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### **DIAMOND DRILLING**

#### REPORT

#### on the

#### SURELOCK #1 - #12 MINERAL CLAIMS

**Situated on Frances Creek** 

GOLDEN, M.D.

NTS 82K/9

Latitude: 50° 44′ 30" Longitude: 116° 25′ 30"

STEPHEN B. BUTRENCHUK September 1, 1992 GEOLOGICAL BRANCH ASSESSMENT REPORT

22,485

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#### DIAMOND DRILLING REPORT ON THE SURELOCK #1-#12 MINERAL CLAIMS

#### Summary

During the period June 15, 1992 to July 26, 1992, Mountain Minerals drilled 304 metres in 11 holes on the Surelock property. This drilling was designed to test the extent of barite mineralization observed at two localities on the property. Drilling confirmed the presence of barite and the structural control of the barite in the Lower or Adit zone. In the Middle Zone barite mineralization is sporadic and very often associated with brecciation.

#### Introduction

The Surelock #1-#12 mineral claims, located on Frances Creek, were acquired by A. Louie in 1989. In July 1990, Mountain Minerals optioned the property and completed a program of soil geochemistry, geological mapping and trenching during the periods June 27, 1990 to July 3, 1990, and August 2, 1990 to August 13, 1990.

Geological mapping, done at a scale of 1:5000, indicated the property to be underlain by carbonate rocks of the Mount Nelson Formation. Several barite occurrences were located along a north-northwest trending breccia zone. A total of 184 soil samples were collected and analyzed for barium. The majority of samples had values in excess of 1,000 ppm Ba with a few samples being in excess of 10,000 ppm Ba.

Four trenches were dug using a John Deere 450 backhoe. Two of the trenches did not penetrate the overburden; one trench contained only dolomite and one trench intersected the barite zone. An adit was completed in 1991.

In June - July, 1992, Mountain Minerals completed a program of diamond drilling on the property. This program was designed to determine the extent of barite in the vicinity of the adit and in the Middle Zone.

#### **Location and Access**

The Surelock property, consisting of 12 mineral claims, is located on Frances Creek in the Golden Mining District at:

Latitude: 50° 44′ 30" Longitude: 116° 25′ 30"

In particular, the claims are located 6.4 km southeast from Mr. Horeb and 7.5 km by road along Frances Creek from the Westside logging road.

Access to the property is via the Westside road and Frances Creek logging roads, a distance of 50 km from Invermere. These roads are well travelled logging roads with the exception of the last 6 km along Frances creek. Here the road is narrow with a few rough intervals. The property is also accessible by road from Brisco.

### **Property**

The Surelock #1-#12 mineral claims (Figure 2) are owned by Arthur Louie of Invermere, B.C. and are currently under option to Mountain Minerals Co. Ltd. of Lethbridge, Alberta. The particulars of the claims are described as follows:

<u>Claims</u>	Record No	Date Recorded	Date Due*
Surelock #1	2065	September 21, 1989	September 21, 2002
Surelock #2	2066	**	79
Surelock #3	2067	99	79
Surelock #4	2068	**	78
Surelock #5	2069	September 26, 1989	September 26, 2002
Surelock #6	2070	**	**
Surelock #7	2071	September 29, 1989	September 29, 2002
Surelock #8	2072	77	14
Surelock #9	2073	October 2, 1989	October 2, 2002
Surelock #10	2074	11	78
Surelock #11	2075	October 6, 1989	October 6, 2002
Surelock #12	2076	17	11

\*Pending acceptance of this report

#### <u>Geology</u>

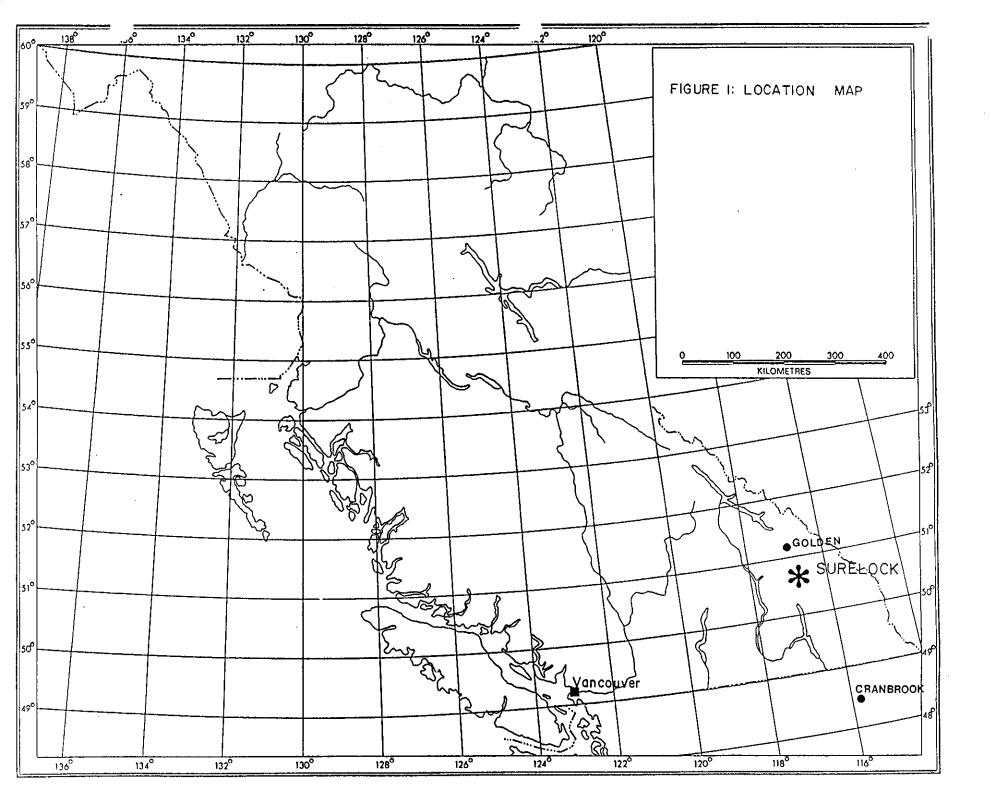
Predominantly carbonate rocks of the Proterozoic Mount Nelson Formation underlie the Frances Creek area. Locally at the higher elevations small patches of Toby Conglomerate are present.

Mapping on the Surelock property, done at a scale of 1:5000, was restricted to a small area in the vicinity of known barite occurrences (Figure 3).

Gently dipping dolomite, argillaceous dolomite and minor shale of the Mount Nelson Formation underlie most of the area mapped. The dolomite is grey to orange-brown weathering, grey to cream or white, finely crystalline and thin to medium bedded. Locally the dolomite may have a bleached appearance. This bleaching is most obvious proximal to the barite.

Zones of pale greenish-grey argillaceous dolomite occur within the dolomite. Most of this material occurs proximal to known barite. Minor chert was encountered in the drilling.

Along the western margin of the mapped area sandstone and grit of the Toby Formation are present. This unit is interpreted to be in fault contact with the Mount Nelson dolomite.



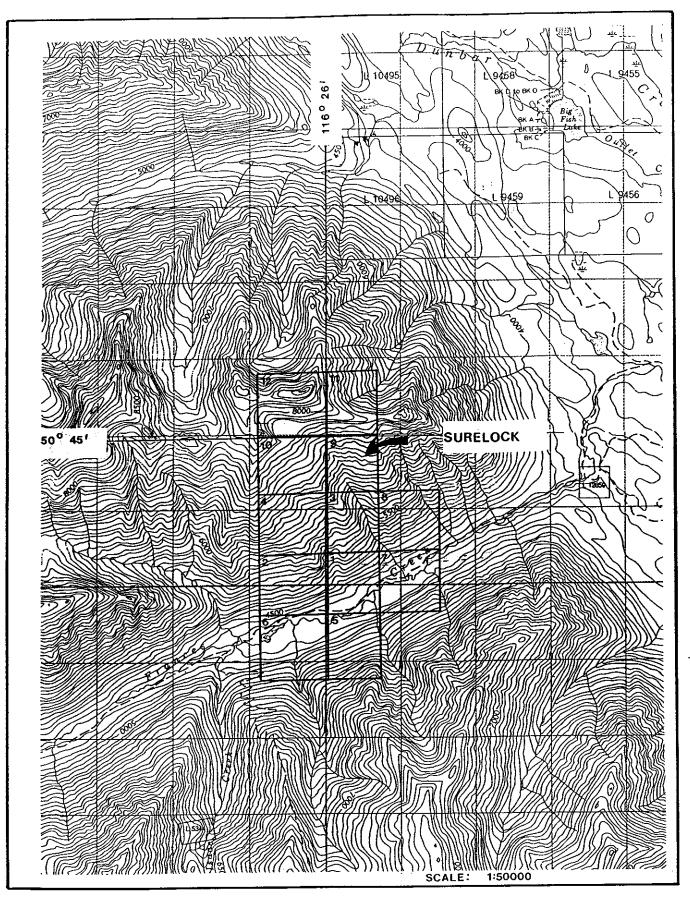


FIGURE 2: CLAIM MAP

Bedding on the property is generally gentle with dips varying from 15 to 20 degrees both easterly and westerly. Locally, the bedding becomes very steep to vertical. This steepening of dip may be related to a possible fault structure that occupies the north-northwest trending creek valley in the centre of the map area. This same fault structure may have controlled the localization of barite on the property.

#### **Mineralization**

Barite occurs at several localities within a north-northwest trending breccia zone, sub-parallel to a fault structure occupying a creek valley. These occurrences are present over a length of approximately 450 metres. The barite itself is present as cement surrounding dolomite fragments. It varies from 5% to 10% of the rock to greater than 90% of the rock by volume.

The lower barite or adit zone occurs between 2 + 00 N to 3 + 50 N along the baseline. Here the barite is approximately 5 metres wide and confined within two westerly dipping (70°) parallel faults. Nowhere has the eastern margin of the breccia zone been observed. Within the dolomite adjacent to the western edge of the breccia zone, narrow stringers of barite are present.

The middle zone, located at 6 + 25 N, appears to be approximately 50 metres to 100 metres wide (east-west direction) and may be a stratabound breccia zone within the shallow dipping dolomite beds. This zone has not, as yet, been adequately defined. Drilling has indicated that the barite is sporadic.

#### **Diamond Drilling**

During the period June 21, 1992 to July 30, 1992 a total of 305 metres in 11 holes was drilled on the Surelock property. Drilling was done by Vern Emery Drilling & Exploration Ltd. of Nelson, B.C. using a Diamec drill. The core has been stored at Mountain Minerals' mine at Parson, B.C.

Drill holes DDH92 - 1 to 5 were designed to test the lower mineralized zone in the vicinity of the adit. Drilling confirmed that the barite was confined to a narrow fault breccia. This breccia zone trends north-northwest and dips 70° to the west.

Drill holes DDH92 - 6 to 11 were designed to test the middle zone. Barite in this zone is sporadic and is present in breccias and as stringers. The quantity of barite is low.

#### **Conclusions**

The diamond drill program confirmed the presence of barite at depth and the structural controls on the barite. Quantities of barite are small and are not considered to be economical.

Report by: STEPHEN B. BUTRENCHUK

Stephen B. Butrenchuk.

#### STATEMENT OF EXPENDITURES

Vern Emery Drilling & Exploration Ltd.

1003 feet @ \$18.00/ft	\$18,054.00
------------------------	-------------

S. B. Butrenchuk

25 days @ \$200.00day

TOTAL

\$23,054.00

5,000.00

.

#### STATEMENT OF QUALIFICATIONS

I, Stephen B. Butrenchuk, of 34 Temple Crescent West, Lethbridge, Alberta, do hereby certify that:

- 1. I am the Exploration Manager for Mountain Minerals Co. Ltd. of Lethbridge, Alberta.
- 2. I am a graduate of the University of Manitoba with a B.Sc. in Geology (1966) and a M.Sc. in Geology (1970).
- 3. I have been practising my profession in British Columbia and Yukon since graduation.
- 4. I am a fellow of the Geological Association of Canada and a member of the Society for Mining, Metallurgy and Exploration, Inc.
- 5. This report is based upon knowledge of the Surelock property gained from supervision of exploration work on the property.

Stephen B. Butrenchuk.

**STEPHEN B. BUTRENCHUK** 

### **APPENDIX I**

**Diamond Drill Logs** 

### **APPENDIX I**

.

**Diamond Drill Logs** 

Foo		PRC	PERTY SURELOCK				HOLE No.	DDH 92-	1	_	
	F00		P TEST     Angie     Reading   Corrected     Hole No.   DDH 92-1     Section     Date Begun   June     Date Finished   June     Date Logged   June	Dep Bearing Elev. Collo	30+15E 30 11- 4	03° 550	feet	Total Depth_ Logged By Claim_ <b>Su</b> Core Size	25:3 SE RELOCK BQ	5 metre 38 # 1	- - -
DEI	РТН ТО	RECOVER		SAMPLE No.	FROM	то	WIDTH OF SAMPL	Ξ			
0	2.3	2.2	Breccia : dolomite fragments in baritematri	<u>x;</u>							
			20-25% barite : barite-white to creat	n							
<u>.3</u>	5.7	3.4	Fault - gouged dolomite; rusty brown		ļ		ļ				
		,	colour		ļ		<u> </u>				
۲.	ב.ר	1.5	Dolomite : green and maroon, minor								
			shearing @ Bo° to core axis		ļ						
٢	11.7	4.5	Shearing @ 80° to core axis Dolomite : green, buff, þinkish-green, @ 8.3 m shear								
			@ 8.3 m shear								
			@ 11-2 m Icm thick barite stringe								
٦	25.3	13.3	Dolomite : green, maroon, pink, rare shea		<u> </u>		-				
			or slip, rare quartz stringer, NO			<b></b>					
			BARITE			ļ					<u> </u>
					ļ						
			E.O. 17. @ 25.3 metres								
					+						
<u> </u>							· · · · ·				,. <u>.</u>
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DIP TEST   Angle     Footoge   Reading     Beering   20.4     Dote Begun   June 25, 1992     Dote Looged   June 25, 1992     Dote Sample   Dote Sample     Dote Sample   Sample     June 23, 0.5   Fault			PF	ROPERTY	, 	SURELOCK				HOLE No	DDH 92-	2	
Section Dep. OHSE Logged By S&B   Dote Begun June 25, 1992 Bearing 30.3° Claim SureLock # (   Date Finished June 25, 1992 Bearing 30.3° Claim SureLock # (   Dep. 4550 Feet Core Size BQ   Dep. 450 Feet Core Size BQ   Dep. 450 Feet Core Size BQ   Dep. 450 Feet Core Size BQ   Dept. To respect to the size To respect to the size BQ   Dept. To respect to the size To respect to the size BQ   Dote Logged June 25, 1992 SAMPLE No. FROM TO of SAMPLE Core Size   Dote Sample Matrix ; barite 25% Sametrix ; barite 25% Sametrix ; barite 25% Sametrix ; barite 25%   Dote Single Barite stringer Sametrix ; barite stringer Sametrix ; barite 25% Sametrix ; barite 25%   Singl	-			Ал	gle	DDH 92-22 October 1	1 -4		2	0+00N	Total Dooth	22.4	metres
Depth Recovery Description SAMPLE No. FROM TO WIDTH of SAMPLE   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.5 Fault 0   0.9 2.3 0.5 Fault 0   2.3 6.8 4.0 Fault: dolomite, rusty brown colour, single barite stringer 0   5.8 22.9 15.6 Dolomite: green, pink, maroon, rare quartz stringer and shear 0	-	+00	tage	Reading	Corrected	Hole No. ODIT 32 - Sheet No		•	 	TISE	Looped By	SBB	, ,
Depth Recovery Description SAMPLE No. FROM TO WIDTH of SAMPLE   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.5 Fault 0   0.9 2.3 0.5 Fault 0   2.3 6.8 4.0 Fault: dolomite, rusty brown colour, single barite stringer 0   5.8 22.9 15.6 Dolomite: green, pink, maroon, rare quartz stringer and shear 0	F	_				Date Berlin June 25, 1992	Dep	3	03°		Claim S	URELOCH	< #(
Depth Recovery Description SAMPLE No. FROM TO WIDTH of SAMPLE   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.9 Breccia: dolomite fragments in barite 0   0 0.9 0.5 Fault 0   0.9 2.3 0.5 Fault 0   2.3 6.8 4.0 Fault: dolomite, rusty brown colour, single barite stringer 0   5.8 22.9 15.6 Dolomite: green, pink, maroon, rare quartz stringer and shear 0	F					Date Finished June 25, 1992	Elev. Collo	ar 4	550	feet	Core Size	BQ	
TO Incontrain Description SAMPLE No. FROM 10 OF SAMPLE   0 0.9 0.9 Breccia: dolomite fragments in barite 0   matrix; barite 25% 0 0   0.9 2.3 0.5 Fault 0   2.3 6.8 4.0 Fault: dolomite, rust; brown colour, single barite stringer 0   6.8 22.4 15.6 Dolomite: green, pink, maroon, rare 0   9 9 15.6 Dolomite: stringer and shear 0						Date Logged. June 25, 1993	2 Angle	-	30°				
matrix; barite 25%   0.9 2.3 0.5 Fault   2.3 6.8 4.0 Fault: dolomite, rusty brown colour, single barite stringer   5.8 22.9 15.6 Dolomite: green, pink, maroon, rare   quart z stringer 1	DE ROM	PTH TO	RECOVE	RY		DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE			
0.9   2.3   0.5   Fault	0	0.9	0.9	Bre	eccia:	dolomite fragments in barite							
2.3 6.8 4.0 Fault: dolomite, rusty brown colour, single barite stringer   5.8 22.9 15.6 Dolomite: green, pink, maroon, rare   guartz stringer and shear						; barite 25%							
5.8 22.9 15.6 Dolomite: green, pink, maroon, rare guartz stringer and shear	<u>9</u> .9	2.3	0.5	<u> </u>	ult	· · · · · · · · · · · · · · · · · · ·		ļ			ļ		
5.8 22.9 15.6 Dolomite: green, pink, maroon, rare guartz stringer and shear	2.3	6.8	4.0	Fa	ult: d	tolomite, rusty brown colour.							
5.8 22.9 15.6 Dolomite : green, pink, maroon, rare quartz stringer and shear					single	barite stringer							
	6.8	22.9	15.6	Do	lomite :	green, pink, maroon, rare							
					quart:	z stringer and shear							
E.O.H @ 22.4 metres.					D	J							
Image: Section of the section of th					E.O	.H @ 22.4 metres.							
Image: Solution of the second secon		 			· · · · · · · · · · · · · · · · · · ·						ļ		
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NEVILLE CROSBY INC.

		PRO	PERTY	SURELOCK				HOLE No.	DDH 92-	3	
	Foot		TEST Angle Reading Corrected	Hole No. <u>DDH 92-3</u> Sheet No. <u>1</u> Section <u>June 26, 1992</u> Date Begun <u>June 27, 1992</u> Date Finished <u>June 37, 1992</u> Date Logged <u>June 30, 1992</u>	Lat. Dep. Bearing Elev. Coli Angle	1+95 0+10 02 ar 45	N E 20° 550 45°	feet	Total Depth_ Logged By_ Claim Core Size	27.3 m SBB RELOCK # BQ	<u>etre</u> s
DE	РТН ТО	RECOVERY		CESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE			
	0.6	٦. 5	Overburden Dolomite:	grey, medium-bedded, rare 2- barite stringer guartz-barite							
	7.8 11.0	0.2 3.2	Dolomite								
	14.3			dolomite fragments in white matrix ; barite 35%		 					
	15.5 27.3	0.5	Fault Dolomite :	pale pinkish grey to maroon 8 20cm thick shear zone	<u> </u>	i 					
				O.H. @ 27.3 metres							
			+ +				}				
	-										

		PR	OPERTY	SURELOCK				HOLE No	DDH 92-	. 4			
[		0	P TEST										
	Foo	tage	Angle Reading Corrected	Hole No. DDH 92-4 Sheet No. 1	Lat	1+95N			Total Depth <u>30.3</u> Logged By <u>SBB</u>				
ł				Section	Dep				Logged By	JELOCK #	· /		
				Date Begun June 21, 1992	Bearing_	<u> </u>	550	fact	Claim <b></b> Core Size	ROCK #	1		
l				Hole No. DDH 92-4 Sheet No. 1 Section Date Begun June 27, 1992 Date Finished June 28, 1992 Date Logged June 30, 1992	Elev. Colli Angle	ar4	50°	Tecc	Core Size	<u> </u>			
DE FROM	PTH TO	RECOVER	Y	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE					
0	0.6		Overburden										
0.6	8.2	7.2	Dolomite :	grey, medium-bedded grey dolomite fragments in a white									
8.2	9.7	1.5	Breccia :	grey dolomite fragments in a white									
				grey dolomite fragments in a white barite -quartz matrix ; barite 10%									
						<u> </u>							
5.2	11.8	2.1	Dolomite :	g rey					ļ				
1.8	15.1	3.0	Breccia ;	grey white barite with some dolom	ite	<u> </u>							
			and	guartz; barite 45-55%									
		·	- dolor	mite - pale brown colour									
5.1	16.6	1.0	Breccia :	barite 25%									
			-@	16m - rock highly sheared									
6.6	30.3	13.5	Dolomite :	pale greenish-grey, maroon, ium-bedded; rare guartz-bariti				-					
			med	ium-bedded ; rare quartz-barit	2	_							
			strir	nger perpendicular to cove axis									
				· · · ·									
									ļ				
			E.0	.H. @ 30.3 metres									
									<b></b>				
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				Surelock				HOLE No.	DDH92-	- 5	-		
F		(	DIP TEST	ngle								,	
	Foo	tage		Corrected	Hole No. <u>DDH92-5</u> Sheet No. <u>1</u> Section		2+00	0 E		Total Depth_ Logged By			
					Hole No. DDH 92-5 Sheet No. 1 Section Date Begun June 29, 1992 Date Finished June 29, 1992 Date Logged June 30, 1992	_ Bearing_ _ Elev. Collo _ Angle	Bearing 285 Elev. Collar 4550 feet Angle -30°			Logged By <u>SBB</u> Claim <u>SuRELock #1</u> Core Size <u>BQ</u>			
DE FROM	РТН ТО	RECOVE	RY		DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE				
0	6.0	6.0	Brea	<u>ecia: p</u> siderite	ale brown carbonate(probably ) in a barite - dolomite matrix;								
				barite	20-25% m 1.5 metres dolomite								
6.0	7.5	1.0		eccia:	sideritic rock; minor barite- stringers; barite 10%								
7.5	10.5	2.0		ault :	sideritic rock								
		1.0	De	<u>plomite</u> :	pale green and maroon; sheared								
2.0	15.0	3.0	Do	<u>slomite :</u> harit	pale greenish-grey; rare e stringer								
				04110									
				E.O	·H· @ 15 metres		+						<del></del>
	1					<u> </u>							
<u> </u>								. <u>.</u> .					
				,,,,,,,			1		-				

PRC	PERTYS	URELOCK				HOLE No.	DDH 92-	-6	_
1	P TEST Angle Reading Corrected	Hole No. DDH 92-6 Sheet No. 1 Section Date Begun July 9, 1992 Date Finished July 5, 1992 Date Logged July 7, 1992	Lat Dep Bearing Elev. Colla Ang la	6+25 1+05 2: 1r 5 e -	N W 30° 350 60°	feet	Total Depth. Logged By_ Claim_Su Core Size_	4.5 5B1 RELOCK - BQ	
DEPTH RECOVERY		DESCRIPTION	SAMPLE No.						
4.5 3.0	Dolomite : barite	some stringers and pods of (less than 10%)							
	<u>ب</u> ع	O.H. @ 9.5 metres							
							-		
	······································								
	-			+	· - · · · · · · ·				

		PR	OPERTY	SURELOCK				HOLE No	DDH92-	<u> </u>	
Ĺ		Ç	DIP TEST	7							
ł	Foot	age	Angle Reading Corrected	Hole No. DDH92-7 Sheet No. 1	Lot	6+25	<u>s</u> N		Total Depth_	46 0 met	<u>res</u>
F				Section	Dep	0+99	<u>5</u> W		Logged By	SBB	
-				Date Begun July 10, 1992	Bearing	2	300	0 <u> </u>	Claim_Su	RELOCK #3	
-				Date Begun July 10, 1992 Date Finished July 11, 1992	Elev. Collo	ar55	50 1	reet	Core Size	υφ	
L.				Date Logged July 13, 1992	_ Itng le	• •• 	45-	<b></b>			
DE. FROM	РТН ТО	RECOVE	RY	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE			
0	3.2	white,		barite and grey dolomite; barite is							
		<u> </u>	white	70-75% of rack			L				
3.5	ר.2	3.5	Breccia:	white barite and palegrey dolomit	و						
				barite 50-75%							
7.2	12.2	5.0	Breecia :	grey dolomite fragments in barite							
			matrix	· barite 25-35% · some quartz							
			associa	ated with barite (5-10%)		1					
7.7	14.9	2.5		pale grey to grey, some barite							
			stri	ngers							
			- mii	nor amounts of limonite							
14.9	19.5	4.6	Dolomite :	grey to pale grey, thin to medium beddee	l.						
			few w	hite barite-dolomite stringers							
19.2	19.6	0.)	Barite : 1	white with some limonite		<u> </u>					
19.6	20.7	1.0	Dolomite:								
			-@ 20	4 m locm thick barite zone							
20.7	20.8	0.1	Fault								
	22.4	1.6	Dolomite								
	22.6	0.2		40% white to cream barite; grey dolomit	k						
				fragments.							
22.6	26.9	3.8	Dolomite	,							
	26.8			5% dolomite fragments							

NEVILLE CROSBY INC.

_				ΥΥ	SURELOCK				HOLE No.	00000	(	<u></u>	
	Foot	tage	DIP TEST A Reading	ngle Corrected	Hole No. <u>DDH92-7</u> Sheet No. <u>2</u> Section Date Begun Date Finished Date Logged	Dep, Bearing				Logged Bj Claim		·····	
DEI ROM	РТН ТО	RECOVE	RY	······································	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLI	Ξ			
3.8	27.2	0.4	De	olomite					ļ				
7.2	31.0	3.7	Do	omite :	brecciated; 25-30% white barite	2.	<u> </u>		ļ				
				barite	also cream coloured								ļ
1.0	34.7	<u> </u>	0	olomite :	pale grey to grey				ļ	-	ļ		
1.7	46.0	<u> 11.3</u>		olomite :	pale grey to grey pale grey to grey, thin to medium d, siliceous, in part laminated	<u>~</u>				-	· · · · ·		+
				budded	, siliceous, in part laminated						_	+	
				- shea	ring @ 45.8 m.				· · · · ·				<b>_</b>
				- 0000	sional barite stringer (1cm the	<u>ek)</u>							+
		<u> </u>			.8 m O.S cm barite	<u>.</u>							+
		·			5.5 m 10 cm thick barite wit	<u> </u>		<b> </b>			_		+
·				li	monitic laminae		+						<u></u>
								<u> </u>					
				<u> </u>	0.H. @ 46.0 metres								
				<u> </u>			_						
						····			+		<u> </u>		
····										<b>_</b>	_		+
								<b> </b>					+
					10-0-0				- <b> </b>	· · · · ·	·		+
												+	+
								<u> </u>					+

	PROPERTY			SURELOCK	HOLE N. <u>DDH92-8</u>							
[		DIP	TEST	]								
-	Foo	tage F	Angle Reading Corrected	Hole No. <u>DDH9.2 - 8</u> Sheet No. <u>1</u> Section	Dep	0+9	<u>sw</u>		Total Depth. Logged By_	SB.	B	
				Date Begun July 12, 1992 Date Finished July 13, 1992 Date Logged July 15, 1992	Elev. Colli	or <u>53</u>	<u>so f</u> 90°	eet	Claim_Su Core Size_	<u>BQ</u>	<u> </u>	
DE FROM	PTH I TO	RECOVERY		DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE				<u> </u>
0	2.5	1.6	Barite : b	reccia; 25% dolomite; barite is								
			white,	medium crystalline, limonitic								
· · · · · · · · · · · · · · · · · · ·			lamin	ae throughout barite								
	3.8	1.4	Dolomite:	grey palegrey		+						······································
3.8	6.8	3.0	Dolomite:	grey, palegrey, maroon; banite 5.3 m and 6.7 m								
6.8	7.0	0.2	Mud sear	n			L					
7.0	8.8	1.8	Dolomite:	contains up to 15% barite,								
			broken	core from 8.3 m								
8.8	15.9	· 7.1	Dolomite :	pale greenish grey, palegrey, rare								
			barite.	stringer, limonitic vugs and stringer	s							
			Comme	on								
15.9	16.0	0.1	Barite									
-	16.2		Dolomite									
16.2	16.6	0.4		Dolomite in equal amounts			<u> </u>					
16.6	20.5	<u>e.</u> E	Dolomite									
	20.7		Broken core	; breccia, gouge, fault								
20.7	37.8	1.1	Dolomite:	thin to medium budded, limonitic		-						
			stringers	s throughout, rare guartz or barite								
			stringe	1								
				E.O.H. (a) 37.8 metres								<del></del> .

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PROPERTY SURELOCK					HOLE No. DDH92-9							
	Foo		TEST Angle Reading Corrected	Hole No. DDH92-9_Sheet No1	L. at	6+25	<u>5 N</u>		Total Depth	23	3	
	· · · · · · · · · · · · · · · · · · ·			Hole No. <u>DDH92-9</u> Sheet No. <u>1</u> Section Date Begun <u>July 15, 1992</u> Date Finished <u>July 21, 1992</u> Date Logged <u>July 21, 1992</u>	Dep Bearing Elev. Colla <b>Angle</b>	0+9 0 1r 53 - 4	<u>ຮູດ</u> 50° 50 1 50 1	feet	Logged BySBB ClaimBQ Core SizeBQ			
DE	PTH	RECOVERY		DESCRIPTION	SAMPLE No.	1		WUNTU				
}	2.8	1.3	Dolomite :	grey, broken core; 15-20%						_		
			1 .	arite								
2.8	3.8	1.0	Dolomite :	brecciated ; barite matrix								
[			and st	ringers relatively common;								
			15-20	% barite	-							
3.8	6.8	3.0	Dolomite :	grey ; less than 15% barite -						ļ		
			mainl	y in stringers						 		
	6.9	0.1	Barite	-					+			
		0.4	Dolomite	······································				· · · · · · · · · · · · · · · · · · ·			ł	
		0.15	Barite					·····		ļ		
		1.55		occasional barite bleb				· · · ·				
		0.15		hite coarse crystalline				<b></b>				
3.15	10.2	1.05		abundant barite 9.45-9.75 m.				<u> </u>		ļ]		
10.2	13.2	3.0	Dolomite : pi	ale grey to pale pink; occasional		<b>_</b>						
				<u>k barite stringer ; few shear</u>								
·			•	limonitic hairline fractures								
	16.3		Dolomite			<u> </u>			·	ļ		
	16.5	0.2	1 1	uartz with minor barite matrix						<u> </u>		
	18.3			ate grey to pale pink, thin bedded				<b>_</b>				
18.3	22.8	4.5	Dolomite				 	ļ				
22.8	23.3	0.5	Chert : lamir	ated, pale pink topale grey; rare guart	2							
NEVI	LLE (	CROSBY IN	ic. string	er 1								

E.O.H. 23.3 metres

		PROF	PERTYSURELOCK	HOLE N. DDH 92-10							
	Foo		TEST     Angle     eading   Corrected     Hole No.   DDH92-10     Section	Lot. Dep. Bearing Elev. Coll Angle	6+2 0+9 0: ar5	5 N 5 W 50 ° 350 °	fect	Total Depth_ Logged By_ ClaimSu Core Size	SBB RELOCIC	>	_
DE FROM	PTH TO	RECOVERY	DESCRIPTION	SAMPLE No			1 WIDTL				
0	1.8	0.4	Broken rock : breccia, dolomite fragments in								
ļ			barite matrix ; barite 10-15%.								
1.8	3.3	1.4	Dolomite : grey to pale grey, siliceous ; rare			· 					
	+	ļ	guartz flor barite stringer				ļ	┿──┼			
3.3	4.4	1.0	Broken core : mainly grey dolomite ; rare					+			<del></del>
ļ			barite stringer			<u> </u>					
			- @ 9.2m. 5mm thick barite zone								
			-@ 9.35m. 1 cm thick barite veinlet			L					
ļ	ļ		parallel to core axis								
4.4	8.3	و. ج	Dolomite : occasional to rare barite stringer		1	L					
			(1 cm thick)								
8.3	8.5	0.2	Barite: some buff colouration, otherwise whit	2							
8.5	9.5	1.0	Breccia: grey to dark grey dolomite fragments in	<u>n</u>							
			Breccia: grey to dark grey dolomite fragments in cherty matrix; minor barite								
9.5	9.T	0.2	Chert: Fault sub-parallel to core axis;								
			1 cm. displacement								
9.7	11.0	1.3	Dolomite: in part brecciated; minor barite								
			in thin stringers from 10.7 m			L					
11.0	11.5	0.5	Barite: badly sheared and brecciated								
			-fault gouge at 11.05 m.								
				1							-

NEVILLE CROSBY INC.

	PROPERTYSURELOCK									HOLE No	DDHS	12-10		
	DIP TEST Angle Footage Reading Corrected			Hole No. DDH92-10 Sheet No. 2 Section Date Begun Date Finished Date Logged		Dep Bearing					Total Depth Logged By Claim Core Size			
DE	PTH TO	RECOVER	łΥ .		DESCRIPTION	SAM	PLE No.	FROM	то	WIDTH OF SAMPLE				
1.5	12.5	1.0	Dolor	thin-bed	<u>le pink to pale pinkish-grey; silie</u> ded ; no barite ; few thin argilla	ecus,								
2.5	14.5	2.0	Dolor		ale brown to buff, thin bedded, i siliceous, nobarite, few shea									
				perp	endicular to core axis 3.8 Chert.									
1.2	18.7	4.2	Dolo	mite: pr siliceous	ale pinkish-grey, thin budded, ; scm. thick band of chert at	<u> </u>								
					ng perpendicular to core axis					 				
				core	hin quartz stringer perpendicular axis		,							
				c	dolomite has pale brown to but olour									
				in	<u>4 cm breccia Zone; barite fragi</u> <u>guartz matrix.</u>	ments								
<u>3.7</u>	21.5	2.8		@ 19.4-	cish grey, siliceous, thin bedded 3cm. thick guartz-barite breccia									
				,	<u>- scm thick shear perpendic</u> ore axis.	UIAr		1					_	  .

	PROPERTY SURELOCK			SURELOCK	HOLE No. DDH92-10							
	DIP TEST Angle Footage Reading Corrected		Angle	Hole No. <u>DDH 92-10</u> Sheet No. <u>3</u> Section Date Begun Date Finished Date Logged	Dep Bearing				Total Depth Logged By Claim Core Size			
DE FROM	РТН ТО	RECOVE	RY .	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE				
21.5	26.0	4.5	- @ 22	y dolomite: pinkish grey to grey, thir m - shear zone								
··			- @ 22	<u>sm</u> <u>abundant quartz stringers to</u> .8m		-						<u> </u>
				sm shear								
			E.O.F	t. @ 26.0 metres								
	· · · ·											
. <u>.</u>												
												<u>_</u>
						+						<u> </u>
				, , , , , , , , , , , , , , , , , , ,							+	+
				······································							<u> </u>	<u> </u>
						ļ						

		PROF	PERTYS	URELOCK		HOLE No. DDH 92-11					
	Foo		TEST Angle leading Corrected	Hole No. DDH 92-11 Sheet No. 1 Section Date Begun July 22, 1992 Date Finished July 24, 1992 Date Logged July 24, 1992	Lat. Dep. Bearing Elev. Coll Angle	6+25 0+5 2 ar	: N ): W ::::::::::::::::::::::::::::::::::	feet	Total Depth_ Logged By_ Claim Core Size	<u>25 5 те</u> 5 <u>ВВ</u> RELOCK #_3 ВФ	3
DE FROM	PTH I TO	RECOVERY	· · · · · · · · · · · · · · · · · · ·	DESCRIPTION	SAMPLE No			WIDTH OF SAMPLE			
0	3.5	3.0	Dolomite : pin siliceou	k to grey, thin bedded, partly s; rare barite-guartz veinlet	or						
3.5	5.0	1.45	stringer Cherty dolomi broken	te: pale grey to grey; some							
5.0	5.2	0.2	-@ 5.0 m	2 cm thick barite. : some barite present							
	5.5		Cherty dolom	to		-					
	6.3	<u>0.3</u>	Quartz an	allel to core axis							
6.3	7.85	1.55	Cherty dolomi	ite: grey topink; few barite. stringers	-						
			-@ 6.0	om breccia				<u> </u>	++		
7.85	9.3	1.45	<u>Barite : whi</u>	te, occasional dolomite fragment	1						
				dolomite and barite in equa unts							
				contains small amounts of						·	
			limonitic	material in blebs and fractures	s.						
9.3	11.0	1.7	Cherty dolomite	: pale pink to grey, thin bedde	d.						
1.0	11.6	0.6	Barite : some	e : pale pink to grey, thin bedde e cherty dolomite present.		ļ					
			-@ 11.2 r	n fault							

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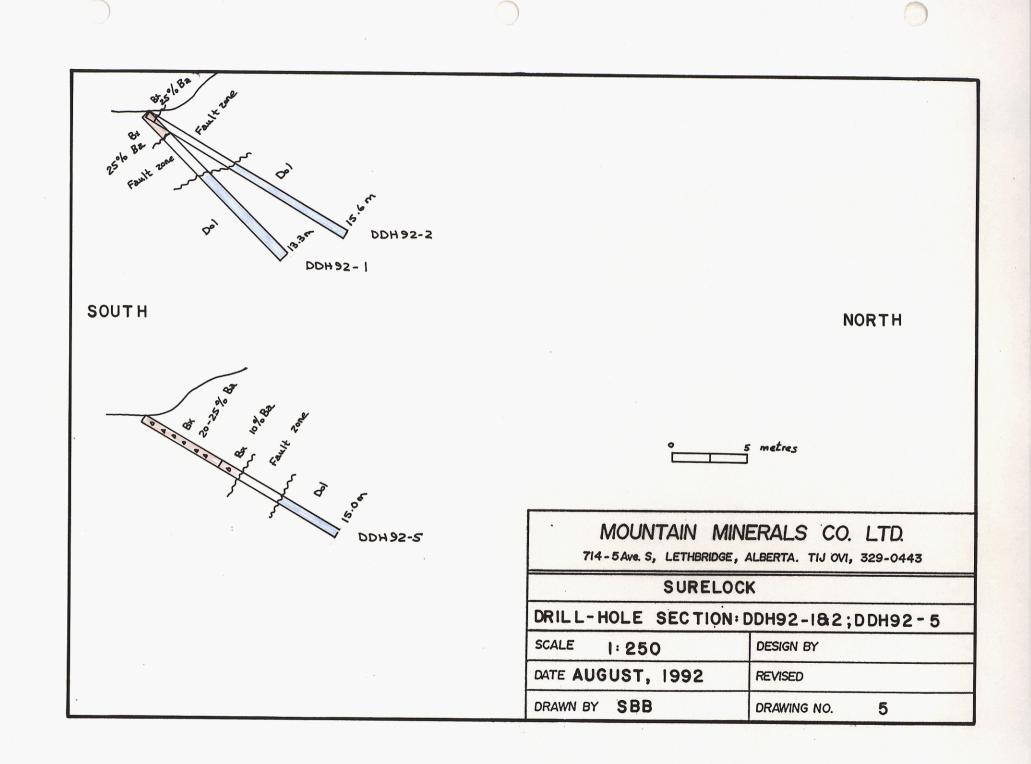
SURELOCK PROPERTY\_\_\_\_\_ DIP TEST Angle Hole No. DDH92-11 Sheet No. 2 Lat. Reading Corrected Footage Section \_\_\_\_\_ Dep. \_\_\_\_ Date Begun \_\_\_\_\_ Bearing \_\_\_\_\_ Date Finished\_\_\_\_\_\_ Elev. Collar\_\_\_\_\_ Date Logged

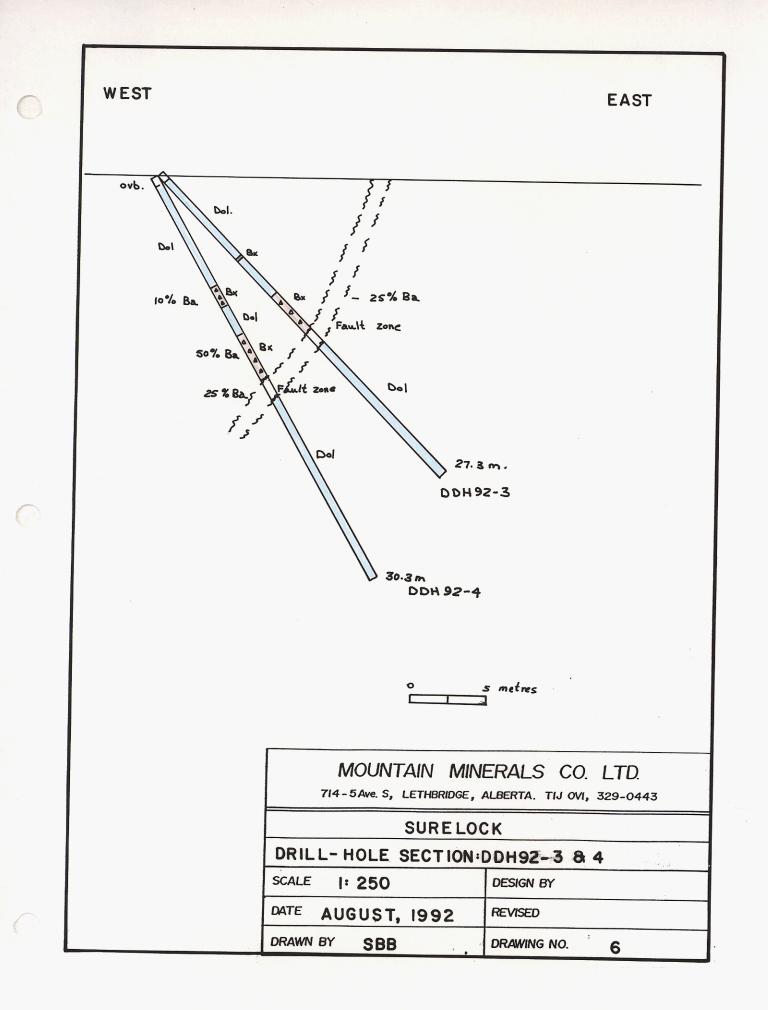
HOLE No.	<u>DDH 92-11</u>
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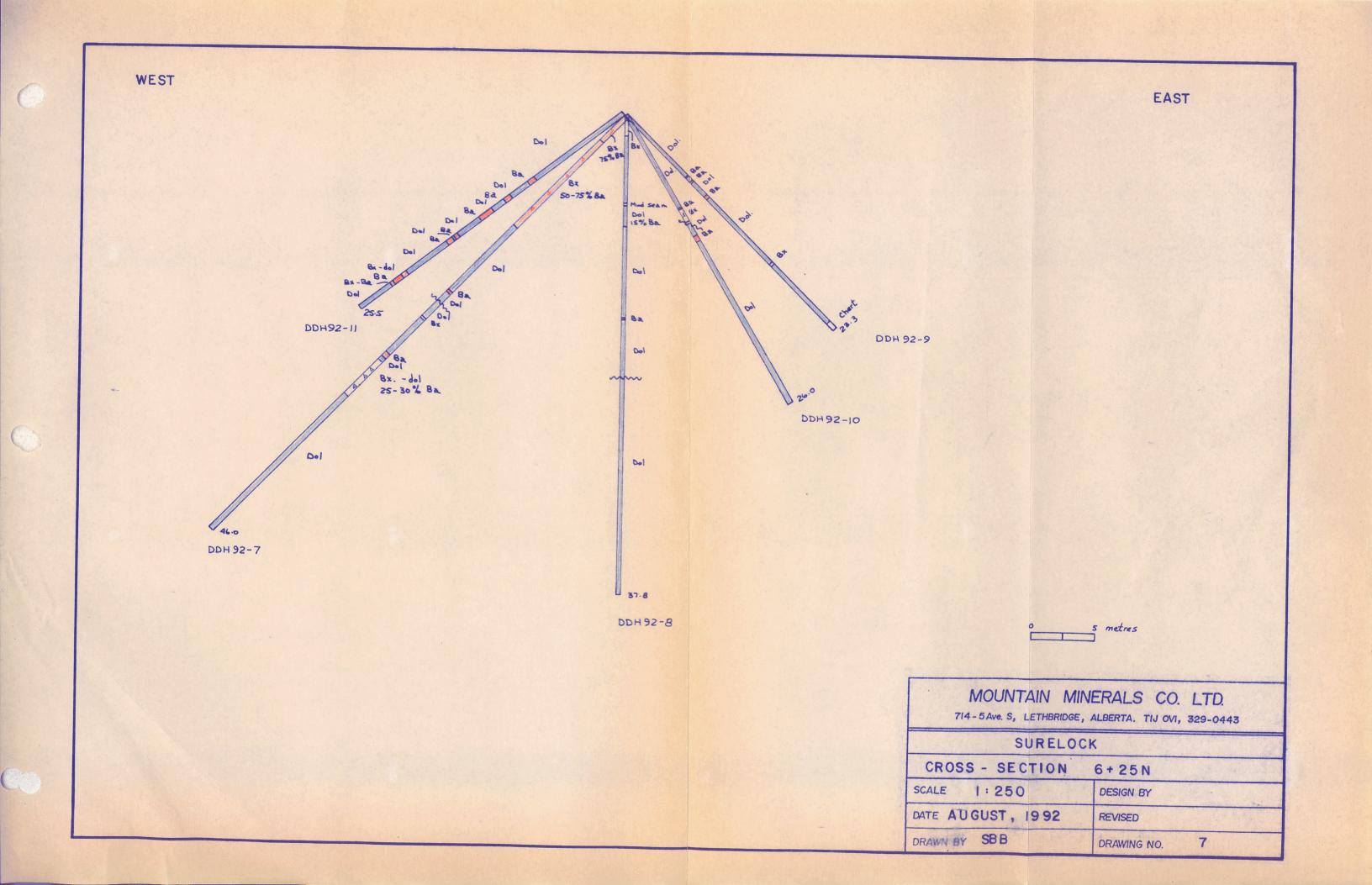
Total	Depth
Logge	ed By
Clain	)- <u></u>
Core	Size

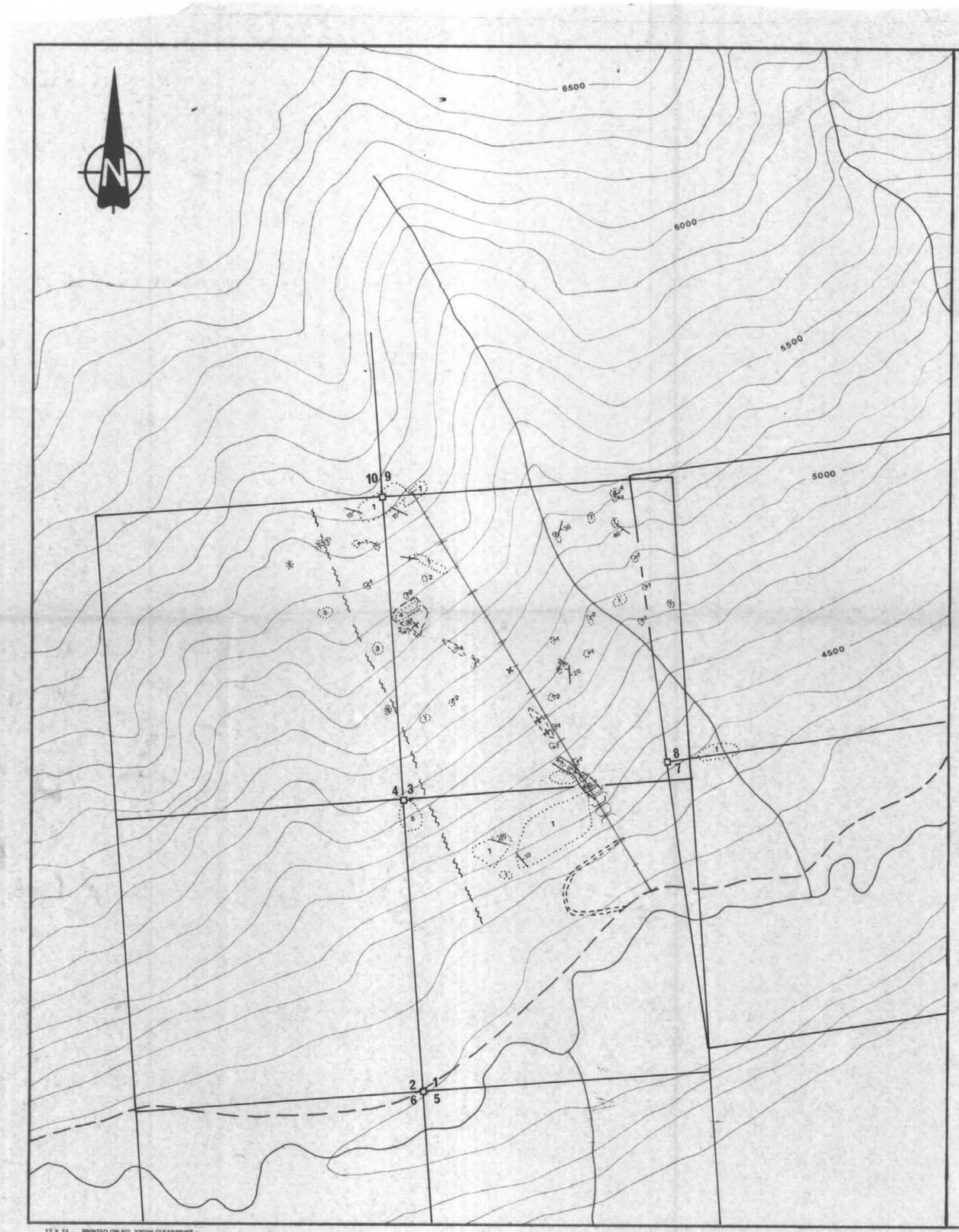
DE I FROM	PTH TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE				
			-@ 11.3 m Scm thick zone of laminated								
			dolomite.								
11.6	12.7	1.1	Cherty dolomite : few barite blebs (5-10%)								
			Cherty dolomite ; few barite blebs (5-10%) - brecciated	(							
12.7	13.85	1.15	Barite: white to buff, limonitic hairline		 				<u> </u>		
			fractures common;								
			-@ 13m - fault		L						
13.85	16.0	2.15	Cherty dolomite: pale pinkish grey; occasional								
			barite stringer orbleb to 14.5 m.		ļ						
16.0	16.4	0.2									
16.4	16.5	0.1	Cherty dolomite.								
16.5	16.9	0.4	Barite: few grey dolomite fragments								
16.9	21.0	4./	Cherty dolomite:			]					
			-@ 17.8 m shear								
			17.8-18.0 brecciated								
			-@ 18.9 scm thick barite								
			-@ 19.4 2 cm thick barite-guartz								
			vein let 0								
7.91	21.4	1.7	Breccia: barite at 21 m; barite-siderite								
			@ 21.1 m								
L	I İ			<u> </u>	1	I	<u>المحمد ، محمد المحمد المحم</u>	·	J	- <b>I</b>	

	PROPERTY		PERTY	SURELOCK			l	HOLE No.	DDH 92	-11		
	Foot		TEST Angle eading Corrected	Hole No. <u>DDH92-11</u> Sheet No Section Date Begun Date Finished Date Logged	Dep Bearing				Total Depth Logged By. Claim Core Size_			<del></del>
DE FROM	PTH TO	RECOVERY	· · · · · · · · · · · · · · · · · · ·	DESCRIPTION	SAMPLE No.	FROM	то	WIDTH OF SAMPLE	Ē			
21.4	22.3	0.9	contact (	a so to creamy white upp a so to core axis; lower con	er Hact							
22.3	22.5	0.2	Breccia:	to core axis.								
22.5	٦. 22	0.2		ontains blebs of siderite								
<u>ר גג</u>	24.5	1.8	Dolomite:	grey, siliceous 10 cm of barite -quartz-				· · · · · · · · · · · · · · · · · · ·				
			side	rite		++						
24.5	25.5	1.0	Cherty dolom	ite : pale grey to grey								
			@ 25.0	Em Icm thick barite veinle	ŧ							
			E . 0. l	t @ 25.5 metres								
						+				<u> </u>		
										l	L	









17 X 22 PRINTED ON NO. 1000H CLEARPRINT .

# LEGEND

TOBY	FORMATION
5	Sandstone, grit
MOUNT	NELSON FORMATIO
4	Barite
3	Shale, dolomitic shale
2	Dolomite: argillaceous
1	Dolomite

# SYMBOLS

CD	Outcrop
++	Bedding (inclined, vertical)
33,5	Fault (known, approximate)
$\asymp$	Trench
¢	Claim post
×	Mineralized small outcrop
***	Trail

Geological contact (known, approximate)

0

Viet has

# GEOLOGICAL BRANCH ASSESSMENT REPORT

22,485

100 200 300 METRES

MOUNT	AIN MINERALS	CO.	LTD.
CALE: 1: 5000	APPROVED BY:	DRAWN BY SBB REVISED	
ATE: AUG., 1990			
GE	OLOGY MAP		
SUR	ELOCK	DRAWING N	UMBER

