82 512

Nt. Banner East

Drill Hole and Trench Information.

Analysis

C. C. # 277, 280 281,
1299

432

ENCLOSURE 16

DDH-MBE-101 CORE DESCRIPTION (57 Pages)

GEOLOGICAL BRANCH ASSESSMENT BEPORT

00432

PROJECT	MOUNT	BANNER	EAST	
AREA	S.E.	B.C.		

, TE	BEGIN	26.09.80
٥	END	22.10.80

			- '
HOLE	No.	MBE	101

PAGE

HOLE PARTICULARS

LOCATION	5544396.35 m N		
	660551.28 m.E.		
ELEVATION	2044.1 m	HOLE BEARING (AZT)	•
TOTAL DEPTH		HOLE ANGLE (*)#	Vert.

LOGGING	
LOGS RUN	Cal.Dev.,Gamma,Dens.
LOGGED BY	Roke Davies
OTHER	
TESTS	

2 00111110 1 6111	ORMANCE
RE DIAMETER	HQ
CORE RECOVERED	
LENGTH CORED	
CORE RELOVERY	%
	CORE RECOVERED

EXAMINATION	
LOG USED	
No. OF SEAMS SAMPLED	
EXAMINER (S)	G. Sloan
DATE	22.10.80

	DEPTH	DE	PTH			LITHO DESCRIPTION	SEAM	EDDIN-	SUMM.	ARY GI	OTECH	*****			ANALY	TICAL	DATA		
.	OF OF	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC.	RQD	SAMPLE NO.		IST %	ASH %	V.M.%	F.C. %	F.S.1.	C.V.
170.	BÖX	FRUM	10	ļ	MAIN	AMPLITIED LINCEODE COAL RECOVERT FOR EACH SERMI		(*)	NE22	FREQ.			a.r.b.	residual				7.0	——·
4	12.19	<u> </u>		<u> </u>						 		<u> </u>		 					
\vdash		12.19		19	SLT	shalev. dark grav. calcite along fractures.			R3						\longrightarrow				
				ļ		broken stick			├	 				<u> </u>					
-		 								 	├			ļ					
-			13.61	1.23	SST	very fine grain, light gray, dark silty bands,			R3	 				_					
			<u> </u>	 		broken stick, advanced soft sediment deformation			 	 									
\vdash				-		Joints: 1 x 8°, calcite; 1 x 45°, calcite		71	 	 		-						-	
	10 20			 			\vdash		t	! 	(1)			 					
+	13.72	13.72	 	1 25	SST	as above, broken stick	 		R3	+	61.9			├					
-		13.72	 	11.33	391	Joints: 1 x 11°: 3 x 30°: calcite		-	 ~~	! 	1		· ·	 					
		\vdash				Joines: 1 x 11 : 5 x 50°; carette	1		 	 	 			 					
_				11	Sha1e	black, dark gray, broken stick			R3	 	1			╅					$\overline{}$
_		<u> </u>		• • • • • • • • • • • • • • • • • • • •	_Dilate	Didek, dark graff broken berek	i		1	! 	 			 	-	-			
			15.25	-07	SST	as above, broken stick			R3										
T			17.00	T															
	15.24										72.5								$\overline{}$
		15.24		.29	SST	as above, broken stick		63	R3										
						Joints: 2 x 250 Calcite				1									
			16.36	.83	Shale	dark grav black, very massive, broken stick			R3										
						Joints: 1 x 15° Calcite													
				<u> </u>						1	<u></u>								
2									<u> </u>	ļ	<u> </u>			<u> </u>					
_			16.68	. 32	Shale	as above, broken stick	 		R3	1	<u> </u>			<u> </u>					—
		<u> </u>	<u> </u>	 _	<u> </u>					 				 					<u> </u>
	16.76	ļ	 				 		ļ	 	31.9			<u> </u>					
-		.16.76	<u> </u>	-21	Shale	as above, broken Stick	-		├	 	<u> </u>			1					
-		ļ		07			├		 _	├	ļ			ļ					<u> </u>
\rightarrow		 		.07	SST	very fine grain, light gray, shale streaks	-		 	1	-	-		 					
-+		├──-		-		broken stick	-		├	 	 			 					
-	_	 	17.06	02	Shale	dark gray, coal streak, broken stick		59	R3	┼─	0		<u> </u>	 					
-+		 	17.06	.02	puate	dark gray, coar streak, broken strek		29	1,7	 	۳			 	 				
-+	17.07	 	 	 		\(\frac{1}{2} \)	 		 	 	 			\vdash					·
1	1/. 1/.	17.07	 	10	SST	very fine grain, light gray, broken stick	 		R3	 	 		 	 	 				
\vdash		1	 	1	J.J.	Joints: 1 x 31	 		† 	 	 			 					
		†	-	t	 	JOINES, I A JI				†	 			<u> </u>	<u> </u>	-	•		
				28	Shale	black, very carbonaceous at base, broken stick	1		R3	1	 								Г <u> </u>
_		<u> </u>		Т "	I	I THE TAXABLE OF THE PARTY OF T	T		1	1				† 					$\overline{}$

ALL LINEAR UNITS IN METRES

: MEASURED FROM THE HORIZONTAL PLANE

* : • R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

• RQD -- ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

RESOURCES LIMITED

CORE & COAL CORE DESCRIPTION

OJECT	MOUNT BANNER EAST	HOLE No.	PAGE 2
REA	S.E. B.C.	CONTINUED MBE 101	OF

X DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	SUMM		ARY GE	OTECH	SAMPLE	ANALYTICAL DATA						
BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	ROD	NO		residual	ASH %	V M %	FC %	F.S.I.	C.
17.0	,																	
			. 18	SST	very fine grain, light gray, interbedded dark			R3										
<u> </u>					siltstone	<u> </u>		↓										
↓	 				Joints: 3 x 65° calcite	↓	ļ		ļ				ļ				ļ <u>.</u>	
 				<u> </u>	 	1		 	 				├					\vdash
	 		40	Shale	black, broken, becomes carbonaceous at base	+		R3	 				┿					<u> —</u>
+	 	18.28	25	Conl	warm chalon withle coft	.1	_60	62	-	37.1			 			-		\vdash
+	 	10.28	23	Coar	very shaley, rubble, soft Joints: 1 x 15° calcite	J	<u> </u>	132	 -	3/.4			 					\vdash
18,59					Sources. I k is carcite	†	<u> </u>	†	 	 		 	†					
1	18.59		64	Coal	very shaley, rubble, soft	J		52										
						I												
<u> </u>			.12	Coal	dull, hard, broken	J		54			_							
-↓	<u> </u>	1			<u> </u>	↓		ļ	<u> </u>			_	<u> </u>					—
 	 	19.61	. 26	Coal	soft, dull, mushy	J_	ļ	S2		0			 					
 		-				-	}- · ·	ļ	 	 -		·	 	ļ	 i			\vdash
20.0	20.02		1.7	Coal	soft dull mushy	+-	_	52			-	 	+					\vdash
 	20.02			COAL	SOIE, GUII, MUSAV	+-		32				l	 	<u> </u>				
+	+	20 34	15	Shale	carbonaceous, sheared, slicked, rubble	1		55	ļ				 	<u> </u>				
1		202.19		лидае.	Landia Cola, Sicarcia, Sassage Emples	1												
20,5								Ι										
Ι	20.57		. 44	SLTST	slicked iron-stain at top becomes shaley at			R3										
I					base, iron-weathering zone, slicked near base			L	Ļ									
<u> </u>					Joints: 2 x 35° calcite	ļ		↓		ļ		ļ	 _					
	ļi							├ —	ļ	<u> </u>		 	 					⊢
3	1 22 22		1.1		1 - 14-1-4 - 11-1-	+-	<u> </u>	R3	 	<u> </u>		<u> </u>	├					
╂	21.01		.14	Shale	as above, iron-stain, slicked, rubble Joints: 3 x 46', 1 x 60'	 		₹3—	 	 	-	 	+	 				\vdash
+					JOINES: 3 X 40 , 1 X 00	+	 	 	\vdash	 		-	 					\vdash
 		21.36	. 21	Shale	black, broken stick	+	\vdash	R3				<u> </u>	 		<u> </u>			\vdash
1			•	Onare	Diden octon	1			†	<u> </u>			1					
21.3	4					T						Ī				,		
	21.34		.02	Shale	as above	1		R3				L						
								<u> </u>						<u> </u>				_
↓	-		.03	SST	very fine grain, rust-weathered, slick with	+	<u> </u>	R3	↓			ļ	↓		<u> </u>			—
	 				calcite and iron Joints: 56	- 	<u> </u>	├ ─	 	<u> </u>		 	├	 				-
+	+				Joints: 56	+	├	 	+			 	+	 		ļ		-
+	— —			Gh = 1 ::	as above, few very fine grain sandstone	+	67	R3	 		-	 	 				<u> </u>	
 	†		8	Shale	stringers, slicked along bed breaks, broken	 	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	اٽ	 			· · · · ·	-					\vdash
1-	 				stick	 	<u> </u>	 	1			t —	 	t		<u> </u>		
 	1			 	Joints: 146° calcite: 165° calcite	1		 	1			†	1			-	-	\Box
1 —	1				LUCANIAN ATO S CHARACTOR AND S	T		T					1		-			$\overline{}$

ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

1 -- R &/OR 5 -- GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

MANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

FILE No 8A - 267 REVISED Feb. 1981 FORMERLY FILE No. BA - 212A

DJECT	MOUNT BANNER EAST	HOLE No. MBE 101	PAGE
REA	S.E. B.C.	CONTINUED	OF

вох	DEPTH AT TOP	DE	PTH	•		LITHO DESCRIPTION	SEAM	BEDDING	SUMM	ARY GE	OTECH	SAMPLE		57.84		TICAL			
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	SUMM HARD- NESS	FRAC	RQD	NO		ST % residual	ASH %	V M %	FC.%	F.S.1.	C.V.
-	21-34	-						<u> </u>					GAT.D.						
_,	Z1- 14		22.13	16	T22	fine grain, light gray, shale stringers			R3										
			_66.1.	***	331	broken stick			1		-								
									1										
	22, 25								Ī .										
		22.25		.10	SST	as above, broken stick			R3	Ι	84.8								
									1										
			23.78	1.43	Shale	black, silty, sandy interheds 5.15 m and			R3										
						bioturbation and worm burrows in sandy beds,			ļ										
Ш						calcite in fractures, broken stick			ļ			$ldsymbol{\sqcup}$							
Ш						Joints: 1670, calcite	 		 _										
							<u> </u>	<u> </u>	ļ	L		1	_						
Ш	23.77						} -		L	ļ · .	92	1					\Box		
$\vdash\vdash$	<u> </u>	23.77		<u> </u>	Shale	as above	┞—	-	R3		<u> </u>								
Н			21 (2		G1 MGM	alclay in places with for this			P2	 		 	L					——	
Н			24.62	1.79	SLTST	medium gray, shaley in places with few thin	 	59	<u> </u>				<u>-</u>						
				 		sandy interbeds, stick Joints: 160°, calcite: 126°	 		 		 -	-							
				 	-	Joints: 160°, calcite: 12h	 		 		<u> </u>	 							
Н	24 69								 		100	 -							
	74. ng	24.69		-41	SLTST	as above, fracture along bed, slicked, calcite		70	R 3		100				_				
					[iron-stain			<u> </u>	Ţ]				_				
				i –	1				1										
4				i –					1										
			26.21	1.11	SLTST	as above, broken stick to broken,			R3										
						some soft sediment deformation, few calcite and													
L						iron-filled minor joints				Ĺ									
Ш							ļ	<u> </u>	<u> </u>					,,					
	26.21						ļ		<u> </u>		90	ļ							
Ш		26.21		.09	SLŢST	as above, broken stick	 		R3			 			· · · · · · · · · · · · · · · · · · ·				
\vdash	<u> </u>			-			—	 	l D C	 	├			 		 	-		ļ.,
-	 			.16	SST	fine grain, weathers very red (iron-	 	 	R3	├		├-				ļ	 		
\vdash	 			├	 	stain), with siltstone/shale/coal streaks,	 	 	├	 	_	-						 i	
-	-			 		calcite along fracture (appears faulted)	-	 	├ -			 	<u> </u>		 _	 			
Н	-			0.	Calades	band, probable line of fault		 	R3	-	-			·			 		
	} <u> </u>				Carcite.	pand, propagte true or fautt		 	ראן.	 		┝		 -	 				
				27	SST	as above, broken stick		 	R3	1		 		<u> </u>	 				
	h			\ <u></u>	231	no gover proven other		1	1,3	<u> </u>						<u> </u>			
			27.73	.00	SLTST	with interhed light gray, fine sand, some shale		1	R3	1			,	1					
						bands, broken stick		Ι	1										
						bands, broken stick Joints: 2 x 0°, calcite; 2 x 167°, calcite													
									1										

ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

* ** # &/OR 5 — GOLDER ASSOCIATES HARDNESS CODE

• RQD - ROCK QUALITY DESIGNATION (%)

FF -- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

PROJECT	 MOUNT	BANNER EAST
AREA	S.E.	в.с.

HOLE No.	MBE	101
CONTINUED		

PAGE 4

вох	DEPTH AT TOP	DE	PTH		<u> </u>	LITHO DESCRIPTION	SEAM	E DDING	SUMM	ARY GI	OTECH	SAMBLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)		ANGLE	HARD NESS	FREG	OTECH RQD	SAMPLE NO		ST % residual	ASH %	V M.%	F.C. %	F.S.1.	C.V.
4	, DQ.																i		
\Box	27.74						—	 	R3	ļ	61.8								
H		27.74	28.28	54	TR.IZ	some shaley heds	 		R3	 									
\Box							<u> </u>												
\mathbf{H}	28. 35	28, 35		80	SLTST _	as above	├	 	R3	 	90.7						- →		
5				. 31	Shale_	black, broken stick	 	├	R3	+-									
口				[,															
$\vdash \vdash$.01	Coa1	hard, bright	╁┈	₩-	 	 	 								
			29.92	.45	Shale	silty, black, coal stringers, slicked calcite,		1											
├─┼						iron-stain, stick Joints: 52 calcite	 		 	┿	<u> </u>								
口						Joints: 32 , calcite	1	<u> </u>	1										
├ ─┼	30.03			- 07	Shale		├ —-	-	├	+	96			-					
口		30-02		07	Shale	very carbonaceous and coaly		<u> </u>											
\Box				.13	Coal_	du11	I _												
				.07	Coa1	bright with dull, very soft	I	 	1	+	1			<u> </u>			-		-
口							ı	.		1									
┢┼				. 21	Coal	dull, very soft		┼──	 	+-			-						
H				.04	Coal	bright and dull	I			1									
┞╌┼			·	.07	Coal	bright with dull	 -	┼─	┼	1-	 					\longrightarrow			
									<u> </u>										
⊢┼				.06	Coal	bright, hard, broken stick	1	├─	 	┼	ļi			 	 				
				.08	Coal	bright with dull, hard, broken stick	I												
\Box				10	Coa1	dul1	Ī			_									
					COAL	GOTT	<u> </u>		1	<u> </u>									
\Box				.08	Coal	bright	I		ļ	ļ									
				.15	Coal	dull, sulfur smell	1	 	 	 	-			ļ	-		-		
									L		-								
$\vdash \vdash$.03	Coal	bright, broken stick	I	\vdash	 	+-				 					
				,06	Coal	dull and bright, broken stick	1												
				L	<u> </u>		<u> </u>	<u> </u>	<u> </u>	١]		L	<u> </u>					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

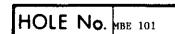
PROJECT	MOUNT BANNER FAST	HOLE No. June 101	PAGE 5
AREA	S. E. R. C.	CONTINUED MBE 101	OF

вох	DEPTH AT TOP	QE (PTH			LITHO DESCRIPTION	SEAM	A DOLL	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
No.	AT TOP OF BOX	FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	RQD	SAMPLE NO		ST %	ASH %	V M %	F.C. %	F.\$.I.	C.V.
140.		FROM	,,,		10124114	Amenico (mecore cone recover ion enerior		17)	NE 33	FREC			0.r.b.	residual					-
1-5	30-02			. 18	Coal	bright, broken stick	I		1	 	-						·		
\Box																			
			31.46	,11	Coal	dull, mushy	I												
┝	31.70							-	├	├	<u> </u>					i			
	-31.70	31.70		.02	Coal	shaley, soft, highly broken	I			 									
										I									
⊢				. 24	Coal	dull	I		-	 			ļ			——┼			
╂─╂				.10	Coal	dull with bright, broken stick	I		- -	<u>† </u>	 								
							<u> </u>			I									
H		 		.19	Coal	dull, broken stick	I		-		ļ				_				
H				. 07	Coal	bright with dull, broken	ī												
\square							L												
			32.40	08	Coal	hright with dull, rubble	Ι	 	1										
H	32.61								<u> </u>	İ									
\Box		32.61		.03	Coa1	bright with dull, broken	I												
┞─┤				0.3	Coal	bright, pyrite, broken	1	-	 	+	 	-		+		1			
Н	-				COAL	bright, pyrite, broken	 		†	†									
口				.05	Coal	bright with dull, rubbley	I												
┢┷┨				0.3	Coal	bright with dull, broken	T	 	 	+	 			 	-				\vdash
					COAL	bright with dair, broken	 				İ								
\Box				.02	Coal	dull with bright	I			1									
H		-		12	Coa1	bright with dull, broken	ī	-	╂	 	ļ			ļ		-			\vdash
Н				• 12	COST	bright with dair, broken	1		!										
				. 09	Coal	bright, broken	I							<u> </u>					
${f H}$		_		06	Coal	bright and dull, broken	T	├	 	+	 	 -				-			
H				100	LCOAL	Diight and dull, broken	<u> </u>		 	 	 			<u> </u>					
				.06	Coal	dul1	I												
Н		ļ		0.1	Coal	bright, rubbley	+	-	1	+	-	 -		+	 	-			\vdash
H	-		-	.01	COAL	DEAKHE, FUDDLEY	╁		†	t									
				.01	Coa1	bright	1												
\vdash			22.21	1.0	1 .	1.11	+-	 	 	 	ļ	 -		├──	 				
\vdash			33.31	- 18	Coa1	dull	╁		 	<u> </u>	 			 	<u> </u>			-	
			1				<u> </u>												

ALL LINEAR UNITS IN METRES

FF ---- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS



FILE No BA-267 REVISED Feb. 1981 FORMERLY FILE No. BA-212A

[.] MEASURED FROM THE HORIZONTAL PLANE

^{* : *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

⁻RQD - ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT	BANNER	EAST		
AREA	 S.E.	B.C.		 	

HOLE No.	МВЕ	101
CONTINUED	<u> </u>	

PAGE_6____ OF_____

BOX DEF	PTH	DEF	'TH			LITHO DESCRIPTION	SEAM PE DESIG A	A DDING	SUMM	ARY GE	OTECH	SAMPLE	ANALYTICAL DATA							
No.		FROM	70	TH.	MAIN	AMPLIFIED [INCLUDE COAL RECOVERY FOR EACH SEAM]	DESIG	ANGLE	HARD NESS	FRAC	RQD	NO	MO arb	5T % residual	ASH %	V M.%	FC.%	F.S.I,	C.V.	
	3.53																			
6	- 1						-		1	1										
-	-+	33.53		.17	Coal	dull, hard, stick	<u> </u>		 	+				 					 	
				.05	Coal	dull and bright, stick	1													
				.02	Coal	dull, stick	1		<u> </u>											
				.06	Coal	bright, stick	1		ļ											
				.035	Coal	dull and bright, stick	I													
				.02	Coal	dull	I			<u> </u>		<u> </u>								
				,21	Coal	bright and dull, stick	I													
				.02	Coal	bright, stick	1		<u> </u>											
				.08	Coal	bright with dull	<u> </u>													
				05	Coal	bright	1													
				.08	Coal	bright and dull	I		<u> </u>											
				.04	Coal	bright	I									_				
	\perp						1	<u> </u>	1	1	ļ								\vdash	
┝╼╊┈				04	Coal	dull with bright	1		 	+	 -		.	<u> </u>				i	 	
			34.645	.06	Shale.	carbonaceous, broken	Ī			-										
3/	4. 75						 	 	+	+	 									
		34.75		.03	Shale	carbonaceous	1			Ī										
				.005	Coal	dull, shaley, pyrite	Ī		†	<u> </u>										
				.08	Coal	dull with bright	Ī	 		ļ				1						
	\Rightarrow			. 36	Coa1	slick, bright, pyrite, broken stick	I		1	<u> </u>										
				.02	Coal	bright and dull	I	<u> </u>												
				. 17	Coal	bright with dull	I			-		<u> </u>								
$\vdash +$.065	Coal	bright	1		1	 	\vdash	 	 							
						# MEASURED EROM THE MORIZONITAL RUANIC	A 4346							-						

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* * * *} A/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	Γ
AREA		

HOLE No.		
CONTINUED	MBE	10

PAGE__7___ OF.....

XOX !	DEPTH AT TOP	DEF	TH I			LITHO DESCRIPTION	SEAM		SUMM			SAMPLE		C7 C1	ANALY	TICAL	DATA		
No.		FROM	70	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	RQD	NO		residual	ASH %	v м %	F.C.%	F.S.I.	C.V.
-	34 75	1 110111	-10				┼	<u> </u>						14110041					
-	-14. / 5			<u> </u>	Coal	dull and bright	ī							· · · · · ·					
一					UUU														
[.02	Coal	hright	1		ļ	ļ									
							-		<u> </u>	<u> </u>									
-				.025	Coal	dull with bright	ļI —		\vdash					 					
\dashv	+			1.0	Coal	bright with dull	† 		1	†				<u> </u>					
\dashv					COAL	DITENE WILL WILL													
			35,76	.025	Coal	dull	1		I										
					Ĺ		↓	├	├		<u> </u>			ļ	ļ				
+	35, 97				ļ		 		 -					 					
+		35.97		.005	Coal		╀	··· -	 	 	·	h · · · · ·		<u> </u>	 				
-+				22	Shale	carbonaceous with coaly stringers	1	İ											
十					E		I	Ĺ											
				81	Shale	silty, black, with light gray, fine sandstone	1			ļ									
4					<u> </u>	stringers, minor soft sediment deformation	 		\vdash	1	<u> </u>	ļ	<u> </u>	 -					
\dashv					<u> </u>		+-		 	+	.81		 	-	 				
+	36.88	36.88		38	Shale	silty, black, with light gray, fine sandstone	 	 	 	1				1	 				
-		30.00			Share	stringers, minor soft sediment deformation,			1										
						coaly traces													
						Joints: 1560, calcite, iron-stain	<u> </u>		ļ	<u> </u>	ļ			 					
_							-		├	 	-	├	├ ─-	 	 				
				.47	SST	fine grain, light gray, numerous dark thin silty bands, worm burrows,	$+\cdots$	77	 	+	-		 	 	 				
+						silty bands, worm burrows,	1	 '' 	 	1			<u> </u>	 	†···	<u> </u>			
+					 	coaly stringers near top Joints: 154°, calcite	1	†	1			1		<u> </u>	İ				
⇉																			
7					ļ		<u> </u>	├	↓	 	 	 	!	 	 	<u> </u>	ļ		ļ.—
_				20	SLTST	medium gray, thin very fine grain, light gray	₩	 	 	+	.75	1		+	 	 			
\dashv				<u> </u>	 	sandstone bands	 	╁	+	 			 				 	 	
-+		-		21	SST	light gray fine grain coal and shale	†	71	+	1	 	t	 	1	†	† 		 	
十				1	1001	light gray, fine grain, coal and shale streaks throughout, broken stick			L_					Ī					
						Joints: 1 x 162°, calcite/iron: 1 x 156°,									ļ		ļ		.
\dashv						calcite	 	↓	↓	+	<u> </u>	-	_	 	-	 			├
		<u>-</u>		.	<u> </u>		 	-	╁┈	 	 	├ ─┈	 	1	 	 	 	 -	+
\dashv			38.44	- 20	SLTST	as above, shaley in places	+	 	t	+	 	 	<u> </u>	1	 	<u> </u>	<u> </u>	t	1
+	38.40			t	 		1	t	1	1	<u> </u>	1	1			L	<u> </u>		
_	20.70	38.40		1.45	SLST/SS	medium to light gray, very fine grain, inter-	1		R3	1	63								
7				Ī		bedded, shaley in places, broken stick					1		1		l]	<u> </u>

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R B/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] ROD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	
AREA	S.E. B.C.

HOLE No.	MBE	101
CONTINUED	ı	

PAGE 8

BOX	DEPTH AT TOP	DE	РТН			LITHO DESCRIPTION	SEAM		SUMM			SAMPLE		167.04	ANALY	TICAL	DATA		
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	ROD	SAMPLE NO		residual	ASH %	V M.%	F.C.%	F.\$.I.	C.V.
7																			
	39.93						↓							<u> </u>					<u> </u>
		39.93		.5/	SLST/SS	as above, becomes shaley at base	 	73	R3		66.8			 	<u>'</u>				
_				. 34	Shale	black, slicked along fractures, slightly silty	<u> </u>		-	 -				+					
						in places, broken stick			R3										
\dashv				1.7	(1)		├		R3	ļ				ļ					-
\dashv				.17	Shale	as above, coaly streaks near base	┼	├─	K3_	†				 					
コ				.01	Coal	dull and bright, broken	H		R3					1					
\Box								\Box											
				.03	Shale	black, coaly streaks, broken	H		R3	 -				┼					 -
\dashv	- 1			.02	Coal	bright and dull, broken	H		R3	 				† 					
\Box																			
-				.01	Shale_	coaly, broken	Н	ļ	<u>R3</u>	<u> </u>				 					
┪				-02	Coal	bright, broken	† n	 	R3										
\Box				<u></u>						1									
-				-02	Coal	dull, broken	H_		R3	-				 					 -
_			41,20	ng	Shale_	black, coal streaks, broken stick	H		R3	 				 		_			
\exists	41-45		41.20	- 00	Juare	DIGEN, COAL STIEGAS, DIONER STIER	1 **				53.5			1					
		41.45		_11	Sha1e	as above	H	<u> </u>	R3				<u>.</u>						
-+				005	Coal	hright	H	<u> </u>	R3	}				 				<u> </u>	
╛		-		1.005	Loa	nright	1 "		~ -	t			-	1	1				
\Box				,06	Coa1	dul1	H		R3	Ι									
\dashv				005	Coal	hydahe	H	├	R3	├				-					
┪				.003	COAL	bright	 "	\vdash	K3	 				†					
				.005	Coal	dul1	Н		R3										
				<u> </u>	 		 ,,-	<u> </u>	R3	<u> </u>					-				
-				10	Coal	bright, broken stick	H		L K3	 				 	1				
				.07	Coal	dull, broken stick	H		R3	<u> </u>									
\dashv					ļ														
				20	Coal	bright with dull, broken stick	H		R3	 	-			 			· · · · · · · · · · · · · · · · · · ·		
				.10	Coal	dull with bright, broken stick	H	 	R3	 			-	1					
コ																			
_				.005	Shale	coaly, broken stick	H	 	R3	-									
				0.1	Coal	bright and dull, broken stick	H		R3	₩	├─┤			 	 	\vdash			
_				.01	Local	MATURED FROM THE MONTONIAN BLANK	1	L		——			<u> </u>						

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*} RQD -- ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST
AREA	S.E. B.C.

A ANGLE MEASURED FROM CORE AXIS

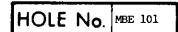
HOLE No.		
CONTINUED	MBE	101

PAGE.9...

Ox !	DEPTH AT TOP	DEF	PTH LITHO DESCRIPTION	LITHO DESCRIPTION	SEAM				OTECH				ANALY	TICAL	DATA				
Jo. ^		FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD.	FRAC	RQD	SAMPLE NO		ST %	ASH %	V M %	F C.%	F.S.L	C.V
7 4	1.45	1			<u> </u>								Gr.b.	14570007					
1				.01	Coal	Bright, broken stick	Н		R3	1									
													-					•	
4	\longrightarrow			.10	Coal	dull, broken stick	Ĥ	.	R3	1			·						
				.06	Shale	black, coal streak, slicked at top, broken stick	LI .		R3	 	\vdash			-	<u> </u>				
+		- -		•00	SIMIE	black, coal streak, slicked at top, broken stick	1	-	10	 				 				 -	<u> </u>
1				.03	Coal	dull with bright, broken stick	Н		R3		1								
1					<u></u>					_									
+				.005	Shale	carbonaceous, broken stick	H	.	R3	 				-	 _				<u> </u>
-+-				01	Coal	dull, broken stick	H		R3	1				 		 			-
T				.01		dully broken selek	 "		† . '`	†				 	-				
\Box				.01	Coal	dull and bright, broken stick	Н		R3										
				205			 	ļ		<u> </u>	ļ			<u> </u>	 				
+				.005	Coal	bright, broken stick	Н.		R3	 -	 			 	 				
寸			42.36	.01	Coal	dull, shalev. Broken stick	н		R3	 				<u> </u>	1				
\Box										ļ	L								L.
8	42.67				-		<u> </u>		ļ	1				<u> </u>	 				
+	72.07	42.67		.07	Shale	black, carbonaceous streaks, rubble, trace coal	Н		R3	 	 				<u> </u>				
十					†		<u> </u>		†	1									
\Box				.025	Coal	rubble	H		R3	ļ				L					
+			44 155	1 20	Ch-la	black, silty in places, coal streak, stick		<u> </u>	R3		ļ			<u> </u>	-				
-+-			44.155	1.39	Snare	black, sifty in places, coal streak, stick	╁	 	10	 	-			 					
十	44.35				 		 		R3	 	7			 	 				
\Box		44.35		.25	Shale	as above, coaly streak at base, stick			R3										
-				0.3	01/0	Lawrence bushess at Late	├		R3	-				<u> </u>					<u> </u>
+				.03	Sh	very heavy, broken stick	 		LC.	 				┼					
+	-			· · · · · · · · · · · · · · · · · · ·	Dil		<u> </u>	<u> </u>	1	<u> </u>				<u> </u>	 				
ユ				.305	Shale	as above, stick		1	R3									*	
\bot				-2-				7.	100					<u> </u>	L				
+				. 33	SS/SLST	interbedded, coal along bedding break	ļ	76	R3	\vdash	_			 	 				
+			45.495	.23	Shale	black, carbonaceous, coaly streaks, broken	 		R3		-			 	 				
						stick								<u> </u>					
\bot							<u> </u>		1	-	175 .				ļ				
+	45.87	45.87		205	Shale	as above	├		R3	 	75.4			-	 				\vdash
+		43.0/		.203	SIMILE	as autive	 		 	1		\vdash		 					
+				.035	Coal	dull, shaley			R2	 	t	\vdash	· · · · · · · · · · · · · · · · · · ·	 	 				\vdash

ALL LINEAR UNITS IN METRES

FF --- FRACTURE FREQUENCY



MEASURED FROM THE HORIZONTAL PLANE

^{* --} R &/OR S -- GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT BANNER EAST
AREA	S.E. B.C.

		-
HOLEN	O MBE 101	
CONTINUED	1	

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BOX	DEPTH AT TOP	DE !	27 H		,	LITHO DESCRIPTION	S & A 14	A	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD	FRAC	ROD	NO		residual	ASH %	V M.%	FC.%	F.S.I.	C.V.
ш	BOX 45.87	FROM			Main				111111				Gr.b.	105.0001					
8	43.07			.19	Shale	as above													
							ļ	-		ļ	72								
\vdash	46.33	46.33		ΛE	Cool /SH	shale interbedded, dull, broken stick	 	 	R3	╁	72			 					
1		40.33		.03	COAL / D.N.														
				.03	Shale	as above, broken stick			R2		<u> </u>								
$\vdash\vdash$				37	Shale	black, coal streaks, stick	 	77	R2	+									
╂─┼				• • •	SHOTE				<u> </u>										
				.005	Coal	shaley, stick	-	ļ	 	+	ļ			 					
—			,	.10	Shale	carbonaceous, stick	├	 	 	 	 			 					
H																			
				.04	Shale	coal stringer, broken		-	<u> </u>	+	<u> </u>		<u> </u>	 					\vdash
$\vdash \vdash$.16	Shale	black, carbonaceous, coal whisps, broken stick	 	 	∤	+-	 	 -	<u> </u>	 					
				.10	DILLIC														
\Box				.19	Shale	black, slightly silty	<u> </u>	-	<u> </u>		ļ		<u> </u>	-					
9				· · ·	 		├	 	1	†			<u> </u>	†	!				
				.20	Shale	as above, coal stringers near base,													
						broken stick	├	 	 	+	ļ	.		1	-				\vdash
\vdash				.02	Coal/SH	rubble	╁	 		+	 	 		 					
		L			1					<u> </u>	ļ								
			47.825	.33	Shale	black, broken stick	<u> </u>	 	R3	 	 	-	-	 	-				
Н	47.85						 	 	 	+	52	 	<u> </u>	<u> </u>	 				
	47.00	47.85	49.02	1.17	Shale	black, sandy/silty in places, stick			R3										
	49.07		50.60	, 53		at all to hyphon at lok	₩-	 	R3	+	83	 		 	 				
\vdash	50.06	49.07	50.60	1.53	Shale	as above, stick to broken stick	 	 	1 1/2	 	69.9			 					
	30.00	50.06		.28	Shale	as above, few coal blebs, slick along bed			R3_					1					
						Joints: 161°	 	 	1	+	<u> </u>	!	 	 	 				\vdash
\vdash		 		35	SLIST	shaley bands, soft sediment deformation, coal	1	†—	╂	+	 	 	 		 				
		<u> </u>		رر،	DUIDI	blebs, coal bright along bedding at base													
		ļ					↓	ļ	R3		 	}	 	-	 				
₽	<u> </u>	 		.10	Shale	black, coal streaks, stick	+	 	17.3	+	1		1-	 	 				
10	<u> </u>		<u> </u>		<u> </u>														
				.13	Shale	black, slick at base with coal, stick	-	 	R3	+-	-		 	-	 			<u> </u>	 -
		L	l	L	1		<u> </u>		ـــــ		上	<u>1 </u>	<u> </u>	1	<u> </u>			L	

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT	BANNER	EAST	
AREA	S.E.	B.C.		

HOLE No. MBE 101

PAGE.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A FDDING	SUMM/ HARD- NESS	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	NO		ST %	ASH %	V M.%	F.C. %	F.\$.1.	C.V.
10	BOX			\vdash				<u> </u>					G 7.D.	18310001			<u> </u>		
\Box				.08	Shale_	as above, stick			R3										
\vdash			51.88	.34_	SLIST	medium and light gray (sandy), stick	 -	 	R3					ļ					
-	52.12			<u> </u>			 	├	 		94.5			—					
	_::::::::::::::::::::::::::::::::::::::	52.12		1.00	SLIST	as above, some sediment deformation, stick	 	73	R3		74.0								
\Box	=			- T.X			L												
\vdash				.10	SST	fine grain, light gray, silty, stick Joints: 2 x 167° with calcite	.	<u> </u>	R3	-							j		
\vdash						Joints: 2 x 167 with calcite	 -		 	<u> </u>							 		
				.12	SLIST _	as above, stick	<u> </u>		R3					<u> </u>					
			53.73	.39	Shale_	as above, stick	 -		R3			ļ					-		
\vdash	53.64				 		 		 		80.7	\vdash		 					
	22.04	53.64		.23	Shale	black, silty, few carbonaceous stringers, stick			R3		00.7								
\Box						Joints: 159° with calcite	<u> </u>							.					
-			53.92	05	Conl	bright and dull, shaley	 	├		 		 							. <u> </u>
\vdash			33.92	• 03	Uai_	Dright and duit, statey	 	├	\vdash					 	-				
	55.17										64								
\Box		55.17		.14	Shale	black, silty, few carbonaceous stringers,		<u> </u>	R3										
						coal along base	├		 			_		 					
┝╾┧				.52	SLIST	medium and light gray, coal blebs, soft sediment			R2	}		 		 -					-
				-		deformation,													
						Joints: 157°													
11				 -			 		├								-		
 -			56.75	.92	SLIST	medium and light gray, shaley at base, stick	-	\vdash	R3	 				 	<u> </u>				
\square	56.69										88.6								
┡		56.69		μ.36	Shale	silty, black	ļ	<u> </u>	R3	ļ		ļ		 	-				
\vdash			58.21	.16	SLIST	as above	 	 	R3	-		-		 					
	58.22										86.1								
┠╼╌┤		58.22		.21	SLIST	as above	<u> </u>		R3	 -	<u> </u>	ļ				<u> </u>			
H			58.52	.09	SST	fine grain, light gray, with shale and siltstone	 	-	R3			 -		 					
						bands, stick, some soft sediment deformation													
		لبسيا			<u> </u>	<u> </u>		L	<u> </u>		L	L		<u> </u>					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

M MEASURED FROM THE HORIZONTAL PLANE

^{* *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER FAST	
AREA	S.E. B.C.	

4			
	HOLE No.		101
l	CONTINUED	PEDE	101

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вох	DEPTH AT TOP	DEF	TH T	LITHO DESCRIPTION					SUMMARY GEOTECH BEDDING ANGLE (*) HARD-FRAC RQD RESS FREG				ANALYTICAL DATA									
No.		FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	ROD	SAMPLE NO		IST %	ASH %	V M.%	F C. %	F.S.I,	C.V.			
11																						
	58.52				·				Ī		70											
		58.52		1.01	SST	as above, occasional coaly streaks, stick			R3													
						Joints: 2 x 163°, calcite																
-					-		↓		 	 												
				.06	SLTST	dark gray to black	+		R3	_				ļ					ļ			
-+				25	SLTST	as above			-	 								···	├──			
\dashv					20121	as above	+			 				 								
12		- 1					+		 	 												
	- 1	1	60.00	.06	SST	light gray, fine to medium grain, salt and			R3	1				†								
					-	pepper, rubble, large joint with calcite	1 -															
										T									_			
	60.05										75.9											
→		60.05	61.31	1.26	Shale	black, silty in places, stick		74	R3													
							J		ļ	├	100		L									
	61.26	61.26		36	Shale	black, stick	+		R3	+	100		ļ	ļ								
-+		01.20		.20	Sinte	black, stick	 		K2	+				 			-					
\dashv				.28	Shale	as above, rubble, some carbonaceous slicks	+		R3	 	-		<u> </u>									
\dashv					Diaze	along bedding breaks (numerous), trace coal	+			1				† — —								
						, , ,																
				.34	Shale	black, stick				1				†								
									Ì													
			62.35	.21	Shale	as above, pyrite, stick																
—						· · · · · · · · · · · · · · · · · · ·				.				<u> </u>								
	62.48	- 40	62.00	1 44	G1 1 -	3.11	1	-5-5	20	ļ	43		ļ	ļ	ļ				ļ			
-		62.48	63.92	1.44	Shale	black, stick Joints: 128°	-	73	R3	+				_		i						
	64.00	-				JOINES: 120	+		<u> </u>	 	85.4		<u> </u>	·					ļ			
\dashv	04.00	64.00		.22	Shale	as above	+		R3	╁──	03.4			 								
13		07100		•	DIRIC	as asove	+		1.3	†				<u> </u>		-						
-7				.25	Shale	as above, broken stick	1		R2	 			<u> </u>	 								
							1			† <u>-</u>				 	-							
				.06	Shale	coaly, sheared, broken stick			R2	1									1			
\Box																						
_				.02	Shale	black, slicked	\bot		R2													
-								ļ						ļ					 _			
\dashv				.06	Shale	carbonaceous, sheared, rubble	+		R2	 				ļ <u>.</u>								
-+	· 			.02	Shale	black, slicked	+	ļ	R2	-									 			
-+			-	.02	anare	DIACK, SIICKEU	+		KZ.	+-				 				· · · · · · · · · · · · · · · · · · ·	 			
\dashv				.01	Coal	dull and bright	+		 					 					 			
-+		——					1			+		$\overline{}$		+								

ALL LINEAR UNITS IN METRES

ANGLE MEASURED FROM CORE AXIS

MBE 101 HOLE No.

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* *} R B/OR S — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	H
AREA	S.E. B.C.	COI

HOLE No.	MBE	101	
CONTINUED	<u></u>		

PAGE.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A	SUMM	ARY GE	OTECH		Ĺ		ANALY	TICAL	DATA		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	AT TOP	FROM	to	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	pesia	ANGLE	HARD-	FRAC	ROD	SAMPLE NO	MO.	ST % residual	ASH %	V M %	F C.%	F.S.1.	C.V.
	OF BOX	FRUM	10		WHILE	Ametrico Interope code accounts for each acount	┝╾┥	(*)	141, 33) KEG			gr.b.	residual	-				
13	64.00			.11	Shale	black, slicked, broken stick		 	 	<u> </u>		 	 						
\Box				.01	Shale	black, carbonaceous and coaly	}		 	-		 							<u> </u>
\vdash				18	Shale	black, rubble	\vdash	-	 			 							
\square			65.52	.58	Shale	black, broken stick	-	-	-	 		 	-						
╁╼┼	65.53			├─			 	 	 	-	66.4	<u> </u>		 					
旦	05.55	65.53		.15	Shale	black													
\Box							 		 -	 -	Ļ	 	-						
⊢				.015	Shale	coaly, sheared	 	ļ · · · · -	 	 -		t	 	<u> </u>					
\Box				.06	Shale	black, slicked, coaly													
\mapsto				-			G		 	┼		├	ļ	 					
				1	Coal	bright.	1												
				.02	Shale	carbonaceous	G		 			<u> </u>	ļ	ļ <u> </u>					 _
╂┷┼				015	Coal	dull with bright	G	 	 	 		 	 	-	 	<u> </u>	<u>.</u>	<u> </u>	$\vdash \vdash \vdash$
H			· 		1		1		<u> </u>		İ	<u> </u>	<u> </u>	1					
				.045	Shale	carbonaceous, coal streaks	G			ļ				ļ					ļ
┞		ļ		003	Coal	bright	G	-	+	 			-	 		<u>. </u>			
H		├							<u> </u>	1					İ				
				.07	Shale	carbonaceous, coaly streaks	G	L	ļ	ļ	<u> </u>		<u> </u>	ļ	ļ				ļ
$\vdash \vdash$		ļ	<u> </u>	104	Coal	dull, rubble	G	 	1	-	 -	╁	├	 					├─┤
\vdash			-	1.04			† <u> </u>	 	1	† 	 	†	<u> </u>		 				
\Box				.03	Coal	dull	G					<u> </u>	<u> </u>	ļ	ļ				
\vdash		-		1 702	Coal	bright and dull	G	├ ──	 	 	-	 	 -	 	 	ļ			
		-	<u> </u>	1.02			1		†	†					İ				
口				.03	Coal	dull with bright	G		Ţ				ļ	ļ					
		ļ	 	015	Coal	bright with dull	G		 	1	\vdash	├	 	 	 	 			
\vdash			 																
				.005	Coal	dull with bright	G				ļ			ļ	1				
 		-	ļ	045	Coal	dull	G	\vdash	 	+-	 	 	 	 	 	 			<u> </u>
┞┈┼		 	 	1	1		†	t	1			1	1		<u> </u>				
				.01	Coal	bright	G				ļ	1			Ţ				
ш				1	<u> </u>		<u> </u>		ـــــ			ــــــــــــــــــــــــــــــــــــــ	<u> </u>	l	<u> </u>			<u> </u>	

ALL LINEAR UNITS IN METRES

ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

FILE No BA - 267 REVISED Feb. 1981 FORMERLY FILE No. BA -212A

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

1	PROJECT	MOUNT	BANNER	EAST	
	AREA	S.E.	B.C.		

HOLE NO MBE 101

PAGE.14

вох С	DEPTH AT TOP	DE	TH			LITHO DESCRIPTION	SEAM	EDDING	SUMM	ARY GI	ОТЕСН	CAMBI E			ANALY	TICAL	DATA		
No.		FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	SAMPLE NO		residual	ASH %	V M.%	FC.%	F.S.I.	C.V.
13	***				· · · · · · · · · · · · · · · · · · ·		1		1				01.0.	1001000					\vdash
				.05	Coal	bright with dull	G												
+				.01	Shale	coaly	G		╁	 	-			 					\vdash
				.01			† <u> </u>		<u> </u>	1				 -					
\perp				.02	Coal	dull and bright	G		1										
+				.015	Coal	dul1	G	 -	 	1		<u> </u>	 	 					
1									1					<u> </u>					
+		_		.005	Coal	bright	G		 	 	ļ	 		├ ──					-
				.02	Coal	dull with bright	G		t -	 	†		<u> </u>						<u> </u>
				005	Gl - 1														
				.005	Shale	coaly	G		╁	1	 		 	 		-			
				.03	Coal	dull	G		ļ		ţ								
+				045	Coal	bright	G	<u> </u>	 	+				├	-				-
				.043															
+				.09	Coal	dull	G	ļ	<u> </u>	ļ	<u> </u>								
+				.03	Coal	bright with dull, rubble	G		 	 	 			 -					
丁																			
\dashv	-			.04	Coal	dull with bright	G		\vdash		 			 					
#				.05	Coal	dull, soft	G			ļ									
\dashv				025	Shale	black, carbonaceous	G	<u> </u>	├	 	ļ			├					<u> </u>
\top		,		.045	State	black, carronaceous	+-	<u> </u>	╁	†	 		<u> </u>	† ·					
\perp				.02	Coal	shaley	G		Ι	ļ	I								
\dashv				.03	Shale	carbonaceous with coal streaks	G		 	†	 	 	l	 -	 				
丰																			
+				.005	Coal	bright	G		 	ļ	ļ	.	<u> </u>		ļ	-			
士				.07	Shale	carbonaceous, slicked	G												
+			CC 702	10	C== 1			ļ	<u> </u>		ļ								
_			66.793	.12	Coal_	dull, rubbley	G	 	 	<u> </u>	-			 					
- (67.21	67.01			g		1			ļ	.15								
\dashv		67.21		.02	Coal	dull	G	 	┼	╅	├	-	<u> </u>	 					
土				.11	Coal	dull with bright	G			1									
$oldsymbol{\perp}$]													Ι					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

M MEASURED FROM THE HORIZONTAL PLANE

^{* •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	
AREA	S.E. B.C.	

HOLE No.	MBE	101	
CONTINUED		***	

PAGE.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A DOUNG	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
No.	AT TOP OF BOX	FROM	to	₹ ₹ ₩.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	RQD	SAMPLE NO	MO	residual	ASH %	V M %	F.C.%	F.S.I.	C.V.
	вох 57.21	1 1000		1			 	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1			Gr.D.	1000					
	,,,,,,			.09	Coal	as above	G												
\vdash				.04	Coal	dull and bright	G		-	 									
 	-			1.04	COAL		1		1					<u> </u>					
\Box				.055	Coal	dull	G	ļ	-	1									
├ ─- ├				.015	Coal	bright with dull	G	 	1	 	<u> </u>			<u> </u>					
口				1						ļ									
┝╼┤				1.035	Coal	dull, broken stick	G	-	+	┼				 					
口				.045	Coal	dull	G							<u> </u>					
П				.015	Coal	bright, broken stick	G-	ļ	 		ļ	├ .							
H		 		1.013			1			<u> </u>									
				.04	Coal	dull with bright, broken stick	Ğ		ļ <u> </u>					 					
┝╼┤		 		.06	Coal	dull, broken stick	G	t	1			-		<u> </u>					
				1			Ī.,		Ţ	1	ļ								
\vdash	-,	-	<u> </u>	.06	Coal	dull and bright, broken stick	G	 	 	+		 		 	 				
	•			.26	Coal	bright with dull, broken stick	G			1		<u> </u>							
		ļ <u> </u>	ļ	.03	Coal	dull with bright, rubble	G	 	+	1		<u> </u>	<u> </u>	 	-				
\Box				1										<u> </u>					
				1.07	Coal	dull	G	 	╁	 	1	-	-	 					ļ
\vdash	 -	ļ	<u> </u>	.035	Shale	carbonaceous	G			†					<u> </u>				
	_	-		1			1	ļ	ļ	ļ				ļ		-			igwdown
14			 	.065	Coal	dull, rubble	G	┼──	† -	+	<u> </u>	 	<u> </u>	 					
				.015	Coal	dull and bright, broken stick	G	1		1	ļ								
\vdash		-	<u> </u>	1.11	Coal	dull, broken stick	G-	┼	 	+	-		-	 	 				
		<u> </u>		<u> </u>	<u> </u>		1							İ					
		Į		.005	Coal	bright, broken stick	G	 		 -	 	 	 		<u> </u>				
\vdash		<u> </u>		.11	Coal	dull, broken stick	G												
		1		1	0.1	3.11th buight bushen ghigh				4				-	ļ		ļ		
Н		 	 	.02	Coal	dull with bright, broken stick	G	 	+	+	\vdash	 	 		<u> </u>			<u> </u>	
				.02	Coal	bright with dull, broken stick	G												
		<u> </u>	ļ <u>-</u>	.005	Coal	bright	G	-	 	+	 	 	 	+					
		ļ	<u> </u>	.003	Coar	I pr. raire		1	_		<u> — — </u>		L	1	<u> </u>			L	

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION [%]

FF --- FRACTURE FREQUENCY

PROJECT		
AREA	S.E. B.C.	

HOLEN	O MBE 101
CONTINUE	5

PAGE.16 OF

вох	DEPTH AT TOP	DE	PTH		[LITHO DESCRIPTION	SEAM	▲ BEDDING	SUMM HARD NESS	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	ROD	SAMPLE NO		residual	ASH %	V M.%	F C.%	F.\$.1.	C.V.
14	8OX						 	<u> </u>					Q.F.D.	14314401			<u></u>		
				.065	Coal	dull	G												
П			60.60	205	7 1	1	G		<u> </u>	 									
 	68.73		68.69	.085_	Coal	bright with dull	16-		+		<u> </u>								
\Box	00.75			.045	Shale	carbonaceous with coaly streaks, slicked	G												
 +				.02	Coal	dull	 G		├					 					
				.02	COAL	<u>uuii</u>	Ť												
\Box				.015	Coal	dull with bright, rubble	G		1	ļ	<u> </u>								<u> </u>
╅			 	.02	SH/Coal	rubble	G	 	 -	 								· 	
\mapsto				.02	Coal	dull with bright	G	 		 	 	<u> </u>	 	 					
旦				.035	Shale	carbonaceous, slicked	G												
-		.,					G		-	-									
H				.02	Coal	shaley, mush			<u> </u>	<u> </u>									
\Box				.055	Coal	dull, slicked	G												
$\vdash \vdash$.07	Coal	dull with bright	G		•	 	 								
↤				.025	Coal	dull, broken stick	G	 	ļ	-	-	-		 					
H			 	.01	Coal	dull, mush	<u> </u>												
\Box				0.3	1	dull, broken stick	G	<u> </u>	ļ			ļ							—
\vdash	_			.03_	Coal	dull, broken sciek	+ -	╁──	 	 	 	-		-	<u> </u>				
				.095	Coal	bright and dull, broken stick	G												
Ы				.06	Coal	bright with dull, broken stick	G	 	 	-	1		<u> </u>						
1			<u> </u>	.00	COUL		 		t										
口				.01	Coal	bright, broken stick	G		Γ	1									
H		·	!	.01	Shale	carbonaceous, broken stick	lg -	 	 	+	<u> </u>	 	<u> </u>	<u> </u>	 				
口																			
1			 	.075	Coal	bright with dull, broken stick	G	\vdash	 	+		 	<u> </u>	ļ. <u></u>	1				$\vdash \vdash$
			<u> </u>	.01	Coal	bright, broken stick	G			†									
							1		ļ										ļ
⊩				.04	Coal	bright with dull, broken stick	G	-	 	 	<u> </u>								
 +			<u> </u>	.065	Coal	dull with bright, broken stick	G		<u> </u>		<u> </u>								
_						MEASURED SHOW THE MODITORIES BLANCE													

ALL LINEAR UNITS IN METRES

M MEASURED FROM THE HORIZONTAL PLANE

A ANGLE MEASURED FROM CORE AXIS * * R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD -- ROCK QUALITY DESIGNATION [%]

PROJECT	MOUNT BANNER EAST
AREA	S.E. B.C.

HOLE No.	MRE	101
CONTINUED		

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PAGE.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	BÉ DDING	SUMM	ARY GE	ОТЕСН	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	RQD	SAMPLE NO	-	residual	ASH %	V M %	F.C.%	F,\$.1.	C.V.
14																			
				.13	Coal	bright with dull, rubble	G	[ļ	<u> </u>									
-				.04	Coal	dull, shaley	G	 	†					<u> </u>					
\Box				00	Co.1	2.17	G	<u> </u>	ļ	ļ.,	[<u> </u>					
				.09	Coal	dull, rubbley	16	 	 	<u> </u>				 			<u> </u>		<u> </u>
\Box				.02	Coal	dull, broken stick	G	!											
\dashv				.03	Coal	dull and bright	G	 	╂	 				-					
二																			
\dashv				.04	Coal	dull with some bright	G	 	 	 				 -					
コ				.06	Coal	dull	G		1	<u> </u>									
\dashv				.02	Coal	dull with bright	G	├	 	+	ļ		<u> </u>	 					
								<u> </u>		1									
-				.11	Coal	dull	G -	 	-				 -	 					
				.02	Coal	dull and bright	G		<u> </u>										
			70.04	02	01	dull	G	├	┼	ļ				 					\vdash
\dashv		-	70.04	.02	Coal	duii		 					_	 					
\Box	70.41	70.42		22							73)								
		70.41		.02	Coal	dull with bright, rubble	G	╁─	┼──	 -	 		 -	 			· ··· ·- <u>-</u>		
_				.03	Coal	dull, rubble	G		\sqsubseteq										
\dashv				.015	Coal	bright	G	├ ──	 	+	-		 	+	-				
\sqsupset								1											
\dashv		<u> </u>		.03	Coal	dull with bright	G		├	 				 	ļ				├──
				.09	Coal	dull, rubble	G		1	1									
				035	Go-1	dull with bright, rubble	G		 	<u> </u>				ļ					-
				.035	Coal			<u>† </u>					<u> </u>						
				.04	Coal	dull, rubble	G	I											
1				.03	Coal	dull, mushy	G	<u> </u>											
\Box								1—	1					1					
		 		.04	Coal	dull and bright, broken stick	G	 	 	+-	-		\vdash	†			<u> </u>		
二				.09	Coal	dull	G	1											
		<u> </u>		L,		<u> </u>	1	<u> </u>	<u> </u>	<u> </u>			<u>L</u>	<u> </u>	ŀ				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* -} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST
AREA	S.E. B.C.

HOLE No.	MBE 101
CONTINUED	

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PAGE.....

BOX D	DEPTH T TOP	DEP	TH			LITHO DESCRIPTION	55.644	(A)	SUMMA	IRY GE	OTECH		ANALYTICAL DATA						
A C	T TOP			тн. }	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	SUMMA HARD- NESS	FRAC	ROD	SAMPLE		ST %	ASH %	V M %	F.C. %	F.S.I.	C.V.
No.	OF BOX	FROM	то		MAIN	AMPLIFIED LINCEDDE COAL RECOVERT TOR EACH SEAM)	$\vdash \vdash$	 '''	MESS	FREG		-	or.b.	residual					
14		\longrightarrow		.05	Coal	dull with bright	G	 	 		\vdash	\vdash		├					
$\vdash \vdash$			+	-U3	COAL	duli with bright													
\Box				.085	Coal	dull and bright	G												
lacksquare		\longrightarrow				<u>.</u>	_	 		\vdash		igwdown		 					
$\vdash +$	+			.02	Coa1	bright	G	 	\dagger		$\vdash \vdash$	\vdash		-					
世				.11	Coal	dull with bright	G.												
	\Box		$\overline{}$							\vdash	\vdash	 	<u> </u>	\vdash					
$\vdash \vdash$	\longrightarrow	+		.015	Coa1	bright with dull	G	\vdash		$\vdash \neg$	 								
				015	Coal	dull with bright	G												
							 _	ļ	\vdash	├ ₁	ł ł	├	<u> </u>	 	\		\longrightarrow		
$\vdash \vdash$.02	Coa1	bright with dull	<u></u>	 											
				.025	Shale	carbonaceous	G												
H	\longrightarrow			025	C - 1	bright with dull	G	 	1			1		 	 	\			
├─ ┼				.025	Coal	DITANT ALEU GATT	Ľ												
口	\Box			.01	Coal	dull, rubble	G	ļ					L	ļ		\			
$\vdash \vdash$	\longrightarrow				Coa1	1_1_1	G	 	\vdash	\vdash			 		 	├	\longrightarrow		
$\vdash \vdash$	\longrightarrow			.09	COAL	bright with dull	Ľ												
口				-11	_Coal	dull with bright	G								-				
$\vdash \vdash$				015	01	bright with dull	G	\vdash	+	\vdash	\vdash	 	 	 	 		<u>'</u> ——		
\vdash					_Coal														
				.01	Coal/SH		G		<u> </u>	<u> </u>	ļ			<u> </u>		<u> </u>		 	
\vdash		· ·		.02	Coal	dull	G		+	-		 		 	-	\vdash			
$\vdash \vdash$				1.02	COAL	GGIT	Ľ												
	\Box			.05	Coal	dull with bright	G	ļ	\bot	ļ	ļ			ļ					
┞╼┿			· · · · · · · · · · · · · · · · · · ·	.05	Coal	bright with dull, rubble	G	┼	 	\vdash	 	\vdash	ļ ——	 	 	 	lacksquare	· · · · · · · · · · · · · · · · · · ·	-
\vdash					COAL	ATTRUC ATCH GOTT? TODDIE		<u> </u>											
口				03	Coal	bright	G	- -	—	<u> </u>		ļ	ļ			 	!		
$\vdash \vdash$	\longrightarrow		` ——	.03	Coal	bright with dull	G	 	+-	 	+	 	 	 	1	 			
\vdash					LOAL	DITAME ATOM OUT													
			71.63	.04	Coal	dull with bright, rubble	G	 		<u> </u>	-	\vdash	ļ	1	ļ	 			
$\vdash +$		\ -	<u> </u>	\vdash	ļ		 	+-	+	 	\vdash	 		+	 	 	\vdash		
-+	71.93	71.93		.025	Coal	bright with dull, broken stick	G												
	1																		
		E WAR FOR FROM THE WORLDWIN BLANE																-	

ALL LINEAR UNITS IN METRES

FF --- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

R MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT BANNER FAST
AREA	S.E. B.C.

HOLE No.	MBE	101
CONTINUED		

PAGE..... OF.....

BOX	DEPTH AT TOP	DE	PTH	Ţ.,		LITHO DESCRIPTION	SEAM	▲ ■EDDING	SUMM	FRAC	OTECH	SAMPLE		CT 9/	ANALY	TICAL	DATA		
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	NESS	FREG	ROD	NO		ST % residual	ASH %	V M.%	F.C %	F.S.I.	C.V.
1/	71.93								i										
				.01	Coal	dull, mush	G												
\vdash							+	ļ		-		ļ							
┢╾╅				.055	Coal	bright and dull, broken stick	G			 -		 							
				.025	Coa1	dull with bright	G												
$\vdash \vdash$						1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	G	 	-	 	ļ	ļ							
┝╼╂				.02	Coal	dull and bright	 		1		<u> </u>	\vdash							
				.01	Coal	bright with dull	G			1				ļ					
┷				.055	Coal	bright and dull	1		 	-	-	-							
\Box			•	.053	COAL	bright and dull	G		 	┿		 -		<u> </u>	-				
				.07	Coal	dull with bright	G												
\vdash				. 12	Coal	Luduka adak da 11	+_	 	 	 	-	 		-					├──
				12	GOAL	hright with dull	L.G.		1	1									
\Box				.055	Coal	dull and hright	G												
$\vdash \vdash$.07	Coa1	dull	G	 	 	 	<u> </u>	<u> </u>			 				
	·									1					1				
\Box				.005	Coal	dull with bright	G	ļ	<u> </u>	<u> </u>		ļ							
\vdash				.045	Coal	dul1	G	 	 -	╅	 	<u> </u>			-				\vdash
15				1.043	boar		1	 	<u> </u>	<u> </u>					<u> </u>				
\Box				.06	Coal	dull, rubbley	G		ļ .	ļ								<u></u>	
				.02	Coal	bright with dull	G			 	·	 	· · · • • • • • • • • • • • • • • • • •		 				
				.02	Joan		Ť	<u> </u>	t										
				.015	Coa1	dull, some bright	Ğ												
\vdash				.01	Coal	dull with bright	G	-	 	 		-		-	<u> </u>				
\Box				.02	Coal	dull, trace pyrite	G												
\vdash				.02	Coal	dull with bright	G	 	 	+		-	-	 	 				
					OUAL				<u> </u>										
\sqcup				.02	Coal	dull and bright	G		ļ										
				.02	Coal	dull, rubble	 G	 -		\vdash	1			 					
				.02	COAL														
\Box				.02	Coal	bright, rubble	G												
\vdash				.025	Coal	du11	G	 	}	+	-				ļ				\vdash
	 -	لـــــــــــــــــــــــــــــــــــــ		.023	COAI			L		↓		L	L		1				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 •} R &/OR 5 — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

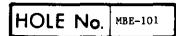
FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	HOLE No.	PAGE 20
AREA	S.E. B.C.	CONTINUED MBE 101	OF

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	BEDDING	SUMM	ARY GI	OTECH	SAMPLE	 	ANALY	TICAL	DATA		
No.		FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FREG	AGD	SAMPLE NO	ST % residual	A5H %	V M %	F C %	F.\$.I.	C.V.
15																		
\Box				.02	Coal	bright and dull	G		ļ									
\vdash				.04	Coal	dull and bright	G	├	 	 	├		 					- i
!				.04	_0041	dari and bright	1		!	1			 					
\Box				.02	Coal	dul1	G											
₩				.04	Coa1	dull with bright, rubble	G	-	 	<u> </u>			 		———			 -
┠╍╂				• • •	COAL	duir with bright, lubble	╁~	 -	 	 -	<u> </u>		 					
			72.895	.05	Coal	dull with bright	G											
\vdash							—	 	 	 			 -					
┝╍┼	73.46	73.46		.06	Shale	carbonaceous	G		 	┼			 					
	_				JULIE	Lativiaceous	<u> </u>											
				.07	_Coal	dull and bright	↓c	-	 		Ļ		 					
┝╌┼				26	Coal	bright, some dull, rubble	G		ł	1	_		 					
				ZO	LOSI	oright, some duit, runoie	1"											
\Box				.35	Shale	carbonaceous	↓ G	<u> </u>	 	 	Ļ		 					
\vdash				.02	Coal	bright and dull, sheared	G	-	 -	 	├							├──
				-U <i>-</i>	Loai	hright and outi, sheared	1			1.								
			74.075	.17	Shale	carbonaceous, minor coal stringers, slicks	<u> </u>				<u> </u>							
							╁		├	├			 					
	74.22	74 22		.49	Sha1e	black, stick	1		† — —	†			 t					
								Ţ	<u> </u>		L		 					
\vdash	——			-02	Shale	hlack, carbonaceous, rubble	┼	├	 	 	 		 					
\vdash				.055	Shale	black, carbonaceous	+	 	╁	 	$\vdash -$		 · · · · · · · · · · · · · · · · · · ·					
					Ullage													
\vdash				.015	Coal	bright			—	-	ļ	.	 -					 _
┝╌┼				.035	Coal	dull with bright	+	 	┼	 			 					
				.055	COAL	dull with bright												
				.025	Coal	bright with dull	 		ļ	4	<u> </u>		 ļ					
╟╌┼				025	Shale	carbonaceous	+	 	 	+	 	_	 	\vdash				\vdash
				142	Share	Carbonaceous				1							· · · ·	
				.05	Coal	bright and dull, broken stick												
┢┷				 	<u> </u>	3.4 - 1	╁	 	 -	╁	├		 · · · ·					
 				.14_	Shale	black	1-	1	 	 	\vdash		 -					
				.02	Coal	bright and dull							<u> </u>					

ALL LINEAR UNITS IN METRES

ANGLE MEASURED FROM CORE AXIS



MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

	PROJECT		BANNER FAST	
		riouni	DAININGN-EAG1	
ŀ	AREA	S.E.	B.C.	

HOLE No.

PAGE 21 OF.....

вох	DEPTH AT TOP	DEF	HT			LITHO DESCRIPTION	SEAM	AE DDING	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		· · · · ·
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	NO		residual	ASH %	V M %	F C. %	F.S.1.	C.V.
	BOX						+						ar.b.	785.0007	-				
11				.09	Shale	black	+		!	<u> </u>				1					
				-107	MIGAL	, Dawett	1												
				.06	Coal	dull with some bright, broken stick													
										ļ	ļ		ļ						—
4			75.695	.45	Shale	carbonaceous, broken stick			R3	ļ	 -	 		├		_			
-	3 - 00							-	-	 	57.4	 	}		<u> </u>				
\dashv	75.90	75.90		.15	Shale	black, stick	+		R3	1	37.5	··	-	 -			-		
-+		73.30		.17	Share	DIACK, SEICK	1		1	1		†							
_				.50	SLTST	gray	T		R3				l				_		
									<u> </u>	L									
\perp				.83	SST	light gray, fine grain, massive			R3		ļ	.		1					
\rightarrow							 		-		81.8	-	├	-	 i				
16				24	000		+		R3	 	81.6	 	 	 	 				-
+	77 42		77.44	.06	SST	as above	 -		1.5	 	 	 	 	 	 				
_	77.42	77 42		.15	SST	as above coal streaks			R3					<u> </u>					
T																			
			78.94	1.37	SST	light gray, fine grain, darker siltstone and			R3_	ļ				<u> </u>	ļ .		·		
_				!		shale bands, coal along fracture near base	4	ļ						ļ					
-				<u> </u>			+			1	71	-	 		 				
+	78.94	78-94			SST	as above, soft sediment deformation	+		R3	+	1/1		 	 -	-				
╅		78.94		1.14	SST	Joints: 1680 with calcite	+		L 1/2	· · · · · ·		_	 	ļ	<u> </u>				
_						Joines, 100 with Calcute	1					İ		T					
				30	SLTST	sandy, becoming shaley at base			R3										
ightharpoonup										-					ļ				
		·	80.42	.04	Shale	silty, black			R3	+		├ ──	ļ	ļ	ļ		ļ		—
-+	· -			-				ļ	┼	 	32.9	1	 		<u> </u>				
- 	80.47	80.47		.04	Shale	black, carbonaceous		 	╁	+	J. J.	1	 	 	 				
-		00.47	-	.04	Buate	Diack, Carbonaceous		 		1		 	 	 	1				\vdash
\neg				.22	Coal	dull with bright	1					1			<u> </u>				
_[.15	Shale	carbonaceous		 	 	-			ļ	 	<u> </u>				
\dashv						 		-	₩	+	 		 	 	 	ļi			
			 	.025	Coal	dul1			 -	+	-	 	├	 	 				
\dashv				.045	Coal	dull, shaley	 		╁	+		 	 	 	 				<u> </u>
-+	•			. 043	CUBL	- dutil Silatey		!	1	1	1	†	1	1	 				
				.025	Coal	dull with bright													
				.09	Coal	dull with bright, rubble		<u></u>	<u> </u>	<u> </u>	1	<u> </u>	<u>l </u>	<u> </u>					l

ALL LINEAR UNITS IN METRES

FF ---- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* *} R &/OR 5 — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

	PROJECT	Moun	r banner	EAST		-
ı	AREA	S.E.	B.C.		 	_

HOLE No.	мве	101	
CONTINUED			

PAGE 22 OF

вох	DEPTH AT TOP	DE	PTH		1	LITHO DESCRIPTION	SEAM	▲	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	ARY GE FRAC FREG	ROD	NO		residual	ASH %	V M %	FC.%	F.S.I.	C.V.
16	802						+	,,,	1	1			Gr.D.	residuoi					
				.21	SST	silty, coal along fracture													
_																			
			ļ	.06	Shale	with coal along fracture	↓	ļ	ļ	ļ			· · · · · ·	ļ		}			
+			-	.10	SST	silty, coal along fracture	· 	 	┼	╅									
\dashv				•10	331	Silty, toal along fracture		 	<u> </u>	 `						1			
17							İ	<u> </u>			10								
_			81.96	.66	SST	fine grain, coal along fracture Joints: 5 x 165° with calcite		43	R3	<u> </u>									
\rightarrow			-	ļ	-	Joints: 5 x 165° with calcite	 	 		 									
\dashv	82.14								 	 	100			 					
	- 14	82.14		.41	SLTST	sandy, dark gray, coal along fracture	†	 	R3	†	100								
							1												
				. 32	SST	as above	 	_	R3		ļ				L				ļ
-+					G1 = G2		┪—	 	R3		-			ļ					—
十				_11_	SLTST	as above	+	<u> </u>	- K3	 									
			83,70	.72	SST	fine grain, coal and calcite along fracture,	1		R3										· ······
\perp			<u> </u>			stick													
\dashv				·			↓		.	ļ									
—∤-	83,67	83.67	 	1 62	SST		+-	├	R3	+	82.6			-					
\dashv		03.07	<u> </u>	1.42	331	as above, minor soft sediment deformation, Joints: 2 x 167 with calcite	+		173	+									
工						9324501 5 4 507 112511 04252210			1	<u> </u>				Ì		i			
			85.20	ш.	SLTST	sandy, dark gray, coal along fracture, stick		69	R3	T						1			
-							+	—	—	 									
 -	85-19	85.19	-	.44	SST	as above, silty, stick	+	 	R3	 	82.3			 	 	-			
18	- 1	דינס_		-44	201	as above, sitty, stick	+	 	- CX	 				 		- 1			
				.86	SST	as above			R3					İ .					
\dashv							1												
+			86.73	.24	SLTST	as above, shaley, stick	+		R3	-				-					
	86.72						+	 	 	+	79.8			 		 			
士	-06.72	86.72		.21	SLTST	shaley with coal breaks some bioturbation	1		R3	1	,,,,			<u> </u>	 				
\Box																			
+			 _	_41	SST	as above, stick	_	ļ	R3	-									
\dashv	+			. 51	SH/SLST	interbedded	+	 	R3	+					 				
十			<u> </u>	-31	านางกรา	Turerbeaned	+	1	2.7	1									
				.50	SST	medium grain, silty, stick	1		R3						i i				
工																			
			88,40	.05	SLTST	shaley, stick	<u> </u>		R3		L	L		<u> </u>			1		

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 : *} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

1		· · · · · · · · · · · · · · · · · · ·	
	PROJECT	MOUNT	BANNER EAST
	ADEA		
1	AREA	SE	R.C.

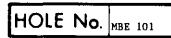
HOLE No.	MBE	101
CONTINUED	L	101

PAGE23....

EPTH T TOP OF BOX					LITHO DESCRIPTION	ISEAMI	BEDDING			\neg	CAMPIE!			ANALY				,I
	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	SEAM DES+G	ANGLE	MARD-	FRAC FREG	ROD	SAMPLE NO		ST % residual	ASH %	V M.%	F.C.%	F.S.I.	C.V.
																		1
88.39										63.6								
 -∔	88.39		.05	SLTST	as above	1		R3										[ـــــــــــــــــــــــــــــــــــــ
			1 12	SITST	eandy etick	ļ	72	D2							+			
\dashv			1.14	36131	Joints: 2 x 164°: 142°	+	12	- 2										
						1										- 1		
		89.90	. 34	Sha1e	slightly silty, coal blebs			R3										
						1		ļ										
0 02						1		├	\vdash	02 7	\longrightarrow					$\overline{}$		\longmapsto
39. 32	89. 92		. 55	Shale	slightly silty	1 1		R3	 	92.7								-
	0,1,2					1			†									
			. 30	SST	silty, stick			R3						1				
		03.44		01 mas										L				
		91.44	.6/	SLTST	shaley	╂—		R3				· ·		 			-	
91.44						+-				90				1				
	91.44		1.01	SLTST	sandy in places, stick			R3						<u> </u>				
			-05	Shale	slightly carbonaceous	1		R3										ļ
\longrightarrow				CT (TO)		1		-										1
			-25	SLTST	as above, stick	+		K3	\vdash				-					\vdash
 t			.01	Coal	hright	1												
					23.311													
↓		92.94	.18	SLTST	as above. stick	1		R3										
02 02						+		├		70		· · · · - · · · · · · · · · · · · · · ·	ļ	-				
94.96			. 52	SLTST	becoming sandy at base	+ -		D2	 	/8		··	 	 				$\vdash \vdash \vdash$
	72.70			ODIOI	becoming dancy at base	1		1.v3					 	1 1				
			.44	SST	with silty bands, stick		73	R3		1					1			
					Joints: 170° with calcite													
			2/	G) -1	12. (1)1	+								\Box				├
			. 24	Shale	slity with coal streaks	+		R3						 				\vdash
						+		 	<u> </u>				 	 				
			.035	SS/SLST	interbed, coal on breaks			R3								1		
					·													
		94.555	. 36	SLTST	snaley, sandy in places, coal streaks			R3	 i				ļ					
9/ 6/						1		 		84 O			ļ	 	_ 			├
74.04 1	94.64		.07	SLTST	as above. stick	+		R3		07.7			 					-
								† *` '					†	1				
3 9	9.92	9.92 89.92 1.44 91.44 2.96 92.96	88.39 89.90 9.92 89.92 91.44 1.44 91.44 92.96 92.96 92.96	88.39 .05 1.12 89.90 .34 9.92 .55 30 91.44 .67 1.44 91.44 1.01 .05 .25 .01 92.94 .18 2.96 92.96 .52 .44 .035	88.39 .05 SLTST 1.12 SLTST 89.90 .34 Shale 9.92 .55 Shale 9.92 .91.44 .67 SLTST 1.44 91.44 1.01 SLTST .05 Shale .25 SLTST .01 Coal .92.94 .18 SLTST 2.96 .52 SLTST .44 SST .44 SST .24 Shale .035 SS/SLST .94.555 .36 SLTST	88.39 .05 SLTST as above 1.12 SLTST sandy, stick Joints: 2 x 164°; 142° 89.90 .34 Shale slightly silty, coal blebs 9.92	88.39 .05 SLTST as above 1.12 SLTST sandy, stick Joints: 2 x 164°; 142° 89.90 .34 Shale slightly silty, coal blebs 9.92	88.39 .05 SLTST as above	R8.39	R8.39	88.39	88.39	88.39	88.39	88.39	88.39 .05 SLTST as above	88.39	88.39

ALL LINEAR UNITS IN METRES

ANGLE MEASURED FROM CORE AXIS



MEASURED FROM THE HORIZONTAL PLANE

^{* **} R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD -- ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT	BANNER	EAST	HOLE No.	_
AREA	S.E.	B.C.		CONTINUED	10

PAGE .24...

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION		A	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
	AT TOP			TH.			DESIG	ANGLE	HARD- NESS	FRAC	#Qn	SAMPLE NO		ST %	ASH %	V M %	F C %	F.S.I.	C.V.
No.	OF BOX	FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)		(*)	NESS	FREG			ar.b.	residual	7.0	7 78	, , ,		
20									Ļ	<u> </u>	<u> </u>								
	94 64								 _	↓			ļ	 					
				1.33	SST	light gray, fine grain, dark silty bands,	1		R3	├	<u> </u>	.	ļ	ļ					
_						soft sediment deformation and bioturbated,	_{-		 	├ ──									-
						stick	1		}	 	-	 		 					
-							+-		+	 	 	1		 			— -		-
╛				•01	Coal/SH		-+		 	 	-	ļ	 	 					
-			96.22	17	SST	as shows becomes oilty at hear	+		R3	<u> </u>	 	 	<u> </u>						t
			40-22	.1/	7221	as above, becoming silty at base Joints: 2 x 165° with calcite			1	 	†		t	1					1
-						JOHNES. Z A 105 WIEN CORCELE	1 -		!	1		<u> </u>							
	96-16				\						99								
		96.16		1, 32	SLTST	with sandy bands, stick	1		R3			Γ							
									L			<u> </u>							
				025	SH/Coal					ļ			ļ	<u> </u>	L				
					Calcite				↓	<u> </u>	ļ	L	L						
\Box					ļ				.	↓		!	ļ						
_				1.02	SLIST	sandy, becoming shaley at base	- 		R3	 		├	 	ļi					-
-							+		├ ─	+			 		-	——			
\dashv				.06		(fault?) broken stick	+		╁	 	-	 	├	 					
-					_Coal_				+		 	 	 	 		-			
-			98.665	00	SLTST	medium gray, slightly shaley	+-	\vdash	R3	+-	1		 	 					
			90.003	.08	9P19T	medium gray, stignily sharey	+		1 2	+	 	 	 						
┪	97.84						 		<u>† - </u>	1	51.6	•	1	 	† 				
\dashv	97.04	97.84		. 71	SLTST	as above, black			R3	† — —			t	 					
\dashv		77.03			, JE101				1	1	1	1							
21	I								1			T	<u>.</u>						
		-		.26	SLTST	black, stick			R3	I			Ĺ	<u> </u>	<u> </u>				
										<u> </u>	ļ								
\Box			99.33	. 52	SLTST	sandy, coal blebs near top		<u> </u>	R3	ļ	└		<u> </u>	ļ	<u> </u>				
					ļ	<u> </u>	-	├ —	1	<u> </u>	\ <u></u>			ļ	<u> </u>			<u> </u>	<u> </u>
	99.36	ļ		Ь—	ļ			<u> </u>	<u> </u>	}	85	ļ	├	ļ	 		<u> </u>		
		99.36	<u> </u>	.18	SLTST	as above. stick		-	R3-R	4	 		-	ļ	 	 			
		 	105				+	-	R3-R	 	 	 	 -	 	 				
			100-91	1.37	SST	very fine grain, coal blebs near top	+-		1K.3-R	4	┼	 	 	<u> </u>	 	-			 -
_	100.00	 		 	 		+	\vdash	1	† 	94.8	 	1		 				
	100_89	100 80	102.41	1 52	CCT	fine grain to medium, light gray,		 	R3-R	4	1 7.0	1	1	 	t				t
		11111.03		1-34		bioturbated salt and pepper, stick	1	-	1	1		1			Ī				
\neg				<u> </u>		PIOCOL POLEY - SAIL AIM PEPPEL			I	1									
1	102.41			T	1		1				96								
		102.41		.35	SST	as above, stick			R3-R	4			[
				<u> </u>	I		T					I	1						

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

ROJECT	MOUNT BANNER EAST	HOLE No.	-
AREA	S.E. B.C.	CONTINUED MBE 10)

80x (DEPTH	DE	PTH		Ι	LITHO DESCRIPTION	SEAM		SUMM						ANALY	TICAL	DATA		
N	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	AMOLE	HARD-	FRAC	RQD	NO		residual	ASH %	V M.%	FC.%	F.S.I,	C.V.
22	BU^_			\vdash			├─	' 	1	-			G.F.D.	resiavai			!		
		-	-	. 32	SST	as above, with fine grain rip-up clasts, stick	┪	-	R3-R4	4				 					
o					551	do doores water 11110 pt and college of college	†		1					 					
			103.90	.82	SST	medium gray, fine grain, coal and calcite			R3-R4	4									
						sticks, some rip-up clasts, coarser at base													
									1	<u> </u>									<u></u>
	103.94						!	<u> </u>	↓	1	95.3					_			
		103.94	105.46	1.52	SST	medium gray, medium grain, coal streaks,	 		R3-R4	4	— Ц					_			
-					<u> </u>	rip-up clasts, broken stick, salt and pepper	⊢	 	∔		———	J		ļ <u>.</u>					
 -	05 /6						-	-	 	 	65.7								_
 	05.46	105.46	106 95	1 //0	CCT	medium grain, salt and pepper, massive, rip-up	├-	 	R3-R4	,	05.7		-	 					-
		105.40	100.77	1.47	331	clasts minor numerous calcite-filled joints.	 		אַבנאן	1				 					
						clasts, minor numerous calcite-filled joints, Joints: 2 x 69°, 156°, 157°	t		<u> </u>	†		- '		-		_	-		
						00200								1					
_ l	06.98							I	ļ		90.6								
		106.98		.07	SST	medium grain, salt and pepper, massive rip-up	<u> </u>		R3-R4										
				L		clasts, numerous calcite-filled joints.	<u> </u>	<u> </u>		<u> </u>		L		↓					
_				<u> </u>	-	badly shattered	├	<u> </u>		 		ļ		 					
-			<u> </u>		-		├		 	 			-		 		-		
-41				.71	SST	medium to coarse, salt and pepper, numerous	├		R3-R4	. 			 	 					-
⊢┼		-		• / 1	331	calcite-filled joints, few rip-up clasts,	╁	 	KJ-K-	1	-			 				····	_
\vdash				 	 	stick. coal breaks and slicks near base	╁	├─-	 	╁			 	+				······	<u> </u>
						atien, coal breaks and sitems near bose	t —		1	 			†	 	<u> </u>				
	_		108,55	.79	SS/SLST	soft sediment deformation, light and dark	†		R3-R4	1			<u> </u>	 					
						gray, fine grain sandstone, numerous coaly			1				i -						
						slicks, stick			}										
							↓	L				ļ							
\vdash	.08.51			<u> </u>		· · · · · · · · · · · · · · · · · · ·	<u> </u>		<u> </u>		61.1	ļ							<u> </u>
		108.51	110.00	1.49	SS/SLST	as above, stick	├ ─-	ļ	R3-R4	•		L		ļ	-				
-							├	├	 	 	100		ļ	+					
\dashv	10.02			70	an /ar am	1 1 1 - 1161 1-1	├	56	R3-R4		100			 					<u> </u>
		110-03		- /9	SS/SLST	as above, becoming siltier - joint has	 	30	א-נא	'		-	 	+					
					 , 	Joints: 1650 with calcite	\vdash		 	<u> </u>			 	† -	 				_
\top		· · · · · · ·		T	1	MATHER FOLLOW	1	 	 	\vdash			 	1	 				
				.44	SLTST	medium gray, shaley, stick, minor coal	i		R3	 					<u> </u>				
						along breaks								İ					
24					<u> </u>		ļ												
 			111,61	.35	Shale	silty, black, coal streaks and breaks, minor	 	<u> </u>	R3	ļ	ļ	<u> </u>	<u> </u>	ļ					ļ
\vdash				├—	1	slicks	├	ļ		 		<u> </u>		+		⊢			
	•		L.,,,,,,,,	<u></u>		Joints: 310 with minor calcite		L	<u> </u>		L	<u> </u>	<u> </u>	<u> </u>	<u>. </u>				

ALL LINEAR UNITS IN METRES



PAGE 25....

[#] MEASURED FROM THE HORIZONTAL PLANE

A ANGLE MEASURED FROM CORE AXIS

^{1 : •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

		_
PROJECT	MOUNT BANNER EAST	ſ
AREA	S.E. B.C.	┟

CONTINUED MBE 101

PAGE. 26 OF.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM			ARY GE					ANALY	TICAL	DATA		
No.	OF BOX	FROM	70	TH.	MAIN	AMPLIFIED [INCLUDE COAL RECOVERY FOR EACH SEAM]	DESIG	ANGLE	HARD.	FRAC	RQD	SAMPLE NO		ST % residual	ASH %	V M.%	F.C.%	F.S.I,	C,V.
2/	BUX							,,					a7.0.	14210001					
	111.56										91.1				1			_	
		111.56		.97	SLTST	shaley, black, coaly and slicked along			R3										
┡						fracture, stick		ļ	-	<u> </u>									
⊢┼				.46	Sha1e	silty, coal streaks in fractures	+	-	R3	 							-		
\vdash				.40	Share	Sirty, coar streams in fractures	+	-	 ^. _					<u> </u>					
			113.06	.07	SLTST	dark gray, minor rip-up clasts			R3										
\Box							1		ļ										
┝┵	113.08						 		<u> </u>	-	86.6								
┥		113.08		-27	SLTST	as above, coal stringers	+	 	R3	 				 	 				
			11/4 65	1 30	Shale	hlack, some silty bands, broken stick	1		R3	† -				 					
					- DIMITE	Training Training Water States													
\Box	114-60						 	ļ	ļ		70.7	 							,
$\vdash \vdash$		114.60		. 89	SLTST	black, shaley in places, stick			.R3_	_			L	├	ļ				,——
╏╗╏									├	 				 					
			115.97	.48	SLTST	shaley, sandy bands, stick, minor soft			R3										
						sediment deformation, medium gray to black													
${oxdot}$							-		ļ		91.9			ļ					
$\vdash \vdash$	116.13	116 12	117 71	1 50	SLTST	as above, stick	+	├	R3	+	91.9			 					
┝┈┼	117.65		11/./1	1.50	SPISI	as above, stick	+		-54	+	94.3			 	-				
\Box	117.00	117.65	119.19	1.54	SLTST	as above, stick,		76	R3	1				1					
\Box						Joint: 2 x 1680 with calcite			lacksquare	ļ									
┝╌┼	119.18				2***			<u> </u>	ļ <u></u>	 	28.5	1							
26		119.18	_	.61	SLTST	as above, stick	+	-	R3	 		-		-		_			
49			120.79	1.0	SLTST	as above, stick	+	 	R3	· 	<u> </u>	<u> </u>		 	-				
			1201.7											1	İ				
\Box	120.70										96.8			ļ .					
⊢		120.70		1.05	SLTST	as above, stick	╂	 	R3	┼		-	·	 	1				
┝╌┼			122.17	62	SST	very fine grain, silty, medium to light gray	+	+	R3	ł	 			 					
			144.1/	. 44.	331	very line grain, offer, meaton to light gray	1		1 ~ 7		†			<u> </u>					
口	122,22									ļ	93.1					=			
${oxed}$		122.22		1.30	SST	as above, stick	-	-	_R3_		-	<u> </u>		ļ					, _
⊢				005	Calcite	breccia, slicked	+	90	.R3	1	-	ļ		 					
╅				-005	Calcite	preccia, siicked		70_	1.83	†	t	-		1					
			123,75	.23	SST	as above			R3		٠								
														ļ					
ட				<u> </u>	<u></u>			<u> </u>	Ь.	<u> </u>	<u> </u>		L	<u> </u>	<u>. </u>				لا

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION [%]

FF --- FRACTURE FREQUENCY

			_
DJECT	MOUNT BANNER EAST	HOLE No MBE 101	
REA	S.E. B.C.	CONTINUED MBE 101	

вох	DEPTH AT TOP	DE	РТН		-	LITHO DESCRIPTION	SEAM	≜	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.		FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	RQD	NO		ST %	ASH %	V M.%	F C.%	F.S.I.	c.v.
26	. 5QX			-			1		1				,,,,						
	123.75						1		1		100								
		123.75		.27	SST	fine grain, light gray, salt and pepper, stick			R3-R4	4									
							ļ		ļ						L				·
27							├			<u> </u>						4			, [!]
				.77	SST	fine grain, light gray, darker silty beds,	<u> </u>	-	R3-R4	•				<u> </u>					
\rightarrow						bioturbated, stick Joints: 87° with calcite	 		 	1				-	 				
-				.09	SST	as above, pyrite blebs	1	 	 	 								-	
-+				.09	SST	as above, pyrice blens	†								t i				i
_			125, 28	. 40	SST	as above, no pyrite blebs	1		R3-R4	4									
			17 7. 2.	. 70		Joints: 1690 with minor calcite	Ĺ.,												
																			ļ
\Box	125.27						↓	ļ	<u> </u>	<u> </u>	87.5				-				
		125.27		.13	SST	as above, broken	} —	 	R3-R4	4				<u> </u>	<u> </u>				
-							 —	┼ - ·- ·	R3-R4	+		├		 	-	+			
\dashv			126.85	1.45	SST	as ahove, stick	+	┼──	K3-K1	1		-		 	1		-		
_	126.80						t		1 .	 	73.4	1							
	120.00	126.80		. 85	SST	as above, minor pyrite, slicks along breaks			R3-R4	4									
		I LUI OV		155	-	broken stick													
						Joints: 5° with major calcite,				ļ				ļ	ļ				<u> </u>
						24 with major calcite	↓	<u> </u>	.			ļ							-
_				ļ			 	1 05				ļ		ļ					
-				.56	SST	fine to medium grain, light gray,	┼	85	R3-R4	4	<u> </u>	 -			 				
		ļ				coaly stringers with breaks along coal	+	╁	†	+	-	 		 	 				
28							 	 	 	╅┈┈				<u> </u>	<u> </u>	-			\vdash
28			128.30	00	SST	as above, stick	†		R3-R4	4				<u> </u>	 				
	128_32	<u> </u>	120.30	<u> </u>		NO 2007C1 012CN	1		1	1	60.6								
	1711_ 14.	128.32		.51	SST	as above, coarsening toward base, occasional			R3-R4	4									
						pyrite blebs, minor slicks along coal	<u> </u>		ļ	ļ				ļ	<u> </u>				—
				ļ			<u> </u>	ļ	ļ	ļ		ļ		ļ	\vdash				
		<u> </u>	<u> </u>	.005	Pyrite	rich band	 	1	-	 	-	-	ļ	+	 				
-		 	ļ	 		0.1	+	 	R3-R4			 		 	 				
		├	ļ	.64	SST	as above, 2 large calcite joints.	+	 	KJ-K	+	 	 		 	 				
-		 		 	 	JOINES: Z X U	1	t —	1	†	†			 	1				
		t	 	1.11	Shale	black	1		R3										
			129.785	.20	SST	as above	<u> </u>	<u> </u>	R3					<u> </u>	<u> </u>				
			ļ	ļ	ļ	Joints: 130 with calcite	<u> </u>	 	↓	↓	 	ļ		 	_				
 _		ļ			<u></u>		—	├ ──	-	-	<u> </u>	 		 	 	\vdash			
								<u> </u>	1			<u> </u>	<u> </u>		<u> </u>				

ALL LINEAR UNITS IN METRES

FF --- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

PAGE 27....

MEASURED FROM THE HORIZONTAL PLANE

^{* - •} R B/OR S -- GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT BANNER EAST	HOLEN
AREA	S.E. B.C.	CONTINUED

TINUED MBE 101 PAGE 28 OF

BOX	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A PEDDING	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
No.	AT TOP OF BOX	FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC FREG	RQD	SAMPLE NO		IST %	ASH %	V M %	F.C. %	F.S.I.	C.V.
28	BUX							· · ·					G1.0.				<u></u> :		
	129, 84										52.5								
		129.84	131.37	1.53	Shale	black, silty with siltstone bands, stick			R3_					 					
$\vdash \vdash$	131.37	131.37		1 14	Shale		 		R3	 	98								
		111-1/		1.14	Snate	as above				1				<u> </u>					
29																			
$\vdash \vdash$			132.84	.33	Shale_	black, silty with siltstone bands, stick	-		R3	 									
╂╾╂	132.89				· -		 		 		93.8			 					
	132.07	132.89	134.48	1.59	Shale	as above, coaly streaks near base, stick			R3		73.0			1					
Ш							ļ	<u> </u>				L							
\vdash	134.42	134.42		.81	Shale	as above, coaly streaks near top, stick	 		R3		91.1	├		 	-				
\square		139.42			SHATE	as above, roaty streams near top, streams													
口				.04	SST	medium grain, coal interheded, slicked	Į		R3]
}	-		135.63	26	Shale	A	 	 	R3_					├					
\vdash	135.94		133.63	. 30	Snare	as above	<u> </u>		\ \-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\		78.5			<u> </u>					
		135.94		.04	Shale	as above, stick			R3	Ţ				<u> </u>					
\vdash		ļ					 	<u> </u>	-	-	ļ								
\vdash				.01	Coa1	shaley	 	-	R3_	 				<u> </u>			_		
			İ	25	SLTST	medium to dark gray			R3										
\square							ļ	<u> </u>	<u> </u>	-		L	<u> </u>	 					\vdash
				.61	SS/SLST	very fine grain, rip-up clasts, coal at base, few carbonaceous streaks	-	1	R3	 	1			}				<u> </u>	
						l lew carbonaceous streaks	1						-	<u> </u>	İ				
				. 09	SLTST	shaley, fine sandy beds			R3										
30		 	ļ				├	 	 -	1	├			 					
130		 	137.72	. 78	SLTST	as above, coal slicks on breaks, stick	1	 	R3	 				 	 			-	
														<u> </u>					
\Box	137.46	102.45								<u> </u>	92.6			ļ					
╂─╌╂		137.46	-	. 10	SLTST	as above, stick	 	-	R3_	+		 		 					
\Box		<u> </u>		.01	Coal_	shaley, stick			R3		<u> </u>								
口									Ι										
\vdash			138.98	1.41	SLTST	sandy with sandstone beds, stick Joints: 7° + 22° with calcite	 	67	R3_	+		-		 	 				
1		 				Joints: /* + 22" with calcite	 	 	 -	†		\vdash							
	138.99										92.1								
		138.99	140.49	1.50	SLTST	as above, coal stringers, some calcite along	ļ		R3_					<u> </u>					
لــــــــــــــــــــــــــــــــــــــ	·			<u> </u>		bedding, stick. Joints: 2 x 16° with calcite.	<u> </u>	<u>L</u>	ــــــ		<u></u>	L	L		l				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* •} R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT	BANNER	EAST		
AREA	S.E.	B.C.			

HOLE	No.	MRE	101
CONTINU	ED	MBE	101

вох	DEPTH AT TOP	DE	PTH		1	LITHO DESCRIPTION	SEAM	A DEDDING	SUMM	ARY GE	OTECH	SAMPLE			ANAL	TICAL	DATA		
No.		FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	SUMM/ HARD- NESS	FRAC	RQD	SAMPLE NO		IST %	ASH %	V M.%	F.C.%	F.S.I.	C.V.
30							1												
	40.51										97.3			Ī					
		140.51		.41	SLST/SS	as above, stick			R3										
									.	ļ									
31					ļ		 	ļ	L										—
\longrightarrow				1.16	SLST/SS	interbedded, sandstone is light gray, fine		 	R3	_				├	ļ				
\rightarrow				-	ļ <u>.</u>	grain; siltstone is sandy, medium gray;		ļ		-				 		L		\longrightarrow	
			····		-	occasional coaly breaks, slicks, stick Joints: 18° with calcite	+-		 	 -									
1				-		Joints: 18 With calcite	+-		 	 	 			├					
			142.08	 	1			-	 	+	-	<u> </u>		 	·				
—	42.04	-	142.00		 		- 	 		 	82.8			 	 				
	42.04	142 04	143.45	1.41	SLTST	as above	+	 	R3-R4		02.0		·	 -	 				
	f	172.07	143.43		55,101	as above	1	· · · · · · -	13 24.		t :	f 1		t	<u> </u>	-			l
	43.56								1		82.9			1					
		143.56	145.16	1.60	SLTST	as above, becoming shaley near base			R3-R4	T					Ι				
									I										
	145.08								<u> </u>	<u> </u>	66.8]	
		145.08		.16	Shale	black, silty, coal stringers and blebs			R3	ļ	ļ							,	<u> </u>
					<u> </u>	broken stick	┷-		.			L						<u></u>	
				<u> </u>	ļ				.	ļ	-	ļ		-	ļ				₩
32				ļ.,					 	 	 	-		 					
				1.13	Shale	as above, broken stick		-	R3	├		ļ		1					
						1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E	-	R2	+				 	 				
				-04_	Coa1	dull with bright, broken	F		I KZ	 	 	 -		 	 	 			
1		ļ.,	 	.025	Coal	bright, broken	E	1	R2		-		-	 	 				
1				1,023	LOAL	bright, broken	+-		1111	 				<u> </u>	-	<u> </u>			
\vdash			†	.01	Coa1	bright with dull, broken	E	-	R2					1	<u> </u>				
				1	- WORL	DILEGIC WITH COLUMN TO A COLUM			<u> </u>					<u> </u>					
	1			.015	Coal	bright and dull, broken	Е		R2										
					l									<u> </u>					
								L	<u> </u>	ļ				ļ		<u> </u>			
igspace		ļ	ļ		.		-	ļ	 	ļ	ļ	ļ	ļ	 	ļ	ļ			—
igwdap			<u> </u>	₽	 			 	₩	₩	 	 	ļ	 	ļ	—			
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\vdash		-	t	 	 		+-	 	t	 	 		 	 	 				
}		 	 	 	 		1	<u> </u>	t	†	<u> </u>		 	 	 	 			
\vdash		 	 	 	 		 	t	† 	 	 			 	 				
			1	1		A MEATURED FROM THE MODITONIES IN ANY			1	ــــــــــــــــــــــــــــــــــــــ				<u> </u>					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* : •} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

1	PROJECT	MOUNT	BANNER EAST
	AREA	S.E.	B.C.

HOLE No. MBE 101

PAGE 30 OF.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM DESIG	ME DDING	SUMM	ARY GI	EOTECH	SAMPLE			ANALY	TICAL	DATA		
No.		FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	ROD	NO	, mo	IST % residual	ASH %	V M.%	FC.%	F.S.I.	C.V.
-	BOX	, ,,,,,,,,					 	- ' ' -		1		_	a r.b.	residuai					$\vdash \vdash$
32		_	146.49	.03	Coal	dull with bright, broken	E		R2										
							1_		<u> </u>	<u> </u>									
	146-61	144 (1)		- 01	01	J. 11 - Jak kadaha makkin	E	 	 	1	75.1	 	<u> </u>	 					
\dashv		146.61		.04	Coal	dull with bright, rubble	+ 5-	\vdash	† —	 	<u> </u>				-				
\Box				.005	Coal	bright	Е												
4		-					E	-	╂	┼	 	 	 						
-				-005	Coal	dull with bright	 		<u> </u>	+	<u> </u>	 -	 						
				.01	Coal	dull	E			1_	<u> </u>								
4							+	 -	 	∔-			-	 					-
				.065	Coal	dull, broken	E		 	 		† ·	 						
				.08	Coal	dull with bright	E												
							 	 	ļ <u></u> -	 	 	├	ļ	<u> </u>	ļ	-			-
\vdash				-06	Coal	duli, rubble	F.			 	+	 							
				.05	Coa1	dull	E_			1									
\Box							+		 	╁	+	 -	<u> </u>	ļ	-	-			
\vdash			-	.07	Coal	dull with bright	E		 	 	 	 -	 	 	1	 			
				.06	Coal	rubble	Е							<u> </u>					
\Box							E	<u> </u>	ļ	ļ	ļ	<u> </u>	L						
\vdash		 -		.02	Coa1_	bright	+-		 	+	1	├─	 	 -	 	-			ļ
\Box				.07	Coal	bright and dull	E	<u> </u>	t				<u> </u>	1					
							Ţ <u>_</u>												
		├		.09	Coal	rubble	È		 —	+	\vdash	 -		├	ļ				\vdash
\Box		 	<u> </u>	.025	Coal	dull with bright, hard, broken stick	E	 	 		1	 	-	 	<u> </u>			L	
										ļ									
\dashv			147.51	.25	Coal	bright and dull, hard, broken stick	↓ E		-	 	 	├	<u> </u>	 	-	 -			
-	148.13	 -	-				╁┈┈	 	+-	+	 	 -	<u> </u>	 	 	<u> </u>			
		148.13		.075	Coal	bright and dull	E												
_		 					+_	├	-	 	ļ	 -		ļ	<u> </u>	ļ			
		 -		.01	Coa1	bright, hard	E	 	+	+	 	 		 	<u> </u>				
				.05	Coal.	bright and dull	E												
\Box							+_	ļ.—	\vdash	-	 	 - -		<u> </u>		<u> </u>			
\dashv		 -		.06	Coal	rubble, dull and bright	E		 	+	+	┼─-		├─-	 	 -			-
-				.04	Shale	carbonaceous, coaly stringers, broken stick	E	 	1	1	1	 	1	 	1				
							A 43.6			_				•					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT	BANNER EAST	
AREA	S.E.	B.C	

HOLE No.	MBE	101
CONTINUED		

PAGE 31 OF.....

BOX DE	PTH TOP	DEF	TH		LITHO DESCRIPTION		SEAM	A DE DENC	SUMM	ARY GE	OTECH	SAMPLE	ANALYTICAL DATA								
No. AT		FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FREG	ROD	NO		residual	ASH %	v м %	FC.%	F.S.I.	C.V.		
32	~						+	<u> </u>					G1.U.	4310001							
				.005	Coal	bright	E														
	\rightarrow			.01	Sha1e	contracting coals attributes have attal	E		}	 					1				 		
\dashv	\dashv			.01	Share	carbonaceous, coaly stringers, broken stick	1.5							ļi			. :				
	\Box			.015	Coal	bright with dull	E		igsquare												
$\vdash \vdash$.05	Coa1	dul1	E		 	<u> </u>				 					 		
									1												
				.04	<u>Shale</u>	as above	E-		├	-				-	-						
	$\overline{}$.07	Coal	rubble, dull with bright	T.E.		1	†				<u> </u>					<u> </u>		
	\Box																				
\dashv	$\overline{}$	·		.05	_Coal_	dull with bright, broken stick	E		 	 				 -							
				.05	Coal	rubble, as above	E		1					1							
	 {-			.07	Coal	dull, hard, broken stick	E		├	 				 							
<u> </u>	士			.07	COAL	dull, nard, broken stick				<u> </u>											
	\Box			.04	Coal	rubble, dull	E		1	ļ											
\dashv	<u>-</u>			.03	Coal	as above	E		+	 				 			- -		<u> </u>		
_				.04	Coal	dull with bright	E		₩	-	-			 					 		
				.07	Coal	dull and bright, shale streak at base,	E		<u> </u>					<u> </u>							
	$-\Gamma$					broken stick			<u> </u>	ļ									ļ		
			48.935	.03	Coal	bright with dull	E		 			<u> </u>		 							
	\Box		.40.755		0042	DIEGIE WEVE															
14	9.66	49.66		.03	01	bright and dull, broken stick	E		 	 				 							
		149.00		.03	Coa1_	bright and dull, broken stick	1	_	<u>† </u>	<u> </u>				 							
				.03	Coal	bright with dull, broken stick	E		1												
 				.02	Coal	dull and bright, broken stick	+		+	+				 					\vdash		
					- COAL																
				.01	Coa1	bright, broken stick	E	<u> </u>	₩	-	ļ			 	ļ						
	$\overline{}$.03	Coal	bright with dull		<u> </u>	t		<u> </u>		L								
										T											
 				.02	Coa1	dul1	E		+	 		 		 	<u> </u>				 		
1	-+			.02	Coa1	bright and dull	E		1	1				1							
						M MEASURED FROM THE HORIZONTAL PLANE			·	6 D 1 8 C											

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOU	NT BANNER	EAST	
AREA	S F	ВС		

HOLE No.	MBE	101
CONTINUED	FIBE	101

PAGE 32....

BOX D	EPTH T TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A SEDDING	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	T TOP OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	SAMPLE NO		residual	ASH %	V M %	F C.%	F.S.1.	C.V.
32	ROX	. 10.01	 		,,,,,,,,		+	- 	1323				Gr.B.	14310001	 		<u>.</u>		
<u>''</u>			<u> </u>	.06	Coal	dull with bright	E												
				2:5			-	<u> </u>		-				<u> </u>	[
+				.015	Shale	as above, slicked	E		╁					 	-				
				.01	Coal	dull, shaley with some bright	E												
\rightarrow			}	02	- 1	3.11Jal 1J-1-	E	-	 	}]				
+			 	.02	Coa1	dull with bright	 	 	 	 					 				
				.02	Coal	dul1	E												
		-	<u></u>		- 1	111 1-1-1-	E	-	 -	┼				 					
+		_	 	.05_	Coa1	dull, some bright	15		<u> </u>	†				<u> </u>					<u> </u>
				.01	Coal	dull and bright, broken stick	E		1										
+			 	025	Coal	bright with dull, broken stick	E	 	 	 				 	┼				
				1.025	COAL	bright with duff, broken Stick			1										
-				.13	Coal	dull, broken stick	E_	ļ.—	_	ļ			-	 	ļ				
+			 	.07	Coal	dull, some bright	E		<u> </u>	 					 				
土					CUAL	uutti synt otte													
-				.02	Coal	dull and bright	E		\vdash	 	 —			 					
+			\vdash	.03	Coal	dull, some bright	E	-	t	 									
33																			
-		}		J-17	Coa1	as above	E	├—	 	 	ļ			 	 				
_			 	.005	Shale	carbonaceous. coalv	E	t	1-	 									
-		<u> </u>	-	-005	Coal	bright with dull, broken stick	E	-		+-	 			 	-				
				-06	Coal	dull with bright, broken stick	Е	<u> </u>			<u> </u>								
\Box										<u> </u>				ļ <u> </u>					<u> </u>
-		-	 	1-015	Coal	dull and bright, broken stick	E	 	 	+-	 		-	┼──	 				
				.02	Coal	dull, broken stick	E												
\dashv			ļ	615		Luteta atat dull barbon obtah	E	-	 	-	<u> </u>			 					
-		 	 -	.015	Coal	bright with dull, broken stick	+ <u>-</u> -	<u> </u>	1		 	-							
				.07	Coa1	dull, some bright	E			1									
		 	 	1 02	G1	bright with dull	E	\vdash	-	 	-			┼	 				-
+		 	 	.03	Coal	Dright with dull		\vdash	1-	1		<u> </u>		<u> </u>	 				
				.07	Coal	dull and bright	E												

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	
AREA	S.E. B.C.	

HOLE No. MBE 101

PAGE33....

вох	DEPTH AT TOP	DEF	тн			LITHO DESCRIPTION	SEAM DESIG	▲ DEDDING	SUMM	ARY GE	OTECH	SAMPLE				TICAL			
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FREG	ROD	NO	ar.b	ST %	ASH %	V M.%	FC %	F.5.1.	C.V.
20	BOX	,					1		İ				G.,						
"				.025	Coal	dul1	Е												
							+	ļ	ļ	-		L		<u> </u>					
				.06	Coal	dull and bright	E	 		 									
\vdash				.035	Coal	dul1	E		1	İ.				1					
							Ţ			<u> </u>				<u> </u>					
\vdash				.003	Coal_	bright	E	-	ļ	 	 	<u> </u>	 -						
\vdash				.04	Coal	dull	E	 	1				<u> </u>	İ					
				• • •															
				.03	Shale	carbonaceous, coaly streaks	E	<u> </u>	ļ	 			ļ	<u> </u>					
				-015	Coal	bright and dull	E		†	 	·	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
				-UL)	Lual	nright and harr													
\Box				.035	Coal	dull with bright	E	ļ	ļ	├	ļ	 	ļ	 	<u> </u>				
H						. 11 11 11	F	 	 				 -	† ·					
				015	_Coa1	dull and bright								1					
			51.108	.11	Coal	dull with bright	E	ļ	ļ				_	ļ					
							+	 		 	 	<u> </u>			i İ				
	151.18	151.18		.01	Coal	bright, Broken	E		1					1					
										1				Ţ					
		ļ		-025	Coa1	dull with bright	E	 	 	┼		 -		 	 	 			
Н				-02	Coal	dull	E	 	 	+	<u> </u>	†		<u> </u>	1	 			
П				-1/2	ar				<u> </u>				1						
				.01	Coal	dull with bright	E	<u> </u>	↓	ļ	<u> </u>			ļ	 	 			-
Н		 		.08	Coal	rubble, dull, some bright	E	┼─	 	+	 	 	 	 	 	 			
Н	-	 		.00	COAL			†	1		İ		<u> </u>	1					
				.02	Coal	dull and bright	Е			ļ			ļ			ļ			ļ
\blacksquare		 		.02	Cont	dul1	E	╂	 	 	 	 		+	 	 			
\vdash	-	 		.02	Coal	GULL	+	1-	t	T		1-	1		<u> </u>				
				.035	Coal	dull and bright	E				ļ								
	<u> </u>	ļ				111111111111111111111111111111111111111	E	₩	 	↓	ļ	├	 	-	 				
	 	 	-	.02	Coal	dull with bright, rubble	+-	 	t^-		 	t	<u> </u>	 	 				
				.03	Coal	as above, broken stick	E					L		1					
							+ ;		1	 	—	 	ļ	ļ <u>.</u>	1	<u> </u>			
	ļ	 		.035	Coal	dull, broken stick	Ė	 		+	-	┼──	 	 	 	 			
				L	i .				٠	1	1								

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

^{*} ROD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

ROJEÇT	MOUNT BANNER EAST	HOLE No.
AREA	S.E. B.C.	CONTINUED MBE 101

BOX DE	DEPTH DEPTH				LITHO DESCRIPTION	SEAM	A EDDING	SUMM	ARY GE	OTECH	SAMPLE NO			ANALY	TICAL	DATA			
No.		FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	NO	MO	IST %	ASH %	V M.%	F.C.%	F.S.I.	C.V.
33	O												0.7.0.	restavai					
				.04	Coa1	dull and hright, broken stick	E		-										
				.05	Coal	dull with bright, broken stick	E		ļ										
				.06	Coal	dull, some bright, broken stick	E			-				<u> </u>					
				.005	Coa1_	bright, broken stick	E												
				.04	Coal	dull, some bright, broken stick	E												
				.025	Coal	dull with bright. broken stick	E												
#				.015	Shale	coaly, bright coal interbedded	Ē												
#				.10	Coal	dull with bright, broken stick	E		ļ					ļ					
1				-06	Coal	dull and bright, rubble	E	<u> </u>		<u> </u>				<u> </u>					
				.02	Coa1	dull, broken stick	E		ļ	<u> </u>				<u> </u>					
				.005	Coal	bright	E							ļ .					
				.03	Coal	du11	E							<u> </u>					
\Rightarrow			-	. 22	Coal	dull and bright, rubble	E		_					<u> </u>					ļ
_				.05	Coal	dull, broken stick	E		<u> </u>	<u> </u>									
\pm			152.235	.03	Coal	dull and bright	E												
15	2.70								ļ	 				<u> </u>	_				
		152,70		.025	Coal	dull, broken stick	E	<u> </u>	<u> </u>										
				.01	Coa1	bright	E												
				.11	Coal	dull, broken stick	E							1					
				.075	Coal	dull with bright, broken stick	E												
$\overline{+}$.015	Coal	bright, broken stick	E												
_				.01	Coa1	dull and bright, broken stick	E			-	-			1					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

PAGE 34....

OF

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

⁺RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	H
AREA	S.E. B.C.	co

HOLE No. MBE 101

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ЮХ	DEPTH	DE	PTH		1	LITHO DESCRIPTION	SEAM	EDDING	SUMM	ARY GE	OTECH	SAMPLE	SAMPLE MOIST %									
No.	DEPTH AT TOP OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	RQD	SAMPLE NO		residual	ASH %	V M.%	FC.%	F.S.I.	c.v			
33							Î															
\beth				.01	SH/Coal	bright, broken stick	E	<u> </u>	.	\vdash									—			
\dashv				.03	Coal	dull. broken stick	E															
\dashv							1			ļ												
┪				1.005	SH/Coal	broken stick	E		\vdash	 		-		 					 			
1				.02	Shale	carbonaceous, broken stick	E		<u> </u>	 									<u> </u>			
+				.085	Coa1	du11	E															
7							E	.	1	 									├			
+				.0/5	Coal	dull with bright	E	<u> </u>		<u> </u>				<u> </u>					_			
4				.035	Coal	du11	E			-	<u> </u>	-										
1				.01	Coal	dull and bright	E															
4				025	Coal	du11	E	-	 	 	 	 -		 					├			
1									ļ	1									\sqsubset			
4				.015	Coal	dull and bright	E	-	 	 		├─-	 	 -					 			
\rightrightarrows				.045	Coa1	as above, broken stick	E			1												
1				.005	SH/Coal		E															
4				Ĺ	<u> </u>		E		├	-	-		 	├					╁			
1		 -		.02	Coa1	dull, rubble	F			<u> </u>		<u> </u>		 	<u> </u>							
4				.13	Coal	dull with bright	E												\sqsubseteq			
1				.05	Coal	bright with dull	E	<u> </u>	1	<u> </u>									上			
4				.025	Coal	dull with bright	E		 	ļ		_							┈			
1				.025	Coal																	
4				.035	Coa1	bright with dull	E	<u> </u>	 -					-		<u></u>			-			
				,035	Shale	carbonaceous and coaly	E															
-				.12	Coal	bright with dull	E		ļ	+		-	├						┼			
╛				,12					†													
4				.065	Coal	dull with bright	E	 	 	-	 			 	 				-			
	-			.05	Coal	bright and dull	E		1					1								
4				025	Cool	dull of the height	E	-	+	-		 -	 	 	 -	-			╁			
_				. 025	Coal	dull with bright			4		<u> </u>	PF AXIS		<u></u>	l							

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 -+} R &/OR 5 -- GOLDER ASSOCIATES HARDNESS CODE

^{*} RQD - ROCK QUALITY DESIGNATION (%)

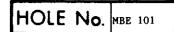
FF ---- FRACTURE FREQUENCY

PROJECT	MOUNT BANNER EAST	HOLE No MBE 101
AREA	S.F. R.C.	CONTINUED MBE 101

ВОХ	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A	SUMM	ARY GE	OTECH			ANALYTICAL DATA									
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	SUMM HARD- NESS	FRAC	ROD	SAMPLE NO		residuat	ASH %	v м %	F.C.%	F.S.I.	C.V.				
33	801	 					1		t				01.0.	10310001									
				. 085	Coa1	bright with dull	E			İ													
Ш		<u> </u>	ļ	-			 _ _	—	┡	_	ļi												
 		 	-	.05	Coal	dull and bright	E	┥	├	-													
H		<u> </u>		.06	Coal	dul1	E	 		1													
\square		ļ		.02	Coal	dull with bright	E	ļ		 													
╂═┪		 	154.12	.03	Coa1	bright and dull	+	 -	 	 													
Н			1154.12	-112	Loai	bright and dull	15	t	<u>† </u>	†													
	154.23						ļ		,														
\vdash		154.23	ļ	. 05	Shale	with coal stringers, rubble	+	ļ	R3	₩		ļ.,						-					
-	···	 	<u>. </u>	. 32	Shale	as above, broken stick	+-	┿	R 3	 				 		1							
				1	-Aua Le	as above, broken still k	1																
34							1		D2	ļ													
-			155.52	.92	SLTST	medium gray, coal blebs, stick	 		R3_	 				}					$\overline{}$				
Н	155.75						t	\vdash	 	1-	71.3												
		155.75		.51	SLTST	as above, shale and sandstone bands, stick			R3														
 		<u> </u>				414 3 3 3 - 1 - 1	↓	 -	R3	 				ļ									
Н		 	157.18	.92	Shale	slightly silty, silty and sandy bands,	 	 -	K.S	 				1									
	157,28					SUICK	1	t			95.8			<u> </u>									
			158.81	1.53	Shale	slightly silty, black, some coal streaks,			R3														
Н		<u> </u>		<u> </u>		stick			ļ	↓		<u> </u>		ļ	ł								
	158.80	 		 			 	├	ļ	+	100			 									
		158.80	<u> </u>	. 37	Shale	as above	1	<u> </u>	R3	1	100			İ	1 1								
								Ţ	J					ļ									
35			160.00				 	├ ~	R3	₩-				ļ	 								
Н	, , ,	 	160, 39	μ_{\star}^{22}	Shale	silty, black		 	1.0	 		 			+ +								
	160_32										89.3				1								
\square		160.32		.51	Shale	as above			R3	L.													
		 	 	 	GT TT TT		┼	\vdash	R4	+	 				1				\longrightarrow				
\vdash		 	 	-64	SLTST	medium gray, sandy streaks	+	\vdash	11.4	 					† †				-				
		1	161.75	.28	SLTST	shaley, as above			R4														
		<u> </u>					 	<u> </u>	1	1				ļ									
	161.85		 	1 22	OV POS		+	 	R4-R	<u>k</u>	80.4			 	 								
\blacksquare		161.85	!	.29	SLTST	as above, broken stick	1	\vdash	1,,,-,,	Ť	 	<u> </u>		1	1 1				—				
-	·	└			L	L																	

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



PAGE36

OF....

W MEASURED FROM THE HORIZONTAL PLANE

^{1 --} R &/OR 5 -- GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

1	PROJECT	MOUNT BANNER EAST
ł	AREA	S.E. B.C.

HOLE No.	MBE	101	
CONTINUED			

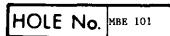
PAGE.37...

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM			ARY GE			ANALYTICAL DATA										
	AT TOP			TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	BEDDING ANGLE	HARD-	FRAC FREG	RQD	SAMPLE		IST %	ASH %	V M %	F C %	F.S.I.	C.V.				
No.	OF BOX	FROM	το		MAIN	AMPLIFIED I INCLUDE COAL RECOVERY FOR EACH SEAM)		(*)	NESS	FREG			a.r.b.	residual	7,511 /6	V 191 /6	, , ,	1,3.7.	- · · ·				
35				L			 	Ь—	 -	ļ				-	L		i						
┈┤	161.85			06	OI DOM		┼	<u> </u>	R4-R5	<u> </u>													
				.96	SLTST	medium gray, sandy, sandstone bands Joints: 172° with calcite	+ -		K4-K	1													
						Joints: 1/2 with calcite	 	\vdash	-	 		-	———		_								
			163.42	12	SST	medium gray, siltstone bands, soft sediment	1		R4-R5														
			111.42	_14	Jai	deformation, coal streaks, broken stick	1			1							- 1						
	163.32								<u> </u>		54.1					I							
36		163.32		.06	SST	as above, fine grain	.	<u> </u>	R3														
							↓	ļ <u>.</u>	<u> </u>	ļ													
-+			<u> </u>	.21	SLTST	sandy, large calcite-filled joints	 		R3			<u> </u>		-									
			164.73	1 16	COT		+	66	0.2	 		-		-									
┰			104./3	1.10	991	medium grav. siltstone bands, soft sediment	†	<u> </u>	L.	 				†									
						deformation, coal streaks, broken stick Joints: 2 x 161° with calcite	1-	┝															
						WINDS 2 A TVA BILL COLUETE	†		†														
	164.90										95.8												
		164.90		1.15	SST	as above		69	R3														
							╄			ļ				ļ									
-			166.32	.27	·	disturbed beds, siltstone rip-up clasts in	 	<u> </u>	R3	<u> </u>													
-						fine to medium light gray sandstone,	 		 -	 		ļ											
						clasts ≤10 cm, photographed by G.S. 09.10.80	╀																
- 	166.42						╂	 		-	97.8												
	100.42	166.42		.23		as above, stick	 	 	R3	1-				 									
		100.42				us above, seren	 		<u> </u>		<u> </u>			 					_				
	_			.48	SST	fine grain, massive	†		R3					† ——									
				.77	SST	fine grain, light gray, fine scale cross-beds,	I	73	R3														
						some bioturbation, coaly slick at base			1					1									
	-						↓		 	-	L			ļ									
37		ļ		بب			╁	L	D2	 				ļ									
-			168.04	.14	SST	as above	+	—	R3	 -		ļ			<u> </u>								
-	1/7 0:						+	├	 	 	92.5												
\dashv	167.94	167.06	169_38	1 1.1.	CCT	fine grain. light gray, with medium gray	+	 	R3	 	/=./	}		+ -				-					
\dashv		107.94	104-10	444	ுவ	silty sandstone. rip-up clasts, stick	1		 ``	1				† · · · ·		- 							
						MATER BUILD VICE 120 WP CAUSES BUILD	1							1									
	169.47						<u> </u>				95.8												
		169.47	171.06	1.59	SST	as above, stick			R3-R4	4													
\Box							<u> </u>																
							 			<u> </u>						}							
					<u> </u>	<u> </u>				L		L		L			1						

ALL LINEAR UNITS IN METRES

FF ---- FRACTURE FREQUENCY

ANGLE MEASURED FROM CORE AXIS



FILE No BA-267 REVISED Feb.1981 FORMERLY FILE No. BA-212A

MEASURED FROM THE HORIZONTAL PLANE

^{* -} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT	BANNER	EAST	٢
AREA	S.E.	B.C.		L

HOLE No.	MBE	101
CONTINUED	MBE	101

PAGE 38

OF SOX				LITHO DESCRIPTION			A DOING	7		7	SAMPLE	ANALYTICAL DATA									
	FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	RQD	NO		residual	ASH %	V M.%	FC %	F.\$.I.	C.V.			
								Î						1							
1.00								R3-R4		98.1											
1.00	171.00		.47	SST	as above, stick			1	1	7002								$\overline{}$			
	17 14111							1	1												
			.61	SST	fine to medium grain, salt and pepper			R3													
					with sandy, silty bands, medium to dark gray,			<u> </u>	I												
					coal streaks, rip-up clasts, becoming finer	<u> </u>															
					at base, broken stick	<u> </u>	<u> </u>	↓	L												
					· · · · · · · · · · · · · · · · · · ·	ļ	L	↓	<u> </u>									ļ			
						┞	 -	5.0	├												
		172.48	.40	SST	as above, cross-beds, slicked along coal	ļ	├	R3						+							
					breaks, broken stick	 	├	₩	∔-	 . i								 			
70 50						₩	 	 	 	07 1	- 1			-				\vdash			
	172 52		1 15	CCT	as above	╁	-	D 2	 	0/,1					- 						
	114.34		1.13	201	as above	\vdash		12.3	 												
			1 05	Shale	black silty in places with fine orain light	†	 	R3	† -												
			4.00	JHOLE		†		1	1			-									
					<u> </u>	1															
			. 18	SST	as above, shaley bands			R3													
									T									<u> </u>			
		175.61	.71	SST	medium grain, salt and pepper, #9 sandstone?	<u>l</u>	77_	R3-R	4												
					coal streaks	<u> </u>		<u> </u>	<u> </u>												
		·				↓	<u> </u>	↓	ļ												
75.56						└	ļ	↓		62.7	L		L					—			
	175.56		-69	SST	as above	▙		R3-R	4		 			1				\vdash			
						├		 	 -	\longleftarrow			ļ	·							
					1	₩	├	+	+						-			\vdash			
			.42	SST		├	-	K3	-												
			-		Stick	├	 	 	+									 -			
			50	CCT	as above numerous soal streaks and stringers	├		D2 D	.					-				_			
			. 50	331	as above, indirectors coal science did stringers	 	 	V.) - V.	1		l -		_	11							
	 		1.86	SST	coarse grain, salt and pepper, with bands	 		R3-R4	4				<u> </u>	† <u> </u>							
			1.00			1			<u> </u>		 		t								
					streaks																
									1												
		179.24	.13	SST	fine grain, becoming silty at base, medium			R3													
					gray, soft sediment deformation																
						<u> </u>	<u> </u>	\leftarrow	ļ				ļ	igwdot							
78.61	<u> </u>		L	ļ		ļ	 	 	↓	76	<u> </u>		ļ	 							
	178.61		1.21	SLST/SS		↓	ļ	<u> </u>	1	ļ	L		ļ								
	<u> </u>			 	stick	-	 	↓	 	1	<u> </u>		ļ	 	 -						
		172,52	172,52 175.61 175.56 175.56 179,24	172,52 1.15 1.05 1.05 1.18 175.61 .71 1.5.56 1.75.56 1.86 1.86	172,52 1.15 SST 1,05 Shale .18 SST .175.61 .71 SST .5.56 .69 SST .42 SST .58 SST .186 SST .179.24 .13 SST	172,52 1.05 Shale 1.06 SST 1.07 SST 1.07 Medium grain, salt and pepper, #9 sandstone? 1.08 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.09 SST 1.00 SS	172,52 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.05 Shale 1.06 SST 1.07 SST 1.07 Medium grain, salt and pepper, #9 sandstone? 1.08 SST 1.09 SST 1.09 SST 1.09 SST 1.00 SST 1.0	172,52 1.15 SST as above 1.05 Shale black, silty in places with fine grain, light gray sandstone bands 18 SST as above, shaley bands 175.61 .71 SST medium grain, salt and pepper, #9 sandstone? 77 coal streaks 175.56 .69 SST as above 175.56 .69 SST as above 18 SST medium grain, salt and pepper, coal streaks, stick 18 SST coarse grain, salt and pepper, with bands of sandstone as above, numerous coal stringers streaks 179,24 .13 SST fine grain, becoming silty at base, medium gray, soft sediment deformation 18.61 1.21 SLST/SS fine, interbedded, shaley in places.	172,52 1.15 SST as above R3 1.05 Shale black, silty in places with fine grain, light gray sandstone bands 18 SST as above, shaley bands 175.61 .71 SST medium grain, salt and pepper, #9 sandstone? 175.56 .69 SST as above R3-R 175.56 .69 SST as above R3-R 175.56 .69 SST as above R3-R 175.56 .69 SST as above, numerous coal streaks, R3 Stick 18 SST coarse grain, salt and pepper, with bands of sandstone as above, numerous coal stringers streaks 179.24 .13 SST fine grain, becoming silty at base, medium R3 gray, soft sediment deformation R3 R3 R3 R3 R3 R3 R3 R3 R3 R	172,52 1.15 SST as above R3 1.05 Shale black, silty in places with fine grain, light gray sandstone bands 1.18 SST as above, shaley bands 175.61 .71 SST medium grain, salt and pepper, #9 sandstone? 176 coal streaks 177 R3-R4 178 SST as above R3-R4 178 SST medium grain, salt and pepper, coal streaks, R3 179 SST stick 188 SST as above, numerous coal streaks and stringers 189 R3-R4 189 SST coarse grain, salt and pepper, with bands of sandstone as above, numerous coal stringers streaks 179 SST fine grain, becoming silty at base, medium R3 179 SST fine grain, becoming silty at base, medium R3 178 SST fine, interbedded, shaley in places, R3	172,52	172,52	172,52	172,52	172,52	172.52	172,52	172,52			

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

M MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

1	PROJECT	MOUNT	BANNER	EAST	
	AREA	S.E.	B.C.		

HOLE NO MBE 101

PAGE.39... OF.....

BOX C	EPTH T TOP	DEF	PΤΗ			LITHO DESCRIPTION	SEAM	▲ MEDDING	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
No.		FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC FREG	RQD	SAMPLE NO		ST % residual	ASH %	V M %	F.C.%	F.S.1,	C.V.
20	<u> </u>																		
1	78.61						ļ												
				. 34	Shale	silty, black	 		R3	}									 -
\dashv				20	SH/SLST	interbedded, black	 		R3	 -									
-				. 20	OH OHOI	Interseded, bluck	<u> </u>			†									
				.15	Sha1e	black, silty			R3										
+							.		ļ	├									
40				.34	Sha1e	as above, broken stick	 		R3	1									
-+	 				Juare	as above, broken strick	1			1						1			
				.01	Coal/SH				R3	1									
\perp							1		<u> </u>	<u> </u>	ļ. <u>. </u>]			ļ					
\dashv	┵	 -		_34	Shale	as above, stick	 		R3	 -		├							
\dashv	+		181.66	.46	SLST/SS	interbedded - fine to medium sandstone.	-		R4_	1				†					
工	1	$==$ \Box				medium gray													
\perp					<u> </u>		!		ļ	<u> </u>					ļ <u>.</u>				
	81.66	181.66		0.5	SS/SLST	as above. stick	 		R3	 	89.1			-					
+		181.90		.03	22/2F2T	as above. Stick	1		- 54	 		1							
	1			.15	Shale	black, coal stringers, stick			R3										
\dashv																			<u> </u>
			184.69	2.83	SLTST	dark gray to black, very shaley, fine	<u> </u>		R3-R	4				-					
						grain sandstone bands, stick	<u> </u>	 	┼	 -				 	<u> </u>		-		\vdash
1	84.71				· · · ·		t	<u> </u>		†	92								
\Box		184.71		.11	SLTST	black, shaley, some plant debris			R3-R	4									
—	∤						<u> </u>		<u> </u>										<u> </u>
41			107.76	2.0/	GI MOM	1-t	<u> </u>	72	R3	-				 	\vdash				 -
\dashv			JX/./6	2.94	SLTST	dark gray, occasional sandy and shaley bands,	†	1/2	1 13	 		\vdash \dashv		 	<u> </u>				
二		1					1			1									
Д і	87.76						ļ				90.4								
\dashv		187.76		-20	Shale	slightly silty, black, stick	├	-	R3	.	-			 -	 				
				13	Shale	black, broken, slicked	 	 	R3	+				 					
				- 11	Snare	nrack, maken, streked	†		1.5										
\Box				.015	Shale	coaly													
\dashv					-		├		├			\vdash	ļ	ļ	 	-			ļ
+				-04	Shale	black, carbonaceous	┼	 	 	 	ļ			 	 				
				.05	Coal	dull, shaley	\vdash		\vdash	<u> </u>				 	 				
					1		1		1	1									

ALL LINEAR UNITS IN METRES

& ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* • # 8/}OR 5 — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

	PROJECT	MOUNT	BANNER		
i	AREA	S.E.	B.C.	 	

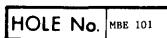
HOLE No.	MBE	101
CONTINUED		

PAGE⁴⁰ OF

BOX [DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A EDDING	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
I I	OF BOX	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	ROD	NO		ST %	ASH %	V M.%	F.C.%	F.S.1.	C.V.
61	BUA							<u> </u>	-		1		Q.F.B.	14310001			<u></u>		
				. 20	Shale	carbonaceous, broken stick			R3										
							ļ												
\vdash				.05	Coal	dull and bright	 		├	ļ		\dashv							
\vdash				.10	Coal	dull with bright	+	<u> </u>	 	 		- 1 -							
\vdash				.005	Coal	bright	┿		R2			—		ļ					
-				. 18	Coal	dull with bright, broken	 		├──	 -					-				
					-					1								-	
\Box				.03	Coal	dull, some bright, broken to powder		L		<u> </u>		_ JŁ							
$\vdash \vdash$.06	Shale	carbonaceous, black	+	ļ - -	R3		ł l	<u> </u>			-				
				. 00	DHare	Carponaccous, praca	1												
\Box				.26	SLST/SS	very fine grain, interbedded			R4-R5										
				<u> </u>			-		├	├									
42		<u> </u>	190.64	1.56	SLTST	as above, becoming sandy at base, stick	+-		R3	 	1			<u> </u>					
						as above, becoming sandy at base, stick Joints: 167 ⁰ , 170°, with calcite													
Н.		├ ─					 	ļ	├	┼	67			 					
┝┼	90.80	190.80		.51	SST	fine to medium grain, salt and pepper	+-	┢	R3	 	07								
Ħ		150.00		• • •	001	Title to medical grants out and pupper			1										
				.03	Shale	carbonaceous with calcite			R3	1									
-		 		1 21	SS/SLST/	interbedded, fine sand,	 	 	R3	 									
		 		1.31	55/5L51/ SH	becoming shaley at base, broken stick, some	 			1	 								
						coaly breaks	1												
-							+	-		ļ				<u> </u>					
- -	<i>-</i>	 		. 17	Shale	carbonaceous with coal streaks and stringers	+		R3	 				-					
				. 82	SLTST	with sand and shale bands, broken stick	1.	l	R3										
									ļ										
43		 	100.70	1.5	01 mgm	shalev, black, broken stick	+	 	R3	├							,		
		<u> </u>	193.79		SLTST	Snatey, plack, proken stick	+	 	KJ	 		 							
ı,	193.85							<u> </u>		ļ									
\vdash		193.85		. 39	SLTST	as above with sandy bands, coal streaks and coaly slicks	 	ļ	R3	-	86.6	ļi							
-+		 		-	 	COMIN STICKS	+		 	1	<u> </u>			 					
				.22	SLTST	grades to fine sandstone at base			R3										
1								ļ , , 	n										
Щ				2.21	SST	fine grain, soft sediment deformation, stick		77	R3	┸			L <u></u>	<u> </u>	نـــــــــــــــــــــــــــــــــــــ				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



[#] MEASURED FROM THE HORIZONTAL PLANE

^{* • # &}amp;/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

4			
	PROJECT	MOUNT BANNER EAST	
i	AREA	S.E. B.C.	

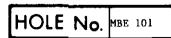
HOLE No.	MBE	101
CONTINUED		

PAGE 41 OF.....

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAMBED	SEAM	A DDING	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED LINCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD	FREG	RQD	NO		IST %	ASH %	V M.%	FC.%	F.\$.1,	C.V.	
140.	BOX	1 10/11			MAIN				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				ar.a.	residuai						
43				.015	Shale	silty with calcite														
				V 1 -	- Share -	SILLY WITH COLUMN														
			96.785	.10	SST	as above, minor carbonaceous streaks, stick			R3											
\Box									ļ	1	06.5		ļ	<u> </u>						
	196.90	100 00		1.24	CCT	as above, occasional rip-up clasts < .01 m	 		R3	 	96.5	 	 	 						
-		196.90		1.24	221	stick	 			 		<u> </u>		<u> </u>						
						- DC-CA														
44												ļ								
			199.96	1.82	SST	as above, stick			R3	-		 -							·	
	199,95	ļ					\vdash	<u> </u>	 	┿	88.5	<u> </u>	-	 						
\vdash	177.73	199.95	-	1 37	SST	as above, bedding starts dipping in other	 	··- ···-	R3	 	1		· · · · · ·	<u> </u>	-					
					.3.1	direction here. Stick														
							ļ	ļ	ļ <u>. </u>	<u> </u>	 	ļ	L	ļ						
\longrightarrow				.80	SST	fine grain, salt and pepper, carbonaceous	 	i	R3	 		 -	 	1						
\vdash				 	}	streaks, stick	1	 	 	├ ┈─		 		ļ					-	
\vdash				. 34	SST	as above, many coaly stringers, slicks with	1	t						<u> </u>						
						calcite, numerous calcite joints but too														
				<u> </u>		broken to measure . broken		<u> </u>	-	-	-		.	.					_	
45				ļ			-	<u> </u>	 	+	 			1						
┝╼╂		_		14.	SST	sandy coal and calcite on break	 	 	 	┼	\vdash	-		<u> </u>			_			
			203.03	.43	SST	fine to medium grain, salt and pepper, silty	<u> </u>	<u> </u>	R3	1			1							
						bands, coal and carbonaceous streaks														
				<u> </u>			<u> </u>	<u> </u>	ļ		ļ	ļ <u>.</u>			-					
\vdash	203.00				ļ. <u></u>		∤		R3	 	77.2	 -		 						
\vdash		203.00		-40	SST	medium grain, salt and pepper, calcite and coal fracture throughout, abrupt below, some		 	-ريا	+	 	 	 	 	 		<u> </u>			
						slicks in coal fracture	İ													
\Box																				
		<u> </u>		.26	SST	sandy medium gray	—	 	R3	1-	<u> </u>	_	ļ	-	ļ					
┝╌╂			<u> </u>	 	CCT	and the same of th	 	 	R3	+	 	├──	1	 					-	
\vdash			 	.17	SST	medium gray, silty	 	t	K2 -	+	<u> </u>	 	 	 	-					
			206.05	2,22	SST	fine grain, medium gray, becomes silty near	1		R2	1										
						base, broken stick			ļ											
\sqcup			1	 			├	↓		-	79.6	 -	Į	1			<u> </u>			
$\vdash \vdash$	206.04	206 64	-	(2)	COT	silty at top with coal stringers, fine grain,	├—	├	R3	+	/9.6	╄	 	 	-				-	
 		206.04		69	SST	medium gray, stick	 	 	K.)	+	†	 -	 	 	 					
\Box		 	<u> </u>	1	 	meatur gray, seren	1		1	1	 	_	1	1						

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



MEASURED FROM THE HORIZONTAL PLANE

^{* *} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

1	PROJECT	MOUNT	BANNER EAST	
ı	AREA	S.E.	B.C.	

HOLE No. MBE 101 OF.....

вох	DEPTH AT TOP	DEF	TH	Ţ.,		LITHO DESCRIPTION	SEAM	▲ EDDING	SUMM	ARY GE	OTECH	SAMPLE	MOIST %			LYTICAL DATA			
No.		FROM	10	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	ROD	HO		ST % residual	ASH %	V M %	F.C. %	F.S.I.	C.V.
46	-00^						 						- C1.D.	72310001					
				.97	SST	as above, silty, becomes shaley near base			R3										
						stick													
_							ļ												
\dashv				.08	Shale	black, carbonaceous with coal streaks	 		R3	ļ		 			L				<u> </u>
+		├		.03	Coa1	shaley	 		R3	 					ļ.——				
\dashv	··· -	 +		.03	Coar	Snarey	 		<u> </u>	 		_			 				
_		 -		.06	Coal	rubbley, dull with bright	 		R3	 			-						
		\Box																	· ·
\Box				.005	Coal	bright			R3										
							ļ	<u> </u>											<u> </u>
\dashv				.015	Coal_	bright and dull	-		R3			.							
				- 02	Coal	dull with bright	+		R3	 		-		<u> </u>	1				
+				-UZ	war	duri with bright	 		A.J.	 									
				.02	Coal	du11	1		R.3										
				.03	Coa1	dull with bright, rubble	<u> </u>		R3	ļ		L			ļ				
-					0-1	dull	┼—			∤					 	——i			
				.03	Coa1	anti — — — — — — — — — — — — — — — — — — —	-		R3	 					1				<u> </u>
\dashv				. 63	Shale	black, slightly silty, occasional coal break	 	 	R3	†		1 -							
					- Q.1.C.2.C	less than .005 m, broken stick				<u> </u>									
\Box																			
_				.04	Shale	rubble. as above			R3										<u> </u>
							_		2.2	ļ		├ ──-		ļ					
+				.29	Shale	as above, broken stick	 		R3	├		├							<u> </u>
-+			08.955	005	Coal	shaley	 		R3	-				-	 				
	209.10		.00.333	.005	COAT	Sharey				 	74.7			 	 				
		209.10		1.43	Shale	as above			R3					t T					
		_		.05	Coal	shaley, mush	 		S4	ļ									—
-+							 -		R3	1				ļ <u> </u>	-				
\dashv			-	.05	Shale	as above, broken slicked	 		C.A.	+		 -		 	 			-	
\dashv				.36	Shale	as above, broken stick,	†		R3	_				<u> </u>	1				
ゴ					, , , , , , , , , , , , , , , , , , ,	Joints: 1 x 24° with calcite			<u> </u>										
\Box																			
47							ļ			ļ									
_		├		.48	Shale	black, pyrite blebs near top, slicks	 		R3	 		├ —			├				-
-+		 		\vdash		broken stick	₩-			 		 		 	 				
_	· ·	لـــــا			L		ــــــــــــــــــــــــــــــــــــــ	L	L		L	L		L					

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{* - *} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT	MOU	NT	BANNER	EAST	•	
AREA	S.E	ì.	B.C.			

HOLE No.	101
CONTINUED	101

PAGE __43__ OF _____

BOX D	EPTH I IOP	DE	PTH			LITHO DESCRIPTION	SEAM	A DEDDING	SUMM	ARY GE	OTECH	SAMBLE			ANALY	TICAL	DATA			
A1.	OF BOX	FROM	to	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD	FRAC	RQD	SAMPLE NO		residual	ASH %	V M.%	F.C. %	F.S.I.	C.V.	
47	<u> </u>					· · · · · · · · · · · · · · · · · · ·	1	<u> </u>		 			G1.5.	74510001						
				.15	Shale	as above, rubble, slicked			R3											
-							↓	<u> </u>	l	ļ										
\dashv		-		. 25	Shale	as above, becomes silty at base	1		R3	+										
\neg			212.02	.15	SLTST	slightly shaley, stick	1	 	R3	†						· · · · · · · · · · · · · · · · · · ·				
21	12.14						1	<u> </u>		 	62.3									
		212,14		.34	SLTST	as above	+		R3	 -									<u> </u>	
				1.48	SS/SLST	as above, interbedded,	†	73	R3	†		-				+		-		
						fine grain, light gray, stick	1													
<u> </u>									_	<u> </u>		L .								
+				.29	SST	light gray, fine grain, silty streak, stick	+	 -	R3	 				<u> </u>						
\dashv		· · · · · · · · · · · · · · · · · · ·				JOINTS: Z X II CAICITE	†		†	†									-	
				.40	SLTST	as above, becomes shaley near base,	†	75	R.3											
-∔-						broken stick	ļ	 									1			
-				.49	Shale	slightly silty, broken	+	├		+				ļ-						
+			_	.47	SHATE	slightly silty, bloken	+	 	R3	┼──				 						
				.02	Coal	hard, bright			R1											
+			216.36	1,20	Shale	as above, black	+		R3	-										
	15.21						+	-	+	1	60.3			 						
48							†	<u> </u>	1	1	00.0			1						
		215.21		.20	Shale	as above, black, broken stick			R3											
-		-		0.0	01	1.11 - Jak budaka - u.b.la				ļ				ļ						
				.06	Coa1	dull with bright, rubble	+	-	R3	+				 						
			216.04	.57	Shale	as above, slightly shaley in places,	T		R3	†				1						
						coaly slicked at top														
-			<u> </u>				1	ļ	<u> </u>	1	,,,									
²	16.10	216.10		. 14	Shale	as above, stick	+-	-	D 2	-	73.4			<u> </u>						
十		210.10		. 14	pnare	as above, stick	+		R3	 				 						
				.12	SLTST	shaley, medium gray, calcite, slicked at base			R3											
						stick														
				.11	SST	light gray, fine grain, silty bands, large	+		R4	-				ļ						
\dashv				• 11	221	scale cross-bed, broken stick	+	 	K4	+	-			 						
\Box						Scare cross bed, broken serek	T	 		1				 		 				
									[1			_				1			

ALL LINEAR UNITS IN METRES

FF --- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] ROD — ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT BANNER EAST	П
AREA	S.E. B.C.	cc

HOLE No. MBE 101

PAGE.44 OF.....

вох	DEPTH AT TOP	DF	РТН			LITHO DESCRIPTION	SE A M DEDD		SUMMARY GEOTECH		5 A M 8 1 5	ANALYTICAL DATA							
No.	AT TOP OF BOX	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	MGLE	HARD NESS	FRAC	ROD	SAMPLE NO		ST %	ASH %	V M.%	F.C.%	F.S.I.	C. V .
40	BUX	,								 			U1.D.	727.000.					
48		 		.44	SLTST	medium gray, sandy, minor calcite slicks			R3			-							
一					DETOT														
]				.44	Shale	black, silty, enormous calcite and coaly slicks	Ь		R3	↓									
						broken stick		<u> </u>		 				<u> </u>					
_						Joints: 1 x 26°, 3 x 28°, 1 x 22°,	├	-	 -	 									
						major calcite slick	├	-	-	 	1			-					
-+				.07	SLTST	as above	╁	 	R3	 				1					
-				.07	31131	as above			<u> </u>	1-				†					
				.07	SST	as above			R3										
						Joints: 1 x 160, calcite-slicked	l												
							L	ļ						<u> </u>					ļ
				.17	SLTST	with sandy bands	├		R3	 	.	.	ļ	-					
_							├	ļ	D 2	 	 	 	1	 	-				
-			217.72	.06	Shale	black '	 	├-	R3	+		 	├·	 	1				<u> </u>
- .	218.03				<u></u>		 		R3		78.3		-	 	t		-	<u> </u>	
+		218.03		.26	SLTST	sandy, medium gray		·	R3	1	1	Ì'''		1					
1		71A-U1				5611671													
				.23	Shale	black, silty			R3										Ļ
\Box							L_	ļ	ļ	↓	ļ	ļ		ļ	 				
_				1.25	Shale	black, slightly carbonaceous, coal streaks	├	-	R3	 	 	ļ	-	 					
			ļ	_	!	and slicks, broken stick	├	 	 	+	ł	 	-	 					
49		<u> </u>	221 04	1 27	Ch = 1 =	black, as above, shaley and silty	 	├	R3	+	48.1		<u> </u>	 					
49			221.04	 1.4./ .	Share	bands in middle. stick	 	†		+	70.1	 	t	1 -					
一			1	\vdash		Dands III middle, Stick	1	<u> </u>	1	†									
	221,13	-		 					R3		92.1		Ī						
		221.13		.12	Shale	black, as above							<u> </u>	<u> </u>	<u> </u>				
_					ļ		-	1	L.	-	-		├ ──		.	-			<u> </u>
_	-			.05	Shale_	black, coal streaked and slicked, broken	├	₩	R3	. 		 	 	┼──				<u> </u>	}
				 		17 1 throughout	╁	 	R3	+-	 	 	 	 	_			 	
-				1.18	Shale	black, carbonaceous and coal streaks throughout Joints: 1 x 1640	 	<u> </u>	1	+	†	 	 	1	 				
_			 	 	 	Joints, T x 104	1	 	1	 		1		† · · · ·					
		T	<u> </u>	.11	Shale	very carbonaceous, rubble, coal slicks			R3					Ì					
\Box				.20	Shale	as above	_	L	R3	—		ļ	<u> </u>					ļ	
		ļ		<u> </u>	 		 	.	R3	+	_	-	-	↓	 			 	
\rightarrow		ļ		. 55	Shale	rubble, coaly slicked	╂	\vdash	1(2	┼	-	 	-	 	 			 	
\rightarrow		 	 	.08	SH/Coal	muhhlo	+-	\vdash	R3	+-	49.8	 	 	+					
			 	1.00	on/coal	TADOTE	+	+	f:-	+	47-0	1 —		+	•			 	†

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

PROJECT		BANNER		
AREA	S.E.	B.C.		

HOLE No.	MBE	101
CONTINUED	1	

PAGE 45...

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A DEDDING	SUMM	ARY GE	OTECH	SAMPLE			ANALY	TICAL	DATA		
No.	OF BOX	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE (°)	HARD- NESS	FRAC FREG	RQD	SAMPLE NO		residual	ASH %	V M. %	F.C. %	F.S.I.	C.V.
49																			
				.04	Coal	shaley, dull	9		R3	-									
				.16	Coal	dul1	9		R3										
$\vdash \vdash$.11	Coal	mush, dull, some bright	9		 	 				 					
\Box																			
	-			.06	Coal	dull, broken stick	9		R3	}				 -					-
				.02	Coal	dull with bright	9		R3	1									
				.135	Coal	dul1	9		R3	<u> </u>									_
-1				.05	Coal	dull with bright	9		R3		·								-
										1									
$\vdash \vdash$			224.185	.19	Coal	bright with dull	9		<u>R3</u>	 -	<u> </u>	 -		 		_	-		
	224.03								R2.R	3									
\vdash		224.03		.035	Sha1e	carbonaceous, black	9		\vdash	 		<u> </u>		 					
\Box				.05	Coa1	bright with dull	9		<u> </u>	 									
				.03	Shale	carbonaceous	9												
\vdash				045	Coal	dull with bright, shale, carbonaceous, rubble	9		├ ─	+	 			 				<u>.</u> —.	-
						dull while braging dimand supplies and 144010				ļ									
50				.06	Coal	dull broken stick	9		├	 	<u> </u>	ļ <u>-</u>			 				
		-	224.31			·								<u> </u>					
			224.31	.06	Shale	carbonaceous with coal stringers, broken stick			<u> </u>					<u> </u>					
H	224.33	224.33		1.84	Shale	black, silty bands, silty near base, stick			R3	1	ļ .								\vdash
		224.33																	
\vdash				.31	SLTST	sandy bands		<u> </u>	R3	}			ļ	 	ļ <u> </u>				
\Box				.085	Shale	black, slightly silty, carbonaceous at base			R4										
廿				.035	Shale	carbonaceous			R3										
╁				14	Coal/SH	rubble			├─	<u> </u>				 					
														 					
╟			227.04	.30	Shale	black, carbonaceous	<u> </u>		 	├	 			├	 				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD -- ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

PROJECT	MOUNT	BANNER	-	
AREA	S.E.	B.C.		

HOLE No.	2 101
CONTINUED	. 101

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вох	DEPTH AT TOP	DEF	PTH .			LITHO DESCRIPTION	SEAM		SUMM	FRAC	OTECH	SAMPLE	ANALYTICAL DATA						
No.	OF I	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	RQD	SAMPLE NO	·	residual	ASH %	V M %	F.C.%	F.S.I.	C.V.
50	BOX						-	• • •					ar.b.	18310001			i		
	227.38								R3	†	79.7			 					
		227.38		.23	Shale	as above, coaly at base, broken stick													
							↓		<u> </u>	<u> </u>				ļ					
				.02	Coal	dull				 				<u> </u>					<u> </u>
\dashv				.01	Coal	bright	┼		R3	 				├	├				<u> </u>
\dashv				.01	COAL	DELIGHT	†		<u> </u>	 					 				<u> </u>
				.03	Coa1	dull				1									
									L	<u></u>									
				.035	Shale	carbonaceous	<u> </u>		R3						ļi				—
\dashv				005	01	3.11 .4.1 t4.1.	 		├					 	 				
		· ··· · · · · · · · · · · · · · · · ·		.025	Coal	dull with bright	 -		\vdash					 	-				<u> </u>
				.31	Shale	black, carbonaceous								Ţ					
							l		I					L					
\rightarrow				.13	Coal	bright with dull, shale interbedded, rubble	-	<u> </u>	-						L				·
				.48	Shale	black, silty in places, broken stick	+	 	R4	-	 			 	 			·	
-				40	Share	black, slity in places, broken stick	 		1,44	-	\vdash	<u> </u>		1	1				\vdash
51				· · · ·			1		<u> </u>					<u> </u>	1 1				
				.47	SLTST	shaley, stick			R3										
								ļ	ļ .	-				<u> </u>					├
				.28_	Shale	black	+		R3	_				 	 				├──
-+				. 68	SST	fine grain, silty at top, shaley at base	+		R4	 				┼	1				
_			_	.00		Time grain, stity at top, sharey at base	†		 	1				 	t				
			30.275	. 195	Shale	black			R4				-	† ·					
							<u> </u>												
	230.43						 		ļ		67.4	ļ		ļ					
\rightarrow		230.43		1.16	_Shale	as above, silty bands, silty at base, stick	-		R3	+	-			 	1				 -
				1 50	SLTST	shaley at top, very fine grain sandstone bands	+	74	R3-R	4	 			 					$\vdash \vdash \vdash$
\vdash				1.00	SETST	near base, stick	 	, , <u>, , , , , , , , , , , , , , , , , </u>	1	1	<u> </u>			<u> </u>					
						New york													
52									L										<u> </u>
			233,54	. 37	SLTST	black, shaley, broken stick	 		R4	 -	 			-					—
	233.48					<u> </u>	+	-	 	+	94.2			-					$\vdash \vdash$
	233.48	233.48	·	.10	SLTST	as above	1	<u> </u>	R4	+	77.2	 		1					
	_	2,2,00			00101	we see to	1	1		Ť	<u> </u>			t					
				. 37	SST	light gray, fine grain, fine darker siltstone		1	R3										
						laminae, soft sediment deformation and small				ļ. <u> </u>				ļ					<u> </u>
						scale cross-bedding, stick	1					L		<u> </u>		ليبسا			

ALL LINEAR UNITS IN METRES

FF ---- FRACTURE FREQUENCY

A ANGLE MEÁSURED FROM CORE AXIS

MEASURED FROM THE HORIZONTAL PLANE

^{1 --} R &/OR S -- GOLDER ASSOCIATES HARDNESS CODE

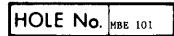
[•] RQD - ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT	BANNER EAST	HOLE No.	MBE 101
AREA	S.E.	B.C.	CONTINUED	MBE 101

DEPTH SUMMARY GEOTECH ANALYTICAL DATA DEPTH LITHO DESCRIPTION SEAM DECIDING AT TOP DESIG ANGLE HARD FRAC OF ASH % V M % FC % F.S.1. C.V. FROM TO MAIN AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM) a.r.b. residual .70 SLTST R3-R4 as above 236.59 1.94 SS/SLST as above, interbedded, stick 75 R3-R4 Joints: 3 x 170° with calcite 90.4 236.52 236.52 .94 SS/SLST as above, stick R3-R4 Joints: 1750 74 92 SS/SLST as above, rip-up clasts at base, stick Joints: 1610 with calcite: 1700 with calcite 239.55 1.17 SLTST dark gray, stick 86.5 239.57 239.57 .61 SLTST as above. stick fine to medium grain, light and medium gray, R4-R . 79 rip-up clasts and silty bands, stick 73 R4-R5 SST medium grain, salt and pepper, distinct bedding stick Joints: 170° with calcite occasional coaly blebs and stringers, 68 R5 242.54 .68 SST broken stick, fine to medium grain, becomes coarser at base Joints: 1650 - 1700 with calcite and breccia 242.62 242.62 1.83 SST medium to coarse grain, salt and pepper, few 70 R3-R4 siltstone rip-up clasts, carbonaceous and coaly stringers and blebs throughout. occasional slicks. broken to broken stick .025 Shale | carbonaceous and coaly . 13 SLTST dark gray .72 SST as above

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



MEASURED FROM THE HORIZONTAL PLANE

^{* : *} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD -- ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

1	PROJECT	MOUNT	BANNER EAST
ı	AREA	S.E.	В.С.

	_			
HO	LE	No.	MBE	101
CONT	INU	ED .		

PAGE⁴⁸

ВОХ	DEPTH AT TOP	DE	PTH		·	LITHO DESCRIPTION	SEAM	PEDDING	SUMM	ARY GE	OTECH	SAMPLE	ANALYTICAL DATA						
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC	ROD	NO		IST %	ASH %	V M %	FC %	F.S.I.	C.V.
54	301									İ		-							
			45.525	.20	Sha1e	black			R3										
4								<u> </u>		 -									
	245.67	245.67		.51	Shale	black		╁	R3	┿	72								
+		243.07	 	. 31	Share	DIACK	┪┈	 	122	 	 					 -†			
				.14	Shale	black, silty, stick			R4										
\perp							_												
55			ļ	00	COM	14-14		├	22	 						 i			
┿			 	.09	SST	light gray, fine grain, minor cross-beds		╁	R3	┿─-	-				<u> </u>			_	r
			248.71	2,30	Shale	black, silty in places, occasional slicks		!	R3	1-									
\Box						and coal, stick	T	Ī											
								 		ļ				_					
- 12	248.72	248.72	 	.46	Shale	as above, becoming silty at base	+-	-	R3 R3	 	87.5			<u> </u>					
\vdash		248.72	1	40	Shale	as above, becoming silty at base		<u> </u>	<u> </u>	┼	1			<u> </u>					
				1.49	SLTST	with fine sandy bands, medium gray			R4-R	4									
							\supset			L			ļ <u>.</u>			}		_	<u></u> _
56			 	 _				-	╁.	┿				 -		i			
		-	-	.91	SLTST	medium gray, becoming shaley at base, broken stick		 	R4	\vdash	1			 -				_	
						DIOREN SLICK	1	†	1										
			251.89	.31	Shale	silty, medium to dark gray			R4										
				<u> </u>				 	<u> </u>	<u> </u>	0.7			 					
2	51.76	251.76	ļ	. 12	CL = 1 =	as above		 	R4-R 4		87.4			<u> </u>		——┪			
+		231.70		-14	Shale	as above		 -	<u> </u>	1	 			 					
			254.70	2.82	SLTST	as above, sandy bands, broken stick	1	†	R4-R	5				<u> </u>					
	54.81						\Box												
57								ļ	-	 	<u> </u>			 					 _
+		254,81		1.15	SLTST	medium gray, disturbed bedding near base, pyrite blebs at base, coal streaks,	- 	┼	R3		-			}	 				
			 	 		broken streaks	+-	 	+	+-									
						Broken Bereaks								1					
\Box				.16	Shale	black, slicked, broken stick	\bot		R3	ļ									
-		——	} -				-}	₩	 	┼	 	<u> </u>	<u> </u>	 	 -	<u> </u>			,
┝╼╂			├─-	.18_	SLTST_	as above, no pyrite		 	R3	 -	<u> </u>			 					
-			 	. 29	Shale	as above	1		R3		<u> </u>			<u> </u>					
				.86	SLTST	as above			R3	<u> </u>				<u> </u>					ـــــا
┟┈╅				<u> </u>			+-	┼	102	┼-	\vdash			 		·			
	<u> </u>		257.70	. 25	Shale	black			R3		L						i		

ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

TO REMOVE S - GOLDER ASSOCIATES HARDNESS CODE

+ RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

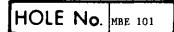
MANGLE MEASURED FROM CORE AXIS

DJECT	MOUNT BANNER EAST	HOLE No	
REA	S.E. B.C.	CONTINUED	E 101

BOX	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	A DING	SUMM	ARY GE	OTECH				ANALY	TICAL	DATA		
No.		FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD	FRAC	RQD	SAMPLE NO		ST %	ASH %	V M %	FC.%	F.S.I.	C.V.
INO.	BOX	FROM	10		MAIN	AMPLITED INCLUDE COAL RECOVERT TOK EACH DEALITY	├	(*)	145.33	FREG			ar.b.	residual					
57	252.06				·		├	 		+	61.6			-					
H	257.86	257.86		1 05	Shale	as above, some slicks	 		R3	+	01.0								
\vdash	- 1	237.00		1.00	Share	as above, some sitces	†		1	 									
				.06	SST	light gray, fine grain		Ì	R3	1						-			
				.20	Sha1e	as above	↓	Ь	R3	1									
$\vdash \vdash$							 	ļ	5.7	 									
├ ─-├				.06	SST	as above, cross-beds	├ ─		R4	 									
58							 	 	 	+									
1				.20	SST	as above	<u> </u>		R5	†									
								Ī		L							1		
				.46	Sha1e	black, broken stick	ļ		R4-R	5									
\sqcup							 	.	<u> </u>	 	\vdash			ļ	-				
\vdash				.60	SLTST	becoming sandy at base	 	 	R5	 		<u></u>		<u> </u>					-
┢			260.91	.42	SST	as above, hinturhaceous	 	 	R5	+		-							
			_/h(91	.47	291	as annye, minimiraceous	1			† —				<u> </u>					
	260.91										86.9								
\Box		260.91		1.03	SST	light gray, fine grain, distrubed bedding,			R5	ļ				ļ					$\vdash \vdash \vdash$
\vdash						siltstone bands	├	-		 	-	<u> </u>							
\vdash				1 67	GT MOM	I to the second state of t	+	├	R4			-		 					
\vdash	-			1.6/	SLTST	dark gray, shaley bands, broken stick	 	 	104	1				 	 				
59					<u> </u>			 	1			1		†—					
			264.04	.43	SST	light gray, fine grain with darker bands,			R 5					Ī					
						turbidity Joints: 0°			.	<u> </u>									igsquare
\sqcup						Joints: 0	↓	ļ		ļ				ļ					
\mapsto							-	 	 	+	81.8			 	ļi			-	
$\vdash \vdash$	263.96	262.06	267.00	2.0/-	CCT	as above, some bioturbaceous, carbonaceous	+	66	R3-R4	4	01.0			+	 		-		
		203.96	Z67.UU	J. U4	291	as above, some protucosceous, carbonaceous	+	100	- 1.7 K	1				 	-				
						streaks. stick Joints: 3 x 165° with calcite	t	† T		t				1					
											\Box								
	267,00							↓	<u> </u>		94.7	ļ		ļ					
${f \sqcup}$		267.00		-78	SST	as above, some medium grain, stick	 	├	R3-R	4	-		<u> </u>		 				
1			 			• -	 	H	 	+			-	 	 				
60			270.10	2 22	CCT	light gray, fine grain, fine scale cross-beds.	1	75	R3-R	4	\vdash		 	 	 				
	-		770.10	Z- 12	351	some turbidity, shaley and silty bands, stick	1	† <i>**</i>	1	1	†	<u> </u>							
						And the state of t								1					
															ļ				
							1						<u>L</u>]	<u>.</u>				

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



PAGE .49...

[#] MEASURED FROM THE HORIZONTAL PLANE

^{* --} R &/OR S -- GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

1	PROJECT	MOUNT B	SANNER EAST	
	AREA	S F B		

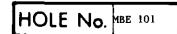
HOLE No.	MRE	101	
CONTINUED	22		

PAGE

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	▲	SUMM	FRAC FREG	ОТЕСН				ANALY	TICAL	DATA		
No.	OF BOX	FROM		TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FREG	RQD	HO		ST % residual	ASH %	V M. %	F.C.%	F.S.I.	C.V.
60	-802			1									4.1.0						
	270.05										98.4								
		270.05		.40	SST	as above, becoming silty at base, stick		75	R4	-									$\overline{}$
┝╍┼			<u> </u>	.18	SLTST	becoming shaley at base	 			┼									
						becoming stratey at base	1			†									
				1.40	Shale	black, silty at top, stick			R3	L						1	1		
			<u> </u>	<u> </u>						 					\longrightarrow				
61				.71	SLTST	medium oray with fine orain sandstone hands			R3-R4	4		+					\longrightarrow		
				-	DETOI	medium gray with fine grain sandstone bands, shaley in places, stick				1									
\vdash			273.10	.36	Shale	black, silty at top, slicked	ļ		R3	 	ļ l	. .	_				\longrightarrow		
١,	273.10		 	 			<u> </u>	 -	<u>. </u>	 	88.5	 				 			
1		273.10		. 43	Shale	black, carbonaceous			R3		00.2								
\vdash				.55	SST	light gray, fine grain, coal streaks and	_		R3	ļ									
\vdash						slicks, calcite, turbidity				<u> </u>				 					
				.01	Coal	dull with bright	10-1			 									
				.035	Coal	dul1	10-1			 -									
\vdash		-		.02	Coal	dull and bright	10-1			+				-					
\vdash			 	.02	Coar	dull and bright	10-1		1	†					1				
				. 32	SS/Coal	interbedded, (intermixed?!) coal - dull, broken	10-1		R3										
\sqcup										Ţ									
-				.06	Coal	dull	10-1			-									
┝╌╋			 	.04	Coal	bright and dull	10-1			+									
				. 94	COBI	bright and duri				†									
				.11	Coal	dull with bright	10-1												
-				-	0-1	3.11	10-1	L	 	+				 					
┝╼┼				.01	Coal	dul1	10-1		 	+		\vdash		 					
				.02	Coal	bright with dull	10-1		L										
₩			ļ	.01	Coa1	dull and bright	10-1	ļ		 	 				 				 #
┥			 	.01	Coa1	bright	10-1		 	+				 					
				· · · · · ·	LOAL	DETRUC	1.0-1		!										
				.085	Coa1	bright, some dull	10-1												
]						Ll		I		

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



MEASURED FROM THE HORIZONTAL PLANE

^{* **} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

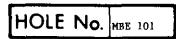
FF --- FRACTURE FREQUENCY

PROJECT	MOUNT DANNER EAST	HOLE No.	100
AREA	S.E. B.C.	CONTINUED	MBE 101

вох	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	▲	SUMM	ARY GE	OTECH			ANALY	TICAL	DATA		
No.	OF BOX	FROM	τo	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	#NGLE	SUMM HARD- NESS	FRAC	RQD	SAMPLE NO	IST % residual	ASH %	V M.%	F.C.%	F.S.1.	C.V.
61	00%															i		
				.17	Coal	dull and bright	10-1		-	ļ								
H				.11	Coal	dull with bright	10-1		!									二
				.015	Coal	bright	10-1											
\mathbf{H}				.03	Coal	bright, rubble	10-1		<u> </u>	-								
				.10	Coal	rubble, dull with bright	10-1											
H				.10			10-1		 									= = = = = = = = = = = = = = = = = = =
III					Shale	black, carbonaceous, broken		Ι										
				.07	Coal	bright and dull, rubble	10-1		<u> </u>									
\Box				.01	Coal	dull with bright, broken	10-1											\square
\Box				.025	Coal	dull with bright, rubble	10-1	!	—									=
H			275.515	075	Coal.	dull with hright, broken	10-1		ļ									
H_{2}	275.84						-	<u> </u>	R3	-	52.2		 					-
H		275.84		.57	Shale	black, carbonaceous, broken stick							 					
62		Ì	_						 									
П				. 30	Shale	black, slightly carbonaceous, slicked, broken	-		R3	Î								\Box
H		ļ		.015	Coal/SH	rubble	10-2											
H				.05_	Coal	dull with bright	10-2		<u> </u>									
Н				.02	Coal	dull	10-2		 				 					
$\vdash \vdash$		<u> </u>		.08	Coal	du11	10-2		ļ <u>.</u>							_		
H				.03	Coal	bright with dull	10-2											=
口		<u> </u>																
				.04	Coal	dull with bright	10-2		-									二
oxdot		<u> </u>		.04	Coal	dull	10-2											
H				.04	Coal	bright with dull	10-2						 					
口				.04	Coal	dull with bright, rubble	10-2											

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS



FILE No BA - 267 REVISED Feb. 1981 FORMERLY FILE No. BA - 212A

PAGE.....

MEASURED FROM THE HORIZONTAL PLANE

^{* - •} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

	
PROJECT	MOUNT BANNER EAST
AREA	S.E. B.C.

HOLE No. MBE 101

PAGE .52 OF

ox P	EPTH T TOP	DE	TH			LITHO DESCRIPTION	SEAM	A EDDING	SUMM	ARY GE	OTECH	SAMBLE			ANALY	TICAL	DATA		
Jo. A	OF BOX	FROM	TO	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FREG	RQD	SAMPLE NO		residual	ASH %	V M %	F C. %	F.\$.1.	C.V.
2	-						+	- ` ' -					41.0.	4514001	1				
				.08	Shale	carbonaceous	10-2												
+					0-1	hulaha and dull mulhin	10-2	 	-	╁					i				├
╅				.09	Coal	bright and dull, rubble	110-2	 	1	 									
				.01	Coal	dul1	10-2												
╌├╴	-+			.02	Coal	bright and dull	10-2	-	+	 	_					- 			
土				.02	ÇOAT	Dirgit and ddri													
4				.08	Shale	as above	10-2	ļ	 	 			 						
十	-			.09	Coal	bright with dull	10-2		†	+				 			_		<u> </u>
工										Ţ				ļ					
+				-01_	Coal	dull and bright	10-2	-	+	+					1				
土				.03	Coal	dull	10-2			1							-		
-				005	01	1 11 Jak badaka	10-2	ļ	 	┼—	<u> </u>			ļ					
+				.095	Coal	dull with bright	110-2		t	<u>†</u>				<u> </u>					
T				.05	Shale	as above	10-2		<u> </u>										
+				04	Coal	dull with bright	10-2	-	 	+		<u> </u>		 					\vdash
						WILL WALL DARME													
+				.03	Coa1	dul1	10-2	-	↓ —	┼—						<u> </u>			├
1.			277.74	.055	Coal	dull with bright, rubble	10-2		†										
\Box									<u> </u>	1									
- 2	77.98	277.98		1.00	Shale	as above, broken to broken stick		 	}	 	-	<u> </u>		 	_				
+			279.17	. 19	Shale	as above, coal stringers, broken	- 		↓	 				 					├ ─
12	79.50				<u>. </u>		_	 	†	 				†					
		279.50		.03	Shale	as above				Ţ									
+				.09	Coa1	dull, shaley	10-3		+	+-					 				
工										†									
		. —		.04	Coal	bright with dull	10-3	}	+	 		 		 		 			
1				.04	Coal	dull and bright	10-3							<u> </u>					
							1,00		ļ	+									<u> </u>
+				.015	Coa1	bright	10-3	 	+-	 		 		-	 -				
十				.035	Shale	carbonaceous	10-3		1 -	†—		<u> </u>		 					

ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

1 - R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

PROJECT		HOLE
AREA	S.E. B.C.	CONTINU

OLE No.	MRF	101	PAGE 53
NTINUED	****	101	UF

вох	DEPTH AT TOP	DEF	PTH	.		LITHO DESCRIPTION	SEAM	▲ ■EDDING	SUMM	FRAC	OTECH	SAMPLE	ANALYTICAL DATA									
No.	OF BOX	FROM	TO	ТН. ;	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	SAMPLE NO	MO	residual	ASH %	V M.%	F C.%	F.S.I.	C.V.			
62	804			 			+			1			Gr.b.	residual					 			
				.025	Coal	dull with bright	10-3										· · · · · · · · · · · · · · · · · · ·					
								<u> </u>	<u> </u>	<u> </u>			-									
\dashv				₩.	Coal	dul1	10-3	├	-	 				 								
1				.015	Shale	coaly	10-3							<u> </u>								
\dashv		L					1		-	ļ	ļ											
\dashv		1		.03	Coa1	dull with bright	110-3	├	 	 									\vdash			
				.06	Coal	bright and dull	10-3															
\dashv							-	<u> </u>		<u> </u>												
┪				-08_	Coal	dull with bright	10-3	 -		 				 					 			
\Box				085	Coal	shaley	10-3	<u> </u>				• •										
\dashv		<u> </u>		-			1	<u> </u>	 	 	-			<u> </u>								
\exists				.02	Coal	bright and dull	10-3	<u> </u>		 				 								
\rightrightarrows				-08	Coal	dull with bright	10-3							ļ								
-+		-		 			 	\vdash	 	+				 	-				├			
\exists				-02	Coal	dull, shaley	10-3		İ	<u> </u>				<u> </u>								
\Box				. 16	Shale	hlack, carbonaceous with coaly stringers and	10-3	<u> </u>	ļ					ļ <u></u>								
				 		streaks	+-	 	1	1				<u> </u>					—			
コ				.01	Shale	coaly	10-3							L								
\dashv				. 10	Ch - 1 -	11a-1 and a same and a same and	10-3							ļ								
-+				1.10	Shale	black, carbonaceous with coaly stringers and streaks	10-3	 	 	┼─┈				 	<u> </u>				 			
\sqsupset														İ								
\dashv				.06	Coal/SH	mush	10-3			<u> </u>				-								
\dashv				.06	Shale	as above	10-3	-		1				 	-				$\vdash \vdash$			
-		-		.01	Coal/SH	mush	10-3			1									<u> </u>			
63		 		†			+-	<u> </u>	<u> </u>	 												
				.09	Coal	shaley	10-3															
		 		. 33	Coal	dull, some bright	10-3	-		 												
				1. 2.	COAL	ddii, some biight	10-3		<u> </u>	1				<u> </u>								
\Box				.03	Çoal	bright with dull	10-3															
\dashv				.03	Coal	dull, shaley	10-3	<u> </u>		 									 			
+		 		.03	COAT	dull, Sharey	+0-3	 	 	 	1			 	 				 			

ALL LINEAR UNITS IN METRES

FF --- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

HOLE No.

MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•]RQD -- ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNI DANNER EASI	HC
AREA	S.E. B.C.	CON

HOLE NO MBE 101 OF.....

ן אכ	DEPTH AT TOP	DE	PTH			LITHO DESCRIPTION	SEAM	.▲ BEDDING	SUMM	ARY GE	OTECH	SAMPLE.			ANALY	TICAL	DATA		,
ا.	OF BOX	FROM	to	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD- NESS	FRAC FREG	RQD	SAMPLE NO		residual	ASH %	V M %	F.C.%	F.S.I.	c
3																			
I				.015	Coal	dull with bright	10-3												
1							-												
1				.23	Coa1	dull	10-3												L.
+							1,0 0	_											L
┿				.055	Coa1	bright and dull	10-3	-		\vdash									٠
╅				185	Coal	dull, some shaley, rubble	10-3	-	1										┪
†				****	Voal	dull, some Sharey, Indute	T*	1											T
Τ		7	81.575	.035	Coal	du11	10-3												
Ţ								.		ļ									L
42	282.24						-	⊢		ļ		L		ļ					L
╀		282.24		1.72	Shale		+	 	├ ──			٠.		 					┞
+						slightly carbonaceous, occasional silty	+-	 	1	 				 -			_		r
t				-		DADOS, STICK	+	!											t
t				.03	Coal/SH	interbedded	10-4												
Ι																			L
1				.21	Coa1	dull with bright	10-4		R1	_									Ļ
+							+	├ ──	L. 	-			<u> </u>	 	ļ				┝
╀				.02	Coal	bright with dull	10-4	╁	R1	 - 					 				┝
╁				.02	Coal	dull with bright	10-4	 	\$1	╁─┤			-						t
t				*VZ.	COAL	dull with bright	1.0-4	' 	71			-			-				t
t				.045	Coa1	bright with dull, rubble	10-4		R2										Ī
Ι																			I
Ţ				.105	Shale	coaly, becoming silty at base		ļ	R3	L.,								·	Ļ
1	∤				ļ		↓	├ ─	┡	ļ			ļ		ļ				Ļ
╀			284.77	- 38	SLTST	medium gray	+	 	R3	\vdash				 -	 				H
+	285 29						╁┈	├ ┈─	 	-	.61		-	 	 				t
ť		285.29		34	SLTST	as above, grading to sandstone at base	╅	 	R3	 	•01								t
†		203.23		- 14		AS AUGUSE, GLANTING TO SAMUSTONE AT DAGE	†								1		_		T
Ι				. 18	SST	light gray, fine grain, silt and shale bands,			R3-R4	4									I
Ţ						medium scale cross-beds, stick	↓	<u> </u>		<u> </u>					[· · · · · · · · · · · · · · · · · · ·	L
+					ļ			├ ─	<u> </u>	 			<u> </u>	 	 				╀
4				1,	CCT		+	-	 	+				 	 				۱
╁				.14	SST	as above	 	 	-	 			-		 				t
+	-			085	Coal/SS	interbedded (intermixed?)	10-5		†	 			· · · · ·		<u> </u>				t
╈							╅┈┈	1	T	1	$\overline{}$		· · · · · ·	 	· · · · · ·				r
								1		1									

ALL LINEAR UNITS IN METRES

.015 Coal

FF ---- FRACTURE FREQUENCY

dull and bright

. ANGLE MEASURED FROM CORE AXIS

10-5

HOLE No. MBE 101

FILE No 8A - 267 REVISED Feb. 1981 FORMERLY FILE No. 8A -212A

MEASURED FROM THE HORIZONTAL PLANE

^{1 : •} R B/OR S - GOLDER ASSOCIATES HARDNESS CODE

[•] RQD - ROCK QUALITY DESIGNATION (%)

PROJECT	MOUNT	BANNER	EAST	
AREA	S.E.	B.C.		

11015	_
LHOLE NO. MBE	101
CONTINUED	

PAGE OF

BOX C	DEPTH AT TOP	DFI	PTH			LITHO DESCRIPTION	SEAM	A DOUGH	SUMM	ARY GE	Ofech				ANALY	TICAL	DATA		
No.	OF BOX	FROM	το	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC FREG	ROD	SAMPLE! NO		residual	ASH %	V M %	F C. %	F.S.I,	C.V.
10	BOX	TAOM		-	M(3)(1)	Additional financial control of the	-	- '-'- -	140.33	1, 4, 6			a.r.b.	residual		_			
 ** -			<u> </u>	. 14	Coal	dull with bright	10-5		İ										
]									
\vdash				.055	Coal	dull and bright	10- <u>5</u>		-	 				·				·	
1				.04	Coal	dull with bright	10-5		t	 	-								
\vdash				.05	Coal	bright with dull	10-5	├	ļ	 	<u> </u>			 	-				
 				.01	Coal	dull	10-5	+-	 		-			+					
世					OCCL														
\Box				.63	Shale	carbonaceous, coaly streaks, sandy silty	ļ	-	ļ	 -	\vdash			ļ					
┝┈┼						streaks	 	·~	+	 	<u> </u>								
旦				.28		Stolen?													
\Box							} —	ļ	Į	1									
╁			288.215	1.00	Shale_	black, carbonaceous with sandy and silty bands	╁	87	R3	1	┝╌┤		-	+			R3 -		
12	88 34							Ĺ			52								
\Box		288.34		. 105	Coal	dull	10-6	ļ	ļ										
┝┼				- 17	Coal	dull, slicked, rubble	10-6	 	1					+	-				
H			·	.1/	COAL	duii, siicked, iuobie	110-0	\vdash	 	1				†					
口				.14	Coal	dull with bright	10-6												
-		ļ	L	2/		1.7.147551.11	10-6	 	 	}	 	-			 			_	,
\vdash				.04	Coal	bright with dull	110-0	 	 	+	-			<u> </u>					
				.03	Coal	sandy (intermixed)													==
$\vdash \vdash$		·					ļ	├ ─	D.F.	ļ		<u> </u>			 			• • • • • • • • • • • • • • • • • • • •	
╁				1.02	SST	medium grain, salt and pepper, massive Moose Mtn., stick	╁	 	R5	 				+	 				
65																			
			290.97	1.13	SST	fine to coarse, mainly massive,		73	R5	ļ				ļ					}
\vdash		 	 	 		occasional coal streaks, occasional chert pebble bands, stick	1	├	 -	+	 	ļ		 	+	-			
\vdash				 		pennie nanus, stick													
2	91, 39										81.6								
		291.39	294.42	3.03	SST	as above	 	79	R5	 	 	 	 	 	+				
2	94.44	 		 				<u> </u>	1_		100				1				
		294.44		.14	SST	as above		Ĺ	R5					Į					
66			205 //	-	acm	Landa dan tanah alam anda anda anda anda anda anda anda an	┼	77	0.5	-	 -	<u> </u>	<u> </u>	 	 				
┡╌┼	_		295.44	. 86	SST	as above, breaks along carbonaceous streaks	 	77	R5	+	 	 	 -	 	 				
		.	<u> </u>			<u> </u>	<u> </u>	Ц	ь—	4	Щ		ــــــــــــــــــــــــــــــــــــــ					لبيسسيا	

ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

1 : R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

• RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

A ANGLE MEASURED FROM CORE AXIS

PROJECT	MOUNT BANNER EAST	HOL
AREA	S.E. B.C.	CONTI

HOLE No.

PAGE 56 OF....

вох	DEPTH AT TOP	DF	PTH			LITHO DESCRIPTION	55.44		SUMM	ARY GI	OTECH				ANALY	TICAL	DATA		
No.	OF BOX	FROM	то	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD NESS	FRAC	RQD	SAMPLE NO		IST %	ASH %	V M. %	FC %	F.S.I,	C.V.
	вох	I KOM	-'`		7417174		_	1-1-1	1.46.33	- RIG	 		gr.b.	residual					
66	295.20	 					1		 	1	79								
	-11.231	295.20	295.96	.86	SST	as ahove			R5								\Box		
	:	<u> </u>						ļ	 	 	82.6								
	295.96	295.96		. 36	SST	as above		<u> </u>	125	 -	02.0		_	 					
		277.70													1	1			
				.005	Coal_	sandy		ļ	R5_	-									
-			297.105	78	SST	as above, becoming massive at base	+	80	R5	+				-	+	-			
+		ļ	297.10.	1.75	331	as above, becoming massive at base			1	 									
	297.48								J	L	89.1								
-		297.48	-	1.365	SST	as above	+	∤	R5	 -	<u></u>	├			- 				
67		\vdash	300.495	1.65	SST	as above, stick	+	t	R5	 									
							1	[<u> </u>									
1	300.53	22.2.2.	<u> </u>	0 = 1			+-	-	ne -	-	93.2			 					
68		300.53	<u> </u>	2.76	SST	as above	+	 	R5_	1	 	 		†	-	-			
			303.59	.30	SST	as above			R5										
Ì	303.58			<u> </u>			<u> </u>		1	ļ	100								ļ
\vdash		303.58	306.62	3.04	SST	as above		<u> </u>	R5_	1				 					
-	306.63	 	<u> </u>	<u> </u>			 	 	1		90.1					1			
		306.63		.98	SST	as above, occasional shaley bands			R5					L					
\vdash		 	 					}	╁				 	}	-				
69		 	<u> </u>	.42	SST	as above	 	+	R5	+	 			 	-				-
			·																
\Box				.18	SH/SST	Interbedded	_		R5_	-	ļ			<u> </u>					ļ
\vdash		 	309.65	1 44	CCT	as above		82	R5	+	+			 					_
 		\vdash	702.03	1.44	331	40 AVOVE	1	1	†~~				· .	1					.
	309,68							I			94.4			ļ					
\vdash		309.68	 	2.29	SST	as above	+	79	R5	···	 		 	 	ļ				ļ
70		 		\vdash	 		 	 	┼─╴	t	 		 	\vdash	\vdash	-			
			312.66	.70	SST	as above			R5										
Ш		.					-		\vdash	<u> </u>	100								
┞╼┼	312.72	212 72	315.76	2 04	CCT	as above	+	\vdash	R5	+	93	\vdash	-	+	 				
		1314-74	13.70	13.04	991	as apove			12					1		·			
	315.77										32.1								
		315.77	<u> </u>	. 56	SST	as above		<u> </u>	R5	<u> </u>		L	L.,,	<u></u>	L				L

ALL LINEAR UNITS IN METRES

A ANGLE MEASURED FROM CORE AXIS

[#] MEASURED FROM THE HORIZONTAL PLANE

^{1 -} R &/OR 5 - GOLDER ASSOCIATES HARDNESS CODE

^{*}RQD - ROCK QUALITY DESIGNATION (%)

FF ---- FRACTURE FREQUENCY

CROWS N. RESOURCES LIMITED

CORE & COAL CORE DESCRIPTION

PROJECT	MOUNT BANNER EAST	HOLE No
AREA	S.E. B.C.	CONTINUED

BOx	DEPTH	DEPTH LITHO DESCRIPTION				LITHO DESCRIPTION			SUMM	ARY GE	OfECH		ANALYTICAL DATA							
No	DEPTH AT TOP OF BOX	FROM	10	TH.	MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)	DESIG	ANGLE	HARD-	FRAC	RQD	SAMPLE NO	MO	ST % residual	ASH %	V M. 1/4	F.C.%	F.S.I.	C.V.	
	BOX						+	- ' '		1 100	 		G.F.B.	178310001						
71-			318.88	2 55	ССТ	as above, stick	 	81	R5	 				!						
\vdash			.110.00.	Z-11	221	AS ADDVE. SIXCE	†	1	 	\vdash	—				1					
H	318.82					T.D.	1				100									
							T									1				
Щ							-	<u> </u>	ļ					 		↓				
\mapsto				⊢			+			 	ļ			ļi		∤				
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┞╌╂		 -		\vdash			+	 	\vdash	 	 									
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							1	<u> </u>		†										
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igspace				.			 	↓	ļ	↓	L		ļ	 						
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ALL LINEAR UNITS IN METRES

MEASURED FROM THE HORIZONTAL PLANE

* : • R &/OR 5 -- GOLDER ASSOCIATES HARDNESS CODE

• ROD — ROCK QUALITY DESIGNATION (%)

FF --- FRACTURE FREQUENCY

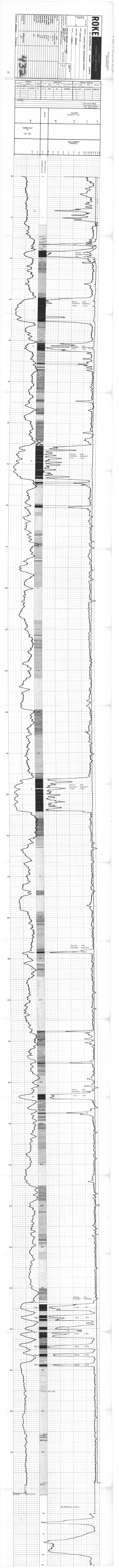
A ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

FILE No BA - 267 REVISED Feb. 1981 FORMERLY FILE No. BA - 212A

PAGE.... OF... 57

MBE 101



K-SHELLIME. BANNER EAST 80(3)A

K-SHELL MT BANNER EAST 80(3)A

	APPIC 3	ECTION		NATION:		PARTO		
	AT. BANNER	EAST				AUTHOR: G. SLOAN	DATE: 1981 -01-1	9
AREA:						SOURCE OF DATA:		
LOCATION:						SPENCER RIDGE TRE	NCH I, SEAM I	
CONTROL	INTERVAL	LITUOLOGY	STRIKE			DESCRIPTION		
CONTROL		LITHOLOGY	& DIP	MAIN		AMPLIFIED		SAMPLE
SCALE 1:20								
m)						Cover (cleate)		
0						Cover (sltstn) Clay? - gray	*	
						Coal - dull, some bright, badly wthra	1	
						Coal - dull w/bright		
		Market St.						
						Shale		
2								
						Coal - dull & bright		
						Shale		
						Coal		
						Shale / Sltstn - interbedded		and the
3								
	*						HG-65/	M
				7			110-03/	
					£			
		1						

STRATIGRAPHIC S	ECTION		DESIG	NATION:	B-SHELL-IMI. BHINNE	PARTOF	
PROJECT: MT. BANNER					AUTHOR: G. SLOAN	DATE: 1981-01-19	
AREA:					SOURCE OF DATA:		
LOCATION:					MAIN RIDGE TREN	ICH 1, SEAM L	
CONTROL		STRIKE			DESCRIPTION		
CONTROL	POINT LITHOLOGY & DIP				AMPLIFIED		SAMPLE
SCALE 1:50 [m]							
-0					Shale		
					Coal - hard, bright .		
-1					Shale - carb. fragments		
_2					Coal Shale - black		
-3					Coal		
-4							
					Shale - carb. streaks Coal - hard, bright		
-5	50500000000000000000000000000000000000				Shale - reddish Coal - interbedded w/Shale Shale - wthrs red		
					Sandstone		
						F	IG-65A
				* .			* 3

TRATIGRAPHIC S				AUTHOR: G. SLOAN	The same of the sa	RT O				
AREA:	-731				SOURCE OF DATA:					
OCATION:					N. WATERFALL RIDGE TRENCH 1, SEA					
	T									
CONTROL	LITHOLOGY	STRIKE &		DESCRIPTION			SAMPLE			
CONTROL		DÎP	MAIN	AMPLIFIED						
CALE 1:50										
n]										
0						-				
				Shale						
1	Name of the last o									
	非有等证法			Coal - bright						
2				Shale Coal - soft, bright						
				Shale						
•				Coal - soft, bright Shale - gray brown	(9)					
3	R BREET			Shale - gray prown		•				
	Design to the second									
				Coal - bright						
4										
				Shale Coaly Shale Shale						
5				Shale	`					
6										
							HG-65			

STRATIGRAPHIC S	ECTION		DESIGNA	ATION: PART OF
PROJECT: MT. BANNER E				AUTHOR: G. SLOAN DATE: 1981 - 01 - 19
AREA:				SOURCE OF DATA:
LOCATION:				SPENCER RIDGE TRENCH 2, SEAM G
U CONTROL INTERVAL		STRIKE		DESCRIPTION
CONTROL	LITHOLOGY	& DIP	MAIN	AMPLIFIED
SCALE 1:50				
[m]				Cover
-0				
				Coal - badly weathered, bright & dull, shaley in places
_1				
_2				
	====			Shale - very coaly Coal - A/A
				Ironstone - badly weathered
— 3				Coal - A/A, bright w/dull
	TEXT OF THE			Shale - gray
				Coal - bright w/duil Shale - grey
-4				
				Coal - hard & bright
-5				
-6				Shale-grey Coal - hard & bright Shale-red
				Coal - hard & bright Coal - shaley
-7		_		Shale-carb w/coaly stringers Coal-hard & bright Coal-dull, shaley
				Coal - dull, shaley Shale - grey
	8			
-8				
				HC 450
				HG-65D
		-		
f	T.			

OF

HG-65C

K-SHELL MT. BANNER

PART

PROJECT: AUTHOR: G. SLOAN DATE: 1981 - 01 - 19 MT. BANNER EAST SOURCE OF DATA: AREA: TRENCH 2, SEAM G PAC RIDGE LOCATION: DESCRIPTION INTERVAL STRIKE CONTROL LITHOLOGY & DIP SAMPLE POINT **AMPLIFIED** MAIN SCALE 1:50 [m] Shale -0 Coal - dull -1 Shale - light gray -2 **-**3 Coal - hard, bright, becomes duller near top -5 -6 -7 Carb. Shale -9 Coal - hard, bright Sltstn - wthrs red Coal - hard, bright -10 Carb. Shale - contains thin hard bright coal stringers Coal - hard, bright Shale - dark gray Ļij Coal - hard, bright Shale - dark gray, two thin oal bands -12 Coal - hard, bright -13 Shale & Ss. - interbedded -14 -15 Ss. - light brown, very resistant

DESIGNATION:

STRATIGRAPHIC SECTION

STRATIGRAPHIC SECTION DESIGNATION							PART	OF	
PROJECT: MT. BANNER EAST AREA:						AUTHOR: G. SLOAN	DATE: 19	81 - 01 - 19)
						SOURCE OF DATA:			
LOCATION:						MAIN RIDGE TRE	NCH 2, SEA	AM K	
CONTROL	INTERVAL		STRIKE			DESCRIPTION			
	LITHOLOGY	& DIP	MAIN		AMPLIFIED			SAMPLE	
SCALE 1:50 [m]									
-0					Shale -	carbonaceous		>	
-1									
-2					Coal-	hard, bright, badly sheared -contains a fewthin carb shale stri	ngers		
-3									
-4					Shale				
									HG-6

432 K-Mt. Binnel End 80[3] A

PART OF _____

STRATIGR	RAPHIC S	ECTION		DESIGNA	ATION:	•	PARTO	
	AT. BANNER				AUTHOR: G. SLOAN DATE: 1981 - 01- 19			
AREA:						SOURCE OF DATA:		
LOCATION:				N. WATERFALL RIDGE	TRENCH 2, SEA	AM K		
	INTERVAL	LITHOLOGY	STRIKE & DIP		DESCRIPTION			
CONTROL				MAIN		AMPLIFIED		SAMPLE
SCALE 1:50 [m]								
-0					Siltsto		•	
						Shale		
-1					Coal	- soft, dull		
_2								
					Coal	- soft, shiny w/occ. bands of hard, I	bright	
-3								
					Coal	- soft, dull		
- 4					Shale			
								0 (5)
							Н	G-651
-								

STRATIGRAPHIC SEC	CTION		DESIGN	ATION:	K-SHELL-MT.	PART OF	
PROJECT: MT. BANNER EAS	T			AUTHOR: G. SLOAN	DATE: 1981 - 01 - 19		
AREA:				SOURCE OF DATA:	14		
LOCATION:					N. WATERFALL RIDGE	TRENCH 3, SEA	M G
CONTROL		TRIKE			DESCRIPTION		
CONTROL	ITHOLOGY	& DIP	MAIN	Ť	AMPLIFIED		SAMPLE
SCALE 1:50							
[m]				Shale	*		
-0						-	
-1							
-2				Coal -	dull w/occ. interbeds of Shaley Coal		
_3							
-4							
				Shale			
				Coal -	bright and dull		
-5				Coal-	dull		
	Ш			Shaley	Coal - w/bands of shale		
-6							
				Coal-	bright		
_7							
				Shale			
-8						HG	-65J
						110	

S-SHELL-MT. BANNER EAST 80,
PART _____OF

ROJECT: MT.	BANNER E	AST		AUTHOR: G. SLOAN DATE: 1981 -01 - 19 SOURCE OF DATA: PAC RIDGE TRENCH 3, SEAM E			
OCATION:							
CONTROL	INTERVAL	LITUOLOGY	STRIKE		DESCRIPTION		
CONTROL		LITHOLOGY	& DIP	MAIN	AMPLIFIED	SAMPL	
ALE 1:00							
CALE 1:20							
					Shale - gray, badly wthred		
	0.45				Coal - few thin shale bands		
					shale banas		
	0.20				Coal - interbedded w/ Carb. Shale		
					Coal - wthred bands		
	1.55						
					Shale - w/coaly stringers		
	0.30				Coal - hard, bright		
					Shale, Carb w/coaly stringers		
	0.30				Coal - dull	**	
				* * * * * * * * * * * * * * * * * * * *	Coal - interbedded w/ Shale 75% / 25%		
	0.80						
		-					
	0.10				Coal - bright		
					Shale - gray		
	0.40				Coal - bright		
	0.40						
	0.30				Coal - interbedded w/ Carb, Shale		
The second second		<u> </u>		and the second second			
					Coal - bright		
	1.70						
	*						
		******			Ss / Ironstone		
					Coal - bright		
	1.10						
					Siltstone		
	0:40						
	0.40				Coal - bright		
					Coal- interbedded w/ Carb. Shale		
	0.30	-			Codi - Interpedded Wy Carb. Shale	7	
					J.F.		
4							
					Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		
	2.70				Coal - bright		

STRATIGRAPHIC S				PART)F		
PROJECT: MT. BANNER	EAST		AUTHOR: G. SLOAN DATE: 1981 -01 - 19				
AREA:			SOURCE OF DATA:				
LOCATION:			PAC RIDGE TRENCH 1, SEAM K				
CONTROL) ITHOUSEN	STRIKE			DESCRIPTION		
CONTROL	LITHOLOGY	& DIP	MAIN	AMPLIFIED			SAMPLE
SCALE 1:50							
m)							
0				ee.			
					Shale		
1					Coal/Carb. Shale - interbedded		
-2					Coal - hard, bright		
-3					Carb. Shale		
					Coal - hard, bright		
-4					Carb. Shale		
-5					Coal- hard, bright	25-	
6					Shale - wthrs red Coal - hard, bright		
7					Carb. Shale/Coal - interbedded		ı
-8					Shale - gray black		
-9					Shaley Coal		
-10					Coal - bright Shale Coal - bright Shale		

STRATIGR	APHIC S	ECTION		DESIG	NATION:		PART_	OF	
	MT. BANNER			AUTHOR: G. SLOAN DATE: 1981 - 01 - 19 SOURCE OF DATA:					
AREA:									
LOCATION:				SPENCER RIDGE TR	ENCH 3, SE	AM E			
CONTROL	INTERVAL		STRIKE			DESCRIPTION			
CONTROL		LITHOLOGY	& DIP	MAIN		AMPLIFIED		SAMPLE	
CALE 1: 50									
n]						Shale			
0						Shale		-	
						Coal - badly weathered			
					1	Coal - dull, weathered slightly			
						Coal - badly weathered, dull			
-2,						Shale-coaly stringers			
3						Coal - dull, bands of shiny coal			
				*					
4					. 1				
						Coal - dull			
5									
6						Coaly shale			
						Coal-dull			
7						Shale - coaly stringers			
		1 12							
								HG-65E	
		line of							

STRATIGRAPHIC S	ECTION		DESIGNATION	P	ARTOF	
PROJECT: MT. BANNER I				AUTHOR: G. SLOAN D	ATE: 1981-01-19	
AREA:				SOURCE OF DATA:		
LOCATION:				N. WATERFALL RIDGE T	RENCH 4, SEAM	E
CONTROL INTERVAL		STRIKE &		DESCRIPTION	e x	
CONTROL	LITHOLOGY	& DIP	MAIN	AMPLIFIED		SAMPLE
SCALE 1:20						
[m]				Cover		
-0						
				Coal - dull w/some bright bands		
1.70				Coal - auli w/some bright bands		
-1						
						- A
				Shale - coaly		
_2						
					VA 1.	
_3 1.90				Coal - dull w/occ. bands of Shaley Coal		
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
-4 0.60				Cool dill		
0.00				Coal - dull	en lugares en estado que en en	
				Shale - interbedded w/Sltstn		
		•				
*					HG-650	
-			A			
*						
1						
	1 1					

	APHIC SECTION AT. BANNER EAST	DESIGNATI	ON: BANNER EAST 80(3)A ON: PART OF AUTHOR: G. SLOAN DATE: 1981-01-19
AREA: LOCATION:			SOURCE OF DATA: SEAMS D,E & F ON ROAD
CONTROL	LITHOLOGY	STRIKE & MAIN	DESCRIPTION SAME
SCALE 1:20 m]			
0	0.30		Ss - med. to coarse grain, coaly stringers Coal - dull w/bright
	0.12		Coal - bright w/ dull Shale - carb. w/ plant debris Coal - hard, bright Shale - carb. w/ coaly bands
	0.08 0.05 0.15		Shale - carb. w/coaly bands Coal - dull Coal - bright Shale - gray Coal - bright, hard
	0.05 0.05 0.45		Shale - gray w/coaly bands Coal - bright Coal - bright Coal - bright
2			Shale - silty, gray, massive
3	0.04		Coal - bright, lensey
			Shale - gray, coaly bands, silty at base (coarsens to South) (appears to be thrust over seam below - shattered)
4	0.02		Coal - dull Shale- carb., brown
	0.60		Coal - dull
	0.06		Shale - gray Coal - dull Shale - carb. & coaly Coal - wthrs dull
	0.18		Coal - dull w/bright Shale - carb. Coal - bright
	**		Shale - brown, plant debris, some disturbance.
			Shale - carb. lenses
	0.945		Coal - dull & bright bands
	0.02		Coal - shaley Coal - dull
	0.27		Shale-brown, carb. Coal - dull
	0.06		Coal - shaley
	0.66		Coal - dull, hard bands
	*****		Ironstone- nodular, red. coaly
	0.28		Coal - bright & dull Shale - slightly carb., gray Carb. Shale - interbedded w/coaly shale & shaley coal
	0.02	005 04	Coal - hard, bright Coal - hard, bright Coal - dull Coal - hard, bright
	0.38		Shale -carb., lensey Coal - shaley, dull, hard
	0.07		Ironstone - red Coal - dull w/bright Shale - carb.
	0.35		Coal - dull w/bright, bright stringers —— SEAM Coal - dull
	0.24		Shale - carb. Coal - dull, shale stringers Shale - carb.
1	0.23		Coal - dull Shale - carb. Coal - dull Shale - carb.
	0.53		Coal - dull
			Shale - carb.
			Coal - dull, some bright near base
	1.01		
	0.08		Shale - carb. Coal - dull
	0.11		Coal - dull Shale - carb.
	0.92		Coal - dull
	0.03		
	0.03		Coal - bright Shale-carb., gray
	0.75		Coal - dull, some bright
			Shale - carb., gray
	0.78		Coal -bright & dull
			Shale - carb., gray
	0.11		Coal - dull w/bright
			Ss silty, small scale x-beds, fines downward & upward to Shale
	0.10		Coal - lensey, badly wthred
			Shale - silty same who So lawing
*			Shale - silty, some vfg Ss. laminations, some Carb. Shale

Slistn dk gray/Ss. vfg orange - laminar interbeds

Sltsn - shaley in places

Shale - gray, lensey w/coaly stringers

Shale - carb., gray & brown, becomes silty at base

Sltsn- gray

Coal - dull w/disontinuos

Shale - coaly, wthrs yellow

Coal - shaley, badly wthred

Shale / Sltstn - carb., faulted into Coal to East

Coal - dirty, some bright bands, shaley lenses

-SEAM D

HG-65R

STRAT SECTION OF SEAMS DIE, F ON ROAD

Ss - vfg, gray

Shale - black

Coal - dirty

Coal - shaley, dirty

Coal - soft, dull

Shale - gray

Sitstn/Shale - carb.

-20

-21

-22

-23

-24

-25

-26

-27

-28

-30

0.17

0.63

0.39

0.10

0.77

0.43

00 432

A A A A A A A A A A A A A A A A A A A	APHIC S				A)ITHOR: C CLOAN	€'\
REA:	. BANNER E	мэі			AUTHOR: G. SLOAN DATE: 19 81-01-19 SOURCE OF DATA:	
OCATION:					SEAM G ON ROAD	
CONTROL	INTERVAL		STRIKE		DESCRIPTION	-
CONTROL		LITHOLOGY	& DIP	MAIN	AMPLIFIED	MPLE
1.						
ALE 1: 20						
0]					Shale - carb., coaly fragments	
	0.60				Coal - soft	
					Shale- coaly	
	0.71					
	0,1				Coal - soft	
					Shale - grey	
	0.60				Coal - dull w/bright bands, fairly hard	
					Shale	
	0.61				Coal- dull w/ bright bands	
	0.10				Shale Coal - bright, hard	
					Shale	
118						
					Coal- dull w/bright	
	0.90					
					Shale	
	0.33				Coal - dull w/bright	
					State window County with in two (Southout 2)	
					Shale - pinches & swells, splits in two (faulted?)	
					Coal - mostly vitrain	
	0.55					
	0.06				Shale / Coal - interbedded, discontinuous to south	
	0.05		i Na salama		Shale / Coal - Interbedued, discontinuous 10 south	
	0.42	MEETS.			Coal- bright	
	0.16	XXXXXXX			Ironstone - lensey	
					Coal Ironstone	
					Coal - dull, hard	
	0.45					
	0.08				Coal - w/Ironstone nodules	
	0.52				Coal- dull w/bright bands	
		三 二章			Shale - thins to south	
	0.40					
	0.40				Coal - soft, dull (gouge?)	
	0.16				Shale Coal- medium bright	
	0.10				Coal - w/Ironstone nodules	
	0.19				Coal - soft, dull w/bright bands	
	0.10				Shale - w/coaly streaks, brown wthrs yellow, thins to south	
					Coal - soft, bright, lensey Shale - brown Coal - dull w/bright	
	0.12				Coal - dull w/bright Shale - wthrs yellow , lensey	
	0.19				Coal - dull w/bright	
	0.21				Shale - wthrs red, thins to south Coal - dull w/bright	
	0.05					
	0.07				Shale- yellow Coal - dull Shale-lensey Coal - shaley	
					Siltstone - grey wthrs brown	
	0.09				Coal - dull	
					Shale - w/coaly bands (Shattered zone) Shale - coaly	
					Shale/Siltstone - interbedded, grey carb. fragments	
	0.04				Coal - soft, bright, pinched & squeezed	
					Rubbly zone (Sitstn./Shale minor bright Coal)	
	0.07				Cool Shale	
	0.07				Coal - shaley Shale - coaly bands	
	0.14	I LEVIS II THE			Coal-dull, soft	
	0.14					
					Coal - dull, hard	
	0.38				Coal - dull, hard	

432

STRATIGRAPHIC SECTION PART OF **DESIGNATION:** DATE: 1981-01-19 AUTHOR: G. SLOAN PROJECT: MT. BANNER EAST SOURCE OF DATA: AREA: SEAM H IN TRENCH ON ROAD LOCATION: DESCRIPTION INTERVAL STRIKE SCALE SAMPLE CONTROL LITHOLOGY & DIP AMPLIFIED POINT MAIN SCALE 1: 20 [m] Siltstone - shaley -0 Coal - dirty 0.10 Shale - Carb. 0.20 Coal Shale - red, black Coal - dull, bright 0.33 Shale Coal - soft, slicked 0.05 Shale Coal 0.34 Shale - red Coal Shale 0.06 Coal - bright 0.08 Shale - w/coaly stringers Coal - soft , dull & bright 0.11 Shale - w/carb. fragments Coal 0.13 Shale 0.13 Coal - shaley Siltstone - gray, carb. fragments HG -65F

K-SHELL-MT. BANNER STRATIGRAPHIC SECTION DESIGNATION: PART OF DATE: 1981 - 01 - 19 MT. BANNER EAST PROJECT: AUTHOR: G. SLOAN SOURCE OF DATA: AREA: SEAM I ON ROAD LOCATION: DESCRIPTION INTERVAL SCALE STRIKE CONTROL SAMPLE LITHOLOGY & DIP POINT **AMPLIFIED** MAIN SCALE 1:20 [m] Siltstone - massive, gray -0 Shale - Carb. 0.31 Shale - interbedded w/Coal, sheared Coal - soft, dull 0.14 Coal - badly sheared 0.29 Coal - bright & dull 0.20 Coal - w/yellow band 0.10 Coal - dull w / bright 0.33 Shale - Carb. wthrs red & yellow -2 _3 3.05 Coal - dull & bright, clean, blocky Shale - coaly, wthrs yellow -5 Coal - bright w / dull, hard 1.47 - 6 0.50 Carb. Shale - Coal bands, badly wthrd Siltstone - gray massive HG-65G

ENCLOSURE 19

Coal Analysis And Tests Record (10 Pages)

CROWS NEST RESOURCES "'YSIS REPORT

HOLE NO. Trench DAIL: July 29/80

ANALYST Bernie

AREA: Mount Banner

% LAB. SAMPLE AIR DRY CALC. Koal/ INTERVAL LOSS MOISTURE F.C. F.S.I. SULFUR YIELD 110. SEAM (METRES) **FRACTION** ASH V.M. BASIS NO. ka ADB 9.81 2.15 16.73 RAW 80-105 Trench SR3 E ARB 3 17.10 DB 1.5 FLOAT ADB 6899 1.78 6.19 23.38 68.65 0 45 6.30 23.81 69.89 7024 DB FLOAT ADB DB FLOAT ΛDB DB ADB RAW 2.15 23.91 14.18 0 ARB 80-106 Trench E SR3 24.43 DB#1 & 2 1.5 FLOAT ADB 2.11 6.83 26 | 6690 6834 6690 24.89 66.17 0 DB 6.98 25.43 67.59 FLOAT ADB DB FLOAT ADB DB RAW ADB ARB DB ADB FLOAT DB FLOAT ADB DB ADB **FLOAT** क्रिका स्ट्रांस The street of th DB

CROWS NEST RESOURCES 1 YSIS REPORT

AREA:	Mount	Banner		HOLE NO.	Trench	_ DATE:	July 2	4/80	ANAL	YST	<u>Bernie</u>			
	[<u>,</u>		1 %			1	<u> </u>	<u> </u>		г		
LAB. NO.	SAMPLE NO.	SEAM_	INTERVAL (METRES)	FRACTION	AIR DRY LOSS	% MOISTURE	% ASH	% V.M.	% ` F.C.	F.S.I.	SULFUR	% YIELD	Kcal/ kg	CALC. BASIS
80-112	PR 2	G	Lower half	RAW	19.31	5.88	16.42			0				AD8
												, i		ARB
]	·			17.44							DB
				1.5 FLOAT			5.65	29.53	61.15	0		23		ADB
							5.86	30.66	63.48			23		DB
				FLOAT								रक्तम् <i>रस्या राज्याः</i>		ADB
														DB
				FLOAT										ADB
								2.74						DB ADB
				RAW			The state of the s							
						हारू एक स्था <u>र</u>							·	ARB DB
				CLOAT								1		
			7	FLOAT								G7979		ADB DB
		-		FLOAT		Asia San San				· · · · · · · · · · · · · · · · · · ·				
				LLUNI								ত চেড্না লগু রু		ADB DB
				FLOAT		1						4424		
				ILON	<u>.</u> ;	44.7.2. 14 sug	•		·			and a section		ADB DB
				RAW : 11 /		and the same of		a na a san sa asan Marangan						ADB
				IVVM							·		. _	ARB
				·				-					· · · · · · · · · · · · · · · · · · ·	DB
				FLOAT								<u>Danasial</u>	·····	AUB
												73.00		DB
				FLOAT	والمنظمة المنظمة المنظمة المنظمة							to man been de la de de		ADB
										<u> </u>		A ATHER WATER		DB
]			FLOAT	uvaanun ju L	الأحدث						الم المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة المناسبة		ADB
											<u> </u>	चरक्रशासकः स		DB
					avenuelle de la comme	<u> </u>						10.		

CROWS NEST RESOURCE? ALYSIS REPORT

BERNIE & DAKREN DATE: MAR. 25/81 HOLE NO. OUTCROP ANALYST AREA: MT. BANNER AIR DRY CALC LAB. SAMPLE INTERVAL % % Kcal/ % % LOSS MOISTURE F.C. | F.S.I. SULFURIYIELD **SEAM** (METRES) FRACTION ASH V.M. BASI: NO. NO. kα ADB RAW 3.38 30.92 23.11 42.49 0 ARB $^{11}D^{11}$ 80-876 DB 32.00 23,92 44.08 DN ROAD 1.6 FLOAT 5860 2.41 11.34 11.62 ADB 36 27.95 58.30 0 .49 DB 6005 .50 28.64 59.74 FLOAT ADB DB FLOAT ADB DB ADB 22.12 50.39 RAW 4.73 22.76 0 ARB $\pi E_{\rm II}$ 80-877 LOWER HALF DB 23.89 23.22 52.89 ON ROAD 1.6 FLOAT ADB 54 1.46 9.52 25,20 63.82 0 .32 6841 DB .32 6841 9.66 25.57 64.77 **FLOAT** ADB DB FLOAT ADB The second secon DB RAW AD8 22.07 0 5.79 27.47 44.67 1933 1933 ARB A STATE OF THE STA $^{\rm HEH}$ UPPER HALF 80-878 DB 29.16 47.41 23.43 1.6 FLOAT AUB 45 6078 26.51 60.32 0 .37 ON ROAD 3.39 9.78 7 DB 27.44 62.44 .38 6291 10.12 FLOAT ADB DB AD8 FLOAT DB

CROWS NEST RESOURCES ALYSIS REPORT AREA: MT. BANNER HOLE NO. OUTCROP DATE: MAR. 25/81 ANALYST BERNIE & DAKREN LAB. SAMPLE INTERVAL AIR DRY Kcal/ ΝΟ. NO. SEAM (METRES) FRACTION LOSS MOISTURE F.C. F.S.I. SULFUR YIELD ASH V.M. kq 1.25 45.64 36.78 RAW 16.33 uAn 80-879 46.22 16.54 37.24 ON ROAD 1.6 FLOAT 2.16 9.54 23.48 64.82 29 6905 .69 स्वर अस्त 9.75 24.00 66.25 .71 7057 FLOAT * 100 2 3 5 7 6 1 2 2 1 1 2 2 2 FLOAT RAW 2.55 12.01 25.36 60.08 0 utu 80-880 12.32 26.02 61.66 1.6 FLOAT 2.09 5.44 26.83 65.64 0 82 .53 6761 DN ROAD सर्वे खाउँ इ.स.च्या 5.56 27.40 67.04 6797 FLOAT

CALC

BASI

ADB

ARB

DB

ADB

DB

ADB

DB AD8

DB ADB

ARB

DB

ADB

DB

ADB ŨΒ

ADB DB

ADB ARB DB

ADB

DB

ADB BG

ADB

DB

FLOAT RAW FLOAT FLOAT Acres 19 Company FLOAT 100 m CROWS NEST RESOURCES ALYSIS REPORT

HOLE NO. MBE-101

AREA: MT. BANNER

DATE: MAR. 25/81 ANALYST BERNIE & DAKLEN CALC AIR DRY 'Kcal/ LAB. SAMPLE INTERVAL % % F.C. F.S.I. SULFUR YIELD MOISTURE BASI ΝΟ. (METRES) FRACTION LOSS ASH V.M. ka NO. SEAM ADB RAW 14.79 38.25 2.57 41.21 17.97 ARB 18.34 -80-996 J DB 39.26 42.30 18,44 21.19 1.6 FLOAT 2.07 ADB 37 নামসক্ষ 63.08 10.91 23.94 6886 DB 64.41 24.45 7031 11,14 .90 FLOAT ADB DB ADB FLOAT DB ADB 61.11 19.94 8 18.46 RAW 4.55 .49 ARB 34.69 -80-997 Ι DB 18.55 20.04 61.41 35.97 1.6 FLOAT ADB 8 ½ 81 .57 5.87 23.03 70.53 8124 .62 DΒ 70.94 5.90 23.16 .62 8170 FLOAT ADB DBFLOAT ADB the first constitution of the same of the DB. 66,50 7 ⅓ ADB 12.05 20.80 RAW 5.57 .65 ARB A STORY Ι 30.09 -80-998 12.13 DB 66.93 20.94 1.6 FLOAT ADB .68 34.69 21.44 86 6.49 71.39 <u>.58</u> 8005 700 DB Ž1.59 71.88 6.53 8060 FLOAT ADB DBADB FLOAT 7.11 DΒ

CROWS NEST RESOURCES ALYSIS REPORT

HOLE NO. MBE-101 DATE: MAR. 25/81 ANALYST BERNIE & DARREN MT. BANNER AREA: CALC. INTERVAL AIR DRY LAB. SAMPLE Kcal/ MOISTURE F.C. | F.S.I. | SULFUR | YIELD | BASIS NO. NO. SEAM (METRES) FRACTION LOSS ASH V.M. ka ADB 2.51 RAW .60 49.70 14.01 35.69 1 ARB 80-999 H 41.01 -D350.00 35.90 14.10 42.96 1.6 FLOAT .75 7502 34 ADB 11.93 67.60 5 19.88 DB .75 7546 68.00 12.00 20.00 FLOAT ADB DB ADB FLOAT DB 3 ADB 1.27 RAW .62 24.55 18.09 56.74 ARB DB 65.75 -80-1024 G 24.70 18.20 57.10 1.6 FLOAT ADB 4 at 2.3 7741 8.93 20.08 70.48 .41 71 74.05 DB.41 7780 8.98 20.18 70.84 FLOAT ADB त्यक्षास्य सङ्ग्रह्म DB FLOAT ADD Agent of the state DB 58.13 2.58 22,41 19.05 3 1 RAW .41 ADB ARB 80-1025 Ε 146.49 -22.50 19.13 58.37 DB 154.24 1.6 FLOAT AUB 73 10.47 19.28 69.64 6 .61 7639 10.53 .37 DB 19.40 70.07 7686 FLOAT ADB DB FLOAT ADB DB

CROWS NEST RESOURCES ALYSIS REPORT AREA: .. BANNER HOLE NO. MBE-101 L...c: MAR. 25/81 ANALYST Bernie & Darren LAB. SAMPLE INTERVAL AIR DRY .CALC Kcal/ ΝО. NO. (METRES) SEAM FRACTION LOSS MOISTURE F.C. F.S.I. SULFUR YIELD ASH V.M. BASIS ka RAW 2.55 .48 ADB 15.60 17.54 66.38 1 . हिहिन ARB 80-1028 MARKER 188.39 -15.68 DB 17.63 66.69 188.76 1.6 FLOAT '8<u>5</u> 10.00 7656 17.67 .58 ADB 71.85 DB 10.05 17.75 72.20 .58 7693 FLOAT ADB DB. ADB FLOAT DB RAW ADB 24,22 16.50 58.87 80-1029 9 223.42 -ARB 24.32 16.57 03 59.11 224.25 1.6 FLOAT 75 ADB 10.81 17.70 1 71.00 .52 7640 10.86 .52 17.79 71.35 7677 FLOAT ADB DB FLOAT SCA DB. RAW 2.43 28.38 ADB. .40 16.10 55.12 1726 80 -1030 ARB 10-1 274.08 -28.49 16.17 DB 55.34 275.84 1.6 FLOAT AU3 7737 .48 10.02 70.91 18.59 8 62 10.07 7774 .48 D3 18.68 71.25 FLOAT ADB DB

ADB

DB

FLOAT

CROWS NEST RESOURCES ALYSIS REPORT

AREA: MT. BANNER HOLE NO. MBE-101 DATE: MAR. 25/81 ANALYST BERNIE & DARREN LAB. SAMPLE INTERVAL AIR DRY % CALC. Kcal/ 10. SEAM (METRES) FRACTION LOSS MOISTURE F.C. |F.S.I. | SULFUR | YIELD | NO. ASH V.M. BASIS kα ADB RAW .40 19.74 20.54 59.32 ARB 80 -1039 10 - 2276.71 -DB 19.82 59.56 20.62 1.6 FLOAT 277.98 ADB 10,22 71 18.27 71.14 7773 DB 10.26 18.34 . 48 🛴 🛴 👯 71.40 7802 FLOAT ADB DB. FLOAT ADB D8 2.75 38.61 16.56 44.39 ADB RAW ARB 80-1040 10 - 3279.53 -38.78 16.63 44.59 DB 1.6 FLOAT 10.79 282.24 17.88 70.96 ADB 7619 DB 10.83 17.95 71.22 :7647 FLOAT ADB DB FLOAT ADB DB RAW 2.60 ADB 16.35 17.40 65.95 ARB 80-1041 284.48 -10-4DB 16.40 17.45 66,15 .6 FLOAT ĀDB 284.80 10.82 17.59 71.23 7708 DB10.86 17.65 71.49 FLOAT ADB DB FLOAT ADB DB

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HOLE NO. MBE-101 DATE: MAR. 25/81 ANALYST BERNIE & DARREN

AIR DRY LAB. SAMPLE INTERVAL CALC. Kcal/ F.C. F.S.I. SULFUR YIELD (METRES) LOSS MOISTURE NO. SEAM FRACTION ASH V.M. BASIS NO. ka ADB 25.04 4 1/2 RAW 1.43 .35 16.26 58.35 ARB 80 - 104210-5 285,95 -DB25.13 16.32 58.55 286.58 1.6 FLOAT 11.81 70.47 7 <u>1</u> ADB .30 17.42 7609 ক্ষুব্র ক্ষুব্র ১৯৯১ DB 11.85 17.47 70.68 .50 7632 FLOAT ADB क्ष्णीयर प्रा<u>मि</u>ण्डे **द**ेशी DB FLOAT ADB DB ADB. RAW .32 22.55 17.50 59.63 ARB 80-1043 10∸6 288.34 -DB 22.62 59.82 17.56 1.6 FLOAT 288.82 8 ADB 12.54 68.30 78 18.85 .31 7533 DB12.58 68.51 18.91 7556 FLOAT ADB DBFLOAT ADB DB ADB RAW ARB erspring profession DB FLOAT ADB इस्टब्स् DB FLOAT ADB DB ADB FLOAT WALL BURNERS Complete Street of the first street of DB