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MOUNTAIN MINERALS COMPANY LTD.

PARSON MINE

ASSESSMENT TECHNICAL REPORT

DIAMOND DRILLING

082N/02E

51° 01' N

116° 39' W



**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**

F. Harvey  
20, 1994

23,573

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*and*  
Sections

### Introduction

As a part of an underground drilling program at the Parson Mine during September and October, 1994, three holes totalling 864 feet of BQ core were drilled by Kootenay Exploration Drilling Ltd. The purpose of these three holes was to drill test beneath the mine workings and drill through a major fault encountered in the underground workings.

### Location

The Parson Barite Mine is located about 6.0 km south of the town of Parson, B.C., about 35 km south of Golden. It is within patents 14351, 14352, and 15734. The Fillup Group (20 units) and the Hobo Group (10 units) have recently been added to enlarge the property (Figure 1).

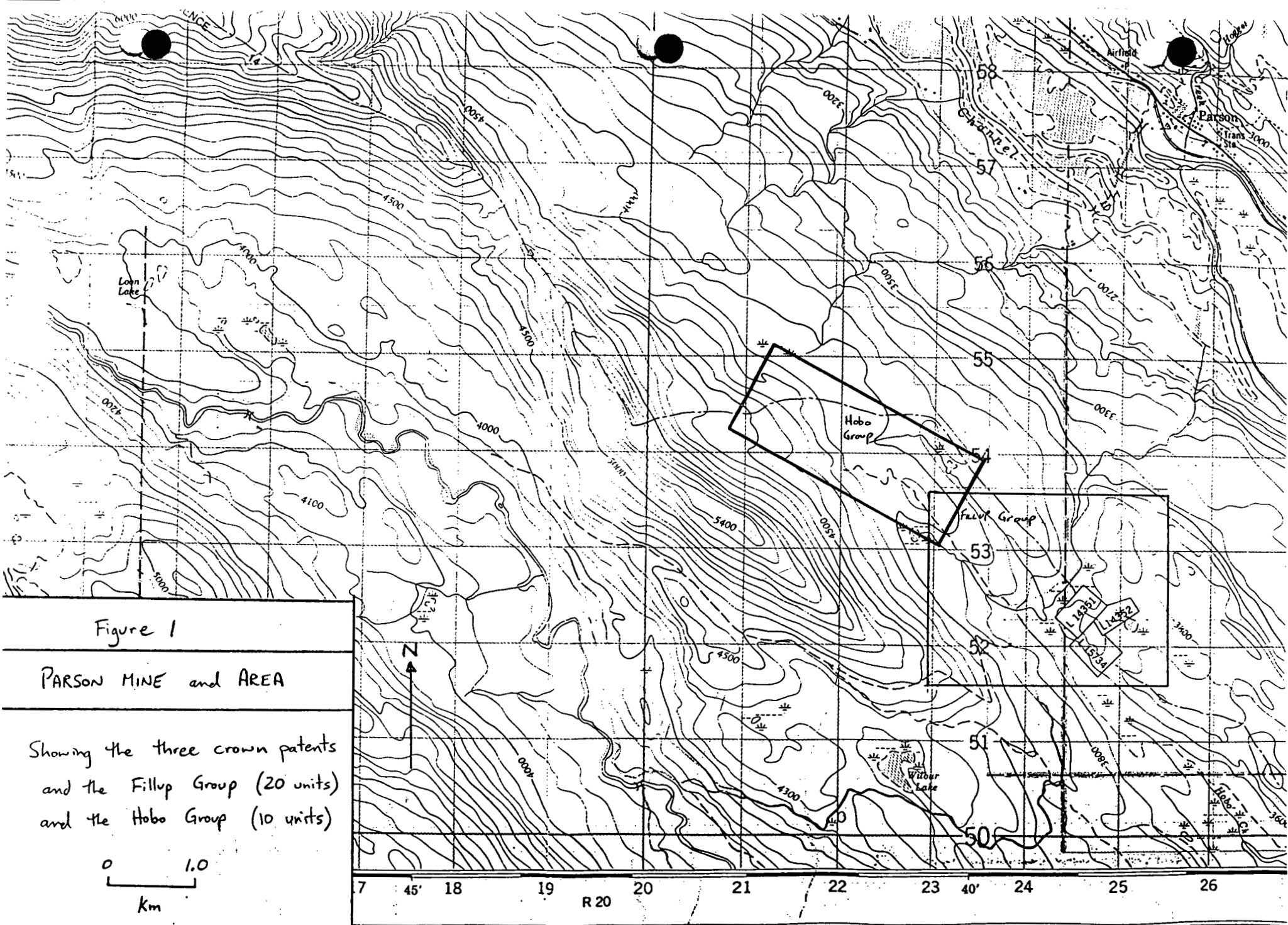
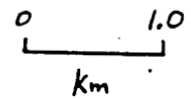


Figure 1

PARSON MINE and AREA

Showing the three crown patents and the Fillup Group (20 units) and the Hobo Group (10 units)



from NTS sheet 82 N/2

### Geology

The mine occurs within Hamill Formation quartzites, near the contact with Donald Formation slates (Figure 2). It consists of two north - south trending barite veins (the East and West Veins) which are about 300 feet apart at surface. At surface the veins dip at about 45 degrees West, but the dip shallows with depth so at the mine bottom (600 feet below surface) they converge. Several smaller veins offshoot from and link the two veins (the Central Zone). Underground workings encountered a major fault (North Fault) at several locations in the mine, which has apparently truncated the barite veins (Figures 3 and 4).

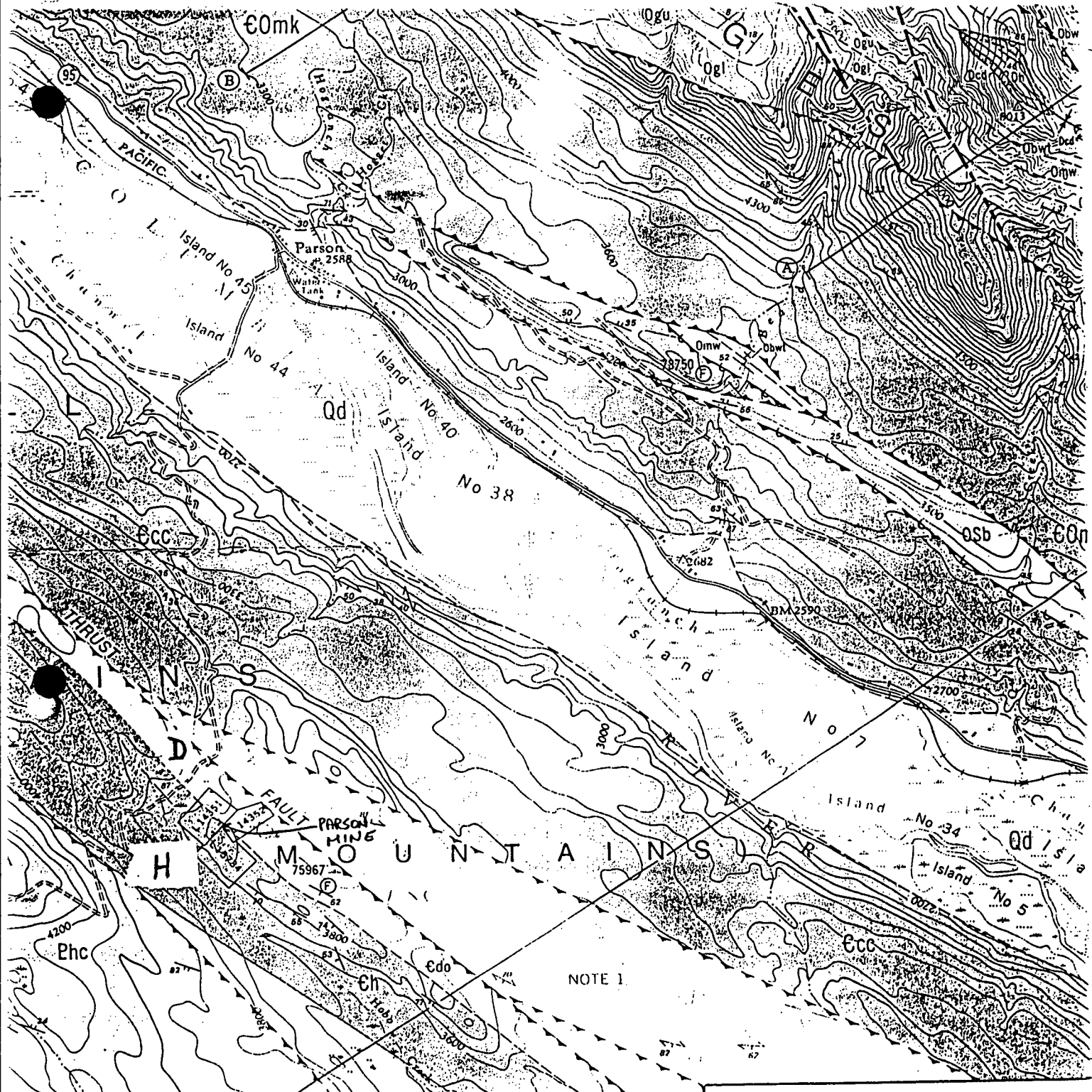


FIGURE 2

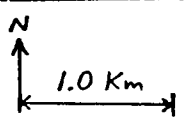
GEOLOGY- PARSON MINE AREA

- H- Hamill Formation  
Quartzite, sandstone, shale,  
siltstone
- D- Donald Formation  
Slate, siltstone, dolomite,  
limestone

GSC MAP 1501A  
GEOLOGY

**McMURDO**

(East Half)  
WEST OF FIFTH MERIDIAN  
BRITISH COLUMBIA



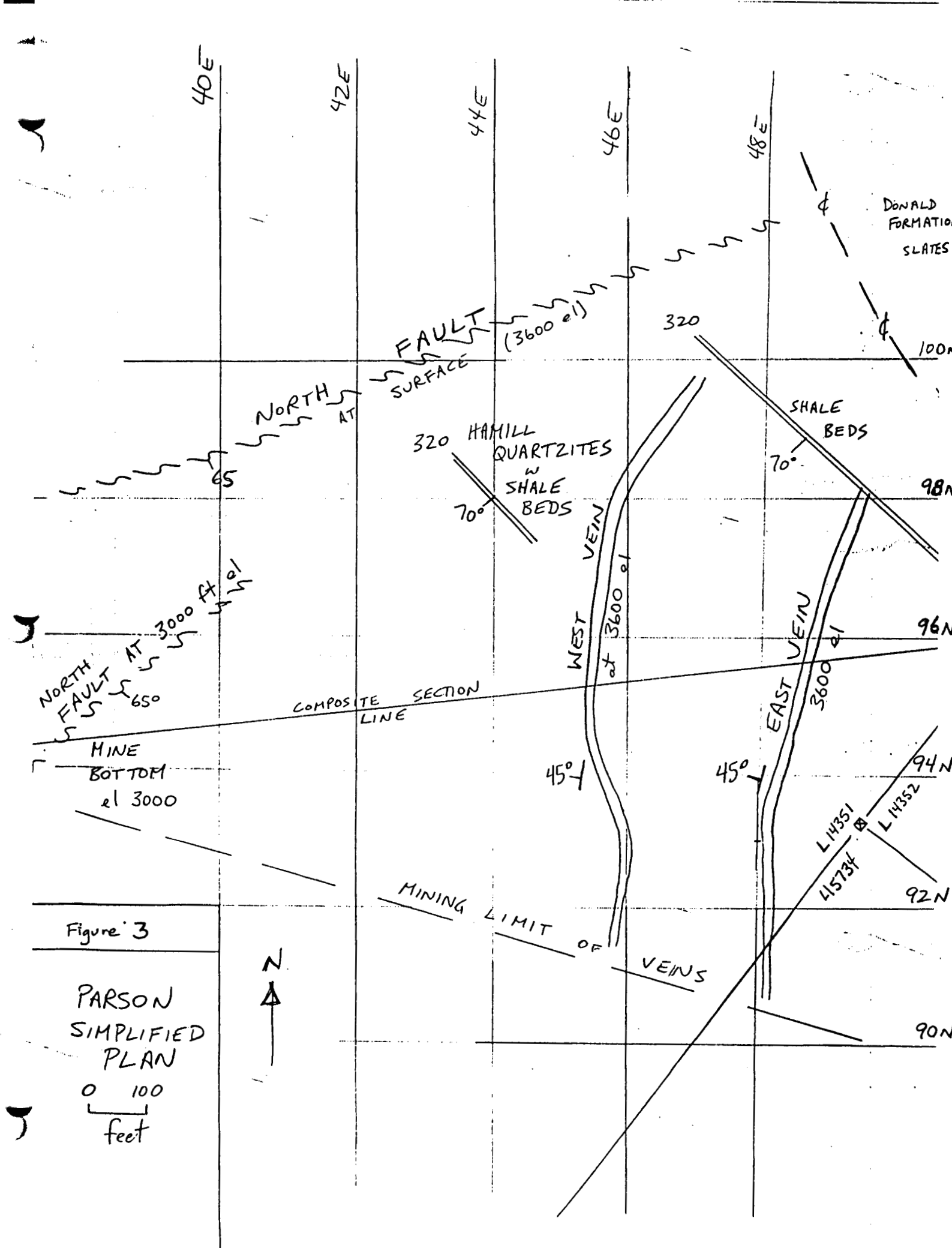


Figure 3  
 PARSON  
 SIMPLIFIED  
 PLAN  
 0 100  
 feet

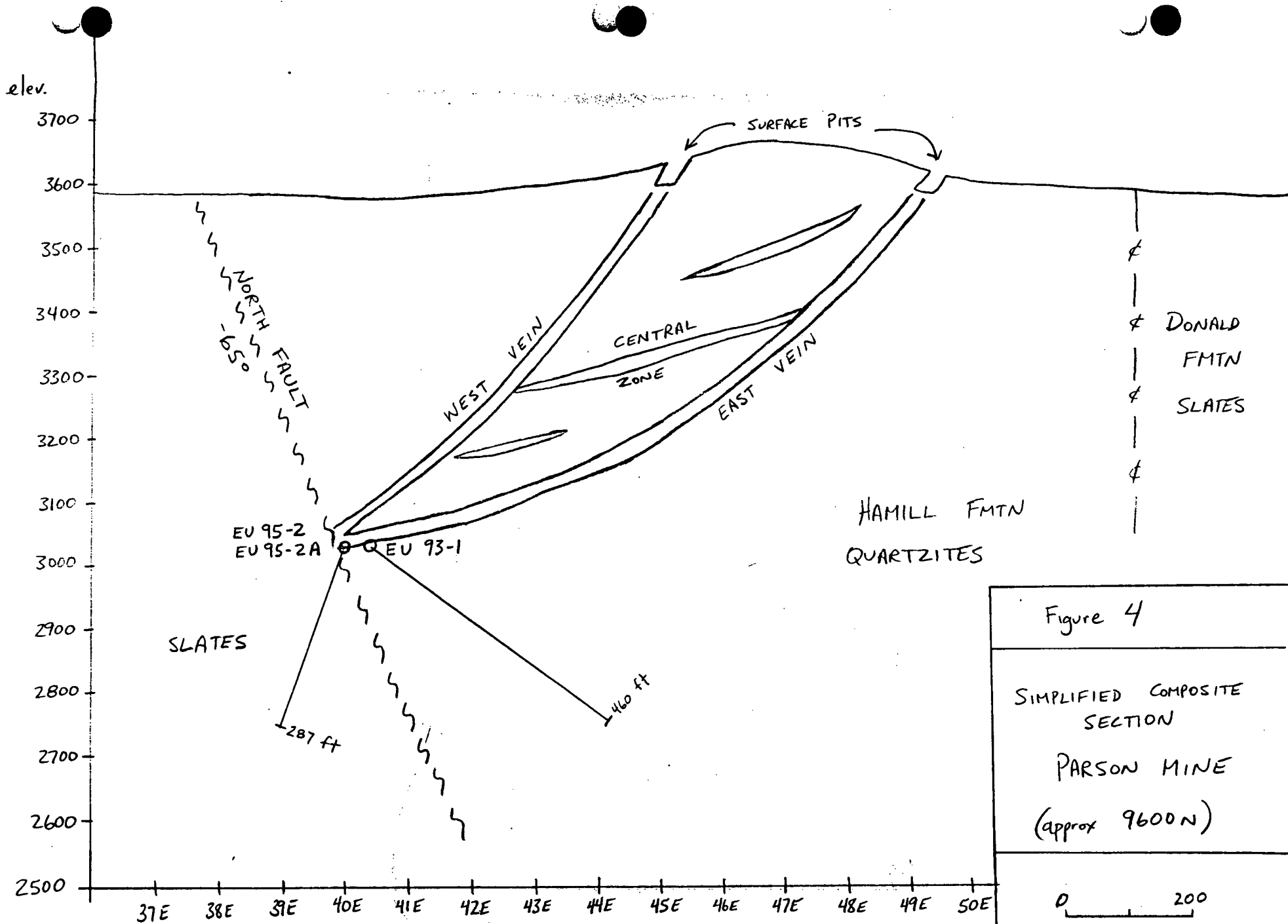


Figure 4

SIMPLIFIED COMPOSITE SECTION

PARSON MINE  
 (approx 9600N)

0 200  
 feet



1994 Diamond Drill Program

During September and October, 1994, three underground BQ diamond drill holes were drilled to test beneath the known barite veins, as well as test the geology beyond the North Fault (Figure 4).

## Hole EU 93-1

This hole was drilled from the bottom of the mine at an azimuth of 060 degrees and a dip of -35 degrees. The purpose was to test for any parallel barite veins beneath the East Vein. Numerous barite stringers were encountered, but the best veins were 2.5 feet with 3.65 S.G. (Specific Gravity) at 108.0 - 110.5 and 1.5 feet with 4.22 S.G. at 303.5 - 305.0. These intersections are considered uneconomic at the present time. The hole was stopped at 460 feet.

## Hole EU 95-2

This hole was also drilled from the bottom of the mine, at an Azimuth of 315 degrees and a dip of -70 degrees. The purpose was to test the geology beyond the North Fault. Difficulties were encountered in drilling through the fault, and the hole was abandoned at 117 feet.

## Hole EU 95-2A

This hole was drilled from the same location as EU 95-2, and was successful in drilling through the North Fault. Very blocky core with abundant fault gouge material in quartzites was encountered through the fault from the collar of the hole to 147.0 feet. The geology changed to slates from 147.0 feet to 227.0 feet, but the core was still faulted, and filled with calcite-rich breccia. Again, blocky core and fault gouge was common. From 227.0 feet to 287.0 feet (end) the core was a uniform, grey-black calcareous slate.

### Conclusions

No economic barite veins were encountered with hole EU 93-1, designed to test the area of the mine beneath the lowermost vein (the East Vein).

Drilling through the North Fault indicated that the fault is a thick zone of rubble and gouge, and the geology beyond the fault consists of a uniform, grey-black calcareous slate. This unit may be part of the nearby Donald Formation.

## STATEMENT OF QUALIFICATIONS

I, Peter G. Harvey, of the City of Timmins, Province of Ontario, do hereby certify that:

- 1 I received a B.Sc. degree (Honours) in Geology from Lakehead University, Thunder Bay, Ontario, in 1985.
- 2 I have been employed as a geologist by various mining companies in Ontario since 1985.
- 3 I am the author of this report.
- 4 I have no direct interest, nor do I have any shares of any company exploring the properties described in this report, nor on any adjacent or surrounding properties.

*Peter G. Harvey*

*Parson, B.C.*

*Oct 18, 1994*

APPENDIX

DRILL LOGS  
*and*  
Sections

# Drill Hole Log

COMPANY **MOUNTAIN MINERALS**

PROPERTY

**PARSON**

Section No. **93-95 N**

HOLE No. **EU 93-1**

Bored Sept 20 '94	Bearing Az 060	Lat. 9287 N	Collar El. 2975	Logged by <i>P. Harvey</i>	Date Sept '94
Completed Sept 30 '94	Angle from Horiz. -35°	Dip. 392 E	Bottom El.	Remarks test 200' at 33°; 400' at 30°	
Driller Kootenay	Length 460	Location 95-39 Ramp	Level		

Footage		Interval	RECOVERY		Graphic Log	DESCRIPTION	Sample No.	From - To	Interval	ASSAY	
From	To		Ft.	%							
0	7		90			Breccia - collared into qtzite-barite breccia fragments 1-3"					
7	101		95			Quartzite - black med-course grained, foliation at 45° CA, shale beds <2" common, few barite veinlets at high angle to foltn as noted.					
						13.5 6" Barite 24.5 6" Barite 25.0-27.0 Green shale bed 32.0 3" Barite 55.0-60.0 weak breccia - qtz + barite					
						72.0-75.0 Bleached creamy white interval with 2" qtz vein w 10% pyrite 75.0-101.0 Numerous 1-6" shale beds, few <2" veins					
101	104		95			Breccia - qtzite-shale breccia infilled w barite					
104	108		95			Quartzite - finer grained, darker black than above, cut by 1x6"; 1x3" Barite veins					
108	110.5		95			BARITE - massive, coarse, minor quartz and shale fragments. Vein at 50° CA; 90° to foltn.	5605	108.0-110.5	2.5	3.65	
110.5	303.5		95			Quartzite - finer grained, darker colour than at 7-101, less than 1% <1" veining cuts unit. About 1% 2" shale beds throughout. 152 - fine pyrite in shale beds					

# Drill Log

COMPANY

PROPERTY **PARSON**

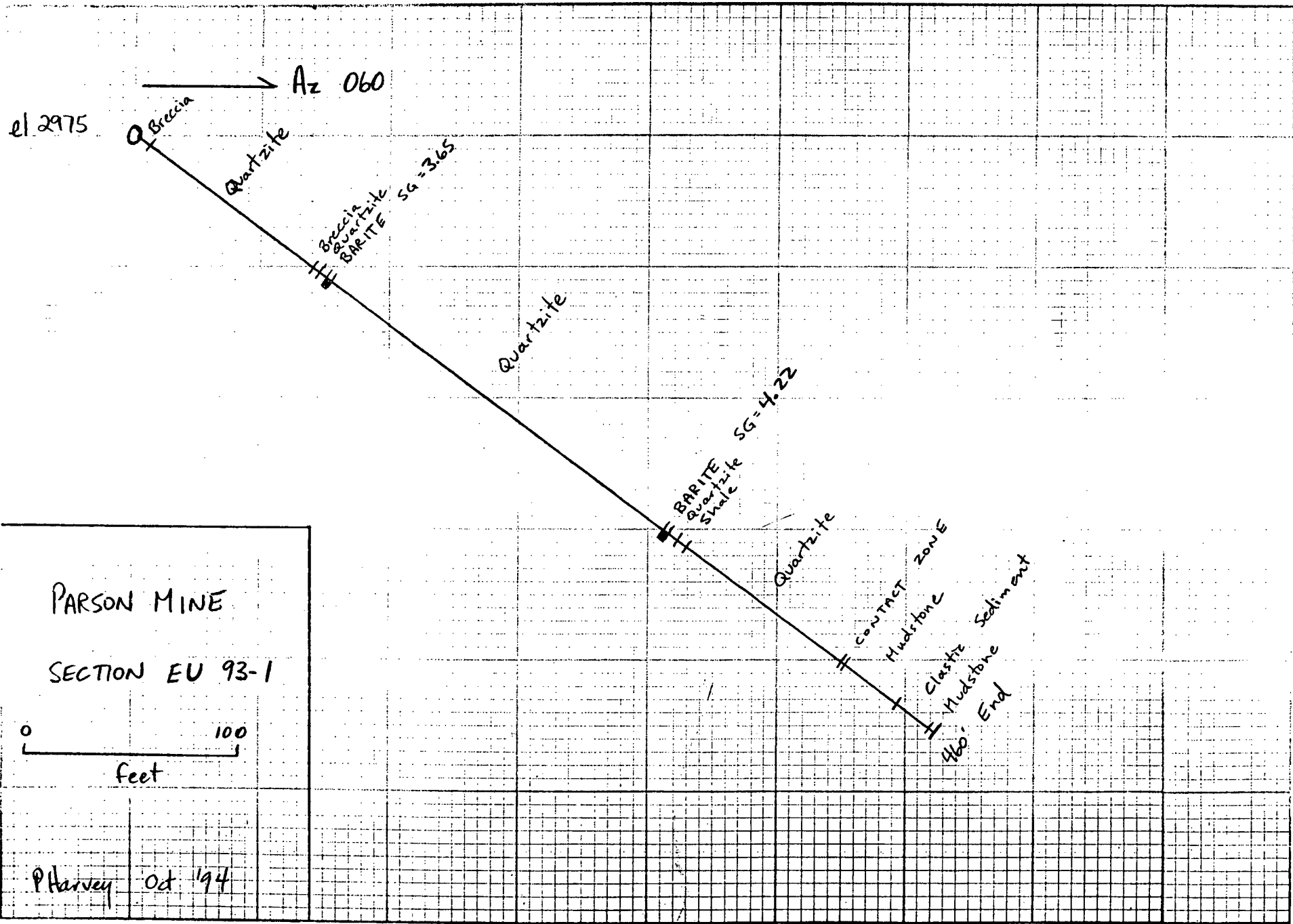
Section No.

Dated <b>Sept 20 '94</b>	Bearing	Lat.	Collar El.	Logged by	Date
Completed	Angle from Horiz.	Dep.	Bottom El.	Remarks	
Driller <b>Kootenay Ex. Drilling</b>	Length	Location	Level		

Footage From To	Interval	RECOVERY		Graphic Log	DESCRIPTION	Sample No.	From - To	Interval	ASSAY	
		Ft.	%							
					204.0; 207.0 Minor faults/slips - with gouge 242 Vuggy qtz vein; 1" at 45° Core Axis 290 3" Vein - qtz 293 2" Barite (on margin) and qtz 300-303.5 Breccia - irreg 1/2" Bar Veins in quartzite					
303.5	305.0		90		<u>BARITE</u> - upper contact in fault gouge, lower at 30° CA. coarse, crystalline, blocky. <u>Quartzite</u> - as above, few shale beds < 6" <u>Shale</u> - Grey-green shale, bedding at 60° CA; trpy.	5606	303.5-305	1.5	4.22	
305.0	311.0									
311.0	316.0									
316.0	405.5		95		<u>Quartzite</u> - typical, black med-coarse grained as above, < 5% shale beds 2-4" scattered throughout; so 50-60° 319, 324, 335 - 1-2" wormy qtz veins with 10% barite crystals. Vein 10-30° CA					
405.5	406.5		95		<u>Contact Zone</u> mixed interval w quartzite as above and fine grained mudstone as below, angular slate frags and < 1/2" py as irregular beds and masses. Bedding 65° CA. <del>Subsided mudstone</del> <del>15-20' thick</del>					
406.5	437.0		95		<u>Mudstone - Siltstone</u> - very fine grained; pale-dark grey mud with silt layers < 2" throughout. bedding at 65-70° CA. Poorly developed turbidite? 420-427 - white-quartzose beds; argon texture, lill. 15° CA					







# Drill Hole Log

COMPANY MOUNTAIN MINERALS

PROPERTY

PARSON

*P. Harvey*  
Section No.

HOLE No EU95-2

Started OCT 1 '94	Bearing 315	Lat. 9520 N	Collar El. 3005	Logged by P Harvey	Date Oct '94
Completed OCT 6 '94	Angle from Horiz. -70°	Dep. 3915 E	Bottom El.	Remarks Test below North Fault-hole	
Driller Kootenay	Length 117 ft.	Location 95-39 RAMP	Level	abandoned. Lost water at 11'	

Footage		Interval	RECOVERY		Graphic Log	DESCRIPTION	Sample No.	From - To	Interval	ASSAY	
From	To		Ft.	%							
0	11.0		50			<u>BARITE</u> - Rubble core; barite and 10% wallrock as ground core; not sampled.					
11.0	26.0		80			<u>BRECCIA</u> - quartz-quartzite breccia, minor barite and few veinlets; irregular, stockwork; 30% quartzite through interval, gouge at 22.0 brecciated green shale 22.0-26.0					
26.0	77.0		95			<u>QUARTZITE</u> - typical - med-coarse grained; blue quartz eyes; cut by qtz-carbonate veining minor barite at 30° CA; generally 1/2 to 2" true width; 3-5% veins in interval. Blocky 42-49. 61.0-64.0 - Green shale, bedding 50° CA; few slips 64.0-77.0 - A few slips and minor gouge; and vuggy intervals through quartzite					
77.0	117.0		80			<u>FAULT ZONE</u> in Quartzite. 77-82.0 gouge in shale beds 87-95.0 blocky, rubble grey quartzite 97.0-105.0 blocky, rubble, and gouge sections <1"					
						105-117.0 blocky, fault gouge; 5% veining, random; ≤1" wide.					
	117.0					END- Hole abandoned - could not drill through Fault. Core barrel and rod lost down hole.					

Az 315°

el 3005

BARITE  
Breccia

Quartzite

Fault Zone

117 feet  
End

(Hole Abandoned)

PARSON MINE

SECTION EU 95-2

0 100

feet

P. Harvey

Oct '94

# Drill Hole Log

COMPANY MOUNTAIN MINERALS

PROPERTY PARSON

Section No. *Peter Harvey*

HOLE No. *EU 95-2A*

Drilled <i>Oct 12 '94</i>	Bearing <i>Az 315</i>	Lat. <i>9515 N</i>	Collar El. <i>3005</i>	Logged by <i>P Harvey</i>	Date <i>Oct 15 '94</i>
Drilled <i>Oct 15 '94</i>	Angle from Horiz. <i>-70°</i>	Dop. <i>3920 E</i>	Bottom El.	Remarks <i>Test below fault.</i>	
Site <i>Kootenay</i>	Length <i>287 feet.</i>	Location <i>95-39 Ramp.</i>	Level	<i>Lost water at 11 feet.</i>	

Footage		Interval	RECOVERY		Graphic Log	DESCRIPTION	Sample No.	From-To	Interval	ASSAY	
From	To		Ft.	%							
<i>0.0</i>	<i>10.0</i>			<i>0</i>		<i>CASING - cased fault rubble.</i>					
<i>10.0</i>	<i>18.0</i>			<i>70</i>		<i>BARITE - blocky core; 10% wallrock fragments; breccia; qtz and carb ass. w. barite.</i>					
<i>18.0</i>	<i>41.0</i>			<i>90</i>		<i>Quartzite - typical - greyblack, med-coarse grained, few qtz-carb veins &lt; 4" at 30° CA.</i>					
<i>41.0</i>	<i>147.0</i>			<i>80</i>		<i>FAULTZONE in Quartzite - typical grey-black quartzite, blocky and broken core, zones of gouge (sand) common; qtzite cut by 10-20% veins ≤ 1" of qtz and carbonate, random box type veins</i>					
						<i>41-58 blocky; minor gouge</i>					
						<i>58-64 Fault-gouge and mud; barite fragments at 60-61.</i>					
						<i>64-68 Shale bed - fractured + tectonized</i>					
						<i>68-82 quartzite w several zones of fault gouge + slips</i>					
						<i>82-147 quartzite cut by 10-20% veining ≤ 1"; stockwork of qtz carbonate, core more competent; R&amp;D = 50%, zones of gravel and gouge common, esp 127-142 where core is mixed w shale beds, graphitic, and fragments thereof.</i>					

# Drill Hole Log

Page 2  
EU 95-2A

COMPANY \_\_\_\_\_ PROPERTY \_\_\_\_\_ Section No. \_\_\_\_\_ HOLE No. \_\_\_\_\_

Started	Bearing	Lat.	Collar El.	Logged by	Date
Completed	Angle from Horiz.	Dep.	Bottom El.	Remarks	
Driller	Length	Location	Level		

Footage		Interval	RECOVERY		Graphic Log	DESCRIPTION	Sample No.	From - To	Interval	ASSAY		
From	To		Ft.	%								
147.0	167.0			80		Fault Zone in Slates; blocky, RQD = 10%; black, graphitic slate/argillite. Cut by 2-5% qtz veins < 1".						
167.0	193.0			95		Slate - black, graphitic - argillite (?) - core <del>was</del> high RQD = 80-90%, fine grained; bedding indistinct but generally at 20° CA. Core fractures along bedding - defined by silt layers.						
193.0	227.0					Fault Zone in Slate - similar to 167; but interval cut by strong stockwork of calcite breccia veining and veinlets. Zones of rubble and gouge common - esp 206-212 and 220.						
227.0	287.0					Slate - grey-black, rhythmically bedded at 20-30° CA axis; very strong & pervasive reaction w HCl - calcareous slate. Reasonably competent; RQD = 80% w zones 6" of blocky core. Graphitic throughout -						
	287.0					weakly; fractures on graphitic planes, and blocky sections are also graphitic. Qtz calcite veins 1-6" wide; both parallel and perpendicular to bedding, 2-3 1/2 overall.						
						END.						

Az 315°



el 3005

Casing  
BARITE

Quartzite

Fault Zone  
in  
Quartzite

Fault Zone  
in  
Slate

Slate

Fault Zone  
in  
Slate

Slate

287 feet  
End

PARSON MINE  
SECTION EU 95-2A

0 100

P. Harvey Oct '94