

K-SHELL - MT. BANNER EAST 80(3)A

82 512

Mt. Banner East
Drill Hole and Trench Information
Analysis

C.L.# 27, 280, 281,
1299

432

CONFIDENTIAL

ENCLOSURE 16

DDH-MBE-101 CORE DESCRIPTION (57 Pages)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

00 432

CORE & COAL CORE DESCRIPTION

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

DATE	BEGIN	26.09.80
	END	22.10.80

HOLE No.	MBE 101
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HOLE PARTICULARS

LOCATION	5544396.35 m N		
	660551.28 m E		
ELEVATION	2044.1 m	HOLE BEARING (AZ°)	
TOTAL DEPTH	318.82 m	HOLE ANGLE (°)*	Vert.

LOGGING

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

COAL CORING PERFORMANCE

CORE DIAMETER	HQ
CORE RECOVERED	
LENGTH CORED	
CORE RECOVERY	%

EXAMINATION

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

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA								
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC. FREQ.	RQD		MOIST % a.r.b. residual	ASH %	V.M. %	F.C. %	F.S.I.	C.V.			
1	12.10																				
		12.19		.19	SLT	shaley, dark gray, calcite along fractures, broken stick				R3											
				13.61	1.23	SST	very fine grain, light gray, dark silty bands, broken stick, advanced soft sediment deformation. Joints: 1 x 8°, calcite; 1 x 45°, calcite			R3											
											71										
		13.72										61.9									
		13.72		1.35	SST	as above, broken stick Joints: 1 x 11°; 3 x 30°; calcite				R3											
				.11	Shale	black, dark gray, broken stick				R3											
				15.25	.07	SST	as above, broken stick			R3											
		15.24										72.5									
		15.24		.29	SST	as above, broken stick Joints: 2 x 25° Calcite				R3	63										
				16.36	.83	Shale	dark gray, black, very massive, broken stick Joints: 1 x 15°, Calcite			R3											
2				16.68	.32	Shale	as above, broken stick			R3											
		16.76										31.9									
		16.76		.21	Shale	as above, broken stick															
				.07	SST	very fine grain, light gray, shale streaks broken stick															
				17.06	.02	Shale	dark gray, coal streak, broken stick				59	R3	0								
		17.07																			
		17.07		.10	SST	very fine grain, light gray, broken stick Joints: 1 x 31°				R3											
				.28	Shale	black, very carbonaceous at base, broken stick				R3											

ALL LINEAR UNITS IN METRES

- * MEASURED FROM THE HORIZONTAL PLANE
- † °R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH				ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARD-NESS	FRAC FREQ	RQD	SAMPLE NO.	MOIST %		ASH %	V M %	F.C. %	F.S.I.	C.V.
													ar.b.	residual					
3	21.34		22.13	.16	SST	fine grain, light gray, shale stringers, broken stick			R3										
	22.25	22.25		.10	SST	as above, broken stick			R3		84.8								
			23.78	1.43	Shale	black, silty, sandy interbeds \leq .15 m and bioturbation and worm burrows in sandy beds, calcite in fractures, broken stick Joints: 167°, calcite			R3										
	23.77	23.77		.06	Shale	as above			R3		92								
			24.62	.79	SLTST	medium gray, shaley in places with few thin sandy interbeds, stick Joints: 160°, calcite; 126°		59	R3										
	24.69	24.69		.41	SLTST	as above, fracture along bed, slicked, calcite iron-stain		70	R3		100								
4			26.21	1.11	SLTST	as above, broken stick to broken, some soft sediment deformation, few calcite and iron-filled minor joints			R3										
	26.21	26.21		.09	SLTST	as above, broken stick			R3		90								
				.16	SST	fine grain, weathers very red (iron-stain), with siltstone/shale/coal streaks, calcite along fracture (appears faulted)			R3										
				.01	Calcite	band, probable line of fault			R3										
				.27	SST	as above, broken stick			R3										
			27.73	.99	SLTST	with interbed light gray, fine sand, some shale bands, broken stick Joints: 2 x 0°, calcite; 2 x 167°, calcite			R3										

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	DIPPING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
													ar.b.	residual						
4	27.74	27.74	28.28	.54	SLST	some shaley beds			R3		61.8									
	28.35	28.35		.80	SLTST	as above			R3		90.7									
5				.31	Shale	black, broken stick			R3											
				.01	Coal	hard, bright														
		29.92		.45	Shale	silry, black, coal stringers, slicked calcite, iron-stain, stick joints: 52° calcite														
	30.03	30.02		.07	Shale	very carbonaceous and coaly					96									
				.13	Coal	dull			I											
				.07	Coal	bright with dull, very soft			I											
				.21	Coal	dull, very soft			I											
				.04	Coal	bright and dull			I											
				.07	Coal	bright with dull			I											
				.06	Coal	bright, hard, broken stick			I											
				.08	Coal	bright with dull, hard, broken stick			I											
				.10	Coal	dull			I											
				.08	Coal	bright			I											
				.15	Coal	dull, sulfur smell			I											
				.03	Coal	bright, broken stick			I											
				.06	Coal	dull and bright, broken stick			I											

ALL LINEAR UNITS IN METRES

R MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

I R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
5	30.02			.18	Coal	bright, broken stick	I													
			31.46	.11	Coal	dull, mushy	I													
	31.70			.02	Coal	shaley, soft, highly broken	I													
				.24	Coal	dull	I													
				.10	Coal	dull with bright, broken stick	I													
				.19	Coal	dull, broken stick	I													
				.07	Coal	bright with dull, broken	I													
			32.40	.08	Coal	bright with dull, rubble	I													
	32.61			.03	Coal	bright with dull, broken	I													
		32.61		.03	Coal	bright, pyrite, broken	I													
				.05	Coal	bright with dull, rubblely	I													
				.03	Coal	bright with dull, broken	I													
				.02	Coal	dull with bright	I													
				.13	Coal	bright with dull, broken	I													
				.09	Coal	bright, broken	I													
				.06	Coal	bright and dull, broken	I													
				.06	Coal	dull	I													
				.01	Coal	bright, rubblely	I													
				.01	Coal	bright	I													
			33.31	.18	Coal	dull	I													

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- ! R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
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HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH				SAMPLE NO.	ANALYTICAL DATA					
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	MOIST % arb. residual		ASH %	V.M. %	FC %	F.S.I.	C.V.	
6	33.53																		
		33.53		.17	Coal	dull, hard, stick	I												
				.05	Coal	dull and bright, stick	I												
				.02	Coal	dull, stick	I												
				.06	Coal	bright, stick	I												
				.035	Coal	dull and bright, stick	I												
				.02	Coal	dull	I												
				.21	Coal	bright and dull, stick	I												
				.02	Coal	bright, stick	I												
				.08	Coal	bright with dull	I												
				.05	Coal	bright	I												
				.08	Coal	bright and dull	I												
				.04	Coal	bright	I												
				.04	Coal	dull with bright	I												
		34.645		.06	Shale	carbonaceous, broken	I												
	34.75																		
		34.75		.03	Shale	carbonaceous	I												
				.005	Coal	dull, shaley, pyrite	I												
				.08	Coal	dull with bright	I												
				.36	Coal	slick, bright, pyrite, broken stick	I												
				.02	Coal	bright and dull	I												
				.17	Coal	bright with dull	I												
				.065	Coal	bright	I												

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

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• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

PROJECT	MOUNT BANNER EAST
AREA	

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M %	F.C %	F.S.I.	C.V.	
6	34.75																			
				.03	Coal	dull and bright	I													
				.02	Coal	bright	I													
				.025	Coal	dull with bright	I													
				.18	Coal	bright with dull	I													
			35.76	.025	Coal	dull	I													
	35.97																			
		35.97		.005	Coal	dull	I													
				.27	Shale	carbonaceous with coaly stringers														
				.81	Shale	silty, black, with light gray, fine sandstone stringers, minor soft sediment deformation														
	36.88																			
		36.88		.38	Shale	silty, black, with light gray, fine sandstone stringers, minor soft sediment deformation, coaly traces Joints: 156°, calcite, iron-stain														
				.47	SST	fine grain, light gray, numerous dark thin silty bands, worm burrows, coaly stringers near top Joints: 154°, calcite		77												
	36.88																			
				.20	SLTST	medium gray, thin very fine grain, light gray sandstone bands														
				.31	SST	light gray, fine grain, coal and shale streaks throughout, broken stick Joints: 1 x 162°, calcite/iron: 1 x 156°, calcite		71												
			38.44	.20	SLTST	as above, shaley in places														
	38.40																			
		38.40		1.45	SLST/SS	medium to light gray, very fine grain, inter-bedded, shaley in places, broken stick			R3		63									

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

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• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA									
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)		HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V M %	F.C. %	F.S.I.	C.V.			
												ar.b.	residual								
7	39.93																				
		39.93		.57	SLST/SS	as above, becomes shaley at base	73	R3		66.8											
				.34	Shale	black, slicked along fractures, slightly silty in places, broken stick			R3												
				.17	Shale	as above, coaly streaks near base			R3												
				.01	Coal	dull and bright, broken	H		R3												
				.03	Shale	black, coaly streaks, broken	H		R3												
				.02	Coal	bright and dull, broken	H		R3												
				.01	Shale	coaly, broken	H		R3												
				.02	Coal	bright, broken	H		R3												
				.02	Coal	dull, broken	H		R3												
		41.20		.08	Shale	black, coal streaks, broken stick	H		R3												
	41.45									53.5											
		41.45		.11	Shale	as above	H		R3												
				.005	Coal	bright	H		R3												
				.06	Coal	dull	H		R3												
				.005	Coal	bright	H		R3												
				.005	Coal	dull	H		R3												
				.10	Coal	bright, broken stick	H		R3												
				.07	Coal	dull, broken stick	H		R3												
				.20	Coal	bright with dull, broken stick	H		R3												
				.10	Coal	dull with bright, broken stick	H		R3												
				.005	Shale	coaly, broken stick	H		R3												
				.01	Coal	bright and dull, broken stick	H		R3												

ALL LINEAR UNITS IN METRES

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▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V M %	F.C. %	F.S.I.	C.V.
													ar.b.	residual					
7	41.45			.01	Coal	Bright, broken stick	H		R3										
				.10	Coal	dull, broken stick	H		R3										
				.06	Shale	black, coal streak, slicked at top, broken stick	H		R3										
				.03	Coal	dull with bright, broken stick	H		R3										
				.005	Shale	carbonaceous, broken stick	H		R3										
				.01	Coal	dull, broken stick	H		R3										
				.01	Coal	dull and bright, broken stick	H		R3										
				.005	Coal	bright, broken stick	H		R3										
		42.36		.01	Coal	dull, shaley, Broken stick	H		R3										
8	42.67																		
		42.67		.07	Shale	black, carbonaceous streaks, rubble, trace coal	H		R3										
				.025	Coal	rubble	H		R3										
		44.155		1.39	Shale	black, silty in places, coal streak, stick			R3										
	44.35								R3		7								
		44.35		.25	Shale	as above, coaly streak at base, stick			R3										
				.03	Coal/Py/ Sh	very heavy, broken stick			R3										
				.305	Shale	as above, stick			R3										
				.33	SS/SLST	interbedded, coal along bedding break		76	R3										
		45.495		.23	Shale	black, carbonaceous, coaly streaks, broken stick			R3										
	45.87								R3		75.4								
		45.87		.205	Shale	as above													
				.035	Coal	dull, shaley			R2										

ALL LINEAR UNITS IN METRES

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• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No. MBE 101
CONTINUED

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA																		
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.												
8	45.87				.19	Shale	as above																								
	46.33										72																				
		46.33			.05	Coal/SH	shale interbedded, dull, broken stick			R3																					
					.03	Shale	as above, broken stick			R2																					
					.37	Shale	black, coal streaks, stick			77	R2																				
					.005	Coal	shaley, stick																								
					.10	Shale	carbonaceous, stick																								
					.04	Shale	coal stringer, broken																								
					.16	Shale	black, carbonaceous, coal wisps, broken stick																								
					.19	Shale	black, slightly silty																								
9					.20	Shale	as above, coal stringers near base, broken stick																								
					.02	Coal/SH	rubble																								
					47.825	.33	Shale	black, broken stick			R3																				
	47.85										52																				
		47.85	49.02		1.17	Shale	black, sandy/silty in places, stick			R3																					
	49.07										83																				
		49.07	50.60		1.53	Shale	as above, stick to broken stick			R3																					
	50.06										69.9																				
		50.06			.28	Shale	as above, few coal blebs, slick along bed Joints: 161°			R3																					
					.35	SLTST	shaley bands, soft sediment deformation, coal blebs, coal bright along bedding at base																								
					.10	Shale	black, coal streaks, stick			R3																					
10																															
					.13	Shale	black, slick at base with coal, stick			R3																					

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▲ ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

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OF

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	DIPPING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
													a.r.b.	residual					
10				.08	Shale	as above, stick			R3										
		51.88	.34	SLTST	medium and light gray (sandy), stick				R3										
	52.12			1.00	SLTST	as above, some sediment deformation, stick		73	R3		94.5								
				.10	SST	fine grain, light gray, silty, stick Joints: 2 x 167° with calcite			R3										
				.12	SLTST	as above, stick			R3										
		53.73	.39	Shale	as above, stick				R3										
	53.64			.23	Shale	black, silty, few carbonaceous stringers, stick Joints: 159° with calcite			R3		80.7								
		53.92	.05	Coal	bright and dull, shaley														
	55.17			.14	Shale	black, silty, few carbonaceous stringers, coal along base			R3		64								
				.52	SLTST	medium and light gray, coal blebs, soft sediment deformation, Joints: 157°			R2										
11		56.75	.92	SLTST	medium and light gray, shaley at base, stick				R3										
	56.69			1.36	Shale	silty, black			R3		88.6								
		58.21	.16	SLTST	as above				R3										
	58.22			.21	SLTST	as above			R3		86.1								
		58.52	.09	SST	fine grain, light gray, with shale and siltstone bands, stick, some soft sediment deformation				R3										

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

† R 8/OR 5 — GOLDR ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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FILE No BA-267
REVISED Feb. 1981
FORMERLY FILE No. BA-212A

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % arb.	residual	ASH %	V.M. %	FC %	F.S.I.	C.V.	
11	58.52																			
		58.52		1.01	SST	as above, occasional coaly streaks, stick Joints: 2 x 163°, calcite				R3		70								
				.06	SLTST	dark gray to black				R3										
				.35	SLTST	as above														
12			60.00	.06	SST	light gray, fine to medium grain, salt and pepper, rubble, large joint with calcite				R3										
	60.05											75.9								
		60.05	61.31	1.26	Shale	black, silty in places, stick		74		R3										
	61.26											100								
		61.26		.26	Shale	black, stick				R3										
				.28	Shale	as above, rubble, some carbonaceous slicks along bedding breaks (numerous), trace coal				R3										
				.34	Shale	black, stick														
			62.35	.21	Shale	as above, pyrite, stick														
	62.48											43								
		62.48	63.92	1.44	Shale	black, stick Joints: 128°		73		R3										
	64.00											85.4								
		64.00		.22	Shale	as above				R3										
13				.25	Shale	as above, broken stick				R2										
				.06	Shale	coaly, sheared, broken stick				R2										
				.02	Shale	black, slicked				R2										
				.06	Shale	carbonaceous, sheared, rubble				R2										
				.02	Shale	black, slicked				R2										
				.01	Coal	dull and bright														

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

● ANGLE MEASURED FROM CORE AXIS

† • R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.	
												arb.		residual						
13	64.00				.11	Shale														
					.01	Shale														
					.18	Shale														
			65.52		.58	Shale														
	65.53											66.4								
		65.53			.15	Shale														
					.015	Shale														
					.06	Shale														
					.01	Coal														
					.02	Shale														
					.015	Coal														
					.045	Shale														
					.003	Coal														
					.07	Shale														
					.04	Coal														
					.03	Coal														
					.02	Coal														
					.03	Coal														
					.015	Coal														
					.005	Coal														
					.045	Coal														
					.01	Coal														

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

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OF

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
												or b. residual							
13				.05	Coal	bright with dull	G												
				.01	Shale	coaly	G												
				.02	Coal	dull and bright	G												
				.015	Coal	dull	G												
				.005	Coal	bright	G												
				.02	Coal	dull with bright	G												
				.005	Shale	coaly	G												
				.03	Coal	dull	G												
				.045	Coal	bright	G												
				.09	Coal	dull	G												
				.03	Coal	bright with dull, rubble	G												
				.04	Coal	dull with bright	G												
				.05	Coal	dull, soft	G												
				.025	Shale	black, carbonaceous	G												
				.02	Coal	shaley	G												
				.03	Shale	carbonaceous with coal streaks	G												
				.005	Coal	bright	G												
				.07	Shale	carbonaceous, slicked	G												
		66.793		.12	Coal	dull, rubblely	G												
	67.21																		
		67.21		.02	Coal	dull	G												
				.11	Coal	dull with bright	G												

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE
 † R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
 • RQD — ROCK QUALITY DESIGNATION (%)
 FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	FC %	F.S.I.	C.V.	
													ar.b.	residual						
14				.065	Coal	dull	G													
		68.69		.085	Coal	bright with dull	G													
	68.73			.045	Shale	carbonaceous with coaly streaks, slicked	G													
				.02	Coal	dull	G													
				.015	Coal	dull with bright, rubble	G													
				.02	SH/Coal	rubble	G													
				.02	Coal	dull with bright	G													
				.035	Shale	carbonaceous, slicked	G													
				.02	Coal	shaley, mush	G													
				.055	Coal	dull, slicked	G													
				.07	Coal	dull with bright	G													
				.025	Coal	dull, broken stick	G													
				.01	Coal	dull, mush	G													
				.03	Coal	dull, broken stick	G													
				.095	Coal	bright and dull, broken stick	G													
				.06	Coal	bright with dull, broken stick	G													
				.01	Coal	bright, broken stick	G													
				.01	Shale	carbonaceous, broken stick	G													
				.075	Coal	bright with dull, broken stick	G													
				.01	Coal	bright, broken stick	G													
				.04	Coal	bright with dull, broken stick	G													
				.065	Coal	dull with bright, broken stick	G													

ALL LINEAR UNITS IN METRES

- * MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	F.C. %	F.S.I.	C.V.
												ar.b. residual							
14				.13	Coal	bright with dull, rubble	G												
				.04	Coal	dull, shaley	G												
				.09	Coal	dull, rubblely	G												
				.02	Coal	dull, broken stick	G												
				.03	Coal	dull and bright	G												
				.04	Coal	dull with some bright	G												
				.06	Coal	dull	G												
				.02	Coal	dull with bright	G												
				.11	Coal	dull	G												
				.02	Coal	dull and bright	G												
		70.04		.02	Coal	dull	G												
70.41																			
	70.41			.02	Coal	dull with bright, rubble	G				(73)								
				.03	Coal	dull, rubble	G												
				.015	Coal	bright	G												
				.03	Coal	dull with bright	G												
				.09	Coal	dull, rubble	G												
				.035	Coal	dull with bright, rubble	G												
				.04	Coal	dull, rubble	G												
				.03	Coal	dull, mushy	G												
				.04	Coal	dull and bright, broken stick	G												
				.09	Coal	dull	G												

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA								
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % ar.b. residual	ASH %	V M %	F. C. %	F. S. I.	C. V.			
				.05	Coal	dull with bright	G														
				.085	Coal	dull and bright	G														
				.02	Coal	bright	G														
				.11	Coal	dull with bright	G														
				.015	Coal	bright with dull	G														
				.015	Coal	dull with bright	G														
				.02	Coal	bright with dull	G														
				.025	Shale	carbonaceous	G														
				.025	Coal	bright with dull	G														
				.01	Coal	dull, rubble	G														
				.09	Coal	bright with dull	G														
				.11	Coal	dull with bright	G														
				.015	Coal	bright with dull	G														
				.01	Coal/SH		G														
				.02	Coal	dull	G														
				.05	Coal	dull with bright	G														
				.05	Coal	bright with dull, rubble	G														
				.03	Coal	bright	G														
				.03	Coal	bright with dull	G														
				71.63	.04	Coal	dull with bright, rubble	G													
	71.93																				
		71.93		.025	Coal	bright with dull, broken stick	G														

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

† R &/OR S — GOLDR ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.
													arb.	residual					
14	71.93																		
				.01	Coal	dull, mush	G												
				.055	Coal	bright and dull, broken stick	G												
				.025	Coal	dull with bright	G												
				.02	Coal	dull and bright	G												
				.01	Coal	bright with dull	G												
				.055	Coal	bright and dull	G												
				.07	Coal	dull with bright	G												
				.12	Coal	bright with dull	G												
				.055	Coal	dull and bright	G												
				.07	Coal	dull	G												
				.005	Coal	dull with bright	G												
				.045	Coal	dull	G												
15				.06	Coal	dull, rubble	G												
				.02	Coal	bright with dull	G												
				.015	Coal	dull, some bright	G												
				.01	Coal	dull with bright	G												
				.02	Coal	dull, trace pyrite	G												
				.02	Coal	dull with bright	G												
				.02	Coal	dull and bright	G												
				.02	Coal	dull, rubble	G												
				.02	Coal	bright, rubble	G												
				.025	Coal	dull	G												

ALL LINEAR UNITS IN METRES

- * MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- ROD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA								
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.		
													arb.	residual							
15				.02	Coal	bright and dull	G														
				.04	Coal	dull and bright	G														
				.02	Coal	dull	G														
				.04	Coal	dull with bright, rubble	G														
			72.895	.05	Coal	dull with bright	G														
	73.46																				
		73.46		.06	Shale	carbonaceous	G														
				.07	Coal	dull and bright	G														
				.26	Coal	bright, some dull, rubble	G														
				.35	Shale	carbonaceous	G														
				.02	Coal	bright and dull, sheared	G														
			74.075	.17	Shale	carbonaceous, minor coal stringers, slicks															
	74.22																				
		74.22		.49	Shale	black, stick															
				.02	Shale	black, carbonaceous, rubble															
				.055	Shale	black, carbonaceous															
				.015	Coal	bright															
				.035	Coal	dull with bright															
				.025	Coal	bright with dull															
				.025	Shale	carbonaceous															
				.05	Coal	bright and dull, broken stick															
				.14	Shale	black															
				.02	Coal	bright and dull															

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE-101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION	SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA										
		FROM	TO					HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.				
16				.21	SST																	
				.06	Shale																	
				.10	SST																	
17		81.96		.66	SST		43	R3			10											
	82.14										100											
	82.14			.41	SLTST																	
				.32	SST																	
				.11	SLTST																	
		83.70		.72	SST																	
	83.67										82.6											
	83.67			1.42	SST																	
		85.20		.11	SLTST		69	R3														
	85.19										82.3											
	85.19			.44	SST																	
18				.86	SST																	
		86.73		.24	SLTST																	
	86.72										79.8											
	86.72			.21	SLTST																	
				.41	SST																	
				.51	SB/SLST																	
				.50	SST																	
		88.40		.05	SLTST																	

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R & / OR S — GOLDER ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
													ar.b.	residual						
18	88.39	88.39		.05	SLTST	as above			R3		63.6									
				1.12	SLTST	sandy, stick Joints: 2 x 164°; 142°		72	R3											
		89.90		.34	Shale	slightly silty, coal blebs			R3											
19	89.92	89.92		.55	Shale	slightly silty			R3		92.7									
				.30	SST	silty, stick			R3											
		91.44		.67	SLTST	shaley			R3											
	91.44	91.44		1.01	SLTST	sandy in places, stick			R3		90									
				.05	Shale	slightly carbonaceous			R3											
				.25	SLTST	as above, stick			R3											
				.01	Coal	bright														
		92.94		.18	SLTST	as above, stick			R3											
	92.96	92.96		.52	SLTST	becoming sandy at base			R3		78									
				.44	SST	with silty bands, stick Joints: 170° with calcite		73	R3											
				.24	Shale	silty with coal streaks			R3											
20				.035	SS/SLST	interbed, coal on breaks			R3											
		94.555		.36	SLTST	shaley, sandy in places, coal streaks			R3											
	94.64	94.64		.07	SLTST	as above, stick			R3		84.9									

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

● ANGLE MEASURED FROM CORE AXIS

† R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

● RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % arb.	residual	ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
20	94.64			1.33	SST	light gray, fine grain, dark silty bands, soft sediment deformation and bioturbated, stick			R3											
				.01	Coal/SH															
	96.22			.17	SST	as above, becoming silty at base Joints: 2 x 165° with calcite			R3											
96.16	96.16			1.32	SLTST	with sandy bands, stick			R3		99									
				.025	SH/Coal/Calcite															
				1.02	SLTST	sandy, becoming shaley at base			R3											
				.06	SH/CC/Coal	(fault?) broken stick														
	98.665			.08	SLTST	medium gray, slightly shaley			R3											
97.84	97.84			.71	SLTST	as above, black			R3		51.6									
21				.26	SLTST	black, stick			R3											
				99.33	.52	SLTST	sandy, coal blebs near top		R3											
99.36	99.36			.18	SLTST	as above, stick			R3-R4		85									
				100.91	1.37	SST	very fine grain, coal blebs near top		R3-R4											
100.89	100.89	102.41		1.52	SST	fine grain to medium, light gray, bioturbated, salt and pepper, stick			R3-R4		94.8									
102.41	102.41			.35	SST	as above, stick			R3-R4		96									

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

! R &/OR S — GOLDR ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)		HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
												ar.b.	residual						
22				.32	SST	as above, with fine grain rip-up clasts, stick													
		103.90		.82	SST	medium gray, fine grain, coal and calcite sticks, some rip-up clasts, coarser at base													
	103.94																		
	103.94	105.46		1.52	SST	medium gray, medium grain, coal streaks, rip-up clasts, broken stick, salt and pepper													
	105.46																		
	105.46	106.95		1.49	SST	medium grain, salt and pepper, massive, rip-up clasts, minor numerous calcite-filled joints, Joints: 2 x 69°, 156°, 157°													
	106.98																		
	106.98			.07	SST	medium grain, salt and pepper, massive rip-up clasts, numerous calcite-filled joints, badly shattered													
23				.71	SST	medium to coarse, salt and pepper, numerous calcite-filled joints, few rip-up clasts, stick, coal breaks and slicks near base													
		108.55		.79	SS/SLST	soft sediment deformation, light and dark gray, fine grain sandstone, numerous coaly slicks, stick													
	108.51																		
	108.51	110.00		1.49	SS/SLST	as above, stick													
	110.02																		
	110.03			.79	SS/SLST	as above, becoming siltier - joint has .005 cm movement Joints: 165° with calcite	56												
				.44	SILTST	medium gray, shaley, stick, minor coal along breaks													
24		111.61		.35	Shale	silty, black, coal streaks and breaks, minor slicks Joints: 31° with minor calcite													

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

† R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
													arb						
24	111.56	111.56		.97	SLTST	shaley, black, coaly and slicked along fracture, stick													
				.46	Shale	silty, coal streaks in fractures													
		113.06		.07	SLTST	dark gray, minor rip-up clasts													
	113.08	113.08		.27	SLTST	as above, coal stringers													
		114.65		1.30	Shale	black, some silty bands, broken stick													
	114.60	114.60		.89	SLTST	black, shaley in places, stick													
25		115.97		.48	SLTST	shaley, sandy bands, stick, minor soft sediment deformation, medium gray to black													
	116.13	116.13	117.71	1.58	SLTST	as above, stick													
	117.65	117.65	119.19	1.54	SLTST	as above, stick, Joint: 2 x 168° with calcite		76											
	119.18	119.18		.61	SLTST	as above, stick													
26		120.79		1.0	SLTST	as above, stick													
	120.70	120.70		1.05	SLTST	as above, stick													
		122.17		.42	SST	very fine grain, silty, medium to light gray													
	122.22	122.22		1.30	SST	as above, stick													
				.005	Calcite	breccia, slicked		90											
		123.75		.23	SST	as above													

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

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HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA								
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % a.r.b. residual		ASH %	V.M. %	F.C. %	F.S.I.	C.V.		
26	123.75	123.75		.27	SST	fine grain, light gray, salt and pepper, stick			R3-R4			100									
27				.77	SST	fine grain, light gray, darker silty beds, bioturbated, stick Joints: 87° with calcite			R3-R4												
				.09	SST	as above, pyrite blebs															
		125.28		.40	SST	as above, no pyrite blebs Joints: 169° with minor calcite			R3-R4												
	125.27	125.27		.13	SST	as above, broken			R3-R4			87.5									
		126.85		1.45	SST	as above, stick			R3-R4												
	126.80	126.80		.85	SST	as above, minor pyrite, slicks along breaks broken stick Joints: 5° with major calcite, 24° with major calcite			R3-R4			73.4									
				.56	SST	fine to medium grain, light gray, coaly stringers with breaks along coal		85	R3-R4												
28		128.30		.09	SST	as above, stick			R3-R4			60.6									
	128.32	128.32		.51	SST	as above, coarsening toward base, occasional pyrite blebs, minor slicks along coal			R3-R4												
				.005	Pyrite	rich band															
				.64	SST	as above, 2 large calcite joints, Joints: 2 x 0°			R3-R4												
				.11	Shale	black			R3												
		129.78		.20	SST	as above Joints: 13° with calcite			R3												

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
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- RQD — ROCK QUALITY DESIGNATION (%)
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▲ ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.	
28	129.84																			
		129.84	131.37	1.53	Shale	black, silty with siltstone bands, stick				R3		52.5								
	131.37																			
		131.37		1.14	Shale	as above				R3		98								
29																				
		132.84		.33	Shale	black, silty with siltstone bands, stick				R3										
	132.89																			
		132.89	134.48	1.59	Shale	as above, coaly streaks near base, stick				R3		93.8								
	134.42																			
		134.42		.81	Shale	as above, coaly streaks near top, stick				R3		91.1								
				.04	SST	medium grain, coal interbedded, slicked				R3										
		135.63		.36	Shale	as above				R3										
	135.94																			
		135.94		.04	Shale	as above, stick				R3		78.5								
				.01	Coal	shaley				R3										
				.25	SLTST	medium to dark gray				R3										
				.61	SS/SLST	very fine grain, rip-up clasts, coal at base, few carbonaceous streaks				R3										
				.09	SLTST	shaley, fine sandy beds				R3										
30																				
		137.72		.78	SLTST	as above, coal slicks on breaks, stick				R3										
	137.46																			
		137.46		.10	SLTST	as above, stick				R3		92.6								
				.01	Coal	shaley, stick				R3										
		138.98		1.41	SLTST	sandy with sandstone beds, stick Joints: 7° + 22° with calcite			67	R3										
	138.99																			
		138.99	140.49	1.50	SLTST	as above, coal stringers, some calcite along bedding, stick. Joints: 2 x 16° with calcite.				R3		92.1								

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

* R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

* RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA											
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.					
30	140.51	140.51																						
		140.51		.41	SLST/SS	as above, stick				R3														
31				1.16	SLST/SS	interbedded, sandstone is light gray, fine grain; siltstone is sandy, medium gray; occasional coaly breaks, slicks, stick Joints: 18° with calcite				R3														
			142.08																					
	142.04	142.04	143.45	1.41	SLTST	as above				R3-R4														
	143.56	143.56	145.16	1.60	SLTST	as above, becoming shaley near base				R3-R4														
	145.08	145.08		.16	Shale	black, silty, coal stringers and blebs broken stick				R3														
32				1.13	Shale	as above, broken stick				R3														
				.04	Coal	dull with bright, broken			E	R2														
				.025	Coal	bright, broken			E	R2														
				.01	Coal	bright with dull, broken			E	R2														
				.015	Coal	bright and dull, broken			E	R2														

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
32		146.49		.03	Coal	dull with bright, broken	E		R2											
	146.61										75.1									
	146.61			.04	Coal	dull with bright, rubble	E													
				.005	Coal	bright	E													
				.005	Coal	dull with bright	E													
				.01	Coal	dull	E													
				.065	Coal	dull, broken	E													
				.08	Coal	dull with bright	E													
				.06	Coal	dull, rubble	F													
				.05	Coal	dull	E													
				.07	Coal	dull with bright	E													
				.06	Coal	rubble	E													
				.02	Coal	bright	E													
				.07	Coal	bright and dull	E													
				.09	Coal	rubble	E													
				.025	Coal	dull with bright, hard, broken stick	F													
		147.51		.25	Coal	bright and dull, hard, broken stick	E													
	148.13																			
	148.13			.075	Coal	bright and dull	E													
				.01	Coal	bright, hard	E													
				.05	Coal	bright and dull	E													
				.06	Coal	rubble, dull and bright	E													
				.04	Shale	carbonaceous, coaly stringers, broken stick	E													

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- † : R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA								
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RGD		MOIST %		ASH %	V M %	F.C. %	F.S.I.	C.V.		
													arb.	residual							
32				.005	Coal	bright	E														
				.01	Shale	carbonaceous, coaly stringers, broken stick	E														
				.015	Coal	bright with dull	E														
				.05	Coal	dull	E														
				.04	Shale	as above	E														
				.07	Coal	rubble, dull with bright	E														
				.05	Coal	dull with bright, broken stick	E														
				.05	Coal	rubble, as above	E														
				.07	Coal	dull, hard, broken stick	E														
				.04	Coal	rubble, dull	E														
				.03	Coal	as above	E														
				.04	Coal	dull with bright	E														
				.07	Coal	dull and bright, shale streak at base, broken stick	E														
		148.935		.03	Coal	bright with dull	E														
	149.66																				
		149.66		.03	Coal	bright and dull, broken stick	E														
				.03	Coal	bright with dull, broken stick	E														
				.02	Coal	dull and bright, broken stick															
				.01	Coal	bright, broken stick	E														
				.03	Coal	bright with dull	E														
				.02	Coal	dull	E														
				.02	Coal	bright and dull	E														

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE
 † R B/OR S — GOLDER ASSOCIATES HARDNESS CODE
 • RQD — ROCK QUALITY DESIGNATION (%)
 FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH				ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	SAMPLE NO	MOIST %		ASH %	V M %	FC %	F.S.I.	C.V.	
													ar.b.	residual						
32				.06	Coal	dull with bright	E													
				.015	Shale	as above, slicked	E													
				.01	Coal	dull, shaley with some bright	E													
				.02	Coal	dull with bright	E													
				.02	Coal	dull	E													
				.05	Coal	dull, some bright	E													
				.01	Coal	dull and bright, broken stick	E													
				.025	Coal	bright with dull, broken stick	E													
				.13	Coal	dull, broken stick	E													
				.07	Coal	dull, some bright	E													
				.02	Coal	dull and bright	E													
				.03	Coal	dull, some bright	E													
33				.17	Coal	as above	E													
				.005	Shale	carbonaceous, coaly	E													
				.005	Coal	bright with dull, broken stick	E													
				.06	Coal	dull with bright, broken stick	E													
				.015	Coal	dull and bright, broken stick	E													
				.02	Coal	dull, broken stick	E													
				.015	Coal	bright with dull, broken stick	E													
				.07	Coal	dull, some bright	E													
				.03	Coal	bright with dull	E													
				.07	Coal	dull and bright	E													

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- ROD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH				ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	SAMPLE NO.	MOIST %		ASH %	V.M.%	F.C.%	F.S.I.	C.V.
													ar.b.	residual					
33				.025	Coal	dull	E												
				.06	Coal	dull and bright	E												
				.035	Coal	dull	E												
				.003	Coal	bright	E												
				.04	Coal	dull	E												
				.03	Shale	carbonaceous, coaly streaks	E												
				.015	Coal	bright and dull	E												
				.035	Coal	dull with bright	E												
				.015	Coal	dull and bright	E												
		151.108		.11	Coal	dull with bright	E												
	151.18																		
	151.18			.01	Coal	bright, Broken	E												
				.025	Coal	dull with bright	E												
				.02	Coal	dull	E												
				.01	Coal	dull with bright	E												
				.08	Coal	rubble, dull, some bright	E												
				.02	Coal	dull and bright	E												
				.02	Coal	dull	E												
				.035	Coal	dull and bright	E												
				.02	Coal	dull with bright, rubble	E												
				.03	Coal	as above, broken stick	E												
				.035	Coal	dull, broken stick	E												

ALL LINEAR UNITS IN METRES

☐ MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

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• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
													ar.b.	residual					
33				.04	Coal	dull and bright, broken stick	E												
				.05	Coal	dull with bright, broken stick	E												
				.06	Coal	dull, some bright, broken stick	E												
				.005	Coal	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	E												
				.10	Coal	dull with bright, broken stick	E												
				.06	Coal	dull and bright, rubble	E												
				.02	Coal	dull, broken stick	E												
				.005	Coal	bright	E												
				.03	Coal	dull	E												
				.22	Coal	dull and bright, rubble	E												
				.05	Coal	dull, broken stick	E												
		152.235		.03	Coal	dull and bright	E												
	152.70																		
		152.70		.025	Coal	dull, broken stick	E												
				.01	Coal	bright	E												
				.11	Coal	dull, broken stick	E												
				.075	Coal	dull with bright, broken stick	E												
				.015	Coal	bright, broken stick	E												
				.01	Coal	dull and bright, broken stick	E												

ALL LINEAR UNITS IN METRES

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HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
33				.01	SH/Coal	bright, broken stick	E												
				.03	Coal	dull, broken stick	E												
				.005	SH/Coal	broken stick	E												
				.02	Shale	carbonaceous, broken stick	E												
				.085	Coal	dull	E												
				.075	Coal	dull with bright	E												
				.035	Coal	dull	E												
				.01	Coal	dull and bright	E												
				.025	Coal	dull	E												
				.015	Coal	dull and bright	E												
				.045	Coal	as above, broken stick	E												
				.005	SH/Coal		E												
				.02	Coal	dull, rubble	E												
				.13	Coal	dull with bright	E												
				.05	Coal	bright with dull	E												
				.025	Coal	dull with bright	E												
				.035	Coal	bright with dull	E												
				.035	Shale	carbonaceous and coaly	E												
				.12	Coal	bright with dull	E												
				.065	Coal	dull with bright	E												
				.05	Coal	bright and dull	E												
				.025	Coal	dull with bright	E												

ALL LINEAR UNITS IN METRES

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•RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ.	RQD		MOIST % ar.b. residual	ASH %	VM %	F.C. %	F.S.I.	C.V.		
33				.085	Coal	bright with dull	E													
				.05	Coal	dull and bright	E													
				.06	Coal	dull	E													
				.02	Coal	dull with bright	E													
		154.12		.05	Coal	bright and dull	E													
154.23	154.23			.05	Shale	with coal stringers, rubble				R3										
				.32	Shale	as above, broken stick				R3										
34		155.52		.92	SLTST	medium gray, coal blebs, stick				R3										
155.75	155.75			.51	SLTST	as above, shale and sandstone bands, stick				R3	71.3									
		157.18		.92	Shale	slightly silty, silty and sandy bands, stick				R3										
157.28	157.28	158.81		1.53	Shale	slightly silty, black, some coal streaks, stick				R3	95.8									
158.80	158.80			.37	Shale	as above				R3	100									
35		160.39		1.22	Shale	silty, black				R3										
160.32	160.32			.51	Shale	as above				R3	89.3									
				.64	SLTST	medium gray, sandy streaks				R4										
		161.75		.28	SLTST	shaley, as above				R4										
161.85	161.85			.29	SLTST	as above, broken stick				R4-R5	80.4									

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE
 † R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
 • RQD — ROCK QUALITY DESIGNATION (%)
 FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM BEDDING DESIGN	ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.
													ar.b.	residual					
35	161.85			.96	SLTST	medium gray, sandy, sandstone bands Joints: 172° with calcite			R4-R5										
		163.42		.32	SST	medium gray, siltstone bands, soft sediment deformation, coal streaks, broken stick			R4-R5										
	163.32										54.1								
36	163.32			.06	SST	as above, fine grain			R3										
				.21	SLTST	sandy, large calcite-filled joints			R3										
		164.73		1.16	SST	medium gray, siltstone bands, soft sediment deformation, coal streaks, broken stick Joints: 2 x 161° with calcite			66 R3										
	164.90										95.8								
		164.90		1.15	SST	as above			69 R3										
		166.32		.27		disturbed beds, siltstone rip-up clasts in fine to medium light gray sandstone, clasts ≤10 cm, photographed by G.S. 09.10.80			R3										
	166.42										97.8								
		166.42		.23		as above, stick			R3										
				.48	SST	fine grain, massive			R3										
				.77	SST	fine grain, light gray, fine scale cross-beds, some bioturbation, coaly slick at base			73 R3										
37		168.04		.14	SST	as above			R3										
	167.94										92.5								
		167.94	169.38	1.44	SST	fine grain, light gray, with medium gray silty sandstone, rip-up clasts, stick			R3										
	169.47										95.8								
		169.47	171.06	1.59	SST	as above, stick			R3-R4										

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

● ANGLE MEASURED FROM CORE AXIS

* R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

* RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	SAMPLE NO	MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.
													arb.	residual					
37	171.00																		
		171.00		.47	SST	as above, stick				R3-R4		98.1							
				.61	SST	fine to medium grain, salt and pepper with sandy, silty bands, medium to dark gray, coal streaks, rip-up clasts, becoming finer at base, broken stick				R3									
38		172.48		.40	SST	as above, cross-beds, slicked along coal breaks, broken stick				R3									
	172.52											87.1							
		172.52		1.15	SST	as above				R3									
				1.05	Shale	black, silty in places with fine grain, light gray sandstone bands				R3									
				.18	SST	as above, shaley bands				R3									
		175.61		.71	SST	medium grain, salt and pepper, #9 sandstone? coal streaks		77		R3-R4									
	175.56											62.7							
		175.56		.69	SST	as above				R3-R4									
39				.42	SST	medium grain, salt and pepper, coal streaks, stick				R3									
				.58	SST	as above, numerous coal streaks and stringers				R3-R4									
				1.86	SST	coarse grain, salt and pepper, with bands of sandstone as above, numerous coal stringers, streaks				R3-R4									
		179.24		.13	SST	fine grain, becoming silty at base, medium gray, soft sediment deformation				R3									
	178.61											76							
		178.61		1.21	SLST/SS	fine, interbedded, shaley in places, stick				R3									

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

† R &/OR S — GOLDR ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIC	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO	ANALYTICAL DATA									
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % arb.	residual	ASH %	V.M. %	F.C. %	F.S.I.	C.V.			
39	178.61																					
				.34	Shale	silty, black				R3												
				.20	SH/SLST	interbedded, black				R3												
				.15	Shale	black, silty				R3												
40				.34	Shale	as above, broken stick				R3												
				.01	Coal/SH					R3												
				.34	Shale	as above, stick				R3												
		181.66		.46	SLST/SS	interbedded - fine to medium sandstone, medium gray				R4												
	181.66	181.66		.05	SS/SLST	as above, stick				R3	89.1											
				.15	Shale	black, coal stringers, stick				R3												
		184.69		2.83	SLTST	dark gray to black, very shaley, fine grain sandstone bands, stick				R3-R4												
	184.71	184.71		.11	SLTST	black, shaley, some plant debris				R3-R4	92											
41		187.76		2.94	SLTST	dark gray, occasional sandy and shaley bands, stick		72		R3												
	187.76	187.76		.20	Shale	slightly silty, black, stick				R3	90.4											
				.13	Shale	black, broken, slicked				R3												
				.015	Shale	coaly																
				.04	Shale	black, carbonaceous																
				.05	Coal	dull, shaley																

ALL LINEAR UNITS IN METRES

- ⊙ MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	DIPPING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % ar.b.	residual	ASH %	V.M. %	FC %	F.S.I.	C.V.	
41				.20	Shale	carbonaceous, broken stick			R3											
				.05	Coal	dull and bright														
				.10	Coal	dull with bright														
				.005	Coal	bright			R2											
				.18	Coal	dull with bright, broken														
				.03	Coal	dull, some bright, broken to powder														
				.06	Shale	carbonaceous, black			R3											
				.26	SLST/SS	very fine grain, interbedded			R4-R5											
42		190.64		1.56	SLTST	as above, becoming sandy at base, stick Joints: 167°, 170°, with calcite			R3											
	190.80										67									
	190.80			.51	SST	fine to medium grain, salt and pepper			R3											
				.03	Shale	carbonaceous with calcite			R3											
				1.31	SS/SLST/ SH	interbedded, fine sand, becoming shaley at base, broken stick, some coaly breaks			R3											
				.17	Shale	carbonaceous with coal streaks and stringers			R3											
				.82	SLTST	with sand and shale bands, broken stick			R3											
43		193.79		.15	SITST	shaley, black, broken stick			R3											
	193.85																			
	193.85			.39	SLTST	as above with sandy bands, coal streaks and coaly slicks			R3		86.6									
				.22	SLTST	grades to fine sandstone at base			R3											
				2.21	SST	fine grain, soft sediment deformation, stick		77	R3											

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

* R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

* RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M.%	F.C.%	F.S.I.	C.V.
													ar.b.	residual					
43				.015	Shale	silty with calcite													
		96.785		.10	SST	as above, minor carbonaceous streaks, stick			R3										
	196.90										96.5								
	196.90			1.24	SST	as above, occasional rip-up clasts < .01 m stick			R3										
44																			
		199.96		1.82	SST	as above, stick			R3										
	199.95										88.5								
	199.95			1.37	SST	as above, bedding starts dipping in other direction here, stick			R3										
				.80	SST	fine grain, salt and pepper, carbonaceous streaks, stick			R3										
				.34	SST	as above, many coaly stringers, slicks with calcite, numerous calcite joints but too broken to measure, broken													
45				.14	SST	sandy coal and calcite on break													
		203.03		.43	SST	fine to medium grain, salt and pepper, silty bands, coal and carbonaceous streaks			R3										
	203.00										77.2								
	203.00			.40	SST	medium grain, salt and pepper, calcite and coal fracture throughout, abrupt below, some slicks in coal fracture			R3										
				.26	SST	sandy medium gray			R3										
				.17	SST	medium gray, silty			R3										
		206.05		2.22	SST	fine grain, medium gray, becomes silty near base, broken stick			R2										
	206.04										79.6								
	206.04			.69	SST	silty at top with coal stringers, fine grain, medium gray, stick			R3										

ALL LINEAR UNITS IN METRES

* MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

1 • R &/OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
												ar.b.		residual					
47				.15	Shale	as above, rubble, slicked													
				.25	Shale	as above, becomes silty at base													
		212.02		.15	SLTST	slightly shaley, stick													
212.14											62.3								
	212.14			.34	SLTST	as above													
				1.48	SS/SLST	as above, interbedded, fine grain, light gray, stick		73	R3										
				.29	SST	light gray, fine grain, silty streak, stick Joints: 2 x 0° Calcite			R3										
				.40	SLTST	as above, becomes shaley near base, broken stick		75	R3										
				.49	Shale	slightly silty, broken			R3										
				.02	Coal	hard, bright			R1										
		216.36		1.20	Shale	as above, black			R3										
215.21											60.3								
48																			
	215.21			.20	Shale	as above, black, broken stick			R3										
				.06	Coal	dull with bright, rubble			R3										
		216.04		.57	Shale	as above, slightly shaley in places, coaly slicked at top			R3										
216.10											73.4								
	216.10			.14	Shale	as above, stick			R3										
				.12	SLTST	shaley, medium gray, calcite, slicked at base stick			R3										
				.11	SST	light gray, fine grain, silty bands, large scale cross-bed, broken stick			R4										

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

! - R &/OR S — GOLDR ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % arb.	residual	ASH %	V M %	F. C. %	F. S. I.	C. V.	
48				.44	SLTST	medium gray, sandy, minor calcite slicks			R3											
				.44	Shale	black, silty, enormous calcite and coaly slicks broken stick Joints: 1 x 26°, 3 x 28°, 1 x 22°, major calcite slick			R3											
				.07	SLTST	as above			R3											
				.07	SST	as above Joints: 1 x 16°, calcite-slicked			R3											
				.17	SLTST	with sandy bands			R3											
		217.72		.06	Shale	black			R3											
218.03									R3		78.3									
	218.03			.26	SLTST	sandy, medium gray			R3											
				.23	Shale	black, silty			R3											
				1.25	Shale	black, slightly carbonaceous, coal streaks and slicks, broken stick			R3											
49		221.04		1.27	Shale	black, as above, shaley and silty bands in middle, stick			R3		48.1									
	221.13								R3		92.1									
	221.13			.12	Shale	black, as above			R3											
				.05	Shale	black, coal streaked and slicked, broken			R3											
				1.18	Shale	black, carbonaceous and coal streaks throughout Joints: 1 x 164°			R3											
				.11	Shale	very carbonaceous, rubble, coal slicks			R3											
				.20	Shale	as above			R3											
				.55	Shale	rubble, coaly slicked			R3											
				.08	SH/Coal	rubble			R3		49.8									

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

1 : R & / OR S — GOLDER ASSOCIATES HARDNESS CODE

• RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH				ANALYTICAL DATA						
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	SAMPLE NO	MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.
													a.r.b.	residual					
49				.04	Coal	shaley, dull	9		R3										
				.16	Coal	dull	9		R3										
				.11	Coal	mush, dull, some bright	9												
				.06	Coal	dull, broken stick	9		R3										
				.02	Coal	dull with bright	9		R3										
				.135	Coal	dull	9		R3										
				.05	Coal	dull with bright	9		R3										
		224.185		.19	Coal	bright with dull	9		R3										
224.03									R2, R3										
	224.03			.035	Shale	carbonaceous, black	9												
				.05	Coal	bright with dull	9												
				.03	Shale	carbonaceous	9												
				.045	Coal	dull with bright, shale, carbonaceous, rubble	9												
50				.06	Coal	dull, broken stick	9												
		224.31		.06	Shale	carbonaceous with coal stringers, broken stick													
224.33																			
	224.33			1.84	Shale	black, silty bands, silty near base, stick			R3										
				.31	SLTST	sandy bands			R3										
				.085	Shale	black, slightly silty, carbonaceous at base			R4										
				.035	Shale	carbonaceous			R3										
				.14	Coal/SH	rubble													
		227.04		.30	Shale	black, carbonaceous													

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
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- FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH				ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD	SAMPLE NO.	MOIST %		ASH %	V M %	F.C. %	F.S.I.	C.V.	
													arb.	residual						
50	227.38	227.38		.23	Shale	as above, coaly at base, broken stick			R3		79.7									
				.02	Coal	dull														
				.01	Coal	bright			R3											
				.03	Coal	dull														
				.035	Shale	carbonaceous			R3											
				.025	Coal	dull with bright														
				.31	Shale	black, carbonaceous														
				.13	Coal	bright with dull, shale interbedded, rubble														
				.48	Shale	black, silty in places, broken stick			R4											
51				.47	SLTST	shaley, stick			R3											
				.28	Shale	black			R3											
				.68	SST	fine grain, silty at top, shaley at base			R4											
	230.275			.195	Shale	black			R4											
	230.43										67.4									
	230.43			1.16	Shale	as above, silty bands, silty at base, stick			R3											
				1.58	SLTST	shaley at top, very fine grain sandstone bands near base, stick		74	R3-R4											
52		233.54		.37	SLTST	black, shaley, broken stick			R4											
	233.48										94.2									
	233.48			.10	SLTST	as above			R4											
				.37	SST	light gray, fine grain, fine darker siltstone laminae, soft sediment deformation and small scale cross-bedding, stick			R3											

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.	
													arb.	residual						
52				.70	SLTST	as above														
				236.59	1.94	SS/SLST	as above, interbedded, stick Joints: 3 x 170° with calcite		75											
				236.52								90.4								
				236.52	.94	SS/SLST	as above, stick Joints: 175°													
53																				
					.92	SS/SLST	as above, rip-up clasts at base, stick Joints: 161° with calcite; 170° with calcite		74											
					239.55	1.17	SLTST	dark gray, stick												
				239.57								86.5								
				239.57	.61	SLTST	as above, stick													
						.79	SST	fine to medium grain, light and medium gray, rip-up clasts and silty bands, stick												
						.89	SST	medium grain, salt and pepper, distinct bedding stick Joints: 170° with calcite		73										
54																				
					242.54	.68	SST	occasional coaly blebs and stringers, broken stick, fine to medium grain, becomes coarser at base Joints: 165° - 170° with calcite and breccia		68										
				242.62								94.3								
					242.62	1.83	SST	medium to coarse grain, salt and pepper, few siltstone rip-up clasts, carbonaceous and coaly stringers and blebs throughout, occasional slicks, broken to broken stick		70										
						.025	Shale	carbonaceous and coaly												
						.13	SLTST	dark gray												
						.72	SST	as above												

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- † R &/OR S — GOLDR ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG	▲ BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
54		245.525		.20	Shale	black			R3											
	245.67										72									
	245.67			.51	Shale	black			R3											
				.14	Shale	black, silty, stick			R4											
55				.09	SST	light gray, fine grain, minor cross-beds			R3											
		248.71		2.30	Shale	black, silty in places, occasional slicks and coal, stick			R3											
	248.72								R3		87.5									
	248.72			.46	Shale	as above, becoming silty at base			R3											
				1.49	SLTST	with fine sandy bands, medium gray			R4-R5											
56				.91	SLTST	medium gray, becoming shaley at base, broken stick			R4											
		251.89		.31	Shale	silty, medium to dark gray			R4											
	251.76								R4-R5		87.4									
	251.76			.12	Shale	as above			R4-R5											
		254.70		2.82	SLTST	as above, sandy bands, broken stick			R4-R5											
	254.81																			
57		254.81		1.15	SLTST	medium gray, disturbed bedding near base, pyrite blebs at base, coal streaks, broken streaks			R3											
				.16	Shale	black, slicked, broken stick			R3											
				.18	SLTST	as above, no pyrite			R3											
				.29	Shale	as above			R3											
				.86	SLTST	as above			R3											
		257.70		.25	Shale	black			R3											

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE
 * R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
 * RQD — ROCK QUALITY DESIGNATION (%)
 FF — FRACTURE FREQUENCY

▲ ANGLE MEASURED FROM CORE AXIS

HOLE No. MBE 101

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST % ar.b.	residual	ASH %	V.M. %	F.C. %	F.S.I.	C.V.	
60	270.05	270.05		.40	SST	as above, becoming silty at base, stick		75	R4			98.4								
				.18	SLTST	becoming shaley at base														
				1.40	Shale	black, silty at top, stick			R3											
61				.71	SLTST	medium gray with fine grain sandstone bands, shaley in places, stick			R3-R4											
		273.10		.36	Shale	black, silty at top, slicked			R3											
	273.10	273.10		.43	Shale	black, carbonaceous			R3			88.5								
				.55	SST	light gray, fine grain, coal streaks and slicks, calcite, turbidity			R3											
				.01	Coal	dull with bright			10-1											
				.035	Coal	dull			10-1											
				.02	Coal	dull and bright			10-1											
				.32	SS/Coal	interbedded, (intermixed?!) coal - dull, broken			10-1	R3										
				.06	Coal	dull			10-1											
				.04	Coal	bright and dull			10-1											
				.11	Coal	dull with bright			10-1											
				.01	Coal	dull			10-1											
				.02	Coal	bright with dull			10-1											
				.01	Coal	dull and bright			10-1											
				.01	Coal	bright			10-1											
				.085	Coal	bright, some dull			10-1											

ALL LINEAR UNITS IN METRES

- MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- * R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
- * RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
----------	---------

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH.			SAMPLE NO.	ANALYTICAL DATA									
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	F.C. %	F.S.I.	C.V.			
													ar.b.	Residual								
62				.025	Coal	dull with bright	10-3															
				.01	Coal	dull	10-3															
				.015	Shale	coaly	10-3															
				.03	Coal	dull with bright	10-3															
				.06	Coal	bright and dull	10-3															
				.08	Coal	dull with bright	10-3															
				.085	Coal	shaley	10-3															
				.02	Coal	bright and dull	10-3															
				.08	Coal	dull with bright	10-3															
				.02	Coal	dull, shaley	10-3															
				.16	Shale	black, carbonaceous with coaly stringers and streaks	10-3															
				.01	Shale	coaly	10-3															
				.10	Shale	black, carbonaceous with coaly stringers and streaks	10-3															
				.06	Coal/SH	mush	10-3															
				.06	Shale	as above	10-3															
				.01	Coal/SH	mush	10-3															
63				.09	Coal	shaley	10-3															
				.33	Coal	dull, some bright	10-3															
				.03	Coal	bright with dull	10-3															
				.03	Coal	dull, shaley	10-3															

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE

▲ ANGLE MEASURED FROM CORE AXIS

* R & / OR S — GOLDR ASSOCIATES HARDNESS CODE

* RQD — ROCK QUALITY DESIGNATION (%)

FF — FRACTURE FREQUENCY

HOLE No. MBE 101

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

CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIG.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	VM %	FC %	F.S.I.	C.V.	
													ar.b.	residual						
63				.015	Coal	dull with bright	10-3													
				.23	Coal	dull	10-3													
				.055	Coal	bright and dull	10-3													
				.185	Coal	dull, some shaley, rubble	10-3													
		281.575		.035	Coal	dull	10-3													
282.24																				
	282.24			1.72	Shale	black, occasional coaly streaks and slicks, slightly carbonaceous, occasional silty bands, stick														
				.03	Coal/SH	interbedded	10-4													
				.21	Coal	dull with bright	10-4		R1											
				.02	Coal	bright with dull	10-4		R1											
				.02	Coal	dull with bright	10-4		S1											
				.045	Coal	bright with dull, rubble	10-4		R2											
				.105	Shale	coaly, becoming silty at base			R3											
		284.77		.38	SLTST	medium gray			R3											
285.29																				
	285.29			.34	SLTST	as above, grading to sandstone at base			R3											
				.18	SST	light gray, fine grain, silt and shale bands, medium scale cross-beds, stick			R3-R4											
68				.14	SST	as above														
				.085	Coal/SS	interbedded (intermixed?)	10-5													
				.24	Coal	dull with bright	10-5													
				.015	Coal	dull and bright	10-5													

ALL LINEAR UNITS IN METRES

● MEASURED FROM THE HORIZONTAL PLANE
 ○ R & / OR S — GOLDR ASSOCIATES HARDNESS CODE
 ● RQD — ROCK QUALITY DESIGNATION (%)
 FF — FRACTURE FREQUENCY

● ANGLE MEASURED FROM CORE AXIS

HOLE No.	MBE 101
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CORE & COAL CORE DESCRIPTION

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

HOLE No.	MBE 101
CONTINUED	

BOX No.	DEPTH AT TOP OF BOX	DEPTH		TH.	LITHO DESCRIPTION		SEAM DESIGN.	BEDDING ANGLE (°)	SUMMARY GEOTECH			SAMPLE NO.	ANALYTICAL DATA							
		FROM	TO		MAIN	AMPLIFIED (INCLUDE COAL RECOVERY FOR EACH SEAM)			HARDNESS	FRAC FREQ	RQD		MOIST %		ASH %	V.M. %	FC %	F.S.I.	C.V.	
													ar.b.	residual						
66	295.20																			
		295.20	295.96	.86	SST	as above														
	295.96																			
		295.96		.36	SST	as above														
				.005	Coal	sandy														
			297.10	.78	SST	as above, becoming massive at base		80												
	297.48																			
		297.48		1.36	SST	as above														
67			300.49	1.65	SST	as above, stick														
	300.53																			
		300.53		2.76	SST	as above														
68			303.59	.30	SST	as above														
	303.58																			
		303.58	306.62	3.04	SST	as above														
	306.63																			
		306.63		.98	SST	as above, occasional shaley bands														
69				.42	SST	as above														
				.18	SH/SST	interbedded														
			309.65	1.44	SST	as above		82												
	309.68																			
		309.68		2.29	SST	as above		79												
70																				
			312.66	.70	SST	as above														
	312.72																			
		312.72	315.76	3.04	SST	as above														
	315.77																			
		315.77		.56	SST	as above														

ALL LINEAR UNITS IN METRES

- * MEASURED FROM THE HORIZONTAL PLANE
- ▲ ANGLE MEASURED FROM CORE AXIS
- R &/OR S — GOLDER ASSOCIATES HARDNESS CODE
- RQD — ROCK QUALITY DESIGNATION (%)
- FF — FRACTURE FREQUENCY

HOLE No.	MBE 101
----------	---------

ROKE

SIDEWALL DESCRIPTION
 CALIFORNIA

FILE NO. _____ COMPANY: **ROKEL OIL ENTERPRISES LTD.** CALGARY, ALBERTA
 WEL: **204-1-141** LOCATION: **ROKEL**
 FIELD: **CANADIAN**

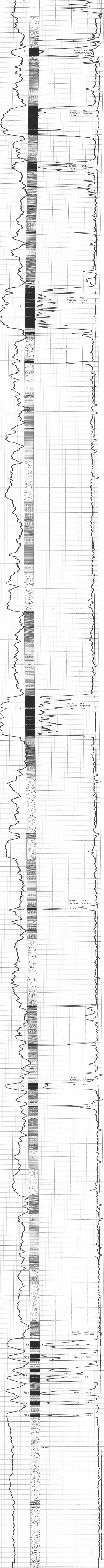
DATE: _____
 DRILLER: _____
 LOGGERS: _____
 SUPERVISOR: _____

LOGGING UNIT: _____
 LOGGING NO.: _____

REMARKS: _____

GENERAL		GAMMA RAY		SIDEWALL DENSLOG	
RUN NO.	DEPTH	SEND SETTINGS	ZERO DIVL OR #	T.C. SEC.	ZERO DIVL OR #
1	0	200	0	1.2	272.62

REMARKS: CR TUBE 3 1/2" FROM TOOL/JEAS CAL. 100-4 1/2"



EXPANDED SCALE

K-SHELL, MT. BANWICK EAST 80331A



DAVIES EXPLORATION LOGGING LTD.

COMPANY Crows Nest Resources

HOLE NUMBER MBS. - 101

LOCATION MT. BANWICK EAST

PROVINCE B.C.

ELEVATION

LOG TYPE CALPER, NATURAL GAMMA, RESISTIVITY, DENSITY

DATE Sept. 18 1960

DRILLED DEPTH

LOGGED DEPTH

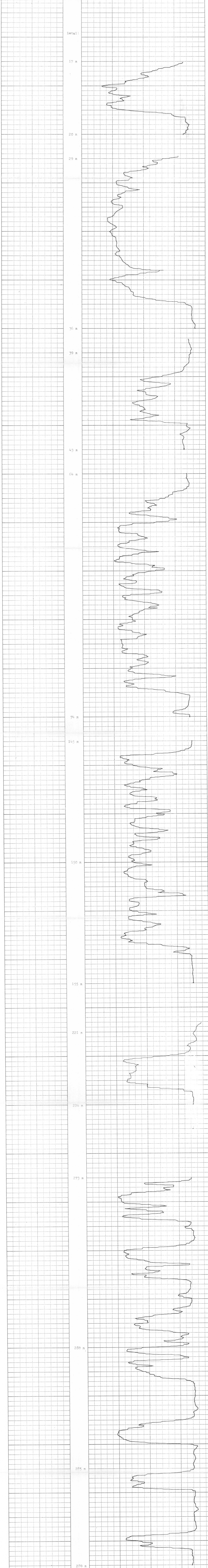
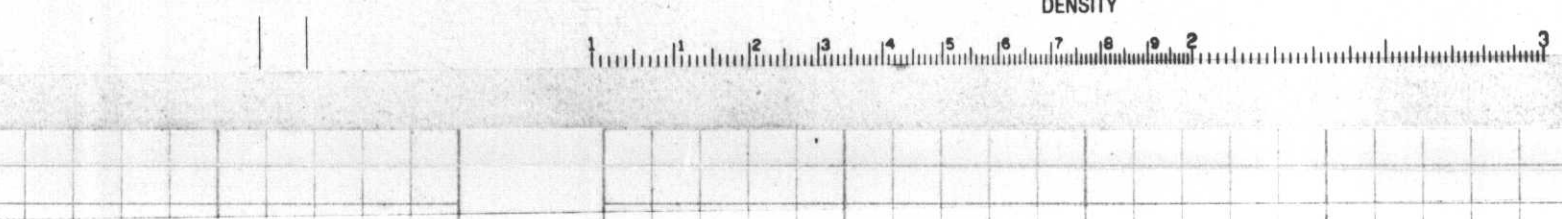
ZERO DATUM G.L.

HOLE DIAMETER IN.

CASING LENGTH

REMARKS

432



135

DAYTES EXPLORATION LOGGING LTD.

COMPANY: DAYTES EXPLORATION LOGGING LTD. (Logo)

CLIENT: CHEONG HONG RESOURCES

WELL NUMBER: KRS - 101

LOCATION: Mt. Ranier

PROVINC: B.C.

ELEVATION:

LOG TYPE: CAPTURE WINDING GAMMA, RESISTIVITY, DENSITY

DATE: SEPT. 15 1970

DRILLED DEPTH: 319 m

LOGGED DEPTH: 318 m

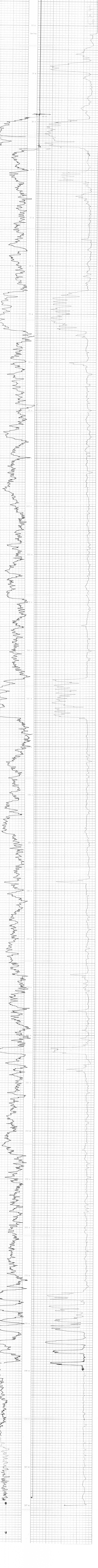
LOG BOTTOM: C.L.

WELL DIAMETER: 100 mm

LOG LENGTH: 114.5 m

REMARKS: Drilled 5' 6" (1.68 m) @ 318 m, 1' 3" (0.38 m) @ 300 m. No. 1 Gamma Shot down @ 28 m

432



432

K-SHELL-MT. BANNER EAST 8(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST

AUTHOR: G. SLOAN

PART _____ OF _____

DATE: 1981 -01-19

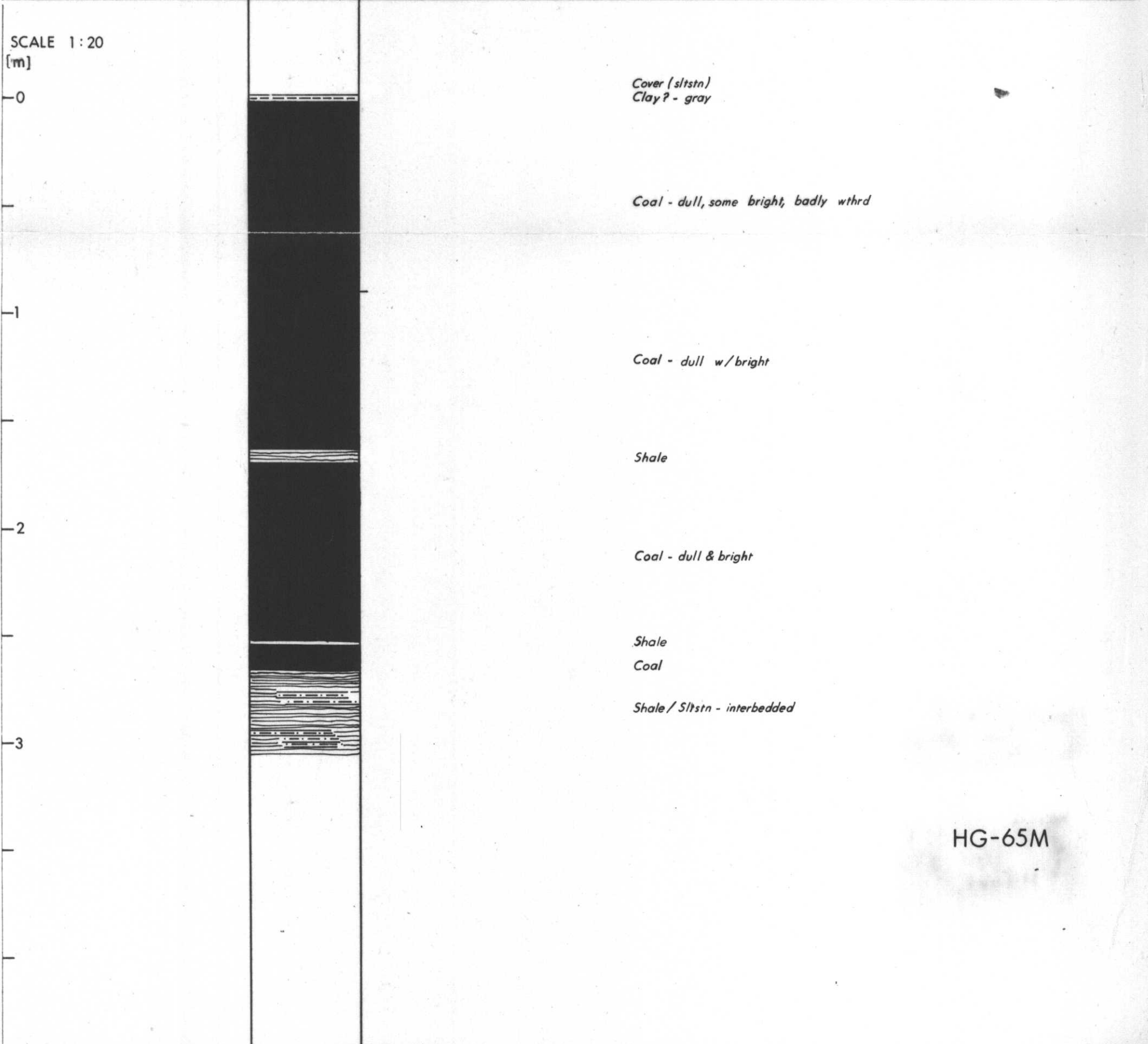
AREA:

SOURCE OF DATA:

LOCATION:

SPENCER RIDGE TRENCH 1, SEAM I

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	



HG-65M

432

STRATIGRAPHIC SECTION

DESIGNATION: K-SHELL-MT. BANNER EAST SD(3)A

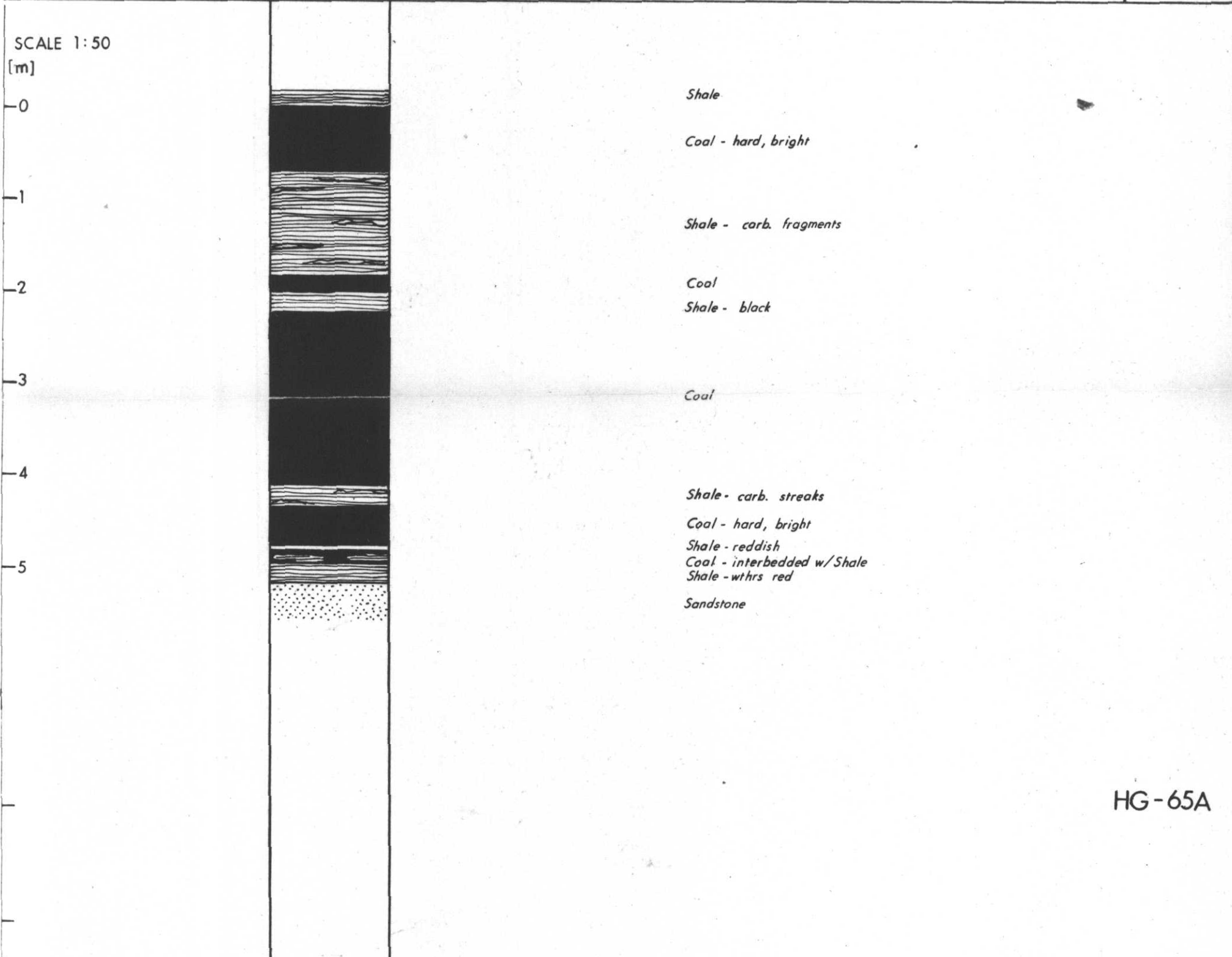
PART _____	OF _____
AUTHOR: G. SLOAN	DATE: 1981-01-19
SOURCE OF DATA: MAIN RIDGE TRENCH 1, SEAM L	

PROJECT: MT. BANNER EAST

AREA: _____

LOCATION: _____

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	



HG-65A

432

K-SHELL - MT. BANNER EAST (3)A

STRATIGRAPHIC SECTION

DESIGNATION: _____ PART _____ OF _____

PROJECT: MT. BANNER EAST

AUTHOR: G. SLOAN DATE: 1981-01-19

AREA: _____

SOURCE OF DATA:
N. WATERFALL RIDGE TRENCH 1, SEAM L

LOCATION: _____

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
[m]

0
1
2
3
4
5
6



Shale

Coal - bright

Shale
Coal - soft, bright
Shale
Coal - soft, bright
Shale - gray brown

Coal - bright

Shale
Coaly Shale
Shale

HG-65H

432

K-SHELL-MT. BANNER EAST SD(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST
 AREA:
 LOCATION:

PART _____ OF _____
 AUTHOR: G. SLOAN DATE: 1981-01-19
 SOURCE OF DATA:
 SPENCER RIDGE TRENCH 2, SEAM G

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
[m]

0
1
2
3
4
5
6
7
8

Cover

Coal - badly weathered, bright & dull, shaley in places

Shale - very coaly

Coal - A/A
 Ironstone - badly weathered

Coal - A/A, bright w/dull

Shale - grey
 Coal - bright w/dull
 Shale - grey

Coal - hard & bright

Shale - grey
 Coal - hard & bright
 Shale - red

Coal - hard & bright
 Coal - shaley
 Shale - carb w/ coaly stringers
 Coal - hard & bright
 Coal - dull, shaley
 Shale - grey

HG-65D

432

K-SHELL - MT. BANNER EAST 8(3A)

STRATIGRAPHIC SECTION

DESIGNATION: _____ PART _____ OF _____

PROJECT: MT. BANNER EAST

AUTHOR: G. SLOAN DATE: 1981-01-19

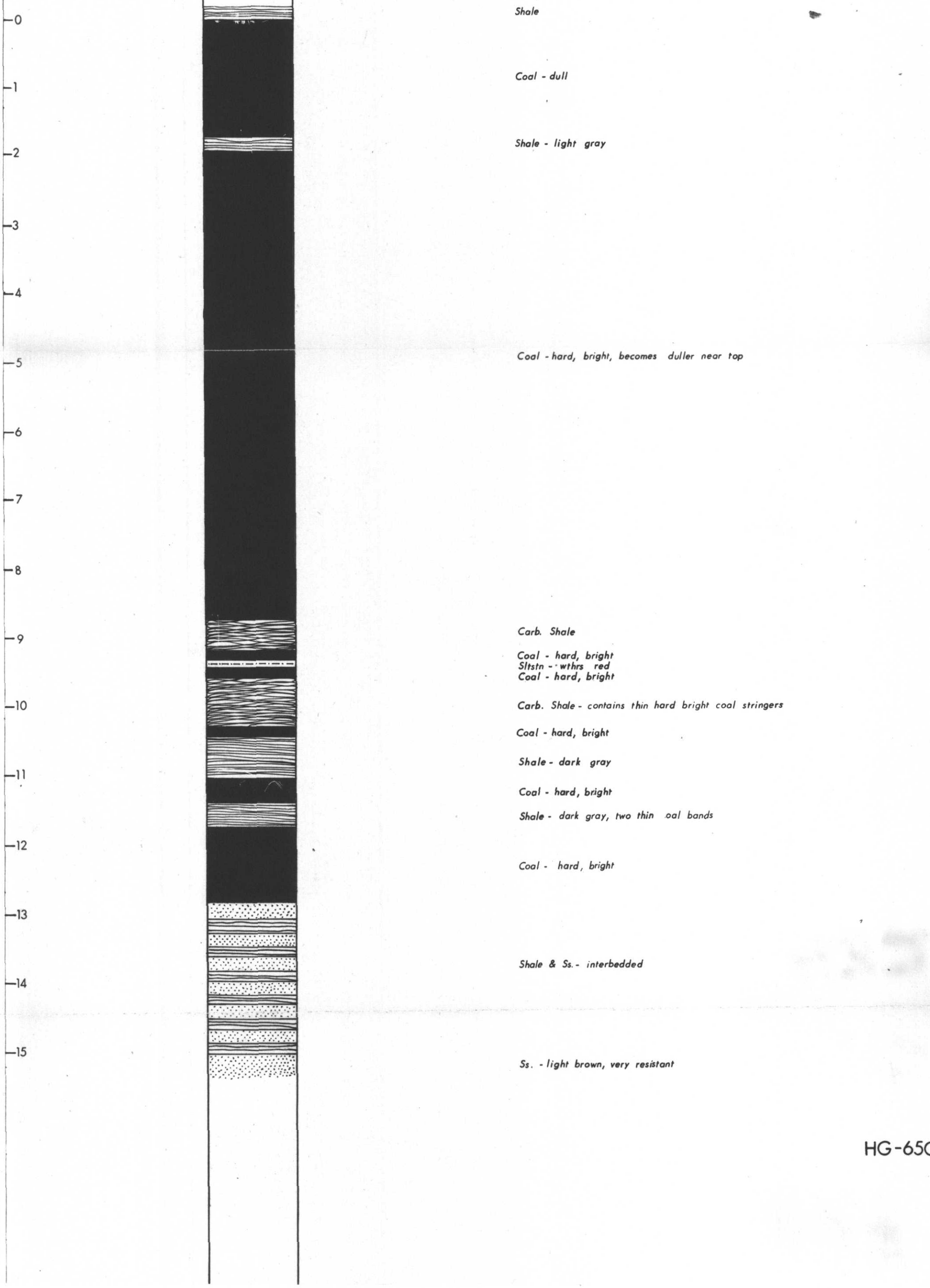
AREA: _____

SOURCE OF DATA:
PAC RIDGE TRENCH 2, SEAM G

LOCATION: _____

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
[m]



HG-65C

432

K-SHELL-MT. BANNER EAST 80(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST

AUTHOR: G. SLOAN

DATE: 1981-01-19

AREA:

SOURCE OF DATA:

LOCATION:

MAIN RIDGE TRENCH 2, SEAM K

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
(m)

0

1

2

3

4



Shale - carbonaceous

*Coal - hard, bright, badly sheared
- contains a few thin carb. shale stringers*

Shale

HG-65

432

K-Mt. Banner East 80(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PART _____ OF _____
AUTHOR: G. SLOAN
DATE: 1981-01-19
SOURCE OF DATA: N. WATERFALL RIDGE TRENCH 2, SEAM K

PROJECT: MT. BANNER EAST

AREA:

LOCATION:

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
[m]

0
1
2
3
4



Siltstone
Coaly Shale
Coal - soft, dull
Coal - soft, shiny w/occ. bands of hard, bright
Coal - soft, dull
Shale

HG-651

432

K-SHELL-MT. BANNER EAST SD(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST

PART _____ OF _____

AREA:

AUTHOR: G. SLOAN DATE: 1981-01-19

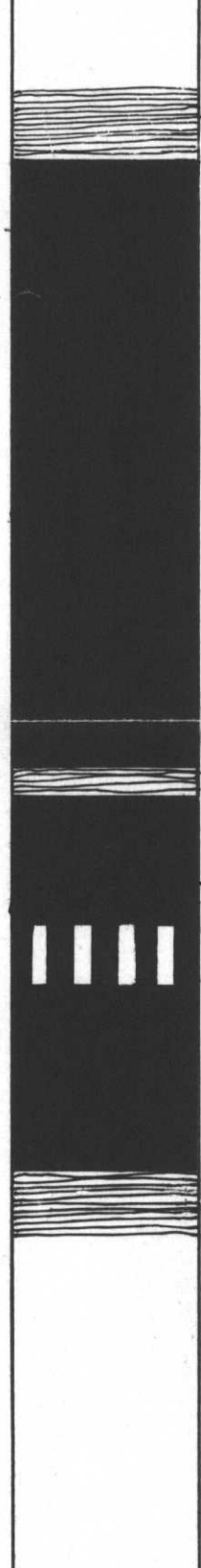
LOCATION:

SOURCE OF DATA:
N. WATERFALL RIDGE TRENCH 3, SEAM G

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:50
[m]

0
1
2
3
4
5
6
7
8



Shale

Coal - dull w/occ. interbeds of Shaley Coal

Shale

Coal - bright and dull

Coal - dull

Shaley Coal - w/bands of shale

Coal - bright

Shale

HG-65J

432

STRATIGRAPHIC SECTION

DESIGNATION:

K-SHELL - MT. BANNER EAST 80/3) A

PROJECT: MT. BANNER EAST

PART ____ OF ____

AREA:

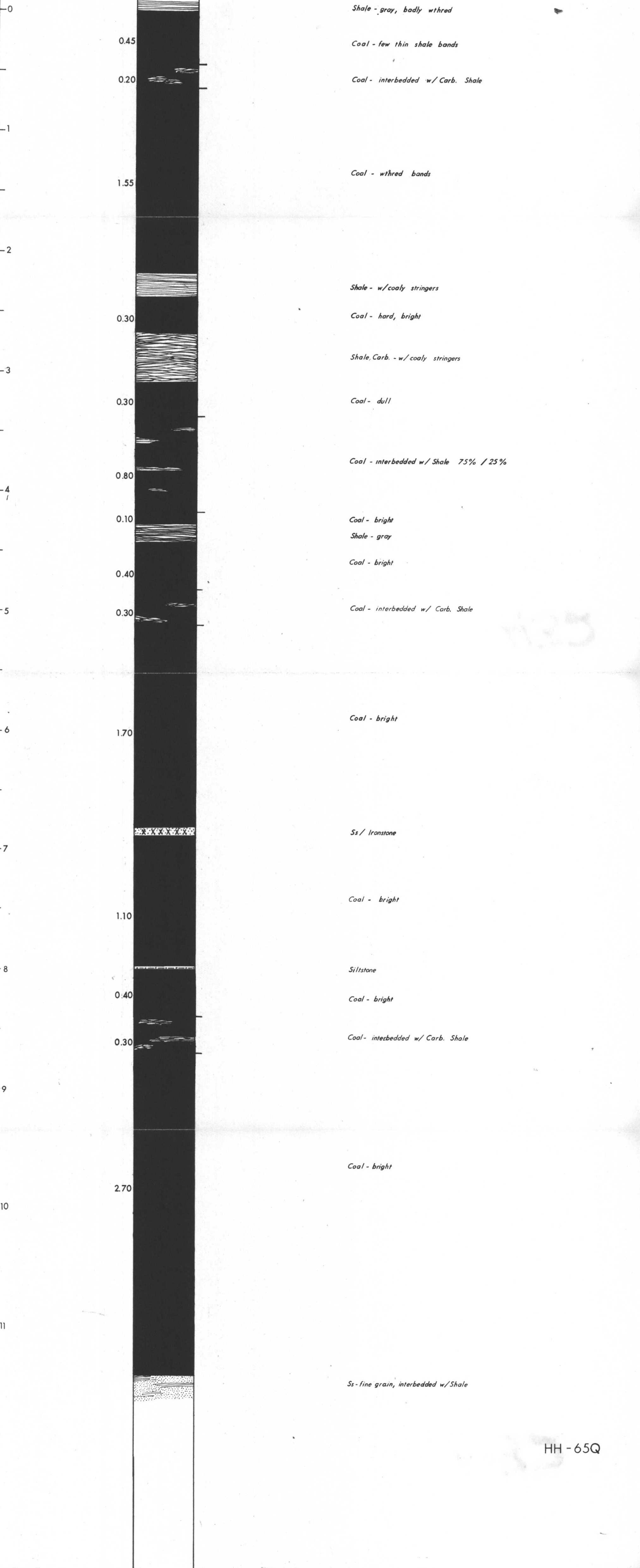
AUTHOR: G. SLOAN DATE: 1981-01-19

LOCATION:

SOURCE OF DATA:
PAC RIDGE TRENCH 3, SEAM E

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:20
[m]



HH-65Q

432

K-SHELL - MT BANNER EAST (3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST

PART _____ OF _____

AREA:

AUTHOR: G. SLOAN DATE: 1981-01-19

LOCATION:

SOURCE OF DATA:
PAC RIDGE TRENCH 1, SEAM K

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	
SCALE 1:50							
(m)							
0							
1			[Wavy lines]			<i>Shale</i>	
2			[Dark solid]			<i>Coal/Carb. Shale - interbedded</i>	
3			[Wavy lines]			<i>Coal - hard, bright</i>	
4			[Dark solid]			<i>Carb. Shale</i>	
5			[Wavy lines]			<i>Coal - hard, bright</i>	
6			[Dark solid]			<i>Carb. Shale</i>	
7			[Wavy lines]			<i>Coal - hard, bright</i>	
8			[Wavy lines]			<i>Shale - wthrs red</i>	
9			[Wavy lines]			<i>Coal - hard, bright</i>	
10			[Wavy lines]			<i>Carb. Shale/Coal - interbedded</i>	
			[Vertical lines]			<i>Shale - gray black</i>	
			[Dark solid]			<i>Shaley Coal</i>	
			[Dark solid]			<i>Coal - bright</i>	
			[Dark solid]			<i>Shale</i>	
			[Dark solid]			<i>Coal - bright</i>	
			[Dark solid]			<i>Shale</i>	

432

K-Mt. Banner East 8(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST
 AREA:
 LOCATION:

PART _____ OF _____
 AUTHOR: G. SLOAN DATE: 1981-01-19
 SOURCE OF DATA:
 SPENCER RIDGE TRENCH 3, SEAM E

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	
SCALE 1:50 [m]							
0			[Wavy lines]			<i>Shale</i>	
						<i>Coal - badly weathered</i>	
1						<i>Coal - dull, weathered slightly</i>	
						<i>Coal - badly weathered, dull</i>	
2			[Wavy lines]			<i>Shale - coaly stringers</i>	
						<i>Coal - dull, bands of shiny coal</i>	
3							
4							
5						<i>Coal - dull</i>	
6			[Wavy lines]			<i>Coaly shale</i>	
						<i>Coal - dull</i>	
7			[Wavy lines]			<i>Shale - coaly stringers</i>	

HG-65E

432

K-SHELL - MT. BANNER EAST 8D(3)A

STRATIGRAPHIC SECTION

DESIGNATION: _____ PART _____ OF _____

PROJECT: MT. BANNER EAST

AUTHOR: G. SLOAN DATE: 1981-01-19

AREA: _____

SOURCE OF DATA:

LOCATION: _____

N. WATERFALL RIDGE TRENCH 4, SEAM E

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	

SCALE 1:20

[m]

0

Cover

1.70

Coal - dull w/some bright bands

1

2

Shale - coaly

3

1.90

Coal - dull w/occ. bands of Shaley Coal

4

0.60

Coal - dull

Shale - interbedded w/Sltstn

HG-650

432

STRATIGRAPHIC SECTION

K-SHELL - MT. BANNER EAST 80(3)A

PROJECT: MT. BANNER EAST	DESIGNATION:	PART	OF
AREA:	AUTHOR: G. SLOAN	DATE: 1981-01-19	
LOCATION:	SOURCE OF DATA:	SEAMS D, E & F ON ROAD	

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	
SCALE 1:20 (m)							
		0.30				Ss - med. to coarse grain, coaly stringers	
		0.12				Coal - dull w/bright	
		0.20				Coal - bright w/dull	
		0.08				Shale - carb. w/plant debris	
		0.05				Coal - hard, bright	
		0.15				Shale - carb. w/coaly bands	
		0.05				Coal - dull	
		0.05				Coal - bright, hard	
		0.05				Shale - gray w/coaly bands	
		0.05				Coal - bright	
		0.45				Coal - bright	
							SEAM F
						Shale - silty, gray, massive	
		0.04				Coal - bright, lensey	
						Shale - gray, coaly bands, silty at base (coarsens to South) (appears to be thrust over seam below - shattered)	
		0.02				Coal - dull	
						Shale - carb, brown	
		0.60				Coal - dull	
		0.06				Shale - gray	
						Coal - dull	
						Shale - carb. & coaly	
		0.13				Coal - w/hrs dull	
		0.18				Coal - dull w/bright	
		0.10				Shale - carb.	
						Coal - bright	
						Shale - brown, plant debris, some disturbance.	
						Shale - carb. lenses	
		0.945				Coal - dull & bright bands	
		0.02				Coal - shaley	
		0.22				Coal - dull	
						Shale - brown, carb.	
		0.27				Coal - dull	
		0.06				Coal - shaley	
		0.66				Coal - dull, hard bands	
						Ironstone - nodular, red, coaly	
		0.28				Coal - bright & dull	
		0.14				Shale - slightly carb., gray	
		0.01				Carb. shale - interbedded w/coaly shale & shaley coal	
		0.02				Coal - hard, bright	
						Coal - hard, bright	
						Coal - dull	
						Coal - hard, bright	
						Shale - carb., lensey	
		0.38				Coal - shaley, dull, hard	
		0.07				Ironstone - red	
						Coal - dull w/bright	
						Shale - carb.	
		0.35				Coal - dull w/bright, bright stringers	
		0.16				Coal - dull	
		0.24				Shale - carb.	
		0.23				Coal - dull, shale stringers	
		0.06				Shale - carb.	
						Coal - dull	
						Shale - carb.	
						Coal - dull	
		0.53				Shale - carb.	
		1.01				Coal - dull, some bright near base	
		0.08				Shale - carb.	
		0.11				Coal - dull	
						Coal - dull	
						Shale - carb.	
		0.92				Coal - dull	
		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	
		0.10				Ss - silty, small scale x-beds, fines downward & upward to shale	
						Coal - lensey, badly w/thead	
						Shale - silty, some vfg Ss laminations, some Carb. shale	
						Siltstn dk gray/Ss vfg orange - laminar interbeds	
						Siltstn - shaley in places	
						Shale - gray, lensey w/coaly stringers	
						Siltstn - gray	
						Shale - carb., gray & brown, becomes silty at base	
		0.17				Coal - dull w/discontinuous	
		0.06				Shale - coaly, w/hrs yellow	
						Ss - vfg, gray	
						Shale - black	
		0.63				Coal - shaley, badly w/thead	
						Shale/Siltstn - carb., faulted into Coal to East	
		0.39				Coal - dirty	
		0.10				Coal - shaley, dirty	
		0.77				Coal - soft, dull	
						Shale - gray	
		0.43				Coal - dirty, some bright bands, shaley lenses	
						Siltstn/Shale - carb.	
							SEAM D

HG-65R

STRAT SECTION OF SEAMS D, E, F ON ROAD

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

00 432

STRATIGRAPHIC SECTION

DESIGNATION: K-SHELL - MT. BANNER EAST 80(3)A

PROJECT: <u>MT. BANNER EAST</u>	AUTHOR: <u>G. SLOAN</u>	PART _____ OF _____
AREA: _____	DATE: <u>19 81-01-19</u>	
LOCATION: _____	SOURCE OF DATA: <u>SEAM G ON ROAD</u>	

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	
SCALE 1:20 [m]							
						Shale - carb., coaly fragments	
		0.60				Coal - soft	
						Shale - coaly	
		0.71				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	
		0.90				Coal - dull w/bright	
						Shale	
		0.33				Coal - dull w/bright	
						Shale - pinches & swells, splits in two (faulted?)	
		0.55				Coal - mostly vitrain	
		0.05				Shale/Coal - interbedded, discontinuous to south	
		0.42				Coal - bright	
		0.16		XXXXXXXXXX		Ironstone - lensey	
						Coal Ironstone	
		0.45				Coal - dull, hard	
	0.08				Coal - w/ironstone nodules		
	0.52				Coal - dull w/bright bands		
					Shale - thins to south		
	0.40				Coal - soft, dull (gouge?)		
	0.16				Shale		
	0.10				Coal - medium bright		
					Coal - w/ironstone nodules		
	0.19				Coal - soft, dull w/bright bands		
	0.10				Shale - w/coaly streaks, brown wthrs yellow, thins to south		
	0.12				Coal - soft, bright, lensey		
					Shale - brown		
	0.19				Coal - dull w/bright, lensey		
					Shale - wthrs yellow, lensey		
	0.21				Coal - dull w/bright		
					Shale - wthrs red, thins to south		
	0.05				Coal - dull w/bright		
	0.07				Shale - yellow		
					Coal - dull		
					Shale - lensey		
					Coal - shaley		
	0.09				Siltstone - grey wthrs brown		
					Coal - dull		
					Shale - w/coaly bands (Shattered zone)		
					Shale - coaly		
	0.04				Shale/Siltstone - interbedded, grey carb. fragments		
					Coal - soft, bright, pinched & squeezed		
					Rubby zone (Siltst./Shale minor bright Coal)		
	0.07				Coal		
	0.07				Shale		
					Coal - shaley		
					Shale - coaly bands		
	0.14				Coal - dull, soft		
	0.38				Coal - dull, hard		
					Sandstone - vfg, dk grey		

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K-SHELL - MT. BANNER EAST SD(3)A

STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST

PART _____ OF _____

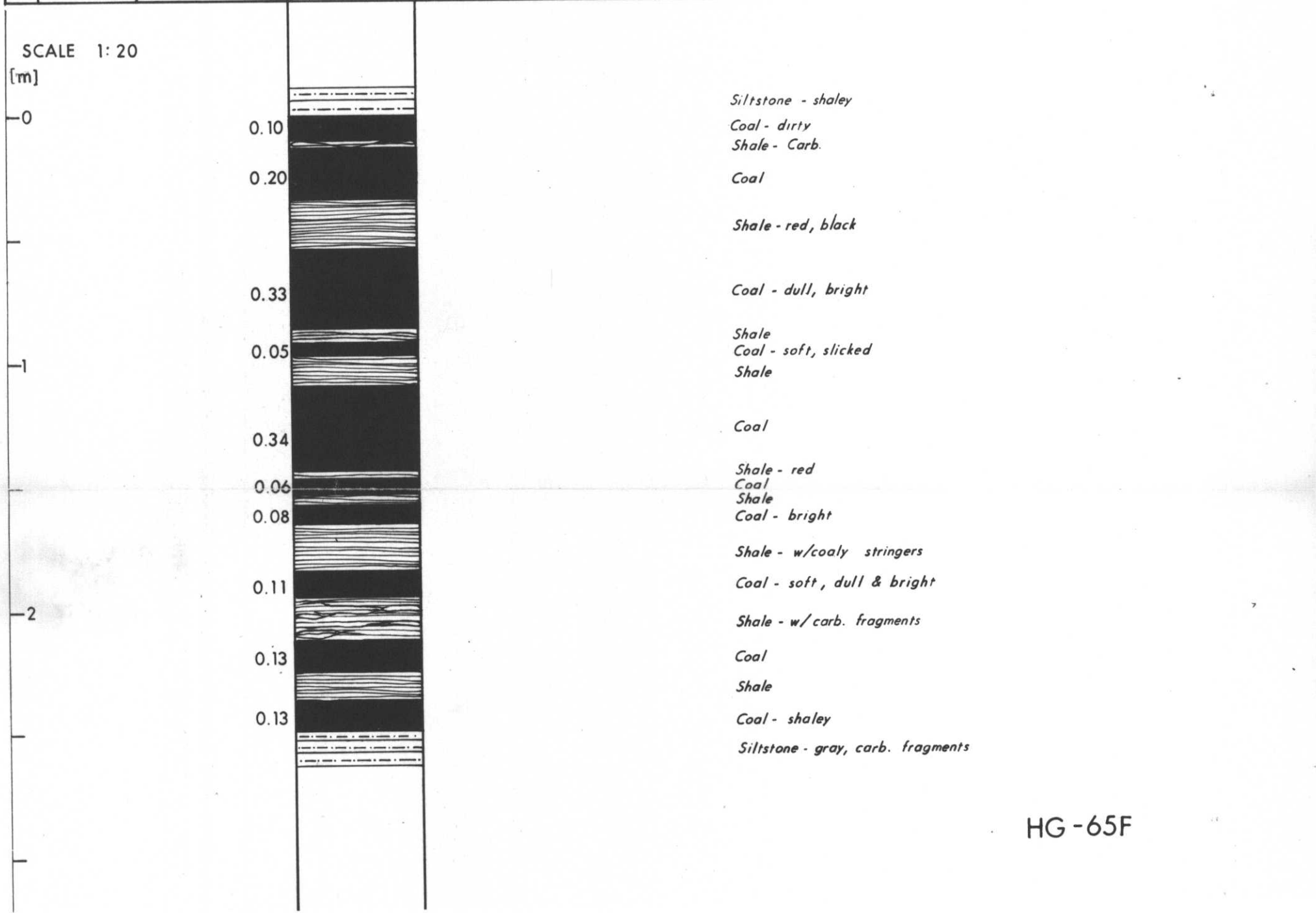
AREA:

AUTHOR: G. SLOAN DATE: 1981-01-19

LOCATION:

SOURCE OF DATA:
SEAM H IN TRENCH ON ROAD

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	



HG-65F

432

K-SHELL - MT. BANNER EAST 50(3)A

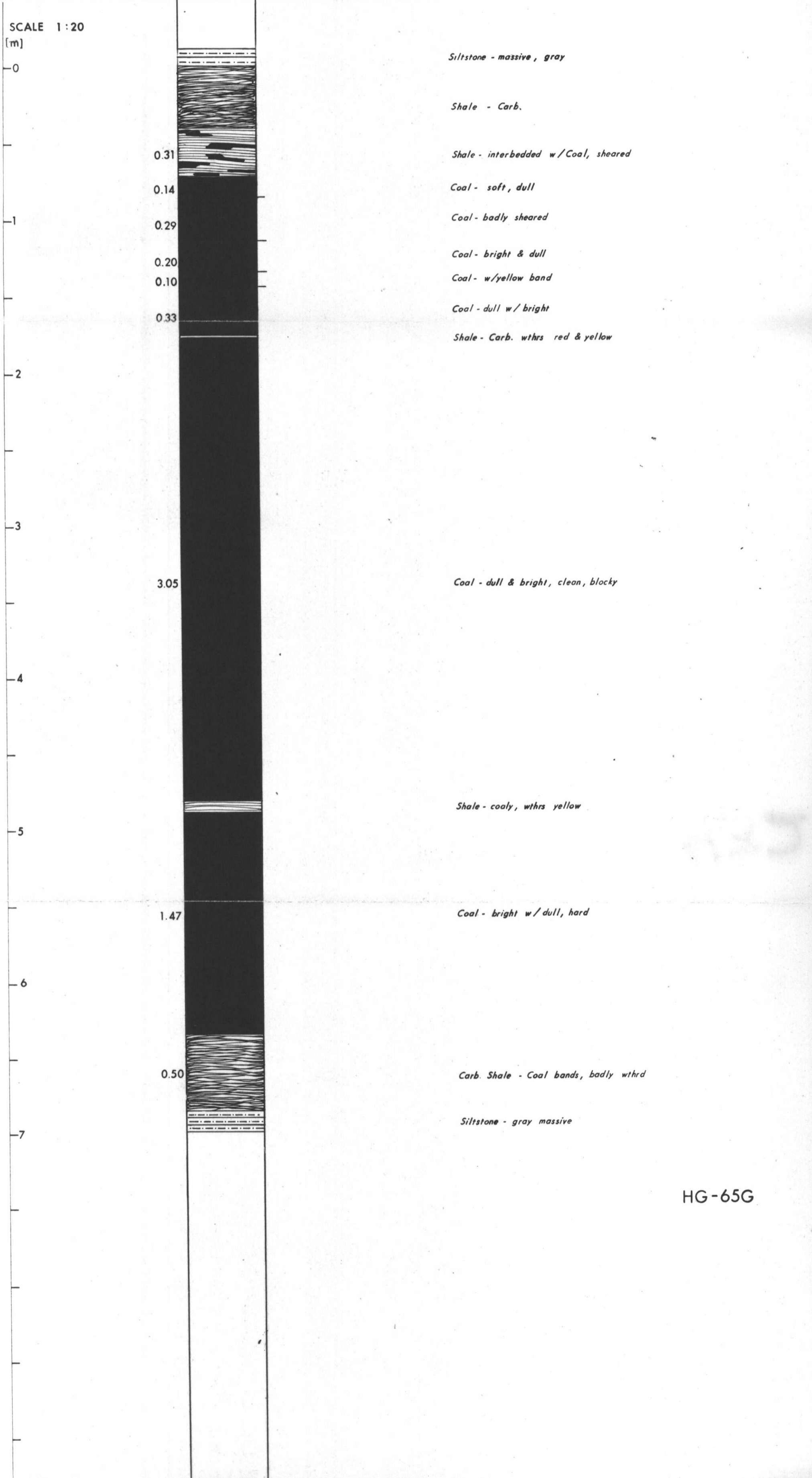
STRATIGRAPHIC SECTION

DESIGNATION:

PROJECT: MT. BANNER EAST
 AREA:
 LOCATION:

PART	OF
AUTHOR: G. SLOAN	DATE: 1981 - 01 - 19
SOURCE OF DATA: SEAM I ON ROAD	

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION		SAMPLE
					MAIN	AMPLIFIED	



HG-65G

ENCLOSURE 19

Coal Analysis And Tests Record (10 Pages)

CROWS NEST RESOURCES ANALYSIS REPORT

AREA: Mount Banner

HOLE NO. Trench

DATE: July 29/80

ANALYST Bernie

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
80-105	Trench 3	E	SR3	RAW	9.81	2.15	16.73			0				ADB
							17.10							ARB
				1.5 FLOAT		1.78	6.19	23.38	68.65	0	45	6899	ADB	
						6.30	23.81	69.89			7024	DB		
				FLOAT									ADB	
													DB	
				FLOAT									ADB	
80-106	Trench #1 & 2	E	SR3	RAW	14.18	2.15	23.91			0				ADB
							24.43							ARB
				1.5 FLOAT		2.11	6.83	24.89	66.17	0	26	6690	ADB	
						6.98	25.43	67.59			6834	DB		
				FLOAT									ADB	
													DB	
				FLOAT									ADB	
				RAW										ADB
														ARB
														DB
				FLOAT									ADB	
														DB
				FLOAT									ADB	
														DB
FLOAT									ADB					
										DB				

