made by Hanna Instruments Canada, with a sensitivity of 0.01 pH units. The probe was placed in the stream and a reading taken in the normal manner. Occasionally sampling was repeated, but readings rarely varied more than 0.02 or 0.03 of a pH unit.

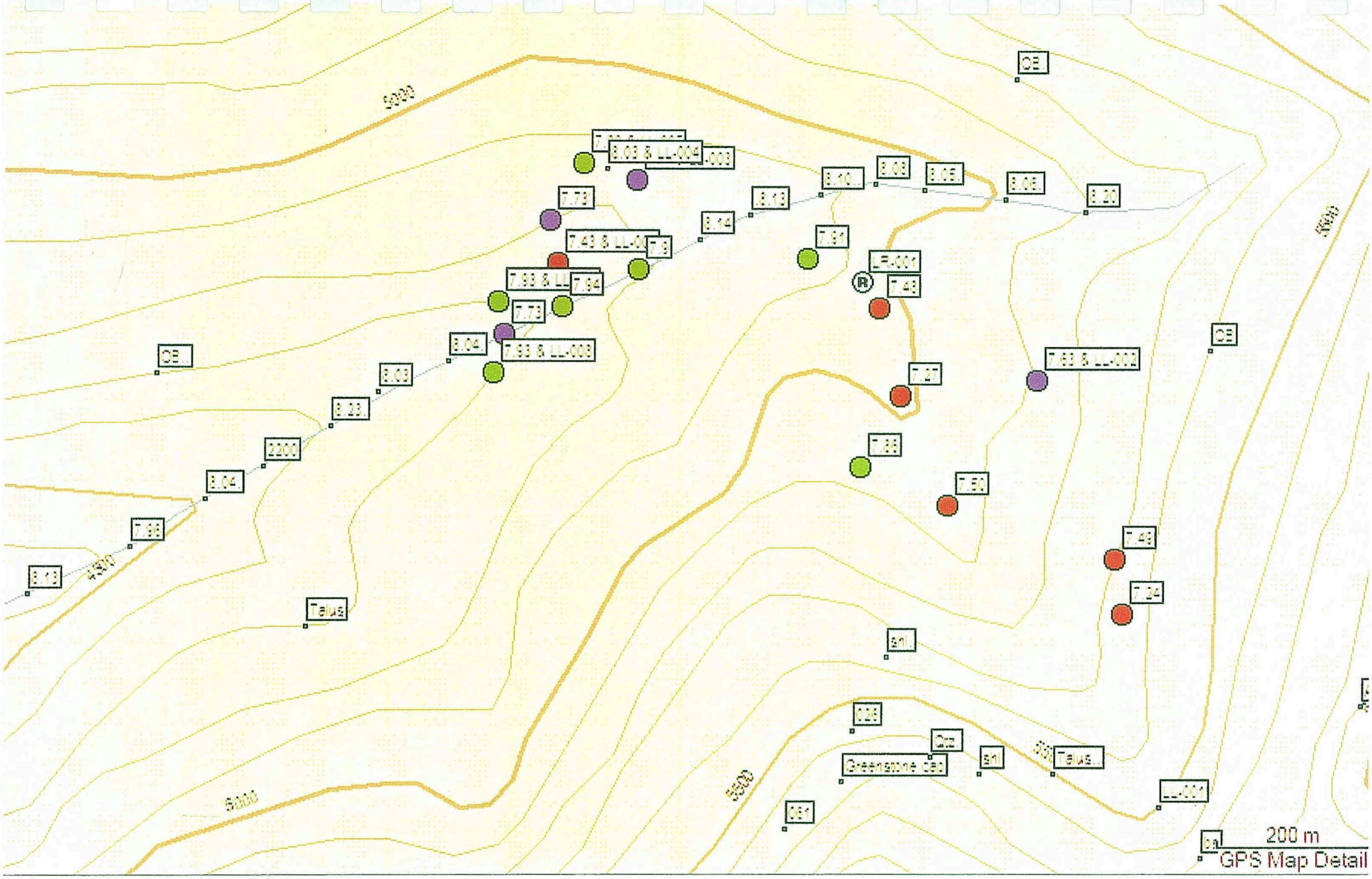
Silt samples were collected every 200 m. intervals along the creek. Stations were marked with flagging upon which the station number was marked with a felt pen. Horizontal control was by use of a hip-chain. Each 200 m the position was taken with GPS and



Lapie Project area location map



Lapie project, stream water pH sample site location map



Lapie project, stream water pH sample site location map

recorded. GPS was not very accurate in the creek valley. The intermediate stations were interpolated later when plotting.

Prospecting was only possible above the tree line, where any outcrop found was in creek bottoms until above 5400 ft elevation. Traverses were made around the watershed area, and some exploratory silts and pH testing of seeps were collected.

Prospecting and Geology

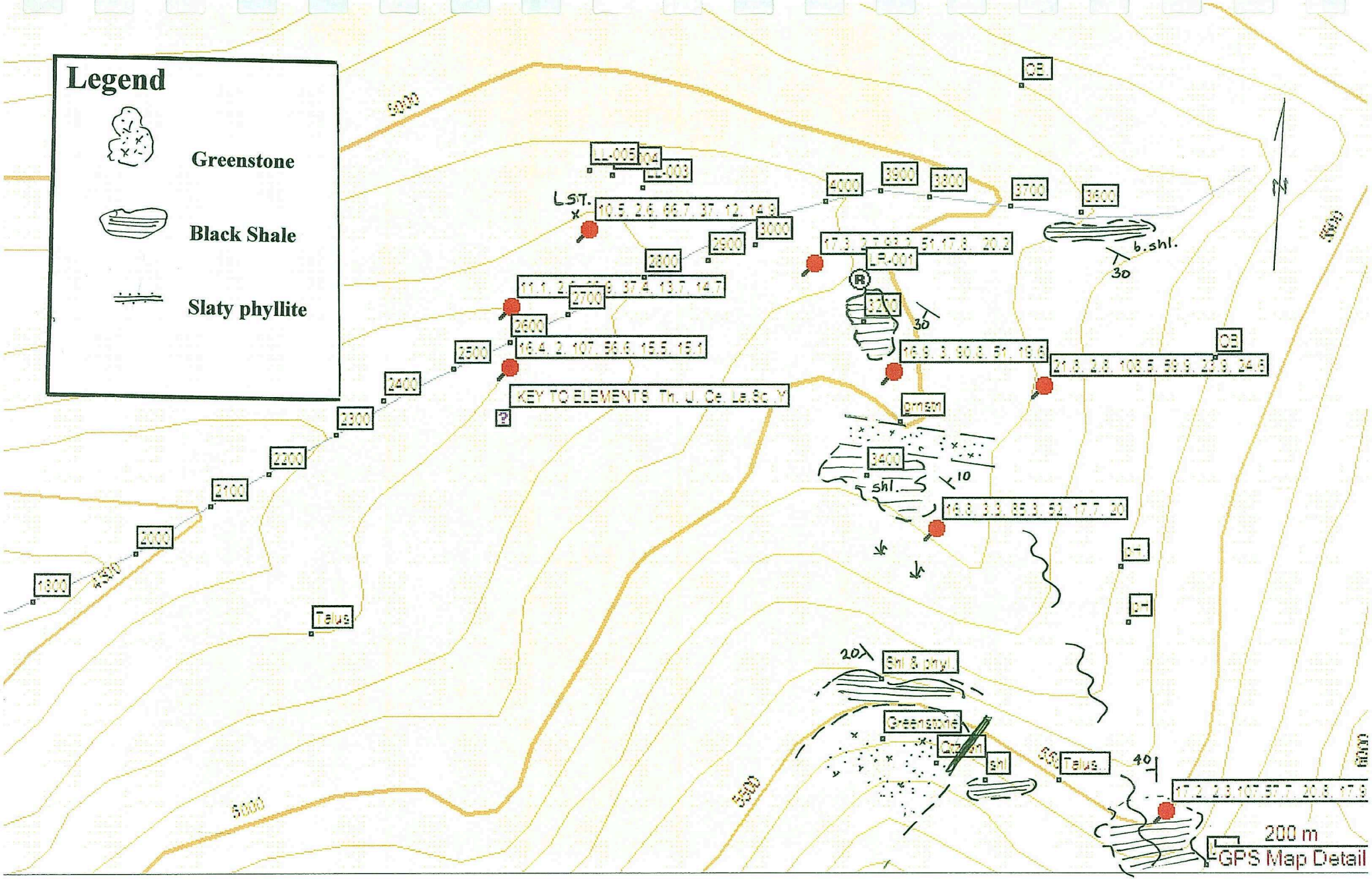
The main rock type is a grey to black chlorite quartz phyllite, invaded by ubiquitous quartz-carbonate veining. Only one instance of mineralization was seen in the form of a small lens of siderite-pyrite associated with quartz and calcite veining in phyllite, below an area statistically anomalous in stream water pH sample locations. Greenstone is present in a belt over 50 m wide which bounds the anomalous pH values, to the south, and again as a cap over interdigitated grey chlorite phyllite and pale brown slightly siliceous shale some 300 m further up hill above 5450 ft. The contact can be seen at the base of the cap, where the margins are occupied by a layer of glassy looking carbonate material. The greenstone is normally dark grey to green, with chlorite on fractures. Evidence of faulting is seen in the form of slickenside on rubble below the cliff. A large vertical barren quartz vein marks the contact on the SE between the greenstone and a buff shaley phyllite.

A north trending fault crosses and appears to terminate in the upper watershed area to the east of the greenstone cap, and is marked by a gossanous zone which appears to be mainly a limonitic alteration of the shaley phyllite. Shardy siliceous grey weathering phyllite is found along the east margin of the fault. This fault appears to end a few hundred meters north of the gossan, but it may veer north-west and be associated with the statistically anomalous stream pH values.

Lapie Project Geological Legend

SD2A. Askin. Silurian to Devonian
Medium grey to buff weathering, medium to thick dolomite, silty and sandy dolomite LST, medium to thick bedded mature orthoquartzite, dolomitized laminated mudstone, and dolomite with vugs, birdseye and fenestral cavities

COK 1, 2. Kechika. Upper Cambrian and lower Ordovician.
(Fine grain pelitic strata, intercalated mafic volcanics)
1.- Thin bedded, lustrous, calcareous slate, phyllite, LST. Minor grey dolomite and dolomitized LST; quartz carbonate veins, minor sills, and flows of basalt and basaltic tuff, may include Ordovician black slate at top of succession.
2.- massive, dark green, and maroon amygdaloidal basalt flows and volcaniclastics, medium to fine grain diabase, or dolomite sills with chilled



Lapie project, surficial geology and anomalous U,Th location map

margins, medium grey chlorite, muscovite, quartz, phyllite with abundant undifferentiated lenses of 'greenstone'.

lCR. Rosella. Lower Cambrian
Resistant, thick bedded to mafic LST and argillaceous LST, local archaeocyathid buildup, trilobite fragments, ooliths, and pisolites, pisolitic massive dolomite, and LST: marble, calc-silicate, calcareous phyllite and minor schist

PC1 4. Ingenika. Upper Proterozoic, Lower Cambrian
Thin bedded slate, siltstone, quartzite, and minor LST, with local medium to coarse grained feldspathic sandstone, to orthoquartzite, muscovite biotite +/- garnet schist, micaceous`quartzite, minor amphibolite, minor marble, rare granodiorite gneiss (ketza or Harvey gp.

Stream pH and silts

Due to the volume of water, the boulders in the stream bed and the lack of fines, silt samples are perhaps not of the highest quality, but all samples were collected by means of an industrious application of elbow grease. Stream water pH did not appear to be affected by the volume of water since there was a definite pH change at sample 3100
52 locations were tested for water pH. The main stream was quite alkaline, as was the left handed fork (looking upstream). The right hand fork has the main volume of water, and drains the south portion of the catchment basin. The surface exposure of the fault lies in this area. Several water pH samples points with values of one pH unit over background were collected along this branch of the creek.

30 silt samples and one rock sample were collected on the traverses over 3 days spent on site. These samples were sent for geochemical analysis.

pH values varied from 8.23 to 7.24, or a 10 (1 pH unit) fold difference.

Results

pH testing

52 locations were sampled for stream water pH, as described above. The writer completed a statistical determination for pH data, using the mean, and standard deviation for the population.

Statistical determinations

σ	0.254			
x	7.95			
x + 1 σ	7.69 to 7.44			
x + 2 σ	<7.44			
Range	8.12 to 7.24			
Background	8.18			

Anomaly categories are:

Negative = 0 to mean (x)	> 7.95
Possibly anomalous = mean to mean + 1σ'	7.95 to 7.70
Probably anomalous = mean + 1σ' to mean + 2σ'	7.69 to 7.44
Definitely anomalous > than 2σ'	< 7.44
Range	8.12 – 7.24
Background	8.18

Three sample sites returned definitely anomalous pH in stream water. Four samples fell into the high probably anomalous category. 9 samples fell in the possibly anomalous category. These samples cluster to loosely form a band 800 m long and about 150 m wide.

Silt sample analysis

30 silt samples collected along the creek and from seeps around the headwater area were submitted for geochemical analysis to ALS Chemex for treatment with their ME-MS61 method.

The results obtained are somewhat low but after several elements were treated to the same statistical determination as for the pH data it appears that a zone at the headwater area adjacent the fault and associated with the pH anomaly is statistically definitely anomalous for the population (higher than X+2σ) in Bi, U, Th, Cr, Cs, Ni and Y, with statistically elevated ("probably anomalous" or from X+ 1σ to x+2σ) values in As, Ce, Co, Cu, La, Mo, Sc, Sn, Tl, V, Zn.

Sr is elevated only in an area 500m north of the anomalous pH, associated with highly calcareous seeps (calcareous tufa was forming in the drainage)

Elements were assembled in roughly associated groups for ease of interpretation. These groups were plotted in an x-y format and are included in the appendix at the end of the report.

A statistical determination was carried out on selected elements.

Anomaly categories for selected elements are the same as for pH, as follows:

Negative	=	0 to x
Possibly anomalous	=	x to x+1σ
Probably anomalous	=	x+1σ to x+2σ
Definitely anomalous	=	> x+2σ

U, Th, and REE

	Th	U	Ce	La	Sc	Y	
n	30	30	30	30	30	30	
σ	0.249	0.0932	15.92	9.11	3.72	4.83	
x	1.05	0.452	72.2	46.5	13.74	14.26	
x+1σ	1.299	0.545	88.12	55.61	17.46	19.09	
x+2σ	1.548	0.638	104.04	64.72	21.18	23.92	

Metals

	Ag	As	Cd	Co	Cr	Cu	Mo
n	30	30	30		30	30	30
σ	0.075	2.506	.226		15.92	7.346	.688
x	0.1636	5.496	.293		72.2	25.03	1.299
x+1σ	0.2385	8.09	.519		88.12	32.37	1.987
x+2σ	0.3136	10.59	.745		104.04	39.72	2.675

	Ni	Pb	Sb	Sn	W	Li	Zn
n	30		30	30	30	29	29
σ	9.42		0.274	.442	0.197	10.9	23.8
x	30.22		0.872	1.856	1.07	37.87	91.7
x+1σ	39.64		1.146	2.29	1.26	48.77	115.5
x+2σ	49.06		1.42	2.74	1.46	59.67	139.3

Alkali, Carbonate etc

	Al%	Ca%	Fe%	K%	Mg%	Na%	S%
n	30	30	30	30	30	30	30
σ	1.42	1.6	.684	1.39	0.216	0.149	0.0298
x	7.37	2.52	3.675	2.25	1.151	0.934	0.056
x+1σ	8.79	4.12	4.36	3.64	1.36	1.083	0.0858
x+2σ	10.21	5.72	4.84	5.03	2.583	1.232	0.1146

The data shows that above station 3000 on the creek, there is an increase in H+, and a general modest increase in value for most elements. Statistically definitely anomalous values are associated with a seep sample (LL002) and probably anomalous values are

associated with silt samples from 3000 to 3500. U is definitely statistically anomalous in silt samples 3300 and 3500.

A single rock sample from a haematite-siderite breccia in a black shale outcrop near silt/water pH anomaly below station 3100m returned low REE, U and Th values. This is not discouraging since the rock sample is on the edge of the H+ anomalous zone and removed from the statistically anomalous for the population 2.5 to 3.3 ppm U in silt.

The analytical certificate is included with the silt sample results at the end of the report.

Appendix

LAPIE
PROJECT,
STREAM
WATER
pH DATA

Main Branch		North branch		Seeps	
0	8	3600	8.2	wpt 125	7.24
100	8.11	3700	8.05	wpt 126	7.48
200	8.06	3800	8.05	wpt 127	7.63
300	8.07	3900	8.08	wpt 130	7.74
400	8.1	4000	8.1	wpt 131	8.03
500	8.25			wpt 132	7.88
600	8.31			wpt 133	7.73
700	8.21			wpt 134	7.43
800	7.95				
900	8.05				
1000	8.19				
1100	8.1				
1200	8.23				
1300	8.15				
1400	8.04				
1500	7.98				
1600	8.15				
1700	8.12				
1800	8.13				
1900	7.92				
2000	7.96				
2100	8.05				
2200	7.99				
2300	8.23				
2400	8.03				
2500	8.04				
2600	7.93				
2700	7.94				
2800	7.9				
2900	8.14				
3000	8.13				
3100	7.9				
3200	7.48				
3300	7.27				
3400	7.86				
3500	7.5				

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 22-SEP-2007
This copy reported on 24-SEP-2007
Account: DIRMOR

CERTIFICATE VA07092255

Project:

P.O. No.:

This report is for 30 Soil samples submitted to our lab in Vancouver, BC, Canada on 21-AUG-2007.

The following have access to data associated with this certificate:

DIRK MORAAL		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS61	48 element four acid ICP-MS

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 22-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092255

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
LL-001		0.24	0.16	9.01	13.7	740	3.79	0.19	0.87	0.24	107	35.3	117	13.75	40.4	5.05
LL-002		0.20	0.48	10.35	4.9	780	3.97	0.36	0.7	0.1	108.5	22	93	17.4	40.4	4.9
LL-003		0.12	0.15	5.81	2.4	380	1.64	0.15	5.48	0.21	47	9.4	41	6.44	23	2.32
LL-004		0.28	0.13	5.32	4.2	420	1.49	0.1	8.58	0.35	62.9	8.4	48	6.36	14.5	2.12
LL-005		0.18	0.29	5.58	4.3	740	1.16	0.11	2.68	1.29	35.7	7.3	32	2.86	19.2	2.27
LL-006		0.12	0.15	6.58	2.9	630	1.9	0.14	1.65	0.38	66.7	10.6	59	4.84	20.6	2.87
LL-007		0.34	0.27	7.18	10.5	1130	2.11	0.16	2.99	0.61	69.9	15.8	64	5.18	26.9	4.2
LL-008		0.18	0.15	7.82	7.3	750	2.6	0.19	1.22	0.21	107	18	83	5.69	24.3	3.97
LS1-00		0.10	0.15	6.93	3.3	630	2.03	0.14	4.24	0.19	87.5	12	61	4.99	18.4	3.15
LS1-200		0.10	0.15	6.81	3.9	630	1.83	0.13	3.74	0.19	74.9	11.3	60	4.69	19.9	3.12
LS1-400		0.22	0.12	7.14	4.4	660	2.13	0.13	3.62	0.17	103	12.8	63	5.02	18.6	3.34
LS1-600		0.24	0.14	7.13	4.5	690	2.09	0.15	3.37	0.17	99.3	13.1	67	4.91	19.8	3.36
LS1-800		0.40	0.14	7.11	4.2	650	2.25	0.14	4.1	0.19	89	13.8	62	5.3	26.2	3.6
LS1-1000		0.16	0.16	7.55	4.4	750	2.29	0.14	2.3	0.18	103	13.9	76	5.37	19.7	3.61
LS1-1200		0.18	0.15	7.59	3.8	780	2.15	0.16	2.18	0.17	90.6	12.6	74	6.44	18.1	3.46
LS1-1400		0.22	0.15	7.57	4.3	760	2.24	0.15	1.9	0.2	87.4	13.7	80	6.3	19.3	3.62
LS1-1600		0.28	0.11	7.49	5.4	770	2.31	0.15	1.64	0.23	100.5	15.4	74	5.19	21.1	4.27
LS1-1800		0.22	0.16	7.47	5.4	800	2.15	0.16	1.85	0.3	80.2	14.3	72	6.12	22.4	3.71
LS1-2000		0.34	0.16	7.71	5.2	760	2.37	0.16	2.05	0.35	74.9	14.5	73	6.8	24.6	3.91
LS1-2200		0.24	0.15	7.67	4.5	770	2.12	0.15	2.46	0.35	83.7	13.5	70	6.28	23.6	3.69
LS1-2400		0.24	0.22	7.38	5.7	840	2.29	0.17	2.53	0.53	70.1	14	72	6.97	31.9	3.61
LS1-2600		0.22	0.15	8.19	5.9	760	2.61	0.19	1.68	0.22	87.1	15	78	8.16	25.6	3.81
LS1-2800		0.32	0.15	8.09	6.3	780	2.64	0.21	1.68	0.31	84.2	16	83	9.59	33.5	3.89
LS1-3000		0.28	0.1	7.91	4.1	590	2.49	0.18	1.84	0.14	97.6	15	80	7.82	21.5	3.69
LS1-3100		0.20	0.18	8.62	7.7	1000	2.92	0.24	1.18	0.4	93.2	20	87	11.35	39.2	4.32
LS1-3300		0.34	0.18	8.88	9	1100	2.82	0.24	0.86	0.42	90.8	20.4	84	9.22	37.2	4.56
LS1-3500		0.30	0.16	8.43	10.3	1080	2.95	0.24	0.82	0.35	85.3	22.8	84	8.39	36.4	4.43
LS1-3600		0.30	0.08	7.87	4.4	540	2.5	0.18	2.56	0.11	95.2	15	73	6.06	21.6	3.59
LS1-3800		0.68	0.08	8.19	4.3	570	2.57	0.19	2.24	0.11	95.3	17	80	6.04	21.9	3.95
LS1-4000		0.48	0.09	7.92	3.7	550	2.24	0.17	2.57	0.12	82.4	13.9	78	6.78	20.8	3.8

Comments: REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 22-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092255

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10	0.5
LL-001		27.2	0.25	3.4	0.066	2.99	57.7	58.6	1.51	670	2.38	0.87	23	53.5	1070	26.4
LL-002		29	0.26	3.7	0.079	2.9	59.9	83.2	1.86	421	0.51	0.67	22.6	44.7	670	9.1
LL-003		14.5	0.18	2.1	0.036	1.53	27	27	0.97	304	1.33	1.01	8.6	16.6	910	8.2
LL-004		12.8	0.15	1.6	0.028	1.76	34.8	14.4	0.7	277	0.72	0.5	8.8	16.5	840	10.7
LL-005		12.5	0.15	2.5	0.022	1.49	19.5	16.7	0.7	444	1.72	1.41	6.9	18.6	1010	11.2
LL-006		16.6	0.18	2.3	0.038	1.75	37	32.9	0.95	337	1.19	1.1	13.4	24.4	930	18.2
LL-007		18.3	0.21	2.5	0.049	2.26	37.4	27.7	1.13	870	2.86	0.89	15.9	36.2	950	29.5
LL-008		21.5	0.25	2.5	0.046	2.48	56.6	29.4	0.94	554	1.57	0.83	15.3	32.1	830	25.2
LS1-00		17.05	0.22	2	0.041	2.1	48.8	33.8	1.18	411	0.66	0.88	13.1	23.8	840	14.3
LS1-200		16.5	0.19	2	0.037	2	41.8	32.2	1.14	421	0.73	0.94	11.5	22.4	800	13.5
LS1-400		18.5	0.22	2	0.044	2.15	56.6	37.7	1.22	412	0.77	0.96	14	27	780	14.5
LS1-600		18.05	0.22	2.2	0.04	2.2	54.8	35.5	1.17	441	0.82	1.01	13.7	26.1	850	15.5
LS1-800		18.5	0.23	2.2	0.044	2.19	48.6	38.3	1.23	575	0.76	0.82	13	26.6	790	15.2
LS1-1000		19.4	0.23	2.2	0.047	2.28	56.1	37.4	1.23	453	0.92	1.03	15.4	29.7	840	15.7
LS1-1200		18.2	0.23	2.4	0.044	2.32	49.8	31.1	1.07	420	0.82	1.02	14.5	25.9	870	15.8
LS1-1400		18.85	0.22	2.4	0.046	2.23	47.3	31.2	1.04	443	0.8	1	15.6	27.8	880	16.9
LS1-1600		19.35	0.24	2.2	0.051	2.24	54	36.1	1.14	884	1.33	0.84	13.6	33	740	18.6
LS1-1800		19.2	0.2	2.3	0.047	2.25	43.2	31	1	589	1.69	0.86	15.5	28.6	870	18.5
LS1-2000		19	0.21	2.4	0.049	2.28	40.4	30.8	0.97	587	1.11	0.83	14.6	29.4	930	23.4
LS1-2200		18.6	0.22	2.4	0.045	2.16	46.1	35.5	1.12	492	1.2	0.98	17.2	30.2	930	23.1
LS1-2400		18.05	0.21	2.5	0.045	2.02	38.6	35.1	1.06	579	1.78	0.93	15.9	32.9	1060	27.4
LS1-2600		21.5	0.23	2.8	0.057	2.15	47.8	47.6	1.22	444	1.08	1.12	20	33.7	850	26.5
LS1-2800		21.4	0.22	2.8	0.054	2.26	45.7	44.9	1.18	502	1.55	0.97	18.7	35.8	880	20.5
LS1-3000		21.6	0.24	2.9	0.05	2.14	52.3	50.3	1.22	454	0.73	1.02	20.3	34.8	760	14
LS1-3100		24.7	0.23	3.1	0.067	2.6	51	49.3	1.28	631	2.4	0.93	20.6	39.5	920	26.2
LS1-3300		24.9	0.25	3.2	0.066	2.73	50.1	47.3	1.27	799	2.41	0.92	19.5	38.2	900	25.7
LS1-3500		25	0.25	3.2	0.07	2.66	46.8	47.8	1.27	905	2.82	0.89	18.2	39.6	770	25.6
LS1-3600		20.5	0.23	2.5	0.044	2.1	52.1	51.5	1.22	478	1.15	0.93	17.3	36	650	12.4
LS1-3800		23.5	0.24	2.7	0.05	2.27	48.7	59.4	1.35	506	0.72	0.94	19.2	40	620	12.7
LS1-4000		19.15	0.22	2.5	0.046	2.13	45	47.8	1.2	495	0.79	0.94	18.2	33	740	12.9

Comments: REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 22-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092255

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
LL-001		143.5	<0.002	0.04	0.76	20.8	2	2.6	133	1.49	<0.05	17.2	0.567	0.6	2.3	140
LL-002		142	<0.002	0.02	0.47	23.9	2	3.1	106	1.59	<0.05	21.8	0.498	0.65	2.8	91
LL-003		67.9	<0.002	0.12	0.44	12.9	3	1.2	308	0.6	<0.05	8.9	0.262	0.29	1.4	51
LL-004		82.4	0.002	0.12	0.65	8.3	3	1.2	291	0.6	<0.05	8.9	0.238	0.3	1.3	47
LL-005		45.9	0.002	0.12	0.86	7.9	4	0.8	368	0.48	<0.05	5.8	0.24	0.28	2.2	76
LL-006		80.4	0.003	0.12	0.6	12	4	1.4	247	0.9	<0.05	10.5	0.335	0.37	2.5	75
LL-007		93.4	<0.002	0.05	1.82	13.7	3	1.6	226	1.04	<0.05	11.1	0.433	0.47	2.6	194
LL-008		117.5	0.003	0.04	1.06	15.5	2	2.1	213	1.05	<0.05	16.4	0.417	0.51	2	91
LS1-00		93.3	<0.002	0.04	0.95	12.1	2	1.6	204	0.87	<0.05	12.5	0.332	0.39	1.6	72
LS1-200		86	<0.002	0.05	0.89	11.5	2	1.5	223	0.8	<0.05	11.4	0.319	0.37	1.6	70
LS1-400		95.3	<0.002	0.03	1	12.7	2	1.7	213	0.97	<0.05	13.1	0.372	0.41	1.7	80
LS1-600		93.3	<0.002	0.03	1.03	12.7	2	1.7	212	0.94	<0.05	13.5	0.374	0.39	1.8	81
LS1-800		99.2	<0.002	0.04	1.04	12.6	2	1.7	196.5	0.87	<0.05	12.7	0.335	0.4	1.7	76
LS1-1000		98.3	<0.002	0.03	0.94	13.5	2	1.8	212	1.01	<0.05	13.8	0.414	0.4	1.8	91
LS1-1200		96.6	<0.002	0.05	0.84	12.8	2	1.8	200	0.99	<0.05	13	0.412	0.44	1.8	91
LS1-1400		99.2	<0.002	0.05	0.87	13.6	2	1.8	200	1.06	<0.05	13.1	0.416	0.43	2.1	92
LS1-1600		102.5	<0.002	0.04	1.01	13.3	2	1.8	156.5	0.9	<0.05	13.7	0.361	0.43	1.8	84
LS1-1800		102	0.004	0.06	0.99	13.4	3	1.8	194.5	1.03	<0.05	13.5	0.4	0.44	2	93
LS1-2000		105	<0.002	0.07	1.04	13.7	3	1.8	200	0.97	<0.05	13	0.374	0.45	2	85
LS1-2200		96.7	<0.002	0.06	0.91	13.1	3	1.8	206	1.1	<0.05	12.5	0.409	0.43	2.1	97
LS1-2400		96	<0.002	0.09	1.24	13.7	4	1.7	202	1.06	<0.05	12.2	0.359	0.43	2.5	102
LS1-2600		110.5	<0.002	0.05	0.86	15	3	2.1	194.5	1.31	<0.05	14.8	0.425	0.48	2.3	90
LS1-2800		114.5	<0.002	0.08	0.83	16.1	3	2.1	180.5	1.21	<0.05	15.5	0.407	0.5	2.5	89
LS1-3000		110	<0.002	0.04	0.57	14.2	2	2.1	187.5	1.31	<0.05	15.7	0.428	0.48	2	83
LS1-3100		132.5	<0.002	0.06	0.95	17.8	3	2.4	158.5	1.35	<0.05	17.3	0.439	0.6	2.7	106
LS1-3300		138	<0.002	0.04	0.97	17.9	2	2.3	155	1.28	<0.05	16.9	0.437	0.6	3	117
LS1-3500		134.5	<0.002	0.05	1.01	17.7	2	2.3	154	1.19	<0.05	16.8	0.412	0.61	3.3	111
LS1-3600		106.5	<0.002	0.03	0.54	13.2	2	2	187	1.12	<0.05	15	0.367	0.46	1.9	79
LS1-3800		105	<0.002	0.02	0.53	13.7	2	2.1	188	1.24	<0.05	14	0.381	0.52	1.9	84
LS1-4000		100	<0.002	0.04	0.51	12.8	2	1.8	186.5	1.17	<0.05	14.2	0.399	0.43	1.9	77

Comments: REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

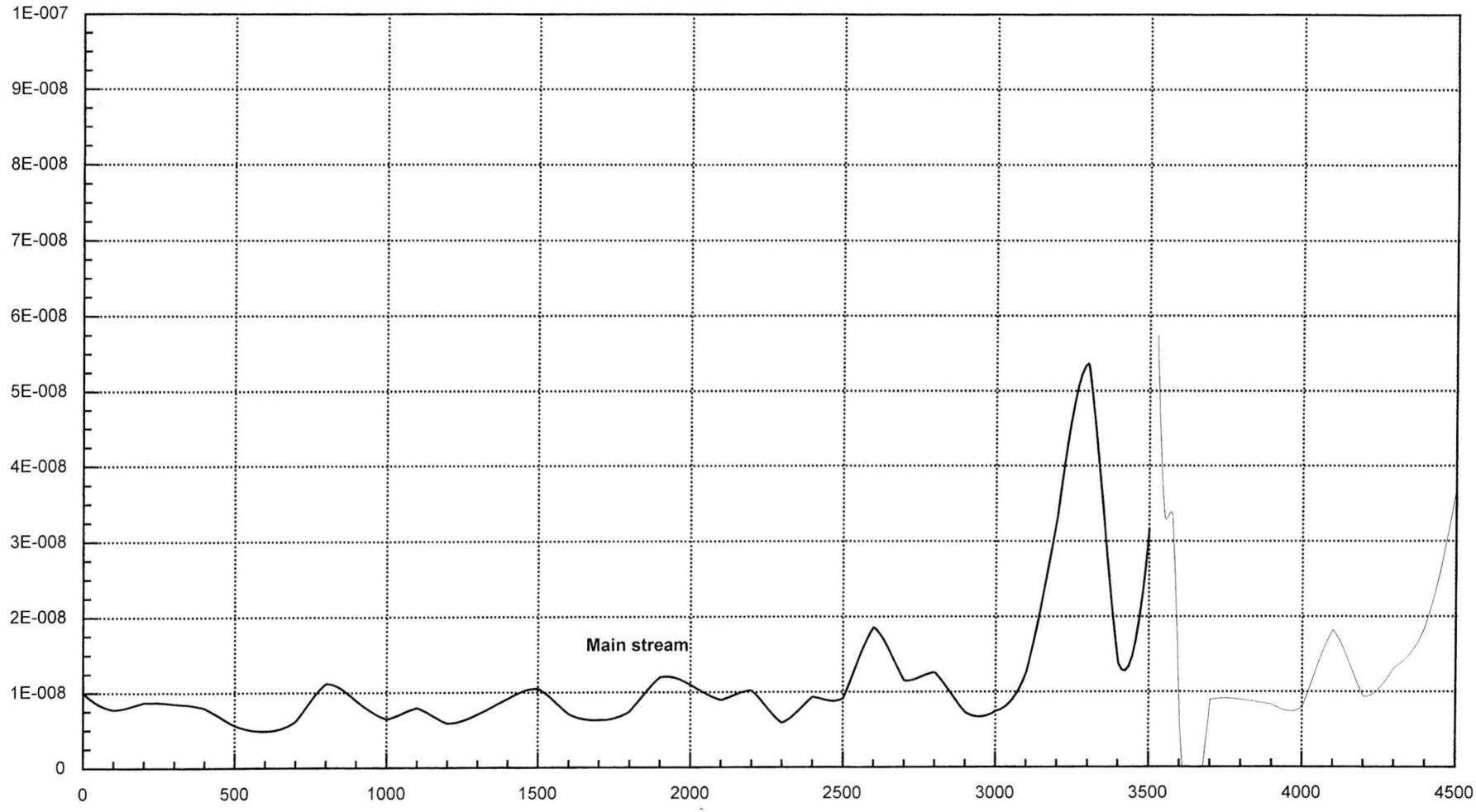
To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 22-SEP-2007
Account: DIRMOR

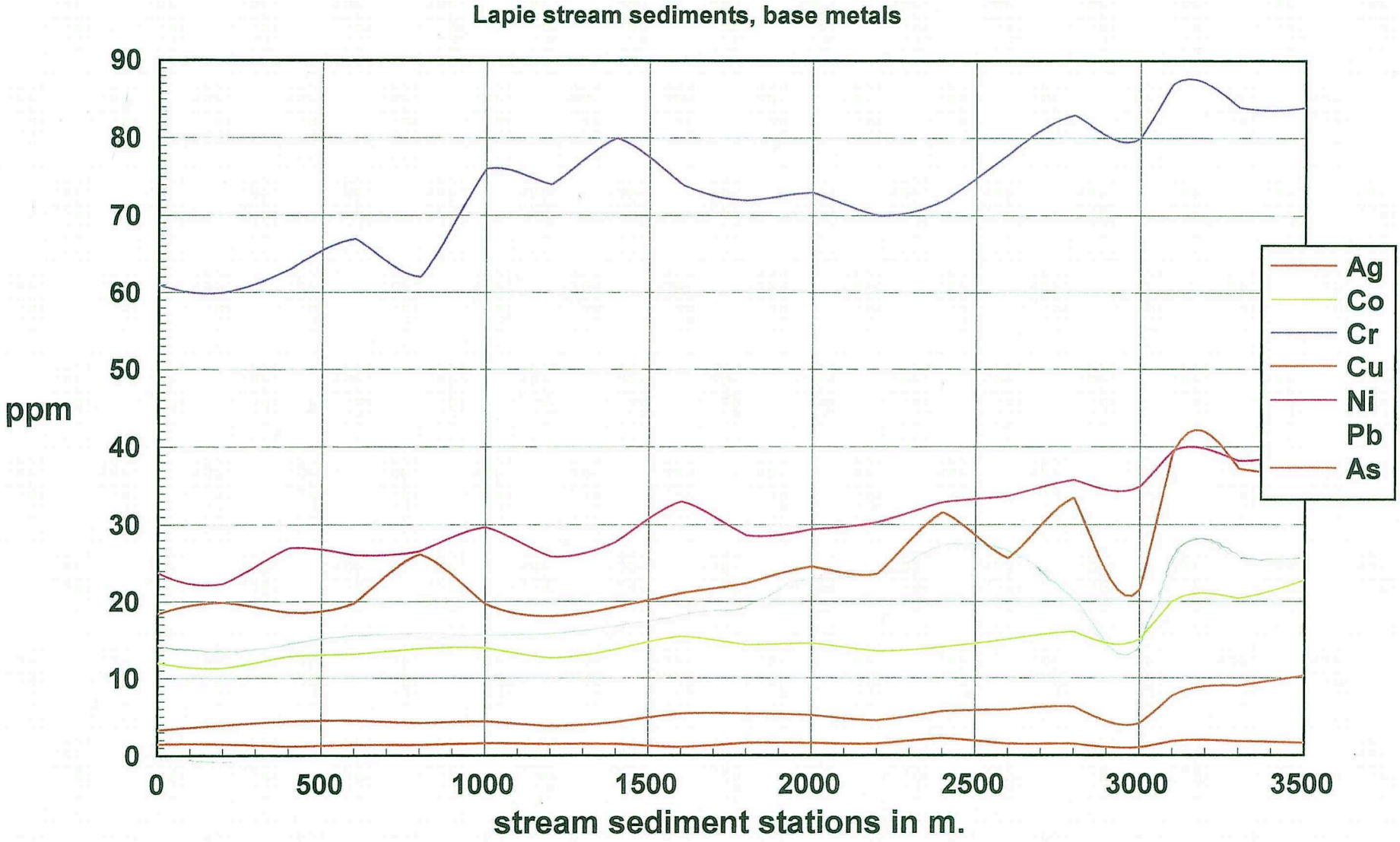
CERTIFICATE OF ANALYSIS VA07092255

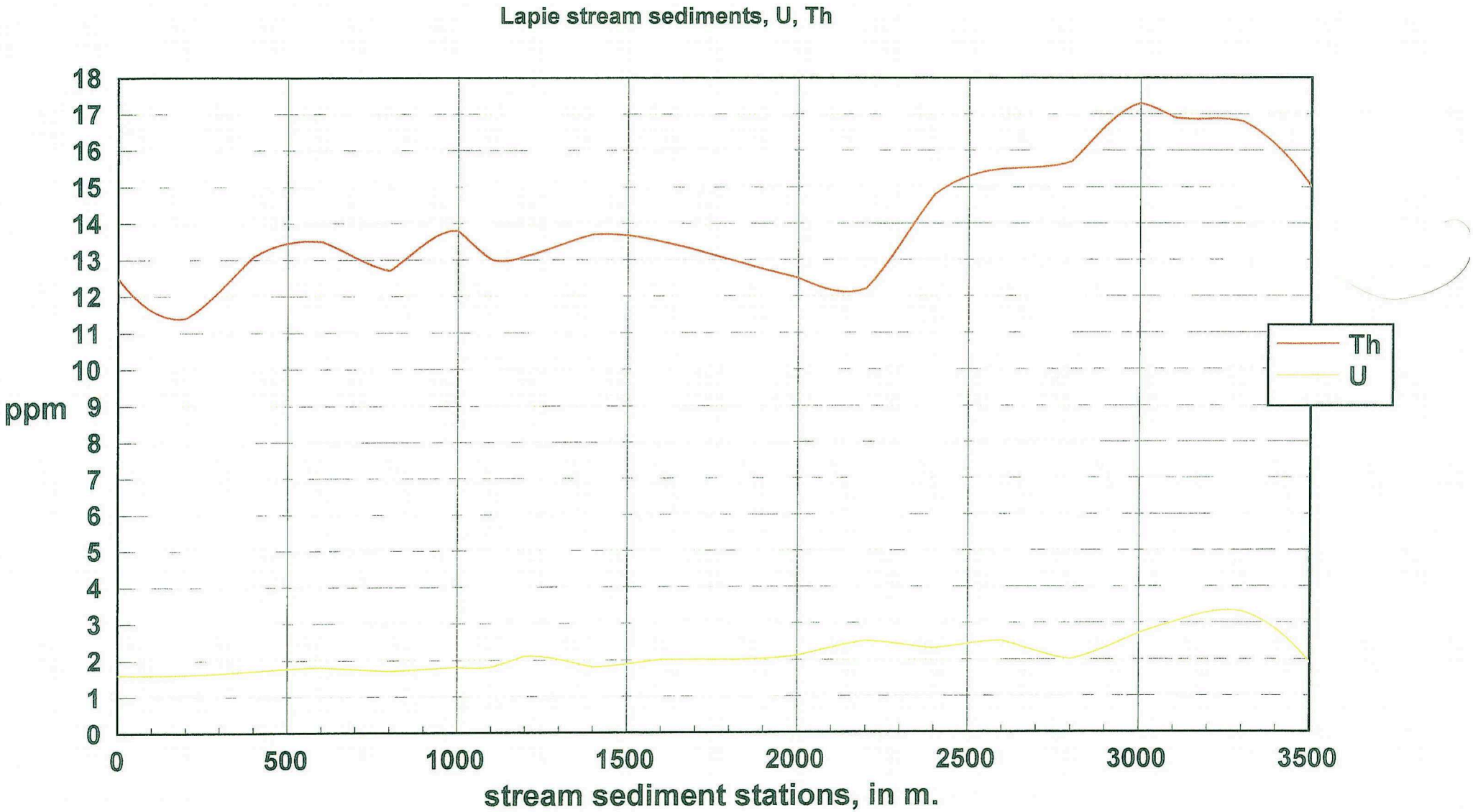
Sample Description	Method / Analyte / Units / LOR	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
LL-001		1.3	17.9	175	115.5
LL-002		1.5	24.6	81	120
LL-003		0.7	14.6	57	69.4
LL-004		0.9	8.6	81	56.2
LL-005		0.6	10.9	90	88.6
LL-006		0.9	14.9	110	79.2
LL-007		0.9	14.7	131	86.1
LL-008		1.1	15.1	85	84.1
LS1-00		0.9	12.6	68	67.9
LS1-200		0.9	12.2	71	65.1
LS1-400		1	12.8	74	67.5
LS1-600		1	13.5	75	70.8
LS1-800		1.2	12.9	74	72.5
LS1-1000		1	13.9	81	73.4
LS1-1200		1	13.5	80	77.1
LS1-1400		1.4	14.5	79	80.4
LS1-1600		1	14.3	79	72.1
LS1-1800		1	14	88	77.5
LS1-2000		1.1	14.8	95	80.5
LS1-2200		1.2	14.4	100	81.3
LS1-2400		1	16.8	110	85.3
LS1-2600		1.2	16.9	101	96.6
LS1-2800		1.2	20.5	114	96
LS1-3000		1.3	15.5	78	96
LS1-3100		1.4	20.2	143	106
LS1-3300		1.1	19.6	153	108
LS1-3500		1.2	19.3	134	112
LS1-3600		1.1	14.5	74	87.4
LS1-3800		1.1	12.6	77	92.9
LS1-4000		1.1	14.4	77	86.7

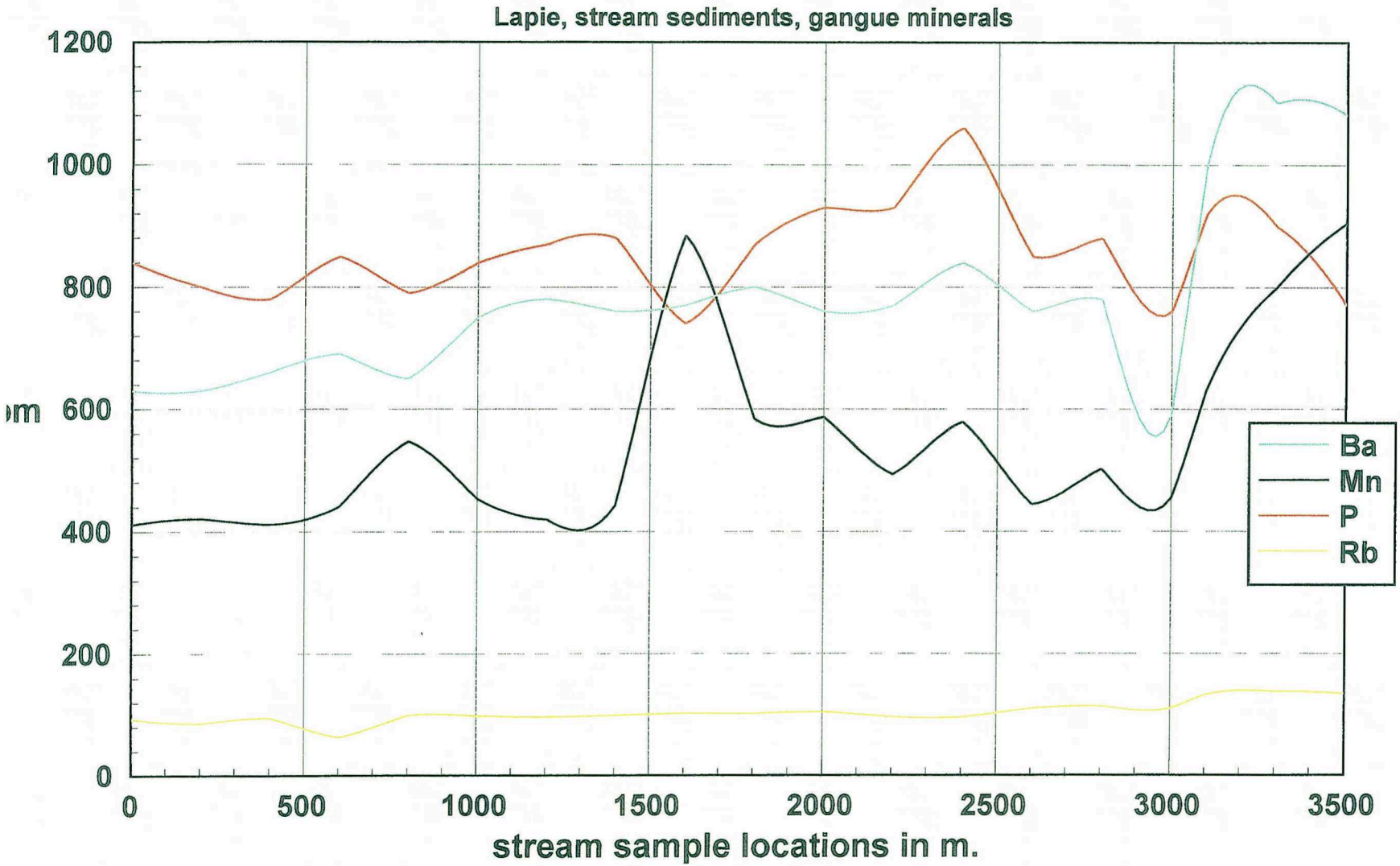
Comments: REE's may not be totally soluble in MS61 method.

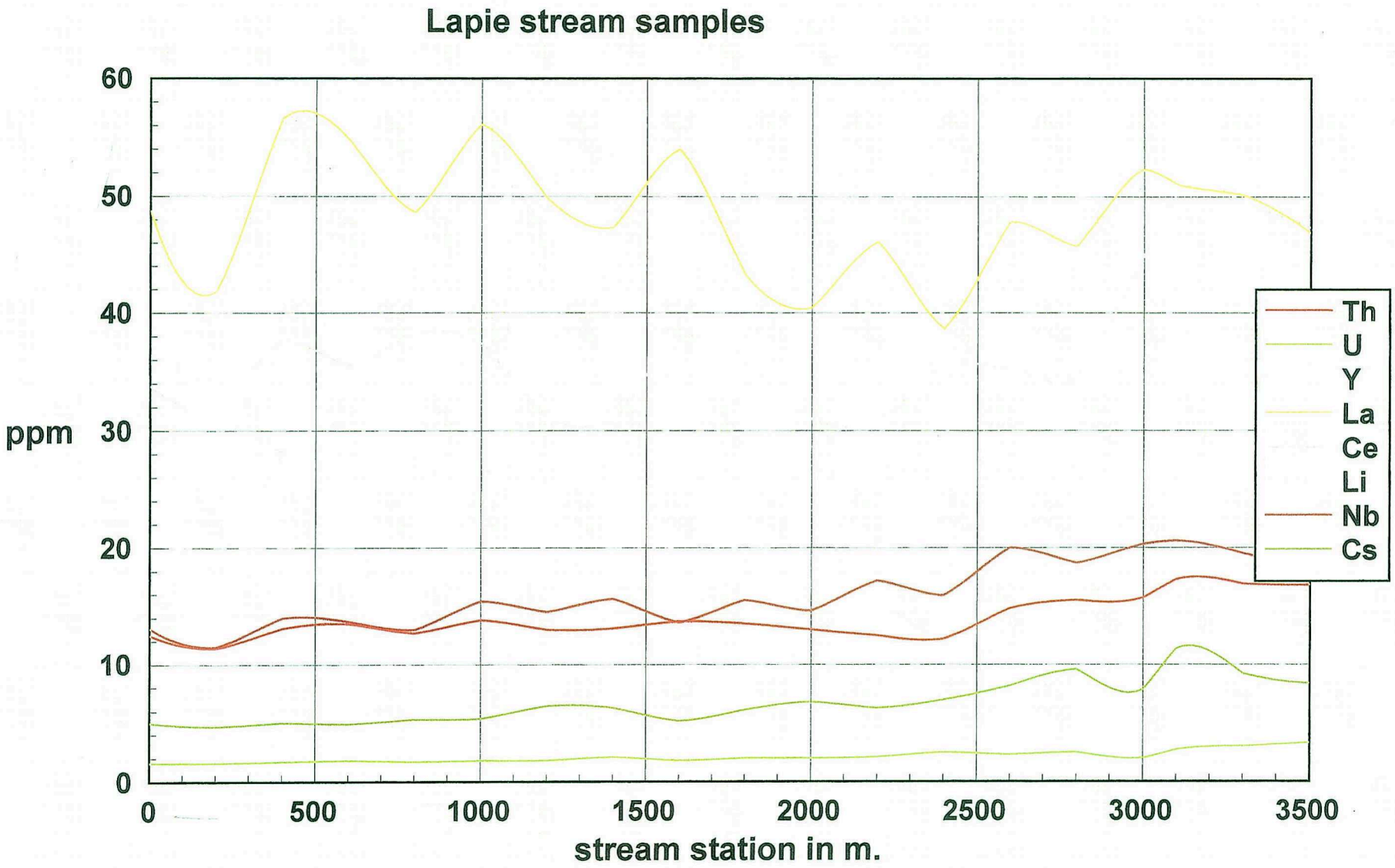


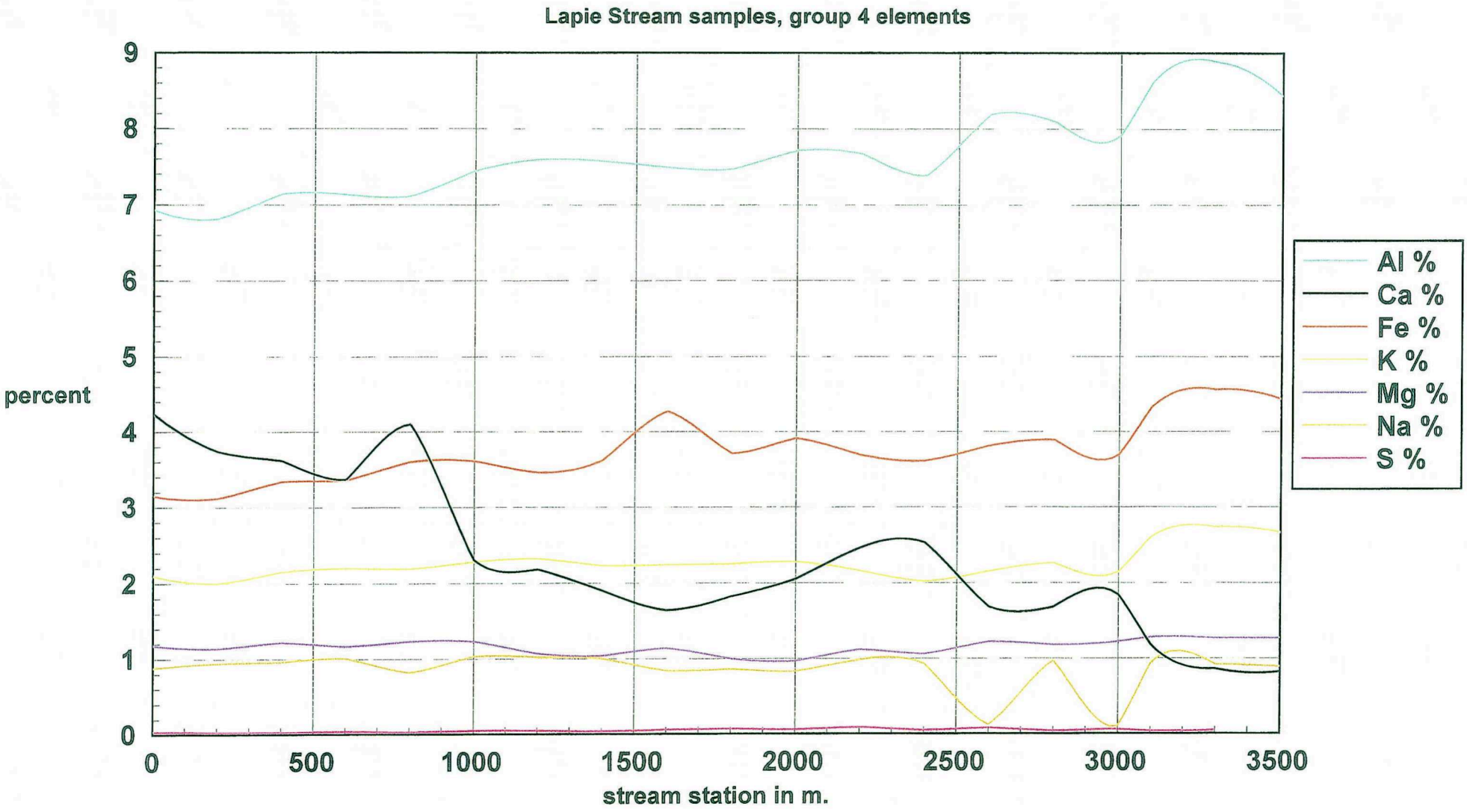
Lapie 1 Stream water Hydrogen +Mole
background= 7.25e-9 (8.24)
o= 0.5688e-1 (0.245)
x= 1.096e-8 (7.96)
x-1= 1.927e-8 (7.71)
x-2= 3.427e-8 (7.47)

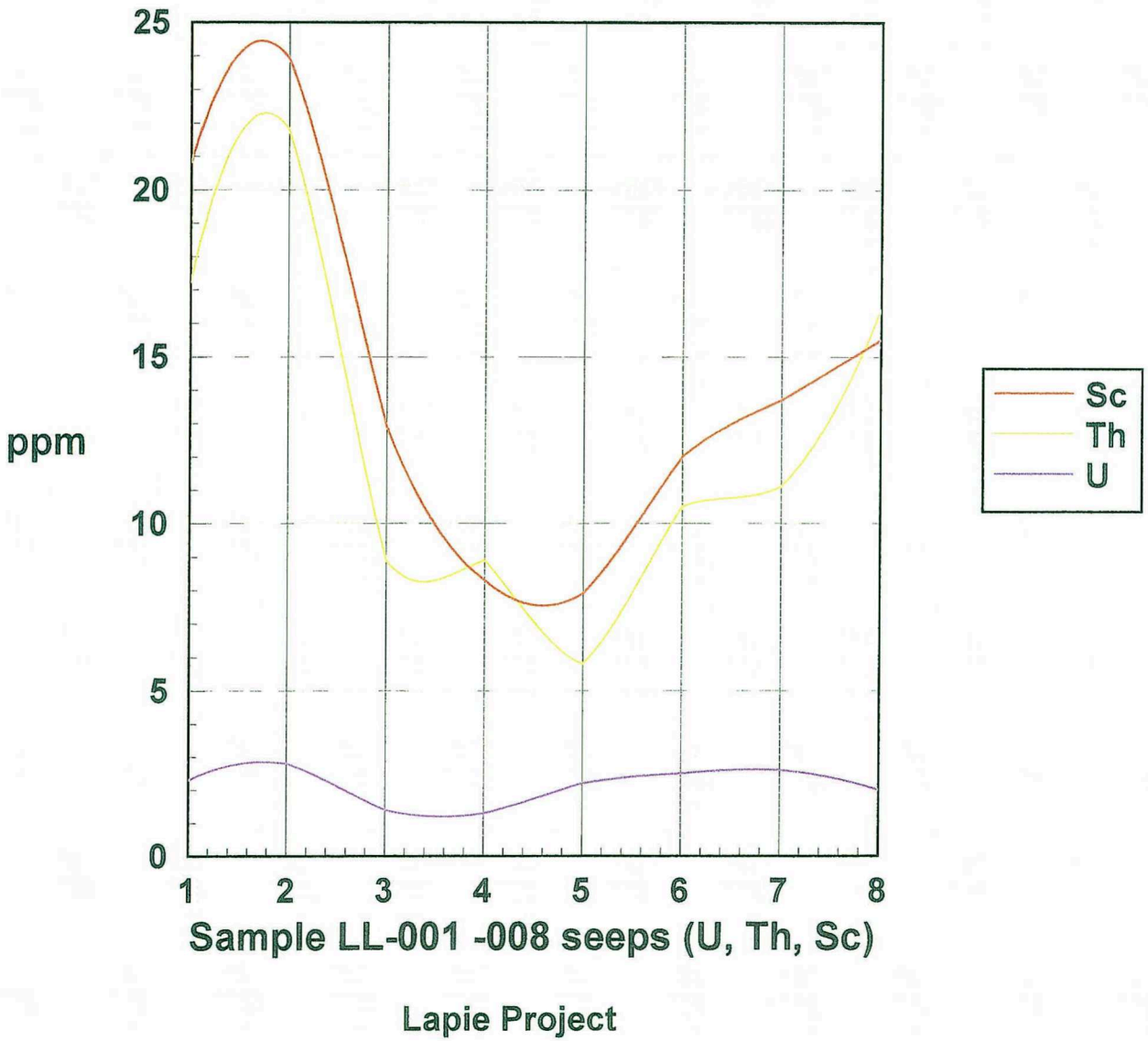

Lapie stream sediments, base metals
ppm
90
80
70
60
50
40
30
20
10
0
0
500
1000
1500
2000
2500
3000
3500
stream sediment stations in m.
Ag
Co
Cr
Cu
Ni
Pb
As

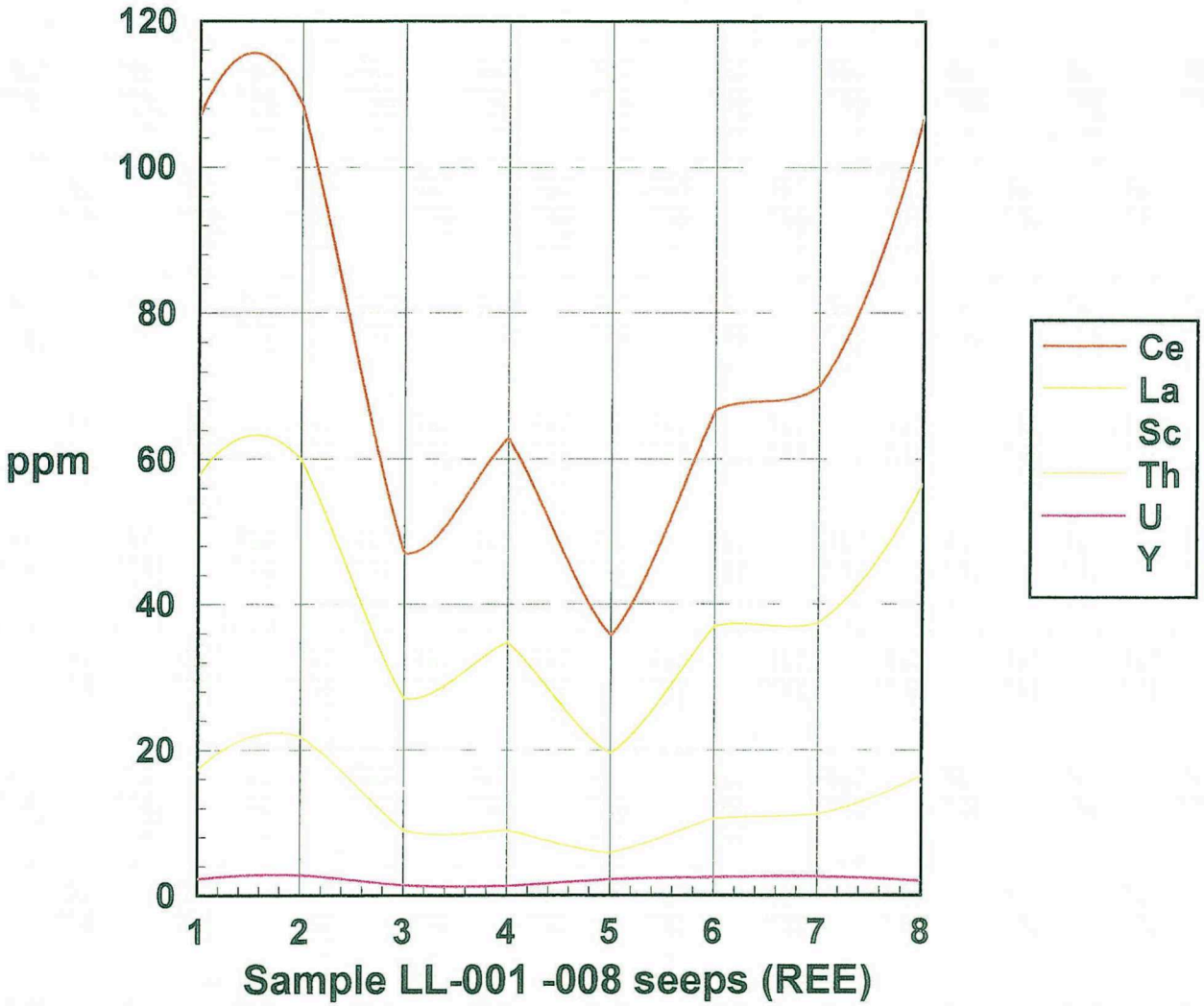

Lapie stream sediments, U, Th
ppm
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
0
500
1000
1500
2000
2500
3000
3500
stream sediment stations, in m.
Th
U


Lapie, stream sediments, gangue minerals
1200
1000
800
600
400
200
0
ppm
0
500
1000
1500
2000
2500
3000
3500
stream sample locations in m.
Ba
Mn
P
Rb


Lapie stream samples
60
50
40
30
20
10
0
ppm
0
500
1000
1500
2000
2500
3000
3500
stream station in m.
Th
U
Y
La
Ce
Li
Nb
Cs


Lapie Stream samples, group 4 elements
percent
0
1
2
3
4
5
6
7
8
9
0
500
1000
1500
2000
2500
3000
3500
stream station in m.
Al %
Ca %
Fe %
K %
Mg %
Na %
S %


25
20
15
10
5
0
ppm
1
2
3
4
5
6
7
8
Sample LL-001 -008 seeps (U, Th, Sc)
Sc
Th
U
Lapie Project



Lapie Project

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 10-SEP-2007
This copy reported on 14-SEP-2007
Account: DIRMOR

CERTIFICATE VA07092254

Project:

P.O. No.:

This report is for 1 Rock sample submitted to our lab in Vancouver, BC, Canada on 21-AUG-2007.

The following have access to data associated with this certificate:

DIRK MORAAL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS61	48 element four acid ICP-MS

To: **DIRK MORAAL EXPL.**
ATTN: DIRK MORAAL
BOX 75
TAGISH YT Y0B 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 10-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092254

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 5	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
LR-001		0.44	0.06	1.35	<5	10	0.12	0.05	11.25	0.02	27.70	4.5	4	0.14	35.6	31.20

Comments: Interference: Ca>10% on ICP-MS As,ICP-AES results shown. REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 10-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092254

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10	0.5
LR-001		4.28	0.32	0.3	0.632	0.01	15.6	6.8	1.41	10450	0.20	0.02	0.8	34.2	60	1.5

Comments: Interference: Ca>10% on ICP-MS As,ICP-AES results shown. REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 10-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092254

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
LR-001		0.6	<0.002	1.29	0.21	3.8	2	<0.2	405.0	0.06	<0.05	1.7	0.023	<0.02	0.5	10

Comments: Interference: Ca>10% on ICP-MS As,ICP-AES results shown. REE's may not be totally soluble in MS61 method.

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **DIRK MORAAL EXPL.**
BOX 75
TAGISH YT Y0B 1T0

Finalized Date: 10-SEP-2007
Account: DIRMOR

CERTIFICATE OF ANALYSIS VA07092254

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm
	LOR	0.1	0.1	2	0.5
LR-001		0.1	9.9	19	8.0

Comments: Interference: Ca>10% on ICP-MS As,ICP-AES results shown. REE's may not be totally soluble in MS61 method.

Statement of expenses

	A	B	C	D
1				
2				
3	Expenses chargeable to YMIP grant			additional
4				
5	Living expenses	34 days @ 35 per day	$1,190.00	
6	Truck, 3/4 ton 4x4	3786 km @ .545 per km	$2,064	
7	ATV	1 week	$600	
8	SBX radio	1 month	$225	
9	Iridium sat phone activation		$325	receipt
10	Iridium sat phone replenish		$240	receipt
11	Chain saw	1 month	$450	
12	pH field lab kit	1 month	$400	
13	magnetometer	1 week	$100	
14	Geochem analytical costs		$5,893.04	receipt
15	Computer, printer software ink cart'gs		$400	
16	Report writing	8 days	$1,500	
17	Cost of reprographics	budgeted		$120
18	Cost of field supplies		$832.32	
19	Shipping (samples)		$254.81	
20				
21		Total	$14,594.08	
22				
23				
24				
25				
26				
27				
28	Additional expenses related but not chargeable to project			
29				
30	Equipment and miscelaneous expenses		$1,497.83	
31				
32				
33		Total project cost	$16,091.91	

YEIP
2007
-001
Vol. 2

Summary of field days and Prospectors dairy

YMIP 2007-1

Summary of field days

Marsh Project	22 days
Keno Project	9 days
Lapie Project	4 days
Total field days	35 days

V.2

Prospectors Diary YMIP 2007-1

Day 1. Marsh project.
June 3 2007 Hot and dry, bugs ferocious.
Locate starting point on at pullout on highway at 6690000N-545300E. Traverse north crossing contact where mapped on geol. sheet. No o/c seen. Area covered with mainly glacial debris. No samples taken. Later checked for other access points, but new highway is built to prevent getting off the pavement.

Day 2. Marsh project
10 June 2007. Hard rain, bugs worse
Working more to the east, from road to 2800 feet. Lower parts o/b covered poplar and some spruce grading open spruce forest higher up, No outcrop. Some quartzite float, well rounded. No samples taken
Starting to think geochemistry unless I find some decent o/c in designated project area. A line parallel to the (mapped) contact to pick up any splay or cross fracture associated with contact. Linears may be of interest

Day 3. Marsh project
June 11 2007. Raining, 15 C, bugs worse if that is possible.
Staring 6.5 km east of Tagish bridge, through poplar spruce forest, o/ covered ground Traverse crosses several gravel ridges and depression which might be either outwash or recessive zones. Find remains of radio sonde. Northern end of traverse around large pond outcrop, fresh looking spherulitic basalt, no mineralization. Major joints 340 deg. Return leg to hwy o/b covered ground. Can't go further west due to land claims.
Collected 6 soils over a depression (ML1 500 to 600) for pH

Day 4. Marsh project
10 July 2007. Windy, wet and muddy from long rainy period. Bugs still savage
Ran soil line parallel to contact between (Laberge and Cache Creek) to see if orthogonal depression coincides with e-w- trending linears on map. Collected 52 soils on the return trip, at 20 m intervals (ML1 1400 to 400). Soils occasionally have a white horizon below the humus but it does not appear to be the leached horizon. Ash? Wonder if significantly adverse to pH. Soils mainly soft silt to sandy grading to coarse sand and gravels. Cobbles are mainly basalt and granitic, well rounded and very dissimilar. Soil line makes slight bent at around 100m, my error or magnetic deviation? Need to check with mag.
Samples strung to dry a bit before testing. Red soils in area of depression need investigating. May be useful to know why.

Day 5. Marsh project
11 July 2007. Blustery day, bugs bad anyway
Mag survey at 10 m sta. over ML1. There was no significant anomaly as expected over anomalous pH, but there is a coincidence between mag and pH profiles at around 1000m
Mag was corrected for diurnal and smoothed which gave a better set of profiles.

At end of day drove to end of road ob the ridge above Pennycook creek to investigate access. 9.3 km to turnoff and then 1.3 to end of useable road at abandoned comm. tower site. An atv trail goes on from there for another 500 m. Some few outcroppings of arkosic sandstone occur on the mountain top. A rounded float boulder had some chalcopyrite and malachite, but is not local. Followed atv trail down towards headwaters of Pennycook Cr. More arkosic sandstone in small outcrops.
Soils still wet. Reason that it does not matter and may even change pH vakues of soil if they dry out. Will test them.

Day 6, Marsh project
25 July 2007. Overcast cold.
Bends in soil line are not due to magnetic influence jut to gps pints being 100 m apart and in forest accuracy not all that good. Tested soils for pH, and plotted on computer There is a single H+ peak near 950 on ML1 which needs additional sampling to define. Coincidental mag dipole between 850 and 950

Day 7 Marsh project
26 July 2007. decent day for once. Must be summertime.
In field to do magnetometer survey over northern portion of the project area. Field appeared active but it was a problem with the magnetometer. Returned to camp to do repairs to cable, Hard rain in afternoon washed (yes, pun) out mag survey. Recalibrated pH meters, paperwork. Spent some time looking at plots and wondering what it is I do not see.

Day 8. Marsh project
27 July 2007.
Returned to Marsh soil line 1 and samples between 20 m sites from 800 to 1000m to cover area of H+ and mag anomaly. Added daya to soil profile. Wonder if close to bedrock between 930 and 970. Soil is red and pH changes more acidic, by a whole pH unit. Width of anomaly now only 20 m after closing up on spacing. I wonder about meaning of the absence of a double peak. Very narrow oxidizing zone, maybe oly one side of a bigger one, or just a wet fault?

Day 9, Marsh project
28 July 2007. Dry in AM. 12 deg., bugs bad anyway because it rained in afternoon.
Ran ML2 parallel line to ML1 and 100 m west. Took soils at 10 m intervals, ran magnetometer over the line as well. Tested samples. There is a H+_ anomaly at 1030 which may be related to the one on ML1. Plotted data.

Day 10, Marsh project.
29 July 2007. Rain, bugs bush dripping wet.
Returned to extend line ML2. Tested this batch of soils. Two anomalous H+ peaks. Soil geochem may give some guidelines to understand these single peaks. Or not. Soils from 800 to 1300 m will be sent in for analysis. So fr, there is no definite correlation between soil colour and composition with pH (and H+) results. This I think is a good sign since it would suggest that H+ is not much affected by soil conditions in undisturbed areas. Since

anomalies do not have the characteristics double peak I wonder if the anomalies have more to do with bedrock features that oxidizing sulphides. Since the anomalies occur beside and not over the depressions, might be caused by water or faults. With of 10 to 30 m has not been explained. Maybe VLF?

Day 11, Marsh project
20 July 2007. raining again, bush slippery
Traversing west of tower road. Slopes o/b covered fairly brushy and no outcrop seen. No float. Moss and permafrost. No samples

Day 12, Marsh project
31 July 2007. Rain and low clouds,
Traverses low, parallel to highway and south of ponds. Quite wet. No o/c. seen. Mainly moss covered permafrost. Forest is gnarly. Tough going. No samples
Sun came out in PM and about time. If this keeps up I will head to the upper Pennycook creek hoping to get some silts done.

Day 13, Marsh project
1 August 2007. O/cast and low clouds cleared up by noon no rain
6 km traverse from top of hill (old tower station) down into Pennycrook. A trail leads halfway down. It is a 45 minute walk to tart point. Problem. There is no creek! The mapped creek is a deeply incised drainage channel in glacial material (coarse sand and medium gravels) bottom is organic filled and becomes lush meadow higher up.
Since there is no chance in hell of collecting silts, decided to run soil lines over end of e-w aeromagnetic features. First one on ridge between two branches of Pennycook cr. Line ML3 consisted of 23 soils ML4 at the opposite end of the aeromag and north of the 'creek" runs uphill from creek towards the tower site, and is mainly a bench. 25 samples were collected here. Was delayed a bit by a feeding grizzly in the upper creek / meadow

2 august. Tested samples for pH and plotted travel to Keno

Distances to Keno
Tagish 0
Whitehorse 103
Carcross 280
Stewart Xing 455
Mayo 506
Elsa 551.5
McQuesten lk turnoff 556.1
Keno (at museum) 568.3
Keno 700 turnoff 567.5

Day 14, Keno Project
3 August 2007. Bit rainy and cold. Bugs not bad at all. Relief !
Hanson Lake area Traverses on west side of the hill overlooking the lake In afternoon huge thunderstorm and deluge,

Generally thick moss, swamp and permafrost. No o/c seen. Traversed over hill but nothing g seen. o/b covered.

Day 15 Keno project
4 August 2007. wet and rainy and muddy.
Signs of recent staking so I will have to ait till Monday morning to find out if there is any open ground in the project area.
Got out of the swamp and went up to Keno Hill to locate a missing pin. Roads on topo map are way out of whack so I was looking in the wrong place when I staked the 43 claim. With calculated gps coordinates this time I found the pin where it always was. There is an open strip of ground. Prospecting the area a rusty zone by an "area of plant stress" suggested the need for sampling. Ran 3 lines 50 m apart to bracket the zone of interest. Samples were collected at 10 m intervals since any vein will be narrow. A 50 x 25 m area was scraped off with a cat exposing thin bedded black shale. Near the pin, flat lying sericite, chlorite qtz schist outcrops. The open fraction was staked as the DOH fr. It is 80 m wide by 450 n-s. the road bisects the claim.

Day 16 Keno project
5 August 2007. Started out o/cast but raining by 9 am
Tested 34 samples for pH and plotted on map. Line 150 has a strong H+ peak. Needs lines at 125 and 175 to define that can be done in 2 days to cover the area east of the dry wash. Maybe cr. is contact.
Soaking wet and rain won't quit soon. Packed up went to Mayo for maps and decided to keep on going

9 August travel to Lapie . 240 km, (488 return)

Day 17 Lapie project
10 August 2007. Clear and crisp.
Orientation and planning day at Lapie area. Located starting point. Road has been changed a bit since I was last here. Prospected lower reaches of creek in question and brushy slopes on south side of creek. Lots of transported material under moss, little soil form 4200 feet elevation and down. Camped for night at groundhog Cr.

Day 18 Lapie project
11 August. Clear, cold frost on ground. O/cast windy but no rain
Started doing water pH in creek, 100 m interval. Water quite fast, and clear, due to wet year, I guess. Taking water temp and pH even though the meter is temperature compensated. Sample quality and significance will be affected by two things here. Lack of fines due to fast nature of creek. due to high volume of water from wet year. And large washed boulders abundant in creek bed. Lapie was left for august expecting lower volume of water would help silt deposition. Maybe in future a sieve and bucket and even collecting fines in a coffee filter from a large volume of streambed material. The uphill distance is 3 km, with thick willows and underbrush along creek. 41 sites were tested for water pH.

Day 19, Lapie project
12 August 2007. O/cast in AM warmed up later. Great day
Silt sampling at 200 m intervals along creek. Prospecting upper reaches of creek. Above 5000 feet we are in alpine. First outcrop exposures are in creek bed near higher pH in water samples. A small siderite haematite brecciated zone within the black shale has some pyrite and chlorite. A "belt" of greenstone (sill?) boulders crosses creek. stream goes underground here but reappears further up when again cutting black shale. Above this, a flat swampy meadow. The fault is visible on the ridge above. A greenstone cap above interbedded black shale and buff coloured shaley phyllite forms thee top of the mountain west of fault. Here fault crosses black shale which have weathered to limonite. Series of samples taken around the basin from seeps. Lst (calc tuff) forming in the more northern seeps. 23 silts collected.

Day 20, Lapie project
13 August 2007. Clear and blue sky. Weather good and hot and the Yukon is way to green willows way taller than years ago, and none of the open brown and white areas as were 30 years ago.
Handling samples. Plotted data from past 2 days and made maps with available pH info. Data shows a "statistically definitely anomalous" area at the headwaters of the creek above the siderite breccia. The zone appears to be 200 y 800 meters in size, Geochem will tell the tale. Decide to get samples to town to ship. Pulled leg muscle , flat tire. Pack up and return to Tagish in evening

Day 21 Keno Project
19 August 2007. Severe clear and pleasant, till mayo. Raining at Keno. What did I expect
Drove in to Hanson Lake Almost whole area I was to prospect has been block staked by Alexco except for a small area north of the block. Traverses from road to east, no outcrop seen ground cover is mainly spruce forest and alder, moss covered glacial silty sands and gravel, Heavy rain from 5 PM on ended day

Day 22, Keno project
20 August 2007. Wet in AM but sunny after mid morning
Prospecting for fractions. Not much left after Alexco blitz. Found possible contact between thin bed quartzite and black shale adjacent to Apex area, on the Comstock fault. Small fraction open found adjacent east side of Son 2 but I was unable to find the pins mining recorder demands for this kind of staking.
Located another possible fr SE corner 591 off Mc Kay creek prospected around but found signs of fresh staking so made my way back. Dumped samples nothing to show.
Rained for the rest of the day and all night and till 10 AM today. 10 PM started to rain all over again

Day 23, Keno project
21 August 2007. Raining all day but no bugs. Worked in fog and 0 visibility till 5 PM when fog lifted and rain stopped soon as I got back to camp. Figgers!

Today's prospecting led me down the steep cliffs to the headwaters of Faro Gulch. In search of a 200m x 450m fraction wedged between the desirable Teach claims. Because of the fog I did not realize I was headed for vertical cliffs composed mainly of loose wet slippery talus. Did the goat thing and made it down, but could not find any new staking as shown on the claim map. Located pins and monuments for the fraction, actually an original pin for Teach claims, and a monument with no pin or post, it long ago having rotted, I guess. Several old shallow trenches into black shale were found during prospecting. Non crossed the contact between diorite and shale. Small exposures of diorite occur at the south end of the claim along Faro gulch. Soil depth is 2 to3 m along the creek where bedrock is exposed. Collected 32 sample across the lower part of the prospected area.

Day 24, Keno project
22 August 2007. clear day at Keno
Quick early morning trip to Mayo for fuel and mining recorder. Despite what found, Teach are in good standing…except for the O NO fraction which lapsed after Stack staked the Teach. The claim map is wrong, but that will be corrected on paper now. Was back at Keno by mid morning and staked the O NO fraction. In the afternoon returned to the DOH fraction to collect some 50 soils. 4 fill in lines will explain the H+ anomaly there
Slipped into Elsa in late PM to talk to Alexco guys about optioning the Dirkeno Group. (Mike Stammers, Jim Munsert)

Day 25, Keno Project
23 August 2007. Sunny calm morning. PM what else, thunder and lightning.
Set up pH lab and tested O NO soil samples for pH.
O NO Fr. soils have definitely anomalous H+ peak near the east end of the soil line.
Plotted soils on graph. Used "wet time" to plot further strategy

Note: At this writing, O NO and DOH fractions have not been granted. Therefore, all work on these pieces of ground is prospecting on crown land

Day 26, Keno project
24 August 2007. Wet
Completed testing of soils taken from DOH Fr. Averaging 10 samples per hour unless I get distracted. Results show a trough between peaks running from line 200 to line 100. This is the closest I have come to finding a classical "trough" between peaks" signature typical of a sulphide occurrence as outlined with H+ mole. Pack up and return to Tagish in evening.

Day 27, Marsh project
26 August 2007. Overcast
Distances Camp to Tagish Bridge 2.9
Bridge to highway turnoff 3.0
Highway turnoff to 2nd turnoff 7.9
Turnoff to old tower site 1.4

Prospecting slope south of old comm. Tower site . Few outcrops of JL sandstone mixed with transported granitic boulders.
Soil sampled line ML5, 36 samples at 20 m sta. Soils varied between a grey clay to tightly packed boulder fields under thin moss with poor soil development. Return to camp and process samples. An anomalous H+ area exists between 300 and 450 m.

Day 28, Marsh Project
27 August 2007. Overcast and pleasant, -5 in AM
Back to Marsh (south). Continued traverses over Pennycook area. Still no outcrop of significance. o/b covered hard packed transported boulders. I decide I need to run another soil line this one about a claim length east of line ML5. Line ML 6 consists of 40 samples collected in similar soil conditions and soil zoning as ML5 and ML4. to test if there is continuity between the other two lines.
Extra Stuff to do: extend line ML4, do 10 m sampling ML5, to define a 3.5x above background H+ anomaly.

Day 29, Marsh Project
29 August 2007. Day started out OK but after 3 hours in he field it started to rain again. Web feet may make walking on deep moss a lot easier.
Continued prospecting the east side of the access road which is the area of the Laberge, Cache creek contact but also hosts an aeromagnetic anomaly which is noticeable in the 2nd derivative. A deep gully or outwash channel about 700 m east of road was tested with a soil line, ML8, 20 m intervals just in case it was associated with a recessive zone. Variable soils conditions, either poorly developed dine loose silty or hard packed rocky ground with poor soil development. Gully had sandy grey clay and organics.
East end of line has some H+ activity. Seems displaced
No outcrop was noted on these traverses. Soils are either coarse sand and pebbles or grey clay-sand mixed with white ash which could be a thick A3 leach zone but is not consistent enough either in thickness, or location to be A3. The east half of the grid is very rocky, thinly covered with a powdery, bleaches yellow fine soil, and the white ash line layer. The rocky part is composed of sub angular to rounded basalt cobbles tightly wedged together. The west side is less rocky and commonly is a thick sandy soil under a 40 cm layer of moss and root mass.
Later note: White ask like substance is likely to be wood ash from an historic forest fire. Microscopic inspection of the ash did not show any silica fragments and the ash layer was not ubiquitous. Fragments of charred wood in the ash is probably the best indicator that this is neither volcanic ash nor a leached A3 horizon.

Day 30, Marsh project
30 August 2007. Good weather
Returned to ML5 to fil in samples, but testing tells me I should have gone just one more sample over. Plot of H+ shows a distinct 2 peak anomaly peaks 70 m apart. This looks more like what the literature indicates. Question is are we looking at a wide zone or two narrow edges.

Day 31, Marsh project
2 September, 2007. good day
Started early today, in AM ran 2 soil lines over west side of road just below the big switchback, which I believe to the east side of an aeromagnetic anomaly which straddles the road. Collected34 samples on lines ML9 and ML10.
This was difficult digging as almost each sample required at least 15 to 20 minutes of hard digging in rocky frozen ground under deep moss and organics. The Edelman Dutch soil auger I ordered has not arrived yet, now that I really need it.
In afternoon I returned to the hill and did fill in sampling n line ML6. another 13 samples

Day 32, Marsh project
3 September 2007. Overcast
Prospected above road around what I think is the west side of the aeromag anomaly. No outcrop. Banks on road show a mix of thick gravel and clay. At end of day just not to go home empty-handed, ran a soil 200 m soil line over the edge of the anomaly. Same rocky, organic, hardpan, etc conditions apply here as to further down the slope. Tough goin'.
Traverses to east of the access road to explore around mag anomaly, area 500 m north of big switchback. Regolith consists of glacial deposits (rounded cobbles in gravel and clay)usually covered by a thick layer of moss. A transmission ground cable lies on ground parallel to the road and about 60 m west. I wonder if it has a bearing on shape and size or even existence of this magnetic anomaly. No outcrops seen. O/b can't be too thick because further up the road there is rock rubble around bas of power line poles. Same vegetation cover. 20 soil samples.

Day 33, Marsh project
6 September 2007. Overcast. Pleasant, no bugs.
Return to top of ridge along tower access road to run line along west edge of the mag anomaly It is a short line, mainly in almost impenetrable hardpan and rocks. thin dry soil alternates with a clay sand mix. There is a noticeable permafrost under moss covered areas.

Day 34. Marsh Project
12 Sept 2007, overcast, then spitting rain
Chasing mad anomalies. Made several traverses from tower access road to east to check out vicinity of anomalies. Distance of traverses was 2.5 km each way. Depressing. No outcrops noted, Terrain is cut by several deep gullies, probably outwash channels (gravel banks, organic bottoms) Variable vegetation, dry areas with the usual pine-spruce cover, permafrost areas have thick moss cover, with willow. No samples collected.

Day 35, Marsh project
15 September 2007. Overcast and pleasant.
A last kick at the cat. Access for this line is from highway, parked at entrance to road to Little atlin farm. Crossing valley and up a gnarly forested slope. Area swampy in valley, then permafrost with tangled spruce. Many blow downs. Soil line in typical Yukon terrain…small black spruce and willow over permafrost under thick moss cover. Really need a powered auger to get past the frozen muck. The target mag anomaly seems to lie

under a permafrost belt between hard packed gravel and cobble regolith. Given the difficulty of sampling, a 20 m sta. was used. Testing for pH returned two H+ peaks 200 m apart. It is hard to see how they are related, unless they are caused by edge effect, except there is no vegetation change on the western peak.