

019803

REPORT ON BULLDOZER TRENCHING  
ENGINEERING EVALUATION AND DIAMOND DRILLING  
FIVE MINERAL CLAIM GROUP  
TRAFFIC MOUNTAIN AREA  
Watson Lake Mining Division  
Yukon territory

Long. 130° 40 West  
Lat 62° 03 North

by  
Clyde L. Smith, Atlas Explorations Ltd.  
Aug. 1st - Oct. 25th, 1966  
April 20-26, 1967.

REPORT ON BULLDOZER TRENCHING,  
ENGINEERING EVALUATION, AND DIAMOND DRILLING

on

PIKE MINERAL CLAIM GROUP

TRAFFIC MOUNTAIN AREA

Watson Lake Mining Division

Yukon Territory

019803

Long. 130° 40' West

Lat. 62° 08' North

by

~~W. L. Smith~~  
Clyde L. Smith

Atlas Explorations Limited

August 1 - October 25, 1966

and

April 20-26, 1967

TABLE OF CONTENTS

	<u>Page</u>
KEY MAP . . . . .	(i)
LIST OF CLAIMS	(ii)
INTRODUCTION . . . . .	1
LOCATION AND ACCESS . . . . .	2
GEOLOGY . . . . .	3
TRENCHING . . . . .	4
DETAILED GEOLOGY OF TRENCHES AND MINERAL OCCURRENCES . . . . .	5
METHODS OF SAMPLING AND ASSAYING	7
TABULATED RESULTS OF ASSAYS . . . . .	7
DIAMOND DRILLING	7
LOG OF DRILL HOLE . . . . .	8
CONCLUSIONS AND RECOMMENDATIONS . . . . .	8
APPENDIX	

LIST OF CLAIMS

<u>Claim Number</u>	<u>Grant Number</u>	<u>Date Recorded</u>
PIKE 1 - 24	Y13149 - Y13172	July 4, 1966
25 - 88	Y13443 - Y13506	August 10, 1966
89 - 152	Y13682 - Y13745	August 30, 1966
153 - 608	Y13763 - Y16204	September 9, 1966
609 - 776	Y16727 - Y16894	October 17, 1966
PIKE FRACTIONS		
1 - 6		
8 - 9		
14 - 22	Y17243 - Y17259	November 21, 1966

## INTRODUCTION

Atlas Explorations Limited became interested in the Pike Lake area during June, 1966. Interest was prompted primarily by an earlier prospecting discovery by Al Kulan of Cu-Ag mineralization in porphyry, running about 20 ounces Ag, in the area of Pike Lake. An airborne magnetic and electromagnetic survey, under contract to Lockwood Survey Corporation, was conducted in a 35-square mile area west of Traffic Mountain in early June, and prospectors began prospecting, trenching and geochemical silt sampling anomalous magnetic areas.

A 24-claim group was staked in mid-June to cover showings and anomalous geochemical results discovered. The Pike group was increased to 152 claims in mid-July. In mid-August, the decision was made to increase the Pike group to 608 total claims to cover scattered high geochemical results as well as an area of apparently significant structural geology. A 168-claim addition was staked in mid-September, bringing the Pike group total to 776 claims.

Geologic mapping on Pike grid number 1 was done using grid stakes for location. This grid consists of 140,000 feet of cut line with a 10,000-foot long base line and 400-foot spaced cross lines. Cross lines between 80W and 0 run 2,000 feet north and 3,000 feet south of base line. Between 0 and 56E cross lines run 1,000 feet north and 3,000 feet south of base line.

Mapping on Pike grid number 3 was done on 1,000-foot scale air photo blow-ups and was tied to grid stakes in the north half of the grid area. Pike grid number 3 consists of 111,100 feet of cut line with a 14,000-foot long base line and 800-foot spaced cross lines. Cross lines average about 5,000 feet long.

#### LOCATION AND ACCESS

The Pike group is centered roughly at latitude 62° 08' North and longitude 130° 40' West, and covers much of the north half of topographic sheet 105J-2, and a western portion of sheet 105J-1. The group is elongate in a westerly direction, and extends from the south slopes of Traffic Mountain to a point 15 miles to the west. Three small groups adjoin the Pike claims on the west end: Star 1-40 and Cree 1-32 held by A. Rasicot, and Oxo 1-40 held by C. Poli.

Access to the property is by aircraft from Ross River; air-line mileage is 52 miles. Beavers on floats have been used, and landings made on 3/4-mile long Pike Lake. A temporary camp was established on the north side of Pike Lake, from which supplies were transported to the base camp, 1½ miles to the west, by helicopter or D6 Cat. Pike Lake is connected with the base camp by a Cat road.

During April, 1967, a tote road was put in from north of Finlayson Lake on the Watson Lake-Ross River road to the Pike

group. Fuel was trucked over the road to the Pike base camp. It was intended that the road be used for bombardier support but the Pelly River could not be forded with the bombardier and it was not used on the property.

#### GEOLOGY

Pike region lies within major northwesterly-striking wrench fault zone and is underlain by steeply-dipping early Paleozoic cherts and shales folded around northwest-southeast striking axes and intruded by a Cretaceous granitic stock.

The north and west parts of Pike #3 grid are underlain by a N70°W-striking, steeply-dipping sequence of black slates, massive-bedded cherts, and carbonaceous shales with interbedded limestone bands. Sediments are cut by quartz monzonite, granite, and four varieties of gray dyke rocks. The area is extensively faulted as indicated by strong N70°W photo-linears.

Portion of Pike #1 grid underlain by steeply-dipping, N70°W-striking, partially chilled biotite granite dyke, ranging from few feet to 500 feet wide, with length of about 2 miles, which appears to be offshoot of underlying Pike stock.

Porphyry Cu-Ag mineralization with minor Pb-Zn veins, occurs throughout much of the hydrothermally altered (silica, chlorite, clay-sericite, and biotite), chilled biotite granite dyke of the Pike grid.

TRENCHING

A total of 16 bulldozer (D6 and D8) and two hand trenches were put across two elongate geochemical anomalies. The following is a tabulation of trenching done:

<u>Trench</u>	<u>Dimensions (in feet)</u>	<u>Volume (in cubic feet)</u>
56W	170 x 70 x 8	95,200
50W	200 x 25 x 8	40,000
48W	260 x 12 x 8	24,960
TTW (hand)	130 x 5 x 5	3,250
46W	180 x 12 x 8	16,280
45W	230 x 23 x 8	42,320
44W (hand)	65 x 5 x 8	2,600
43	150 x 15 x 8	18,000
43AW	110 x 10 x 8	8,800
28W	200 x 12 x 8	19,200
24W	500 x 12 x 8	48,000
20W	600 x 12 x 8	57,600
12W	400 x 12 x 8	38,400
10W	600 x 12 x 8	57,600
8W	600 x 12 x 8	57,600
4E	900 x 12 x 8	86,400
6E	400 x 12 x 8	38,400
24#	600 x 12 x 8	57,600

TOTAL: 705,560 cubic feet

In addition an area 360 x 240 feet in the area of trenches 56W-43AW was stripped to an average depth of 3 feet. Total volume removed by stripping: 216,000 cubic feet.

TOTAL VOLUME REMOVED in trenches and by stripping:  
921,560 cubic feet.

Work was under contract by Liard Construction. Two shifts of 10 hours were run for 2-3 weeks in early August, 1966, and one shift of 10 hours for the duration of the work until October, 1966. In 1967, two trenches (20W and 4E) were put in



during the time that a tote trail was being put in to the Pike camp from north of Finlayson Lake on the Watson Lake-Ross River road.

DETAILED GEOLOGY OF  
TRENCHES AND MINERAL OCCURRENCES

J. Staniford mapped all trenches in zone 1, and trench maps were made by C. L. Smith at 43W and 48W in zone 1.<sup>1</sup> The following statements are drawn mainly from Smith's observations in zone 1.

Copper-silver, with minor lead-zinc, mineralization of potential economic grade occurs over narrow widths in the hydrothermally altered, chilled granitic dyke of the Pike grid area.

Mineralization is predominantly of the porphyry copper type with the rather unusual mineral assemblage, arsenopyrite, pyrrhotite, pyrite, chalcopyrite, tetrahedrite, and minor enstatite, bornite, sphalerite, and galena occurring as disseminations and veinlets in zonally altered intrusive. Narrow ladder veins occur perpendicular to dyke contacts along the north and south margins and carry nearly all of the significant lead-zinc.

The intrusive contains irregular alteration-mineral type zones which roughly parallel dyke contacts. Alteration minerals are silica (quartz), chlorite, clay-sericite, and biotite.

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1. Refer to report "Trenching and Engineering Evaluation on Pike Mineral Claim Group" by C. L. Smith for Atlas Explorations Ltd.

Higher copper grades appear to be related to silification. Relative mineral percentages and character of veinlets vary between zones; veinlets are less common in more intensely altered zones, most copper mineralization occurs as disseminations.

In addition to veinlet sets, which commonly have consistent trends within zones, three fracture types are recognizable: (1) movement set - consisting of rusty gouge zones of crushed quartz which parallel dyke contacts and run across the intrusive at low angles, (2) mineralized set - carrying arsenopyrite, chalcopyrite, sphalerite, galena, striking N15°W-N10°E, dipping steeply to the west, locally opening into ladder veins up to one foot wide, (3) barren set - planar fractures striking N25°W, dipping steeply to the east, have no control on mineralization. Sets (2) and (3) appear to be tensional cracks, which opened late in the cooling history of the dyke.

A trench across the dyke at line 24E exposed negligible copper mineralization, although narrow sections of Pb-Zn-Ag were found along north and south contacts. Anomalous Pb and Zn geochemistry overlie mineralization at 24E, and it is notable that anomalous Cu geochemical values are lacking. In general, geochemistry at the Pike accurately reflects the character of underlying mineralization.

F. A. Campbell did a brief polished section study of type specimens from Pike which suggests the following paragenetic

relations: sphalerite (early), arsenopyrite, chalcopyrite, tetrahedrite, arsenopyrite (late). It is notable that some sphalerite contains exsolution chalcopyrite which may be difficult to recover; however, sphalerite is a minor mineral in the assemblage, and the amount of exsolution copper lost would probably be negligible.

Pike mineralization appears to be of the typical mesothermal porphyry copper type, although the association between tetrahedrite and arsenopyrite suggests that the deposit is telescoped - has formed at a relatively shallow crustal level.

#### METHODS OF SAMPLING AND ASSAYING

Exposed rock faces along the walls of bulldozer trenches were sampled by T. Skonseng. Samples were taken by the "continuous chip" method, bagged in five-foot sections, and locations were marked along trench margins for correlation with geology. Samples were sent to the Whitehorse Assay Office and run for copper, lead, zinc, gold, and silver.

#### TABULATED RESULTS OF ASSAYS

The following pages are assay results from trenches sampled as well as average results in copper and silver for potentially economic sections.

#### DIAMOND DRILLING

A Winkie drill was purchased by Atlas early in October and

drilling was begun at Pike on October 9. The drill hole was spotted 29 feet S70°W of Hub 3 in trench 43W, or latitude 29 feet S, departure 4 feet W of Hub 3. The hole was drilled at N10°E, - 60° for a depth of 78 feet.

The driller was C. Richardson, and he was assisted by W. Barr. Drilling was at the slow average rate of 5 feet/day due to several mechanical breakdowns, water problems, and cold weather. On October 24 drilling was suspended due to slow progress.

LOG OF DRILL HOLE (attached)

#### CONCLUSIONS AND RECOMMENDATIONS

Two potentially economic zones were defined by anomalous geochemistry on the Pike group, and trenching was begun in August on these zones. It became apparent late in the season, however, that due to the lack of time remaining for a comprehensive trenching program, as well as to the difficulty of trenching in zone 2, the best means of evaluating the potential economics of the Pike situation would be to put several trenches across zone 1, map the trenches in detail and sample them at 5-foot intervals. From this base it was hoped to extrapolate information gathered about zone 1 to areas of similar geochemical-geological characteristics in zone 2.

Figure 2 is a trench-assay map of zone 1 with potentially economic widths connected from trench to trench to define

potentially economic areas. The total area has a length of 615 feet and averages 46 feet wide; it is discontinuous, being broken at trench 45. The tabulated results give area-value factors for blocks A-G shown on the figure. Total area is 27,672 feet, with averages of 0.61% Cu and 2.44 oz/ton Ag. Using a tonnage-volume factor of 11, this gives 2,515 tons per vertical foot; e.g., assuming a depth of 100 feet, tonnage for zone 1 would be roughly  $\frac{1}{2}$  million tons. Taking the prices \$0.45/lb. for Cu and \$1.40/oz. for Ag, the area has a value of \$8.91/ton.

Copper and silver assay values increase and decrease in crude relation to each other across the trenches, indicating that silver values are most likely carried in tetrahedrite, which occurs with chalcopyrite. It is notable that galena is absent across widths of relatively high silver value, and that other silver-bearing minerals have not been recognized.

Any hope of tonnage in zone 1 lies in depth. However, two factors suggest that depth may not be great. One is that in trench 43A it can be seen that the dyke host rock appears to come to a peak and plunges to the east beneath barren country rock; if this is indeed the "top" of the dyke, it may be that mineralization is confined only to its uppermost portion. The other factor which bears consideration is the gap in the mineralized area at trench 45, which suggests discontinuity in the zone in depth as well as laterally.

Although tonnage possibilities in zone 1 are probably not good, zone 2 contains areas of anomalous Cu geochemistry totalling about twice the size of the anomalous Cu area in zone 1. Cu geochemical values are nowhere as high as in zone 1, however. One trench was made across a Cu geochemical anomaly in zone 2 at 12W and only low Cu-Ag assay values were obtained.

The significance of assay results to date at the Pike is that it has been demonstrated that Cu-Ag ore of potential economic grade does exist and is detectable geochemically, and perhaps magnetically, within a large area which is anomalous in air magnetics (the probable Pike stock). Further drilling for depth extensions and perhaps more trenching are definitely warranted.

TR 43A

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu%</u>
0 - 5		
5 - 10		
10- 15		
15- 20		
20- 25	2.23	.24
25- 30	1.58	.12
30- 35	.90	.40
35- 40	2.28	1.47
40- 45	1.94	1.50
45- 50	1.60	.99
50- 55	.70	.30
55- 58.	.78	.51

(a) From 20' - 58' i.e. length of 38'

Average Ag = 1.50

Average Cu = .69

TR. 43

<u>Length</u>	<u>AG (ozs/ton)</u>	<u>Cu %</u>
0 - 5		
5 - 10		
10- 15	.26	TR
15- 20	.26	TR
20- 25	.10	TR
25- 30	.08	TR
30- 35	.30	TR
35- 40	.24	TR
40- 45	.20	TR
45- 50	1.31	.93
50- 55	.60	.25
55- 60	1.13	.61
60- 65	1.05	.52
65- 70	1.12	.60
70- 75	.93	TR
75- 80	1.18	.60
80- 85	3.95	.99
85- 90	1.70	.63
90- 95	.34	.07
95- 100	.38	.30
100-105	.08	TR

From 45' - 90' i.e. length of 45'

Average Ag = 1.44

Average Cu = .57



HT-2 (TR. 44)

<u>Length</u>	<u>AG (ozs/ton)</u>	<u>Cu%</u>
0 - 5	.30	TR
5 - 10	.70	.33
10 - 15	.56	.34
15 - 20	.64	.31
20 - 25	1.20	.49
25 - 30	.75	.36
30 - 35	.76	TR
35 - 40	1.20	.24
40 - 45	1.30	.75
45 - 50	1.24	.81
50 - 55	.92	.37
55 - 60		

From 5'- 55' i.e. length of 50'

Average AG = .93 ozs/ ton

Average Cu = .40%

TR. 46

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu %</u>
0 - 5 contact	.94	TR.
0 - 5	.58	TR.
5 - 10	.52	TR.
10- 15	1.10	.07
15- 20	.14	.07
20- 25	.18	.01
25- 30	1.22	.48
30-35	1.32	.45
35- 40	.66	.15
40- 45	1.62	.82
45-50	1.24	.15
50- 55	.38	.07
55- 60	3.14	.18
60- 65	.80	.07
65- 70	.42	TR.
70- 75	.24	TR.
75 - 80	TR.	TR.
80 - 85	1.27	TR.
85 - 90	2.74	.19
90 - 95		
95 - 100		

From 25' - 45' i.e. length of 20'

Average Ag = 1.20

Average Cu = .45

T - TR

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu%</u>
0 - 5	.72	.15
5 - 10	1.22	.36
10 - 15	3.18	.60
15 - 20	.66	.07
20 - 25	.18	.16
25 - 30	1.18	.75
30 - 35	1.02	1.60
35 - 40	2.74	1.90
40 - 45	.78	.01
45 - 50	.50	.16
50 - 55	2.90	.87
55 - 60	.26	TR.
60 - 65	2.84	1.50
65 - 70	4.04	2.20
70 - 75	3.28	2.00
75 - 80	2.32	1.80
80 - 85	3.84	2.30
85 - 88	2.98	.75
Special Contact	10.10	1.9 (6.3% Comb. Pb/Zn)

(a) From 25' - 88' ie length of 63'

Average Ag = 2.20

Average Cu = 1.21

(b) From 60' - 88' ie length of 28'

Average Ag = 3.21

Average Cu = 1.75

T-TR LEG

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu%</u>
0 - 5	2.38	1.14
5 - 10	2.49	1.09
10 - 15	3.64	2.20
15 - 20	3.98	2.40
20 - 25	2.06	.60
25 - 30	.46	.16
30 - 35	.10	TR.
35 - 40	1.04	.43
40 - 45		
45 -50		
50 - 55		
55 - 60		
60 - 65		
65 - 70		
70 - 75		
75 - 80		

(a) From 0' - 25' i.e. length of 25'

Average Ag = 2.91

Average Cu = 1.48

TR. 48

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu%</u>
0 - 5	.48	.04
5 - 10	.38	.07
10 - 15	4.94	.19
15 - 20	7.22	.45
20 - 25	4.40	.07
25 - 30	6.60	.86
30 - 35	5.81	.75
35 - 40	5.04	.30 (3.4% Comb. Pb/Zn)
40 - 45	2.34	Tr.
45 - 50	5.12	0.30 (2.7% Comb. Pb/Zn)
50 - 55	2.30	.37
55 - 60	1.34	.21
60 - 65	2.30	.60
65 - 70	3.42	1.48
70 - 75	1.36	.51
75 - 80	1.90	.28
80 - 85	.24	.04
85 - 90	.66	.13
90 - 95	.86	.19
95 - 100	1.96	.75
100 - 105	1.84	.54
105 - 110	4.26	.52
110 - 115	1.02	.28
115 - 120	.30	Tr.
120 - 125	.26	.01
125 - 130	1.46	.42
130 - 135	1.82	.29
135 - 140		

From 10' - 80' i.e. length of 70'

Average Ag = 3.86

Average Cu = .44

TR.50

<u>Length</u>	<u>Ag (ozs/ton)</u>	<u>Cu%</u>
0 - 5	.42	TR
5 - 10	.40	TR
10 - 15	.76	.25
15 - 20	.37	.01
20 - 25	.46	.18
25 - 30	4.46	.37
30 - 35	1.40	.48
35 - 40	4.90	.45
40 - 45	1.72	.75
45 - 50	2.48	1.05
50 - 55	2.26	.97
55 - 60	1.14	.30
60 - 65	-	-
65 - 70	1.74	.36
70 - 75	.47	TR
75 - 80	1.32	TR
80 - 85	1.04	.07
85 - 90	3.56	.36
90 - 95	1.14	.01
95- 100	.76	.15
100 -105	1.24	.34
105- 110	1.34	.30
110- 115	1.48	.01
115- 120	1.74	.18

From 25' - 60' i.e. length of 35'

Average AG = 2.48

Average Cu = .61

TR- 12W

<u>Length</u>	<u>AG (ozs/ton)</u>	<u>Cu %</u>	
00 - 5	1.82	.01	(4% Comb Pb/Zn)
5 - 10	2.72	.01	(4.4% Comb Pb/Zn)
10-- 15			
15 - 20	.18	TR	
20 - 25	.18	TR	
25 - 30	.66	.01	
30 - 35	.30	TR	
35 - 40	.48	.01	
40 - 45			
45 - 50			
50 - 55			
55 - 60	.98	.27	(2.4% Pb)
60 - 65			
65 - 70			
70 - 75	.32	.01	
75 - 80	.16	TR	
80 - 85	1.02	.03	
85 - 90			
90 - 95	.30	TR	
95 - 100	.32	TR	
100- 105	.78	.16	
105- 110	.68	.15	(1% Pb)
110- 115	TR	.12	
115- 120	.42	TR	
120- 125	.42	.01	
125- 130	.18	TR	
130- 135	.86	.22	
135- 140	.42	.01	
140- 145	.30	TR	
145 - 150	.92	.30	
150- 155	.72	.28	
155- 160	.18	TR	
160- 165	.32	TR	
165- 170	.32	.01	
170- 175	.18	TR	
175- 180	1.40	.30	
180- 185	.48	.15	
185- 190	.74	.03	
190- 195	1.42	.07	
195- 200	.46	.01	
200- 205	.18	TR	
205- 210	.38	TR	
210- 215	.80	.18	
215- 220	.34	.12	
220- 225			
225- 230	.30	TR	
230- 235	.30	TR	
235- 240	.50	.07	
240- 245	.16	TR	
245- 250	.38	.01	(3% Pb)

TR 24 E

<u>Length</u>	<u>AG</u>	<u>Cu</u>
0 - 5	5.70	.30 (8.6% Comb. Pb/Zn)
5 - 10	.24	TR.
10- 15	.16	.04
15- 20	.80	.01
20- 25	.60	.18
25- 30	.24	TR.
30- 35	.52	TR.
35- 40	.56	.01
40- 45	.86	TR.
45- 50	.86	TR.
50- 55	.92	TR.
55- 60	1.00	TR.
60- 65	TR.	TR.
65- 70	.24	.01
70- 75	.30	TR.
75- 80	TR.	TR.
80- 85	.12	.01
85- 90	.04	TR.
90- 95	.12	TR.
95- 100	.24	TR.
100- 105	.26	TR.
105- 110	.12	TR.
110- 115	.28	.12
115- 120	1.95	.81
120- 125	1.46	TR.
125- 130	2.06	Tr.
130- 135	.12	TR.
135- 140	.52	TR.
140- 145	1.64	TR.
145- 150	.28	TR.
150- 155	.22	TR.
155- 160	TR.	TR.
160- 165	.20	TR.
165- 170	TR.	TR.
170- 175	6.60	TR. (8.3% Comb. Pb/Zn)
175- 180	.32	TR. (4.4% Comb. Pb/Zn)
180- 185	.06	TR.
185- 190	10.10	.01 (10.6% Comb. Pb/Zn)
190- 195	12.30	.12
195- 200	.36	.01
200- 205	.58	TR.
205- 210		



APPENDIX I

Summary of Costs

Bulldozer Trenching, Pike Mineral Claims

Total volume material moved; 912,560 cu. ft.  
= 31,220 cu. yds.

Material moved by D6 C and D8-46A bulldozer under contract to Atlas Explorations by Liard Construction Ltd., of Whitehorse, Y.T.

Overall cost for trenching in accordance with 'Schedule of Representation Work, Yukon Quartz Mining Act (January 1963)' at \$5.00 per cubic yard.

TOTAL COST..... 31,220 cu. yds @ \$5.00/cu. yd. = \$156,100

APPENDIX II

A F F I D A V I T

Supporting Summary of Costs

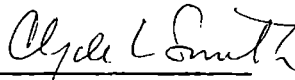
I, Clyde L. Smith, Chief Geologist, Atlas Explorations Limited, of Vancouver, B.C., do hereby state that to the best of my knowledge and belief the statement of costs as presented in Appendix I of this report "Report on Bulldozer Trenching, Engineering Evaluation, and Diamond Drilling on Pike Mineral Claim Group" is both true and correct.

DATED at Pelly Lakes, Yukon Territory, this 6th day of July, A.D. 1967

SWORN BEFORE ME at  
Pelly Lakes, Yukon  
Territory, this 6th  
day of July, A.D. 1967



A Commissioner for taking  
Affidavits in the Yukon  
Territory



Clyde L. Smith

# DIAMOND DRILL RECORD,

HOLE NO. \_\_\_\_\_ P.D.H. #1 \_\_\_\_\_

PROPERTY PIKE - ZONE 1 (WESTERN)

SHEET NUMBER 1

SECTION FROM 0 TO 7'1"

STARTED October 10, 1966

LATITUDE 29'S. of Hub 3 in Tr.43

DATUM -

COMPLETED October 23, 1966

DEPARTURE 4'W. of Hub 3 in Tr.43

BEARING N 10°E

ULTIMATE DEPTH 78'

ELEVATION 3400'

DIP -60°

PROPOSED DEPTH -

Logged by C. L. Smith.

DEPTH FEET	CORE RECOV	DESCRIPTION	CORE SAMPLE NO.	FOOTAGE	CORE ASSAYS				SLUDGE SAMPLE NO.	FOOTAGE	SLUDGE ASSAYS			
					AG.	CU.	PB.	ZN.			AG.	CU.	PB.	ZN.
0'-2'		Light gray, massive chert with scattered small lenses of black chert. Minor quartz veinlets.												
2'-6'6"		Black, massive, bedded chert with some light gray chert interbeds up to 1/2" thick. Bedding c.a. 45°. White sugar quartz, irregular, planar veinlets, c.a. 5-30°. One 1/4" wide quartz vein, c.a. 45°. Local brecciation and slight movement along fracture. Minor fracture set, c.a. 80°.												
6'6"-7'1"		Gray-olive green massive chert. Disseminated black spots (-1 mm. diameter) throughout contain pyrrhotite (5%), sphalerite (2%)? Three veinlet sets: (1) pyrrhotite-sphalerite, c.a. 20°, 5/perpendicular foot;												

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**ZONE 7**  
 PATCHY AREAS OF INTENSE SILICIF., MILD TANNISH-CREAM ARGILLIZ. IN OTHERWISE FRESH, LOCALLY PORPHYRITIC, CHILLED GRANITE  
 DISSEM. ASP., PYRR., FIG CAL., FIG SPHAL.  
 VEINLETS ASP., PY, CP.

**ZONE 6**  
 FRESH, PORPHYRITIC, CHILLED GRANITE  
 DISSEM. MINOR PYRR.  
 VEINLETS MINOR ASP., CP.

**ZONE 5**  
 YELLOWISH-STAINED, HIGHLY SILICIFIED CHILLED GRANITE  
 DISSEM. CP. (ABUNDANT), PY, ASP., MINOR BORNITE, LOCAL VUGS SOOTY CHALCOCITE

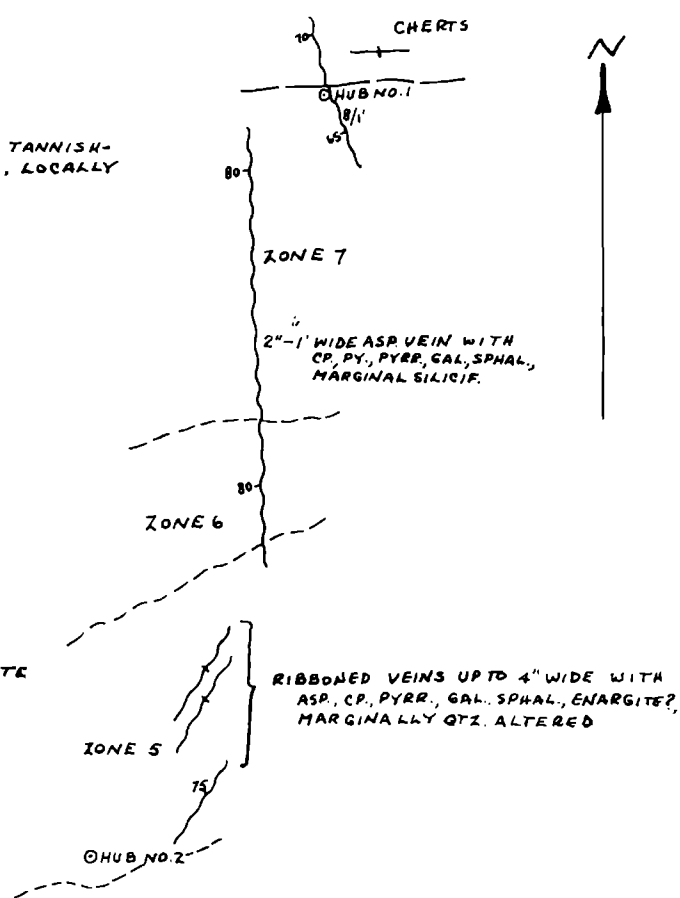
**ZONE 4**  
 PATCHY AREAS OF MILD CHLORITIZATION, MODERATE FIG BIOTITIZATION IN OTHERWISE FRESH PORPHYRITIC, CHILLED GRANITE  
 DISSEM. PYRR. (CHARACTERISTIC), ASP., CP. IRREG. VEINLETS CP. WITH MARGINAL CHLORITE (STOCKWORK TYPE MINERALIZ) ZONE 4

**ZONE 3**  
 YELLOWISH-STAINED, HIGHLY SILICIFIED, LOCALLY FIG BIOTITIZED, HIGHLY FRACTURED, PORPHYRITIC CHILLED GRANITE  
 DISSEM. CP. (ABUNDANT), BORNITE? WITH MARGINAL FIG BIOTITE  
 2' ON N.W. SIDE OF ZONE RICH IN CP WITH INTENSE SILICIFICATION (50%), CHLORITIZATION (50%).

**ZONE 2**  
 MIXED ZONE OF MODERATELY CHLORITIZED AND FRESH PORPHYRITIC CHILLED GRANITE  
 IRREG. DISSEM. CP. (MARGINAL CHLORITE), PYRR., ASP. VEINLETS OF CP. WITH MARGINAL CHLORITE 1-2" WIDE; 2 SETS: N20°E, 90; N85°E, 70S-90.

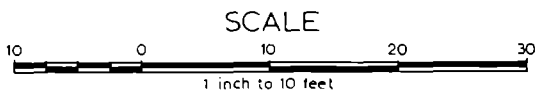
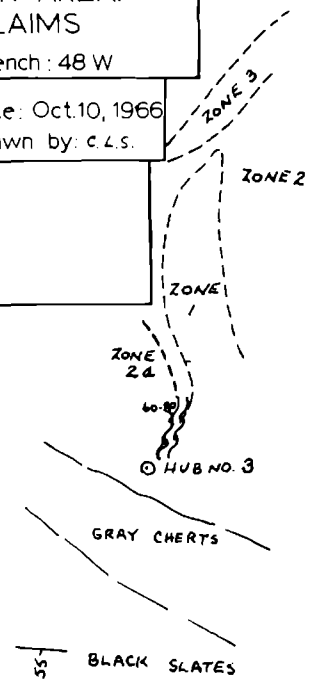
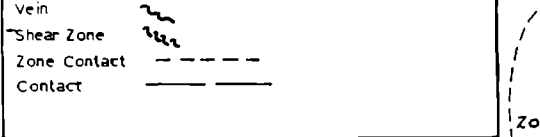
**ZONE 2a**  
 HIGHLY SILICIFIED, MINOR TANNISH-CREAM ARGILLIZED, PORPHYRITIC, CHILLED GRANITE  
 DISSEM. ASP., PYR., CP., MINOR SPHAL.

**ZONE 1**  
 FRESH, PORPHYRITIC, CHILLED GRANITE (BIO., QTZ, PLAG. PHENOCRYSTS).  
 DISSEM. PYRR. MINOR.  
 VEINLETS OF CP., N 20°E, 60-80°W.



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 PIKE MINERAL CLAIMS  
 Geology Map Of Trench: 48 W

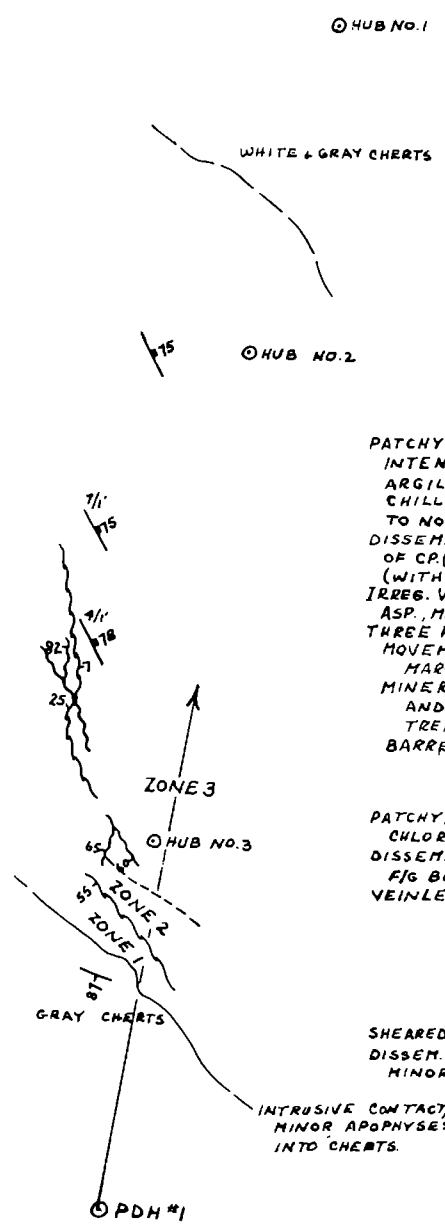
Scale: 1"=10' Date: Oct. 10, 1966  
 Geology by: C.L. Smith Drawn by: C.L.S.



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 TRAFFIC MOUNTAIN AREA  
 PIKE MINERAL CLAIMS  
 Geology Map Of Trench 43W

Scale: 1"=10'      Date: Oct. 10, 1966  
 Geology by: C.L. Smith      Drawn by: C.L.S.

- Vein
- Shear Zone
- Zone Contact
- Contact
- Barren Planar Fractures



**ZONE 3**  
 PATCHY AREAS OF INTENSE CHLORITIZATION, INTENSE SILICIF, MILD TANNISH-CREAM ARGILLIZ. IN LOCALLY PORPHYRITIC, CHILLED GRANITE. ALTERATION DECREASE TO NORTH - GRADES INTO FRESH CHILLED GR DISSEM. CLUSTERS, WITH MARGINAL CHLORITIZ., OF CP.(CHL. INTENSE), PYRR.(CHL. MOD), ASP. (WITH OR WITHOUT CHL), ENARGITE?, IRREG. VEINLETS + ELONGATE CLUSTERS ASP., MINOR CP.  
 THREE FRACTURE SETS:  
 MOVEMENT SET - RUSTY GOUGE ZONES WITH MARGINAL SUGARY, CRUSHED QUARTZ PATCHES  
 MINERALIZED SET - ANASTOMOSING VEINLETS AND SHEARLETS FILLED WITH ASP, PY, CP. TREND ABOUT N10-20W, DIP WESTWARD.  
 BARREN SET - PLANAR JOINTS, N25W, D1PEAST.

**ZONE 2**  
 PATCHY, MODERATELY SILICIF. AND CHLORITIZED CHILLED GRANITE DISSEM. ASP., CP., PYRR., F/G ENARGITE?, F/G BORNITE?  
 VEINLETS ASP., CP.

**ZONE 1**  
 SHEARED, HIGHLY SILICIF, CHILLED GRANITE DISSEM. PY.(CHARACTERISTIC), CP., BOR., MINOR ASP. IN SHEARS

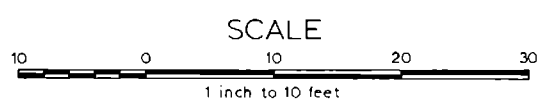
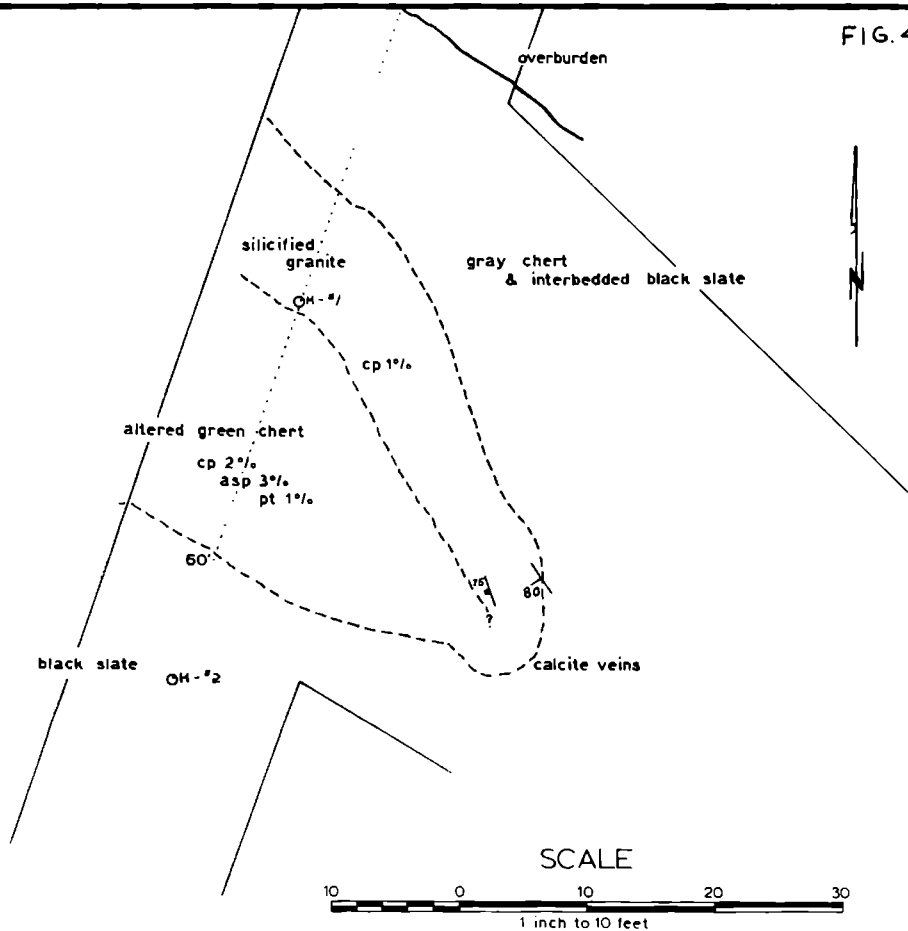


FIG. 4



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Geologic Map of Trench 43a

Scale: 1" = 10'

Date: Sept., 1966

Geology by: J. Staniford

Drawn by: *Jay Staniford*

Contact (±1ft) - - - - -

Control Hub H-1 60

Strike & Dip of Contact

Strike & Dip of Fractures 15

Chip Sample Line

Visual Estimate of Mineralization

asp: arsenopyrite cp: chalcopyrite

pt: pyrrhotite