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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								(CASSING SET TO 67.2')							
								BOX 1							
												R			
17	20.00	21.16	116					SILTSTONE: Medium gray to brown, clay rich				2.5			
10	21.16		114					CLAYSTONE: Silty at top, very silty towards bottom, medium gray occasional friable clay rich bands				R2.5			top 25cm some- what broken
		22.66	36					SILTSTONE: Medium gray, clay rich		75'/22.9m		R2.5			bottom 13cm broken
								BOX 2							
11	22.66	23.64	98					CLAYSTONE: Medium to dark gray brown, occasional carbonaceous bands in top .30cm, 10cm friable claystone band at bottom							
12	23.64		77					SILTSTONE: Medium grey, occasional claystone bands in bottom 40cm							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	.	.	.	85'/25.9m				
						.	.	.	.	D				
6		24.57	16			SITSTONE:	Medium grey,	occasional	sandy lenses						
											
											
	24.57		82			CLAYSTONE:	Dark grey,	11cm friable	carbonaceous		R2			bottom 53cm core	
						.	claystone band	34cm from top						somewhat broken	
											
											
						.	BOX 3	.	.						
											
16		26.44	105			CLAYSTONE:	Medium to dark brown,	occasional			R2				
						.	carbonaceous bands	calcite filled							
						.	stringers	40cm from top							
											
	26.44	26.64	20			COAL LOSS:	.	.	.						
											
											
	26.64		20			ROCK LOSS:	.	.	.						
											
											
			5			C4:	occasional	vertical	stringers					core broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			34												
		27.30	7			CLAYSTONE: Carbonaceous, dark brown to black					R1.5			core broken	
	27.30		16			COAL LOSS:									
			8			COAL C1/C2:					R2			core broken	
		27.63	9			COAL C2/C2:					R2				
	27.63		37			ROCK LOSS:									
		28.10	10			CLAYSTONE: Occasional coal y' parti cles'								core very broken	
	28.10	28.13	3			COAL C3:								core broken	

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
14	28.13		42			CLAYSTONE:	very carbonaceous,	C4 coal'y				95'/29.0m	D+	R3		
28			67			CLAYSTONE:	dark gray at top,	light at bottom								
							silty towards bottom									
								BOX 4								
9			26	26		SILTSTONE:	light to medium gray,	abundant sandy						R3.5		
							lenses in middle,	minor claystone								
							bands									
												105'/32m				
												E-Top				
												C=Bottom				
		31.00	152	150		SILTSTONE:	as above, large claystone band in									
							middle, minor soft sediment de-									
							formation									
	31.00	-	34	34	↑	COAL LOSS:										

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			19	19	1150	COAL C2/C3;		occasional	2 small	C4 bands at top					core very broken	
											
			3	3			C4;		R2			
											
			6	6			COAL C3;					core broken
											
											
		31.65	3	3			COAL C2/C3;					
											
											
	31.65	31.68	3	3			CLAYSTONE:		very	carbonaceous						core broken
											
											
		31.68	5	5			COAL C3;					
											
											
			3	3		COAL C1/C2;						
											
											
			6	6		COAL C2/C3;		C4 band at top	.	.						
											
											
		31.84	2	2		COAL LOSS (C3)?						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	31.84	31.87	3	3	1150	C4: clay band in middle										
	31.87		3	3		COAL C3:										
			14	14		COAL LOSS:										
			22	22		COAL C1/C2:										core broken pulverized
			4	4		COAL C3:										
							BOX 5									
			5	5		COAL C2/C3: C3 band in middle						R2				
		32.40	5	5		COAL C3: minor claystone at top						R2				
	32.40		3	3	COAL C3/C4:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		32.55	12	12	1150	C4: occasional vitrain stringers, minor calcite	.	.	.	.		
			7	7		COAL C2/C3:	.	.	.	.		R2				
			7	7		COAL C1/C2:	.	.	.	.		
			19	19		COAL C2:	.	.	.	.						core very broken pulverized
			3	3		COAL C3: minor claystone stringers	.	.	.	.						core sheared and broken
			12	12		COAL C1/C2: minor C4 stringers in bottom 5cm, core sheared	.	.	.	.		
			3	3		COAL LOSS:	.	.	.	.		
			10	10		COAL C2/C3:	.	.	.	.						core broken pulverized

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		33.20	4	4	150 V217	COAL C3: abundant claystone at bottom									
14	33.20		77	76		CLAYSTONE: dark brown to medium gray, top 14cm carbonaceous, silty towards bottom						R2.5			
											115'/35.1m				
											D+				
		34.49	52	51		CLAYSTONE: medium gray, silty						R2.5			
18	34.49		48	47		SILTSTONE: light to medium gray, sandy lenses towards bottom						R3			
						BOX 6									
12		35.12	15			SILTSTONE: medium gray						R3			
	35.12	35.89	77			CLAYSTONE: medium gray, silty						R2.5			
25	35.89	36.16	27		CONGLOMERATE: granule light gray, chert and quartz clasts, (1-3 mm thick) 4cm sandstone band near bottom						R4				

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	36.16	36.48	32			CLAYSTONE:	silty to very silty with medium gray					R3			
											
	36.48		46			SILTSTONE:	light to medium gray, minor sandy lenses								
						.	in middle, minor claystone bands								
											
						.	.	.	.	125'/38.1m					
						.	.	.	.	D+top					
17			76			SILTSTONE:	as above, abundant claystone in			C+bottom					
						.	middle	.	.						
											
											
						.	BOX 7	.	.						
											
		38.05	35			AS ABOVE:	.	.	.						
											
	38.05		70			SANDSTONE:	fine to medium grained, coarsening down-								
						.	wards from fine to medium grained								
						.	abundant coaly fragments								
											
											
		39.01	26			SANDSTONE:	fine grained medium gray upper boundary								
						.	sharp	.	.						

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	45.90	46.09	19	18		CLAYSTONE: very carbonaceous, medium to dark brown streak blocky fractures									
											155' / 47.2m				
	46.09	46.20	11	11			C4: 1cm claystone band at top, abundant vitrinite towards bottom								
	46.20		6	6	1164 ↑ ↓	COAL C1/C2:							core broken		
			15	14			COAL C2: claystone stringers at bottom							core broken	
			8	8			COAL C1: vitrinite								
		46.61	12	12		COAL C1/C2									

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	46.61	46.67	6	6		C4: vitrinite stringers at top						R2.5			
	46.67		46	44		ROCK LOSS:									
		47.20	7	7.		CLAYSTONE: carbonaceous at top, silty towards bottom									
	47.20	47.34	14			COAL LOSS: (C3)									
	47.34		16			CLAYSTONE: carbonaceous to very carbonaceous, coal bands and fragments in top and bottom									core very broken
			18			ROCK LOSS.									
			105			CLAYSTONE: dark gray to black, coal bands at 26cm 60cm, 80cm, from top, coaly stringers throughout									core somewhat broken

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		48.78	5			CLAYSTONE: carbonaceous, coaly stringers								core very broken	
	48.78		8			COAL C3/C4: claystone (carbonaceous) particles towards bottom								core very broken	
		48.89	3			COAL C3: C4 stringers									
	48.89		18			CLAYSTONE: silty medium gray to dark, coaly particles 10cm from top								core broken 10cm from top	
										165'/50.3					
										D-					
			2			ROCK LOSS:									
		49.16	7	7		CLAYSTONE: carbonaceous coaly stringers towards bottom									
	49.16	49.23	7	7		COAL LOSS:									

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	49.23	49.26	3	3	151 ↑	C4:		R2.5				
												
	49.26	49.38	12	11			ROCK LOSS:					
												
	49.38		6	6			COAL C2/C3:	C4 band towards bottom	.	.	.					
												
			9	9			COAL C1/C2:					
												
17			3	3			COAL C3:		R2			
												
			8	8			COAL C2/C3:		R2			
												
			16	15			COAL C1/C2:	C3 band 5cm from bottom	.	.	.					
												
			4	4			COAL C2/C3:	minor C4 bands	.	.	.					
												
			23	22			COAL C1/C2:	minor C3 bands 6cm from top	.	.	.					bottom 4cm very

broken

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			4	4	151	COAL C3:	.	.	.	.		
			4	4		COAL C2/C3:	.	.	.	.	.
			17	16		CORE LOSS:	.	.	.	.	.
			4	4		COAL C3/C4:	.	.	.	.	.					core broken- pul- verized
			14	13		COAL LOSS:	.	.	.	.	.
		50.61	11	11		COAL C1:	.	.	.	.	.
	50.61	50.70	9	9		C4: 2cm vitrinite band in middle	.	.	.	.	.	R2.5				
	50.70		19	18		COAL C2/C3: minor C4 bands	.	.	.	.	.	R2				
			25	24		COAL C2/C3: 6cm C4 band in middle	.	.	.	.	.	R2				
			6	6		COAL C2/C3:	.	.	.	.	.
		51.31	11	11		COAL C3: minor claystone particles near bottom					core very broken
	51.31	51.36	5	5		C4: claystone stringers					
	51.36		20	19		COAL C1/C2:	R2				

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			7	7	1151 ↙	COAL C3: C4 band in middle (3cm thick) minor claystone stringers in middle					-				core broken
		52.18	55	53		COAL C1/C2: occasional C3 bands in top 19cm, minor claystone stringers 20cm from top core somewhat sheared									middle 17cm very broken
	52.18		5	5		CLAYSTONE: carbonaceous									
											175/53.3				
						BOX 12									
		52.54	31	30		AS ABOVE:									
	52.54		74		SILTSTONE: medium gray, coarse grained bedding plainer, low angle crossbeds common quartz filled fractures very common sections are branched										
			109		SILTSTONE: fine grained, medium to dark gray with play fractures										

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 13							
		55.68	131					AS ABOVE:							
	55.68		140					SANDSTONE: fine grained, medium gray, angular branchiated top contact, irregular coaly fragment and partings common, rare quartz veins							
												185'/56.4m			
			4					AS ABOVE:							
			49					AS ABOVE:							
		58.11	50					AS ABOVE:							
	58.11		167					SANDSTONE: medium grained, abundant carbonaceous stringers, salt and pepper texture, cross beds abundant							

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		69.48	124			AS ABOVE:	.	.	.	.	
										
						.	.	.	.	.	235' / 71.6m				
	69.48	71.09	161			AS ABOVE:	.	.	.	.	
										
										
			140			AS ABOVE:	.	.	.	.	
										
						.	.	.	.	.	245' / 74.7m				
			149			AS ABOVE: with abundant angular siltstone frag-									
						ments near top of section and at base									
										
										
										
			140			AS ABOVE: angular siltstone near top of section,									
						section is finning downwards									
										
						.	.	.	.	.	255' / 77.7m				
		77.18	180			SANDSTONE: fine grained light gray, almost no									
						dark lenses, but on contact sharp but									
						irregular quartz veinlets common									
										
										
14	77.41		112			SILTSTONE: medium gray, bedding planar, set lenses									
						common occasional soft sediment deformation									

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 21							
			10			AS ABOVE:									
	78.63		60			SANDSTONE:	medium grained, salt and pepper texture,								
							abundant siltstone interbeds extremely								
							broken up and section appeared to be								
							grounded (fault?)								
			100			AS ABOVE:	but no fractures, calcite veins common								
										265' /					
			113			AS ABOVE:	quartz calcite veins common								
								BOX 22							
			68			AS ABOVE:	but sandstone coarse to very coarse								
		83.02	121			SANDSTONE:	medium grained, abundant carbonaceous								
							stringers, light gray color upper								
							contact sharp, section more carbon-								
							aceous near top								

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						.	.	.	.	.	275'/83	8m			
22			87			AS ABOVE:	.	.	.	.	
										
	83.89	83.91	2			SILTSTONE: medium gray, fine grained, upper	.	.	.	.	
						contact sharp	.	.	.	.	
										
						'BOX 23	.	.	.	.	
										
14	83.91	85.18	127			CLAYSTONE: silty, medium gray, occasional sandy	.	.	.	.		R2.5			
						lenses	.	.	.	.	
										
										
5	85.18		85	85		SILTSTONE: medium to light gray, abundant dark	.	.	.	.		R3			
						silty laminations and sheared lenses	.	.	.	.	
						interbedded, minor cross laminations	.	.	.	.	
						shows tips up	.	.	.	.	
										
						.	.	.	.	.	285'/86	9m			
						.	.	.	.	.	E-top				
			46	46		SILTSTONE: as above, very sandy towards bottom	.	.	.	.	D=bottom				
						.	.	.	.	.		R3			
										
						'BOX 24	.	.	.	.	
										
										
		86.53	4	4		SILTSTONE: as above, 1cm claystone (carbonaceous)		R3			
						band at bottom					

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	86.53		32	32	↑ 1152 ↙	COAL LOSS:	.	.	.	.		
		87.27	42	42		COAL C1/C2: occasional C3 bands throughout, minor C4 bands approximately 1cm) near bottom	.	.	.	.	.	R2			top 18cm very broken
											
												
	87.27		13	13		ROCK LOSS:	.	.	.	.		
		88.13	73	73		CLAYSTONE: carbonaceous, coaly bands near top and bottom; bottom 14cm sheared and broken	.	.	.	.	.	R2			
											
	88.13		7	7	↑ 1153 ↙	COAL LOSS:	.	.	.	.		
		88.75	55	55		COAL C2: occasional C3 bands and stringers	.	.	.	.	.				core broken
											
	88.75		3	3		ROCK LOSS:						
												
4			12	12		CLAYSTONE: very carbonaceous at top, silty towards bottom	R2.5				

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
7			54	54		CLAYSTONE: silty, occasional carbonaceous bands					295'/89.9m D-	R2.5			
11		89.94	50			CLAYSTONE: silty at top, carbonaceous towards						R2.5			
						bottom									
	89.94		2			COAL LOSS:									
		90.05	9			COAL C2/C3:									
	90.05		3	3		ROCK LOSS:									
		90.35	27	27		CLAYSTONE: carbonaceous towards bottom, 4cm C4									
						band in middle									
	90.35		3	3		COAL C3:									
			14	14	1154	COAL C1/C2:									

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			5	5	1154	COAL C3:										
			13	13		COAL C1/C2:										
			5	5		COAL C2/C3: minor claystone stringers										
			21	21		COAL C3: occasional C4 bands										
			8	8		COAL LOSS:										
			4	4		COAL C2/C3:										core broken
3			15	15		COAL C2/C3:						R2				
	91.23	91.28	5	5		COAL C3: small C4 band in middle										
10			12	12		COAL C1/C2: minor calcite filled fractures 3cm from top						R2				
			4	4		COAL C2:										
			7	7		COAL C1/C2:										
			3	3		COAL C2:										

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	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			4	4	1154 ↓	C4: vitrinite stringers										
			11	11		COAL C1/C2:										
			1	1		COAL C3:										
		91.74	4	4		COAL C3: C4 stringers throughout					304.51/92.8m				core very broken	
	91.74		6	6		ROCK LOSS:										
		91.84	4	4		CLAYSTONE: carbonaceous									core very broken	
		91.84	6	6		COAL C3/C4: minor vitrinite stringers										
			4	4		COAL C1/C2										
			5	5		COAL LOSS:										
		92.17	18	18		COAL C2/C3:									core very broken	
4	92.17		17	17		SANDSTONE: fine grained, dark to medium gray,						R3.5				
						salt and pepper, carbonaceous near top										
						BOX 26										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	92.34		255	254		AS ABOVE:	medium to light color less carbonaceous								
											
			13			AS ABOVE:	.	.	.		315' /				
											
						.	BOX 27	.	.						
											
	97.93		291			AS ABOVE:	.	.	.						
											
						.	.	.	.		325' / 99m				
						.	BOX 28	.	.						
											
			285			AS ABOVE:	with carbonaceous stringers more common								
						.	towards base	.	.						
											
						.	BOX 29	.	.						
											
			11			AS ABOVE:	.	.	.						
											
											
	103.54		265			AS ABOVE:	.	.	.		335' / 102.1m				
											
						.	BOX 30	.	.						
											
			48			AS ABOVE:	.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			232			AS ABOVE:	becoming slightly darker gray				345'/106	1m			
							BOX 31								
			56			AS ABOVE:									
		109.06	216			AS ABOVE:					355'/108	2m			
							BOX 32								
			86			AS ABOVE:									
			190			AS ABOVE:									
4			8			SILTSTONE:	gray to black, fine grained, splintery								
							fracture contact sharp								
							BOX 33								
			2			AS ABOVE:									
		112.83	91			SANDSTONE:	medium gray, fine grained, abundant								

plainer siltstone lenses and bands, siltstone

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						lenses generally less than 1cm									
			188			AS ABOVE: with 1 carbonaceous claystone unit					375'	114.3m			
						very fractured with calcite lines buds									
						BOX 34									
			126			AS ABOVE: siltstone unit less numerous, unit									
						thicker disrupted beddings									
		117.60	163			AS ABOVE:					385'	117.3m			
						BOX 35									
8			128			AS ABOVE:									
			161			AS ABOVE: with slightly more siltstone lenses					395'	120.4m			
						BOX 36									
		121.88	139			AS ABOVE: siltstone approximately 40%									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			157								405'/123.4m				
						AS ABOVE:									
			20			AS ABOVE:									
			121			AS ABOVE: with siltstone about 10%					411'/				
											415'/126.5m				
		126.07	121			AS ABOVE:									
							BOX 38								
			43			AS ABOVE:									
			105			SANDSTONE: medium grained, highly carbonaceous, medium to light gray, carbonaceous fragments common, bedding very dis- rupted									
4			11			SILTSTONE: black-light brown streak, highly carbonaceous, upper boundary sharp but irregular lower boundary sharp at 4 BCN platy fractures									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	127.66	127.79	13			CONGLOMERATE: pebbled to 1cm sorting good, rounding moderate upper and lower boundary very sharp (channel?)									
	127.79		4			SILTSTONE: medium gray to black, with streak plain, laminations platy fractures									
			45			AS ABOVE:					425' / 129.5m				
		128.53	25			SILTSTONE: light brown color, fine grained, very friable, platy fracture									
	128.53	128.83	30			SANDSTONE: fine grained, pebbly bioturbated, medium brown color, abundant carbonaceous fragments									
	128.83	128.96	13			CONGLOMERATE: sorting poor, rounding is good, upper and lower contact are distinct, pebbles to 1cm									
	128.96		5			SANDSTONE: fine grained, medium brown, pebbly bioturbated									
						BOX 39									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		129.34	33			AS ABOVE:	1cm pebble band at base of section									
	129.34	129.42	8			SILTSTONE:	fine grained, medium brown color, upper and lower contact sharp, well laminated									
6	129.42	129.85	43			CONGLOMERATE:	rounding moderate and sorting poor, finer near top of section, both boundaries very sharp pebbles to 2cm									
	129.85		176			SANDSTONE:	fine grained, brown-gray color, dis- tinct cross beds									
			24			AS ABOVE:					435'/132.6m					
							BOX 40									
			231			AS ABOVE:	but pebbly in places									
											445'/135.6m					
		134.86	70			AS ABOVE:	calcite veins uncommon									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			286												
			29												
			147								455' / 137.7m				
	139.48	140.16	68			SILTSTONE:	highly carbonaceous,	black color,							
							light brown streak,	coaly lenses uncommon,							
							upper boundary sharp,	lower boundary							
							gradational								
	140.95		5			CLAYSTONE:	highly carbonaceous,	light brown streak,							
							black color,	splintery fractures							
		141.42	42												
						AS ABOVE:	but lower boundary is diffused								
	141.42		41			SANDSTONE:	as the upper one								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		143.11	128			AS ABOVE:	abundant carbonaceous fragments									
	143.11		99			SILTSTONE:	medium brown color, fine grained, well laminated, upper boundary diffused, darker towards base of section									
			114			AS ABOVE:	becoming dark brown at base				475'/144.8m					
							BOX 44									
		147.10	186			AS ABOVE:										
			149			AS ABOVE:					35'/147.8m					
							BOX 45									
			231			AS ABOVE:										
											495'/150.9m					
		151.39	49			AS ABOVE:										
							BOX 46									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		151.77	38			AS ABOVE:	much more carbonaceous, black color,								
							possible shell fossils near base of								
							section								
	151.77	153.05	128			CLAYSTONE:	very carbonaceous, black color, black								
							to dark brown streak, grading towards								
							coal in section bands of shell fragments?								
	153.05		78			SANDSTONE:	fine to medium grained, light gray,								
							carbonaceous near top contact,								
							abrupt but irregular quartz veins								
							moderately common								
											505'/153.9m				
			52			AS ABOVE:									
							BOX 47								
			258			AS ABOVE:									
											515'/157m				
		157.00	7			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	0	16.22				OVERBURDEN (casing to 53.2 feet)									
											56' / 17.0m				
											D+ Top				
											C- Btm				
24°	16.22	17.61	139			SANDSTONE: fine grained to very fine grained. light gray, dark silty laminations in top 70cm. iron stains on fractured surfaces, occasional clay particles in bottom 17cm						R3.5		bottom 17cm broken to very broken	
	17.61	17.78	17			SILTSTONE & CLAYSTONE: mixed, abundant iron stains								core very broken	
											64' / 19.5m				
											C+ Top				
											D- Btm				
	17.78		45			CLAYSTONE: dark brown to black, silty at top carbonaceous towards bottom, minor coaly bands in bottom 15cm.								top 26cm broken, bottom 19cm broken to pulverized	
20°		18.28	5			CLAYSTONE: black, C4 bands towards bottom						R1.5			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	18.28		6												
			6			C4:					R2			core very broken	
		18.53	13			ROCK LOSS:									
	18.53		19			COAL C1:	minor C4 stringers at top brightening				R1			core broken	
							banded, bottom 4cm pulverized and								
							sheared, minor claystone partings								
							in bottom 2cm								
		19.32	60			COAL LOSS:									
	19.32		16			CLAYSTONE:	carbonaceous, black, 2cm C4 bands				R2			core broken	
							at top								
		20.28	80			ROCK LOSS:									
	20.28		5			COAL C3:	minor C4 stringers, top 2cm				R2			core broken	
			10			COAL LOSS:									
							BOX 2								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			5			COAL C3:	·	·	·	·		R2			core solid
			7			COAL C2:	·	·	·	·		R2			solid core
		20.57	2			COAL C3:	·	·	·	·					core broken
	20.57	20.83	26			ROCK LOSS:	·	·	·	·					
	20.83	21.14	31			COAL LOSS:	·	·	·	·					
	21.14	21.39	25			CLAYSTONE:	·	·	·	·		R2			top 5cm broken
							·	·	·	·					
							·	·	·	·					
18°	21.39	22.49	110			SILTSTONE:	·	·	·	·		R2.5			
							·	·	·	·					
							·	·	·	·					
							·	·	·	·					
							·	·	·	·					
							·	·	·	·					
	22.49		25			ROCK LOSS:	·	·	·	·					
			22			CLAYSTONE:	·	·	·	·		R1.5			core broken
							·	·	·	·					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			75			ROCK LOSS:									
			83			CLAYSTONE:	dark brown to black, occasional				R15			core broke to	
							coaly bands and stringers, silty							pulverized	
							bands at 26cm to bottom and at								
							bottom, bottom friable								
							BOX 3								
			100			ROCK LOSS:									
			42			CLAYSTONE:	medium dark brown, clay rich							core pulverized	
							partially indured								
										85' /25.9m					
										C					
30°			31			CLAYSTONE:	dark brown, occasional coaly				R2			core broken at	
							stringers, minor silty lenses in							bottom 8cm	
							middle								
		26.32	5			ROCK LOSS' (C4):									
	26.32	26.41	9			COAL Cl:	minor calcite stringers, core				R0			core pulverized	
							sheared							bottom 3cm	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	26.41		50												
			149			ROCK LOSS:									
						CLAYSTONE:	medium brown, occasional silty bands,					RL5			middle 7cm and
							blocky dessication fractures								bottom 41cm broken
							abundant, middle 7cm and bottom 41cm								pulverized
							broken, pulverized, core clay rich								
											93'/29.9m				
											D-				
			19			CLAYSTONE:	carbonaceous, dark brown to black,					RL5			bottom 14cm broken
							occasional coaly stringers, core								
							some what sheared								
			45			ROCK LOSS:									
							BOX 4								
			12			CLAYSTONE:	carbonaceous, dark brown to black								core pulverized
							core sheared								
			25			ROCK LOSS:									
34°			61			CLAYSTONE:	very dark brown, coaly bands and					RL5			core broken
							stringers in bottom 27cm								pulverized in
															bottom 27cm

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
33°		30.26	24			CLAYSTONE:	carbonaceous,	dark brown to black,				R2			
							occasional C4	bands in middle							
	30.26	30.29	3			COAL C3:						R1.5			
40°	30.29		25			CLAYSTONE:	carbonaceous in top 17cm,	coaly				R2			bottom 17cm very
							bands in top 17cm								broken
			25			ROCK LOSS:									
			81			CLAYSTONE:	medium to dark brown,	clay rich				R1.5			
							core crumbly								
			50			ROCK LOSS:									
			5			CLAYSTONE:	carbonaceous to coaly,					R2			core broken
												102' / 31.1m			
23°			24			CLAYSTONE:	carbonaceous,	occasional coaly				R1.5			
							stringers	core crumbly							
		32.42	3			C4:						R2.5			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 5	.	.						
	32.42		4			COAL C2:	C3 bands (1cm thick at top)	.	.		R2				
			7			COAL C1:	.	.	.		R1.5				
		32.57	4			COAL C3:	minor C4 stringers	.	.		R2				
	32.57		10			ROCK LOSS:	.	.	.						
		32.70	3			CLAYSTONE:	carbonaceous, brown to black, sheared	.	.		R1			core broken	
	32.70		10			COAL LOSS:	.	.	.						
		32.88	8			COAL C2:	.	.	.					core sheared and broken	
	32.88	32.90	2			CLAYSTONE:	carbonaceous	.	.						
	32.90	32.93	3			COAL C2:	occasional claystone stringers towards bottom	.	.		R1.5				
	32.93		12			ROCK LOSS:	.	.	.						
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		33.58	53			CLAYSTONE:	carbonaceous, coaly, coaly stringers					R2			core broken
							and bands throughout, core somewhat								
							sheared, occasional C4 bands in								
							middle								
	33.58		8			COAL LOSS:									
		33.68	2			COAL C3:									core broken
	33.68		30			ROCK LOSS:									
			48			CLAYSTONE:	very carbonaceous coaly, abundant								core broken
							coaly stringers and bands, core								pulverized
							sheared								
											112' / 34.1m				
			25			ROCK LOSS:					B-				
			104			CLAYSTONE:	as above, BCN steepens to almost								core sheared
							vertical (possible core of fold)								and broken
							BOX 6								
		35.90	15			CLAYSTONE:	as above					R2			core broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	35.90		5			COAL LOSS:									
		35.98	3			COAL:									very broken
	35.98		20			ROCK LOSS:									
			71			CLAYSTONE:	carbonaceous to coaly, coaly bands and stringers throughout, core sheared				R1.5				core broke to pulverized
										119' / 36.3m C					
			20			ROCK LOSS:									
			86			CLAYSTONE:	very carbonaceous to coaly, core sheared								core broken pulverized
26°			28			CLAYSTONE:	medium to dark brown				R2				
			5			ROCK LOSS:									
			67			CLAYSTONE:	very carbonaceous to coaly, abundant coaly bands and stringers, core sheared, abundant slickensides								core very broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						126' / 38.4m					
						D-					
							BOX 7	.	.						
			19			CLAYSTONE:	as above	.	.						core broken to pulverized
26°			149			CLAYSTONE:	dark brown, minor carbonaceous	.	.		R2				middle 69cm broken
						.	stringers, silty towards bottom	.	.						
						131' / 39.9m					
						D-					
			72			CLAYSTONE:	medium brown, silty, abundant	.	.		R2				
						.	fractures in bottom 37cm	.	.						
											
						.	BOX 8	.	.						
											
21°			151			CLAYSTONE:	medium to dark brown, very silty in	.	.						
						.	top 20cm, occasional calcite filled	.	.						
						.	fractures in middle, few carbonaceous	.	.						
						.	bands throughout	.	.						
						141' / 43.0m					
						C+					
			82			CLAYSTONE:	as above	.	.						core very broken
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 9							
			12			CLAYSTONE:		silty, light to medium gray			R2				
30°	44.20		40			CLAYSTONE:		medium to dark gray, carbonaceous							core broken
								towards bottom, very carbonaceous							
								at bottom							
	44.20		19			C4:		C3 bands at top			R2				core broken
			8			ROCK LOSS		(claystone coaly)							
		44.54	7			CLAYSTONE:		carbonaceous							core broken
	44.54		6			COAL LOSS:									
		44.64	4			COAL C3:									core broken
	44.64		44			CLAYSTONE:		very carbonaceous, abundant vitrinite			R1.5				
								stringers towards bottom, 2cm coal							
								bands 7cm from top							
		45.13	5			C4:		occasional vitrinite stringers and							core broken
								C3 bands							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	45.13		2			COAL LOSS:									
			10			COAL C2:	dull and bright				R1.5				
		45.34	9			COAL C3:									
	45.34		7			C4:	occasional vitrinite stringers								
19°		45.54	13			CLAYSTONE:	silty and carbonaceous brown to black				R2				
	45.54		16			COAL LOSS:	(C3?)								
			2			COAL C1:									core broken
		45.75	3			COAL C3:	C4 stringers								core broken
	45.75	45.77	2			CLAYSTONE:	carbonaceous								
	45.77	45.80	3			C4:									
											151' / 46.0m				
											D Top				
											B Btm				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other. Sed. Charact.			bd.	jt.	
40	45.80	46.47	67			CLAYSTONE:	silty, occasional coaly								core somewhat
							stringers, medium brown								broken
							BOX 10								
27	46.47	47.50	103			SILTSTONE:	light to medium gray.				R3				core solid
							occasional sandy lenses.								
							intermittant dark silty								
							laminations; clay rich								
							towards bottom.								
	47.50	48.06	56	49		ROCK & COAL LOSS:	(approximately 30%								
							coal and 70% rock)								
	48.06		7	6		CLAYSTONE & COAL:	mixed (60% claystone,								core broken-
							40% coal)								pulverized
		48.22	9	8		CLAYSTONE:	very carbonaceous, abundant				R2				
							vitritinite stringers through-								
							out.								
	48.22		71	63	↑	COAL LOSS:									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		49.01	8	7	1156	COAL C2/C3:	small particles of claystone								core very broken	
								mixed in								
	49.01	49.09	8	7		CLAYSTONE:	carbonaceous, 2cm C4 bands									
								at top								
	49.09	49.40	31	27		COAL & CLAYSTONE:	mixed (80% coal, 20%									core broken
								claystone)								pulverized
	49.40	49.45	5	4		COAL LOSS:										
	49.45	49.47	2	2		C4:						R2.5				
	49.47		3	3		COAL C3:										core broken
											161' / 49.1m					
			7	6		COAL C3:	occasional vitrinite						R1.5			
								stringers								
			2	2		COAL C1:										
			13	11		COAL C2:	minor claystone stringers						R1			
								near top, core sheared								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30			24	21	1156	COAL C1:			occasional claystone stringers		R1.5				
		50.01	5	4		COAL C3:			claystone particles towards						core very broken
									bottom						
	50.01		8	7		ROCK LOSS:									
		50.29	20	17		CLAYSTONE:			very carbonaceous, abundant						core very broken
									vitritinite stringers near						
									bottom						
	50.29		40	35		COAL LOSS:									
			6	5		COAL C1:						R1.5			core very broken
									BOX 11						
			4	4		COAL C3:			minor C4 stringers			R2			
			20	18	COAL LOSS:										
			4	4	COAL C2/C3:			1cm claystone band						core very broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
15°			11	11	1156	COAL C2:						R2				
			4	4		COAL C3:										
			29	28		COAL LOSS:										
			8	8		COAL C2:	2cm band of claystone at									core broken
							bottom									pulverized
			7	7		COAL C3:							R2			
	51.64		2	2		COAL C1:										core broken
	51.64	51.69	5	5		COAL & CLAYSTONE:	mixed, (80% coal 20%									core pulverized
							claystone)									
	51.69	51.89	20	19		CLAYSTONE:	very carbonaceous at top.									
							silty near bottom, black to									
							medium gray									
	51.89		3	3		COAL LOSS:										
		52.03	11	11	COAL C3:	claystone bands at top						R2			core broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1156											
11	52.03	52.09	6	6		C4:	·	·	·	·						
	52.09		12	12		COAL C3:	·	·	·	·						
			20	20		COAL LOSS:	·	·	·	·						
			7	7		COAL C1/C2:	·	·	·	·						coal broken
			6	6		COAL C2:	·	·	·	·						
23			47	43		COAL C1:	·	·	·	·						
		53.15	14	13		COAL C2:	·	·	·	·						
	53.15	53.18	3	3	CLAYSTONE:	·	·	·	·							
	53.18	53.36	18	17	COAL C1:	·	·	·	·						core broken	
	53.36	53.50	14	13	ROCK LOSS:	·	·	·	·							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1156 ↙											
	53.50		3	3		COAL:	C3/C4									core broken
		53.57	4	3		COAL LOSS:	(C3/C4)									
34°	53.57	53.99	42	35		SILTSTONE:	medium dark gray, clay rich at top					R2.5				
	53.99	54.09	10	7		CLAYSTONE:	silty, dark gray, minor coaly rootlets near top, minor calcite along joint surfaces, slickensides									core somewhat broken
											179' / 54.6m					
											E-					
23°	54.09	54.45	36	33	SILTSTONE:	medium gray, clay rich sandstone in top 14cm					R2				core solid	
	54.45	54.61	16		CLAYSTONE & COAL:	mixed (70% claystone 30% coal)									core very broken	
	54.61	54.74	13		COAL LOSS:	(C3/C4)										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	54.74	54.95	21													
						CLAYSTONE:	silty, medium dark gray,	occasional								
							coaly bands and stringers									
26°	54.95	56.08	113			SILTSTONE:	medium gray, minor calcite filled				R2.5					
							fractures									
										185' / 56.4m						
										E-						
26°	56.08	57.01	93			SILTSTONE:	as above				R2.5					
							BOX 13									
36°	57.01	59.39	238			AS ABOVE:	but no quartz veins									
										195' / 59.4m						
	59.39		67			AS ABOVE:										
							BOX 14									
		62.42	236			AS ABOVE:	coaly fragments common									
										205' / 62.5m						
	62.42	62.80	38			AS ABOVE:	but more carbonaceous									
							BOX 15									
	62.80	64.40	160			SILTSTONE:	medium dark gray, clay rich				R2.5					

towards bottom

HOLE No. QMD 8102

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DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	64.40	64.46	6			CORE LOSS:	(C4)								
	64.46	64.49	3			COAL C2/C3:	possible core loss								core broken
	64.49		8	7		ROCK LOSS:									
			83	76		CLAYSTONE:	silty, dark gray to brown					R2			
												215' / 65.5m			
		65.64	24	22		CLAYSTONE:	as above								
							BOX 16								
	65.64		4	4	↑	COAL C2/C3:	vitroinite stringers					R2			core broken
			9	8		COAL LOSS:									
			4	4		COAL:	C3/C4 bands at top					R2			
			9	8	1157	COAL LOSS:									
			5	5		COAL C2:						R2			core broken
			4	4		COAL C1:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					✓											
		66.08	9	8		COAL, C2:							R2			
	66.08	66.80	72	66		CLAYSTONE:							R2.5			core somewhat broken at bottom
	66.80	67.16	36	33		COAL, LOSS:										
	67.16	67.37	21	19		ROCK LOSS:										
	67.37		3			COAL:										core very broken
		67.62	22			COAL, LOSS:										
	67.62		21			CLAYSTONE:							R2			core broken
		68.34	51			ROCK LOSS:										
	68.34		16		COAL, LOSS:											
			8		COAL, C1/C2:											
		68.72	14		COAL, C1:							R1.5				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS		
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.			
22°	70.77	71.52	75	70	1158	SILTSTONE:	light medium gray brown;	occasional				R2.5					
								sandy lenses in middle,	clay rich								
								in top 13cm									
												235' / 71.6m					
												C+ Top					
												E-Bottom					
	71.52	71.56	4	4			CLAYSTONE:	carbonaceous,	coal towards bottom				R2				
	71.56		18	16		8511	COAL LOSS:										
			2	2				COAL C3:									core broken
			18	16				COAL C2:									core broken
			3	3			COAL C3:										
			14	12			COAL LOSS:										
		72.19	8	7			COAL C1/C2:									core pulverized	
	72.19	72.25	6	5			C4:										
	72.25	72.32	7	6			ROCK LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1158 ↓											
	72.32		4	4		COAL C3/C4:										core broken
		73.03	67	59		COAL LOSS:										
	73.03	73.14	11	10		COAL & CLAYSTONE: mixed (80% coal 20% claystone)										core broken pulverized
	73.14	73.46	32	28		ROCK LOSS:										
	73.46		25	22		COAL C1/C2: abundant vitrinite						R2				
		73.91	20	17		COAL LOSS:										
	73.91		5	4		C4:										
		74.05	9	8		ROCK LOSS: C4										
	74.05	74.17	12	10		COAL LOSS:										
						BOX 18										
34°	74.17	74.46	29	25		SANDSTONE: very fine grained, light gray, occasional plant fragments load casts shows tops up						R3.5				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30°	74.46		71			SILTSTONE:	medium dark gray, clay rich at top					R2.5			
							and bottom								
27°		76.22	105			SILTSTONE:	light medium gray, calcite filled					R3.5			
							fractures in top 52 cm, 14cm clay								
							rich bands in middle								
26°	76.22	76.43	21			CLAYSTONE:	dark gray brown, carbonaceous					R2.5			
							towards bottom								
	76.43	76.54	11			COAL & CLAYSTONE:	mixed(50% - 50%)								core very broken
	76.54	76.60	6			COAL C3:						R2			
	76.60		31			CLAYSTONE:	carbonaceous, dark gray brown					R2.5			
							BOX 19								
		77.61	70			AS ABOVE:									
												255' / 77.7m			
12°	77.61	78.05	44			SILTSTONE:	medium gray, fine grained,								
							blocky cleavage, sandstone lenses								
							common, bottom boundary abrupt								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	78.05		171			SANDSTONE:	medium to fine grained,	light							
							gray at top of section,	to dark							
							gray towards base,	siltstone							
							lenses common								
							BOX 20								
		80.96	120			AS ABOVE:									
										265' / 80.8m					
47°	80.96		171			AS ABOVE:	quartz veins rather common								
							BOX 21								
			129			AS ABOVE:	section fine grained grading								
							towards siltstone								
		84.66	70			AS ABOVE:	coarser grained towards base of			275' / 83.6m					
							section								
18°	84.66	85.52	86			SILTSTONE:	medium gray, coarse grained,								
							moderate carbonaceous upper								
							boundary, sharp but irregular,								
							sand lenses common								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	85.52		157	145											
22°		88.57	148	137							285' / 86.9m				
	88.57	88.64	7	6		SILTSTONE:	medium gray					R2.5		core broken	
30°	88.64	89.65	101	87		CLAYSTONE:	medium dark gray brown,								
							carbonaceous at top, silty towards								
							bottom, minor plant fragments in								
							middle								
21°	89.65	90.52	87	79		SILTSTONE:	light medium gray, 14cm claystone					R3			
							bands in middle								
	90.52	90.62	10	9	↑	COAL LOSS:									
	90.62	90.76	14	13		ROCK LOSS:									
	90.76		28	26	1159	COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					↓											
		91.36	32	30		COAL C1:	core somewhat sheared								core sheared and broken	
22°	91.36	91.62	26	24		SILTSTONE:	light medium gray, minor claystone stringers, occasional carbonaceous bands					295' /89.9m C+	R2.5			
	91.62	91.65	3	3		COAL C3:										
	91.65	91.89	24	22		CLAYSTONE:	silty at top, carbonaceous towards bottom						R2			
	91.89		12			COAL C3:	2cm claystone bands, 3cm from bottom						R2.5			
		92.10	9			COAL C3:	C4 band at bottom						R1.5		top 5cm broken	
	92.10		15		CLAYSTONE:	carbonaceous, dark brown to black occasional vitrinite stringers						R2.5		bottom 6cm broken		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
22°	93.70	145				CLAYSTONE:	carbonaceous,	medium dark gray,							
							occasional coaly bands and								
							stringers, two siltstone bands								
							at 17cm from top and 5cm from								
							bottom								
	94.00	30				ROCK LOSS:									
	94.00	94.05	5			COAL & CLAYSTONE:	mixed (70% claystone 30%							core very broken	
							coal								pulverized
27°	94.05		11	10		CLAYSTONE:	carbonaceous at top, silty				R2				
							towards bottom								
							.BOX 25								
			6	6		C4 LOSS:									
27°	94.60	38	34			CLAYSTONE:	carbonaceous at top 10cm, dark				R2			top 8cm broken	
							brown to black, coaly bands 6cm								
							from top								
	94.60		6	5	↑	COAL C1:								core broken	
														pulverized	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			25	22	0911	COAL LOSS:	.	.	.	.		
			10	9		COAL C2/C3:	.	.	.	.		R2				
			5	4		COAL C1:	minor clay stringers	3cm from top	.	.	.					
28°			9	8		COAL C2/C3:	occasional C4 stringers	5cm from top	.	.	.		1.5			
			60	53		COAL LOSS:	.	.	.	.	.
			3	3		COAL C1:	.	.	.	.	.					core broken pulverized
			6	5		COAL C2/C3:	minor C4 stringers	towards bottom	.	.	.					
			7	6		COAL LOSS:	.	.	.	.	.
			7	6		COAL:	core sheared	.	.	.	.					core sheared and pulverized
31°			9	8		COAL C2/C3:	occasional claystone stringers	.	.	.	.					bottom 2cm very broken
							bottom 2cm, core sheared	.	.	.	.	
							315' /96.0m				
							C+				
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		96.14	7	6	0911	COAL C3:									core broken	
	96.14	96.17	3	3		C4:										core broken
	96.17	96.19	2	2		COAL C3:										
	96.19	96.21	2	2		CLAYSTONE:		carbonaceous								core broken
	96.21		5	4		COAL C3/C4:										core broken
			15	13		COAL C3:										top 5cm broken to pulverized
			11	10		COAL C3:										
			31	27		COAL LOSS:										
			8	7		COAL:										core broken pulverized
			38	33		COAL C2/C3:										core broken in middle

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			24	22	O911 ↓	COAL C2:	.	.	.	.		R1.5				
			13	12		COAL C1: bright banded	.	.	.	.		R1				
			20	18		COAL LOSS:	.	.	.	.		
			13	12		COAL C1/C2:	.	.	.	.						core very broken
			7	6		COAL C2/C3: occasional C4 stringers	.	.	.	.		
			6	5		COAL C1/C2: core somewhat sheared	.	.	.	.		
							.	.	.	.	325' /99.1m					
							.	.	.	.	E-					
							BOX 26	.	.	.	.	
	98.16		4	4		COAL C3:	.	.	.	.			R2			
20°	98.16	100.97	281	264	CLAYSTONE:	silty to very silty in centre						R2.5		core somewhat broken		
						occasional calcite filled fractures										
						in middle 140cm										
						BOX 27										
												
												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	100.97	101.80	83			AS ABOVE:									
	101.80		5			SANDSTONE:	fine grained, medium gray, bedding								
							faint and weavy, abundant silt-								
							stone bands and lenses								
										335' / 102.1m					
		104.02	217			AS ABOVE:									
							BOX 28								
			109			AS ABOVE:									
										345' / 105.2m					
9°			185			AS ABOVE:	but bedding much more consistant								
							and planer 9° (cross beds)								
							BOX 29								
		107.48	52			AS ABOVE:									
12°	107.48	107.86	38			SILTSTONE:	medium gray, coarser grained,								
							blocky fractures, upper and lower								
							boundary gradational,								
							carbonaceous fragments rare								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	107.86		39			SANDSTONE:	fine to medium grained,	massive							
							light gray color,	siltstone							
							fragments common in layers								
							carbonaceous stringers								
											355' / 108.2m				
			153			AS ABOVE:									
							BOX 30								
			141			AS ABOVE:	quartz veins much more common								
							towards base								
											365' / 111.3m				
			138			AS ABOVE:	with calcite lined, vugs and								
							fractures common								
							BOX 31								
17°			159			AS ABOVE:	gradually coarser to medium								
							grained at base								
											375' / 114.3m				
		115.03	87			AS ABOVE:	carbonaceous fragments much								
							more common								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	115.03		36			SANDSTONE:	fine	grained,	light gray,	salt and					
								pepper	texture in	cross beds,	upper				
								boundary	abrupt						
								BOX 32							
		115.46	7			AS ABOVE:									
44°	115.46	117.27	181			SILTSTONE:	coarse	grained,	grading to	fine					
								sandstone	in section,	upper					
								boundary	abrupt,	fractures	blocky				
								veins and	slickensides	common,					
								dark gray	color,	carbonaceous					
								partings							
											385' / 117.3m				
	117.27	117.95	68			AS ABOVE:									
41°	117.95		37			SANDSTONE:	medium	grained,	light gray,	salt					
								and pepper	texture,	upper					
								boundary	sharp and	slickenside					
								cross	beddings	very faint					
								BOX 33							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		120.45	213			AS ABOVE:	carbonaceous stringers and silt-								
							stone fragments common								
										395' / 19' 0.4m					
	120.45		79			AS ABOVE:	bedding more conspicuous								
							BOX 34								
			217			AS ABOVE:									
			59			AS ABOVE:				405' / 123.4m					
							BOX 35								
		126.58	258			AS ABOVE:	quartz veins common near base								
										415' / 126.5m					
	126.58		14			AS ABOVE:									
							BOX 36								
38°			287			AS ABOVE:									
										425' / 129.6m					
		130.65	106			AS ABOVE:	but coarser and carbonaceous								
							fragments much more numerous								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	130.65	130.83	18												
						SANDSTONE:	coarse grained,	salt and pepper							
							texture,	carbonaceous fragments							
							and stilstone	clasts very							
							abundant,	upper and lower							
							boundary sharp	but not parallel							
	130.83		164			SANDSTONE:	fine to medium	grained, light							
							gray,	salt and pepper texture,							
							bottom of section	highly fractured							
							BOX 38								
			8			AS ABOVE:									
												445' / 135.6m			
		135.26	271			AS ABOVE:	carbonaceous	stringers common							
							rare pyrite	coating							
							BOX 39								
	135.26		98			SANDSTONE:	fine grained to	medium grained,				R3			
							abundant	coaly plant fragments,							
							rootlets and	bands throughout							
												455' / 138.7m			
												E Top			
												D- Btm			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30°		137.20	96	83		SANDSTONE:	as above, coaly partings top 2cm				R3.5				
							abundant silty laminations through-								
							out								
	137.20		7	6	↑	COAL LOSS:									
30°		137.33	6	5		COAL C2/C3:					R2			core broken	
	137.33	137.42	9	8	1161	ROCK LOSS:									
	137.42		38	33		COAL C2:	occasional minor claystone							core broken	
							stringers, core somewhat sheared								
		137.94	14	12	↓	COAL LOSS:									
	137.94		43	37		ROCK LOSS:									
			18	16		CLAYSTONE:	carbonaceous, minor vitrinite							core broken	
							stringers								
							BOX 40								
			41	36		CLAYSTONE:	carbonaceous, very carbonaceous				R2.5				
							top 12cm								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	.	.	.	465' /141.7m				
						.	.	.	.	.	D				
37	139.43		47	36		CLAYSTONE:	as above, bottom 12cm very								
						.	carbonaceous, bottom 4cm sheared								
						.	and broken								
										
	139.43		4	3	↑	COAL:	.	.	.	.					core sheared and pulverized
			10	8		COAL LOSS:	.	.	.	.	
										
		139.87	30	25	↓	COAL CL/C2:	claystone fragments at bottom								core sheared and broken
										
	139.87	139.94	7	6		CLAYSTONE:	carbonaceous, silty towards				R2.5				
						.	bottom								
										
32	139.94	140.48	54	46		SILTSTONE:	medium dark gray, clay rich in top				R2.5				
						.	25cm								
										
	140.48		4	3		ROCK LOSS:	.	.	.	.	
										
		140.76	24			CLAYSTONE:	carbonaceous at top, silty				R2				
						.	towards bottom								
										
42	140.76		35			SILTSTONE:	medium dark gray				R3.5				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
37°		141.59	48												
	141.59		10												
27°		141.80	11	10											
	141.80		11	10											
		141.95	4	4											
	141.95		3	3											
		142.14	16	14											
	142.14		15	13											
			52	46											

BOX 41

SILTSTONE: medium dark gray, occasional
carbonaceous laminations

475' / 144.8m
C

ROCK LOSS:

CLAYSTONE: silty at top, carbonaceous at
bottom

R2.5

COAL LOSS:

COAL C2/C3: core sheared

core broken

ROCK LOSS:

CLAYSTONE: carbonaceous

R2.5

COAL LOSS:

COAL C1/C2: claystone stringers in middle,
core sheared

core very broken
to pulverized

1163
911

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	206.29		28			*COAL LOSS									SOMEWHAT BROKEN
		206.65	8			COAL C1/C2									BROKEN
	206.65		5			*ROCK LOSS									
		207.46	76			SILTSTONE: medium to dark grey, clayrich at top									SOMEWHAT BROKEN
	207.46		22			*COAL LOSS									
		207.72	4			COAL C3									BROKEN
	207.72		3			C4									
		207.88	13			CLAYSTONE: Carbonaceous									
	207.88	207.98	10			*COAL LOSS									
	207.98	208.09	11			COAL 50/50									BROKEN/PULVERIZED
						CLAYSTONE MIX									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		144.18	4	3	1163 ↓	COAL C3:		minor vitrinite stringers								
34°	144.18	144.22	4	3		C4:		claystone band in middle				R3				
	144.22	144.30	8	7		COAL C2/C3:		claystone stringers in middle								
31°	144.30		42	36		SANDSTONE:		fine grained, medium dark gray, carbonaceous in top 5cm				R3.5				
											485' / 147.8m					
34°			224	186		SANDSTONE:		fine grained, light gray, salt and pepper				R3.5				
								BOX 43								
			68	56		AS ABOVE:										
			214			AS ABOVE:							495' / 150.9m			
								BOX 44								
	150.67		89		AS ABOVE:											
												505' / 153.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			198			AS ABOVE:			and minor carbonaceous bands						
									BOX 45						
			86			AS ABOVE:									
31°			196			AS ABOVE:					515' / 155m				
									BOX 46						
		156.57	110			AS ABOVE:									
											525' / 160.1m				
			172			AS ABOVE:			and more common carbonaceous stringers						
									BOX 47						
			129			AS ABOVE:			but fewer stringers						
											535' / 163.1m				
		161.09	151			AS ABOVE:									
									BOX 48						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			149			AS ABOVE:	slightly finer grained and darker								
			138			AS ABOVE:				545' /166m					
			60			AS ABOVE:									
		164.95	39			AS ABOVE:				552' /168.2m					
38°	164.95		181			SANDSTONE & SILTSTONE:	sandstone 90% siltstone								
							10% sandstone fine grained,								
							medium gray, well bedded, cross								
							beds sometimes evident, siltstone								
							dark gray to black, highly								
							carbonaceous								
							BOX 50								
			98			AS ABOVE:	sandstone 95% - siltstone 5% as								
							clasts								
			189			AS ABOVE:	sandstone 95% siltstone 5% as			562' /171.3m					
							clasts, quartz veins very common								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			131												
						AS ABOVE:									
			161			AS ABOVE:						572' / 174.3m			
			155			AS ABOVE:									
		175.34	124			AS ABOVE:									
			178			AS ABOVE:									
18°			97			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		180.26	217			AS ABOVE:	sandstone	50%	siltstone	50%					
			72			AS ABOVE:	sandstone	50%	siltstone	50%	603' / 183.8m				
							BOX 55								
28°			233			AS ABOVE:	sandstone	40%	siltstone	60%					
		183.76	45			AS ABOVE:	sandstone	40%	siltstone	60%	613' / 186.8m				
							BOX 56								
			258			AS ABOVE:	siltstone	50%	sandstone	50%					
							bedding becoming feathery								
											623' / 189.9m				
			24			AS ABOVE:	sandstone	80%	siltstone	20%					
							BOX 57								
			18			AS ABOVE:	siltstone	50%	sandstone	50%					
	186.76	186.79	3			CLAYSTONE:	extremely rounded up parallel								
							walls, possible fault								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
23°	186.79		164			SANDSTONE:	just about 100%								
										624' / 190.2m					
			77			AS ABOVE:	sandstone slightly coarser 60%								
							siltstone 40%								
							BOX 58								
		192.04	284			SANDSTONE:	occasionally pebbly, sandstone								
							65% siltstone 35%								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						TOP OF HOLE CORE STARTS AT 3.2m									
						BOX 1									
	3.20		14			CLAY, SOIL AND SANDSTONE FRAGMENTS								pulverized	
		6.34	300			ROCK LOSS:									
	6.34	6.53	19			SANDSTONE: fine grained, light gray, salt and pepper								very broken	
	6.53		33			CLAY, SOIL AND SANDSTONE FRAGMENTS								pulverized	
		9.86	300			ROCK LOSS:									
	9.86	10.01	15			SANDSTONE: medium coarse grained								broken	
	10.01		99			CLAY, SOIL AND SANDSTONE FRAGMENTS:								pulverized	
		14.00	300			ROCK LOSS:									
						BOX 2									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	14.00		13			SANDSTONE:	fine grained,	light gray to brown						broken	
							silty laminations								
		14.75	62			ROCK LOSS:									
	14.75		45			CLAYSTONE:	dark gray brown,	occasional						pulverized	
							sandy fragments and coaly								
							fragments								
										50' / 15.2m					
		18.20	300			ROCK LOSS:									
	18.20		190			CLAYSTONE:	as above							pulverized weathered	
							BOX 3								
		23.10	300			ROCK LOSS:									
	23.10		89			CLAYSTONE:	as above							weathered pulverized	
			221			ROCK LOSS:									
										36' / 10.9m					
			184			CLAYSTONE:	dark gray brown,	occasional coaly						extremely fractured	
							stringers, limonite stain on							and sheared	
							fractured surfaces							extremely weathered	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		29.02	98	63											very broken pulverized	
							BOX 4									
	29.02	30.52	150	96		CLAYSTONE:	dark gray brown to black				96' / 29.3m				very sheared and weathered, broken pulverized	
							carbonaceous to coaly, occasional									
							coaly fragments									
	30.52		100	64	↑ 100	COAL C1/C3:	some iron stain on fragments								broken-pulverized weathered	
			60	39		COAL C1/C2:									sheared broken	
							BOX 5									
		32.19	7	4		COAL C2:									very broken	
	32.19		164	105		COAL C1/C2:						106' / 32.8m			broken-pulverized	
			16	10		COAL C2/C3:									broken	
			77	49		COAL C1/C2:									broken-pulverized	
							BOX 6									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			44	28	1700 ↓	COAL C1/C2;	.	.	.	.					broken	
			24	15		COAL C2:	.	.	.	.	116' / 35.4m					broken
		35.88	44	28		COAL C1/C2:	.	.	.	.						broken-pulverized
	35.88	37.32	144	93		CLAYSTONE:	medium dark gray brown, occasional									very sheared and weathered
							coaly fragments and stringers									broken-pulverized
							BOX 7									
	37.32		33	21		ROCK LOSS:	.	.	.	.		
			23			CLAYSTONE:	medium gray brown, occasional coaly									sheared very broken
							stringers				126' / 38.4m					
88		38.11	23			CLAYSTONE:	as above, coal bands near top									broken
	38.11		10		ROCK LOSS:	.	.	.	.			
			39		COAL & CLAYSTONE:	mixed 70% coal 30% claystone									pulverized	
		38.75	15		COAL LOSS:	.	.	.	.			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	38.75		166			CLAYSTONE:	dark gray brown;	carbonaceous, coaly						very sheared broken-pulverized	
								in parts,	occasional silty bands						
								BOX 8							
		40.85	44	9			CLAYSTONE:	as above							pulverized
											176' / 41.4m				
	40.85	40.99	14	3			CLAYSTONE:	carbonaceous to very carbonaceous							very broken
	40.99	41.08	9	2			C4:								very broken
	41.08	41.14	6	1	↑ 1701	COAL LOSS:									
	41.14	41.26	12	2		COAL & C4:	mixed "								broken-pulverized
	41.26	41.39	13	3	↓	ROCK LOSS:									
	41.39		92	19	↑ 1702	COAL C1/C2:								broken	
		42.64	33	7	↓	COAL LOSS:									
	42.64		52	11		CLAYSTONE:	medium dark gray brown							very broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1703 ↗ ↘											
			18	4												
		43.65	31	6			ROCK LOSS:									
		43.65					CLAYSTONE: as above									broken
	43.65		42	9			COAL C1/C2:									top 6cm pulverized
			53	11							146' / 44.5m					
		44.67	7	1			COAL C1/C2:									very broken
	44.67		36	7		CLAYSTONE: medium to dark gray									sheared-very broken	
78			92	19		CLAYSTONE: silty to very silty, medium gray									broken	
						brown										
		46.78	83			CLAYSTONE: as above, coaly bands near top									very broken	
78	46.78		54			SILTSTONE: medium gray, sandy lenses towards									broken	
						bottom										
										156' / 47.5m						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		48.48	116			SILTSTONE:	as above							broken, solid at bottom	
							BOX 11								
	48.48	49.22	74			ROCK LOSS:									
	49.22	50.06	84			CLAYSTONE:	silty at bottom, carbonaceous at top, occasional coal fragments, medium brown to dark gray brown							broken-pulverized	
										165' / 50.3m					
	50.06		152			CLAYSTONE:	carbonaceous to silty in places coal fragments throughout							broken to very broken	
							BOX 12								
			144			CLAYSTONE:	carbonaceous, dark gray brown to black, coal fragments at 45cm from top and 75cm from top							broken to pulverize	
										175' / 53.3m					
		54.16	114			CLAYSTONE:	gray brown to medium gray, somewhat silty at top, somewhat friable							broken-pulverized	
							BOX 13								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		54.99	83			CLAYSTONE: medium to dark gray brown, minor coal fragments 44cm from top, carbonaceous towards bottom									very broken to pulverized
	54.99	55.25	26			ROCK LOSS: (C4?)									
70	55.25	55.63	38			COAL & CLAYSTONE: (70% coal 30% rock)									broken to pulverize
	55.63	55.78	15			ROCK LOSS: (claystone and C4)									
	55.78		36			CLAYSTONE: dark gray brown, somewhat carbonaceous									very sheared broken to pulverize
			47			CLAYSTONE: silty, abundant carbonaceous filled fractures				185' / 56.4m					solid
68		56.79	18			CLAYSTONE: dark brown to black, abundant coaly stringers towards bottom									sheared broken
	56.79	56.93	14			COAL & CLAYSTONE: mixed 70% coal 30% claystone									broken to pulverize
						BOX 14									
	56.93	57.00	7			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	57.00	57.04	4			COAL & CLAYSTONE:	mixed 50/50								very broken to pulverized
	57.04		18			ROCK LOSS:									
		57.52	30			CLAYSTONE:	medium to dark gray brown,	occasional							top 5cm very broken
							coaly stringers								
	57.52		2			COAL LOSS:									
		57.64	10			COAL C1/C2:									very broken
	57.64	57.85	21			CLAYSTONE:	very carbonaceous to coaly,	abundant							broken
							C4 bands towards bottom								
	57.85	57.89	4			COAL C3/C4:									
										191' / 58.2m					
	57.89	58.34	45			COAL C1/C2:	C4 particles at bottom								very broken
	58.34	59.03	69			CLAYSTONE:	carbonaceous, somewhat silty in								broken
							middle, dark brown to black								
	59.03	59.15	12			COAL C4:	mixed 80% coal 20% C4								
	59.15		26			CLAYSTONE:	carbonaceous, occasional coaly								

stringers

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
			25			CLAYSTONE:	as above	.	.	.	196' / 59.7m				
										
							BOX 15	.	.	.					
										
		60.28	62			CLAYSTONE:	as above	.	.	.					
										
	60.28	60.38	10			ROCK LOSS:	(C4 and carbonaceous claystone)	.	.	.					
										
	60.38	60.42	4			COAL :	.	.	.	.					pulverized
										
	60.42	62.20	178			CLAYSTONE:	medium gray to dark gray, brown to	.	.	.					broken
						.	black, silty at top, carbonaceous	.	.	.					
						.	towards bottom, abundant C4 bands	.	.	.					
						.	at bottom	.	.	.					
										
	62.20		14			C4:	.	.	.	.	
										
		62.41	7			ROCK LOSS:	.	.	.	.	
										
	62.41	62.47	6			COAL & C4:	mixed	.	.	.					broken
										
	62.47		8			COAL LOSS:	.	.	.	.	
						.	.	.	.	.	206' / 62.8m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 16	.	.						
		62.65	10			COAL C3/C4:	.	.	.					broken to pulverize	
	62.65		36			ROCK LOSS:	.	.	.						
		63.14	13			CLAYSTONE: carbonaceous	.	.	.					very broken	
	63.14	63.56	42			COAL C1/C2:	.	.	.					broken	
	63.56	63.64	8			C4 and CLAYSTONE:	.	.	.					broken	
	63.64	64.02	38			CLAYSTONE: a 7cm C4 band at bottom	.	.	.					broken	
	64.02	64.08	6			COAL C3 with C4 bands at top	.	.	.					very broken	
53	64.08		133			CLAYSTONE: silty medium gray brown, minor coal bands at bottom	.	.	.					solid	
							BOX 17	.	.						
		65.60	19			CLAYSTONE: very carbonaceous to coal, abundant coaly stringers, C4 bands	.	.	.					broken	
								.	.						

216' / 65.8m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
50	65.60		35	22		CLAYSTONE & C4 : interbedded, very carbonaceous									broken
						black coal bands									
			13	8		ROCK LOSS:									
		66.30	22	.14		CLAYSTONE: carbonaceous, dark brown, minor									
						silty bands									
	66.30	67.53	123	87	↑	COAL C1/C2:									bottom 25cm pulverized
	67.53		13	9		ROCK LOSS:									
		67.80	14	10		CLAYSTONE: carbonaceous									
	67.80		47	33		COAL LOSS:									
			30	21		COAL C1/C2: occasional C3 bands									very broken
		68.76	19	13	↓	COAL C1/C2:									very broken
42	68.76	69.02	26	19	↑	CLAYSTONE:					226' / 68.9m				very broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1705 ←											
	69.02		10	7		COAL LOSS:										
		69.22	10	7		COAL C2/C3:										broken
	69.22		19	14		CLAYSTONE:	carbonaceous, coaly stringers									
		69.45	4	3		C4:										
31	69.45		123	105		COAL C1/C2:										
		70.78	10	9		COAL LOSS:										
	70.78	71.08	30	26	CLAYSTONE:	silty, medium gray										
	71.08		33	28	SILTSTONE:	medium gray, coaly rich at top										
						BOX 19										
		71.98	57		SILTSTONE:	medium gray, occasional sandy laminations									solid	
										236' / 71.9m						
42	71.98		246		SANDSTONE:	very fine grain to fine grain, light to medium gray, abundant silty laminations and bands									solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
65			58			SANDSTONE:	as above,	calcite filled	fractures						somewhat broken
							at bottom								
89T 47B			215			SANDSTONE:	as above,	abundant calcite filled	fractures from top 135cm						
		77.91	74			SANDSTONE:	as above,	becoming clay rich towards	bottom and very silty						
57	77.91	79.99	208			SILTSTONE:	medium gray,	clay rich at top,	occasional sandy laminations						solid
62	79.99		94			SANDSTONE:	fine grain to very fine grain,	medium gray,	abundant silty laminations						
50T 60B			189			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			109												
60	85.71		180			SANDSTONE:	as above				276' / 84.1m				
52	85.71	86.83	112			SILTSTONE:	medium gray, sandy towards bottom								solid
							sandy lenses at bottom								
											286' / 87.2m				
62	86.83	88.36	153			SANDSTONE:	very fine grained, medium gray,								
							abundant silty laminations, minor								
							claystone bands 43cm from bottom								
55	88.36		147			SILTSTONE:	medium to dark gray, occasional								
							claystone bands, sandy lenses towards								
							bottom								
											296' / 90.2m				
		91.25	142			SILTSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 26								
56	91.25		179			CLAYSTONE: silty to very silty, medium to dark gray									somewhat broken
										306' / 93.3m					
50			120			CLAYSTONE: as above, sandy towards bottom									
							BOX 27								
54			195			CLAYSTONE: as above, somewhat sandy near top									broken
										316' / 96.3m					
		97.04	85			CLAYSTONE: as above									
							BOX 28								
	97.04		11	9		COAL LOSS:									
		97.42	27	22		COAL C1/C2:									broken
36	97.42	98.12	70	57		CLAYSTONE: medium to dark gray brown, silty at top, carbonaceous in bottom 14cm									bottom 14cm broken to pulverize
	98.12		75	59	↑	COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					107 ↓											
		99.20	33	26			COAL C1/C2: occasional claystone particles in middle									pulverized
											326' /99.4m					
42	99.20	99.84	64	48			CLAYSTONE: dark gray brown, coal bands 20cm from top									broken
	99.84		2	1			COAL LOSS:									
		99.92	6	4			COAL: C3 with C4 stringers									
	99.92		4				ROCK LOSS:									
		100.03	7				CLAYSTONE: carbonaceous									
	100.03		28				COAL C1/C2:									
		100.33	2				COAL LOSS:									
	100.33		19				CLAYSTONE: medium to dark gray brown, somewhat friable									broken
							BOX 29									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		101.40	88		1701	CLAYSTONE:	dark gray brown;	as above						broken to very broken	
	101.40	101.80	40			SILTSTONE:	medium gray, clay rich at top, sandy	towards bottom						blocky fracture throughout	
43	101.80		59	43		SANDSTONE:	very fine grained to fine grained,	light to medium gray, silty laminations	occasional claystone bands					broken	
		103.49	110	87		SANDSTONE:	as above				336' / 102.4m			broken	
								BOX 30							
36	103.49	105.33	184	149		SANDSTONE:	very fine grained to fine grain	silty laminations, abundant claystone	bands towards bottom					broken	
	105.33		4	3		↑	COAL C1/C2:							broken to pulverize	
	106	106.19	82	66			COAL C1/C2:	claystone particles 30cm from top	and 74cm from top minor claystone	and C4 particles mixed in throughout					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	106.19	106.34	15	12	1708 ↓ ↑	ROCK LOSS:	.	.	.	.	
									BOX 31						
	106.34	106.98	64	52			COAL C1/C2: as above, claystone particles	.	.	.	.				pulverized
											354' / 107.9				
	106.98		37	31			COAL LOSS:	.	.	.	.
		107.49	14	12			COAL C2/C3:	.	.	.	.				broken
	107.49		7	6			ROCK LOSS:	.	.	.	.
		107.65	9	7			C4: coal particles	.	.	.	.
	107.65		40	33			COAL LOSS:	.	.	.	.
		108.16	11	9			COAL & C4 PARTICLES: 50/50	.	.	.	.				very broken
	108.16	108.51	35	30			ROCK LOSS:	.	.	.	.
	108.51		93	79			COAL C1/C2:	.	.	.	.				broken to pulverized
		109.65	21	18			COAL LOSS:	.	.	.	.
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
30	109.65		62	54	1709 ↙	CLAYSTONE:	carbonaceous at top and bottom,								broken	
								silty to sandy in middle								
		110.46	19	16			ROCK LOSS:									
											365' / 111.3m					
	110.46		58	50		1710 ↗	COAL LOSS:									
		111.07	3	3			COAL:								pulverized to powdered	
								BOX 32								
	111.07	112.15	108	88			COAL C1/C2:								broken to pulverized bottom 45cm sheared	
	112.15	112.36	21	17			COAL & CLAYSTONE: (50% coal)	carbonaceous and							very broken	
								C4 particles								
	112.36	112.63	27	22			ROCK LOSS:									
	112.63		57	47			COAL LOSS:									
		113.97	77	63	↙		COAL C1/C2:									broken
	113.97	114.09	12	9			CLAYSTONE:	carbonaceous, dark brown								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
39	114.09	114.48	39	30		SILTSTONE:	medium gray, light gray, sandy								
							lenses in middle								
											376' / 114.6m				
							BOX 33								
	114.48	115.68	120			CLAYSTONE:	dark gray brown to medium gray,								somewhat broken
							carbonaceous at top, silty towards								
							bottom								
64	115.68	116.38	70			SILTSTONE:	medium gray, occasional sandy								
							laminations, very sandy towards								
							bottom								
	116.38		96			SANDSTONE:	fine grain to very fine grain, light								
							to medium gray, silty in middle								
							BOX 34								
42			10			SANDSTONE:	as above								somewhat broken
											386' / 117.7m				
45		120.27	283			SANDSTONE:	very fine grain to fine grain,								solid
							medium to light gray, minor								
							bio-turbations								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
63			129			SANDSTONE:	as above,	10cm silty claystone band							
							near top,	worm burrows at top shows							
							tops up,	occasional calcite filled							
							fractures								
										426' / 129.9m					
49		131.77	156			SANDSTONE:	as above,	medium gray band near top							
							BOX 39								
	131.77		27			SANDSTONE:	fine grain,	light to medium gray							broken
							abundant silty laminations,	clay							
							rich at top								
63			92			SANDSTONE:	as above,	coarsening towards bottom							
							occasional calcite filled	fractures							
										436' / 132.8m					
87T 40E			137			SANDSTONE:	as above,	silty towards bottom							
							BOX 40								
40		134.90	57			SANDSTONE:	as above,	minor soft sediment							solid
							deformation								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
68	134.90	135.80	90												broken at bottom
	135.80		132								446' / 135.9m				broken
		137.18	6												
64	137.18		170												solid
		139.84	96								456' / 138.9m				solid
	139.84		40	22											broken
		140.36	12	7											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	140.36		5	3	↑	ROCK LOSS:	(C4)									
		140.61	20	11		COAL:	C3 with abundant C4 bands									
	140.61		6	3		ROCK LOSS:										
56		140.89	22	12	←	CLAYSTONE:	very carbonaceous to coaly									
	140.89		2	1	→	COAL LOSS:										
		141.94	103	58	←	COAL C1/C2:									broken to pulverized	
	141.94	142.15	21	12	→	CLAYSTONE:	carbonaceous to coaly, C4 bands								very broken	
							towards bottom									
	142.15	142.32	17	10	←	COAL C2/C3:	C1 bands									
	142.32		23	13		CLAYSTONE:	carbonaceous, dark brown to black								broken	
							occasional coaly bands									
							BOX 43									
			210	117		CLAYSTONE:	carbonaceous, occasional large coal									
							bands (5 to 6cm) minor silty bands									

throughout

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		144.75	10			ROCK LOSS:									
											47.6' / 145.1m				
	144.75	144.90	15			ROCK LOSS: C4									
	144.90		3			COAL C2/C3:									very broken to pulverized
		144.97	4			COAL C3:									broken
	144.97	145.01	4			C4:									
	145.01	145.03	2			COAL C3:									
	145.03	145.05	2			CLAYSTONE: carbonaceous									
	145.05	145.07	2			COAL C1:									
	145.07		16			ROCK LOSS:									
		145.55	32			CLAYSTONE: silty at top, very carbonaceous									broken
						towards bottom, coaly fragments									
						at bottom, medium brown to black									
	145.55	145.68	13	7		ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1714											
	145.68		6	3			ROCK LOSS:									
		145.90	16	8			CLAYSTONE:	carbonaceous to coaly, vitrinite								very broken
								stringers, dark brown to black								
	145.90		8	4			COAL LOSS:									
		146.05	7	4			COAL C2/C3:	minor claystone stringers at								
								bottom								
	146.05	146.26	21	11			CLAYSTONE:	carbonaceous at top, silty towards								broken
								bottom, coaly stringers at bottom								
	146.26		36	19	1715	COAL LOSS:										
		147.88	126	67			COAL C1/C2:	occasional C3 bands								broken to pulverized
											486' / 148.1m					
	147.88		131	66			COAL LOSS:									
			87	44			COAL C1/C2:	as above, occasional C4 bands								very broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1715 ↙											
			260	130												
							COAL C1/C2: occasional C3 bands									broken
		153.30	64	32												
							COAL C1/C2: occasional C3 bands									broken
60	153.30	153.98	68	34			CLAYSTONE: carbonaceous at top, silty towards bottom, dark brown to medium brown									
											506' / 154.2m					
57	153.98	155.41	143	78		SILTSTONE: medium gray, occasional claystone bands, sandy laminations throughout very sandy towards bottom									solid	
53	155.41	157.07	166			SILTSTONE: medium to dark gray, sandy laminations at top, abundant clay- stone bands towards bottom									solid bottom 25cm broken	
	157.07		114			CLAYSTONE: silty, dark gray brown									broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		160.11	190			CLAYSTONE:	as above								solid
										526' / 160.3m					
55	160.11	161.16	105			SILTSTONE:	medium to dark gray, clay rich at top, occasional sandy lenses, minor bio-turbated								somewhat broken
44	161.16	162.33	117			SILTSTONE:	as above								somewhat broken
	162.33	163.99	166			CLAYSTONE:	silty, medium gray brown, very silty towards bottom								
66	163.99		226			SANDSTONE:	very fine grain, medium gray, abundant light gray fragments, sandstone laminations, occasional claystone bands								solid
										546' / 166.4m					
			53			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
45		169.36	258			SANDSTONE:	as above								solid
										556' /169.	4m				
	169.36		28			SANDSTONE:	as above								solid
			280			SANDSTONE:	very fine grain to fine grain,								solid
							light to medium gray, silty								
							laminations, occasional claystone								
							bands								
										556' /172.	5m				
49			97			SANDSTONE:	fine grain , medium gray, claystone								
							band at top								
55			176			SANDSTONE:	fine to medium grain, light to								
							medium gray, cross laminations								
							shows tops up								
										576' /175.	5				
		175.42	25			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
46	175.42		309												
						SANDSTONE:	fine grain to medium grain, occasional								solid
							coarse grain lenses, abundant								
							silty laminations, cross laminations								
							shows tops up								
			24												
						SANDSTONE:	as above								
											587' / 178.6m				
43			253			SANDSTONE:	medium grain, light gray, salt and								
							pepper, abundant, silty laminations								
							minor claystone clasts at bottom								
			181.87	59		SANDSTONE:	as above, large claystone bands at								
							bottom, soft sediment deformation								
											596' / 181.6m				
56	181.87		97			SANDSTONE:	fine to medium grain, light gray								solid
							abundant silty laminations								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			143			SANDSTONE:	as above,	very few silty	laminations						
			76			SANDSTONE:	as above								
										606'	/184.7m				
			22			SANDSTONE:	as above								
35			190			SANDSTONE:	fine to medium grain,	light gray							
								abundant silty	laminations						
			187.37	22		SANDSTONE:	as above								solid
										616'	/187.7m				
50	187.37		276			SANDSTONE:	fine to medium grain,	light gray							solid
								salt and pepper,	minor silty						
								laminations at top							
			113			SANDSTONE:	as above								
										626'	/190.8m				
			176			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
51			129			SANDSTONE:	as above									
										636' / 193.8m						
		195.85	154			SANDSTONE:	as above								somewhat broken near top	
	195.85		144			SANDSTONE:	medium grain, light gray, salt and pepper, occasional calcite filled fractures									solid
										646' / 196.9m						
37			142			SANDSTONE:	as above									
			106			SANDSTONE:	as above, a few calcite filled fractures at bottom									
										659' / 199.9m						
34		200.84	107			SANDSTONE:	as above, minor claystone rip-up clasts in bottom 38cm									
	200.84		89			SANDSTONE:	medium grain, light gray, abundant claystone rip-up clasts throughout									solid

(approximately 0.5 to 3cm thick)

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			107			SANDSTONE:	as above								somewhat broken
			66			SANDSTONE:	medium grain, light gray, salt and pepper								
											666' / 202.9m				
29			106			SANDSTONE:	medium to fine grain, light gray salt and pepper, silty laminations								
		205.39	87			SANDSTONE:	fine grain, light gray								solid
45	205.39		90			SANDSTONE:	medium grain, light gray, abundant silty laminations								solid
											676' / 206m				
			100			SANDSTONE:	as above								
			43			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			147			SANDSTONE:	fine grain to very fine grain, medium								very fractured and jointed towards bottom, broken at bottom
							gray, abundant silty laminations,								
							limonite stain along fracture and								
							joint surfaces								
										686' / 209m					
		209.72	53	22		SANDSTONE:	as above								very broken
							BOX 66								
66	209.72	210.31	59	24		SILTSTONE:	clay rich at bottom, medium to dark								broken
							gray								
	210.31		111	45	↑	COAL LOSS:									
			60	24	1716	COAL C1/C2:	powdered coal								pulverized powder
										696' / 212.1m					
		212.08	6	2	↓	COAL C1/C2:									broken to pulverize
	212.08		142	58		CLAYSTONE:	medium brown to dark brown to black								very broken
							coal band 38cm from top and at								
							bottom								
							BOX 67								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			21	9	↑ ||||| ↓	ROCK LOSS:	.	.	.	.	
	214.00		29	12		CLAYSTONE: as above	.	.	.	.					very broken
	214.00		100	50		COAL C1/C2:	.	.	.	.					broken to pulverized
	215.02		2	1		COAL LOSS:	.	.	.	.	
	215.02		5	3		CLAYSTONE: carbonaceous	.	.	.	.	
			16	8		ROCK LOSS:	.	.	.	.	
	215.60		37	19		CLAYSTONE: carbonaceous at top, silty towards bottom, dark brown to medium brown	.	.	.	.	706'/215.1m				broken
53	215.60		96			SILTSTONE: medium gray, clay rich at top occasional sandy lenses towards bottom	.	.	.	.					solid
						BOX 68	.	.	.	.	
	216.80		24	14		SILTSTONE: as above	.	.	.	.					solid
										
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	216.80	216.97	17	10		COAL C1/C2:									very broken
	216.97		7	4		ROCK LOSS:									
		217.35	31	19		CLAYSTONE: carbonaceous, dark brown black									broken
	217.35		75	50	↑	COAL C1/C2:									broken
			2	1		COAL LOSS:					716' / 218.2m				
		219.10	98	66		COAL C1/C2:									broken
	219.10	219.19	9	6		CLAYSTONE & C4: very carbonaceous to coaly									pulverized
					1718										
	219.19	219.28	9	6		C4 & COAL:									pulverized
	219.28		11	8		COAL LOSS:									
		220.39	100	77	↓	COAL C1/C2: C3 bands									very broken
	220.39		89	68		SANDSTONE: medium grain, light gray, salt and pepper, silty laminations									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. f.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
										
		222.12	84	64		SANDSTONE:	as above	.	.	.	726' / 221.	2m			
										
						.	BOX 70	.	.	.					
										
	222.12		208			SANDSTONE:	as above	.	.	.					solid
										
			73			SANDSTONE:	as above	.	.	.	736' / 224.	3m			
										
						.	BOX 71	.	.	.					
										
34			230			SANDSTONE:	as above	.	.	.					
										
						.	.	.	.	.	746' / 227.	4m			
50			58			SANDSTONE:	as above	.	.	.					
										
						.	BOX 72	.	.	.					
										
43		230.25	244			SANDSTONE:	as above, middle 110cm light yellow	.	.	.					
						.	gray (ground water weathering)	.	.	.					
										
						.	.	.	.	.	756' / 230.	4m			
	230.25		43			SANDSTONE:	as above	.	.	.					solid
										
						.	BOX 73	.	.	.					
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
52			248			SANDSTONE:	fine to medium grain,	light gray							
							salt and pepper,	occasional silty							
							laminations								
										766'	/233.4m				
			35			SANDSTONE:	as above								
							BOX 74								
52			250			SANDSTONE:	as above								broken
										776'	/236.5m				
		236.07	6			SANDSTONE:	as above								
							BOX 75								
	236.07		160			SANDSTONE:	fine to medium grain,	light to							somewhat broken
							medium gray,	minor yellowing at							
							core (ie-ground water towards								
							bottom)								
			82			SANDSTONE:	fine to medium grain,	light gray							abundant fracturing
							to yellow gray,	occasional coaly							very broken
							band and plant fragments								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 76	.	.						
								.	.						
						BOX 76 SKIPPED, 10FOOT RUN BETWEEN BOX 75 AND									
						BOX 77	.	.	.	.	
											
							BOX 77	.	.	.					
											
48		238.77	28			SANDSTONE:	fine to medium grain, light to							somewhat broken	
							medium gray, silty laminations								
							.	.	.	786' / 239.5m					
42	238.77		255			SANDSTONE:	as above	.	.					solid	
							.	.	.						
							BOX 78	.	.						
							.	.	.						
			40			SANDSTONE:	fine grain, light gray, occasional								
							silty laminations, minor claystone								
							stringers	.	.						
							.	.	.	796' / 242.5m					
56			241			SANDSTONE:	as above	.	.						
							.	.	.						
							BOX 79	.	.						
							.	.	.						
58			50			SANDSTONE:	fine to medium grain, silty								
							laminations	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	.	.	.	806' / 245.6m				
		246.91	228			SANDSTONE:	as above,	occasional	claystone	.					
						.	rip-up	clasts	.	.					
										
						.	BOX 80	.	.	.					
										
	246.91		69			SANDSTONE:	as above	.	.	.					solid
						.	.	.	.	.	816' / 248.6m				
55			216			SANDSTONE:	as above	.	.	.					
										
						.	BOX 81	.	.	.					
										
			87			SANDSTONE:	as above	.	.	.					broken
						.	.	.	.	.	826' / 251.8m				
50			187			SANDSTONE:	as above	.	.	.					broken
										
						.	BOX 82	.	.	.					
										
		253.50	100			SANDSTONE:	fine grain,	light gray,	salt and	.					
						.	pepper	.	.	.					
						.	.	.	.	.	836' / 254.8m				solid
										
	253.50		170			SANDSTONE:	as above	.	.	.					solid
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		263.54	10			SANDSTONE:	as above	.	.						
37	263.54	264.47	93			SILTSTONE:	medium to dark gray, sandy bands	.	.					solid	
						.	claystone bands	.	.						
36	264.47	266.20	173			SANDSTONE:	fine grain, light gray, silty	.	.						
						.	laminations, claystone bands at	.	.						
						.	93cm and bottom	.	.						
						.	BOX 87	.	.						
33	266.20		223			SANDSTONE:	fine grain, light gray, silty	.	.					solid	
						.	laminations, occasional to abundant	.	.						
						.	claystone bands	.	.						
						.	.	.	.	886' / 270m				
		268.95	52			SANDSTONE:	as above	.	.						
						.	BOX 88	.	.						
	268.95		242			SANDSTONE, SILTSTONE, CLAYSTONE;	interbedded	.	.					somewhat broken	
						.	beds 2-15cm thick	.	.						
						.	.	.	.	896' / 273m				
		271.65	28			SANDSTONE, SILTSTONE, CLAYSTONE:	as above	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
9	271.65		255												
						SANDSTONE, SILTSTONE, CLAYSTONE:			as above						broken
										906' / 276.1m					
			6			AS ABOVE:									
6		274.82	56			SANDSTONE, SILTSTONE, CLAYSTONE:			as above						
11	274.82		227			SANDSTONE:°	fine grain, light gray,	abundant							somewhat broken
							silty laminations,	occasional							
							claystone bands								
										916' / 279.0m					
		277.15	6			SANDSTONE:	as above								
4	277.15	277.72	57			SANDSTONE, SILTSTONE:	interbedded								somewhat broken
	277.72	278.86	114			SANDSTONE:	fine grain, light gray,	silty							solid
							in bottom 72cm								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	278.86	279.22	36			SILTSTONE:	medium to dark gray,	sandy lenses							
							at top								
	279.22	280.00	78			CLAYSTONE:	silty,	medium to dark gray							broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	0	21.22			1719 ↑	OVERBURDEN:										
							BOX 1									
	21.22		48				SANDSTONE: fine to medium grain, light gray									solid
							a 7cm medium grain band at top, iron									
							stain along fractured surfaces									
											76' / 23.2m					
			107				SANDSTONE: fine grain, light gray, iron stain									somewhat broken
							along fractures with some calcite									
											30' / 24.4m					
	23.11		34	32			SANDSTONE: as above, occasional claystone bands									broken
	23.11	23.36	25	23			SILTSTONE & CLAYSTONE: interbedded, light gray									broken, bottom 6cm very broken
							to dark gray, coaly particles in									
							bottom 6cm									
	23.36	23.49	13	12			COAL C1/C2:									
	23.49	23.72	23	22		COAL & CLAYSTONE: mixed (70% coal 30% claystone)									pulverized to powdered	
	23.72	23.78	6	6		ROCK LOSS:										
						BOX 2										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1719 ↓											
	23.78		43	40		COAL LOSS:										
		24.25	4	4		COAL C2:										very broken
	24.25		7	7		CLAYSTONE:	silty to very silty									very broken
		25.12	80	75		ROCK LOSS:	(carbonaceous claystone)									
	25.12	25.66	54	51		SANDSTONE:	fine grain, abundant silty laminations occasional dark gray claystone bands									
	25.66		7			SILTSTONE:	medium gray, some claystone particles				37'/26.5m					very broken
		26.22	49			ROCK LOSS:										
23	26.22	26.56	34			SANDSTONE:	fine grained, light gray, abundant silty laminations, occasional carbonaceous particles									broken
	26.56		58			ROCK LOSS:										
		27.50	36			SILTSTONE, SANDSTONE, CLAYSTONE:	mixed, a few coaly to carbonaceous particles in									very broken

bottom of box

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	27.50	27.67	17												
	27.67		5			CLAYSTONE:	minor coaly stringers								very broken
			134			CORE LOSS:	(claystone with small coal bands)								
		29.16	10			CLAYSTONE:	silty to carbonaceous								very broken
	29.16		4			COAL C1/C2:									broken
			16			COAL LOSS:									
		29.40	4			COAL C2/C3:									broken
	29.40		8			CLAYSTONE:	carbonaceous								
			28			ROCK LOSS:									
			38			CLAYSTONE:	silty and carbonaceous, medium to								very broken to pulverized
							dark gray, occasional coaly and								
							carbonaceous particles								
							BOX 3								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			12		1720 ↑	CLAYSTONE:	dark gray brown							broken	
			5			CLAYSTONE:									broken to pulverize
		30.74	43			CLAYSTONE:	somewhat silty at top, very silty								broken to pulverized
							at bottom, medium to dark gray								
	30.74	31.16	42			ROCK LOSS:									
											104'/31.7m				
	31.16	31.32	16			C4 & CLAYSTONE:	mixed, occasional coaly								very broken
							particles								
5	31.32		17	17		SANDSTONE:	fine grain, light to medium gray								broken
							silty laminations, claystone band								
							at bottom								
											108'/32.9m				
9		32.39	90	89	SANDSTONE:	as above, carbonaceous fragment								solid	
						at top									
	32.39	32.85	46	45	ROCK LOSS:										
	32.85		6	6	COAL C2/C3:									very broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1720											
			5	5		COAL C2/C3:										very broken
			20	20		COAL LOSS:										
		33.26	10	10		COAL C2:										very broken
	33.26		17	17		CLAYSTONE: carbonaceous, coaly fragments at bottom										bottom 2cm broken to pulverized
		33.62	19	19		ROCK LOSS:										
	33.62		4	4		COAL C3/C4:										very broken
		33.93	27	27		COAL LOSS:										
	33.93		15	15		CLAYSTONE: silty at top, carbonaceous at middle and bottom										very broken
		34.34	26	26		ROCK LOSS:										
	34.34		15	15		COAL C2/C3: abundant vitrinite stringers in middle										broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1721 ↓											
			24	24												
			23	23												somewhat broken
		35.59	63	63							117' / 35.7m					broken
	35.59	35.81	22	22												broken
	35.81	35.83	2	2												
6	35.83	37.38	155	154												somewhat broken
	37.38	37.67	29												broken	
	37.67	39.83	216							120' / 36.6m					broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 6								
11	3983	41.08	125			SANDSTONE:	fine grain, light to medium gray								solid
							abundant silty laminations, very								
							silty towards bottom								
	41.08	41.26	18			COAL LOSS:									
	41.26	41.44	18			CLAYSTONE:	silty; medium to dark gray brown								bottom very broken
	41.44		35			SILTSTONE:	medium gray, occasional claystone								top 22cm very broken
							particles in top 21cm, occasional								
							coaly particles								
		41.88	9			CLAYSTONE:	silty to very silty, medium gray								broken
	41.88	41.92	4			COAL C2/C3:									very broken
	41.92		11			ROCK LOSS:									
		42.08	5			CLAYSTONE:	silty								broken
	42.08	42.17	9			CLAYSTONE & COAL:	mixed								broken to pulverized

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	42.17	42.32	15			COAL LOSS:									
											138'/42.1m				
	42.32		32			CLAYSTONE: silty; medium gray brown; occasional coaly stringers									broken 10cm from top
			112			ROCK LOSS:									
							BOX 7								
		44.09	33			CLAYSTONE: as above									
											148'/45.1m				
	44.09	44.88	79			CLAYSTONE: silty; medium gray brown, very silty towards bottom									solid
20	44.88	45.21	33			SILTSTONE: light to medium gray									solid
	45.21	45.81	60			ROCK LOSS:									
	45.81		4			COAL C2:									broken
		45.92	7			COAL LOSS:									
	45.92		14			CLAYSTONE: silty; medium to dark gray brown									somewhat broken
											154'/46.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		46.44	38			CLAYSTONE:	silty to very silty, medium to dark								top 25cm broken
							gray brown, occasional carbonaceous								
							band in middle								
5	46.44		66			SANDSTONE:	fine grain, light to medium gray								solid
							abundant silty laminations, clay								
							rich at top								
							BOX 8								
9			17			SANDSTONE:	fine grain, light to medium gray								solid
							clayey at bottom								
										159'/48.5					
3		47.71	44			SANDSTONE:	as above								solid
	47.71		16			CLAYSTONE:	silty, medium gray brown								somewhat broken
9		48.12	25			SILTSTONE:	medium gray, sandy towards bottom								broken
10	48.12	48.95	83			SANDSTONE:	fine grain, light to medium gray								solid
							abundant silty laminations								
6	48.95	49.68	73			SILTSTONE:	medium to dark gray, occasional								bottom 20cm very
							claystone bands and sandstone bands								broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
							BOX 9									
	49.68	49.98	30			SANDSTONE:	fine grain, medium gray, abundant								solid	
							dark gray silty and claystone									
							laminations									
	49.98	50.16	18			COAL LOSS:										
										169' / 51.5m						
6	50.16	50.59	43			SILTSTONE:	medium gray, sandy laminations								somewhat broken in middle	
	50.59		5			CLAYSTONE:	carbonaceous, dark gray brown, coaly								broken	
							stringers									
		50.80	16	16		ROCK LOSS:										
	50.80	50.85	5	5		C4:	abundant coaly stringers								broken	
	50.85	50.99	14	14		CLAYSTONE:	carbonaceous, occasional coaly								top 9cm broken	
							stringers									
	50.99		63	63	1722 ↑	COAL LOSS:										
		51.69	7	7			COAL C2:									broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1722 ↓											
	51.69		17	17		ROCK LOSS:										
		51.88	2	2		CLAYSTONE: carbonaceous										broken
	51.88	51.94	6	6		COAL C2/C3:										broken
	51.94	52.20	26	26		ROCK LOSS:										
	52.20	52.62	42	42		COAL & CLAYSTONE: 70% coal 30% claystone										pulverized to powder
	52.62	53.29	67	67		COAL LOSS:										
												75' / 53.3m				
	53.29	53.51	22	22	SILTSTONE: medium gray, occasional sandy lenses and claystone bands										very broken	
	53.51	53.77	26	26	CLAYSTONE: silty, medium gray brown										solid	
	53.77	54.00	23	23	SILTSTONE: medium gray, clay rich, occasional sandy laminations										solid	
	54.00	54.45	45		SANDSTONE: fine grain, light to medium gray silty, calcite filled fractures bottom 15cm										bottom 15cm broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 10								
3	54.45	54.79	34			SANDSTONE:	fine grain, light gray, silty								broken
							laminations								
5	54.79	56.38	159			SILTSTONE:	light to medium gray, clayey in								broken
							middle, very sandy towards bottom								
										188' / 57.3m					
7	56.38		106			SANDSTONE:	fine grain, light to medium gray,								solid
							silty at top, occasional claystone								
							bands								
							BOX 11								
2		57.78	34			SANDSTONE:	as above								solid
	57.78	58.51	73			SILTSTONE:	medium gray, abundant sandy bands								solid
							at top								
	58.51		73			SANDSTONE:	fine grain, light gray, very silty								solid
							in middle								
										198' / 60.3m					
		59.51	27			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS				
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.					
9	59.51	60.06	55																
						SILTSTONE:	medium gray brown, clay rich at top												solid
							sandy in middle												
	60.06		17																
						SANDSTONE:	fine grain, abundant silty laminations												solid
							occasional claystone bands												
							BOX 12												
6		61.18	95																
						SANDSTONE:	as above, very silty at top												solid
	61.18		28																
						SILTSTONE:	medium gray, occasional claystone												solid
							and sandstone bands, minor soft												
							sediment deformation												
													208' / 63.4m						
5		61.73	27																
						SILTSTONE:	as above												
	61.73	61.81	8																
						SANDSTONE:	fine to medium gray, light gray												
							salt and pepper												
	61.81		38																
						CLAYSTONE:	silty to very silty, medium gray												somewhat broken
		62.31	12																
						CLAYSTONE:	very clayey, buff brown												pulverized

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
7	62.31		52			SILTSTONE:	medium gray, abundant claystone								solid
							bands throughout, minor sandy								
							lenses								
							BOX 13								
25		63.16	33			SILTSTONE:	medium to dark gray, claystone								broken
							bands near bottom, sandy lenses								
							at top								
	63.16	64.16	100			CLAYSTONE:	silty; medium to dark gray brown								core solid clay band pulverized
							a 3cm clay band 17cm from top								
18	64.16		88			SILTSTONE:	medium gray, occasional sandy lenses								solid
										218' / 66.4m					
			47	45		SILTSTONE:	as above								solid
							BOX 14								
		65.78	27	26		SILTSTONE:	as above								solid
	65.78	66.10	32	31		C4 & CLAYSTONE:	brown black to black, carbonaceous								broken
							stringers throughout								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					↑ 1723 ↓											
	66.10		13	13		COAL LOSS:										
		66.25	2	2		COAL C2:										
	66.25		4	4		C4 & CLAYSTONE:										broken
		66.37	8	8		ROCK LOSS:										
	66.37		17	17		COAL LOSS:										
		66.87	33	33		COAL C1/C2:										broken
10	66.87	67.27	40	39		SANDSTONE: fine grain, light gray, silty										broken
						laminations, medium grain towards										
						bottom.										
	67.27		67	66	ROCK LOSS:											
		69.19	125	123	CLAYSTONE: silty; occasional carbonaceous										broken	
					bands and coaly stringers, medium											
					to dark gray brown											
					BOX 15											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	69.19		2		1725 AND 1724	ROCK LOSS:	(C4)								
		69.24	3			C4:	a 1cm 'C1 band at bottom								broken
	69.24	69.46	22	22		CLAYSTONE:	silty; medium gray brown, carbonaceous claystone band at bottom								
	69.46		74	73		CORE LOSS:	(C3 with C4)								
		70.41	21	21		COAL C1/C2:	claystone stringers in middle								very broken
	70.41	70.51	10	10		COAL C3:	two large 1.5cm carbonaceous clay- stone bands in middle								
	70.51		15	15		COAL LOSS:									
		70.72	6	6		COAL C2:									
	70.72		8	8		COAL C3/C4:									
		70.83	3	3		CORE LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1725											
	70.83	70.87	4	4		C4: claystone stringers										
	70.87		3	3		COAL LOSS:										
			11	11		COAL C1/C2:										
			16	16		COAL LOSS: C3										
			3	3		COAL C3/C4:										
			2	2		COAL C1:										
			4	4		COAL C2/C3: occasional claystone stringers										
			38	37		COAL C1/C3: some C4 and claystone particles										broken to pulverized
		71.67	3	3		COAL C3: with claystone stringers										broken
	71.67	71.72	5	5		C4: vitrinite stringers										
	71.72		2	2		COAL C3: with C4 stringers										
			5	5		COAL C2/C3:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1725 ↓											
			4	4		COAL C1/C2:										
											238' / 72.5m					
			11	11		COAL C1/C2:										very broken
			6	6		COAL C1/C2:										pulverized
		72.03	3	3		COAL C3:	with C4 stringers									
10	72.03		62	61		CLAYSTONE:	dark gray brown to medium gray, carbonaceous at top, silty towards bottom									solid
						BOX 16										
		74.07	142	139	CLAYSTONE:	silty at top, somewhat carbonaceous in middle, silty towards bottom, medium gray to dark gray									broken	
12	74.07	74.44	37	36	SILTSTONE:	medium gray, occasional sandy laminations towards bottom										
13	74.44	74.88	44		SANDSTONE:	fine grain, light to medium gray abundant silty laminations, calcite filled fractures on bottom									solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	.	.	.		248' / 75.6m			
6	74.88	75.65	77			SILTSTONE:	medium to dark gray, clay rich in							broken	
						.	middle, carbonaceous band in middle								
											
						.	BOX 17	.	.						
											
4	75.65	77.21	156			SANDSTONE:	very fine grained, light to medium							solid	
						.	gray, abundant silty laminations								
						.	very silty towards bottom								
											
2	77.21	77.70	49			SILTSTONE:	medium to dark gray, claystone band							broken	
						.	in middle								
											
	77.70		16			CLAYSTONE:	silty; medium gray brown								
						.	.	.	.		258' / 78.6m			
		77.98	12			CLAYSTONE:	silty to very silty towards bottom							broken	
						.	dark to medium gray								
											
	77.98		43			SILTSTONE:	medium gray							solid	
											
						.	BOX 18	.	.						
											
9		79.19	78			SILTSTONE:	as above, clay rich at top, sandy							solid	
						.	towards bottom								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10	79.19	80.52	133												broken
						SANDSTONE:	fine to medium grain, light to								
							medium gray, abundant calcite filled								
							fractures								
										266' / 81.1m					
	80.52	80.93	41			SILTSTONE:	medium gray, clay rich towards								
							bottom								
	80.93	81.25	32			CLAYSTONE:	silty; medium gray, very silty								broken
							towards bottom								
							BOX 19								
2	81.25		258			SILTSTONE:	medium to dark gray, occasional								somewhat broken
							sandy bands, abundant claystone								
							bands.								
										276' / 84.1m					
			37			SILTSTONE:	as above								
							BOX 20								
		85.47	127			SILTSTONE:	as above, becoming clay rich								solid
	85.47		40			CLAYSTONE:	silty; medium to dark gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		86.12	25			CLAYSTONE OR CLAY:	poorly indurated,	powders						powder	
							easily,	buff reddish brown							
0	86.12		18			SILTSTONE:	light to medium gray,	occasional						broken	
							claystone bands	and stringers							
			82			SILTSTONE:	as above,	sandy towards bottom			283' / 86.3m			solid	
							large 6cm	claystone band at top							
							BOX 21								
		87.93	81			SILTSTONE:	as above,	very sandy at top						broken	
											288' / 87.3m				
	87.93	89.04	111			CLAYSTONE:	silty;	medium to dark gray brown						somewhat broken	
3	89.04		86			SANDSTONE:	very fine grain	to fine grain,							
							medium gray								
							BOX 22								
			60			SANDSTONE:	as above							broken	
											297' / 90.5m				
7			207			SANDSTONE:	as above							solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 23								
4			52			SANDSTONE:	as above								somewhat broken
		93.54	45			SANDSTONE:	fine to medium grain, light to medium gray, silty laminations, small coaly stringers at top								
										307' / 93.6m					
9	93.54		175			SANDSTONE:	medium to coarse grain, light gray salt and pepper; cross laminations shows tops up, occasional coaly stringers								solid
							BOX 24								
11			122			SANDSTONE:	as above, fine grained band in middle								solid
										317' / 96.5m					
15		97.26	75			SANDSTONE:	as above, calcite filled fractures near bottom								
17	97.26		70			SANDSTONE:	fine to medium grain, light gray silty laminations								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		99.50	154			SANDSTONE:	as above,	37cm of abundant calcite							37cm core broken 30cm from top
							filled fractures	37cm from top							
							coarser towards	bottom							
											327' / 99.7m				
17	99.50	100.29	79			SANDSTONE:	medium to coarse grain,	light to -							bottom 33cm broken with calcite along fractures
							medium gray,	occasional fine grained							
							bands,	occasional coaly stringers							
							and plant fragments								
13	100.29	101.21	92			SANDSTONE:	fine to medium grain,	light gray							solid
							salt and pepper,	cross laminations							
							shows tops up,	minor clay clasts							
							at bottom								
16	101.21		127			SANDSTONE:	fine grain to very fine grained,								solid
							light to medium gray,	dark gray							
							claystone bands	towards bottom							
4			67			SANDSTONE:	very fine grain,	medium gray							solid
							abundant silty bands,	occasional							

claystone bands

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
8		104.34	119			SANDSTONE:	as above, abundant claystone bands								solid
							towards bottom								
	104.34	105.52	118			SILTSTONE:	medium to dark gray, occasional								
							sandy bands								
											348'	106.1m			
11	105.52	34	33			SANDSTONE:	very fine grain to fine grain,								solid
							light to medium gray								
							BOX 28								
		106.75	89	87		SANDSTONE:	fine grain to very fine grain,								middle 23cm very broken
							light to medium gray, abundant								
							silty laminations, occasional								
							claystone bands; bottom 5cm								
							carbonaceous								
	106.75		82	81		COAL LOSS:									
		107.86	29	29		COAL C1/C2:									broken

← 1726 →

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1727											
	107.86		40	40		ROCK LOSS:										
		108.71	45	44		CLAYSTONE: silty and carbonaceous, very carbonaceous band at bottom										broken
	108.71	108.80	9	9		COAL C2/C3:										
	108.80	109.05	25	25		CLAYSTONE: dark gray										broken
	109.05		23	23		COAL C2:										
											360' / 109.7m					
							BOX 29									
			18	18		COAL C2: occasional C3 bands										broken
			11	11		COAL LOSS:										
		109.73	16	16	COAL C1/C2:										pulverized	
	109.73		41	40	CLAYSTONE: silty to very silty, dark gray to black brown, a few carbonaceous bands										broken	
			9	9	ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		110.88	65	64		SILTSTONE: medium to dark gray, clay rich at bottom, sandy at top								broken in middle	
	110.88	111.03	15	15			COAL C1/C2:								broken
	111.03	111.21	18	18	* 1728 →	CLAYSTONE: somewhat carbonaceous, occasional coaly stringers									
	111.21		16	16			COAL C1/C2:								broken
			4	4	1729	COAL LOSS:									
			4	4			COAL C2/C3:								broken
			53	53		COAL C1/C2: occasional c3 bands					368' / 112.2m			broken	
						BOX 30									
		112.56	58	58		COAL C1/C2:								solid	
	112.56		7	7		ROCK LOSS:									
		112.75	12	12		CLAYSTONE: carbonaceous to coaly, abundant C4 and vitrinite stringers								broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1729 ↓											
	112.75		4	4		COAL LOSS:										
		113.01	22	22		COAL C1/C2:										broken
											374' / 114m					
6	113.01	114.85	184	183		SANDSTONE:	fine to medium grain, light gray									
							salt and pepper, coarsening towards									
							bottom									
							BOX 31									
-	114.85		65	64		SANDSTONE:	medium grain, light gray, salt and									solid
							pepper									
										382' / 116.4m						
15			222	214		SANDSTONE:	as above									solid
							BOX 32									
6		120.20	248	247		SANDSTONE:	fine to medium grain, light gray									solid
							silty laminations									
										398' / 121.3m						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						HOLE STARTS AT 7.3m									
						BOX 1									
25	7.30	7.92	62			SANDSTONE: fine grained, light gray, silty lam- inations, clay band at bottom (crumbly)									top 25cm bottom 13cm broken-very broken
	7.92	8.54	62			ROCK LOSS:					26'/7.9m				
	8.54	8.60	6			CLAYSTONE: medium brown, poorly consolidated and crumbly									pulverized
15	8.60	8.97	37			SANDSTONE: fine grained, light gray, silty lam- inations, iron stain on fracture surfaces									broken-very broken core rounded from redrilling
	8.97		26			CONGLOMERATE: chert and quartz pebbles to cobbles, very poorly sorted									broken
			29			CONGLOMERATE: chert and quartz granule to pebble, moderately sorted					30'/9.1m				somewhat broken
											35'/10.7m				
		10.10	58			CONGLOMERATE: as above:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	10.10	11.10	100												
24	11.10		126												
		12.87	51								44'/13.4m				
	12.87	13.19	32												
	13.19	13.50	31												
	13.50	14.26	76												
	14.26	14.55	29												
	14.55	17.06	251												
	17.06	17.20	14								56'/17.1m				

CLAYSTONE: medium gray dark gray brown, minor
coaly fragments

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	17.20		81			ROCK LOSS:									
		18.57	56			SILTSTONE: light to medium gray, occasional sandy fragments and claystone fragments iron stain on fracture surfaces									very broken, core rounded from re- drilling
	18.57		26			SANDSTONE: fine grained, light gray, silty lam- inations, occasional claystone particles in top of box, iron stain									rounded and broken
13		19.65	82			SANDSTONE: as above:									very broken and rounded
	19.65		20			CLAYSTONE: somewhat carbonaceous, brown to black, abundant iron stain									very sheared and pulverized
		19.99	14			CLAYSTONE: as above:									sheared and pulver- ized
	19.99	20.25	26			ROCK LOSS:...									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	20.25		15			CLAYSTONE: carbonaceous, coaly in spots, occasional									broken-pulverized
						coaly fragments									
			66			ROCK LOSS:									
	21.06	21.12	6			SILTSTONE: light gray									very broken
	21.12	21.28	16			COAL LOSS:									
	21.28		2			ROCK LOSS:									
		21.41	11			CLAYSTONE: silty, medium gray brown									very broken
	21.41		60			COAL LOSS:									
			14			COAL C1/C3:									very broken- pulverized
		22.65	50			COAL LOSS:									
	22.65		13			CLAYSTONE: light medium gray, coaly bands at top and bottom									broken
			23			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		23.08	7			CLAYSTONE: silty, dark gray brown, occasional								broken	
						coaly stringers									
	23.08	23.26	18			COAL LOSS: (C3)									
	23.26		45			ROCK LOSS:					80'/24.4m				
		23.81	10			CLAYSTONE: as above								broken	
	23.81	24.00	19			COAL LOSS:									
	24.00	24.32	32			ROCK LOSS:									
							BOX 4								
	24.32	24.57	25			COAL LOSS:									
17	24.57		47			SANDSTONE: very fine grained, light-medium gray								broken	
						abundant silty laminations, iron									
						stain on fracture surfaces									
			5			ROCK LOSS:					86'/26.2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		25.29	20			SANDSTONE:	as above	.	.	.				broken	
	25.29	25.42	13			CLAYSTONE:	silty, medium gray brown, occasional	.	.	.				broken	
							stringers in top	.	.	.					
	25.42		6			COAL LOSS:	.	.	.	.	
		25.52	4			COAL C1/C2:	.	.	.	.				pulverized
	25.52	25.72	20			ROCK LOSS:	.	.	.	.	
22	25.72	26.67	95			SANDSTONE:	very fine grained, light medium gray	.	.	.				broken	
							very silty at top and bottom, iron stain	.	.	.					
	26.67		39			ROCK LOSS:	.	.	.	.	
		27.43	37			SILTSTONE:	medium-dark gray, clay rich towards	.	.	.				somewhat broken	
							bottom	.	.	.					
	27.43	27.60	17			ROCK LOSS:	(C4)	.	.	.					
	27.60		33			ROCK LOSS:	.	.	.	.	
		28.03	10			CLAYSTONE:	very dark gray brown, minor coaly	.	.	.				pulverized	
							particles	.	.	.					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	28.03	28.16	13			COAL LOSS:	.	.	.						
							.	.	.						
	28.16		16			CLAYSTONE:	medium gray brown, carbonaceous bands								broken
							towards bottom, coaly stringers at top								
							.	.	.						
							BOX 5	.	.						
							.	.	.						
			4			ROCK LOSS:	.	.	.						
							.	.	.						
			7			CLAYSTONE:	somewhat carbonaceous	.	.						broken-pulverized
							.	.	.						
							.	.	.	96'/29.3m					
		29.19	76			CLAYSTONE:	light-medium gray brown at top, dark								
							gray brown at bottom, carbonaceous								
							towards bottom	.	.						
							.	.	.						
	29.19		30			COAL AND CLAYSTONE MIX:	50/50	.	.						pulverized
							.	.	.						
		26.94	15			COAL LOSS:	.	.	.						
							.	.	.						
19	29.64		31			CLAYSTONE:	medium brown-black, carbonaceous bands								broken
							in top 25cm, coaly stringers in top 25cm								
							.	.	.						
			4			ROCK LOSS:	.	.	.						
							.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
13			66			CLAYSTONE:	silty,	carbonaceous	at top					broken	
		30.90	25			CLAYSTONE:	medium brown,	very friable	and crumbly					pulverized	
							carbonaceous	to coaly	particles in top 4cm						
	30.90	31.23	33			COAL AND ROCK LOSS:									
	31.23		41			ROCK LOSS:					106' / 32.3m				
							BOX 6								
13		31.97	33			CLAYSTONE:	carbonaceous	to very carbonaceous,						broken	
							coaly stringers	and C4 bands	towards						
							bottom								
	31.97		17			COAL C1/C2:	occasional	C3 stringers	near top						
		32.17	3			COAL C3:									
	32.17	32.19	2			C4:									
	32.19	32.39	20			CLAYSTONE:	carbonaceous	at top,	dark brown-					broken	
							medium gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	32.39	32.44	5		1801	C4	.	.	.	.					broken	
	32.44	32.50	6			CLAYSTONE: carbonaceous	.	.	.	.		
	32.50	32.56	6			COAL C2/C3:	.	.	.	.						very broken
	32.56		19	19		ROCK LOSS:	.	.	.	.		
10		33.02	27	27		CLAYSTONE: medium gray brown, carbonaceous towards bottom	.	.	.	.						broken
	33.02	33.07	5	5		C4: vitrinite stringers	.	.	.	.		
	33.07		7	7		COAL C3:	.	.	.	.		
		33.23	9	9		COAL C3: C4 stringers at top	.	.	.	.		
	33.23	33.26	3	3		C4:	.	.	.	.		
	33.26		7	7		ROCK LOSS:	.	.	.	.		
		33.40	7	7	CLAYSTONE: very carbonaceous with coal'y stringers	.	.	.	.			
	33.40	33.47	7	7	C4: abundant vitrinite	.	.	.	.						broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	33.47	33.50	3	3	1801 ↓	COAL LOSS:	.	.	.	.		
											
	33.50	33.63	13	13		C4:	.	.	.	.	.					broken
											
	33.63	33.65	2	2		COAL:	.	.	.	.	.					very broken
											
	33.65	33.71	6	6		CLAYSTONE:	very carbonaceous-coaly	.	.	.	.					broken
											
	33.71		4	4		COAL C3:	.	.	.	.	.
											
			10	10		COAL C2/C3:	.	.	.	.	.
		33.92	7	7		COAL C3:	C4 stringers	.	.	.	.	
											
	33.92	33.97	5	5		C4:	abundant vitrinite stringers	.	.	.	.	
											
	33.97	33.99	2	2		CLAYSTONE:	very carbonaceous	.	.	.	.	
											
	33.99	34.03	4	4	COAL C3:	.	.	.	.	.	
											
	34.03	34.06	3	3	CLAYSTONE:	carbonaceous	.	.	.	.		
											
	34.06		6	6	COAL LOSS:	.	.	.	.	.	
											
		34.15	3	3	COAL C2/C3:	.	.	.	.	.					broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
11	34.15		31	31	1802	SILTSTONE: medium-dark gray, occasional clay-								solid	
						stone bands									
						BOX 7									
			14	14		SILTSTONE: as above:								broken	
		35.06	46	45		SILTSTONE: as above					116' / 35.4m			solid	
	35.06		9	9		COAL LOSS:									
		35.16	1	1		COAL C3:								broken	
	35.16		7	7		ROCK LOSS:									
		35.42	19	19		CLAYSTONE: very carbonaceous-coaly								broken	
	35.42		15	15	COAL C2/C3:								very broken		
			6	6	COAL C2:								very broken		
			14	14	COAL C1/C2:								very broken-pul-		
													verized		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			9	9	1802	COAL C2/C3:	.	.	.					broken	
											
			7	7		COAL C2/C3:	.	.	.	.					broken
											
		36.04	11	11		COAL	.	.	.	.					pul veri zed
											
	36.04		12	12		ROCK LOSS:	.	.	.	.	
											
		36.21	5	5		CLAYSTONE: very carbonaceous to coaly	.	.	.	.					very broken
											
	36.21		4	4		COAL LOSS:	.	.	.	.	
											
			21	21		COAL C2/C3:	.	.	.	.					broken
											
			12	12		COAL C3:	.	.	.	.	
											
		36.67	9	9	COAL C1/C2:	.	.	.	.		
											
12	36.67	36.77	10	10	CLAYSTONE: very carbonaceous to coaly at top	.	.	.	.		
											
	36.77	36.83	6	6	SILTSTONE: medium to dark gray, occasional	.	.	.	.		
					carbonaceous bands	.	.	.	.		
											
	36.83	36.89	6	6	CLAYSTONE: very carbonaceous	.	.	.	.					broken	
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	36.89		5	5	1802 ↓	COAL LOSS:	.	.	.							
		37.01	7	7		COAL C2/C3:	.	.	.	.		
	37.01	37.16	15	15		CLAYSTONE AND C4:	.	.	.	.		
	37.16		5	5		COAL C3:	.	.	.	.		
			3	3		COAL C1/C2:	.	.	.	.		
			36	36		COAL C2:	occasional C3 stringers and vitrinite	.	.	.						broken
							bands	.	.	.						
								.	.	.						
								.	.	.						
			27	27		COAL LOSS:	.	.	.	.		
		38.21	34	34		COAL C1/C2:	C3 band near top	.	.	.						broken
	38.21	38.43	22	22	CLAYSTONE:	medium dark gray brown, carbonaceous at	.	.	.						broken	
						top, very silty at bottom, minor coaly	.	.	.							
						stringer in middle	.	.	.							
							.	.	.							
2	38.43	38.92	49	49	SILTSTONE:	medium gray, clay rich at top, sandy	.	.	.						solid	

towards bottom

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
3	38.92	39.52	60	60		SANDSTONE: fine grained to very fine grained, abundant silty laminations, light to medium gray								solid	
	39.52		67			SILTSTONE: medium gray brown, clay rich BOX 9								broken	
8	40.34		15			SILTSTONE: medium gray, clay rich								broken	
	40.34		30			CLAYSTONE: silty, medium gray brown, micro calcite filled fractures at top								broken	
											136' / 41.5m				
12	42.87		223			CLAYSTONE: silty to very silty in middle, car- bonaceous towards bottom, coaly stringers at bottom BOX 10								broken	
	42.87	43.03	16			COAL C1/C2								very broken-pul- verized	
	43.03		33			CLAYSTONE: dark brown black-dark brown, carbon- aceous at top, somewhat silty towards bottom								broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		43.69	33			ROCK LOSS:									
										146' / 44.5m					
	43.69	43.85	16			SILTSTONE: medium gray brown, clay rich at top									broken
						sandy towards bottom									
13	43.85	44.36	51			SANDSTONE: very fine grained to fine grained,									solid
						light to medium gray, abundant silty									
						and claystone laminations									
	44.36		10			CLAYSTONE: very carbonaceous									very broken
		44.82	36			CLAYSTONE: carbonaceous at top, silty at bottom									very broken
						dark brown to medium gray brown, coaly									
						stringers and bands at top									
	44.82	45.63	81			SILTSTONE: medium gray, clay rich at bottom									solid
	45.63	45.79	16			CLAYSTONE: carbonaceous, dark gray brown, occ-									broken
						asional coaly stringers									
	45.79	45.87	8			CLAYSTONE AND C4: carbonaceous, occasional coal									very broken
						bands									
	45.87		27			CLAYSTONE: silty, medium gray									broken

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5			60												broken
0		47.81	107												broken
	47.81		49												broken
7			85												broken
6			42												solid
7		50.80	123												solid
	50.80	52.13	73												solid

minor carbonaceous band in middle

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
9	51.53	52.13	60		1803	SANDSTONE: fine grained, light gray, medium and dark gray, abundant laminations								solid	
	52.13		9	9		CLAYSTONE: silty, medium gray brown								broken	
						BOX 13									
			66	65		CLAYSTONE: as above								solid	
7		53.52	64	64		CLAYSTONE: as above, very silty towards bottom					176' / 53.6m			solid	
	53.52		54	54		COAL LOSS:									
			2	2		COAL C3/C4:								very broken	
		54.15	7	7		COAL C2/C3:								very broken	
	54.15	54.32	17	17		CLAYSTONE: carbonaceous, very carbonaceous towards bottom								broken	
	54.32		60	60		COAL C1/C2: C3 bands in middle								broken	
		55.00	8	8	COAL LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	55.00	55.15	15	15	1803 ↓	CLAYSTONE:	carbonaceous,	silty in middle						broken	
	55.15		20	20		COAL LOSS:									
		55.55	20	20		COAL C2:	C1 band near top							bottom 7cm pulver-	
														ized	
	55.55		19	19		SILTSTONE:	medium gray,	carbonaceous at top						solid	
								BOX 14							
			22	22		SILTSTONE:	as above							solid	
											186' / 56.7m				
		56.22	26	25		SILTSTONE:	as above							solid	
13	56.22		78			SANDSTONE:	fine grained, light medium gray,								
						abundant silty laminations									
14			28		SANDSTONE:	medium grained to coarse grained,							solid		
						occasional coaly stringers in bottom									
						salt and pepper									
11			120		SANDSTONE:	fine grained, light gray, silty							solid :		
						laminations throughout									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 15									
6			42			SANDSTONE: as above, medium gray								solid	
		59.36	46			SANDSTONE: as above, coarsening towards bottom					196'	59.7m			
15	59.36	60.72	136			SANDSTONE: medium grained, light to medium gray occasional fine grained and coarse grained bands, minor pebbly bands towards bottom, minor plant fragments towards bottom									
	60.72	60.83	11			CONGLOMERATE: chert and quartz pebbles, moderately sorted sub-angular to sub-rounded clasts, channel log deposit								solid	
4	60.83		60			SANDSTONE: fine grained to medium grained, light to medium gray, coarsening towards bottom 3cm, pebbly band near top									
						BOX 16									
3		61.93	50			SANDSTONE: fine to medium grained, as above, occasional 1cm pebbly bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											206'/62	8m			
9	61.93	63.51	158			SANDSTONE: medium grained, abundant pebbly and granule bands throughout top 123cm									
10	63.51	64.31	80			SILTSTONE: medium gray, a few sandstone bands in top 30cm, clayey towards bottom									solid
						BOX 17									
7	64.31		66			SANDSTONE: fine grained, medium gray, silty laminations, a 7cm medium grained sandstone band in middle									
			90			SANDSTONE: as above					216'/65	8m			
13			66			SANDSTONE: medium grained, light gray									
16		67.05	52			SANDSTONE: fine grained, medium gray, abundant silty laminations									
	67.05		9			CLAYSTONE: silty, medium gray brown									
						BOX 18									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		67.35	21			CLAYSTONE: as above, very silty towards bottom								solid	
11	67.35		70			SANDSTONE: fine grained, medium gray; abundant silty laminations throughout									
7		69.24	119			SANDSTONE: as above, a 20cm claystone band in middle					226'/68.9m				
	69.24	69.95	71			SILTSTONE: medium gray, clay rich band at top									
						BOX 19									
	69.95	70.58	63			CLAYSTONE: silty at top, carbonaceous in middle minor coaly stringers in middle								somewhat broken	
5	70.58		45	45		SILTSTONE: medium gray, occasional dark gray bands								top 12cm very broken	
2		71.42	39	39		SILTSTONE: as above					236'/71.9m			broken	
	71.42		10	10		ROCK LOSS									
		71.54	2	2		CLAYSTONE: carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	71.54		5	5	1804 ↑ ↓	COAL LOSS:									
		71.75	16	16		COAL C2/C3: occasional C4 stringers near bottom									very broken
	71.75	71.90	15	15		C4: claystone stringers occasional vitrinite stringers									
	71.90		5	5		COAL LOSS:									
		72.48	53	53		COAL C1/C2: occasional C3 stringers and bands									pulverized to broken
			3	3		CLAYSTONE: carbonaceous									
3			42	42		SANDSTONE: fine grained, light gray, abundant silty laminations, clay rich towards bottom									solid
						BOX 20									
			8	8		CLAYSTONE: very carbonaceous to coaly, a few coaly fragments									pulverized
			60			CLAYSTONE: medium gray brown to dark gray brown, occasional carbonaceous to coaly bands									broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			11			C4: coaly stringers									
		74.00	28			CLAYSTONE: carbonaceous to coaly towards bottom, medium brown to black brown									
	74.00		7			CLAYSTONE: medium brown, somewhat silty									broken
			11			ROCK LOSS:									
										246'/75.0m					
			17			CLAYSTONE: medium gray brown, silty									broken
			10			ROCK LOSS:									
			4			CLAYSTONE: very carbonaceous to coaly									broken
10			25	25		CLAYSTONE: medium gray brown, somewhat silty									
			3	3		CLAYSTONE: very carbonaceous, minor coaly frag- ments in bottom of box									very broken
	74.77	74.88	11	11		COAL LOSS:									
	74.88	75.08	20	20		CLAYSTONE: silty at top, carbonaceous towards bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	75.08		9	9	↑ 1805	COAL LOSS:	.	.	.	.	
			11	11		COAL C2/C3:	.	.	.	.					very broken
			5	5		COAL C3/C4:	.	.	.	.					very broken
			11	11		COAL C2/C3: occasional vitrinite stringers	.	.	.	.					broken
7			7	7		C4: claystone stringers near top	.	.	.	.	
			6	6		COAL C3:	.	.	.	.					broken
			9	9		COAL C3: with C4 bands	.	.	.	.	
			9	9		COAL C3:	.	.	.	.	
			16	16		COAL C1/C2:	.	.	.	.	
						BOX 21	.	.	.	.	
	75.94		3	3		COAL C1/C2:	.	.	.	.	
	75.94		3	3		C4:	.	.	.	.	
	76.04		7	7		ROCK LOSS:	.	.	.	.	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			14	14	1805	COAL C1/C2:									very broken	
			19	19		COAL C2/C4: C4 band at bottom										very broken
			4	4		COAL C3:										
	76.47		6	6		COAL C2:										
	76.47	76.53	6	6		C4:										
	76.53		5	5		COAL C1:										
			20	20		COAL C2/C3: minor C4 stringers										
			9	9		COAL C3:										
	76.97		10	10		COAL C2:										
	76.97		5	5		ROCK LOSS:										
	77.04		2	2		CLAYSTONE: carbonaceous										
			7	7		COAL LOSS:										
			19	19		COAL C3: C4 stringers										very broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1805 ↓						256' / 78.0m					
			7	7		COAL C1:										
12			10	10		COAL C2/C3: minor claystone stringers										
			32	31		COAL C2: C3 bands in middle										
		77.88	9	9		COAL C1:										
	77.88	77.97	9	9		CLAYSTONE: silty, occasional carbonaceous stringers										broken
11	77.97	78.22	25	25		SILTSTONE: medium gray										
		78.22	37	36		CLAYSTONE: silty at top, carbonaceous at bottom										
						BOX 22										
			18			CLAYSTONE: carbonaceous, vitrinite band at bottom										broken
17		78.97	20		CLAYSTONE: medium gray brown, silty											
	78.97	79.04	7		COAL C3: C4 fragments										very broken	
	79.04		5		ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			41			CLAYSTONE:	carbonaceous at top with coaly stringers								broken
							· silty towards bottom, a 2cm C1 band								
							· 22cm from top								
7		79.86	36			SILTSTONE:	medium gray brown, clay rich								
							·								
	79.86	80.22	36			CLAYSTONE:	carbonaceous at top, silty at bottom,								
							· a 3cm C1 band 12cm from bottom								
							·								
							·				266' / 81.1m				
	80.22	80.81	59			CLAYSTONE:	carbonaceous at top and bottom, silty								broken
							· in middle, a 3cm and a 2cm C1 band,								
							· 40 and 50cm from top respectively								
							· (rootlet?)								
							·								
5	80.81		60			SILTSTONE:	medium gray to dark gray, sandy lam-								
							· inations at top, clay band at bottom								
							·								
							· BOX 23								
							·								
		81.69	28			SILTSTONE:	as above, clay band in middle								
							·								
6	81.69	81.85	16			CLAYSTONE:	medium to dark brown, silty carbon-								
							· aceus								
							·								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
9	81.85	82.29	44			SILTSTONE: medium to dark gray, occasional sandy laminations, carbonaceous - claystone band in middle, clay rich towards bottom								broken	
	82.29	82.44	15			CLAYSTONE: carbonaceous at top and middle, silty towards bottom, 2cm coal band in middle									
9	82.44	83.26	82			SANDSTONE: fine grained, light to medium gray, abundant silty laminations, occasional claystone laminations								solid	
											276'/84.1m				
1	83.26	84.28	102			SILTSTONE: medium gray, sandy at top, clay rich towards bottom								solid broken at bottom	
						BOX 24									
1	84.28	85.00	72			SANDSTONE: very fine grained, medium gray, abundant silty laminations								solid	
6	85.00	85.54	54			SILTSTONE: medium gray, claystone band in middle									
	85.54		74			SANDSTONE: very fine grained, light gray, occasional small claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10		87.14	86			SANDSTONE: as above, a claystone band 29cm from top, minor bio-turbated					286'/87.2m				
						BOX 25									
10	87.14		178			SANDSTONE: fine grained to very fine grained, light to medium gray, silty in middle									solid, broken in middle
12			49			SANDSTONE: fine grained, abundant silty laminations cross laminations shows tops up									solid
			65			SANDSTONE: as above					296'/90.2m				
						BOX 26									
		90.27	21			SANDSTONE: as above, cross laminations shows tops up									broken
	90.27	90.46	19			CLAYSTONE: silty, medium gray brown									
	90.46	91.21	75			SILTSTONE: medium gray, clay rich at top, sandy in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	91.21	91.65	44			CLAYSTONE:	silty,	medium dark gray brown						broken	
4	91.65		80			SANDSTONE:	fine to medium grained,	light gray,						solid	
							minor claystone rip-up,	clast at top							
											306'/93.3m				
			44			SANDSTONE:	as above							solid	
								BOX 27							
7			262			SANDSTONE:	fine grained,	light to medium gray						solid bottom	
							abundant silty and claystone lami nati ons							broken	
							and bands, cross lami nati ons shows tops								
							up								
											316'/96.3m				
		95.78	27			SANDSTONE:	as above							broken	
								BOX 28							
11	95.78		287			SANDSTONE:	as above,	very silty towards bottom						solid	
											326'/99.4m				
		98.84	19			SANDSTONE:	as above							broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 29									
9	98.84	100.48	164	162		SILTSTONE: medium to dark gray, abundant silty lenses and laminations									solid
	100.48	100.77	29	29		SANDSTONE: fine grained, light to medium gray abundant silty laminations, cross laminations shows tops up									solid
	100.77	101.24	47	46		SILTSTONE: medium to dark gray, clay rich towards bottom									solid
	101.24		51	50	↑ 1806	COAL LOSS:									
			38	38		COAL C1/C2:									broken-pulverized
											336' / 102.2m				
					↓ 1807	BOX 30									
		102.22	9	9		COAL C1/C2:									very broken
	102.22		18	18		ROCK LOSS									
		103.17	77	76		CLAYSTONE: carbonaceous, C4 and coaly claystone in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	103.17		40	40	18081	COAL LOSS:	.	.	.						
		103.95	38	38		COAL C2/C3: occasional C1 bands towards bottom	.	.	.	.					broken at top
	103.95	104.05	10	10	6081	CLAYSTONE: very carbonaceous to coal y, abundant	.	.	.					very broken	
						vitri nite stringers	.	.	.	.	
8	104.05	104.44	39	39	18081	SANDSTONE: fine grained, light to medium gray,	.	.	.					solid	
						abundant silty lamina tions	.	.	.	.	
8	104.44		33	33	18081	CLAYSTONE: carbonaceous at top, silty at bottom	.	.	.					broken	
						dark brown to medium gray brown	.	.	.	.	
		104.89	12	12	1810	CLAYSTONE: as above	.	.	.					broken	
										
	104.89	104.92	3	3	1810	C4	.	.	.						
						COAL LOSS:	.	.	.	.	
		105.04	7	7	1810	COAL C1/C2:	.	.	.						
										
	105.04		1	1	1810	ROCK LOSS:	.	.	.						
										
		105.19	14	14	1810	CLAYSTONE: carbonaceous	.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	105.19		5	5	↑ 181	COAL C1/C2:	.	.	.	.				*
										
						BOX 31	.	.	.	.	
			11	11		COAL C2:	.	.	.	.					broken to very broken
										
			19	18		COAL C1:	.	.	.	.	
										
			7	7		COAL C2/C3:	.	.	.	.	
										
			23	22		COAL C1/C2:	.	.	.	.	
										
			9	9		COAL C2/C3:	.	.	.	.	
										
			9	9		COAL LOSS:	.	.	.	.	
										
17			29	28		COAL C1:	.	.	.	.					broken to very broken
										
			6	6	COAL C2:	.	.	.	.		
										
			25	24	COAL C1:	.	.	.	.		
										
	106.64		2	2	COAL C3:	.	.	.	.		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	106.64		14	14	1181 ↓	ROCK LOSS:									
		106.87	9	9		C4: with claystone stringers									
	106.87		9	9		COAL LOSS:									
		107.21	25	25		COAL C1/C2:									
9	107.21		66	65		SANDSTONE: medium grained, medium gray, salt and pepper								solid	
		108.48	61	60		SANDSTONE: as above									
						BOX 32									
22	108.48		235			SANDSTONE: fine to medium grained, light to medium gray, occasional silty laminations, abundant shearing in middle with calcite along fracture surfaces								top 185cm broken very broken rest solid	
			31		SANDSTONE: as above										
					BOX 33										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
12			275			SANDSTONE: as above									solid
										376'/114.6m					
13	114.01		12			SANDSTONE: as above									
							BOX 34								
12	114.01		283			SANDSTONE: fine grained, light to medium gray, occasional claystone stringers									solid
							BOX 35								
			6			SANDSTONE: as above									
9			281			SANDSTONE: as above									solid
							BOX 36								
			22			SANDSTONE: as above									broken
		122.57	264			SANDSTONE: as above, minor calcite filled fractures at bottom									solid top broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
8			223			SANDSTONE:	as above,	a few large	claystone	bands					somewhat broken
								in middle	and bottom,	abundant smaller					
								claystone	bands	throughout					
								BOX 40							
		132.03	77			SANDSTONE:	as above								broken
											436' / 132.9m				
7	132.03	132.84	81			SANDSTONE:	as above								broken
	132.84		132			SANDSTONE, SILTSTONE, AND CLAYSTONE:	interbedded								
								bedding	approximately						
								1-7cm							
								BOX 41							
		136.90	274			SANDSTONE, SILTSTONE AND CLAYSTONE:	as above occ-								
								asional	fracturing						somewhat broken
								BOX 42							
	136.90		123			SANDSTONE:	fine grained,	light to	medium gray						broken towards
								abundant	silty lami	nations; occasi					onal
								claystone	bands						bottom

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
7		139.59	146			SANDSTONE:					456'/139.0m				broken
	139.59	139.77	18			SILTSTONE:									broken
10	139.77	140.46	69			SANDSTONE:									solid
12	140.46		78			CLAYSTONE:									broken
13		141.62	38			CLAYSTONE:					466'/142.0m				broken
	141.62	141.89	27			CLAYSTONE:									powdered
	141.89	142.40	51			CONGLOMERATE:									solid
	142.40		12			SNADSTONE:									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 44								
12			170			SANDSTONE:	fine to medium grain, medium gray								solid
							· silty laminations								
										476' / 145.1m					
		144.99	77			SANDSTONE:	as above, a 3cm pebbled band 15cm								solid
							· from bottom								
	144.99		39			CLAYSTONE:	silty to very silty, medium to dark								solid
							· gray								
							BOX 45								
		145.78	40			CLAYSTONE:	as above, minor carbonaceous band								solid
							· in middle								
4	145.78	145.98	20			SANDSTONE:	fine grained, medium gray, silty								broken
							· laminations								
		145.98	8			CLAYSTONE:	somewhat carbonaceous, dark brown to								broken
							· black								
		146.16	10			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	146.16	146.50	34			SILTSTONE: medium gray, occasional claystone bands									
	146.50	146.55	5			ROCK LOSS:									
	146.55	146.60	5			COAL C2/C3:									broken
	146.60	147.32	72			SILTSTONE: medium gray, sandy laminations towards bottom									solid
3	147.32		101			SANDSTONE: fine grained to very fine grained light to medium gray, abundant silty laminations					486' / 148.1m				solid
						BOX 46									
			204			SANDSTONE: as above, occasional claystone bands calcite filled micro fractures 72cm from top and 23cm from bottom									broken in middle
											496' / 151.2m				
			79			SANDSTONE: as above									
						BOX 47									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
28		153.26	210			SANDSTONE:	as above,	abundant calcite filled							somewhat broken
							fractures								
											506'/154.2m				
	153.26		54			SILTSTONE:	medium to dark gray,	sandy at top							broken
							and middle,	abundant calcite filled							
							micro fractures								
							BOX 48								
		153.89	9			SILTSTONE:	as above								broken
	153.89		4			COAL LOSS:									
			5			COAL C3:									
		154.10	12			COAL C1/C2:									
	154.10		220			SANDSTONE:	fine grained to medium grained,								somewhat broken
							light to medium gray,	salt and							
							pepper,	somewhat carbonaceous at							
							top,	occasional calcite filled							
							fractures								
											516'/157.3m				
			30			SANDSTONE:	as above								broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	ft.	
14			274			SANDSTONE: as above									
										526' / 160.3m					
			12			SANDSTONE: as above									
9		161.22	176			SANDSTONE: as above									somewhat broken
5	161.22		118			SANDSTONE: fine grained, light gray, occasional silty laminations, cross laminations shows tops up									solid
10			285			SANDSTONE: as above									solid
			27			SANDSTONE: as above									solid
										546' / 166.4m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other. Sed. Charact.			bd.	jt.	
9			250			SANDSTONE: as above									
								BOX 53							
		168.58	56			SANDSTONE: as above									
										556' / 169.5m					
8	168.58		232			SANDSTONE: as above									solid
								BOX 54							
			73			SANDSTONE: as above									
										566' / 172.5m					
			161			SANDSTONE: as above, becoming more silty towards									
						bottom									
9		173.77	53			SANDSTONE: fine grained, light gray, abundant									
						silty laminations, minor clay bands									
	173.77	173.89	12			SANDSTONE, SILTSTONE, CLAYSTONE, INTERBEDDED:									
								BOX 55							
10	173.89	174.04	15			SANDSTONE: fine grained, light gray, claystone									broken
						bands at top									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS			
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.				
	174.04	174.23	19															
						SILTSTONE: medium to dark gray, abundant claystone bands, minor sandstone lenses												solid
16	174.23		49			SANDSTONE: fine grained, medium gray, siltstone laminations, occasional claystone lenses												
		175.03	31			SANDSTONE: as above					576' / 175.6m							
	175.03	175.57	54			SILTSTONE: medium to dark gray, claystone bands and sandy bands												
14	175.57	176.37	80			SANDSTONE: fine grained, light to medium gray abundant silty laminations, minor claystone bands												
						BOX 56												
14	176.37		106			SANDSTONE: fine grained, light gray, silty laminations, abundant claystone bands at top and bottom cross laminations shows tops up												solid
											586' / 178.8m							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
6	179.47	204				SANDSTONE: as above, abundant claystone and siltstone bands towards bottom									
						BOX 57									
10	179.47	182.40	293			SANDSTONE, CLAYSTONE, SILTSTONE, INTERBEDDED: bedding approximately 2-7cm									broken
						BOX 58									
	182.40	183.74	134			SANDSTONE, SILTSTONE, CLAYSTONE: as above									
										606' / 184.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	0	15.40													
11	15.40	17.20	180			SILTSTONE: medium gray, light gray, sandy bands and lenses, very sandy towards bottom some dark gray claystone bands, cross laminations shows tops up									broken
										56'/17.1m					
13	17.20		125			SANDSTONE: very fine grain to fine grain, abundant silty laminations, abundant claystone bands light and dark gray									
16		19.74	129			SANDSTONE: as above									
	19.74	21.00	126			SILTSTONE: medium to dark gray, abundant sand- stone and claystone bands, cross laminations shows tops up									broken
10	21.00	21.44	44			SANDSTONE: fine grained, light to medium gray abundant silty laminations and claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	21.44	21.80	36			SILTSTONE: medium gray, sandy towards bottom									
11	21.80	22.86	106			SANDSTONE: fine grain, abundant silty bands, and claystone bands, occasional medium to coarse grain sandstone bands. Iron stains on fractured surfaces									
	22.86	22.96	10			CONGLOMERATE: quartz and chert pebbles, well sorted								broken	
	22.96		24			CLAYSTONE: very carbonaceous to coaly in middle silty at top and bottom, dark brown to black. Iron stain on fragments								very broken	
			16			ROCK LOSS:					76' / 23.2m				
		23.41	5			CLAYSTONE: carbonaceous, dark brown								broken	
	23.41		6			COAL LOSS:									
		23.55	8			COAL C2/C3:									
	23.55		14			CLAYSTONE: carbonaceous, dark brown to black									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			45													
						CLAYSTONE:	silty to sandy,	medium brown								
							BOX 4									
		24.72	58			CLAYSTONE:	silty, medium to dark brown,	occasional								broken
							sandy bands in middle.	Iron stain								
							on fractured surfaces									
	24.72		5			COAL LOSS:										
		24.83	6			COAL:	claystone particles									pulverized
11	24.83	25.17	34			SANDSTONE:	fine grain, medium gray to brown									broken
							very silty at top, occasional									
							carbonaceous stringers									
9	25.17		108			SANDSTONE:	medium gray to coarse grain, abundant									somewhat broken
							silty laminations, cross laminations									
							shows tops up, occasional coaly									
							stringers at top									
											86' / 26.2m					
			53			SANDSTONE:	medium grain to coarse grain, light									solid
							gray salt and pepper, silty									
							laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 5								
13			234			SANDSTONE:	as above, cross laminations shows								
							tops up, occasional iron stain								
										96' / 29.2m					
			51			SANDSTONE:	as above								
							BOX 6								
15			258			SANDSTONE:	as above, cross laminations shows								
							tops up								
										106' / 32.3m					
		32.49	28			SANDSTONE:	as above								
							BOX 7								
7	32.49	33.26	77			SANDSTONE:	as above								solid
	33.26	33.38	12			CLAYSTONE:	medium brown								pulverized
	33.38	33.44	6			COAL C3:	C4 bands, occasional pyrite								broken
	33.44	33.60	16			CLAYSTONE:	carbonaceous, dark brown to black								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	33.60	33.64	4			COAL C2/C3:									
	33.64	33.80	16			SILTSTONE: clay rich at top; sandy towards									
						bottom; medium to dark gray									
19	33.80	34.20	40			SANDSTONE: very fine grain to fine grain, light									
						to medium gray, clay rich towards									
						bottom									
	34.20		38			CLAYSTONE: silty at top, carbonaceous towards									
						bottom; occasional coaly stringers									
										116' / 35.3m					
20			14			CLAYSTONE: carbonaceous, occasional silty bands								broken	
		34.92	20			CLAYSTONE: medium brown, silty towards bottom									
	34.92	35.13	21			SILTSTONE: medium gray, minor sandy bands near									
						bottom									
							BOX 8								
10	35.13	35.47	34			SANDSTONE: very fine grain, light to medium									
						gray, clay rich towards bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	35.47	36.07	60		1730 →	CLAYSTONE:	medium brown,	silty						very broken	
	36.07	36.47	40			SILTSTONE:	medium gray,	clay rich at top,	some-						broken
								what sandy towards bottom							
12	36.47	37.32	85			SANDSTONE:	very fine grain to fine grain,								broken
								abundant silty laminations and							
								claystone bands							
	37.32		18			SILTSTONE:	medium to dark gray								
											126' / 28.4m				
		37.82	32			SILTSTONE:	as above,	clay rich towards bottom							
								BOX 9							
	37.82	38.57	75	72		SANDSTONE/CLAYSTONE:	silty concretions, minor								broken
								carbonaceous material							
	38.57		11	11	ROCK LOSS:										
		38.84	16	15	CLAYSTONE:										
	38.84		2	2	COAL LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1730 ↓											
		39.35	49	47		COAL C1: general dull bands indistinct, some siltstone at base, pyrite at base										pulverized
			24	23		SILTSTONE: sandy dark gray, carbonaceous										broken
			52	50		SANDSTONE: fine to medium grain, carbonaceous fragments and bands, minor claystone siltstone interbeds, some visible pyrite										
		40.52	41			SANDSTONE: as above (Hardy sample #1)										
											136' / 41.4m					
	40.52	40.61	9			SANDSTONE: as above										
						BOX 10										
	40.61	40.93	32			CLAYSTONE: carbonaceous at top, silty towards bottom; dark brown to medium brown										broken
18	40.93	41.62	69			SANDSTONE: fine grain, light to medium gray abundant silty laminations and clay- stone bands, occasional coaly stringers										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
26	41.62	43.49	187													
						SILTSTONE:	medium to dark gray, occasional									
							sandy bands at top, abundant clay-									
							stone bands throughout, occasional									
							coaly stringers									
							BOX 11									
	43.49		9			SANDSTONE:	fine grain to medium grain, medium									broken
							gray									
										146' / 44.5m						
15		46.09	251			SANDSTONE:	fine grain, medium gray, abundant									solid
							light gray, medium grained sand-									
							stone lenses at top, silty at									
							bottom									
	46.09		19			CLAYSTONE:	very carbonaceous to coaly, coaly									broken
							fragments at bottom of box									
							BOX 12									
			10			CLAYSTONE:	carbonaceous, medium to dark gray									
							brown									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
8		46.59	21			CLAYSTONE:	silty	medium brown							
										156'	47.5m				
	46.59	46.86	27			CLAYSTONE:	silty;	medium to dark brown							broken in middle
								carbonaceous band in middle, iron							
								stain on fractured surfaces							
15	46.86		215			SANDSTONE:	fine grain,	light to medium gray							broken
								abundant fracturing iron stain							
								BOX 13							
			62			SANDSTONE:	as above,	occasional claystone							
								bands in middle							
										166'	50.5m				
21			47			SANDSTONE:	as above,	claystone band at top							top 25cm very broken
26		50.37	27			SILTSTONE:	medium gray,	sandy lenses at top							
	50.37	51.70	133			CLAYSTONE:	silty;	medium to dark brown,							
								occasional carbonaceous bands							
								BOX 14							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	51.70		111			CALYSTONE:	dark gray,	silty bedding	indistinct						broken
							minor pyrite								
										176' / 53.6m					
			48			CLAYSTONE:	as above	*Hardy Sample #7							
			20			CLAYSTONE:	as above	*Hardy Sample #3							
			15			CLAYSTONE:	very carbonaceous	to coal,	coal						
							bands up to 2cm	at top,	visible						
							pyrite	*Hardy Sample #3							
	54.68		104			CLAYSTONE:	as above,	some sand	at top						
							BOX 15								
	54.68	54.91	23			CLAYSTONE:	carbonaceous	to very carbonaceous							very broken
							towards bottom,	dark brown	to						
							black								
	54.91		2			COAL LOSS:									
		55.13	20			COAL C1/C2:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	55.13		10			ROCK LOSS:									
		55.51	28			CLAYSTONE: medium grain, brown to black, carbonaceous at bottom, occasional coaly stringers at bottom									
20	55.51	55.83	32			COAL C1/C2:									
	55.83		7			CLAYSTONE: carbonaceous, dark gray, brown to black					186' / 56.5m				
		57.30	140			CLAYSTONE: carbonaceous, silty in middle, coal fragments at 11cm at 72cm and at bottom					190' / 57.9m				
	57.30		23			CLAYSTONE: as above, coaly at top									
						BOX 16									
		57.73	20			CLAYSTONE: silty, medium gray brown									broken
	57.73	59.07	134			SILTSTONE: light to medium gray, occasional sandy bands									
											196' / 59.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16	59.07	60.61	154												some what broken
	60.61		190												solid
			46												
		63.82	85												
21	63.82		190												solid
			106												
10			199												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
17			89			SANDSTONE:	as above								
							BOX 20								
			66			SANDSTONE:	as above								
10		71.85	153			SANDSTONE:	medium grain to coarse grain, light								
							gray, salt and pepper, cross								
							laminations shows tops up								
										236' / 71.9m					
	71.85		61			SANDSTONE:	as above								solid
							BOX 21								
17			203			SANDSTONE:	as above								
			40			SANDSTONE:	fine to medium grain, light gray								
							salt and pepper; occasional silty								
							laminations								
										246' / 74.9m					
30			46			SANDSTONE:	as above								
							BOX 22								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
33			261			SANDSTONE:	as above								
										256' / 78m					
		78.31	35			SANDSTONE:	as above								
							BOX 23								
18	78.31		114			SANDSTONE:	as above								solid
15			157			SANDSTONE:	medium to coarse grain, light gray								
							salt and pepper; silty laminations								
							a quartz and chert pebble granular								
							band (approximately 10cm thick)								
							66cm from top								
										266' / 81.1m					
			23			SANDSTONE:	medium grain, light gray, salt and								
							pepper; occasional silty laminations								
							BOX 24								
14			283			SANDSTONE:	as above								
										276' / 84.1m					
		84.18	10			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
22	84.18		286												
						SANDSTONE:	medium to coarse grain,	light gray							solid
							salt and pepper;	occasional							
							carbonaceous bands								
										286' / 87.2m					
		87.91	87												
						SANDSTONE:	as above, abundant	coaly stringers							
							plant fragments	and rootlets in							
							bottom 53cm								
	87.91	88.06	15												
						CONGLOMERATE:	chert and quartz	pebbles,							
							approximately 0.5 - 1cm,	channel							
							lag deposit								
14	88.06	90.01	195			SANDSTONE, SILTSTONE:	fine grained,	interbedded							
							beds approximately 1 - 5cm								
	90.01		20			SANDSTONE, SILTSTONE:	as above, medium to dark								solid
							gray, interbedded	sandstone, silt-							
							stone, distinct	bands. Babcock member							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			165								296' / 90.2m				
						SANDSTONE, SILTSTONE:	as above								
			48			SANDSTONE, SILTSTONE:	as above	*Hardy Sample #5							
		93.04	70			SANDSTONE, SILTSTONE:	as above, very silty to								
							base								
								BOX 28							
15	93.04		30			SANDSTONE, SILTSTONE:	interbedded, claystone								solid
							bands throughout, medium to dark								
							gray								
											306' / 93.2m				
		94.44	110			SANDSTONE, SILTSTONE:	as above	*Sample							
17	94.44		139			SANDSTONE:	fine grain, light gray, abundant								
							silty laminations, occasional								
							claystone particles, cross laminations								
							shows tops up								
								BOX 29							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
15	96.39	96.39	56												
						SANDSTONE:	as above								
										316' /96.	3m				
	96.39	97.18	79			SANDSTONE:	as above								
11	97.18	98.74	156			SANDSTONE, SILTSTONE:	interbedded, interbeds								somewhat broken
							approximately 1-10cm, occasional								
							claystone bands, very silty towards								
							bottom								
							BOX 30								
	98.74	99.44	70			SILTSTONE:	medium gray								solid
										326' /99.	4m				
19	99.44	101.41	197			SANDSTONE:	fine grain, light gray, abundant								somewhat broken
							silty laminations, occasional								
							claystone bands, minor calcite								
							filled fractures								
							BOX 31								
13	101.41	102.41	100			SANDSTONE, SILTSTONE, CLAYSTONE:	interbedded								broken
							interbeds approximately 3-15cm,								
							mostly sandstone								
										336' /102.	4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
9	102.41		189			SANDSTONE:	fine grain, light gray, abundant								broken
							· silty laminations and claystone								
							· bands ·								
							· · ·								
							· BOX 32 ·								
			127			SANDSTONE:	as above, abundant calystone bands								
							· · ·			346' / 105.4m					
11		106.37	80			SANDSTONE:	fine grain, as above, claystone								
							· bands in middle ·								
							· · ·								
	106.37	106.80	43			SILTSTONE:	dark gray, abundant claystone bands								
							· minor sandstone bands, iron on								
							· fractured surfaces ·								
							· · ·								
	106.80		45			SANDSTONE:	fine grain, light gray, occasional								
							· silty laminations at top ·								
							· · ·								
		108.47	122			ROCK LOSS:	· · ·								
							· · ·								
							· BOX 33 ·								
							· · ·								
							· · ·			356' / 108.5m					
							· · ·								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	108.47	108.60	13			SILTSTONE:	medium to dark gray, sandy	bands at							broken
							bottom								
13	108.60	109.17	57			SANDSTONE:	fine grain, light gray, silty								
							laminations and claystone bands								
6	109.17	109.53	36			SILTSTONE:	medium to dark gray, occasional								
							sandy lenses and claystone bands								
9	109.53	110.10	57			SANDSTONE:	fine to medium grain, light gray,								
							silty laminations								
	110.10		31			CONGLOMERATE & SANDSTONE:	coarse grain								possible core loss
		110.80	39			ROCK LOSS:									
										366'/111.5m					
	110.80	110.84	4	4		CLAYSTONE:	medium to dark gray, silty								broken
	110.84	111.32	48	47		CONGLOMERATE:	chert & quartz pebbles, poorly								
							sorted								
	111.32	111.50	18	18	1731 →	COAL:	C3 at top, C1 at bottom								broken to pulverized
							BOX 34								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1731 ↓											
	111.50	111.66	16	16		C4: abundant vitrinite stringers and C3										broken
						bands										
	111.66		12	12		COAL C3:										
		111.92	14	14		COAL C1:										
	111.92		3	3		ROCK LOSS:										
		112.04	9	9		CLAYSTONE: carbonaceous to coaly										
	112.04		18	18		COAL LOSS:										
		113.62	140	138		COAL C1/C2: minor C4 bands in middle, 10cm										
						claystone, carbonaceous, minor silty										
						stringers										
	113.62		5	5		ROCK LOSS:							375.5' / 114.3m			
		113.94	27	27		CLAYSTONE: medium to dark gray brown, silty										broken
	113.94		7			COAL LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		114.04	3			COAL C3:									
								BOX 35							
	114.04		2			ROCK LOSS:									
		114.13	7			CLAYSTONE:	carbonaceous								
	114.13		3			COAL LOSS:									
		114.25	9			COAL C2:C3:	occasional C1 bands								
	114.25	114.75	50			CLAYSTONE:	very carbonaceous to coaly								
							*Hardy Sample #6								
	114.75		4			COAL LOSS:									
10		114.97	18			COAL C1/C2:									
	114.97	115.47	50			CLAYSTONE:	carbonaceous at top, silty towards								
							bottom								
	115.47		3			COAL C3:									broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		115.64	14			COAL C3/C4:									
	115.64		7			CORE LOSS:									
		115.78	7			CLAYSTONE & C4: mixed, coal fragments near bottom									
	115.78	115.81	3			COAL C3:									
	115.81	115.84	3			C4:									
	115.84	116.24	40			SANDSTONE, SILTSTONE: interbedded, *Hardy Sample									
						#7									
	116.24	116.31	7			COAL LOSS:									
	116.31	116.36	5			CLAYSTONE, COAL: mixed									pulverized
	116.36	116.39	3			ROCK LOSS:									
	116.39	116.55	16			SILTSTONE: dark gray, sandy towards bottom, carbonaceous at top									very broken
16	116.55	116.80	25			SANDSTONE: fine grain, light to medium gray, abundant silty laminations									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	.	.	.	386'/117.6m				
20	116.80		18			SILTSTONE:	medium gray,	occasional	sandy bands						broken
										
							BOX 36	.	.	.					
										
		117.36	38			SILTSTONE:	somewhat sandy at top,	medium to							
						.	dark gray	.	.	.					
										
	117.36	117.39	3			CLAYSTONE:	very carbonaceous to coaly'								
										
	117.39		3			COAL LOSS:	.	.	.	.	
										
		117.48	6			COAL C1/C2:	occasional claystone particles								pulverized
										
	117.48		42			CLAYSTONE:	carbonaceous to coaly,	very coaly in							broken
						.	middle	.	.	.					
										
		118.00	10			ROCK LOSS:	.	.	.	.	
										
	118.00		12			COAL C2/C3:	with C4 stringers at bottom								broken
										
		118.17	5			COAL LOSS:	.	.	.	.	
										
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	118.17	118.24	7		1732	C4:	vitronite stringers									
	118.24	119.03	79			CLAYSTONE:	carbonaceous at top, silty at bottom									
	119.03		11			CORE LOSS:	(C3/C4?)									
		119.18	4	4		COAL C2/C3:	occasional claystone particles									pulverized
	119.18	119.88	70	67		CLAYSTONE:	carbonaceous to very carbonaceous									broken
							towards bottom									
	119.88		4	4		COAL LOSS:										
			4	4	COAL C2/C3:	C1 particles									pulverized	
						BOX 37										
										396' / 120.7m						
		120.03	7	7	COAL C1/C2:										broken	
	120.03		6	6	ROCK LOSS:											
		120.16	7	7	CLAYSTONE:	very carbonaceous									broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	120.16		1	1	1732	COAL LOSS:										
	120.40		23	22		COAL C1/C2:										
	120.40	120.64	24	23		CLAYSTONE: very carbonaceous, coaly at top										
	120.64		15	14		COAL C2/C3: C4 band near bottom										
			4	4		COAL LOSS:										
			53	51		COAL C3: occasional C4 bands										
	121.50		14	13		COAL C1/C2:										
	121.50	121.62	12	11		C4: claystone band in middle										
	121.62		5	5		ROCK LOSS: (C4?)										
	121.72		5	5		COAL C2: with vitrinite stringers										
15	121.72		51	49	SILTSTONE: medium to dark gray, carbonaceous at bottom											
	122.30		7	7	ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	122.30	122.57	27	26	1734	C4 & CLAYSTONE: interbedded; abundant C1 bands									broken	
							in middle									
	122.57		4	4			ROCK LOSS:									
		122.70	9	9			CLAYSTONE: very carbonaceous									
	122.70		13	13			COAL C1/C2:									
					1735											
							BOX 38									
			12	12			COAL C1/C2:									
			4	4			COAL LOSS:									
											406' / 123.7m					
		123.28	29	28			COAL C1/C2:									
	123.28		11	11			ROCK LOSS: (C4)									
		123.45	6	6			CLAYSTONE: carbonaceous with C4 bands									
	123.45		3	3			COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1735	.	.	.	.		
		123.88	40	39	* 1736	COAL C2/C3:	.	.	.						somewhat broken
	123.88	124.36	48	46		CLAYSTONE: carbonaceous, a 4cm sandy band at top a 6cm coaly band in middle					
	124.36		14	14	* 1737	COAL LOSS:	.	.	.						
		125.32	82	79		COAL C1/C2:	.	.	.	.					somewhat broken
						BOX 39	.	.	.						
	125.32		23	22		SILTSTONE & SANDSTONE: as above, interbedded dark gray, carbonaceous stringers and bed up to 2mm	.	.	.					solid	
			52	49		SILTSTONE & SANDSTONE: as above Hardy Sample #8	.	.	.	416' / 126.7m					
	127.66		159			SILTSTONE & SANDSTONE: as above	.	.	.						
	127.66	128.55	89			SILTSTONE & CLAYSTONE: dark gray, minor carbonaceous material	.	.	.						
						BOX 40	.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
22	128.55		39		1738 → 1739 →	SILTSTONE:	medium gray,	sandy bands	throughout					solid	
								occasional	claystone	bands					
											426'	/129.8m			
16			244				SILTSTONE:	as above,	clay rich	towards bottom					
								BOX 41							
			56				SILTSTONE:	as above							
											436'	/132.8m			
21		134.16	222	207			SILTSTONE:	as above,	sandy in	middle					
								BOX 42							
	134.16		35	33		ROCK LOSS:									
		134.55	4	4		CLAYSTONE:	silty,	carbonaceous	at bottom					broken	
	134.55		6	6		COAL LOSS:									
		134.88	27	25		COAL C1/C2:									
	134.88		5	5		ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1739 * 1740 * 1741 * 1742											
		135.32	39	36		CLAYSTONE: light to medium gray, somewhat carbonaceous towards bottom										
	135.32		9	9		COAL LOSS:										
			6	6		COAL C2/C3: minor C1 particles										pulverized
			15	14		COAL C3: occasional vitrinite stringers										broken
		135.76	14	13		COAL C1/C2:										
	135.76		4	4		ROCK LOSS:										
		135.98	18	17		CLAYSTONE: carbonaceous, medium to dark brown										
	135.98	136.01	3	3		COAL C1/C2:										
	136.01	136.08	7	7		CLAYSTONE: carbonaceous to coaly, coaly stringers						446' / 135.9m				broken
	136.08	136.36	28	26		COAL C1/C2:										
	136.36		104	98		SILTSTONE & CLAYSTONE: interbedded, very carbonaceous with coaly band										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1743											
		137.44	4	4		ROCK LOSS:										
								BOX 43								
	137.44		87	82		SANDSTONE: very fine grain to fine grain, medium gray, abundant silty laminations										solid
19		140.30	199	187		SANDSTONE: as above										
								BOX 44								
	140.30		2	2		COAL LOSS:										
		140.64	32	30		COAL C1/C2:										sheared & pulveriz
	140.64		4	4		ROCK LOSS:										
		140.86	18	17		CLAYSTONE: silty at top, carbonaceous towards bottom										broken
	140.86		14	13	COAL c3: C1 bands towards bottom											
			2	2	COAL LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		141.16	14	13	1743 ↓	COAL C1/C2:									pulverized	
	141.16		10	9		ROCK LOSS:	C4									
		141.28	2	2		CLAYSTONE:	very carbonaceous									broken
	141.28		3	3		COAL C1/C2:										
			3	3		COAL LOSS:										
		141.45	11	11		COAL C2/C3:	minor C4 stringers near bottom					466' / 142.0m				
	141.45	141.65	20	19		CLAYSTONE:	carbonaceous to very carbonaceous									
	141.65		12	11		COAL LOSS:										
		142.22	45	42		COAL C1/C2:	C3 band at bottom									
	142.22		95	91		CLAYSTONE:	carbonaceous at top, carbonaceous in middle, silty towards bottom									broken
							BOX 45									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16		143.97	80	77		CLAYSTONE:	medium to dark gray brown,	silty						somehow broken	
	143.97	144.27	30			SILTSTONE:	medium gray,	clay rich							
21	144.27	144.41	14			SANDSTONE:	fine grain, light gray,	abundant silty laminations							
											476' / 145.0m				
	144.41	144.61	20			SILTSTONE:	medium gray,	sandy towards bottom							
14	144.61	145.54	93			SANDSTONE:	fine grain, light to medium gray,	abundant silty laminations,	cross laminations shows tops up						
	145.54	145.97	43			SILTSTONE:	medium gray								
							BOX 46								
	145.97		141			SANDSTONE & SILTSTONE:	as above, interbedded	beds to 30cm coaly bands occasional	less than 1mm sandstone fine grain					solid	
			43			SILTSTONE:	as above, minor sandstone *Hardy					486' / 148.1m			
							Sample #9								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			92			SANDSTONE, SILTSTONE:									
							BOX 47								
		149.01	28			AS ABOVE:	very sandy								
	149.01		82			SANDSTONE:	very fine to fine grain, dark gray								
			58			SANDSTONE:	as above, *Hardy Sample #10								solid
			120			SANDSTONE:	as above			496'/151	1m				
		152.02	41			SANDSTONE:	as above								
	152.02		144			SILTSTONE, SANDSTONE:	interbed, dark gray, minor carbonaceous material								
										506'/154	2m				
			103			SILTSTONE, SANDSTONE:	as above, very sandy to base								
							BOX 49								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		155.09	60			SILTSTONE & SANDSTONE: as above, predominately sandstone									
	155.09	155.40	31			SILTSTONE: grades to claystone, below minor carbonaceous material									
	155.40	155.83	43	41		CLAYSTONE: very carbonaceous, coaly at base *Hardy Sample #11									
	155.83	155.96	13	12		C4: 1cm vitrinite band									
	155.96		49	47	↑ 1744 ↓	COAL C1: higher ash at top, gradational from above									core somewhat broken
			3	3		COAL LOSS:									
		156.59	11	10		COAL C2/C3:									
						BOX 49									
	156.59	157.17	58	55		SANDSTONE: fine grain, dark gray rootlets									
	157.17		20	19		CLAYSTONE: coaly at top, carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1745											
				37			CLAYSTONE:	dark gray brown to black,	C4 bands							broken
								throughout								
24		158.48		74			CLAYSTONE:	carbonaceous to coaly,	2cm coaly							
								band 18cm from bottom								
	158.48			3			COAL LOSS:									
		158.58		7		6	COAL C2/C3:									somewhat broken
	158.58			3		3	ROCK LOSS:									
		158.74		13		12	CLAYSTONE;	vitrimite stringers								
	158.74			38		35	COAL LOSS:									
				7		6	COAL C3:									
				46	43	COAL C1/C2:	occasional C4 bands									
				72	67	COAL C2:	occasional C4 bands, minor claystone									
							band near bottom									

521' / 158.8m

526' / 160.3m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1745 ↓											
			4	4												
		160.46	5	5			COAL C2:									
	160.46		6	6			C4:	vitrinite stringers								
			2	2			ROCK LOSS:									
		160.64	10	9			C4:	claystone stringers								somewhat broken
	160.64		10	9			COAL C3:	minor C4 stringers at top								
			31	29			COAL C2/C3:									
		161.33	28	26			COAL C1/C2:									
	161.33	161.73	40	38			CLAYSTONE:	silty, dark gray brown to medium brown, carbonaceous at top, rootlet in middle								
19	161.73	162.64	91	86			SANDSTONE:	fine grain, light to medium gray, abundant silty laminations								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
											
	162.64	163.19	55			CLAYSTONE: silty to very silty, medium gray					536' / 163.4m				
						brown									
						BOX 52									
23	163.19		256			SANDSTONE: fine grain, light to medium gray,									somewhat broken
						very silty at top									
											
		165.99	24			SANDSTONE: as above					546' / 166.5m				
											
						BOX 53									
	±65.99	166.19	20			CLAYSTONE: silty to very silty towards bottom,									
						medium gray brown									
											
13	166.19	167.76	157			SILTSTONE: medium gray, abundant sandy bands									
						in middle and bottom									
											
	167.76	168.16	40			SANDSTONE: fine grain, light gray, abundant									
						silty laminations									
											
5	168.16		68			SILTSTONE: light gray to dark gray, occasional									somewhat broken
						sandy bands, abundant claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
											
						.	.	.	.	556' / 169	.5m				
		168.92		8		SILTSTONE:	as above	.	.						
											
						.	BOX 54	.	.						
											
	168.92	169.62		70		CLAYSTONE:	silty to very silty towards bottom	.	.						
						.	medium to dark gray brown	.	.						
											
13	169.62	170.00		38		SILTSTONE:	medium gray, clay rich towards	.	.						
						.	bottom	.	.						
											
	170.00	171.33		133		CLAYSTONE:	carbonaceous at top, silty throughout	.	.						
						.	occasional carbonaceous bands	.	.						
						.	towards bottom	.	.						
											
	171.33	171.69		36		SANDSTONE:	fine grain, light gray, minor silty	.	.						
						.	laminations	.	.						
											
						.	BOX 55	.	.						
											
	171.69	171.91		22		SILTSTONE:	dark gray, clayey	.	.						
						.	.	.	.	566' / 172	.5m				
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	171.91		47			SANDSTONE & SILTSTONE: dark gray, interbed									
						*Hardy sample #12									
		173.02	64			SANDSTONE & SILTSTONE: as above									
	173.02		94			CLAYSTONE: silty and carbonaceous, calcareous									
						carbonaceous bands up to 2mm									
		174.53	57			CLAYSTONE: as above *Hardy sample #13									
						BOX 56									
25	174.53		21			CLAYSTONE: silty to very silty, medium gray									broken
						brown									
										576' / 175.5m					
		174.99	25			CLAYSTONE: as above, becoming very silty towards									somewhat broken
						bottom									
	174.99	175.52	53			SILTSTONE: medium gray, occasional sandstone									
						bands towards bottom									
20	175.52		198			SANDSTONE: fine grain, medium gray, occasional									
						silty bands and laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 57	.	.						
26	177.98		48			SANDSTONE:	as above, minor calcite filled	.	.					solid	
						.	fractures at top	.	.						
						.	.	.	.	586' / 178.6m				
33	177.98		241			SANDSTONE:	as above	.	.					solid	
											
						.	BOX 58	.	.						
											
			63			SANDSTONE:	as above	.	.						
						.	.	.	.	596' / 181.6m				
50			224			SANDSTONE:	fine to medium grain, light to medium	.	.						
						.	gray, abundant silty laminations,	.	.						
						.	occasional claystone bands	.	.						
											
						.	BOX 59	.	.						
											
			82			SANDSTONE:	as above	.	.						
						.	.	.	.	606' / 184.7m				
42	186.05		197			SANDSTONE:	as above	.	.						
											
						.	BOX 60	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
36	186.05		100			SANDSTONE: as above									solid
										616'/187.7m					
21			184			SANDSTONE: as above, abundant silty bands in									somewhat broken
						middle, calcite filled fractures in									
						middle									
							BOX 61								
14			124			SANDSTONE: medium grain, light to medium gray									bottom 35cm broken
						abundant silty laminations, cross									
						laminations shows tops up									
										626'/190.8m					
		191.77	164			SANDSTONE: as above, occasional fine grain									broken
						sandstone bands (medium to dark gray)									
							BOX 62								
33	191.77	193.20	143			SANDSTONE: fine to medium grain, light to									solid
						medium gray, abundant silty laminations									
						occasional claystone bands									
										636'/193.8m					
34	193.20		137			SANDSTONE & SILTSTONE: interbedded, light and									
						dark gray bands, bedding approximately									
						10-20cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 63								
			170			SANDSTONE & SILTSTONE:	as above								
										646' / 196.9m					
33		197.48	121			SANDSTONE & SILTSTONE:	as above								
							BOX 64								
32	197.48		177			SANDSTONE & SILTSTONE:	fine grain, light to dark gray, coaly band 16cm from bottom								solid
										656' / 199.9m					
			100	87		SANDSTONE & SILTSTONE:	as above								
							BOX 65								
26		201.44	119	107		SANDSTONE & SILTSTONE:	as above								
	201.44		25	22		COAL LOSS:									
			56	51		COAL C1/C2:									broken
										666' / 203m					
		202.52	27	24		COAL C1/C2:									

↑
1746
↓

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1747											
	202.52		65	58		CLAYSTONE: carbonaceous at top, silty towards bottom; medium to dark gray brown										broken
			23	21		ROCK LOSS:										
						BOX 66										
		204.46	106	95		CLAYSTONE: carbonaceous, dark gray brown, occasional very carbonaceous to coaly bands										solid, broken bottom 60cm
	204.46	204.89	43	39		COAL C1/C3: occasional claystone particles towards bottom										broken to pulverize
	204.89		38	34		CLAYSTONE: carbonaceous, very carbonaceous towards bottom										broken
			30	27		CLAYSTONE: as above, 3cm C4 band at bottom						676' / 206m				broken
		205.60	3	3		C4:										
	205.60		3	3		COAL C3:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1748 ↓											
			42	38			COAL LOSS:									
			250	225			COAL C1/C2:									broken
		209.23	68	61			COAL C1/C2:									
	209.23		17	15			CLAYSTONE: carbonaceous, dark gray brown to black									
													686.5' / 209.2m			
		209.46	6	5		ROCK LOSS:										
	209.46	211.02	156	140		SILTSTONE: medium gray to dark gray, carbonaceous towards bottom									solid	
					1749 ↑											
	211.02		12	11			COAL LOSS:									
		211.33	19	17			COAL C1/C2:									broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	211.33	211.36	3	3	1749	COAL & CLAYSTONE:	mixed,	90% coal							pulverized	
	211.36	211.57	21	19		CLAYSTONE:	carbonaceous									broken
	211.57		219	197		COAL C1/C2:					696'	212.1m				sheared
			22	20		COAL LOSS:										
		214.03	5	4		COAL C2/C3:										broken
	214.03		8	7		ROCK LOSS:										
		214.20	9	8		C4/C3:		vitroinite stringers								
			2	2		COAL C3:										
			40	36		COAL C2/C3:										
			190	171		COAL C1/C2:		C4 and claystone particles								broken to pulverized

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			165	148	1749 ↓											
						COAL LOSS:										
		219.08	91	82		COAL C1/C2: claystone particles towards bottom										broken to pulverized
	219.08		6	5		ROCK LOSS:										
		219.27	13	12		CLAYSTONE: carbonaceous										broken
	219.27		8	7		COAL LOSS:										
		219.40	5			COAL:										pulverized
	219.40		2			ROCK LOSS:										
		219.54	12			CLAYSTONE: carbonaceous										
	219.54		16			COAL LOSS:										
		219.79	9			COAL:										pulverized
	219.79		18			SANDSTONE: fine grain, medium gray to black										
						carbonaceous at top										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			60			SANDSTONE: fine to medium grain, light to medium gray									broken
		221.27	70			SANDSTONE: as above					726' / 221.3m				
						BOX 72									
	221.27		73			SANDSTONE: medium to dark gray, minor carbonaceous stringers *Hardy sample #14									
			158			AS ABOVE: 3cm coal band midway					736' / 224.3m				
		224.07	49			SANDSTONE: as above									
						BOX 73									
34	224.07	226.54	247			SANDSTONE: medium grain, medium gray; abundant silty laminations in top 80cm					746' / 227.4m				somewhat broken
	226.54		27			SANDSTONE: fine to medium grain, medium gray abundant silty laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			269												
			270												
		233.12	92												very broken at bottom
	233.12		151												somewhat broken
			37												
56			228												solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 78								
		237.97	69			SANDSTONE:	as above								solid
										786' / 239.5m					
	237.97		210			SANDSTONE:	fine to medium grain, light gray								solid
							occasional claystone rip-up clasts								
							BOX 79								
			90			SANDSTONE:	fine to medium grain, as above								
										796' / 242.6m					
			183			SANDSTONE:	as above								
							BOX 80								
			159			SANDSTONE:	as above								somewhat broken
										806' / 245.6m					
		245.57	118			SANDSTONE:	as above								
							BOX 81								
	245.57		136			SANDSTONE:	fine to medium grain, light gray								somewhat broken
							occasional claystone rip-up clasts								towards bottom
										816' / 248.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			151			SANDSTONE: as above									
						BOX 82									
			150			SANDSTONE: as above									solid
										826'/251	.7m				
85			128			SANDSTONE: as above, minor silty laminations towards bottom									
						BOX 83									
74		252.94	172			SANDSTONE: as above									
										836'/254	.8m				
	252.94	254.02	108			SANDSTONE: as above, 2 large claystone rip-up clasts									somewhat broken
						BOX 84									
	254.02		196			SANDSTONE: fine grain, light to medium gray occasional silty laminations, occasional claystone rip-up clasts calcite filled fractures at top									
										846'/257	.8m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
34		256.94	96			SANDSTONE: as above, minor sandstone									
						BOX 85									
76	256.94		199			SANDSTONE: fine to medium grain, light to medium gray, large 4cm calcite band 25cm from bottom									
			78			SANDSTONE: as above					856' / 260.9m				
						BOX 86									
61		262.01	230			SANDSTONE: fine to medium grain, light to medium gray, abundant calcite filled fractures in middle, occasional claystone rip-up clast									solid
											866' / 264m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						START OF HOLE QMD 8107 CORE STARTS AT									
						12.42 m.									
						BOX 1									
3	12.42		99			SANDSTONE: interbedded								BROKEN	
						SILTSTONE: light to dark grey bedding equals								BROKEN	
						very fine interbedded particle									
						laminations, occasional claystone									
						bands limonite stained on fractured									
						surfaces									
						HULCROSS								BROKEN	
										44' / 13.4m					
			157			SANDSTONE: as above								BROKEN	
						SILTSTONE: becoming very silty towards bottom								BROKEN	
						ROCK LOSS								BROKEN	
						BOX 2									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
0	15.08		137			SILTSTONE:	medium to dark grey, abundant fine particles, sandy laminations, abundant clay rich bands. Iron stains on fractured surfaces.								BROKEN
										54'/16.5m					
3			120			SILTSTONE:	As above, large calcite filled fracture 17 cm. from 6 ft. mark								
			30			ROCKLOSS									BROKEN
							BOX 3								
			180			SILTSTONE:	As above								BROKEN
										65'/19.8m					
1	20.70		95			SILTSTONE:	As above, Clayrich								BROKEN
							BOX 4								
	20.70		180			SILTSTONE:	As above, sand in middle; Iron stained on fractured surfaces								BROKEN
		22.80	30			ROCKLOSS									BROKEN
										75'/22.9m					
2	22.80		90			SILTSTONE:	very fine grained - interbedded								BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
						SILTSTONE:	very fine laminations,	monor cross								BROKEN
							laminations equals tops down?									
								BOX 5								
			172			SANDSTONE:	As above									BROKEN
						SILTSTONE:	Occassional clayrich bands									BROKEN
			25.86	44		SILTSTONE:	Medium to dark grey, abundant									BROKEN
							claystone bands, occassional sandy									
							laminations									
										85' / 25.9m						
			25.86	63		SILTSTONE:	As above, clayrich limonite stain									BROKEN/PULVERIZED
								BOX 6								
				45		ROCKLOSS:										BROKEN
2				198		SILTSTONE:	As above, very clayrich in top									TOP 60 cm.broken
																PULVERIZED
										95' / 29m						
				71		SILTSTONE:	As above									BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 7							
		31.98	235			SILTSTONE:	Interbedded								MIDDLE 90 cm. BROKEN
						CLAYSTONE:	Very fine thin particles; laminations medium to dark grey								
										105'/32m.					
7	31.98		51			SILTSTONE:	Medium grey clayrich at top sandy towards bottom								broken
								BOX 8							
4			181			SILTSTONE:	As above, minor cross laminations equals tops up								BROKEN
										111'/33.8m					
			73			SILTSTONE	As above			25.1m					BROKEN
										115'/35.1m					
			25			SILTSTONE:	As above								BROKEN
								Box 9							
5	38.06		278			SILTSTONE:	as above, increasingly more sandy laminations.								BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												125' / 38.1m			
								BOX 10							
	38.06	40.80	274					SANDSTONE: fine grained, interbedded							BROKEN
								SILTSTONE: light and dark grey, occasional calcite filled fractures.							BROKEN
								BOX 11							
	40.80		22					SANDSTONE: fine grained, light to medium grey abundant silty laminations, limonite stain							BROKEN
												135' / 41.1m			
		42.80	178					SANDSTONE: As above, occasional claystone bands. A 4 cm. medium grained sandstone band 39 cm. from bottom.							BROKEN
								HULCROSS GATES CONTACT							BROKEN
	42.80		12					SANDSTONE: medium to coarse grained, light grey, salt and pepper.							BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5			70			SANDSTONE: fine grained, medium to dark grey									BROKEN
						abundant silty laminations,									
						occasional claystone bands									
						BOX 12									
			46			SANDSTONE: as above, claystone bands toward									
						bottom									BROKEN
										145' / 44.2m					
		46-46	238			SANDSTONE: medium to fine grained silty									SOLID
						laminations, occasional claystone									
						rip up clasts limonite stain on									
						fractured surfaces, minor calcite									
						filled fractures									
						BOX 13									
	46.46		61			SANDSTONE: as above, a 13cm. clayrich band									BROKEN
						25 cm. from top.									
										155' / 47.2m					
	47.07	47.33	26			CLAYSTONE: silty towards sandy, medium to									BROKEN
						dark grey									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	47.33		171			SANDSTONE: medium towards fine grained, light to medium grey, clayrich band in middle									SOMEWHAT BROKEN
						BOX 14									
8			99			SANDSTONE: fine towards medium grained, light grey, silty laminations									SOMEWHAT BROKEN
										165' / 50.3m					
3	51.34		131			SANDSTONE: As above, cross laminations equals tops up.									
	51.34	51.73	39			CLAYSTONE: silty, dark grey-green									SOMEWHAT BROKEN
						BOX 15									
	51.73	52.15	42			SILTSTONE: dark grey green, silty at top, sandy towards bottom									SOMEWHAT BROKEN
11	52.15		77			SANDSTONE: fine towards medium grained, light to medium grey, abundant silty laminations, occasional calcite filled fractures									SOMEWHAT BROKEN
										175' / 53.3m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
1		54.05	113			SANDSTONE:	medium grained,	abundant silty						SOLID	
							laminations								
4	54.05		7			CLAYSTONE:	carbonaceous,	dark brown to black						BROKEN	
		54.19	7			COAL CLAYSTONE MIX								PULVERIZED	
	54.19		13			CLAYSTONE:	carbonaceous,	dark brown to black						BROKEN	
			6			COAL C2, C3.								BROKEN	
		54.47	9			CLAYSTONE:	silty,	medium to dark grey/brown						BROKEN	
							BOX 16								
10	54.47	54.72	25			SANDSTONE:	very fine grained,	light to medium						SOMEWHAT BROKEN	
							grey								
	54.72	54.94	22			SILTSTONE:	clayrich towards bottom,	medium to						SOMEWHAT BROKEN	
							dark grey brown,	occasional sandy							
							laminations at top								
	54.94	55.17	23			CLAYSTONE:	silty at top,	carbonaceous in						BROKEN	
							middle,	dark grey brown							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	55.17	55.67	50			SANDSTONE: very fine grained, medium grey green									BROKEN
						abundant claystone bands, a 10 cm.									
						very well indurated sandstone band									
						at top.									
										185' / 56.4m					
2	55.67		153			SANDSTONE: very fine grained towards fine									SOMEWHAT BROKEN
						grained, a 17 cm. claystone band									
						in middle									
						BOX 17									
			60			SANDSTONE: as above									
			78			SANDSTONE: medium grained, abundant silty									SOMEWHAT BROKEN
						laminations, a coarse grained band									
						in middle									
										195' / 59.4m					
		58.85	27	27		SANDSTONE: medium to coarse grained, medium									SOMEWHAT BROKEN
						grey, salt and pepper									
4	58.85	59.89	104	104		CLAYSTONE: silty, dark grey green to grey brown									BROKEN
						bottom 8 cm. carbonaceous									
	59.89		14	14	↑ 1644	* COAL LOSS									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1644 ↓											
			8	8		COAL:										PULVERIZED/POWDER
									BOX 18							
		60.43	32	32		COAL OCCASSIONAL C1 and C2										PULVERIZED/POWDER
	60.43	60.70	27	27		CLAYSTONE: carbonaceous at top, silty at bottom										
						dark brown to medium grey										
4	60.70	61.28	58	58		SILTSTONE: medium grey sandy lenses,										SOMEWHAT BROKEN
					occasional claystone bands											
	61.28		29		SANDSTONE: fine grained, medium grey silty										SOMEWHAT BROKEN	
					laminations, occasional claystone											
					bands											
2		63.05	148		SANDSTONE: As above, abundant silty laminations						205' / 62.5m				SOLID	
					in top, carbonaceous claystone band											
					50 cm. from bottom											
								BOX 19								
5	63.05		159		SANDSTONE: fine grained, light to medium										SOLID	
					grey, abundant silty laminations											
					occasional claystone bands and											
					stringers											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											215' / 65.5m				
2			131			SANDSTONE:	As above,	very silty	towards	bottom					
								BOX 20							
2			99			SANDSTONE:	As above								BROKEN to BOTTOM
7			76			SILTSTONE:	medium grey,	a 9 cm.	sandy	band					SOMEWHAT BROKEN
								near	bottom						
											225' / 68.6m				
		68.17	47			SANDSTONE:	very fine	grained,	silty	at top					
								and	bottom,	medium	grained.				
	68.17	68.57	40			CLAYSTONE:	medium to	dark	grey,	silty					SOMEWHAT BROKEN
4	68.57		36			SANDSTONE:	fine	grained,	light	grey,	abundant				SOMEWHAT BROKEN
								silty	laminations						
								BOX 21							
		69.00	7			SANDSTONE:	As above								
	69.00	69.84	84			CLAYSTONE:	silty	medium	to	dark	grey	brown			SOMEWHAT BROKEN
								minor	carbonaceous	stringers					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5	69.84	70.36	52												SOMEWHAT BROKEN
	70.36	70.82	46												SOMEWHAT BROKEN
	70.82	71.94	112							235' / 71.6m					SOMEWHAT BROKEN
	71.94		192												SOMEWHAT BROKEN
3			100							245' / 74.7					BOTTOM BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		76.04	118												
	76.04	76.93	89			CLAYSTONE:	dark grey brown to black,	silty at							
							top,	carbonaceous to coal	at bottom						
	76.93	77.14	21			CLAYSTONE:	carbonaceous at top,	silty towards		255' / 77.7m					SOMEWHAT BROKEN
							bottom,	coal bands and stringers in							TOP 11 cm. very
							top 11 cm.								very broken
	77.14	77.30	16			SANDSTONE:	very fine grained,	medium grey							SOMEWHAT BROKEN
	77.30	77.42	12			CLAYSTONE:	silty at top,	carbonaceous towards							
							bottom								
	77.42		16			COAL C1 and C2									BROKEN PULVERIZED
			27			ROCK LOSS									
		77.93	8			COAL C 4									
							BOX 24								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5	77.93	79.98	205												SOMEWHAT BROKEN
						SILTSTONE: light to medium grey, occasional									
						sandy stringers and bands and									
						claystone bands									
										265' / 80.8m					
	79.98	80.23	25			SILTSTONE: as above									SOMEWHAT BROKEN
	80.23	80.75	52			CLAYSTONE: medium to dark grey brown, silty at									
						top, somewhat carbonaceous towards									
						bottom									
						BOX 25									
	80.75		10			C4 - very carbonaceous - claystone									BROKEN PULVERIZED
		81.12	27			ROCKLOSS									
	81.12	81.77	65			SILTSTONE: medium to dark grey, abundant									SOMEWHAT BROKEN
						sandy bands, occasional claystone									
						bands									
7	81.77		126			SANDSTONE: medium grained, light grey,									
						abundant silty laminations,									
						occasional claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		83.73	70			SANDSTONE: As above					275' / 83.8m				
								BOX 26							
20	83.73		225			SANDSTONE: as above, occasional calcite filled									SOMEWHAT BROKEN
						fractures									6 cm. pulverized
											285' / 86.9m				33 cm. from top
4			73			SANDSTONE: medium to fine grained, light to									SOMEWHAT BROKEN
						medium grey, minor carbonaceous									
						bands at top, occasional plant									
						fragments									
								BOX 27							
3			237			SANDSTONE: fine grained to very fine grained									SOMEWHAT BROKEN
						medium grey, occasional siltstone									
						and claystone bands.									
											295' / 89.9m				
	89.13	89.71	63			SILTSTONE: medium grey, somewhat sandy									SOMEWHAT BROKEN
								BOX 28							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
2	89.71		246			SANDSTONE: very fine grained, medium grey, very silty towards bottom; occasional calcite filled fractures									SOMEWHAT BROKEN
			31			SANDSTONE: as above				305' / 93m					
						BOX 29									
3			219			SANDSTONE: as above, abundant claystone bands in middle and bottom									SOMEWHAT BROKEN
10			50			SANDSTONE: medium grained, light grey, abundant silty laminations, occasional coarse grained bands									SOMEWHAT BROKEN
										315' / 96m					
70	95.32		15			SANDSTONE: fine to medium grained, abundant silty laminations, possible soft sediment deformation									
						BOX 30									
67T 56B	95.32		271			SANDSTONE: medium grained, silty laminations two large claystone bands at 63cm. from top and 130 cm. from top									SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 31							
										325'	.99	1m			
75		100.37	234			SANDSTONE:	As above,	minor carbonaceous							
							stringers								
85- 90	100.37	100.66	29			CLAYSTONE:	dark grey brown,	silty							
	100.66	100.82	16			SANDSTONE:	medium grained,	light grey,	claystone						VERY BROKEN
							to sandstone contact goes	from 85°							
						*Note:	vertical and to 85°	overturned,							
							possible fold or	minor fault zone							
								BOX 32							
	100.82	100.87	5			SANDSTONE:	As Above								BROKEN
	100.87	101.03	16			CLAYSTONE:	very silty								BROKEN
	101.03		17			SANDSTONE:	Medium grained,	minor claystone							BROKEN
							bands								
			12			ROCK LOSS									
										375'	/102	1m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
86			216			SANDSTONE:	As above,	claystone	rip up	clasts					VERY BROKEN
							in broken area								44 cm. from top
							BOX 33								
			90	10		SANDSTONE:	As above,	large	claystone	rip-up					SOMEWHAT BROKEN
							clasts	towards	bottom						BOTTOM 74 cm
															BROKEN
											346' / 105.2m				
39	106.38		200	10		SANDSTONE:	As above,	claystone	bands	towards					SOMEWHAT BROKEN
							bottom								
							BOX 34								
	106.38	106.61	23			CLAYSTONE:	dark grey	brown	to	black,	sheard				BROKEN PULVERIZED
							and friable								
	106.61		56			SANDSTONE:	very fine	grained,	medium	grey					BROKEN
							abundant	fine	calcite	filled	fractures				
			36			* ROCK LOSS									BROKEN
												355' / 108.2m			
			100			SANDSTONE:	very fine	grained -	fine	grained,					PULVERIZED AT
							medium	grey							BOTTOM

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			50			ROCKLOSS									
										360' / 109.7m					
5			55			SANDSTONE: medium to fine grained, light to medium grey, abundant silty laminations, calcite filled fractures towards bottom									SOMEWHAT BROKEN
26		110.09	51			SANDSTONE: As above, large calcite filled fractures in top 21 cm.									BROKEN
										365' / 111.3m					
	110.09		54			SANDSTONE: fine grained, medium grey									BROKEN
3			239			SANDSTONE: medium grained, abundant silty laminations, minor plant fragments occasional calcite filled fractures									SOMEWHAT BROKEN
7		113.07	5			SANDSTONE: As Above, carbonaceous bands at top and bottom.									BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	113.07	113.18	11			CLAYSTONE:	carbonaceous to coaly, abundant								BROKEN
							coal stringers and bands								
11	113.18		47			SANDSTONE:	medium grained, abundant silty								SOMEWHAT BROKEN
							laminations								
										375' / 114.3m					
7		115.23	158			SANDSTONE:	medium to fine grained, light to								
							medium grey, two large claystone								
							bands at 38 cm. from bottom and 76								
							cm. from bottom								
	115.23		71			SILTSTONE:	medium to dark grey, clarich at top								SOMEWHAT BROKEN
							and bottom, sandy in middle								
							:BOX 37								
9		118.03	81			SILTSTONE:	As above, sandy towards bottom								
										385' / 117.3m					
14		118.03	128			SILTSTONE:	As above, abundant claystone bands								
							3 large sandy bands at 26, 63 and								
							105 cm. from top								
	118.03		85			SANDSTONE:	very fine to fine grained coarsening								
							towards bottom, medium gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 38							
13		119.80	92			SANDSTONE:	as Above								
										395' /120.	4m				
	119.80	121.74	194			SANDSTONE:	As above, very silty towards bottom								SOLID
								BOX 39							
11	121.74		111			SILTSTONE:	medium to dark grey, clayrich at top, sandy towards bottom								SOLID
										405' /120.	4m				
		124.30	145			SILTSTONE:	As above, sandy at top, clayrich towards bottom								29 cm. broken pulverized - 83 cm. from top
	124.30	124.52	22			CLAYSTONE:	medium grey brown, silty								
								BOX 40							
10	124.52	125.15	63			SILTSTONE:	medium grey, clayrich at top								SOMEWHAT BROKEN
	125.15		63			CLAYSTONE:	silty, medium grey brown								SOMEWHAT BROKEN
										415' /126.	5m				
15	125.78	126.09	31			SILTSTONE:	medium grey, clayrich at top, sandy towards bottom								SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
37	126.09		63			SANDSTONE:	medium to coarse grained,								SOMEWHAT BROKEN
							abundant claystone rip-ups clasts								
							throughout silty laminations								
			74			SANDSTONE:	fine to very fine grained, claystone								SOMEWHAT BROKEN
							bands throughout, minor calcite								
							filled fractures								
							BOX 41								
17	128.86		140	15		SANDSTONE:	fine grained, light grey, abundant								SOMEWHAT BROKEN
							claystone and siltstone bands and								
							laminations, minor slicks on fract-								
							ured surfaces, occasional calcite								
							filled fractures:								
										425'/129.5m					
21	128.86	130.45	159			SANDSTONE:	As Above								
							BOX 42								
29	130.45		156			SILTSTONE:	medium to dark grey, light grey								SOMEWHAT BROKEN
							sandstone bands in top 52 cm.,								
							abundant claystone bands								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		133.20	119			SILTSTONE: As Above					435'/132.6m				BOTTOM 61 cm. VERY BROKEN
						BOX 43									
35	133.20		159			SANDSTONE: fine grained, light grey, occasional dark grey siltstone and claystone bands and laminations									BROKEN
		135.06	27			ROCK LOSS									
											445'/135.6m				
33	135.06		98			SANDSTONE: As Above, occasional calcite filled fractures									SOMEWHAT BROKEN
						BOX 44									
40		137.01	97			SANDSTONE: As above, very silty towards bottom, 2 large claystone bands in middle									VERY BROKEN IN MIDDLE
	137.01	137.07	6			CLAYSTONE: medium to dark grey-brown									PULVERIZED
	137.07	137.25	18			SANDSTONE: fine grained, light grey, silty laminations									BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	137.25	138.06	81			SILTSTONE:	medium grey								SOMEWHAT BROKEN
										455' / 138.7m					
38	138.06	138.81	75			SANDSTONE:	fine grained, light to medium grey,								SOMEWHAT BROKEN
							abundant silty laminations, siltstone								
							band at top								
47	138.81	139.60	79			SANDSTONE:	As Above								SOMEWHAT BROKEN
															AT TOP
	139.60	140.39	79			SANDSTONE:	interbedded siltstone approximately								SOMEWHAT BROKEN
							0.5 - 2 cm. and large claystone								
							bands (5 cm. to 12 cm.) from bottom								
46	140.39		13			SANDSTONE:	fine grained, light grey, silty								SOMEWHAT BROKEN
							laminations throughout.								
										464' / 141.4m					
		141.16	64			SANDSTONE:	fine to very fine grained, light to								BROKEN
							medium grey, abundant siltstone and								
							claystone bands and laminations								
			30			*ROCKLOSS									
	141.16	141.60	14			CLAYSTONE:	dark grey, poorly consolidated								BROKEN/PULVERIZED

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS		
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.			
	141.60	141.64	4														
						SANDSTONE: fine to medium grained, light to medium grey, abundant calcite filled fractures											VERY BROKEN
	141.64		83			SANDSTONE: fine to medium grained as above											TOP 10cm. BROKEN (pulverized)
						Note: BCN changes from 84° - vertical - 73°											
						Core shows overturning abundant calcite filled fractures											
67T 54T			141			SANDSTONE: as above, abundant calcite filled fractures						469' / 143.0m					BROKEN
			40			*ROCKLOSS											
		144.66	38			SANDSTONE: as above, abundant claystone clasts and bands											BROKEN
25	144.66		209			SANDSTONE: fine grained, light to medium grey abundant claystone bands and silty laminations throughout											BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
34		152.65	161			SANDSTONE: fine grained, light to medium grey bioturbation 42 cm. from top abundant claystone bands and calcite filled fractures in bottom 124 cm.									BOTTOM 124 cm. VERY BROKEN
32	152.65		61			SANDSTONE: fine grained, light grey, silty laminations Note: Babcock member contact. BOX 50					500' / 152.4m				SOMEWHAT BROKEN
			20			SANDSTONE: as above									
35			166			SANDSTONE: as above					505' 153.9m				SOLID
			95			SANDSTONE: fine grained, light grey, silty laminations, claystone bands throughout, pebbled bands towards bottom. BOX 51									BOTTOM 54cm. BROKEN/PULVERIZED
		156.31	24			* ROCKLOSS									
											514' / 156.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
69	156.31	156.85	54												BROKEN
	156.85	157.13	28												BROKEN
	157.13		68												SOLID
			117												SOMEWHAT BROKEN
			39												SOMEWHAT BROKEN
	159.79		42							524'/159	7m				
	159.79	160.25	46												SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						*NOTE: sample taken: channel lag conglomerate for D. Johnson (Ker Priestman)									
39	160.25	160.82	57			SANDSTONE: medium to coarse grained, light grey salt and pepper at 6 cm. pebbled band 10 cm. from bottom.								SOMEWHAT BROKEN	
	160.82	161.20	38			CONGLOMERATE: chert and quartz pebbled poorly sorted light grey, coarse grained sandstone matrix								SOMEWHAT BROKEN	
	161.20	161.65	40			SANDSTONE: fine to medium grained, light grey silty laminations at 3 cm. granule band in middle								SOMEWHAT BROKEN	
	161.65	161.83	18			CONGLOMERATE: chert and quartz pebbled BOX 53									
	161.83		58			CONGLOMERATE: chert and quartz pebbled poorly sorted, medium to coarse grained, sandstone matrix well cemented, pebbled size show 0.5 to 1 cm., large pebbles at bottom.								SOMEWHAT BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			77								534'/162	8m			
						CONGLOMERATE: as above, minor cobbled in middle								SOLID	
		163.34	16								536'/163	4m			
						CONGLOMERATE: as above									
30	163.34	163.71	37			SANDSTONE: medium to coarse grained, crossing towards bottom, light grey salt and pepper								SOLID	
33	163.71	164.57	86			SANDSTONE: fine to medium grained, light grey silty laminations, at 13 cm. pebbled band at bottom.								SOMEWHAT BROKEN	
						BOX 54									
	164.57	165.59	102			SANDSTONE: medium grained, interbedded conglom- ate, chert and quartz pebbled towards cobbled, a few cobbles at bottom								SOMEWHAT BROKEN	
33	165.59		15			SANDSTONE: medium grained light grey, abundant silty laminations								SOMEWHAT BROKEN	
											545'/166	1m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
43	166.19	166.19	45			SANDSTONE:	as above								
	166.19	166.67	48			CONGLOMERATE:	chert and quartz pebbled towards								SOMEWHAT BROKEN
							cobbled, very poorly sorted, well								
							cemented								
31	166.67	167.40	73			SANDSTONE:	medium grained, light grey, salt and								SOLID
							pepper								
	167.40		31			CONGLOMERATE:	chert and quartz pebbled								
							BOX 55								
	167.81		10			CONGLOMERATE:	As above								
	167.81	167.93	12			SANDSTONE:	medium to coarse grained, light grey								SOLID
							salt and pepper small pebbled band								
							near bottom.								
	167.93	168.57	64			CONGLOMERATE:	chert and quartz pebbled, pebbled								SOLID
							approximately 1 to 3 cm. very little								
							matrix, well cemented *Sample for								
							D. Johnson (Ker Priestman)								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	168.57	168.83	26			SANDSTONE: coarse grained, light grey,									SOLID
						occasional small pebbled bands									
	168.83		28			SANDSTONE: as above				555'/169	2m				SOMEWHAT BROKEN
18		169.55	44			SANDSTONE: medium grained, light grey, salt and pepper									
	169.55	170.10	55			CONGLOMERATE: chert and quartz pebbled, poorly sorted well cemented									SOMEWHAT BROKEN
24	170.10	170.20	10			SANDSTONE: medium grained									
	170.20	170.37	17			CONGLOMERATE: chert and quartz pebbled									
	170.37		8			SANDSTONE: medium to coarse grained, light grey salt and pepper									SOMEWHAT BROKEN
						BOX 56									
		170.91	46			SANDSTONE: as above, minor pebbled bands in middle									SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	170.91	171.79	88												
						CONGLOMERATE: chert and quartz pebbled, poorly sorted, coarse grained matrix well cemented, occasional cobbles throughout.									BOTTOM 23cm VERY BROKEN
										565' / 172	2m				
	171.79	172.89	110			CONGLOMERATE: as above, sandstone and granule bands in middle									
23	172.89		23			SANDSTONE: fine to medium grained, light grey granule band at top									SOMEWHAT BROKEN
						BOX 57									
30		173.51	39			SANDSTONE: as above									SOLID
	173.51		111			CONGLOMERATE: chert and quartz pebbled, large pebbles near bottom *NOTE:Channel conglomerate sample for D. Johnson (Ker Priestman)									SOLID
		174.72	10			CONGLOMERATE: chert and quartz granule, coarse matrix, light grey									SOLID

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	174.72		117								575' / 175	3m			SOLID
						CONGLOMERATE: chert and quartz pebbled,									
						occasional granule bands and minor									
						sandstone bands, poorly sorted, well									
						cemented									
						BOX 58									
29			180			CONGLOMERATE: As above									SOLID
											585' / 178	3m			
		177.89	20			CONGLOMERATE: As Above									SOLID
	177.89		72			SANDSTONE: very coarse grained to granule									SOMEWHATBROKEN
						light to medium grey									
						BOX 59									
		179.46	85			SANDSTONE: as above									SOMEWHAT BROKEN
	179.46	179.98	52			CONGLOMERATE: chert and quartz pebbled									SOMEWHAT BROKEN
						approximately 0.5 to 2 cm.									
						moderately well cemented.									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
	179.98	180.53	55	49	1812 ↑ 181	CONGLOMERATE - chertz and quartz granule								BROKEN	
						SANDSTONE - coarse grained									BROKEN
	180.53		75	67		SANDSTONE - very coarse grained to granule, light grey					595' / 181.4m				BROKEN
						BOX 60									
		181.39	11	10		SANDSTONE: coarse grained, light to medium grey, occasional small granules									BROKEN
	181.39		13	12		*Coal Loss									
		181.75	23	20		COAL C1/C2									
	181.75		27	19		*Rock Loss									
		182.25	29	26		CLAYSTONE: carbonaceous, coal fragments in middle									VERY BROKEN
						C4									
	182.25		7	6		*Coal Loss									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1812											
		182.55	23	20		COAL C1/C2										
	182.55		9	8		CLAYSTONE: dark brown, occasional carbonaceous stringers										VERY BROKEN
		182.68	4	4		*Rock Loss										
26	182.68		87	78		COAL C1/C2, occasional C3 Bands										BROKEN
			41	37	*Coal Loss						605' / 184.4m					
			29	26	COAL C1/C2										BROKEN	
		184.35	10	9	COAL C2/C3: minor claystone particles near bottom										BROKEN/PULVERIZED	
	184.35		25	22	*Rock Loss											
		184.65	5	4	CLAYSTONE: carbonaceous											
	184.65	184.82	17	15	*Coal Loss											
	184.82	185.15	33	30	**Rock Loss							610' / 185.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1815 ↑											
	185.15		±0	9		COAL C2/C3										BROKEN PULVERIZED
			3	3		COAL C1/C2										VERY BROKEN
			7	6		COAL C3: claystone stringers in middle										
			5	4		COAL C2/C3										BROKEN
			4	4		COAL C2										VERY BROKEN
			12			* COAL LOSS										
			4	4		COAL C3										BROKEN
			33	30		COAL C2/C3										BROKEN
											613'/186.8m					
			5	4		COAL: minor claystone particles										PULVERIZED
			14	13		COAL C1/C2: occasional C3 bands										VERY BROKEN
			30	27		*Coal Loss										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1815	.	.	.	.		
		186.48	6	5	↓	Coal	.	.	.					POWDERED	
	186.48		9	8		CLAYSTONE: carbonaceous with coaly particles	.	.	.					PULVERIZED	
			30	27		*Rock Loss	.	.	.						
		187.14	27	24		CLAYSTONE: very carbonaceous at top, somewhat silty at bottom, dark brown to black	.	.	.					VERY BROKEN, PULVERIZED	
	187.14	187.29	15			Coal Loss	.	.	.	616.5/187.9					
	187.29		42			CLAYSTONE: carbonaceous at top, silty in middle carbonaceous towards bottom, dark grey brown towards black	.	.	.					BROKEN	
			39			*Rock Loss	.	.	.						
		188.15	5			C4	.	.	.						
	188.15		9			COAL C2/C3: minor claystone particles	.	.	.					VERY BROKEN	
			23			Coal Loss	.	.	.	620'/189m					
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		188.49	2			Coal C3									
	188.49		2			*Rock Loss									
24		188.89	38			CLAYSTONE: carbonaceous at top, silty in middle									BROKEN
	188.89		16			Coal Loss									
		189.08	3			Coal C3: minor claystone stringers									
						BOX 62									
	189.08	189.12	4			C4									BROKEN
	189.12	189.20	8			SILTSTONE: medium grey brown, clayrich at top somewhat carbonaceous * SAMPLED									
16	189.20	189.64	44			SANDSTONE: fine grained, medium grey *SAMPLED									SOMEWHAT BROKEN
						SILTSTONE: abundant silty laminations, occa- sional claystone bands									
										625'/190	5m				
	189.64	190.17	53			SANDSTONE: as above			11cm.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30	190.17	190.42	25												SOMEWHAT BROKEN
						CLAYSTONE: very silty at top, carbonaceous									
						towards bottom.									
	190.42	190.68	26			*Coal Loss									
	190.68		3			C4									
		191.00	29			*Rock Loss									
	191.00	191.29	29			*Coal Loss									
	191.29	192.07	78			CLAYSTONE: silty at top, very carbonaceous									VERY BROKEN
						towards bottom, some carbonaceous									BOTTOM 4cm. sheared
						fragments 20 cm. from top, coaly									
						fragments									
	192.07		7			*Coal Loss									
		192.22	8			Coal: claystone particles									BROKEN/PULVERIZED
	192.22		28			CLAYSTONE: somewhat carbonaceous, dark brown									
						C4 band in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 63							
			11			CLAYSTONE:	silty at top, carbonaceous in middle silty at bottom, minor coaly frag- ments in bottom of box								VERY BROKEN
			28			*Rock Loss						635' / 193.5m			
	194.26		137			CLAYSTONE:	dark grey coal fragments at 27 cm. and 42 cm. from top.								BROKEN TO VERY BROKEN
	194.26		19			*Coal Loss									
		194.49	4			Coal C2/C3									VERY BROKEN
	194.49	194.69	20			CLAYSTONE:	silty at top, carbonaceous towards bottom, occasional coaly stringers and bands at top.								BROKEN
	194.69		6	6		C4									BROKEN
		195.00	25	25		*Rock Loss									BROKEN
	195.00		14	14	↑ 1816 7181	Coal C3 with C4 stringers									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		195.24	10	10	9181	*Coal Loss	.	.	.	.		
	195.24		10	10		CLAYSTONE: medium grey carbonaceous at top, silty in middle.										BROKEN
		195.38	4	4		*Rock Loss	.	.	.	.		
	195.38		17	17		Coal C2/C3	.	.	.	.		
			2	2		*Coal Loss	.	.	.	.		
		195.60	3	3		Coal C3/C4	.	.	.	.		
	195.60	195.72	12	12		C4: coal stringers, claystone stringers	.	.	.	.		
	195.72	195.78	6	6		CLAYSTONE: carbonaceous	.	.	.	.		
						BOX 64	.	.	.	.		
												
	195.78		6	6		*Coal Loss	.	.	.	.		
			11	11		Coal C2/C3	.	.	.	.						VERY BROKEN
												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		196.15	20	20	1816 ↓	COAL C1/C2/C3 BANDS TOWARDS BOTTOM									BROKEN	
	196.15		4	4		*ROCK LOSS										BROKEN
		196.21	2	2		C4										BROKEN
	196.21	196.28	7	7		COAL C2										BROKEN
	196.28	196.32	4	4		C4										BROKEN
	196.32		18	18		*ROCK LOSS										BROKEN
		196.52	2	2		CLAYSTONE CARBONACEOUS										BROKEN
	196.52		9	9		COAL C2/C3										BROKEN
			5	5		*COAL LOSS										BROKEN
		196.71	5	5		COAL C3, C4 bands										BROKEN
	196.71	196.84	13	13		C4, C3 band near bottom										BROKEN
	196.84	196.93	9	9		*COAL LOSS										BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5	196.93		68	68	1817	SILTSTONE:	medium to dark grey,	clayrich top						SOLID	
								and bottom,	occasional sandy						
								lenses							
		197.64	3	3			*ROCK LOSS								
	197.64	197.71	7	7			C4:	abundant coal stringers	and 1 cm. C1 band						
								at bottom							
	197.71	197.74	3	3			*COAL LOSS								
	197.74		14	14			CLAYSTONE:	carbonaceous to very carbonaceous							BOTTOM 4 CM.
								some coal fragments at bottom							BROKEN/PULVERIZED
			6	6			*ROCK LOSS								
		198.04	10	10		CLAYSTONE:	carbonaceous abundant coaly stringers							BROKEN	
	198.04		4	4	1818	*COAL LOSS								BROKEN	
			8	8			COAL C3								BROKEN
			8	8			COAL C2/C3								VERY BROKEN
															PULVERIZED

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1818											
		198.66	42	41		COAL C1/C2, C3 bands towards bottom										
											655'	199.6m				
	198.66		15	15		*ROCK LOSS										
		198.86	5	5		CLAYSTONE: carbonaceous										VERY BROKEN
	198.86		5	5		COAL C1/C2										
			8	8		COAL C2/C3, minor C4 band										
			6	6		COAL C2, some C3 fragments										VERY BROKEN
		199.09	4	4		COAL C2/C3										BROKEN
	199.09	199.11	2	2		C4										BROKEN
	199.11	199.17	6	6		COAL C1/C2										BROKEN
	199.17	199.21	4	4		C4										BROKEN
	199.21	199.34	13	12		*COAL LOSS										BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
16°	199.34		5	5	181 ↓	CLAYSTONE: medium grey									BROKEN	
		199.48	9	9		*ROCK LOSS										BROKEN
	199.48	199.52	4	4		C4										BROKEN
	199.52		10	10		*COAL LOSS										BROKEN
		199.66	4	4		COAL C1/C2										BROKEN
	199.66		10	10		*ROCK LOSS										BROKEN
		199.79	3	3		C4										BROKEN
	199.79		4	4		COAL C3										BROKEN
		200.86	103	99		COAL C1/C2										TOP 30cm. BROKEN
	200.86		8	8		*ROCK LOSS										SOMEWHAT BROKEN
		201.84	90	87		SILTSTONE: medium grey, sandy towards bottom somewhat carbonaceous in middle										SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	201.84		15			*ROCK LOSS (C4)					665'	202.7m			SOMEWHAT BROKEN
		202.03	4			C4									
	202.03		14			CLAYSTONE: silty at top and bottom, carbonaceous in middle									SOMEWHAT BROKEN
								BOX 66							
		202.33	16			*ROCK LOSS									
22	202.33		26			SILTSTONE: medium to dark grey, occasional sandy lenses, abundant claystone bands, minor coaly rootlets and plant fragments					675'	205.7m			SOMEWHAT BROKEN
			15			SILTSTONE: as above									
								BOX 67							
16		206.29	120			SILTSTONE: medium to dark grey, occasional sandy lenses, abundant claystone bands.									SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	206.29		28			*COAL LOSS									SOMEWHAT BROKEN
		206.65	8			COAL C1/C2									BROKEN
	206.65		5			*ROCK LOSS									
		207.46	76			SILTSTONE: medium to dark grey, clayrich at top									SOMEWHAT BROKEN
	207.46		22			*COAL LOSS									
		207.72	4			COAL C3									BROKEN
	207.72		3			C4									
		207.88	13			CLAYSTONE: Carbonaceous									
	207.88	207.98	10			*COAL LOSS									
	207.98	208.09	11			COAL 50/50									BROKEN/PULVERIZED
						CLAYSTONE MIX									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	208.09	208.17	8			SILTSTONE: medium to dark grey, clayrich at top sandy towards bottom									
4	208.17		21			SANDSTONE: fine grained, light to medium grey, silty laminations, minor claystone stringers								SOLID	
						BOX 68									
12		210.70	232			SANDSTONE: as above, becoming very silty towards bottom, cross laminations equals tops up								SOLID	
	210.70	210.85	15			CLAYSTONE: silty, medium grey brown								SOLID	
											695' / 211.8m				
	210.85	210.96	11			G4/CLAYSTONE								BROKEN	
	210.96		14			CLAYSTONE: medium to dark grey brown, carbonaceous towards bottom									
						BOX 69									
9		211.47	37			CLAYSTONE: medium grey, occassional coaly bands								BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	211.47		8			*COAL LOSS									BROKEN
		211.57	2			COAL CL/C2									BROKEN
	211.57	211.63	6			CLAYSTONE: carbonaceous to coaly									BROKEN
	211.63	211.81	18			COAL G3, with G4 bands throughout									BROKEN
	211.81		30			*ROCK LOSS									BROKEN
20		213.04	93			CLAYSTONE: carbonaceous at top, very silty towards bottom, dark brown to medium grey									BROKEN
21	213.04		92			SANDSTONE: very fine grained to fine grained abundant silty laminations, light to medium grey, occasional clay- stone bands									BROKEN
			4			*ROCK LOSS									
		214.10	10			SANDSTONE: as above									

705' / 214.9m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	214.10	215.16	116												
15	215.16	215.65	39			SILTSTONE:	medium to dark grey, clayrich in								SOMEWHAT BROKEN
							middle, sandy at top and bottom,								
							minor carbonaceous stringers in								
							middle								
11	215.65	215.96	31			CLAYSTONE:	medium grey brown to black, silty								SOMEWHAT BROKEN
							at top, very carbonaceous at bottom								
	215.96	216.00	4			C4									BROKEN
	216.00		43			*ROCK LOSS (C4)									BROKEN
		216.45	2	2		COAL C3/C4									BROKEN
	216.45		7	7		*ROCK LOSS									BROKEN
		216.72	20	20		CLAYSTONE:	very carbonaceous to coaly								BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					61819											
	216.72		12	12		COAL C3, minor C4 stringers										
			27	27		COAL C1/C2										BROKEN
			16	16		*COAL LOSS					715' / 217.9m					
			9	9		COAL C1/C2										
			8	8		COAL C2/C3 with vitrinite stringers										BROKEN
		217.54	10	10		COAL C3										BROKEN
	217.54		5	5		*ROCK LOSS										BROKEN
9		217.77	18	18		CLAYSTONE: medium to dark grey brown; carbon- aceous at top, silty towards bottom										BROKEN
	217.77		31	31		*COAL LOSS										
		218.12	4	4		COAL C2/C3										VERY BROKEN
	218.12		10	10		*ROCK LOSS										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		218.26	4	4		CLAYSTONE: very carbonaceous towards coaly									
	218.26	218.36	10	10		COAL LOSS (C3)									
	218.36	218.69	33			CLAYSTONE: very carbonaceous at top, silty towards bottom								BROEKN	
17	218.69	220.23	154			SANDSTONE: fine grained, light grey, abundant silty laminations, claystone bands near bottom								SOMEWHAT BROKEN	
	220.23	220.36	13			CLAYSTONE: silty, medium grey brown					725' / 221m			SOMEWHAT BROKEN	
35	220.36		14			SANDSTONE: fine to medium grained, abundant silty laminations, salt and pepper								SOMEWHAT BROKEN	
						BOX 72									
18		222.03	153			SANDSTONE: as above, becoming silty towards bottom								SOMEWHAT BROKEN	
18	222.03		126			SILTSTONE: medium to dark grey, occasional sandy lenses, clayrich towards bottom								SOMEWHAT BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		223.40	11			SILTSTONE: as above					735' / 224m				SOMEWHAT BROKEN
						BOX 53									
	223.40	223.79	39			SILTSTONE: medium grey, clayrich at top, sandy towards bottom, occasional light grey sandy laminations throughout									SOMEWHAT BROKEN
10	223.79		256			SANDSTONE: fine grained, light to medium grey abundant silty laminations					745' / 227.1m				SOLID
						BOX 74									
20			286			SANDSTONE: fine to medium grained, light grey abundant silty laminations, minor coarse grained bands towards bottom									SOMEWHAT BROKEN
						BOX 75									
		229.43	22			SANDSTONE: as above									SOMEWHAT BROKEN
15	229.43		261			SANDSTONE: medium grained, light grey, occasional silty laminations coarse grained bands					755' / 230.1m				SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 76							
			44			SANDSTONE:	as above								SOMEWHAT BROKEN
										765' / 233.	2m				
			47			SANDSTONE:	as above								SOMEWHAT BROKEN
13		234.42	147			SANDSTONE:	fine to medium grained, light to medium grey, silty laminations occasional calcite filled fractures								SOMEWHAT BROKEN
16	234.42	134.65	23			SILTSTONE:	medium grey green, clayrich towards bottom								SOMEWHAT BROKEN
	234.65	234.80	15			CLAYSTONE:	silty, medium dark grey brown								SOMEWHAT BROKEN
								BOX 77							
	234.80		58			CLAYSTONE:	medium grey brown, silty at top two 1 cm. coal bands at bottom (rootlets)								SOMEWHAT BROKEN
										775' / 236.	2m				
		235.42	4			CLAYSTONE:	carbonaceous								BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	235.42	235.56	14		1820 ↑ ↓	C4 abundant vitrinite stringers and C3 bands								BROKEN	
	235.56	235.59	3	3		*Coal Loss									BROKEN
	235.59		16	15		C4 claystone stringers throughout									BROKEN
		235.84	9	8		*ROCK LOSS									BROKEN
	235.84		8	7		COAL C2/C3									BROKEN
			30	28		COAL C1/C2									BROKEN
		236.56	34	32		*Coal Loss						778' / 237.1m			BROKEN
	236.56		7	6		CLAYSTONE: dark grey towards black, carbonaceous									BROKEN
23			69	64		SILTSTONE: interbedded sandstone, medium to dark grey, occasional claystone bands, minor bioturbated									BROKEN
22			67			CLAYSTONE: medium grey brown - dark brown a few carbonaceous bands throughout									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 78							
		238.06	7			CLAYSTONE:	very carbonaceous towards	coaly,							BROKEN
							dark brown to black								
	238.06	238.10	4			*COAL LOSS									BROKEN
	238.10	238.17	7			COAL C4 Mixed									BROKEN/PULVERIZED
	238.17	238.21	4			CLAYSTONE:	carbonaceous, dark brown, a 2 cm.								
							coal band in middle								
	238.21		20			*COAL LOSS									
		238.45	4			COAL C1/C2									BROKEN
	238.45	238.49	4			CLAYSTONE:	somewhat carbonaceous								BROKEN
										785' / 239.3m					
19	238.49	238.79	30			SILTSTONE:	medium grey, clayrich at top								
	238.79	238.82	3			*COAL LOSS									
	238.82	238.86	4	4		CLAYSTONE AND COAL MIXED									POWDERED

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	238.86		2	2	1821	ROCK LOSS'										
		238.95	7	7		CLAYSTONE: very carbonaceous towards coaly										BROKEN
	238.95		20	19		COAL LOSS'										BROKEN
			17	16		COAL C2/C3 claystone band at bottom										BROKEN
		239.60	28	26		COAL G1/G2: occasional C3 bands near bottom										BROKEN
	239.60	239.64	4	4		C4										BROKEN
	239.64		14	13		COAL C2										BROKEN
			40	38		COAL G1/G2, C3 band at bottom										BROKEN
			8	8		COAL C3										BROKEN
		240.28	2	2		*COAL LOSS										BROKEN
	240.28		3	3		C4										BROKEN
		240.41	10	10		ROCK LOSS'										BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	240.41	240.78	37	36	1821 ↓	COAL C2/C3, occasional vitrinite bands, minor C4 stringers towards bottom									BROKEN
	240.78	240.85	7	7		C4, C3 bands									BROKEN
	240.85	241.09	24	23		COAL C2/C3									BROKEN
	241.09		5	5		*ROCK LOSS									BROKEN
		241.20	6	6		C4, vitrinite stringers									BROKEN
	241.20		5	5		COAL C1/C2									BROKEN
						BOX 79									
			32	31		*COAL LOSS									
		241.88	31	30		COAL C1/C2									BROKEN
											795' / 242.3m				
13	241.88	242.72	84	82		SILTSTONE: medium to dark grey, clayrich, carbonaceous towards bottom									SOMEWHAT BROKEN
	242.72	242.95	23	22		CLAYSTONE: dark brown to black, occasional C4 and coaly fragments									BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	242.95	243.00	5												BROKEN
	243.00	243.07	7												BROKEN
16	243.07	243.52	45												BROKEN
	243.52	244.33	81												SOMEWHAT BROKEN AT TOP
	244.33		23												BROKEN
20		245.13	57												SOMEWHAT BROKEN

243.4m
805' / 245.4m

BOX 80

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16	245.13	247.18	205			SILTSTONE: medium to dark grey, abundant light grey sandy bands throughout, occasional claystone bands								SOMEWHAT BROKEN	
	247.18	247.77	59			SANDSTONE: very fine grained to fine grained, light to medium grey, occasional silty laminations								SOMEWHAT BROKEN	
	247.77	247.89	12	∴		SANDSTONE: fine grained, interbedded siltstone occasional claystone bands				815' / 248.4m				SOMEWHAT BROKEN	
						BOX 81									
14	247.89	250.13	224			SANDSTONE: as above, siltstone; occasional medium grained sandy bands towards bottom								SOMEWHAT BROKEN	
	250.13		77			SANDSTONE: fine grained, light to medium grey abundant silty laminations equals tops up.								SOMEWHAT BROKEN	
						BOX 82				824.5' / 251.3m					
			15			SANDSTONE: as above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		251.92	87								825' / 251.5m				
						SANDSTONE:	as above,	very silty	towards bottom						SOMEWHAT BROKEN
							cross laminations	equals tops up,							
							calcite filled	fractures near bottom							
17	251.92	253.72	180			SILTSTONE:	medium to dark grey,	clayrich at top							SOMEWHAT BROKEN
							sandy in middle	and towards bottom							
							occasional claystone	bands							
	253.72		9			SANDSTONE:	medium grained,	light to medium							SOMEWHAT BROKEN
							grey, silty laminations,	claystone							
							rip up clasts.								
			30			SANDSTONE:	as above								
21		255.20	109			SANDSTONE:	as above,	abundant silty laminations			835' / 254.5m				
							towards bottom								
28	255.20		140			SANDSTONE:	medium grained,	light grey,							SOLID
							abundant silty laminations,	salt							
							and pepper								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 84							
27			55			SANDSTONE:	as above								SOLID
										845'	/257.6m				
			224			SANDSTONE:	as above								
								BOX 85							
30			67			SANDSTONE:	fine to medium grained, light grey								SOMEWHAT BROKEN
							abundant silty laminations, salt								
							and pepper, occassional minor								
							claystone bands								
										855'	/260.1m				
29		262.12	206			SANDSTONE:	as above								
								BOX 86							
	262.12		90			SANDSTONE:	as above								SOMEWHAT BROKEN
										865'	/263.7m				
31			72			SANDSTONE:	as above								
22		264.38	64			SANDSTONE:	fine to very fine grained, medium								SOMEWHAT BROKEN
							grey, abundant silty laminations								
							very silty towards bottom								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	264.38	264.53	15			SILTSTONE: carbonaceous towards bottom medium									BROKEN *NOTE:
						to dark grey									PROBABLE FAULT
	264.53		110			*COAL LOSS									
		265.69	6			COAL minor claystone particles									PULVERIZED POWDER
	265.69		107			*ROCK LOSS									
		266.80	4			CLAYSTONE: carbonaceous, sheared									VERY BROKEN
	266.80		58			*COAL LOSS									
		267.45	7			COAL G1/C2									FAULT ZONE
	267.45		6			CLAYSTONE: carbonaceous, calcite along									BROKEN
						fractured surfaces, abundant slicks									
						BOX 87									
			30			CLAYSTONE: carbonaceous, dark grey brown to									VERY BROKEN
						black, occasional C4 bands, minor									
						coal fragments in bottom of box									
										875' / 266.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		267.86	5			CLAYSTONE: silty								VERY BROKEN	
24	267.86	268.16	30			SILTSTONE: medium to dark grey, occasional claystone bands								BROKEN	
	268.1	268.28	12			*COAL LOSS									
	268.28	268.57	29			CLAYSTONE: carbonaceous at top, silty towards bottom.								VERY BROKEN AT TOP & BOTTOM	
	268.57		110			*COAL LOSS									
		269.85	18			COAL C1/C2 C3 fragments at bottom, claystone in bottom of box (fault gouge)*FAULT ZONE								VERY BROKEN/ PULVERIZED	
	269.85		11			*ROCK LOSS									
		269.99	3			C4									
	269.99	270.13	14			*COAL LOSS									
43	270.13		145			SANDSTONE: medium to coarse grained, medium grey salt and pepper								SOMEWHAT BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 88							
38			46			SANDSTONE: medium grained, light grey,									SOMEWHAT BROKEN
						occasional carbonaceous stringers,									
						occasional calcite filled fractures				267.7m					
										885' / 269.7m					
			160			SANDSTONE: as above, abundant calcite filled									SOMEWHAT BROKEN
						fractures throughout									
			68			SANDSTONE: fine to medium grained, light grey									BROKEN TOWARDS BOTTOM
						minor carbonaceous band at top									
								BOX 89							
		275.19													
26			87			SANDSTONE: as above									SOMEWHAT BROKEN
										895' / 272.8m					
	275.19		193			SANDSTONE: as above, occasional plant fragments									SOMEWHAT BROKEN
						minor calcite filled fractures									
								BOX 90							
			32			SANDSTONE: medium grained, medium grey,									SOMEWHAT BROKEN
						occasional plant fragments									
										905' / 275.8m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
33			260			SANDSTONE:	as above,	calcite filled	fractures						SOMEWHAT BROKEN
							at 80 cm.	from top,	150 cm. from top						
							and at bottom								
							BOX 91								
35	281.25		121			SANDSTONE:	fine to medium	grained,	light grey						SOMEWHAT BROKEN
							occasional	plant	fragments,	minor					
							silty	laminations,	calcite	along					
							fractured	surfaces	at top						
										915' / 278.9m					
37	281.25		163			SANDSTONE:	as above,	minor	calcite filled						SOMEWHAT BROKEN
							fractures	towards	bottom						
							BOX 92								
28			13.0			SANDSTONE:	as above,	occasional	large	silty					SOMEWHAT BROKEN
							bands								
										925' / 28.9m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
31			115			SANDSTONE: as above, clayey towards bottom								SOMEWHAT BROKEN	
											
		285.67	20			SANDSTONE: fine grained, medium grey; clayrich								SOMEWHAT BROKEN	
						towards bottom									
											
											
	285.53	285.59	6			SILTSTONE: medium grey brown, very clayrich								BROKEN/PULVERIZED	
						slicks along fractured surfaces									
											
											
											
											
											
											
											
											
											
											
											
											
											
	285.59	285.65	6			ROCK LOSS (C4)									
											
											
											
											
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	285.65	285.78	13		1822 ↑	COAL:	claystone mixed							BROKEN/PULVERIZED	
	285.78	285.99	21			CLAYSTONE:	carbonaceous at top, silty towards bottom, dark brown to medium grey								BROKEN
	285.99		45			SILTSTONE:	light to medium grey, sandy at top carbonaceous towards bottom, calcite filled fractures								SOMEWHAT BROKEN
		286.53	9			*ROCK LOSS									
	286.53	286.58	5			C4 and coal mixed									VERY BROKEN/ PULVERIZED
	286.58	286.64	6			*COAL LOSS									
	286.64		12	11		CLAYSTONE:	silty, medium grey								
		286.89	13	12		*ROCK LOSS									
	286.89	286.94	5	4		COAL:	90% claystone, 10% coal, claystone mixed								BROKEN/PULVERIZED
	286.94		44	40		*COAL LOSS					935' / 284.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					2722 ↓										
		287.57	19	17		COAL C1/C2									
25	287.57	288.71	114	103		SANDSTONE: very fine grained to fine grained silty at top								SOMEWHAT BROKEN	
										940' / 286.5m					
	288.71		26	24		CLAYSTONE: dark brown to light grey, carbon- aceous at top, silty towards bottom C4 band near top								SOMEWHAT BROKEN	
			35			*ROCK LOSS									
		289.40	8			CLAYSTONE: as above								BROKEN	
	289.40	289.47	7			*COAL LOSS								BROKEN	
	289.47	289.50	3			C4								BROKEN	
	289.50		50			CLAYSTONE: carbonaceous, coaly bands 12cm. from bottom								BROKEN	
		290.11	11	10		*ROCK LOSS								BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	> STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	290.11	290.15	4	4	1823	CLAYSTONE AND COAL MIXED									BROKEN/PULVERIZED	
											945' / 288m					
	290.15		104	90		COAL C1/C2: minor claystone particles										BROKEN/PULVERIZED
						G Seam repeat										SHEARED
			138	120		*COAL LOSS										
											955' / 291m					
		292.65	8	7		COAL C2/C3										VERY BROKEN
	292.65		12	10		*ROCK LOSS										
		292.82	5	4		C4: vitrinite stringers										
	292.82		29	25		COAL C1/C2										VERY BROKEN
			103	89		*COAL LOSS										
		294.43	29	25		COAL C1/C2										BROKEN/PULVERIZED
35	294.43	295.36	93	76	SILTSTONE: medium to dark grey, sandy lenses										BROKEN	
					in middle, clayrich in top and											
					bottom, carbonaceous in top and											
					bottom.											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	295.36		12	10		CLAYSTONE:	carbonaceous to coaly,	minor coal							BROKEN
							band near top								
			17			*ROCK LOSS					962' / 293.2m				
	295.84		19			CLAYSTONE:	very carbonaceous,	abundant vitrinite							SOMEWHAT BROKEN
							stringers towards bottom								
	295.84		16			*COAL LOSS									
	296.04		4			COAL C3:	claystone stringers								
	296.04		32			CLAYSTONE:	carbonaceous,	occasional vitrinite							SOMEWHAT BROKEN
							stringers towards bottom								
											965' / 294.1m				
	297.15		79			CLAYSTONE:	carbonaceous,	medium to dark brown/ black, occasional C4 bands, a 2cm. vitrinite band near bottom							SOMEWHAT BROKEN
							BOX 96								
25	297.15	297.88	73			CLAYSTONE:	light grey brown to dark brown, carbonaceous, a 13cm silty band near top occasional coaly stringers and bands.								SOMEWHAT BROKEN

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
39°	297.88	298.21	33			SILTSTONE: medium to dark grey, clayrich								SOMEWHAT BROKEN	
						towards bottom									
28	298.21		116			SANDSTONE: fine grained, light to medium grey,								SOMEWHAT BROKEN	
						abundant silty laminations,									
						occasional claystone bands									
										975' / 297.1m					
17		300.17	80			SANDSTONE: fine to medium grained, light to								SOMEWHAT BROKEN	
						medium grey, abundant silty laminations,									
						occasional calcite filled fractures.									
						BOX 97									
16	300.17		230			SANDSTONE: as above, minor calcite filled								SOMEWHAT BROKEN	
						fractures									
			56			SANDSTONE: as above				985' / 300.2m				SOMEWHAT BROKEN	
						BOX 98									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
8			249			SANDSTONE: fine grained, light to medium grey abundant silty laminations, minor soft sediment deformation, calcite filled fractures in top 65 cm.									TOP 65cm BROKEN
		305.85	33			SANDSTONE: as above					995' / 303.2m				BROKEN
						BOX 99									
20	305.85		281			SANDSTONE: as above, light grey towards bottom abundant claystone bands in top									SOMEWHAT BROKEN
											1005' / 306.3m				
19		308.86	20			SANDSTONE: fine grained, light to medium grey abundant silty laminations, occasional claystone bands									SOMEWHAT BROKEN
						BOX 100									
28	308.86	311.67	281	248		SANDSTONE: fine grained, interbedded siltstone abundant claystone laminations and bands, occasional carbonaceous bands									SOMEWHAT BROKEN
											1015' / 309.3m				
						BOX 101									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
24	311.67	313.42	175	160	↑ 1824 ↓	SANDSTONE: fine grained, as above, siltstone								SOMEWHAT BROKEN	
						clayrich towards bottom, carbonaceous									
						at bottom									
	313.42		131	119		*COAL LOSS									
			36	33		COAL C1/C2 * J SEAM REPEAT								BROKEN/PULVERIZED	
											1025' / 312.4m				
		315.20	11	10		COAL C1/C2								BROKEN PULVERIZED	
											1026.5' / 312.9m				
	315.20		8	7		*ROCK LOSS									
		315.34	6	5		SILTSTON: sandy, light to medium grey								BROKEN	
	315.34		44	38		COAL C1/C2								BROKEN/PULVERIZED	
						BOX 102									
			54	47		COAL C1/C2								BROKEN/PULVERIZED	
											1030' / 313.9m				
			20	17		*COAL LOSS									
		317.11	59	45	COAL C1/C2								BROKEN		
										1032' / 314.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1825											
	317.11		27	21		*ROCK LOSS										
		317.76	38	29		CLAYSTONE: carbonaceous at top, silty in middle, carbonaceous at bottom, a C4 band 9 cm. from bottom										broken
	317.76		24	18	1826	*COAL LOSS										
			8	6		COAL C1/C2										BROKEN/PULVERIZED
		318.51	43	33		COAL C1/C2, C3 band in middle						1035' / 315.4m				
	318.51		4	3	1827	ROCK LOSS										
53			31	19		CLAYSTONE: medium grey brown, silty, carbaceous in top 4 cm.										SOMEWHAT BROKEN
		139.29	43	28		CLAYSTONE: carbonaceous, silty at top										BROKEN
	319.29		5	4		*COAL LOSS										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					↑ 1828 ↓											
		319.45	11	8		COAL C1/C2										BROKEN
											1040'	316.9m				
	319.45		6	4		*ROCK LOSS										
		319.58	7	5		C4 minor claystone stringers										
	319.58		91	79		COAL C1/C2: a 3 cm. C4 band at bottom										VERY BROKEN
											1045'	318.5				
			33	29		*COAL LOSS										
			4	3		COAL C2/C3: minor claystone stringers										BROKEN
			16	14		COAL C1/C2										BROKEN
			8	7	COAL C2/C3										BROKEN	
		321.16	6	5	COAL										BROKEN PULVERIZED	
	321.16	321.50	34	29	*ROCK LOSS											
	321.50	321.72	22	21	*COAL LOSS											
321	72		3	3	CLAYSTONE: carbonaceous										BROKEN	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			37			SANDSTONE: coarse grained, salt and pepper									SOMEWHAT BROKEN
						medium grey									
						BOX 104									
			176			SANDSTONE: as above									
										1055' / 321.5m					
10			105			SANDSTONE: as above, minor silty laminations									SOLID
						occasional carbonaceous bands									
			41			SANDSTONE: as above									SOLID
						BOX 105									
			73			SANDSTONE: as above									
										1065' / 324.6m					
15			198			SANDSTONE: coarse to medium grained, occasional									SOLID
						silty laminations									
						BOX 106									
			59			SANDSTONE: fine to medium grained, light grey									SOLID
						occasional claystone clasts and									
						carbonaceous stringers									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							1075'	327.6m			
5			227			SANDSTONE:	as above	.	.						
											
						.	BOX 107	.	.						
											
16			232			SANDSTONE:	fine to medium grained, light grey	.	.					SOLID	
						.	occasional silty laminations	.	.						
							1085'	330.7m			
			48			SANDSTONE:	as above	.	.						
											
						.	BOX 108	.	.						
											
		336.24	253			SANDSTONE:	fine to medium grained, light to	.	.					SOLID	
						.	medium grey, occasional silty	.	.						
						.	laminations, occasional claystone	.	.						
						.	stringers	.	.						
							1095'	333.7m			
											
						.	END OF HOLE	.	.						
											
											
											

PR. QUINTETTE 81(3A)

615

neglected decimals

prev decimals

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	4.00		71												
		5.42	71			As Above									
	5.42		19			SILTSTONE: Fine grained, dark grey to black, very friable, extremely broken up, core lost									
			17			As above - but less crumbly									
			36			As above, but coarser grained and less crumbly.									
			41			As above - but completely crumbled, possible section lost									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											26' / 7.9m				
		6.86	31			As above; but less fragmented									
											28' / 8.5m				
								BOX 2							
62°	6.86	7.88	102			SILTSTONE, Dark grey, slightly crumbly with Sandstone lenses and bands, lower contact sharp at 62° BCN									
	7.88	8.28	40			SANDSTONE, fine to medium grained massive with rust coloured fractures and patches, lower contact sharp									
19°	8.28	8.50	22			SILTSTONE, fine grained, dark grey with limestone lenses, possible rip-ups, lower contact sharp at 19° BCN									
	8.50	9.26	76			SANDSTONE - red fine grained, massive, grey									
	9.26		23			SILTSTONE - dark grey upper contact very irregular									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		9.72	23			AS ABOVE					36' / 11m				
								BOX 3							
52°	9.72	11.46	174			SANDSTONE, light grey, finegrained, massive,									
						lower contact sharp at 52°.									
	11.46	11.76	30			SILTSTONE, fine grained friable dark grey to									
						black, vary carbonaceous									
	11.76		40			SHALY COAL: dark brown strea, blocky cleavage									
											45.5' / 13.9m				
			48			AS ABOVE									
								BOX 4							
			53			AS ABOVE									
		13.38	21			AS ABOVE ; unit highly fractured, possible lost									
						section									
	13.38		14			SILTSTONE, very finegrained black, white to									
						light brown streak									
			201			AS ABOVE:					57' / 17.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			54					BOX 5							
						As Above									
		17.52	145							66' / 20.1m					
						As Above									
	17.52		86			SHALY COAL-	medium to dark brown streak, very broken up, possible section lost, blocky fracture								
								BOX 6							
			09			As Above									
										74' / 22.6m					
			61			As Above									
										76' / 23.2m					
		21.20	212			As Above									
								BOX 7							
										83' / 25.2m					
	21.20		102			SILTSTONE-	black, highly carbonaceous; white to light brown streak, upper contact gradational								
										86' / 26.2m					
		23.33	111			As Above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	23.33		71			SANDSTONE, fine grained light grey massive, abundant carbonaceous stringers, upper contact sharp but broken.									
						BOX 8				BOX 8					
			121			As Above									
										96' / 29.3m					
		25.53	28			As Above									
	25.53	26.29	76			SANDSTONE & SILTSTONE interbedded, light grey sandstone and dark grey siltstone									
	26.29		66			SANDSTONE, fine grained, massive, light grey									
						BOX 9				BOX 9					
			71			As Above									
										102' / 31m					
			99			As Above									
										106' / 32.3m					
			117			As Above; with several siltstone bands									
						BOX 10				BOX 10					
			167			As above but without siltstone bands									
										116' / 35.4m					
			119			As Above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			177					BOX 11							
						As Above									
		35.30	85								126' / 38.4m				
						As Above									
63°	35.30		23			SILTSTONE - dark grey, massive, blocky cleavage.									
						upper contact sharp									
								BOX 12							
48°		36.31	78			As Above; bottom of siltstone sharp at 48° BCN									
	36.31		137			SANDSTONE-fine to medium grained, light grey,									
						mottled with redish patches; siltstone									
						lenses									
											136' / 41.5m				
			71			As Above									
								BOX 13							
			242			As Above - but siltstone lenses and bands more									
						common.									
											146' / 44.5m				
			44			As Above									
								BOX 14							
			215			As Above; but sandstone is finer grained									
											154.5' / 47m				
			71			As Above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		45.77	166												
47°	45.77		88												
			37												
		48.55	153												
52°	48.55		133												
			263												
			71												
			25												
			127												
			133												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	BOX 19	.	.					
			71			As Above	.	.	.	.	
						195'	59.4m			
			143			As Above:	Siltstone bands, gradually disappear,								
						.	mottled red more pronounced								
						199'	60.7m			
			59			As Above:	with no siltstone bands								
						201'	61.8m			
			14			As Above	.	.	.	.	
										
						.	.	BOX 20	.	.					
			133			As Above	.	.	.	.	
						206'	62.7m			
			155			As Above	.	.	.	.	
										
						.	.	BOX 21	.	.					
			170			As Above	.	.	.	.	
						216'	65.8m			
			115			As Above	.	.	.	.	
										
						.	.	BOX 22	.	.					
			203			As Above	.	.	.	.	
						226'	68.9m			
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			85			As Above									
								BOX 23							
			202			As Above									
										236' / 71	9m				
			55			As Above									
								BOX 24							
			58			As Above: core highly broken, occasional									
						fragmented									
										239' / 72	8m				
		72.66	196			As Above: with siltstone bands (dark grey)									
						and lenses									
	72.66		15			SILTSTONE: Dark grey fine grained, massive,									
						blackish cleavage, crushed, possible									
						section lost									
										246' / 75m					
			15			As Above: slightly less crushed									
								BOX 25							
		73.10	14			As Above									
	73.10		39			SANDSTONE: light grey, fine grained, massive,									
						abundant redish stain, siltstone									
						lenses and bands common									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			55			As Above:	severely	broken	up			248' / 75.6m			
			177			As Above:	moderately	shattered				250.5' / 75.4			
								BOX 26							
			36			As Above:	with fewer	siltstone	bands, more						
								iron	staining						
			107			As Above:	severely	broken	up.			256' / 78m			
			57			As Above:						259.5' / 79.1m			
			104			As Above:	moderately	broken	up			261' / 79.6m			
			29			As Above :	with minor	siltstone	bands and						
								lenses							
								BOX 27							
			42			As Above									
			65			As Above:	but siltstone	bands	common, section			265' / 80.8			
								grades	to siltstone	in places					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			163			As Above:	with less siltstone bands				267'/81	4m			
			13			As Above					273'/83	2m			
							BOX 27								
			71			As Above									
		84.82	214			As Above:	with less iron staining, siltstone				276'/84m				
							lense common grading to siltstone								
							in place contact between siltstone								
							lenses and sandstone is often wavy								
							and irregular								
											281'/85	6'			
							BOX 29								
	84.82		56			SANDSTONE & SILTSTONE:	light grey, core very								
							broken possible loss of section.								
											282'/86m				
		85.67	29			As Above:	but less broken up								
											283'/86	3m			
	85.67		49			SANDSTONE:	light grey, fine grained, mottled								
							with Iron Oxide Stains massive,								
							siltstone disappeared								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		87.28	112			As Above					284' / 86.5m				
47°	87.28		57			SILTSTONE: light grey to black, fine grained									
						massive, moderately carbonaceous,									
						contains rare calcite veins.									
						BOX 30									
			23			As Above					291' / 88.7m				
			23			As Above					292' / 89.0m				
			14			As Above					292.5' / 89.2m				
		88.67	22			As Above					293.5' / 89.4m				
	88.67		49			SANDSTONE: dark grey, fine grained, carbon-									
						aceous.					295' / 89.9m				
			65			As Above					297' / 90.5m				
		90.38	57	40		As Above: with minor shaly coal intervals									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	90.38		65	46		CONGLOMERATE: upper contact shattered, clay- stone up to 2.5 cm. rounding is fair, sorting is poor, massive well cemented.										
		91.85	82	58		As Above										
	91.85	92.04	19	13	↑ 1179	COAL C1: Broken										
	92.04		2	1			CLAYSTONE: dark grey									
		92.13	7	5			ROCKLOSS									
	92.13		23	16			COAL C2:									
			103	73			COAL C2:									
			9	6			COAL C3: Broken									
		93.58	10	7			ROCK LOST:									
	93.58		12	8		CLAYSTONE: dark grey core very broken										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1179											
		93.76	6	4		ROCK LOSS:										
	93.76		27	19		COAL C2: Very Broken										
									BOX 32							
			29	21		COAL C2: dull										
			19	14		COAL C1: core broken										
			6	4		COAL C1: Very broken, shiny bands						313' / 95.4m				
		94.64	7	5		COAL LOST:										
	94.64		14	10		CLAYSTON: Carbonaceous broken										
		94.88	10	7		ROCK LOSS:										
	94.88	95.04	16	12		COAL LOST:										
	95.04		63	46		CLAYSTONE: very fine grained, highly carbonaceous, black colour, white to light brown streak, massive, top contact sharp.						314' / 95.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		96.99	132								316' / 96.3m				
						As Above:	becomes	coarser	and less carbon-						
									aceous towards base						
									BOX 33						
	96.99	98.79	180			SILTSTONE TO MEDIUM SANDSTONE;	part of fining								
							up sequence that includes previous								
							claystone, unit becomes less carbon-								
							aceous towards base of section								
											326' / 99.4m				
	98.79		43			SANDSTONE:	medium light grey, small carbon-								
							aceous stringers, part of previous								
							fining up sequence								
											327.5' / 99.8m				
			76			As Above									
									BOX 34						
		102.06	208			As Above:	becoming finer toward base of								
							section.								
											337.5' / 102.9m				
	102.06		61			SANDSTONE:	Medium to fine but fining downward								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 35							
			211			As Above:									
										346'	105.5m				
			41			As Above:									
								BOX 36							
		106.99	180			As Above:	but carbonaceous stringers more								
							common								
41°	106.99	107.83	84	63		SILTSTONE:	top contact sharp at 41° BCN, grey								
							to black, massive, wavy bedding,								
							becomes more carbonaceous towards								
							base								
										356'	108.5m				
	107.83		18	14		CLAYSTONE:	black, becomes finer and more								
							carbonaceous towards base, streak								
							is white to light brown, grades								
							towards shaly coal.								
								BOX 37							
		108.11	10	8		CLAYSTONE:	Dark gray, carbonaceous								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					↑ 1181											
	108.11		52	39		COAL C1: shiny thin dull bands										
			18	14		COAL C2:										
		108.89	8	6	↓	COAL C2: Core Broken					354.5'	109.6m				
	108.89		26	20	↑ 1181	CLAYSTONE: core very broken, carbonaceous										
		109.33	18	14		ROCK LOSS:										
	109.33	109.44	11	8		CLAYSTONE: Very Carbonaceous C-4					361'	110m				
	109.44		46	35	↑ 1181	As Above: Core Broken										
			3	2		As Above:					363'	110.6m				
		110.03	10	8	↓	ROCK LOSS:										
	110.03	110.20	17	13	↑ 1181	COAL C2: rightbands										
	110.20		58	44		COAL C1:										
			28	22		COAL C1: Broken Core					366'	111.3m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1182 ↓											
									BOX 38							
		111.44	38	29			COAL C1:	Thin, dull bands.								
	111.44		35	27			COAL C2:									
		112.06	27	21			COAL C2:	core very broken								
	112.06	112.71	65	50			CLAYSTONE:	dark grained, core broken				371' / 113.1 m				
	112.71	113.13	42	32			SHALEY COAL:	medium to dark brown streak, section very broken, muddy and possible losses.								
												374.5' / 114m				
	113.13	113.64	51	39			SHALEY COAL:	as above but less broken and muddy.								
									BOX 39							
	113.64		104				SHALEY COAL SILTSTONE:	interbedded of light to medium and medium to brown streak, megascopically indistinguishable.								
												379' / 115m				
		115.54	86				As Above:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	115.54	116.20	66												
						SHALEY: coal very broken and muddy, possible									
						loss.									
								BOX 40							
	116.20	116.50	30			SHALEY COAL: medium to dark brown streaks									
												384'/117m			
	116.50	117.10	60			CLAYSTONE: medium to light brown streaks									
	117.10		178			SHALEY COAL: with coaly lenses and stringers									
			16			As Above									
								BOX 41							
			152			As Above									
		121.90	134			As Above									
	121.90		17			SILTSTONE: black; light to medium brown									
						streak, carbonaceous, blocky									
						fracture									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			133												
			151												
			8												
			144												
			141												
			10												
			151												
			120												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			36													
						As Above: Finer grained, more carbonaceous										
			84								431' / 131.4m					
						As Above										
			152								436' / 132.9m					
						As Above										
						BOX 46										
			64													
						As Above:										
			210								441' / 134.4m					
						As Above										
						BOX 47										
			90													
						As Above:										
			178								451' / 137.5m					
						As Above:										
						Box 48										
			11													
						As Above										
											456' / 139m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			112												
			151			As Above:					461' / 140.5m				
			16			As Above:					466' / 142m				
			154			As Above:									
		144.bl	138			As Above:									
								BOX 49							
						As Above:									
	144.bl		22			CLAYSTONE:	as above but finer grained and more carbonaceous								
											476' / 143.6m				
		146.l2	129			As Above:	increasing in carbon content								
	146.l2		4			COALY SHALE:	medium to dark brown streak, black colour, 'black' cleavage								
											481' / 146.6m				
		147.24	108			As Above:	section slightly broken up								
											486' / 148.1m				
								BOX 51							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	147.24	147.64	40	31	1183 ↑	CLAYSTONE:	very carbonaceous,	core broken								
	147.64	147.72	8	6			C4:	broken								
	147.72	147.83	11	9			COAL LOSS:									
	147.83	148.87	104	81			COAL C3:	broken and powdered								
											491.1'/149.7m					
	148.87	149.13	26	20			COAL C1:	shiny thin dull bands								
	149.13	149.44	31	24			COAL C2:									
	149.44	149.77	33	26			COAL C1:									
	149.77	150.25	48	37			COAL C2:									
							BOX 52									
	150.25	150.53	28	22		COAL C1:	dull band									
										496.5'/151.3m						
	150.53	150.74	21	16		COAL C2:										
	150.74	151.15	41	32		COAL C3:	dull clay band									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1183 ↓										
	151.15	152.01	86	67		COAL C1:									
					1184 ↑										
	152.01		40	31		CLAYSTONE: carbonaceous, core broken									
		152.46	5	4	1185 ↓	ROCK LOSS						501' / 152.7m			
	152.46		31	24		COAL: powdered									
		153.14	37	29		COAL LOSS:									
	153.14	153.43	29	23		CLAYSTONE: carbonaceous									
	153.43		11	9		SHALEY COAL:									
												505.5' / 154.1m			
			149	116		SHALEY COAL:									
			118			SHALEY COAL:						510.5' / 155.6m			
		156.45	24			As Above: bottom boundary gradational									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	156.45		27			CLAYSTONE:	black very fine grained,	white to							
							light brown streak,	highly carbon-							
							aceous,	blocky fracture							
										516' / 157.3m					
			148			As Above									
										521' / 158.8m					
			67			As Above									
								BOX 55							
		159.39	52			As Above									
	159.39		78			SHALEY COAL:	section slightly broken up								
										526' / 160.3m					
		160.74	57			As Above:									
	160.74		9			SILTSTONE:	white to light brown streak,	highly							
							carbonaceous,	very fine grained.							
		161.11	28			As Above									
										531' / 161.8m					
	161.11		33			SILTSTONE:	slightly lighter colour and less								
							carbonaceous								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			34			As Above									
			148			As Above					561' / 171m				
			80			As Above					566' / 172.5m				
			68			As Above									
		175.13	186			As Above: but less carbonaceous and grading towards fine sandstone					571' / 174m				
	175.13		39			SANDSTONE: as above slightly coarser and less carbonaceous					576' / 175.6m				
		176.37	85			As Above: grading to siltstone									
	176.37		150			SILTSTONE: as above but slightly finer grained					581' / 177.1m				
			51			As Above:					586' / 178.6m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			97			As Above									
										591' / 180	1m				
		180.94	159			As Above: with increasing fine grained									
						· sandstone lenses and bands, rare									
						· calcite veinlets									
										596' / 181	7m				
		180.94	29			SANDSTONE, as above, slightly coarser grained									
			75			As Above									
										601' / 183	2m				
			193			As Above, slightly coarser and more calcite									
						· veinlets									
			148			As Above				606' / 184	7m				
			139			As Above:				611' / 186	2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	BOX 65	.	.	.					
			23			As Above:	.	.	.	.	
			148			As Above: slightly coarser grain	.	.	.	.	616'/187.8m			
						.	.	.	.	.	621'/189.3m			
		188.68	19			As Above: fining downwards rapidly	.	.	.	.	
	188.68		89			SILTSTONE: dark grey, highly carbonaceous, massive block fracture	.	.	.	.	
						.	BOX 66	.	.	.					
			38			As Above: grading to sandstone	.	.	.	.	
						.	.	.	.	.	626'/190.8m			
37		190.29	34			As Above: bottom contact sharp at 37° BCN	.	.	.	.	
										
	190.29		97			SANDSTONE: medium to fine grained with many siltstone bands and layers	.	.	.	.	
						.	.	.	.	.	631'/192m			
			118			As Above	.	.	.	.	
						.	BOX 67	.	.	.					
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		192.63	19													
	192.63	193.15	52							636'/193	8m					
	193.15		120			SILTSTONE:										
						SANDSTONE:	light grey, fine grained, many silt-									
							stone bands and stringers, biotur-									
							bated with faint worm burrows and									
							and soft sediment structures.									
		195.46	111	84						641'/195	3m					
							BOX 68									
	195.46		71	54		CLAYSTONE:	dark grey to black, very fine									
							grained lines downward, white									
							to light brown streak, bottom									
							contact sharp but irregular									
										646'/196	9m					
		196.69	52	39		CLAYSTONE:	as above									
	196.69	196.93	24	18		COAL LOSS										
	196.93	197.22	29	22		COAL C3:	dull bands, core broken									

1186
↑
9811

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					9811 ↙ 1186											
	197.22	197.76	54	41		COAL C2: Claystone blebs along beddings										
											650.5'	198.3m				
	197.76	198.09	33	25		COAL C3: Core broken bright bands										
41°	198.09		46	35		COAL C1: Bright shiny bands good core										
		198.69	14	11		COAL C1: coal loss										
	198.69	198.81	12	9		CLAYSTONE: white to light brown streak, very fine grained, carbonaceous, blocky cleavage										
	198.81	199.45	64	48	SILTSTONE to fine SANDSTONE: portion of fining up sequence that includes previous claystone, becomes less carbonaceous towards base.											
	199.45	200.81	136	103	SANDSTONE: fine to medium grained, part of fining up sequence											
	200.81		101		SANDSTONE: medium grained, aprt of fining up sequence											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 70							
			75			As Above									
										666' / 203m					
49°		204.13	156			As Above:	base of unit sharp at 49° BCN								
	204.13	204.18	5			SILTSTONE:	dark grey, carbonaceous								
										671' / 204.5m					
	204.18	204.81	63			SILTSTONE to medium SANDSTONE:	fining up sequence								
								BOX 71							
	204.81		84			SILTSTONE/SANDSTONE:	interbedded, siltstone lenses very irregular and contorted quartz calcite vein/etc common								
										676' / 206m					
			140			As Above:	but upper position very brecciated								
										681' / 207.6m					
			75			As Above:									
								Box 72							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			102												
						As Above:									
43°	209.45		63			As Above: fining down, grading to siltstone				686'	/209.1m				
						bottom contact sharp at 43° BCN									
	209.45	210.02	57			SHALY COAL: with coal lenses, slightly broken									
										691'	/210.6m				
	210.02		75			SHALY COAL: very broken, muddy, possible loss									
						BOX 73									
			88			As Above:									
										696'	/212.1m				
		213.12	147			As Above: less broken, grading to siltstone									
										701'	/213.7m				
	213.12		67			SILTSTONE: fine grained, dark grey to black,									
						highly carbonaceous, white to light									
						grey streaks									
						BOX 74									
			90			As Above:									
										706'	/215.2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			159												
			56							711' / 216.7m					
								BOX 75							
			181												
										720' /					
			118												
								BOX 76							
			35												
										725' /					
			166												
										730'					
			103												
								BOX 77							
		222.97	10												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	222.97		183			SHALY COAL: medium to dark brown streaks,									
						splintery fracture section broken									
						up, possible losses									
										739.5' /					
		225.18	38			As Above: base gradational									
	225.18		66			CLAYSTONE: highly carbonaceous, white to									
						light brown streak, blocky									
						cleavage, pirated band at 742.6									
						BOX 78									
			55			As Above									
										744.5					
			225			As Above: with shaly coal bands and lenses									
										255.5' / 230.3m					
			23			As Above:									
						BOX 79									
		229.35	48			As Above									
	229.35	230.21	86			SHALY COAL: medium to dark streak, heavily									
						broken, mud stains, possible losses									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	230.21	230.94	73												
						SILTSTONE: upper contact gradual, muddy seams possible, loss of section									
						BOX 80									
48°	230.94	231.69	75												
						CLAYSTONE: very fine grained, highly carbon- aceous, grading to coaly, white to medium brown streak, calcite veins common, bottom boundary sharp at 48° BCN									
	231.69	233.06	137			SANDSTONE: medium grained, many lenses and stringers of siltstone, calcite veins common									
										766' / 233.5m					
	233.06	233.93	87			SILTSTONE: top section highly carbonaceous, decreasing down, heavily biotur- bated									
						BOX 81									
51°	233.93	235.12	119			SILTSTONE to medium SANDSTONE: fining up sequence, bottom contact sharp at 51° BCN									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	235.12	235.39	27			SILTSTONE: heavily carbonaceous, black, white to light brown streak					776' / 236	5m			
	235.39	236.34	95			SHALY COAL: broken, splintery fracture, few calcite veins									
	236.34		55			SILTSTONE: highly carbonaceous, grading to coaly, black to medium gray									
						BOX 82									
			227			As Above:					786' / 239	6m			
			65			As Above: base broken and medium stained, possible losses.					788' / 240	2m			
						BOX 83									
		241.53	172			As Above:									
	241.53		18			COAL SHALE: medium brown streak, splintering fracture, slicks common, moder- ately broken up.					796' / 242	6m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			29			As Above:									
			20			As Above:					797.5/243.1m				
		242.32	12			Core Loss									
			37			SANDSTONE: very fine grained, black, white to medium brown streak, blocky fracture									
						BOX 84									
			111			As Above: with common calcite veins									
			13			Rock Loss									
		244.53	60			SHALY COAL: broken, possible loss									
	244.53		10			COAL: powdered and broken					805.1/245.4m				
			100			CLAYSTONE: very carbonaceous, some powdered coal, very broken									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 85							
			25			As Above:									
		246.2b	38			CORE LOSS: (rock and coal)									
	246.2b		169			SANDSTONE: fine grained, light to medium grey many coal particles									
		248.1b	21			SANDSTONE; core loss									
										815.5' / 248.6m					
	248.1b		43			SHALY COAL: highly fractured									
										818' / 249.3m					
			19			COAL & CLAYSTONE: mixed									
			18			CLAYSTONE: carbonaceous									
			15			COAL G-1: broken and claystone powder									
		249.71	60			COAL & CLAYSTONE: core loss									
								BOX 86							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	249.71		122			CLAYSTONE: carbonaceous, dark grey silty									
										826' / 251.8m					
			115			CLAYSTONE: gray, silty calcite stringers									
			13			CLAYSTONE: very carbonaceous, broken									
		252.35	14			Rock Loss:									
	252.35		29			COAL C-2: vitrinite bands									
										253.3' /					
							BOX 87								
			12			C-4									
			7			COAL C-3/C-4									
			47			COAL & CLAYSTONE: core loss									
		253.38	8			COAL & CLAYSTONE: broken									
	253.38	253.76	38			CLAYSTONE: gray to dark gray, minor carbon- aceous material									
										853' / 254.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	253.76	255.05	129												
						SHALY COAL: medium to dark brown streak, blocky fracture, moderately broken									
											840' / 256m				
	255.05		78			SILTSTONE: dark grey to black, highly carbon- aceous, light to medium brown streak, wavy									
											842.6' / 256.8m				
			17			As Above:									
						BOX 88									
											844' / 257.3m				
			266			As Above									
						BOX 89									
			18			As Above									
		260.33	149								854' / 260.3m				
						As Above: with rare coal lenses									
48°	260.33	260.63	30			COAL: ground up to pulp, boundary sharp at 48° BCN									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	260.63		97			SILTSTONE:	dark grey to black, very fine								
							grained, white to medium brown								
							streak, block fracture, massive								
								BOX 90							
			190			As Above:	with common calcite veins, moderate-								
							ly ^{common?} coarser fine grained sandstone								
							lenses, bedding wavy and soft								
							sediment disturbed								
										865' / 263.7m					
			105			As Above:									
								BOX 91							
			10			As Above:									
										875' / 266.7m					
		267.47	282			As Above:									
								BOX 92							
32°	267.47		41			SANDSTONE:	medium grained, upper contact very								
							sharp at 32° BCN, light grey,								
							massive, rare calcite veins								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
			252			As Above:	.	.	.			886' / 270.1m			
											
						.	BOX 93	.	.						
											
			68			As Above:	.	.	.						
								896' / 273.1m			
			230			As Above:	.	.	.						
											
						.	BOX 94	.	.						
											
			118			As Above:	but slightly finer grained								
								906' / 276.1m			
			177			As Above:	.	.	.						
											
						.	BOX 95	.	.						
											
			40			As Above:	with abundant worm burrows								
								916' / 279.2m			
			256			As Above:	.	.	.						
											
						.	BOX 96	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			174												
						As Above:	but worm burrows,	rare and less							
							distinct,	rare slickensides							
			119							926' / 282	.2m				
						As Above:									
							BOX 97								
			194												
						As Above:	but slightly finer grained,	upper							
							section has many calcite veins								
			97							936' / 285	.3m				
						As Above:	but less calcite veins								
							BOX 98								
			203												
						As Above:									
			89							946' / 288	.3m				
						As Above:	but finer grained,	rare siltstone							
							veins.								
							BOX 99								
			220												
						As Above:	but siltstone bands more common								
										956' / 291	.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			73			As Above;	but siltstone bands rarer								
							BOX 100								
			220			As Above;	with 15' cm siltstone band								
										966'	294.4m				
			73			As Above;	with no' siltstone bands								
							BOX 101								
			240			As Above									
										976'	297.5m				
			57			As Above									
							BOX 102								
			249			As Above;	but grading to medium grained								
							sandstone towards base								
										986'	300.5m				
			43			As Above;									
							BOX 103								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
49°		300.82	102												
	300.82	300.88	6			SILTSTONE:	light grey	moderately	carbonaceous,						
							top and bottom	contacts	very sharp						
							and parallel,	marked	grain size						
							change at top	and bottom	contacts.						
	300.88		186			SANDSTONE:	fine grained,	light grey	with common						
							bands and lenses	of siltstone							
										996'	303.6m				
			22			As Above:									
							BOX 104								
		304.43	147			As Above:									
	304.43		146			SANDSTONE:	medium grained,	grey/grown,	very						
							common quartz	lenses and	veinlets						
							locally	brecciated							
							BOX 105								
		308.18	229			As Above:	lower boundary	sharp but	broken						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	308.18		63			SANDSTONE: fine grained, very carbonaceous,									
						medium to dark grey									
						BOX 106									
			213			As Above: with slightly less carbon									
										1022.5'	311.7m				
			82			As Above:									
						BOX 107									
			20			As Above: but slightly coarser grain									
										1026'	312.7m				
			271			As Above: with one pyrite bearing cm. thick									
						siltstone band									
						BOX 108									
			31			As Above									
										1036'	315.8m				
			261			As Above									
						BOX 109									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			28			As Above									
			266			As Above: with rare calcite veins					1046' / 318.8m				
			57			As Above: with common siltstone bands									
			234			As Above: base of section contains well preserved worm burrows indicating tops					1056' / 321.9m				
			73			As Above									
			220			As Above:					1066' / 325m				
			89			As Above: with less siltstone bands									
			207			As Above:					1076' / 328m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			155												
						As Above									
								BOX 116							
			168			As Above:									
											1115' / 339.9m				
			124			As Above: with minor sandstone lenses									
								BOX 117							
			200			As Above:									
											1125' / 342.9m				
			92			As Above:									
								BOX 118							
			232			As Above:									
											1135' / 345.9m				
			65			As Above:									
								BOX 119							
49°		348.61	233			As Above: bottom section sharp at 49° BCN									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	348.61		11			SANDSTONE: fine grained, light grey, abundant siltstone bands and stringers, massive, bedding disrupted and folded.									
										1146'	349.3m				
			50			As Above:									
						BOX 120									
70°		350.00	78			As Above: bottom contact sharp at 70° BCN									
	350.00		182			SILTSTONE: medium grey, coarse grained, bedding irregular, sandstone lenses irregular, massive, blocky fracture									
										1156'	352.3m				
			33			As Above:									
						BOX 121									
			292			As Above: but slickensides abundant near base									
						BOX 122									
										1166'	355.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			292												
						As Above:	slickensides abundant near top of								
							section								
							BOX 123								
			23			As Above:									
										1176' / 358.4m					
			270			As Above:									
							BOX 124								
			30			As Above:									
										1186' / 361.5m					
			266			As Above:									
							BOX 125								
			26			As Above:									
										1196' / 364.5m					
			267			As Above:									
							BOX 126								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			43												
						As Above:						1206' / 367.6m			
			252			As Above									
								BOX 127							
			67			As Above									
												1216' / 370.6m			
42°		372.19	176			As Above:	coarsening down, top is distinct but								
							not sharp								
		372.19	55			SANDSTONE:	fine grained, light grey, siltstone								
							lenses and bands common, massive								
								BOX 128							
			82			As Above:									
												1226' / 373.7			
51°		374.46	90			As Above:	coarsening down, bottom boundary								
							distinct at 51° BCN								
		374.46	123			Similar as Above but sandstone to medium grained									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	380.91		19			SANDSTONE: fine grained, massive light grey, section moderately broken with common healed fractures.									
						BOX 131									
			168			As Above									
		383.41	63			As Above					1256' / 382.8m				
64°	383.41		23			SHALY COAL: medium to dark brown streak, splintery fracture, upper section broken, possible loss, upper boundary distinct at 64° BCN									
			45			As Above:					1259' / 383.7m				
						BOX 132									
			90			As Above:									
		385.43	94			As Above:					1262' / 384.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
72°	385.93		38			SANDSTONE: fine grained, light grey, abundant siltstone bands and lenses, upper contact feathery but distinct at 72° BCN									
			76			As Above					1266' / 385.9m				
						BOX 133									
		387.80	73			As Above:									
	387.80	388.39	59			SILTSTONE: dark grey, light to medium brown streak, blocky cleavage noticeable slikensides planes, very fine grained.									
	388.39		5			SHALY COAL: medium to dark brown streaks					1276' / 388.9m				
		388.96	52			As Above: central portion close to coal, severely broken, possible loss									
	388.96	390.00	104			SILTSTONE to medium SANDSTONE: rapid fining up sequence, approximately 60% medium sandstone									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	390.00	390.19	19												
	390.19		116												
			159								1286' / 392m				
		393.36	42												
	393.36		253												
			23												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			234												
						As Above: with relatively common quartz veins									
						BOX 139									
			73			As Above									
										1333'	406.3m				
			221			As Above:									
						BOX 140									
			77			As Above									
										1343'	409.3m				
		410.36	191			As Above									
										1346'	410.3				
52°	410.36	410.65	29			CLAYSTONE: dark grained, carbonaceous									
										1347'	410.57m				
						E.O.H.									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
21			147												
			7												
25	18.16		287												
22	18.16		55												
			20												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			31												
						SANDSTONE: fine grained light gray thin claystone bands									
18			191			SANDSTONE: medium grained, light gray, massive. iron stain along fracture, thin claystone bands									
						BOX 6									
			37			As Above: fractured									
											72' / 21.9m				
12			251			As Above: core very broken, iron, salt and pepper									
						BOX 7									
			56			As Above:									
											82' / 25m				
		26.05	148			As Above:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
											
											
	26.05		75			As Above:	.	.	.						
											
						BOX 8	.	.	.						
											
		28.88	208			As Above: core broken slicks	.	.	.						
											
											
											
						SANDSTONE: fine grained, light gray	.	.	.						
						carbonaceous material along	.	.	.						
23	28.88		70			bedding core broken	.	.	.						
											
						BOX 9	.	.	.						
											
28		30.66	108			As Above: thin claystone bands, medium	.	.	.						
						grained at base,	.	.	.						
											
						SANDSTONE: medium grained, light gray,	.	.	.						
						carbonaceous material, bedding,	.	.	.						
						salt and pepper texture	.	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						106'	32.3m			
			53			As Above:	.	.	.	.	
										
						BOX 10	.	.	.	.	
										
			72			As Above:	.	.	.	.	
										
						116'	35.4m			
						As Above:	.	.	.	.	
			108			.	.	.	.	.
24			107			SANDSTONE: fine grained, claystone laminated,	.	.	.	.	
						core broken	.	.	.	.	
										
						BOX 14	.	.	.	.	
										
			86			As Above: core very broken	.	.	.	.	
										
		35.73	81			SANDSTONE: fine grained, light gray, massive	.	.	.	.	
						iron stains along fracture	.	.	.	.	
										
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
32			24	20		As Above:										
							conglomerate clasts rounded									
			113	96			quartz up to 2 cm, sand matrix									
	41.49		102	87	↑ 1651	COAL C1:	vitrinite bands solid core, thin									
							dull bands (.5cm									
			5	4			COAL C2:	pyrite blebs								
			13	11			COAL C1:									
			6	5			COAL LOSS:									
		42.82	7	6			COAL C3:	thin claystone bands .5cm								
	42.82	42.95	13	11			ROCK LOSS:									
								BOX 14								
	42.95	43.06	11	9			COAL C2 & C3:									
	43.06	43.17	11	9			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1651 ←											
	43.17		9	8		COAL C1 & C2: mixed, powdered										
			5	4		COAL C1:										
			6	5		COAL LOSS:					147' / 44.8m					
			12	10		COAL C3: vitrinite bands										
		43.54	5	4		COAL LOSS:										
	43.54	43.60	6	5		CLAYSTONE: carbonaceous										
	43.60		15	13		COAL LOSS:										
		43.86	11	10		COAL C3: thin claystone bands, .5cm										
	43.86		8	7		ROCK LOSS:										
		44.00	6	5	CLAYSTONE: carbonaceous											
	44.00	44.12	12	10	COAL C3: vitrinite bands											
	44.12		20	18	CLAYSTONE: very carbonaceous, core broken, vitrinite bands											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
28	46.19	46.19	187	165		CLAYSTONE:	silty laminated carbonaceous								
							material, along bedding, medium								
							grained.								
							BOX 15								
	46.19	46.33	14	12		SILTSTONE:	light gray, laminated								
							SANDSTONE:	fine grained, dark gray with light							
							gray laminated carbonaceous								
	46.33		10				material along bedding.								
										157' / 47.8m					
28			198			As Above:									
			48			SANDSTONE:	medium grained, light gray								
							carbonaceous material along								
							bedding, salt and papper texture,								
							thin claystone, calcareous along								
							fracture								
							BOX 16								
32	49.39		50			As Above:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	.	.	.	167' / 50.9m					
35	49.39		232			As Above:	.	.	.						
											
						BOX 17	.	.	.						
											
			63			As Above:	.	.	.						
						.	.	.	.	177' / 53.9m					
28		54.44	210			SANDSTONE: fine grained, light gray, dark gray,	.	.	.						
						laminations, wavy beddings,	.	.	.						
						carbonaceous material along bedding	.	.	.						
											
						BOX 18	.	.	.						
											
	54.44		80			CLAYSTONE: silty, medium grained, poorly	.	.	.						
						laminated	.	.	.						
						.	.	.	.	187' / 57m					
											
		55.30	6			As Above:	.	.	.						
											
	55.30	56.00	70			SANDSTONE: medium grained, medium to dark gray,	.	.	.						
						core broken, abundant calcite	.	.	.						
						throughout, core broken	.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	56.00	56.48	48													
						CLAYSTONE:	dark gray, carbonaceous at top,									
							core very broken									
										191' / 58.2m						
	56.48		5			As Above:										
							BOX 19									
43			201			As Above:	core very broken									
		59.19	65			As Above:	carbonaceous pyrite along bedding,									
							core very broken									
							BOX 20									
	59.19	59.93	74			As Above:	core very broken, coaly stringers,									
	59.93	60.09	16			COAL & CLAYSTONE:										
						COAL C1:	very broken									
	60.09	60.23	14			CLAYSTONE:	black, very carbonaceous, core									
							very broken									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	60.23	60.28	5												
	60.28	61.82	154								207' / 63.1m				
	61.82	61.88	6												
	61.88		7												
		62.10	15												
	62.10	62.17	7												
	62.17	62.32	15												
											216' / 65.8m				
	62.32	62.59	27												
45	62.59	63.39	80												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			97			SILTSTONE:	dark gray,	calcite stringers,							
							along fracture,	core broken							
							BOX 22								
		65.31	95			As Above:									
										226' / 68.9m					
						As Above:	carbonaceous								
	65.31	65.42	11			COAL & SILTSTONE:	core powdered								
43	65.42		25			SANDSTONE:	fine grained,	light gray,	dark						
							gray laminated,	wavey bedding							
							abundant calcite	stringers							
							BOX 23								
05		66.21	54			As Above:	micro faults								
	66.21		12			As Above:	core very broken,	fault zone							
00			55			As Above:	salt and pepper	texture							
										237' / 72.2m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			195												
						As Above:									
							BOX 24								
		69.03	20			As Above:									
	69.03	69.42	39			As Above:					246' / 75.0m				
	69.42	69.50	8			COAL & CLAYSTONE:	very broken								
	69.50	69.57	7			CLAYSTONE:	very hard, fault zone								
05	69.57		203			SILTSTONE:	thinly bedded medium grained								
							with dark gray lamination, planar								
							bedding (hulcross)								
							BOX 25								
		72.87	127			As Above:									
	72.87		212			CONGLOMERATE:	moderately well sorted, salt and								
							pepper texture pebbles average								
							approximately every 3 mm sub-								
							rounded persistent calcite vein								

at 81' B.C.N.

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
											
27		77.01	202			As Above:	.	.	.						
											
	77.01	77.92	91			SANDSTONE: fine grained, massive, bio-turbated,									
						· rare wavy siltstone laminations,									
						· light gray									
											
	77.92	78.28	36			CONGLOMERATE: as above, pebbles 5mm									
											
						· BOX 26									
											
28	78.28	79.76	148			SILTSTONE: carbonaceous, with minor coaly									
						· seams approximately 1cm, 2cm, 6cm,									
						· abundant pyrite nodules to 4.5cm,									
						· nodules are fine grained;									
						· radiating may be some core loss									
						· 1 interval of broken coal									
											
	79.76		148			SANDSTONE: fine-medium grained, gray									
						· carbonaceous fragments, abundance									
						· near top, no core loss									
											
						· BOX 27									
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		81.71	47												
03	81.71	82.58	87			SILTSTONE: carbonaceous									
28	82.58		34			SANDSTONE: fine grained, gray									
		83.50	58			As Above:						276' / 84.7m			
08	83.50	84.34	84			SANDSTONE-SILTSTONE: fining upward cycle, medium sandstone at base, carbonaceous siltstone									
	84.34	84.67	33			SILTSTONE: carbonaceous, dark gray									
						BOX 28									
	84.67	86.12	145			As Above: last 400cm very broken and slicken sided									
												285' / 86.9m			
	86.12		145			SANDSTONE: medium grained, top 300cm heavily crumpled bedding, abundance fine carbonaceous lamination, rare dark gray siltstone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 29								
		89.18	161			As Above:	fine grained carbonaceous silt-								
							stone; core broken near bottom								
										295' / 89.0m					
	89.18		104			As Above:									
							BOX 30								
			223			As Above:	with 260 medium grained sandstone								
							bands								
										305' / 93.0m					
			73			As Above:									
							BOX 31								
		94.09	91			As Above:									
	94.09	94.78	69			SANDSTONE:	fine grained carbonaceous, very								
							contorted bedding, possible								
							slump structure								
	94.78		20			SILTSTONE:	fine grained, carbonaceous very								
							black color								

DRILL CORE LOG

HOLE No. QB 3102

PAGE No. 17

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		95.27	29			As Above:									
	95.27	96.10	83	79		SANDSTONE: fine grained carbonaceous beds, very contorted, possible slump structure									
						BOX 32									
17	96.10		100	96		SANDSTONE: fine grained, medium gray, abundant silty laminations, medium grained sandstone bands towards bottom									slightly broken
		97.27	17	16		CLAYSTONE: silty medium gray, brown									
	97.27		28	27		COAL C2 & C3:									broken
			24	23		COAL LOSS:									
		97.96	17	16		COAL C1 & C2:									
	97.96	98.17	21	20		CLAYSTONE: silty medium gray, a 3cm carbonaceous band at top									broken

DRILL CORE LOG

HOLE No. OP 9102

PAGE No. 18

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	98.17	98.27	10	10		COAL LOSS:									
	98.27	98.33	6	6		C4;	(50-50)								broken-pulverized
						COAL MIX:									
	98.33	98.45	12			ROCK LOSS (C4)									
	98.45		15			CLAYSTONE: carbonaceous coaly fragments in middle									very broken
		98.69	9			ROCK LOSS:									
	98.69	98.79	10			C4: coaly stringers									broken
	98.79	98.81	2			COAL C2: claystone stringers									broken
	98.81		53			CLAYSTONE: carbonaceous C4 bands in middle occasional coaly stringers									broken
						BOX 33									
	99.34	99.76	42			CLAYSTONE: silty C4 bands towards bottom									

DRILL CORE LOG

HOLE No. QBD 102

PAGE No. 19

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	99.76	101.09	133												
						SILTSTONE: carbonaceous, bedding wavy, 13cm fine grained sandstone band									
										336'	102.4m				
	101.09		103			As Above:									
						BOX 34									
		102.74	62			As Above:									
22	102.74	103.62	88			CLAYSTONE: (carbonaceous) medium brown streak very broken up; slickensides common									
	103.62		15			ROCK LOSS:									
		104.14	37			SILTSTONE: very fine grained, carbonaceous, upper contact gradual									
										346'	105.5m				
	104.14	104.70	56			As Above:									
26	104.70		34			SANDSTONE: fine grained, carbonaceous bedding is wavy									

DRILL CORE LOG

HOLE No. QBD 102

PAGE No. 20

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 35								
			217				As Above:								
		107.84	63				As Above:				356' / 108.5m				
							BOX 36								
18	107.84	109.28	144				SILTSTONE: carbonaceous, dark gray-black								
		109.28	18				CLAYSTONE: (carbonaceous) medium brown streak								
		109.46	64				SILTSTONE: carbonaceous, dark gray-black, bedding is wavy								
			12				ROCK LOSS:								
											366' / 111.6m				
36		110.77	55				As Above:								
							BOX 37								
30	110.77		106				SILTSTONE: medium gray, occasional sandy laminations at top, abundant dark gray claystone bands								broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		112.32	49		1654	CLAYSTONE:	medium gray brown,	extremely						broken-pulverized	
								friable							
	112.32		9	8			ROCK LOSS:								
		112.50	9	8			C4:	abundant vitrinite bands	towards						
								bottom							
	112.50	112.80	30	27			CLAYSTONE:	carbonaceous-coaly	towards bottom						broken, pulverized
								coal particles in bottom							at bottom
	112.80		5	5			COAL LOSS:								
		113.04	19	17			COAL C2/C3:	occasional vitrinite	stringers						very broken
	113.04	113.38	34	31			CLAYSTONE & COAL:	50/50 mixed							very broken - pulverized
	113.38	113.48	10	9			ROCK LOSS:								
	113.48		5	5			COAL C2/C3:								
		113.63	10	9		COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	113.63	113.79	16	15		CLAYSTONE:	carbonaceous,	extremely friable						pulverized	
	113.79	114.02	23	21		COAL LOSS:									
	114.02	114.11	9	8		ROCK LOSS:									
	114.11	114.27	16			COAL LOSS:									
							BOX 38								
	114.27		75			CLAYSTONE:	carbonaceous								
		115.72	70			CLAYSTONE:	carbonaceous,	medium brown streak							
							irregular coal patches								
	115.72	117.06	134			SILTSTONE:	carbonaceous,	dark gray-black,							
							coaly streams,	core lost near							
							base.								
										386' / 117.7m					
							BOX 39								
	117.06	118.94	188			SANDSTONE:	fine to medium,	fining upward							
							cycle with medium grain at base								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 41								
	122.65	122.93	28			As Above:									
										406' / 123.7m					
	122.93	123.02	9			CLAYSTONE: dark gray, moderately fissile, boundaries quite sharp									
27	123.02	125.42	240			SANDSTONE: medium grained; light gray, minor silty bands, persistent calcite grain at 84° BCN.									
							BOX 42								
	125.42	125.91	49			As Above: with 7cm silty bands									
										416' / 126.8m					
21	125.91		229			SANDSTONE: medium grained, massive, light gray, rare carbonaceous, laminated and rare, sub-rounded pebbles									
							BOX 43								
26		128.60	40			As Above: lower contact sharp									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	128.60	128.85	25													
						SILTSTONE:	light gray,	abundant carbonaceous								
							lamination,	bedding very wavy								
										426' / 129.8m						
	128.85	129.53	68			As Above:	with minor faulting,	displacement								
							about 1cm									
23	129.53		147			SANDSTONE:	medium grained,	light gray, massive,								
							carbonaceous laminations	uncommon,								
							calcite veinlets	common								
							BOX 44									
		131.76	76			As Above:	with moderately common	slickensides								
							and calcite quartz									
										436' / 132.9m						
	131.76	132.52	76			As Above:										
18	132.52	132.79	27			SILTSTONE:	dark gray, carbonaceous,	contacts								
							sharp; bedding is wavy									
11	132.79		82			SANDSTONE:	medium-fine grain,	massive								
							BOX 45									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		134.57	96												
						As Above:	abundant bitumen as fractured								
							coating and cavity filling near								
							base of section								
										446' / 135.9m					
	134.57		183			As Above:	with calcite and bitumen fractures								
							BOX 46								
			122			As Above:	with rare shale bands, rare calcite								
							bands								
										456' / 139m					
		138.94	132			As Above:									
							BOX 47								
	138.94		146			As Above:									
										466' / 142m					
		141.72	132			As Above:									
							BOX 48								
42	141.72	142.01	29			SILTSTONE:	Carbonaceous, dark gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	142.01	143.47	146			SANDSTONE: fine grained, light gray;									
						carbonaceous laminations; 8.0cm									
						thick									
										476/145	1m				
	143.47	143.61	14			As Above: bottom contact sharp, contact at									
						43°									
	143.61		94			SILTSTONE: banding is wavy sometimes disrupted,									
						light gray-black, moderate									
						carbonaceous									
						BOX 49									
48		146.27	172			As Above: but less carbonaceous, lower									
						contact sharp, contact about 48°									
	146.27	146.33	6			SILTSTONE: fine grained, highly carbonaceous									
						black; heavily veined									
										486/148	1m				
	146.33	147.37	104			As Above: but slightly less carbonaceous,									
						highly broken and veined									
						BOX 50									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	147.37		141			SANDSTONE:	medium to fine grain,	light grey,							
							moderately fractured into large								
							pieces, minor calcite veins								
										496' / 151.	2m				
		149.99	121			As Above:	with rare leachouts								
							BOX 51								
	149.99	150.18	19			SILTSTONE:	dark gray black,	moderately fissil							
	150.18		189			SANDSTONE:	medium to fine grain,	light gray							
							massive, occasional open fractures								
										506' / 154.	2m				
			44			As Above:									
							BOX 52								
			253			As Above:									
										516' / 157.	3m				
			29			As Above:									
							BOX 53								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			274			.	.	.	.		
						As Above:	.	.	.						
		158.16	9			.	.	.	.	526' / 160.3m				
						As Above:	.	.	.						
											
						BOX 54	.	.	.						
											
	158.16		267			As Above:	.	.	.						
											
						BOX 55	.	.	.						
											
			29			As Above:	.	.	.						
						.	.	.	.	536' / 163.4m				
		161.61	49			As Above:	.	.	.						
											
	161.61	161.91	30			SANDSTONE: medium grain, broken up some,									
						places to powder, slickensides									
						common	.	.	.						
											
64	161.91		149			SANDSTONE: fine grained, light gray, massive									
											
						BOX 56	.	.	.						
											
			80			As Above:	.	.	.						
						.	.	.	.	546' / 166.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
		166.20	200			As Above:	.	.	.						
							BOX 57	.	.						
											
	166.20		96			As Above:	.	.	.						
						.	.	.	.	556'/169	5m			
			185			As Above:	.	.	.						
											
						.	BOX 58	.	.						
											
		169.66	65			As Above:	.	.	.						
						.	.	.	.	566'/172	5m			
	169.66	170.41	75			CLAYSTONE: carbonaceous, dark gray fissel,									
						· slickensides common, broken up									
						· towards top of section, fracture									
						· planes curved									
											
68	170.41		142			SANDSTONE: light gray, fine grained, slicken-									
						· sides common, fractures curved,									
						· very broken in sections									
											
						.	BOX 59	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		173.64	181			As Above:	but less fracturing								
										576' / 175.6m					
	173.64		97			As Above:									
							BOX 60								
			255			As Above:	fracturing much more intense,								
							carbonaceous siltstone bands rare								
										586' / 178.6m					
			19			As Above:									
							BOX 61								
86			240			As Above:									
										596' / 181.7m					
			41			As Above:									
							BOX 62								
			253			As Above:									
		183.10	41			As Above:	very broken with gauge of 71° BCN								
										606' / 184.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 63								
	183.10	183.39	29			SANDSTONE:	light gray, massive				606' / 184.7m				
	183.39	184.10	71			SILTSTONE:	very broken up, slickensides								
							common, fractures curved; dark								
							gray carbonaceous								
	184.10		195			SANDSTONE:	light gray, massive, fine grained								
							with open fractures, bitumen								
							filling cavities								
							BOX 64								
			15			As Above:	with less abundant fractures								
		187.02	82							616' / 187.8m					
	187.02	187.31	29			SILTSTONE:	dark gray to black, carbonaceous,								
							holy in places, very friable,								
							slickensides common.								
47	187.31		152			SANDSTONE:	massive, fine grains, open								
							fractures common, light gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 65	.	.						
											
			48			As Above:	.	.	.						
						.	.	.	.	626' / 190.8m					
			236			As Above:	.	.	.						
											
							BOX 66	.	.						
											
			70			As Above:	.	.	.						
						.	.	.	.	636' / 193.9m					
		192.64	27			As Above:	.	.	.						
											
	192.64	192.85	21			SILTSTONE:	black very carbonaceous, fissile,								
						.	slickensides common	.	.						
											
	192.85	194.50	165			SANDSTONE:	fine grained, light gray, fractures								
						.	common, calcite bitumen filled,								
						.	siltstone bands fairly common								
						.	broken with slickensides near								
						.	base of section	.	.						
											
							BOX 67	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	194.50		100			As Above:	with less fractures								
										646'	196.9m				
			183			As Above:	slightly bioturbated								
							BOX 68								
			108			As Above:									
										656'	199.9m				
		199.18	77			As Above:	bottom contact sharp at 24 BCN								
	199.18		98			SILTSTONE:	bedding slightly disrupted, fissile								
							fairly common, slickensides, some								
							sandstone bands								
							BOX 69								
		201.25	109			As Above:	with sandstone bands becoming more								
							common towards base of section								
	201.25	201.55	30			SANDSTONE:	fine grained, light gray; some								
							healed some open fractures, rare								
							slickensides								
										566'	203m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	201.55		140			As Above:	but fracturing	less intense,	19cm						
							coaly	siltstone	bed						
							BOX 70								
			164			As Above:	with fractures	locally	common						
			155			As Above:	with very little	fracturing							
							BOX 71								
			181			As Above:	with much more	common	calcite and						
							bitumen	fractures							
		208.63	68			As Above:									
	208.63	208.92	29	22		SILTSTONE:	dark gray,	fissile,	slickensides						
							common,	contact	sharp at 16°						
							BOX 72								
41	208.92		46	35		SILTSTONE:	medium dark gray,	occasional							broken
							sandy	bands in	middle, coaly						
							rich	towards	bottom						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		209.52	14	11		CONGLOMERATE: chert and quartz pebbles (pebbles approximately 0.5 - 2.5cm) coarse grained sandstone matrix well cemented									broken
	209.52		130	98	↑ 1655	COAL C1/C2: occasional C3 bands									
			57	43		COAL C1/C2: C3 bands towards bottom					696'	212.1m			
			7	5		COAL C2/C3: minor vitrinite stringers									
						BOX 73									
			7	5		COAL C2/C3:									broken
			13	10		COAL LOSS:									
			3	2		COAL C3: with C4 bands towards bottom									
		211.99	30	23		COAL LOSS: (C3 with C4)									
	211.99		6	5		COAL C2/C3:									broken pulverized sheared
											699'	213.1m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	214.39	215.30	91			As Above:	with decreasing	carbon content							
							towards base of	section							
	215.30	216.93	163			SANDSTONE:	fine to medium grain,	light gray,							
							medium gray towards	base, decreasing							
							carbonaceous content	towards base							
							portion of a fining	up sequence							
							which includes	overlying siltstones							
							and the underlying	medium grain							
							sandstone for a	total length of							
							848cm								
											716'/218.2m				
	216.93	217.19	26			See Above:	medium grained,	light gray massive							
							with carbonaceous	stringers							
							BOX 75								
	217.19	219.98	279			As Above:	but slightly	coarser towards	base						
							see interval	Box 74							
											726'/221.3m				
							BOX 76								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			8	6	1655 ←											
						COAL LOSS:										
			11	8		COAL C2/C3:										very broken
		212.83	59	43		COAL C1/C2: occasional C3 particles, minor claystone particles										very broken
	212.83	213.05	22	16		CLAYSTONE: carbonaceous-coaly abundant C4 bands and coaly stringers										broken
	213.05	213.08	3	2		COAL & CLAYSTONE MIX: 60% coal and 40% claystone										pulverized
	213.08	213.19	11	8		COAL LOSS:										
			79	57		CLAYSTONE: carbonaceous at top, silty towards bottom, dark brown-medium gray, core fissile										pulverized in middle
44		214.39	41	29		SANDSTONE: very fine grained, light gray medium gray, silty laminations						706'/215.2m				
						BOX 74										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	219.98		96			SANDSTONE: medium to coarse, base of fining up sequence, lowest unit has clasts 5mm in diameter, base of section is irregular and fines downward									
		222.36	142			SANDSTONE: medium to fine grained, light gray lower contact sharp at 47°, shake rip ups near base of sandstone									
	222.36	222.91	55			SILTSTONE: dark gray carbonaceous, fining down to claystone, broken up, very muddy near base of section, claystone highly fractured with numerous calcite veinlets.									
						BOX 77									
	222.91		20			CLAYSTONE: as above									
											736' / 224.3m				
42		225.73	262			As Above: less calcite veins, bedding slightly disturbed									
						BOX 78									
											746' / 227.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	225.73		28	20	1656 ↑	CLAYSTONE:	silty at top,	carbonaceous towards							broken-pulverized	
								bottom, minor coaly fragments								
								towards bottom								
											746'/227.4m					
		226.25	24	17			As Above:	a 2cm coal band	3cm from bottom							broken
	226.25		27	19			COAL LOSS:									
			7	5			COAL C2/C3:									very broken
		227.32	73	53			COAL C1/C2:	occasional C3 fragments								very broken pulverized
	227.32	227.50	18	13		C4:	claystone stringers								broken	
	227.50	227.58	8	6		CLAYSTONE:	carbonaceous, coaly stringers									
	227.58		70	50		COAL C1/C2:									broken	
			14	10		COAL LOSS:										
							BOX 79									
		228.63	21	15		COAL C2:	vitrinite stringers,	C3 bands							broken	
															∇	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1656 ↓											
	228.63		20	14		ROCK LOSS: C4										
		228.92	9	6		C4: vitrinite stringers										
	228.92		9	6		COAL LOSS: (C4)										
		229.14	13	9		COAL C2/C3: minor C4 stringers towards bottom										
	229.14	229.30	16	12		C4: claystone stringers										
	229.30		13	9		COAL LOSS:										
		229.76	33	24		COAL C2/C3: C1 bands in middle										
	229.76		3	2		C4: vitrinite stringers										
		231.48	169	122		CLAYSTONE: silty medium gray carbonaceous in middle with coaly stringers										
						BOX 80										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	231.48	232.02	54	39											
						As Above:	but slightly less carbonaceous and								
							dark gray								
										766' / 233	5m				
	232.02		232			SILTSTONE:	to very fine grained sandstone,								
							becomes less carbonaceous and								
							coarser towards base, bedding								
							wavy and in places disrupted								
							BOX 81								
			78			SILTSTONE:	dark gray, carbonaceous with fine								
							grain sandstone bands and lenses								
										776' / 236	5m				
			216			As Above:									
							BOX 82								
			104			As Above:									
			208			As Above:				786' / 239	6m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
											
											
						.	BOX 83	.	.						
											
	240.40		117			As Above:	but slightly less carbonaceous								
						.	.	.	.	796' / 242.6m				
		243.29	172			As Above:	.	.	.						
											
	243.29		26			ROCK LOSS:	.	.	.						
											
						.	BOX 84	.	.						
											
											
37			148			SANDSTONE:	fine grained, light gray, fairly								
						.	common siltstone bands, bedding								
						.	disrupted in places								
						.	.	.	.	306' / 245.7m				
		246.60	157			As Above:	slightly finer and more								
						.	carbonaceous	.	.						
											
						.	BOX 85	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	246.60		173			SILTSTONE: highly carbonaceous, white streaked									
						grades to claystone at base, one									
						3cm coal seam									
										816' / 248.7m					
		249.65	132			As Above: but more carbonaceous									
						BOX 86									
	249.65		210			As Above:									
										826' / 251.8m					
		252.76	101			As Above:									
						BOX 87									
	252.76		20			ROCK LOSS:									
			198			SILTSTONE: shaly coal, boundary gradational									
						over section, light to medium									
						brown streak, small coal lenses									
						scattered throughout									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1657 ↑	.	.	.	.	.	
											
		255.76	82	41		As Above:	.	.	.	.		
											
						BOX 88	.	.	.	.		
											
	255.76		10	5		ROCK LOSS:	.	.	.	.		
											
			218	109		CLAYSTONE: medium gray brown-dark gray brown	.	.	.	.						broken
						· silty at top, carbonaceous towards	.	.	.	.		
						· bottom, slickensides along	.	.	.	.		
						· fractured surfaces	.	.	.	.		
											
		258.56	52	26		ROCK LOSS:	.	.	.	.		
											
	258.56	258.83	27	14	C4 & CLAYSTONE: minor coaly fragments	.	.	.	.						broken	
					· very carbonaceous towards bottom	.	.	.	.			
					·							
					BOX 89	.	.	.	.			
											
	258.83		73	37	C4 & COAL C3: 80% C4 and 20% C3	.	.	.	.						very broken	
											
			68	34	C4 & COAL C3: 50% C4 and 50% C3	.	.	.	.			
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1657											
		260.66	42	21		C4 & COAL C3: occasional C2 particles, 50/50										very broken
	260.66	261.04	38	16		C4 & CLAYSTONE: carbonaceous										
	261.04	261.12	8	3		CLAYSTONE: carbonaceous					860' / 262.1m					sheared
	261.12		30	13		COAL C1 & C2:										broken
			61	26		COAL LOSS:										
						BOX 90										
			90	30		COAL C1 & C2:										sheared, broken
			70	24		COAL LOSS:					866' / 263.9m					
		264.83	120	41		COAL C1 & C2:										very broken pulverized
			24	8	CLAYSTONE: carbonaceous, coaly fragments in middle					872' / 265.8m					broken	
					BOX 91											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	265.07		11	3		CLAYSTONE: very carbonaceous, coaly, abundant vitrinite stringers, abundant C4 bands.									
77	265.74		56	13		CLAYSTONE: gray, carbonaceous stringers					876' / 267m				
85°	265.74		229			As Above: becomes more carbonaceous towards base									
		268.79	76			As Above: sections may grade to shaley coal, white to light brown streaks									
	268.79		208			SANDSTONE: fine grained, upper boundary gradational, very carbonaceous, black calcite filled fracture and veinlets common, slickensides relatively common					886' / 270.1m				
			91			As Above:									
											896' / 273.1m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
		273.75	197			As Above:	.	.	.						
							BOX 94	.	.						
	273.75		113			As Above:	.	.	.						
								.	.		906' / 276.2m				
		276.33	145			As Above:	slightly more carbonaceous towards	.	.						
							base	.	.						
	276.33		38			CLAYSTONE:	carbonaceous	.	.						
							BOX 95	.	.						
								.	.						
			67			CLAYSTONE:	carbonaceous, dark brown streak,	.	.						
							blackly cleavage, muddy towards base	.	.						
								.	.		914' / 278.6m				
		279.27	189			As Above:	top of section shattered, slicken-	.	.						
							sides abundant	.	.						
	279.27	279.54	27			SILTSTONE:	very carbonaceous, white streak	.	.						
							blackly	.	.						
							BOX 96	.	.						
								.	.						
								.	.		921' / 280.7m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1659 ↑ ↙											
	279.54	280.22	68			SILTSTONE: medium gray, coaly at top										broken
	280.22	280.58	36	12		COAL LOSS:										
	280.58		7	2		C4 and CLAYSTONE: occasional coaly particles										broken-pulverized
		280.73	8	3		ROCK LOSS:										
	280.73		19	6		COAL LOSS:										pulverized
			74	25		COAL C1/C2: occasional claystone particles at top										
		283.05	139	48		COAL LOSS:										
	283.05		40	14		ROCK LOSS:					931' / 283.8m					
		283.51	6	2		C4 and CLAYSTONE:										BROKEN-pulverized
	283.51		49	17		CLAYSTONE: carbonaceous at top, silty towards bottom; minor C4 bands in middle										broken
		284.69	69			CLAYSTONE: as above, carbonaceous towards bottom					936' / 285.3m					broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						BOX 97	.	.	.						
	284.69	285.88	119			As Above:	.	.	.						
	285.88		116			SILTSTONE: black, very fine grained, highly carbonaceous, white to light brown streak, upper contact gradational, coarser towards base	.	.	.						
		287.44	40			SILTSTONE: as above but coarser and less carbonaceous	.	.	.	946' / 288	3m				
						BOX 98	.	.	.						
	287.44	289.80	236			SILTSTONE: to medium sandstone, portion of fining up sequence which includes previous siltstone, becoming less carbonaceous and more coarser towards base, carbonaceous stringers abundant in sandstone portion	.	.	.						
	289.80		37			SANDSTONE: medium grained, part of fining up sequence	.	.	.	956' / 29	.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 99	.	.						
			268			As Above:	getting more coarse towards base	.	.						
						.	of section	.	.						
						.	BOX 100	.	.						
			17			As Above:	.	.	.						
						965' / 294.1m					
			254			As Above:	minor crushing and calcite veinlets	.	.						
											
						.	BOX 101	.	.						
			50			As Above:	.	.	.						
						975' / 297.2m					
		298.15	209			As Above:	more intense calcite veinlets	.	.						
											
						.	BOX 102	.	.						
											
		298.15	94			As Above:	but fining downward, calcite veins	.	.						
						.	abundant	.	.						
						985' / 300.2m					
						As Above:	becoming fine grained towards base	.	.						
						.	carbonaceous stringers increase	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	300.66		39			SILTSTONE:	very carbonaceous,	white to light							
							brown streak,	blacken down							
							BOX 103								
		302.39	134			As Above:	more fractured;	calcite veinlets							
							common								
										996'/303.5m					
	302.39	303.71	132			SILTSTONE:	to fine sandstone,	fining up							
							sequence,	very broken,	numerous						
							calcite veinlets								
							BOX 104								
	303.71		173			SANDSTONE:	fine to medium	grained,	light						
							gray,	massive	calcite veinlets						
							common,	part	fining up	sequence					
											1006'/306.6m				
		306.47	103			As Above:	but fining	downwards							
							BOX 105								
68	306.47		116			SANDSTONE:	fine grained,	medium gray,							
							abundant silty	laminations,	abundant						
							calcite filled	fractures							top 77cm very broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	307.63	307.70	7			COAL LOSS:									
	307.70	308.11	41			CLAYSTONE & COAL MIXED: 80% claystone and 20% coal									pulverized
	308.11	308.25	14			ROCK LOSS:									
	308.25	308.72	47			COAL LOSS:									
	308.72	308.90	18			C4 and COAL: mixed 60% coal				1016'/309.7m					very broken-pulverized
	308.90	309.03	13			ROCK LOSS (4):									
	309.03	309.54	51			COAL LOSS:									
	309.54		11			CLAYSTONE: very carbonaceous, coaly stringers									very broken
		309.90	25			ROCK LOSS:									
	309.90	309.99	9			CLAYSTONE & C4: mixed, coaly particles in bottom of box									pulverized - very broken
	309.99	310.13	14	8		COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1660 ↑											
	310.13	310.45	32	18		CLAYSTONE & COAL MIX: 70% 'claystone' and 30% coal										pulverized - powdered
	310.45	310.72	27	15		ROCK LOSS:										
	310.72		26	15		COAL C2/C3: occasional C4 fragments and clay- stone fragments										very broken
						BOX 106										
			4	2		COAL LOSS:										
			9	5		COAL C2/C3										very broken
		311.18	7	4		COAL C3:										
	311.18	311.31	13	7		ROCK LOSS C4:										
	311.31	311.38	7	4		COAL C3: minor C4 bands										
	311.38		27	15	COAL C1/C2:											
			79	45	COAL LOSS:											

1026' / 312.7m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					↓											
		312.58	14	8			COAL C1/C2:									broken - pulverized
											1030' / 31	4.0m				
50	312.58	313.16	58	33			SILTSTONE: medium gray, clay rich at top, sandy towards bottom									broken
69	313.16		120	43			SANDSTONE: medium grained to fine grained, light medium gray, abundant calcite filled fractures throughout									broken
											1036' / 31	5.8m				
		314.58	22				SANDSTONE: as above									
							BOX 107									
	314.58		220				As Above: but slightly coarser and slightly less carbonaceous, very shattered near base of section with possible loss of core									
											1044' / 31	8.2m				
			47				As Above: but thoroughly shattered									
							BOX 108									
			73			As Above:										
										1048' / 31	9.4m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		320.10	212			As Above:	but less shattered								
							BOX 109								
	320.10		7			As Above:									
			274			As Above:	slightly coarser grain								
							BOX 110								
			32			As Above:									
			225			As Above:									
							BOX 111								
			46			As Above:	slightly more shattered with								
							abundant slickensides								
			201			As Above:									
							BOX 112								
			107			As Above:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1661 ↑ ↓											
	335.66		31	23		COAL LOSS:										
		336.78	81	59		COAL C1/C2:										sheared-broken
	336.78		13	10		CLAYSTONE: very carbonaceous, dark brown to black										
		337.27	36	28		ROCK LOSS: BOX 115										
	337.27	338.04	77	59		CLAYSTONE: silty at top, carbonaceous towards bottom, medium brown to very dark brown										broken
	338.04		71	55		COAL LOSS:										
			39	30		COAL C1/C2:										broken-pulverized powdered
		339.45	31	24		COAL C1/C2: minor C3 fragments										very broken
	339.45		19	15		ROCK LOSS:										
					1662 ↑											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1662 ↓											
		339.88	24	20		CLAYSTONE: very carbonaceous, coaly abundant										broken
						C4 bands, minor vitrinite stringers										
	339.88	339.92	4	3		C4:										
	339.92		3	2		COAL C1/C2:										broken
			6	5		COAL LOSS										
			10	8		COAL C3:										broken
		340.20	9	7		COAL C2/C3:										broken
	340.20	340.39	19	16		CLAYSTONE: carbonaceous coaly							1119.5'	341.2m		
	340.39		45	37		COAL LOSS:										
		341.13	29	24		COAL C1/C2: C3 fragments towards bottom										
						BOX 116										
	341.13		6	5		CLAYSTONE: carbonaceous, coaly										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			97	81												
						CLAYSTONE: carbonaceous, 'dark gray'										
		343.10	94	79						1126' / 343.2m						
						As Above:										
31°	343.10	344.22	112			SILTSTONE: carbonaceous, 'bedding is plain finer sandstone lenses and bands										
						BOX 117										
	344.22		104			As Above:										
			184			As Above: with coaly lenses										
						BOX 118										
			116			As Above:										
			148			As Above: sand lenses more common towards base					1146' / 349.3m					
						BOX 119										
		351.13	139			As Above:										
											1156' / 352.3m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	351.13		133			SANDSTONE: fine grained, carbonaceous with									
						siltstone bands and lenses									
						BOX 120									
38°			169			As Above:									
										1166' / 355.4m					
		355.27	112			As Above:									
						BOX 121									
	355.27		188			As Above:									
										1176' / 353.4m					
		358.05	90			As Above:									
						BOX 122									
	358.05	360.28	223			SANDSTONE: fine grained to siltstone,									
						particles of fining downward									
						cycle, black to gray carbonaceous									
						bedding disrupted, very wavy									
										1186' / 361.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	360.28		76			CLAYSTONE:	very fine grained,	black colour,							
							light brown streak,	upper contact							
							gradational								
							BOX 123								
			224			As Above:									
										1196' / 364.5m					
		363.92	64			As Above:									
							BOX 124								
60	363.92		49			SILTSTONE:	medium to dark gray,	abundant							broken
							claystone bands								
			99	64		CLAYSTONE:	medium gray brown to dark gray								bottom 15cm very broken
							brown, silty at top, carbonaceous								
							at bottom, C4 bands at bottom								
	365.40	365.70	30	19		C4 and CLAYSTONE:	interbedded								
	365.70	366.00	30	19		ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	366.00		45	29	1663	COAL C1/C2:	.	.	.	.					broken	
			24	15		COAL C1/C2:	.	.	.	.						broken
			29	19		COAL LOSS:	.	.	.	.						broken
						BOX 125	.	.	.	.		
	368.01		103	66		COAL C1/C2:	.	.	.	.						sheared in middle very broken
	368.01		6	4		ROCK LOSS:	.	.	.	.		
	368.15		8	5		CLAYSTONE: very carbonaceous	.	.	.	.		
	368.15	368.29	14	9		COAL LOSS:	.	.	.	.		
	368.29		9			C4 AND CLAYSTONE: Mixed	.	.	.	.						very broken
	368.42		4			ROCK LOSS:	.	.	.	.		
	368.42		8			COAL LOSS:	.	.	.	.		
	368.56		6			COAL C3: claystone stringers	.	.	.	.						broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	368.56		6			ROCK LOSS:									
		368.76	14			CLAYSTONE: very carbonaceous, coaly									
	368.76		43			CLAYSTONE: carbonaceous at top, silty towards bottom, dark brown to medium gray									
		369.61	42			SILTSTONE: medium gray, sandy laminations towards bottom									
38	369.61	369.91	30			SANDSTONE: very fine grained, light gray									
						BOX 126									
	369.91	371.44	153			As Above:									
										1222' / 372.5m					
	371.44	372.79	135			COAL: shaly, medium to dark brown streaks									
						BOX 127									
	372.79		152			SILTSTONE: high carbonaceous, black, white to light brown streaks, slightly sandy in places, very fine grained									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	.	.	.	1232' / 375.5m				
		375.07	76			As Above:	.	.	.	.	
										
	375.07	375.50	43			CLAYSTONE: carbonaceous, minor coaly frag-	.	.	.	.	
						ments	.	.	.	.	
										
	375.50		32			SILTSTONE: high carbonaceous, black, white	.	.	.	.	
						to light brown streaks, slightly	.	.	.	.	
						sandy, very fine grained	.	.	.	.	
										
						BOX 128	.	.	.	.	
										
			175			As Above:	.	.	.	.	
						.	.	.	.	.	1243' / 378.9m				
		378.59	102			As Above:	.	.	.	.	
										
						BOX 129	.	.	.	.	
										
	378.59		217			As Above:	.	.	.	.	
						.	.	.	.	.	1244' / 379.2m (drillers skipped a marker				
			76			As Above:	.	.	.	.	
										
						BOX 130	.	.	.	.	
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			255		1664											
						As Above: slightly coaly in places										
		384.41	34								1254' / 382.2m					
						As Above:										
						BOX 131										
	384.41		53	39												broken
42			134	98			SILTSTONE: medium gray, abundant dark gray claystone bands, minor light gray sandy bands									
		386.71	43	31			CLAYSTONE: silty at top, carbonaceous towards bottom, medium gray to dark gray brown									
	386.71		42	31			COAL C1/C2:									broken - pulverized
											1264' / 385.3m					
			21	15		COAL LOSS:										
						BOX 132										
		387.96	62	45		COAL C1/C2: a 5cm C3 band towards bottom									broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	387.96	388.02	6	4		C4:									
	388.02	388.11	9	7		CLAYSTONE:	silty, medium gray brown							broken	
44	388.11	389.97	186	136		SANDSTONE:	very fine grained to fine grained							solid	
							light medium gray, abundant								
							silty laminations								
							BOX 133								
	389.97		133			As Above:	slightly coaly in spots								
										1274'	388.3m				
			133			As Above:									
							BOX 134								
			58			As Above:									
			227			As Above:									
							BOX 135								
			76			As Above:									
										1295'	394.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
47		396.30	6												
						As Above: bottom contact distinct but irregular at average 47° BCN									
	396.30		199			SANDSTONE: fine grained, medium gray, massive black fracture, less carbonaceous towards bottom									
						BOX 136									
			244			As Above: with small siltstone lenses									
						BOX 137									
			132			As Above: but siltstone lenses more numerous									
										1314' / 400.5m					
		402.39	34			As Above:									
	402.39		105			SANDSTONE: medium gray, very porous, abundant fractures and cavities, coated with soapy clay like substance, bottom very broken up									
						BOX 138									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		404.06	62												
	404.06	406.24	218			SANDSTONE: fine grained, siltstone fragments									
						and stringers common, light gray									
						massive									
						BOX 139									
	406.24		131			SANDSTONE: fine to medium grained, section									
						coarsens down, minor coaly									
						partings, change in bedding									
						noticeable, possible channel									
						bedding changes from 27° to 49°									
						BCN									
		407.85	30			As Above: continues coarsening down									
	407.85		131			CONGLOMERATE: large variation in grain size									
						and degree of roundness, pebbles									
						to 4cm, coaly partings common,									
						coaly stringers rare, large									
						variation in bedding angle,									
						appears to be channel									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 140								
		409.98	82				As Above: gradual decrease in grain size								
	409.98		87				SANDSTONE: pebbly sand, and coarse grained, with abundant pebbles identical lithology to conglomerate								
		411.08	23				As Above:					1343' / 409.3m			
	411.08	411.99	91				SANDSTONE: medium grained, abundant siltstone fragments, medium gray, upper contact sharp								
							BOX 141								
	411.99		191				As Above: with minor coaly lenses								
			91				As Above:					1353' / 412.4m			
		416.16	135				As Above: with conglomerate pebbles, contact sharp					1356' / 413.3m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	416.16		150			CONGLOMERATE: sorting much better than previous section, grain size variation much smaller, degree of round, very poor pebbles to 2cm, pebbles and sandstone coarse, shale, quartz-chert, matrix is sand, coaly lenses out lining serve pebbles, general decrease in pebble size top to bottom									
						BOX 143									
			15			As Above:									
											1366' / 4.6.4m				
		418.41	60			As Above: grain size gradually decreases, to very coarse sand									
											1368' / 4.7m				
	418.41		149			SANDSTONE: coarse grained, continuation of fining down of conglomerate, base very sharp and curved, salt and pepper colour									
						SANDSTONE: fine grained, light gray, massive bedding truncated by conglomerate									

massive

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
							BOX 144								
			56			As Above:	slightly darker colour								
										1371' / 419.4m					
40°			74			As Above:	with abundant coaly stringers near base								
			54			SANDSTONE:	medium grained, salt and pepper texture, massive								
							BOX 145								
			112			As Above:	but coaly stringers common, section broken with several crushed zones								
										1386' / 422.5m					
47°		423.69	48			As Above:									
	423.69	424.40	71			SILTSTONE:	medium gray, coarse grained, massive, upper contact sharp, lower diffuse								
	424.40		44			SANDSTONE:	medium gray, salt and pepper texture, massive coaly stringers common, fractures often clay coated								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 146								
			137												
						As Above:	pebbles common, grading to minor								
							conglomerate lenses								
										1396'	425.5m				
		426.36	15			As Above:									
	426.36		130			SANDSTONE:	fine grained, abundant fragments								
							and rep-ups of siltstone, light								
							gray massive								
							BOX 147								
			274			As Above:	grading to medium sand in lower								
							80cm								
							BOX 148								
		431.67	127			As Above:	continuation of coarsening down								
							becomes conglomerate in last 24cm								
	431.67	432.33	66			SANDSTONE:	coarse grained, pebbly, salt and								
							pepper texture, minor coaly								
							stringers becomes conglomerate in								

places

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	432.33		90			SANDSTONE: fine grained, light gray, massive					1416'/431.6m				
						rare coaly stringers									
						BOX 149									
		433.86	63			As Above:									
	433.86		147			SANDSTONE: coarse grained, slightly pebbly									
						salt and pepper texture, massive									
						coaly lenses very abundant									
											1426'/434.6m				
		436.09	76			As Above: coaly lenses abruptly cease									
						BOX 150									
	436.09	437.63	154			CONGLOMERATE: similar to preceding									
						conglomerates but rounding is									
						fair									
	437.63		70			SANDSTONE: medium grained, massive, medium									
						gray, top boundary sharp but									
						irregular									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
						.	.	.	.	.	1436'	487.7m			
		438.85	52			As Above:	.	.	.	.	
										
						BOX 151	.	.	.	.	
										
	438.85		243			As Above:	.	.	.	.	
						.	.	.	.	.	1446'	440.7m			
			35			As Above:	.	.	.	.	
										
						BOX 152	.	.	.	.	
										
			272			As Above:	.	.	.	.	
						.	.	.	.	.	1456'	443.8m			
										
						BOX 153					
										
			278			As Above:					
										
						BOX 154					
										
			22			As Above:					
						1466'	446.8m			
										
										

DRILL CORE LOG

HOLE No. QBD 8102

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		449.80	245			As Above:	fracturing more pronounced,								
							calcite veins become more common								
							towards base								
							BOX 155								
	449.80		59			As Above:									
											1476' / 449.9m				
			247			As Above:									
							BOX 156								
			85			As Above:									
											1486' / 452.9m				
			220			As Above:									
							BOX 157								
			112			As Above:									
											1496' / 456m				
			192			As Above:									
							BOX 158								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			126			.	.	.	.		
						As Above:	.	.	.						
		461.98	177			.	.	.	.	1506' / 459m				
						As Above:	.	.	.						
											
						BOX 159	.	.	.						
											
	461.98		171			As Above:	.	.	.						
						.	.	.	.	1516' / 462.1m				
46		464.68	99			As Above:	.	.	.						
											
	464.68		36			SILTSTONE: dark to medium gray, fine down,	.	.	.						
						sandy towards top, coaly partings	.	.	.						
						medium to high carbonaceous	.	.	.						
											
						BOX 160	.	.	.						
											
			185			As Above: with several lcm coaly partings	.	.	.						
						.	.	.	.	1526' / 465.1m				
		468.08	119			As Above:	.	.	.						
											
						BOX 161	.	.	.						
											
41	468.08	468.50	42			SILTSTONE: medium gray, minor sandy bands	.	.	.					broken	
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	468.50	468.60	10			COAL LOSS:									
	468.60	468.64	4	3		C4 : coaly fragments									broken
	468.64	468.89	25	19		SILTSTONE: medium gray, very sandy towards bottom									
	468.89	469.10	21	16		CLAYSTONE: silty at top, carbonaceous towards bottom, medium gray brown									
	469.10		5	4		COAL LOSS:									
		469.56	41	31		COAL C1/C2:									
	469.56		32	24		CLAYSTONE: carbonaceous, coaly									
			6	5	ROCK LOSS:										
		470.09	15	11	CLAYSTONE: as above									broken-pulverized	
	470.09		26	20	COAL LOSS: (C3/C4)										
		470.48	13	10	COAL C3: with C4 bands									broken	

1665 →

→

1666

1536' / 468.2m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1669 ↓										
	470.48	470.74	26	20		CLAYSTONE: very carbonaceous C4 bands									broken
	470.74		3	2		ROCK LOSS:									
		470.84	7	5		C4:									
	470.84	471.07	23	17		CLAYSTONE: carbonaceous									
	471.07	471.19	12	9		COAL C3: coaly fragments in bottom of box									
						BOX 162									
	471.19		18	14		CLAYSTONE: carbonaceous, a 2cm C3 fragment in middle									
		471.58	21	16		CLAYSTONE: carbonaceous									
	471.58		18	14		COAL C2: vitrinite stringers									
		471.86	10	8	COAL LOSS:										
	471.86		17	13	CLAYSTONE: carbonaceous									broken	
		472.08	5	4	ROCK LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1667											
	472.08	472.15	7	5		C4:										
	472.15		16	12		COAL C2/C3:										
		472.36	5	4		COAL C3: C4 bands towards bottom										
	472.36		4	3		ROCK LOSS:										
		472.45	5	4		C4:										
	472.45		4	3		COAL LOSS:										
		472.56	7	5		COAL C3:										
	472.56	472.59	3	2		ROCK LOSS:										
	472.59	472.64	5	4		COAL C3: claystone stringers										
	472.64		102	77		COAL C1/C2:										very broken
			13	10		COAL LOSS:										
			8	6		COAL C2: C3 bands at bottom										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			4	3	1667	COAL C3:	.	.	.	.		
	473.95		4	3		COAL C1/C2:	.	.	.	.		
						BOX 163	.	.	.	.		
	473.95	474.22	27	20		CLAYSTONE: silty medium gray, some what carbonaceous towards bottom	.	.	.	.						bottom 6cm broken-pulverized
	474.22		4	3		COAL LOSS:	.	.	.	.		
		474.70	44	33		COAL C2: vitrinite stringers	.	.	.	.						broken
	474.70		2	2		ROCK LOSS:	.	.	.	.		
		474.83	11	8		CLAYSTONE: carbonaceous	.	.	.	.		
	474.83		5	4		COAL LOSS:	.	.	.	.		
		474.96	8	6		COAL C2/C3:	.	.	.	.		
	474.96	475.23	27	20	CLAYSTONE: carbonaceous, coaly fragments in middle	.	.	.	.						broken in middle	
												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	475.23	475.31	8	6	16991	COAL LOSS:								11cm pulverized	
	475.31	475.42	11	8		ROCK LOSS:									
	475.42		54	41		COAL C1/C2: C3 fragments near top									broken-pulverized
		476.20	24	18		COAL LOSS:									
	476.20	476.31	11	8		C4: coaly stringers throughout						1556' / 474.2m			
	476.31		85	64		COAL C1/C2:									broken
						BOX 164									
			97	73		COAL C1/C2:									broken
		478.45	32	24		COAL LOSS:									
	478.45	478.71	26	20		CLAYSTONE: carbonaceous at top, silty in middle									
	478.71		4	3		COAL LOSS:									
		478.81	6	5		COAL: claystone particles									pulverized

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, q, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	478.81	478.92	11			CLAYSTONE:	carbonaceous at top,	silty towards							broken
							bottom,	minor coaly stringers							
41	478.92	479.47	55			SILTSTONE:	medium gray	occasional sandy bands							
	479.47		42			CLAYSTONE:	silty at top,	carbonaceous towards							
							bottom,	occasional coaly bands							
							and stringers								
		480.06	17			CLAYSTONE & G4:	mixed,	occasional coal							broken-pulverized
							particles								
							BOX 165								
	480.06		154			CLAYSTONE:	highly carbonaceous,	coaly seams							
							light to medium brown streak,	parts							
							broken up,	dark gray to black							
											1576' / 480.4m				
			173			SILTSTONE:	fine grained,	medium gray, highly							
							carbonaceous,	massive blocky							
							cleavage								
			18			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	485.14	485.41	27	20		CLAYSTONE:	silty to very silty, dark gray								broken
							brown to medium gray, some what								
							sandy towards bottom								
	485.41		68	51		SANDSTONE:	very fine grained, medium gray								broken
							somewhat carbonaceous								
		486.49	40			SANDSTONE:	carbonaceous as above, *Hardy								
							Assoc sample								
							BOX 167								
36	486.49	486.70	21	17		SANDSTONE:	fine grained, medium gray, minor								
							light gray sandy bands								
	486.70		3	2		ROCK LOSS:									
		486.74	1	1		CLAYSTONE:	carbonaceous								broken
	486.74		16	13	↑	COAL LOSS:									
		487.14	24	19		COAL C1/C2:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1671 ↓										
	487.14	487.32	18	15		COAL & CLAYSTONE: mixed									sheared-broken pulverized
	487.32		20	16		COAL LOSS:									
			64	52		COAL C1/C2: C3 bands near top									very broken
											1596'	486.5m			
			36	29		COAL LOSS:									
		489.11	59	48		COAL C1/C2:									broken
	489.11	489.56	45	36	CLAYSTONE: carbonaceous, occasional coaly stringers and C4 bands										
					BOX 168										
	489.56	489.91	35	28	As Above:										
	489.91		109	88	SANDSTONE: fine grained, carbonaceous near top, mainly light to medium gray one 3cm siltstone bands; bedding indistinct and wavy calcite vein- lets common near base										
										1606'	489.5m				
			92		As Above: with less carbonaceous bands										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						BOX I69	.	.	.						
		492.16	24			As Above:	.	.	.						
48°	492.16	492.62	46			SILTSTONE: very fine grained, gray with black	.	.	.						
						colour, carbonaceous, boundary	.	.	.						
						sharp at 48° BCN	.	.	.						
	492.62		99			SANDSTONE: medium fine grained, coaly in	.	.	.						
						top 15cm, light gray, massive	.	.	.						
							.	.	.	1616' / 492.6m					
		494.42	81			As Above:	.	.	.						
						BOX I70	.	.	.						
							.	.	.						
	494.42	496.19	177			As Above:	.	.	.						
							.	.	.	1626' / 495.6m					
							.	.	.						
							.	.	.						
							.	.	.						
							.	.	.						
							.	.	.						
							.	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 1								
	5.33		87												
						SILTSTONE:	Hulcross formation, dark gray to								
							black, finely laminated to clay								
							stone, severely fractured with								
							possible loss of section fracture								
							coated with iron oxide								
											23'/7.01m				
			132			AS ABOVE:									
											27'/8.22m				
			60			AS ABOVE:									
							BOX 2								
			130			AS ABOVE									
											37'/11.2m				
			102			AS ABOVE:	but less broken up								
											40'/12.2m				
		10.98	54			AS ABOVE:									
							BOX 3								
	10.98	11.18	20			AS ABOVE:									
											43'/13.1m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	11.18		60			SILTSTONE:	medium gray to dark gray bands,								
							distinctly lighter and more								
							competent than above unit								
										48' / 14.6m					
			186			AS ABOVE:									
										53' / 16.2m					
		13.79	15			AS ABOVE:									
							BOX 4								
	13.79		260			AS ABOVE:	base of section broken up								
							possible loss								
										60' / 18.3m					
			30			AS ABOVE:									
							BOX 5								
		16.94	25			AS ABOVE:	with darker bands predominating								
										62' / 18.8m					
	16.94		200			AS ABOVE:	section severely shattered at								
							places								
										66' / 20.1m					
			58			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	BOX 6	.	.						
											
		19.82	30			AS ABOVE:	.	.	.						
											
	19.82		71			SILTSTONE:	grades to fine sandstone; light								
						.	gray beds begin to become								
						.	prominent, small scale channel								
						.	and scours are rare, bandings								
						.	are weavy	.	.						
						.	.	.	.	71'/21.6m				
			160			AS ABOVE:	.	.	.						
											
						.	BOX 7	.	.						
											
			38			AS ABOVE:	.	.	.						
						.	.	.	.	76'/23.1m				
67			80			AS ABOVE:	Base of section severely broken,								
						.	possible core loss	.	.						
						.	.	.	.	79'/24m				
		24.85	154			AS ABOVE:	dark bands begin to disappear								
											
						.	BOX 8	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	24.85		53			AS ABOVE:									
										90'/27.4m					
			150			AS ABOVE: Dark bands more prominent; increased									
						20% near top to 60% near base of									
						section. Broken; possible loss									
										98'/29.8m					
		27.20	32			AS ABOVE: very broken up, possible lost									
						section									
	27.20		51			CONGLOMERATE: pebbles 5mm well sorted, moderately									
						round, cemented by calcite in places									
						upper contact sharp and broken									
						Gates?									
						BOX 9									
			17			AS ABOVE: with common claystone partings									
										95'/28.9m					
64		28.00	12			AS ABOVE:									
	28.00	30.49	249			SANDSTONE: light gray, fine grained pebbly									
						bands, thin lenses near top, highly									
						bio turbated carbonaceous filaments									
						common, section broken near base									
						fractures coated with limonite									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
			36			AS ABOVE:	.	.	.						
											
						BOX 11	.	.	.						
											
		33.79	41			ROCK LOSS:	.	.	.						
											
	33.79		102			SILTSTONE: claystone medium gray, fine	.	.	.						
						laminated lamella are disturbed	.	.	.						
						moderately carbonaceous; friable	.	.	.						
						pyrite modules increase towards	.	.	.						
						base of section.	.	.	.						
											
			70			AS ABOVE: pyrite modules up to 3%	.	.	.						
											
			42			AS ABOVE: sections shattered	.	.	.						
											
		36.07	14			AS ABOVE: pyrite modules	.	.	.						
											
						BOX 12	.	.	.						
											
	36.07		25			AS ABOVE:	.	.	.						
											
			36			AS ABOVE:	.	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		37.08	40			AS ABOVE:		but pyrite much less common							
										124.5'	37.9m				
	37.08		183			AS ABOVE:		with infrequent coaly intervals							
										129.5'	37.5m				
								BOX 13							
63°			280			AS ABOVE:									
								BOX 14							
			69			AS ABOVE:		no visible pyrite							
										141'	43m				
		43.78	138			AS ABOVE:		occasional coaly stringers and pyrite coating							
	43.78		42			CLAYSTONE:		carbonaceous, occasional coaly stringers and bands							
										146'	44.5m				
						AS ABOVE:									
			39												
								BOX 15							
		44.68	9			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	44.68		81			SILTSTONE:	fine 'sandstone', medium to dark								
							gray, highly carbonaceous to coaly								
							in places, moderately abundant								
							pyrite and accessible with coaly								
							fragments								
			13			SILTSTONE:	medium gray, massive faint								
							laminations								
										151'/46m					
			145			AS ABOVE:	moderate pyrite on fractures								
										156'/47.6m					
		47.36	29			AS ABOVE:									
							BOX 16								
	47.36	47.48	12			AS ABOVE:									
	47.48		9			CLAYSTONE:	black color highly carbonaceous								
							with highly coaly lenses								
										158'/48.1m					
		48.49	92			AS ABOVE:	minor pyrite on fractures								
										162'/49.4m					
	48.49	49.85	136			SANDSTONE:	fine grained, medium gray very								
							disturbed carbonaceous stringers								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			161												
						AS ABOVE:									
										192' / 88.5m					
		58.67	61			AS ABOVE:									
							BOX 20								
	58.67		103			AS ABOVE:									
										197' / 60m					
		60.05	35			AS ABOVE:	but some lighter color								
	60.05	61.63	158			SANDSTONE:	fine grained, broken up in places								
							pyrite coated fractures are common								
							slickensides are common, section								
							broken in places, possible loss								
							sandstone, medium gray								
										202' / 61.6m					
							BOX 21								
	61.63		147			AS ABOVE:	much less broken up and veined,								
							minor dark silty lenses								
										207' / 63.1m					
			140			AS ABOVE:	with minor siltstone lenses								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			84													
						SANDSTONE:	fine grained, medium gray,									
							moderately carbonaceous, bedding									
							thin and weavy, common siltstone									
							bands									
							BOX 22									
		65.53	19			AS ABOVE:										
										212' / 64.6m						
	65.53		46			AS ABOVE:	calcite veins common									
53°		66.09	10			AS ABOVE:	ore contact gradual over 20cm but									
							sharp									
	66.09	67.12	103			CLAYSTONE:	black, highly carbonaceous, coaly									
							stringers common, angular									
							fractures									
	67.12	67.31	19			SANDSTONE:	fine grained, medium gray color									
							upper contact gradual for 6cm									
							bedding in faint and planer									
										217' / 66.1m						
	67.31		77			AS ABOVE:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
							BOX 23	.	.						
		68.46	38			AS ABOVE:	finer downward	.	.						
	68.46		33			SILTSTONE:	medium to dark gray, moderate	.	.						
							carbonaceous friable splintery	.	.						
							fractures	.	.						
								.	.	222' / 67.7m					
		70.37	158			AS ABOVE:	basive sections coaly and very	.	.						
							fractured	.	.						
								.	.	220' / 69.2m					
	70.37		36			AS ABOVE:	.	.	.						
								.	.						
							BOX 24	.	.						
								.	.						
			92			AS ABOVE:	moderate fractures	.	.						
								.	.	232' / 70.7m					
		72.54	89			AS ABOVE:	.	.	.						
								.	.	237' / 72.2m					
	72.54		81			AS ABOVE:	.	.	.						
								.	.						
							BOX 25	.	.						
								.	.						
								.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		73.93	58			AS ABOVE:	with coaly seams and lenses,								
							secondary fractures, possible loss								
	73.93		127			SANDSTONE:	medium grained, bedding weavy and								
							carbonaceous stringers common,								
							common calcite veinlets								
										242' / 73.8m					
		75.91	71			AS ABOVE:	moderately common silstone lenses								
							BOX 26								
	75.91		15			SILSTONE:	coarse grained, moderately								
							carbonaceous, rounded sandstone								
							fragments "rip up" dark gray								
							calcite veinlets common								
										247' / 75.3m					
		76.19	13			AS ABOVE:	sections shattered								
	76.19	77.52	133			SANDSTONE:	fine grained, medium gray color								
							with silstone patches and lenses								
							very common quartz calcite, pyrite								
							veins, local branchiated areas								
							fragments coated with quartz								
							and pyrite								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	77.52		25			AS ABOVE:	but calcite veins less common				252' / 76.8m				
		78.47	70			AS ABOVE:	fining downwards								
							BOX 27								
	78.47	79.14	67			MUDSTONE:	siltstone medium gray, part of fining downwards sequence mentioned above								
57°	79.14	80.32	118			SANDSTONE:	coarse grained, salt and pepper color apparent, lower boundary sharp (channel ?) quartz pyrite veinlets common								
	80.32		69			SILTSTONE:	black, highly carbonaceous, light brown streaks, splintery fractures very friable				262' / 79.8m				
		81.16	15			AS ABOVE:	but coarsing downwards								
	81.16		37			SANDSTONE:	medium gray in color, abundant siltstone lenses, bedding diffused								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 28								
		82.16	63			AS ABOVE:	coaly bands, lenses common, quartz pyrite veins common								
	82.16		23			SANDSTONE:	interlayered sandstone and silt- stone, layers are fringy and irregular								
				40		AS ABOVE:					267' / 81.4m				
		83.48	69			AS ABOVE:									
42°	83.48	84.00	52			SILTSTONE:	medium gray, friable splintery fractures, coaly seams common, rare calcite veins								
											272' / 82.9m				
	84.00		40			AS ABOVE:									
							BOX 29								
			70			AS ABOVE:	but more carbonaceous and friable								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			52												
						AS ABOVE:	but less broken up								
		85.72	10			AS ABOVE:					277'/84.4m				
		86.79	107			SANDSTONE:	fine grained medium gray, minor siltstone and coaly lenses, rare quartz pyrite veins, bedding is weavy and veins are approximately parallel to it								
	86.79		35			AS ABOVE:					282'/85.9m				
							BOX 30								
			110			AS ABOVE:	siltstone becomes more common towards base								
		88.33	9			AS ABOVE:					287'/87.4m				
64	88.33		138			SILTSTONE:	medium to dark gray, bedding pronounced, moderately friable and splintery fractures								
											292'/89m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, g, d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			66												
						AS ABOVE:									
							BOX 31								
		90.55	18			AS ABOVE:	claystone								
	90.55	91.41	86			CLAYSTONE:	very carbonaceous, black, white streak, very broken and mixed with coal fragments at top of section. Base of section diffused.								
47	91.41	92.20	79			SANDSTONE:	salt and pepper texture, quartz pyrite veins, moderately common								
	92.20		15			SILTSTONE:	black, coarse grained, highly carbonaceous, contact sharp								
		92.40	5			AS ABOVE:									
	92.40	92.81	41			SANDSTONE:	medium grained, salt and pepper texture, lower boundary sharp and irregular								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	92.81	92.99	18			SILTSTONE:	black;	highly carbonaceous,							
							splintery	fractures							
							BOX 32								
											302' / 92m				
	92.99		125			AS ABOVE:	but sections	broken, possible	loss						
											303.5' / 92.6m				
		94.79	55			AS ABOVE:	but less	broken up							
52°	94.79	95.28	49			SANDSTONE:	fine grained,	medium gray,	abundant						
							siltstone	bands and	lenses						
											308.5' /				
	95.28		37			AS ABOVE:									
							BOX 33								
			66			AS ABOVE:									
											312' / 95.1m				
		96.40	9			AS ABOVE:									
	96.40	97.78	138			SILTSTONE:	highly carbonaceous,	black splintery							
							fractures,	upper and lower							
							boundary	gradational,	minor coaly						
							partings								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	97.78	98.09	31			AS ABOVE:					317' /				
	98.09		18			SANDSTONE: fined grained, light gray massive quartz calcite: Veins rare, siltstone bands common									
						BOX 34									
		98.89	62			AS ABOVE:					322' / 98	1m			
	98.89		159			AS ABOVE: carbonaceous stringers become common towards base									
											327.5' / 99.8m				
			47			AS ABOVE: but no siltstone bands on carbon- aceous stringers									
						BOX 35									
			92			AS ABOVE:									
											332' / 101	.2m			
	103.40		153			AS ABOVE:									
											337' / 102	.7m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	103.40		17			AS ABOVE:									
								BOX 36							
			116			AS ABOVE:	with occasional siltstone chips +								
							calcite veins								
										342' / 104.2m					
		105.67	94			AS ABOVE:	but coarsening downwards with								
							large siltstone chips near base								
	105.67	106.72	105			SILTSTONE:	medium gray, carbonaceous contact								
							very sharp								
	106.72		33			SANDSTONE:	medium grained, salt and pepper								
							texture, rare calcite veins and								
							slickensides								
										347' / 105.7m					
								BOX 37							
			153			AS ABOVE:									
										352' / 107.3m					
		109.87	129			AS ABOVE:	coaly partings and slickensides								
							common near base. Base section more								

friable

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	109.87		21			AS ABOVE:									
											357' /				
			223			AS ABOVE:	minor brecciation and leaching								
		114.36	205			AS ABOVE:	siltstone lenses carbonaceous								
							and layers more common								
											372' / 113.4m				
	114.36		71			AS ABOVE:									
							BOX 40								
			79			AS ABOVE:									
42°		117.15	129			AS ABOVE:	siltstone lenses disrupted and								
							weavey with many rip-up clasts								
											382' / 116.4m				
	117.15		63			AS ABOVE:	and only minor siltstone lenses								
							BOX 41								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	125.21	125.73	52												
						SANDSTONE: fine grained, medium gray, top and bottom contact sharp, rare pyrite contact fractures									
	125.73		5			SILTSTONE: highly carbonaceous, black ir- regular fractures, friable quartz veins common									
										412'/125.6m					
			15			AS ABOVE: BOX 44									
		126.08	15			AS ABOVE:									
	126.08	127.38	130			SANDSTONE: medium gray, massive common leached joints and coated with pyrite spheres and calcite. Pyrite approximately 1%									
										417'/127.1m					
	127.38		114			AS ABOVE: with less pyrite BOX 45									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			26			AS ABOVE:									
										422'/128.	6m				
		130.27	149			AS ABOVE:	with sections of carbonaceous								
							siltstone								
										427'/130.	1m				
	130.27		94			AS ABOVE:	with no claystone bands								
							BOX 46								
			262			AS ABOVE:									
							BOX 47								
		133.85	2			AS ABOVE:									
										439'/133.	8m				
	133.85	134.12	27			SILTSTONE:	highly carbonaceous, black in								
							color, splintery fractures friable								
							rare modules (possible pyrite)								
	134.12		87			SANDSTONE:	with abundant siltstone inter-								
							layers, fine grained with medium								
							gray, with carbonaceous stringers								
							siltstone see above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			111			SANDSTONE:	medium gray fine grained,	thin							
							cross beds,	common siltstone bands							
							and lenses								
											447' / 136.2m				
		136.32	22			AS ABOVE:									
							BOX 48								
		136.32	164			SANDSTONE:	light gray in color with abundant								
							siltstone lenses and layers of								
							carbonaceous stringers irregular								
							1 to 1.5cm long, rare quartz veins								
							and coaly partings								
											153' /				
			61			AS ABOVE:									
											155' / 138.7m				
		139.03	46			AS ABOVE:	siltstone bands more common								
							BOX 49								
		139.03	140.41	138		SILTSTONE:	dark gray, highly carbonaceous,								
							coaly stringers, lenses and								
							slickensides common, beds weavy								
							and abundant, clasts bottom contact								

shattered

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	140.41		96			SANDSTONE:	fine grained,	medium gray,	massive						
							with common	pyrite coated	fractures						
		141.64	27			AS ABOVE:				464' / 141.4m					
							BOX 50								
	141.64		272			AS ABOVE:	with pure	pyrite coated	fractures						
							BOX 51								
			21			AS ABOVE:									
		146.10	153			SANDSTONE:	fine grained,	dark gray,	more						
							carbonaceous	than previous,	sections						
							with abundant	siltstone	bands						
							in places	and pebbly	bands near						
							base of	sections							
	146.10	146.34	24			CONGLOMERATE:	rounding is	good,	sorting is						
							poor;	large pebble	bands near	top					
							with pebbles	near 6cm,	smaller						
							bands	beneath	the larger	ones					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
										
	146.34	146.41	7			AS ABOVE:	similar to small pebble unit				484' / 147.5m				
										
	146.41		24			SANDSTONE:	coarse grained, salt and pepper texture, upper contact sharp and irregular, sharp cross beds								
										
						.	BOX 52	.	.	.					
										
			19			AS ABOVE:	.	.	.	.	
										
41°		148.54	170			AS ABOVE:	more carbonaceous downwards and fining				485' / 147.8m				
										
	148.54	149.31	77			SANDSTONE & SILTSTONE:	interbedded, weavy, lenses of medium gray sandstone and dark carbonaceous siltstone								
										
						.	BOX 53	.	.	.					
										
	149.31	149.40	9			SANDSTONE:	fine grained, light gray, occasional plant fragments								minor slickensides
										
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
26	149.40	149.47	7	6	1251 ↑	SILTSTONE:	medium to dark gray, abundant									
								dark claystone stringers towards								
								bottom								
35	149.47		14	11			CLAYSTONE:	silty at top, carbonaceous at								
								bottom, dark gray to black								
		149.65	4	3			CLAYSTONE:	very carbonaceous								core very broken
	149.65		22	19			COAL C3:	C4 and claystone (carbonaceous)								core very broken
								particales in top 5cm				495'/150.9m				
			5	4			COAL C3:	claystone stringers in middle								core very broken
			12	10			COAL C3:	occasional C4 particles								very broken
			2	2			C4:	vitritite stringers								
			16	14			COAL C3:	occasional C4 particles								core broken
			6	5		COAL C3:	occasional claystone stringers								broken	
26		150.35	7	6		COAL C3:									core solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	150.35		16	14	1251	COAL C2/C3:									core solid	
			21	19		COAL C3:										solid
			12	11		COAL C3:										solid
			8	7		COAL C3:										solid
	151.09		17	15		COAL C2/C3:										solid
	151.09		15	13		COAL C2:										core solid
			10	9		COAL C2/C3:										
			36	32		COAL C2:										
			5	4		COAL C2/C3:										solid
			10	9		COAL C1/C2:										core solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			14	13	1251	COAL G2/C3:	.	.	.					broken	
	152.05		6	5		COAL G3:	.	.	.						broken
	152.05		12	11		COAL G2/C3:	.	.	.						core broken
			10	9		COAL G2:	minor C3 stringers at top	.	.	.					core solid
			16	14		COAL LOSS:	.	.	.						
			2	2		COAL G1/G2:	.	.	.						
			8	7		COAL G2/G3:	.	.	.						broken
			7	6		COAL G1/G2:	.	.	.						broken
			10	9		COAL G2/G3:	G4 stringers at top, minor clay-stone stringers at bottom	.	.	.					broken
25			23	21		COAL G1/G2:	.	.	.						core solid
			20	18		COAL LOSS:	.	.	.						
											
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1252											
	154.81		20	18		ROCK LOSS:										
			35	31		CLAYSTONE: carbonaceous, some coaly particles										core very sheared and broken
						throughout										abundant slicken-sides
			22	20		CLAYSTONE & C4: mixed					512' / 156.1m					very broken
			10	9		ROCK LOSS:										
			19	17		CLAYSTONE: carbonaceous										very sheared
	155.92		5	4		C4:										
	155.92		14	12		COAL C3: C4 stringers										core sheared
			10	9		COAL LOSS:										
			16	14	COAL C3: abundant C4 particles										broken to pulverized	
			5	4	COAL C2/C3:											
			30	26	COAL LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		157.01	34	30	1253	COAL:										
	157.01		12	10		COAL LOSS:										
		157.18	5	4		COAL C3:										broken
	157.18	157.22	4	3		C4:		C3 stringers								broken
	157.22		20	17		COAL LOSS:										
			5	4		COAL C2/C3:										broken
			14	12		COAL C2/C3:										core solid
			10	9		COAL LOSS:										
		157.96	25	21		COAL G1/C2:										
	157.96		9	8		ROCK LOSS:										
		158.13	8	7		COAL C3/C4:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	158.13		25	21	1253 ←	COAL LOSS:	.	.	.	.	
		158.45	7	5		COAL C3:	.	.	.	.	.				core broken
	158.45		5	4		ROCK LOSS:	.	.	.	.	.
		158.59	9	7		COAL C3/C4:	.	.	.	.	.				broken
	158.59	158.97	38	29		COAL LOSS:	.	.	.	.	.	521' / 158.8			
						BOX 56	.	.	.	.	.
	158.97		10	8		CLAYSTONE: carbonaceous to coaly	.	.	.	.	.				solid
		159.26	19	15		CLAYSTONE: carbonaceous, broken at bottom	.	.	.	.	.
	159.26	159.32	6	4		C4:	.	.	.	.	.				broken
	159.32		10			CLAYSTONE: very carbonaceous to coaly	.	.	.	.	.				solid
53		159.55	13			CLAYSTONE: carbonaceous, calcite bands near bottom	.	.	.	.	.				solid
							.	.	.	.	.	526' / 160.3m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
60T	159.55	160.86	131			SANDSTONE:	fine grained,	medium gray,	light						
29M							gray;	salt and pepper,	carbonaceous						
58F							bands at top and bottom;	silty							
							laminations,	cross laminations							
							shows tops up								
57	160.86		41			SANDSTONE:	fine grained,	light gray,	silty						
							laminations								
										532' / 162.2m					
		161.55	28			SANDSTONE:	as above,	minor calcite filled							
							fractures								
							BOX 57								
	161.55		99			SANDSTONE:	fine grained,	medium gray,	highly						
							carbonaceous,	abundant siltstone							
							stringers,	beddings highly							
							disrupted,	rare calcite and							
							pyrite coated	fractures							
			27			ROCK LOSS:									
										537' / 163.7m					
		164.20	139			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
52°	164.20		42			SANDSTONE:	medium grained, light gray.								
							abundant plainier carbonaceous								
							stringers, salt and pepper								
							texture								
							BOX 58								
			116			AS ABOVE:									
		167.46	168			AS ABOVE:	but slightly coarser				547' / 166.7m				
							BOX 59								
	167.46	168.52	106			AS ABOVE:	but fining towards base								
	168.52		39			SANDSTONE:	fine grained, very disrupted								
							beddings, medium gray, abundant								
							siltstone lenses, coaly fragments								
							and calcite veinlets common								
											551' / 167.9m				
			142			AS ABOVE:									
							BOX 60								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		172.01	168												
						AS ABOVE:	grading and siltstone towards base				567' / 172.8m				
44°	172.01		108			SILTSTONE:	medium gray with irregular carbonaceous bands, blocky fractures								
							BOX 61								
			183			AS ABOVE:									
		175.81	89			AS ABOVE:					577' / 175.9m				
							BOX 62								
											587' / 178.9m				
37	175.81		30	25		CLAYSTONE:	siltstone interbeds in top								core solid
34			27	22		CLAYSTONE:	carbonaceous, middle 13cm broken pulverized								broken-pulverized
		176.83	45	37		CLAYSTONE:	carbonaceous and coal mixed, (90% claystone, 10% coal) very coaly at bottom								coal broken - pulverized
	176.83		50	41	↑	COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			29	24	1254 ↓	COAL C2:	.	.	.	.					broken-pulverized	
55			16	12		COAL C1:	.	.	.	.						core sheared
			32	25		COAL LOSS:	.	.	.	.		
		178.34	24	18		COAL C1/C3: claystone particles near bottom	.	.	.	.						broken-pulverized
46	178.34		19	15		CLAYSTONE: carbonaceous, very broken at top pyrite along fractured surfaces	.	.	.	.	589' / 179.5m					
		178.59	6	4		ROCK LOSS:	.	.	.	.		
	178.59	178.67	8	6		COAL & CLAYSTONE: (90% coal) mixed	.	.	.	.						broken-pulverized
	178.67	178.91	24	18		COAL LOSS:	.	.	.	.		
	178.91	179.11	20	15		CLAYSTONE: very carbonaceous and coaly	.	.	.	.						broken
						BOX 63	.	.	.	.		
	179.11		65	45		SANDSTONE: with no carbonaceous staining, cavities lined with quartz and pyrite	.	.	.	.		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
			201			AS ABOVE:	.	.	.		593' / 180.7m				
											
						BOX 64	.	.	.						
											
		181.82	5			AS ABOVE:	.	.	.						
											
	181.82		26			SANDSTONE: medium gray, fine grained, with	.	.	.						
						abundant coaly partings, sections	.	.	.						
						broken up possible loss	.	.	.						
						.	.	.	.		602' / 183.5m				
			141			AS ABOVE:	.	.	.						
						.	.	.	.		605' / 184.4m				
		184.65	116			AS ABOVE:	.	.	.						
											
						BOX 65	.	.	.						
											
	184.65		131			AS ABOVE: with small siltstone units and	.	.	.						
						calcite and pyrite veins	.	.	.						
						.	.	.	.		612' / 186.5m				
			127			AS ABOVE:	.	.	.						
											
						BOX 66	.	.	.						
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		187.44	21			AS ABOVE:	but siltstone lenses less common								
							but leaching more evident								
	187.44		112			AS ABOVE:					617'/188.1m				
			108			AS ABOVE:	with minor coaly partings some								
							coaly partings and sandstone								
							grounded and sections shattered								
							(fault ?)								
							BOX 67								
			58			AS ABOVE:									
		191.45	123			AS ABOVE:	but less leaching								
											626'/190.8m				
	191.45		92			AS ABOVE:									
							BOX 68								
			48			AS ABOVE:									
											634'/193.2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		193.20	35			AS ABOVE:									
	193.20	193.41	21			CLAYSTONE: highly carbonaceous, black, medium									
						brown streak, abundant pyrite									
						lenses									
	193.41	194.77	136			CONGLOMERATE: 13cm large pebbles, bands up									
						to 7cm over lies small pebbles									
						1cm, conglomerate rounding good,									
						sorting is poor and small bands									
						of pebbly sand									
						BOX 69									
	194.77	195.25	48			SANDSTONE: light gray, coarser grained.									
						pebbly salt and pepper texture									
										642' / 195.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	12.80		169								42' / 12.8m				
						SILTSTONE: Hulcross Formation dark gray to									
						black, fine plainer laminations,									
						core very broken up, iron stains on									
						joints									
											47' / 14.3m				
			98			AS ABOVE:									
		15.73	26			AS ABOVE:									
	15.73		131			AS ABOVE:					52' / 15.8m				
47°		17.96	92			AS ABOVE: core extremely broken, round and									
						iron stain									
	17.96		17			CONGLOMERATE: friable dark gray, pebbles to									
						3mm Top of Gates									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		18.56	43			AS ABOVE:	but contact fractured								
	18.56		25			SANDSTONE:	fine grained, medium gray to brown crossbeds, common fracture near top of section				60' / 18.3m				
			93			AS ABOVE:	with minor siltstone				66' / 20.1m				
		20.55	81			AS ABOVE:	but very broken up and iron stains possible loss								
							BOX 4								
		20.59	4			AS ABOVE:									
	20.59		36			CLAYSTONE:	white to light gray, very friable soapy texture				71' / 21.6m				
		21.79	84			AS ABOVE:	contacts sharp but broken								
	21.79	23.30	151			SANDSTONE:	fine grained, carbonaceous towards top of section, very fractured lighter towards base								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 5								
	23.30		49			AS ABOVE:									
		23.89	10			AS ABOVE:				77' / 23.5m					
20	23.89		201			SILTSTONE:	medium black, fine grained, top								
							boundary broken, bedding is plainer								
							but wavy in places								
							BOX 6								
		26.40	50			AS ABOVE:									
	26.40		200			AS ABOVE:	becoming darker towards the base			87' / 26.5m					
							coaly intervals minor pyrite								
							BOX 7								
			106	97		AS ABOVE:	pyrite more common, coaly lenses								
							more common								
										92' / 29.6m					
		31.01	155	142		AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 8								
23	31.01	31.34	33	30		CLAYSTONE:	medium to dark gray,	silty at top,							core broken in mic
							carbonaceous	towards bottom							
	31.34		9	8	4165	COAL LOSS:									
		31.89	46	42		COAL C2/C3:									core very broken
	31.89	31.93	4	4		CLAYSTONE:	silty,	dark gray							core very broken
25	31.93	32.31	38	35		SILTSTONE:	medium gray,	clay to rich at top,							core very broken 5cm from bottom
							blocky fracturing,	sandy at bottom							
										106.5'/32.5m					
	32.31	32.48	17	16		SANDSTONE:	fine grain,	medium gray,	silty						
							laminations	towards bottom,	occasional						
							claystone stringers	at bottom							
	32.48	33.75	127			CLAYSTONE:	dark gray,	some silty bands	through-						bottom 88cm very broken to pulveri: in places
							out,	occasional carbonaceous	bands,						
							a 2cm coal band	(broken) 40cm from							
							top								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	33.75		62			ROCK LOSS:									
								BOX 9							
			36			ROCK LOSS:									
		35.36	63			AS ABOVE:	section very broken up, possible loss								
											116.6' / 35.5m				
	35.36	36.57	121			SANDSTONE:	very fine grained, medium gray color abundant siltstone bands and coaly fragments, calcite veins common								
	36.57	37.42	85			SILTSTONE:	black, fine grained, very friable modular weather earthing								
								BOX 10							
	37.42		30			AS ABOVE:									
			25			ROCK LOSS:									
											123' / 37.4m				
			71			AS ABOVE:									
											125' / 38.1m				core broken up possible loss

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. a. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			107												
		40.03	28												
	40.03		108												
38			154												
		43.44	79												
	43.44	44.19	75												
18	44.19		38												
			166												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			104												
						AS ABOVE:									
12		47.57	30			AS ABOVE: bottom boundary sharp									
	47.57		78			SILTSTONE: medium gray to black, fine grained, abundant laminations contains rare sandstone lenses									
											170' / 57.8m				
			30			ROCK LOSS:									
						AS ABOVE:									
		49.75	13			SILTSTONE: black, very fine grained, friable modular weathering, highly carbonaceous									
	49.75	49.97	22			SANDSTONE: fine grained, medium gray, bedding faint									
	49.97	50.03	6			SILTSTONE: black, fine grained, highly carbonaceous									
											175' / 53.3m				
	50.03		57			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			25												
		51.02	17												
	51.02	51.62	60												
	51.62	51.70	8												
	51.70		167												
		53.79	42												
	53.79	54.85	106												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	54.85		172								190' / 57.9m				
						CLAYSTONE: black, very fine grained, friable									
						modular weathering, abundant coaly									
						seams and fragments, slickensides									
						common towards base									
											195' / 59.4m				
			43			AS ABOVE:									
						BOX 16									
		57.22	22			AS ABOVE:									
38	57.22		67			SANDSTONE: fine grained, medium gray; bedding									
						wavy, siltstone lenses common									
											200' / 60.9m				
		58.29	40			SILTSTONE: coarse grained, medium gray, sandy									
						lenses common									
	58.29	58.33	4			COAL:									
	58.33		16			ROCK LOSS:									
		58.56	7			CLAYSTONE: carbonaceous, black, calcite veinlets									
						common									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From.	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	58.56	59.46	90												
						SANDSTONE: fine grained, medium gray, bedding wavy, coaly fragments common near top									
											205' / 62.4m				
	59.46		54			AS ABOVE: but siltstone lenses and fragments common									
38		60.30	30			AS ABOVE:									
	60.30		65			SANDSTONE: light gray, fine to medium grained massive quartz veins common									
											210' / 64.0m				
			151			AS ABOVE:									
											215' / 65.5m				
		62.96	50			ROCK LOSS:									
	62.96		121			AS ABOVE:									
											220' / 67.0m				
			86			AS ABOVE: with one 11cm siltstone lense									
											223' / 67.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			97												
						AS ABOVE:									
							BOX 19								
		66.72	72			AS ABOVE:									
										228' / 69.4m					
	66.72		173			AS ABOVE:									
										233' / 71.0m					
			61			AS ABOVE:									
							BOX 20								
						AS ABOVE:									
			159							238' / 75.2m					
		71.93	128			AS ABOVE:	with rare siltstone lenses								
										244' / 74.3m					
	71.93		19			AS ABOVE:									
							BOX 21								
						AS ABOVE:									
			132							249' / 75.8m					
		74.83	139			AS ABOVE:	quartz common and banded in places								
										253' / 77.1m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	74.83		37			AS ABOVE:									
							BOX 22								
			115			AS ABOVE: with abundant carbonaceous stringers									
										258' / 78.6m					
			160			AS ABOVE: siltstone lenses more common									
		78.41	46			SILTSTONE: coarse grained, medium gray, wavy laminations, sandstone lenses common									
							BOX 23								
	78.41		162			AS ABOVE: siltstone lenses and quartz veins common									
										269' / 81.9m					
			29			ROCK LOSS:									
			130			AS ABOVE: crushed, common small faults, quartz, calcite and pyrite veins common									
							BOX 24								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		81.91	29			AS ABOVE:									
										274' / 83.5m					
	81.91		182			AS ABOVE: but no calcite veins, rare pyrite coated fractures									
										279' / 85m					
			78			AS ABOVE:									
							BOX 25								
			227			AS ABOVE:									
										289' / 88m					
		87.67	89			AS ABOVE: abundant siltstone lenses near top of section, one 1cm pyrite band near top of section									
							BOX 26								
	87.67		97			AS ABOVE:									
										294' / 89.6m					
		90.21	157			AS ABOVE: with moderate coaly siltstone lenses									
										299' / 91.1m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	90.21	90.65	44												
						SANDSTONE, SILTSTONE: as above, 40% black, highly carbonaceous siltstone with abundant pyrite lenses, 60% lenses wavy and inconsistent									
						BOX 27									
	90.65	91.04	39			AS ABOVE:									
41	91.04		85			SANDSTONE: gray to black, medium grained, bedding planar, pyrite lined fractures common									
										304' / 92.2m					
			41			AS ABOVE:									
		93.39	109			SANDSTONE & SILTSTONE: sandstone as above, 40% siltstone, black, fine grained, highly carbonaceous 60% one band 3cm wide 10% pyrite									
	93.39	93.61	22			SANDSTONE: as above, no pyrite									
										309.6' / 94.1m					
	93.61		6			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		94.55	88												
	94.55	95.13	58			AS ABOVE:		with one band of 5cm of siltstone							
	95.13	95.30	17			SILTSTONE:		dark gray, carbonaceous, wavy bedding							
								sandstone lenses common							
	95.13	95.30	17			SANDSTONE:		fine grained, light gray, massive							
										316' / 96.2m					
20°	95.30		155			AS ABOVE:									
			7			AS ABOVE:									
			57			AS ABOVE:		core highly broken up, possible							
								loss							
			15			ROCK LOSS:									
		97.85	21			AS ABOVE:									
	97.85		35			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			6												
			50			SILTSTONE:	dark gray to black, very fine								
							grained, friable, splintery fractures								
			104			CONGLOMERATE:	rounding fair, sorting poor. Bands								
							of 1.5cm pebbles in 3mm diameter								
							matrix. Slightly leached with								
							quartz and pyrite coated fractures.								
										328'/99.9m					
	100.03		23			AS ABOVE:									
							BOX 30								
	100.03		139			AS ABOVE:									
										333.6'/101.6m					
			42			ROCK LOSS:									
	102.05		21			AS ABOVE:									
	102.05	103.21	116			SANDSTONE:	coarsening downwards from coarse								
							sand at top grading to siltstone								
							at base. Abundant, coaly fragments								
							and coaly bands. Light gray at top								

to medium gray at base.

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						(CORE SIZE = NQ)									
						BOX 31									
	103.21		20	18		ROCK LOSS:									
26°		103.62	21	19		CLAYSTONE: silty, medium to dark gray					R25				
	103.62		4	4		COAL C2/C3:					339' / 103.3m				
			9	8		COAL C1/C2: minor calcite along cleat					D-				
			19	17		COAL LOSS:									
			6	5		COAL C2/C3: minor claystone stringers near bottom									core very broken
			18	16		COAL LOSS:									
			4	4		C4: claystone stringers									core very broken
24°			9	8		COAL C2/C3:									



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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		104.42	11	10	↑ 7911	COAL C2:									core broken	
	104.42		6	5		COAL C2/C3:										
25°			21	19		COAL C1/C2: minor iron pebbles, occasional calcite along cleat										core somewhat broken
			19	17		COAL C2/C3: minor calcite along cleat										
			20	18		COAL C1/C2: C3 band in middle										
	105.13		5	4		COAL C3: C4 band at bottom										
	105.13		6	5		ROCK LOSS:										
	105.23		4	4		CLAYSTONE:										core broken
	105.23		3	3		COAL LOSS:										
	105.31		5	4		COAL C2/C3:										core very broken
31°	105.31		56	48	CLAYSTONE: carbonaceous at top, silty in middle carbonaceous at bottom, coaly fragments 16cm from top						349.5'/106.5m				core very broken at 16cm from top	
												R2.5				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		106.02	15	13	8911 ↑ ↓	ROCK LOSS:	.	.	.						
	106.02	106.16	14	12		COAL C1/C2:	.	.	.	.					core broken
	106.16		6	5		COAL LOSS:	.	.	.	.	
		106.26	4	3		COAL C3/	.	.	.	.					core broken
	106.26		10	8		ROCK LOSS:	.	.	.	.	
		106.42	6	5		G4 & CLAYSTONE: carbonaceous, abundant slicken-									core broken to pulverized
						sides along fractured surfaces									
	106.42		11	9		COAL C1/C2:	.	.	.	.	
			2	2		COAL C2/C3:	.	.	.	.	
						BOX 32	.	.	.	.	
		106.75	20	17		COAL C1:	.	.	.	.	
											350' / 106.7m				
											E-				
	106.75		7	6		ROCK LOSS:	.	.	.	.	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		107.01	19	16		SILTSTONE:	light to dark gray, core very								core very broken
							broken and fractured, abundant								
							calcite throughout, clay rich near								
							top, coaly partings								
	107.01	108.14	113	95		SANDSTONE:	fine to medium grain, light gray,				R2.5				core very broken
							abundant irregular fractures,								
							occasional coaly stringers abundant								
							in fractures								
	108.14		7			SANDSTONE:	fine grain, light gray, silty				R3				
							laminations, occasional calcite								
							filled fractures								
										355' / 108.2m					
										E					
36		109.21	100			SANDSTONE:	as above								
							BOX 33								
	109.21		61			AS ABOVE:									
										360' / 109.7m					
		110.90	108			AS ABOVE:	but coarsening towards base, quartz								
							pyrite veins common								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	110.90	111.35	45												
						SANDSTONE:	coarse	grained,	salt and	pepper					
							texture,	upper and	lower	boundary					
							sharp	(channel?)							
	111.35		14			SANDSTONE:	fine to	medium	grain,	light gray					
							massive								
											385'	/111.2m			
		112.15	66			AS ABOVE:									
							BOX 34								
	112.15		78			AS ABOVE:									
											370'	/112.7m			
			169			AS ABOVE:									
											373'	/113.7m			
			54			AS ABOVE:	minor	siltstone	lenses	and calcite					
							veins								
							BOX 35								
		117.74	258			AS ABOVE:									
											385'	/117.3m			
	117.74		27			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r, a. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			127			AS ABOVE:									
										390'	/118.8m				
			157			AS ABOVE:									
										395'	/120.4m				
		121.00	15			AS ABOVE:									
		121.00	69			AS ABOVE: with minor siltstone lenses									
										400'	/121.9m				
			229			AS ABOVE:									
23										405'	/123.4m				
		124.01	3			AS ABOVE:									
		124.01	73			AS ABOVE: but abundant coaly fragments and pyrite coatings, small siltstone lenses near base									
										410'	/124.5m				
			217			AS ABOVE: but many leach joints with quartz and pyrite coatings									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											415' / 126.4m				
		127.76	85												
						AS ABOVE:	but less leaching								
											420' / 128m				
	127.76	128.13	37			AS ABOVE:									
	128.13	128.89	76			SANDSTONE & SILTSTONE:	sandstone 60% abundant pyrite. Siltstone 40%, siltstone lenses								
	128.89		107			SANDSTONE:	fine grained, medium gray, abundant carbonaceous fragments, heavy leaching, back joints coated with quartz.								
							BOX 40								
		131.43	147			AS ABOVE:	one to two centimeter section of ground rock (some fault?)								
											430' / 131m				
	131.43		147			AS ABOVE:									
											435' / 132.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		138.70	33			AS ABOVE:										
							BOX 43									
	138.70		30			ROCK LOSS:										
			39	30		SANDSTONE:	fine grain, light to medium gray,									top 20cm broken
							occasional irregular fractures with									
							calcite					R3				
											460' / 140.2m					
											D+ TOP					
											C- BOTTOM					
39		139.85	46	36		SANDSTONE:	as above, silty laminations,									
						carbonaceous at bottom					R3.5					
	139.85		8	6	ROCK LOSS:											
		140.03	10	8	CLAYSTONE & COAL:	mixed									core very broken	
	140.03	140.21	18	15	COAL LOSS:											
	140.21	140.24	3	3	C4:										core broken	

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	140.24		7	6	6911 ↓	COAL LOSS:									
			45	39		COAL C1/C2: slickensides along fractured surfaces, minor calcite throughout.									core very broken
	141.01		25	22		COAL LOSS:					465' / 141.7m				
											C				
24°	141.01		72	66		COAL C1/C2: minor calcite along fractured surfaces									core very broken to pulverized in places
			27	25		COAL LOSS:									
						BOX 44									
	142.08		8	7		COAL C1/C2:									core sheared and broken
	142.08		4	4		CLAYSTONE: carbonaceous									
			17	16		ROCK LOSS:					470' / 143.3m				
										C+					
	142.55		26	24	CLAYSTONE: dark brown, very carbonaceous bands 6cm from bottom; abundant shearing									core broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	142.55		20												
		142.81	6												very broken
	142.81	143.07	26												
	143.07	143.18	11												
	143.18	143.21	3												core broken
	143.21		13												
		143.43	9												core broken to very broken
	143.43	143.54	11												
22	143.54	143.65	11												core very broken
	143.65	143.68	3												
	143.68	143.82	14												

calcite filled fractures

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	143.82		10												
		144.00	8			CLAYSTONE:	very carbonaceous, abundant coal								core very broken to pulverized
	144.00		36			COAL LOSS:									
		144.41	5			COAL G1/G2:									core very broken
	144.41		10			CLAYSTONE:	carbonaceous to coaly, abundant								core very broken to pulverized
			10			ROCK LOSS:									
										474' / 144.5m					
										D					
		144.78	17			CLAYSTONE:	silty, dark gray, very silty towards								
							bottom				R2.5				
60°	144.78	145.03	25			SILTSTONE:	medium gray, minor sandy lenses								
							claystone lenses at top and bottom								
	145.03	145.49	46			CLAYSTONE:	carbonaceous in middle, medium to								
							dark gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	145.49	145.93	44													
						SILTSTONE:	light to medium gray, abundant									
							fracturing and calcite filled									
							fractures, two 3cm claystone bands									
							in middle									
							BOX 45									
	145.93		60			SANDSTONE:	medium grained, salt and pepper									
							texture, highly leached, calcite,									
							quartz, pyrite coated fractures									
							abundant carbonaceous fragments									
											480' / 146.3m					
			152			AS ABOVE:										
		148.46	41			AS ABOVE:										
							BOX 46									
	148.46		25			AS ABOVE:										
			90			SANDSTONE:	fine grained with laminated,									
							abundant, carbonaceous stringers									
							and siltstone lenses, calcite									
							quartz veins very abundant									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											490' / 149.3m				
		151.27	166			AS ABOVE:									
											495' / 150.8m				
							BOX 47								
	151.27		88			SILTSTONE:	medium gray, occasional dark clay-								core broken
							stone bands and stringers, calcite								
							filled fractures, abundant fracturing								
	152.15		8			COAL LOSS:									
		152.29	6			COAL:									core pulverized
	152.29		20	19		ROCK LOSS:									
			23	22		CLAYSTONE:	medium gray to brown, occasional								top 6cm pulverized
							carbonaceous bands								
											500' / 152.4m				
										B					
		153.06	34	33		CLAYSTONE:	as above, carbonaceous towards								
							bottom								
					↑ 117D										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	153.06		32	31	1170 ↓	COAL LOSS:									
	153.91		53	51		COAL C1/C2: occasional C3 fragments									core very broken to pulverized
											504' / 153.6m				
	153.91	154.12	21	20	1171 ↑	CLAYSTONE: carbonaceous, dark gray black					C				
						BOX 48									
	154.12	154.16	4	4		C4:									
	154.16		6	6	COAL C1:									core very broken	
18'			6	6	COAL C2:										
										506' / 154.2m					
		154.53	25	24	COAL C1/C2: minor claystone particles at bottom					B				core very broken	
	154.53	154.76	23	22	ROCK LOSS:										
	154.76	154.91	15	14	COAL LOSS:										
	154.91		6	6	CLAYSTONE: carbonaceous									core broken to pulverized	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		155.16	19	18	↓											
						ROCK LOSS:										
	155.16		15	14		COAL G2/G3: claystone carbonaceous particles in										core very broken
						bottom of box										
		155.35	4	4		COAL LOSS:										
	155.35		6	6		CLAYSTONE: carbonaceous										
		155.49	8	8		ROCK LOSS:										
	155.49	155.64	15	14		COAL LOSS:										
											509' / 155.1m					
											G+					
20	155.64	155.94	30	28	CLAYSTONE: carbonaceous, dark brown to black,										core broken	
					very carbonaceous at top, coal											
					fragments in bottom of box						R2					
	155.94	156.10	16	15	CLAYSTONE & COAL: mixed, 60% coal											
										513' / 156.4m						
										D+						
	156.10	156.30	20		COAL LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	161.33		167			AS ABOVE:	with no calcite veins				534' / 162m				
			31			AS ABOVE:									
							BOX 51								
		164.45	114			AS ABOVE:	quartz and pyrite				539.6' / 165.3m				
	164.45	165.45	100			AS ABOVE:					542' / 167.5m				
	165.45		88			SANDSTONE:	fine grained, medium gray, abundant siltstone bands and carbonaceous stringers, upper boundary gradational quartz veins common								
							BOX 52								
		167.02	69			AS ABOVE:					548' / 169m				
	167.02		169			AS ABOVE:	quartz pyrite veins common				553' / 168.6m				
			61			AS ABOVE:									
							BOX 53								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		170.00	68			AS ABOVE:	but coarser grain								
	170.00	170.23	23			SANDSTONE:	medium grained, salt and pepper texture, carbonaceous fragments common								
	170.23		69			AS ABOVE:	with siltstone fragments, bottom boundary sharp (channel?)				558.5' / 170.2m				
16°		171.41	49			SANDSTONE:	medium gray, fine grained, quartz veins common, bottom boundary gradational								
	171.41		12			SILTSTONE:	dark gray to black, highly carbon- aceous, friable, splintering fractures, carbonaceous partings								
			33			ROCK LOSS:					563.5' / 171.7m				
		172.37	51			AS ABOVE:									
							BOX 54								
	172.37		22			ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
24		172.78	19		1172	SILTSTONE:	medium gray,	occasional plant fragments						core broken	
								a 0.5cm coaly band at bottom			R2.5				
27	172.78		18	16		CLAYSTONE:	silty, medium gray,	occasional plant							
								fragments, calcite filled fractures			R2.5				
								at bottom							
											566' / 172.5m				
											D-				
27		173.85	89	79		CLAYSTONE:	very silty, calcite filled fractures							core somewhat broken	
								slickensides on fractured surfaces			R2.5				
											570' / 173.7m				
										C					
	173.85		18	16	↑	COAL LOSS:									
		174.17	14	12		COAL C3:							core broken to pulverized		
	174.17		11	10		ROCK LOSS:									
		174.35	7	6		CLAYSTONE:	very carbonaceous to coaly,	core sheared					core broken to pulverized		
	174.35		8	7		COAL LOSS:									
		174.48	5	4		COAL C3:							core broken to pulverized		
	174.48		2	2		ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology.	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		174.65	15	13	1172 ↓	CLAYSTONE: very carbonaceous, core sheared								core broken	
	174.65		15	13		COAL G1/G2:									
		175.05	25	21		COAL LOSS:									
	175.05	175.40	35	30		COAL & CLAYSTONE: mixed, (coal 80%, claystone 20%) claystone fragments in middle								core broken to pulverized	
	175.40	175.45	5	4		CLAYSTONE:									
						BOX 55									
	175.45		13	10	AS ABOVE:										
		177.04	146		AS ABOVE: but less carbonaceous, calcite quartz veins and slickensides common					575' / 175.3m					
										580' / 176.8m					
41	177.04	178.15	111		SILTSTONE: medium grained, dark gray, carbonaceous, bedding wavy, upper boundary gradational, calcite quartz veins very common, slickensides common										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	178.15		33												
36°		178.76	28												
	178.76	180.91	215												
84°	180.91		37												
76°			255												
90°			40												
		185.44	121												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
78°	185.44		126			SILTSTONE:	medium gray, coarse grained, bedding								
							faint, rare quartz veins								
							BOX 59								
		187.25	55			AS ABOVE:									
	187.25		8			SANDSTONE:	fine grained, plainer beddings,								
							light gray color, abundant siltstone								
							lenses								
										617' / 188.4m					
		188.10	77			AS ABOVE:									
	188.10	189.53	143			SILTSTONE:	coarse grained, medium gray, beddings								
							faint and feathery								
							BOX 60								
	189.53		71			AS ABOVE:									
										627' / 191.1m					
77°			220			AS ABOVE:									
							BOX 61								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			94			AS ABOVE:									
		195.32	194			AS ABOVE:				637' / 194.2m					
							BOX 62								
75°	195.32		107			AS ABOVE:									
			196			AS ABOVE:				647' / 197.2m					
							BOX 63								
			122			AS ABOVE:									
		201.28	171			AS ABOVE:				657' / 200.3m					
							BOX 64								
	201.28		155			AS ABOVE:	minor quartz veins								
			142			AS ABOVE:	becoming slightly more carbonaceous			667' / 203.3m					
							BOX 65								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	213.61	213.66	5	3	↑ 1174	C4:									core broken	
	213.66	213.77	11	6		CLAYSTONE: carbonaceous to coaly, abundant coaly stringers towards bottom										
	213.77		6	3		COAL LOSS:										
		213.89	6	3		COAL C3:										
55	213.89	214.02	13	7		CLAYSTONE: carbonaceous at top, silty towards bottom, occasional coaly stringers at top						R2.5				
50	214.02	214.20	18	12		SILTSTONE: dark gray, somewhat carbonaceous at top							R3			core solid
	214.20		9	6		ROCK LOSS:										
		214.35	6	4	C4: slickensides along sheared surfaces minor calcite along sheared surfaces										core very broken	
			22	14	COAL C3: core broken											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS				
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.					
		214.92	35	22	1175														
																		core sheared and broken	
											707' / 215.5m								
											C Top								
											D Bottom								
	214.92		21	13			COAL C1:	core sheared parallel to axis										core sheared and very broken	
			15	9			COAL C1/C2:											core broken	
			11	7			COAL C1:												
								BOX 69											
			60	36			COAL C1/C2:	occasional C3 bands and stringers in middle											core sheared and broken
											717' / 218.5m								
											D- Top								
											B+ Bottom								
			23	13			COAL C1/C2:	4cm C3 band in middle											
	217.27		105	60			COAL C2:	occasional C3 bands and C4 stringers near bottom, occasional claystone particles											core somewhat fractured and sheared

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1175 ↓ ↑										
	217.27	217.89	62	36		COAL:	occasional claystone particles, core very sheared (possible fault)								core broken to pulverized
							BOX 70								
	217.89		9	5		COAL Cl/C2:	minor claystone stringers in bottom 4cm (possible fault)								core sheared
			100	57		COAL LOSS:									
			40	23		COAL:	(possible fault)								core broken to pulverized
			13	7		COAL Cl:									core sheared
											724' / 220.7m				
											D-				
			100	57		COAL LOSS:									
			21	11		COAL :	(possible fault)								broken to pulverized
			25	14		COAL LOSS:									
		221.31	34	19		COAL Cl:									core sheared and broken
	221.31		11	6		ROCK LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		221.95	53	27	1176 ↓ ↑	CLAYSTONE:	carbonaceous, coaly near top, plant					R2			core broken	
							fragments throughout									
												727' / 221.6m				
												D-				
	221.95	222.08	13	7			COAL LOSS:	(C3/C4)								
	222.08		28	14			CLAYSTONE:	carbonaceous, coaly stringers in								core broken
								middle and bottom								
		222.37	1	1			ROCK LOSS:	C4)								
	222.37	222.41	4	2			COAL C3:									core broken
62	222.41	222.55	14	7			CLAYSTONE:	carbonaceous, coaly stringers near								
							bottom									
	222.55	222.60	5	2		C4:	occasional vitrinite stringers									
							BOX 71									
	222.60		12	6		COAL LOSS:	C3									
		222.74	2	1		COAL C3:									core broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1177											
	222.74		4	2		ROCK LOSS:										
62		222.95	17	8		C4: vitrinite stringers										core broken
	222.95		6	3		COAL LOSS: (C3)										
		223.05	4	2		COAL C3:										core broken
	223.05		5	2		ROCK LOSS: C4										
		223.14	4	2		C4:										core broken
	223.14	223.16	2	1		COAL C2:										core broken
	223.16		17	8		ROCK LOSS:										
		223.38	5	2		GLAYSTONE: carbonaceous										core broken
	223.38		13	6		COAL LOSS: C3										
			4	2		COAL C2:										core broken
			2	1		COAL LOSS:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			25	12	177 ↓	COAL C3/G4:	interbedded								core broken	
	224.04		22	10		COAL LOSS:										
											737' / 224.6m					
											D					
	224.04	224.11	7	3		G4:	occasional vitrinite stringers									
	224.11	224.22	11	5		CLAYSTONE:	carbonaceous									
	224.22	224.81	59	28		SILTSTONE:	medium to dark gray									
	224.81		122			CLAYSTONE:	silty; dark gray brown, occasional carbonaceous bands in middle									core somewhat broken
											744' / 226.8m					
											D+					
		226.13	10			CLAYSTONE:	as above									
							BOX 72									
	226.13		108			CLAYSTONE:	silty; medium to dark gray brown, a 6cm siltstone band in middle									
											747' / 227.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			50			CLAYSTONE:	silty at top, carbonaceous towards							core somewhat broken	
							bottom, coaly stringers and plant								
							fragments in bottom								
			9			CLAYSTONE:	carbonaceous, abundant coaly stringers								
							and plant fragments								
			42			CLAYSTONE:	silty, dark gray brown, minor								
							coaly stringers at bottom								
		228.37	15			ROCK LOSS:									
	228.37	228.47	10			SILTSTONE:	medium gray, minor calcite filled							core broken	
							fractures, fractures with slicken-								
							sides								
	228.47		20			ROCK LOSS:									
			56			CLAYSTONE:	dark gray to black, abundant							core very broken	
							fractures								
										753' / 229.5m					
										D					
		229.30	7			CLAYSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	229.30	229.43	13												
63	229.43	230.35	92												
	230.35		188												
64		233.25	102	45											
	233.25		11	7											
		234.96	160	103											

abundant fractures in bottom 55cm
with slickensides

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 75								
	234.96		15	11	↑	COAL LOSS:									
			5	4		COAL C2/C3:									core broken
40			7	5		COAL C2:									
			19	15		COAL C1/C2:									
											775' / 236.2m				
			23	18		COAL LOSS:					C-				
			20	15		COAL C1/C2:									core sheared bottom 7cm pulverized
		235.94	9	7		COAL C2/C3:									core broken
	235.94	236.02	8	6		ROCK LOSS: (G4)									
	236.02		15	12		COAL C3:	minor C4 stringers and bands								core broken
										777' / 236.8m					
			30	23	COAL LOSS:					D-					

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		236.53	6	5	117 ↓	COAL C3:									core very broken	
	236.53		59	45		COAL C2:	occasional C3 bands in top portion								core broken at top	
		237.29	17	13		COAL C1/C2:										
	237.29	237.43	14	11		G4:	abundant vitrinite stringers									
	237.43		8	6		CLAYSTONE:	carbonaceous, dark brown to black					781' / 238m				
											E-					
41		238.26	75	57		CLAYSTONE:	carbonaceous at top, very silty towards bottom, minor soft sediment deformation									
							BOX 76									
69	238.26	239.27	101			AS ABOVE:	coarser grained and sandy in sections					787' / 239.9m				
	239.27		187			AS ABOVE:	BCN changes irregularly, minor folding? slickensides common									
						BOX 77										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			184												
			109			AS ABOVE:					77' / 23.5m				
			26.71	196		AS ABOVE:									
	26.71		78			AS ABOVE:					87' / 26.5m				
			221			AS ABOVE:									
			54			AS ABOVE:					97' / 29.6m				
71			256			AS ABOVE:									
											107' / 32.6m				
		32.91	11			AS ABOVE:									
	32.91	33.03	12			CLAYSTONE:	sandy, unconsolidated, medium gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
										
79			71			AS ABOVE:	.	.	.	.	
						147' / 44.8m				
			207			AS ABOVE:	.	.	.	.	
										
						BOX 13	.	.	.	.	
										
			74			AS ABOVE:	.	.	.	.	
						157' / 47.9m				
83		50.11	223			AS ABOVE:	.	.	.	.	
										
						BOX 14	.	.	.	.	
										
						AS ABOVE:	.	.	.	.	
		50.11	115			.	.	.	.	.	167' / 50.9m				
68			178			AS ABOVE:	.	.	.	.	
										
						BOX 15	.	.	.	.	
										
			67			AS ABOVE:	.	.	.	.	
						177' / 53.9m				
			222			AS ABOVE:	.	.	.	.	
										
						BOX 16	.	.	.	.	
										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			108												
						AS ABOVE:									
										185'	56.4m				
75		58.96	195			AS ABOVE:									
							BOX 17								
		58.96	137			AS ABOVE:				195'	59.4m				
			161			AS ABOVE:									
							BOX 18								
			163			AS ABOVE:									
										205'	62.5m				
			133			AS ABOVE:									
							BOX 19								
71			159			AS ABOVE:									
										215'	65.5m				
		67.84	135			AS ABOVE:									
							BOX 20								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	67.84		138			AS ABOVE:									
										224' / 68.3m					
			136			AS ABOVE:	minor calcite fractures perpendicular								
							to bedding								
							BOX 21								
			135			AS ABOVE:									
										233' / 71.0m					
67			119			AS ABOVE:									
										237' / 72.2m					
			22			AS ABOVE:									
							BOX 22								
		76.23	289			AS ABOVE:									
							BOX 23								
										247' / 75.3m					
	76.23		260			AS ABOVE:									
										255' / 77.7m					
66			30			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	BOX 24	.	.						
											
			285			AS ABOVE:	.	.	.						
						.	.	.	.	265'	/80.8m				
											
						.	BOX 25	.	.						
											
			276			AS ABOVE:	.	.	.						
						.	.	.	.	275'	/83.8m				
											
						.	BOX 26	.	.						
											
66T	87.60		286			AS ABOVE:	.	.	.						
85	Bottom					.	.	.	.		
											
						.	BOX 27	.	.						
											
	87.60		27			AS ABOVE:	.	.	.						
						.	.	.	.	285'	/86.9m				
84			201			AS ABOVE:	.	.	.					core broken with slickensides along bedding planes	
											
						.	.	.	.	292'	/89.2m				
											
						.	BOX 28	.	.						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
75	Bottom	92.40	252			AS ABOVE:									
							BOX 29								
		92.40	127			AS ABOVE:									
			126			AS ABOVE:	calcite fractures and slickensides					305' / 93.0m			
							across bedding								
							BOX 30								
			146			AS ABOVE:									
60			135			AS ABOVE:									
							BOX 31								
		100.45	271			AS ABOVE:									minor slickensides continue
							BOX 32								
64	100.45		287			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			14			AS ABOVE:									
										337' / 102.7m					
			275			AS ABOVE:									
			30			AS ABOVE:									
										347' / 105.8m					
			239			AS ABOVE:									
64		109.57	67			AS ABOVE:									
										357' / 108.8m					
	109.57		189			AS ABOVE:									
			108			AS ABOVE:									
										367' / 111.9m					
			161			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			162												
						AS ABOVE:									
										404.5'	123.3m				
		125.10	134			AS ABOVE:									
							BOX 41								
		125.10	195			AS ABOVE:									
										415'	126.5m				
64			86			AS ABOVE:									
							BOX 42								
			245			AS ABOVE:									
										425'	129.5m				
			57			AS ABOVE:									
							BOX 43								
			298			AS ABOVE:									
										435'	132.6m				
							BOX 44								
		136.36	245			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											
						.	.	.	.	445' / 135	.6m				
						.	BOX 45	.	.						
											
57	136.36		280			AS ABOVE:	.	.	.						
						.	.	.	.	454' / 138	.4m				
			43			AS ABOVE:	.	.	.						
											
						.	BOX 46	.	.						
											
			234			AS ABOVE:	.	.	.						
						.	.	.	.	464' / 141	.4m				
59			41			AS ABOVE:	.	.	.						
											
						.	BOX 47	.	.						
											
		142.72	38			AS ABOVE:	.	.	.						
											
55	142.72	143.06	34			CONGLOMERATE: unsorted pebbles up to 1cm,									
						interbedded fine sandstone laminations,									
						carbonaceous slickensides									
						.	.	.	.	467' / 142	.3m				
	143.06	143.20	14			AS ABOVE:	.	.	.						
											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					NOTE:	*HULCROSS/GATES CONTACT*									
	143.20	143.66	46			SANDSTONE:	fine grain, dark gray, carbonaceous/ laminated slickensides								
	143.66		20			CLAYSTONE:	carbonaceous with coaly stringers slickensides very broken								very broken
			40			ROCK LOSS:									
			11			COAL?:	minor claystone fragments								pulverized
			29			CLAYSTONE:	carbonaceous with coaly stringers								
		145.03	37			AS ABOVE:						474' / 143.9m			
						BOX 48									
54	145.03		240			CLAYSTONE:	black to dark gray, carbonaceous in top 60cm, silty towards bottom slickensides along fractured surfaces, occasional calcite filled fractures								core broken at 21cm and 70cm
												482' / 146.9m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			30			CLAYSTONE:	as above								
							BOX 49								
59	149.86	213				CLAYSTONE:	as above, very silty in top 50cm								core somewhat broken
							and bottom 60cm, carbonaceous in middle								
	149.86	150.32	46			SILTSTONE:	medium to dark gray, clayey				492' / 150m				
							BOX 50								
65	150.32	208				CLAYSTONE:	silty, medium to dark gray, occasional light brown claystone clasts, minor soft sediment deformation								
											501' / 152.7m				
			74			CLAYSTONE:	as above								
							BOX 51								
48	153.83	69				CLAYSTONE:	as above, carbonaceous in middle 14cm								core somewhat broken
											511' / 155.8m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
61	153.83		212			SILTSTONE:	medium to dark gray, claystone							core solid	
							rich at top, sandy laminations in								
							middle, minor soft sediment								
							deformation, claystone rich at								
							bottom								
							BOX 52								
60		158.34	239			SILTSTONE:	as above, coaly stringers and							solid	
							plant fragments near bottom								
							*Kilborn Sample shows bottom 128cm								
										521' / 158.8m					
	158.34		14			CLAYSTONE:	carbonaceous								
			3			C4:								core broken	
			7			COAL C3/C4:								very broken	
		158.71	13			CLAYSTONE:	carbonaceous, dark gray to black								
							BOX 53								
60	158.71	159.60	89			CLAYSTONE:	silty to very silty at bottom								
										526' / 160.3m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		165.80	10			SILTSTONE:	carbonaceous, claystone rich								core broken	
										546' / 166.4m						
	165.80		146			CLAYSTONE:	silty to very silty at bottom, minor sandy laminations at top, carbon- aceous material at top									
							BOX 56									
		167.37	11			CLAYSTONE:	as above									
	167.37	167.65	28			SILTSTONE:	sandy lenses throughout, soft sediment deformation									somewhat broken
										552' / 168.2m						
60	167.65	170.09	244			CLAYSTONE:	silty, dark gray, occasional very fine grain, sandy bands, local fracturing near bottom									
							BOX 57									
58	170.09		70			SANDSTONE:	fine grain, light to medium gray, abundant silty laminations towards bottom									
										562.5 / 171.5m						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
64			113			SANDSTONE:	as above,	occasional medium grain							
							bands,	minor claystone bands							
										567' / 172.8m					
			111			SANDSTONE:	as above								
							BOX 58								
58			188			SANDSTONE:	as above								
										577' / 175.9m					
60	175.89		98			SANDSTONE:	as above,	silty, coarser towards							
							bottom								
							BOX 59								
59	175.89	177.38	149			SANDSTONE:	fine to medium grained,	silty							core solid
							laminations throughout,	carbonaceous							
							at bottom								
75	177.38		53			CLAYSTONE:	carbonaceous,	some coaly fragments							top 18cm very broken pulverized
							in top 18cm								
										587' / 178.9m					
55		178.54	63	36		CLAYSTONE:	silty, medium gray								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	178.54	178.65	11	6		SILTSTONE:	somewhat sandy, dark gray, coaly								
							stringers								
							BOX 60								
	178.65	178.74	9	5		CLAYSTONE:	carbonaceous with coaly stringers								
	178.74		62	32		COAL C1/C2:								bottom 20cm very	broken to pulverized
		179.39	3	2		COAL LOSS:									
	179.39		61	31		CLAYSTONE:	carbonaceous, dark gray to black							bottom 33cm broken	
							coaly stringers and plant frag=								
							ments								
										596' / 181.7m					
		180.06	6	3		CLAYSTONE:	as above								
	180.06	180.15	9	5		C4 & COAL:	mixed (50-50)							core very broken	
	180.15	180.29	14			COAL LOSS:	(C3)								
	180.29	180.49	20			CLAYSTONE:	very carbonaceous to coaly, C4								
							bands								

← 1672 →

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	180.49		14			CORE LOSS:	(rock & coal)								
		180.96	33			CLAYSTONE AND COAL:	mixed 50/50							broken to pulverized	
	180.96		20			CLAYSTONE:	carbonaceous to coaly							broken	
			30			ROCK LOSS:									
68		181.57	11			CLAYSTONE:	very silty and carbonaceous, minor coaly stringers								
	181.57	182.03	46			ROCK LOSS:	(C4?)								
											600' / 182.9m				
							BOX 61								
	182.03		151			SILTSTONE:	medium to dark gray, carbonaceous in top 25cm, claystone rich in bottom 14cm							solid	
											606' / 184.7m				
59		184.79	125			SILTSTONE:	as above, abundant dark claystone bands on top, minor sandy lenses at top, abundant sandy bands at bottom, load casts shows tops up								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 62								
59	184.79	185.12	33			CLAYSTONE:	silty, dark gray, sandy lenses								solid
							towards bottom								
68	185.12		144			SILTSTONE:	light to medium gray, very sandy								
							at top, occasional dark claystone								
							bands, minor soft sediment deformation and rip-up clasts								
										616' / 187.8m					
			70			SILTSTONE:	as above								
							BOX 63								
65		189.60	234			SILTSTONE:	as above, clay rich towards bottom								somewhat broken
										626' / 190.8m					
	189.60		40			SILTSTONE:	as above								
							BOX 64								
53			135			SILTSTONE:	medium gray, occasional dark gray								
							claystone bands, abundant sandy								
							bands in middle, minor calcite								
							filled fractures								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		192.36	101			SILTSTONE:	light gray, carbonaceous band								solid
							near bottom								
41	192.36		9			CLAYSTONE:	carbonaceous								broken
										636' / 193.9m					
		192.87	42			CLAYSTONE:	medium gray to black, carbonaceous								solid
							at top, silty at bottom								
							BOX 65								
56	192.87	194.46	159			CLAYSTONE:	silty at top, carbonaceous at								somewhat broken
							middle and bottom, occasional								
							plant fragments and coaly stringers								
							in middle								
	194.46	195.16	70			SILTSTONE:	light gray, silty, carbonaceous								
							at top								
58	195.16		47			SANDSTONE:	very fine grain to fine grain,								solid
							light gray, sandy laminations								
							BOX 66								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		195.71	8			SANDSTONE:	fine grain, light gray, silty								
							laminations								
										646' / 196.9m					
59	195.71	198.25	254			SANDSTONE:	medium gray to light gray green								solid
							occasional calcite filled fractures								
							in top 180cm increasing calcite in								
							bottom 64cm, 13cm claystone band								
							at bottom								
							BOX 67								
	198.25	198.74	49			CLAYSTONE:	dark gray, occasional coaly stringers								core broken
							slickensides along fractured								
							surfaces								
										656' / 199.9m					
54	198.74	200.90	216			SILTSTONE:	medium gray, clay rich at top,								
							somewhat sandy towards bottom, minor								
							load casts shows tops up								
							BOX 68								
55	200.90	201.79	89			CLAYSTONE:	silty at top, medium to dark gray								
										666' / 203m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
65	201.79		166			SILTSTONE:	clay rich at top, medium to dark gray, occasional sandy bands and dark claystone bands								
							BOX 69								
			144			SILTSTONE:	as above								
55		205.32	43			SILTSTONE:	as above, increases sandy towards bottom				676' / 206m				
	205.32	205.86	54			SANDSTONE:	very fine grained, light to medium gray, clay bands near top								
63	205.86		41			SILTSTONE:	medium to dark gray, large sandy band near bottom								solid
							BOX 70								
53		206.71	44			SILTSTONE & SANDSTONE:	interbedded, minor soft sediment deformation								
58	206.71		125			SANDSTONE:	fine grain to very fine grained, light gray, silty laminations in								solid

top

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			101			SANDSTONE:	as above				686' / 209.1m				
							BOX 71								
53		210.75	178			SANDSTONE:	as above, soft sediment deformation								
							at bottom, graded bedding shows								
							tops up								
	210.75		26			SILTSTONE:	medium gray brown, soft sediment								
							deformation, spheroidal sandstone								
							bands								
											696' / 212.1m				
	211.01		76			CLAYSTONE:	carbonaceous at top, dark gray								
							brown to light brown in middle,								
							paleo to expansion fractures shows								
							tops up								
							BOX 72								
			230			CLAYSTONE:	as above, carbonaceous, broken								broken in middle
							in middle								
											706' / 215.2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		214.58	51												
55	214.58		22												
60		217.30	250												
65	217.30	217.86	56												
35	217.86	218.41	55												
54	218.41		88												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS			
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.				
		223.73	13															
						COAL & CLAYSTONE: mixed, (60% coal)												very broken to pulverized
	223.73	224.17	44			ROCK LOSS:												
	224.17		31			CLAYSTONE: medium gray												
						BOX 76												
			111			CLAYSTONE: dark gray, medium brown, claystone bands near top												
		225.62	3			COAL C2: (small rootlets)												very broken to pulverized
	225.62		90			CLAYSTONE: carbonaceous, dark gray to black, large coal rootlets top 3cm, top 50cm broken, core somewhat friable top 50cm												very broken to pulverized
										746' / 227.4m								
			54			CLAYSTONE: medium to dark gray, top 26cm carbonaceous, silty at bottom, bottom 6cm friable and broken												broken
						BOX 77												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			9			CLAYSTONE: medium gray, friable and broken									friable and broken
						clay rich									
		227.65	50			ROCK LOSS:									
	227.65		236			CLAYSTONE: silty, medium gray									solid
			54			CLAYSTONE: as above				756' / 230.6m					
						BOX 78									
54		231.00	45			CLAYSTONE: as above, carbonaceous at bottom,									
						bottom 20cm somewhat broken									
	231.00	231.32	32			SILTSTONE: medium gray, occasional sandy lenses									
						minor soft sediment deformation									
55	231.32	231.89	57			SANDSTONE: fine grained, light gray, dark silty									
						laminations									
58	231.89	232.24	35			SILTSTONE: medium gray to dark gray, abundant									
						sandy bands towards bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
57	232.24		84			CLAYSTONE: silty, medium to dark gray									solid
										767' / 233.8m					
			41			CLAYSTONE: as above									
						BOX 79									
			18			CLAYSTONE: as above									broken
			42			CLAYSTONE: carbonaceous, dark gray to black									broken
62			200			CLAYSTONE: medium to dark gray, silty towards bottom									somewhat broken
										777' / 236.8m					
		236.25	16			CLAYSTONE: as above									
						BOX 80									
60	236.25	236.60	35			SILTSTONE: medium to dark gray, claystone rich at top, occasional sandy lenses									
50	236.60		240			SANDSTONE: fine grained, light to medium gray, abundant dark claystone and siltstone bands and laminations in top 150cm possible bioturbation or soft sediment deformation in top 30cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
51			146			SANDSTONE:	as above					787' / 239.9m			
		241.31	85			SANDSTONE:	fine to medium grain, light gray, very								core swollen and
							clay rich, leached of cement, very								crumbly
							poorly indurated, possible clay								
							replacement								
57	241.31	242.05	74			SANDSTONE:	fine to medium grain, light gray,								
							minor silty laminations								
	242.05		27			SANDSTONE:	fine grain to medium grain, light								
							gray, minor salt and pepper, silty								
							laminations								
43			205			SANDSTONE:	as above								
52			64			SANDSTONE:	fine grain, light to medium gray,								
							claystone bands in top 36cm								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 83								
51			38			SANDSTONE: fine grain, light gray, salt and pepper; silty laminations									solid
										807' / 246m					
56			246			SANDSTONE: as above, minor claystone stringers in middle									
							BOX 84								
57		248.45	60			SANDSTONE: as above									
										817' / 249m					
54	248.45		84			SANDSTONE: fine to medium grain, light gray, silty laminations									solid
50			147			SANDSTONE: fine to very fine grain, light to medium gray, claystone and silty laminations									
							BOX 85								
55			72			SANDSTONE: as above, minor calcite filled fractures parallel to bedding									
										827' / 252.1m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
50		253.65	217			SANDSTONE: as above, large claystone bands in middle and bottom 70cm									
						BOX 86									
46	253.65		98			SANDSTONE: as above									solid
										837' / 255.1m					
		256.06	143			SANDSTONE: fine grain to very fine grain, silty laminations, large claystone rip-up clasts 50cm from top									
46	256.06	256.51	45			SILTSTONE: medium gray, sandy at top									
						BOX 87									
58	256.51		107			SANDSTONE: fine grain, light to medium gray, silty laminations									
										847' / 258.2m					
44		259.47	189			SANDSTONE: as above									
						BOX 88									
52	259.47	260.08	61			SANDSTONE: fine grain, light gray									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	260.08		54			SILTSTONE: medium gray, sandy towards bottom					857' / 261.2m				
52			171			SANDSTONE & SILTSTONE: light and dark gray interbedded, interbeds shows 10-30cm claystone bands towards bottom, load casts shows tops up									
						BOX 89									
49			112			SILTSTONE: medium gray, sandstone interbeds (approximately 6-8cm) minor claystone bands									
52	263.70		25			SANDSTONE: fine grain, light gray, medium gray silty laminations					867' / 264.3m				
48	263.70		127			SANDSTONE: fine to very fine grained, light to medium gray, silty towards bottom								solid	
						BOX 90									
54			177			SANDSTONE: as above, abundant claystone and siltstone stringers in middle					877' / 267.3m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
47			110			SANDSTONE:	as above							core somewhat broken 40cm from top	
							BOX 91								
		267.94	10			SANDSTONE:	as above								
54	267.94	269.34	140			SILTSTONE:	medium to dark gray, light gray sandy lenses, claystone bands								
58	269.34	269.83	49			SANDSTONE:	fine to very fine grain, light gray abundant silty laminations							solid	
										886' / 270.1m					
	269.83	270.13	30			SILTSTONE:	medium to dark gray, sandy lenses							somewhat broken	
45	270.13	270.51	38			SANDSTONE:	fine to very fine grained; light gray, siltstone and claystone bands in stringers								
	270.51		13			SILTSTONE:	medium to dark gray, sandstone lenses and claystone bands								
							BOX 92								
		271.50	86			SILTSTONE:	as above							solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
43	275.83	277.59	176												solid
	277.59	278.02	43												broken
	278.02	278.22	20												
	278.22	278.39	17												broken with slickensides
63	278.39	278.54	15								917' / 279.5m				
	278.54		30												
40			292												broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
50		288.44	98			CLAYSTONE:	as above,	abundant	sandy lenses						
							towards	bottom							
	288.44		192			SANDSTONE:	fine grain,	light gray,	abundant						
							silty	laminations,	claystone bands						
							at top,	siltstone	bands with slicken-						
							sides.	*Ker Priestman	Sample #1						
							BOX 99								
62			27			SANDSTONE:	fine grain,	light gray,	silty						broken
							laminations,	minor calcite	filled						
							fractures								
										957'	291.7m				
53			260			SANDSTONE:	as above								
							BOX 100								
50		293.78	55			SANDSTONE:	as above								
										967'	294.7m				
50	293.78	293.96	18			SANDSTONE:	fine grain,	light gray,	minor						
							granule	bands near	bottom						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			57												broken	
						CONGLOMERATE: chert and quartz pebbles to cobble conglomerate; "lag conglom- erate". *Ker Priestman Sample #3*										
			166			CONGLOMERATE: chert and quartz pebbles, sand- stone matrix poorly sorted; clasts shows 0.5 - 2cm										
						BOX 101										
			64			CONGLOMERATE: as above										solid
											977' / 297.7m					
		299.09	226			CONGLOMERATE: as above										
						BOX 102										
	299.09		71			CONGLOMERATE: as above										solid
											987' / 300.8m					
			221			CONGLOMERATE: as above; *Ker Priestman Sample #2										
						BOX 103										
50			94			CONGLOMERATE: as above, 31cm sandstone coarse grain to granule band in middle										solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		303.69	74								997' / 303.8m				somewhat broken
54	303.69	303.80	11			SANDSTONE: fine to medium grain, light gray granule bands at top and bottom									
52	303.80		95			CONGLOMERATE: chert and quartz granule to pebbles becoming more pebbly towards bottom									broken
						BOX 104									
		304.93	18			CONGLOMERATE: as above									
56	304.93	305.27	34			SANDSTONE: fine to medium grain, light gray, silty laminations									
		305.27	54			CONGLOMERATE: chert and quartz granule to pebbles									broken
			25	14		ROCK LOSS:									
		306.32	26	15		CONGLOMERATE: as above					1007' / 306.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		307.16	84	47		SANDSTONE:	fine grain,	light gray,	claystone						broken	
							bands throughout,	occasional coaly	fragments,	minor carbonaceous band						
							at bottom									
											1011' / 308.1m					
	307.16		39	22	↑ 1673	COAL C1/C2:									very broken	
		307.64	9	5		COAL LOSS:										
								BOX 105								
	307.64	308.04	40	22		COAL & CLAYSTONE:	mixed,	(60% coal and 40%								very broken to pulverized
							claystone)									
	308.04	308.07	3	2		ROCK LOSS:										
	308.07		35	20		COAL C2/C3:	some C1 fragments									very broken to pulverized
		309.30	88	49		COAL LOSS:										
											1017' / 309.9m					
	309.30		8	4	COAL C1/C2:										very broken	
			7	4	COAL C2/C3:										very broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			6	3	1673	COAL C1/C2:									very broken	
			5	3		COAL C3:										very broken
		309.82	26	15		COAL C1/C2:										very broken
56	309.82		9	5		COAL C2/C3: minor claystone stringers at top										very broken
			107	60		COAL LOSS:										
			43	24		COAL C1/C2:										very broken to pulverized
			37	21		COAL C1/C2:					1024' / 312.1m					very broken to pulverized
						BOX 106										
		311.95	17	10		COAL C1/C2: C3 bands at bottom										broken
	311.95		3	2		ROCK LOSS:										
		312.26	28	16		CLAYSTONE: carbonaceous, occasional coaly stringers										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1673 ↓											
	312.26		10	6		COAL LOSS:										
		313.04	68	38		COAL G1/G2: bottom 38cm broken to pulverized										broken to pulverized
	313.04		10	6		ROCK LOSS:										
		313.32	18	10		CLAYSTONE: carbonaceous										very broken
	313.32		62	35		COAL LOSS:										
		313.98	4	2		COAL G2:										very broken
	313.98		50			CONGLOMERATE: chert and quartz granule, very coarse grain, sandstone matrix top 35cm very broken										very broken
56		314.76	28			CONGLOMERATE: as above, minor chert and quartz pebbles 9cm from bottom						1031' / 314.2m				
54	314.76		16			SANDSTONE: fine to medium grain, granule bands in top 8cm, light gray										
			20		ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		315.18	6												
	315.18	315.83	65								1033' / 314.9m				broken
44	315.83	316.04	21												
	316.04		178												bottom somewhat broken
											1040' / 316.9m				
			60												very broken
			30												
		319.34	62												
											1042' / 317.6m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	319.34		7		AL 91	SILTSTONE:	carbonaceous,	dark gray to black						broken	
								brown							
		320.01	60			ROCK LOSS:									
35	320.01		34	28		SANDSTONE:	fine to medium grain,	pebble bands						solid	
								in middle,	light gray,	carbonaceous					
								band at bottom							
											1047' / 319.1m				
		320.49	14	12		SANDSTONE:	as above								
	320.49		93	76		COAL LOSS:									
		322.02	60	49	COAL C1/C2:	occasional C4	fragments near	bottom					broken to pulverized		
										1050' / 320.0m					
	322.02		11	9	CLAYSTONE:	carbonaceous,	dark gray to black						broken		
							brown								
			8	7	CLAYSTONE:	silty,	medium to dark gray								
			43	35	ROCK LOSS:										
							BOX 109								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS		
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.			
		325.28	264														
						CLAYSTONE: dark gray, somewhat silty, carbonaceous bands 43cm from bottom										somehow broken	
						BOX 110											
	325.28		24			CLAYSTONE: as above											
			87								1062' / 323.7m						
			165			CLAYSTONE: as above, very carbonaceous bands 25cm from bottom and 60cm from top										broken 30cm from bottom	
						BOX 111											
		328.31	27			CLAYSTONE: carbonaceous at top, silty towards bottom, black to dark gray											
	328.31	329.32	101			SILTSTONE: medium to dark gray, claystone bands at top										solid	
											1075' / 327.6m						
61	329.32		134			SILTSTONE: medium to dark gray, occasional sandy bands, clayey towards bottom											
						BOX 112											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
65			69			SILTSTONE: as above, progressively sandy towards bottom								solid	
			70			SANDSTONE: fine grain, silty laminations *Sampled (K-P #4)									
			4			SILTSTONE: medium to dark gray, clay rich *Sampled (K-P #4)									
		332.79	70								1085'	330.7m			
43	332.79	333.44	65			SILTSTONE: as above									
						BOX 113									
70	333.44	334.52	108			CLAYSTONE: silty to very silty, dark gray to black, carbonaceous near bottom sandy lenses at bottom								bottom 25cm broken	
81	334.52		59			SANDSTONE: fine grain, medium gray, abundant silty laminations									
		335.17	6			SANDSTONE: as above					1095'	333.7m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	335.17	335.56	39			CLAYSTONE:	silty to very silty,	very dark gray							broken
							to brown black								
	335.56		10			SILTSTONE:	dark gray brown								
78		335.87	21			SANDSTONE:	fine grain, light to medium gray,								
							silty laminations								
							BOX 114								
65	335.87		28			SANDSTONE:	fine grain, medium gray, abundant								
							silty laminations								
										1097' / 334.3m					
80		336.37	22			SANDSTONE:	as above								
	336.37		52			CLAYSTONE:	silty at top and bottom, very dark								top 40cm broken
							gray, large calcite filled fractures								to pulverized
							at bottom with abundant horsetailing								
							micro fractures around it								
		337.61	72			ROCK LOSS:									
	337.61		47			SILTSTONE:	medium to dark gray, occasional								
							calcite filled fractures								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		338.43	35			SANDSTONE:	fine grain,	light gray to medium							
							gray,	silty towards bottom,	soft						
							sediment	deformation							
	338.43		22			CLAYSTONE:	silty,	calcite filled fractures							broken
							near bottom,	somewhat carbonaceous							
											1105' / 336.8m				
			19			CLAYSTONE:	medium to dark gray brown,	silty							
							towards bottom								
							BOX 115								
			56			CLAYSTONE:	as above,	carbonaceous 15cm from							broken 15cm from bottom
							bottom								
			45			ROCK LOSS:									
											1109' / 338m				
			220			CLAYSTONE:	as above								
							BOX 116								
	342.27		22			CLAYSTONE:	as above								
											1117' / 340.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	342.27		178			CLAYSTONE:	dark gray brown,	occasional							
							carbonaceous bands,	silty carbonaceous							
							throughout								
										1122' / 341.9m					
			76			CLAYSTONE:	as above,	very carbonaceous near						bottom 48cm very	
							bottom with coaly	stringers						broken	
							BOX 117								
	345.00		19			CLAYSTONE:	carbonaceous at top,	very silty							
							at bottom,	occasional carbonaceous							
							stringers								
64	345.00	345.52	52			SANDSTONE:	fine to medium grain,	light to							
							medium gray,	somewhat carbonaceous							
							at top,	minor coaly stringers at							
							top								
										1127' / 343.5m					
64	345.52		203			SANDSTONE:	as above,	abundant silty laminations							
							BOX 118								
76		348.00	45			SANDSTONE:	as above							solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	348.00		47			SILTSTONE: medium to dark gray brown, sandy									
						lenses at top, clayey towards bottom									
											1137' / 346.5m				
			132			SILTSTONE & SANDSTONE: very fine grain									
						*Sample									
		350.48	69			SILTSTONE & SANDSTONE: as above									
						BOX 119									
68	350.48		122			SILTSTONE & SANDSTONE: fine grain, medium to									solid
						dark gray, soft sediment deformation									
											1147' / 349.6m				
61			157			SILTSTONE: medium to dark gray, sandy towards									
						bottom, clayey in middle									
						BOX 120									
		353.65	38			SILTSTONE: as above									broken
50	353.65	354.75	110			SANDSTONE: fine grain, light gray, abundant									
						silty laminations, coaly rootlet									
						in middle, some soft sediment									
						deformation									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											1157' / 352.6m				
58	354.75		152			SANDSTONE: fine to medium grain, light gray,									broken
						· salt and pepper, silty laminations									
						· coarsening towards bottom									
						· BOX 121									
						·									
68			147			SANDSTONE: medium grain, light gray, salt and									somewhat broken
						· pepper, occasional calcite filled									
						· fractures, silty laminations									
						·					1167' / 355.7m				
			55			SANDSTONE: as above, carbonaceous fragments in									
						· middle									
						·									
55		359.06	77			SANDSTONE: fine grain, medium gray, silty									broken
						· laminations									
						·									
						· BOX 122									
						·									
63	359.06	360.49	143			SILTSTONE: medium gray, claystone laminations									solid
						· sandy at top									
						·									
	360.49	360.82	33			CLAYSTONE: carbonaceous at top, very silty									broken
						· towards bottom, black to medium gray									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											1177'	358.7m			
49	360.82	361.69	87			SILTSTONE: medium to dark gray, clayey at top									solid
						somewhat sandy near bottom									
						BOX 123									
40	361.69	363.79	210			SANDSTONE: very fine grain, medium gray, silty									somewhat broken
						at top, abundant claystone stringers									
						in middle, minor soft sediment									
						deformation, silty laminations									
											1187'	361.7m			
43	363.79	364.19	40			SANDSTONE: as above									
	364.19		8			SILTSTONE: medium to dark gray, occasional									somewhat broken
						sandy laminations, somewhat clayey									
						BOX 124									
53		365.88	161			SILTSTONE: as above									
61	365.88		86			SANDSTONE: very fine grain to fine grain, light									
						to medium gray, abundant silty									
						laminations									
											1197'	364.8m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		366.90	16			SANDSTONE:	as above								
	366.90	367.00	10			SILTSTONE:	medium gray, minor sandy laminations								
							BOX 125								
	367.00	367.49	49			SILTSTONE:	medium gray, occasional sandy laminations								broken
63	367.49		206			SANDSTONE:	very fine grain to fine grain, abundant silty laminations, some claystone laminations								
											1207' / 367.8m				
			24			SANDSTONE:	as above								
							BOX 126								
59			298			SANDSTONE:	as above, silty, coarser near bottom								broken
							BOX 127								
											1217' / 370.9m				
41		375.63	286			SANDSTONE:	fine grain, light gray, calcite filled fractures near top								broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											1226' / 373.7m				
33	375.63		127			SANDSTONE: fine to medium grain, light gray									
						abundant silty laminations									
											1230' / 374.9m				
24			88			SANDSTONE: as above									
47		378.40	62			SANDSTONE: medium grain to fine grain, silty									
						laminations									
44	378.40	379.24	84			SILTSTONE: medium to dark gray, sandy laminations									
						and lenses, occasional claystone									
						laminations, minor bioturbation in									
						claystone bands									
											1237' / 377m				
53	379.24		76			SILTSTONE: as above, somewhat more sandy									somewhat broken
											1240' / 377.9m				
60			125			SILTSTONE & SANDSTONE: very fine grain, light									
						to medium gray, occasional dark									
						claystone bands, some bioturbation									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			179												
						SILTSTONE & SANDSTONE: as above, large claystone									
						band near top									
										1250' / 381.0m					
45			112			SILTSTONE & SANDSTONE: very fine grain									
		385.41	125			SILTSTONE: medium to dark gray, clay towards									
						bottom, occasional sandy lenses									
										1257' / 383.1m					
64	385.41		155			SILTSTONE: as above, claystone rich in parts									somewhat broken
51		387.80	84			SILTSTONE: as above									
	387.80		65			CLAYSTONE: silty at top, dark gray									
										1267' / 386.1m					
52		389.67	122	75		CLAYSTONE: as above, somewhat carbonaceous 19cm									
						from bottom, minor slickensides near									
						bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 133								
43	389.67	390.97	130	95		CLAYSTONE: silty, occasional silty laminations									broken to very broken
						medium to dark gray									
	390.97		2	1	↑	COAL LOSS:									
			38	27	1675	COAL C2:									broken top pulverize
		391.50	13	9	↓	COAL C3:				1277' / 389.2m					broken
	391.50		12	8	↑	C4 & CLAYSTONE: carbonaceous									broken
			7	4	1676	ROCK LOSS:									
51		391.87	18	11	↓	CLAYSTONE: silty, dark gray, minor light gray									broken
						laminations at top									
	391.87		10	6	↑	COAL C2/C3:									broken
			36	23	1677	COAL C1/C2:									broken
							BOX 134								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			59	37	1677											
						COAL LOSS:										
			95	60		COAL C1/C2:									broken to pulverized at bottom, solid at top	
											1284' / 391.3m					
			160	101		COAL C1/C2: occasional C3 bands									top 50cm broken bottom 20cm broken to pulverized and sheared	
			59	37		COAL LOSS:										
								BOX 135								
			43	27		COAL C1/C2:									broken to pulverized	
											1293' / 393.8m					
		396.53	4	3	COAL C2/C3:											
	396.53		11	7	ROCK LOSS:											
		396.97	33	21	CLAYSTONE: carbonaceous, dark gray to black									very broken		
					3cm C4											
	396.97		25	16	COAL C2/C3: vitrinite bands throughout									very broken		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.		
			11	7	1679 ↓											
						COAL LOSS:										
			28	18		COAL C1/C2:										very broken to pulverized
		398.24	63	40		COAL C1/C2:					1297'	395.3 m				very broken to pulverized
	398.24	398.29	5	3		CLAYSTONE:	carbonaceous, dark gray to black, occasional coaly stringers									
50	398.29	398.47	18	12		SILTSTONE:	dark gray, clayey at top									broken
47	398.47		37	25		SANDSTONE:	fine grain, light to medium gray, abundant silty laminations									solid
							BOX 136									
60		399.26	42			SANDSTONE:	as above									broken
	399.26		30			ROCK LOSS:										
			6		CLAYSTONE:	very carbonaceous, coaly stringers									very broken	
		400.01	39		ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	400.01	400.11	10												broken to pulverized
	400.11	400.38	27												
	400.38		11												
			38												broken
		400.95	8												broken
	400.95		30												broken to pulverized
			101												somewhat broken
		402.35	9												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	407.86	408.04	18			SILTSTONE: medium to dark gray, sandy band in middle; clayey towards bottom								broken	
	408.04	408.14	10			CLAYSTONE: silty								broken	
	408.14	408.19	5			SILTSTONE: dark gray								fractured	
55	408.19	408.89	70			CLAYSTONE: carbonaceous at top, silty towards bottom								broken	
51	408.89		89			SILTSTONE: dark gray, large 10cm sandy band 23cm from top									
		409.96	18			SILTSTONE: as above				1336' / 407.2m					
60	409.96	410.44	48			SANDSTONE: very fine grain, medium gray, abundant silty laminations, top 12cm bioturbated								broken	
						BOX 140									
54	410.44	411.29	85			SANDSTONE: very fine grain, light to medium gray, abundant dark silty laminations minor bioturbation								solid	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
56	411.29	411.86	57												
						SILTSTONE: medium to dark gray, sandy bands in top, clayey towards bottom									
50	411.86	412.82	96												
						CLAYSTONE: silty, dark gray, light gray silty bands									
											1346' / 410.2m				
50	412.82		41												
						SILTSTONE: medium to dark gray, minor sandy laminations									
						BOX 141									
48		415.84	261												
						SILTSTONE: as above, occasional large claystone bands, progressively sandy towards bottom									some what broken
											1356' / 413.3m				
	415.84		9			SILTSTONE: as above									
						BOX 142									
		416.67	74												
						SILTSTONE & SANDSTONE: very fine grain, occasional bioturbation in top, minor soft sediment deformation									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
61	416.67		64			SANDSTONE: very fine grain, light to medium gray, abundant silty laminations									
63		418.73	142			SANDSTONE: fine grain, light gray, silty laminations, more silty towards bottom								broken	
						BOX 143									
	418.73	418.87	14			SILTSTONE & SANDSTONE: fine grain to interbedded occasional claystone bands								broken	
											1367' / 416.6m				
50	418.87		109			SILTSTONE & SANDSTONE: as above								broken	
44		421.43	147	106		SILTSTONE: medium gray, occasional dark gray claystone bands								solid	
						BOX 144									
55	421.43		32	18		CLAYSTONE: silty, dark gray, light silty laminations								broken	
											1377' / 419.7m				
		421.79	4	2		CLAYSTONE: as above									
					↑										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1680											
	421.79		10	6		COAL LOSS:										
		421.97	8	5		COAL C2/C3:										very broken
	421.97		5	3		ROCK LOSS:										
		422.05	3	2		CLAYSTONE: carbonaceous										very broken
	422.05		14	9		COAL LOSS:										
		422.26	7	4		COAL: C3 particles, coal underneath										very broken
	422.26		6	4		ROCK LOSS:										
		422.34	2	1		C4:										very broken
	422.34		7	4		COAL LOSS:										
		422.46	5	3		COAL C3:										very broken
	422.46		15	10		ROCK LOSS:										
		422.66	5	3		C4: vitrinite stringers										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1680 ↓											
	422.66		3	2		COAL LOSS:										
			14	9		COAL C2/C3: with C4 stringers										very broken
		423.03	20	13		COAL C2/C3: some vitrinite bands										broken
	423.03		7	5	ROCK LOSS:											
			67	44	SILTSTONE: medium to dark gray, some carbonaceous areas										very broken	
										1382' / 421.2m						
46		424.54	77	53	SILTSTONE: as above, somewhat clayey towards bottom										broken	
	424.54		41	28	↑ COAL LOSS:											
		425.13	18	12	COAL C1/C2:										very broken to pulverized	
										1387' / 422.7m						
	425.13	425.40	27	17	ROCK LOSS:											
	425.40	425.54	14	9	1681 COAL & CLAYSTONE: mixed, (70% coal, 30% clay-stone)										very broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1681 ↓											
	425.54	425.58	4	3		COAL LOSS:										
	425.58		23	15		ROCK LOSS:										
		425.88	7	4		CLAYSTONE: carbonaceous										broken
	425.88	426.50	62	40		COAL LOSS:										
	426.50		25	16		SANDSTONE: fine grain, carbonaceous, dark gray to black										broken
			17	10		ROCK LOSS:										
52		427.76	84	52		SANDSTONE: as above										
	427.76	428.24	48	30		COAL C1/C2: C3 bands at bottom										broken
	428.24	428.43	19	12		COAL & CLAYSTONE: mixed, 60/40 (10cm of coal seperated)										
	428.43		6	4	C4:										broken	
			13	8	CLAYSTONE: carbonaceous											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			88												
		429.65	15			ROCK LOSS:									
						COAL & CLAYSTONE:	mixed (70% claystone 30% coal)								broken to pulverized
	429.65	429.70	5			CLAYSTONE:	carbonaceous				1400' / 426.7m				broken
							BOX 146								
			31			CLAYSTONE:	carbonaceous at top, silty towards bottom, abundant fracturing with calcite along fractured surfaces								very broken
						ROCK LOSS:									
67	430.25	430.54	29			SILTSTONE:	medium to dark gray, sandy laminations								
60	430.54		85			SANDSTONE:	very fine grain to fine grain, medium gray to light gray, very silty in top 32cm, calcite filled fractures near top								
64			105			SANDSTONE:	as above					1406' / 428.5m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		432.84	40												
						ROCK LOSS:									
								BOX 147							
	432.84		46			SANDSTONE: light to medium gray, abundant									
						· silty laminations									
										1412' / 430.3m					
			171			SANDSTONE: as above, becoming less silty									somewhat broken
						· towards bottom *136cm Sampled									
										1417' / 431.9m					
56		435.68	67			SANDSTONE: as above, clayey towards bottom									somewhat broken
								BOX 148							
49	435.68		228			SANDSTONE: fine grain, light gray, abundant									solid
						· silty laminations, bioturbation in									
						· in bottom									
										1427' / 434.9m					
38		438.45	49			SANDSTONE: as above, progressively silty									solid
						· towards bottom									
	438.45		10			CLAYSTONE: dark gray, silty									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 149								
		438.88	33			CLAYSTONE:	as above								broken
54	438.88	440.89	201			SANDSTONE:	very fine grain, medium gray, abundant								somewhat broken
							silty laminations, calvey at top								
											1437' / 437.9m				
52	440.89		31			SILTSTONE:	medium gray, sandy at top								
							BOX 150								
42		443.03	183			SILTSTONE:	as above, minor soft sediment								solid
							deformation								
	443.03		98			SANDSTONE:	fine grain, light to medium gray,								solid
							abundant soft sediment deformation								
							and bioturbation								
											1447' / 441.0m				
							BOX 151								
53		446.84	283			SANDSTONE:	fine to medium grain, light to								
							medium gray, occasional claystone								
							bands in top 110cm, becoming more								

silty towards bottom

C NO.	THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To		Apparent	True	Strat. Lithology	Grain Size	Fresh Colour			Bedding Charact.	Other Sed. Charact.		bd.	jt.
						BOX 152							
59	446.84		23		SANDSTONE(fine grained) & SILTSTONE: fine grain							broken	
					light to medium gray, interbedded								
									1457' / 444m				
51		448.34	127		SANDSTONE & SILTSTONE: as above, becoming more							solid	
					silty towards bottom, worm burrows								
					shows tops up								
64	448.34	449.68	134		SILTSTONE: medium gray, occasional sandy lenses							broken	
					laminations near top								
						BOX 153							
54	449.68	450.06	38		CLAYSTONE: silty, medium to dark gray								
									1467' / 447.1m				
	450.06		91		CLAYSTONE: as above, carbonaceous bands							very broken	
					throughout							23cm from top	
			90		ROCK LOSS:								
									1473' / 448.9m				
			4		CLAYSTONE & COALY PARTICLES: 95% claystone							pulverized	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			104												
						CLAYSTONE: carbonaceous at top, silty at bottom occasional coaly bands and rootlets									broken
						BOX 154									
47		453.55	60			CLAYSTONE: silty to very silty, medium gray									somewhat broken
										1486'	452.9m				
	453.55	454.26	71			SILTSTONE: light to medium gray, occasional sandy bands and lenses									broken
	454.26	454.99	73			CLAYSTONE: silty to very silty, dark gray to brown black, coaly stringers in middle									
54	454.99	455.38	39			SANDSTONE: very fine grain, medium gray, abundant silty lenses									
	455.38		19			CLAYSTONE: silty at top and bottom, carbonaceous in middle									broken
						BOX 155									
			54			CLAYSTONE: carbonaceous to coaly, very dark gray to black, minor coal fragments									bottom 30cm broken to pulverized

towards bottom

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		456.39	28								1489' / 453.8m					
						CLAYSTONE:	black to dark gray,	carbonaceous								
							to silty towards	bottom								
49	456.39	457.60	121			SANDSTONE:	fine grain,	abundant silty laminations								
		457.60	13			CLAYSTONE:	carbonaceous,	silty towards bottom								
		457.73	60			SILTSTONE:	light to dark gray,	silty carbonaceous								broken
							at top,	somewhat sandy towards								
							bottom									
			16			ROCK LOSS:										
							BOX 146									
			4			SILTSTONE:	as above									broken
											1497' / 456.2m					
50		458.96	43			SILTSTONE:	as above,	abundant sandy laminations								
							in middle									
		458.96	60			CLAYSTONE:	carbonaceous at top,	silty towards								
							bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		459.96	40			CLAYSTONE:	as above								broken	
	459.96		112			SILTSTONE:	clayey at top, carbonaceous band 35cm									
							from top, somewhat sandy towards									
							bottom									
		461.33	25			ROCK LOSS:										
							BOX 157									
	461.33		8			CLAYSTONE:	silty, dark gray									broken
										1506' / 459.0m						
43		461.95	54			CLAYSTONE:	silty, as above, minor carbonaceous									
							bands at top and bottom									
55	461.95	462.47	52			SILTSTONE:	medium to dark gray, somewhat sandy									
							at top; coaly stringers at bottom									
53	462.47	463.81	134			CLAYSTONE:	black and dark gray, 3 carbonaceous									carbonaceous bands
							bands (approximately 12cm thick at									very broken with
							top, then 17cm from top, then 72cm									minor coaly fragments
							from top)									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	463.81		16												
			50												
		464.97	50								1516' / 462.0m				
	464.97	465.26	29												
57	465.26	465.93	67												
	465.93	466.15	22												
	466.15	466.66	51												
	466.66		4								1524' / 464.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 159							
			19			C4:									
			50			ROCK LOSS:									
			5			COAL C3/C4:								broken	
60	468.09		65			CLAYSTONE:	carbonaceous to coaly at top, silty towards bottom, black to dark gray								
51	468.09	469.27	118			SILTSTONE:	occasional (carbonaceous and claystone) bands, medium to dark gray, clayey towards bottom								broken
45	469.27	469.73	46			SANDSTONE:	fine grain, medium gray, silty at top, occasional coaly stringers at top					1533' / 467.2m			
								BOX 160							
55	469.73	470.59	86	49		SANDSTONE:	fine grain, medium gray, abundant silty laminations								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	470.59		14	8	1683 ↑	COAL & C4:	mixed	.	.	.				pulverized	
			20	12		ROCK LOSS:	.	.	.	.	.
	472.36		143	88		CLAYSTONE:	carbonaceous at top,	silty in middle	.	.	.				broken
							very carbonaceous to coaly at bottom	.	.	.	.
							very coaly band 31cm from bottom	.	.	.	.
												1543' / 470.3m			
	472.36		5	3		COAL C2/C3:	.	.	.	.	.				very broken
	472.55		14	9		COAL C1/C2:	.	.	.	.	.				very broken
						BOX 161	.	.	.	.	
	472.55		32	20	COAL C1/C2:	.	.	.	.	.				very broken to pulverized	
			22	14	COAL LOSS:	.	.	.	.	.
			10	6	COAL C2/C3:	.	.	.	.	.				very broken to pulverized	
			12	7	COAL C2:	.	.	.	.	.				very broken to pulverized	
	473.84		53	33	COAL C1/C2:	.	.	.	.	.				broken to pulverized	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					589 ↓											
	473.84		37	23								1547' / 471.5m				
		474.43	22	14		ROCK LOSS:										
						COAL & C4: (60% C4 and 40% coal)										very broken to pulverized
	474.43		39	24		COAL LOSS:										
		475.10	28	17		COAL C1/C2:										somewhat broken
	475.10	475.17	7	4		CLAYSTONE: carbonaceous at top, silty at bottom										
	475.17	476.15	98	60		SANDSTONE: fine grain, medium gray, silty laminations										broken
						BOX 162										
	476.15	476.29	14			SILTSTONE: dark gray to black, carbonaceous										
	476.29		40		CLAYSTONE: carbonaceous to coaly in places, occasional coaly bands and C4 bands										broken	
48			30		CLAYSTONE: carbonaceous and silty						1557' / 474.5m				broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			26			CLAYSTONE: carbonaceous to coaly, silty band									broken
						at bottom									
			9			COAL:									broken to pulverized
			5			C4:									broken to pulverized
		477.81	42			ROCK LOSS:									
	477.81		14			COAL G1/G2:									broken to pulverized
		478.00	5			CLAYSTONE: carbonaceous									
49	478.00	478.14	14			SILTSTONE: medium to dark gray, occasional									broken
						sandy lenses									
	478.14		5			C4 & COAL:									broken
			40			CLAYSTONE: silty at top, carbonaceous at bottom									broken
						carbonaceous band 15cm from top									
										1563' / 476.4m					
31		478.82	23			CLAYSTONE: silty									broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	478.82	479.00	18												
						SANDSTONE: fine grain, light gray, occasional silty laminations									
						BOX 163									
41	479.00		260			SILTSTONE: medium gray, sandy laminations, 4cm coal band 137cm from top, coal band pulverized									solid
										1573' / 479.4m					
			35			SILTSTONE: as above									solid
						BOX 164									
	483.38		143			SILTSTONE: as above, medium gray, becoming more sandy towards bottom									solid
50	483.38	484.67	129			SANDSTONE: fine grain, light to medium gray, abundant silty laminations									
										1583' / 482.4m					
						BOX 165									
56	484.67	487.59	292			SANDSTONE: very fine grain to fine grain, light to medium gray, abundant silty laminations									solid

some bioturbation

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	487.59		34												
33			91								1593'/485.5m				solid
45		490.40	156												solid
50	490.40	491.00	60												solid
	491.00	491.43	43												solid
43	491.43		204												solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
46	495.22	495.22	175	122		SILTSTONE:	as above	.	.	.					somewhat broken	
												1617'	492.8m			
	495.22	495.62	40	27		SILTSTONE:	as above, very sandy towards bottom					broken
	495.62	496.25	63	43		CLAYSTONE:	silty at top, carbonaceous at bottom					broken
	496.25		17	12	↑ 4891 ↓	COAL C1/C2:	.	.	.	.					very broken
			6	4		COAL LOSS:					
		496.63	15	10		COAL C1/C2:					broken to pulverized
	496.63		2	1	ROCK LOSS:	.	.	.	.	.	
		497.22	57	39	CLAYSTONE:	carbonaceous at top and bottom, silty	.	.	.	.					somewhat broken
						in middle, medium to dark gray brown	.	.	.	.		
	497.22		28	19	↑ 5891 ↓	COAL LOSS:	.	.	.	.		
		497.89	39	27		COAL C1/C2:	claystone particles towards bottom					broken to pulverized
						(80% coal 20% claystone)	.	.	.	.		

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
48	497.89	498.16	27	18	786	CLAYSTONE:	silty, medium to dark gray brown								very broken	
											1627' / 495.9m					
	498.16	498.78	62	40		SILTSTONE:	medium to dark gray brown, clayey									solid
							at top									
51	498.78	499.51	73			SANDSTONE:	fine grain to very fine grain, light									solid
							to medium gray, silty laminations									
							BOX 170									
47	499.51	500.16	65	44		SILTSTONE:	medium gray, sandy at top, clay rich									somewhat broken
							at bottom									
	500.16		18	12	ROCK LOSS:											
		500.54	20	14	CLAYSTONE:	silty, medium gray brown									broken	
	500.54		6	4	COAL LOSS:						1634' / 498m					
		501.44	84	59	COAL C1/C2:										very broken to bulverized	
											1637' / 498.9m					
	501.44		20	17	CLAYSTONE:	silty at top, carbonaceous at bottom									broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			2	2											
						C4 & COAL:									broken
32			23	20		CLAYSTONE: very carbonaceous at top and bottom, silty in middle									broken
			2			COAL C2/C3:									broken to pulverized
			21			CLAYSTONE: carbonaceous, coaly stringers at top, C4 band at top									broken
			7			COAL & CLAYSTONE: mixed									broken to pulverized
		502.59	40			ROCK LOSS:									
	502.59		10			CLAYSTONE: carbonaceous at top, silty towards bottom, dark gray brown									broken
						BOX 171									
		502.80	11			CLAYSTONE: silty, dark gray brown									solid
	502.80	503.04	24			SILTSTONE: medium to dark gray, very sandy towards bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
53	503.04		90			SANDSTONE:	fine grain, light gray, abundant								
							· silty laminations in top ·								
		504.48	54			SANDSTONE:	medium grain, light gray, coarsening								solid
							· towards bottom, siltstone band at								
							· bottom, cross laminations shows tops								
							· up ·								
										1647' / 502m					
50	504.48		105			SILTSTONE:	medium grain, dark gray, somewhat								solid, broken
							· clayey in middle ·								towards bottom
							· BOX 172 ·								
		505.68	15			SILTSTONE:	as above, progressively clay rich								
							· towards bottom ·								
	505.68		76			CLAYSTONE:	silty to carbonaceous, dark gray to								broken
							· to dark gray brown ·								
47			101			CLAYSTONE:	very carbonaceous to coaly at top								broken
							· silty in middle, very carbonaceous								
							· at bottom ·								
										1657' / 505m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		507.61	16													
						CLAYSTONE: silty, medium to dark gray brown									broken	
45	507.61		61			SILTSTONE: medium gray, abundant light gray sandy laminations towards bottom									solid	
						BOX 173										
46			224			SILTSTONE & SANDSTONE: fine grain, interbedded abundant bioturbation, medium to light gray, cross laminations shows tops up									solid	
			46			SILTSTONE & SANDSTONE: fine grain, as above					1667'/50B.1m				solid	
						BOX 174										
47		513.52	260			SILTSTONE & SANDSTONE: as above, becoming more sandy towards bottom, abundant bioturbation									solid	
											1677'/51L.1m					
42	513.52		29			SANDSTONE: fine grain, light gray, silty bands and laminations towards bottom									solid	
						BOX 175										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			143			SANDSTONE:	as above,	occasional	claystone	bands					solid
49			134			SANDSTONE:	fine grain,	light gray,	minor silty						solid
							laminations								
											1687' / 514.1m				
								BOX 176							
43	519.31		273			SANDSTONE:	as above,	darkening	towards	bottom					solid
							calcite	filled	fractures	in bottom					
							142cm								
								BOX 177							
	519.31		18			SANDSTONE:	fine grain,	light to	medium	gray,					broken
							calcite	filled	fractures						
											1697' / 517.2m				
40			257			SANDSTONE:	as above,	occasional	medium	grain					solid
							bands								
								BOX 178							
			84			SANDSTONE:	as above								solid
											1707' / 520.2m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
48		524.86	196			SANDSTONE:	as above								solid
							BOX 179								
41	524.86		72			SANDSTONE:	fine grain, light gray, silty								solid
							laminations at top								
		526.17	59			SANDSTONE:	as above, slightly darker				1717' / 528.3m				
37	526.17	526.94	77			SILTSTONE:	medium gray, occasional sandy bands								solid
45	526.94		65			SANDSTONE:	fine grain, light gray, silty at top								
							claystone pebbles at bottom								
							BOX 180								
29		528.10	51			SANDSTONE:	as above, claystone bands near bottom								solid
							worm burrows								
	528.10	528.51	41			SILTSTONE:	medium to dark gray, sandy bands								solid
							towards bottom								
											1727' / 526.3m				
	528.51		137			SANDSTONE:	fine grain, medium gray, occasional								solid
							light gray lenses								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
40			21			SANDSTONE: fine grain, light gray									solid
			28			SANDSTONE: fine grain, medium gray, calcite filled fractures in middle, clayey at top									
						BOX 181									
41	531.44		107			SANDSTONE: fine grain, light to medium gray, silty laminations, occasional claystone bands									solid
										1737' / 529.4m					
37	531.44		170			SANDSTONE: fine grain, medium gray, occasional light gray sandy bands									solid
			138			SANDSTONE: as above									solid
			148			SANDSTONE: as above									
						BOX 183									
			156			SANDSTONE: as above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											1757'	535.5m			
32		538.68	112			SANDSTONE:	as above,	light gray,	sandy bands						
							in bottom,	occasional	claystone bands						
								BOX 184							
35	538.68	540.53	185			SILTSTONE:	occasional	sandy lenses	and claystone						solid
							lenses,	medium to	dark gray						
											1767'	538.5m			
37	540.53		96			CLAYSTONE:	silty,	medium gray							
								BOX 185							
			45			CLAYSTONE:	as above								
34			158			CLAYSTONE, SILTSTONE, SANDSTONE:	fine grain,								
							interbedded,	some	bioturbation						
											1777'	541.6m			
		544.29	77			CLAYSTONE, SILTSTONE, SANDSTONE:	fine grain,								
							as above								
								BOX 186							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
41	544.29	546.42	213												core broken
	546.42		45								1787' / 544.6m				solid
28			84												solid
			44												somewhat broken
	549.47		132												broken
	549.47	550.00	53												broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	0	4.06													
6	4.06		261			SANDSTONE: medium to coarse grain, light gray salt and pepper; occasional plant fragments									somewhat broken
			30			SANDSTONE: as above, cross laminations shows tops up									
25	7.21		24			SANDSTONE: fine grain, medium gray, occasional claystone bands, abundant silty laminations									
	7.21	8.46	125			SILTSTONE & CLAYSTONE: interbedded, medium gray to dark gray brown, occasional coaly rootlets, occasional sandy lenses towards bottom, a few minor sandstone fragments at top, iron stains on fractured surfaces									broken, top 61cm very broken
13	8.46	8.71	25			SANDSTONE: fine grain, abundant silty laminations light gray									somewhat broken

25 / 7.6m

615

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
12	8.71	9.17	46												
						SILTSTONE: medium gray, sandy at top, claystone bands towards bottom									
						BOX 3									
17	9.17		127												
						SANDSTONE: fine to medium grain, light gray, abundant silty laminations, occasional claystone bands									
		10.51	7							35'/10.7m					
						SANDSTONE: as above									
22	10.51	11.27	76												
						SILTSTONE: medium to dark gray, occasional claystone bands, abundant sandy laminations									
	11.27	11.88	61												
						SANDSTONE: fine grain, medium gray, abundant silty laminations									
						BOX 4									
22	11.88	12.35	47												
						SANDSTONE: fine grain, light to medium gray, abundant silty laminations, occasional claystone bands									somewhat broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	12.35	13.03	68													
						SILTSTONE: medium gray, sandy at top, clay rich towards bottom										
										44' / 13.4m						
27	13.03		159			SANDSTONE & SILTSTONE: interbedded, bedding shows 0.5 to 1cm, medium to dark gray, light gray sandy bands										
						BOX 5										
15		16.69	207			SANDSTONE & SILTSTONE: as above, claystone bands towards bottom										
	16.69		8			CLAYSTONE: silty to sandy, medium gray to dark gray									somewhat broken	
										56' / 17.1m						
20		17.46	69			CLAYSTONE: as above, minor coaly stringers in middle										
						BOX 6										
18	17.46	18.14	68			SILTSTONE: medium to dark gray, abundant clay- stone bands and laminations										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS			
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.				
	18.14	19.46	132		1687													
						CLAYSTONE: medium to dark gray brown, silty at top and bottom, coaly stringers 42cm from top, coal fragments 53cm from top, iron stain on fractured surfaces											broken middle 24cm and bottom 10cm very broken	
	19.46		31	30		CLAYSTONE: as above											broken	
						BOX 7												
		19.91	14	13		CLAYSTONE: carbonaceous, dark brown to black, coaly stringers towards bottom, minor coal fragments in bottom of box												
	19.91		26	25		COAL LOSS:												
			8	8		COAL C3: C4 stringers at top												
			100	96		COAL LOSS:												
			26	25		COAL C2/C3: minor C4 and claystone fragments at top												very broken
		21.97	46	44		COAL C1/C2: occasional minor C3 bands												broken to pulverized

66' / 20.1m

75' / 22.9m

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1687 ↓											
	22.84		7	7		ROCK LOSS:										
		22.94	3	3		CLAYSTONE: carbonaceous to coaly										very broken
	22.94		2	2		COAL C2/C3: minor claystone stringers										broken
			48	46		COAL LOSS:										
						BOX 8										
		23.69	25	24		COAL C2/C3: abundant vitrinite particles, minor claystone stringers 5cm from bottom										very broken
	23.69		3	3		CLAYSTONE: carbonaceous with coaly stringers										very broken
			52	50		ROCK LOSS:										
			8	8		C4: vitrinite stringers										broken
15		25.07	75			CLAYSTONE: silty at top, carbonaceous towards bottom, coaly stringers in middle										
	25.07	25.65	58			SILTSTONE: medium to dark gray, minor carbonaceous bands in middle										somewhat broken

79' / 24.1m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
20	25.65		58			SANDSTONE:	fine grain, abundant silty laminations								
							minor carbonaceous stringers								
										87' / 26.5m					
			30			SANDSTONE:	as above								
19							BOX 9								
18		27.84	131			SANDSTONE:	as above, minor bioturbation, clay								solid
							rich towards bottom								
12	27.84	29.07	123			CLAYSTONE:	silty at top, carbonaceous in middle								middle 20cm very broken
							coaly stringers in middle, very								
							silty towards bottom								
										97' / 29.6m					
	29.07		12			SILTSTONE:	medium to dark gray, abundant								somewhat broken
							claystone bands								
							BOX 10								
		29.34	15			SILTSTONE:	as above								
20	29.34		206			SANDSTONE:	fine grain to very fine grain,								solid
							medium gray, abundant silty laminations								
							afew claystone bands throughout								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m'		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
17		31.89	49			SANDSTONE: medium grain, abundant silty laminations, light gray									
	31.89	32.00	11			CLAYSTONE: silty to very silty, medium gray brown									
						BOX 11									
	32.00	32.12	12			SILTSTONE & SANDSTONE: fine grain, interbedded, occasional claystone bands, light and dark gray bands								solid	
9	32.12		259			SANDSTONE & SILTSTONE: very sandy towards bottom					107' / 32	6m			
						BOX 12									
17		35.07	36			SANDSTONE & SILTSTONE: as above								somewhat broken	
											17' / 35.7m				
20	35.07	37.53	246			SILTSTONE: medium to dark gray, an 8cm sandstone band 84cm from top, abundant large claystone bands									
						BOX 13									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	37.53	37.60	7		8891	SILTSTONE:	as above								somewhat broken	
	37.60		51	48		SANDSTONE:	medium grain, light to medium gray									
								abundant silty laminations in top								
20		38.60	49	45		SANDSTONE:	as above									
23	38.60	39.90	130	120		CLAYSTONE:	silty at top, carbonaceous towards									
								bottom, medium to dark gray brown								
								minor sandy bands at top								
	39.90		5	5		COAL LOSS:										
			28	26		COAL C2/C3:	occasional C1 fragments near bottom									very broken
								BOX 14								
		40.41	18	17	COAL C1/C2:										very broken	
	40.41	40.54	13	12	COAL C3:	minor C4 band near bottom									very broken	
	40.54		3	3	ROCK LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		40.64	7	6	8891	C4:		minor coaly stringers							broken	
40.64		12	11	CLAYSTONE:				very carbonaceous to coaly								
	40.93	17	16	CLAYSTONE:				carbonaceous, occasional coaly								
								stringers								
40.93	40.96	3	3	C4:												
40.96		30	28	COAL LOSS:												
	41.95	69	64	COAL C2/C3:				occasional G1 bands, C4 fragments								very broken
								in middle								
41.95		7	6	ROCK LOSS:												
	42.07	5	5	CLAYSTONE:				carbonaceous, medium to dark brown								
42.07	42.13	6	6	C4:				claystone stringers								
42.13	42.30	17	16	SILTSTONE:				medium gray, silty, carbonaceous								broken
42.30		59	54	COAL C2:				vitrite bands near top, occasional								
								C3 and C4 bands and stringers near								

bottom

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
			11	10	1688 ↓											
						COAL LOSS:										
									BOX 15							
		43.07	7	6		COAL C2/C3: minor C4 stringers										
	43.07	43.11	4	4		ROCK LOSS: C4										
	43.11	43.14	3	3		CLAYSTONE: carbonaceous										
	43.14	43.29	15	14		ROCK LOSS: C4										
	43.29		6	6		COAL C2/C3: with vitrinite fragments										broken to pulverized
		43.57	22	20		COAL LOSS:										
	43.57		3	3		C4: claystone stringers					145' / 44.2m					broken
			6	6		CLAYSTONE: carbonaceous, coaly stringers										
		43.68	2	2		C4:										
23	43.68		25			SANDSTONE: very fine grain; a 4cm claystone band at top, abundant silty laminations										somewhat broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
20			26			SANDSTONE: fine grain, light to medium gray, abundant silty laminations					147' / 44.8m				
26	46.01		182			SANDSTONE: fine grain, light to medium gray abundant silty laminations, cross laminations shows tops up								solid	
						BOX 16									
12	46.01	46.72	71			SANDSTONE: fine to medium grain, light gray, abundant silty laminations								somewhat broken	
	46.72		47			SILTSTONE: medium gray, abundant dark gray claystone bands; occasional sandy bands					157' / 47.9m				
26		47.90	71			SILTSTONE: as above									
	47.90	48.28	38			CLAYSTONE: silty, dark gray brown, calcite along fractured surfaces, very silty towards bottom								very broken	
20	48.28	48.68	40			SANDSTONE: fine grain, light to medium gray abundant silty laminations, occasional medium grain sandstone lenses								broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			23												
			61			SANDSTONE: fine grain to very fine grain, medium gray, abundant silty laminations, minor claystone bands									
						BOX 20									
23	59.32		209			SANDSTONE: as above, medium grain sandstone bands in middle									
										197' / 60.0m					
	59.32		86			SANDSTONE: as above								solid	
						BOX 21									
32			223			SANDSTONE: fine to medium grain, light to medium gray, abundant silty laminations, occasional claystone bands, minor load casts shows tops up									
										207' / 63.1m					
			60			SANDSTONE: very fine grain, medium gray, abundant silty laminations and claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
25		65.97	50			SANDSTONE:	as above								
							BOX 23								
	65.97		47			SANDSTONE:	as above, calcite on fractured								very broken
							surfaces								
			38			ROCK LOSS:									
14			170			SANDSTONE:	as above								broken
										2271/69.2m					
			25			SANDSTONE:	as above								
							BOX 24								
22			75			SANDSTONE:	as above								somewhat broken
9		70.12	60			SANDSTONE:	fine grain, light to medium gray,								
							abundant silty laminations, abundant								
							claystone bands								
14	70.12	71.57	145			SILTSTONE:	medium to dark gray, abundant sandy								
							laminations, abundant claystone bands								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					6891 ↓											
	71.57		42	41												
		73.06	107	103								239' / 72.8m				
	73.06	73.15	9	9												
	73.15		2	2											broken	
		73.33	16	15												
	73.33		7	7												
		73.50	10	10												
	73.50		4	4												
		73.73	19	18												
	73.73	73.79	6	6												
	73.79	73.90	11	11												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1689 X											
	73.90	74.00	10	10		C4:	claystone stringers, vitrinite									
							stringers									
	74.00		4	4		COAL LOSS:										
		74.09	5	5		COAL C2:										
	74.09		5	5		ROCK LOSS:										
		74.19	5	5		C4:	vitritine stringers									broken
	74.19		17	16		COAL LOSS:										
		74.42	6	6		COAL C2/C3:	vitritine stringers									
	74.42	74.49	7	6		CLAYSTONE:	carbonaceous, C4 band at top									
										245' / 74.7m						
	74.49	74.60	11	10	C4:	vitritine stringers towards bottom										
	74.60		3	3	COAL C3:											
			28	26	COAL LOSS:											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		75.25	34	31	1691	COAL C1/C2:									very broken to pulverized	
	75.25	75.29	4	4		CLAYSTONE & C4: mixed										
						BOX 26										
26	75.29	75.71	42	38		SANDSTONE: very fine grain, abundant silty laminations, occasional claystone and carbonaceous bands										broken
	75.71		5	5		ROCK LOSS:										
15		75.82	6	6		CLAYSTONE: silty at top, very carbonaceous towards bottom										broken
	75.82	75.87	5	5		C4: carbonaceous with coaly stringers					250' / 76.2m					
	75.87		2	2		COAL LOSS:										
		76.14	25	24		COAL C1/C2:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
16	76.14	76.52	38	37	1691 ↓ 1692	SILTSTONE:	medium gray, clay rich towards									
							bottom									
	76.52	76.61	9	9			CLAYSTONE:	silty at top, carbonaceous towards								
							bottom,	medium to dark brown								
	76.61		4	4			C4:	coaly fragments								very broken
		76.74	9	9			C4:	minor vitrinite stringers								
	76.74	76.86	12	11			COAL C2/C3:									
	76.86		10	10			ROCK LOSS:									
		77.00	4	4			C4:									broken
	77.00		6	6			COAL C3:	minor C4 stringers				257' / 78.3m				
			75	71			COAL C1/C2:									very sheared towards bottom pulverized at bottom
		79.35	154	146			COAL LOSS:									
												261' / 79.6m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
20	79.35		11	10		SILTSTONE: light to medium gray, minor coaly band near bottom								broken	
						BOX 27									
			11	10		SILTSTONE: as above									
27		79.85	28	25		SANDSTONE: fine grain to very fine grain, light and dark gray banded, abundant silty laminations									
	79.85		22			ROCK LOSS:									
		80.32	25			CLAYSTONE: silty, medium gray to brown, minor coaly stringers at top								broken	
	80.32	80.42	10			COAL LOSS:									
	80.42	80.54	12			ROCK LOSS:									
	80.54		4			C4: claystone bands, coaly fragments in bottom of box									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		80.63	5												
	80.63		22												
		80.98	13												
	80.98	81.01	3												
	81.01	81.09	8												
	81.09	82.24	115								267' / 81.4m				
	82.24		18	17											
		82.64	22	21											
	82.64		79	76											

1693 ↑

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		83.57	14	13	1693 ↓											
						COAL C1/C2:										very broken
								BOX 28								
15	83.57	84.14	57	55		SILTSTONE:	medium gray to brown, very clay									broken
							rich towards bottom, occasional									
							carbonaceous bands									
	84.14		4	4		C4:	coal fragments in bottom of box									very broken to pulverized
											280' / 85.3m					
			46	45		ROCK LOSS:										
		84.66	2			C4:										
10	84.66	86.66	200	197	SILTSTONE:	medium to dark gray, abundant sandy									somewhat broken	
						lenses in middle, occasional										
						carbonaceous bands, clay rich										
						towards bottom										
							BOX 29									
	86.66	86.74	8	8	CLAYSTONE:	carbonaceous									broken	
										287' / 87.5m						

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1694											
	86.74		41	40		COAL LOSS:										
		87.44	29	28		COAL C1/C2:										very broken
	87.44	87.71	27	26		SANDSTONE & SILTSTONE: interbedded, claystone										broken
						band at top										
	87.71		7	7		CLAYSTONE: very carbonaceous to coaly, coaly										
						band in middle										
			25	24		ROCK LOSS:										
		88.17	14			CLAYSTONE: carbonaceous at top, occasional										somewhat broken
						silty bands										
	88.17	88.57	40			SILTSTONE & SANDSTONE: interbedded, silty at										
						top, sandy towards bottom										
	88.57	88.79	22			CLAYSTONE: silty at top, carbonaceous towards										
						bottom										
	88.79		38			CLAYSTONE: very carbonaceous to coaly, coal										broken
						bands at top (approximately 1cm										
					thick) coal fragments in middle and											

bottom

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		89.33	16								295' / 89.9m				
						CLAYSTONE:	silty								
18	89.33		63	60		SANDSTONE:	medium grain to coarse grain,								broken in middle
							coarsening towards bottom; occasional								
							silty laminations								
							BOX 30								
18		91.06	110	105		SANDSTONE:	fine grain, light to medium gray								somewhat broken
							bioturbation in middle 48cm, abundant								
							thin calcite filled fractures								
							(ie-horsetailing)								
											301' / 91.7m				
	91.06	91.97	91	87		SILTSTONE:	medium to dark gray, clay rich								somewhat broken
							towards bottom								
	91.97		42	40		COAL LOSS:									
		92.56	17	16		COAL C1/C2:									broken
	92.56	92.62	6	6		CLAYSTONE:	carbonaceous								
17	92.62	92.89	27	26		SILTSTONE:	medium to dark gray, minor sandy lenses								

← 5691 →

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	92.89		18	17							307' / 93.6m					
						CLAYSTONE:	carbonaceous with coaly stringers									very broken
							throughout									
		93.98	91													
						CLAYSTONE:	medium to dark gray brown,									somewhat broken
							carbonaceous at top, silty in									
							middle, carbonaceous at bottom									
	93.98		9			COAL C4:	interbedded									broken
13			8			CLAYSTONE:	carbonaceous									somewhat broken
		94.18	3			C4:	vitroinite band at top									
16	94.18	94.63	45			SANDSTONE:	very fine grain, medium gray,									
							abundant siltstone and claystone									
							bands									
	94.63	94.98	35			CLAYSTONE:	silty, medium gray brown									
13	94.98	95.36	38			SANDSTONE:	fine to medium grain, light gray,									
							abundant medium gray siltstone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
4	95.36	95.57	21													
						SILTSTONE:	medium gray,	occasional light gray								
							sandy bands,	clay rich towards								
							bottom									
	95.57	95.95	38			CLAYSTONE:	silty, medium gray brown									
										317' / 96.6m						
	95.95	96.04	9			SILTSTONE:	medium to dark gray,	clay rich								somewhat broken
							BOX 32									
	96.04	97.71	167			CLAYSTONE:	dark gray brown,	silty and								top 90cm very broken
							carbonaceous									
13	97.71		114	10		SILTSTONE:	medium to dark gray,	occasional								somewhat broken
							light gray sandy lenses,	bioturbation								
							BOX 33									
			15			SILTSTONE:	as above									
										327' / 99.7m						
15		99.76	76			SILTSTONE:	as above									
10	99.76		112			SANDSTONE & SILTSTONE:	fine grain,	interbedded								somewhat broken
							light and dark gray bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16			51			SANDSTONE: fine grain, light gray, abundant silty laminations, cross laminations shows tops up									
			19			SANDSTONE & SILTSTONE: interbedded BOX 34									
14			39			SANDSTONE: fine grain, light gray, abundant silty laminations, siltstone bands at top									
6	104.40		243			SANDSTONE: as above, occasional siltstone bands and silty laminations BOX 35									
	104.40		60			SANDSTONE: as above, large silty band towards bottom									somewhat broken
10			137			SANDSTONE: as above, abundant silty laminations and bands, soft sediment deformation towards bottom									

337'/102.7m

347'/105.8m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10			93			SANDSTONE: fine to medium grain, light gray									
						occasional silty laminations and									
						bands									
						BOX 36									
20			80			SANDSTONE: as above									
										357' / 108.8m					
	108.18	109.01	91			SILTSTONE: medium to dark gray, very sandy									
						at top and bottom, occasional									
						claystone bands									
10	109.01		119			SANDSTONE & SILTSTONE: fine grain sandstone									somewhat broken
						interbedded, bedding approximately									
						8-29cm									
						BOX 37									
			40			SILTSTONE: medium gray, occasional sandy lenses									solid
						at top									
9		111.16	56			SANDSTONE & SILTSTONE: fine grain sandstone,									solid
						interbedded, light and dark gray									
						bands, soft sediment deformation									

towards bottom

HOLE No. QBD 8106

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B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
17	111.16		212			SILTSTONE: medium gray, occasional light gray sandy bands					367' / 111.9m				solid
						BOX 38									
		113.65	37			SILTSTONE: as above, along 5cm sandstone band 7cm from bottom									
22	113.65	113.81	16			SANDSTONE: fine to medium grain, light gray occasional silty laminations									somewhat broken
13	113.81		50			SILTSTONE: sandy bands and claystone bands throughout, light gray to medium brown to dark gray									
18		116.07	176			SILTSTONE: as above					377' / 114.9m				
	116.07		10			SANDSTONE: fine grain, light gray, abundant silty laminations									
						BOX 39									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		116.24	7			SANDSTONE:	as above									
	116.24	117.35	111			SILTSTONE:	medium gray, occasional sandy laminations and bands, clay rich in spots									
20	117.35		185			SILTSTONE:	medium to dark gray, occasional sandy bands and lenses, occasional claystone bands				387'/118.0m				somewhat broken	
			110			SILTSTONE:	as above, clay rich towards bottom								solid	
25			194			SILTSTONE:	as above, large fine grain sandstone bands in bottom 134cm				397'/121.0m				solid	
							BOX 41									
		122.53	29			SILTSTONE:	as above, abundant sandy bands towards bottom								somewhat broken	
24	122.53	122.74	21			SANDSTONE:	fine grain, light gray, abundant silty laminations, two claystone bands 3cm from bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	122.74	122.99	25			SILTSTONE: medium to dark gray, abundant sandy lenses and claystone bands								somehow broken	
23	122.99	123.37	38			SANDSTONE: fine to medium grain, light to medium gray coarsening towards bottom two 6cm claystone bands near bottom									
	123.37	124.93	156			SANDSTONE & CLAYSTONE: medium to coarse grained sandstone, interbedded, bedding approximately 6-10cm, occasional plant fragments and carbonaceous bands, light to dark gray band					407' / 124.1m			broken	
	124.93	125.02	9			SANDSTONE: medium to coarse grain, as above									
21	125.02	125.41	39			SILTSTONE: medium to dark gray, abundant medium grain sandstone rip-up clasts								somehow broken	
	125.41		82			SANDSTONE: medium to coarse grain, occasional large claystone bands, minor clay- stone rip-up clasts					417' / 127.1m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
27			175			SANDSTONE: medium to coarse grain, as above									
						minor claystone rip-up clasts at									
						top, occasional dark carbonaceous									
						bands									
						BOX 43									
25	129.41		143			SANDSTONE: medium to coarse grain, light gray,									solid
						salt and pepper, abundant silty									
						laminations, cross laminations									
						shows tops up									
										427' / 130.1m					
33	129.41		161			SANDSTONE: as above									solid
						BOX 44									
18			153			SANDSTONE: as above, occasional very coarse									
						grained bands									
										437' / 133.2m					
17	133.28		73			SANDSTONE: medium grain, light gray, salt and									somewhat broken
						pepper, silty laminations, occasional									
						claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	133.28	133.46	18												
						CONGLOMERATE: chert and quartz pebbles to granule, clast size approximately 0.1 to 1cm									
12	133.46	133.69	23			SANDSTONE: fine to medium grain, light gray, two large dark siltstone bands towards bottom									
	133.69	133.77	8			CONGLOMERATE: chert and quartz granule to pebbles, very little matrix, well cemented, moderately sorted									
						BOX 45									
	133.77	133.83	6			CONGLOMERATE: chert and quartz, light gray, medium grain, sandstone matrix, well cemented									solid
20	133.83		174			SANDSTONE: medium grain, light gray, abundant silty laminations									
			123			SANDSTONE: as above					447' / 136	2m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
21			180			SANDSTONE:	as above								
											457' / 139.3m				
12		139.83	123			SANDSTONE:	as above								
15	139.83		79			SANDSTONE:	medium to coarse grain, medium gray								solid
							salt and pepper, chert and quartz								
							granule to pebble bands in bottom								
							45cm, pebbles and granules fining								
							upward								
		141.47	85			SANDSTONE:	medium grain, medium gray, minor								
							silty laminations, small pebble								
							band at bottom								
	141.47		5		J	C4:	coaly stringers								broken
			14			CLAYSTONE:	carbonaceous, dark brown to black								
							coaly stringers								
											467' / 142.3m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		141.82	16												
	141.82		6			CLAYSTONE' & COAL:	'mixed (50-50)								very broken
			60			ROCK LOSS:									
		142.58	10			CLAYSTONE:	medium to dark brown, carbonaceous at top, silty towards bottom								broken
16	142.58		33			SANDSTONE:	medium grain to fine grain, medium gray, abundant silty laminations towards bottom								
			18			SANDSTONE:	very fine grain, somewhat carbon- aceous								
			15			SANDSTONE:	medium grain, light gray, claystone band in middle								very broken and rounded from re- drilling
			78			ROCK LOSS:									
							BOX 48								
		144.16	14			SANDSTONE:	as above								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. a. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	144.16	144.29	13			CLAYSTONE:	carbonaceous, coaly fragments				475' / 144.8m				very broken
							throughout								
	144.29		23			SANDSTONE:	fine to medium grain, light gray								broken and rounded from redrilling
			30			ROCK LOSS:									
		145.74	92			SANDSTONE:	fine grain, light to medium gray, abundant silty laminations and clay- stone bands								bottom 12cm very broken
15	145.74	146.99	125			SILTSTONE:	medium gray, abundant sandy laminations, occasional claystone bands								somewhat broken
	146.99		13			CLAYSTONE:	silty, medium gray brown				484' / 147.5m				
		147.25	13			CLAYSTONE:	as above								
11	147.25	148.68	143			SILTSTONE:	medium to dark gray, abundant sandy laminations and bands towards bottom								somewhat broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
18	148.68	149.41	73													
						SANDSTONE:	fine grain, medium gray, abundant									
							dark gray siltstone and claystone									
							bands									
											493' / 150.3m					
	149.41	149.72	31			SILTSTONE:	medium to dark gray, occasional									
							sandy lenses									
							BOX 50									
15	149.72		159			SANDSTONE:	very fine grain to fine grain, dark									
							gray, very silty at top and bottom									
							occasional light gray sandstone									
							bands									
		152.64	133			SANDSTONE & SILTSTONE:	fine grain sandstone,									
							interbedded, light and dark gray									
							bands, cross laminations shows tops									
							up									
											503' / 153.3m					
	152.64		2			SANDSTONE:	fine grain, light gray, abundant									
							silty laminations									
							BOX 51									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		152.82	16			SANDSTONE & SILTSTONE: fine grained sandstone, interbedded									somehow broken
	152.82	153.45	63			SILTSTONE: medium to dark gray, sandy towards bottom									
	153.45		227			SANDSTONE: very fine grain to fine grained, silty at top, medium gray, minor light gray sandstone clasts BOX 52									bottom 53cm broken
		155.89	17			SANDSTONE: fine grain, light gray, abundant silty laminations									somehow broken
	155.89	156.04	15			SANDSTONE: fine grain to very fine grained, medium gray towards bottom, silty towards bottom					513'/156.4m				somehow broken
21	156.04	156.47	43			SILTSTONE: medium to dark gray, clay rich at top, occasional light gray sandy bands									
18	156.47		70			SANDSTONE: fine grain, light gray, abundant silty laminations, occasional claystone bands and clasts									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
6		163.23	176			SANDSTONE: medium grain, light gray, salt and pepper, silty laminations, occasional 1cm coarse grained sandstone bands						537' / 163.7m			
18	163.23		95			SANDSTONE: medium grain, light blue gray, minor silty laminations									somewhat broken
						BOX 55									
10			205			SANDSTONE: as above									solid
			69			SANDSTONE: as above									
						BOX 56									
			244			SANDSTONE: as above									
15	169.89		53			SANDSTONE: as above, occasional carbonaceous stringers									
						BOX 57									
17	169.89		125			SANDSTONE: as above, occasional claystone rip-up clasts									somewhat broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
19			87			SANDSTONE: fine to medium grain, light gray, abundant silty laminations									
10			31			SANDSTONE: fine to medium grain, light gray blue occasional silty lamintions									
			36			SANDSTONE: as above					567' / 172.8m				
						BOX 58									
			265			SANDSTONE: as above									
		175.56	23			SANDSTONE: as above, minor claystone bands near bottom					577' / 175.9m				
						BOX 59									
21	175.56		274			SANDSTONE: as above, abundant siltstone and clay- stone bands and clasts towards bottom, minor bioturbation, worm burrows shows tops up									somewhat broken
		178.33	3			SANDSTONE: fine grain, medium to dark gray, minor claystone bands					587' / 178.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	178.33	179.05	72												
16	179.05	181.14	209												
	181.14		21												
19			47												
13		184.12	230												
15	184.12		37												

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		184.57	8												
12	184.57	186.43	186			SANDSTONE: fine grain to very fine grain, light									somewhat broken
						to medium gray, abundant medium to									
						dark gray silty bands and claystone									
						bands									
	186.43	187.05	62			SILTSTONE: medium to dark gray, occasional sandy									
						lenses									
			7			SANDSTONE: fine grain, light gray, occasional									
						dark gray silty bands and laminations									
						BOX 63									
17			35			SANDSTONE: as above									
										617'/188.1m					
17		190.02	255			SANDSTONE: as above, a few large dark gray									
						siltstone and claystone bands at 38cm									
						from top, 115cm from top and at									
						bottom									
						BOX 64									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	190.02		45			SANDSTONE: fine grain to very fine grain, light to medium gray, occasional claystone bands, abundant silty laminations									somewhat broken
										627' / 191.1m					
15			247			SANDSTONE: as above									
						BOX 65									
20			65			SANDSTONE: as above, two dark claystone bands at top and middle									
										637' / 194.2m					
14	195.85		226			SANDSTONE: as above, abundant dark gray siltstone and claystone bands and laminations in bottom 164cm									
						BOX 66									
	195.85		67			SANDSTONE: as above, very silty at bottom									somewhat broken
										647' / 197.2m					
16			228			SANDSTONE: as above, abundant dark gray siltstone and claystone bands towards bottom, (light and dark gray banded)									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			77												
10		201.82	225			SANDSTONE:	as above,	light and dark gray	banded						
							at top								
										657' / 200	.3m				
14	201.82		63			SANDSTONE:	as above,	bioturbation 14cm	from top						somewhat broken
							cross laminations	shows tops up							
										667' / 203	.3m				
13			233			SANDSTONE:	as above,	abundant dark siltstone							
							and claystone bands	& laminations							
							light and dark banded								
			88			SANDSTONE & SILTSTONE:	(fine grained sandstone)								
							interbedded,	light and dark gray							
							banded,	bands approximately 3-7cm							
										677' / 206	.3m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
21		207.06	140			SANDSTONE: fine grain, light gray, abundant dark gray silty laminations and clay- stone bands									
20	207.06	207.74	68			SILTSTONE & SANDSTONE: (fine grain sandstone) interbedded, claystone bands throughout BOX 70									somewhat broken
	207.74	207.85	11			SANDSTONE: fine grain, light gray, abundant silty laminations									
	207.85	208.11	26			SILTSTONE: medium to dark gray, abundant light gray sandy laminations towards bottom									
15	208.11		61			SANDSTONE: fine grain, light to medium gray, abundant dark gray siltstone laminations and claystone bands									
											687' / 209.4m				
9		210.05	133			SANDSTONE: as above, calcite filled fractures in middle									
	210.05	210.56	51			SILTSTONE: dark gray, abundant light gray sandy lenses at top, clay rich in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 71								
	210.56	210.97	41			SILTSTONE & SANDSTONE: (fine grain sandstone)								somewhat broken	
						interbedded, light and dark gray									
						banded									
17	210.97	211.87	90			SANDSTONE: fine grain, light gray, two large									
						dark gray siltstone and claystone									
						bands 35cm from top and 4cm from									
						bottom									
											697' / 212.4m				
	211.87	212.43	56			SILTSTONE: medium to dark gray, abundant light									
						gray sandy laminations at top									
13	212.43	212.93	50			SANDSTONE: fine grained, light gray, abundant									
						silty laminations									
	212.93	213.40	47			SILTSTONE: medium to dark gray, a 12cm sandstone									
						band in middle									
						BOX 72									
18	213.40		156			SILTSTONE: as above, occasional light gray								somewhat broken	
						sandy bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		215.30	34			SILTSTONE:	as above				207'/215.5m				
21	215.30		92			SANDSTONE:	fine grain, light gray, abundant								
							silty laminations, two large claystone								
							to siltstone bands at 16cm from top								
							and at bottom								
							BOX 73								
22		218.05	183			SANDSTONE:	fine grain to very fine grained, light								
							to medium gray, abundant silty								
							laminations, abundant large siltstone								
							to claystone bands throughout, minor								
							bioturbation								
											717'/218.5m				
	218.05	218.66	61			SANDSTONE:	fine grain, light gray, abundant								somewhat broken
							silty laminations towards bottom								
25	218.66		29			SILTSTONE:	medium to dark gray, abundant light								
							gray sandstone bands								
							BOX 74								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		219.95	100												
16	219.95		111			SANDSTONE & SILTSTONE: (fine grain sandstone)									
						interbedded, light and dark gray									
						banded, abundant claystone bands									
										727' / 221.6m					
			72			SANDSTONE: fine grain, light gray, silty									
						laminations at top									
						BOX 75									
18		222.88	110			SANDSTONE: as above, siltstone to claystone									broken 16cm from top
						band, 16cm from top									
	222.88	223.44	56			SILTSTONE: dark gray, occasional sandy laminations									somewhat broken
						at top, abundant light gray sandy									
						lenses towards bottom									
	223.44		62			SANDSTONE: fine grain, light gray, an 8cm dark									
						gray siltstone to claystone band									
						at bottom									
										737' / 224.6m					
20		224.61	55			SILTSTONE: medium to dark gray, occasional									
						sandstone laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
							BOX 76								
18	224.61		113			SANDSTONE: fine grain, light gray, abundant									
						dark gray silty laminations and									
						claystone bands									
20		226.12	38			SILTSTONE: medium to dark gray, abundant light									
						gray sandy laminations									
19	226.12	227.06	94			SANDSTONE: fine grain, light gray, abundant									somewhat broken
						silty laminations towards bottom									
										747/227.7m					
14	227.06		45			SILTSTONE: dark gray, clay rich in middle,									
						occasional light gray sandy bands									
						and lenses									
							BOX 77								
		227.82	31			SILTSTONE: as above									
23	227.82	229.12	130			SANDSTONE: fine grain, light gray, abundant									
						silty laminations at top, two dark									
						gray claystone bands in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
19	229.12	230.21	109												
						SILTSTONE & SANDSTONE: (fine grained sandstone)									
						interbedded, light and dark gray									
						banded, occasional claystone bands									
											757' / 230.7m				
	230.21		8			SILTSTONE & SANDSTONE: (fine grained sandstone)								somewhat broken	
						interbedded, light and dark gray									
						banded, occasional dark gray claystone									
						bands									
						BOX 78									
24			287			SILTSTONE & SANDSTONE: (fine grained sandstone)									
						as above, cross laminations shows									
						tops up, very silty towards bottom,									
						abundant dark gray claystone bands									
						BOX 79									
			94			SILTSTONE & SANDSTONE: (fine grain sandstone)									
						as above									
			73			SANDSTONE: fine grain, light gray, silty									
						laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
15		236.01	118			SILTSTONE: medium to dark gray, a few sandstone									
						bands and lenses, occasional claystone									
						bands									
											777' / 236.8m				
						BOX 80									
31	236.01		240			SILTSTONE: as above									top 40cm broken
						BOX 81									
16			176			SILTSTONE: medium to dark gray, occasional									somewhat broken
						light gray sandy bands and lenses									
											791' / 241.1m				
			128			SILTSTONE: as above									
						BOX 82									
19			181			SILTSTONE: as above									
											801' / 244.1m				
		244.52	126			SILTSTONE: as above									
						BOX 83									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
15	244.52		197			SILTSTONE: medium dark gray; occasional light gray sandy laminations, occasional claystone rich bands									somewhat broken
			93								811' / 247.2m				
19			216			SILTSTONE: as above									
			71								821' / 250.2m				
							BOX 84								
23	252.72	243				SILTSTONE: as above									
16	252.72		55			SILTSTONE: as above									somewhat broken
			125			SILTSTONE: as above									
											831' / 253.2m				
19			162			SILTSTONE: as above, clay rich at top									
											837' / 255.1m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			137												
		258.33	82							847' / 258.1m					
16	258.33	259.01	68												
14	259.01		140												somewhat broken
		261.94	153							857' / 261.2m					
20	261.94	263.65	171												
	263.65	264.91	126							867' / 264.2m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	264.91		179												
						CLAYSTONE:	silty to very silty, dark gray to								somewhat broken
							gray brown, occasional light gray								
							sandy laminations								
										877'	267.3m				
13		267.88	118			CLAYSTONE:	as above								
	267.88		186												
						SILTSTONE:	dark gray, abundant clay rich bands								
										887'	270.3m				
19			114			SILTSTONE:	as above								
		272.78	190												
						SILTSTONE:	as above								
										897'	273.4m				
27	272.78	273.84	106			SILTSTONE:	as above								somewhat broken
	273.84		197			CLAYSTONE:	silty to very silty, dark gray, a 6cm								
							sandstone band 22cm from bottom								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	264.91		179												somehow broken
13		267.88	118			CLAYSTONE: as above					877' / 267.3m				
	267.88		186			SILTSTONE: dark gray, abundant clay rich bands									
19			114			SILTSTONE: as above									
		272.78	190			SILTSTONE: as above									
27	272.78	273.84	106			SILTSTONE: as above									somehow broken
	273.84		197			CLAYSTONE: silty to very silty, dark gray, a 6cm									
						sandstone band 22cm from bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			70			CLAYSTONE: as above					907' / 276.4m				
							BOX 94								
			70			CLAYSTONE: as above									
		279.37	216			CLAYSTONE: as above									
							BOX 95								
24	279.37		79			CLAYSTONE: silty to very silty, dark gray to dark gray brown, minor sandy laminations at top									somewhat broken
			173			CLAYSTONE: as above, very silty at top						922' / 281.0m			
			45			CLAYSTONE: as above									
							BOX 96								
16		283.82	148			CLAYSTONE: as above, a 5cm silty to sandy band in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER .rec. .r.q.d. .d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	283.82		12			CLAYSTONE:	light gray,	extremely friable and							pulverized
							splintered								
			42			ROCK LOSS:									
			68			CLAYSTONE:	silty, dark gray to dark gray brown								somewhat broken
							carbonaceous towards bottom								
		285.50	46			CLAYSTONE:	as above, a 5cm sand band at bottom				937' / 285.5m				
							BOX 97								
	285.50	285.52	3			SANDSTONE:	coarse grained, light to medium gray,								
							salt and pepper								
	285.53		158			CLAYSTONE:	silty, dark gray to dark gray brown,								
							occasional carbonaceous bands								
		287.15	4			CLAYSTONE:	light gray, very friable								broken
	287.15	287.18	3			TUFF?	very chalky, white irregular pebbles								broken
							and grains, poorly consolidated								
							*Sample								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
16	287.18		87													
						CLAYSTONE: silty to very silty, medium to dark gray brown										somewhat broken
											947' / 288.6m					
			22			CLAYSTONE: as above										
							BOX 98	:								
			274			CLAYSTONE: as above										
			13			ROCK LOSS:										
											957' / 291.6m					
		291.19	5			CLAYSTONE: silty to very silty										very broken
							BOX 99									
23	291.19	293.90	271			SILTSTONE: medium to dark gray, occasional clay rich zones, minor sandy laminations										somewhat broken very broken at botto
							BOX 100									
	293.90		27			CLAYSTONE: dark gray to dark gray brown, silty occasional carbonaceous bands										somewhat broken
											967' / 294.7m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
12			183			CLAYSTONE: as above, calcite filled fractures at top									
										973' / 296.6m					
14			95			CLAYSTONE: as above									
						BOX 101									
			47			CLAYSTONE: as above									
										977' / 297.8m					
		299.70	228			CLAYSTONE: silty to very silty, medium to dark gray, occasional carbonaceous bands									
						BOX 102									
	299.70	299.82	12			CLAYSTONE: as above									somewhat broken
	299.82		54			SILTSTONE: medium to dark gray, occasional clay rich bands									
										987' / 300.8m					
		300.49	13			SILTSTONE: as above									
11	300.49	301.65	116			SANDSTONE: fine to medium grain, medium to dark gray, somewhat carbonaceous, occasional plant fragments and coaly stringers									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	301.65	302.45	80												
						CLAYSTONE: silty at top, carbonaceous at bottom,									
						medium to dark brown, a 5cm C4 band									
						11cm from bottom									
						BOX 103									
16	302.45		96			SILTSTONE: medium gray, occasional light gray									somewhat broken
						sandy bands, clay rich at top									
										997' / 303.9m					
15		304.64	123			SILTSTONE: as above									
12	304.64	305.44	80			CLAYSTONE: silty, dark gray									
						BOX 104									
13	305.44		99			SILTSTONE: medium to dark gray, a 4cm carbonaceous									
						band 34cm from top, minor calcite									
						filled fractures									
										1007' / 306.9m					
17		308.40	197			SILTSTONE: as above									
						BOX 105									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
15	308.40	308.84	44													somewhat broken
	308.84	308.95	11													
	308.95		55													
12		311.18	168													
	311.18	311.57	39													
26	311.57	312.32	75													
	312.32	314.14	182													

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
20	314.14		136		1696	SANDSTONE: very fine grain to fine grain, light to medium gray, abundant silty laminations									
											1037'/316.1m				
26	315.74	316.33	83			SILTSTONE: medium to dark gray, minor sandy laminations									
25	316.33		84	76		CLAYSTONE: silty, dark gray, minor silty laminations									
12		318.20	103	101		CLAYSTONE: as above, somewhat carbonaceous towards bottom									
										1045'/318.5m					
	318.20		11	11	COAL LOSS:										
		318.64	33	32	COAL C1/C2:									somewhat broken	
	318.64	318.82	18	18	CLAYSTONE: carbonaceous to coaly, occasional coaly stringers									broken	
	318.82		4	4	C4:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		318.92	6	6											
						C4:	coaly stringers, vitrinite								
	318.92		13			COAL LOSS:									
			4			COAL C3/C4:									
		319.11	2			COAL C2:									
	319.11	319.58	47			CLAYSTONE:	carbonaceous, occasional calcite filled fractures								somewhat broken
	319.58		2			COAL LOSS:									
		319.72	12			COAL C1/C2:									broken
17	319.72	320.09	37			CLAYSTONE:	carbonaceous at top, silty towards bottom								
	320.09		9			SANDSTONE:	fine to medium grain, light gray, salt and pepper, silty laminations								somewhat broken
							BOX 109								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10		320.43	25			SANDSTONE: as above									
	320.43	320.51	8			CLAYSTONE: silty at top, carbonaceous towards bottom									
	320.51	320.57	6			COAL C1/C2:									broken
	320.57	320.76	19			CLAYSTONE: carbonaceous at top, silty towards bottom									broken
	320.76	320.94	18			SILTSTONE: medium gray, occasional sandy bands									somewhat broken
14	320.94	321.34	40			CLAYSTONE: very silty to silty, dark gray to dark gray brown									
										1055.5' / 321.7m					
26	321.34		168			SANDSTONE: fine grain, light to medium gray abundant silty laminations, very silty towards bottom									somewhat broken
							BOX 110								
18			157			SANDSTONE: very fine grain to fine grain, medium gray, occasional dark gray brown, claystone bands in middle									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1697											
24		325.96	137	125			SANDSTONE: fine to medium grain, abundant silty laminations, silty towards bottom					1065.5'	324.8m			
							BOX 111									
18	325.96	326.68	72	68			SILTSTONE: medium to dark gray, clay rich towards bottom, calcite filled fractures in middle									bottom broken
18	326.68		69	66			COAL C1/C2:									very broken bottom 50cm
												1075.5'	327.8m			
		328.19	82	78			COAL C1/C2:									broken
		328.19	4	4		ROCK LOSS: (C4)										
		328.28	5	5		C4: vitrinite stringers										
		328.28	32	31		COAL C2: vitrinite stringers										
			29	28		COAL LOSS:										
						BOX 112										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	343.63		21			SANDSTONE: fine to medium grain, light gray,									solid
						· salt and pepper, silty laminations,									
						· minor bioturbation in middle									
										1127' / 343.5m					
12			268			SANDSTONE: as above									
						·									
						· BOX 118									
						·									
			33			SANDSTONE: as above									
						·				1137' / 346.6m					
12	347.97		112			SANDSTONE: as above									
						·									
	347.97	348.29	32			CONGLOMERATE: chert and quartz pebbles, pebbles									
						· approximately 0.5' to 3cm, very poorly									
						· sorted, well cemented, coarse grained									
						· sandstone matrix, pebbles sub angular									
						· to sub rounded									
						·									
	348.29		71			SANDSTONE: coarse grain, abundant claystone.									solid
						· rip-up clasts throughout									
						·									
20			23			SANDSTONE: fine to medium grain, medium gray,									
						· abundant silty laminations									
						·									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			20			SANDSTONE: coarse grain, light gray, salt and pepper, abundant claystone rip-up clasts, clasts size approximately 1 to 8cm									
						BOX 119									
			41			SANDSTONE: as above					1147' / 349.6m				
			42			SANDSTONE: as above									
		351.67	141			SANDSTONE: medium to coarse grain, claystone rip-up clasts in bottom 96cm									
14	351.67		56			SANDSTONE: medium grain, light gray, salt and pepper, minor silty laminations									solid
						BOX 120									
			19			SANDSTONE: as above, coarse grain band at bottom fining upwards									somewhat broken
											1157' / 352.7m				
27		353.73	131			SANDSTONE: medium to coarse grain, light gray, salt and pepper, silty laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	353.73	354.85	112												
						CONGLOMERATE: chert and quartz pebbles, light gray, occasional claystone rip-up clasts, abundant coarse grained sandstone matrix									
14	354.85	355.25	40			SANDSTONE: medium grained, light gray, salt and pepper									
						BOX 121									
	355.25		10			SANDSTONE: as above, large claystone rip-up clasts in middle									somewhat broken
21			28			SANDSTONE: fine grained, light gray, silty laminations									
											1167'	355.7m			
13		356.56	93			SANDSTONE: as above									
	356.56	356.63	7			CLAYSTONE: medium to dark gray, occasional sandy lenses									
						BOX 122									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						NOTE: Core Changes from HQ to NQ									
18	356.63	357.06	43			SANDSTONE, SILTSTONE & CLAYSTONE: interbedded, bedding approximately 1 to 2cm thick light and dark gray banded									
										1170' / 356.6m					
	357.06	357.11	5			SANDSTONE, SILTSTONE & CLAYSTONE: interbedded light and dark gray banded								somewhat broken	
	357.11	357.28	17			CONGLOMERATE: chert and quartz pebbles to granule; medium gray, medium grained sandstone matrix with abundant granules									
	357.28		45			SANDSTONE & SILTSTONE: (fine grain sandstone) interbedded, light and dark gray banded, abundant very dark gray claystone bands									
14		358.49	76			SANDSTONE: fine grain, light to medium gray, abundant siltstone laminations and bands, occasional claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
17	358.49		55			SANDSTONE & SILTSTONE: (fine grain sandstone)								somewhat broken	
						interbedded, light and dark gray									
						banded, occasional claystone bands									
											1177' / 358.7m				
			47			SANDSTONE & SILTSTONE: (fine grain sandstone)									
						as above									
						BOX 123									
17		360.81	130			SANDSTONE & SILTSTONE: (fine grain sandstone)									
						as above									
9	360.81	361.16	35			SANDSTONE: fine to medium grain, light gray,									
						salt and pepper, silty laminations									
	361.16	361.48	32			SILTSTONE: medium to dark gray, sandstone bands									
						towards bottom, claystone bands									
						throughout, minor load clasts at									
						bottom shows tops up									
10	361.48	361.66	18			SANDSTONE: fine to medium grain, light gray,								somewhat broken	
						salt and pepper, silty laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	361.66		42			SANDSTONE & SILTSTONE: interbedded, light and dark gray banded, occasional black claystone bands									
			30			SANDSTONE & SILTSTONE: as above					1187'	361.8m			
						BOX 124									
8	363.37		99			SANDSTONE & SILTSTONE: as above, bioturbation in middle									
	363.37	363.74	37			SANDSTONE: fine grain, light gray, abundant silty laminations, calcite filled fractures in middle, cross laminations shows tops up									
23	363.74	364.60	86			SANDSTONE & SILTSTONE: (fine grain sandstone) interbedded, light and dark gray banded									somewhat broken
	364.60		44			SILTSTONE: medium gray, abundant light gray sandy laminations, occasional claystone bands									
											1197'	364.8m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		365.19	15												
						SILTSTONE: as above, clay rich									
						BOX 125									
10	365.19	368.09	290			SANDSTONE & SILTSTONE: (fine grain sandstone)								solid	
						interbedded, claystone bands									
						throughout, light and dark gray									
						banded									
										1207' / 367.9m					
						BOX 126									
	368.09	368.65	56			CLAYSTONE: silty to very silty, occasional								somewhat broken	
						sandy bands, medium to dark gray									
						brown									
14	368.65	369.06	41			SANDSTONE & SILTSTONE: (fine grain sandstone)									
						interbedded, light and dark gray									
						banded									
	369.06	369.44	38			SANDSTONE: fine grain to very fine grain, light									
						to medium gray, silty laminations									
						throughout									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
14	369.44		161			CLAYSTONE: silty to sandy, occasional light gray sandy bands in middle, medium to dark gray									
						BOX 127									
										1217' / 370.9m					
10		272.43	138			CLAYSTONE: silty, occasional sand bands near bottom, dark gray brown									
		272.43	12			SANDSTONE: coarse grain, light to medium gray salt and pepper, small pebble band at bottom									somewhat broken
14			131			SANDSTONE: medium grain, light gray, salt and pepper, silty laminations, a 6cm pebble band 52cm from bottom									
						BOX 128									
			6			SANDSTONE: as above									
										1227' / 374.0m					
11			290			SANDSTONE: as above, minor pebble band in middle coarsening towards bottom									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		376.89	7												
		376.89	376.98	9		SANDSTONE:	medium to coarse grain, light gray,								
							salt and pepper								
											1237'/377.0m				
		376.89	376.98	9		SANDSTONE:	as above								somewhat broken
16	376.98	377.53	55			CLAYSTONE:	carbonaceous at top, silty towards								
							bottom, dark brown to black, a 5cm								
							C4 band 14cm from top								
	377.53	377.93	40			SILTSTONE:	dark gray, occasional sandy bands in								
							middle								
	377.93	379.16	123	118		SANDSTONE:	very fine grain, medium gray, abundant								
							silty bands, somewhat carbonaceous								
							towards bottom								
	379.16	379.58	42	40		SILTSTONE:	dark gray, occasional black carbonaceous								broken at bottom
							bands at top, a 7cm sandstone band								
							6cm from bottom, 4cm of C4 at bottom								
											1247'/380.1m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	383.15	383.49	34	33		CLAYSTONE: dark brown to dark gray, carbonaceous at top, silty towards bottom									somewhat broken
7	383.49		248	246		SILTSTONE: medium to dark gray, abundant sand bands in top, abundant claystone bands towards bottom									broken
											1267' / 386.2m				
						BOX 132									
		386.56	59			SILTSTONE: as above, abundant sandy bands towards bottom									somewhat broken
20	386.56	388.29	173			SANDSTONE: very fine grain, medium gray, abundant sandy laminations and bands									
											1277' / 389.2m				
12	388.29	388.84	55			SANDSTONE: as above									very broken at bottom
						BOX 133									
2	388.84	389.81	97			SILTSTONE: medium to dark gray, sandy bands at top, large claystone band in middle									somewhat broken

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	389.81		150			SANDSTONE: very fine grain to fine grain, medium gray, occasional silty bands					287' / 392.3m				
			39			SANDSTONE: as above									
						BOX 134									
3	394.47		277			SANDSTONE: fine grain, medium gray, occasional silty laminations					297' / 395.3m			solid	
	394.47		17			SANDSTONE: as above								solid	
						BOX 135									
9			148			SANDSTONE: fine grain, as above, abundant silty laminations, occasional claystone bands near bottom									
11			141			SANDSTONE: fine to medium grain, abundant silty laminations, 13cm claystone clasts 32cm from top, soft sediment deformation					307' / 398.4m				
	397.58		5			SANDSTONE: as above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
14	397.58		127												
						SANDSTONE:	medium grain,	light gray,	salt and						somewhat broken
							pepper,	abundant silty laminations							
							throughout,	abundant claystone bands							
							in middle								
			149			SANDSTONE:	coarse grain,	light to medium gray,							
							silty laminations,	minor plant							
							fragments and rootlets,	chertz and							
							quartz pebble bands	towards bottom							
14			19			SANDSTONE:	as above								
										317' / 401.4m					
12		403.21	268			SANDSTONE:	as above,	occasional coaly stringers							solid
							in middle,	minor pebble bands							
21	403.21		32			SANDSTONE:	medium to coarse grain,	light gray							somewhat broken
							abundant silty laminations								
										327' / 404.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		404.78	125			SANDSTONE: as above, coaly stringers in middle									
	404.78	405.10	32			CONGLOMERATE: chert and quartz pebbles, pebbles approximately 0.5' to 2cm well cemented									
	405.10	405.24	14			SANDSTONE: medium grain, light gray, abundant silty laminations									
	405.24	405.39	15			CONGLOMERATE: chert and quartz pebbles									
11	405.39	405.51	12			SANDSTONE: medium to coarse grain, silty laminations									
	405.51		64			CONGLOMERATE: chert and quartz pebbles, granule band at bottom								somewhat broken	
						BOX 139									
			25			CONGLOMERATE: as above									
											1337' / 407.5m				
7		406.49	9			SANDSTONE: medium to coarse grain, light gray abundant silty laminations									
	406.49	407.26	77			CONGLOMERATE: chert and quartz pebbles, minor coaly stringers, coarse grain sandstone									

bands at top

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16	407.26	409.16	190			SANDSTONE: medium to fine grain, light gray, abundant silty laminations at top									
						BOX 140									
11	409.16		50			SANDSTONE: fine to medium grain, light gray									somewhat broken
											1347' / 410.6m				
8			197			SANDSTONE: medium to coarse grain, light to medium gray, abundant coaly bands and rootlets towards bottom, minor pebble bands towards bottom fining upwards sequencé, cross laminations shows tops up									
			49			SANDSTONE: fine grain to medium grain, light to medium gray, very silty at top, abundant coaly bands and rootlets towards bottom									
						BOX 141									
17		412.79	67			SANDSTONE: fine grain, light gray to medium gray abundant silty laminations, minor claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1699											
	412.79		36			ROCK LOSS:						1357' / 413.6m				
10		413.88	73	72		SANDSTONE: as above										somewhat broken
9	413.88	414.85	97	96		CLAYSTONE: medium to dark brown to black, silty at top, carbonaceous at bottom, coaly stringers towards bottom										
	414.85		50	48		COAL C1/C2:										
			8	8		COAL LOSS:										
			41	40	COAL C1/C2:											
											1367' / 416.7m					
			11	11	COAL C1/C2:											
			11	11	COAL C2/C3:											
		416.08	2	2	COAL C1/C2:										broken	

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1691 ↓											
	416.08		9	9		ROCK LOSS:										
		416.22	5	5		C4:										broken
	416.22		8	8		COAL LOSS:										
		416.33	3	3		COAL C1/C2:										broken
	416.33	416.51	18	17		SILTSTONE: medium gray, minor light gray sandy bands in middle										somewhat broken
23	416.51	418.05	154	142		SANDSTONE: fine grain, light to medium gray, abundant silty laminations; occasional dark gray claystone bands, very silty in middle										
	418.05	418.23	18	17		CLAYSTONE: very dark brown, somewhat carbonaceous										
	418.23		6			SANDSTONE: fine grain, light to medium gray, abundant silty laminations										
						BOX 143										

B.C. N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
19	420.95		97			SANDSTONE: medium grain, light to medium gray, abundant coaly stringers at top, abundant silty laminations, occasional coarse grained bands									some what broken
		423.61	169			SANDSTONE: as above, claystone rip-up clasts towards bottom, sequence fining upward					1387' / 422.8m				
13	423.61	423.83	22			SILTSTONE: medium to dark gray, occasional sandy laminations									
						BOX 145									
	423.83	424.97	114			CLAYSTONE: medium brown to dark brown, silty at top, carbonaceous towards bottom, minor calcite filled fractures towards bottom									
	424.97	425.58	61			CLAYSTONE: as above					1397' / 425.8m				some what broken
20	425.58	425.91	33			SANDSTONE: fine grain, medium gray, abundant silty laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
	430.36		63			SANDSTONE: very fine grain, occasional claystone bands, minor calcite filled fractures									top broken
										1417' / 431.9m					
12	432.50		151			SANDSTONE: as above, occasional carbonaceous bands, calcite filled fractures towards bottom									broken towards bottom
						BOX 148									
	432.50	433.14	64			SILTSTONE: medium to dark gray, calcite fractures occasional carbonaceous bands									broken
	433.14	433.98	84			CLAYSTONE: black to medium gray brown; very carbonaceous to coaly at top, silty towards bottom									broken
										1427' / 434.9m					
3	433.98		134			SANDSTONE: fine grain to very fine grain, abundant silty laminations and bands light and medium gray banded									solid
						BOX 149									
5	435.86		54			SANDSTONE: very fine grain, medium gray									solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	435.86		160			CLAYSTONE:	medium gray to medium gray brown,								somewhat broken
							very silty at top, somewhat carbon-								
							aceous towards bottom								
										1437' / 437.9m					
			86			CLAYSTONE:	as above								
							BOX 150								
		439.51	119			CLAYSTONE:	carbonaceous to coaly, dark gray brown								broken
							to black, occasional C4 bands								
	439.51		85			SILTSTONE:	medium to dark gray								broken
										1447' / 447.0m					
	440.41	441.07	71			CLAYSTONE:	medium gray to medium gray brown,								broken
							silty at top, carbonaceous towards								
							bottom								
							BOX 151								
	441.07		192			CLAYSTONE & C4:	(claystone carbonaceous) abundant								very broken
							coaly bands and stringers								
										1457' / 444.0m					
			77			CLAYSTONE:	carbonaceous, dark brown to black								somewhat broken
							occasional coal bands and stringers								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
5			208												broken
			50												
		446.70	36												broken
	446.70		62												somewhat broken
		447.83	51												
	447.83	448.88	105												
19	448.88		71												
10	449.59	450.33	74												solid

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
11	453.47		242			SANDSTONE:	coarse grain to very coarse grain,								somehow broken at bottom
							light to medium gray, occasional								
							coaly bands and rootlets throughout								
							silty laminations, minor medium								
							grain band in middle								
										1497' / 456.3m					
15			38			SANDSTONE:	medium grain, medium gray, silty								somehow broken
							laminations								
							BOX 156								
		457.43	116			SANDSTONE:	coarse grain to granule, medium								
							gray, abundant coaly bands and								
							rootlets, abundant claystone rip-								
							up clasts								
17	457.43		24			SANDSTONE:	medium grain, abundant claystone								somehow broken
							bands and stringers								
19			138			SANDSTONE:	medium to coarse grain, light to								
							medium gray, silty laminations,								
							sequence fining upward								
										1507' / 459.3m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			31												
						SANDSTONE:	coarse grain,	light gray,	salt and						
							pepper,	minor coaly	rootlets in						
							middle								
							BOX 157								
13		461.75	239			SANDSTONE:	coarse grain,	light gray,	salt and						
							pepper,	occasional carbonaceous							
							to coaly stringers,	minor silty							
							laminations,	very coarse grain							
							towards bottom,	sequence fining							
							upward								
	461.75	461.94	19			CONGLOMERAGE:	chert and quartz pebbles,								somewhat broken
							sequence fining upward								
	461.94		14			CLAYSTONE:	very dark brown,	somewhat carbon-							broken
							aceous								
											1517' / 462.4m				
							BOX 158								
15	462.30	463.60	152			SILTSTONE:	medium to dark gray,	carbonaceous							somewhat broken
							claystone bands towards bottom,	minor							at bottom
							sandy bands in middle								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC./m		FRACTURE TYPE AND CHARACTERISTICS			
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.				
	467.60	464.43	83															
						CLAYSTONE:	silty at top, very carbonaceous											broken
							to coaly towards bottom, coaly											
							stringers and C4 bands towards											
							bottom											
	464.43	464.52	9			COAL C2/C3:												pulverized
	464.52	464.58	6			C4:												very broken
	464.58	464.68	10			CLAYSTONE:	silty, medium gray brown											somewhat broken
13	464.68		30			SANDSTONE:	very fine grain to fine grain,											
							medium gray, very silty at top,											
							occasional claystone bands											
							BOX 159											
			12			SANDSTONE:	as above											
12			208			SANDSTONE:	fine to medium grain, light to											
							medium gray, abundant silty laminations											
							occasional dark gray claystone bands,											
							minor claystone rip-up clasts											
							throughout											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
13		468.00	82			SANDSTONE:	fine grain to very fine grain,								
							medium gray, abundant silty bands								
							BOX 160								
	468.00		30			SANDSTONE:	fine grain, medium gray								somewhat broken
										1537'/468.4m					
		469.09	79			SANDSTONE:	fine to medium grain, light to								
							medium gray, abundant silty laminations								
							and claystone bands								
	469.09	469.82	73			CLAYSTONE:	very silty at top, silty throughout								
							medium gray brown to dark gray								
							brown								
5	469.82		101			SANDSTONE:	fine grain to very fine grain, light								
							to medium gray, abundant silty								
							laminations and claystone bands								
							BOX 161								
		471.40	57			SANDSTONE:	as above								
										1547'/471.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
17	471.40	471.78	38			SANDSTONE:	fine grain to very fine grain,							somehow broken	
							light to medium gray								
	471.78	471.99	21			CLAYSTONE:	silty, dark gray brown							broken	
15	471.99	472.94	95			SANDSTONE:	fine grain to very fine grain,							broken	
							medium gray, abundant silty								
							laminations and claystone bands								
13	472.94	473.64	70			CLAYSTONE:	silty, medium to dark gray brown							broken	
							BOX 162								
12	473.64	473.75	11			SANDSTONE:	very fine grain, medium gray							broken	
			43			CLAYSTONE:	silty, medium to dark gray brown							very broken	
			32			ROCK LOSS:									
										1557' / 474.6m					
		475.00	50			CLAYSTONE:	as above, carbonaceous towards							very broken	
							bottom								
23	475.00	475.17	17			SANDSTONE:	very fine grain, medium gray, minor							broken	
							rootlets and plant fragments								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
21	475.17	476.41	124												
						CLAYSTONE:	silty to very silty, minor sandstone lenses								
	476.41	476.77	36			SILTSTONE:	medium gray, abundant light gray sandy bands, occasional dark gray claystone bands								
							BOX 163								
21	476.77	477.55	78			SANDSTONE & SILTSTONE:	(fine grain sandstone) interbedded, light and dark gray bands banded, bioturbation towards bottom								somewhat broken
	477.55	477.72	17			CLAYSTONE:	carbonaceous at top, silty towards bottom, very dark black brown to medium black brown								broken
30	477.72		110			SILTSTONE:	medium to dark gray, sandy at top clay rich in middle								somewhat broken
		479.22	40			ROCK LOSS:									
	479.22		53			CLAYSTONE:	medium brown to dark gray brown to black, silty at top, carbonaceous at bottom, coal fragments in bottom 15cm								broken to pulverized

