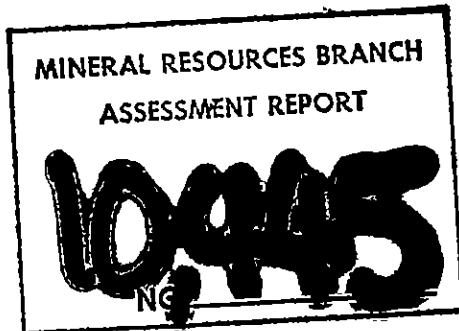


82-394-10445

CANADIAN OCCIDENTAL PETROLEUM LTD.

MINERALS DIVISION



TRENCHING PROGRAM

ON THE  
MUN CLAIM GROUP

CLAIM SHEET NO. 82E/12W

LAT.: 49°44'N  
LONG.: 119°58'W

CLAIMS:

MUN 8-18 and MUN 29

RECORD NUMBERS 31019 through 31029 and 31040

OZOYOOS MINING DIVISION,

BRITISH COLUMBIA

by:

M.P. HENRICK, Ph.B.

COVERING TRENCHING COMPLETED DURING THE PERIOD

OCTOBER 18 THROUGH NOVEMBER 6, 1981

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## PLANS (In Back Pocket)

Plan 1	Trench IN
2	Trench IS

## 1. SUMMARY AND RECOMMENDATIONS

The MUN claim group is located 18 miles (29 km) northwest of Summerland, British Columbia. The property was staked in 1973 to follow up reconnaissance stream geochemical work. Geological, geochemical and magnetometer surveys carried out in 1974 outlined several Cu-Mo-Zn anomalies, three of which were drilled in the fall of 1974.

Further reconnaissance work by the Geological Survey of Canada in 1976 indicated that the streams draining the MUN group were also anomalous in silver. Hence, all 1974 soil and drill core samples were re-analysed for silver. To test the zone of highest silver in soils, 562 feet (171 m) of wireline BQ diamond drilling was completed between October 7 and 20, 1977.

During the period October 8 through November 6, 1981 two large trenches were cut to further check the large discrete coincident multi-element soil geochemical anomaly that occurred between lines 24+00E and 40+00E near the north boundary of the property on mineral claims MUN #29 and MUN #11. A total of 1300 feet (396.2 m) of trenching was completed.

A total of 690 feet (210.3 m) was cut in the 1 North trench between line 24+00E and line 32+00E at station 71+50N. The 1 North trench was intermittent due to poor drainage and abundant ground seepage. The trench was cut into bedrock consisting of highly altered, rubbly, friable,

granodiorite between 24+00E and 27+55E. Bedrock was not reached again despite an effort to dig the trench to 18 feet (5.5 m) between stations 28+25E and 28+45E.

A total of 138 soil samples were cut on a continuous 5-foot (1.5 m) channel section along the bottom of the trench. These samples were taken from either the bedrock interface or well into the drift. One (fresh) rock sample was taken in the granodiorite section.

A total of 1290.5 cubic yards (1180.0 cubic metres) of material was displaced. Drainage through and out of each trench was established to minimize any environmental impact.

A total of 610 feet (185.9 m) was cut in the 1 South trench between line 24+00E and line 36+00E at approximately 66+00N. The 1 South trench was intermittent due to poor drainage and abundant ground seepage. Between 33+75E and 34+670E the trench was cut into bedrock consisting of highly altered, rubbly, friable quartz feldspar porphyry. Bedrock was not reached again despite an effort to dig to a depth of 15 feet (4.6 m) between 29+85E and 30+00E.

A total of 122 soil samples were cut on a continuous 5-foot (1.5 m) section along the bottom of the trench. All samples were taken at either the bedrock interface or well into the drift. One (fresh) rock sample was taken in the quartz feldspar porphyry section.

A total of 1394.6 cubic yards (1275.2 cubic metres) of material was displaced. Drainage through and out of each trench was established to minimize any environmental impact.

The work just completed should be submitted for assessment credit to hold the ground.

Cominco should be approached to determine the commodity they are interested in and to see if they are agreeable to a joint venture.

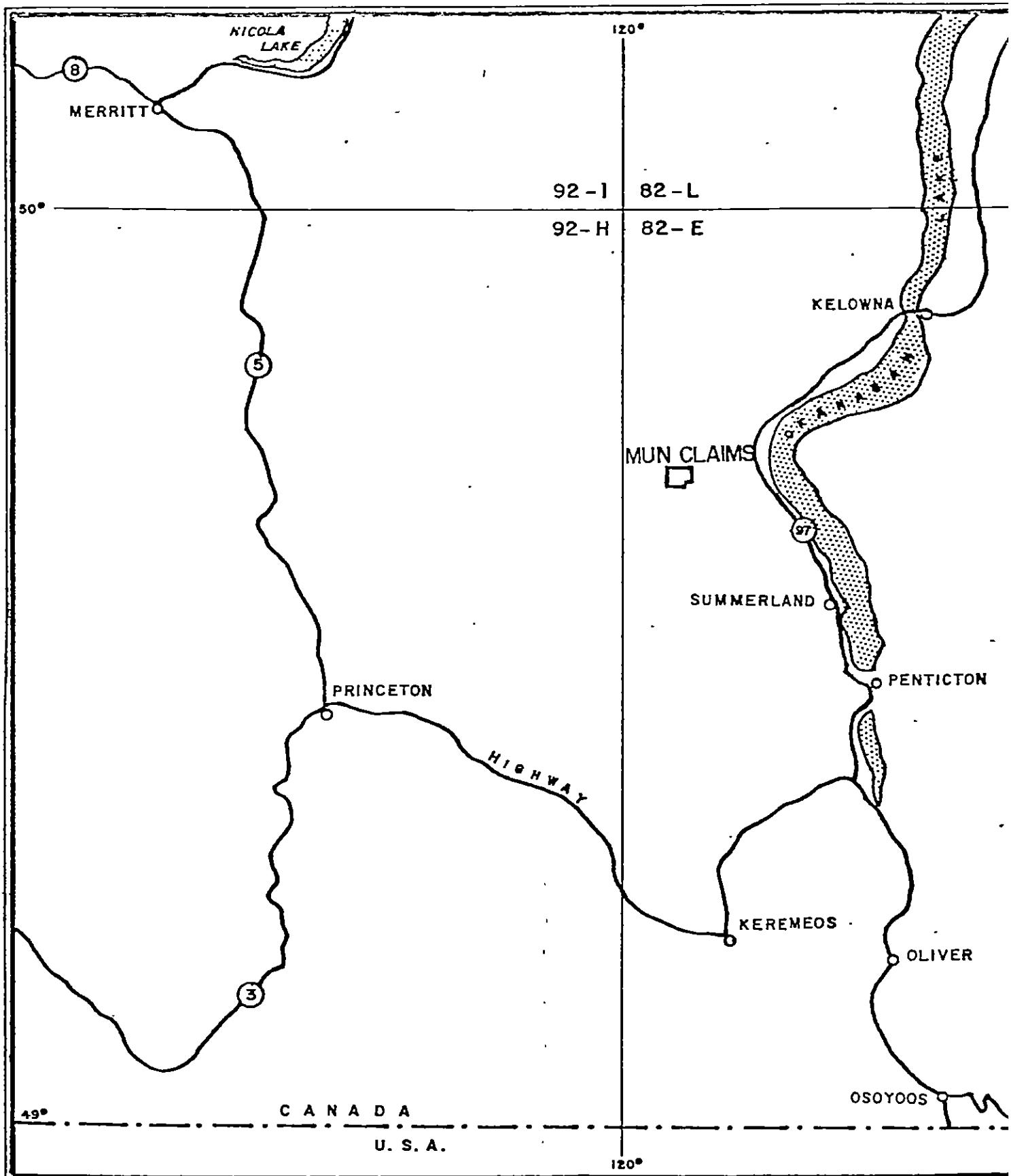
No further work should be done on this property at this time.

## 2. INTRODUCTION

During the summer of 1974 Canadian Occidental Petroleum Ltd., Minerals Division, carried out geological, geochemical, and magnetometer surveys on the MUN claim group. The results of this work are summarized in a report by J. Schindler dated October 30, 1974. Several coincident Cu-Mo-Zn anomalies were outlined, and three of these were tested by diamond drilling in September and October, 1974. Low-grade Cu-Mo-Zn mineralization was intersected, but did not warrant further work at the time.

The results of regional stream sampling by the Geological Survey of Canada during the summer of 1976 were made public in Geological Survey of Canada Open File Report #409, and indicated that the streams draining the MUN claims were anomalous in silver. All 1974 soil and drill core samples were then analysed for silver, which showed that economically interesting values were obtained over short distance in the drill core, and that the area of highest Ag in soils had not yet been drilled (see report by R.H. Wallis, September 12, 1977). The main anomalous area was tested by drilling in 1977 and was found to be sub-economic at the time.

It was later decided that two trenches would be dug to further assess the large multi-element coincident anomaly along the north boundary of the property. This report will describe the results of the trenching of the north limb of this anomaly.



CANADIAN OCCIDENTAL PETROLEUM LTD  
MINERALS DIVISION

**LOCATION of MUN CLAIMS**

Princeton-Nicky Project

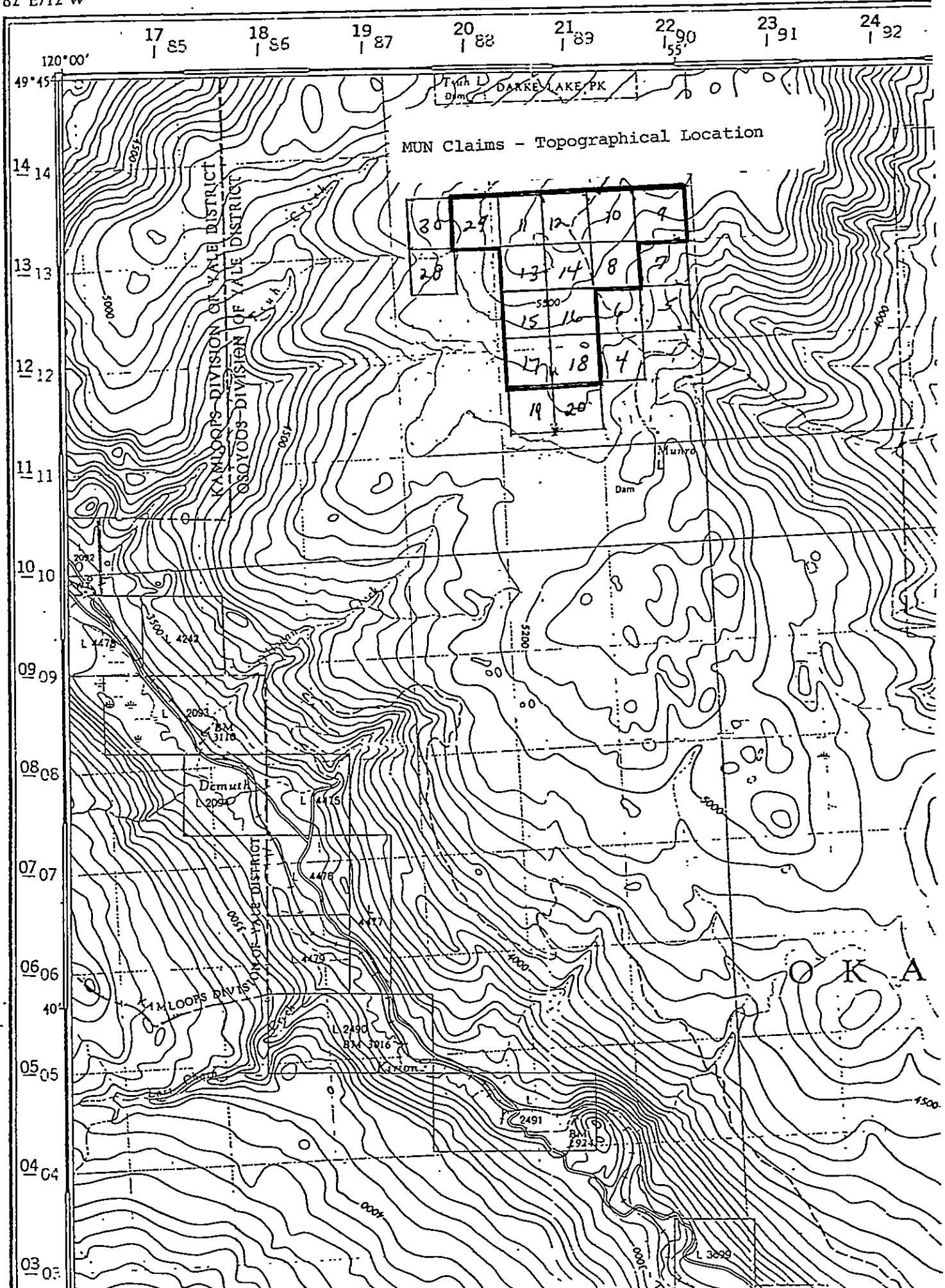
British Columbia

N.T.S. 82 E 12

82 E/12 W

Figure 2

- 6 -  
1:50,000



## 2.1 Location and Access

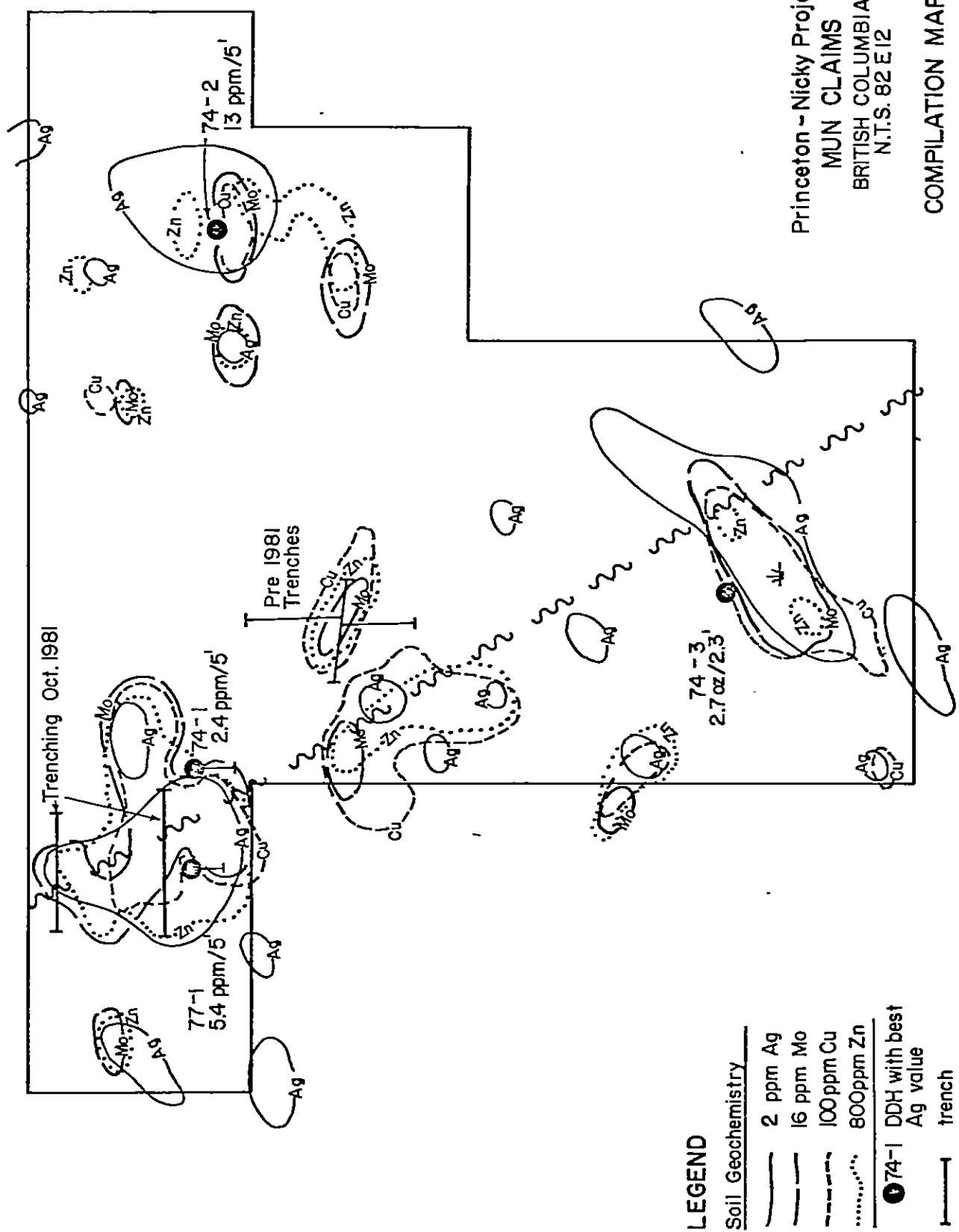
The MUN group is recorded on claim sheet 82E/12W in the Osoyoos Mining Division. The property is 18 air miles (29 km) northwest of Summerland, British Columbia. The property is accessible by secondary road from Summerland to Darke Lake, and from there by a 4 x 4 road to the property, a distance of 4.7 miles (7.6 km). Alternate access is from Peachland, west on the Brenda Mine Road to the sawmill, and from there by secondary road to the property, approximately 10 miles (16 km).

A second alternate access is via the secondary road from Summerland to Princeton, turning north of the O'Hagan Creek logging road (a distance of 20.9 miles [33.6 km] west of Summerland) and following this road to its termination on the property (11.8 miles [19 km] from the turnoff).

## 3. WORK COMPLETED - 1981

### 3.1 Mobilization

A single axle 4-ton truck from Model Transfer of Princeton was used to transport the John Deere 550 Dozer from Princeton to the property using the O'Hagan Creek road. The Dozer was walked via existing roads and trenches from the off-loading point to the trenching area - a distance of 1.2 miles (1.9 km). The above procedure was reversed to transport the Dozer back to Princeton.



### 3.2 Trenching

A total of 1300 feet (396.3 meters) of trenching was completed by Rosaire Beaupre of Beaupre Diamond Drilling Ltd., Princeton, B.C. Approximately 2685.1 cubic yards (2455.3 cubic meters) of glacial drift was removed.

The 1 North trench was pushed in between lines 24+00E and 32+00E at station 71+50N. The timber was stripped, tramped and rowed on the south side of the trench. The material excavated from the trench was pushed over the timber and levelled to form an access road along the trench.

The 1 South trench was pushed in between lines 24+00E and 36+00E at approximately station 66+00N. An existing road was used and thus the timber did not have to be removed. All material removed from the trench was pushed to the south alongside the trench and levelled to allow proper drainage.

### 3.3 Sampling

The trenches were chained and ribboned every 5-foot (1.5 m) interval starting at 24+00E. The flagging tape ribbons were sequentially numbered and attached to the side of the trench with nails approximately 4 feet (1.2 m) above the bottom of the trench. A small hand-shovelled trench was cut into the fresh material along the bottom of the cat trench to prevent any contamination from sloughing and scouring of the dozer blade. A 5-foot (1.5 m) channel sample was then cut along the bottom of the hand dug trench using a small hand trowel. This material was placed into

pre-numbered Kraft soil bags and sealed. The numbers on the bags and ribbons were checked for similarity.

### 3.4 Geochemical Analysis

A total of 260 soil samples and 2 rock samples were collected for analyses. There were 138 soil samples and 1 rock sample collected from the 1 North trench. The 1 South trench yielded 122 soil samples and 1 rock sample. All samples were shipped to Chemex Labs Ltd., Vancouver, B.C. for analysis. The samples were analysed as per Chemex analytical procedures sheets, Appendix 1.

Initially all 262 samples were analysed for Cu, Mo, Zn and Ag. In addition 40 consecutive samples within the section of highest geochemical response were analysed for Pb and Au. Later, 80 soil samples were analysed for tungsten. A total of 1208 analyses were made. The analytical results obtained from Chemex Labs Ltd. are given in Appendix 2.

## 4. GEOCHEMISTRY

### 4.1 Presentation of Results

The location of both trenches is shown on the trench location map, Figure 4.

Plans and sections of the trenches showing geology and geochemical plots are illustrated in Plans 1 and 2 at the back of the report.

A statistical report displaying histograms and cumulative frequencies is also included at the end of the report, Appendix 3.

#### 4.2 Sampling Results

The best results were achieved in the 1 North trench within a 355-foot (108.2 m) section of trench that traversed a highly altered, rubbly, friable granodiorite. Values in the granodiorite section were significantly higher than values in the remainder of the trench. Anomalous values do occur in the remainder of the trench but they are masked by the glacial drift.

The best values within this section are as follows:

The best silver value was 11.5 ppm or 0.34 oz/ton between 26+15E and 26+00E. The average grade for the section was 3.06 ppm or 0.09 oz/ton between 25+95E and 26+70E.

The best zinc value was 2300 ppm or 0.23% Zn between 25+95E and 26+00E. The average grade for the section was 1466 ppm or 0.15% Zn between 25+85E and 27+30E.

The best copper value was 1550 ppm or 0.16% Cu between 26+15E and 26+20E. The average grade for the section between 25+85E and 27+25E was 541 ppm or 0.05% Cu.

The best molybdenum value was 250 ppm or 0.03% Mo at 26+15E and 26+20E. The average grade for the section ran 30.75 ppm or 0.003% Mo between 25+85E and 27+50E.

The best lead value was 1380 ppm or 0.14% Pb between 26+15E and 26+20E. The average grade for the section between 25+55E and 27+55E ran 84.05 ppm or 0.008% Pb.

The section between 25+55E and 27+55E was also analysed for gold. All values within this section ran less

than 10 ppb Au except for two samples which contained 10 ppb Au at 25+80E to 25+85E and 26+50E to 26+55E.

Check analyses for tungsten gave discouraging results. A mineralized (fresh) rock sample was taken within the anomalous granodiorite section of the 1 North trench at 26+10E. It contains 85 ppm Cu, 1 ppm Mo, 760 ppm Zn and 0.1 ppm Ag. Another (fresh) rock sample was taken from the quartz feldspar porphyry section of the 1 South trench at 34+30E. This rock contains even lower amounts of Cu (6 ppm), Mo (1 ppm), Zn (195 ppm), and Ag (0.1 ppm).

#### 5. CONCLUSIONS

The trenching program on the Munro Lake mineral claims successfully explained the presence of the multi-element coincident soil anomaly. All values encountered for all elements are at present sub-economic. It is doubtful whether a drill hole would produce values any better than previously achieved in the drilling program of 1977. Hence, at this time the property does not possess any economically recoverable mineralization.

Respectfully submitted,

*Michael P. Henrick.*

M.P. Henrick, Ph.B.

Toronto, Ontario

AUTHOR'S QUALIFICATIONS

MICHAEL P. HENRICK, Ph.B

Michael P. Henrick graduated with a undergraduate Science degree (Ph.B) in Geology from the University of North Dakota in 1970. Following graduation he has been employed as a geologist with W.G. Wahl Ltd. (1970-71), Barringer Research Ltd. (1971-73) and Canadian Occidental Petroleum Ltd. (1973 to present).

In his capacity as a geologist with Canadian Occidental he has carried out or been in charge of numerous exploration projects across Canada. He is currently a member of the G.A.C.

Cost Statement

Trenching (John Deere 550)      \$ 4520.00  
2455.3 m<sup>3</sup>

Geochemistry (soil sampling). 1401.80  
260

Geologist, 20 days @ 150.00      3000.00

T.K. -      8921.80

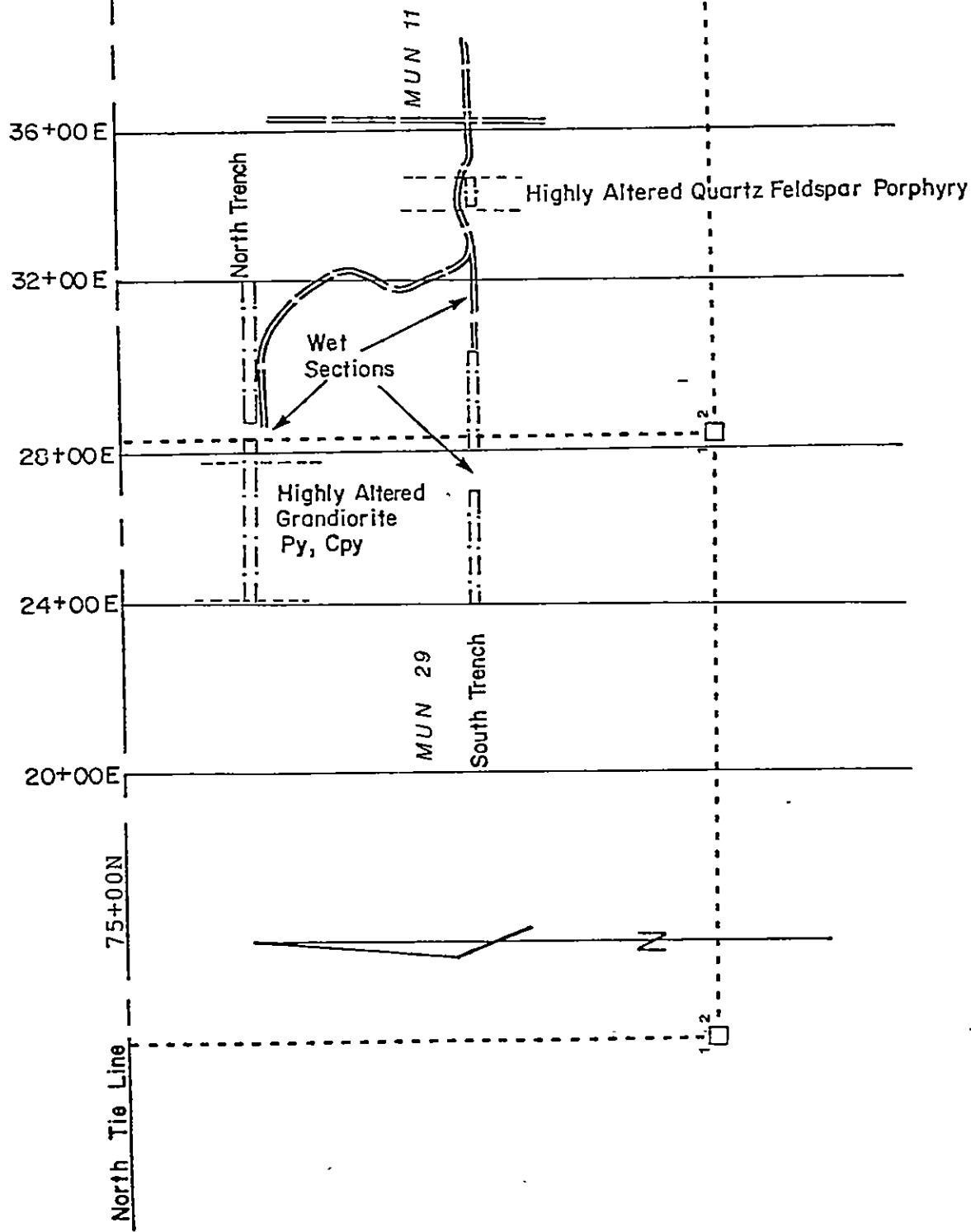
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MUN TRENCHES  
SCALE 1" = 400'

Figure 4

LEGEND

- Road location
- Trench location
- Altered bedrock



APPENDIX 1

GEOCHEMICAL ANALYSES

GEOCHEMICAL ANALYSES (PPM)

Sample Preparation and Analytical Procedures.

Standardized Preparation Procedures:

1. Soils and stream sediments
  - dried at 50°C
  - material sieved through an 80 mesh ( $177\mu$ ) screen is retained for analysis; the rest is discarded.
2. Lake sediments
  - dried at 50° C
  - the entire sample is pulverized on a rotary pulverizer equipped with ceramic plates.
3. Rock chips and core for geochemical analysis
  - entire sample is crushed
  - if necessary (greater than 250 gms) the sample is split on a Jones splitter, the reject is retained for a short period.
  - the split fraction is pulverized such that 90% passes a 200 mesh ( $74\mu$ ) sieve.

Geochemical Analytical Procedures:

A 1.000 gm sample is digested in hot nitric-perchloric acid till fuming. The sample volume is adjusted to 25 ml and is stirred vigorously. The following table gives some of the pertinent atomic absorption parameters for the particular element as well as the detection limit, and a mean value with standard deviation of one of our standards.

Element	Background Correction	Flame Type	Wavelength nm	Detection Limit	Chemex Standard	± 1 Std. Deviation (ppm)
Cu		A	324.7	1	71	± 3
Mo		N	313.3	1	25	± 1
Pb	yes	A	217.0	1	59	± 1
Zn		A	213.8	1	52	± 3
-Ni	yes	A	232.0	1	25	± 2
Co	yes	A	240.7	1	12	± 2
Ag	yes	A	328.1	0.2	8.5	± 0.5
Cd	yes	A	228.8	0.2	1.0	± 0.2

A = Air acetylene flame

N = Nitrous oxide-acetylene flame

#### SAMPLE PREPARATION

Soils, silts, lake bottom sediments - Samples are sorted and dried at 50°C for 12 - 16 hours. Dried material is then screened to obtain the -80 mesh component of each sample. Coarse material is discarded unless other instructions are received. Other mesh sizes are available if required.

Rock chips or pieces of core designated as rock geochem samples are dried, crushed and then pulverized to -100 mesh in a ring grinder. The sample is homogenized and packaged.

#### SAMPLE ANALYSES

(a) ppm Copper, Lead, Zinc, Silver: A 1.0 gm portion of sample is digested in conc. perchloric-nitric acid ( $\text{HClO}_4\text{-HNO}_3$ ) for approx. 2 hrs. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques using background correction for lead and silver analysis.

(b) ppm Arsenic: Digest as above. Generate arsine using the borohydride technique and determine the arsenic concentration by atomic absorption analyses.

(c) ppb Gold: 5 gm samples ashed @ 800°C for 1 hr., digested with aqua regia - twice to dryness - taken up in 25%  $\text{HCl}^-$ , Au extracted as the bromide into MIBK and analyzed via AA.

(d) ppm Ba, Sr, Mg, Ca & Na: 0.2 - 0.5 gm samples digested with  $\text{HClO}_4\text{-HNO}_3\text{-HF}$ , to dryness taken up in 10%  $\text{HClO}_4$  with an ionization suppressant added and analyzed via A.A. - acetylene-nitrous oxide for Ba, Mg, Ca & Sr.

(e) ppm Te: 1 - 5 gm digested with aqua regia, the Te extracted into MIBK as the bromide and analyzed via A.A. using background correction.

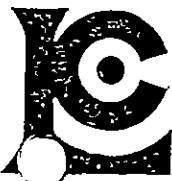
(f) Cold Extractable Metals: 1 gm sample is leached for 1 hour with 25 mls of 0.1M HCl in a hot water bath, filtered (Whatman #31) and then analyzed via standard A.A. techniques.

(g) Assay Ag & Au - Fire Assay Method: 0.5 Assay ton sub-samples are fused in litharge, carbonate and siliceous fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The Ag & Au alloy is weighed on a micro balance, parted, annealed and again weighed as Au. The difference in the two weighings is Ag. Results reported in Oz/Ton.

For low grade samples and geochemical materials 10 gram samples are fused as above with the addition of 10 mg of Au-free Ag metal and cupelled as above. The silver bead is parted with dilute  $\text{HNO}_3$  and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer to a detection of 5 ppb.

APPENDIX 2

CHEMEX ANALYTICAL PROCEDURES



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE (604)984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-001-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

ELEVATION 55730 - 54750

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	TRENCH 23785 IN. 24100E	FOOTAGE
18700	201	21	1	203	0.3	---	---
18701	201	22	1	288	0.7	---	OSE
18702	201	28	1	540	0.4	---	10E
18703	201	48	5	735	1.0	---	15
18704	201	70	8	840	0.9	---	20
18705	201	54	7	820	1.1	---	25
18706	201	70	10	1020	0.8	---	30
18707	201	71	8	928	0.9	---	35
18708	201	112	17	1300	1.0	---	40
18709	201	104	28	2000	2.8	---	45
18710	201	82	41	2000	0.8	---	50
18711	201	69	25	1280	0.5	---	55
18712	201	66	17	655	0.2	---	60
18713	201	34	19	485	0.1	---	65
18714	201	39	9	770	0.2	---	70
18715	201	57	14	1020	0.6	---	75
18716	201	35	2	485	0.4	---	80
18717	201	19	1	250	0.4	---	85
18718	201	25	1	246	0.7	---	90
18719	201	32	1	310	0.4	---	95
18720	201	29	1	225	0.2	---	100E
18721	201	35	1	230	0.4	---	105
18722	201	34	1	328	0.7	---	110
18723	201	30	3	272	0.4	---	115
18724	201	29	2	324	0.4	---	120
18725	201	68	1	435	0.6	---	125
18726	201	27	1	248	0.5	---	130
18727	201	36	1	230	0.3	---	135
18728	201	36	1	220	0.5	---	140
18729	201	66	2	328	0.3	---	145
18730	201	54	1	275	0.5	---	150
18731	201	66	1	320	0.3	---	155
18732	201	50	1	310	0.2	---	160
18733	201	93	22	805	0.1	---	165
18734	201	210	11	755	0.1	---	170
18735	201	400	54	970	0.1	---	175
18736	201	126	17	850	0.2	---	180
18737	201	61	4	865	0.3	---	185
18738	201	271	12	2050	0.1	---	190
18739	201	300	9	1900	0.2	---	195

Certified by ..... *Hart Bechler*



MEMBER  
CANADIAN TESTING  
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MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-002-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

TRENCH IN

SAMPLE INTERVAL

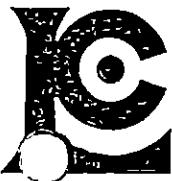
Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	FROM	TO
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18741	201	530	8	1600	4.8	—	05
18742	201	610	17	1600	2.6	—	10
18743	201	700	15	1850	0.9	—	15
18744	201	1550	>250	1550	11.5	—	20
18745	201	730	15	1630	1.1	—	25
18746	201	565	17	2000	0.6	—	30
18747	201	810	31	2130	2.6	—	35
18748	201	1300	91	1650	6.8	—	40
18749	201	500	19	1140	1.2	—	45
18750	201	750	16	1680	0.3	—	50
18751	201	890	160	960	9.7	—	55
18752	201	1300	42	1400	1.2	—	60
18753	201	670	27	1120	0.3	—	65
18754	201	380	20	1280	1.3	—	70
18755	201	285	18	1230	0.2	—	75
18756	201	260	11	1000	0.1	—	80
18757	201	350	13	1100	0.1	—	85
18758	201	160	11	800	0.1	—	90
18759	201	215	22	865	0.1	26795-27100E	—
18760	201	117	5	950	0.1	—	05
18761	201	415	65	1400	1.1	—	10
18762	201	176	7	1480	0.1	—	15
18763	201	270	13	1680	0.1	—	20
18764	201	230	17	1750	0.3	—	25
18765	201	270	16	1830	0.3	—	30
18766	201	69	9	590	0.1	—	35
18767	201	47	8	400	0.3	—	40
18768	201	49	10	415	0.2	—	45
18769	201	44	13	395	0.1	—	50
18770	201	31	7	235	0.1	—	55
18771	201	46	5	365	0.1	—	60
18772	201	42	6	345	0.1	—	65
18773	201	49	4	360	0.9	—	70
18774	201	57	7	405	0.8	—	75
18775	201	64	6	450	0.4	—	80
18776	201	60	6	500	0.2	—	85
18777	201	69	8	610	0.7	—	90
18778	201	60	5	550	0.3	—	95
18779	201	50	4	490	0.2	—	—

Certified by ..... *Hart Bechler*



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MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-003-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

Sample description	Prep code	TRENCH IN				FOOTAGE From 27195 - 28100E	To 65 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000
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18780	201	52	8	490	0.5		
18781	201	59	6	498	0.5	--	65
18782	201	67	5	500	0.7	--	10
18783	201	49	6	348	0.6	--	15
18784	201	71	4	500	0.5	--	20
18785	201	60	3	377	0.3	--	25
18786	201	48	3	285	0.2	--	30
18787	201	47	2	310	0.2	--	35
18788	201	61	6	510	0.5	--	40
18789	201	47	5	405	0.2	--	45
18790	201	51	4	480	0.3	--	50
18791	201	48	5	465	0.3	--	55
18792	201	62	6	525	0.6	--	60
18793	201	48	5	415	0.4	--	65
18794	201	49	5	455	0.1	--	70
18795	201	53	5	455	0.2	--	75
18796	201	41	3	330	0.1	--	80
18797	201	40	4	280	0.1	--	85
18798	201	47	2	290	0.1	--	90
18799	201	44	3	288	0.1	28795E - 29700E	95
18800	201	59	2	320	0.1		100
18801	201	54	2	310	0.1	--	105
18802	201	57	1	345	0.1	--	110
18803	201	53	3	338	0.1	--	115
18804	201	52	2	370	0.1	--	120
18805	201	51	4	550	0.3	--	125
18806	201	37	3	368	0.3	--	130
18807	201	62	10	670	0.2	29725E	135E
18808	201	55	8	755	0.2	--	140E
18809	201	53	7	550	0.1	--	145E
18810	201	55	7	590	0.1		150E
18811	201	39	5	555	0.2	--	155E
18812	201	60	14	610	0.3	--	160E
18813	201	46	7	640	0.3	--	165E
18814	201	42	4	508	0.2	--	170E
18815	201	49	10	770	0.1	--	175E
18816	201	42	6	515	0.1	--	180E
18817	201	42	8	615	0.5	--	185E
18818	201	45	6	580	0.2	--	190E
18819	201	50	9	810	0.5	--	195E

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212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE (604)984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-004-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

IS: 54+40 - 55+70

TRENCH IN 4 15

FOOTAGE

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	FROM 30+40E	TO 30+55E
18820	201	39	6	510	0.1	--	55
18821	201	45	7	780	0.4	--	50
18822	201	44	4	945	0.2	--	55
18823	201	38	5	532	0.1	--	60
18824	201	44	7	605	0.2	--	65
18825	201	44	8	615	0.2	--	70
18826	201	46	7	550	0.2	--	75
18827	201	41	7	1150	0.1	--	80
18828	201	52	9	685	0.1	--	85
18829	201	29	6	408	0.1	--	90
18830	201	40	6	460	0.6	30+40E	31+40E
18831	201	27	4	300	0.7	--	45
18832	201	33	2	335	0.1	--	55
18833	201	30	1	328	0.5	--	60
18834	201	30	1	328	0.2	--	65
18835	201	32	3	435	0.2	--	70
18836	201	25	1	380	0.2	--	75
18837 TRENCH IN ENDS	201	30	2	480	0.5	--	80
18838 TRENCH 15 STARTS	201	16	1	160	0.5	23+25E	24+40E
18839	201	16	1	188	0.7	--	45
18840	201	16	3	210	0.8	--	50
18841	201	17	2	200	0.7	--	55
18842	201	17	3	208	0.5	--	60
18843	201	23	5	265	0.6	--	65
18844	201	22	4	270	0.4	--	70
18845	201	21	2	248	0.3	--	40
18846	201	19	1	235	0.2	--	45
18847	201	19	2	225	0.3	--	50
18848	201	25	7	240	0.4	--	55
18849	201	17	2	195	0.3	--	60
18850	201	16	3	222	0.6	--	65
18851	201	23	5	270	0.5	--	70
18852	201	19	4	255	0.4	--	75
18853	201	20	4	238	0.4	--	80
18854	201	27	7	250	0.9	--	85
18855	201	31	7	283	1.6	--	90
18856	201	33	11	275	1.5	--	95
18857	201	17	5	220	0.1	24+40E	25+40E
18858	201	19	6	248	0.3	--	OS
18859	201	17	5	230	1.0	--	OS

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TELEPHONE (604)984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-005-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

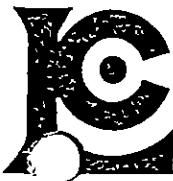
15-TRENCH

### FOOTAGE

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	FROM 25' DESE	TO 25' DESE
18860	201	18	1	230	0.2	--	--
18861	201	19	3	225	0.5	--	--
18862	201	19	2	220	0.5	--	--
18863	201	19	2	234	0.4	--	--
18864	201	21	2	265	0.5	--	--
18865	201	22	3	285	0.5	--	--
18866	201	20	2	238	0.6	--	--
18867	201	25	5	292	0.3	--	--
18868	201	17	3	225	0.5	--	--
18869	201	17	2	215	0.2	--	--
18870	201	17	1	235	0.3	--	--
18871	201	17	2	240	0.2	--	--
18872	201	20	2	254	0.3	--	--
18873	201	21	3	268	0.2	--	--
18874	201	17	2	250	0.2	--	--
18875	201	16	1	205	0.1	--	--
18876	201	17	1	258	0.3	--	--
18877	201	19	4	270	0.1	254.95E - 261.00E	95
18878	201	17	1	238	0.2	254.95E - 261.00E	05
18879	201	16	2	238	0.5	--	--
18880	201	19	3	245	0.3	--	--
18881	201	19	2	248	0.3	--	--
18882	201	20	1	268	0.2	--	--
18883	201	18	1	265	0.2	--	--
18884	201	17	1	250	0.2	--	--
18885	201	16	1	244	0.2	--	--
18886	201	17	2	260	0.5	--	--
18887	201	19	1	255	0.4	--	--
18888	201	17	2	188	0.3	--	--
18889	201	17	3	185	0.4	--	--
18890	201	15	2	160	0.5	--	--
18891	201	16	2	158	1.2	--	--
18892	201	16	6	172	1.2	264.70E - 264.75E	70
18893	201	16	3	195	1.1	264.70E - 264.75E	05
18894	201	18	8	258	1.1	271.95E - 281.00E	05
18895	201	17	15	325	0.6	--	--
18896	201	13	10	250	0.6	--	--
18897	201	14	7	245	0.7	--	--
18898	201	15	8	240	0.4	--	--
18899	201	13	7	258	0.9	--	--

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## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-006-A  
INVOICE # : I8115308  
DATE : 26-NOV-81  
P.O. # : NONE

1S-TRENCH

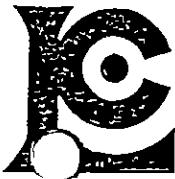
FOOTAGE

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	From 2872SE	To 2873O
18900	201	15	9	340	0.6	--	--
18901	201	15	4	292	0.9	--	35
18902	201	21	17	492	1.0	--	40
18903	201	18	6	310	0.5	--	45
18904	201	17	7	420	0.7	--	50
18905	201	18	8	385	0.9	--	55
18906	201	17	8	310	1.0	--	60
18907	201	19	8	320	1.0	--	65
18908	201	32	14	765	2.1	--	70
18909	201	30	11	615	1.0	--	75
18910	201	33	13	622	1.9	--	80
18911	201	35	3	355	1.4	--	85
18912	201	19	2	300	0.7	--	90
18913	201	15	2	220	0.3	--	95
18914	201	16	1	243	1.3	28785 - 29100E	
18915	201	14	3	228	0.7	--	65
18916	201	32	42	420	0.9	--	10
18917	201	17	6	300	0.8	--	15
18918	201	16	2	280	0.7	--	20
18919	201	15	3	265	0.3	--	25
18920	201	15	1	235	0.4	--	30
18921	201	14	2	220	0.3	--	35
18922	201	15	3	235	0.5	--	40
18923	201	13	1	206	0.9	--	45
18924	201	15	3	248	0.5	--	50
18925	201	14	2	205	0.4	--	55
18926	201	16	2	220	0.2	--	60
18927	201	16	3	275	0.8	--	65
18928	201	16	2	255	0.7	--	70
18929	201	16	1	275	0.8	--	75
18930	201	16	3	275	0.5	--	80
18931	201	17	2	250	0.4	--	85
18932	201	21	4	252	0.7	--	90
18933	201	16	2	190	0.2	--	95
18934	201	16	1	230	0.8	29195	30100E
18935	201	17	4	208	0.9	--	05
18936	201	16	1	215	0.6	--	10
18937	201	14	2	220	0.6	--	15
18938	201	14	1	190	0.7	--	20
18939	201	15	3	205	0.4	--	25

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TELEPHONE (604)984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115308-007-A  
INVOICE # : 18115308  
DATE : 26-NOV-81  
P.O. # : NONE

TRENCH 1S

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm	FOOTAGE FROM 33+25E	TO 30+30E
18940	201	22	3	258	0.3	--	--
18941	201	42	8	375	1.1	--	35
18942	201	29	11	515	0.5	--	40
18943	201	35	12	570	0.7	33+80 -	33+80
18944	201	54	29	945	1.7	--	85
18945	201	59	28	1100	1.5	--	90
18946	201	47	22	755	1.4	--	95
18947	201	38	8	375	1.1	33+95E -	34+00E
18948	201	35	8	420	1.0	--	05
18949	201	34	7	436	0.6	--	10
18950	201	37	9	290	0.6	--	15
18951	201	34	7	600	0.3	--	20
18952	201	40	7	740	0.7	--	25
18953	201	30	6	450	0.2	--	30
18954	201	37	6	595	0.6	--	35
18955	201	42	8	620	0.2	--	40
18956	201	52	7	585	1.0	--	45
18957	201	47	8	650	0.9	--	50
18958	201	40	6	450	1.0	--	55
18959	201	43	5	500	1.1	34+55 -	34+60E

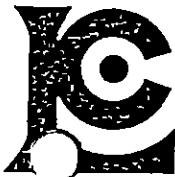
END OF 1S TRENCH

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CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115307-001-A  
INVOICE # : I8115307  
DATE : 26-NOV-81  
P.O. # : NONE

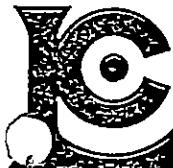
### ROCK SAMPLES

Sample description	Prep code	Cu ppm	Mo ppm	Zn ppm	Ag ppm		
18960	205	85	1	760	0.1	--	--
18961	205	6	1	195	0.1	--	--

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TELEPHONE: (604) 984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. #: A8210152-001-  
INVOICE #: I8210152  
DATE : 26-JAN-82  
P.O. #: NONE

ATTN: CHRIS RICHARDSON      M.P. HENRICK

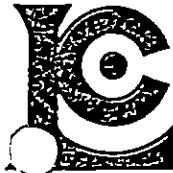
Minerals Claims, BC.

Sample description	Prep code	W	dpm					
18700	214	2	--	--	--	--	--	--
18701	214	2	--	--	--	--	--	--
18702	214	2	--	--	--	--	--	--
18703	214	5	--	--	--	--	--	--
18704	214	5	--	--	--	--	--	--
18705	214	3	--	--	--	--	--	--
18706	214	7	--	--	--	--	--	--
18707	214	5	--	--	--	--	--	--
18708	214	8	--	--	--	--	--	--
18709	214	14	--	--	--	--	--	--
18710	214	5	--	--	--	--	--	--
18711	214	7	--	--	--	--	--	--
18712	214	5	--	--	--	--	--	--
18713	214	2	--	--	--	--	--	--
18714	214	1	--	--	--	--	--	--
18715	214	1	--	--	--	--	--	--
18716	214	1	--	--	--	--	--	--
18717	214	1	--	--	--	--	--	--
18718	214	1	--	--	--	--	--	--
18719	214	2	--	--	--	--	--	--
18720	214	1	--	--	--	--	--	--
18732	214	2	--	--	--	--	--	--
18733	214	14	--	--	--	--	--	--
18734	214	10	--	--	--	--	--	--
18735	214	20	--	--	--	--	--	--
18736	214	6	--	--	--	--	--	--
18737	214	10	--	--	--	--	--	--
18738	214	13	--	--	--	--	--	--
18739	214	6	--	--	--	--	--	--
18740	214	28	--	--	--	--	--	--
18741	214	25	--	--	--	--	--	--
18742	214	10	--	--	--	--	--	--
18743	214	12	--	--	--	--	--	--
18744	214	15	--	--	--	--	--	--
18745	214	13	--	--	--	--	--	--
18746	214	10	--	--	--	--	--	--
18747	214	30	--	--	--	--	--	--
18748	214	34	--	--	--	--	--	--
18749	214	28	--	--	--	--	--	--
18750	214	5	--	--	--	--	--	--

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TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, GNT.  
M9W 6A9

CERT. # : A8210152-002-  
INVOICE # : I8210152  
DATE : 26-JAN-82  
P.O. # : NONE

ATTN: CHRIS RICHARDSON

Sample description	Prep code	W ppm					
18751	214	25	--	--	--	--	--
18752	214	7	--	--	--	--	--
18753	214	12	--	--	--	--	--
18754	214	25	--	--	--	--	--
18755	214	15	--	--	--	--	--
18756	214	5	--	--	--	--	--
18757	214	15	--	--	--	--	--
18758	214	10	--	--	--	--	--
18759	214	12	--	--	--	--	--
18760	214	7	--	--	--	--	--
18761	214	28	--	--	--	--	--
18762	214	1	--	--	--	--	--
18763	214	5	--	--	--	--	--
18764	214	13	--	--	--	--	--
18765	214	10	--	--	--	--	--
18766	214	4	--	--	--	--	--
18767	214	5	--	--	--	--	--
18768	214	2	--	--	--	--	--
18769	214	2	--	--	--	--	--
18770	214	1	--	--	--	--	--
18771	214	3	--	--	--	--	--
18772	214	2	--	--	--	--	--
18942	214	2	--	--	--	--	--
18943	214	1	--	--	--	--	--
18944	214	5	--	--	--	--	--
18945	214	4	--	--	--	--	--
18946	214	3	--	--	--	--	--
18947	214	3	--	--	--	--	--
18948	214	2	--	--	--	--	--
18949	214	2	--	--	--	--	--
18950	214	5	--	--	--	--	--
18951	214	4	--	--	--	--	--
18952	214	1	--	--	--	--	--
18953	214	2	--	--	--	--	--
18954	214	2	--	--	--	--	--
18955	214	5	--	--	--	--	--
18956	214	5	--	--	--	--	--
18957	214	3	--	--	--	--	--
18958	214	4	--	--	--	--	--
18959	214	2	--	--	--	--	--

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TELEPHONE: (604) 984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115547-002-A  
INVOICE # : I8115547  
DATE : 16-DEC-81  
P.O. # : NONE

Sample description	Prep code	Pb ppm	AU-AA ppb
18772	214	15	<10
		--	--
		--	--
		--	--



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TELEPHONE (604) 984-0221  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION,  
180 ATTWELL DRIVE, 4TH FLR.,  
REXDALE, ONT.  
M9W 6A9

CERT. # : A8115547-001-A  
INVOICE # : I8115547  
DATE : 16-DEC-81  
P.O. # : NONE

Sample description	Prep code	Pb ppm	AU-AA ppb				
18732	214	39	<10	--	--	--	--
18733	214	18	<10	--	--	--	--
18734	214	25	<10	--	--	--	--
18735	214	40	<10	--	--	--	--
18736	214	24	<10	--	--	--	--
18737	214	14	10	--	--	--	--
18738	214	46	<10	--	--	--	--
18739	214	32	<10	--	--	--	--
18740	214	112	<10	--	--	--	--
18741	214	95	<10	--	--	--	--
18742	214	210	<10	--	--	--	--
18743	214	84	<10	--	--	--	--
18744	214	1380	<10	--	--	--	--
18745	214	64	<10	--	--	--	--
18746	214	44	<10	--	--	--	--
18747	214	63	<10	--	--	--	--
18748	214	385	<10	--	--	--	--
18749	214	50	<10	--	--	--	--
18750	214	23	<10	--	--	--	--
18751	214	108	10	--	--	--	--
18752	214	39	<10	--	--	--	--
18753	214	36	<10	--	--	--	--
18754	214	39	<10	--	--	--	--
18755	214	29	<10	--	--	--	--
18756	214	21	<10	--	--	--	--
18757	214	26	<10	--	--	--	--
18758	214	20	<10	--	--	--	--
18759	214	24	<10	--	--	--	--
18760	214	20	<10	--	--	--	--
18761	214	62	<10	--	--	--	--
18762	214	15	<10	--	--	--	--
18763	214	17	<10	--	--	--	--
18764	214	25	<10	--	--	--	--
18765	214	45	<10	--	--	--	--
18766	214	23	<10	--	--	--	--
18767	214	15	<10	--	--	--	--
18768	214	14	<10	--	--	--	--
18769	214	11	<10	--	--	--	--
18770	214	8	<10	--	--	--	--
18771	214	17	<10	--	--	--	--

Certified by ... *[Signature]*



MEMBER  
CANADIAN TESTING  
ASSOCIATION

APPENDIX 3

STATISTICAL REPORT

Appendix 3  
GUIDE TO THE STATISTICAL REPORT

1. LIST OF VALUES AND RANK.

The Sample Number is followed by the measured analytical value and % Rank for each element or parameter. For measured values below the detection limit, the assigned value is 1/2 of the detection limit. A - sign indicates that no analytical value is available. The number of samples with values for a given element is given at the end of the table.

The Rank specifies the position of the corresponding measured value in a sequence from the highest to the lowest values; it is given in % of the number of values for that element to the nearest integer. For example if there are 55 samples, all values below detection are ranked 100 (there are no lower values). The highest value is ranked 2 (1 sample is 2% of 55). Missing values are given 0 rank.

2. STATISTICAL SUMMARY TABLE.

For Element E with N values

a) AR (Arithmetic) MEAN:  $MA = \bar{E} = \frac{1}{N} \sum E$

b) STD DEV (Standard Deviation):  $SD = \sqrt{\frac{1}{N-1} \sum (E - \bar{E})^2}$

c) GEOM (Geometric) MEAN:  $MG = \text{Exp} \left[ \frac{1}{N} \sum \ln (E) \right]$

d) LN DEV (Deviation of the Logarithms):

$$LD = \text{Exp} \left[ \sqrt{\frac{1}{N-1} \sum \left[ (\ln(E) - \ln(MG)) \right]^2} \right]$$

In the formulas  $\ln$  indicates the Natural Logarithm,  $\text{Exp}$  the exponential function.

The Geometric Mean and Logarithmic Deviation are expressed in the same measuring units as the corresponding arithmetic parameters.

- e) The RANGE gives the Minimum and Maximum values
- f) SMPLES is the total number of samples with values for the element (including below detection)
- g) < DET LIM indicates how many of the sample values are below the detection limit.

### 3. DEVIATIONS FROM THE MEANS.

The table gives the VALUE of the MEAN and at 1 and 2 deviations below and above the mean. The % indicates the RANK of such value, or what percentage of the measured values would be above it. The deviations are given for both the Arithmetic (ARITH) and Logarithmic (LOG) parameters. All Values are expressed in the same measuring units.

Example. Given MA = 10.0 ppm

$$SD = 15.0 \text{ ppm}$$

$$MG = 7.0 \quad \ln(MG) = 1.95$$

$$LD = 2.0 \quad \ln(LD) = 0.69$$

For Mean + 2 DEV

ARITH - VALUE is  $10 + 2 \times 15 = 40 \text{ ppm}$

LOG - VALUE is  $\text{Exp} [\ln(MG) + 2 \times \ln(LD)] = \text{Exp}(3.33) = 28 \text{ ppm}$

The LOG value could also be computed directly in true units:

$$V = MG \times (LD)^2 = 7 \times 4 = 28$$

### 4. HISTOGRAM AND CUMULATIVE FREQUENCY.

The INTERVAL limits values, the number of SAMPLES in each interval and the Cumulative Frequency are printed. The scaled Bar Diagram (\*\*\*\*\*) illustrate the number of samples in the interval.

The + plots the Cumulative Frequency Curve, rising to 100% at the right. The Number of Samples, the number below the detection limit and the Minimum and Maximum values are shown in the last line.

### 5. CORRELATION COEFFICIENTS.

The table consists of cells for pairs of elements. In each cell the first value is the Linear Correlation Coefficient for the pair. The second line is the range of the level of significance; it indicates the % probability that the correlation is due to causes other than random measuring errors and is computed by a modified Student-t test at the 50, 60, 80, 90, 95 and 99% levels.

A 0-50 range means that there is better than 50% chance that the correlation is caused by random errors.

A 99--\*\* range means that there is less than 1% probability that errors cause the correlation, or that there is better than 99% certainty that the coefficient reflects the true behaviour of the data.

The third value in the cell indicates the number of samples in the pair, including values below detection.

For N pairs of elements X and Y with means  $\bar{X}$  and  $\bar{Y}$  and deviations  $s_X$  and  $s_Y$ , the correlation coefficient R is

$$R = \frac{\sum XY - N \cdot \bar{X} \bar{Y}}{N \cdot s_X \cdot s_Y}$$

#### 6. SCATTERGRAM AND LINEAR REGRESSION.

For selected pairs of elements the values are plotted in the scattergram using logarithmic scales on both axes; the labels are in true measuring units. An \* indicates one occurrence of a pair of values, a 2 is for two pairs at the same position, 3 for three pairs, etc. up to 9. For ten or more pairs a + is used.

The linear regression is computed assuming errors in both elements, thus the fit minimizes the sum of the distances from the occurrences to the regression line.

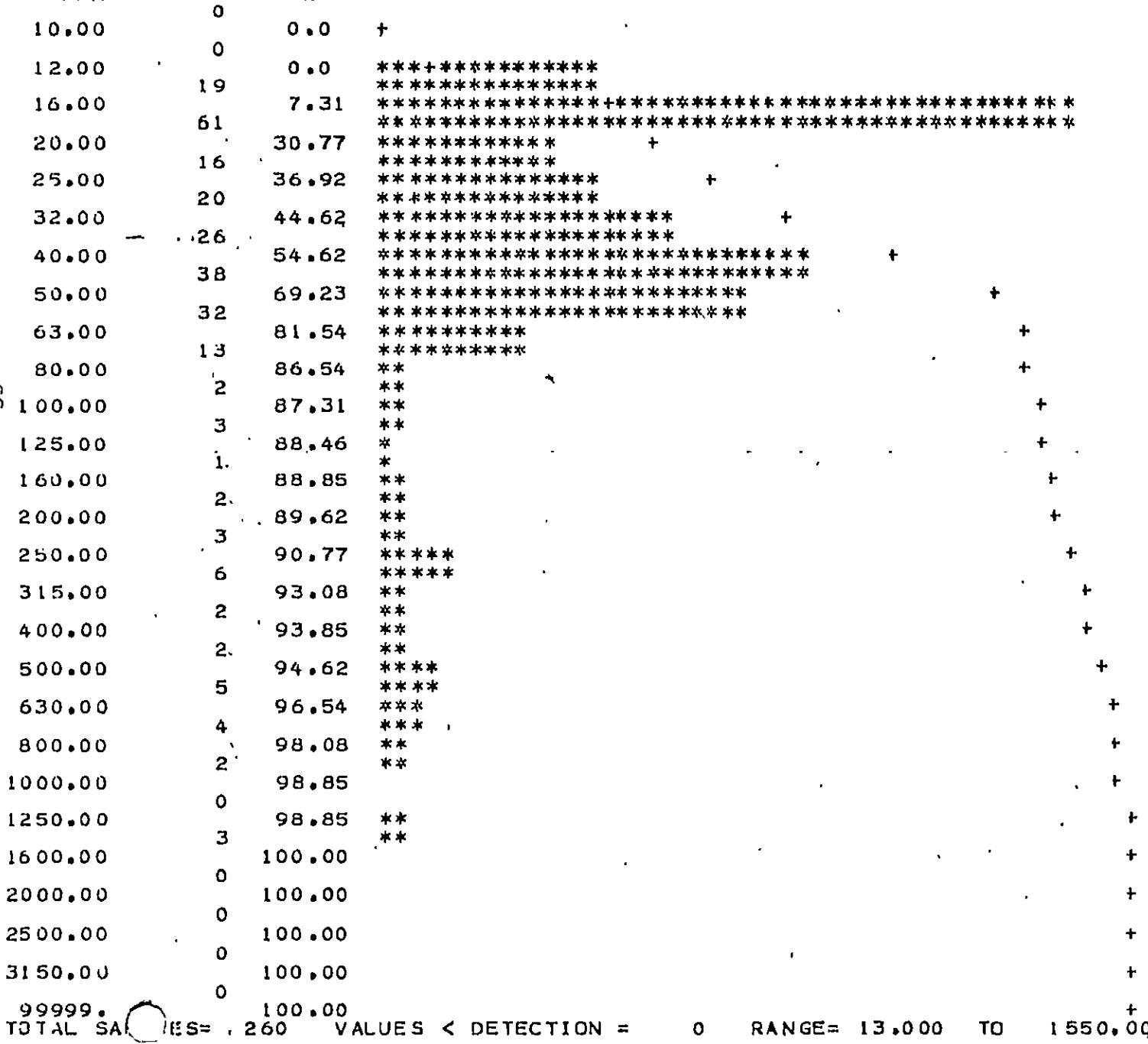
Two possible fits result, the more logical being shown by the regression line.

The last line in the page specifies the number of sets of pairs plotted, the additional number of values for each element below the detection limit (not plotted), the linear correlation coefficient for the plotted values and the percentage of the values which can be predicted from the correlation.

TOTL  
AG  
INTERV SAMPLES CUM FR  
PPB X

INTERV	SAMPLES	CUM FR
0.10	0	0.0
0.20	40	15.38
0.30	41	31.15
0.40	34	44.23
0.50	22	52.69
0.60	28	63.46
0.80	35	76.92
1.00	21	85.00
1.20	18	91.92
1.60	10	95.77
2.00	3	96.92
2.50	1	97.31
3.20	3	98.46
4.00	0	98.46
5.00	1	98.85
6.30	0	98.85
8.00	1	99.23
10.00	1	99.62
12.50	1	100.00
16.00	0	100.00
20.00	0	100.00
25.00	0	100.00
31.50	0	100.00
40.00	0	100.00
50.00	0	100.00
63.00	0	100.00
99999.	0	100.00
TOTAL SAMPL	260	VALUES < DETECTION = 0
		RANGE= 0.100 TO 11.50

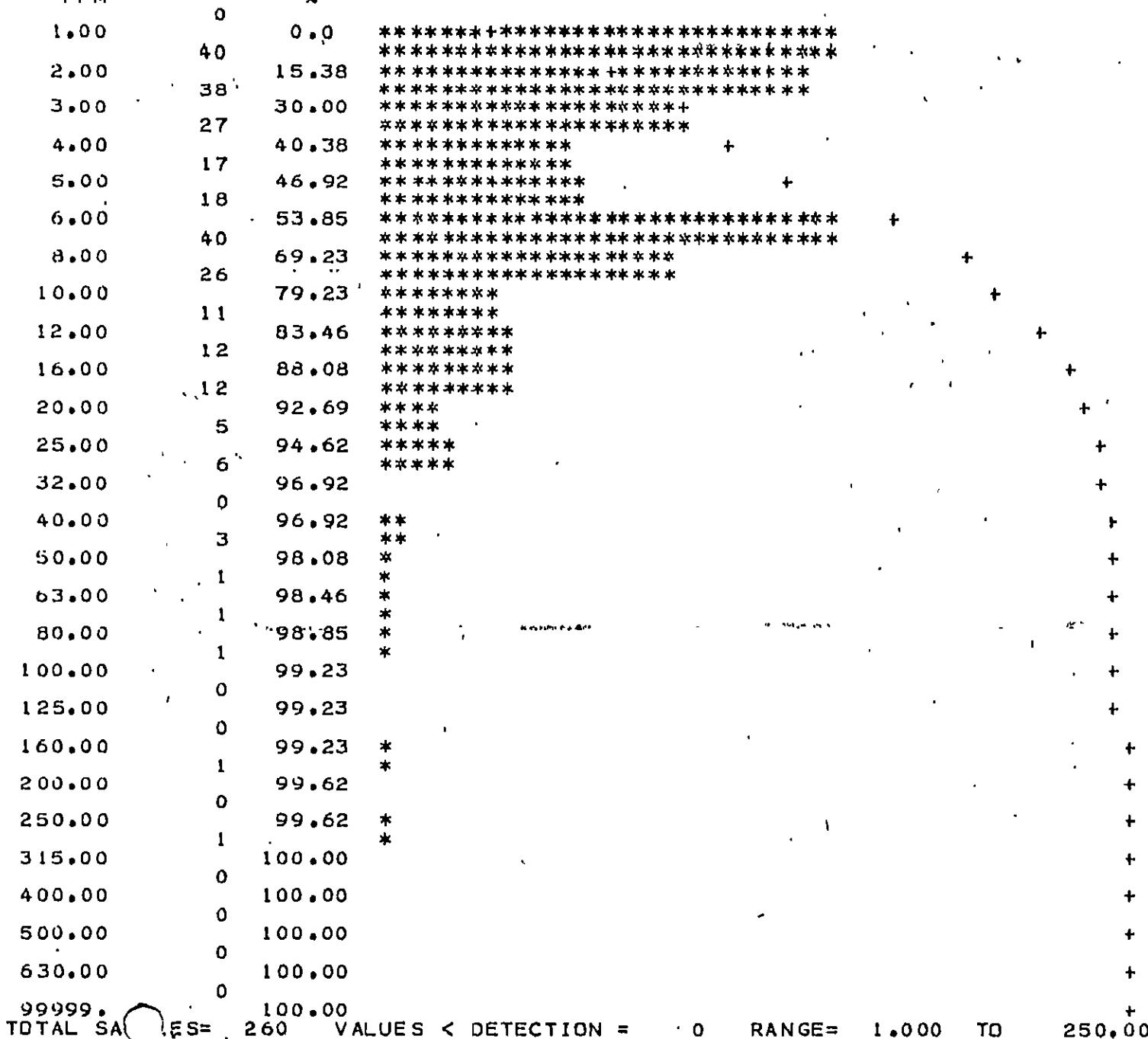
TOTAL  
CU  
INTERV SAMPLES CUM FR  
PPM X



TOTL  
ZN  
INTERV SAMPLES CUM FR  
PPM X

100.00	0	0.0	+
112.00	0	0.0	+
125.00	0	0.0	+
140.00	0	0.0	+
160.00	1	0.38	*
	3		**
180.00	7	1.54	***+***
			*****
200.00	19	4.23	*****+*****
			*****+*****
225.00	33	11.54	*****+*****
			*****+*****
250.00	31	24.23	*****+*****
			*****+*****
280.00	20	36.15	*****+*****
			*****+*****
315.00	16	43.85	*****+*****
			+
355.00	11	50.00	*****+*****
			+
400.00	12	54.23	*****+*****
			+
450.00	15	58.85	*****+*****
			+
500.00	17	64.62	*****+*****
			+
560.00	15	71.15	*****+*****
			+
630.00	5	76.92	****
			***
710.00	9	78.85	*****
			*****
800.00	8	82.31	*****
			+
900.00	6	85.38	*****
			+
1000.00	5	87.69	****
			***
1120.00	4	89.62	***
			***
1250.00	3	91.15	**
			**
1400.00	4	92.31	***
			***
1600.00	7	93.85	*****
			*****
1800.00	9	96.54	*****
			*****
99999.		100.00	
TOTAL SAMPLES =	260	VALUES < DETECTION =	0
		RANGE=158.000 TO 2300.00	+

TOTAL  
MO  
INTERV SAMPLES CUM FR  
PPM X



## PROJECT MUN TRENCH GEOCHEMISTRY

## CORRELATION COEFFICIENTS, LEVEL OF SIGNIFICANCE, NUMBER OF SAMPLES

	CU	MO	ZN	AG
CU	***** 0.73 0.68 0.65 99-** 99-** 99-** 260 260 260			
MO	0.73 ***** 0.44 0.85 99-** **-** 99-** 99-** 260 ***** 260 260			
ZN	0.68 0.44 ***** 0.31 99-** 99-** **-** 99-** 260 260 ***** 260			
AG	0.65 0.85 0.31 ***** 99-** 99-** 99-** **-** 260 260 260 *****			

## EXPLANATION-- IN THE CELL FOR EACH PAIR

R = LINEAR CORRELATION COEFFICIENT  
 LEVEL = % CERTAINTY THAT R IS NOT DUE TO ERRORS  
 (% INTERVALS: 0 50 60 80 90 95 99 \*\*)  
 NUMBER=NUMBER OF SAMPLES PAIRED TO COMPUTE R

TOTAL

## PROJECT MUN TRENCH GEOCHEMISTRY

## STATISTICAL SUMMARY OF ALL SAMPLES

ELEMENT	AR.	MEAN	STD DEV	GEOM MEAN	LN DEV	RANGE		SMPLS	<DET LIM
						MIN	MAX		
CU		91.515	198.953	40.906	2.757	13.000	1550.00	260	0
MO		8.988	20.271	4.647	2.818	1.000	250.00	260	0
ZN		534.654	438.383	422.235	1.899	158.000	2300.00	260	0
AG		0.640	1.091	0.397	2.451	0.100	11.50	260	0

## DEVIATIONS FROM MEANS : VALUES AND % FROM TOP OF GROUP

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ELEMENT	MEAN-2 DEV		MEAN-1 DEV		MEAN		MEAN+1 DEV		MEAN+2 DEV		ARITH LOG E
	VALUE	%	VALUE	%	VALUE	%	VALUE	%	VALUE	%	
CU	-306.39	100	-107.44	100	91.52	13	290.47	7	489.42	5	
CJ	5.38	100	14.84	97	40.91	44	112.77	12	310.87	7	LOG E
MO	-31.55	100	-11.28	100	8.99	23	29.26	3	49.53	2	ARITH
MO	0.59	100	1.65	85	4.65	53	13.09	14	36.90	3	LOG E
ZN	-342.11	100	96.27	100	534.65	31	973.04	12	1411.42	7	ARITH
ZN	117.04	100	222.30	88	422.23	42	801.98	17	1523.26	7	LOG E
AG	-1.54	100	-0.45	100	0.64	30	1.73	3	2.82	2	ARITH
AG	0.07	100	0.16	85	0.40	56	0.97	15	2.39	3	LOG E

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**PROJECT MUN GEOCHEMICAL DATA LIST : TRENCH 1 N**      PAGE 1

SAMPLE	FOOTAGES		CU PPM	MO PPM	ZN PPM	AG PPM
	FROM	TO				
18700	2395	2400	21	1	203	0.3
18701	2400	2405	22	1	288	0.7
18702	2405	2410	28	1	540	0.4
18703	2410	2415	48	5	735	1.0
18704	2415	2420	70	8	840	0.9
18705	2420	2425	54	7	820	1.1
18706	2425	2430	70	10	1020	0.8
18707	2430	2435	71	8	928	0.9
18708	2435	2440	112	17	1300	1.0
18709	2440	2445	104	28	2000	2.8
18710	2445	2450	82	41	2000	0.8
18711	2450	2455	69	25	1280	0.5
18712	2455	2460	66	17	655	0.2
18713	2460	2465	34	19	485	0.1
18714	2465	2470	39	9	770	0.2
18715	2470	2475	57	14	1020	0.6
18716	2475	2480	35	2	485	0.4
18717	2480	2485	19	1	250	0.4
18718	2485	2490	25	1	246	0.7
18719	2490	2495	32	1	310	0.4
18720	2495	2500	29	1	225	0.2
18721	2500	2505	35	1	230	0.4
18722	2505	2510	34	1	328	0.7
18723	2510	2515	30	3	272	0.4
18724	2515	2520	29	2	324	0.4
18725	2520	2525	68	1	435	0.6
18726	2525	2530	27	1	248	0.5
18727	2530	2535	36	1	230	0.3
18728	2535	2540	36	1	220	0.5
18729	2540	2545	66	2	328	0.3
18730	2545	2550	54	1	275	0.5
18731	2550	2555	66	1	320	0.3
18732	2555	2560	50	1	310	0.2
18733	2560	2565	93	22	805	0.1
18734	2565	2570	210	11	755	0.1
18735	2570	2575	400	54	970	0.1
18736	2575	2580	126	17	850	0.2
18737	2580	2585	61	4	865	0.3
18738	2585	2590	271	12	2050	0.1
18739	2590	2595	300	9	1900	0.2
18740	2595	2600	550	21	2300	0.8
18741	2600	2605	530	8	1600	4.8
18742	2605	2610	610	17	1600	2.8
18743	2610	2615	700	15	1850	0.9
18744	2615	2620	1550	250	1550	11.5
18745	2620	2625	730	15	1630	1.1
18746	2625	2630	565	17	2000	0.6
18747	2630	2635	810	31	2130	2.6
18748	2635	2640	1300	91	1650	6.8
18749	2640	2645	500	19	1140	1.2
18750	2645	2650	750	16	1680	0.3
18751	2650	2655	890	160	960	9.7
18752	2655	2660	1300	42	1400	1.2
18753	2660	2665	670	27	1120	0.3
18754	2665	2670	380	20	1280	1.3
18755	2670	2675	285	18	1230	0.2
18756	2675	2680	260	11	1000	0.1
18757	2680	2685	350	13	1100	0.1
18758	2685	2690	160	11	800	0.1
18759	2690	2695	215	22	865	0.1
18760	2695	2700	117	5	950	0.1
18761	2700	2705	415	65	1400	1.1
18762	2705	2710	176	7	1480	0.1
18763	2710	2715	270	13	1680	0.1
18764	2715	2720	230	17	1750	0.3
18765	2720	2725	270	16	1830	0.3
18766	2725	2730	69	9	590	0.1
18767	2730	2735	47	8	400	0.3
18768	2735	2740	49	10	415	0.2
18769	2740	2745	44	13	395	0.1
18770	2745	2750	31	7	235	0.1
18771	2750	2755	46	5	365	0.1
18772	2755	2760	42	6	345	0.1
18773	2760	2765	49	4	360	0.9
18774	2765	2770	57	7	405	0.8

SAMPLE	FOOTAGES FROM	TO	CU PPM	MO PPM	ZN PPM	AG PPM
18775	2770	2775	64	6	450	0.4
18776	2775	2780	60	6	500	0.2
18777	2780	2785	69	8	610	0.7
18778	2785	2790	60	5	550	0.3
18779	2790	2795	50	4	490	0.2
18780	2795	2800	52	8	490	0.5
18781	2800	2805	59	6	498	0.5
18782	2805	2810	67	5	500	0.7
18783	2810	2815	49	6	348	0.6
18784	2815	2820	71	4	500	0.5
18785	2820	2825	60	3	377	0.3
18786	2825	2830	48	3	285	0.2
18787	2830	2835	47	2	310	0.2
18788	2835	2840	61	6	510	0.5
18789	2840	2845	47	5	405	0.2
18790	2845	2850	51	4	480	0.3
18791	2850	2855	48	5	465	0.3
18792	2855	2860	62	6	525	0.6
18793	2860	2865	48	5	415	0.4
18794	2865	2870	49	5	455	0.1
18795	2870	2875	53	5	455	0.2
18796	2875	2880	41	3	330	0.1
18797	2880	2885	40	4	280	0.1
18798	2885	2890	47	2	290	0.1
18799	2890	2895	44	3	288	0.1
18800	2895	2900	59	2	320	0.1
18801	2900	2905	54	2	310	0.1
18802	2905	2910	57	1	345	0.1
18803	2910	2915	53	3	338	0.1
18804	2915	2920	52	2	370	0.1
18805	2920	2925	51	4	550	0.3
18806	2925	2930	37	3	368	0.3
18807	2975	2980	62	10	670	0.2
18808	2980	2985	55	8	755	0.2
18809	2985	2990	53	7	550	0.1
18810	2990	2995	55	7	590	0.1
18811	2995	3000	39	5	555	0.2
18812	3000	3005	60	14	610	0.3
18813	3005	3010	46	7	640	0.3
18814	3010	3015	42	4	508	0.2
18815	3015	3020	49	10	770	0.1
18816	3020	3025	42	6	515	0.1
18817	3025	3030	42	8	615	0.5
18818	3030	3035	45	6	580	0.2
18819	3035	3040	50	9	810	0.5
18820	3040	3045	39	6	510	0.1
18821	3045	3050	45	7	780	0.4
18822	3050	3055	44	4	945	0.2
18823	3055	3060	38	5	532	0.1
18824	3060	3065	44	7	605	0.2
18825	3065	3070	44	8	615	0.2
18826	3070	3075	46	7	550	0.2
18827	3075	3080	41	7	1150	0.1
18828	3080	3085	52	9	685	0.1
18829	3085	3090	29	6	408	0.1
18830	3090	3095	40	6	460	0.6
18831	3095	3100	27	4	300	0.7
18832	3100	3105	33	2	335	0.1
18833	3105	3110	30	1	328	0.5
18834	3110	3115	30	1	328	0.2
18835	3115	3120	32	3	435	0.2
18836	3120	3125	25	1	380	0.2
18837	3125	3130	30	2	480	0.5

SAMPLE	FOOTAGES		CU	MO	ZN	AG
	FROM	TO	PPM	PPM	PPM	PPM
18838	2395	2400	16	1	160	0.5
18839	2400	2405	16	1	188	0.7
18840	2405	2410	16	3	210	0.8
18841	2410	2415	17	2	200	0.7
18842	2415	2420	17	3	208	0.5
18843	2420	2425	23	5	265	0.6
18844	2425	2430	22	4	270	0.4
18845	2430	2435	21	2	248	0.3
18846	2435	2440	19	1	235	0.2
18847	2440	2445	19	2	225	0.3
18848	2445	2450	25	7	240	0.4
18849	2450	2455	17	2	195	0.3
18850	2455	2460	16	3	222	0.6
18851	2460	2465	23	5	270	0.5
18852	2465	2470	19	4	255	0.4
18853	2470	2475	20	4	238	0.4
18854	2475	2480	27	7	250	0.9
18855	2480	2485	31	7	283	1.6
18856	2485	2490	33	11	275	1.5
18857	2490	2495	17	5	220	0.1
18858	2495	2500	19	6	248	0.3
18859	2500	2505	17	5	230	1.0
18860	2505	2510	18	1	230	0.2
18861	2510	2515	19	3	225	0.5
18862	2515	2520	19	2	220	0.5
18863	2520	2525	19	2	234	0.4
18864	2525	2530	21	2	265	0.5
18865	2530	2535	22	3	285	0.5
18866	2535	2540	20	2	238	0.6
18867	2540	2545	25	5	292	0.3
18868	2545	2550	17	3	225	0.5
18869	2550	2555	17	2	215	0.2
18870	2555	2560	17	1	235	0.3
18871	2560	2565	17	2	240	0.2
18872	2565	2570	20	2	254	0.3
18873	2570	2575	21	3	268	0.2
18874	2575	2580	17	2	250	0.2
18875	2580	2585	16	1	205	0.1
18876	2585	2590	17	1	258	0.3
18877	2590	2595	19	4	270	0.1
18878	2595	2600	17	1	238	0.2
18879	2600	2605	16	2	238	0.5
18880	2605	2610	19	3	245	0.3
18881	2610	2615	19	2	248	0.3
18882	2615	2620	20	1	268	0.2
18883	2620	2625	18	1	265	0.2
18884	2625	2630	17	1	250	0.2
18885	2630	2635	16	1	244	0.2
18886	2635	2640	17	2	260	0.5
18887	2640	2645	19	1	255	0.4
18888	2645	2650	17	2	188	0.3
18889	2650	2655	17	3	185	0.4
18890	2655	2660	15	2	160	0.5
18891	2660	2665	16	2	158	1.2
18892	2665	2670	16	6	172	1.2
18893	2670	2675	16	3	195	1.1
18894	2795	2800	18	8	258	1.1
18895	2800	2805	17	15	325	0.6
18896	2805	2810	13	10	250	0.6
18897	2810	2815	14	7	245	0.7
18898	2815	2820	15	8	240	0.4
18899	2820	2825	13	7	258	0.9
18900	2825	2830	15	9	340	0.6
18901	2830	2835	15	4	292	0.9
18902	2835	2840	21	17	492	1.0
18903	2840	2845	18	6	310	0.5
18904	2845	2850	17	7	420	0.7
18905	2850	2855	18	8	385	0.9
18906	2855	2860	17	8	310	1.0
18907	2860	2865	19	8	320	1.0
18908	2865	2870	32	14	765	2.1
18909	2870	2875	30	11	615	1.0
18910	2875	2880	33	13	622	1.9
18911	2880	2885	35	3	355	1.4
18912	2885	2890	19	2	300	0.7

SAMPLE	FOOTAGES FROM	TO	CU PPM	MO PPM	ZN PPM	AG PPM
18913	2890	2895	15	2	220	0.3
18914	2895	2900	16	1	243	1.3
18915	2900	2905	14	3	228	0.7
18916	2905	2910	32	42	420	0.9
18917	2910	2915	17	6	300	0.8
18918	2915	2920	16	2	280	0.7
18919	2920	2925	15	3	265	0.3
18920	2925	2930	15	1	235	0.4
18921	2930	2935	14	2	220	0.3
18922	2935	2940	15	3	235	0.5
18923	2940	2945	13	1	206	0.9
18924	2945	2950	15	3	248	0.5
18925	2950	2955	14	2	205	0.4
18926	2955	2960	16	2	220	0.2
18927	2960	2965	16	3	275	0.8
18928	2965	2970	16	2	255	0.7
18929	2970	2975	16	1	275	0.8
18930	2975	2980	16	3	275	0.5
18931	2980	2985	17	2	250	0.4
18932	2985	2990	21	4	252	0.7
18933	2990	2995	16	2	190	0.2
18934	2995	3000	16	1	230	0.8
18935	3000	3005	17	4	208	0.9
18936	3005	3010	16	1	215	0.6
18937	3010	3015	14	2	220	0.5
18938	3015	3020	14	1	190	0.7
18939	3020	3025	15	3	205	0.4
18940	3025	3030	22	3	258	0.3
18941	3030	3035	42	8	375	1.1
18942	3035	3040	29	11	515	0.5
18943	3375	3380	35	12	570	0.7
18944	3380	3385	54	29	945	1.7
18945	3385	3390	59	28	1100	1.5
18946	3390	3395	47	22	755	1.4
18947	3395	3400	38	8	375	1.1
18948	3400	3405	35	8	420	1.0
18949	3405	3410	34	7	436	0.6
18950	3410	3415	37	9	290	0.6
18951	3415	3420	34	7	600	0.3
18952	3420	3425	40	7	740	0.7
18953	3425	3430	30	6	450	0.2
18954	3430	3435	37	6	595	0.6
18955	3435	3440	42	8	620	0.2
18956	3440	3445	52	7	585	1.0
18957	3445	3450	47	8	650	0.9
18958	3450	3455	40	6	450	1.0
18959	3455	3460	43	5	500	1.1

