K-FORDING RIVER 81(3)A
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

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APPENDIX 2

DRILLHOLE LOGS

i) Lithological Logs

DDH 1750

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: July 29, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	55				16.7						Overburden
55	5 3					SLT	M grey	VF gr	84°	Blocky, mod. well indurated	Muddy silt with wavy VF gr SST laminae, minor calcite veinlets.
56.5	67					SLT/SST 50/50	M grey rust red	range VF gr/VFgr	83°	Mostly blocky, some brecciated	SST laminae and ripple laminae in SLT, red oxide staining and oxidation with minor unaffected zones, finer grained portions are brecciated, minor calcite veinlets.
67	96					MST/SLT 80/20	M grey creamy white, rust red	VF gr	82°	Fragmented to Brecciated	Slightly sandy in places, oxidation in 80% of core, approx. 13' of core missing, minor calcite along bedding planes.
96	98					SST	Lt grey	VF gr	74°	Blocky, mod. well indurated	Only slightly silty, minor oxidation, thinly bedded, calcerous surfaces subparallel to bedding planes.
98	102					SLT	M grey	F gr	82°	Brecciated to blocky at bottom.	Minor SST laminae, oxide staining on joint surfaces which are at 19° wrt c.a.
102	108					SST	Lt - M grey	VF gr	83°	Large blocky, well indurated	Best described as silty SST, massively bedded. with fine laminations, oxidation is rust red and present mostly around calcite healed fractures, joints at 24° wrt c.a.
108	113					SLT	M grey	F → VF gr	79°	Fragmented	Core breaks along bedding planes, thinly bedded, fines downwards, bituminous lenticles at base, phosphate ? and oxides

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
											along joints surfaces which are at 17° wrt. c.a.
113	116					sst./slt.	m-lt.gr.	f & m gr.	80°	small angular blocky	Interbedded sst/slt, wavy bedding, carbonaceous material along bedding planes, worm burrows, oxide staining, overall fining downwards, calcite joints at 6° wrt. c.a.
116	123					slt.	m-dk.gr.	f gr.	88°	brecciated	Marble sized material, .5' coal and muddy coal at base, minor oxide staining, 2.5' core missing.
123	134.5					slt.	m.gr.	c.gr.	83°	blocky to fragmented	Only slightly sandy, bituminous in upper 1' massive bedding with fine sst. laminae, fe stained joints at 23° wrt. c.a. 1' of finer grained slt. near base, 2.5' extra core.
134.5	137.0					sst./slt. 90/10	lt.gy.	f.-cgr.	73°	intact, well indurated	Bedding contorted to wavy; minor carbonaceous materials, polished surfaces, calcite veins at various orientations.
137.0	150.0					slt.	m.gy.	var. v.fgr. m.gr.	-	small blocky→ fragmented	Massive bedding with minor sandy patches. 0.5' oxidized material at top. (creamy white) coaly interval ≈ 1.0' thick below oxidized part. Polished surfaces, fe stained joint surfaces @ 13° w.r.t. c.a. Sandy @ base.
150.0	155.0					slt./sst. 70/30	m.gy.	m→fgr.	84°	large blocky well indurated	Interbedded slt./sst., minor carbonaceous material, large fe stained joints @ 11° wrt. c.a. 2.0 extra core.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
155	157					slt.	m→d.gy.	v.fgr.	-	blocky	Slightly bituminous, very muddy, fe stained borderline slt./mst.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
157	161	153.2'	157.1'	46.7m	47.9m	COAL	Black	—	—	Blocky, well indurated for coal	1 - 4" MST parting 3" from top, minor polished surfaces at upper contact, calcite along bedding planes. 3.9' — 1.2m coal Seam 14
161	174.5					SST/SLT	Lt grey	FtoM gr	85°	Intact to blocky, well indurated	SLT 1' goes quickly into SST with minor SLT beds, laminated, ripple laminated small scale beds, contorted and wavy bedding carbonaceous specks along bedding planes, numerous calcite veins at various orientations.
174.5	182					SLT	M grey	M gr	—	Large blocky, mod. well indurated	Best described as sandy SLT, bituminous lenticles, massive bedding, polished surfaces near base.
182	184.5					SST	Lt - M grey	VF gr	?	Intact, very well indurated	Fine laminae in a massive appearing bedding minor carbonaceous material, calcareous joints at 8°, polished surfaces.
184.5	191					SST/SLT 90/10	M grey	FtoM gr	65° variable	Blocky, well indurated	Interbedded SST/SLT, numerous bituminous lenticles throughout, polished surfaces along bedding planes, minor calcite veins.
191	202					SLT	M grey	C&F gr	65°-83° variable	Blocky to fragment Mod. well indurated	Few fine SST laminae and patches, numerous bituminous lenticles, Fe stained joints at 13°, main difference between this and next lower interval is presence of carbonaceous material.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
202	215.5					SLT	M grey	CtoF gr	86°	Large blocky	Similar to last interval, laminations more prevalent, carbonaceous material absent, numerous Fe stained joints at 72°, wet. ca.
215.5	230					SLT/SST 60/40	M to Lt grey	MtoF gr	82°	Intact, Well indurated	SLT with numerous SST laminae and thin beds, SST increases downwards, worm burrows, minor carbonaceous material along bedding planes.
230	231	238.2'	241.1'	72.6m	73.5m	COAL	Black	—	—	Intact	Sharp upper contact and gradational lower contact, hard bright and dull coal (vitrain and durain). 2.9' — .9m coal part of 14 Lower.
231	241					MST	Dk grey to black	—	86°	Intact to fragmented at base	Very coaly but not bituminous, glossy black and dense for approx. 1', laminated light and dark MST in lower portion, becomes bituminous near base, breaks concoidally, minor calcite veins.
241	243					SST	Lt grey	VF gr	—	rextallized, intact	SLT breccia in calcite healed SST, possible minor fault zone, some distorted bituminous pods, minor polished surfaces.
243	244					COAL	Black	—	—	Intact	Hard, bright and dull coal, minor calcite veinlets subparallel to bedding direction.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
244	247					SLT	M grey	F gr	85°	Blocky	Faintly laminated, becomes slightly sandy at base, common carbonaceous fragments, polished surfaces minor, breaks conoidally.
247	255.5					SLT/SST 70/30	M to Lt grey	MtoF gr	85°	Intact, well indurated	Interbedded SLT/SST, sandier at top 1' and bottom 1', sparse carbonaceous material, minor calcite veins and polished surfaces
255.5	260.5					MST	Dk grey	—	—	Small blocky	Carbonaceous MST with coaly bands, breaks concoidally, slightly silty in some places numerous polished surfaces with minor calcareous veins.
260.5	266	257.9	261.2	78.6 m	79.6 m	COAL	Black	—	—	Fragmented to brecciated, soft	Mostly dull coal with bright bands, 1 thin 3" MST parting 1' from top, woody appearing coal (durain) dirties bands, polished surfaces. 3.3' —1.0m coal part of 14 Lower
266	278					MST/COAL	Dk grey black	—	—	Fragmented	Initial 1' is silty and has calcite partially filling vugs, rest of interval is MST with numerous bituminous lenses and coaly bands, unit is very coaly from 274' - 277', MST has faint laminae, polished surfaces are glossy.
278	280					COAL	Black	—	—	Fragmented	Actually 1" less than 2 ft, 1 MST parting 2" thick, mostly dull coal with bright bands.

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280	318.5					SST/SLT 50/50	M to Lt grey	FtoM gr	78°-90° variable Av. 82.°	Intact, well indurated	Interlaminated SST/SLT, wavy and planar laminae, contorted and small scale x beds in places, 1 small block of finely crystalline pyrite. Carbonaceous material along bedding planes becomes siltier near base, polished surfaces are minor, joints at 14° wrt. CA are not common.
318.5	324					SLT	M grey	M gr	76°	Intact, well indurated	Massively bedded except for sparse sandy laminated, carbonaceous material throughout, bituminous lenticles at base, minor polished surfaces.
324	345.5	322.2	335.6	98.2	102.3	COAL	Black	—	—	Blocky to brecciated	Hard and soft bright and dull coal, MST partings at 324.5-324.6' and 334-335.5' and 339-340', MST is bituminous, coal is overall good quality (appearance wise), good vitrain. 13.5' —4.1m coal-part of 13 seam.
345.5	349					SST	Lt grey	F-VF gr	84°	Intact, well indurated	Wavy to undulatory bedding, carbonaceous material along bedding planes, calcite healed fractures near base of unit, sharp upper and lower contacts.
349	351	340.2	341.9	103.7	104.2	COAL/MST	Black	—	—	Fragmented	Coal and coaly MST, mostly dull coal with fine bright bands. 1.6' -0.5m coal part of seam 13.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
351	363.5					SLT	M grey	VF-M gr	78°	Small blocky, Mod. well indurated	Coarsens downwards eventually becoming slightly sandy at base, minor faint laminae, fine bituminous lenticles, glossy polished surfaces, few calcite veinlets.
363.5	403					SST/SLT 40/60	M to Lt grey	F to M gr	72°-78° variable	Intact to large blocky, well indurated	Interbedded SST/SLT, upper portions have wavy and contorted bedding. From 381' - 399' bedding is thin to laminar, minor bituminous lenticles, calcareous surfaces along bedding planes, glossy polished surfaces present, calcareous joints at 17°. wrt. ca
403	413.5					SLT/MST 10/90	Dk grey	VF gr	81°	Small blocky, mod well indurated	Faintly laminated in places, MST is silty in places, very carbonaceous to bituminous throughout, glossy polished surfaces, core breaks concoidally, calcite veinlets.
413.5	423	410.8	414.4	125.2	126.3	COAL	Black	—	—	Fragmented to brecciated	Bright and dull coal, slightly cleated in places. 1 silty MST parting at 418' - 419' upper contact gradational, lower contact is sharp. 3' - 0.9m coal & 3' - 0.9m coal part of 12 seam
		416.3	419.3	126.9	127.8						
423	451.5					SLT/SST 50/50	Lt to M grey	F gr	72°-80°	Intact to large blocky, well indurated.	Upper 2' is very silty, rest of interval is interlaminated SLT/SST, bedding is variable, wavy, undulatory and laminar types polished surfaces along bedding planes, joints at 13°, bituminous lenticles in places.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
451.5	459.5					SLT	M grey	CtoVF gr	84°	Blocky	Slightly sandy at top and muddy at base, fining downwards, increasing carbonaceous material downwards, glossy polished surfaces, joint at 17° w.r.t. c.a.
459.5	467	456.0	463.6	139.0	141.3	COAL	Black	—	—	Blocky to brecciated	Bright and dull coal, cleated and somewhat sheared in places, gradational top, fairly sharp contact at base. 7.5' — 2.3m coal part of seam 12.
467	471.5					SLT	M grey	MtoF gr	78°	Intact, mod. well indurated	Minor SST laminae, carbonaceous material common at top decreasing downwards, minor polished surfaces and fine calcite veinlets
471.5	477					SLT/SST 70/30	Lt to M grey	MtoF gr	81°	Intact, well indurated	SLT with SST laminae, carbonaceous smear along bedding planes, bedding is wavy, core breaks along bedding, polished surfaces minor.
477	479					COAL/MST 50/50	Black	—	?	Fragmented	Carbonaceous to bituminous MST, dull coal with bright bands, core breaks concoidally, polished surface at lower contact.
479	483					SLT/SST	M to Lt grey	F gr	— n.a.		Bedding is undulatory to contorted, lithologies include some MST, bituminous lenticles, polished surfaces, minor fine calcite veinlets.

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483	499.5					SST/SLT 50/50	M & Lt grey	F&M gr	84°-88°	Intact, well indurated	Interbedded SST/SLT, beds are up to 3' thick, withing bedding are fine planar and wavy laminae, main difference between this interval and previous one is presence of regular bedding forms, SLT beds become more prevalent towards base, core breaks along bedding, minor polished surfaces and calcite along bedding.
499.5	505					MST	Black	—	—	Small blocky to fragmented	Breaks concoidally, has coaly appearance but not bituminous except at base, some polished surfaces, pyrite along bedding (pod like).
505	554.5					SST/SLT 60/40	M to Lt grey	FtoM gr	77°-84°	Large blocky to intact, well indurated	Interbedded and interlaminated SST/SLT, mostly laminar bedding with small scale low angle × beds and some wavy, carbonaceous material present but not common, calcareous joints at 11° - 22° are concentrated near middle of unit, some joint sets.
554.5	567					SLT	M grey	FtoM gr	85°	Intact, well indurated	Best described as sandy siltstone, fines downwards into MST at base, calcareous joints at 13°, carbonaceous material sparse except at base.
567	572					MST	Dk grey black	—	—	Small blocky	Slightly silty at top, fairly homogeneous MST, breaks concoidally, some grassy leaf impressions, faintly laminated, sharp lower contact with coal.

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572	581	568.9	580.4	173.4	176.9	COAL	Black	—	—	Small blocky	Bright cleated and dull sheared coal, MST partings thin, approx. 1" thick (at least 2), gradational lower boundary into inter-bedded coal/MST unit, also muddy coal bands. 11.5' — 3.5m 11u
581	585					COAL/MST	Black	—	—	Small blocky, mod. indurated	MST is bituminous, coal has cleated and bright bands within dull sheared coal which is dominant, numerous glossy polished surfaces.
585	603					SLT	M grey	F-VF gr	82°	Blocky, very well indurated for silt	Dominantly VFgr SLT, slightly muddy at top, sandy laminated for 2' at 595', laminated at base with MST, fine bituminous lent-icles near lower contact with coal, minor polished surfaces.
603	626.5	600.4	612.9	183.0	186.8	COAL	Black	—	—	Blocky to fragmented	Mostly dull with bright bands, MST partings at 612' (4 inches), 616' (silty 4 inches), 617' (1' 2"), 621, (4 inches), 623' (2 inches) 624' (1 inch), minor calcite and 1 pod of pyrite near base of interval. 12.5' — 3.8m and 3.6' — 1.1m seam 11
		616.1	619.8	187.8	188.4						
626.5	646					SLT	M grey	FtoM gr	82°	Blocky, mod. well indurated	Interval is F gr at both ends and coarser in middle, sandy laminae near middle also, bituminous near upper and lower con-tacts glossy polished surfaces, calcareous joints at 8° (rare).

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646	648					MST	Dk grey	--	—	Large round chips	Very bituminous MST, numerous polished surfaces, breaks along coaly bands, plant impressions.
648	651					COAL	Black	--	--	Fragmented	Numerous MST bands in this thin seam, coal is muddy, mostly dull, small fraction of bright coal.
651	667.5					SLT	M grey	F-VF gr	87°	Blocky, mod. to well indurated	Coarsens downwards, some sandy laminae throughout, abundant carbonaceous material along bedding planes, grassy impressions, bedding massive except for laminae, numerous polished surfaces (glossy), minor calcite veinlets.
667.5	676					SST/SLT 80/20	Lt to M grey	FtoM gr	78°-84° variable	Intact, very well indurated	Lithology is dominantly VF gr SST to C gr SLT, interlaminated SST/SLT, minor soft rock deformation, carbonaceous material present as a smear along bedding planes, one calcareous joint at 18° w.r.t. ca.
676	699					SLT	M grey	MtoC gr	87° consistent	Intact, well to very well ~~indurated~~	Thinly to laminae bedding (some wavy), best described as sandy siltstone, fines near base, dominantly C gr SLT, carbonaceous material present as a smear along bedding planes, minor calcareous surfaces along bedding, distinct lack of structure.
699	701					MST	Dk grey black	—	—	Fragmented	Very coaly MST, numerous bituminous lenses, core breaks concoidally, glossy polished surfaces, density very low for MST almost coal.

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701	727	697.5	723.8	212.6	220.6	COAL	Black	—	—	Blocky to brecciated	Mostly dull coal with bright bands, 1 thin MST band (approx. 2" thick) at 711', phosphate bands at 702.5' (3" thick) and 725' (4" thick), coal is slightly sheared in places. 26.2'-- 8m Part of seam 9.
727	737.5					SLT	M grey	FtoM gr	?	Fragmented to blocky	Massive bedding with some wispy sandy pods, few bituminous lenticles at top, carbonaceous material and smears throughout, numerous polished surfaces, and calcite healed fractures, coarsening downwards, NOTE: entering fault zone.
737.5	749.5					MST/COAL	Dk grey black	—	?	Brecciated to highly sheared	Approx. 4.5' core missing, both coal and MST are badly sheared and blend together, core is muddy, the core missing is probably coal (interpret.)
749.5	757	746.4	753.9	227.5	229.8	COAL	Black	—	?	Brecciated soft	Coal is muddy, mostly dull and highly sheared, 2.5' core missing 7.5' — 2.3m part of seam 9.
757	758					SLT	Dk grey	F gr	—	Sheared, fragmented	Calcareous sheared surfaces, slickensides original structures destroyed, carbonaceous.
758	762					COAL	Black	—	—	Sheared, muddy	3' core missing, coal is dull and muddy intermixed with sheared but glossy MST.

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762	763.5					SLT	M grey	M gr ?	—	Small angular, blocky	Badly structured, calcite fractures, numerous glossy polished surfaces.
763.5	766					MST/COAL	Black	—	—	Sheared, soft	Coal is very muddy, both lithologies are highly structured.
766	774					SLT	MtoDk gr	F gr	—	Fragmented	Some plant impressions, most of the core is structured, numerous bituminous bands, calcareous surfaces and calcite healed fractures, slickensides.
774	811					SLT	M grey	CtoM gr	—	Angular, blocky	Core is dominantly SLT with thin badly structured bands of MST and coal, coaly bands at 792' (3"), 793.5' (5"), 799' (1 ft). 2.5' core missing between 787' and 796', unaccountable fractures and slickensides as well as associated calcite, towards base jointing is apparent at 36°. 2.3' — 7m coal.
		793.96	797	242.0	242.7						
811	818.5	805.4	814.3	245.5	248.2	COAL	Black	—	—	Blocky to brecciated	Coal is dull with bright bands, sheared in places, phosphate band 5 inches thick at 816', muddy at base, apparently leaving major part of fault zone. 8.9' — 2.7m coal.
818.5	826.5					SLT	M grey	VF gr	57° poor reading	Small angular blocky	Muddy at top, coarsens downwards, numerous bituminous lenticles, carbonaceous plant impressions; glossy polished surfaces with minor calcite, slightly sheared in places.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 7, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
826.5	836					SST	Lt grey	VF to F gr	54°-58° variable	Very well indurated	Slightly silty at top, coarser (F gr that is) laminae make up only bedding, numerous calcite healed fractures and joints which are at 33°, sharp lower contact.
836	838					SLT	M grey	F gr	60°	Angular, blocky, mod. well indurated	Faintly laminated, carbonaceous specks present, polished surfaces with calcite subparallel to bedding planes.
838	839.5					COAL	Black	—	—	Brecciated, soft	Mostly dull coal, sharp upper and lower contacts.
839.5	841.5					SST/SLT 50/50	M to Lt grey	F&M gr	67°	Blocky, well indurated	Pod like SST beds in SLT, very fine bituminous lenticles, minor displacement of bedding, calcareous joints at 22°, polished surfaces.
841.5	849					SLT	M grey	M gr	70° good reading	Blocky, Mod. well indurated	SLT with sparse sandy laminae and fraction bituminous lenses scattered, surprisingly no jointing and minor calcite veins, many glossy polished surfaces.
849	855					SLT/SST 70/30	M grey	MtoVF gr	64° variable	Intact, well indurated	SLT with wavy to undulatory beds and laminae of SST, minor carbonaceous material along bedding, calcareous joints almost parallel to core axis, polished surfaces along bedding planes.
855	858					SLT	M to Dk grey	F gr	—	Blocky, Mod. well indurated	Bituminous lenticles, nondescript, massive bedding with very faint laminae at top, polished surfaces along bedding, calcareous,

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 7, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
858	881					SLT/SST 80/20	M grey	F gr	64°	Blocky, well indurated	Interbedded SLT/SST, some laminar bedding, where SST is present there is wavy and laminar bedding, bituminous lenticles, polished surfaces near bituminous areas, calcareous joints at 17° wrt. c.a.
881	887					SLT	M grey black	VF-F gr	60°	Small to blocky to brecciated	Wispy laminae, bituminous lenticles and interval 1' thick at 882', abundant carbonaceous plant impressions, polished surfaces along bedding, bituminous area is brecciated, minor calcareous surfaces.
887	895					SLT/SST 60/40	M to Lt grey	MtoF gr	55°	Intact to blocky, well indurated	SLT with SST laminations, laminae are planar and wavy, carbonaceous smear along bedding planes, SST decreases downwards, polished surfaces and calcite along bedding. Minor calcite otherwise.
895	902					SLT/MST/COAL	Dk grey to black	VF gr	66°	Small blocky to brecciated	Fining down sequence into coal, SLT is muddy, MST is silty, bituminous MST, carbonaceous material increases downwards, MST is sheared, coal is brecciated (approx. 1') sharp lower contact, minor calcite.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
902	926					SST	Lt grey	FtoVF gr	65°	Intact to blocky very well indurated	Carbonaceous at top 1', laminated, ripple laminated, minor wavy bedding, calcite joints at 17°, numerous calcite healed fractures, slickensides near base, contorted beds at bottom, sharp lower contact (erosional).
926	943					SLT/SST 90/10	M grey	—	—		Bedding is variable including wavy, contorted, minor laminar, evidence of soft rock deformation, bituminous lenticles, many fine calcite veinlets, minor polished surfaces, sandier at lower 1 ft, sharp lower contact.
943	944.5	939.3	940.9	286.3	286.8	COAL	Black	—	—	Soft, sheared	Soft, muddy sheared dull coal. 1.6' — .5m COAL
944.5	956.5					SLT/SST 95/5	M grey	MtoF gr	50° variable	Blocky, well indurated	Dark carbonaceous SLT with SST laminae, numerous polished surfaces (glossy) and slickensides (calcareous), minor bituminous lenticles.
956.6	964					SST/SLT 60/40	Lt grey	F&C gr	70°	Intact, well indurated	Borderline SLT/SST lithology, interlaminated, core breaks along bedding which sometimes has polished surfaces, calcareous joints at 24°, brecciated but calcite healed zone 1' from base.
964	978.5					SLT/MST 90/10	M grey	VFtoM gr	63°	Intact, well indurated	Interlaminated MST/SLT, some sandy intervals, contorted beds at top, some collapse structures, polished surfaces, calcareous joints 26° wrt core

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
978.5	987.5					SLT	Dk grey	VF gr	70°	Blocky to large wafers	Slightly muddy in places where laminated, carbonaceous material throughout, golssy, polished surfaces subparallel to bedding, calcareous joints at 26° w.r.t. c.a.
987.5	995.5					SLT/SST 80/20	M to Lt grey	MtoVF gr			Dominantly C gr SLT with SST laminae, thinly bedded to laminar, minor contorted beds at top, minor carbonaceous material along bedding, sandier at top, calcareous joints at 26° w.r.t. c.a.
995.5	997.5					SLT	M grey brown	FtoVF gr	60°	Small blocky to large wafers	Interlaminated SLT (carbonaceous VS noncarbonaceous muddy) slightly bituminous, sheared at 997', very minor calcite.
997.5	1002					SST	Lt grey	FtoVF gr	—	Intact, well indurated	Relics of laminar bedding, fracture zone (minor), numerous calcite healed fractures contorted bituminous lense, sharp upper and lower contacts, some vuggy porosity.
1002	1008					SLT	M grey	M-C gr	58°	Intact, very well indurated	Massively bedded, becomes more carbonaceous downwards, very fine sandy laminae at base, sharp lower contact, calcite along bedding planes, minor glossy polished surfaces.
1008	1014					SST	Lt grey	VFtoF gr	10°-90° variable (highly)	Small blocky	Wavy, contorted and laminar bedding, some very high angle bedding at base, numerous bituminous lenses along bedding where core breaks, calcite veins & 1 slickensided joint at 25° w.r.t. c.a.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 11, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1014	1052					SLT/SST 90/10	M grey	MtoF gr	31° where laminar	Intact to blocky, well indurated	SLT with SST fraction, SST is laminar, wispy and contorted, appears to be turbiditic deposit, some rock deformation also evident, some high angle bedding, widely scattered bituminous lenticles, calcareous joints and veins, slickensides also present, jointing subparallel to bedding reading.
1052	1078	1049.2	1060.4	319.8	323.2	COAL	Black	—	—	Brecciated soft	Mostly dull soft coal, numerous partings, 1066'-1068', 1070'-1070.5', 1071'-1073'; partings are bituminous MST, approx 3.5' core missing. 3.9' — 1.2m coal part of seam 5
		1071.5	1075.5	326.6	327.8						11.2' — 3.4m coal part of seam 5
1078	1090.5					SLT/SST	M grey	VF gr	57°	Blocky, well indurated	SLT with sandy intervals, laminar to wispy bedding, evidence of small displacement, soft rock deformation, bituminous lenticles calcareous veinlets and some vuggy porosity at 1088'.
1090.5	1095					COAL	Black	—	—	Bracciated soft	Soft dull coal, 1"-2" MST parting approx. 2' core missing, sharp lower contact.
1095	1126					SLT	M grey	MtoVF gr	66°	Blocky, well indurated	Massively bedded SLT, carbonaceous material throughout, sandy at base, some very faint laminae present, polished surfaces, calcareous fractures with some vuggy porosity.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 11, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1126	1136.5					SST	M to Lt grey	VF gr	58° variable	Intact, very well indurated	Best described as silty SST, wavy to laminar bedding, carbonaceous at base, minor calcite, joint at 20° w.r.t. c.a.
1136.5	1154	1133.5	1152.6	345.5	351.3	COAL	Black	—	—	Fragmented to brecciated	Dull coal with bright bands, woody appearing in places, some cleated coal, MST partings at 1138' (2"), 1147' (2"), muddy at base, 2 - 2.5' core missing. 19.0' — 5.8m coal.
1154	1157					MST	Black	—	65°	Blocky, mod. well indurated	Very bituminous MST, faintly laminated, minor calcite, many glossy polished surfaces.
1157	1165					SLT	M grey	M-C gr	70°	Intact, very well indurated	Massively bedded, bituminous lenticles are only laminations, carbonaceous fragments throughout, fining downwards, very intact.
1165	1199					SLT	M to Dk grey	F-VF gr	62°	Blocky to fragmented in places mod. well indurated	Faint lamainations in a massive bedded SLT, carbonaceous material throughout, bituminous lenticles isolated, calcareous surfaces along bedding (some ½" thick), slickensides.
1199	1243					SLT/SST 90/10	M to lt grey	Vf > f gr.	68°	Blocky, well indurated	Various SLT grain sizes with laminae and pods of SST, some contorted beds, carbonaceous impressions more prevalent in finer grained intervals, polished surfaces in fine grained areas also, minor calcite, SST beds less than 1' thick; very long interval.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1243	1246.5					SST	Lt grey	F-VF gr	?	Intact, very well indurated	Bedding is contorted (turbiditic), F gr SST with VF gr SST fraction, very little carbonaceous material, calcite veins and surfaces, slightly laminar bedding at base.
1246.5	1252					SLT	M to Dk grey	F gr	82° poor reading	Large blocky, well indurated	Dominantly massive bedding, carbonaceous material and impressions (grassy) define bedding planes, slightly sandy at base, minor glossy polished surfaces.
1252	1262.5					SLT/SST 70/30	M grey	M&F gr	71°-74°	Large blocky, well indurated	SLT with wavy to unduratory laminae of SST, carbonaceous smear along bedding planes, core breaks along bedding planes, minor calcite.
1262.5	1287					SLT	M grey	M gr	—	Large blocky, very well indurated	Except for 2 thin SST pods unit is consistant M gr SLT, minor carbonaceous fragments, minor polished surfaces, fines quickly at base into coal, minor fine bituminous lenticles, isolated grassy and leaf plant impressions, minor calcite and polished surfaces.
1287	1311.5	1281.96	1293	390.6	394.1	COAL	Black	—	—	Fragmented to brecciated	Woody appearing coal, mostly dull coal with some bright coal, MST partings at 1292' (3"), 1295' (1 ft), 1301' (4"), polished surfaces at upper and lower contacts, 3.5' core missing, one large MST parting from 1305'-1306.5'.
		1294.6	1302.5	394.6	397.0						
		1304.8	1309.7	397.7	399.2						11.5' — 3.5m & 7.9' — 2.4m & 4.9' — 1.5m Coal, R-13

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1311.5	1337					SLT	M grey	FtoM gr	60° questionable	Mostly intact except for bituminous parts, well indurated	F to M gr SLT with C gr fraction at top, bituminous intervals 1319' (3"), and 1320' (1 ft), otherwise only slightly carbonaceous, sparse laminations in dominant massive bedding, polished surfaces at top, 1314' and bituminous areas, minor calcareous surfaces.
1337	1350.5					SLT/SST 70/30	M to Lt grey	MtoF gr	72°	Large blocky, well indurated	SLT with variable SST laminae, contorted wavy, undulatory and planar laminar, the latter increasing downwards, soft rock deformation (collapse structures), little carbonaceous material calcareous joint at 30°.
1350.5	1352.5					SLT/MST 50/50	Dk grey	VF gr	81°	Small blocky	Faintly laminar, fines downwards into coal, gradational lower contact, very little carbonaceous material until base, glossy polished surfaces.
1352.5	1356.5	1350.1	1353.3	411.5	412.5	COAL					Muddy soft dull coal, 2 - 3 inches MST parting at top and bottom, MST has polished surfaces, gradational lower contact. 3.3' — 1.0m COAL.
1356.5	1363.5					SLT	M to Dk grey	F gr	—	Small blocky, mod. well indurated	Best described at carbonaceous SLT, numerous fine bituminous lenticles, no well defined bedding angle, calcareous slickensides and polished surfaces, slightly coarser downwards.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1363.5	1365					COAL	Black	—	—	Fragmented	Mostly dull coal with bright bands.
1365	1369.5					SLT	M grey	MtoF gr	67°	Blocky to fragmented at base	Carbonaceous SLT, numerous fine bituminous lenticles as well, faint laminae, lower 1 ft has glossy polishes surfaces and a sharp contact.
1369.5	1374.5					SST	Lt grey	FtoVF gr	—	Angular blocky, well indurated	Contorted and undulatory bedding, appears to be bioturbated to some extent, laminar at base, virtually non carbonaceous, calcareous joints at 6° (large), vuggy porosity along calcite veins, sharp upper but gradational lower contact.
1374.5	1388					SLT/SST 70/30	M grey	M&F gr	top 52° bottom 85°	Intact, well indurated	Interlaminated SLT/SST, bedding angle becomes larger wrt c.a. at base, bottom of interval is more carbonaceous, minor bituminous lenticles, laminations are wavy to podlike and planar, calcareous veins and joints at 10° wrt c.a.
1388	1402					SLT	M to Dk grey	F gr	80°-87°	Blocky to fragmented in places	Carbonaceous SLT, bituminous intervals at 1390' (2"), 1396' (5"), 1400' (1 ft), faintly laminated, bituminous intervals have numerous polished surfaces, calcite veins along bedding planes, pyrite pod approx. 4" thick at 1398'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1402	1415.5					SLT	M grey	M gr	87°	Intact, well indurated	Slightly coarser than previous interval, less carbonaceous also, sandy at base, laminated, small slickensides along joints which are at 5° wrt c.a. (also calcareous).
1415.5	1422					SLT/SST 80/20	M grey	M&VF gr	?	Intact, very well indurated	Best described as sandy SLT, thinly bedded (dumped in appearance), vitually non carbonaceous, apparent joints at 47° wrt c.a., calcite veins also (common), sandier at base.
1422	1429					SST/SLT 95/5	Lt grey	F&VF gr	80°	Blocky, very well indurated	Borderline F gr - VF gr SST, slightly silty, undulatory to wavy laminar bedding, carbonaceous material present as a smear along bedding planes, numerous calcite veins in a short interval.
1429	1462.5					SLT/SST 90/10	M grey	F gr	85°	Intact, well indurated	Dominantly non carbonaceous M gr SLT with isolated but regular thin bands of SST ripple, laminated in places, sandier at base, sharp lower contact, minor calcite along bedding planes, joint at 11° (good reading).
1462.5	1463.5					COAL	Black	—	—	Brecciated to small wafers	Very carbonaceous MST at top, muddy coal otherwise, sheared, minor calcite.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1463.5	1472.5					MST	Dk grey	—	87°	Small blocky	Except for extremely fine carbonaceous material interval is non
								apparent		concoidally	carbonaceous, most consistent and longest interval of MST I
										fractured	have logged in the Kootenay Gp., joint at 14° (good reading),
											minor calcite, polished surfaces at base.
1472.5	1480.5	1470.5	1478.7	448.2	450.7	COAL	Black	—	—		Mostly sheared dull coal with cleated (vitrain) bright bands,
											slightly muddy at 1474.5', sharp lower contact.
											8.2' — 2.5m COAL R-11u.
1480.5	1498					SLT	M grey	M-F gr	76°	Intact, well	Faintly laminated, carbonaceous
										indurated	material present as a film along bedding, minor plant impres-
											sions, minor bituminous lenticles at base, polished surfaces
											more common at bottom, slightly sandy in places.
1498	1503					SLT/SST 60/40	M grey	M gr	74°	Blocky, well	Undulatory and contorted beds of SST in SLT, carbonaceous
										indurated	material along bedding planes, some fine bituminous lenses,
											joints at 5°, calcite veins sandier at base.
1503	1507.5					SST	Lt grey	VF gr	87°	Intact, well	Massive with some faint laminae, non carbonaceous, extremely
										indurated	fine calcite veinlets silty at base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1507.5	1537					SLT/SST 90/10	M grey		85°	Blocky, well indurated	SLT with wavy laminae of SLT, more SST at top 2 ft than rest of unit, some concentrations of bituminous lenticles lower in section, fining with increasing carbonaceous material downwards minor calcite veinlets, gradational lower contact.
1537	1542					MST/COAL 90/10	Dk grey	—	?	Small blocky, mod. well indurated	Interbedded MST coal, MST is carbonaceous to bituminous, slightly silty, coal is approx. half bright + half dull; core breaks concoidally, minor polished surfaces, gradational unit in coal.
1542	1557	1542	1549.2	470.1	472.2	COAL	Black	—	—	Fragmented to brecciated	Mostly dull sheared coal, MST parting at 1551' (10") and 1553' (4"), muddy coal in places, fairly sharp lower contact.
		1551.8	1553.1	473.0	473.4						Approx. 3 ft core missing. 6.9' — 2.1m & 1.3' — .4m Coal R-11
1557	1566					SLT/SST 80/20	M grey	M gr	81°	Intact, well indurated	Laminar and small scale crossbedding of SST within SLT, carbonaceous material present as a smear along bedding, long calcite veins and joints subparallel to c.a.
1566	1585.5					SLT/COAL	M grey black	VF&M gr	?	Blocky to fragmented	Various SLT grain sizes with bituminous intervals, coal at 1567.5' (4"), 1570.5 (6"), 1576.5' (2"), 1577' (3"), 1581.5' (6"), some polished surfaces, minor calcite veinlets, faintly laminated, overall coarsening downwards.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1585.5	1590.5					SST/SLT 90/10	Lt grey	F gr	81° avg.	Intact to blocky, well indurated	Laminated SST with SLT, laminae are wavy to contorted, load casts at lower contact, carbonaceous fragments along bedding, minor polished surfaces and calcite veins.
1590.5	1598					MST	Dk grey	—	—	Small blocky, to large wafers, mod. well indurated	Best described as silty MST, bituminous lenticles, plant impressions, core breaks concoidally, polished surfaces throughout, gradational lower contact which is silty, minor calcite.
1598	1603.5					SST/SLT 60/40	M to Lt grey	FtoM gr	68°-82° 2 readings	Intact, well indurated	Interbedded SST/SLT, wavy to undulatory laminae, thin carbonaceous film along bedding planes, 6" SLT bed at base, polished and calcareous surfaces are minor, calcite veins subparallel to c.a. are fairly extensive.
1603.5	1606					SST	Lt grey	VF gr	80°	Intact, very well indurated	Massive bedding, faint laminae, distinct upper and lower contacts, large calcite filled voids; one slickenside along bedding.
1606	1612					SST/SLT 50/50	M to Lt grey	F&C gr	81°	Intact, well indurated	Borderline SLT/SST, interlaminated lithologies minor bituminous lenticles, some SST laminae are discontinuous (podlike), less SST at base, calcite along bedding planes.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1612	1613					COAL	Black	—	—	Brecciated	Sheared muddy coal, sharp upper and lower contacts.
1613	1624					SLT/MST	Dk grey black	VF gr	68°	Small blocky to fragmented, poorly indurated	Bituminous SLT/MST, coarsening downwards with minor C gr SLT at base, faintly laminated, very coaly at 1622' - 1623' minor calcite associated with bituminous lenses.
1624	1639					SLT/SST 90/10	M grey	MtoF gr	56° top 72° base variable		SLT with SST laminae, minor bituminous material but associated with polished surfaces, minor calcite veins, little to be said about a long interval.
1639	1655					SST/SLT 5/95	Dk grey	M gr	73°	Intact, well indurated	SLT with slight SST, laminations. Many plant impressions with carbon replacement. Carbon in no other form. 1" unit of FV gr SST @ 1647'. Minor calcite lenticles throughout SLT. Fining down as unit progresses.
	Logged By: Barry Musil										
1655	1659					SLT/SST 50/50	M grey	F gr	74°	Intact, well indurated	Carbon along bedding planes, dewatering structures throughout. Some carbon in slightly thicker lenticles.
1659	1664					SLT/MST 50/50	Dk grey	VF gr	—	Blocky, brecciated	High carbon content especially in crumbly MST. Calcite vein in SLT @ 1662'. Some coal in crumbly MST. (hard and shiny black).

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 17, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1664	1676					SLT	Dk grey	F gr	—	Blocky/brecciated 30/70	Intact core is hard and brittle. Carbon smears throughout, as well as on plant impressions. 1" layer of M gr SST @ 1670'. This unit is full of coal lenticles, fine calcite veining throughout. Brecciated section from 1673' - 1676' (very sharp and angular).
1676	1678					MST	Black	F gr	—	Crumbly	Many polished surfaces. Many coal lenticles throughout.
1678	1704	1675.9	1692.9	510.8	516.0	MST/COAL 10/90	Black	—	—	Crumbly	Some good coal (hard, shiny, black).
		1694.2	1699.1	516.4	517.9						17.1' — 5.2m & 4.9' — 1.5m COAL part of seam R-9
1704	1712					SLT/SST 50/50	M grey	F gr	75°	Intact, well indurated	High carbon content with coaly lenticles throughout. Some calcite veining. Some minor crossbedding throughout.
1712	1717	1711.6	1713.9	521.7	522.4	COAL	Black	—	—	Blocky	Hard and shiny. Good coal. 2.3' — .7m COAL part of seam R-9
1717	1722					SST	Lt grey	F gr	—	Intact	Contains lots of coal in the form of lenticles and layers. Many calcite lenses throughout.
1722	1730					SLT/SST 40/60	M grey	F gr	66°	Intact/brecciated 70/30	Hard well indurated. Dominant SST with very fine SLT bedding. Only carbon spread finely throughout. Calcite throughout (along discontinuous joints).

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1730	1754					SST/SLT 40/60	Dk grey	F gr	83°	Intact	Hard brittle. Sparse coal in the form of lenticles spread thinly throughout the unit. Continuous joint @ 1739' 18° wrt ca. Calcite filled. Many slickenslides throughout (e.g. 1752', 1745' - 1750').
1754	1759					SST/SLT 50/50	M grey	F gr	—	Intact, blocky	Many slickenslides throughout, bedding contorted and undulatory throughout. No carbon.
1759	1768					SST/SLT 5/95	Dk grey	M gr	68°	Intact	Some slickenslides. Lots of calcite (in discontinuous joints). Some sparse coal lenticles throughout unit.
1768	1787					SLT/SST 30/70	M grey	F gr	—	Intact/blocky 70/30	Hard well indurated. Many slickenslides containing calcite. Less that 34°. No bedding, dominant SST with disseminated SLT. Unit very uniform. Fractures at 1773' (calcite filled). No visible carbon.
1787	1792					SST/SLT 10/90	Dk grey	M gr.	45° Poor reading	Intact	Hard brittle. Undulatory bedding throughout. No visible carbon. Uniform unit.
1792	1796					SLT/SST 80/20	Dk grey	F gr	—	Intact	Undulatory contorted bedding throughout. Slight carbon smears in bedding surfaces. Some calcite in joints as well. Contact with M gr SST at 52° wrt. ca.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1796	1805.5					SLT/SST 10/90	Lt grey	M gr	—	Brecciated	Slight carbon on joint surfaces. Core crumbled and broken. Much calcite in fractures and joints throughout. Unreadable joint on bedding angle. Many SLT rip up clasts at 1802'.
1805.5	1842.5					SST	Lt grey	M gr	variable av 64° low 45° ~~high 72°~~	Intact, very well indurated	Thinly to laminar bedded SST, sparse bituminous lenticles increasing at base, (1836' to base is bituminous), core breaks along bedding planes, minor calcite, joint at 19°, sharp lower contact.
	Logged By: Jon Popel										
1842.5	1846					SST	Lt grey	F gr	62° av	Blocky, well indurated	Laminar bedding, silty at top, coarsening downwards, wispy carbonaceous and silt fragment, calcareous joint at 20°, minor carbonaceous polished surfaces.
1846	1872					SST	Lt grey	FtoM gr	62° as low as 48°	Blocky to intact	Thinly to laminar bedding, interbedded lithologies, bituminous lenticles scattered throughout, core breaks along bedding planes, calcareous veins and joints at 22°, silt bed at 1862'-1872' (laminar), overall fining downwards, gradational lower contact bedding ≠ becomes closer to that of c.a. at base.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1872	1886					SLT	M grey	M gr	20^{0}-30^{0} where visible	Intact, well indurated	SLT with sandy intervals and beds, bedding at low angle to c.a., gradational upper and lower contact, laminar to wavy laminar bedding, SST load casts 3' from base, sparse calcite veins, one slickensided joint surface at 18^{0} wrt c.a.
1886	1889					SST	Lt grey	F gr	45^{0}-50^{0}	Blocky, well indurated	Thin to laminar bedding, sharp lower contact, core breaks along bedding planes, some M gr fraction near base, mildly calcareous joints at 18^{0} wrt c.a.
1889	1900					SLT/SST 25/75	Dk to Lt grey	M gr	variable	Blocky	SST hard and well indurated. Dominant SST with SLT beds and clasts (no good bedding angles). Calcite infilling in discontinuous joints. Many slickensides and continuous joints throughout, @ 45^{0} wrt. c.a. Coal between joints.
1900	1913					COAL/SST 15/85	Black Lt grey	M gr	- -	Brecciated	Dominant SST (hard well indurated units) with coaly lenticles and layers. Calcite present in joints and veins. Core jointed and broken throughout unit.
1913	1920					SST	Lt grey	F&M gr	57^{0}	Large blocky, well indurated	Contains a C gr fraction near base. Laminar bedding, core breaks along bedding planes, bituminous lenticles near base. MST clasts at 1918', sharp lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1920	1938.5					SLT/SST 60/40	M grey	MtoF gr	65°-75° variable	Intact, well indurated	Various laminar bed forms (wavy, undulatory contorted), carbonaceous material present as smear along bedding planes, minor calcite veins.
1938.5	1943.5					SST	Lt grey	VFtoM gr	?	Large blocky, well indurated	Massive bedding, contorted bituminous lenses throughout, slightly silty, sharp lower contact, large but rare calcite veins, minor polished surfaces.
1943.5	1966					SLT/SST 90/10	M grey	FtoVF gr	68° av. low 40° high 75° variable	Intact, well indurated	Best described as silty SST, overall fining downwards with increasing carbonaceous material SST laminae are planar to contorted, calcareous joints at 40°, calcareous surfaces along bedding planes, minor pyrite at 1965', minor polished surfaces.
1966	1970					SLT	M grey	VF gr	?	Small blocky, mod. well indurated	Abundant carbonaceous material along supposed bedding planes, borderline SLT/MST at base, minor calcite veins and polished surfaces.
1970	1976.5					SLT/SST 90/10	MtoLt grey	MtoF gr	70°	Intact, well indurated	SLT with SST laminae, finer at top and base, minor calcite along bedding, carbonaceous material present as smear along bedding planes, note: small worm burrows at 1973'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jon Popel Date: August 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1976.5	1982					SLT	Dk grey	VF gr	77°	Small blocky, mod. well indurated	Carbonaceous SLT, numerous fine bituminous lenticles, faintly laminated, glossy polished surfaces, minor calcite veinlets.
1982	1997					SLT	M grey	M gr	?	Intact, well indurated	Little carbonaceous material, massive bedding, calcite veinlets becomes sandy at base (wispy sand pods).
1997	2030					SLT/SST 60/40	M to Lt grey	MtoF gr	55°-72° av. 68°	Blocky, well indurated	SLT with numerous sandy laminae, laminae are VF gr at top, F gr at middle to base. Mostly planar laminae with minor undulatory and contorted sections, worm burrows at 2015', calcareous veins and joints at 37°, overall coarsening downwards.
2030	2045					SST	Lt grey	F gr	70°	Angular blocky, well indurated	Variable bedding types, laminar to thinly bedded, planar to contorted, minor SLT beds, erosionally truncated beds, numerous polished surfaces and calcite veins, fault breccia at 2042', entering a possible fault zone, numerous contorted bituminous lenticles.
2045	2052 END					SLT	M grey	FtoM gr	n.a.	Small angular blocky	Massively bedded, fine bituminous lenticles coarsening downwards, numerous glossy polished surfaces and minor associated calcite, sandy at top.
											END OF HOLE

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION
149,654.40 m.	25,135.85 m.	2250.50 m.

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☒ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	40	0	28	0	8.5	COAL					COAL PART SEAM - 15 8.5m - 28.2'
40	55.5					MST	Dk gr	F gr		Indurated, friable	Abundant FeO_2 staining, minor pyrite staining, minor fossils present on bedding planes, carby mst present (43.7-44.2) joint sets at 25° to core axis, color becomes progressively darker with depth.
55.5	74.5					SLT	M to Dk grey	M gr	86°	Well indurated	Color becomes progressively darker with depth, becoming a muddy silt, minor fossils, FeO_2 STAINING present, minor crossbedding, slt ground mass with laminated sst increasing with depth. Continuous joint at 26° to core axis, slickensides present at a depth of 73.2', coal lenses occuring throughout.
74.5	77					SST	Lt gr	C gr	88°	Blocky	Clacite veins and fissures occuring throughout, crossbedding present, sst ground mass with slt stone bedding, bedding is disturbed, pyrite present.
77	81					SLT	Dk gr	M gr		Well indurated	Pyrization, calcite fissures present, becomes progressively finer grained and darker with depth.
81	83	80	82	24.4	25	COAL	Black			Brecciated	Soft, wet and crumbly, progresses into a carby mst 2.0', 0.6 m. FeO_2 staining present in a minor amount. 0.6m 2.0'

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
83	88.5					MST	Dk gr	F gr		Brecciated	Minor bands of coal present at a width of 2-3", pyritization, dark carby mudstone progressing lighter with depth.
88.5	94					SLT	Dk gr	F gr	87°	Blocky	Joint set at 24° to core axis (continuous), polished surface on bedding plane, minor laminae of coal, FeO_2 staining.
94	96					SST	M gr	C gr	85°	Indurated	Mud clasts and calcite fissures present, sst with slt bedding, crossbedding present, FeO_2 staining present.
96	102					SLT	Dk.gr.	F gr		Blocky	Color becomes darker with depth, minor sst laminae present, pyritization, coal lenses present.
102	107	103.0'	106.4'	30.6'	32.'	COAL	bl			Fragmented	Fragmented, wet, crumbly, progresses to mudstone with depth, actual core 3'. 5' 1.5m Coal Pt 14u
107	122					MST	bl	F gr		Blocky	Lenses of coal present ranging in width from 1' - 3", coal is friable. Laminated coal also foung throughout, discontinuous joint at 25° to core axis. Calcite fissures present, band of siltstone ½' long.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
122	132	120	129.5	36.6	39.5	COAL	bl			Brittle	Bright, wet, some amounts of dull calcite fissures, bands of mudstone 2" - 5" pyritization, some plant imprints. Increasing to a carb mst with depth. 9.5' 2.9m COAL SEAM 14u
132	136.5					MST	bl	F gr		Blocky	Lenses of bright coal throughout, veins of fragmented coal ranging from 2" - 6" pyritization and calcite fissures. Minor fossils.
136.5	141.5					COAL	bl			Blocky	Bright coal with mudstone bands ranging in size from 1" - 2" calcite veins present, pyritization, minor plant fossils.
141.5	143					MST	bl	F gr		Indurated	Carb mst, slickensides at depth of 143', calcite fissure present some coal lenses.
143	144					SLT	lt bl	M gr		Well indurated	Abundance of fossils, becomes coarser grained with depth.
144	145					SST	m gr	M gr	88°	Well indurated	Discontinuous joint set at 74° to the core axis, calcite fillings along joints, calcite fissures, laminated siltstone.
145	149					SLT		F gr		Intact	Calcite fissures, coal laminae increasing with depth, discontinuous joint at 76° to core axis. Becomes increasingly dark with depth.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
149	151					MST	bl	F gr		Blocky	Carb mst with a 6" vein of brittle, bright coal progresses to a siltstone. Pyritization.
151	153					SLT	lt bl	M gr		Undurated	Abundance of pyritization, becomes coarser grained with depth (as well as lighter).
153	158					SST	dk gr	C gr	86°	Well indurated	Abundance of pyritization, laminated with a carb slt. calcite fissures throughout.
158	164					SLT	dk gr	F gr	84°	Blocky	Thin laminae of sst in slt ground mass, minor crossbedding, discontinuous joint at 72° to core axis becomes increasingly darker with depth. Joint infilled with calcite, calcite fissures throughout.
164	166					SST	lt gr	C gr	85°	Intact	SST ground mass with thin laminae of carby slt, wavey bedding with minor crossbedding, increasing lamination of slt with depth, calcite fissures.
166	182					MST	bl			Blocky	Grassy fossils abundant, joint sets at 78° to core axis, thin lenses of coal throughout. 1' vein of wet, brittle coal at 171.5 calcite fissures throughout, pyritization (massive) at 178', progressively becomes silty with depth.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
182	185					SLT	lt bl	F gr	86°	Intact	Abundance of fossils, calcite fissures, thinly laminated sst, crossbedding, becomes progressively darker at depth, minor pyrite.
185	187					MST	bl	F gr		Blocky	Fossils present, vein of soft, wet coal at 186' at a thickness of 5".
187	189					COAL	bl			Blocky	Brittle, bright coal with minor amounts of durain progresses to carby mst.
189	194.5					SLT	lt bl	F gr	89°	Intact	Calcite and pyrite present, carby slt, minor fossils, thinly laminated mudstone, progressively darker with depth.
194.5	196.5					MST	bl	F gr		Blocky	Minor lenses of coal, 2" vein of wet dull coal, fossils present.
196.5	204					SLT	dk gr	M gr		Intact	Contorted bedding, thin lamination of SST with SLT ground mass, increasingly darker with depth. MINOR AMOUNTS OF FOSILS
204	211.5	202.4	208.3	61.7	63.5	COAL	bl			Blocky	Pyritization, coal becomes brighter with depth, slickensides present at 211.5'. 5.9' 1.8m COAL SEAM 14

Hole No. D.D.H. 1751 Page 5 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
211.5	218.5					MST	bl	F gr	87°	Blocky	At depth 211.5' - 211.75' there is a zone of vuggy porosity with massive pyrite infilling and small calcite veinlets. Pyritization found on polished surfaces throughout, small lenses of coal present, a vein of wet friable coal at 217', 6" long.
218.5	220					SLT	dk gr	FtoM gr	85°	Intact, indurated	Crossbedding present, joint infillings of calcite. Continuous joint at 82° to core axis, lamination of SST and SLT becomes lighter with depth, calcite veinlets present throughout.
	Logged	By Barry	Musil	May 5,	1981						
218.5	220					SLT	dk gr	F gr		Intact	Dark grey with an increase in carbon content, towards 220' some sandstone bedding present 87° wrt. c.a. Brittle, discontinuous jointing at 219' with calcite intrusions. SST beds are laminated.
220	222					MST	lt blk	F gr	82°	Blocky	Contains more carbon. Fine laminations at 82° wrt. c.a. brittle fractures easily.
222	228.5					SLT	lt blk	F gr		Intact	Very brittle. Thin laminations with light SST bedding, many joints (discontinuous) 18° joints at 225.5'. Calcite filling in joints.

Hole No. D.D.H. 1751 Page 6 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
228.5	232.5					SLT	grey	F gr		Intact	Core intact but brittle. many SST laminations throughout. 77° SST swirling occurs at 230' joint angle ≈10°
232.5	235.5					SLT	dk gr	F gr		Intact	Strong, not easily fracturable. Joints 10°. Calcite vein at 233.5' (1" thick). There is slt shards present in vein.
235.5	239.5					MST	dk gr	F gr		Brecciated	Jointing at 17°, fractured throughout. Very brittle. Homogeneous throughout. Minor fossilization at 237.5' (pine needle). Carbon content increasing towards greater depth.
239.5	246	237.8	246.0	72.5	75.0	COAL	blk	F gr		Intact	Soft but intact 5" mst band at 242'. 8.2' 2.5m COAL SEAM 14L
246	249					SLT	dk gr	F gr		Intact	Strong slickenside at 246.5' 22°. Slight fossilization present. Bituminous layer at 247'.
249	251					COAL	blk	F gr		Crumbly	Coal tends to MST then back to coal again at 251'.
251	261					SLT	dk gr	F gr		Intact	Hard and brittle. Joints at 12° wrt. c.a. SST bedding @ 85-90°, continuous jointing every 2 feet.

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Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
261	282					MST	lt blk	F gr		Intact	Core very intact but becoming blocky and then very brecciated. at 277'. Core very brittle. Joint at 267', 272', 40° wrt core axis. Joint at 277' 20°. Thin bituminous layering at 280'.
282	287					SLT	lt blk	F gr		Intact	Band durable slight SST bedding present. There is approx. 2' of core missing between markers.
287	292					SLT	lt blk	F gr		Brecciated	Hard but bery brittle. Crumbly in places (287'-289'). No visible jointing.
292	294					SLT	lt bl	F gr	87°	Indurated	Vertical fractures with calcite infillings, small lenses of coal, FeS_2 present, minor fossils, SLT interbedded with C gr SST, becomes darker with depth, progresses to a carb. SLT.
294	295					COAL	bl			Friable	Dull coal with some lenses of bright coal. FeS_2 present.
295	299.5					SLT	lt bl	M gr	86°	Blocky	Discontinuous joint at 77° wrt. ca., minor bedding of SST, cross-bedding present, overall bedding is wavey. Coal lenses appear with depth as well as laminated carb. SLT, becomes coarser grained with depth.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
299.5	306					SST	m gr	C gr	86°	Indurated, intact	Discontinuous joint at 80° wrt ca, bedding contorted, cross-bedding present, thin laminae of SLT becoming thicker with depth, calcite present along bedding planes FeS_2 present.
306	328					SLT	dk gr	M gr		Fragmented	Highly fractured both vertically and horizontally with calcite infilling, calcite present on bedding planes, fossils present, becomes carbonaceous in sections with the presence of coal lenses Slickenside at 327 @ 79° w.r.t. core axis.
328	333					SLT	dk gr	C gr		Intact	Continuous joint at 329' 10° wrt core axis. Has calcite filling strong and durable. Joint (continuous) at 330'. Has concoidal as well as feather and plume fractures. Thin carbonaceous layer at 332', joint at 332' (continuous), @ 12° wrt. Ca.
333	347					SLT	Dk gr	M gr		Intact	Strong with SST bedding. Discontinuous jointing at 337'. There is calcite filling with much pyrite present also. Discontinuous jointing at 341', SST bedding at 335', discon't jointing throughout.
347	368					SLT	lt blk	F gr		Intact	Discon't jointing throughout. Sandstone bedding at 351'. This bedding has abundant joints with calcite filling. Thin carbonaceous layer at 358', SST laminations at 359'. Thin carbonaceous layer at 360'. Much pyrite along this layer. Contact with

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	thin (3") layer of SST at 87° w.r.t. core axis.
368	371					SLT	lt gr	M gr		Intact	String contains jointing throughout (calcite filling). SST laminations at 368.5'. Pyrite present in fine grains.
371	374					MST		F gr		Blocky	Numerous joints, from 371'-372', w.r.t. core axis, 33°. This MST is soft and easily broken. Thin bands of coal present (0.5 cm.)
374	403	372	397.6	113.4	121.2	COAL	black			Blocky	Soft shiny, much is intact although it breaks easily. There is a MST band at 390'. 25.6' 7.8m COAL SEAM 13
403	413					SLT	black	F gr		Intact	Strong set. Contains much carbon as there is a band of coal at 404' which is ½" thick. Slickenside at 405', 69° w.r.t.c.a. More thin sections of coal at 408'. Core becoming soft. Coal lenses becoming fraquent 409'. Minor fossilization (needles) at 412'.
413	417.5					MST	black	F gr		Intact	Very strong, durable. Joint at 414', 70° w.r.t.c.a. Numerous lenses of coal throughout.
417.5	420					SLT	lt gr	C gr		Intact	This SLT is laminated with SST. Joint at 419', 51° w.r.t.c.a. 5" sandstone belt at 419.5', continuing into SLT laminations.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
420	425					MST	dk gr			Intact	5" SST layer at 422'. Core strong and durable.
425	436					SST	lt gr	M gr		Intact	Strong, light SLT, bedding throughout. Bedding at 65° w.r.t.c.a. Burrowing structures at 427'. Slickenside at 427.5'. Thin carbonaceous layer at 434'. Some coal lenses present here.
436	440					SLT	dk gr	F gr		Blocky	Well indurated, tends to become stronger towards the SST at 440'.
440	451					SST	lt gr	M gr		Intact	Well indurated. Joint at 443', 32° w.r.t core axis. Slickenside at 443.2', 49° w.r.t.c.a. Slight SLT bedding throughout. Joint at 445', 30°. Layer of coal at 449' (4" thick). Many lenses of coal at 448'-451'.
451	465					SLT	lt bl	F gr		Intact	Strong, durable, has SST bedding throughout. SST laminations @ 459'. Joint at 461', 83° w.r.t.c.a. Joint at 463', 80° w.r.t.c.a. Discontinuous joint at 464', <17° w.r.t. core axis.
465	475					SLT	lt bl	M gr		Intact	Core brittle and hard, SST laminations going to bedding. Fault along core axis. Displacement 1", 466'. Minor fossilization by carbon replacement at 465.5'. Discontinuous jointing with calcite filling at 467'. Core becoming brecciated at 468'. Much pyrite present here.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
475	481					SLT	grey	F gr		Brecciated	Core becoming very carbonaceous with numerous fossils around 480',
481	486					MST	lt bl	F gr		Intact	Easily broken. More carbon content. Fossils of leaves and grass throughout. Slickenside at 484' ≃54° Slickenside at 486', 51° wrt c.a.
486	495					MST	brown	F gr		Intact	Black going to brownish intervals in core. Possible burrowing at 486.5'. Core hard and durable. Resistant to fracturing. Many fossils present.
495	513	496.1	513.8	151.2	156.6	COAL	black	—		Blocky	Soft, shiny black. Bedding at 0° wrt c.a. 8" MST interbed at 504'. 17.7' 5.4m COAL SEAM 12
513	518					SLT	dk gr	F gr		Intact	Core very intact but fractures easily. SST bedding at 516'. Continuous joint at 517.5', 21° wrt c.a. SST laminations at 518'.
518	531					MST	black	F gr		Intact	Breaks easily, some carbonaceous spot throughout. Layer of coal at 526' (2" thick). SST bedding at 521', 90° wrt c.a. Core getting very carbonaceous (527'). Abundant grass fossils at 529'.
531	537					SLT	dk gr	F gr		Intact	Durable and hard. Some MST laminations near 532'. SST bedding at 533'. Contact with SST unit at 75° wrt core axis

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
537	559					SST	lt gr	C gr		Intact	Very hard and durable. Resistant to breakage. Joint surface at 539.5', 10° w.r.t. core axis. Burrowing at 538', thin layer of SLT (F gr) at 540' (7" thick). Burrowing at 543', SLT laminations at 543'. Thin layer of SLT (F gr) at 546' (10" layer). Discontinuous joint at 549' (calcite filling), burrowing at 552' and 557'.
559	569					SST	lt gr	M gr		Intact	Very hard and durable. Burrowing at 559', 563', 569'. Siltstone laminations at 560'. SLT bedding irregular throughout. Leaf fossil at 560'. Joint at 564', 10° w.r.t. core axis.
569	580					SLT	dk gr	F gr		Intact	Durable, and hard. SST bedding throughout, continuous joint at 576' (calcite filling).
580	585					SST	lt gr	M gr			Hard and brittle. SLT layering throughout (perpendicular to core axis).
585	590					SLT	dk gr	F gr		Intact	Soft, easily fractured. Carbon content increasing towards 590' 10" MST later at 590'.
590	598.5	588	600.4	179.3	183.0	COAL	black	—		Brecciated	Very soft, ground up crumbly, very wet. 12' 3.7 m COAL SEAM 11a
598.5	607					MST	lt bl	F gr		Blocky	Soft, easily broken. 3" SST layer at 601', slight fossilization at 603'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
607	617					SLT	lt bl	M gr		Blocky	Strong unit. SST bedding at 608' and 612'. These units are between 6 and 8 inches thick, burrowing at 612'.
617	624					SST	lt gr			Intact	Fairly fracturable. SLT bedding throughout (perpendicular to core axis). Discontinuous jointing at 620'. Siltstone laminations at 621'.
624	636					SLT	dk gr	F gr		Blocky	Core fractures easily, contains many fossils (628'), very little SST bedding. Joint surface at 629', 9° wrt ca. Fossilization throughout. Thin section (6") of MST at 633'. Coal lenses becoming frequent near 635'.
636	660	637.8	659.5	194.4	201.0	COAL	black	—		Intact	Coal quite soft even though it is intact. 6" layer of MST at 645'. Contact 90° wrt ca. Thin 6" MST layer at 652'. 21.6' 6.6m COAL SEAM II
660	667					SLT	dk gr	F gr		Intact	Very hard, indurated. Continuous joint at 662', calcite filling, 7° w.r.t. core axis. Minor fossiliaation present.
667	683					SLT/SST	lt gr	M gr		Intact	Strong, discontinuous jointing at 668' (calcite filling). Burrowing features @ 670'-672'. SLT laminations 675'. 4" band of SST at 676'. Discontinuous jointing at 678'. Pyrite at 680'. There is also iron staining at 680.5'. SLT with SST laminations

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	from 680' - 685'. 75° w.r.t. core axis.
683	689					SLT	dk gr	M gr		Intact	Fractures easily. Joint (continuous) with calcite filling at 688' 72° w.r.t. core axis, some SST bedding throughout. Pyrite at 687' (present in veins). 1/8" thick.
689	708					SST	lt gr	M gr		Intact	Some SLT mixing in the bedding, generally light SST throughout, getting coarser ground towards 697'. Discontinuous jointing with calcite filling present. 6" interval of coarse SST at 699', mud clasts at 700', 704'. Lense of carbon at 707'. Joint (continuous) at 705', 25° w.r.t. core axis.
708	722					SST	lt gr	C gr		Intact	Easily fracturable because of numerous joints. Continuous joint at 710', 7° w.r.t.a. Carbon content becoming quite high with numerous coal lenses from 713'-722'. Pyrite also present in these lenses.
722	732					SLT	dk gr	F gr		Blocky	Very fragile, contains minor grass fossils throughout. Core is carbon rich, massive bedding with F gr SST at 726'. SLT going very fine and forming a 9" MST unit at 727'. Unit contains much carbon.
732	734					COAL	black	—			Crumbly soft and wet. 1 foot missing.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
734	746					SLT	lt bl	F gr		Intact	Core crumbles easily, slight fossilization throughout. Joint (continuous) at 740', 12° w.r.t. core. Discontinuous jointing with calcite filling at 741'. SST laminations throughout, perpendicular to core axis.
746	756					SLT	dk gr	F gr		Intact	Hard, well indurated, some lenses of carbon present throughout. SST bedding at 747', fossilization of grass present. Discontinuous joint at 746' and 749' (calcite filling).
756	760.5					SST	lt gr	M gr		Blocky	Hard, discontinuous joint at 759.5'. Mudclasts at 757.5'. SLT bedding throughout. 77° w.r.t. core axis.
760.5	767					SLT	lt bl	F gr		Blocky	Fractured and brecciated. Many continuous joint surfaces that have calcite filling. Also FeO_2 staining present.
767	800					SLT	lt bl	F gr		intact	Uniform throughout, hard. SST bedding at 786'. Discontinuous joint at 784'. Continuous joint at 780', 19° w.r.t. core. Slight fossilization throughout. SST layer at 777'. Pyrite crystal present. SST bedding at 798'. Slight carbonization present at 798.5'.
800	804					MST	black	F gr		Brecciated	Crumbly, soft, high carbon content becoming higher as you near coal. MST becoming very soft at 804'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
804	825	799.2	820.9	243.6	250.2	COAL	black	—		Crumbly	Soft, wet, crumbly, fractures easily. 21.6' 6.6m COAL SEAM 9
825	836					MST	lt bl	M gr		Blocky	Hard, strong, continuous joint @ 827.5', 24° w.r.t. core axis. No filling. Carbon content becoming very high with 2" coal layer.
836	837.5	834.6	838.6	254.4	255.6	COAL	black	—		Intact	Shiny black, soft easily fracturable, contact 87° w.r.t. core axis. 4' 1.2m COAL SEAM B
837.5	843					MST	lt bl	F gr		Blocky	High carbon content, coal lenses throughout. Thin coal seam (3") at 840'. 4" seam at 843'.
843	845					SST	lt gr	M gr		Intact	Hard, well indurated, slight SLT bedding. Bioturbidation present.
845	849					SLT	lt gr	F gr		Intact	Hard, brittle, easily fractured, lt brn MST bedding at 849'.
849	854					SST	lt gr	M gr		Intact	Strong, hard, contains slight SLT bedding throughout. 85° w.r.t. core axis. Bioturbation at 851', discontinuous joint with calcite filling at 851.5'.
854	858.5					SLT	lt bl	F gr		Intact	Slight bedding with MST throughout. 79° w.r.t. core axis.
858.5	867					SST	lt gr	M gr		Intact	Durable, strong. Burrowing shows at 859' and 861'. SLT laminations at 859.5', continuous joint at 860' 18° w.r.t. core axis.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
867	876					SLT	dk gr	F gr		Intact	Contains brownish MST layering 88°. High carbon content with lense of carbon throughout.
876	86_					SLT	dk gr	M gr		Intact	Durable, hard. Some SST bedding perpendicular to core axis. Continuous joint at 878', at 18°. Ripple marks at 879'.
882	886					SLT/SST	lt bl	M gr		Intact	Light SST with heavy SLT bedding. Ripple marks. SLT bedding at 82° w.r.t. core axis.
886	896					SLT	dk brn	F gr		Intact	Some light brown MST bedding at 85°. Slight fossilization at 896'.
896	899					MST/SLT	dk gr	VF gr		Intact, well indurated	Ripple marks, some lenses of coal present. SST bedding present at 898' at 86°.
899	909					SLT/SST	lt gr	M gr		Intact	Well indurated siltstone with sandstone bedding going to dominant sandstone with siltstone bedding at 69°. Joint at 900' at 14°. lense of coal in SST at 904' and 908'.
909	918					SST/SLT	lt gr brown	F gr		Intact	Some small coal lenses present. Disconintuous jointing with calcite filling at 912'. Brecciated broken layer at 915'. Core blocky at 916'. Very wavy bedding at 917'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
918	924					SLT	dk gr	F gr		Intact	Strong, well indurated SST bedding at 919' at 77°, core softening towards 924'.
924	925.5					MST	black	F gr		Intact	Soft, easily fractured. High carbon content. Contact with coal at 85° w.r.t. core axis.
925.5	942	924.2 935.0	931.1 940.9	281.7 285.0	283.8 286.8	COAL	black	—		Blocky and slightly precciated	Coal, hard, black and shiny. Contains quite a bit of MST with 9" layer of MST at 933'. 2.1m–6.9' 1.8m–5.9' COAL SEAM 7
942	946					SST/SLT	lt gr	M gr		Intact	Core hard and brittle. SST with SLT bedding going to dominant SLT with SST bedding. 82° w.r.t. core axis. Bioturbation at 945'. SST bedding in swirls.
946	949					MST	dk gr	M gr		Intact	Hard, concoidal fracturing present. Brittle, fractures easily.
949	960.5					MST/SLT	lt bl	M gr		Intact	Hard, easily fracturable SLT with MST bedding. 1" SST bed at 950' at 89° w.r.t. core. Core uniform throughout.
960.5	977	960.6	976.0	292.8	297.5	COAL	black	—		Crumbly	Soft, friable, broken badly, wet. 15.4' 4.7m COAL SEAM 7
977	984					MST	dk brn	F gr		Intact	Hard, brittle, continuous joint at 978' at 18°, contains carbon lenses.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
984	987	982.6	988.2	299.5	301.2	COAL	black	—		Intact	Hard but brittle, shiny black, dry. 5.6' 1.7m COAL SEAM 7
987	997					MST/SLT	dk gr	M gr		Intact	Hard and brittle. Fossilization of leaves, grasses, etc., throughout. Some minor MST bedding with mud clasts at 992'.
997	1005					SLT	lt bl	VF gr		Intact	Intact but easily fractured. Hard and brittle. Carbon content increasing at 1002' with a 8" coal seam at 1002.5'. Coal lensing from 1003' to 1005'.
1005	1009					SST/SLT	md gr	M gr		Intact	Hard and brittle, dominant SST with SLT bedding. Bedding approx. perpendicular to core axis. Some very fine carbonaceous lensing throughout.
1009	1013					SLT	dk gr	F gr		Intact	Hard and brittle, some slight SST bedding at 89° wrt c.a., discontinuous jointing with calcite filling at 1011. ½" layer of coal at 1011'.
1013	1033					SST	lt gr	F gr		Intact	Hard, well indurated. SLT bedding at 1017'-1027' at 76°. Fossils in M gr SST at 1023'. Continuous joint at 1025' at 11° wrt c.a. (calcite filling). Thin layer of M gr SST at 1030' (6"). Continuous joint at 1033' at 4° wrt c.a. Pyrite filling in joint.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1033	1043					SLT	dk gr	C gr		Blocky	Hard, indurated, joint at 1035' (continuous) with pyrite filling at 80° wrt core. Pyrite flaking throughout core. Some SLT bedding at 1040' perpendicular to core. Bituminous layer at 1042.5' (½" thick).
1043	1052					SST	lt gr	F gr		Blocky to broken	Core is hard and strong but has been smashed by drill bit. 6" layer of F gr SLT at 1046', SLT bedding at 1049.5' at 90°.
1052	1054					MST	black	M gr		Blocky	Hard and brittle. Coal lensing throughout, concoidal fracturing.
1054	1068					SST	dk gr	M gr		Intact	Hard and brittle. SLT bedding at 1057' at 90°. Bituminous lensing from 1054'-1065'. Discontinuous jointing with calcite filling at 1060'. SLT bedding at 1067' at 88°.
1068	1076					SLT	dk gr	F gr		Intact	Hard and brittle, crumbly. SST bedding at 1073' at 84°. Discontinuous joint with calcite filling at 1073'. SST swirling at 1075'.
1076	1081					SST	lt gr	M gr		Intact	Hard indurated. Discontinuous jointing at 1078.5' (calcite filling), bituminous layer (1" thick) at 1079'. SLT bedding from 1079'-1081' at 78° wrt core. Continuous joint at 1079.5' has pyrite filling at 27° w.r.t. core axis.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1081	1098					SLT	dk gr	M gr		Intact	Hard, well indurated. Continuous joint at 1082.5' at 17° w.r.t.c.a. SST swirling at 1085', discontinuous joint with calcite filling at 1085.5. Carbon layering at 1185', 1187', 1188', 1189', 1190'. Continuous joint at 1195' with carbonaceous filling at 49°.
1098	1110					MST	dk gr	M gr		Blocky and brecciated	Hard, brittle concoidal from timing. Discontinuous jointing with calcite filling at 1102'.
1110	1115	1107.3	1112.2	337.5	339.0	COAL	black	—		Brecciated	Soft, easily broken, crumbly. 4.9' 1.5m COAL Pt.5
1115	1117					MST	lt bl	M gr		Blocky & broken	Soft, crumbly, many carbon lenses with 6" carbon layer at 1116', 1½" layer of SLT at 1117'.
1117	1126					SLT	lt bl	M gr		Blocky/Intact	Hard and brittle coal lensing with coal seam (6") at 1120'. Some SST bedding at 1124' at 90° w.r.t.c.a.
1126	1128					MST	lt bl	F gr		Intact	Soft, crumbly. Concoidal fracturing.
1128	1130.5					SST	lt gr	M gr		Intact	Some silty bedding present at 78°. Coal lensing present. Continuous joint at 1130' at 21° w.r.t. core axis.
1130.5	1133.5					COAL	black	—		Blocky & broken	Many coal intervals, shiny, hard and brittle. 6" MST at 1132'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: May 29, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1133.5	1158					MST	black	M gr		Broken & blocky	Very carbonaceous, soft and crumbly. 6" of coal at 1142'. Slickenside at 1138' at 58° w.r.t. core. Coal lensing at 1147'. 5" coal layer at 1152'. Concoidal.
1158	1169					SLT	dk gr	M gr		Intact	Fracturing present, core hard and brittle. SST bedding at 1164.5' at °. Slight fossilization of leaves and needles at 1167'. slickenside at 1167' at 82° w.r.t. core. Joint at 1168' at 56° w.r.t. core.
1169	1178					SLT/SST	md gr	M gr		Intact	Hard, well indurated. SLT bedding throughout. 74° w.r.t. core axis. Discontinuous joint with calcite filling at 1171'. 2" layer of coal at 1174'. Core becomes dominant in SLT at 1177'-1178'.
1178	1207					SST	lt gr	M gr		Intact	Hard, brittle. Discontinuous joint at 1179', 1190', 1200', and 1206'. All have calcite filling. Mudclasts in sandstone swirls at 1182'. Coal lensing throughout SLT bedding at 1193' at 74° w.r.t. core. Heavy coal lensing at 1202'. Joint filling at 1206'. Some type of sulphide
1207	1213					SST	lt gr	C gr		Intact	Uniform throughout, hard and indurated, continuous joint at 1211-1212' at 5° w.r.t core axis.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1213	1218					SST	grey black	C gr		Intact	Coarse SST with a heavy mixture of mud clasts and coal lensing. Core has a twisted ground up appearance. Coal lensing throughout. Very sharp contact at 1213', possible movement of lithologies. 71° w.r.t core axis.
1218	1220					SLT	dk gr	VF gr		Intact	Very well indurated. Joint (continuous) at 1218.5' at 56° w.r.t. Slickenside at 1220' at 39° w.r.t. core axis.
1220	1225					SST	lt gr	F gr		Intact	Indurated, slight SLT bedding throughout. 54° w.r.t. core axis. Discontinuous joint at 1222' (calcite filling). Bedding swirling at 1222'-1223'. Continuous joint at 1223' 51°.
1225	1234					SLT	lt bl	F gr		Blocky	Hard indurated 2" coal layer at 1225'. Discontinuous jointing with calcite filling at 1228'.
1234	1249					SST/SLT	lt gr	F gr		Intact	Hard, indurated. Dominant SLT with some SST bedding at 18° (calcite filling). Coal lensing at 1240'. Core ground up from bit at 1249'.
1249	1252					SLT	dk gr	F gr		Intact	Indurated joint at 1249.5' at 64° w.r.t. core axis.
1252	1269					SLT/SST	lt bl	F gr		Intact	Indurated. SST with SLT bedding throughout (very finely mixed in), discontinuous jointing with calcite filling at 1259',

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	1263', 1264', and 1265'. Joint fractured at 1262 @ 22°.
1269	1284					SST	md gr	F gr		Intact	Hard, well indurated. SLT bedding throughout. 88° calcite filled joint at 1270' at 58° w.r.t. core axis.
1284	1286					SST/SLT	dk gr	M gr		Intact	Hard, well indurated. SST with SLT bedding at 74°. Fractured at 1285' 47° w.r.t. core axis.
1286	1300					SST	lt gr	M gr		Intact	Hard indurated, contact surface from SLT sharp. 64°. Discontimuous jointing with calcite filling from 1287'-1293'. SLT bedding throughout at 78°. Continuous joint at 1296' at 15°.
1300	1310					SST	lt gr	C gr.		Intact	Hard indurated. Many coal lenses throughout. Angular mudclasts at 1301'. Polished surface and fracture at 1307'.
1310	1319'					SST	lt gr	F gr		Blocky	Hard and brittle contains coal lensing throughout.
1319	1335					SST	lt gr	M gr		Intact	Many coal lense present up to 1327'. SLT bedding throughout. 81°, contact with SLT 87° w.r.t. core axis.
1335	1342					SST/SLT	dk gr	F gr		Intact	Well indurated. Mixture with M gr SST at 1340'. 4" unit of M gr SST. Contact 62°. Discontimuous joint with calcite filling in this SST unit. Continuous joint at 1336', 20°.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1342	1360					SST	lt gr	M gr	71°	Intact	Hard, brittle. Discontinuous joint at 1349'. Coal lensing throughout, but becoming intense at 1357'-1360'.
1360	1364.5					SST/SLT	dk gr	C gr		Intact	Erosional contact with rip up clast at 1360'. 78° w.r.t. core axis. Crossbedding and swirling throughout. Thin calcite vein in discontinuous joint at 1362'.
1364.5	1374					SLT	dk gr	M gr		Blocky	Hard and brittle, slight SST mixed in 80% SLT 20% SST. Discontinuous joint with calcite filling at 1371.9'
1374	1383					SLT	lt bl	VF gr		Blocky & broken	Hard and brittle, SST unit (3" thick) at 1382.5' Many fossils of grasses and leafy plants. Core uniform throughout. Continuous joint at 1375' at 71° w.r.t. core axis.
1383	1423	1382	(COAL ~~29.5'~~ 1411	~~9.0m)~~ 421.2	430.2	COAL	black	—		Blocky & broken	Coal soft and wet 3' of MST at 1412. Otherwise coal uniform throughout. 9.0-29.5' COAL SEAM 4
		1411	1415.7	430.2	431.5	(dirty	coal)				
		1415.7	1422.0	431.5	433.4	(6.2'	1.9m COAL)				
1423	1425					MST	black	f gr		Blocky & brecciated	Soft & crumbly. Numerous joints & fractures throughout. Calcite vein @ 1425.0'.
1425	1431					SLT	dk gr	m gr		intact	Hard & brittle continuous joint @ 1427.0'. ∡ 51° w.r.t. c.a. Calcite vein @ 1427.0'. SST. BEDDING @ 1430.0' ∡ 84° w.r.t. c.a.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1431	1441					SLT/SST	dk gy	f gr		intact	Hard indurated 2" coal unit @ 1431.0'. SST core has SLT bedding throughout; ∡90° w.r.t. c.a. Slickenside @ 1432.0', ∡66° w.r.t. c.a. Calcite filling. Joint continuous @ 1435.0' ∡22° w.r.t. c.a. Calcite filled 1" SLT bed @ 1437.0' ⊥ to c.a. Calcite vein @ 1440.5'.
1441	1444					MST		F gr		Blocky	Soft crumbly. Slickenside at 1442' at 30°, small bituminous layers throughout.
1444	1446					SLT	dk gr	M gr		Blocky	Core hard indurated. Chewed by drill bit.
1446	1460					SLT/SST	lt gr	F gr		intact	Hard and brittle SST with SLT bedding throughout. 83°. Continuous joint at 1452', 65° w.r.t. core axis. Continuous joint at 1453', 47°, little movement with high pressure occured at this joint as beds are bent and dragged. Crossbedding at 1455', continuous joint at 1454.5' at 76°. SLT laminations at 1457'. Continuous joint at 1458', 25° w.r.t. core axis. Pyrite present in joint.
1460	1470					SST	lt gr	C gr		Intact	Channel, hard indurated, uniform throughout. SLT bedding throughout. 78°, continuous joint at 1466' at 69°.
1470	1490					SST	lt gr	C gr		Intact	Channel, hard indurated, uniform throughout. No foreign bedding, continuous joint at 1474', 37° w.r.t. core axis.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1490	1500					SST	lt gr	C gr		Intact	Channel, hard indurated, uniform throughout. SLT bedding throughout at 85° angle. Large rip up clasts at 1493'-1494'. Joint (continuous) at 1497' at 66° angle. SLT crossbedding at 1500'.
1500	1505					SST	lt gr	C gr		Intact	Massive (channel) hard indurated, uniform throughout.
1505	1515					SST	lt gr	C gr		Blocky	Hard, indurated, contains large rip up clasts at 1505' and 1515' clasts are very well indurated. F gr SLT, SLT bedding 80°.
1515	1520	1492.1	1496.7	454.2	456.2	COAL	black	—		Blocky	Soft, crumbly. Bituminous. 4.6' 1.4m coal SEAM 3
1520	1529					SLT/SST	lt gr	F gr		Intact	Hard, brittle, SST with SLT bedding at 70°. Continuous joint at 1524' calcite filling (movement has occurred along this joint) @ 25° w.r.t. c.a.
1529	1539	1504.1 1512.1	1510.1 1515.6	458.5 460.9	460.3 462.0	COAL	black	—		Blocky	1½' layer of MST at 1533'. Coal hard and shiny. SEAM 2 1.1m 3.6' coal 5.9' 1.8m coal SEAM 1
1539	1550					SST	lt gr	M gr		Intact	Hard indurated, uniform throughout. 1547.5' contains 2" of coal lensing.

Hole No. D.D.H. 1751 Page 28 of _____

NDN

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Barry Musil Date: June 4, 1981

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1550	1637					SST	lt gr	M gr		Intact	Hard indurated, slight SLT throughout. 82°, continuous joint at 1559' at 6° angle. Continuous joint at 1569' 5° angle., uniform throughout.
1637	1679					SST	lt gr	F gr		Intact	Hard indurated, no joints, slight SLT bedding throughout, 87°, joint at 1652' (nofilling), 19° w.r.t. core axis. Thin (½") bituminous layer at 1648', contact with F gr SLT at 86°.
1679	1702					SST	lt gr	F gr		Intact	Hard indurated 2" layer of SLT at 1679'. 10" layer at 1681'. Slight SLT layering throughout. 85°, polished concoidal surface at 1697.5'. Continuous joint with calcite filling at 1699', 50° w.r.t. core axis. Calcite filling.
1702	1741					SST	lt gr	F gr		Intact	Core uniform throughout with many continuous and non-continuous joints throughout. Also there is SLT bedding throughout. 88°. Continuous joint at 1707.5:. 28°. Many polished surfaces at 1709'. 12" of intense fracturing with calcite filling at 1718.5'. Many discontinuous joints with calcite filling from 1719'-1741'. Many polished surfaces at 1732' 40° w.r.t. core axis.
1741	1754					SLT/SST	lt gr	F gr		Intact/ blocky & brecciated	Entering fault zone. SST with SLT bedding throughout 58°. Many polished surfaces 58°. Very fractured throughout, with calcite filling. Core going into wafers at 1753'. Core becomes

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	indistinguishable, mixture of SST, SLT, MST, and COAL at 1754'.
1754	1765					COAL	black	—		Crumbled	Crushed, wet, powdery.
1765	1769					MST	black	F gr		Blocky	Hard and brittle, core can't be broken withour having a polished surface.
1769	1771					SLT	dk gr	M gr		Intact	Hard, brittle, joint (continuous) with calcite filling at 49°.
1771	1773					SST	lt gr	M gr		Intact	Hard indurated continuous joint at 1772' 54° w.r.t. core axis.
1773	1786					SLT	dk gr	M gr		Broken	Hard indurated, continuous joint at 1776', 28° (calcite filling) core becoming brecciated at 1779', with many polished surfaces. Polished surfaces at 1785.5', also contact with F gr SST at 1786'. 89° w.r.t. core axis.
1786	1804					SST	lt gr	M gr		Intact	Hard indurated well, discontinuous jointing 1786.5' with calcite filling. Polished surfaces at 1789', continuous jointing at 1795', 18°. Wedge at 1801', 17°. Bedding angle here is 72°.
1804	1813					SLT/SST	lt gr	M gr		Intact	Hard, well indurated. Disct. joint with calcite filling at 1805', SLT bedding throughout, 86°. @ 1805' the bedding starts to crossbed. Polished surface at 1811'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1813	1852					SLT/SST	dk gr	M gr		Intact	Hard indurated, SLT bedding in dominant SST throughout, 68° (1826'). 63° (1846'). Polished surfaces at 1817', 69°. Disct. joint with calcite filling at 1825'. Coal lense at 1831'. Bedding swirling here but returns to normal 63° at 1842'. Contact with SLT at 1852', 9°, calcite in joint.
1852	1877.5					SLT	dk gr	M gr		Intact	Hard indurated. Coal lensing throughout. Slight fossilization (leaves, needles, etc.) at 1861'-1872'. Thin crumbly coal at 1868' and 1879'. 3" layers. Polished surfaces at 1875.5'.
1877.5	1883	1854.3	1858.3	565.2	566.4	COAL	black	—		Blocky and crumbly	Soft and wet. 1" layer of MST at 1881'-1882'. 1.2m - 4.0' SEAM Pe R5
1883	1889					MST	~~lt bl~~ dk gy	F gr		Blocky	Soft easily fracturable, very broken and fractured. Slight fossilization throughout.
1889	1895					SLT	~~lt bl~~ dk gy	F gr		intact	Hard and brittle. Some SST bedding at 1890' and 1892'. Bedding is in swirls. Crumbly and broken at 1893'.
1895	1902					SLT/SST	lt. gy.	F gr		Blocky	Hard and brittle, SST has SLT swirling throughout. Disc. fracturing with calcite filling throughout. Polished surface at 1897', 67°. Soft rock deformation at 1900'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1902	1906					SLT	dk gr	F gr		Blocky & broken	Hard and brittle, slickenside at 1905'. 80°. Many polished surfaces throughout.
1906	19					MST	black	F gr		Brecciated	Broken, many polished surfaces, possible fracture zone. Coal mixed in with the MST. Slight fossilization.
1911	1920					MST	black	M gr		Blocky	Fractured, broken, polished surfaces throughout. 1' of coal at 1917', broken and brecciated throughout.
1920	1930					SLT	dk gr	F gr		Blocky	Hard, brittle, slight plant fossilization throughout. 2" layer of coal at 1926'.
1930	1934'					MST	black	F gr		Broken to brecciated	Soft, crumbly, coal lensing throughout, shiny polished surfaces. Slight fossilization. Concoidal fractures.
1934	1950					SLT	lt bl	F gr		Blocky	Hard, indurated. Cont. joint at 1938', 14°. Slickenside at 1944', 24°. 2" layer of coal at 1946'. Calcite veins at 1947'.
1950	1957					SLT	lt bl	M gr		Intact	Hard, well indurated, disc. jointing with calcite filling at 1951'. SST bedding at 1956', 74°.

Hole No. D.D.H. 1751 Page 32 of _____

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 8, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1957	1967					SST	dk gr	M gr		Intact	Hard, well indurated. Coal lenses at 1957.5'. SLT bedding throughout. Bedding is swirly. Disct. jointing with calcite filling @ 1962'.
1967	1989					SLT	black	F gr		Intact	Hard and brittle. 1" layer of coal at 1972'. Slickenside at 1972.5, 75°. Cont. joint at 1980', 27°. SST bedding at 1984', 90°. 1985; has discontinuous jointing with calcite filling.
1989	2002					SLT/SST	lt gr	F gr		Intact	Hard. Contains SLT bedding throughout. Crossbedding at 1993', discontinuous joint with calcite filling at 1992'. Crossbedding with SLT at 1994'. Continuous joint with calcite filling at 1997'. 5°.w.r.t. core axis.
2002	2010					SST	lt gr	F gr		Intact	Hard, indurated. Crossbedding with SLT throughout. Thin carbonaceous layer at 2004', uniform throughout.
2010	2035					SST	lt gr	M gr		Intact	Hard, well indurated, continuous joint at 2017', 6°. Entering fault zone at 2022'. SST fractured and brecciated for 5' 2022' - 2027').
2035	2047					SST	lt gr	C gr		Intact	Core hard indurated intact until 2043' when it becomes fractured and broken. Some SLT bedding throughout, 81°. Discontinuous joint with calcite filling at 2042'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2047	2050					SLT	dk gr	F gr		Brecciated	Broken, brittle, crumbled. Many polished surfaces.
2050	2051.5					SST	lt gr	F gr		Intact	Core hard, well indurated. SLT bedding swirls throughout.
2051.5	2079					SLT	dk gr	M gr		Brecciated/ intact	Core brecciated going to intact, many polished (glossy) surfaces throughout.
2079	2081					MST	black	F gr		Crumbly	Core fractured and crumbled, very carbonaceous throughout.
2081	2107	2086.5	2090			SLT	dk gr	F gr		Intact	Hard indurated, SST bedding at 2088', 60°. Slight fossilization throughout. Coaly lenses at 2091', 2093'. SST bedding at 2095' 68°. 1' of SST at 2097', 68°. Discontinuous joint with calcite filling at 2100'.
2107	2113					SLT/SST	lt gr	F gr		Intact	Hard, well indurated. Continuous joint at 2112', 14°. SLT bedding throughout. 75° w.r.t. core axis.
2113	2117.5					SLT	dk gr	F gr		Intact	Hard and brittle. 1" coal seam at 2116'.
2117.5	2137					SST/SLT	dk gr	F gr		Intact	Hard, well indurated. SST bedding throughout, 76°.@ 2122'. 76° @ 2130'. Coal lensing throughout.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2137	2161					SLT/SST	dk gr	F gr		Intact	Hard, indurated, discontinuous jointing with calcite filling throughout. SLT bedding throughout. Angle varies throughout also. 75° @ 2137', 68° @ 2150'. Bedding swirls at 2139.5'. Many polished (glossy) surfaces at 2147'. 1" layer of coal at 2145'. Vein at (calcite) 2149.5'.
2161	2172					SLT	dk gr	M gr		Intact	Soft easily fractured, crumbly layer (2" thick) at 2162'. Core very carbonaceous.
2172	2189					SLT/SST	grey	F gr		Intact	Hard, well indurated. Light SLT bedding throughout. Coal lenses throughout.
2189	2196					—	—	—	—	—	Core missing.
		2165.4	2197.0	660.0	669.6						
2196	2229	2204	2205.3	670.7	672.2	COAL	black			Blocky	Hard coal brittle MST at 2220'-2222'. 2212'-2217' core missing. 9.6m - 31.5' 1.5m - 4.9' SEAM R4
2229	2234					SLT	dk gr	M gr		Intact	Hard, brittle, SST crossbedding @ 2231' (2"). Very carbonaceous, slight fossilization.
2234	2236					MST	black	F gr		Block	Soft, easily fracturable, much carbon content, many plant fossils.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2236	2247					SST	lt gr	F gr		Intact	Hard, well indurated, contact 90°, slight SLT banding throughout. Coal lenticles at 2241', SLT clasts @ 2243', SLT cross-bedding from 2243' to 2247'. Discontinuous jointing from 2243'-2247' (calcite filling).
2247	2272					SST	lt gr	M gr		Intact	Hard, well indurated. Discontinuous jointing with calcite filling throughout. Light SLT bedding throughout. 65° angle. Coal in joint at 2265'.
2272	2287					SST	lt gr	M gr		Intact	Hard indurated, very massive, no bedding.
2287	2301					SST	lt gr	M gr		Intact	Hard, indurated. SLT bedding throughout, 53° discontinuous joint with calcite filling at 2295'. Coal lense at 2292'. Contact with SLT at 2301', 76° w.r.t. core axis.
2301	2302					SLT	dk gr	M gr		Intact	Hard and brittle. Discontinuous jointing with calcite filling.
2302	2324					SST	lt gr	M gr		Intact	Hard, well indurated. Core broken and blocky @ 2302.5'. SLT bedding throughout, 74°. Coal lensing at 2314'-2320'. Joint angle of SLT contact 64°.
2324	2324.5					SLT	dk gr	M gr		Intact	Hard and brittle.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2324.5	2329.5	2314.3	2321.2	705.4	707.5	COAL	black	—		Blocky	Crumbly and soft, wet. 7.5' 2.3m COAL SEAM R1
		2301.2	2305.1	701.4	702.6						3.9' 1.2m COAL SEAM R2
2329.5	2332					MST	black	F gr		Blocky	High carbon content, crumbly.
2332	2338					SLT/SST	lt gr	F gr		Intact	Hard, indurated. SLT bedding throughout. Bedding swirls and crossbeds throughout.
2338	2346					COAL	black	—		Blocky	Crumbly, soft, dry. Contact with SST @ 2346' 70°.
2346	2397					SST	lt gr	M gr		Intact	Hard, indurated. Coal lense at 2349', continuous joint with calcite filling @ 2353.6', 20°. Continuous joint @ 2356', 13°. Discontinuous joint with calcite filling at 2389' and 2390'. ½" siltstone layer at 2390.5', contact angle 73°.
2397	2503					SST	lt gr	F gr		Intact	Hard indurated. Continuous joint at 2411', 17°. Continuous joint with calcite filling @ 2403', 16°. Core fractured and brecciated @ 2419-2420'. Continuous joint with calcite filling @ 2438', 21°. Continuous joint at 2456', 24°. Discontinuous joint with calcite filling @ 2461'. Continuous joint (no filling) @ 2497', 11° w.r.t. core axis.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: June 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2503	2522					SLT/SST	lt gr	F gr		Intact	Hard indurated angle of contact with F gr SST 74° w.r.t. core axis. SST dominant with SLT bedding throughout.
2522	2532					SST	lt gr	F gr		Intact	Hard, well indurated. Continuous joint with calcite filling @ 2525', 72° w.r.t. core axis.
2532	2579					SLT/SST	lt gr	F gr		Intact	Hard, quite well indurated. Discontinuous jointing with calcite filling throughout. SLT bedding throughout often crossbedding, coal lensing @ 2537'. 2" SLT unit @ 2551'. Coal lense @ 2555'. Polished surfaces @ 2551'. Extense discontinuous joint @ 2568.5 - 2571.5'. Polished surfaces from 2577'-2579'.
2579	2722					SST/SLT	dk gr	M gr			Hard indurated. SLT dominant with SST bedding throughout, angle changes frequently. Unit very uniform throughout with dominant SLT SST bedding swirls occasionally. Discontinuous joint with calcite filling @ 2607'-2608'. 1' SST interval @ 2658'. Pyrite vein at 2690'.
2722	2902					SLT	black	F gr		Intact	Hard, brittle, continuous and discontinuous joint throughout (all have calcite filling). Polished surfaces at 2752'. More polished surfaces @ 2760' +. Slickenside @ 2788', 16° w.r.t. core axis, heavy calcite vein @ 2792'. Many slickensides and polished surfaces from 2808' on. Many pyrite modules at 2850'.

END OF HOLE

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 12, 1981

LATITUDE	DEPARTURE	ELEVATION
149,163.987	25,384.00	2260.95

Area: DDH 1752

Total Depth: 2,737'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☒ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	38'	0	33.5	0	10.2						33.5' - 10.2m coal - 15 SEAM
38'	38'7"					Coal	bl.			brecciated	fragmented < 4cm, mostly bright coal with small amt. dull.
38'7"	43'4"					mdst	dk.gy		90°	blocky	carby → bituminous layers, iron stained joint surfaces and minor rosebud pyritization, few polished surfaces, the less carbonaceous units are blocky 1½' (feet) of section missing at 40' (joints 42° to c.a.).
43'4"	59'6"					mst/slt 50/50	md.gy.	f.gr.	90°	lg.blocky	Upper part gradational and muddy, iron stained joint surfaces laminated mud, coal, slt interlayers, well indurated in places; calc. surfaces and veins (fine) unit becomes increasingly muddy down section and is borderline silty mst., lower part silty and gradational into neat unit, plant fossils throughout mostly grass-type. (joints 30° to c.a.).
59'6"	75'					slt/sst 90/10	md.lt. gy.	f.gr.	70°	intact, well indurated	unit dominantly slt with thin < 5cm sst beds, calcareous veins easily visible on joint surfaces and sub ll to bedding, ripple laminations, Fe staining on joint surfaces; surprising lack of carbonaceous material, interesting small scale structures (perhaps dewatering or cracking filling types). Mst band at 71' (~1' thick) (joints 24° to c.a.)

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
75'	82'5"					mst	md.gy.→ dk.gy.		88°	blocky,well indurated	laminated, concoidal fractures, sparse carbonaceous fossils, joints 10° to core axis, minor calcite coatings on joint surfaces, unit becomes silty towards lower contact.
82'5"	90'5"					slt.	md.gy.	f.gr.	70°	intact, well indurated	dominantly slt with one sst band (1 ft. thick at 85'5") minor carby frags, core breaks along bedding planes some bedding undulatory, sst lenses tend to be calcite cemented, sst bands at lower angle to c.a. than dominant slt bedding, grades into mst at base of section.
90'5"	91'5"					coal	bl.			intact	mostly bright coal, grassy leaf impressions, some dull coal, muddy at top, polished surfaces and minor calcite coatings.
91'5"	100'					mst	dk.gy.			blocky	abundant polished suraces, calcite surfaces, iron staining on joints, thin coal bands < 4" thick. This interval has one sst. band (10" thick at 98') lower part of interval is silty and more bituminous.
100'	101'					coal	bl.			crumbly, soft	mostly dull coal, highly sheared, minor bright bands

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective: To log as much core as possible

Logged By: Jonnie Popel **Date:** May 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
101'	104'5"					slt/sst	md. → lt.gy.	f.gr.	80°	blocky mod. lithified	Laminated and ripple laminated, slicken sides, Fe staining interbedding of sst/slt with minor carbonaceous stringers, joints at 10° to c.a. lower contact abrupt with coal.
104'5"	111'					coal	bl.			mostly intace	dull, Fe stained, sheared in places (abundant polished surfaces)
111'	117'6"					mst/slt	md.gy.	ufgr.	84°-90°	intact, well indrated	interlaminated slt, mst & carbonaceous lenses, minor sst laminae (1 in.) joint 14° to core axis, calcite rose-buds on joint surface and minor pyrite as well, unit becomes bituminous down section and grades into coal. Sparse plant (woody) impressions.
117'6"	130'6"	112.2'	126.0'	34.2m	38.4m	coal	bl.			intact-blocky	mostly bright coal, pyrite rosebuds visible, polished surfaces minor calcite, mst. bands at top of unit 13.8ft. coal 4.2m coal - Seam 1Hu
130'6"	138'6"					slt	md.gy		75°	blocky, mod. well indurated	thin bituminous laminae (approx. 1-2cm thick) at top and near base of unit, carbonaceous material is sparse otherwise, calcite coatings on joint surfaces (joints 12° to c.a.) also minor pyritization, some polished surfaces. ≈ 3.5' core missing.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain DDH1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
138'6"	146'					slt/sst 50/50	lt.gy.	f.gr.	72°	intact, well indurated	except for one thin muddy band (≈10 in. thick) there is little carbonaceous material visible, the mud band has many polished surfaces, the bedding is undulatory and mod. laminated, no joint surfaces but some fine calcite veins.
146'	153'6"					slt	md.gy.		78°		massive for the most part, laminated with mst interbeds in the 2.5', fine sst laminae (< .5cm. thick) above the mst laminae (lt. gy.) very visible but not abundant, polished joint surfaces at 52° to c.a., minor calcite coatings.
153'6"	159'6"					slt	lt.gy	c.gr.		intact, well indurated	although intact core is fractured and recemented by numerous calcite veins, undulatory bedding, one joint reading at 14° to c.a., borderline sst/slt. ≈ 3' core missing
159'6"	171'6"					slt	md.gy.	f.gr.	75°	blocky, 10 in. pieces	slightly laminated where muddy, at least two thin coal bands (6 in. or less) near middle and bottom of interval, leaf impressions where slt is muddy, pyrite veins (f.gr.) at top of unit (160'), calcite coatings on joint surfaces. (no joint reading reliable).
171'6"	177'					slt/sst 90/10	m.gy.	f.gr.	81°	intact, well ndurated	slt with numerous fine laminae of sst, fine scale ripple laminae, distinct absence of carbonaceous material, gradational into underlying unit.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
177'	180'					sst/slt 60/40	lt.gy.	f.gr.	73°	Intact, well indurated	bedding highly variable; distorted, laminated, ripple laminated, crack filling...., grades into lower unit similar to previous interval, calcite surfaces negligible.
180'	191'					slt	md.gy.	m.gr.	78°	block, mod. indurated	core breaks along bedding laminae, 2 thin sst bands at 184.5' & 189', 6 in. thick, the first one has unusual high angle bedding features joints are at 24° to c.a. and have both Fe stains & calcite surfaces, distinct lack of carb. mat.
191'	194'					mst	dk.gy.			block, mod. indurated	best described as silty mst., sparse carby frags, massively bedded, breaks concoidally, Fe stains on unoriented joints, thin calcite veinlets.
194'6"	197'	189.9	192.9	57.9	58.8	coal	bl.			fragmented	muddy coal with 6" mst parting, some bright bands, well cleated, pyrite and calcite surfaces, some polished surfaces, woody plant impression in parting. 3' coal 0.9m coal (2.5'/0.45m

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
197'	198'6"					mst.	dk.gy.			2" blocks, poorly indurated	abundant grassy plant impressions, grades quickly into lower slt., unexciting.
198'6"	210'					slt.	md. → dk.gy.	v.fgr.		blocky, moderately well indurated	abundant carbonaceous fragments, massively bedded, joints at 5-10° to c.a., pyrite on joint surfaces, muddy at top of unit becoming siltier towards base which is mgr. slt.
210'	222'6"					slt/sst 70/30	m.gy.	fgr.cgr	70°	intact, well indurated	ripple laminae, undulatory bedding, laminated, some carbonaceous laminae and fragments, core generally breaks along bedding planes, unit is fairly consistent throughout, minor pyritization veinlets , some calcareous veins subparallel to bedding, interval is slightly muddy at base.
222'6"	224'6"					mst.	dk.gy.			blocky, mod. well indurated	concoidal fracture habit, surprisingly uncarbonaceous massively bedded.
224'6"	228'					mst.	dk.gy. → bl.			brecciated, poorly indurated	best described as coaly mst., 3 ft. of core missing, bright vitreous lenses
228'	229'					slt.	dk.gy.			small blocks, mod. well indurated	bituminous lenses, abundant carbonaceous plant imprints, massive bedding

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
229'	231'					sst/slt 90/10	lt.gy.	f.gr.	69°	intact, well indurated	largely ripple laminated, some contorted bedding, calcareous surfaces on joint faces, joints at 17° wrt. c.a., speckled Fe. stains on core surface, 3" sandy mst. at base of interval, minor carbonaceous laminae.
231'	234'	230.2'	234.6'	70.2m	71.5m	coal	bl.		82°	brecciated, soft	very muddy coal with bright cleated bands sheared in places, adding diesel fuel would make it burn. 4.3' coal 1.3m coal SEAM 14
234'	236'6"					mst.	dk.gy.			intact, mod. well indurated	massive bedding, unoriented carbonaceous and bituminous material, pyritization along bedding or in bituminous lenses, only slightly silty.
236'6"	240'					coal	bl.		83°	mod. brecciated to blocky	bright and dull coal, highly sheared but intact 3 thin cogly mst. partings (2" thick), mst. have polished surfaces and calcite surfaces.
240'	241'					slt.	m.gy.	fgr.	65°	intact	interesting type porosity developed with calcite and pyrite recrystallization taking place, slightly carbonaceous, lower contact is slickensided apparently along bedding.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
241'	242'					sst.	lt.gy.	fgr.	78°	intact, well indurated	laminated, only slightly carbonaceous, 2 thin (≈ 1cm) bituminous lenses, slickensided.
242'	251'					slt/sst 50/50	lt. - m.gy.	fgr.	78°	blocky, well indurated	alternate 2 inch bands of slt. & sst. ripple laminations, wavy bedding, numerous thin (X 1cm) bituminous lenses, joint surface are pyritized and sometimes calcareous, joints at 12° wrt. c.a., fossil pine-like impressions in the slt.
251'	253'					slt.	m.gy.	m.gr.	75°	small blocky (2-3' pieces)	bituminous lenses (≈ 1cm) throughout which define bedding surfaces, gradational into lower unit.
253'	286'					sst/slt 90/10	lt.gy.	fgr.→ mgr.	75°	intact, 2'-3' pieces	large interval surprisingly consistant throughout, conjugate joints at top expressed as calcite veins, well developed joints at 90° to each other also. 8-10° wrt. c.a., well developed slickenside surfaces along bedding planes, laminated and wavy bedding at top of unit, well developed ripple laminations at 277' → base of interval bedding angle is very sound, several thin bituminous bands at 285' (≈ 1 cm. thick).

Diamond Drill Geological Log

FORDING COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
286'	296'					slt.	m.gy.	fgr.	75°	intact for the most part well indurated	joints at 11° wrt. c.a., calcareous surfaces on joints, slickensides are sub parallel to bedding direction, sparse carbonaceous material, generally present as thin laminae, sst. laminae as well.
296'	298'					slt/sst 50/50	lt.gy.	fgr.	80°	intact, well indurated	equal proportions of interlayered sst/slt. ripple laminations, calcareous joint surfaces at 10° wrt. c.a.
298'	300'					slt.	m.gy.	fgr.		blocky, well indurated	finely laminated with distinctive but thin sst. lenses, one 2 inch band of creamy brown slt., gradational into lower muddy unit, carbonaceous fragments along bedding planes.
300'	302'					mst.	dk.gy.		80°		massively bedded, polished surfaces ≈ parallel to inferred bedding, contact with lower coal is amazingly planar, sparse carbonaceous material.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
302'	307'	298'	309'2"	91.0m	94.2m	coal	bl.	-		fragmented	muddy coal at top & base of unity, bright and dull coal, polished surfaces, ≈ 1 ft. core missing. 10.4' 3.2m coal SEAM 14
307'	309'6"					mst.	dk.gy.		71°	fragmented	very bituminous, 4 inches of coal at base, polished surfaces, Fe staining, woody plant impressions.
309'6"	310'6"					slt.	dk.gy.	v.fgr.	-	intact, well indurated	microfractured and calcite filled veinlets, (unoriented) contorted laminae, sparse carbonaceous fragments.
310'6"	313'6"					coal	bl.		75°	brecciated, soft	dull coal with some bright bands, polished surfaces 4 inch mst. parting approx. in middle of unit, abrupt upper contact.
313'6"	314'6"					slt.	m.gy.	m.gr.	78°	blocky, well indurated	small scale x-bedding, convolute bedding, abundant leaf plant impressions (carbonized) along bedding, thin sst. laminae.
314'6"	319'6"					slt.	dk.gy.	v.fgr.	74°	blocky with some intact portions	abundant leafy carbonaceous plant impressions along bedding planes, thin (4 inch) muddy coal at 317', 2 thin < 1 inch sst. bands, polished surfaces along bedding & unoriented into carbonaceous sections.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
319'6"	324'					sst/slt 50/50	m. → lt.gy.	fgr.	75°	intact, well indurated	ripple laminated, undulatory and planar bedding, carbonaceous shean along some bedding, calcite vein and surfaces on joint planes which are at 7° wrt. c.a. (quite abundant), interesting structures i.e. (burrowing & replacement structure which appears to be a snail). (May possibly be a seed core).
324'	327'					slt.	m.gy.	fgr.	-	blocky, well indurated	dominantly massively bedded, some fine laminae, joints at 8° wrt. c.a., concoidal fractures, little or carbonaceous material lower contact is undulatory.
327'	332'					slt/sst 60/40	m. → lt.gy.	fgr.	78°	intact, well indurated	interlaminated slt. & sst., wavy & planar bedding carbonaceous material present as laminar shean, 2 - 3 small scale collapse structures unit fining downwards.
332'	333'6"					mst.	dk.gy.		-	small block mod., well indurated	best described as silty mst., polished surfaces along bedding planes, calcareous surfaces, and calcite veinlets, faintly laminated, sparse carbonaceous material.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 19, 1981

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
333'6"	336'					slt	h.gy.	c.gr.	–	intact through recrystallization	borderline sst., highly fractured zone, numerous polished surfaces and calcite veins, joints at 7° wrt. c.a.
336'	345'					mst.	dk. → md. gy.		77°	blocky, mod. well indurated	numerous planar polished surfaces along bedding, fine laminations caused by siltier material, carbonaceous material virtually nonexistant.
345'	347'					slt.	m.gy.	fgr.	80°	blocky, mod. well indurated	slickensided surfaces with calcite coatings, sparse carbonaceous material along bedding, one thin (≈ 1 in.) sst. lense in middle of unit.
347'	350'					coal/ mst.	bl.			brecciated, mod. well indurated	1 foot section missing, coal is bright, mst. is coaly, concoidal fractures, uncleated massive coal pieces, chewed up by drilling, pyrite and calcareous growths on polished surfaces.
350'	362'					mst.	dk.gy.		82°		laminated top 1 ft. of unit due to silty influence, 1 2in. coal band at 353', basically massive mst., some well preserved plant fossils, pyrite and calcite growths on bedding surfaces, lower contact gradational into slt.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
362'	365'					slt.	m.gy.	fgr.	-	intact, well indurated	massive bedding, bituminous fragments, some (rare) muddy laminae, dull and uninteresting jointed but not continuous.
365'	366'					mst/coal	bl.		-	brecciated, soft	bituminous mst., slightly silty, sheared to rat poop.
366'	374'6"					slt.	m.gy.	m.fgr.	75°	blocky, well indurated	laminated with 1 foot zone of thin sst. lenses, at 369', becomes massive and finer grained towards bottom of unit, carbonaceous material throughout, few good plant impressions minor calcite associated with carbonized material.
374'6"	375'6"					coal	bl.			almost friable soft	muddy at top, coal is in small squares (well cleated), calcite surfaces, lower contract is abrupt with slt.
375'6"	382'					slt.	md.gy.	fgr.	70°	blocky	abundant bituminous lenses along bedding planes and associated pyrite, small scale undulatory bedding minor calcite veinlets towards base of unit.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
382'	385'					sst/ slt. 50/50	m.gy.	v.fgr/ m.gr.	87°	intact, well indurated	laminated slt. & sst., undulatory bedding, burrows in sst. along & (+) perpendicular to bedding, calcite veinlets and surfaces, joint at 15° wrt. c.a., very little difference to slt. of lower unit.
385'	394'					slt.	m.gy.	fgr.	-	intact, well indurated	scattered carbonaceous fragments, sst. influence at top of unit, the sst. is not laminated but pod shaped, intermixed and discontinuous, pyrite is minor, calcite is present as joint coatings which are at 20° wrt. c.a.
394'	404'					slt/ sst. 90/10	m.gy.	m.gr.	70°	intact, well indurated	thin (< 1 in.) sst. beds approximately 6 inches apart throughout unit, numerous calcite veins and surfaces on joint sets which are at 17° wrt. c.a. minor pyritization. At 399' there is an (1.5 ft.) interval of slt. without sst. beds afterwhich the sequence continues, the unit becomes coarser towards the base eventually grading into a v.fgr. sst.
404'	406'6"					sst.	lt.gy.	v.fgr.	-		laminated and distorted bedding, massive (for core) 2 ft. joints, calcareous surfaces on joints which are at 2° wrt. c.a. minor pyrite growths, unit is siltier at the base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
406'6"	412'6"					slt.	m.gy.	fgr.	-	large blocky well indurated	except for a thin sst. laminae at top and bottom the interval is massively bedded, carbonaceous fragments are unoriented throughout some calcareous surfaces associated with joints near top otherwise nonexistent.
412'6"	419'					sst/ slt. 90/10	lt.gy.	fgr./ c.gr.	70°	intact, well indurated	laminated, ripple laminated, fractured, joint sets at 5° - 7° wrt. c.a., calcite veins carbonaceous material present as a sheen, slt. increases towards lower gradational unit, appears to be some sort of soft rock deformation in bed forms.
419'	424'6"					slt.	m.gy.	fgr.		intact, well indurated	irregular pods and lenses of fgr. sst., S shaped beds and other distorted bed forms (appear to be soft rock deformation), sparse carbonaceous material, calcite veins associated with sst. lenses are subparallel to bedding.
424'6"	427'	423.2'	457.7'	129.0m	139.5m	mst./ coal 60/40	bl.		-	fragmented	mst. is bituminous, coal is bright, both are sheared, unit from top is 3" coal, 9" mst., 5" coal, 13" mst., calcareous joint surface in mst. at 1° wrt. c.a. 34.4' - 10.5m TRUE COAL THICKNESS 25.6' - 7.8m. SEAM 13
427'	439'					coal	bl.		-	brecciated, soft	mostly bright with 2-1 inch muddy coal bands, sheared with calcite coatings in places approximately 3' core missing.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
439'	441'					mst.	bl.			small blocky	best described as bituminous mst., slightly silty, slickensided, calcareous surfaces, ½ ft. core missing.
441'	445'6"					coal	bl.			intact & brecciated	hard bright coal, cleated at base.
445'6"	450'6"					mst./coal 70/30	bl.		65°-70°	blocky, poorly indurated	bituminous mst. with coaly bands < 1 in. thick, polished surfaces, calcareous & (phosphate?) surfaces subparallel to bedding planes.
450'6"	461'6"					coal	bl.			blocky, mod. indurated	mostly bright coal with some dull bands 2 - 4 in. mst. partings at 456' and 458', cleated, sheared (phosphate?) coating along bedding.
461'6"	464'6"					mst.	dk.gy.	b.gr.	85°	small block	bituminous, grassy plant impressions, white (phosphate) surfaces, (voids) vuggy at top, silty towards base which is gradational into slt., decreasing carbonaceous material at the bottom of interval, thin calcite veinlets along bedding.
464'6"	473'					slt.	m.gr.	m.gr.	87°	indurated	calcite veinlets parallel to bedding, small lenses of coal throughout minor sst. bedding present at depth, grain size becomes coarser with depth interval of 1½' at 470 of sst. with thin laminae of carbonaceous slt., pyrite present.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
473'	476'					slt.	lt.bl.	f.gr.	81°	intact	minor fossils present along bedding planes, increasing
											darkness with depth (progressing to a carb. slt.) coal lenses
											present throughout, continousjoint set at 82° wrt.c.a.
476'	482'	471.1'	478.3'	139.8m.	145.8m.	coal	bl.	-	85°	blocky -	bright coal with bands of dull, wet, brittle, FeS_2.
										friable	7.2' 2.2m. SEAM pt13
482'	496'					slt.	lt.b.	f.gr.	86°	intact	fossils present on bedding plane.
											calcite infilling along fractures,
											becomes progressively darker with depth with thin
											laminae of sst. appearing
											crossbedding present,
											interval of sst. ½ ' at 491',
											bedding disturbed.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
496'	499'					sst.	.gr.	c.gr.	86°	indurated	sst. bedded with carb. slt. cross bedding present, bedding is disturbed. 1½' of slt. at 497.5.
499'	50^					sst/ slt 80/20	lt.gr./ lt.bl.	c.gr.	89°	intact	thin lenses of coal throughout, bedding is wavy with cross-bedding present, slt. becomes darker with depth.
503'	507'					mst.	lt.bl.	fgr.		blocky	minor fossils present, small amounts of coal throughout grain size increases with depth.
507'	521 3/4'					slt.	lt.gr.	mgr.	87°	indurated - intact	intervals of sst. bedding ranging in size from ½' to 1'. bedding is undulated, some minor crossbedding present. colour becomes increasingly darker with depth, minor pyrite present.
521 3/4	542	519.4'	539.4'	158.3m	164.4m	coal	bl.		86°	blocky-friable	very brittle bright coal, minor beds of mudstone present < 2". COAL - 20.0' 6.1m SEAM 12
543'	547'6"					slt.	dk.gy.	v.fgr.	78°	blocky	muddy slt., bituminous lenses ≈ 1 cm. with associated pyrite & calcite, abundant carbonized plant impressions, faint planar bedding, polished surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
547'6"	550'6"					slt./sst. 70/30	m.gy.	m.gr./fgr.	72°	intact, well indurated	planar and lenticular bedding of slt./sst., calcite veinlets along joints at 14° wrt. c.a., carbonaceous material at top of unit, fining downwards.
550'6"	553'6"					mst.	dk.gy.		-	blocky, mod. well indurated	silty mst., laminated, abundant polished surfaces associated calcite, very bituminous towards base.
553'6"	555'6"					coal/mst	bl.			fragmented - brecciated	4 - 6" intervals, mst.-coal-mst.-coal, upper 6" coal is hard-dull muddy, lower coal is soft and brecciated, calcite and pyrite on sheared surfaces.
555'6"	565'					slt./sst 60/40	m.gy.	c.gr./fgr.	75°	blocky	interbedded slt. & sst., various bedding types, undulatory, contorted, planar, minute calcite veinlets, joints subparallel to bedding and at 9° wrt. c.a., most sediments mixed (no individual type, poorly sorted)
565'	570'6"					slt./sst. 70/30	m.gy.	v.fgr. c.gr.	74°	intact, well indurated	unique repetition of fining down sequences, x bedding and ripple beds near base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area DDH 1752

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
570'6"	573'6"					slt.	m.gy.	fgr.	–	blocky, well indurated	massive bedding, slickensides along bedding and associated calcite, sparse carbonaceous fragments, one joint at 18° wrt. c.a., 2 lcm. sst. laminae outline bedding direction.
573'6"	575'6"					sst.	lt.gy.	m.gr.	85°	intact, well indurated	massive and planar bedding, unjointed, 1 calcite vein along bedding, sharp lower contact.
575'6"	578'					slt.	dk.gy.	v.fgr.	85°	small blocks moderately well indurated	carbonaceous material along bedding planes which are not clearly evident, slickensided surfaces, 1-3 in. contorted sst. bed at 377.5', slightly muddy.
578'	581'6"					sst./ slt. 90/10	lt.gy.	fgr.	76°	intact	planar bedding, bioturbation (contorted beds) joint sets (calcite filled) at 15° wrt. c.a., thin slt. laminae (< lcm.) throughout, small scale x bedding and ripple beds near base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
581'6"	582'6"					slt.	dk.gy.	fgr.	-	blocky	massive, carbonaceous fragments, polished surfaces
582'6"	592'					sst./ slt. 80/20	lt.→ m. gy.	m.gr.→ fgr./ fgr. - c.gr.	78°	intact, well indurated	dominantly sst. with 2 - 1' intervals of sandy slt. at 587' and 590', x-bedded, undulatory bedding and contorted bedding where burrowing occurs in sst., carbonaceous material presence as a sheen along bedding, joints at 5° wrt., c.a., calcite veinlets.
592'	604'6"					slt./ sst. 90/10	m.gy.	m.gr./ fgr.	70-80°	intact, well indurated	slt. is carbonaceous, sst. (1-2 in. beds) are burrowed, calcareous filled joints at 10° wrt. c.a., interval is quite consistent throughout (evenly spaced sst. beds)
604'6"	626'					sst./ slt. 80/20	m.gy.→ lt.gy.	m.gr.	78°	(fractured) intact, well indurated	fracture zone at 604'6" - 606', core is jointed and fragmented lack of slickensides may mean fractures are a function of drilling, unit is very continuous, planar bedding and small scale ripple bedding are dominant, long calcite healed joints are at 10° wrt. c.a. core breaks along bedding, surprising lack of carbonaceous material and slickensides for size of unit.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
626'	630'					slt.	m.gy.	m-fgr.	80°	intact, well	laminated with sst., fines downsection, joints
										indurated	at 16° wrt. c.a., core breaks along bedding
											planes, upper contact shows some sort of load
											clast structures, interval becomes more carbonaceous
											downwards.
630'	632'					mst.	dk.gy.		80°	blocky	gradational with upper unit,
											slt. laminae
											fine bituminous lenses at base, breaks concoidally.
632'	647'	628.3'	639.1'	191.5m	194.8m	coal	bl.		-	blocky	hard bright coal, some places cleated,
										fragmented	others sheared, 4 in. mst. parting at 640' and 644',
											10 in. mst. at base, polished surfaces, coal 10.8' 3.3m. Seam 11u
647'	650'					mst.	dk.gy.	-	-	blocky	best described as silty, mst., bituminous lenses and
											abundant woody impressions, slickensides very fine
											calcite veinlets subparallel to bedding.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
650'	652'					slt./sst. 60/40	m.gy.	fgr./fgr.	79°	intact, well indurated	sst. laminates the slt. but slt. dominates, sst. is burrowed, slt. is carbonaceous, bedding is wavy.
652'	664'					slt.	m.gy.	f.-mgr.	82°	blocky to intact, well indurated	slightly sandy for ≈ 1 ft. at top and bottom of interval which is also laminated, planar bedding, consistent unit unjointed, well preserved (sequoia-type), plant impression, thin (pencil lead) bituminous lenses at top of section, calcareous vein ≈ 1 cm. thick at bottom contact with coal.
664'	686'	659.4	683.1'	201.0m	208.2m	coal	bl.		-	block, fragmented, brecciated	good hard bright coal with numerous mst. partings, coal is cleated, sheared and jointed 1 in of pyrite (crystalline) at 682.5', mst. partings at 666' (4 in.), 674' - 676' (3 - 1 in.), 679' (10 in.), 680' (10 in.), 684' (4in.), minor calcite surfaces on joints at 38° wrt. c.a. 23.6' - 7.2m True coal thickness - 21' - 6.4m Seam 11
686'	688'					mst.	bl.	-	?	fragmented, but quite well indurated	slickensides on most surfaces, bituminous, calcite surfaces
688'	694'6"					slt./sst. 90/10	m.gy.	v.fgr./fgr.	-	blocky (angular)	massive bedding, well jointed with calcareous surfaces, sst. beds have a "dumped in" appearance carbonaceous fragments are unoriented, joints at 12° wrt. c.a.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
694'6"	698'					slt.	m.gy.	mgr.	?	blocky, well indurated	massive bedding with minor faint laminations, sparse carbonaceous material, numerous minute veinlets of calcite, joints at 8° wrt. c.a. have calcareous surfaces, because of jointing blocks are angular, 1 - 1.5 in. sst. contorted bed near base of interval.
698'	700'6"					sst.	lt.gy.	v.fgr.	80°	intact, very well indurated	undulatory bedding, clean (no mud), fines downwards, small calcite healed fractures, silty at base of interval.
700'6"	704'6"					slt./ sst.	m.gy.	fgr./ fgr.	-	large angular block, well indurated.	mixed lithology as well as some thin sst. laminae (undulatory) very long joints at 7° wrt.c.a., calcite surfaces
704'6"	714'					slt.	m.gy.	f.-m.gr.		blocky, well indurated	massive bedding, sparse carbonaceous material throughout, joints at 10°-14° wrt. c.a. have calcareous surfaces, some joints appear to have been filled by coarser material (it is perhaps because the calcite has made the sediment look coarser), bituminous lenses at 712' - 713'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
714'	726'					sst./slt.	m-lt.gy.	fgr./cgr.	80°	intact but jointed	2 - 3 inch beds of slt. within a dominantly sst. lithology, wavy bedding and small scale x-beds, calcareous joints at 22° wrt. c.a., also a 1ft. calcite healed fracture zone at 724', sparse carbonaceous material.
726'	731'					slt.	mgy.	mgr.	72°	fractured	best described as sandy slt., numerous calcite healed fractures vuggy (secondary) porosity developed, (phosphate) white non-calcareous deposits on joint surfaces gradational into lower unit.
731'	734'6"					sst.	lt.gy.	fgr.	70°	fractured	silty sst., abundant calcite healed fractures planar bedding and vuggy porosity, slickensides.
734'6"	741'					slt.	fgy.	fgr.	70°	intact, mod well indurated	massive bedding with faint and thin sst. laminae; calcite healed fractures, carbonaceous material present mainly as a shear, at base of unit are thin bituminous lenses.
741'	744'6"					sst.	lt.gy.	fgr.	85-90°	intact, well indurated	mgr. fraction as well, planar bedding, small scale x-bedding one calcite filled joint at ≈45° wrt. c.a.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 22, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: DDh 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
744'6"	762'					slt.	mgy.	f-mgr.		blocky, well indurated	massively bedded with minor faint laminations, carbonaceous fragments throughout as well as bituminous lenticles, slickensides, joint at 10° wrt. c.a., calcite veins sub-parallel to bedding direction, lt. colored mud clasts one of which contains a gastropod.
762'	763'					mst.	dk.gy.			small blocks	bituminous mst., calcite veins at 90° wrt. c.a., polished surfaces.
763'	764'6"					slt./sst.	mgy.	fgr.	80°	intact, well indurated.	interbedded slt./sst., undulatory to waxy bedding, cracking filling structures ?, only slightly carbonaceous, gradational top and bottom.
764'6"	766'					coal	bl.	-	-	fragmented soft	sheared bright and dull coal, slickensides no calcite.
766'	767'					slt.	dk.gy.	v.fgr.	-	small blocks	best described as muddy slt., abundant carbonaceous fragments along bedding plane, 1 thin (≈1cm.) sst. lenses, calcite veinlets.
767'	768'					sst/slt. 80/20	lt.gy.	v.fgr./cgr.	84°	intact, well indurated	fines downwards, joints at 10° wrt. c.a. have calcareous surfaces, laminated planar bedding.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 22, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
768'	772'					slt.	mgy.	v.fgr.	85°	blocky	best described as muddy siltstone, slickensided but no joints, calcareous surfaces along bedding planes, bituminous lenses throughout, coarsens downsection.
772'	777'					slt./sst. 80/20	v.fgr./fgr.	mgy.	80-85°	intact, well indurated	mainly slt. with pods, stringers and laminae of sst., the slt. is carbonaceous, the sst. is bored, calcareous veins along bedding planes.
777'	782'6"					slt.	fgr.	mgy.	85°	intact, well indurated.	laminated planar bedding, abundant grassy plant impressions, minor calcite veinlets, some places slightly sandy.
782'6"	785'					sst./slt.	v.fgr./mgr.	lt.mgy	85°	intact, well indurated.	planar with some small scale x-bedding, minor pyrite in sst., virtually non-carbonaceous.
785'	793'					slt.	mgy.	fgr.	>85°	intact, well indurated.	faintly laminated, carbonaceous material present as sheen along bedding, slickensides, unjointed, fine calcite veinlets slightly sandy in places.
793'	815'					slt./sst. 60/40	mgy.	cgr./v.fgr.	86°	intact, well indurated	interbedded slt.& sst., various bed forms, planar undulatory, wavy, ripple bedding, burrows (pelecypod) calcite veinlets throughout, bituminous stringers 1-1 ft. sst. bed at 804' sst. decreases towards base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
815'	818'					slt.	mgy.	f.-vfgr.	84°	blocky, well indurated	slightly sandy, faintly laminated with sst. and carbonaceous layers which contain abundant plant impressions, one joint at 20° wrt. c.a., calcareous surfaces along bedding planes.
818'	827'					slt./sst. 40/10	mgy.	fgr.	-	intact, well indurated	basically the same as the above unit with irregularly spaced sst. beds, joint. at 12° wrt. c.a.
827'	833'					slt.	mgy.	vfgr.	80°	intact, well indurated	laminated, carbonaceous and bituminous fragments breaks conchoidally, polished surfaces present but rare, minor calcite veinlets, unit sandy near base.
833'	837'					slt.	mgy.	m-cgr	81°	intact, well indurated	thin sst laminae in some places, carbonaceous smear along bedding planes, planar bedding with some contorted beds, fines near base of unit.
837'	842'					mst.	dkgy→ bl	-	-		best described as coaly mst or in places muddy coal, 2 bituminous layers < 1" thick polished surfaces and calcite veins at various ∠'s (angles) w.r.t. c.a., grades into coal.
842'	857'6"	837.6'	868.8'	255.3m.	264.8m.	coal	bl.	-	-	angular blocky and fragmented	good hard bright coal, cleated and also jointed (at 26° w.r.t. c.a.), 4 - 1in. slt. partings, 31.2' - 9.5 m. true coal thickness 27.2' - 8.3 m. Seam 9

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
857'6"	870'					mst./coal	bl.	-	88°	small blocks, mod. well indur.	best described as bituminous to carbonaceous mst. with thin coal beds (<4 in.), slightly silty in places, numerous polished surfaces. Calcareous veinlets along bedding near base of interval. 6 in. coal bed at 868'.
870'	874'6"					coal	bl.	-	-	blocky to brecciated	bright and dull coal, muddy at top and base, polished surfaces intact blocks are dull with bright bands. Coal 34.1' 10.4m. with mst. partings.
874'6"	879'					mst.	dk.gy.	-	81°	blocky, mod. well indurated	poorly preserved plant impressions (carbonized) bituminous stringers, unoriented calcite veinlets, becomes silty at base, faintly laminated by 2 colors of mud, polished surfaces.
879'	892'6"					slt.	m. gy.	vfgr.-fgr.	83°	blocky, well indurated	planar bedding with carbonaceous laminae, core breaks along bedding, polished surfaces along bedding, gradational upper and lower contacts.
892'6"	902'					slt.	m.-lt.gy.	m.-cgr.	87°	intact, well indurated	laminated by coarser material, carbonaceous material virtually non-existant, well jointed with calcareous surfaces, joint sets at 1-2° wrt. c.a., lower 4 ft. is slightly coarser with abundant calcite healed fractures.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
902'	904'					slt.	m.gy.	v.fgr.	–	small blocks	best described as muddy siltstone, slickensides, slightly bituminous, core breaks concoidally.
904'	925'6"					slt./ sst. 80/20	m.gy.	fgr./ fgr.	76-85°	blocky to intact	very diverse grain size, very difficult unit to generalize sst. beds up to 6 in. located at various places throughout interval, some bioturbation in the slt., calcite filled joints at 9° wrt. c.a., polished surfaces, carbonaceous fragments along bedding planes which are x bedded, planar and undulatory.
925'6"	929'					slt.	m.gy. → lt.gy.	cgr.	75°	intact, well indurated.	sst. interbeds, carbonaceous smear along bedding planes, calcite healed joints at 12° wrt. c.a., planar and undulatory bedding, sharp contact with lower unit.
929'	934'6"					slt.	m.gy.	v.fgr.	75°	blocky, mod. well indurated	best described as muddy slt., faintly laminated with carbonaceous and bituminous material, polished surfaces, ≈ 1 ft. core missing, calcite veins subparallel to bedding planes.
934'6"	937'					slt./ sst. 90/10	m.gy.	m.gr./ v.fgr.	–	blocky, well indurated	very thin laminae of sst. and bituminous material, fining downwards, calcite veinlets associated with bedding and carbonaceous material.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 26, 1982

LATITUDE	DEPARTURE	ELEVATION

Area DDH 1752 Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
937'	941'6"					slt./mst. 50/50	dk.gy.	-	-	small blocks	massive bedding with abundant bituminous material throughout as well as plant impressions, unjointed, calcite veinlets along supposed bedding, fining downwards into coal.
941'6"	967'	938.3'	970.5'	286.0m.	295.8m	coal	bl.	-	-	blocky to brecciated	bright and dull coal, ≈ 11 ft. core missing, mst. partings, polished surfaces, core is extremely fragmented near base (probably) due to drilling, minor calcite veins in intact sections. 32.1' coal 9.8 m. coal. Seam 7
967'	968'					sst.	lt.gy.	v.fgr.	-	fragmented	calcareous surfaces, angular blocks, laminated by slt., grades into slt. , core is difficult to interpret because of poor coring status, x' core missing?
968'	976'					mst.	dk.gy.	-	-	small chips	4 ft. core missing, very carbonaceous to bituminous mst., polished surfaces, core looks like it was drilled with a rotary rig.
976'	982'6"					slt.	m.gy.	v.fgr. fgr.	85°	blocky, poorly indurated	at top of interval core is fractured with calcite surfaces, the core becomes less fractured and coarsens downwards , there is a coaly mst. at 978.5' (2 in. thick), polished surfaces, abundant carbonaceous material scattered throughout.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
982'6"	986'6"					slt./sst. 80/20	m.gy.	m.gr./v.fgr.	90°	block, mod. well insulated	slt. with planar tripple laminae of sst., carbonaceous fragments, calcite healed joints at 11 wrt. c.a.
986'6"	988'6"					mst.	dk.gy.	-	-	small blocks to brecciated	CHANGEOVER to NQcore, carbonaceous plant impressions, silty in places, coaly laminae sharp contact with coal at base of interval.
988'6"	994'	934.3	990.0	300.0m	307.1m.	coal	bl.	-	-	brecciated, soft	≈ 2½ → 3 ft. core missing, core is in rough shape, very muddy from drilling, dull muddy coal with bright bands cleated 5.6' 1.7m. coal. SEAM #7
994'	1003'					slt.	m.gy.	v.fgr.	80°	small blocks	best described as muddy slt., joints at 9° wrt. c.a., bituminous and carbonaceous material define bedding planes, at 998' there are some fine sst. laminae.
1003'	1008'6"					slt.	m.gy.	c.gr.	77°	angular blocks well indurated	calcareous joints at 11 wrt. c.a., polished surfaces, carbonaceous material along bedding planes, sst.beds beginning to appear at base of interval.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1008'6"	1039'6"					slt./sst. 60/40	m.lt.gy.	m.gr./v.fgr.	76°	intact, well indurated	nondescript bedding planes, almost massively bedded, well developed and well spaced joints, joints at 11° wrt. c.a., sharp lower contact with coarser sst., sparse carbonaceous material which is present mainly as a smear on bedding planes, minor calcite veins subparallel to bedding.
1039'6"	1058'6"					sst.	lt.gy.	v.fgr.-m.gr.	77°	intact, very well indurated	laminar and wavy bedding, 6 in. of c.gr. sst. at 1057 and a c.gr. fraction dispersed throughout, calcareous joints at 8° wrt. c.a., virtually, non-carbonaceous, 2 thin (1 in.) slt. bands, lower contact is sharp with slt.
1058'6"	1067'					slt.	m.gy.		65°-75°	small blocks mod. well indurated	massive bedding, slightly laminar at base caused by sst. influence, carbonaceous throughout with bituminous stringers, polished surfaces, gradational into lower unit.
1067'	1097'					sst.	m.-cgr.	lt.gy.	65° ? - 85°	large blocks well indurated	mainly massive bedding with some planar beds, unoriented bituminous lenses, mud clasts, minor calcite veins associated with the bituminous lenses, joints at 14° wrt. c.a. very long and consistent recognizable unit.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1097'	1106'6'					slt./sst.	m.gy.	m.gr./f.gr.	85°	intact, well	borderline silty sst. or sandy siltstone, individual beds
						50/50				indurated	of each as well, laminar and small scale ∝ bedding, also
											structures which have pinch and swell characteristics,
											fine calcite veinlets, polished surfaces, sparse carbon-
											aceous material, fines downwards.
1106'6"	1113'					slt.	dk.gy.	v.f.gr.	85°	block, mod.	slightly sandy at top, fining towards mst. at base, numerous
										well indurated	carbonaceous (grassy) plant impressions, calcareous joint
											at 6° wrt. c.a., become bituminous near bottom contact with
											coal, laminar bedding.
1113'	1117'	1107.0'	1112.2'	337.4m	339.0m	coal	bl.	-	-	angular blocky	muddy at top and bottom of interval 2 in. mst. parting,
										cleated	slickensided at 26' wrt. c.a. 5.2' coal 1.6m. coal. Seam - pt 5
1117'	1125'					slt.	dk.gy.	v.f.gr.	72°-80°	blocky, mod. well	best described as muddy slt., some places are silty mst.,
										indurated	numerous fine bituminous lenses and grassy plant impressions,
											calcite veinlets along bedding planes, unjointed, some
											polished surfaces, 4 in. coal at 1119'.
1125'	1131'					sst.	lt.gy.	f.gr.	86°	intact, well	joint at 20° wrt. c.a., calcareous surfaces, planar bedding,
										indurated	silty at top and bottom of interval, sparse carbonaceous
											material, unit become more laminar towards lower contact which
											is gradational.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1131'	1140'6"					slt./sst.	m.gy.	m.gr./v.f.gr.	84°	intact, well	fine laminae of sst. in slt., calcareous joint at 9°
						90/10				indurated	wrt. c.a., carbonaceous fragments along bedding planes which
											are planar to wavy, sst. laminae disappear as the unit fines
											near the base.
1140'6"	1147'					slt.	dk.gy.	v.f.gr.	-	small, blocks	muddy slt., carbonaceous laminae and unoriented fragments
										mod. well	in more massive sections, 4 in. coal at 1143.5', polished
										indurated	surfaces, coarsens downwards.
1147'	1150'					slt./sst.	m.gy.	m.gr./v.f.gr.	78°	intact, well	interbedded slt. & sst., calcareous joint at 5° wrt. c.a.
						60/40				indurated	polished surfaces along bedding planes, fines downwards and is
											gradational with lower interval.
1150'	1152'6"					slt.	dk.gy.	v.f.gr.	-	blocky, mod.	faintly laminated, muddy at base, sparse carbonaceous fragments
										well indurated	bituminous (very fine) lenticles near contact with coal.
1152'6"	1155'					coal	bl.	-	-	brecciated	bright and dull coal, muddy coal at top and brecciated muddy
											crap at base.
1155'	1158'6"					mst.	dk.gy.	-	-	blocky, mod.	massively bedded, bituminous at top, slightly silty at base,
										well intact	polished surfaces and thin calcite veins.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1158'6"	1162'6"					slt.	m-dkgy.	v.f.gr.	?	small blocks	massively bedded, unoriented carbonaceous fragments, fine
										mod. well	bituminous lenticles, fine calcite healed fractures,
										indurated	joint at 10° wrt. c.a., polished surfaces.
1158'6"	1167'					mst./ slt.	m.gy.	?	-	brecciated, soft	driller logs 3 ft. mst. missing, slt. clasts in mixed mst. -
											slt. matrix, abundant polished surfaces and associated
											calcite, definitely associated with some fault movement.
1167'	1179'6"					slt.	m.gy.	f.gr.	78°	brecciated at top	slightly muddy and bituminous at top of interval, carbonaceous
										blocky at bottom	throughout, massive bedding with some high ∠ (angle) wavy
											bedding ≈ 60°, calcareous joints at 10° wrt. c.a., ≈ 3 ft.
											core missing apparently at the top of the unit.
1179'6"	1184'					mst.	dk.gy.	-	-	small blocks,	2 in. coaly layer at top contact, mst. breaks concoidally,
										mod. well	(massively bedded), carbonaceous material decreases down-
										indurated	wards until it disappears, polished surfaces, joints at 30°
											wrt. c.a.
1184'	1193'6"					slt.	m.gy.	v.f.gr./ f.gr.	72°	blocky to intact	coarsens downwards, carbonaceous material present as a smear
									at cont.	well indurated	in massive - type bedding, core breaks concoidally, joint at
											8° wrt. c.a., sharp lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: May 29, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1193'6"	1203.6"					slt./sst. 70/30	m.-ltgy.	m.gr./v.f.gr. → f.gr.	80°	blocky, intact well indurated	slt. with sandy beds up to 5 in. thick, joints at 8° wrt. c.a., calcite veins subparallel to bedding planes, one surface has recrystallazed qtz. as a vein, interval becomes sandier towards lower contact.
1203'6"	1208'6"					slt./sst. 50/50	m.gy.	c.gr./v.f.gr	av=75°	intact, well indurated	interbedded sst. & slt., smale scale x-bedding, planar and wavy bedding as well, virtually non-carbonaceous, calcareous joint at 4° wrt. c.a.
1208'6"	1218'6"					sst.	lt.gy.	v.f.gr.	82°	intact, well indurated	best described as silty sst., core breaks along bedding planes, thin carbonaceous laminae, bedding is planar to wavy, polished surfaces along bedding, one calcareous joint at 8° wrt.c.a.
1218'6"	1231'					sst.	lt.gy.	f-m.gr.	81°	intact, well indurated	fairly consistent unit although 1-5 in. slt. bed at 1229'6" slickensided calcareous joints at 8° wrt. c.a., very sparse carbonaceous fragments, bedding is planar.
1231'	1237'					slt.	m.gy.	m.gr.	-	blocky well indurated	top of interval is gradational with sandstone siltstone has a sst. (v.f.gr.) fraction, core is fragmented by drilling at base abundant bituminous lenticles throughout.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1237'	1249'					sst.	lt.gy.	m.gr.	-	intact to	massively bedded throughout, from 1242' to base contains
										blocky, well	mst. and shale rip up clasts up to 1" thick and at
										indurated	least 2" wide calcite veinlets and calcareous joints at
											11° wrt. c.a., mineralogy seems to indicate more chert
											than normal.
1249'	1251'					slt./sst.	m.gy.	f.-vfgr-fgr.	83°	blocky to	slt. with thin ≈ 1 cm. beds of sst., polished surfaces along
						90/10				fragmented and	bedding planes, numerous calcite veinlets, sparse carbon-
										well indurated	aceous fragments, lower contact is abrupt with m.gr. sst.
1251'	1265'					sst.	lt.gy.	m.gr.	-	angular blocky	numerous joints at 30° wrt. c.a., some bituminous lenticles
										to intact	2 types of clasts; dark laminated rip up clasts, light
											massive clay clasts, the former are angular, and up to
											3 cm. in size, the clay clasts are larger in general and
											very well rounded, massively bedded except for interval
											1257' - 1258' which is wavy, grain size is approaching c.gr.
											sst. in places.
1265'	1283'6"					slt./sst.	m.gy.	c.gr./v.fgr	var.	block, well	joint at 30° wrt. c.a., bedding is variable, small scale
						50/50				indurated	planar, wavy and contorted bedding, carbonaceous material
											present as a smear along some bedding planes, increasing
											amount of sst. towards lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1283'6"	1287'6"					sst.	lt.gy.	f.-v.f.gr.	75°	blocky (angular)	fine slt. laminae, wavy to contorted beds (soft rock deformation), polished surfaces, very fine contorted bituminous lenticles at base of interval, joints at 18° and 40° wrt. c.a.
1287'6"	1295'6"					mst.	dk.gy.	-	-	small blocks to fragmented	slightly silty in places, bituminous, abundant polished surfaces, calcareous surfaces.
1295'6"	1307'					slt.	m.gy.	m.gr.	-	blocky, mod. well indurated	carbonaceous at top for ≈1 ft., 1 -4 in. sst. bed at 1297' weird bedding e.g. s-shaped step-like (soft rock deformation?) calcareous joints at 6° wrt. c.a., few unoriented polished surfaces, load clasts at basal contact.
1307'	1317'6"					slt./sst. 50/50	m.gy.	m.gr./f.gr.	77°	blocky and brecciated	variable grain sizes interbedded, wavy, contorted bedding due to soft rock deformation, polished surfaces along bedding planes, difficult interval to generalize, calcareous surfaces, sparse carbonaceous material.
1317'6"	1336'					sst.	lt.gy.	f.gr.-m.gr.	av.=75°	large blocky well indurated	upper 2 ft. is irregularly bedding with slt. rip up clasts (upt to 2 in. across), the rest of the interval is planar bedded with low angle, small scale x-bedding, minor v.f.gr. sst. beds, calcareous joints at 30° wrt.c.a., polished surfaces, gradational lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1336'	1356'					sst.	lt.gy.	m.gr.	72°	blocky, mod. well indurated	borderline m.gr.-f.gr. sst., from 1346' to base interval has numerous bituminous lenses, polished surfaces along bedding joint at 19° wrt. c.a., very sharp lower contact, bedding is dominantly planar but less regular in bituminous zone.
1356'	1374'					slt.	m.gr.	f.gr.	88°	blocky, well indurated	v.f.gr. at upper contact, thin and very widely spaced sandy laminae, massively bedded, sparse carbonaceous fragments, calcite veinlets and joints at 11° wrt. c.a. arbitrary lower boundary, general coarsening downwards.
1374'	1392'6"					slt.	m.gy.	m.gr. c.gr.	72°-81°	blocky, well indurated	variable lithologies although dominantly m.gr. slt., c.gr. slt. - v.f.gr. sst. lenses and thin beds unevenly spaced throughout unit (6 in. thick at most), largely non-carbonaceous calcareous joint at 19° wrt. c.a., planar bedding except for wavy beds of coarser material, 2-3 fining up sequences, difficult interval to generalize but overall coarsening downwards.
1392'6"	1405'					slt./sst. 70/30	m.gy.	m.-c.gr. -v.fgr.	80°	intact, well indurated	interlaminated lithologies, largely laminar bedding but also wavy, small scale ripples and contorted bedding, calcareous joints at 26° wrt. c.a., 2 small fining up sequences, core is fragmented at base (2 ft.) possibly because of drilling.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1405'	1408'					sst.	lt.gy.	f.gr.	-	intact, well	some m.gr. fraction, mostly laminar bedding, carbonaceous
										indurated	material present as a smear, calcareous joint at 6° wrt. c.a.
											gradational upper contact, lower contact sharp. (erosional?)
1408'	1419'					slt.	m.gy.	m.-cgr.	76°	intact to blocky	laminar bedding at top (sst. laminae) wispy discontinuous
										well indurated	bedding from middle of interval to base, calcareous joint
											at 30° wrt. c.a., lower contact is gradational, small
											∠ .5 cm. slt. clasts in one of the thin sst. beds.
1419'	1427'					slt./sst, 50/50	m.-lt.gy	m.-cgr. v.f.gr.	var. 52°-89°	blocky	interbedded sst./slt., beds are 1" - 1' thick and usually
											gradational into each other, bedding is mostly planar, some
											small scale laminar and contorted laminae within beds, calcite
											veinlets and joints at 23° wrt. c.a., slickensides subparallel
											to bedding planes, minor carbonaceous fragments.
1427'	1433					sst.	lt.gy.	f.gr.	var. 55°	angular blocky	best described as silty sst.wavy to contorted bedding, lower
											angle to c.a. than normal, displaced beds due to soft-rock
											deformation, calcite veins, siltier at base, lower contact
											with coal is abrupt.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1433'	1470'6"	1427.2'	1466.5'	435.0m.	447.0m.	coal	bl.			blocky to	bright and dull coal, many polished surfaces (sheared), some
										brecciated	muddy coal but no evident partings. 3.5' core missing between
											1433' and 1445', 3' core missing between 1454' and 1459',
											1' core missing between 1459' and 1465'. 39.4' - 12.0 m. coal
											SEAM 4
1470'6"	1480'6"					mst.	bl.	-	?	angular	best described as bituminous mst., abundant polished surfaces
										fragmented	thin coaly bands up to 2 in. thick, calcareous surfaces.
										soft	
1480'6"	1483'					coal	bl.	-	-	fragmented	mostly dull coal; woody appearance; cleated SEAM 4L
1483'	1494'					slt.	m.gy.	f.gr.	74°	small blocky,	massive to planar bedding, calcareous joints at 10-12° wrt.
										mod. well	c.a., carbonaceous fragment present along bedding planes, few
										indurated	polished surfaces.
1494'	1508'					slt.	m.gy.	m.-cgr.	81°	angular blocky	some thin sandy laminae otherwise wavy to planar bedding,
										to brecciated	calcareous joints at 30° wrt. c.a. small burrow like structures
											very brecciated (fractured) from 1495' - 1496' and from 1499'
											1501', the rest of the core is slickensided and jointed,
											sedimentary structures are not well preserved.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1508'	1514'					slt./mst. 30/70	dk.gy.	v.f.gr.	76°	fragmented	slt. is present as one bed at 1512'6" and at base as part of gradation into next unit, mst. is bituminous with glossy polished surfaces, calcareous coatings are minor ≈ 2.5' core missing.
1514'	1530'					slt./sst. 80/20	m-ltgy	m.gr./v.fgr. range	72°	intact, well indurated	laminated, planar and massive bedding, fining up sequences, wispy sst. beds, numerous carbonaceous fragments along bedding planes, polished surfaces one calcareous joint at 12° wrt.c.a.
1530'	1533'6"					sst.	lt.gy.	f.gr.	80°	blocky, well indurated	wavy, undulatory and contorted bedding, bituminous fragments silty at base, lower contact is sharp with coal, calcareous joint at 15° wrt. c.a.
1533'6"	1540'	1526.6'	1545.3'	465.3m	471.0m	coal	bl.	-	-	blocky	bright and dull coal, polished surfaces surprisingly intact, coal is muddy at base. 18.7' - 5.7m. true thickness 15.1' - 4.6m. SEAMS #3 & #2
1540'	1542'6"					mst./slt. 80/20	dk.gy.	v.f.gr.	79°	small blocky	interlamintated mst./slt., extremely fine bituminous laminae, polished surfaces, gradational lower contact.
1532'6"	1545'					sst.	lt.gy.	v.f.gr.	85°	blocky, well indurated	planar bedding, numerous calcite healed fractures slickensides wispy and contorted bituminous lenticles especially near base of interval.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1545'	1548'6"	1546.9'	1551.8'	471.5m.	473.0m.	coal	bl.	-		blocky	mostly dull coal, woody apperance, sheared surfaces,
											surprisingly intact. 4.9' 1.5 m. coal. SEAM 1
1548'6"	1551'6"					slt.	m.gy.	m.gr.	82°	blocky to	best described as sandy slt., faint laminations of
										intact, well	carbonaceous and sandy material, slickensides with minor
										indurated	calcareous surfaces.
1551'6"	1556'6"					coal	bl.	-	-	brecciated to	dull, muddy boring coal with sheared surfaces, real crap,
										fragmented	sharp lower contact with sst. at SEAM 1 ?
										soft.	
1556'	1597'6"					sst.	lt.gy.	m.gr.	80°	intact to	planar and laminar bedding, long calcareous joint surfaces at
										blocky	11° wrt. c.a., sparse carbonaceous flecks, slickensides
											surfaces along bedding planes.
1597'6"	1685'					sst.	lt.gy.	f.gr.	av.80°	intact to	except for a small fraction of v.f.gr. and m.gr. this interval
										breciated	is surprisingly consistent, numerous calcareous joints at (16°
											- 36°) av. 24° wrt. c.a., calcite healed fractures, brecciated
											zones at 1602', 1617' and 1655-1657', bedding is planar to
											massive, in fracture zones secondary vuggy porosity developed.
											at 1672' there is a 1 ft.interval of v.f.gr. slt., interval of
											slt. contains more carbonaceous material than rest of unit.
											at base there is 1 ft. of contorted bedding (slightly carbona-
											ceous), unit is slightly finer at base.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1685'	1687'					mst.	black	-	?	brecciated	best described as coaly mst., fine silty to sandy bands≈1cm.
										soft	thick, sheared with glossy polished surfaces.
											Beginning a major FAULT ZONE to 1730'.
1687'	1694'					slt.	m.gy.	m.gr.	?	blocky (angular)	bedding essentially destroyed, uncountable calcite healed
										mod. well	fractures, numerous polished surfaces all carbonaceous
										indurated	material present as a smear.
1694'	1700'					coal/mst.	bl.	-	?	sheared, soft	difficult to distinguish mst. from coal because of amt. of
											shearing and high gloss polished surfaces, 2.5'core missing.
1700'	1702'					sst./slt.	m.gy.	v.f.gr./c.gr.	-	small angular	hardly a surface without slickensides, abundant calcite healed
						50/50				blocky, mod.	fractures, discontinuous carbonaceous laminae, lower contact
										well indurated.	not conformable.
1702'	1710'					slt.	m.gy.	f.gr.	-	angular blocky	numerous polished surfaces and calcite healed fractures,
											displaced and contorted bedding, joint readings at ≈30°
											wrt. c.a., uncomformable lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1710'	1730'6"					sst./slt. 50/50	lt-mgy.	v.f.gr./m.gr.	-	blocky to irregular shaped, mod. well indurated	most bedding is destroyed, lower boundary is drawn where normal bedding and major fracturing dissipates, carbonaceous lenticles, zone from 1723' - 1727' is 3/4 calcite, numerous slickensides, difficult unit to describe other than by "structured", lower contact base of FAULT ZONE.
1730'6"	1740'					slt./sst. 90/10	m.gy.	v.f.gr./m.gr.	72°	intact to blocky, well indurated	normal planar to wavy bedding, sst. present as laminae in slt., slickensides along bedding planes, few calcite filled fractures fining downwards, increase in carbonaceous material and grassy leaf imprints towards lower contact.
1740'	1743'6"					slt./mst.	dk.gy.	-	70°	small blocks mod. well indurated	grassy plant imprints, becomes more bituminous downwards, numerous glossy polished surfaces. massive bedding.
1743'6"	1756'6"					mst.	bl.	-	-	fragmented to brecciated	best described as bituminous mst., bituminous lenses, glossy polished surfaces, extremely sheared in places, grassy leaf impressions, ≈4.5' core missing.
1756'6"	1761'	1746.1	1755.9	532.2	535.2	coal	bl.	-	-	brecciated sheared	dull structured coal, muddy in places ≈6" core missing. 9.8' - 3.0m COAL SEAM R11u

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1761'	1774'					mst.	dk.gy.	-	-	brecciated	≈6' core missing, best described as coaly mst. with 2
							~~bl.~~			(wafers) sheared	coal layers at least 6" thick at 1765' and 1769', abundant
										soft	glossy polished surfaces, slightly silty in places.
1774'	1793'	1777.6'	1787.4'	541.8m	544.8m	coal	bl.	-	-	brecciated and	bright and dull coal, 2 - 2 in. mst. partings at 1777'6"
										soft (sheared)	and 1781', ≈ 2 ft. core missing, at 1287' there is ≈ 6"
										and small blocky	of granular, high specific gravity material (phosphates)
											9.8' - 3.0 m. coal. Seam R11
1793'	1798'6"					mst.	dk.gy.	-	82°	large wafers	2 - 2-3 in. coal bands, abundant carbonaceous (sequoia leaves
										mod. well	& woody) plant impressions, few polished surfaces.
										indurated	
1798'6"	1802'6"	1791.3'	1798.0'	546.4m	548.0m	coal	bl.			fragmented	mostly dull coal with bright bands, muddy at base. 5.2' - 1.6m
											pt. Seam R11.
1802'6"	1809'6"					mst./ slt.	dk.gy.	v.f.gry.	-	small blocky	bituminous mst. grading in slt. at base, massively bedded
						60/40					some polished surfaces, abundant grassy plant impressions ,
											minor calcite veinlets.
1809'6"	1819'					slt.	m-dk.gy.	f.gr.	82°	blocky, mod.	laminated and ripple laminated by 5% sst., calcite veinlets
										well indurated	subparallel to bedding, joints at 18° wrt. c.a., carbonaceous
											fragments throughout, fining downwards.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1819'	1826'					slt./mst.	m-dkgy.	v.fgr.	-	small angular	best described as silty mst., bituminous in places, abundant
						50/50				blocks	glossy polished surfaces calcites veins at various orientations
											coarsening downwards, contacts are not readily apparent.
1826'	1841'					slt.	m.gy.	f.gr.	-	blocky, mod	massively bedded, joint readings of 20° wrt. c.a., few
										well indurated	calcite healed fractures, carbonaceous woody plant impressions
											(1 megaspore) lower contact at interval where sst. laminae
											begin.
1841'	1864'					slt./sst.	m.gy.	m.gr./f.gr.			slt. with wispy discontinuous sst. laminae slickensides with
						90/10		range			associated calcite, some distorted beds (soft rock deformation)
											carbonaceous material present as a smear along bedding planes,
											sst. increases downsection.
1864'	1871'					sst./sst.	lt-mgy	v.fgr./c.gr.	55°	intact, well	mixed fractions of both lithologies, planar to almost massive
						?		range	var.	indurated	bedding with some laminae, soft rock deformation, calcareous
											joint sets at 22° wrt. c.a., slickensides along bedding planes
											carbonaceous material scarce.
1871'	1873'6"					slt.	m.gy.	m.gr.	?	intact, well	massive bedding, sparse carbonaceous material fractures at
										indurated	top of unit (calcareous), gradational coarsening downward
											contact.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1873'6"	1878'6"					slt./sst.	m.gy.	m.gr./f.gr.	50–80°		sandy slt., sst. laminae distorted soft rock deformation
						80/20			var.		calcareous joint sets at 14° wrt. c.a., calcite healed
											fractures at 1878'.
1878'6"	1880'6"					sst.	lt.gy.	v.f.gr.	58°	intact, well	contorted bedding due to soft rock slumping, calcareous
										indurated	joint sets at 14° wrt. c.a., slightly silty at base of
											interval, fine wispy carbonaceous laminae.
1880'6"	1892'6"					sst./slt.	lt.gy.	f.gr./c.gr.	50°	intact, well	looks like a turbidite deposit (although it isn't) mixed
										indurated	and contorted lithologies, bedding almost parallel to
											c.a. in places, slt. rip up clasts, some bituminous lenticles
											many calcareous veins at various orientations lower boundary
											drawn where coarser sst. and massive bedding begins.
1892'6"	1902'					sst.	lt.gy.	m.gr.	-	large angular	some f.gr. sst. fraction (qtz.) and c.gr. carbonaceous
										blocks	particles, numerous bituminous lenticles, core breaks along
											bituminous lenses, calcareous joints at 25° wrt. c.a.,
											slickensides.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1902'	1920'					slt.	m.gy.	m-cgr.	72°	blocky to	massive slumped bedding, some sandy laminae, 2 - 1 ft. muddy
										intact, mod.	intervals at top and 1904'6", the muddy intervals are very
										well indurated	carbonaceous, overall the unit is coarsening downwards,
											polished surfaces and calcareous veinlets are present but
											not common, small scale fining up units (may be turbiditic).
1920'	1923'					sst./ slt.	m.gy.	v.fgr.	66°	intact, well	core breaks along bedding which is laminar to wavy, calcareous
						70/30	lt.gy.	c.gr.		indurated	joints at 28° wrt. c.a., sparse carbonaceous leaf impressions.
1923'	1938'6"					slt.	m.gy.	f.-mgr.	-	blocky, mod.	massively bedded with some v.fgr. slt. fraction, few carbon-
										well indurated	aceous fragments, calcareous joint at 36° wrt. c.a., few
											polished surfaces, calcite veins near base.
1938'6"	1974'					slt./ sst.	m.gy.	m.-cgr. /v.fgr.	57°	intact to	pods and irregular beds of sst. throughout, 4-6 in. sst.
						90/10				blocky, well	beds, 2 at top and 2 at bottom of interval polished surfaces
										indurated	and calcareous joints at 15° wrt. c.a., carbonaceous material
											present as a film on bedding surfaces, some well preserved
											leaf impressions, best described as sandy siltstone, unit is
											quite consistent throughout.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752 Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1974'	1984'					sst.	lt.gy.	f.gr.	68°	blocky to fragmented	wavy bedded sst. with slt. clasts elongated along bedding planes, a slt. bed at 1980' (6 in. thick, slickensides and fragmented), discontinuous bituminous lenticles from 1978' to base, calcareous joints at 25° wrt. c.a., bedding becomes less regular and more contorted at base.
1984'	1991'					slt./sst. 60/40	m-lt.gy.	m.gr./f.gr. range	56° var.	intact, well indurated	appears to have turbiditic type bedding contorted and poorly sorted beds and lithologies, some bituminous and carbonaceous material scattered throughout, calcareous veins along bedding planes.
1991'	2013'					slt./sst. 90/10	m.gy.	m-fgr./v.fgr.	55° gd.rd.	intact to blocky, well indurated	regular laminar sst. bedding at top 2' and bottom 3', other sst. laminae are contorted and discontinous (soft rock slumping), calcite veins along bedding planes and minor polished surfaces no joint readings, carbonaceous material present as a film on bedding planes.
2013'	2020'6"					slt./sst. 40/60	m-ltgy.	f.gr./m.gr. range	54°	blocky, well indurated	wavy to laminar interbedded sst./slt., carbonaceous material present as small specks along bedding planes, core breaks along bedding, minor calcite joints at 23° wrt. c.a, coarsening and increasing downwards.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2020'6"	2025'					sst.	lt.gy.	f.gr.	55°	intact, very well indurated	laminar bedding, calcite healed fracture zone at 2022'6" calcareous joints at 20° wrt. c.a., polished surfaces along bedding planes, slt. clasts at lower contact, very little carbonaceous material present, very regular laminar bedding throughout.
2025'	2027'					slt./sst. 50/50	lt-mgy.	m.gr./fgr.	57°	blocky, well indurated	similar to unit before last, laminar and contorted sst. beds some slt. lenticles; polished surfaces, gradational coarsening downwards.
2027'	2048'					sst.	lt.gy.	f-m.gr.	76°?	small blocky, mod. well indurated	dominantly massive bedding except for 1 thin lenses of laminar slt., bituminous lenses throughout, numerous polished surfaces along bituminous lenses (glossy appearance) minor calcite veins and slt. clasts, abrupt lower contact.
2048'	2054'					slt.	m.gy.	c.gr.	64°?	blocky to fragmented, mod. well indurated	borderline slt./sst., slightly sandy in places, planar bedding where evident, non-carbonaceous calcareous joints at 21° wrt. c.a., high ∠ (angle) sst. laminae at middle of interval, abrupt lower contact.
2054'	2063'					sst.	m.gy.	f.gr.	–	small angular blocky to fragmented	≈ 1 ft. core missing, mgr. sst. and c.gr. slt. fraction, abundant bituminous lenticles and polished surfaces, minor associated calcite, massive bedding, sharp undulatory lower contact.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 11, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2063'	2082'					slt.	m.gy.	vf-mgr.	var.	blocky, mod.	massively bedded with few fine sst. laminae (irregular)
								range		well indurated	≈ 1 ft. coal at 2074', slt. is muddy near coal, unit is
											carbonaceous throughout but less so in the coarsest fractions
											overall coarsening downwards, calcareous dragon's teeth
											slickensides.
2082'	2098'					slt.	m.gy.	m.gr./ c.gr.	52°	intact to	thin sst. laminae outline faint bedding planes, some v.f.gr.
										blocky, well	and f.gr. fraction, carbonaceous material scarce, minor
										indurated	polished surfaces near base and calcite veins.
2098'	2107'6"					mst./ slt.	dk.gy.	v.f.gr.	67°	small blocky	best described as silty mudstone, bituminous, abundant glossy
										mod. well	polished surfaces, (most at 67° wrt. c.a.), muddier core
										indurated	breaks, concoidally minor calcareous veinlets.
2107'6"	2108'6"					sst./ slt.	m.gy.	f.gr./ m.gr.	54°	blocky, well	actually, 3 ft. core, 2 extra feet according to interval blocks
								range		indurated	best described as silty sst., polished surfaces and calcar-
											eous joints at 28° wrt. c.a., sparse carbonaceous material,
											wavy laminar bedding.
2108'0"	2111'6"					mst.	dk.gy.	-	-	small blocky,	bituminous silty mst., glossy polished surfaces core breaks
										mod. well	concoidally, minor calcareous surfaces, become siltier towards
										indurated	contact with lower unit.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 11, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2111'6"	2117'					sst./slt.	m-dk.gy.	f.gr./fgr.	50°	small blocky,	sandy slt., (bituminous to carbonaceous) and sst. laminae
						20/80		range	gd.rd.	well indurated	calcareous joint at 26° wrt. c.a., decreasing sst. down-
											wards, core breaks along bedding planes.
2117'	2124'					mst./slt.	m-dkgy.	v.f.gr.		small blocky	carbonaceous silty mst., numerous planar polished surfaces
						90/10				mod. well	(glossy), sheared coaly mud (≈1 ft) at 2121', calcareous
										indurated to	joint at 40° wrt. c.a., siltier at base of interval.
										poor	
2124'	2136'					slt.	m.gy.	m-cgr.	57°	blocky to intact	massively bedded with few faint sst. laminae, carbonaceous
										well indurated	fragments throughout, minor bituminous lenticles, micro-
											veinlets of calcite near base of interval which fines down-
											wards.
2136'	2138'					mst.	dk.gy.	-	-	small blocky,	silty at top of unit, sharp lower contact, bituminous, core
										mod. well	has a very smooth surface, glossy polished surfaces.
										indurated	
2138'	2149'					slt.	m-dkgy.	v.fgr.	52°	small blocky	dominantly massive bedding, carbonaceous throughout except
								fgr.		well-very well	where very well indurated, coaly at 2145'-2146', slightly
										indurated	muddy near coal interval, polished surfaces and minor calcite
											veins, base of interval drawn at 1st influx of sst.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 11, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2149'	2151'					slt./ sst. 90/10	m-dkgy.	f.gr./ f.gr.	≈60°	blocky, well indurated	1-2" blobs of sst., (only indicated of bedding) very carbonaceous, calcite veinlets and minor polished surfaces.
2151'	2157'6"					slt./ sst. 60/40	m.gy.	c.gr./ f.gr. range	58°	blocky, well indurated	laminae to contorted bedding, borderline sst./slt., many calcite veinlets and joints at 30° wrt. c.a., one small burrow at 2151'6", sparse carbonaceous material.
2157'6"	2162'6"					slt./ m.st. ?	m-dkgy.	v.f.gr.	-	small blocky, mod. well indurated	gradational upper and lower contacts, abundant carbonaceous fragments (some leaf impressions) best described as muddy slt. some fine bituminous lenticles, polished surfaces and calcareous veinlets.
2162'6"	2168'6"					slt./ sst. 70/30	m-ltgy.	c.gr./ v.f.gr.	58° var.	intact to blocky well indurated	bedding is wavy to contorted, slickensided surfaces along bedding planes, minor calcite veinlets sparse carbonaceous material.
2168'6"	2186'					slt.	m.gy.	v.f.gr. f.gr.	59°	blocky, well indurated	except for a few fine sst. laminae interval is massively bedded, minor calcite veinlets and bituminous lenticles along bedding planes, glossy polished surfaces, abundant carbonaceous fragments and grassy impressions, coarsens downwards.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area DDH 1752 Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2186'	2206'6"					slt./sst. 90/10	m-ltgy.	f-cgr./v.f.gr. fgr. range	60°	blocky to intact well indurated	best described as slt. with irregularly spaced sst. beds, slt. is massive, sst. bedding is variable including ripple laminations, wavy, planar and contorted bedding, some collapse structures and load clasts, polished surfaces and associated calcite along bedding planes, none of the sst. beds exceed 4" in thickness, difficult unit to generalize or break down into smaller divisions.
2206'6"	2222'					sst.	lt.gy.	f-vfgr	56°	intact, well indurated	except for 2½' bed of borderline slt./sst. at 2218' the interval is relatively consistent mainly laminar bedding with minor small scale ripple and undulatory bedding, 2-3 instances of soft rock deformation, base of unit drawn where bedding becomes contorted, minor calcite veinlets, unjointed, sparse carbonaceous material.
2222'	2225'					sst./slt. 60/40	m-dkgy.	f.gr./c.gr.	?	blocky to intact well indurated	bedding of sst. is contorted to undulatory glossy polished surfaces (planar), little carbonaceous material, minor calcite veinlets, intermixed lithologies.
2225'	2291'6"					sst.	lt.gy.	f-mgr.	52°	intact to blocky, well indurated	core breaks along bedding which is laminar until 2252' and then some massive bedding carbonaceous material present as a film along bedding planes, bituminous lenticles begin where core becomes massive, calcareous joints at 28° wrt. c.a. some fracture porosity present.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: DDH 1752

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2291'6"	2302'					slt.	m.gy.	m.-cgr.	-	intact, well indurated	best described as sandy slt., massively bedded abundant carbonaceous fragments, sharp upper and lower contacts, calcareous veins and slickensides.
2302'	2307'6"					sst.	lt.gy.	f.gr.	26°	intact, well indurated	high angle x-bedding laminations, calcareous joints at 48° wrt. c.a., slt. clasts near upper and lower contact, base of unit becomes bituminous, polished surfaces.
2307'6"	2313'					mst./slt.	m-dkgy	v.f.gr.	-	fragmented mod. well indurated	carbonaceous with distorted bedding, abundant polished surfaces, ≈2ft. core missing, calcareous veins.
2313'	2316'6"					sst.	lt.-mgy.	v.f.gr.	30°	angular blocky well indurated	high ∠ (angle) bedding (laminar to distorted) soft rock deformation evidence, small scattered carbonaceous fragments, abundant calcareous joint sets at 40° wrt. c.a., interval is silty at base.
2316'6"	2325'					slt./sst. 90/10	m.gy.	m.cgr./v.f.gr.	30°		slt. with sst. laminae, laminae are wavy to contorted, good evidence for soft rock deformation (small scale faults) fining downwards glossy polished surfaces, few fine bituminous lenticles, calcareous joints at 24° wrt. ca.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Poppel Date: June 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2325'	2334'					slt.	m-dkgy	vfgr-	-	blocky, mod.	massive to distorted bedding, numerous fine bituminous lenticles
								fgr.		well indurated	numerous glossy polished surfaces, few calcareous veinlets.
2334'	2346'					slt.	m.gy.	m-cgr.	45°	large blocky	massively bedded with wispy and lenticular sst. laminae
									var.	well indurated	throughout (∠ 5%), fine bituminous lenticles, one large
											bituminous fragment has later been replaced by pyrite
											(≈1 in. wide and 3 in. long) at 2340' minor calcite veins,
											joints at 38° wrt. c.a. some polished surfaces.
2348°	2359'6"					slt./sst.	m.gy.	m-cgr./f.gr.	55°	blocky, well	slt. with thin beds (∠2in.) and laminae of sst., more
						90/10		range	gd.rd.	indurated	regular bedding than former interval, polished surfaces
											along bedding, core breaks along bedding planes, few
											bituminous lenticles and calcareous veinlets.
2359'6"	2367'					sst./slt.	lt.gy.	fgr./mgr.	41°	intact, well	best described as silty sst., bedding is laminar, wavy with
						90/10				indurated	small scale ripple beds, carbonaceous material present as
											a film along bedding planes, calcareous joints at 38° wrt.
											c.a., core breaks along bedding planes, unit is fining
											downwards and is gradational with lower interval.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2367'	2373'					slt.	m.gy.	f.gr.	40°	intact, well indurated	massive except for minor sst. laminae at base, carbonaceous material scarce except for a few plant impression (grassy) along some bedding planes, calcareous joints at 36° wrt. c.a. coarsens downwards and is gradational with lower unit.
2373"	2377'					sst./slt. 80/20	m-ltgy	v.fgr./cgr.	variable	blocky, well indurated	laminar to wavy bedding, interbedded slt./sst., similar to interval before last, carbonaceous material present as a film along bedding planes. some polished surfaces.
2377'	2392'					slt./sst. 90/10	m.gy.	f-cgr./fgr. range	49°	blocky, well indurated	variable slt. grain sizes with scattered sst. beds and laminaes, carbonaceous plant impressions present as a film along bedding planes, calcareous and polished surfaces along bedding planes, coarsening and fining down units within this interval, lower contact is gradational.
2392'	2401'					sst.	lt.gy.	v.f.gr./f.gr.	45°-50°	blocky, well indurated	bedding is contorted at top to wavy and laminar at base, abundant carbonaceous material along bedding planes, interval becomes silty at base. numerous calcareous fractures and joints at 24° wrt. c.a.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2401'	2415'					slt.	mgy.	m-cgr.	50°	blocky, well indurated	massive bedded slt. with sst. beds of top and bottom of unit scattered plant impressions and carbonaceous fragments, calcareous joints at 45° wrt. c.a., few scattered bituminous lenticles, some glossy polished surfaces, lower contact is abrupt.
2415'	2416'					sst.	lt.gy.	f.gr.	-	small, blocky mod. well indurated	abundant calcite healed fractures, all bedding destroyed, lower contact is abrupt and slickensided, interval looks out of place.
2416'	2417'					slt.	m.gy.	c.gr.		1 block, well indurated	< 1 ft. c.gr. slt., sandy slt., scarce carbonaceous material few calcite healed fractures, polished surfaces, abrupt lower contact.
2417'	2422'6"					sst.	lt.gy.	f.gr.	58°	blocky to intact well indurated.	slightly silty, laminar to planar bedding, core breaks along bedding planes which are carbonaceous, calcareous joints at 30° wrt., c.a., slt. laminae become increasingly more common towards base, some polished surfaces along bedding planes.
2422'6"	2443'					slt./sst. ~50/50	m-lt.gy	m.gr./m.gr. range	49° - 54°	intact, well indurated	best described as interbedded slt./sst., one 7 in. bed borders on m.gr. sst., dominantly c.gr. slt. & f.gr. sst. interbeds, interval is carbonaceous until 2431' then carbonaceous material is scarce, bedding is laminar & wavy to planar, core breaks along bedding surfaces some of which are polished, few frac. & assoc. calcite, one joint reading at 25° wrt. c.a., bottom of

Hole No. D.D.H. _____ Page _____ of _____

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 16, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2737'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2443'	2470'					slt./sst.	m.gy.	m.gr./f.gr.	42-55°	intact, well	less regular bedding than former unit, mostly massive
						70/30		range	var.	indurated	but wavy, contorted and lenticular bedding, difficult
											interval to generalize, core breaks subparallel to bedding
											which is sometimes carbonaceous, calcareous veinlets and
											joints at 21° wrt. c.a., polished surfaces.
2470'	2476'					slt.	dk.gy.	v.f.gr.	-	blocky, mod.	best described as muddy slt., very carbonaceous with numerous
										well indurated	plant impressions some bituminous lenticles, polished surfaces
											minor calcareous veinlets, fairly abrupt contact with coal.
2476'	2515'	2470.5'	2510.8'	753.0m	765.3m	coal	bl.	-	-	blocky to	variable bright to muddy coal, no partings present but not nec.
										muddy, poorly	true, ≈6ft. coal missing from 2476' - 2485', ≈1.5' missing
										indurated	from 2495' - 2500', ≈8.5 ft. missing from 2500' - 2515'.
										sheared	40.4' 13.3m. coal. SEAM R4
2515'	2525'					slt./mst.	dk.gy.	v.f.gr.	54°	small blocky	best described as silty mst., very carbonaceous to bituminous
						?				mod. well	abundant plant impressions, glossy polished surfaces at
										indurated	various orientations, sharp upper contact and more gradational
											lower contact with coal.
2525'	2531'	2521.3'	2527.2'	768.5m	770.2m	coal	bl.	-	-	small blocky to	bright and dull coal, polished surfaces, sheared in places
										brecciated, soft	slightly muddy at top and bottom of interval. 5.6' 1.7m.coal. SEAM R4

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2737

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2531'	2542'					slt.	dk.gy.	v.f.gr.	≈47°	small, blocky, mod. well indurated	best described as muddy slt., abundant carbonaceous material and plant impressions, faintly laminated, coarsening downwards, unjointed and within calcite of any sort.
2542'	2556'					sst./slt. 90/10	lt-mgy	vfgr-fgr/c.gr.	47°	intact to blocky, well to very well indurated	bedding is dominantly planar with some wispy and wavy and laminar bedding as well, silty at top of interval, coarsening downwards calcareous joints at 28° wrt. c.a., minor slt. clasts, overall bedding becomes more regular, some slickensided surfaces along bedding planes.
2556'	2653'					sst.	lt.gy.	f-mgr.	42-50°	mostly intact with some blocky places well to very well indurated	slightly silty at upper 2 ft., then consistently sst., dominated by laminar and then planar bedding, carbonaceous material present only as a film along bedding planes, core breaks along bedding, calcareous joints at 21-30° wrt. c.a., massive bedded interval from 2609' - 2614', some polished surfaces along bedding planes, surprisingly consistent interval another massive bedded interval from 2640' - 2645'.
2653'	2660'6"					sst./slt. 90/10	lt.gy.	f.gr.	-	brecciated to fragmented and mod. well indurated	slt. interval at top (brecciated ≈8 in. thick) then massive bedded fragmented sst. numerous calcareous joints and fract. polished surfaces, at 2658' is ≈1.5' of sst. with slt. rip up clasts, interval is becoming more bituminous downsection.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2737

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2660'6"	2662'					sst./slt. 70/30	m-ltgy	f.gr. /?	49°	blocky, well indurated	best described as interlaminated slt./sst., slt. laminae are bituminous, core breaks along bedding planes, sharp lower contact.
2662'	2663'6"					slt./sst. 90/10	m.gy.	f.gr./f.gr.	48°	blocky, mod. well indurated	slt. is very carbonaceous, sst. present as fine laminae core breaks along bedding planes, few polished surface near upper contact.
2663'6"	2668'	2659.1'	2665.7'	810.5m	812.5m	coal	bl.	-	-	brecciated to muddy	≈3 ft. core missing, coal is mainly muddy, some bright bands, messed up from drilling. 6.6' 2.0m coal. SEAM R3
2668'	2675'					slt.	dk.gr.	v.f.gr.	42°	small blocky to fragmented, mod. well indurated	best described as muddy slt., a few v.f.gr. sst. laminae at 2672', very carbonaceous with numerous plant impressions, carbonaceous material outlines bedding planes, abundant polished surfaces, sharp lower contact.
2675'	2686'					sst./slt. 80/20	m-ltgy	f.gr./f.gr. range	40°	blocky, well indurated	best described as shaley sst., laminar and wavy bedding, many woody plant impressions along bedding planes, interval bituminous at bottom, shaley portions lacking for ≈3ft. in middle of unit, glossy polished surfaces along bedding, calcareous joint at 32° wrt. c.a. core breaks mainly along bedding plane.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Jonnie Popel Date: June 17, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2737

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2686'	2692'	2679.8'	2688.6'	816.8m	819.5m	coal	bl	-	-	blocky to	mostly dull coal (muddy in places) with minor bright bands
										friable, soft	sheared ≈ 2ft. core missing 8.9' 2.7m. coal. SEAM R2
2692'	2697'					slt.	m.gy.	f.gr.	46°	small blocky	only visible bedding trace are faint v.f.gr. sst. laminae at
										mod. well	top and bottom 6 inches, very carbonaceous, believe it or not
										indurated	there is 1 ft. extra core, numerous fine calcite veinlets
											many polished surfaces.
2697'	2704'	2692.7	2700.1'	820.7m	823.0m	coal	bl.	-	-	brecciated, soft	≈6ft. core missing, core is in rough shape appears to be
											muddy coal with some mst./slt. partings. 7.5' 2.3m. coal. SEAM R1
2704'	2737'					sst.	lt.gy.	f-mgr.	30°	intact, very	dominantly massive bedding, slightly bituminous at top,
										well indurated	polished surface at 35° wrt. c.a. (subparallel to planar
											bedding)
											BASAL SST END OF HOLE

Hole No. D.D.H. 1752 Page 64 of 64

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 22, 1981

LATITUDE	DEPARTURE	ELEVATION
150,381.40 m	25319.40m	2160.40m

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO
DIRECTIONAL SURVEY DONE ☒ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	40										OVERBURDEN
40	40.5					MST	grey	fine	65°	Blocky	Contains bituminous material and plant fossils.
40.5	41.1					COAL	black	fine	—	Fractured	Friable, contains oxide material.
41.1	47.5					MST	grey	fine	58°	Blocky	Approx. 2-3" pieces, scratches brown, oxide and mud.
47.5	63.6					SST	grey	med/fine	72°	Intact	Red oxide weathering, joints, calcite filled, at 5°, 20° and 50° bedding lines plus red banding. Core pieces 1' long, core bedding then occurs @ 82° @ 57'.
63.6	67					MST	rd gr	F	—	Rubble	63.6' rubble zone, contains bituminous material and muddy matter, may contain some silty material.
67	72					SST	rd gr	M	80°	Mod. Intact	Red weathering, shows distinct bedding and crossbedding — calcite planar fractures at 15°, 35°.
72	75.7					MST	black	F	—	Broken	Lots of carbonaceous material.
75.7	79.0					SST	gr/rd	M	85°	Highly Fractured	Weathered both red and rust pieces, no more that 1" in size, contains two minor coal intervals at 77.4'-77.6' and 78.0'-78.3'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
79.0	83.6					COAL	black	F	—	Completely	Interbeds of MST 79.5-79.8', contains muddy matter.
		88.6	91.8	27.0	28.0					broken	3.3' coal — 1.0m coal
83.6	85					SLT	gr/rd	F	—	Rubbly	Some banded red oxidized matter, completely fractured.
85	112.8					SST	lt gr	M	67°	Intact	Core loss 85'-102', moderately intact joint at 30°. 111' bitumin-
											ous layers in the sandstone becomes somewhat silty, infilling may
											be clay or mud.
112.8	113.5					MST	black	F	—		Rubbly, high in carbonaceous matter.
113.5	130.7					SST	lt gr	M	81°	Mod. Intact	Shows bedding and crossbedding, some bedding fails along bitumin-
											ous layers, jointing occurs at 20° is infilled with calcite
											and is oxidized.
130.7	134.1					SLT	grey	F	78°	Broken	Joint at 10° oxidized planar surface.
134.1	138.2					SST	grey	M	—	Broken	134.1-137.5' rubble zone has graded. 137.3' coal seam 2" thick,
											137.5' oxide rust colored sandstone till 138.2' then grades
											gradually to sandy siltstone, very coaly.
138.2	141					SLT	dk gr	F	74°		Joints oxidized 42°, 50°, 15° bituminous and oxide material in
											bedding fractures.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
141	150.3					SST	grey	M	73°	Intact	Dark grey oxide weathering especially in joints — jointing at 25° generally infilled with calcite also bedding is quite disturbed.
150.3	156					SLT	gr/blk	F	80°	Fractured	High in carbonaceous material and mud, very hard, preferential breakage at 80° but no bedding visible, grades to sandstone at about 156'.
156	157					SST	dk gr	M	—		Two joints at 25° and 0°, very oxidized then by 157' grades to very sandy siltstone with interbeds of sandstone.
157	170.1					SLT	dk gr	F-M	83°	Mod. Intact	Jointing at 30° 6 of them, jointing at 10° 2 of them. Breccia zone preceeds coal. Considerable oxidization along joints and along some bedding layers. Rubble 169.5'-170.1'.
170.1	176.6	168.6	171.6	51.4	52.3	COAL	black	F	—	Completely broken	About 80% recovery — black, high fractured. 2.9' coal — 0.9m coal #14 SEAM
176.6	177.2					MST	black	F	—	Broken	Bituminous mudstone that occurs at end of coal seam quickly becomes sandstone.
177.2	187					SST	grey	F-M	82°	Intact (mod.)	Shows distinct bedding and disturbed bedding — fractures along bituminous layers. Joints, oxidized at 25°. Veins (bituminous)

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	at 183' - 183.3', 183.7' - 183.9', 186.7' - 187'.
187	188.8					MST	gr/blk	F	—	Broken	High in bituminous material, shows deformation and oxidation, grades to siltstone.
188.8	193					SLT	dk gr	F	85°-90°	Mod. Intact	Jointing at 35°, 15°. 192.4' and 193' two small layers of calcite crystallization.
193	197					MST	dk gr	F	85°-90°	Broken	Contains small bituminous bands almost concoidal fracture. Small sandstone layer at 196' - 196.3'.
197	210.4					SST	grey	F	87°	Mod. Intact	198.2' - 199.1' bituminous mudstone banded somewhat silty, FINE grained, jointing at 23°. Cross bedding just before 207'.
210.4	216.5					MST	black	F	—	Mod. Fractured.	Oxidized, bituminous. 213.5'-214' coal, 214.2'-214.7' coal, 215.4'-216' coal.
216.5	226.1					SST	grey	M	68°	Mod. Intact	Very disturbed bedding, oxide fractures, very rough joints at 50°. 225' bedding 75° breaks along bituminous layers.
226.1	227.3					SLT	dk gr	F	80°	Mod. Intact	Grades to MST

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
227.3	231.1					MST	dk gr	F	82°	Fractured	Breaks easily almost concoidally, some fractures contain oxidized material, curved joint at 38° contains oxide.
231.1	23					SST	lt gr	M	81°	Broken (4")	Joints 22°, 50° oxidized considerably, alteration zone approx. 1½" thick, bituminous layers predominate along bedding fractures. A few coal veins ½" thick.
237.7	241					SLT	dk gr	F	85°	Mod. Intact	Highly oxidized along joints at 27°, 10°, grades to more and more bituminous matter. Tiny interbeds of SST then grades gradually to MST by 241'.
241	255.4					MST	brn/blk	F	67°	Broken	Joints oxide and carb. at 5°, 35°. Bedding bituminous, also veins of coal ½" thick along bedding lines, piece of sandstone at 252-252.8'.
255.4	257.8					SST	grey	F	80°	Mod. Intact	White rock flour infilling in joints, some oxide in joints at 35°, bedded.
257.8	264.5					SLT	dk gr	F	79°	Quite broken	Very bituminous, hard but oxidized jointing at 20°. Rubble (coaly) from 260.2' - 261'.
264.5	267.4	260.8	264.4	79.5	80.6	COAL	black	F	—	Completely broken	80% recovery. Low grade, quite muddy grades to mudstone. 3.6' coal 1.1m coal.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
267.4	268.8					MST	black	F	—	Rubble	Black coaly, shows some oxide.
268.8	271.9					SST	grey	M	78°	Mod. Intact	40° joints oxidized, bedding distinct at 270-270.8' bituminous mudstone. 270.8' many discontinuous intersecting, closed calcite fractures.
271.9	285.3					SLT	grey	F	87°	Fractured	Bituminous layers very distinct. 273.2' - 273.7' coal vein, joints at 10°, 25° (oxide).
285.3	297.7					MST	black	F	74°	Rubble/Intact	Rubble till 289' then intact to 292' then broken. Distinct laminations of carbonaceous material, grades into coal at 297.7'.
297.7	299.8	295.3	299.2	90.0	91.2	COAL	black	F	—	Friable	Not broken excessively, but is crumbly. 2.0' recovered from 2.1' 3.9' coal, 1.2m coal, part of #14L SEAM.
299.8	302					SST	grey	M	64°	Intact	Very disturbed bedding curved fractures large calcite stringers.
302	302.5					COAL	black	F	—	Broken	About 6" then becomes muddy.
302.5	333.7					SST	grey	M	72°	Intact	Joints at 31° and 15°, calcite infilling, slight oxidization, many of them and they intersect, cross bedding and turbulance evident. 331.2' becomes finer grained.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	324.4' becomes slightly coarser, very disturbed bedding.
											329.7' alteration zones of up to 1½" thick, show up around
											joints (dip 35°).
333.7	338.6					MST	dk gr	F	72°	Broken	Joints at 29°, coal vein 336.6-337', then grades to SST.
338.6	346.0					SST	grey	M	73°	Mod. Intact	Slightly disturbed bedding, contains calcite joints at 20°
											closed, discontinuous, contains silty bands, oxidized layers.
346	352	344.5	347.8	105.0	106.0	COAL	black	F	—	Mod. Intact	Contains some mudstone intervals. RECOVERY 6.0' in 6.0'.
											Interval (friable) 3.3' coal 1.0m coal part of #13 SEAM
352	361.7					MST	brn/blk	F	76°	Mod. Intact	Contains fair bit of carbonaceous material.
											353.1-353.3' coal vein, 355.7-356.2' coal, 356.2-356.8 coal,
											some fracture surfaces curved.
361.7	381.6	364.8	378.3	111.2	115.3	COAL	black	F	—	Broken	Gets softer with depth. 365-365.5' mudstone interbed,
											371.1-371.4' mudstone interbed. Recovery up to 377 feet 14.1'
											recovered out of 15.3'. From 377-377.9' mudstone,
											377.9-381' 90.0% recovery. 13.5' coal – 4.1m coal #13 SEAM
381.6	392.2					SLT	dk gr	F	—	Mod. Intact	Joint surfaces quite irregular, contain shiny bituminous material
											and clay. At 46° 76° some minor discontinuous calcite veins
											(closed).

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
392.2	402.7					SST	lt g	M	71°	Intact	contact with siltstone abrupt, displays crossbedding and disturbed bedding, shows bituminous partings.
402.7	409.1					MST	dk gr	F	67°	Mod. Intact	Contains coaly layers: 404.3-404.5', 404.7-404.9', 405.4-405.8', 406.4-407.1', 408.1-408.7'. Joints and bedding are shiny bituminous material with white rock flour infilling.
409.1	414.4					SST	lt gr	M	—	Mod. Intact	Joints at 22°, 8° calcite filled, seems fairly massive, some very disturbed bedding.
414.4	416.9					COAL	black	F	—	Broken	Very friable, very fractured.
416.9	419.8					SST	grey	M	63°	Mod. Intact	Bedding fractures are along bituminous layers. Some crossbedding no joints, sandstone then becomes quite massive then grades to siltstone.
419.8	431.4					SLT	dk gr	F	60°	Mod. Intact	Massive, few fractures, coal layer from 421.7-422.3', contains some mud, gradually grades to sandstone.
431.4	469.8					SST	grey	M-C	60°	Intact	Massive sandstone structureless till 437.1' then bedding shows up 442.2-442.5' bituminous material. At 446.6' becomes massive again 453.3 bedding reappears but is very disturbed. Joints at 20°, 10°, 57°. At 462' bedding at 74°. 465' load casts in core till

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	465.8', 469.3' coal vein till 469.5'.
469.8	477					MST	black	F	76°	Broken	Very high in bituminous material, bit is still quite hard. Almost has oolitic texture. 474.5-474.8' sandstone interbed. 474.8-475' coal, 476.8-477.1' coal.
477	509.1					SST	md gr	M	81°	Intact	Slightly disturbed bedding mixed with massive areas. Joint 41° clean. 486.6-487.8' disturbed beds, 492-495.6' lighter colored sandstone. 497-501.7' sandstone crossbedded then shows quite a bit of disturbance, fractures from 501.7-507' are irregular and may contain carbonaceous material. Joints at 36° bedding 74°.
509.1	512.2					SLT	gr/brn	F	73°	Mod. Intact	Muddy siltstone quite hard, joints contain bit. material and rock flour, dip at 60° and 42°, grades to mudstone.
512.2	515.4	509.5	512.5	155.3	156.2	COAL	black	F	—	Fractured	Friable, crumbly. RECOVERY 3.1' of 3.2' 2.9' coal — 0.9m coal part of #12 SEAM
515.4	525.7					SLT	grey	F	69°	Broken	Rubbly till 517', quite muddy siltstone, no joints, mainly bedding fractures.
525.7	527.4					MST	dk gr	F	78°	Mod. Intact	Fairly homogeneous, only 2 fractures.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (?)	Core Status	Additional Information
527.4	550.2					SST	grey	M	72°	Mod. Intact	Bedding is uneven till 530.' then core is moderately homogeneous till 532' where disturbed bedding shows up again, joints at 20°, 11° and are calcite filled. Bedding plane fractures along bituminous layers. At 541' becomes finer grained sandstone, bedding 77°, a lot darker grey.
550.2	557	547.2	553.8	166.8	168.8	COAL	black	F	—	Mod. Broken	Brittle, friable, RECOVERY 6.3' of 6.8'. 6.6' — 2.0m coal (#12 SEAM)
557	558.4					MST	dk gr	F	-	Broken	Graded rapidly to sandstone, homogeneous.
558.4	563.6					SST	grey	M	86°	Mod. Intact	3 joints at 14°, open, several inches long, contain a fair amount of calcite.
563.6	588.2					MST	dk gr	F	84°	Broken	Calcite fracture at 13° closed, gradually gets more bituminous rubble zone from 585.8-588.2'.
588.2	615.4					SST	grey	M	84°	Intact	Then there is an abrupt contact with sandstone. Slightly disturbed calcite veins and stringers at about 15°, fracture at 28° clean smooth planar. 592-594' crossbedding and burrowing evident. Then bands of disturbed and undisturbed bedding occur. 601.2-610' crossbedded, 610-615.4' patches of even bedding intermixed with no bedding.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
615.4	629					MST	dk gr	F	77°	Broken	Almost concoiday fracture. 618-618.6' coal, 619.2-619.5' breccia, 620.6-620.9' coal. 621.7 mudstone becomes quite hard.
629	638.2	629.3	636.8	191.8	194.1	COAL	black	F	—	Broken	One small piece mudstone .7' long at 630.6'. RECOVERY 8.9' of 9.2' 7.5' — 2.3m coal #11u seam
638.2	645.5					MST	black	F	86°	Broken	Very bituminous broken contains fossils.
645.5	652					SST	dk gr	F	78°	Intact	Very hard, intact, faint bedding. 647.6-648.3' mudstone band. Slickensides in fractures and rock flour. Extremely silty by 652' essentially MST.
652	659.1					MST	black	F	—	Broken/blocky	Preferential parting at 80°, concoidal fracture, joints at 62° irregular.
659.1	667					SST	lt gr	M	83°	Rubble/broken	Only a few long pieces more than 6", the rest are extremely fractured. Joints at 35°, 40°, 15°, planar, calcite filled, some show oxidized alteration zone. Also blebs of oxide.
667	678.7					MST	black	F	88°	Broken	Not really bedding angle is preferential, breakage concoidal fracture.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
678.7	699	675.8	687.0	206.0	209.4	COAL	black	F		Muddy	RECOVERY 13.1' of 20.3'. Completely broken, considerable mud-
		689.0	694.0	210.0	211.5						stone. 11.2' — 3.4m coal, 4.9' — 1.5m coal #11 SEAM
699	7[illegible].7					MST	black	F	—	Broken	Bituminous
700.7	715					SST	grey	M	84°	Mod. Intact	50°, 14°, 30° fractures, calcite infilling, some beds disturbed
											the rest is homogeneous. From 710' many hairline closed fractures
											that are calcite filled, then grades to mudstone.
715	717.4					MST	black	F	—	Blocky	Quite hard, contains carbonaceous material.
717.4	720.8					SST	grey	M	81°	Mod. Intact	Mostly regular beds, some minor crossbedding, silty interbeds
											evident, grades to mudstone.
720.8	723.9					MST	dk gr	F	80°	Blocky	Homogeneous except for a carbonaceous partings, quite hard,
											breaks concoidally contains a few plant fossils.
723.9	732					SST	lt gr	M	82°	Intact	Has crossbedding and a few very surficial calcite fractures
											(closed). Sandstone becomes quite silty 729.6' very broken core
											— jointing at 29°, 11°, no visible infilling — dark grey.
732	734.6					SLT	dk gr	F	—	Mod. Broken	Homogeneous, hard.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
734.6	736.3					SST	lt gr	F-M	85°	Broken	A few fractures, following core axis.
736.3	742.8					MST	black/ dk gr	F	—	Intact/Blocky	Grades from intact to blocky, carbonaceous material content increases till it hits coal jointing - 17° - clay is evident on weathered surfaces.
742.8	747					COAL	black	F	—	Completely broken	Poor, contains a lot of mudstone. RECOVERY 3.0' of 4.2'.
747	749.6					MST	dk gr	F	80°	Intact	Some bituminous strands. No joints.
749.6	762.7					SST	md gr	M	78°	Mod. Intact	Shows some bioturbation in beds, bedding fractures rough to irregular, joints 13° calcite filled, mostly discontinuous. 754.3-757' silt beds in sandstone. 757-758.1' mudstone then goes back to light colored sandstone. 761.8' darker more homogeneous sandstone.
762.7	774.2					SLT	md gr	F-M	69°	Intact	Sandy siltstone, not much of a gradation from above, just silt particles now predominate - sandstone interbeds. By 767' have real hodgepodge of silty-sandy-muddy layers, even minor varving shown.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
774.2	777					MST	dk gr	F	—	Broken	Bituminous grades to coal, slickensides.
777	791.9	773.6	789.0	235.8	240.6	COAL	black	F	—	Broken	High lustre, friable, several intact pieces. RECOVERY 12.9' of 14.9'. #9 SEAM 15.7' — 4.8m coal
791.9	793					MST	grey	F	—	Broken	Coaly partings and some rock flour.
793	797.3					SST	dk gr	M	81°	Intact	Joints at 8°, discontinuous calcite filled. Bedding fairly even grades gradually to siltstone.
797.3	799.8					SLT	dk gr	F	—	Intact	Featureless, grades from siltstone to mudstone.
799.8	812					MST	dk brn	F	breaks at 82°	Intact	A few discontinuous irregular joints running subparallel to core axis. Many have some bituminous partings. Scratches brown.
812	817.5					SLT	dk gr	F	78°	Intact	Few breaks, quite hard.
817.5	820					MST	dk gr	F	85°	Intact	No joints, one fracture, grades to sandstone.
820	821.8					SST	grey	M	78°	Intact	Joint at 15°, faint bedding.
821.8	834.8					MST	dk gr black	F	83°	Intact/broken	Starts out quite intact for first 5' then becomes more bituminous and more broken at 832' becomes silty.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
834.8	846.5					SST	gray	F-M	74°	Mod. Intact	Disturbed and contains lots of interbeds of siltstone. Curved fracture surfaces.
846.5	852					SLT	gray	F-M	72°	Mod. Intact	Sandstone interbeds a few coal veins, less than ½" thick. Curved fracture surfaces.
852	857					SST	gray	M	76°	Mod. Intact	Crossbedding evident, some silty material, veins of coal at bedding angle very thin.
857	869.6					MST	gray	F	79°	Intact	Coaly partings, some sandstone interbeds, closed calcite veins at 55° grades from quite hard to coaly mudstone.
869.6	873	868.1	872.7	264.6	266.0	COAL	black	F	—	Muddy	Dull, friable, mud. 4.6' — 1.4m coal. RECOVERY 2.6' of 3.4'.
873	877					MST	black	F	83°	Broken	Contains coal, is a coaly mudstone.
877	879.8					SST	gray	M	81°	Intact	Bedding regular, joints at 5° calcite filled.
879.8	895.7					MST	black	F	78°	Blocky	Coal interbed 10 ' long at 881', starts out blocky, gradually becomes more intact. Several coal veins along bedding plane up to ½" thick.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583'

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
895.7	897.8					SST	gray	F-M	77°	Intact	Crossbedded faint grades rapidly to siltstone 2 subparallel fractures at 13° calcite filled
897.8	905.3					MST	Black	F	74°	Blocky	Very high coal content fractures along shiny coal material.
905.3	907					Coal	black	F	-	Muddy	Contains mudstone pieces, the coal is powdery and dull.
907	908.7					SST	grey	M	84°	Intact	Evenly bedded one piece, minor bituminous material inside some bedding planes.
908.7	911					MST	black	F	79°	Blocky	Some bituminous material, generally homogeneous
911	912.4					Coal	black	F	-	Muddy	Dull - too small an interval to sample.
912.4	917.6					MST	black	F	-	Blocky	Banded with coal plant stringers breaks easily.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
917.6	968.7					SST	m.gy.	M	85°	Intact	Very faint bedding, no joints.
											923' bedding appears more distinctly but is disturbed.
											925.4' sandstone becomes dark finer grained till
											927.8'. Hairline discontinuous fractures running
											subparallel to core axis calcite filled 933
											lighter color, distinct crossbeds 937' bedding
											becomes regular 87°. 938.5 bedding, disturbed
											and large ups evident 945.4' - fine grained some
											silt in it. 949 - med. grained with silty inclusions
											fracture surfaces curbed at 67°. 952' coarse
											fairly homogeneous rock. 956.5' bituminous inclusions
											and small coal veins up to 2" wide. Faint cross
											beds. 967 bedding 81°.
968.7	972.8					SLT	dk.gy.	F	83°	Mod. Intact.	Siltstone with sandstone interbeds. Calcite joints
											at 24° bedding fractures along bituminous layers
											are quite irregular.
972.8	976.7					SST.	Dk.Gy.	M	86°	Blocky	Many bituminous inclusions. Begins fairly coarse
											grained then gets progressively finer grained till
											it becomes siltstone @ 976.7'. No joints. Bedding
											slightly irregular due to inclusions.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
976.7	980					SLT.	Dk.Gy.	F	87°	Mod. intact	SST interbeds, no joints.
980	1002.8					SST	Dk.Gy.	F-M	87°	Intact	Crossbedded the odd rip up. No joints, just bedding fractures, high silt content. Approaches 50/50 sand silt. Worm burrows and rip ups found, disturbed.
1002.8	1015.6					SLT	DK.GY.	F-M	84°	Intact	Quite homogeneous, very hard and intact, some muddy lenses. Grades into mudstone/coal.
1015.6	1017.2	1011.2'	1016.1'	308.2	309.7	Coal	Black	F	-	Broken	To small to sample - contain s some mudstone high lustre. 4.9' coal - 1.5 m. coal, part #7 seam.
1017.2	1022.6					MST	DK.BR.	F	82°	Blocky	Sandstone interbed fairly large, high carbonaceous content.
1022.6	1028	1022.3'	1027.2'	311.6	313.1	Coal	Black	F	-	Broken	About 2' core loss, recovery 3.4' of 5.4', dull, friable, blocky 4.9'-1.5 coal. Part #7 seam.
1028	1031					MST	BROWN	F	79°	Blocky	Contains some bituminous partings and clayey mud, some core loss ≈1'.
1031	1037.3	1029.2'	1036.1'	313.7	315.8	Coal	Bl.	F	-	Muddy/broken	Core loss. Recovery 4.9 of 6.3. Muddy, powdery some mudstone. 6.9'-2.1 m coal. part #7 seam.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY – NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1037.3	1045.3					SLT	Gray	F	82°	Mod. intact	Calcite, discontinuous fractures, 25°. Fairly homogeneous A few sandstone interbeds. grades to sandstone.
1045.3	10					SST.	Gray	F-M	84°	Mod. intact	Calcite, planar fractures 18° and some very erratic calcite stringers.
1047	1048.7					MST	Dkgy.Bl	F	80°	Blocky	Joints 27°. rock flour & bituminous infilling, breaks easily.
1048.7	1049.9	1046.9'	1050.0	319.1	320.1	Coal	Blk.	F	-	Muddy	Some lustre too small an interval to sample. Mud. 3.3' - 1.0m. coal.
1049.9	1057					MST	D.gy.	F	77°	Blocky	Contains some coal stringers, mostly homogeneous. No joints.
1057'	1063.8					SST	Gray	F-M	80°	Blocky	Contains quite a bit of silt, breaks in core usually reveal some fossils. joints at 21° calcite filled grades to siltstone.
1063.8	1070.2					MST	Dk.Gy.	F	83°	Blocky	One or two small sandstone interbeds in siltstone,breaks in core reveal powdery coal. Joints, parallel, seve ral calcite, 17°

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1070.2	1072.7					SST	GRAY	M	85°	MOD. INTACT	No joints, fairly even bedding. Bedding fractures bituminous.
1072.7	1075.2					MST	Dk.gy.	F	85°	Blocky	Contains sandstone interbeds. Long fracture at 15' has some rock floor in it.
1075.2	1080					SST	Dk.Gy.	F-M	84°	Mod. intact.	Long calcite joint 2' mostly continuous some crystals visible closed at 10°. Bedding even and shows little disturbance.
1080	1081					MST	Dk.Gy.	F	81°	Blocky	Shows slicks. 2 enpassant joints at 18°, calcite bedding fractures are bituminous.
1081	1087.2					SST	Gray	M	83°	Mod. Intact.	Many joints. Most intersect 10°, 5°, 29°. Some calcite mostly weathered, faint bedding, one fracture @ 10° is 1.5' long.
1087.2	1096					MST	Dk.Gy.	F	85°	Mod. intact.	Sandstone interbeds - bituminous layers are usual break surfaces.
1096	1105					SST	Dk.Gy. Lt.Gy.	F-M	83°	Intact.	Bedding quite even - patchy core - silt rich then sandstone rich deposition. Slight evidence of disturbance - bedding breaks are rough but planar. A few discontinous planar joints running parallel to core axis.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1105	1111.1					MST.	Bl.	F	80°	Blocky/broken	1" calcite vein with rock fragments in it at 1105 - joint
											@ 48° bituminous rock flow surface - Mudstone gets
											progressively more bituminous till it grades into coal.
											core loss of 1'.
1111.1	1117	1108.3	1117.1	337.8	340.5	coal	black	F	-	Muddy	Core loss 1.7' dully broken, contains mud. recovery 4.2 of
											5.9. 8.8'-2.7m. coal part of seam 5.
1117	1119.2					MST	Dk.Gy.	F	-	Broken	Contains chalky material and bituminous layers. Some rubble
											some mud, a few small pieces with joints at 32°.
1119.2	1128.3	1119.4'	1126.3	341.2	343.3	Coal	Black	F	-	Blocky	Shiny, breaks of in blocky pieces - contains some mudstone.
											8.1 of 9.1. 6.9'-2.1m. coal. Seam 5
1128.3	1133					MST	Dk.Gy.	F	84	Broken blocky	Quite bituminous for first 2.3' then two vugs appear.
											Joints at 47° rock flow on surface, irregular surface.
1133	1134.8	1128.6'	1133.2	344.0	345.4	Coal	Black	F	-	Broken	Vitreous, friable, broken. 4.6'-1.4m. coal part of seam 5.
1134.8	1152.5					Mst	Dk Gray	F	81°	Blocky	Joints at 51° contain clay, rx flow and some slickensides -
											some bituminous veins fractures concoidally, rough surfaces

Hole No. D.D.H. 1753 Page 21 of 42

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1152.5	1161					Slt.	Gray	F-M	83°	intact	Sandstone interbeds account for up to 40% of rock.
											Calcite fracture .7' long, closed planar at 1160.1.
											Sandstone content gradually increases, contact therefore
											arbitrary.
1161	1171.1					SST	Gray	M	76°	Mod. Intact	Joints at 25° mostly open filled with calcite irregular
											planar surfaces. Bedding slightly disturbed - Bedding
											fractures are along bituminous layers slightly rough, some
											calcite stringers.
1171.1	1179.3					MST	Dk.Gy.	F	-	Broken	About 4' core loss in some areas quite muddy in others.
											Fairly bituminous. A few rough fractures at 32°.
1179.3	1181.6	1178.8	1180.8	359.3	359.9	Coal	Black	F	-	Muddy	Dull, broken, muddy, recovery 2.3' of 2.3'. 1.9'-.6m. coal.
1181.6	1211					MST	Dk.Gy.	F	83°	Broken/intact	Starts off broken then grades to more intact. Quite a bit
											of coaly material. Coal veins up to several inches thick
											A few fractures at 20-25° with no infilling. Fractures also
											at 52° showing a bit of deformation - contains carbonaceous
											material and rock flour. 1204.2-1204.6 coal vein.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 6, 1981.

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1211	1221					Slt.	Gray	F-M	35°	Mod. Intact	Small piece sandstone to begin with, overturned. Bedding goes from 40° to 15°. Joints in siltstone 37°, 55°. Infilling is rare or patchy calcite.
1221	1226.6					Sst.	Lt.Gy.	M	30°	Blocky	OVerturned beds, many calcite, closed fractures both continuous and discontinuous.
1226.6	1240					Slt.	Gray	F-M	32°		In all directions, joints, calcite, some fractured at 45° display shiney carbonaceous matter and calcite crystals. Has a few sandstone interbeds. Near end of interval bedding 50°.
1240	1244	1237.9'	1240.8'	377.3	378.2	Coal	Black	F	-	Broken	High lustre very crumbly. Largest piece .2' long. Recovery 3.1' of 4.0'. 2.9'-.9m. coal.
1244	1254					MST	Dk.Gy.	F	-	Broken	Recemented rock breccia combination of many kinds of rocks. 1245.5' coal vein .2' then mudstone shows evidence of deformation joints at 50° contain deformed bituminous material and chalky substance. 2' core loss just before 1250'. 1250-1250.4 coal 1252-1254 core loss, recemented (calcite) rock breccia.
1254	1303.7					SST	Gray	M	45°	Blocky to intact	Two minor coal veins just after 1254 bedding is very disturbed and indurated. Abundant hairline fractures of calcite mostly discontinuous. 5 thick calcite filled planar fractures. At 67° and 18°. Most likely in fault zOne area. Bedding becomes regular at 1266.5' and is 76°. Still lots of calcite fractures many are subparallel to core axis. 1287' - extremely fractured all breaks reveal polished surfaces of bituminous material (probably fault zone) Bedding angle goes from 15° to 65°. Cont.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 8, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1254	1303.7										Cont. from p. 23. 1294½' amounts of siltstone in core increase bedding more regular but still shows evidence of being disturbed Bedding @ 79°.
1303.7	1314.3					Slt/Sst	DkGy.	F-M	77°	Mod. Intact	Up to 30% sandstone interbeds, fairly regular. 3 calcite planar fractures at 80°. Grades into sandstone.
1314.3	1334.6					Sst.	Gray	M	80°	Intact/Mod.intact	Generally even bedding. A few worm burrows . Some slightly curved fracture surfaces which contain polished bituminous material. 2 calcite fractures at 80°. By 1330 bedding angle 76° slightly wavy bedding angle.
1334.6	1336					Mst.	Dk.Gy. to Bl.	F	-	Broken	Recovery of core from 1334.6 - 1345 is 2.9 feet. Bituminous mudstone quite shaley.
1336	1355.6	1334.3'	1353.0	406.7	412.4	Coal	Black	F	-	Broken/Muddy	Recovery 7.7 feet of 19.8 18.7'-5.7m. coal (R13). Shiny to polished surfaces. Some mudstone contained, breaks easily.
1355.6	1360.5					SST	Gray	M	60°	Mod. intact	Disturbed beds. Many hairline fractures and some bituminous veins bedding plane fractures vary in angle from 60° - 82° and display polished coaly surfaces.
1360.5	1369.1	1362.2	1366.1	415.2	416.4	Mst.	Dk.Gy. to Bl.	F	81°	Blocky	Shaley bituminous mudstone. Contains shiny undulating material Fractures are often irregular from 1364 to 1368 3.7' core loss. no joints. 3.9' - 1.2m. coal.
1369.1	1378.4					Sst.	Gray	M	85°	Intact	Bedding varies and goes as low as 65°. up to 1370.4 bedding is quite regular and even ≈80° then ripups and a few calcite fractures occur (hairline closed). Some interbedded silty darker gray sandstone at 1377 bedding angle 42°.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1378.4	1384					Mst.	Dk.Gy.	F	75°	Blocky	Joint surfaces are polished and at about 60°. One minor coal vein less than ½" thick.
1384	1386.8					Sst.	Gray	M	76°	Mod. intact	A bit of cross bedding slightly disturbed. Some silt material, calcite closed fracture at 22° (planar).
1386.8	1401.7	1391.4	1394.0	424.1m.	424.9m	Mst.	Dk.Gy.	F	84°	Blocky	Up to 1392.4 shaley.contains plant fossils. Core loss between 1391 and 1396 of 1.6 feet coal 1.2' thick 1392.4 - 1393.6. Scratches brown almost oolitic texture. Veins are either polished or contain fine speckles of coal, some fossils. Grades to siltstone. Arbitrary contact. 2.6'-0.8m.coal.
1401.7	1407.5					Slt.	Gray	F-M	75°	Mod. intact	Gastropods and brachiopods, fairly coarse grained, fairly homogeneous. Joint at 19° no infilling. Grades gradually to sandstone.
1407.5	1421.4					Sst.	lt.gy.	M	83°	Mod. intact	Silty sandstone to begin with.beds regular. Many fractures till 1414'. Mostly calcite filled planar to irregular and occur both open and closed. Occur at 19°, 25°, 45°, 3°, some minor oxide weathering after 1414' siltstone interbeds occur and compose up to 30% of core. Bedding shows a moderate amount of disturbance.
1421.4	1425					Slt/Sst	Gray	F-M	86°	Mod. intact	Siltstone with sandstone interbeds. Up to 20% of core. Curved bedding fractures. Grades to sandstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mountain

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1425	1458					Sst.	M.Gy.	M	75°	Mod. intact	Fairly regular bedding a few minor disturbances at 1432'
											one load cast - bedding fractures yield a polished
											bituminous surface. One area 1434.1 - 1434.3 contains
											pyrite 1439' calcite vein at 60° ½" thick planar closed
											silty interbeds begin to appear and siltstone increases up
											to 25% of core bedding is more disturbed 1447.5 some
											disseminated pyrite.
1458	1462	1456.7	1458.7	444.0m	444.6m.	Coal	Black	F	-	Muddy	A lot of core loss. Recovery 2.0' of 4.0'. Muddy, lacks
											lustre. Only one piece larger than .1". 1.9'-0.6m.Coal (R12).
1462	1467					Mst.	Dk.Gy.	F	81°	Blocky	Core loss 3'. Joints at 32°, 40° which contain polished
											coaly surfaces.
1467	1472.9	1464.6'	1472.6	446.4	448.7	Coal	Black	F	-	Muddy/Blocky	7.5' - 2.3m. coal (R12). Recovery 3.4' of 5.9. Some fair
											size pieces up to .3 of a foot vitreous friable polished
											surfaces on some of the more intact core.
1472.9	1497.3					Slt/sst	Dk.Gy.	F-M	82°	Rubble/Blocky	For first 1' rubble containing bituminous mudstone then sand-
											stone interbeds with a considerable number of fractures of
											calcite at 75° and 22° siltstone becomes progressively
											harder as depth increases bedding is fairly regular 1489.6
											Becomes somewhat shaley for about 1' but is still very hard.
											Some chalky material can be found in fractures core loss
											throughout this interval averages 1' per 10'. By 1487'
											bedding angle changes to 58°. Slickensides at 1496'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning

Date: July 9, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1497.3	1499.7					Mst.	Dk.Gy.	F	-	Blocky	Breaks concoidally.some core loss through this interval calcite
											closed planar fracture at 75°. 4.3'-1.3m. coal (R12)
1499.7	1503	1496.1'	1500.3'	456.0m.	457.3m	Coal	Black	F	-	Broken	High lustre, shiny friable. High core loss in this interval
											assumed to be here since this is broken. Recovery 1.7'of 3.3'.
1503	1512					Sst/Slt	Gray	M-F	47°	Mod. intact	Fracture zone at 1508 slickensides well defined bedding
											disturbed by calcite veins crosscutting in all directions.
1512	1514.8					Mst.	Dk.Gy.	F	-	Broken	Coal rich dull, friable.
1514.8	1522					Sst.	Gray	M	76°	Mod. intact	Many calcite rich fractures, fairly thick up to ½".
											1519' mudstone interbed. bedding fairly regular.
1522	1555					Mst.	Dk.Gy.	F	75°	Intact	A few large calcite veins closed, irregular up to ½" thick.
											Bedding plane fractures have a rough surface. A few minor
											sandstone interbeds .
											1530.3 rubble and minor core loss. 1534.4-1535 coal muddy
											broken. some core loss. 1535 mudstone becomes very regular
											and homogeneous. Fractures contain powdery coal. no calcite
											fractures till 1549.8' which is a large planar closed at 38°.
1555	1568.8					Sst.	Dk. & Lt. Gy.	M	75°	Mod. intact	A few clasts in beds, slighrly disturbed beds but fairly
											regular. Light and dark banding hairline calcite joints at
											35° some bedding fractures contain shiny polished material
											1566 mud and silt interbeds till it grades to Mst.
1568.8	1581.2					Mst	Dk.Gy.	F	81°	Mod. intact	Curved fracture at 60° contains shiny bituminous material.
											Joint at 15° no-infilling mostly homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 10, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1581.2	1587	1577.4'	1586.3	480.8	483.5	Coal	Black	F	-	Broken	At beginning interval mud rich then becomes more vitreous and
											friable. Recovery 5.2' of 5.8'. 8.9'-2.7m. coal. (R11u)
1587	1617.5					Mst.	Dk.Gy.	F	72°	Mod. broken	Bituminous material at 72° occurs as very fine infilling.
											Breaks usually occur there. 1601 - 1602 rubble. Calcite
											closed fracture 1603 at 22°. Many coal layers.
		1612.2'	1617.5	491.4m	493.0m						1607.8 - 1608.6 coal, muddy, high mudstone content.
											5.2'-1.6m. coal (R11). Bedding angle 7° at 1609'. Both
											plant and animal fossils found in fractured surfaces. Coaly
											material occurs on fracture surfaces. 1617' slickensides
											with calcite infilling.
1617.5	1624					Coal	Black	F	-	Blocky/Broken	Friable, contains some oxidized material. breaks easily.
											Recovery 2.3' of 6.5.
1624	1627.3					Slt.	Gray	F	75°	Mod. intact	Bituminous veins less than ½" thick. Slightly curved,
											quite gritty, fairly homogeneous.
1627.3	1628					Sst.	Gray	M	76°	Intact	Disturbed bedding, has a sharp contact with mudstone.
1628	1638.5					Mst.	D.Gy.	F	76°	Blocky	Shaley, high bituminous content, layered fractures yield
											powdery coal material. Contain plant fossils mainly
											but some animal.
1638.5	1641					Sst.	Gray	M	79°	intact	Curved fracture surfaces, contains interbedded siltstone
											and mudstone. Two calcite fractures, one at 79°, one at 12°.
1641	1646.5					Mst	Dk.Gy.	F	55°	Blocky	Most predominant fracturing at 54°. Less predominant at 65°
											coal occurs as minor veins along these fractures and is up to
											½" wide.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1646.5	1655.4					Slt.	Gray	F-M	53°	Mod. intact	A few mudstone interbeds but quite a bit grittier, lighter gray than previous section. Fracture surfaces are slightly undulating. Contains bituminous material and some mud. A few discontinuous bituminous veins. Grades to sandstone grad.
1655.4	1664					Sst/Slt	Gray	F-M	68°	Mod. intact	Sandstone with up to 40% siltstone interbeds. Bedding is slightly wavy - fractures expose rough undulating surfaces. One curved calcite closed fracture.
1664	1667					Slt.	Gray	F	-	Intact	No visible fractures, no preferential angle of breakage. Contains some mudstone interbeds and grades to mudstone.
1667	1673.8					Mst.	Dk.Gy.	F	76°	Mod. intact	A few plant fossils on fracture surfaces. Fractures are quite rough. One coal vein grades to sst.
1673.8	1684					Sst.	Lt.Gy.	M	67°	Mod. intact.	Bedding fractures show a few slickensides, calcite fracture set almost perpendicular to beds. Calcite fractures are closed, planar and discontinuous bedding gets progressively more disturbed with depth.
1684	1721					Mst.	Dk.Gy.	F	70°	Blocky	One sandstone interbed. No joints. Bedding fractures reveal polished surfaces and plant fossils. Concoidal fracture. Fairly homogeneous material. At 1690 considerable amount of coal material 1694 - 1694.6 coal seam. 1697 - quite a bit less bituminous material except in breaks where plant fossils occur. A few slickensided faces with calcite infilling and shiny bituminous material. Calcite fracture at 35°. 1702.5 -1704 coaly mud completely broken but muddy,

Cont.

Hole No. D.D.H. 1753 Page 29 of 42

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1684	1721										Cont. from p. 29. Rubble from 1708 - 1709.3. 1714.2 - 1716.2 rubble some polished surfaces. Quite a bit of calcite and some mud. At 1715 bedding angle changes to 85° and fractures occur at 65°. These are commonly filled with bituminous material.
1721	1730.5					Sst/Mst	Lt.Gy. & Dk.Gy.	F-M	79°	Intact	Interbeds of mudstone up to 40% of core bedding is moderately disturbed. Some calcite fractures at 35° closed, planar and discontinuous. 1730.5 slickensided surfaces many of them contain shiny bituminous material and calcite.
1730.5	1734.8					Mst.	Dk.Gy.	F	82°	Blocky	Joints at 32° reveal polished surfaces. Bedding at 82° yields polished surfaces, also quite a bit of coaly material. grades to coal.
1734.8	1750	1732.3'	1747.0'	528.0m	532.5m	Coal	Black	F	-	Broken	Shows some lustre but overall is quite dull. A few interbeds of mudstone - fractures easily and in some areas is quite muddy. Recovery 13.6' of 15.2. 14.8'-4.5m. Coal (R9 (pt.))
1750	1751.3					Mst.	Dk.Gy.	F	80°	Broken	Rounded surfaces on fractures. High bituminous content, then grades back into coal.
1751.3	1757	1750.0'	1753.9'	533.2m	534.6	Coal	Black	F	-	Muddy	Completely broken muddy lacks lustre. Recovery 5.7' of 5.7'. 3.9' - 1.2m. coal (R9 part of seam).
1757	1762.6					Mst.	Dk.Gy.	F	72°	Blocky	A lot of powdery coal, contains "pods" of coal, many fracture surfaces. Irregular due to the weakness of coal infilling.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1762.6	1767					Sst/Mst	Gray	M-F	73°	Mod. intact	Mudstone interbeds, regular bedding, few breaks and they are clean.
1767	1772.3					Mst.	Dk.Gy.	F	77°	Blocky	Coal vein ≈ 1' long at 1767.5 then becomes quite shaley. Bituminous partings give shaley appearance.
1772.3	1781.5					Sst.	Lt.Gy.	M	-	Massive	A few burrows. No bedding. Two closed calcite fractures at 28°. Both planar but discontiuous. 1776 mudstone interbed .8' long. Grades to Mst. by 1781.5
1781.5	1811					Slt.	Gray	F	-	Intact	A few calcite fractures closed continuous planar, very intact core, only one open fracture at 40°, stepped bituminous material. 1796 calcite fracture at 25° planar, closed 2 bedding fractures at 72° filled with bituminous material.
1811	1830.1					Sst.	Gray	Coarse	71°	Blocky	Ma ny discontiuous coal interlayers. Rock is mostly massive but some faint bedding can be seen. Recurring joint set at 20°, planar open, contains both bituminous material and calcite Many of the bedding breaks are polished surfaces that are curved at 1830. A few rip-ups are seen.
1830.1	1847					Slt/Sst	Dk.Gy.	F-M	68°	Mod. intact/ Blocky	Joints at 15°, 23°, 54°, contain polished bituminous material and patchy c oal (irregular) Rubble at 1836.7 to 1838. Sandstone comprises up to 25% of core. Beds are fairly even and regular (little disturbance).
1847	1853.2					Sst.	M.Gy.	M	80°	Mod. intact	Even bedding, very minor cross beds, joints at 33°, 10°, no infilling, planar open.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1853.2	1864					Sst/Slt	Gray	F-M	72°	Broken/Blocky	Begins with rubble zone till 1857. Joints at 22°, 3°, 35°, a few stepped fractures, some polished bituminous surfaces with patchy calcite, 2 hairline closed calcite fractures.
1864	1872					Slt/Sst	Dk.Gy.	F-M	74°	Blocky, Mod. intact.	Sandstone interbeds display regular even bedding, joint at 29°, rough no infilling, some of the siltstone becomes quite muddy.
1872	1874.9					Sst	Gray	M	82°	Mod. intact	Some rip ups displayed, jointing at 30°, partially open planr, calcite, fairly massive, only minor bedding.
1874.9	1879.7					Slt/sst	Gray	F-M	-	Intact.	No fractures or joints, homogeneous, fairly massive, a few interbeds of Sst.
1879.7	1883.5					Slt.	Dk.Gy.	F	72°	Blocky	Joints at 50°, 65°, major calcite joint at 65°, .1' wide planar
1883.5	1909.5					Slt/Sst	Dk.Gy.	F & M	71°	Mod. intact.	Variable sandstone content, quite a bit to begin with, then lesser amounts occur until 1899', many of the fracture surfaces are curved and contain polished bituminous material. 1908', fractures at 11° and 55°, both contain slickensides.
1909.5	1916					Sst/Slt	Gray	M	78°	Mod. intact.	Joint at 35° with patchy calcite .4' long, planar up to 20% siltstone, hairline calcite fracture .8' long closed.
1916	1926.6					Slt/Sst	Dk.Gy.	F	84°	Mod. intact to intact.	Fractures are generallly rough and contain plant fossils or are clean. Some mudstone can also be found. Sandstone account for only 15% of core.
1926.6	1930.5					Mst	Dk.Gy.	F	86°	Mod. intact.	One coal vein ½" thick near end of interval is quite shaley and fairly hard, no joints, just breaks, some fossils.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1930.5	1940					Sst/Slt	Gray	M	78°	Mod. intact.	Exhibits many calcite fractures ranging from 0°-66° thickness
											varies from hairline to ½" thick, many are discontinuous and
											intersecting, polished bituminous surfaces evident in some
											bedding fractures. Bedding is very disturbed (turbulence)
											Breccia (recemented) in calcite fracture at 32°.
1940	1952					Mst.	Dk.Gy.	F	82°	Blocky to Broken	From 1945 to 1946 coal rich but still muddy. Some shiny
											surfaces containing rock flour. 1946.5 - one interbed
											sandstone .8 feet long. Several joints at 56° with polished
											bituminous infilling (planar) Coal vein 1949.4 to 1949.7.
		1941.3	1943.6	591.7m	592.4m						Coal 2.3' - .7 m. coal.
1952	1959.1					Sst.	Md.Gy.	M	70°	Blocky	Many calcite planar fractures (closed). 89°, 34°, 55°, 51°,
											up to ½" thick. open fractures expose a curved surface with
											plished bituminous material and calcite and show slickensides.
											1953.4 - 1954 rubble. 1957 slickensides and many intersecting
											calcite fractures.
1959.1	1979					Mst.	Gray	F	68°	Rubble/Blocky	A few sandstone patches. Rubble till 1965', then becomes
											blocky, surfaces contain rock flour and many polished
											bituminous surfaces, grades to more intact rock. Breaks
											in rock at 1970 yield plant fossils. Jointing at 26°.
											Irregular/planar surfaces, polished with some calcite.
											1978.2 - 1979 rubble zone, probably some core loss here also.
1979	1980.6	1976.6	1978.3	602.3	603.0	Coal	Black	F	-	Muddy	Dull, powdery, lacks lustre. Too small an interval to
											sample. 2.3' - 0.7m. coal part of R7.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning

Date: July 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1980.6	1988.6					Mst.	Dk.Gy.	F	84°	Mod. intact.	A few fossils mostly stringers of coal. Minor sandstone interbeds up to 15% of core. Some fine hairline calcite fractures. Coal content increases until core grades to coal.
1988.6	1992.8	1986.2'	1993.1	605.4	607.5	Coal	Black	F	—	Muddy/Broken	High lustre. Friable. almost completely broken. Recovery 4.2' of 4.2'. 7.0'-2.1m COAL. (part of R7).
1992.8	1999.5					Mst.	Dk.Gy.	F	76°	Mod. intact	A few bituminous fossils found in breaks. No joints, but a few bituminous inclusions and some calcite (hairline) frac.
1999.5	2002.8					Mst/Sst	Dk.Gy.	F	83°	Mod. intact	A few plant fossils, rough fracture surfaces. Some sandstone interbeds up to 15% of core. Calcite fracture at 65% curved surface.
20 2.8	2022.5					Mst.	Dk.Gy.	F	73°	Blocky	Many bituminous veins usual plane of fracture, contains either polished bit material or powdery vitreous material. Two fractures at 43°, polished stepped irregular appearance. (but not slickensides). Minor amount of fossils.
2002.5	2028					Sst/Mst	Dk. & Lt.Gy.	M &F	68°	Mod. intact.	Bedding fairly even (not disturbed) some bituminous infilling. Almost 50/50 sst/mst, grades to sst.
2028	2052					sst.	M.Gy.	M	73°	Intact.	Joints at 30°, 15°, 46° little infilling only minor coal beds bioturbated one conretion like. Pebble. A few siltstone interbeds. no jointing past 2043', just bedding fractures.
2052	2078.8					Mst.	Dk.gy.	F	78°	Blocky	A few sandstone interbeds up to about 2056' then grades to more bituminous shaley mudstone. Fractures are filled with powdery coal. Some areas around 2062' well indurated. Quite silty, joints at 58°, rough contain coal and sometimes calcite.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2078.8	2081.2	2074.1	2080.7	632.2m	634.2m	Coal	Black	F	-	Broken	Extremely hard, very high lustre. Breaks in blocky fashion.
											6.6' - 2.0m. coal R5(pt.). Recovery 2.4' of 2.4'.
											Contains minor amounts of mudstone.
2081.2	2085.8					Mst.	Black	F	80°	Blocky	Very high bituminous content. Shaley, coaly material
											has high lustre.
2085.8	2094.6					Slt/sst	md.Gy.	M-F	78°	Intact	Beds show evidence of bioturbation. Also evidence of
											sand volcanoes. Some brachiopods on fracture (bedding)
											which are otherwise clean. Calcite fracture at 28° and
											75° both planar, continuous 2089.8 - 2089.6 mudstone interbed.
2094.6	2133					Mst.	Dk.Gy.	F	76°	Blocky to	2096.3 - 2097.4. 2103.5 - 2104.6, 2108.4 - 2109.2, 2119. 7 -
										Broken.	2119.9: Coal Veins. High bituminous content. A few fossils
											2099.5 - 2100 calcite veins closed at 35°. Discontinuous
											but up to ½" thick. 2123 - 2124 silty mudstone. No bituminous
											material. Polished surfaces on fractures in bituminous
											material, others are clean.
2133	2138.8					Slt.	Dk.Gy.	F	78°	Intact	Well indurated, no joints, fractures clean, quite homogeneous.
2138.8	2145.1					Sst/Mst	m. to dk.gy.	M-F	78°	Intact.	Some bituminous infilling, polished some clean very evenly
											banded, 2 small calcite fractures closed at 24°, discontinuous
											planar. Mudstone content increases until it grades back
											to mudstone.
2145.1	2154.7					Mst.	Dk.Gy.	F	81°	Mod. intact.	Fractures slightly irregular contain plant fossils (grasses
											ferns) at 59° 2 fractures at 2148≈ have slickensides. A
											few areas appear quite siltrich , polished surfaces on many
											fracture surfaces, rock fairly homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2154.7	2168					Slt/Mst	Md.Gy.	F	80°	Mod. intact	Slickensides with lots of calcite showing movement, many calcite fractures for ≈ 2', these fractures have been cross cut and show displacement up to 1/8" thickest vein ½" range of angles 43° - 84°. Mudstone interbed - 2158.7' - 2159.4'.
2168	2184.1					Slt/Sst	Md.Gy.	M-F	75°	Mod. intact	Grades to sandy material. Calcite infilling along bedding fractures as well as coal material and some fossils, some calcite veins at same angle as bedding. A few rip ups near beginning of interval, beds show evidence of disturbance near end of interval and mudstone starts to occur.
2184.1	2194.4					Mst	Dk.Gy.	F	77°	Blocky	Plant fossils found on fracture surfaces, a few polished surfaces grades to more bituminous mudstone. Then coal vein. 2191.8 - 2192.6.
2194.4	2196.6	2192.9'	2196.2	668.4	669.4	Coal	Black	F	-	Blocky	Moderate lustre, friable, breaks into powder. Recovery 2.2' of 2.2'. 3.3' - 1.0m. coal F seam.
2196.6	2199.3					Mst.	Dk.Gy.	F	80°	Blocky	Shaley, high bituminous content grades to lower bit. content. Fractures infilled with coal. One calcite vein at 80°.
2199.3	2210.3					Slt.	Md.Gy.	F	82°	Mod. Intact	Contains both interbeds of fine grained sandstone and some muddy portions. gritty, a few calcite fractures at same angle as bedding, one at 36°, all closed and planar. Most fracture surfaces clean.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2210.3	2212.4					Sst.	Md.Gy.	M	84°	Mod. Intact.	Bedding is even only interrupted by a few calcite fractures at 33° planar mostly continuous and up to ½" thick.
2212.4	2219.2					Mst/Sst	Dk.Gy.	F	81°	Mod. intact.	A few polished surfaces along bedding plane. Only bedding fractures. SOME . bituminous matter.sandstone interbeds are crossbedded and compose up to 15% of the core. SEVERAL CALCITE VEIN AT ANGLE OF BEDS.
2219.2	2241.5					Mst.	Dk.Gy.	F	81°	Blocky	2226 -2227.6 rubble shiny, many fractures contain coal and are quite rough. 2.6' - 0.8m. COAL. From 2227 - 2232, 3' of core loss remain der is rubble that is coal mudstone. Jointing at 68° polished surfaces shows evidence of movement. 2237' decrease in coal content. Joint at 23° shows some calcite.
		2224.4	2227.0	678.0m	678.8m						
2241.5	2259.5					Slt/Sst	Gray	F	81°	Quite intact.	2249 a few clean planar joints at 8°, 2250 rip ups evident in sandstone. Beds are disturbed. Bedding fractures are clean, 2259 slightly muddy siltstone. Sandstone comprises 35% of core.
2259.5	2268					Mst/Sst	Dk.Gy.	F	78°	Mod. intact.	Some coal infilling in fractures, many are clean. No joints. Sandstone interbeds compose up to 15% of core disturbed. One calcite vein along bedding plane.
2268	2301					Slt/Sst				Mod. intact.	Sandstone composes up to 35% of core, some curved irregular fractures with bituminous material and phosphate. 2273.6 well defined slikensides infilled with calcite. Bedding disturbed in this interval, 2274.2 fracture at 51° showing movement (strain) with calcite rough surface. (Cont.)

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
											Cont. from p.37. 2276 a few planar calcite veins along bedding
											plane up to 1/8" thick, 2277.6 a marked increase in the number
											of calcite fractures at all angles, most are discontinuous
											and less than .2' long, fewer sandstone interbeds some bedding
											shows heavy disturbance. One bituminous stringy fracture at
											22°, 2284 joint at 42° bituminous polished planar.
											2290.6 joint with lateral slicks at 29°. 2292.8 - 2293.5
											joint showing laterial slicks calcite filled undulating
											at 23°. amt of sandstone interbedding gradually decreasing to
											about 20%. 2298.2 many fractures with polished surfaces and
											calcite infilling, irregular angle varies from 27° - 35°,
											2299 bedding is irregular and sandstone strings through core.
2301	2315.8					sst	Lt.Gy.	M	79°	Blocky to	Bedding regular and even. Joints at 3°, 21°, rough planar
										broken	to irregular and calcite filled. 2308' slickensides at 70°
											with bituminous material and calcite. 2309.1 - 2311.6 rubble
											zone, high number of calcite fractures. 2313 - 2313.8 rubble
											zone, 2313.8 many irregular planar joints at 22° clean.
2315.8	2325.5					Slt.	Dk.Gy.	F	81°	Mod. intact.	Bedding fracture surfaces are mostly clean only a trace of
											coal in some, one fracture at 9° planar clean, a few minor
											interbeds of sandstone. Some plant fossils on fracture
											surfaces. Slightly muddy siltstone at 2322', sandstone
											interbeds at 2324'.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 23, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2325.5	2356.7					Mst/Sst	Dk.Gy.	F	81°	Mod. intact to	2328.5 slickensides at 78° calcite filled with polished
										Blocky	bituminous surfaces. Fractures at 24° clean to trace amounts
											of calcite. Fractures along bedding contain bituminous
											material and plant fossils, sandstone interbeds comprise
		2349.7'	2382.5	716.2m	726.2m						up to 20 % of core. 2347 amount of bituminous material
											increases. A few small coal veins. 32.8' - 10.0m of coal. R4.
2356.7	2385					Coal	Black	F	–	Broken to	Very friable, breaks into a powder. Very low lustre. At
										Muddy	2362' pieces of coal larger, up to 3" long, Recovery
											from 2357 - 2367 core loss = 5.5', 2367 - 2377 core loss = 4.8'
											2377 - 2385 core loss - 4.5', total loss of coal 14.8',
											Overall Recovery - 13.5' of 28.3'.
2385	2392					Mst	Dk.Gy.	F	–	Broken	Many fractures from 32° - 50° with polished slightly rough
											bituminous surfaces, 27° joint with smooth planar bituminous
											fracture. Core very broken quite shaley.
2392	2396.2	2390.1'	2394.4'	728.5m	729.8m	Coal	Black	F	–	Broken to	Powdery except for a few very small pieces, muddy dull (only
										Muddy	a slight lustre in some of the small pieces) Recovery -
											2.1' of 4.2'. 4.3' - 1.3m. Coal. R4 (part of seam).
2396.2	2403.4					Mst.	Dk.Gy.	F	71°	Blocky	
											Fracture surfaces are polished and smooth, once calcite
											fracture at 2402' closed planar. Rock is mostly homogeneous,
											grades from bituminous to silty.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 23/ 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2403.4	2425.2					Slt/Sst	Gray	F	63°	Intact	Sandstone interbeds comprise 15% of core. 2410' slickensided surface calcite rich, sandstone interbeds disturbed evidence of rip ups and load casts. By 2420' bedding angle has changed to 72°, some bituminous partings.
2425.2	2432.2					Sst/Slt	Gray	M	54°	Mod. intact.	Fairly fine grained to begin with and has silty interbeds, this grades to coarser grained sandstone and siltstone disappears. Bedding very regular and even. Some planar hairline calcite fractures nearly perpendicular to bedding at 57°. Bituminous layers on silt fracture surfaces.
2432.2	2503					Sst.	Lt.Gy.	C	70°	Mod. intact	Jointing at 36°, 24° contain calcite but are fairly rough planar fractures. Coarse sandstone grades to very coarse by 2446', At 2447' some rough bituminous material along bedding fractures. Sandstone fairly massive faint bedding at 80° 2456.5' bituminous mudstone veinlets irregular discontinuous occur at all angles through the core. These disappear at 2459.5 and reappear at 2464'. 2465.2 - 2466.4 interbeds of bituminous mudstone. Quite oxide has undulating fractures. 2467.5 - massive no bedding. 2468.7 - finer grained core bedding dist at 84°. 2473.3 coarser grained sandstone faint bedding only. Has some irregular bituminous veins most fracture surfaces are clean. 2491' - 2492' some bituminous fractures along bedding plane. 2492.6' - 2493' some silty clasts angular found in core (cont.)

Hole No. D.D.H. 1753 Page 40 of 42

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2432.2	2503										Cont. breccia like. Up to 2" in size. Joints at 18° planar
											calcite filled .6' long. Joint at 40° planar nearly perpend.
		2462.3	2464.6	750.5	751.2						to bedding which is at 58°, calcite filled joint. Abrupt
											contact with coal at 2503'. 2.3'-0.7m. Coal. R3.
2503'	2507.6	2501.6	2505.2	762.5	763.6	Coal	Black	F	-	Muddy to broken	Core loss in this interval of 2', broken low lustre,
											very friable, dull recovery, 2.6' of 4.6'. 3.6' - 1.1m.
											COAL. R3.
2507.6	2510.5					Mst/ Sst.	Gray	F	74°	Blocky	Few sandstone interbeds to begin with but these increase in
											quantity, Breaks along bituminous layers bedding shows a
											moderate amount of disturbance. No joints.
2510.5	2520.2					Sst./ Mst.	Lt.Gy.	F-M	68°	Blocky	Bedding fractures along muddy or silty layers. Contain
											bituminous material which is rough. Beds show evidence
											of bioturbation and some sand volcanoes.
2520.2	2525	2519.0	2525.6	767.8	769.8	Coal	Black	F	-	Muddy	Recovery 3.6' of 4.8'. Lustre medium very friable.
											No intact pieces, all powdery, contain some duller muddy
											material. 6.6' - 2.0m. COAL. R2.
2525	2526					Mst.	Dk.Gy.	F	72°	Blocky	Bituminous shiny grades to sandstone.
2526	2583					Sst.	Lt.Gy.	Coarse	73°	Mod. intact.	Basal . Finally contains some bituminous material which is
											unusual for basal. Massive joints at 14°, 31°, 18°, calcite
		2528.2	2529.5	770.6	771.0						filled (1.3' - 4m. COAL) R 1.
											2542' a few small mudstone interbeds 2555' joint open planar
											at 28° 1' long. 2562' a few minor bituminous mudstone
											interbeds and some polished surfaces at 64°. 2573' slightly

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning

Date: July 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth: 2583

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2526	2583										Cont. finer grained beds at 67°. 2579.5 calcite
											discontinuous fracture at 35°. 2582.5 2 calcite fractures
											at 46°.
											Bedding is even no more bituminous material.
											AND THUS ENDETH DDH 1753 at 2583'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K Gerrie Date: June 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	92				28.0						OVERBURDEN
92	95					SLT	dk gr	F-M gr		Indurated, intact	Minor fossils, lighter with depth.
95	101					SST	lt gr	M gr	87°	Well indurated	Laminae of SLT crossbedding, calcite fissures parallel to core axis, calcite infillings, continuous joint at 75° to C.A.
101	102					SLT	lt bl	F gr	85°	Intact	Fossils, muddy SLT.
102	109					SST	lt gr	M gr	85°	Well indurated	Discontinuous joint sets at 84° to C.A., laminae of MST, calcite veins concordent and discordent to bedding, minor pyrite, crossbedding.
109	112					SLT	lt-dk bl	F gr	86°	Blocky	Becomes a mudstone with depth, minor coal laminae.
112	113					SST/SLT	dk gr	M gr	84°	Indurated	Intersecting discontinuous joints at 65° and 79° to C.A., calcite infillings, laminae of SLT with 2" band of SLT.
113	116.5	114.2	119.1	34.8	36.3	COAL	black		88°	Blocky	Wet, bright coal with minor MST bands. 4.9' (1.5m) COAL part of 14u Seam.
116.5	120					SLT	lt br	M gr	75°	Intact	SST bands, wavey bedding, darker with depth, continuous joint at 71° to C.A.

Hole No. D.D.H. 1754 Page 1 of ____

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: K Gerrie Date: June 22, 1981

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
120	124.5					COAL	black		83°	Blocky	Wet, brittle coal.
124.5	141.5					SLT	lt bl-bl	F-M gr	80°	Fragmented, indurated	Minor fossils, intervals of mudstone ranging from 6" to 2', minor SST bedding present from depth of 137', slickenside present at depth of 139', mudstone becomes more predominant with depth, continuous joint sets at 87° to C.A., calcite infillings.
141.5	146.5					SST	md gr	C-M gr	82°	Blocky	Disturbed bedding, mudstone laminae, calcite fissures, slickenside at 146'.
146.5	149					MST	black	C-M gr	88°	Fragmented	Minor fossils and pyrite, 1' of wet, brittle coal at 147'.
149	151					SST	black	C gr		Indurated	Laminae of coaly MST, minor lenses of coal throughout, pyrite.
151	162	151.0	153.2	46.0	46.7	COAL	black			Fragmented	Dull to bright coal, brittle, MST bands throughout.
		158.1	161.4	48.2	49.2						2.3' — 0.7m COAL 3.3' — 1.0m COAL part of 14u Seam.
162	171					MST	black	F gr		Fragmented to blocky	Wet, coal bands throughout ranging from 2" - 1', fossils present, pyrite present.
171	190					SST	lt gr	C gr	86°	Indurated	Discontinuous joint sets at 84° to C.A., continuous joint at 80° to C.A., calcite & pyrite present along joint surfaces, minor coal lenses throughout progressively darker with depth,

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	mud infilling, bedding is wavey and disturbed.
190	193.5					SLT	lt bl	M gr	84°	Fragmented to blocky	Pyrite and minor fossils, small laminae of MST, calcite.
193.5	203					MST	black	F gr		Blocky	Coal bands ranging from thin laminae to 1½', minor plant fossils, coal is bright and brittle, pyrite and small calcite fissures.
203	214					SLT	lt bl	F gr	84°	Intact	Small intervals of SST bedding, bedding is undulating, minor plant fossils, pyritization and a white chalky weathering, progresses to a muddy SLT in places.
214	218					SLT/SST 40/60	dk gr/ lt gr	M gr	85°	Intact	Minor crossbedding, discontinuous joint at 79° to C.A., calcite infilling, SST becomes more predominant with depth, small laminae of MST throughout.
218	232					MST	black	F gr	84°	Intact	Pyrite present on coal bands, coal bands throughout, 1' coal band at 222', coal is bright and brittle, polished surface at 223.5', fossils present, joint at 80° to C.A., calcite fissures 11° to C.A., becomes silty with depth.
232	234.5					SLT	lt bl	F gr	85°	Indurated	Small coaly pockets, darker with depth, small intervals of wavey SST bedding.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 23, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY – NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
234.5	237					MST	black	F gr	85°	Blocky	Small coal lenses throughout, slickensides at 236.5'.
237	240					SST	lt gr	C gr	85°	Well indurated	Discontinuous joint at 83° to C.A., megajoints, calcite infilling minor siltstone bedding.
240	244					COAL	black			Fragmented	Bands of MST, bright coal.
244	249.5					SLT	lt bl	M gr	81°	Intact	Small interval of disturbed SST bedding at 245.8', continuous joint at 79° to C.A., calcite infilling, calcite fissures parallel to C.A.
249.5	258					MST	black	F gr	83°	Intact	Continuous joint at 76° to C.A., small coal lenses, SST clasts present at depth, minor fossils, SST bedding with depth, bedding is wavey with some crossbedding, darker with depth.
258	264	255.0	259.0	77.7	79.0	COAL	black		82°	Blocky	Bright, hard coal, some lenses of mudstone. 4.3' (1.3m) COAL 14 Seam.
246	282					SLT	lt bl	F gr	88°	Intact	Intervals of undulating sandstone bedding, continuous joint at 74° to core axis, calcite infilling, slickensides at 299', tends to become muddy with depth.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 23, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
282	289.5	280.5	285.8	85.5	87.1	COAL	black		84°	Blocky	One foot and a half of siltstone at 282', coal is wet and bright.
											5.2' 1.6m COAL 14 L SEAM
289.5	299.5					SLT	lt bl	F gr	88°	Intact	Discontinuous joint at 78° to C.A., calcite infilling, small
											scale drag fold at 292', intervals of disturbed SST bedding
											ranging in size from 2" - 6', darker with depth.
299.5	302					MST	black	F gr		Fragmented	Carbonaceous mudstone progressing to a foot interval of frag-
											mented, wet, bright coal.
302	319					SLT	lt bl	M gr	86°	Intact	Continuous joint at 77° to C.A., calcite infilling, intervals of
											sandstone bedding, minor crossbedding but mainly disturbed.
											Intervals range from 2" -8", darker with depth becoming carbon-
											aceous.
319	324	316.9	320.5	96.6	97.7	COAL	black			Blocky	Hard, coal, bright, 6" interval of mudstone.
											3.6' — 1.1m COAL (SHALEY)
324	331					MST	black	F gr	84°	Intact	Discontinuous joint set at 75° to C.A., small lenses of coal
											throughout, bands ranging in size from 1' - ½', minor fossils.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 25, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
331	342.5					SLT	dk gr	F gr	86°	Well indurated	Minor fossils, discontinuous joint at 67° to C.A., minor SST bedding, (SST.C gr) becomes increasingly darker with depth, minor pyrite, massive calcite fissures running vertically and calcite pockets.
342.5	348					SST	lt & dk grey	C gr	86°	Intact, indurated	Disturbed bedding, discontinuous joint at 58° to C.A., massive calcite veins parallel to bedding, minor crossbedding, MST laminae throughout.
348	363.5					SLT	lt bl	M gr	87°	Intact	Continuous joint at 68° to C.A., calcite infilling, minor bands of sandstone, fossils.
363.5	386					SST/SLT 40/60	dk/lt grey	C gr	88°	Blocky	Crossbedding present, bedding is disturbed in places but predominantly wavey, discontinuous joint set at 70° to C.A., calcite infilling, calcite fissures running concordant to core axis. Siltstone becomes more predominant with depth.
386	392					SST	lt bl	M gr		Well indurated	White chalky weathering on polished surfaces, mudstone lenses throughout, fossils, some coal lenses, increasingly darker with depth.
392	393					MST	black	F gr		Blocky	Some fossils, coal pockets throughout, polished surfaces at 393'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 24, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
393	415	390.7	404.5	119.1	123.3	COAL	black			Blocky	Brittle bright coal, mudstone bands ranging from 3" - 5".
		405.5	409.4	123.6	124.8						13.8' -- 4.2m COAL 3.9' -- 1.2m COAL
415	417.5					MST	black	F gr	83°	Intact	Lighter with depth progressing to siltstone, vuggy porosity with calcite infilling.
417.5	424.5					SST/SLT 30/70	lt bl lt gr	M gr	67°	Intact	SST bedding is disturbed, coal pockets and lenses throughout, siltstone progresses into a mudstone with depth, minor fossils, discontinuous joint at 58° to C.A., calcite infillings.
424.5	429.5					MST	black	F gr		Blocky, fragmented	Progresses to siltstone with depth, laminae of MST in silt, some minor bands of SST.
429.5	436.5					SST	lt gr	C gr	82°	Intact, indurated	Slickensides at 436.5', calcite infilling along joint surfaces, Continuous joint at 78° to C.A., bedding is undulating.
436.5	443					SLT	dk gr	M gr	73°	Indurated	Continuous joint at 67° to C.A., laminae of mudstone, some intervals of sandstone bedding, bedding is disturbed. Slickensides at 438.5', darker with depth, intervals of SST bedding range from 1" - 6".

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
443	459.5					SST	lt gr	C gr	81°	Intact	Calcite infilling along fractures and joints, discontinuous joint set at 51° to C.A., bedding is wavy and disturbed, cross-bedding, small intervals of muddy siltstone with depth vertical calcite fissures throughout, coal lenses and bands at depth.
459.5	487					SLT	lt bl	M gr	86°	Well indurated	Sandy SLT with intervals of muddy SLT, coal lenses throughout, sandstone bedding at depth, bedding is wavy, calcite present, slickensides at 472', continuous joint at 71° to C.A.
487	491					SST	lt gr	C gr	71°	Well indurated	Discontinuous joint set at 60° to C.A., calcite infilling, vuggy porosity infillid with calcite crystals, highly fractured laminae of carb. mudstone.
491	498					SLT	lt bl	C gr	82°	Intact	Laminae of carb. mudstone, intervals of sandstone bedding, bedding is disturbed, some minor crossbedding, slickenside at 496', increasingly carb. with depth.
498	508					MST	black	E gr	88°	Blocky	Lenses of coal, calcite present along polished surfaces, continuous joint set at 63° to C.A., wavey SST bedding intervals.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: K. Gerrie Date: June 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
508	537					SST	lt bl	M gr	83°	Blocky, intact	Laminae of carb. MST throughout, coal bands, bedding is disturbed, core breaks along carb. surfaces, calcite fissures parallel to C.A., continuous joint at 67° to core axis, calcite infilling, sandstone becomes light with depth, with fewer carb. MST laminae.
537	554					MST	black	F gr		Intact	Fossils, coal pockets and lenses with depth, darker with depth.
554	571	551.5	567.3	168.1	172.9	COAL	black			Blocky, friable	Dull coal with bright bands, some mudstone. 15.7' — 4.8m COAL
571	576					SST	grey	F gr	82°	Mod. broken	Bedding shows evidence of being disturbed, some bedding fractures are curved, grades to mudstone.
576	582					MST	black	F gr	86°	Intact	Contains two fractures, very dark color, contains bituminous material.
582	645.3					SST	lt gr	M gr	79°	Mod. Intact	Shows slightly disturbed bedding, one small brecciated area and some crossbedding. Bedding fractures tend to be quite rough. At 590' curved open fracture at 19°, the rest of the joints planar, rough minor calcite infilling at 15°, 34°, 6°. At 608' burrows and bioturbation, rip ups 613.5'. After this core becomes dark and contains silt. 624.5' bioturbated, some minor bands of lighter colored beds, otherwise dark, grades to siltstone by 647.3'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
645.3	654.3					SLT	dk gr	F gr	77°	Mod. Intact	Has sandstone interbeds, also some carbonaceous partings.
654.3	657					MST	black	F gr	64°	Mod. Intact	Contains coal partings plus some silt.
657	667	653.5	663.1	199.2	202.1	COAL	black	F gr	---	Broken	High lustre, friable. RECOVERY 3.6' of 4' FROM 667-661
											from 661'-667' 5.6' RECOVERY 9.5' — 2.9m COAL #11u SEAM
667	674.2					MST	black	F gr	82°	Broken	Very bituminous mudstone, marginally more coal than mudstone.
											Quite hard, may contain rock flour in some areas. 672' mudstone
											considerably less bituminous, quite a bit more intact.
674.2	684.4					SLT	dk gr	F gr	—	Mod. Intact	No joints, very homogeneous. At 681' more carbonaceous material
											shows up, too hard to be mudstone, grades to sandstone.
684.4	690.5					SST	grey	M gr	83°	Mod. Intact	Bedded evenly, has some very minor coal veins approx. 2" thick.
690.5	699.1					MST	dk gr	F gr	—	Mod. Intact	Irregular or concoidal fractures, some bituminous layers but is
											mostly homogeneous - gradually grades to black MST, breaks at
											right angles almost.
699.1	722	698.8	706.7	213.0	215.4	COAL	black	F gr	—	Broken	RECOVERY 20.6' of 22.9', contains several mudstone interbeds.
											Poor - most lack lustre.
											7.9' — 2.4m COAL 3.6' — 1.1m COAL #11 SEAM

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: June 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
722	731.5					MST	black	F gr	86°	Broken	High amounts of bituminous material, one small interbed of siltstone.
731.5	736.7					SST	grey	M gr	81°	Mod. Intact	Breaks mainly along bituminous layers which may contain some fossils. Many joints at 39°, calcite filled, subparallel.
736.7	739.9					MST	dk gr	F gr	88°	Intact	High in bituminous material, breaks unevenly.
739.9	748.8					SST	grey	F-M gr	87°	Intact	One closed calcite fracture 5°, even bedding. Bedding becomes quite disturbed by 742', rip ups (a few), joints 18° at 747' a few mudstone interbeds occur then grades to mudstone.
748.8	756.4					MST	dk gr	F gr	74°	Blocky	Many hairline fractures, bituminous layers are where bedding plane breaks occur, gradual increase in coal content, coal is vitreous. Joint, disco, calcite, 79°.
756.4	757.2					COAL	black	F gr	—	Broken	Vitreous, friable but too short an interval to sample.
757.2	763.2					MST	dk gr	F gr	88°	Blocky/Mod. intact	Many coal veins in first foot of core, alot of plant fossils.
763.2	765.7					SST	md gr	M gr	85°	Mod. Intact	Quite disturbed, one worm burrow, two calcite fractures sub-parallel at 25°.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
765.7	770.5					SLT	grey	F gr	83°	Broken/Mod. Intact	Very broken to begin with then gets progressively more intact. Joints at 30°, no infilling.
770.5	799.1					SST	md gr	M gr	65°	Mod. Intact	Bedding 65° to begin with 772-773' then becomes 82°. Many bedding plane fractures are curved and contain bituminous material. After 777' quite a bit of crossbedding. Good salt and pepper texture. 782.6' section of coarse grained sandstone. 783' period of banded medium grained sandstone and fine grained sandstone. 789.2' rip ups and worm burrows. There is evidence of extreme disturbance to 794'. 794' dark bands increase finer grained. 797' mostly finer grained siltier material. Joints at 15°.
799.1	807					SLT	grey	F-M gr	87°	Intact	806' banded very finely, even, quite a bit of dark material. Many hairline fractures. Joints at 15-20° small, discontinuous calcite filled. Much of the siltstone is interbedded with coal.
807	811.6					MST	brown black	F gr	87°	Intact	Concoidal fracture, calcite fractures at 62°, planar regular continuous, grades into coal.
811.6	828.4	807.7	822.5	246.2	250.7	COAL	black	F gr	—	Blocky	Vitreous amazingly intact, often breaks at 60°. Shiny. RECOVERY is 100%, from 823.3'-828.4' core loss 1.2' 14.8' — 4.5m COAL #9 SEAM

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
828.4	836					MST	dk gr	F gr	73°	Mod. Intact	Smooth, mostly homogeneous. Joints at 34° some bituminous infilling, a few mud lenses. Calcite joint closed at 78°.
836	837					COAL	black	F gr	—	Blocky	Shiny, mod. intact friable, contains some powder.
837	837.7					MST	black	F gr	—	Intact	Contains some coal.
837.7	838.8					COAL	black	F gr	--	Broken	Vitreous, friable.
838.8	865.7					SLT	dk gr	Fgr.	82°		Joints at 22°, no infilling.
865.7	920					SST	grey	M gr	83°	Mod. Intact/ /Intact	Bedding visible only in places, a few rip ups and one breccia zone at 866'. Many discontinuous hairline joints running sub-parallel to the core axis. Open joints at 13° calcite filled, planar, 6-8" long. Closed calcite joints at 58° also one joint 5° oval shape, surficial .5' long filled with clay material. 876'-887' homogeneous intact sandstone 887' on patches of visible lighter bedding showing lenses of surrounding material or silty lenses. A few rip ups. 907' some brecciated material, joints at 24° may contain some patchy calcite, bedding 78° joints irregular to curved. Silty material from 911'-912' some bituminous interbeds.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
920	926.2					SLT	dk gr	F gr	82°	Intact	Contains increasing amounts of sandstone till it grades back to sandstone. NO well defined contact.
926.2	932					SST	dk gr	F-M gr	77°	Intact	Fault evident at about 928', displacement .1', quite silty material, shows high degree of disturbance. Grades to coal.
		927.5	931.1	282.7	283.8	COAL					3.6' — 1.1m COAL
932	935.6					COAL	black	F gr	—	Broken	Contains mudstone, high lustre, mod. friable. RECOVERY 3.6' of 3.6'.
935.6	943.6					MST	black	F gr	83°	Blocky	High bituminous content, generally needle like occurance, some coal veins up to .2' thick, also coal stringers.
943.6	946	939.0	945.0	286.2	288.0	COAL	black	F gr	—	Broken	High lustre, friable, angular breakage. 5.9' —(1.8m) COAL RECOVERY 2.2' of 2.2'
946	954.8					MST	dk gr	F gr	86°	Broken/blocky	Quite a bit of coal to begin with. Till 948.6'. Then grades gradually to siltstone, some bituminous infilling but no predominant joint set.
954.8	957					SLT	grey	F gr	87°	Mod. Intact	Homogeneous, no joints, grades to fine grained sandstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 6, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
957	993.6					SST	grey	F-M gr	82°	Blocky	Contains some very disseminated pyrite. Quite dark, little bedding, a few joints closed in same direction as bedding (calcite). 967' beds more well defined. Disturbed slightly, a few calcite joints at 24° and 84°. Sandstone becomes quite coarse grained 971.6'-974.1'. Then becomes fine grained and quite dark with some very erratic calcite veins. 984.8' lighter color coarser grained 987'. Finer grained higher silt content a few sole marks and some rip ups. Silty-mud content gradually increases till it becomes mudstone.
993.6	1002.8					MST	dk gr	F gr	87°	Mod. Intact	Joints at 49° few joints, no infilling. Bedding fractures contain some bituminous matter.
1002.8	1027					SLT	dk & lt grey	F-M gr	81°	Mod. Intact	Contains up to 45° sandstone interbeds predominantly bedding fractures, some bituminous veins small, discontinuous. 1011' siltstone becomes darker color, no sandstone but some mudstone and some bituminous material. Joint 1' long at 15° at 1017', no infilling.
1027	1033.2					MST	dk gr	F gr	—	Blocky/Mod. Intact	Breaks concoidally joints occur at 56° with shiny bituminous surfaces and chalky material.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 6, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1033.2	1038.6	1029.2	1035.1	313.7	315.5	COAL	black	F gr	—	Blocky	Shiny except for a few mudstone sections. RECOVERY 5.4' of 5.4'. Does not always break easily. 5.9' — 1.8m COAL #7 SEAM
1038.6	1041.7					MST	dk gr	F gr	82°	Broken	Some breccia in bedding breaks, minor coal veins and one joint at 40°, rough, plant fossils.
1041.7	1046	1038.1	1042.6	316.4	317.8	COAL	black	F gr	—	Broken	RECOVERY 3.5' of 4.3' Shiny, fairly hard. 4.6' - 1.4m COAL #7 SEAM
1046	1051					MST	dk gr	F gr	83°	Blocky	Shiny fracture surfaces, very smooth, some calcite.
1051	1056.4	1047.2	1051.8	319.2	320.6	COAL	black	F gr	—	Broken	Dull areas outnumber the shiny areas. RECOVERY 5.0' of 5.4'. contains mudstone, rich areas. 4.6' - 1.4m COAL #7 SEAM
1056.4	1058					SLT	dk gr	F gr	74°	Intact	Homogeneous, no joints or fractures. Bedding fractures contain fossils.
1058	1065.4					SST	grey	M gr	77°	Mod. Intact	Extremely disturbed, many areas with breccia and/or rip ups, a few calcite stringers, some plant fossil matter.
1065.4	1080.7					MST	dk gr	F gr	80°	Blocky	Calcite fracture, smooth planar 24° bedding contains fossils (plant) calcite fractures planar 0°. Bituminous veins up to ½" wide. One section of COAL 1.6' at 1070.4'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 6, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
		1065.6	1067.6	324.8	325.4	COAL					2.0' — 0.6m COAL #7 SEAM
1080.7	1133.7					SST	lt gr	M gr	78°	Mod. Intact	Some areas very high in silt, many small, planar, calcite fractures at 20° all roughly ½' long closed. Many bedding fractures are rough or slightly irregular and contain bituminous fossils. 1109' almost a siltstone till 1111'. 1113' crossbeds and many hairline fractures. 1116' calcite joints large planar at 12°. 1118.5' core becomes a lot darker in color, some mudstone interbeds slightly disturbed, plant fossils in bedding fractures.
1133.7	1137					MST	dk gr	F gr	84°	Mod. Intact	Small calcite and/or coal veinlets, has sandstone interbeds.
1137	1139.3					SST	grey	FtoM gr	60°	Mod. Intact	Extremely disturbed beds, some mudstone interbeds.
1139.3	1153.3					MST	dk gr	F gr	77°	Broken	Joints at 48°, 32°, 4°, with little infilling, little calcite, some bituminous veinlets and calcite, discontinuous hairline fractures. Most of the rock is quite homogeneous. Grades to coal.
1153.3	1162	1149.0	1155.2	350.2	352.1	COAL	black	F gr	—	Broken/Muddy	Vitreous high lustre, some powdery sections, friable, a few intervals of blocky mudstone, no coal interval is very long before it is interrupted by mudstone. RECOVERY 8.7' of 8.7'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1162	1168					MST	dk gr	F gr	80°	Blocky	Contains coal veins, up to .6' long. Some polished surfaces on fractures. At 1167.5' a sandstone interbed occurs.
1168	1171.6	1164.4	1167.7	354.9	355.9	COAL	black	F gr	—	Blocky	High lustre, friable, a few intact pieces up to several inches long. A bit of jointing at 40° contains rock flour. RECOVERY 3.0' of 3.6' 3.3' — 1.0m COAL, 2.3' — 0.7m COAL #5 SEAM
		1171.3	1173.6	357.0	357.7						
1171.6	1193.2					MST	black dk gr	F gr	83°	Mod. Intact/ /blocky	Coal veins occur at 1173.3-1173.5', 1174.9-1175.9', 1188.2-1188.4'. Few joints at 52° contain blebs of coal on an otherwise smooth surface. Few fossils and they are generally very broken, also one joint at 1190' .8'long at 15° NO infilling.
1193.2	1199.4					SST/SLT	lt gr & dk gr	M&F gr	77°	Mod. Intact	Siltstone fairly muddy composes up to 35% of core, some fracture contain small smounts of powdery coal. The rest are clean. A few (4) calcite veins closed, discontinuous at 21°, these are subparallel and slightly irregular.
1199.4	1211.3					MST	dk gr	F gr	—	Intact	Homogeneous, breaks concoidally, only 2 interbands of brown mudstone approx. .2'long, the rest is dark gray, no fossils, no joints till 1209' where there are 3 fractures with polished surfaces, calcite which display slickensides. At 45° ang 9° then grades gradually to sandstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1211.3	1284.5					SST	lt gr	C gr	78°	Mod. Intact	Fairly massive, only faint bedding. Many joints at 24° with minor calcite infilling (patchy), these are up to 1' in length and are either open or closed. Many bituminous layers occur along bedding plane and one interbed .1' long of SLT. 1232'-1233' rubble zone. 1235.5'-1237' rubble zone. A few mudstone lenses at 1247'. Recurring joint set at 25° occurs throughout, generally clean. 1261.8' faint bedding reappears. Numerous bituminous interbeds for first 1'. 1274.3' finer (darker) sandstone, no joints, bituminous content has increased. Beds at 63° breaks occur along bituminous layers that show some calcite infilling. These are planar but not smooth. There is also a bit of siltstone interbeds. 1280.2' coarse grained sandstone. Distinct even bedding contains bituminous material and contains a few siltstone interbeds.
1284.5	1315					SLT/SST	dk gr & lt gr	F&M gr	74°	Mod. Intact	Where sandstone interbeds occur there is evidence of quite a bit of disturbance. Fractures both bedding and joints are often curved to irregular. Calcite joints at 32°, 4°, 76° shows irregular (undulating surfaces) and some evidence of movement. Sandstone interbeds comprise 40% of core up to 1302' then comprise up to 15% of the core. Both bituminous and mudstone interlayers are scattered infrequently throughout core.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1315	1324					SLT	dk gr	F-M gr	76°	Intact	At beginning of interval first .7' a few fractures with polished slightly irregularly surfaces. Then no fractures or joints for rest of interval, homogeneous. Abrupt contact with sandstone.
1324	1332.6					SST/SLT	lt & dk grey	M&F gr	83°	Mod. Intact/ blocky	Contains a fair bit of bituminous material but exposed surfaces are somewhat rough and muddy. Bedding fairly regular. Interbeds of sandstone and bituminous material. 1328.3' very disturbed discontinuous bituminous stringers in all directions. Some polished fracture surfaces. Show rusty oxide material on fracture faces (curved). Tiny calcite veins (many) less than ¼" long. 1330.4' extremely dark (black) till 1332.6' contains high quantity of bituminous material but is very hard.
1332.6	1335					SST	grey	M gr	85°	Mod Intact	Partially disturbed bedding contains irregular bands of bituminous material. No joints, a few fractures that are curved.
1335	1337					SST/SLT	black	F-M gr	81°	Blocky	Very dark core. Very hard. Contains fairly high coal content but it is intermixed with sandstone.
1337	1343.8					SLT/SST	dk & lt grey	F&M gr	81°	Mod. Intact	Bedding is bioturbated and rip ups are evident, bituminous (polished) infilling on bedding fractures (curved) One coal filled fracture at 45° planar, closed, less than .5" long.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1343.8	1350.5					SST	lt gr	C gr	84°	Mod. Intact	Coarse, only faint bedding, bituminous veins in all directions ~~and~~ which are very irregular. Breaks along bituminous veins which exposes not only coal but rock flour and show evidence of polishing.
1350.5	1367.5					SLT/SST	lt & dk grey	F gr	62°	Intact	Sandstone interbeds show evidence of bioturbation, calcite veins running subparallel to core axis (discontinuous) and at 59°. 1366.5' slickensides and polished surface at 56° and at 24° very irregular surface.
1367.5	1371.6					MST	dk gr	F gr	—	Mod. Intact to blocky	A few polished bituminous surfaces at 54°, and 71°, fairly homogeneous, grades to SST.
1371.6	1381.6					SST/SLT	gray	M gr	82°	Mod. Intact	Until 1374.9' many closed calcite fractures, most discontinuous and planar up to ½" thick at 9°, 4°, 24°, one fracture at 24° with abundant calcite infilling. Bedding fractures contain dull bituminous matter. Only a few polished surfaces up to 35% SLT interbeds.
1381.6	1389					SLT/SST	dk gr & some md grey	F gr	86°	Mod. Intact to Fractured	Up to 10% SST interbeds. Sandstone interbeds display rip ups and quite a bit of disturbance. Jointing at 16°, 3° both display slickensides, both contain calcite on polished undulating surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1389	1390.5					SST	lt gr	M gr	81°	Intact	Sandstone shows no distinct bedding, rip ups occur throughout this and a few siltstone bands have been differentially compressed giving the appearance of rip ups.
1390.5	1395.4					MST	dk gr	F gr	81°	Blocky	Fairly hard mudstone. Fractures display polished smooth surfaces, breaks are concoidal (scratches brown). No joints.
1395.4	1398					SST/SLT	dk gr	F gr	80°	Mod. Intact	Minor crossbedding, a few rip ups, interbeds of siltstone comprise up to 20% of core. Many calcite closed fractures running subparallel to core axis. No bedding fractures.
1398	1402.5					SLT/SST	dk gr	F gr	79°	Mod. Intact	Except for some very minor calcite fracturing up to 1½" long there are no visible fractures. Sandstone interbeds are fairly regular, siltstone grades to a finer grained mudstone.
1402.5	1430.8					MST/SST	dk gr	F gr	80°	Blocky	A few minor calcite joints hairline, bituminous infilling occurs along bedding fractures. Sandstone interbeds are locally abundant and compose up to 20% of core. Jointing at 11° no infilling. 1426' core becomes darker, more bituminous, very little sandstone interbedding. 3 polished surfaces at 60° showing slickensides and lateral movement contains calcite, grades to coal.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1430.8	1465	1428.5	1452.4	435.4	442.7	COAL	black	F gr	—	Broken to blocky	High lustre, has some jointing at 43°. Friable, breaks with
		1458.0	1461.9	444.4	445.6						hand. RECOVERY 27.3' of 34.2'. At 1457' a few interbeds of
											mudstone. Coal is duller and more powdery.
											23.9' — 7.3m COAL #4 SEAM
1465	1468.5					MST	dk gr	F gr	74°	Broken	Has veins of coal and polished bedding surfaces. A few calcite
											hairline fractures that are discontinuous.
1468.5	1477					SLT/SST	dk & lt grey	F&M gr	74°	Mod. Intact	Interbeds of sandstone compose up to 10% of the core. Several
											calcite planar fractures at 24° closed mostly discontinuous.
											Joint at 43° polished bituminous surface.
1477	1482					SST	lt gr	M gr	74°	Mod. Intact	A few rip ups, one small breccia zone. Recemented, ½" thick at
											74°. Calcite fracture planar at 18°, bedding slightly disturbed.
1482	1493.9					SLT/SST	dk gr	F gr	85°	Mod. Intact	Sandstone interbeds show evidence of disturbance (bioturbation)
											and some minor rip ups. Bedding fractures are clean, 2 joints,
											one at 54° one at 14°, both contain a fine layer of calcite.
											Some mudstone interbeds also up to 10% of core. Sandstone
											interbeds up to 15% of core.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1493.3	1531.4					SST	lt gr	C gr	77°	Blocky to Rubble	Till 1496.6' faint bedding and crossbedding then becomes coarser grained and massive. Predominant joint set at 19°, some open some closed, all planar, irregular and contain calcite. A few mudstone interbeds occur at 77° up to 1" thick show curved surfaces. Also recurring joint set at 55° planar and contains calcite. 1503.7'-1505' rubble. 1505.6' joint at 31° open planar rough, contains ½" calcite. 1517' many fractures at 28° - 35° long up to 1' long, contain some bituminous material or are clean. 1522.3'-1523.5' high bituminous content, undulating veins. Most are discontinuous, also contains quite a bit of white infilling (phosphate?). 1523.5' bedding angle changes to 59°, breaks along darker coaly layers, bedding still faint.
1531.4	1537.6					SST/SLT	lt & dk grey	M&F gr	62°	Blocky	Very highly fractured, siltstone comprises up to 45% of core. Jointing at 36° and 62°. Joints at 32° polished with calcite and slickensides. Bituminous and calcite along bedding fractures. Bedding fairly even.
1537.6	1557.7					SST	lt gr	C gr	—	Massive	15 fractures at 42° all calcite filled, some evidence of movement. 1550.3' bedding evident in core at 63°. 1553.4' bituminous veins in coal and some rip ups — irregular discontinuous veins. Core is otherwise intact.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1557.7	1566.5	1555.1	1563.0	474.0	476.4	COAL	black	F gr	—	Muddy	Has a bit of lustre, very breakable, some mud. RECOVERY 3.9' of 8.8' 7.9' — 2.4m COAL
1566.5	1568					MST/SST	dk gr	F gr	60°	Blocky	Has sandstone interbeds and gradually grades to sandstone, polished bituminous surfaces along fractures.
1568	1578.6					SST	md gr	M gr	57°	Blocky	Joint set almost perpendicular to bedding fractures. At 40° joints are calcite filled planar. Either closed or open, bedding fractures are planar to undulating contain bituminous polished material. Sandstone contains a fair number of bituminous interbeds. Bedding is moderately disturbed.
1578.6	1590.2	1575.8	1587.9	480.3	488.4	COAL	black	F gr	—	Broken completely	High lustre, very friable, occurs as small particles less than ½" in diameter, mostly. RECOVERY 7.3' of 11.6' 12.2' — 3.7m COAL
1590.2	1602.6					SST	lt gr	C gr	78°	Mod. Intact	Fractures display a fair bit of bituminous material, joints at 0°, with calcite, planar joints at 14° curved with high lustre coal, rock is fairly massive, no evident bedding, only assumed bedding fractured. Abrupt contact with coal.
1602.6	1613	1602.7	1610.2	488.5	490.8	COAL	black	F gr	—	Broken	RECOVERY 5.8' of 10.4' High lustre, vitreous, breaks easily. 7.5' coal — 2.3m coal

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 17, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1613	1622.6					MST	dk gr	F gr	71°	Blocky	Many fractures along bedding planes. Mainly bituminous surfaces expose, calcite closed fractures increase in number over the interval. These occur at all angles and are discontinuous.
1622.6	1636.5					MST/SST	dk & lt grey	F&M gr	75°	Blocky	Jointing at 64° polished with some calcite, contains slickensided surfaces. Many ~~of~~ discontinuous hairline fractures at beginning of fracture zone. Sandstone interbeds disturbed. Up to 25% sandstone interbeds. Slickensides occur throughout this interval. 1632'-1634.2' bedding overturned, many many fractures and one small breccia zone. Bedding angle goes as low as 23°. Many microfaults in which minor displacements can be found. Many undulating surfaces.
1636.5	1652.2					MST	dk gr	F gr	—	Mod. Intact	Number of calcite joints gradually decrease in number. Joints at 79°, 58°, 25° polished planar surfaces showing evidence of movement, some calcite.
1652.2	1659.3					SST/SLT	lt & dk grey	M&F gr	81°	Mod. Intact	Up to 35% siltstone interbeds. Mostly bedding fractures occur as open fractures, closed planar to irregular fractures at 32° up to ½" thick.
1659.3	1666.3					MST	dk gr	F gr	—	Mod. Intact	Jointing at 42° planar smooth high bituminous content. Grades to coal. Only two small hairline fractures. Fairly homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 17, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (?)	Core Status	Additional Information
1666.3	1674	1664.0	1673.6	507.2	510.1	COAL	black	F gr	—	Blocky to broken	1666.5'-1667.4' rubble contains some mudstone. 1667.4'-1670.3' blocky but breaks into a fine powder. 1670.3'-1674' rubble but shows high lustre, friable. RECOVERY 6.6' of 7.7' 9.5' coal — 2.9m coal
1674	1693.3					MST	dk gr	F gr	82°	Blocky	Joints at 43° and 82° and generally bituminous, one small interbed of sandstone 1686.4'-1687', a few coal layers, some white phosphate on fracture surfaces.
1693.3	1713.8	1694.9 1707.3	1701.1 1710.6	516.6 520.4	518.5 521.4	COAL	black	F gr	—	Mud and blocky	RECOVERY 16.6' of 20.5' Powder till 1696.6'-1697' where there is a mudstone interbed. 1707'-1707.8' mudstone interbed. 1708.9'-1709.3' mudstone interbed. 1698' blocky high lustre but breaks fairly easily. 6.2' — 1.9m, 3.3' — 1.0m COAL
1713.8	1727					MST	dk gr	F gr	84°	Mod. Intact to blocky	At 1722' high coal content, some polished surfaces and some powdery. A few joints at 22°, no infilling. 1720.8' minor sandstone interbed-gradually grades to sandstone.
1727	1744.8					SST/MST	grey	M&F gr	81°	Intact	Contains a fair bit of mudstone but it is patchy, it does not occur in regular intervals ~~and~~ and composes up to 35% of core. Calcite joints occur at 18° and 72°-85° generally quite wide up to ¼" thick. Also some hairline fractures. 1741' bedding becomes more regular and interbeds of MST more evenly spaced.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 17, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1744.8	1760.2					MST/COAL	dk gr	F gr	84°	Broken	Contains minor sandstone up to 5% of core and coal. Coal is mudstone rich and only comprises small veins so it was not sampled. Some phosphate and polished surfaces occur on fracture surfaces.
1760.2	1788.6					SST/SLT	lt & dk grey	M&F gr	75°	Mod. Intact	Grades from siltstone rich to more sandstone rich almost 50/50 sandstone/siltstone. Bedding shows moderate disturbance, some bioturbation and a few rip ups. Most fractures are bedding fractures but there are a few closed discontinuous calcite fractures at 0-10° to core axis. Minor bituminous infilling along bedding fractures, quite rough.
1788.6	1791.7					MST	black to dk gr	F gr	77°	Blocky to broken	Grades into coal bituminous content increases with depth. Bedding fractures expose polished surfaces. No joints just breaks.
1791.7	1809	1789.7	1805.8	545.5	550.4	COAL	black	F gr	—	Blocky	Recurring fracture set at 73°, mudstone interbed 1802.8'-1803.4' high lustre, vitreous, quite hard, breaks in a blocky fashion. RECOVERY 15.2' of 17.3' 16.1' — 4.9m COAL
1809	1824.5					MST	dk gr	F gr	76°	Blocky	Fractures along bituminous layers. 1821' shaley bituminous material polished and flakey. No jointing. A few coaly interbeds.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1824.5	1837					SST/MST	grey	M&F gr	—	Mod. Intact	Sandstone is massive and fairly fine grained. Mudstone comprises up to 40% of the core at beginning of interval but this decreases to 15% by end of interval. Very few joints, these are closed calcite joints at 25°, up to 1' long and occur near end of interval. They are planar and up to ½" thick.
1837	1840.2					SST	md gr	M gr	—	Intact	Massive, no bedding, a few planar discontinuous calcite fracture at 14°, at 1838', .9' long, closed.
1840.2	1847					MST	Dk gr	F gr	71°	Blocky	Bituminous layers in this. Exposes partially polished partially powdery surfaces, irregular to curved, otherwise core is homogeneous with no joints.
1847	1851.5					SST/MST	lt & dk grey	M&F gr	79°	Mod. Intact	Bedding is moderately disturbed, mudstone interbeds comprise up to 20% of core, no infilling on bedding fractures, one calcite discontinuous joint at 0°, ¼" thick, .4' long.
1851.5	1854.1	1848.7	1850.7	563.5	564.1	COAL	black	F gr	—	Broken to blocky	RECOVERY 2.6' of 2.6' Shows some lustre, contains mudstone, low grade coal. Fractures angularly. 2' — .6m COAL

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1854.1	1887					SST/MST	dk & md grey	F-M gr	72°	Mod. Intact to blocky	Bedding is not even, a few plant fossils along bedding fractures, polished but slightly irregular surfaces. 1870'-1874' many closed discontinuous calcite fractures at 25°, all roughly subparallel and quite close to each other. 1867'-1870' mostly mudstone some sandstone, some calcite hairline fractures along length of core 0-10°. 1880' a few rough fractures at 31°, clean and quite rough. Siltstone gradations between mudstone and sandstone.
1887	1895.9					MST	dk gr	F gr	82°	Blocky	Siltstone interbed at 1887.4'-1887.7', many tiny fractures in this all calcite filled. Bedding fractures somewhat irregular and contains some plant fossils. 1893.5' calcite joint at 42° with well developed calcite crystals. Bituminous fractures range from 40-55° and may contain trace amounts of phosphate.
1895.9	1898.6					SST	md gr	M gr	83°	Mod. Intact	Calcite fractures subparallel to core at about 9°, with calcite crystals, planar bedding is moderately regular.
1898.6	1906.6					MST	black	F gr	76°	Mod. Intact	Jointing at 54° contains polished bituminous material. Fractures contain bituminous material. 1903.5'-1903.7', 1905.7'-1906' coal veins.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1906.6	1910.7					SST/MST	md gr	F-M gr	81°	Mod. Intact	Calcite planar fracture 1.3' long at 8°, one interbed of SLT bedding fairly regular only slightly disturbed.
1910.7	1935.9					MST	dk gr	F gr	73°	Quite Intact	Contains some silty sandy interbeds at 1914'-1915'. COAL 1913'-1913.8' high lustre, breaks in blocky square pieces, contains some mud. Fractures along beds are polished and bituminous. 1917' mudstone homogeneous, fractures are generally clean, sandstone interbed near end of interval.
1935.9	1943.3					SLT	md gr	F-M gr	82°	Intact	One clean planar fracture at 3°, one sandstone interbed at 1937.7'-1938', otherwise homogeneous and intact.
1943.3	1950.3					MST	dk gr	F gr	85°	Mod. Intact	Some bituminous interlayers along bedding plane, one planar calcite fracture along bedding plane, sandstone interbed at 1938'-1938.2' coarse grained and massive. Bituminous interlayers contain plant fossils.
1950.3	1952.9					SST	md gr	C gr	—	Mod. Intact	Coarse grained material has bituminous layers which are discontinuous in it, no other jointing.
1952.9	1971.8					SLT/SST	grey	F-M gr	68°	Mod. Intact	Plant fossils on some breaks, otherwise fractures are clean. Some worm burrowing evident. Calcite fractures at 21°.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1971.8	1979.8					SST	md gr	M gr	64°	Mod. Intact	One enpassant calcite fracture .7' long, bedding undulates. 4 calcite fractures at 23° planar continuous. A few silty interbeds. Near end of interval bedding shows more disturbance but is considerably less silty.
1979.8	1983					MST	dk gr	F gr	78°	Blocky	Bituminous content, fairly high contains fossils but they are highly broken and barely distinguishable. Mostly bedding fractures, one calcite fracture at 68°, grades to coal.
1983	1987.5	1979.7	1984.3	603.4	604.8	COAL	black	F gr	—	Blocky	Jointing at 44°, fairly blocky coal. Beginning of interval has a higher lustre than end, some mudstone intervals less than 2" long near 1987.5' more friable coal. 4.6' — 1.4m. COAL RECOVERY 4.8' of 4.5'
1987.5	1996					MST	dk gr	F gr	77°	Mod. Intact	A few minor siltstone interbeds especially near end of interval, a few bituminous rich areas. that expose polished bituminous surfaces, grades to sandstone.
1996	2017					SST/SLT	md gr	M-F gr	80°	Quite Intact	Jointing at 18° calcite filled planar fractures. 2 bituminous veins at 65°, one small area containing rip ups, trace amounts of mudstone. Fractures at 24° partially open partially closed. Some muddy interbeds. Up to 30% SLT.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2017	2024.5					MST/SST	dk gr	F gr	82°	Mod. Intact	Sandstone composes up to 10% of core. Slightly more sandstone in initial portion of core, mudstone more indurated, almost approaches siltstone, few fractures.
2024.5	2029.9					MST	dk gr	F gr	83°	Mod. Intact	Only fractures are bedding fractures, these contain polished bituminous material. Two small interbeds of sandstone just prior to coal, fairly homogeneous, contains some slivers of coal.
2029.9	2033	2026.2	2029.5	617.6	618.6	COAL	black	F gr	—	Blocky	Recurring joints at 55°, high lustre, very friable. Crumbles into slivers. RECOVERY 3.1' of 3.1'. 3.3' — 1.0m COAL
2033	2047.4					SLT/SST	dk gr	FtoM gr	80°	Mod. Intact	Siltstone tends to be slightly muddy but is quite hard, plant fossils that are well defined are evident. Fractures are mostly clean or contain fossiliferous material, except for one bituminous interbed at 2043'-2043.7'. Sandstone interbeds show evidence of crossbedding. 2047'-2047.4' bituminous then grades to coal.
2047.4	2054.8	2045.3	2050.5	623.4	625.0	COAL	black	F gr	—	Broken to blocky	2049.2'-2049.7' mudstone, shaley and bituminous. Some polished surfaces and a bit of phosphate evident in coal, high lustre and breaks in blocky fashion till 2052' where coal becomes powdery. RECOVERY 6.6' of 7.4'. 5.2' — 1.6m COAL

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2057.5	2070					MST	dk gr	F gr	69°	Blocky	Bituminous mudstone, fractures vary from 60° to 82° filled with polished bituminous material or plant fossils, some evidence of movement on some fracture surfaces. Some rather muddy coal powdery, broken at 2064.5'- 2064.9'. 2065.2'- 2065.8'. 2066.7'-2067'. Hairline calcite fractures at 9° and 84° planar but discontinuous.
2070	2087					MST/SST	grey	F gr	76°	Mod. Intact	Bituminous infilling on fracture surfaces with some calcite. 2085' slickensides, sandstone interbeds comprise 25% of core, these are fairly even but intermixed with bituminous material. Some fossils evident. Mudstone is quite shaley.
2087	2091					SLT	grey	F gr	83°	Mod. Intact	Some sandstone fine grained interbeds, a few minor fossils. One fracture at 67° bituminous showing evidence of some movement, grades to sandstone.
2091	2109					SST/SLT	grey	M-F gr	66°	Mostly Intact	A few calcite fractures following the angle of the bedding. Bedding is moderately disturbed, fracture surfaces tend to be curved and rough. 2107-2107.8' bedding angle changes to 41°, infillings tend to be more bituminous mudstone than siltstone. Several calcite fractures along bedding plane and some at 0°. Bedding angle goes back to 76° at 2107.8'.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2109	2130.5					SST/MST	grey	F gr	75°	Blocky	A few areas of crossbeds but otherwise fairly even bedding. Calcite fractures at 0-3°, very long, planar. Calcite fracture at 22° planar. Up to 40% mudstone.
2130.5	2137					SLT	dk gr	F gr	76°	Mod. Intact	A few fossils along fracture surfaces. One calcite filled joint 1.9' long at 9°. Rock is mostly homogeneous except for two coal veins, at 2136'.
2137	2161.9	2145.7	2151.8	654.0	655.8	MST	dk gr to black				Very bituminous mudstone till about 2159'. Some fossils found on fractures surfaces. 5.9' — 1.8m COAL Coal veins at 2146-2146.6', 2153.2-2154.3', 2155.5-2156'. Evidence of movement on surfaces throughout this interval. 2158' less bituminous mudstone, more indurated.
2161.9	2166					SST	md gr	M gr	83°-60°	Mod. Intact	Bedding shows variable dip. Several calcite fractures from 1-10° with quite a bit of calcite in them -- salt and pepper color. Minor amounts of bituminous material along bedding fractures.
2166	2177.2					MST	dk gr	F gr	80°	Mod. Intact	Some polished surfaces at 25° with calcite on them, showing evidence of movement. A few fossils on bedding plane fractures core is otherwise homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2177.2	2181.5					SLT	md gr	F gr	83°	Intact	A few closed calcite fractures at 8° and 83°. A few interbeds of fine grained sandstone, some bituminous interlayers, very minor.
2181.5	2237.4					MST	dk gr	F gr	84°	Blocky	Fairly high bituminous content, contains some fossils.
		2190.6	2192.3	667.7	668.2						2187.8'-2188.7' COAL 2194.4'-2195.2' COAL
											Fractures at 45° shows slickensides. Calcite fractures are closed up to ½" thick discontinuous and occur at all angles. Minor patches of almost silty material. Siltstone interbed at 2221.1'-2223', slickensides 59° @ 2226'. 1.6' — .5m COAL
2237.4	2260					SLT/SST	lt-dk gr	F gr	79°	Mostly Intact	Well indurated sandstone comprises up to 50% of rock. Beds show fair degree of disturbance with some rip ups. Trace amounts of coal occur as breccia on fracture surfaces. Joints at 0°-7° are calcite filled and closed.
2260	2275					MST/SST	dk gr	F gr	73°	Mod. Intact	A few bituminous occurances on fracture surfaces, no jointing, some coal veins 2266.8-2267.4'. Some minor sandstone interbeds up to 5% of the core.
2275	2277.6	2272.0	2274.0	692.5	693.2	COAL	black	F gr	—	Broken	Friable, moderate lustre, contains some mudstone. Fairly hard due to mudstone contained. RECOVERY 2.6' of 2.6'. 2.3' —.7m COAL

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2277.6	2289.5					MST	dk gr	F gr	81°	Mod. Intact	Fracture surfaces contain polished bituminous surfaces or contain plant fossils. Joint at 4° contains trace amounts of calcite. 2286-2286.3' coal vein, 2288.1-2288.6' coal vein.
2289.5	2296.6					SST	md gr	F-M gr	79°	Mod. Intact to Blocky	Some crossbedding, a few rip ups, several long calcite joints planar but rough, at 11° up to 1.5' long opened. Some muddy layers and a few fossils found.
2296.6	2312.1					MST	dk gr	F gr	74°	Blocky	Many bituminous infillings along bedding fractures at 2305' well indurated rock, fairly silty. Some jointing at 4° contains some bituminous material. A few fossils can be found. Grades to coal.
2312.1	2317	2311.0	2313.0	704.4	705.0	COAL	black	F gr	—	Broken	High lustre, quite hard, some polished surfaces contains. RECOVERY 4.9' of 4.9'. 2.0' — .6m COAL
2317	2333.7					MST	dk gr	F gr	82°	Mod. Intact	Has some sandy silt interbeds. Fractures contain polished bituminous shiny material. Joints at 46° filled with bituminous material, planar , smooth. Silt content increases near end of interval.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 27, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2333.7	2346					SLT/MST	grey	F gr	77°	Intact	Some fairly sandy silt. 2340-2342' fairly rich in bituminous material, not as well indurated. Fracture surfaces polished and contain bituminous material. 2342' slickensided surface with calcite at 68°.
2346	2356.1					SLT/SST	gr to med. black	F gr	69°	Mod. Intact	A few sand volcanoes show up in sandstone interbeds. Beds are moderatley disturbed, sandstone comprises up to 20% of core. Fracture surfaces are rough planar and clean or may contain a few fossils.
2356.1	2361.8					SST	lt gr	M gr	77°	Blocky	A few minor mudstone interbeds which is where fractures occur. Fracture surfaces are curved to undulating and contain minor amounts of coal. Jointing at 79° planar closed calcite filled. Jointing at 9° planar, open with patchy calcite.
2361.8	2377					SLT/SST	dk & lt grey	F gr	76°	Mod. Intact	Some of the siltstone is quite fine, almost mudstone. Most surfaces of fractures clean but a few plant fossils occur in some and there are two polished bituminous surfaces. One small planar joint at 3° clean.
2377	2383.2					MST	dk gr	F gr	77°	Mod. Intact	Quite shaley bituminous mudstone. Only one sandstone interbed at 2379.8-2380.1', no jointing only one closed calcite fracture along bedding plane. About half the fracture surfaces display

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	irregular polished bituminous surfaces.
2383.2	2389.7					SLT/SST	grey	F gr	81°	Intact	Breaks reveal clean surfaces, joint at 12° 2388' calcite closed planar. Sandstone throughout, but it is fine grained. One slightly muddy but well indurated area at 2385'.
2389.7	2412.4					MST	dk gr	F gr	78°	Mod. Intact	Well indurated hard but breaks concoidally and scratches brown. Some sandstone interbedding till 2043' up to 10% of core. 2396.2'-2397.4' bituminous content high, almost black in color — quite shaley. 2043' — more bituminous — quite shaley. Both plant and animal fossils are found on fracture surfaces and breaks.
2412.4	2417.6					SST	md gr	F gr	80°	Mod. Intact	Contains some silty portions, making the sandstone fine grained. Jointing at 8° calcite filled planar. Also at 13° clean planar joint.
2417.6	2420.5					MST	dk gr	F gr	79°	Blocky	Bituminous, shaley, displays polished surfaces, minor coal veins, grades to coal.
2420.5	2446	2419.0	2446.5	737.3	745.7	COAL	black	F gr	81°	Blocky	Blocky friable, high lustre, crumbles easily. One mudstone intersection, 2425.9'-2426', RECOVERY 16.1' of 25.5'. 27.6' — 8.4m COAL

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2446	2456.9					MST	dk gr	F gr	76°	Blocky	Bituminous and shaley, fractures show polishing and are irregular. Many minor coal veins in this.
2456.9	2461.5	2454.7	2457.3	748.2	749.0	COAL	black	F gr	78°	Blocky	RECOVERY 4.6' of 4.6'. High lustre, some blocky pieces, a few pieces of mudstone near end of interval. Jointing at 0° to core axis. 2.6' — 8m COAL
2461.5	2465.2					MST	dk gr	F gr	80°	Blocky	Breaks concoidally streaks brown. Fractures are filled with bituminous material and fossils. One minor coal vein near beginning of interval.
2465.2	2480.2					SLT/SST	dk & lt grey	F gr	81°	Intact	Only a very few fractures intact pieces of core for up to 4'. Breaks reveal the odd fossil, otherwise clean till 2472'. The siltstone is light to medium gray after 2472', banded light and dark grey with up to 15% sandstone. A few portions of bioturbated bedding.
2480.2	2554.6					SST	lt gr	coarse	83°	Mostly Intact	Bedding, very faint, 2485.1-2486' darker color sandstone. 2488.6-2488.9' rubble with minor bituminous content. 2493.7 bituminous, rough surfaces on fractures. 2497-2497.1' sandstone ripped up into coal band. 2507' bedding angle changes to 71°. 2512.6' irregular bituminous lenses found in core till 2514.3'. Then calcite joint at 24°. 2515.2-2517.4' bituminous lenses.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	2517.8' very coarse massive sandstone, one siltstone interbed.
											Several bituminous stringers. 2525.1 pyrite bleb in core 1.5"
											in diameter. 2526' bituminous partings along fracture surfaces.
											2534' several calcite planar fractures at 66° closed , one at
											31°. 2538.6' polished curved surface with calcite.
											2542-2544.5' calcite planar joints at 24°, some opened some
											closed. 2545.7' bituminous inclusions in rock, discontinuous
											and curved, one calcite joint ellipsoidal 1.4' long at 15°.
2551.6	2556	2548.6	2552.5	776.8	778.0	COAL	black	F gr	81°	Blocky	RECOVERY 3.6' of 4.4' very high lustre, a few joints at 68°,
											friable, breaks easily. 3.9' — 1.2m COAL
2556	2557.5					MST	dk gr	F gr	82°	Blocky	Polished smooth fracture surfaces, shaley, fairly homogeneous.
2557.5	2565					SST/MST	med & dk gr.	M-F gr	82°	Blocky	Sandstone has up to 15% mudstone interbeds, fracture surfaces
											are curved. Bedding is very disturbed, large worm burrows and
											rip ups evident. Grades to more pure sandstone by end of
											interval. Abrupt contact with coal.
2565	2569.6	2562.3	2567.3	781.0	782.5	COAL	black	F gr	—	Blocky	Fair lustre, quite friable. A few intact pieces, some muddy
											portions. RECOVERY 4.6' of 4.6' 4.9' — 1.5m COAL

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: July 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2569.6	2597					SST	lt gr	C gr	87°	Mostly Intact	Some fractures filled with coaly material at beginning of interval, then they become clean. Massive, only faint bedding, no jointing, homogeneous.
											END OF DRILL HOLE 2597'

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 29, 1981

LATITUDE	DEPARTURE	ELEVATION
149,998.6 N	25,931.3 E	2254.7 m

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	26				7.9						OVERBURDEN
26	28					SST	Lt grey	M gr		Blocky	Hard, well indurated, interbedded with SLT.
28	36					SLT/SST	Dk grey	F gr		Intact	Hard, indurated, contains bituminous lenticles. Lent. joint @ 29°, 32°. Joint angle 29°, SST with SLT bedding.
36	41					SST	Lt grey	F gr		Intact	Hard indurated disseminated coal throughout. From 36'-37' is brown in color. Fe stained.
41	42					SLT/MST	Black	F gr		Brecciated	Soft and crumbly.
42	62					SLT/SST	Lt grey	F gr		Intact	Hard indurated, discontinuous joints with calcite filling throughout. SST with SLT clasts in SLT @ 52'. Worm burrows @ 53', SLT bedding joint angle ≃ 86°.
62	82.5					MST/SLT	Dk grey	M gr		Intact, blocky	Fe. staining in joints. MST gets coarser grained and goes to SST @65' going back to SLT, fining to MST from 67'-73'. 6" layer of SST at 68' & 71'. Very fractured with calcite filling. Slickenside at 77'. SLT from 73' - 82.5'.
82.5	84					COAL	Black			Blocky	Soft and crumbly.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 29, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
84	93					MST/SLT	Dk grey	M gr		Blocky	Calcite filling in discontinuous joints. Bituminous lenticles throughout. Some polished surfaces. F gr SST @ 92.5'-93'.
93	119.5					COAL	Black			Blocky	Soft, crumbly. 6" MST parting @ 108'.
119.5	123					MST	Dk grey	F gr		Blocky	Soft, shears easily, many polished surfaces along with plant impressions.
123	131					SLT/SST	Lt grey	F gr		Intact	Hard well indurated. Dominant SST with SLT bedding and cross-bedding. Discontinuous jointing with calcite filling throughout.
131	134					SLT	Dk grey	F gr		Intact	Indurated, some bituminous lenticles.
134	145					SST/SLT	Dk grey	F gr		Intact	Hard, well indurated. Discontinuous jointing with calcite filling throughout. Contact with last unit 57°. Mud clasts at 145'.
145	154.5					SLT	Dk grey	F gr		Brecciated	Brittle, joints Fe stained. Some bituminous lenticles. SST clast @ 146'. Discontinuous jointing.
154.5	162					MST	Dk grey	F gr		Brecciated	Hard and brittle. Concoidal fracturing. Many coal lenses throughout. 6" interval of F gr SLT @ 161.5'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
162	172					SLT	Dk grey	C gr		Intact	Hard, indurated. Discontinuous jointing throughout (calcite filled).
172	177					SST	M grey	F gr		Intact	Hard, well indurated. Discontinuous joint with calcite filling.
177	191					SLT/SST 80/20	Dk grey	F gr		Intact	Hard and brittle. Some bituminous lenticles continuous joints contain Fe staining $\measuredangle$ 25°.
191	195					MST	Dk grey	F gr		Brecciated	Hard and brittle, many polished surfaces, coal lenticles present.
195	200					SLT/MST 50/50	Dk grey	F gr		Intact	Hard, brittle MST and SLT laminated together. Fracture zone infilled with calcite @ 197.5'.
200	202					SST	Lt grey	F gr		Intact	Hard, well indurated discontinous joints with calcite filling.
202	214					MST/SLT 10/90	Dk grey	F gr		Blocky	Hard and brittle. Calcite filling in most discontinuous joints. Bituminous lenticles throughout. Core has polished surfaces.
214	215					SST	Lt grey	F gr		Intact	Hard, well indurated.
215	220					SLT	Dk grey	VF gr		Intact	Hard and brittle. 217' has a discontinuous joint with calcite filling.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
220	224					SLT	Dk grey	VF gr		Brecciated	Badly broken and brecciated. Some grassy impressions.
224	238					SLT	Dk grey	VF gr		Intact	Hard and brittle. Coal lenticles throughout. 6" of coal @229' bordered on each side by 2"-3" of MST.
238	266					SLT/SST 30/70	Lt grey	F gr		Intact	SST dominant with SLT bedding and crossbedding throughout. Continuous jointing with calcite filling at 23°. The SLT becomes dominant from 260'-266'.
266	270					MST	Black	F gr		Blocky	Soft and crumbly. Many polished surfaces, containing much carbon.
270	288			82.3	87.8	COAL	Black			Blocky	Soft and crumbly. .1' of MST @ 275'. 5.2m coal 5.6 - 0.3 = 5.2
288	292					MST	Dk grey	M gr		Intact	Hard and brittle. Many polished surfaces. Numerous coal lenticles.
292	338					SLT/SST 60/40	Dk grey	M gr		Intact	Hard, very well indurated, extensive worm burrowing @ 294'. A coal lense occurs approx. every 6'. Many discontinuous joints. throughout. Many are infilled with calcite. SLT/SST laminations at 304'. Dewatering structure @ 332'. This structure contains disseminated pyrite. 3" of coal @ 335'

Diamond Drill Geological Log

FORDING COAL LIMITED — FORDING OPERATIONS

Objective:

Logged By: Barry Musil Date: August 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
338	347					SLT/SST 10/90	Lt grey	VF gr		Intact	Hard, well indurated. Discontinuous jointing with calcite filling throughout. Some joints are heavily iron stained. 3/4" vein of calcite @ 340'. Dominant SST with SLT bedding and crossbedding.
347	353					SLT	Dk grey	F gr		Intact	Hard indurated. This is a muddy SLT, continuous joint with calcite filling @ 353' and 15°.
353	356				MST 20	SLT/SST 20/60	Lt grey	F gr		Intact	Hard, indurated, many discontinuous joints with calcite filling. Core bedded and crossbedded.
356	360			108.6	109.7	COAL	Black			Blocky	Coal hard and brittle. Very shiny. 1.23 m
360	377					MST/SLT 50/50	Dk grey	VF gr		Intact	Hard and brittle 1 discontinuous joint with calcite filling at 365'. continuous joint with calcite filling @ 369' α 17°.
377	379					COAL/MST 30/70	Black	F gr		Blocky	Hard and brittle, coal shiny, blocky MST, very carbonaceous.
379	382					SLT/SST 20/80	Lt grey	F gr		Intact	Hard indurated. Discontinuous joints throughout, containing calcite.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Barry Musil Date: August 31, 1981

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY -- NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
382	392					SLT	Dk grey	F gr		Intact	Hard indurated, many coal lenses throughout. There is also discontinuous jointing with calcite filling throughout.
392	420					SLT/SST 20/80	Lt grey	F gr		Intact	Hard, indurated, many coal lenses throughout. SST with SLT bedding. Many discontinuous joints with calcite filling.
420	431					MST	Dk grey	VF gr		Intact	Hard, well indurated. 6" of SST (F gr) @ 422'. Contains discontinuous joints with calcite filling.
431	435					SLT/SST 40/60	M grey	F gr		Intact	Wavy undulating beds of dominant SST with SLT secondary. Continuous + Discontinuous jointing. All have calcite filling at 15°.
435	440					MST	Dk grey	F gr		Intact	Hard, brittle, many polished surfaces. Slightly platy Conchoidal fracturing.
440	442					SLT/SST 10/90	Lt grey	F gr		Intact, indurated	Many discontinuous joints with calcite filling. SST dominant with SLT bedding.
442	455					SST/SLT 20/80	Dk grey	VF gr		Intact	Hard indurated, SLT containing slight SST beds. Core goes to 6" of MST @ 4545'.
455	460					MST	Dk grey	F gr		Blocky	Soft, crumbly, many coal intervals of 6" each.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
460	465					COAL	Black			Blocky to brecciated	Hard, shiny black, good coal.
465	482					COAL/MST 20/80	Black	F gr		Blocky	Dominant MST with coal parting every 2' approx. Many polished surfaces.
482	487					SLT/SST 20/80	M grey	F gr		Intact, well indurated	F gr SST with SLT bedding throughout. No jointing, fine coal lenticle @ 483'.
487	497					SLT	Dk grey	F gr		Intact	Hard, well indurated. Concoidal fracturing. Slightly laminated ½" calcite vein @ 495'.
497	508					SLT/SST 20/80	M grey	F gr		Intact	Hard, well indurated. Many discontinuous joints with calcite filling. Some bioturbation @ 498' Worm burrowing at 507'.
508	517					SLT/SST 60/40	Dk grey	M gr		Intact	SLT with SST bedding. Some grassy impressions. Some discontinuous joints with calcite filling.
517	527					SLT/SST 20/80	Lt grey	M gr		Intact	Hard, well indurated, SST dominant containing SLT bedding and crossbedding throughout.
527	537					COAL/MST 30/70	Dk grey	F gr		Blocky	MST with coal partings. Good quality coal, shiny. MST has many polished surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
537	548			163.7	167.0	COAL	Black			Brecciated	Hard and shiny, good coal. 3.3 m coal
548	552					MST	Dk grey	M gr		Blocky	Not many leafy impressions (some). Bituminous lenticles throughout. Hard and brittle, concoidal fracturing.
552	570			168.2	173.7	COAL	Black	—		Brecciated	Good coal, shiny, MST partings @ 565' & 557'. 5.2m coal 5.5 m -(?)0.3 = 5.2m
570	595					SLT	Dk grey	M gr		Intact	Hard, well indurated. Many discontinuous joints (calcite filled). Some coal lenticles present. Polished surfaces @ 580' on.
595	624					SLT/SST 30/70	Dk grey	M gr		Intact	Dominant SST with SLT bedding, coal lenticles very common throughout, 6" of coal @ 604'. Core is hard and well indurated. 8" of coal @ 615'. Mud clasts @ 620'.
624	642					SLT	Dk grey	F gr		Blocky	Hard, brittle. Many plant impressions. ½" coal lense @ 632'. Fracture zone infilled with calcite . Section fines down towards 642' where it is MST.
642	645					MST	Black	F gr		Blocky	Hard, brittle, woody impressions. Many coal lenticles, plant impressions. Polish surfaces present.
645	652			196.6	198.7	COAL	Black	—		Blocky	Good coal, shiny black, hard. 2.1 m coal.

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FORDING RIVER OPERATIONS

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Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY -- NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
652	668					SLT	Dk grey	C gr		Intact	Well indurated. Many leafy impressions. Some SST bedding throughout (very faint). Coal lenticle at 659'. Discontinuous jointing with calcite filling throughout.
668	693					SLT/SST 20/80	Lt grey	F gr		Intact	Hard, well indurated, SST dominant with SLT bedding. Contorted bedding @ 672', thin coal lenses throughout.
693	699					COAL	Black	—		Blocky	Poor coal very crumbly and dull. Contains disseminated pyrite.
699	706					SLT	Dk grey	F gr		Intact	Hard brittle slight SST bedding. No joints or fractures, slight coal lense at 702'.
706	712					SLT/SST 10/90	Dk grey	F gr		Intact	Hard and brittle. Many coal lenses in SST, some SLT bedding.
712	717					MST/SLT 20/80	Dk grey	F gr		Blocky	Hard and brittle SLT dominant going to MST then to 6" layer of coal.
717	740					SLT/SST 30/70	Lt grey	F gr		Intact	Hard, well indurated. Dominant SST with SLT bedding and cross-bedding. Carbonaceous material in imprints of leaves and grass. Woody imprints also contain carbon.
740	747					MST	Dk grey	M gr		Blocky	Soft, crumbly, concoidal fracturing. Very carbonaceous; polished surfaces present.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY -- NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
747	778					SLT/SST 30/70	Lt grey	F gr		Intact	Hard, well indurated. Bedding very contorted @ 752'. Bedding normal from 754'-760' where there is crossbedding. Calcite filling in discontinuous joints throughout. Carbon smears. SLT rip up clasts @ 775'.
778	791					SST	Lt grey	M gr		Intact	Hard, well indurated, very faint SLT bedding throughout. Polished surface @ 778', very massive core to 787'. From 787'-791' some discontinuous joints with calcite filling.
791	818					SLT/SST 30/70	Dk grey	M gr		Intact	Hard, indurated. Many large SLT rip up clasts @ 793'. Dominant SST with SLT bedding and crossbedding. Worm burrows @ 797' and 807'. No carbon visible. 1 discontinuous joint (804') with calcite filling. Small SLT clast @ 808'.
818	830					SLT/SST 50/50	M grey	F gr		Intact	Hard and brittle, core basically uniform. 2"-6" bands of SLT and SST bedding at 82°. No carbon or joints, 1 worm burrow @ 818', bedding closer together towards 830'.
830	836					SST/SLT 20/80	Dk grey	F gr		Intact	Hard indurated. Bedding thin and undulating in places. Core finer grained towards 835'.

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
836	880					MST	Black	M gr		Brecciated	Hard, brittle, concoidal fracturing present. Core destroyed by bit, very crumbly in places (such as 841'-850', 862'-880'), high carbon content with coal lenses throughout. Plant impressions @ 859'. Many polished surfaces throughout. Core very porous @ 861'. Minor fault zone.
880	887			268.2	270.4	COAL	Black	—		Intact	Hard shiny coal, good quality. 2.2 m
887	894					SLT	Dk grey	M gr		Intact	Hard and brittle. Many plant impressions. Some polished surfaces. Some calcite in discontinuous joints.
894	902					SST	Lt grey	VF gr		Intact	Hard, well indurated. Slight SLT bedding throughout, very contorted bedding @ 895'. Discontinuous joints have calcite filling. MST clasts @ 901'.
902	932					MST/SLT 50/50	Dk grey	VF gr		Blocky	Hard and brittle, many polished surfaces. Bituminous lenticles present. Calcite in discontinuous joints. Continuous joints 67°. Many plant impressions. Many bituminous lenticles. Slickensides @ 920'.
932	934					SLT/SST 50/50	M grey	F gr		Intact	Hard and brittle. Bedding @ 66°.

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
934	944					SST/SLT 30/70	Dk grey	F gr		Intact	Hard, well indurated. SLT dominant with SST bedding and cross-bedding. Bedding contorted in places. Calcite in joints.
944	967					SLT	Dk grey	F gr		Brecciated	Soft, crumbly. Many polished surfaces. Core can't be broken without slickensides and polished surfaces. Joints contain calcite. Fractures calcite filled.
967	975					SLT/SST 30/70	M grey	F gr		Intact	Dominant SST with SLT bedding (contorted). Calcite in discontinuous joints. Bituminous lenticles present. Polished shiny surfaces throughout.
975	986					SLT/SST 20/80	Lt grey	F gr		Intact	Hard, well indurated. Bedding contorted throughout. Calcite in joints. Many polished surfaces.
986	993			300.5	302.7	COAL	Black	—		Crumbly	Only 2' of core present. 5' of loss, very poopy.
993	1003					SLT	Dk grey	M gr		Blocky	Some plant impressions (carbon filled). Bituminous lenticle throughout. Many polished surfaces.
1003	1012					SLT/SST 30/70	Dk grey	F gr		Blocky	Containing many large lenticle of polished coal. Bedding is contorted and irregular throughout. Core becoming brecciated at 1008' - 1012'.

Diamond Drill Geological Log

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1012	1019					SLT/SST 50/50	Dk grey	F gr		Intact	Hard, well indurated. Calcite in continuous joints. Joint angle 24°. Worm burrows at 1014'. Bedding undulatory.
1019	1023					SLT/SST 20/80	Lt grey	F gr		Intact	Hard, well indurated. Much calcite throughout. Slight SLT bedding.
1023	1058					SLT/MST 20/80	Dk grey	F gr		Crumbled	Soft, badly brecciated. Contains much coal. Many polished surfaces throughout. Coal is poor.
1058	1077					SLT/SST 30/70	Lt grey	F gr		Intact	Hard, well indurated. SST dominant with SLT bedding and cross-bedding. Carbonaceous layering throughout. Bedding contorted and undulating in places.
1077	1085					SLT/SST 40/60	Lt grey	F&M gr		Intact	Bedding swirling and undulatory, wider SLT bands than unit before. Many discontinuous joints with calcite filling.
1085	1102					MST	Dk grey	M gr		Intact	Hard, brittle. Some calcite in discontinuous joints throughout core. MST rip up clasts in core @ contact with previous unit.
1102	1105					SLT	Dk grey	F gr		Intact	Hard, brittle. Many polished surfaces. Woody impressions with carbon replacement.

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1105	1120					SST	Lt grey	VF gr		Intact	Well indurated. Calcite filled in discontinuous joints. Quartz @ 112'. Core porous from 1112' - 1113'. Polished surfaces at 1115'.
1120	1128					SLT	Dk grey	M gr		Blocky	Well indurated. Some calcite in discontinuous joints. Carbonaceous lenticles throughout. Polished surface @ 1127'.
1128	1137					SLT/SST 40/60	Lt grey	F gr		Intact	Hard, well indurated. Dominant SSt with SLT bedding and cross-bedding. Coaly lenses throughout.
1137	1152					SLT/SST 50/50	Dk grey	M gr		Intact	Intermixed bedding with many coaly intervals. Calcite filling on discontinuous joints throughout. Bedding contorted @ 1140'.
1152	1157					SLT	Dk grey	M gr		Intact	Uniform throughout. Slight SST bedding. Visible carbon on woody impressions and polished surfaces.
1157	1177					SLT/SST 40/60	Lt grey	M gr		Blocky	Hard and brittle. Bedding undulatory and contorted throughout. Calcite filling in joints (discontinuous). Carbonaceous smears along bedding. Worm burrow @ 1164'.
1177	1181					SLT	Dk grey	M gr		Blocky/Brecciated	Brittle. High carbon content with coal lenticles throughout. Core very porous with some calcite filling (1180' - 1181').

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FORDING RIVER OPERATIONS

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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1181	1197					SLT/SST 80/20	Dk grey	M gr		Intact	Well indurated. Dominant SLT with SST bedding and crossbedding. Coal lenticles throughout. Calcite in discontinuous joints. Continuous joint @ 1194', 24° (quartz filled).
1197	1200					SLT/SST 50/50	Lt grey	F gr		Brecciated	Many joints (non-filled) non readable angles. Bedding in 2" bands.
1200	1211					SLT/SST 70/30	Dk grey	M gr		Intact	Hard well indurated. No carbon. Dominant SLT with SST bedding and crossbedding. Bedding contorted @ 1210'. Continuous joint @ 1206', 82°.
1211	1230					SLT/SST 20/80	Lt grey	F gr	72°	Intact	Hard, breaks easily at bedding (72°). Calcite in joints. Carbon between bedding. Bedding contorted @ 1215'. Calcite in joints, very porous.
1230	1238					SST	Lt grey	VF gr		Intact	Well indurated. Some carbon on bedding plane. Calcite in discontinuous joints.
1238	1246					SLT	Dk grey	M gr		Intact	Hard, indurated. Coal lenticles throughout. No bedding. Massive unit.
1246	1250					SLT/SST 30/70	Lt grey	F gr		Intact	Hard, well indurated. CAlcite filling in. No carbon. Unit is massive.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Barry Musil Date: August 31, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1250						SLT	Dk grey	M gr		Intact	Hard, well indurated. Very dark. Carbonaceous in places. 6" SST band @ 1254'.

Hole No. D.D.H. _____ Page 16 of _____

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: August 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Upper Clode

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
											NOTE CAN CORRELATE. 836' MUDSTONE INTERVAL WITH BOTH INITIAL HOLE AND REDRILLED HOLE. SINCE THERE IS ABOUT 45' OF MST & COAL IN BOTH 1755 A & B.
722	731					SST/SLT	M grey	FtoM gr	74°	Mod. Intact	60% SST 40% SLT OPEN JOINTING AT 12°. Clean erosional truncation @ 731', some bituminous layers along fractures.
731	735					SST/SLT	Lt grey	F gr	74°	Mod. Intact	Beds show evidence of slight disturbance, most fractures clean. 90% Sandstone 10% Siltstone Calcite joint partially closed @ 10°.
735	748.5					MST/SLT	Dk grey	F-M gr	82°	Blocky	Homogeneous no fracture infilling. Jointing at 26° but it is clean, planar. 744' rubble zone, some bituminous material. Near end of interval some sandstone interbeds occur. 60% MST 40% SLT
748.5	752					SST	M grey	F gr	75°	Intact	Mostly fine grained sandstone but some of this approaches coarse siltstone, some rip ups. Beds are moderately disturbed, several calcite fractures that follow bedding plane closed planar calcite fracture, some also at 18°. Some load casts near bottom of interval and siltstone becomes more prevalent.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: August 31, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
752	758.5					SLT/SST	M grey	F gr	78°	Mostly Intact	About 35% SLT 65% SST Bedding is crossbedded slightly disturbed and is layered SLT AND SST; a few slightly bituminous layers.
758.5	763					SST/SLT	M-Dk gr	F gr	76°	Mostly Intact	50% SLT 50% SST A few planar calcite fractures along bedding plane. Some also @ 18°, beds are mostly regular.
763	776					SST/SLT	M grey	M gr	76°	Mod. Intact	A few carbonaceous veins that are very narrow. Bedding plane fractures often contain calcite which is patchy. Bedding shows very little disturbance. 20% SLT 80% SST
776	791.2					SST	M grey	M gr	77°	Mod. Intact	Carbonaceous veins especially around 790', calcite occurs along bedding fractures, beds are very regular, not very disturbed.
791.2	811.5					SST/SLT	M-Dk grey	F gr	80°	Mostly Intact	80% SLT 20% SST Sandstone shows some disturbance, a few load casts, minor crossbedding jointing at about 8°. Bedding fractures and joints are clean and planar. One case of erosional truncation.
811.5	836.5					SST/SLT	M & Dk grey	F gr	82°	Intact	About 50/50 sandstone siltstone, some fine grained sandstone, some approaches medium grained. Bands of siltstone and sandstone. Otherwise core is regular, beds are even undisturbed.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: August 31, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
836.5	841					MST	Dk grey	F gr	73°	Blocky to broken	Some core loss through this area, roughly 1' quite bituminous contains some bands of calcite, planar closed, fairly homogeneous fractures are clean, grades to a coaly material.
841	847.8			256.3	258.4	COAL	Black	F gr	—	Broken	Contains some muddy interbeds. Very high lustre breaks in a blocky fashion. RECOVERY 5.5' of 6.5'.
847.8	864.5					MST	Dk grey	F gr	—	Blocky	Quite broken core contains some interbeds of coal. A few plant fossils along fractures.
864.5	877.5			263.5	267.5	COAL	Black	F gr	—	Broken	High lustre fairly well indurated, some interbeds of mudstone, mostly hard, shiny coal. RECOVERY 12' of 13'.
877.5	879.5					MST	Dk grey	F gr	81°	Blocky	Bituminous infilling along joints, a few joints at 70° shows some slickensiding.
879.5	885			268.1	270.0	COAL	Black	F gr	—	Blocky to broken	Quite shiny fracture surfaces show evidence of strain, breaks off in angular blocky, some calcite. RECOVERY 5.0' of 5.5'.
885	891.3					MST/SLT	Dk grey	F gr	87°	Mod. Intact	Some bituminous veinlets, a few plant fossils. Grades to less bituminous, then more silt rich. 70% MST 30% SLT.

Hole No. D.D.H. 1755 B Page 3 of

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: August 31, 1981

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
891.3	900.5					SST/SLT	M grey	F gr	81°	Mod. Intact	About 70% SST 30% SLT Many discontinuous calcite veinlets. Beds are very disturbed, evidence of a few sand volcanoes, also some disseminated pyrite in a somewhat muddy interbed jointing at 38° somewhat irregular surface infilled with Kaolinite.
900.5	901.5			274.5	274.7	COAL	Black	F gr	--	Blocky	High lustre, fairly well indurated, fractured surfaces appear somewhat polished. RECOVERY 100%, not sampled.
901.5	905.5					Shale	Dk grey	F gr	81°	Blocky to Mod. Intact	A few calcite veins along bedding planes, quite fissile carby shale, a few fossils, plant grades to fine grained SST.
905.5	911					SST/SLT	M grey	F gr	54°	Mod. Intact	Quite a change in bedding plane angle grades to silty material at end of interval. Calcite planar joints at 42° roughly perpendicular to bedding plane.
911	917.5					MST	Dk grey to black	F gr	62°	Blocky	Fairly fissile, could almost be called a carby shale. Some surfaces quite shiny. Some fossiliferous material but it is mostly broken.
917.5	931.5					SLT	M to Dk grey	M gr	62°	Mod. Intact	Very minor amounts of bituminous material, fracturing at 20°, clean planar or minor calcite.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: August 31, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
931.5	941					SST/SLT	M to Dk grey	F to M gr	55°-80°	Mostly Intact	Recemented breccia zone at 940'. Bedding shows quite a variation sandstone/siltstone layers are locally concentrated, a few ripple marks, also a few rip ups. 40% SST 60% SLT
941	959					SLT/SST	M grey	F gr	64°	Blocky	20% SST 80% SLT Some shaley interbeds. At 950' calcite fracture zone, many discontinuous fractures (calcite) intersecting each other. A few slickensided surfaces at 25°.
959	971.2					SST/SLT	M to Dk grey	F gr	80°	Mod. Intact	Several calcite filled fractures at 30°. SLT 60% of core, SST 40% of core. Beds are undulating and disturbed. Many calcite fractures that are closed discontinuous and intersecting. Some subangular fracture surfaces may be irregular and bituminous
971.2	984.9					SST	M grey	M gr	78°	Mostly Intact	Bedding shows intervals of being quite disturbed then quite regular and even. Generally the beginning of this interval is more disturbed and fractured than the end. Bituminous content of the rock increases with depth. Many closed calcite joints closed and in all directions but recur at 35°.
984.9	991			300.2	302.1	COAL	Black	F gr	—	Broken	Very high lustre, breaks angularly, slight deformation. RECOVERY 3.7' of 6.1'. 1.9m coal
991	992.7					Shale	Dk grey	F gr	—	Shaley	Fissile carbonaceous mudstone, slight amount of muddy clayey infilling, polished fracture surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
992.7	998.9			302.6	304.5	COAL	Black	F gr	--	Broken	RECOVERY 4.4' of 6.2'. High lustre, quite broken angular fracture again appears to show some strain (deformation). 1.9 m coal
998.9	1021.8					SLT/SST	M to Dk grey	F gr	74°	Mostly Intact	65% SLT 35% SST. Some bituminous material at beginning of interval, grades to more indurated material. Quite a few calcite fractures that are planar and partially open. Calcite fractures range from 5° - 40°. Beds show evidence of a few rip ups, some sand volcanoes and rippling. Also at 1020' some crossbeds, and high degree of fracturing.
1021.8	1025.6					MST	Dk grey	M gr	72°	Blocky	A few calcite fractures closed and discontinuous running sub-parallel to core axis, somewhat silty mudstone, fracture surfaces are polished, breaks are concoidal.
1025.6	1057			312.6	322.2	COAL	Black	F gr	—	Blocky to broken	Beginning of interval has high lustre, fairly well indurated shiny, shows fair resistance to breaking with hammer. 1031'-1032' somewhat muddy interbed, 1036' more powdery coal breaks more easily. 1043'-1043.8' carbonaceous shale interval 1043.8' dusty coal (oxide) breaks to a powder, quite a bit of core loss here. 1053' carbonaceous shale to 1053.4', some muddy fracture surfaces showing evidence of movement. 1053.9'-1057' coal hard shiny, breaks angularly. RECOVERY 21' of 31.4'. Most core loss in interval 1043-1053', RECOVERY 3.2 of 10'

9.6 m coal
1.0 m
9.2 m coal

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 1, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1057	1077					SST/SLT	Dk grey	F gr	78°	Intact	Very fine grained sandstone with some silt material up to 25% of core. A few fine calcite fractures planar from 22° - 35°, one load cast.
1077	1086.5					SST/SLT	M grey	M gr	69°	Intact	Beds are mostly regular and fairly even. At 1084' though beds are disturbed contains rip up clasts. SLT content 10%, SST 90%, some bituminous material on fracture surfaces and some worm burrows near end of interval.
1086.5	1112					SLT	Dk grey	M gr	75°	Mod. Intact	Contains some fossils, core is otherwise homogeneous. Some calcite along fracture surfaces, muddy siltstone. Mudstone content roughly 30%. 1087'-1100' calcite fractures are fairly abundant, some open some closed. Range from 30°-75°. Bituminous polished surfaces occur throughout core.
1112	1125					SST/SLT	M to Dk grey	F gr	85°	Intact	Most fractures are clean, some very minor bituminous infilling, Most fractures are clean. Siltstone content roughly 30%, sandstone content 70%. Fine grained and mostly homogeneous.
1125	1129.6					SLT	M grey	C gr	81°	Mostly Intact	Rather arbitrary level since change is gradational. Coarse silt bordering on fine grained sand. A few joints at 40° with slightly irregular curved surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1129.6	1143					SST/SLT	Lt to M grey	M gr	80°	Mod. Intact	Beds show evidence of turbulant period, rip ups can be seen. A few closed calcite fractures at about 15°, sandstone 80%, siltstone 20%.
1143	1150.4					SST/SLT	M grey	M gr	79°	Blocky to Mod. Intact	Sandstone rich at about 1143'. At 1143' coaly veins comprise up to 10% of core, sandstone is somewhat coarser grained, beds are quite even and regular. A few calcite interbeds.
1150.4	1169.6					SST/SLT	Dk & M grey	F gr	77°	Mostly Intact	Beginning of interval is coarse silt and fine sand. 80% silt, 20% sand, then grades to about 35% sand & 65% silt. Bedding shows slight disturbance, a few load casts. A few discontinuous calcite fractures at 15-25°. Most bedding fractures are clean but may contain some minor carbonaceous material.
1169.6	1182.7					SST/SLT	M grey	M gr	61°-78° range	Mostly Intact	Rough estimate of change in composition since it is gradational, 75% sand, 25% silt, some interbeds are a toss up between coarse silt and fine sand. Calcite planar discontinuous, fractures running 5° - 12°. Beds are quite disturbed, rippled and cross-bedded.
1182.7	1190.5					SLT	Dk grey	C gr	78°	Mod. Intact	Coarse siltstone borders on fine grained sandstone, contains minor quantities of sandstone. Mostly fractureless and what few fractures there are are clean.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1190.5	1229					SLT/SST	Dk to M grey	F gr	77°	Mod. Intact	About 30% sandstone, 70% siltstone. A few rip ups, a sand volcanoe. Beds show only moderate disturbance, few fractures. Coarse silt and fine sand. Siltstone approaches grain size of sandstone. A few fractures at 15°-25°, calcite filled but it is rather patchy.
1229	1244.5					SLT	Dk grey	C gr	79°	Intact	Only a very minor amount of sandstone up to 5%, no fractures except for a few bedding fractures. Very minor amounts of bituminous material on fracture surfaces.
1244.5	1258					SLT/SST	Dk & M grey	F gr	71°	Mostly Intact	Siltstone 70%, sandstone 30%. Crossbedding in sandstone at 1252', quite a few closed calcite fractures in all directions.
1258	1262.5					MST	Dk grey	F gr	—	Blocky	Contains a few fossils, some carbonaceous material borders on a silty material, grades to carby shale.
1262.5	1265					Shale	Dk grey	F gr	—	Broken	Carbonaceous contains fossils is fissile and breaks easily.
1265	1287			385.6	392.3	COAL	Black	F gr	—	Slightly Intact	Fairly well indurated, high lustre, a few minor shaley intervals at 1276.4'-1276.8' and 1275'-1275.2'. Coal is quite hard and breaks in fairly square pieces. RECOVERY 19.2' of 22' 6.68m − .18 = 6.5 m coal

Hole No. D.D.H. 1755 B Page 9 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1287	1291.3					Shale	Dk grey	F gr	—	Shaley	Mostly broken carbonaceous shale, a few fossils (plant), shiny layered fissile, minor coal veins.
1291.3	12					COAL	Black	F gr	—	Broken	High lustre, broken into square pieces, recovery is 100% grouped with above coal.
1292	1299.3					MST	Dk grey	F gr	84°	Mod. Intact	Contains a fair amount of bituminous material and some silty material. Some plant fossils along fracture surfaces, one joint @ 1297' at 12° clean planar 7.' long.
1299.3	1302.8			396.0	397.1	COAL	Black	F gr	—	Blocky	Some jointing at about 35°, fairly high lustre, fractures easily, some of coal fossiliferous. RECOVERY 2.0' of 3.5'. 1.1 m coal
1302.8	1308					MST	Dk grey	F gr	—	Mod. Intact	Contains quite a few fossils, grades gradually to a siltstone. Rock mostly homogeneous, fractures unevenly.
1308	1323.5					SLT/SST	Dk grey	C gr	78°	Mostly intact	One coal interbed 1312.3-1.12.4' grades to coarser grained and more sand rich with depth. Calcite joint at 7° planar dis-continuous. Sandy interbeds show turbulent period. SLT 70%, SST 30%, a few slickensided type surfaces with bituminous infilling. Fracture surfaces (bedding) are smooth and polished.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1323.5	1333					SST/SLT	M grey	M gr	72°-84° range	Mod. Intact	Bedding is rather disturbed and variable, a few rip ups can be seen. Bituminous lenses are very common, sandstone 80%, siltstone (coarse) 20%.
1333	1342.8					MST	Dk grey	M gr	75°	Mod. Intact	Contains alot of fossils, scratches like mudstone but is as hard as siltstone. Grain size fairly large. NOT fissile, is actually carbonaceous silty mudstone fining downhole to a less carbonaceous mudstone. Very end of interval last 4" is very fine grained mudstone and is carbonaceous.
1342.8	1347			409.3	410.6	COAL	Black	F gr	—	Blocky to broken	Some areas have very high lustre, breaks in very angular pieces, some plant imprints in these. RECOVERY 4.2' of 4.2'. ALSO INCLUDED IS 1351.2-1352' 1.3 m coal
1347	1351.2					MST	Dk grey	F gr	79°	Broken	Quite carbonaceous, very rich in fossils, no jointing but breaks irregularly along fossiliferous planes. Scratches brown.
1351.2	1352					COAL	Black	F gr	—	Broken	Included in above coal interval, is the same stuff. RECOVERY 100%.
1352	1379.8					SST/SLT	M grey	FtoM gr	76°	Mod. Intact	Beds show moderate disturbance causing a curved surface on fractures, this is generally bituminous and shiny. Sandstone 85% of core, siltstone 15%. Siltstone more prevalent in upper

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	portion of interval. 2" coal interbed at 1364.5', a few calcite joints @ 10° and some at angle of bedding but not many.
1379.8	1388.5					SLT/SST	Dk grey	F gr	73°	Mostly Intact	Very fine grained siltstone bordering on a coarse grained mudstone, carbonaceous infilling occurs mainly as fossils. Some minor amounts of sandstone 5-10% of core.
1388.5	1390.7					COAL	Black	F gr	—	Broken	Moderate lustre, highest lustre in central section with duller portions on either side. Fractures easily. RECOVERY 2.2' of 2.2'. About 3" of shale at end of this interval.
1390.7	1411.5					SST/MST	M&Dk grey	F gr	71°	Mod. Intact	A real hodgepodge of rock types. Fine grained mudstone interbedded with fine grained sandstone. Beds are fairly irregular, mudstone fractures concoidally and contains some bituminous material. Sandstone 30%, siltstone 10%, mudstone 60%. A few slickensides and one load cast.
1411.5	1416					MST	Dk grey	F gr	—	Blocky	Distinct concoidal fracturing, some bituminous matter further down interval otherwise homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1416	1434					SST	M grey	F gr	77°	Mostly Intact	Bedding shows moderate disturbance and is somewhat variable. One sand volcanoe. Beds vary from 75°-85°, some crossbeds and a few rip ups. A few planar, closed calcite fractures at 35°. Sandstone 75%, siltstone 25%, siltstone is coarse grained.
1434	1441					SLT/SST	Dk grey	FtoC gr	70°	Mostly Intact	Some fossils along fracture surfaces, sandstone interbeds show evidence of disturbance, some crossbedding. Sandstone 15%, siltstone 85%.
1441	1448.5					SLT	Dk grey	C gr	82°	Mod. Intact	Fractures are curved and contain polished bituminous material. No fractures except bedding fracgures. Siltstone is quite coarse is actually almost a fine grained sand.
1448.5	1466					SLT/SST	Dk&M grey	C&F gr	78°	Mod. Intact	15% sandstone, 85% siltstone. A few joints ranging 4°-22°, some are clear some are calcite filled. Beds of sandstone are slightly disturbed, bedding fractures are mainly clean.
1466	1473					MST	Dk grey	F gr	82°	Blocky	Grades from silt rich to coal rich, mudstone - a few planar calcite fractures at 32° (closed), one coaly vein 1468.2-1468.5.
1473	1480.7			449.0	451.3	COAL	Black	F gr	—	Blocky	Slight lustre, contains a few mudstone intervals such as 1478.1-1478.4', fractures to somewhat oxide powder, some areas have higher lustre and a blocky fracture. RECOVERY 7.7' of 7.7' 2.3 m coal

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 4, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1480.7	1526					SLT	Dk grey	C gr	79°	Mod. Intact	Has a few minor interbeds of sandstone up to 10%. The siltstone is quite coarse bordering on a fine grained sandstone. Fossils can be found in most break surfaces, but they are very broken. A few lenses of bituminous material along bedding - graded very gradually to a more mud rich but fragmented fossils are still just as common.
1526	1547					Shale	Black Dk grey	F gr	—	Broken	Carbonaceous shale with many veins of coal, a few inches thick and a few interbeds of siltstone, nothing worth sampling or large enough to sample. A bit of core loss, approx. 2' over whole intervel, contains a few fossils and some phosphate??
1547	1550.5					SLT	Dk grey	M gr	77°	Mostly Intact	Many broken fossils contained grades to sandstone. No jointing, fairly homogeneous rock.
1550.5	1553.5					SST	M grey	MtoF gr	77°	Mod. Intact	Disturbed beds and cross bedding, many closed calcite fractures radiating in all directions (discontinuous), grades to a coarse grained siltstone.
1553.5	1564.5					SLT	Dk grey	C gr	80°	Mostly Intact	Slickensides in more than one direction contain polished surfaces with calcite infilling. Planar closed calcite fractures at 61° and 20°. Beginning of interval quite sandy by end of interval some bituminous plant fossils are evident in the rock.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 4, 1981

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1564.5	1565.7					COAL	Black	F gr	—	Broken	Another coal interval at 1569-1570.5', these are grouped together since neither of them are 2' intervals. RECOVERY is 100% INTERVAL FROM 1565.7-1569' is same siltstone as above.
1565.7	1569					SLT	Dk grey	M gr	74°	Blocky	Contains bituminous plant fossils - has some slickensided surfaces.
1569	1570.5					COAL	Black	F gr	—	Broken	See above coal interval sampled with this.
1570.5	1573					Shale	Dk grey	F gr	—	Blocky to broken	Some calcite along some of the bituminous surfaces. Some occurs as polished slickensided surfaces.
1573	1582					SST/SLT	Dk grey	F&M gr	67°	Blocky to Mod. intact	About 50/50 sandstone siltstone. Beds are quite interrupted. A few load casts are evident jointing at 21°.
1582	1585.4					Shale	Dk grey	F gr	—	Blocky to broken	Very bituminous shale breaks irregularly jointing at 48°, contains a few veins of coal.
1585.4	1588.2					COAL	Black	F gr	—	Broken to powder	Moderate amount of lustre, some areas have very low lustre. RECOVERY APPEARS TO BE 100% 2.8 of 2.8'. Some coal breaks in angular pieces but interval just before 1587' is quite powdery.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1588.2	1597					MST	Dk grey	F gr	55°	Blocky	Quite bituminous mudstone, slight fissility almost a shale. One small coal vein contained.
1597	1605					Shale	Black	F gr	—	Broken	More fissile than above, contains more bituminous material, a bit of calcite occurs on fracture surfaces. Some slickensided surfaces.
1605	1609.9					MST	Dk grey	F gr	77°	Blocky	A few minor calcite joints, contains carbonaceous material and a few fossils, also has a few minor intervals of coal.
1609.9	1610.8					COAL	Black	F gr	—	Broken	High lustre, breaks in angular pieces too small to sample.
1610.8	1616					SLT	Dk grey	MtoC gr	76°	Mostly Intact	Bituminous polished material occurs on fractures also some rather patchy calcite. Grades to a more sand rich rock. Fairly homogeneous rock.
1616	1621					SLT/SST	Lt & Dk grey	M gr	77°	Mostly Intact	Beds are disturbed. Bedding angle ranges from 77° - 84°. One sand volcano, some minor crossbedding.
1621	1624.6					MST	Dk grey	F gr	79°	Blocky	Minor amounts of bituminous material has quite evident concoidal fracture, jointing is at 24°, these are open and clean.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1624.6	1668.5					SLT/SST	Dk&M grey	F gr	81°	Mod. Intact	Beds are quite regular and even sandstone 5-10% of core silt-
											stone is some of the siltstone approaches medium to fine
											grained. Goes for quite a distance before a sandstone interbed
											occurs. Calcite filled planar joints occur at angles from
											15° - 81°, the infilling is generally patchy. Interval from
											1642'-1648' quite sandy. 1657' onward sandstone component
											roughly 30% of core, a few rip ups and some evidence of
											turbulance in core.
1668.5	1670.9					MST	Dk grey	F gr	78°	Blocky	Fracturing is often bituminous, mudstone is fine grained dis-
											playing concoidal fracture a few joints at 28° but are clean.
											The interval between 1667-1683 can't be marked off correctly.
1670.9	1671.9					COAL	Black	F gr	—	Broken	Fairly dull low lustre included in coal interval below it.
											RECOVERY 100%.
1671.9	1674.2					Shale	Dk grey	F gr	—	Blocky	Carbonaceous shale, an interval between two coal intervals.
											Upon breaking reveals considerate amounts of coal, otherwise
											is structureless.
1674.2	1693			510.3	516.0	COAL	Black	F gr	—	Blocky	Well indurated, hard coal, very high lustre, breaks angularly
											often. There are a few mudstone intervals such as at 1688' to
											1689.2'. Coal becomes more blocky near end of interval and alot
											easier to break. A few joints in the coal at 15° or less.

5.7 - 0.37 = 5.3 m coal

Hole No. D.D.H. 1755 B Page 17 of

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 9, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	RECOVERY 15.7' of 18.8'
1693	1698.5					MST/SST	Dk grey	F gr	79°	Blocky	Up to 5% sandstone. A few bituminous lenses and veins most fracture surfaces contain bituminous material, some of these surfaces show some polishing.
1698.5	1703					SST/SLT	M grey	FtoM gr	79°	Mod. Intact	Siltstone comprises approximately 35% of core, sandstone 65%. Most fracture surfaces clean. No other fractures than bedding fractures.
1703	1703.8					Shale	Dk grey	F gr	—	Broken	Carbonaceous shale with some calcite on fracture surfaces. Many of the fracture surfaces are polished.
1703.8	1704.7					COAL	Black	F gr	—	Broken	Quite dull some of it breaks in blocks some in layers (more) fraible. NOT SAMPEED TOO SMALL AN INTERVAL
1704.7	1707					MST	Dk grey	F gr	—	Blocky	Grades from bituminous mudstone to a bituminous siltstone. Calcite can be found on fracture surfaces. A few closed planar calcite fractures at 25°.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1707	1732.9					SLT/SST	M grey	F gr	77°	Mod. Intact	For first 1.5' of interval bituminous material occurs on irregular surfaces, also some calcite on fractures. Then grades to a fairly homogeneous fine grained silty sand with planar calcite fractures @ 12° in it. 711.5' siltstone and sandstone better separated 45% siltstone, 55% sandstone. Beds are slightly disturbed showing mild rippling and a few poorly defined crossbeds. Calcite fractures are few and quite fine.
1732.9	1755.3					S ST	M grey	M gr	84°	Mod. Intact	Minor coal veins throughout. Most fractures occur along these weaker bituminous layers. Many discontinuous calcite fractures just subparallel to core axis. At beginning of interval a few rip ups of siltstone. At 1752' bituminous content in rock increases but it occurs as irregularly banded veins.
1755.3	1758.5					SLT/SST	Dk grey	F gr	78°	Blocky	About 65% siltstone, 35% sandstone and up to 5% carbonaceous matter, some of the bituminous material occurs as plant remains.
1758.5	1777					SST	M to Lt grey	MtoC gr	79°	Mod. Intact to Blocky	Some bituminous material in sandstone and a few silty lenses. Silty intervals occur at beginning of interval. Bituminous veins occur at 1768-1777'. The bituminous layers are curved or discontinuous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1777	1782.5					SST/SLT	MtoLt grey	M&F gr	72°	Mod. Intact	Many many rip ups of siltstone in the sandstone. Several slickensided surfaces with distinct steps and calcite infilling. There are so many rip ups that it almost looks like a breccia zone.
1782.5	1800.5					SST	M grey	M gr	81°	Mostly Intact	Fairly homogeneous, only a few portions with bituminous infilling. Many hairline calcite fractures along bedding angle. 1788-1800.5' silt and coalstone interbeds. Many fractures are bituminous. Several large angular pieces of siltstone in core.
1800.5	1802.3					SLT	Dk grey	C gr	—	Intact	One piece of siltstone in amongst all the sandstone homogeneous coarse grained silt or fine grained sand, no other structures.
1802.3	2040					SST	M grey	C gr	—	Mod. Intact	No beds, massive sandstone. At 1805' quite a few bituminous veins in core till 1807'. 1807' very massive, no beds, joints at 50° clean jointing at 13' bituminous, most joints range from 40° - 65°. At about 1842' faint lineation in core at about 17° slightly bituminous lineation. This disappears at 1873' and rock becomes more intact. A few of the joints are calcite filled but not many at 22°. 1903' one siltstone interbed .6' long contains large bituminous joint at 28° irregular undulating surface. 1913.8' bedding in fairly massive sandstone faint and at 17° for .9' then disappears again.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 11, 1981

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	At 1918' many angular mud clasts in core trending 24° to core axis. 1927' many carbonaceous interbeds in core, some of them show faint slickensiding disappears at 1933'. 1936' bedding angle changes to 12-15° increases to 32° by 1951' and disappears at 1954.5'. 1954.5' bituminous lenses start to appear in core. These are discontinuous and irregular. 1967.7' very fractured coaly veinlets, mostly discontinuous. Also a few hairline calcite fractures. Some planar irregular fractures up to .8' long at 15° remains very bituminous till 2000.2', then number of fractures decrease, faint lineation @ 22° @ 2000.2', fewer coaly fractures - some planar calcite fractures @ 14° & 46°. 2017.6'-2018.4' mudstone and bituminous rip up, ½cm in diameter. 2023-2025' bedding is at about 9°. 2028.4' many bituminous irregular fractures for about 1.5'. From 2030-2040' many bituminous fractures and many calcite ones.
2040	2086.8					SST/SLT	M grey	M gr	10°?	Mod. Intact	Very erratic bedding; siltstone occurs as swirls; siltstone at most 10% of core, many calcite fractures, most occur between 45-65°. Rip ups are fairly common. Also many minor faults. Fractures at 16° contain bituminous material, some calcite and display slickensides. By end of interval not even fault bedding can be determined.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2086.8	2112.5					SST	M grey	C gr	—	Mod. Intact	For first 4' approx. very rich in subrounded mudstone clasts. Also has a few discontinuous calcite fractures. Then clasts disappear and veins and fractures are predominantly coaly with a few vugs of calcite. This range from 24° - 58°. At 2100-2105' little carb shale and silt in sandstone, some fractures also show a bit of phosphate. 2110' bedding is almost 0° till 2112.5'.
2112.5	2117					SST/SLT	M grey	FtoM gr	36°	Blocky to Mod. Intact	Siltstone component up to 10% of core, many calcite fractures at 50°, some planar some discontinuous - quite a bit of cross-bedding and some very disturbed beds. A few of the calcite fractures occur as partially opened, partially closed.
2117	2127					SST	M grey	M gr	0°-30° varies	Mod. Intact	Many calcite fractures planar closed at all angles. Bedding is very irregular and occurs at all angles.
2127	2131.3					SLT	Dk grey	C gr	—	Mostly Intact	Calcite fractures at 31° and 45°. Some sandstone near end of interval fairly homogeneous
2131.3	2176					SST/SLT	M grey	M gr	5°-25° range	Mod. Intact	Siltstone quite patchy, generally found as angular pieces in core or follows and/or interrupts bedding. Many calcite fractures occuring at all angles but predominantly around 60-70°. At 2161' sandstone becomes coarser grained, less bedding.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 14, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	At 2165.5' bituminous content of rocks increases. Many slickensided surfaces and many irregular calcite fractures.
2176	2215					Shale	Black	F gr	—	Broken	Carbonaceous shale about 50/50 coal and shale. Many slickensided surfaces with bituminous faces and some calcite. Some oxide on some of these fracture surfaces. Marginally more mudstone than coal.
2215	2217.1					SST	M grey	M gr	—	Mod. Intact	Fairly homogeneous, a few closed calcite fractures at 60°.
2217.1	2223.5					Shale	Black	F gr	—	Shaley	About 60% mudstone, 40% coal. Fissile, many slickensided surfaces, almost all surfaces are polished and contain phosphate.
2223.5	2234			677.7	680.9	COAL	Black	F gr	—	Broken to shaley	Marginally more coal than mudstone fissile, very shiny, slickensided again containing white powder on fracture surfaces which does not fizz. RECOVERY 9.1' of 10.5' Very oxide or muddy coal. 3.2 m coal
2234	2243					Shale	Dk grey	F gr	—	Shaley to Mod. Intact	Shiny polished fracture surfaces irregular, one minor interbed of sandstone near end of interval, carblayers occur as fine hairs.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:			LATITUDE	DEPARTURE	ELEVATION
Logged By: Beth Manning	Date: Sept. 14, 1981				

Core		Rad. Log				Area	Total Depth	COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO
						Eagle Mtn.		

(Ft.) From	(Ft.) To	(Ft.) From	(Ft.) To	(Meters) From	(Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2243	2247.5					SLT	Dk grey	M gr	--	Blocky	Bituminous siltstone highly fractured bituminous surfaces are polished, many minor calcite fractures.
2247.5	2285.5					SST/SLT	M grey	F gr	67°	Mod. Intact	About 40% coarse silt and 60% fine sand. Many slickensided surfaces bituminous with phosphate?? (does not fizz). Many calcite fractures that are discontinuous and intersecting grades to a lower percentage of silt jointing at 12° and 26° and 65°. Fractures at 12° are clean, fractures at 26° are bituminous and slickensided, fractures at 65° are calcite filled.
2285.5	2290.3					SST	M grey	MtoC gr	—	Mod. Intact	Massive sandstone with bituminous veinlets in it, fractures occur along bituminous layers. These are generally irregular. These mainly trend about 47°.
2290.3	2310					SST/SLT	M&Dk grey	F gr	51°	Mostly Intact	Fractures along bedding plane are quite dull coaly fractures, may contain some patchy calcite. Siltstone to sandstone ratio is about 50/50. Closed calcite fractures at 64°, 13° & 32°. At 2301' some well defined slickensides. 2305.5' beds are very turbated.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2310	2322.8					SLT/SST	Dk grey	C gr	62°	Mostly Intact	Coarse grained silt borderline fine grained sand. Bedding estimate is rough. Slickensided surfaces with calcite infilling and the ever so faithful carbonaceous material. Sandstone 15% of core, siltstone 85% . A few portions of the siltstone have been ripped up to the sandstone. Closed planar calcite fractures at 33°.
2322.8	2329.6					SST/SLT	M grey	M gr	43°	Blocky	Fairly massive sandstone. Bituminous layering along bedding plane. Siltstone 10% of core, sandstone 90%. Many calcite closed fractures (planar) roughly trending 35°. Some powder on fracture surfaces that might be phosphate. Almost all fractures are smooth and/or polished.
2329.6	2335.5					SLT	Dk grey	C gr	42°	Mod. Intact	Trace amounts of sandstone but rock is a fairly homogeneous coarse grained siltstone. Jointing at 17°. Fairly well indurated breakage yields some fossils.
2335.5	2347.5					SST/SLT	banded Lt & Dk grey	F gr	42°	Mod. Intact	Banded siltstone and sandstone 75% sandstone, 25% siltstone, one patch of medium grained sandstone at 2337.1 - 2337.8'. Most fractures display polished bituminous material. Calcite fractures are generally short and discontinuous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2347.5	2358.5					SLT/SST	Dk grey	M gr	39°	Mostly Intact	Sandstone 30%, siltstone 70% of core. Few fractures. These are generally planar. From 2350-2351' many calcite fractures that are closed and planar.
2358.5	2383.2					SST	M grey	M gr	37°	Blocky	Again has bituminous material on fracture surfaces. Almost all fractures are bedding fractures. A few silt clasts but not many. 2357.3' more homogeneous sandstone displays less bedding. Calcite fracturing at about 32° closed planar and discontinuous. 2360-2360.3' carbonaceous layer. At 2362' a few siltstone rip ups and a siltstone interbed. 2367.5' bedding reappears and all fractures contain either polished or rough bituminous material in interval 2368-2370' then quality decreases slightly. 2375.5-2377.5' blocky and bituminous.
2383.2	2390.5					SLT/SST	M&Dk grey	F gr	40°	Very Intact	Only one break in this entire length of core. About 50/50 sandstone siltstone. Beds show evidence of considerable disturbance. There are several areas of rip ups.
2390.5	2396.6					SLT	Dk grey	C gr	--	Mod. Intact	Very coarse grained siltstone or fine grained sandstone. Some calcite crystals on fracture surfaces. Also a few hairline calcite fractures. Bituminous material is patchy.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION
Logged By: Beth Manning Date: Sept. 16, 1981			

Area: Eagle Mtn. | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO | DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2396.6	2502.5					SST	MtoLt grey	M gr	24°	Mod. Intact	Fairly massive only portions have faint bedding. Many of the fracture surfaces are clean or have trace amounts of calcite in them. Minor veinlets of bituminous material till 2045'. At 2411' there are a few siltstone clasts (angular). Calcite veins become more prevalent after 2410', these are at 25° to core axis and subperpendicular to beds. Most fractures are planar irregular. 2417' beds become less well defined, slightly more carbonaceous material along fracture surfaces. At 2432-2437' bituminous component comprises up to 30% of core, very broken core beds are undulating and irregular here. Also quite bituminous at 2453.2-2458.5' bedding angle decreases to as low as 5°. At 2458.5' rock becomes massive homogeneous and intact. 2462' bedding angle is about 25° - 27°. Fractures along bedding plane are clean, jointing at 65° calcite filled, planar with well developed calcite crystals. 2474.6' some large siltstone clasts in core. Also rip ups at 2473' at 2471'. Bedding disappears and rock becomes massive. Both calcite fractures and siltstone clasts occur at irregular intervals in core. 2489.5' faint bedding appears slightly coarser grained core beds at 38°.
2502.5	2510.3					SLT/SST	Dk grey	F gr	45°	Mod. Intact	Siltstone 60%, sandstone 25%, carbonaceous material 15%. Many of the fracture surfaces at 27° are polished and bituminous.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 18, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2510.3	2544.2					SST/SLT	Mt-Lt grey	F gr	41°	Mod. Intact	Many calcite fractures at 65° and as low at 40°. These are closed planar fractures. Many of the bedding fractures contain polished bituminous material. Well defined crossbedding at 2519'-2523'. Siltstone component 15%, sandstone 75%, carbonaceous material 10%.
2544.2	2576					SLT/SST	Dk grey	C gr	—	Very Intact	Coarse grained siltstone fairly homogeneous, sandstone interbeds compose 15% of the core. Many calcite fairly well defined crystals. Planar fractures ranges in angles from 35°-70°. Most fractures are clean or contain patchy calcite.
2576	2587.5					SLT	Dk grey	M gr	—	Mostly Intact	Several fine hairline calcite fractures at 42° about. A few minor patches of sandstone up to 5% of core. Some minor banding of lighter and darker colored siltstone.
2587.5	2591.5					Shale	Dk grey	F gr	—	Broken	Shaley bituminous. This interval contains tiny portions of just about every kind of rock. Mudstone minor amounts of sandstone. Bituminous fracture surfaces show some polishing.
2591.5	2637					SLT/SST	M grey	F gr	54°	Mod. Intact	About 40% sandstone, 60% siltstone. Several calcite fractures at about 32° and 58°. Beds vary slightly and show moderate disturbance. Gets to be more and more sandstone with depth. 2618' many wide planar calcite fractures up to ½" thick. More sand rich,

Diamond Drill Geological Log

FORDING COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Sept. 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	2634.5' rip ups of mud in sandstone.
2637	2642.5					SST	salt & pepper	MtoC gr	—	Mod. Intact	A few bituminous inclusions mostly massive, some calcite.
2642.5	2673.7					SLT/SST	Dk grey	FtoM gr	80°	Mod. Intact to blocky	Sandstone 25%, siltstone 75%. Beds are fairly even or non-existant, some of the siltstone is fairly fine grained, some of the fractures at 46° contain carbonaceous material.
2673.7	2680.2					Shale	Dk grey	F gr	—	Broken to blocky	Bituminous shale displays polished fracture surfaces, some of the coaly portions are powdery grades to a siltstone.
2680.2	2690.4					SLT	Dk grey	F gr	—	Mostly Intact	Homogeneous consistent, no fracturing except at beginning of interval, while it is still grading to siltstone. There are a few bituminous fractures.
2690.4	2705					SLT/SST	MtoDk grey	F gr	82°	Mod. Intact	A hodgepodge of about 60% sandstone and 40% siltstone and some bituminous material. Fractures generally clean or contain calcite. Fractures are 25° - 45°.
											2705' END OF HOLE
											824.5m

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	40					OVERBURDEN					
40'	47'					Mst.	Dk.Gy.	Cgr.	-	Blocky	Very oxidized fracture surfaces. Somewhat silty. Oxidized joints sub-parallel to core axis. Many veins of coal. Recurring fracture set at 71°.
47'	48.4'					Coal	Bl.	Fgr.	-	Blocky	High lustre, breaks angularly, vitrain mostly except at beginning and end of interval where it is muddy coal. Too small an interval to sample.
48.4'	57'					Mst.	D.Gy.	Mgr.	-	Blocky	Most fractures are bituminous and quite sheared. Slicken-sided surfaces are evident. Minor amounts of calcite on fracture surfaces. No prevalent fractures.
57'	81.5'					Slt.	Dk.Gy.	Fgr.	64°	Mod. intact	Many bituminous fractures. Most are polished. Minor amounts of plant fossilization jointing at 25° which is oxidized. 65.5' - 67' sandy silty interbeds shows a mildly bitoturbated bedding.
81.5'	113.8					Slt/ Sst	Grey	Cgr. & Fgr.	75°	Mod. intact	Recurring fracture set at 26° and 8°. Both are calcite filled. 10 - 15% sandstone, fine grained, interbeds 85 - 90% coarse grained siltstone with minor amounts of fines. Interbeds are mildly disturbed showing slump structures and a few rip-ups, good calcite crystalization on some of the fractures.
113.8	144.7					Sst./ Slt.	Lt.Gy.	Mgr.	85°	Modstly intact	30% silt which is medium grained, 70% sandstone medium grained. Bedding is fairly regular and shows little disturbance Silt clasts are found in core and a few discontinuous bituminous fractures. Closed planar calcite fractures (Cont.)

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
113.8	144.7										Cont....ranging from sub-parallel to core axis to 25°. After
											140' bedding gets more disturbed. 134' trace amounts of
											disseminated pyrite. A few minor ripple trains.
144.7	183					Slt./	Dk. &	Cgr. &	74°	Mostly intact	Mildly disturbed. A few worm burrows, several rip-ups and
						Sst.	Lt.Gy.	Fgr.			some slump structures, calcite fracturing at 30°. Some of
											the bedding fractures are bituminous. 80% coarse grained
											siltstone, 20% fine grained sandstone.
183	187					Mst./	Dk.Gy.	Fgr.	-	Broken	Shows some fissility. About 50/50 coal and mudstone. Portions
						Col.					are almost pure coal, quite broken and sheared.
187	200.6			57.0	61.1	Coal	Black	Fgr.	-	Blocky to	Quite hard (intact). Mostly clarain coal but a fair bit of
										Mod. intact	vitrain. Breaks into blocky pieces. Recurring fracture set
											at 70°. Most of the fractures are rough. RECOVERY 12.5' of
											13.6'.
200.6	206.5					Mst.	Dk.Gy.	Fgr.	-	Blocky	Beginning of interval shows a fair degree of fissility.
											Most fractures are bituminous but rough. Several dis-
											continuous coal veins at 65°.
206.5	239.4					Slt./	Dk. &	Fgr.	74°	Mod. intact	Siltstone for the most part is very fine grained. 80% of
						Sst.	Lt.Gy.				core. Sandstone is fine grained, 20% of core. Many of the
											fractures are bituminous and polished. Recurring calcite
											joint set at 30°. 209.5 - 210.4 many wide discontinuous
											calcite fractures. Vugs with calcite crystallization.
											211' very fine grained siltstone with polished bituminous
											surfaces till 216'. Fines downwards with progressively (Cont.)

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 10, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
206.5	239.4										Cont.....less sandstone. Fractures polished and coaly with some calcite.
239.4	244			73.0	74.4	Coal	Black	Fgr.	-	Slightly intact	High lustre, quite well indurated, breaks angularly. Virtually no shearing. RECOVERY 4.6' of 4.6'.
244	253					Slt./ Sst.	Dk. & Lt.Gy.	Mgr.	71°	Mostly intact	Bedding fractures only , these are bituminous sandstone interbeds are mildly disturbed. A bit of evidence of slump structures. 85% medium grained siltstone. 15% fine grained banded sandstone.
253	260.5					Sst/ Slt.	Lt. & Dk.Gy.	Fgr.	72°	Mostly intact	About 75% fine grained sandstone. 25% coarse silt. Beds are mildly disturbed. A few worm burrows, some rip-ups and some load casts. One long calcite fracture at 23° 1.1' long.
260.5	286.8					Slt./ Sst.	Dk. & Lt.Gy.	Cgr.	79°	Mod. intact	Mostly bedding fractures some of which are bituminous and dull. Interbeds are only mildly disturbed with a few rip-ups, siltstone coarse grained fining downwards 80% of core. Sandstone 20% of core, fine grained, light gray. A few hairline calcite fractures at 7°.
286.8	288.5					Coal	Black	Fgr.	-	Mod. intact	Very high lustre mostly vitrain coal, quite hard fractures into angular blocky pieces. Breaks are rough and irregular RECOVERY 1.7' of 1.7'. To small a interval to sample.
288.5	301					Slt.	Dk.Gy.	F. & M.gr.	-	Blocky	Contains coal veins throughtout. Slight fissility shown. Minor amounts of sandstone interbedding and some of the siltstone grades to mudstone. Fractures are bituminous and contain some plant fossils.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
301	313.5					Sst./	Lt. &	Fgr.	77°	Mostly intact	75% fine grained light grey sandstone, 25% coarse grained
						Slt.	Dk.Gy.				dark grey siltstone. Many of the bedding fractures are
											bituminous and planar. Minor calcite hairline fractures
											along bedding angle. Calcite joint set also at 24°. Bedding
											shows moderate disturbance. Some slumo structures and some
											crossbeds.
313.5	344.8					Slt./	Dk. &	Cgr.	78°	Mod. intact	80% coarse grained siltstone dark grey, 20% fine grained
						Sst.	Lt. Gy.				sandstone light grey. Beds are moderately disturbed with
											some sand volcanoes and some slump structures. Calcite
											jointing at 14°, long planar both closed and open. Some
											of the bedding fractures are bituminous with plant fossils.
											At 337' siltstone begins to fine.
344.8	347.9					Mst.	Dk.Gy.	Fgr.	-	Blocky	Concoidal fracture, scatches brown. Fractures at 74° smooth
											clean surfaces. Joints at 20% clean.
347.9	355.4			106.0	108.3	Coal	Black	Fgr.	-	Blocky	Mostly clarain coal with some muddy portions. Very minor
											amounts of vitrain coal fractures angularly except near
											muddy portions when some fissility is shown. 2.3 m coal
											RECOVERY 6.0' of 7.5'.
355.4	365.5					Mst./	Black	fgr.	-	Blocky	Fractures concoidally about 20% to 30% coal, 70 - 80%
						Coal	to Grey				mudstone. Contains some broken plant fossils. Minor amounts
											fissility shown. Some of the coaly surfaces are polished
											and bituminous. Fining upwards sequence.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
365.5	399.7					Slt./	Dk.Gy.	Mgr.	72°	Mod. intact	Very minor amount of sandstone interbedding, 5-10% and this
						Sst.					is quite disturbed. A few worm burrows are evident, some
											sand volcanoes and slump structures. Hairline planar calcite
											fractures range from 7° - 20°. Bedding fractures are
											bituminous and fossiliferous, quite rough.
399.7	435					Sst./	Lt. &	Fgr.	77°	Mod. intact	About 50/50 sandstone, fine grained light grey, and silt-
						Slt.	Dk.Gy.				stone coarse grained dark grey. Beds are quite disturbed.
											Quite a bit of slump structures. Some crossbeds. Many
											discontinuous to planar calcite fractures. Most bedding
											fractures bituminous with trace amounts of calcite.
											Recurring planar joint set at 21°.
435	450					Slt.	Dk.Gy.	M. to	70°	Mod. intact	Beginning of interval has a few sandstone interbeds.
								Fgr.			Slightly disturbed about 5% sandstone fine grained. Clean
											joint set open, planar at 20°. Most bedding fractures
											bituminous with plant fossils fining downwards.
450	464					Mst.	Black	Fgr.	-	Blocky	Several intervals that are quite coaly. Fractures are
							to Dk.				concoidal to irregular. Some of the fractures are rough
							Grey				and bituminous. A few hairline calcite fractures along
											bedding angle. Some core loss in this interval.
464	468.5			141.4	142.8	Coal	Black	Fgr.	-	Broken	Some core loss in this interval but it is hard to determine
											how much is in the coal and how much is in the overlying 1.4m
											mudstone. Low lustre very dull almost a muddy tinge to it. coal
											breaks into a powder in some interval. Some shearing by
											drill displayed. More lustre near end of interval.

RECOVERY 3.4' of 4.5'. Hole No. D.D.H. 1756 Page 5 of 15

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
468.5	478.3					Mst.	Dk.Gy.	Fgr.	-	Blocky	Recurring joint set at 73°. Fractures are bituminous and fossiliferous. Breaks reveal plant fossils. Concoidal fracture quite homogenous.
478.3	481.6			145.8	146.8	Coal	Black	Fgr.	-	Powder to broken	Slight lustre some powder the rest is angular fragments mostly clarain coal. RECOVERY 2.8' of 3.3'. 1.0m coal
481.6	485.5					Mst.	Black	Cgr.	-	Mod. intact	Coarse grained mudstone. Joint set at 23° planar clean. Recurring fracture set at 70°. Bituminous and smooth.
485.5	490			148.0	149.4	Coal	Black	Fgr.	-	Broken	Slight lustre, completely fractured by drill clarain coal in there but it is hard to tell quality since it is so fractured. RECOVERY ASSUMED 3.0' of 4.5'. 1.4m coal
490	505					Slt. Mat.	Dk.Gy.	Mgr.	-	Blocky	About 50/50 mudstone siltstone. Fractures are bituminous planar, rough contain fossils a few minor coal veins. Most are discontinuous. Recurring fracture set at 69° some of these surfaces show some polishing with calcite.
505	548					Sst./ Slt.	Lt.& Dk.Gy.	Fgr.	73°	Mod. intact	Bedding is very disturbed. Sandstone light grey fine grained 80% of core. Siltstone dark grey coarse grained 20% of core. Many calcite fractures closed in all directions. Calcite fracture zone 543'. Bedding fractures are bituminous polished and contain calcite. Many slump structures rip ups and some crossbeds.
548	560.5					Slt.	Dk.Gy.	M. to Fgr.	-	Blocky	Recurring fracture set at 63° all contains polished bituminous material with moderate amounts of calcite. Beginning 1.5' of interval shows some fissility. Coaly layers which are sheared.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 12, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
560.5	563					Sst.	Lt.Gy.	Fgr.	-	Intact	Massive sandstone with many erratic irregular sandstone
											veins throughout.
563	601.8					Sst./	Lt. &	Fgr.	77°	Mod. intact	Beds range from 50 - 77°. 75% fine grain sandstone
						Slt.	Dk.Gy.				25% coarse silt. bedding fractures are bituminous and polished
											with minor amounts of calcite coal vein at beginning of
											interval .6' long (mostly clarain). Calcite fractures at
											25°. Beds are mildly disturbed. A few slump structures.
											586' many calcite fractures at 30° closed planar 592' series
											of ripple traines. At 593' siltstone content increases to
											35%, at 600' slickensides.
601.8	604.6					Coal	Black	Fgr.	-	Brokent to	Very sheared, low lustre, fractures into a powder.
										powder	RECOVERY 2.8' of 2.8'.
604.6	654.9					Sst.	Lt. &	Fgr.	78°	Mod. intact	Abrupt contact with coal. 65% sandstone light grey, fine
						Slt.	Dk.Gy.				grained, 35% siltstone dark grey, coarse grained. Beds are
											very disturbed and bedding angle is highly variable and goes
											as low as 15°. Most fractures are polished and bituminous.
											Many discontinuous closed calcite fractures and blebs
											of calcite. Minor faulting, some slickensides.
											631.3-632.0' rubble zone. After 632' very coal rich beds
											are very disturbed with many slump structures and shearing.
											slickensiding at 22°, some erosional truncation many ripups.
											Fracture sets at 55°, 15°, 20° all polished bituminous material
											generally irregular.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 13, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
654.9	664.6					Shale	Dk.Gy.	Fgr.	-	Broken	Very fissile polished bituminous surfaces mostly sheared.
							to bl.				Probably 30% coal. Fracture set at 15% to 20%. Fractures
											are irregular and undulating.
664.6	67[illegible]					Slt./	Dk. &	Fgr.	85°	Mod. intact	70% fine grained siltstone, often displays some fissility.
						Sst.	Lt.Gy.				Mostly bedding fractures in this and they are bituminous
											and polished 30% fine grained light grey sandstone. Beds
											are mildly disturbed (bioturbated). Silt very fine,
											approaches mudstone but is slightly gritty. Calcite
											fractures at 5° planar, closed but mostly discontinuous.
678	685.3					Sst./	Lt.Gy.	Fgr.	75°	Mod. intact	80% fine grained light gray sandstone, 20% coarse grained
						Slt.					dark grey siltstone. Bedding is mildly disturbed with a
											few cross beds. Most bedding fractures are coaly and
											polished. A few calcite hairline fractures subparallel
											to the core axis.
685.3	707					Sst./	Lt. &	Fgr.	78°	Mod. intact	50/50 fine grained sandstone and fine grained siltstone.
						Slt.	Dk.Gy.				Bedding is mildy disturbed. Slight bioturbation. Banded
											siltstone and sandstone. Joint set at 21° clear, planar.
											Coaly bedding fractures polished may contain minor amounts
											of calcite.
707	715.1					Slt.	Dk.Gy.	C. to	75°	Blocky	Minor amounts of sandstone < 5% of interval. Fossils
								Fgr.			(plant) occur on fracture surfaces. Fractures at 60°
											rough. Fines downwards.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: November 13, 1982

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
715.1	719.5			218.0	219.3	Coal	Black	Fgr.	-	Broken	Moderate lustre contains both clarain and durain coal. 1.3m coal
											Breaks easily in some portions. Fractures into flat
											sheared pieces. RECOVERY 4.4' of 4.4'.
719.5						Slt./	Dk. &	Fgr.	65°	Mod. intact	50/50 sandstone fine grained and fine grained siltstone.
						Sst.	Lt.Gy.				Banded. Beds are mildly bioturbated. Calcite fractures
											subparallel to core axis. BEDDING FRACTURES ARE COALY AND SOMETIME CONTA. PLANT FOSS
732	754					Slt./	D.Gy.	Fgr.	-	Blocky	50/50 mudstone/siltstone. Is borderline fine silt on
						Mst.					coarse mud. Recurring fracture set at 60°. Breaks are
											fossiliferous (plant fossils) contains coaly material.
754	760			229.8	231.6	Coal	Black		-	Crumbly to intact	Crumbly, no partings, mod. vitrain, 40% broken core. 1.8m coal
760	774					Slt Mst./	Dk.Gy	Fgr.	-	intact,well indurated	Bituminous mudstone siltstone.
774	781.4					Mst/Slt	bl/dk.	Fgr.	-	Intact	Bituminous, 774 - 774.6 coal vitrain, mudstone has coal
							Gy.				infilled fractures mudstone contains coaly material.
781.4	798.3					Slt./	Mgy.	Fgr.	60°	Intact well	50% mudstone 50% fgr. sandstone. Calcite infilled fractures
						Sst.				indurated.	infilled fractures occur at 20° to core axis.
798.3	843					Sst.	Lt.Gy.	Mgr.	54°	Intact, well	Some cross bedding, calcite infilled fractures bedding well
										indurated.	displayed some mudstone between sandstone layers, grades
											into coarser sandstone with less mudstone sections (more
											massive).
843	846					Sst.	Lt.Gy.	Cgr.	-	Intact, slightly broken	Coal infilled fractures (veining).
846	851					Slt/Mst	Dk.Gy.	Fgr.	-	Intact well indur.	Bituminous mudstone, coal infilled fractures.
851	855			259.4	260.6	Coal	Black		-	Broken	1.2m coal
855	865					Mst.	Dgy.	Fgr.	-	Intact well indur.	Bituminous mudstone, coal infilled fractures.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin

Date:

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
865	875					Sst.	Mgy.	Mgr.	-	Intact well indurated.	Few calcite infilled fractures.
875	897					Mst.	Dgy.	Mgr.	-	Intact well indurated.	Calcite infilled fractures, bituminous.
897	924					Slt./ Sst.	Mgy.	Fgr.	55°	Intact well indurated.	Siltsone gradually grades into fine grained sandstone, fine grained sandstone disturbed and cross beded and mixed with siltstone.
924	935					Sst./ Slt.	Mgy.	Mgr.	55°	Intact, well indurated.	80% sandstone, 20% siltstone, some calcite fracture infilling.
935	946.5					Sst./ Slt.	Lt.Gy.	Mgr.	55°	Intact, well indurated.	70% sandstone, 30% siltstone, some bituminous fracture infilling
946.5	957					Slt./ Sst.	Dk.Gy.	Fgr.	55°	Intact, well indurated.	50% sandstone, 50% siltstone, some minor crossbedding.
957	967					Sst./ Slt.	Gy.	Fgr.	55°	Intact, well indurated.	70% sandstone, 30% siltstone, calcite fracture infilling.
967	1017					Slt./ Sst.	Dk.Gy.	Fgr.	55°	Intact, well indurated.	80% 20% lots of fine grained pyrite calcite fracture infilling, some pyrite/calcite fracture infilling.
1017	1024					Slt./ Sst.	Dk.Gy.	Fgr.	55°	Intact, well indurated.	Increase of fine grained sandstone 50% sandstone 50% siltstone.
1024	1036.75					Mst.	Bl.	Fgr.	-	Fairly well indurated.	Bituminous fracture infilling.
1036.75	1047			316.0	319.1	Coal	Bl.	Fgr.	-	Fairly intact, friable, crumbly	10' thick. 3.1m coal
1047	1052					Mst.	Bl.	Fgr.	55°	Fairly indurated.	Slightly bituminous.
1052	1084					Sst./ Slt	Dk.Gy.	Fgr.	55°	Intact, well indurated.	Very fine grain sandstone calcite fracture infilling, 50% sandstone, 50 siltstone, become more massive at 1080'.
1084	1107					Slt.	Gy.	Fgr.	55°	Intact, well indur.	Almost pure Slt., massive calcite infilling of fractures.
1107	1118					Slt.	Dk.Gy.	Fgr.	55°	Intact, well indur.	Calcite fracture infilling banding fairly evident.
1118	1127			340.8	343.5	Coal	Blk.	-	-	Friable broken	30% of coal present (sampled) 6" mudstone band below and above coal. 2.7m coal
1127	1137					Mst.	Dk.Gy.	Fgr.	55°	Intact, well indur.	Slightly bituminous with pieces showing small scale ripple marks.

Hole No. D.D.H. 1756 Page 10 of 15

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin Date:

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1137	1177					Slt/Mud	Lt.Gy.	Fgr.	55°	Intact, well indurated.	Calcite infilling, 6" coal 1166', bituminous infilling to 1166.
1177	1180					Mst.	Dk.Gy.	Fg.	-	Intact, well indur.	Calcite infilling
1180	1194			360.0	363.9	Coal	Black	-	-	Fairly int. crumb.	Vitreous 100% of coal present 6" mst. parting. 3.9-0.15 = 3.8 coal
1194	1229					Mst/Slt	Gy.	Fgr.	55°	Intact, well indurated.	60% mst., 40 slt., calcite infilling.
1229	1294					Mst/Slt	Dk.Gy.	Fgr.	55°	Intact, well indurated.	Bedding angle barely visible some bituminous infilling,
											80% mudstone, 20% siltstone.
1294	1368					Slt./	Dk.Gy.	Fgr.	55°-	Fairly intact,	80% siltstone, 20% mudstone, some bituminous with mudstone
						Mst.			80°	indurated.	sections, disturbed bedding, bedding angle 80% in some sections
											some calcite infilling of fractures core becomes more bituminous
											at greater depth and there is more calcite infilling two
											feet of core missing in 1363 - 1367 section could be coal.
1368	1380					Sst/Slt.	Lt.Gy.	Fgr.	55°	Intact, well indur.	Calcite fracture infillling, 80% sandstone, 20% siltstone.
1380	1396					Sst/Slt.	Md.Gy.	Fgr.	55°	Intact, well	Some calcite infilling 50% sandstone 50% siltstone, siltstone
										indurated.	and sandstone very fine grained (close to siltstone/mudstone).
1396	1415					Mst./	Dk.Gy.	Fgr.	55°	Intact, well	No calcite fracture infilling, some fossiliferous material
						Slt.				indurated.	in mudstone, 90% mudstone, 10% siltstone.
1415	1455					Slt/Mst.	Dk.Gy.	Fgr.	55°	Intact, well indurated.	90% siltstone, 10% mudstone, calcite fracture infilling.
1455	1472					Mst.	Gy.	Mgr.	55°	Intact, well	Mudstone become finer grained and more bituminous with depth,
										indurated.	grades into coal at end of unit. Fossiliferous material
											throughout 50% of core.
1472	1542			448.7	470.0	Coal	Black	-	-	Broken core	Medium vitreous, easily broken, crumbly, a few very thin
										missing.	mudstone bands. 70' of coal. 21.3 m coal
1542	1549					Mst.	Black	Fgr.	-	Intact, well indurated.	Bituminous mudstone, some siltstone, highly bituminous.

Hole No. D.D.H. 1756 Page 11 of 15

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin Date:

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1549	1555			472.1	474.0	Coal	Black	-	-	Broken crumbly	Medium vitreous easily broken crumbly a few thin mst. sections. 1.9 m coal
1555	1560					Mst.	Black	-	-	Broken indurated	Highly bituminous, coal fracture infilling.
1560	1574					Coal/ Mst.	Black	-	-	Broken	Coal and mudstone mixture, one 2' mst. part., 60-70% coal.
1574	1[illegible]					Mst.	Dk.Gy.	Fgr.	-	Intact well indur.	Lots of bituminous material & fracture infilling, fossiliferous
1586	1595					Sst/Slt	Dk.Gy.	Fgr.	-	Intact well indur.	Some bituminous veining of fracture infilling very fine grained sandstone and siltstone.
1595	1635					Slt/Mst	Dk.Gy.	Fgr.	55°	Intact well indur.	Still some bituminous fracture infilling, calcite fracture infilling, very fine grained almost mudstone.
1635	1655					Slt/Mst	Dk.Gy.	Fgr.	50° - 90°	Intact well indurated.	25.0% Mst. 75.0% Sst. Lots of calcite fracture infilling core bedding angle varies from 50° - 90°.
1655	1784					Mst.	Dk.Gy.	Fgr.	55°	Intact, some broken sections.	Some calcite fracture infilling, some minor siltstone bands, Mudstone bituminous 1684' - 1686'. Bedding angle steepens to 70° - 90° at 1709'.
1784	1810					Mst/Slt	Dk.Gy.	Mgr.	90°	very intact well indurated.	Bedding angle 90° some calcite infilling of fractures.
1810	1842					Mst.	Dk.Gy. to Bl.	Fgr.	-	Intact well indur.	Mudstone becomes increasingly bituminous 1832 - 1842.
1842	1857					Mst.	Black	Fgr.	-	Broken	Highly bituminous sections, bituminous infilling of fractures 1842 - 1845 50% coal 50% mudstone.
1857	1883			566.0	573.9	Coal	Black	-	-	Broken, crumbly	Crumbly largest piece 6" long. 7.9m
1883	1958					Mst.	Black	Fgr.	-	Intact indurated	Highly bituminous, lots of carboniferous fossilization, some coal fracture infilling or veining.
1958	1979					Slt.	Grey	Cgr.	-	Intact, well indurated.	Bedding angle hard to distinguish present and disturbed in some sections. Occasional slightly bituminous infilling occasional slight calcite infilling of fractures.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin Date:

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1979	1987					Sst.	Lt.Gy.	Fgr.	-	Intact well indur	Fgr. sandstone calcite infilling of fractures, calcite veining.
1987	2054					Slt/Mst	Dk.Gy.	Cgr.	-	Intact well indur	Broken core 2008' - 2011' 90% siltstone 20% mudstone, some
											bituminous infilled fracture, lots of calcite infilling, calcite
											and bitume sometimes occuring together. Bedding angle
											distinguisha ble in 50% of core and variable (0°-70°).
2054	2080					Slt/Sst	Dk.Gy.	Md.Fg.	-	Intact, well	60% Siltstone, 40% fine grained Sandstone, ∠ 6" mudstone
										indurated	sections with slightly bituminous infilling, lots of calcite
											infilling and veining core bedding angle variable and disturbed.
2080	2090					Sst.	Lt.Gy.	Fgr.	-	Intact, well	Fine grained massive sandstone core bedding angle 40° in one
										indurated.	small section.
2090	2096					Slt/Mst	Dk.Gy	Cgr.	-		50% slt., 50% mst.
2096	2111					Mst.	Black	Mgr.	-	Intact indurated.	Slightly fossiliferous.
2111	2147					Slt./	Dk.Gy.	Cgr./	45°	Intact well	50% siltstone, 50% mudstone, interbedded,
						Mst.		Mgr.		indurated	small calcite infilled fractures.
2147	2161					Mst.	Dk.Gy.	Mgr.	-	Intact indurated	Bituminous fossiliferous mudstone 1' coal 2153 → 2154.
2161	2165					Slt.	Dk.Gy.	Fgr.	70°	Intact indurated	Short section (4') of fine grained siltstone.
2165	2194					Mst.	Black	Fgr.	-	Fairly intact,	Highly fossiliferous and bituminous mudstone some coal
										indurated.	∠ 6" thick.
2194	2223					Mst.	Black	Fgr./	60°	Intact well	Fossiliferous bituminous mudstone, a few siltstone bands
								Cgr.		indurated.	∠ 6" fine grained mudstone coarse grained siltstone.
2223	2262					Mst./	Grey	Mgr.	60°	Intact indurated.	75% mudstone 25% siltstone, fossiliferous slightly bituminous,
						Slt.					few small caclcite infilled fractures.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin

Date:

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2262	2322					Mst.	Black	Fgr.	-	Broken sec.	Highly bituminous, coal infilling, 1 coal band 6" thick fossiliferous.
2322	2337			707.7	712.3	Coal	Black	-	-	Broken	Mudstone bands within coal seam, vitreous coal. 4.6 m 0.2 = 4.
2337	2343					Mst.	Black	Fgr.	-	Intact indurated	Bituminous, fossiliferous mudstone.
2343	2348			714.2	715.7	Coal	Black	-	-	Semi intact	Hard, heavy coal, granular texture in heavy coal. 1.5m coal
2348	2368					Mst./ Slt.	Dk.Gy.	Fgr.	50°	Intact well indurated.	Bituminous infilling, fossiliferous, some minor siltstone bands. Bedding angle not evident in mudstone.
2368	2377			721.8	724.5	Coal	Black	-	-	Broken	Only 2' coal recovered. 2.7m coal
2377	2393					Mst./ Slt.	Grey	Fgr.	50°	Intact well indurated.	One two foot siltstone section (2384-2386) some bituminous infilling.
2393	2442					Slt.	Lt.Gy.	Fgr.	55°	Intact well indurated.	Massive siltstone hard to distinguish core bedding angle calcite fracture infilling, core bedding angle 55°.
2442	2462					Slt./ Sst.	Lt.Gy.	Cgr./ Fgr.	55°	Intact well indurated.	Fine grained siltstone grades into fine grained sandstone.
2462	2472					Sst.	Lt.Gy.	Mgr.	55°	Intact well indurated	This unit has graded from last unit to medium grained sandstone occasional calcite fracture infilling.
2472	2503					Sst.	Lt.Gy.	Cgr.	55°	Intact well indurated.	This unit has graded from last unit to coarse grained sandstone. Bituminous infilling approx. parralel to bedding angle.
2503	2518					Sst.	Lt.Gy.	Mgr.	-	Intact well indurated.	Massive sandstone no bitume.
2518	2523					Slt.	Dk.Gy.	Fgr.	-	Intact indurated	

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Greg Sinitsin Date:

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2523	2531					Slt./	Gy.	Fgr.	55°	Intact indurated	Some bituminous infilling parallel to bedding plane.
						Sst.					Occasional small band of siltstone mostly fine grained
											sandstone.
2531	2547					Sst.	Lt.Gy.	Mgr.	-	Intact well	Bituminous infilling of fractures (veining) occasional
										indurated.	small mudstone blebs in sandstone.
2547	2563					Mst.	Black	Fgr.	-	Broken jumbled	Fossiliferous bituminous mudstone.
										see picture	
2563	2595					Mst.	Dk.Gy.	Fgr.	55°	Fairly intact	Slightly fossiliferous fine grained mudstone slight bands
										indurated.	of bitume some fossils.
2595	2627					Slt.	Dk.Gy.	Fgr.	-	Intact well	Massive siltsone some calcite fracture infilling.
										indurated.	
											THE END
											TD = 800.7 m

Hole No. D.D.H. 1756 Page 15 of 15

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION
150,005.6 N.	26,644.9 E	2320.3 m

Logged By: Beth Manning Date: Sept. 22/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft.) From	CORE (Ft.) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE (°)	CORE STATUS	ADDITIONAL INFORMATION
0	12					OVERBURDEN					
12	26					SST	M grey	F to M gr	65°	Mod. intact	Beds are quite disturbed. There is evidence of rip ups and a few crossbeds. Bedding is banded light and dark sandstone. At 24' bituminous inclusions show up inside core. Several calcite fractures some closed some open. Range from 20° to bedding angle. Oxide shows up on some fracture surfaces.
26	34.7					SLT	DK grey	F gr.	62°	Mostly intact	Few fractures, some minor amounts of sandstone interbedding up to 5% of core jointing at 31° with some oxidized material in it.
34.7	37					Shale	DK grey	F gr.	--	Broken	Small interval of Bituminous shale. Many polished surfaces some portions quite coaly.
37	42					SLT/SST	M grey	FtM gr	57°	Mod. intact	About 50/50 sandstone siltstone, beds are slightly disturbed, ripples mostly calcite closed fractures at 24°.
42	48.3					SLT&SST	DK grey	V.F gr	66°	Mod. intact	Very fine graned silt with minor interbeds of sandstone up to 15% of core. Beds are only slightly disturbed. Near end of interval oxide fault breccia that is iron rich might be a siderite since it fizzes.

HOLE NO. DDH. 1757 PAGE 1 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 22/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
48.3	51			14.7	15.5	COAL	Black	F gr	--	Broken	Only moderate lustre. Recovery 2.6 of 2.7. Breakage is fairly blocky, still breaks along 62° - 64° very similar to previous Bedding.
51	85.5					SST	M grey	FtoM gr	64°	Mod. Intact	Finer grained near beginning of interval some minor portions of coarse grained silt. At about 58' sandstone becomes coarser grained. Beds in this interval are crossbedded and slightly bituminous, fractures are filled with calcite and some oxide. Interval 67' to 69' Beds are quite disturbed a few load casts. 72.1 Beds again even and regular, calcite and oxide jointing at 28° and 47, a few of the bedding fractures are bituminous, most are oxide and calcite. At very end of interval last .8' is fine grained, tiny amounts of pyrite on fracture surfaces. Fractures are oxidized and calcified.
85.5	95					MST	Dk grey	F gr	--	Broken to blocky	Very bituminous mudstone has some coal veins up to 2" wide. Many oxidized surfaces.
95	101.4					SLT/SST	Dk grey	C gr	55°	Broken to blocky	About 80% very coarse silt and 20% fine grained sand. Many fractures contain bituminous material along bedding plane. Oxide and calcite if at 35° or 10° bituminous content increases with depth.
101.4	103					COAL	Black	F gr	--	Broken	Contains some mudstone, moderate lustre. Blocky fracture. RECOVERY 1.6 of 1.6 Too small an interval to sample.

HOLE NO. DDH. 1757 PAGE 2 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 23/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
103	107					SLT	Dk grey	M gr	--	Mod. Intact	Many bituminous polished fractures at about 51°. Many of the fractures contain patches of oxide. Looks like trace amounts of limonite in core.
107	120.4					SST	Lt brn M grey	F gr	59°	Mod. Intact	Beginning of interval. Brownish tinge due to limonite in core, some of this has been recemented by calcite. Calcite fractures range from a few degrees to about 65°. By 111' back to a medium grey sandstone with some patches of orange brown. Many calcite fractures in this interval which are hairline and in all directions.
120.4	134					SLT	Dk grey	C gr	58°	Intact	A few fractures at 36° - 60° with some oxide and bituminous material. Coarse grained siltstone with a few interbeds of sandstone mainly near end of interval.
134	142					MST	Dk grey	MtoFgr	58°	Blocky	Range of fractures, many are bituminous and contain moderate amounts of calcite, some silty portions in core. Somewhat fissile although it is hard to tell. IS A BITUMINOUS MUDSTONE. 139 - 139.8 COAL POWDERY CONTAINING SOME MUD.
142	151.6					SLT	Dk grey	M gr	62°	Mod. Intact	At 142 to 143 more of a silt than mud. Some portions of fine grained sand. Calcite fractures at 30° 143.8 - 144.4 Coaly siltstone. Silt seems to occur also as stringers in sandy portions.

HOLE NO. DDH. 1757 PAGE 3 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 23/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE (°)	CORE STATUS	ADDITIONAL INFORMATION
151.6	164.5					SLT/SST	Dk grey	M gr	61°	Mod. Intact	65% siltstone 35% sandstone. Beds are mildly disturbed, fractures occur at 30 - 60° and contain patchy calcite. 158.7 one small interval with some bituminous material in it. 165' Bituminous siltstone for about 5'.
164.5	166.6					MST	Dk grey	F gr	--	Blocky	Many bituminous layers in core, polished surfaces. Most fractures are irregular to curved. A few broken fossils.
166.6	169					SLT	M grey	F gr	--	Mod. Intact	Fracturing at 24°, 70° calcite, some of these are closed, some open. Most of the core is quite homogeneous.
169	175.2			51.5m	53.4	COAL	Black	F gr	--	Blocky to broken	RECOVERY 5.0' of 6.2 Beginning of interval is somewhat shaley, Moderate lustre blocky to slivery fracture. 1.9m Coal
175.2	182					MST	Dk grey	F gr	--	Blocky	Bituminous mudstone coal occurs as slivers in core, scratches brown. At 177' one small interval of sandstone for .4' then gets back to bituminous mudstone. 178.6 - 178.8, 179.5 - 179.9 Coal veins in shaley parts of core.
182	188.8					SLT/SST	Dk grey	FtoMgr	68°	Mod. Intact	Sandstone, portion up to 10% of core siltstone 90%. Some discontinuous calcite fractures. A few calcite fractures planner at 20° - 30°.

HOLE NO. DDH. 1757 PAGE 4 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 23/81

AREA TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
188.8	190.1					COAL	Black	F gr	--	Broken	high lustre appears to be compressed minor quantities of mud in this. Too small an interval to sample.
190.1	218					SLT/SST	Grey	~~Cgr-f~~ F gr.	76°	Mostly Intact	193 - 193.9 carbonaceous shale interval, about 25% sandstone and 75% siltstone. Calcite occurs on fracture surfaces at roughly 54°. Some shiny bituminous surfaces at 40°. Amount of sandstone decreases with depth.
218	227					MST	Dk grey	C gr	--	Blocky	Bituminous fractures mostly range from a few degrees through 63°. 220.1 - 221.1 coal interval ; 223.1 - 224 coal interval Fractures are curved and may contain some calcite. After 224', grades to coarser grained mudstone and grades to silt. A few broken fossils.
227	235.3					SLT/SST	Dk grey	M gr	53°	Mod. Intact	Sandstone 45% siltstone 55% Several lenses of coal fracture surfaces are rough. Bedding where it shows up is regular to slightly undulating. A few calcite fractures that are closed and unusually intact.
235	247					SST	M grey	M gr	54°-62°	Blocky	Many polished bituminous fractures with patches of calcite on them. Movement is minor on these surfaces. Bedding is variable and undulating. Some minor amounts of finer grained sandstone.

HOLE NO. DDH. 1757 PAGE 5 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 24/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE	CORE STATUS	ADDITIONAL INFORMATION
247	250.4					SLT/SST	Lt & Dk grey	M gr	60°	Mod. intact	Sandstone beds are even and fairly regular, a few calcite fractures sub. perpendicular to bedding, at ≈50° some rip ups.
250.4	252.3					MST	Dk grey	F gr	--	Broken	Fairly homogeneous, some coaly material in it. Breaks concoidal .
252.3	264.6					SST/SLT	L&D gr	M gr	58°	Mod. intact	A few rip ups, a few bedding fractures that are clean and planar. Some calcite filled fractures at about 12° about 50-50 siltstone sandstone. Beds are regular. Sandstone interbed 263.4-264.3
264.6	270					MST	Dk grey	M gr	61°	Mod. intact	Some bituminous material along bedding fractures, concoidal fracture a few fossils of grasses, which are broken.
270	276.7					SST/SLT	M grey	FtoM gr	54°	Mostly intact	Beds are fairly regular and even except for 263 - 264' rip ups occur through core, these are lined up along beds.
276.7	290.5					MST	Dk grey	F gr	--	Blocky	277.2 - 277.6 Some really impressive calcite crystallization. This zone is a zone of recemented breccia. At 280' Bituminous content increases. 284.7 - 286 Rubble zone. A few joints at 23° slight amount of bituminous infilling grades to almost fine grained silt. 289.1 - 289.3 & 790.2 - 790.5 Coal veins.

HOLE NO. DDH. 1757 PAGE 6 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 25/81

AREA: Eagle Mtn. TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
290.5	315.6					SST/SLT	M grey	F gr	52°	Mod. Intact	20% siltstone 80% sandstone greatly undulating beds. A few areas of rip ups. Some calcite, closed fractures at 46°. May occur with some bituminous material also.
315.6	318.2					MST	Dk grey	C gr	--	Partially Intact	Contains fossils of grasses but these are mostly fragments, fractures irregularly, some fracturing at 9° clean, coarse mud almost a fine grained silt.
318.2	323.5			97.0	98.6	COAL	Black	F gr	--	Broken to rubble	RECOVERY 4.2 of 5.3 fractures. One small interbed of mudstone, fairly hard (well indurated) high lustre. 1.6 m coal
323.5	334.7					SST/SLT	Grey	F&C gr	72°	Mostly Intact	About 50-50 sandstone siltstone. Some fine grained sand and some coarse silt. The beds that are there are undisturbed.
334.7	348					MST/SST	Dk grey	F gr	64°	Intact	Concoidal fracture cannot see individual grains in core. Minor amounts of bituminous material. Sandstone component 10% of core mud — 90%. Beds are irregular, a few fossils.
348	351.5					SLT	Dk grey	M gr	--	Intact	Recurring joint set at 54°. Minor amounts of bituminous material No major joints in this; fairly homogeneous.
351.5	401.5					SST	M grey	F gr	56°	Intact	A fine grained sandstone with some interbeds of medium grained sandstone. Few fractures except for bedding fractures. A few

HOLE NO. DDH. 1757 PAGE 7 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept 25/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft.) From	CORE (Ft.) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE (°)	CORE STATUS	ADDITIONAL INFORMATION
											subrounded sandstone fragments in the rest of the sandstone.
											At 366.5 slickensided surface. Then calcite fractures begin to
											appear and beds are more well defined. Calcite fractures are @ 42°
											planar closed and sub perpendicular to bedding. 375' mostly lighter
											colored SST, well defined, even beds. At 387' Medium grained
											sandstone with many irregular Bituminous fractures both open and
											closed. PYRITE occurs on some of the fracture surfaces.
											At 394' Bituminous material disappears. Sandstone becomes finer
											grained. All beds through here are rippled, some portions near
											end of interval are somewhat silty.
401.5	429.4					MST	Dk grey	F gr	--	Mod. Intact	Recurring fracture set at 68° often filled with bituminous material
											and trace amounts of disseminated pyrite.
											407.2 - 408.5 coal interbed. High lustre quite hard, fractures
											regularly. 411 - 411.3 Mud broken coaly mud. After 411.3
											bituminous content decreases and only occurs as little flecks on
											break surfaces. At 417.5 bituminous content increases again and
											occurs on the fracture surfaces a few hairline calcite fractures
429.4	431.4					COAL	Black	F gr	--	Broken	Really neat pyrite crystals on coal occurs as blobs. High lustre
											undulating to curved fractures. RECOVERY 2.0' of 2.0'

HOLE NO. DDH 1757 PAGE 8 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 28/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
431.4	457.3					SST/SLT	M grey	M gr	61°	Mod. Intact	Siltstone 75% sandstone 25%, calcite fractures at 59° and 10°. Some of the bedding fractures are calcite filled, some bituminous. 448.5 1" thick coal vein.
457.3	495					SST	M grey	F gr	54°	Mod. Intact to broken	Some siltstone only minor amounts and it is coarse grained. Calcite fractures at 28° planar closed and open. 461.5 core definitely more broken, gradually getting coarser grained. 465' medium grained sand. Many bituminous fractures in all directions. Most bedding is bituminous and polished. 485' slickensides.
495	505.5					SST/SLT	M grey	F gr	59°	Mod. Intact	Beds fairly even and regular. 60% silt, 40% sand, some calcite.
505.5	508.2					MST	Dk grey	F gr	--	Blocky	Fairly homogeneous, contains some broken fossils of animals.
508.2	509.9					COAL	Black	F gr	--	Broken	Moderate lustre blocky breakage, minor slickensiding just before this interval. Contains calcite on fracture surface.
509.9	526.5					SLT/SST	Dk grey	M gr	57°	Mod. Intact	Mostly clean bedding fractures, contains some fine grained sandstone interbeds up to 15% of core. 85% siltstone. By 514' it is about 50/50 sandstone siltstone. At 518' beds begin to show a bit of disturbance, some crossbedding and some undulation. A few calcite fractures at 21° mostly closed. Bedding fractures contain rough bituminous material. At 524.5 one slickensided surface.

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Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 28/81

AREA: Eagle Mtn. TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
526.5	530.5					MST	Dk grey	F gr	55°	Somewhat intact	Some fracturing at 12°, irregular surfaces but are smooth. Grades to siltstone.
530.5	559.7					SLT/SST	Dk grey	C gr	58°	Mostly intact	Contains some fine grained sand, up to 10% of core. Mostly a coarse silt, few fractures, some long planar. Calcite fractures at 18°. Some bituminous aterial polished along bedding fractures. At 549' roughly sandstone content increases to 30°.
559.7	572.5			-		SST	M grey	FtoM gr	56°	Intact	Few fractures only one or two on all interbeds of siltstone. Crossbedding regular and well defined, till 569.4 where a few silty portions are found. Rip ups occur at 566.3 for .3 of a foot. 570' beds are more regular, a few calcite fractures at 50°.
572.5	586					MST	Dk grey	M gr	57°	Mod. intact to blocky	Fossiliferous mudstone, many, many broken critters in this. It is a medium grained to somewhat coarse mud. Jointing at 15-22°. Slightly Bituminous along fracture surfaces.
586	600.5					SLT/SST	Dk grey	C gr	59°	Blocky	589.4 a slickenside, about 60% siltstone, 20% bituminous mudstone and 20% sandstone. A few calcite fractures, bedding planes are bituminous. Fairly highly fractured.
600.5	601.1					COAL	Black	F gr	--	Broken	Moderate lustre, some polishing on fracture surfaces. TOO SMALL AN INTERVAL TO SAMPLE. Blocky to angular breakage.

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Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 28/81

AREA: Eagle Mtn. TOTAL DEPTH: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft.) From	CORE (Ft.) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
601.1	603.5					MST	Brn.	F gr	---	Broken	Concoidal fracture, no joints, no beds, homogeneous
603.5	611			184.0	186.2	COAL	Black	F gr	--	Broken	Beginning and end of interval break in powdery form, medium lustre, somewhat oxide. RECOVERY 6.1' of 7.5' One minor mudstone interval at 607'. 2.2 m
611	616.5					MST	Dk grey	F gr	66°	Broken	Coaly mudstone somewhat fissile, gets progressively less bituminous and more coarse grained. No real bedding but continually fractures at 66°.
616.5	622.6					SLT	Dk grey	M gr	--	Intact	No joints, very homogeneous. Breaks are clean. Some sandier portions near end of interval.
622.6	626.7					SST&LT	L&Dgrey	M gr	59°	Mod. Intact	Beds show only moderate disturbance, some bedding fractures clean, some bedding fractures contain bituminous material that is rough and partially oxidized. Fractures at 24° contain minor amounts of rx flour and bituminous material.
626.7	628.8					MST	Dk grey	F gr	--	Blocky	Coaly mudstone shows some fissility but is not actually shale.
628.8	639.5			191.7	194.9	COAL	Black	F gr	--	Broken to blocky	This interval has quite a few interbeds of mudstone. All have been included in sample. 3.2 −2.2 = 1.0 m coal

HOLE NO. DDH. 1757 PAGE 11 of

Diamond Drill Geological Log

Fording Coal Limited — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 28/81

AREA: Eagle Mtn. TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE (°)	CORE STATUS	ADDITIONAL INFORMATION
628.8	639.5										628.8 - 629.3 coal
											629.3 - 630.4 MST (coaly)
											630.4 - 632.2 COAL
											632.2 - 633.3 MST (powdered oxide coal mst)
											Core loss in this interval .4'
											From 633 - 639 core loss ≈ 2'
											633 - 634.5 MST VERY COALY, ALMOST SHALE
											634.5 - 637.6 COAL } ADJUSTED TO CORE LOSS ~0.9m
											637.6 - 639 MST }
											639 - 639.5 COAL 1.0 m coal
											RECOVERY 8.3' of 10.7'
639.5	640.9					MST	DK grey	F gr	--	Mod. Intact	Homogeneous fine grained mudstone with just a bit of coaly matter. Short interval grades to silty sandstone.
640.9	647					SST/SLT	M grey	F gr	52°	Mostly intact	A few worm burrows. Some minor calcite fracturing at 30°. About 50/50 fine grained sandstone & coarse silt. Beds are moderately disturbed, fossils found on break surfaces.
647	656.5					MST/SST	D&Lgrey	F gr	60°	Mod. Intact	Concoidal fracture some fossils on fracture surfaces. Beds fairly even and regular. Some polished bituminous surfaces. A few calcite fractures at 5°.

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Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 28/81

AREA: Eagle Mtn.

TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (Meters) From	RAD. LOG (Meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
656.5	664					SLT/SST	Lt grey	F gr	57°	Mod. Intact	55% siltstone 45% sandstone. Few fractures except bedding fractures MATERIALS ALONG BEDS ARE bituminous fine grained sand.
664	672.2					MST	Dk grey	F gr	--	Mod. Intact	Fairly homogeneous, no fracturing, concoidal breakage, no jointing.
672.2	686					SST/SLT	M grey	F gr	58°	Intact	A few rip ups, slightly disturbed bedding. A few hairline calcite fractures at 30 - 40°. 20% siltstone & 80% sandstone. 680.5 slickensided surface.
686	693.4					MST	Dk grey	F gr	60°	Blocky	A few Bituminous surfaces with some calcite, evidence of movement, somewhat fissile. Jointing at 14°, clean and planar.
693.4	702.5					SLT	Dk grey	F gr	69°	Mostly Intact	Grades gradually to a siltstone from a mudstone. Minor amounts of fine grained sandstone, most fractures are clean. A few calcite joints at 28°.
702.5	708					SST	M grey	F gr	64°	Mostly Intact	Beds are very disrupted. Silty sand. Minor amounts of bituminous material. Calcite fractures are IMPASSANT and at 0°.
708	712.5					MST	Dk grey	F gr	--	Intact	Fairly homogeneous concoidal fracture, a few broken fossils on break surface

HOLE NO. DDH. 1757 PAGE 13 of

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION
Logged By: Beth Manning Date: September 28, 1981			

Area: Eagle Mountain | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO | DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
656.5	664					SLT/SS	Lt & Dk grey	F gr	57°	Mod. Intact	55% siltstone, 45% sandstone. Few fractures except bedding fractures. Materials along beds are bituminous fine grained sand.
664	672.2					MST	Dk. grey	F gr	—	Mod. Intact	Fairly homogeneous, no fracturing concoidal breakage, no jointing.
672.2	686					SST/SLT	M. grey	F gr	58°	Intact	A few rip ups, slightly disturbed bedding. A few hairline calcite fractures at 30 - 40°. 20% siltstone and 80% sandstone. 680.5 slickensided surface.
686	693.4					MST	Dk. grey	F. gr	60°	Blocky	A few Bituminous surfaces with some calcite, evidence of movement somewhat fissile. Jointing at 14° clean and planar.
693.4	702.5					SLT	Dk. grey	F gr	69°	Mostly Intact	Grades gradually to a siltstone from a mudstone. Minor amounts of fine grained sandstone, most fractures are clean. A few calcite joints at 28°.
702.5	708					SST	M. grey	F gr	64°	Mostly Intact	Beds are very disrupted. Silty sand. Minor amounts of bituminous material. Calcite fractures are impassant and at 0°.
708	712.5					MST	Dk. grey	F gr	—	Intact	Fairly homogeneous concoidal fracture, a few broken fossils on break surface

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 29/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
712.5	717.5					MST/SST	D&L grey	F gr	70°	Mod. Intact	Beds are fairly regular to slightly undulating. Sandstone about 30% of core, mudstone 70%. Proportion of sand decreases after 717' to about 5% of core, few other fractures besides bedding fractures. Most of these are bituminous.
717.5	729.7					MST	Dk grey	F gr	--	Blocky	Few fractures only minor amounts of sand. Concoidal fracture. AT 727' becomes carbonaceous, mudstone.
729.7	753.5			222 A	229.7	COAL	Black	F gr	--	Broken to blocky	RECOVERY 20.6' of 23.8' 7.3 738.6 - 739.3 Mudstone interbed -0.2 = 7.0 m coal 745.2 - 745.5 Mudstone — 752.5 - 753 Mudstone 0.15
753.5	774					MST	DK grey	F gr	--	Broken	Moderate lustre, quite friable carbonaceous fissile somewhat. Some broken plant fossils contained at beginning of interval, some of the fracture surfaces are bituminous, grades to a siltstone no jointing or fracturing other than at about 71°.
774	776					SLT	M grey	F gr	65°	Mod. Intact	Only a few fractures, show bituminous infilling grades rapidly to a sandstone with some silt. Fairly homogeneous, some fossiliferous material.

HOLE NO. ODH. 1757 PAGE 14 of

Diamond Drill Geological Log

Fording Coal Limited

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 29/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
776	782					SST/SLT	M grey	F gr	65°	Mostly Intact	10 - 15% siltstone, >90% sandstone which is fine grained. Quite disturbed, some worm burrows and rip ups.
782	790					SLT/SST	Dk grey	F gr	68°	Mostly Intact	Fine grained siltstone with interbeds of fine grained sandstone about 10% sandstone 90% siltstone. Only a few fractures, minor amounts of bituminous material. Beds are gently waving.
790	814.5					SLT/SST	Med grey	F gr	68°	Mostly Intact	About 50/50 fine grained sand and fine grained silt. A few closed calcite fractures at 28°. Fractures generally clean to slightly bituminous. Bedding displays mild disturbance, gently undulating with a few rip ups.
814.5	825.3					SLT/SST	Dk&Lt grey	F gr	65°	Mostly Intact	No visible jointing, some bituminous polished material on bedding fractures with minor patchy calcite. Breaks reveal fragmented plant fossils. 75% fine to medium silt, 25% fine sand.
825.3	841					SST/SLT	M grey	F gr	66°	Mod. Intact	Beds show evidence of greater disturbance, a few more rip ups, several tiny worm burrows and one load cast. 65% fine sand, 35% silt. Calcite fracturing closed and open planar at 32°, bituminous fracturing from 59° - 65°.

HOLE NO. DDH. 1757 PAGE 15 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 29/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
841	850					SLT/SST	Dk grey	F-M gr	62°	Mod. Intact	Quite homogeneous fractures are clean except for the rare carbonaceous one. sandstone 15% of core at most 85% silt. Sandstone beds are regular and even.
850	853.5					SST/SLT	M grey	F gr	67°	Mod. Intact	Beds are irregular undulating to cross bedded there are some worn burrows in this. Sandstone 80%, siltstone 20%, clean fractures.
853.5	860					SLT/MST	Dk grey	F gr	64°	Intact	Trace amounts of fossilization, actually are some muddy portions up to 30% and about 5% sandstone interbeds, 65% silt, no jointing.
860	872					SLT/SST	Dk & M grey	F gr	60°	Mostly Intact	A somewhat muddy siltstone interbedded with sandstone. Siltstone portion 80%, sandstone 20%. Some coaly bedding fracture surfaces but they are rough.
872	873.2					MST	Dk grey	F gr	--	Broken	A few fossil remains on fractures, concoidal fracture, homogeneous.
873.2	908			266.2	276.8	COAL	Black	F gr	--	Broken to mud	Few intact peices in the entire interval, most is a powdery mud. Lustre moderate to low, very friable. Only one mudstene interval at 881-881.6 RECOVERY 24' of 34.8' 10.5-0.15 = 10.5m coal
908	915					MST/SST	Dk&Lt grey	F gr	64°	Blocky	Beginning of interval is a bituminous mudstone, somewhat shaly a few of the surfaces contains phospate, could be slightly quartzose. interbed of sandstone at 911-912.5 at 913 slickensided

HOLE NO. DDH. 1757 PAGE 16 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Sept. 29/81

AREA: Eagle Mtn. TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
											surface with bituminous material and white non
											calcite infilling. Bedding fractures are rough.
											SST 20% MST 80%.
915	918.3					SLT	Dk grey	F gr	--	Blocky	Fracturing at 36° Tiny fossil fragments which are broken. A
											few hairline calcite fractures.
918.3	921.5					MST	Black	F gr	--	Blocky	Carbonaceous mudstone first .8' is almost pure coal. Recurring
											fracture plane at 72°, displays some fissility.
921.5	933.4					SLT	Dk grey	F gr	--	Blocky	Recurring fracture plane at 55° shiny polished bituminous material
											occurs along this. A few more calcite fractures curved to
											irregular fracture surfaces.
933.4	956.1					SST/SLT	M&Dk grey	F gr	66°-70°	Mod. Intact	Bedding angle increases with depth and beds become more regular and about 70% sandstone, 30%
											siltstone. Many of the bedding fracture surfaces are bituminous
											or calcite filled. Beds up to 939' are undulating and display rip
											ups, beds after this depth to 943' are regular to slightly cross-
											bedded, calcite fracturing up to 53°. 943' rip ups and undulating
											beds contrast between siltstone and sandstone. More definately
											banded still polished bituminous material on fracture surfaces and
											some calcite.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning * Date: Sept. 30/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
956.1	961.5					SLT	Dk grey	C gr	--	Intact	is a coarse silt fining to a mud with depth. One closed calcite vein at 68°, minor amounts of bituminous material on fracture surfaces.
961.5	965.5					MST	Dk grey	F gr	74°	Blocky	Most fracture surfaces are clean, bituminous material is rare. One joint at 37° with bituminous material and calcite.
965.5	987			—		SLT&SST	Dk&M grey	F gr	61°	Intact	Fossiliferous material on fracture surfaces. Beds are fairly even and regular. Fossils appear to be some sort of a coral Y shaped. Sandstone siltstone ratio 50/50. 982' long planar calcite fracture. Beds are definitely more disturbed.
987	994.8					SLT	Dk grey	FtoMgr	--	Mod. Intact	Fossiliferous siltstone. Mostly plant fossils recurring fracture set at 38°, fairly homogeneous.
994.8	1013.5					SLT&SST	Dk&lt grey	F gr	64°	Mod. Intact	Closed calcite fractures at 20 - 35°, even bedding banded. Joints are fine and sometimes impassant. Beds are generally regular and even. Only minor disturbance near 1007'.
1013.5	1017					SLT	Dk grey	FtoMgr	62°	Mostly Intact	Calcite jointing at 25° both closed and open. A few sandstone interbeds up to 5% of the core.

HOLE NO. DDH 1757 PAGE 18 of

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Oct. 1/81

AREA: Eagle Mtn.

TOTAL DEPTH

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
1017	1025.5					MST	Dk grey	F gr	--	Mod. Intact	Homogeneous concoidal fracture a few joints at 25°-30°. Recurring fracture plane at 54°.
1025.5	1037			312.6	316.1	COAL	Black	F gr	--	Blocky to broken	Mostly Clarain, some fusain and Vitrain coal. Mudstone 1034.6 to 1035.2, contains pyrite fairly concentrated. RECOVERY 11.5 of 11.5'. 3.5m − 0.18 = 3.3m Coal
1037	1044.4					MST	Black	F gr	--	Broken	Quite fissile, a few coaly veins, some coal veins have fairly high grade coal.
1044.4	1051					SLT	Dk grey	F gr	56°	Mod. Intact	Bituminous fractures polished and/or fossiliferous, a few bituminous veinlets.
1051	1067.5					SLT/SST	Dk grey	F gr	47°	Blocky	A fine grained sandstone mixed with siltstone. Broken rock partially due to jointing. At 44° slickensides. Some fracture angles display movement but are not really slickensides. 60% siltstone 40% sandstone
1067.5	1090.5					SLT	Dk grey	F gr	--	Mod. Intact	No jointing breaks. Contains fossil fragments. Bituminous fractures at 60°, fairly homogeneous, some sandier portions.
1090.5	1093.5					SST/SLT	Dk&M grey	F gr	72°	Intact	Beds are fairly regular to somewhat irregular, a few rip ups. SST 70% ; SLT 30%

HOLE NO. DDH. 1757 PAGE 19 of

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Oct. 1/81

AREA: Eagle Mtn. TOTAL DEPTH: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE (°)	CORE STATUS	ADDITIONAL INFORMATION
1093.5	1098					MST	Dk grey	F gr	--	Mod. Intact	Bituminous mudstone, some fossiliferous material, minor amounts of calcite, a few silty interbeds at 1082'.
1098	1099.2					SST/SLT	Dk grey	F gr	65°	Intact	Fine grained sand and some coarse silt. Only one bedding fracture, it is bituminous.
1099.2	1139					SLT	Dk grey	F gr	--	Mod. Intact	Somewhat bituminous, contains minor amounts of MST. Joint at 6°. Most fractures clean, very fine silt at 1112', borderline mud. 1120' minor amounts up to 10% of very fine grained sandstone. 1114' Fracture zone with very wide calcite veins cementing it, minor amounts of broken fossils.
1139	1165.5					SST/SLT	M grey	F gr	62°	Mod. Intact	Joint at 24°, rip ups but overall bedding fairly regular. 50/50 SST SLT . 52° Bituminous and calcite fractures. 30° Irregular to curved bituminous fractures. 1163' 75% SST 25% SLT Many rip ups, all fractures clean from 1151'.
1165.5	1195.7					SST	M grey	M gr	52°	Mod. Intact	Many closed calcite fractures at beginning of interval. At 65° sub perpendicular to the bedding. Beds are faint and regular. 1173 a few carbonaceous layers start appearing along bedding planes, fractures are now generally coaly. Many of these coaly veins are irregular or occur as blobs. 1182.3 siltstone interbed 1.4' long After this interval all coaly veins disappear till 1192'.

HOLE NO. DDH 1757 PAGE 20 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Oct. 2/81

AREA: Eagle Mtn. TOTAL DEPTH:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ N

DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

CORE (Ft) From	CORE (Ft) To	RAD. LOG (Ft.) From	RAD. LOG (Ft.) To	RAD. LOG (meters) From	RAD. LOG (meters) To	LITHOLOGY	COLOUR	GRAIN SIZE	CORE BEDDING ANGLE(°)	CORE STATUS	ADDITIONAL INFORMATION
											1192.3' mud clasts occur in the core. Coal veinlets are fre-
											quent discontinuous and display no prevalent orientation. Rip
											up zone at end of interval.
1195.7	1219.4					SST&LT	Dk&M grey	F gr	57°	Mod. Intact	70% SLT 30% SST Most fractures are clean and rough but a few
											are bituminous and rough. Sandstone interbeds show a general
											even trend but show ripples and minor zones of rip ups.
1219.4	1231.5					SST	Dk&M grey	F gr	70°	Mod. Intact	Fine grained sandstone dark and light mixed and layered. A few
											crossbeds, some undulating fracture surfaces and one minor calcite
											fracturezone. Some of the fracture surfaces are polished.
1231.5	1266.5					SLT&SST	Dk&M grey	C gr	68°	Mod. Intact	A few minor calcite fractures. Beds vary from 62 - 68° in very
											short intervals. Minor amounts of carby material on some fractures
											generally quite clean. One clean planar joint at 13° .7' long.
											Silt goes from fairly coarse to quite fine and sandstone interbeds
											decrease from 20% to 5% of core by 1257'. At this point it becomes
											extremely fossiliferous with many many grasses shown on just
											about every break.
1266.5	1275					MST&LT	Dk grey	F gr	67°	Mod. Intact	Fossiliferous or polished bituminous fracture surfaces are common.
											Two calcite joints at 32°. One sandstone interbed at 1267.7 to
											1268.5'. SLT 40% MST 60% Almost all fossils are plant fossils.

HOLE NO. DDH. 1757 PAGE 21 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 2/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1275	1282			388.6	390.8	COAL	Black	F gr	--	Blocky to Broken	Contains portions of both Durain and minor amounts of Vitrain coal. Somewhat fissile in sections. RECOVERY 6.1 of 7.0'. 2.2 m coal
1282	12[illegible].3					MST	Dk grey	F gr	--	Blocky	Bituminous mudstone contains patches of sulphur and chalky Kaolinite type substance. Ferns and grasses have been fossilized in this, common fracture surface is at about 74°.
1284.3	1285					COAL	Black	F gr	--	Powder	Dull completely fractured, just a parting in the mudstone.
1285	1297.5					MST	Dk grey -black	F gr	--	Blocky	At 48° recurring fracture set, polished fracture surfaces containing both phosphates and traces of sulpher.
1297.5	1312			395.5	399.9	COAL	Black	F gr	--	Broken to blocky	Dull, Clarain to Durain, dull to moderate lustre. Fairly friable. At 1308' phosphate in coal evidenced by oolitic coal. Some minor portions of muddy coal, and some fissility. RECOVERY 14' of 14.5' 4.4 m coal
1312	1317.2					SLT	Dk grey	F gr	81°	Blocky	Bituminous siltstone, some fossiliferous material, fractures are irregular and the coaly material on them friable.
1317.2	1322					SLT&SST	Md-Dk grey	F gr	79°	Mod. Intact	About 30% SST 70% SLT. Fossiliferous mainly plant fossils. Sandstone interbeds are regular, fractures irregular.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 5/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY – NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1322	1329.3					MST	Dk grey	F gr	---	Blocky	Bituminous lenses and fossils throughout. Some phosphate on fracture surfaces which are generally polished and curved. Fracture angle range from 38° to 82°, slight fossility displayed.
1329.3	1337.3			405.2	407.6	COAL	Black	F gr	--	Powder to blocky	Coal is clarain to durain, mostly durain. RECOVERY 6.0' of 8.0'. Breaks easily into subangular chunks throughout most of interval except last .3 very shaley. 2.4 - 0.3 = 2.1 m coal
1337.3	1343					MST	Dk grey	C gr	62°	Blocky	Bituminous mudstone minor amounts on some fracture surfaces. Fossiliferous plant material is on some of the breaks. Coarse mud to fine silt.
1343	1351.2					SLT/SST	Dk grey	FtoMgr	73°	Mod. Intact	10% SST 90% SLT no jointing. Traces of bedding which is moderately disturbed. Trace amounts of bituminous material on fractures.
1351.2	1356.2					MST	Dk grey	F gr	---	Blocky	Recurring set of bituminous fractures at 75°, one coal vein .3' wide at 1352.6 - 1352.9', fracture surfaces curved and polished.
1356.2	1365.1					SLT/SST	Dk-M grey	Cgr toF	77°	Mostly Intact	10 - 15% SST 85 - 90% SLT. Fractures somewhat irregular. Calcite fractures 2 of them at 72°, closed and planar.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 6/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
											Rock is fairly massive. Coarse silt, fine sand.
1365.1	1376.5					SST/SLT	M grey	F gr	70°	Mostly Intact	Minor amounts of silt up to 10% of core 90% sandstone fine grained and massive till≈1372. A few hairline calcite, planar fractures at 19°, some closed some open. After 1372' some faint bedding displayed and a few rip ups. Calcite crystals at 1376'.
1376.5	1380.2					SLT	Dk grey	M gr	—	Mod. Intact	Coaly material on fractures at 78 fairly homogeneous massive rock, no jointing.
1380.2	1401.4					SST/SLT	M&Dk grey	F gr	59°	Mod. Intact	60% SST 40% SLT Bedding quite regular, slight crossbedding and a few ripple marks. Calcite joints 64°, 78°, 16° hairline and closed fracture surfaces mostly clean with a few plant fossils, some disseminated pyrite in this interval.
1401.4	1409.1					SST/SLT	M grey	F gr	61°-86°	Mod. Intact	15% SLT 85% SST Bedding is variable and changes are abrupt. With depth fractures become more bituminous.
1409.1	1413.5					SST	M grey	M gr	67°	Blocky	Bituminous content 10% of core veins are erratic and irregular (Discontinuous). Fractures are coaly. Rock is fairly massive with only faint bedding.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 6/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1413.5	1438.8					SLT/SST	Dk grey	M gr	65°	Blocky	Medium grained silt and fine sand. 5% SST 95% SLT. Most interbeds even and regular most fractures clean except for minor fossiliferous material at 1432' a calcite vein along 54° closed and planar irregular at 1423' - 1428' slightly muddy siltstone. Bedding gets more disturbed down hole.
1438.8	1455.4					SST/SLT	M&Dk grey	F gr	75°	Mod. Intact	50% SST 50% SLT Calcite factures planar and irregular at 55°. 1446.1 - 1446.5 coaly shale. Beds are moderately disturbed some go as low at 52°. Some large calcite crystals found on fractures up to 1/5".
1455.4	1477.5					MST	Dk grey	C gr	—	Blocky	1456.1 - 1457 V. coaly mudstone really almost pure coal. Many fractures contain polished coaly material fairly coarse grained mudstone almost fine silt. 1467 a few minor sandy interbeds of silty sandstone up to 10% of core till 1471'. Bedding angle 64° bituminous content negligible in this interval after 1471' Bituminous material reappears and plant fossils can be found on fractures.
1477.5	1487.3					SST/SLT	M&Dk grey	F gr	66°	Mostly Intact	1477.6' Rip up zone. 50/50 SST/SLT Beds mostly regular and fairly evenly spaced. Disturbances mostly slight and occur as a pinching out of beds. Fracture surfaces are clean. One turbulent area just from 1487.0 - 1487.3

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 6/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1487.3	1515					SST/SLT	M grey	M gr	67-75°	Mod. Intact	Some finer grained material intermixed with coarser grained. 15% SLT 75% SST 10% Coal Veinlets. Most fracture surfaces are coaly, the sandstone is fairly massive but is interrupted by siltstone. 1508 - 1509.8 siltier finer grained portion of same interval.
1515	1517					SLT	Dk grey	C gr	—	Mod. Intact	Recurring breakage plane at 70° either clean or has minor fossiliferous matter, rock is fairly homogeneous.
1517	1535.4					SST	M grey	M gr	63°	Blocky	Core loss at beginning of interval, faint bedding, no coaly material till 1527' then no bedding but many coaly discontinuous veins and mud clasts. Fracture angle 64°.
1535.4	1538					SLT	Dk grey	C gr	—	Intact	One shiny bituminous fracture at 42°, rock is otherwise homogeneous and intact.
1538	1547.9					SST/SLT	M&Dk grey	F gr	64°	Mostly Intact	Beds are wavy rippled and crossbedded, they are also variable. SST 75% SLT 25% Most fractures clean, but there is some Bituminous material. Jointing - planar, open, clean at 26°, 15° abrupt contact with siltstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 6/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1547.9	1587					SLT	Dk grey	F gr	—	Mostly Intact	Fine grained, slightly bituminous, silt grading to coarse silt clean fractures after 1551'. At 1577' a few sandstone interbeds begin to show up, up to 10% of core at 69°. Two rough Bituminous joints (planar) at 25° and 36°.
1587	1600.1					SST	M grey	M gr	76°	Mod. Intact	Fairly massive, only faint bedding contains many coaly lenses and quite a few mud clasts. Veins of coal occur along bedding pla e and are the predominant fracture surface. Bedding is fairly regular, changes slightly in angle but is even.
1600.1	1602.7					SLT/SST	Dk&M grey	F gr	72°	Mod. Intact	Contains calcite and slightly bituminous fractures one closed calcite fracture at 64°. Minor amounts of bituminous material on fracture surfaces. SLT 65% SST 35%
1602.7	1608.6					SST	M grey	M gr	73°	Mod. Intact	Contains both bituminous veins and mudstone clasts. Bedding is faint and varies slightly. Most bedding fractures occur along bituminous layers.
1608.6	1613.5					MST	Dk grey	C gr	—	Blocky	Most fractures are clean, fine silts are contained in this interval. Minor amounts of polished bituminous matter on some surfaces.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 7/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1613.5	1615.5					SST	M grey	F gr	60°	Intact	Crossbedded throughout interval. One bedding fracture which is planar and clean, abrupt contact at beginning and end of interval.
1615.5	1635					SLT	Dk grey	EtoC gr	69°	Mod. Intact	A mixture of fine grained almost muddy dark grey silt and a coarse grained slightly lighter colored silt. Fractures in the finer grained silt are bituminous, curved and polished, those in coarser silt are generally clear and curved.
1635	1650.3					SLT/SST	Dk&M grey	C&F gr	67°	Mostly Intact	Sandstone is fine grained and evenly bedded, siltstone coarse grained and fairly homogeneous. Fractures are clean. 2 clean joints at 24°, planar.
1650.3	1661.6					SST/SLT	M&Dk grey	FtoM gr	67°-82°	Mod. Intact	20% SLT 80% SST Sandstone occurs as fine and medium grained. The fine grained sandstone is bedded, the medium grained is massive. Most fractures are clean, some are coaly calcite planar jointing with crystals at 45°, sub perpendicular to bedding, also open planar calcite fracture at 9°.
1661.6	1672.6					SST	M grey	M gr	57°	Mostly Intact	Massive to faintly bedded. One sand volcano. A few mud clasts and some coaly veins. A closed planar calcite joint at ±30°

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 7/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1672.6	1675.2					SLT/SST	Dk&M grey	F gr	57°	Mod. Intact	Fine grained dark silt with interbeds of med. grey med. grained sandstone, some of the fractures are bituminous. One calcite fracture zone .2' long.
1675.2	1688					SST	M grey	M gr	—	Fractured	Bituminous veinlets everywhere, minor erratic calcite veins, mud clasts and silty interbeds, fractures are curved to irregular and coaly, contains a few silty interbeds up to .5' long.
1688	1703.7					SLT/SST	Dk & M grey	C&F gr	72°	Mod. Intact	About 40% SST and 60% SLT Siltstone is coarse grained and sandstone is fine grained. Interbeds of sandstone are moderately disturbed. There are a few rip ups and a few load casts, a few fractures @ 46° with minor amounts of coaly material. Also rough fractures at 14°.
1703.7	1731.3					SST	M grey	M gr	77°	Mod. Intact	Bedding is faint, bituminous material occurs along most fractures and some minor calcite. Most fractures are planar irregular and they all occur along bedding planes. Bedding angle varies slightly.
1731.3	1737					SLT	Dk grey	F gr	—	Mostly Intact	Fracture surfaces are clean, only minor amounts of SST.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 7/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1737	1747					SLT/SST	Dk & M grey	C&F gr	78°	Mostly Intact	50/50 SST/SLT Beds are regular to slightly wavy. One closed calcite fracture along bedding plane.
1747	1761.4					SLT/SST	Dk & Lt grey	C&F gr	67°	Mostly Intact	15% SST 85% SLT rip ups in sandstone.interbeds are gently rolling.
1761.4	1772					SST/SLT	M grey	F gr	70°	Mod. Intact	Several hairline calcite fractures at 35° (planar), moderate amounts of disturbance. Beds fairly regular to slightly uneven. Fractures are clean 60% SST 40% SLT A few joints 15° clean.
1772	1779.3					SST	M grey	F gr	76°	Mostly Intact	Jointing at 46°, calcite filled, closed and planar, fractures are mostly clean or contain minor amounts of calcite. Bedding is quite regular.
1779.3	1798.3					SLT/SST	DK & M grey	F gr	68°	Mod. Intact	40% SST 60% SLT Interbeds of sandstone are quite disturbed. Coaly material appears on some fracture surfaces which are planar curved 1792' - 1792.6 Fracture zone both bituminous and calcite fractures as depth increases so do the number of coaly and calcite fractures.
1798.3	1799.8					COAL	Black	F gr	—	Slightly Intact	Clarain mostly, fractures in a blocky fashion, some shiny fracture surfaces. RECOVERY 100% NOT SAMPLED, TOO SMALL AN INTERVAL.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 8/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1799.8	1812.7					MST	Dk grey	F gr	—	Slightly Intact	Polished fracture surfaces. Recurring fracture set at 65°. Coal intervals 1801 - 1801.5 & 1807 - 1808.2 Fracturing also at 8° bituminous infilling.
1812.7	1827.1			552.5	556.9	COAL	Black	F gr	—	Powdery to blocky	Some Vitrain, mostly durain, powdery, some brownish appearance. 1824.3 - 1825 slightly muddy shaley coal. RECOVERY 10.2' of 14.4' 4.4 m - 0.2 = 4.2 m coal
1827.1	1837					MST	Dk grey	F gr	67°	Mod. Intact	Polished bituminous surfaces. Broken fossil fragments throughout core. Coaly lenses throughout minor quantities of siltstone interbedding.
1837	1881					SLT/SST	DK&M grey	F gr	63°	Mod. Intact	Beds are even but irregularly dispersed through core at 1852' fine grained siltstone almost muddy. SST 10% SLT 90% Fractures are bituminous or slightly bituminous. Clacite fracture @ 62° closed and planar. Breaks display both shell fragments and coaly material. Calcite fracture planar, open @ 30°.
1881	1884.4					MST	Dk grey	MtoF gr	—	Mod. Intact	Gets finer grained and more bituminous with depth, core also becomes darker in color. Fracturing at a few degrees.
1884.4	1900.7			574.4	579.3	COAL	Black	F gr	—	Blocky	Breaks in angular fragments, most of the peices are slightly intact. Lustre is high. Clarain & Vitrain. RECOVERY 14.8 of 16.3' 4.9 m coal

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 8/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1900.7	1902.7					MST	Dk grey	F gr	—	Mod. Intact	Minor fossiliferous material, fracture surfaces bituminous with minor calcite.
1902.7	1987					SLT/SST	Dk & M grey	C gr	54°	Mod. Intact	Bituminous fracture surfaces with minor amounts of calcite up to 25% SST in some portions 75% SLT. Beds are slightly irregular some of the siltstone approaches a fine grained sandstone. A few calcite joints at 23°, one at 57°. Minor amounts of broken plant fossils from 1912' - 1917' portion that is finer silt is darker. 1970 - 1975' slightly muddy sandstone with fossiliferous fracture surfaces jointing at 54°. 1986.3' slickensided surface fracture at 60° step like structure made up of calcite. Minor fracture zone surrounding this (obviously a very small fault) grades to a mudstone.
1987	1998.3					MST	Dk grey	CtoF gr	56°	Blocky	Fossiliferous and bituminous grades from coarse mud (fine silt) to finer mud. Plant fossil imprints are well defined. Some minor discontinuous calcite fractures.
1998.3	2015.4			609.1	614.3	COAL	Black	F gr	—	Blocky	~~Mostly Clarain. Blocky fracture from 1999.8 - 2001 mudstone (shaley), interval in middle of coal shows high degree of fracturing. In coal recurring fracture set is @ 62°.~~ 5.2 m RECOVERY 17.1' of 17.1' 0.37 4.8 m coal

Hole No. D.D.H. 1757 Page 32 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 13/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2015.4	2057.8					SLT	Dk grey	F gr	60°	Blocky	Very minor sandstone interbedding 5 - 10% coaly partings occur on many fracture surfaces. Recurring fractures at 60 - 70°. At 2032' sandstone content gradually increases to a maximum of 25%. Beds are even and only very slightly disturbed. Bituminous fractures are rare and polished. Abrupt contact at base.
2057.8	2076.5					SST	M to Lt grey	M gr	66°	Mod. Intact	Regularly and evenly bedded till 2069', fracture surfaces are polished, coaly material planar and smooth. 2069' beds become less regular, rock is more massive, irregular coal inclusions are found in core.
2076.5	2090					SLT/SST	Dk&Lt grey	F&M gr	62°	Mod. Intact	40% medium grained SST 60% fine silt. Both medium grained, massive sandstone and a finer grained sandstone found calcite fractures at 23° and 62°, fine and hairline bituminous fractures occur along bedding planes, rip ups of siltstone are found in the sandstone interbeds.
2090	2107					SLT	Dk grey	FtoMgr	—	Mod. Intact	Rather arbitrary contact between the two of these, some of the siltstone finer and displays almost concoidal fracture surface fractures at 25° bituminous 2093.5 very disturbed sandstone interbed 2104.1' fracture zone 7' long and minor coaly vein. Fractures are calcite filled.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 13/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2107	2117					SLT/SST	Dk&M grey	C gr	70°	Mod. Intact	Coarse grained silt and fine grained sand; fractures are clean or may contain some plant fossil fragments. 40% SST 60% SLT.
2117	2193					SST	M grey	M gr	58°	Mostly Intact	Bedded; faintly to massive fractures are slightly coaly and almost always occur along bedding plane. A few planar calcite fractures at 24°, some closed some open. The odd lens of coaly material that is discontinuous and irregular.
2193	2197			668.4	669.6	COAL	Black	F gr	—	Broken	Contains some muddy portions. Some of this is shaley and shiny some breaks in subangular pieces. Scratches a brownish color. RECOVERY 3.6' of 4.0' 1.2 m coal
2197	2207.8					SST/SLT	M & Dk grey	F gr	67°	Mod. Intact	35% SLT 65% SST Beds are fairly regular, banded silt and sand especially near beginning of interval. End of interval more sand rich. Bedding fractures are coaly.
2207.8	2215.6			672.9	675.3	COAL	Black	F gr	—	Blocky to broken	Mostly Clarain, some vitrain coal, breaks in angular pieces. A few muddy portions. RECOVERY 6.5' of 7.8' 2.4 m
2215.6	2217.7					SLT/SST	Dk grey	F gr	—	Blocky	Bituminous veins throughout. Fractures are irregular. 65% SLT 35% SST grades to sandstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 14/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2217.7	2351					SST	M grey	M gr	68°	Mostly Intact	Bituminous fractures at beginning of interval decreasing with depth (becoming cleaner), bedding is faint. Calcite fractures at 13°. Bituminous and calcite fractures at 26°. By 2260' rock is very intact and fractures are clean. Bedding is very faint. Jointing at 33° and 12° at 2325', hairline, planar, and closed. Sandstone gets finer grained as you go downhole.
2351	2376.1					SST/SLT	M&Dk grey	F gr	76°	Mod. Intact	25% SLT 75% SST Banded silt and sand. Several discontinuous calcite fractures. Fractures are somewhat bituminous. Beds are somewhat disturbed.
2376.1	2402.5					SST	M grey	F gr	70°	Mod. Intact	Planar closed calcite fractures at 27°, minor amounts of siltstone up to 5% of core. Coaly bedding fractures for some of the surfaces. At 2392' quantity of fracturing (calcite) increases, so does this width. 2397' fracture zone minor, extending for about 1' at 2401' slickensides dipping 40°.
2402.5	2405.2					SLT/SST	Dk&M grey	F gr	70°	Blocky	Beginning of interval has many calcite fractures. Is a fracture zone with disturbed bedding. 1.5' many of the bedding fractures are bituminous and polished. 50/50 SST/SLT.
2405.2	2419.3					SST/SLT	M grey	F gr	63°	Mod. Intact	5 – 10% SLT 90% SST Bedding varies. Some rip ups. 2413' very disturbed bedding for ½', calcite fractures from 10 – 30°.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 14/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2419.3	2433					SST/SLT	M&Dk grey	F gr.	65°	Mod. Intact	35% SLT 65% SST Some bituminous. Bedding calcite fractures at 25 - 30°, banded.
2433	2457					SST/SLT	Dk&M grey	F gr	68°	Mod. Intact	50/50 SST/SLT Calcite joints at 38°, some bituminous fracturing beds are disturbed and eroded throughout many rip ups.
2457	2582					SLT/SST	Dk grey	M gr	74°	Mod. Intact	10 - 15% SST 85 - 90% SLT Medium to coarse grained silt bioturbated worm burrows found throughout, a few slump structures found, calcite fractures @ 20° and some bituminous material and slickensidingfound. Fossils are brachiopods (only a few though). Slicks at 2507' and 2494.5' 2512.2 - 2518.6 small fracture zone. 2527' SST content decreases to about 5%. 2579' fracture zone witn calcite in it begins (beginning of fault zone) At 2582' sandstone begins to occur. Most fractures coaly and contain calcite.
2582	2602.4					SLT/SST	Dk & M grey	F gr	80°	Broken	About 40% SST 60% SLT Fractures are very irregularly shaped, very coaly and calcite. 2590' fracture zone ends. Sandstone and siltstone well mixed. Sandstone is fine grained and massive. Joints at 8°, 22° clean.

Hole No. D.D.H. 1757 Page 36 of

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 15/81

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2602.4	2673.5					SST	Lt&M grey	M gr	69°	Mostly Intact	Massive, clean fractures, no bedding, minor (very minor) siltstone, faint bedding begins to appear after 2609'. Joint set at 21° contains patchy calcite. Other fractures clean.
2673.5	2678.5					SLT/SST	Dk&M grey	M gr	73°	Mostly Intact	Rip ups prevalent throughout. 50/50 SST SLT Fractures are clean and slightly bituminous.
2678.5	2687					SST	M grey	M gr	75°	Mostly Intact	Beginning of interval bedded last few feet massive with silt rip ups in it. No jointing, fractures are clean.
											2687 END OF DRILLHOLE
											819.0 m

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 15, 1981

LATITUDE	DEPARTURE	ELEVATION
150,335.5 N.	26,915.2 E	2371.0 m

Area: Eagle Mtn.

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	45				13.7		OVERBURDEN				
45	52					MST	Dk grey	F gr	—	Broken	Contains some coaly material, somewhat fissile. Calcite fractures are at 46°, fracture surfaces are often polished and Bituminous.
52	56					SLT	Dk grey	F gr	--	Blocky	Fairly homogeneous. Fractures at 6° that are planar long up to 1' filled with calcite and oxidized. Also oxidized fracture at 58°.
56	113.5					SLT/SST	Dk&Lt grey	C gr	65°	Mod. Intact	SST 50% SLT 50% Interbeds of sandstone are relatively undisturbed. Minor amounts of bioturbation. Calcite joint set at 25° with some oxidation. Planar mostly closed. Clacite oxidized fractures at 8° long (sometimes over 1'). After 95' calcite fractures tend to be quite thick. Up to .15', a few tiny worm burrows, coarse silt, fine sand.
113.5	126					SLT	Dk grey	C gr	68°	Mostly Intact	Most fractures clean or oxidized, joint set is closed and planar at 48°.
126	176					SLT/SST	Dk grey	C&F gr	62°	Mod. Intact	40% SST 60% SLT Siltstone is coarse grained, sandstone fine grained. Ripple trails found. Calcite fractures at 26° roughly. Some are oxidized, some are not. Most are closed and planar. A few minor worm burrows, evidence of bioturbation.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 15, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
											After 170' sandstone content decreases to about 25%. Some minor pyrite xtals.
176	181					MST	Dk grey	C gr	—	Mod. Intact	Fracturing at 40° shows trace amounts of bituminous material. Coarse mud getting finer with depth also coaly matter increases. Plant fossils found.
181	235.5			55.2	71.8	COAL	Black	F gr	--	Powder to broken	Most of this has been mashed by the drill. What remains slightly intact is mostly Clarain or sheared. RECOVERY 30.0' of 54.5' mudstone .4' just before 196'. 16.6 -0.1 16.5m coal
235.5	244.5					MST	Dk grey	F gr	—	Blocky	Bituminous mudstone. Breaks reveal pyrite. Layers of calcite along some fractures. Most fractures are curved to irregular, joints at 58°, 15°.
244.5	247					SLT	Dk grey	F gr	—	Blocky	Bituminous layers at ≈70°, discontinuous. One coal vein at 246.7 - 247'. Most fractures are coaly.
247	264.5					SLT/SST	Dk&M grey	F gr	65°	Mod. Intact	70% SLT 30% SST beginning of interval has erratic calcite fractures and some vugs. Bedding shows bioturbation. A few rip ups. Fractures are coaly and calcite, some soft sediment deformation.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
264.5	267					SST/SLT	Dk grey	F gr	51°	Blocky	Very bituminous silty sandstone patches of pyrite on fracture surfaces. 70% SST 30% SLT AND COAL. Fractures at 51°.
267	284.2					SLT/SST	Dk&Lt grey	C&F gr	68°	Mod. Intact	About 50/50 coarse silt and fine grained sand, a few rip ups, but most areas display fairly even bedding. At 24° some jointing, rough surface with minor amounts of calcite. At 280' more sand rich, some medium grained sand. Some fractures are coaly. Bedding at 78°.
284.2	293					SLT/SST	Dk grey	F gr	67°	Mostly Intact	Fine grained sand 10% interbedded with medium grained silt. Calcite fractures along bedding plane. Minor amounts of mudstone. Some coaly matter.
293	299.2					MST	Dk grey	F gr	--	Blocky	Coaly surfaces, some plant fossil matter. Jointing at 28° with minor amounts of calcite. 298' very coaly shale surfaces are sheared.
299.2	311.6					SST/SLT	M&Dk grey	F gr	62°	Mod. Intact	80% SST 20% SLT Beds are disturbed, a few rip ups. Beds are bioturbated and show some slump structures. 5° calcite fractures 41° bituminous.
311.6	315					SLT	Dk grey	M gr	74°	Mod Intact	Fine to medium grained silt. Fractures are coaly and full of plant fossils. No jointing.

Hole No. D.D.H. 1758 Page 3 of

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
315	321.7					SST/SLT	M to Dk grey	F gr	65°	Mod. Intact	Banded siltstone and sandstone. 65% SST 35% SLT Many irregular disconinuous calcite fractures. Bedding shows a fair bit of bioturbation.
321.7	323.5					COAL	Black	F gr	—	Broken	Powdery fractured and sheared minor amounts of clarain coal.
323.5	337					SLT/SST	Dk&M grey	F gr	50-60°	Mod. Intact	Beds are very disturbed, a few worm burrows, some slump structures. Joint set @ 32°, some open, some closed, calcite filled.
337	351.5					MST/SST	Dk grey	C gr	72°	Mod. Intact	5 - 10° sandstone interbeds 90% coarse mud to fine silt (very slightly gritty). 30 - 35° joint set some clean some have minor amounts of calcite.
351.5	364			107.1	111.0	COAL	Black	F gr	—	Blocky	Breaks in angular pieces, mostly clarain, some shearing evident. Portions are muddy 359' - 360.1' (muddy coalstone). RECOVERY 8.0' of 12.5'. 3.9 - 0.34 = 3.6 m coal
364	385					SLT	Dk grey	F gr	—	Mod. Intact	Very fine grained at beginning of interval, gradually getting coarser with depth. Fractures are bituminous and polished. Joints at 30°, fractures at 62°, minor amounts of calcite on some fracture surfaces at 370° pyrite massive begins to show up as veins.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 16, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY -- NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
385	405.5					SST/SLT	M & Dk grey	F gr	61°	Mod. Intact	Fine grained sandstone, 60% coarse silt 40%. Banded but not regularly. Minor amounts of coaly matter on fracture surfaces plus some crystals of pyrite. Joint at 4° 3' long at beginning of interval, slightly disturbed bedding slight bioturbation. Climbing ripples near end of interval.
405.5	427					SLT/MST	Dk grey	F gr	—	Blocky	Recurring fracture set at 60°. A few plant fossils, some polished coaly fractures. 45% MST 55% SLT.
427	484					SLT/SST	Dk&Lt grey	C&F gr	62°	Mod. Intact	Beds are moderately disturbed with rip ups, cross bedding and load casts. 50/50 SLT/SST but not regularly banded. Calcite jointing at 33°, a few minor coaly fractures too. Sandstone becomes medium grained near end of interval.
484	515					SST	M grey	M gr	75°	Mostly Intact	Joint set at 24° clean. Fairly massive, faint bedding. Only minor amounts of siltstone near beginning of interval, some fractures coaly.
515	522.2					SST/SLT	Dk & Lt grey	M gr	68°	Mod. Intact	Jointing at 4°, 30° and 20°, crossbedded. Banded 50/50 SLT medium grained and SST fine grained. Fractures are irregular.
522.2	529					SLT/MST	Dk grey	F gr	—	Mod. Intact	Fine silt and coarse mudstone about 50/50, some of the surfaces are quite coaly.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: October 16, 1981

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
535.5	540					SLT/MST	Dk. grey	F gr.	-	Blocky	Recurring fracture set @ 65°; quite coaly. A few plant fossils on fracture surfaces. Siltstone is fine grained. 30% MST - coarse grained bituminous; 70% siltstone.
540	625.5					SLT/SST	Dk. grey	C gr.	58°	Mod. Intact	25% SST interbeds 75% SLT fractures are bituminous, and pyrite occurs o fractures. Sandstone interbeds show moderate disturbances, and, a few rip ups. Coal interval .9' @ 560.5'. At 572' about 30% SST; 70% SLT; bedding @ 65°. Jointing @ 10°. A few worm burrows, moderately disturb bedding. At 604' many hairline calcite fractures @ 20°. At 609.5' fat worm burrows; more disturbed. At 614' SLT becomes finer grained. (calcite crystals @ 596.5')
625.5	629					MST	Dk. grey	Ft.Mgr.	-	Broken	Carbonaceous mudstone; fairly shaly; contains plant fossils. Grades to coal. Recurring fracture set @ 46°.
629	656			191.7	200.0	Coal	Black	F gr.	-	Broken	Clairain to sheared; minor amounts of vitrain. MST interval of a few inches @ 634'. RECOVERY: 18.5' of 27'. 8.3 m
656	674.8					SLT	Dk. grey	M gr.	70°	Mod. Intact	Up to 5% SST. Fractures are bituminous; calcite also occurs at this angle. SST beds are slightly disturbed. A few calcite, open, planar fractures @ <5°. Some plant fossils.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 20, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
674.8	680.5					MST	Dk grey	F gr	—	Blocky	Bituminous mudstone, some portions quite coaly. Minor amounts of plant fossils.
680.5	687					SLT/SST	Dk&M grey	C&F gr	64°	Mod. Intact	Planar jointing at 15°. Planar calcite joints along bedding plane. SST 40% SLT 60% Bedding fractures are bituminous. Bedding is slightly disturbed.
687	697					MST	Dk grey	F-M gr	—	Blocky	Bituminous mudstone. Recurring fracture set at 66°. Fracture sets display coaly material. Minor calcite fractures, mostly discontinuous.
697	716.6					SLT/SST	Dk&M grey	F-M gr	71°	Mod. Intact	10 - 15% SST 85 - 90% SLT Beds are bioturbated. Fining downwards sequence. Some of the fractures along the bedding are bituminous. Calcite joints planar at 10°. A few worm burrows.
716.6	725.5					MST	Dk grey	F gr	—	Blocky	Carbonaceous mudstone quite coaly, ≈40% coal. Polished (sheared) fracture surfaces. Slightly fossiliferous. Patches are really pure mud and fracture concoidally.
725.5	727.7					SLT	Dk grey	M gr	70°	Mod. Intact	Fractures are clean to slightly coaly, a few calcite fractures discontinuous, joints at 46°, bituminous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
727.7	728.5					COAL	Black	F gr	—	Mod. Intact	Angular fracture, very shiny, quite hard, clarain.
728.5	761					SLT/SST	Dk grey	C&F gr	65°	Mod. Intact	Up to 20% fine grained sandstone 80% siltstone coarse grained, but @ ≈740 - 745' medium to fine grained with minor amounts of coaly material, jointing at 15 - 20° planar long and generally contains only minor calcite. Beds are bioturbated mildly with worm burrows and a few rip ups.
761	777					SST/SLT	M to Dk grey	M gr	71°	Mod. Intact	Medium and fine sand 60%, silt 40% coarse. Almost all bedding fractures are planar irregular and coaly. Closed calcite fractures 25° - 30° some vugs displaying calcite crystals. Some discontinuous coaly veins. Beds fairly regular, slight cross-bedding, slight bioturbation.
777	795.5					SLT/SST	Dk&Lt grey	C&F gr	61°	Mod. Intact	30% SST fgr. 70% Siltstone medium to coarse grained. Interbeds of sandstone are fairly regularly banded, a few rip ups, clean planar joints at 14°. Bituminous fractures at 40° planar polished.
795.5	808.8					SLT	Dk grey	M gr	—	Mostly Intact	Joint set at 12°. A few finer grained portions often containing bituminous material. Fracture set at 60° - 55° with polished sheared bituminous material. Breakage almost concoidal. 798.5' a planar clean fracture 1.8' long.

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Diamond Drill Geological Log

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FORDING RIVER OPERATIONS

Objective:

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
808.8	814					SLT/SST	Dk&Lt grey	M gr	61°	Mod. Intact	Beds are disturbed showing slump structures. Many calcite fractures at all angles, minor amounts of bituminous material on some fractures. At 60° a few calcite fractures showing crystals (vugs). SST 50% fine grained, SLT 50% med. grained.
814	842.7					SLT	Dk grey	M gr	—	Mod. Intact	Recurring fracture set at 51° polished with minor traces of calcite. Rock is fairly homogeneous. Joint set at 30° planar calcite filled. Plant fossils displayed on breaks.
842.7	869					SLT/SST	Dk & Lt grey	C&F gr	70°-75°	Mod. Intact	Banded siltstone and sandstone. Sandstone 15% near beginning of interval increasing to 30% near end of interval fine grained. Siltstone coarse grained. Beds are disturbed and variable. One ripple train. Many rip ups. Most fractures clean. Calcite joints at 76° and 16°. Some evidence of erosion.
869	909.7					SST/SLT	M to Lt grey	M gr	65°	Mod. Intact	Siltstone coarse grained 20% of core, 80% SST. Many silt rip ups. Bedding fairly even and regular. Many uneven discontinuous coaly veins causing irregular fractures. Calcite joint set at ≈25°. Some portions massive with no bedding.
909.7	918.6					SST	M grey	F gr	73°	Mod. Intact	Many calcite irregular fractures subparallel to bedding. Fractures are clean. Minor amounts of silt, no jointing.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
918.6	933					SLT	Dk grey	C gr	—	Mod. Intact	Some finer silts in this sequence. Some of the fractures @ 62° are bituminous, minor amounts of sand.
933	957.5					SLT/SST	Dk&Lt grey	C&F gr	66°	Mostly Intact	Few fractures and all but one is clean. 50/50 fine sand coarse silt. Several joints at 10° all over 1' long clean, planar. Beds are slightly crossbedded, otherwise undisturbed.
957.5	984.					SLT/SST	Dk grey	C gr	68°	Mostly Intact	15% fine grained sand 85% coarse silt. Mostly clean fractures. A few bituminous fractures at 45°. At 25° long planar clean fractures. Undisturbed bedding but irregularly spaced.
984.	992.5					SST/SLT	Lt grey	F gr	69°	Mostly Intact	75% sandstone fine grained fairly evenly bedded. 25% siltstone intermixed with the sandstone. Bedding fractures are planar coaly and fairly smooth. No joints.
992.5	1010.6					SLT/SST	Dk&Lt grey	C&F gr	71°	Mod. Intact	60% coarse grained silt, 40% fine grained sand. Most fractures clean, a bit of coaly material on some. Calcite fractures at a few degrees, closed, and discontinuous.
1010.6	1037					SLT/SST	Dk grey	M gr	66°	Mod. Intact	Medium grained siltstone 80% and fine grained sandstone 20%. Amount of sandstone interbedding decreases with depth and siltstone becomes progressively finer grained, bituminous bedding fractures. Some calcite fractures at angle of Bedding. Interbeds show little disturba

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Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 21, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (?)	Core Status	Additional Information
1037	1040.1			316.1	317.0	COAL	Black	F gr	—	Blocky	RECOVERY 3.1' of 3.1' Coal breaks in angular pieces shows lustre quite hard.
1040.1	1050.4					MST/SLT	Dk grey	F gr	—	Mod. Intact	50/50 mudstone siltstone. Fractures are planar and bituminous range from about 60 - 70°. Joint set planar and clean @≈15°, one tiny interbed of sand.
1050.4	1052			320.2	320.6	COAL	Black	F gr	—	Blocky to Powder	Mostly clarain. Fractures at 65°, most of interval completely broken. Too small an interval to sample. Those pieces that are moderately intact break angularly.
1052	1058.4					MST	Dk grey	F gr	—	Blocky	Bituminous mudstone recurring fracture set at 71°. Minor amounts of plant fossils. No joints.
1058.4	1069.7			322.6	326.0	COAL	Black	F gr	—	Blocky to Broken	Mostly powdery, low lustre or flakes off in flat pieces. RECOVERY 7.7' of 11.3' 3.4m coal
1069.7	1090.6					SLT/SST	Dk grey	VF gr	75°	Mod. Intact	Very fine grained siltstone about 90% with minor interbeds of sandstone fine grained 10%. Many of the fractures are coaly. Broken plant fossils can be seen on fracture surfaces. Calcite joints at 7°,27°,38°, planar, open and closed, few discontinuous.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1090.6	1100.4					SLT/SST	M grey	F gr	73°	Mod. Intact	Fine grained sandstone 65%, 35% coarse silt. Most bedding fractures are polished. Several closed hairline, planar calcite joints ranging from 12° - 30°. Bituminous fracture set at 52°.
1100.4	1117.5					SLT/SST	Dk grey	VF gr	67°	Mostly Intact	90% very fine silt (borderline mud but is gritty) 10% sandstone. Fine grained in middle portion of this interval. Bedding fractures are coaly, breaks contain many fossil fragments. At 36° bituminous surfaces polished. No sand for last few feet of interval.
1117.5	1135			340.6	346.0	COAL	Black	F gr	—	Blocky to Broken	High lustre some vitrain coal mostly clarain. Some shearing by drill causing powder. Breaks angularly. Recurring fracture set at 63°. RECOVERY 9.8' of 17.5'. 5.4 m coal
1135	1145.2					SLT/SST	Dk grey	F gr	64°	Mod. Intact	Siltstone is fine grained 85%, contains plant fossils, sandstone is fine grained 15%. Most fractures occur on coaly portions. Siltstone is borderline mudstone but is gritty. Fracture set at 39°, bituminous polished and planar.
1145.2	1146					COAL	Black	F gr	—	Broken	Contains minor amounts of mud (shaly) broken, moderate lustre.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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Area: Eagle Mtn.

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
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Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1146	1154.5					SLT/SST	Dk grey	F-M gr	70°	Mod. Intact	20% fine grained sandstone, 80% fine to medium grained siltstone. Bituminous fractures with minor amounts of calcite at all angles. A few hairline calcite fractures running parallel to core axis.
1154.5	1179.6					SLT/MST	Dk grey	F gr	—	Blocky	70% fine silt, 30% coarse mud. Fractures are curved to irregular and coaly. Minor amounts of fossilization. Jointing ranges from 17° - 33° mostly clean to minor amounts of calcite. A few vugs with calcite crystals. Bituminous fracture set at 13° showing movement.
1179.6	1212.1					SLT/SST	Dk&Lt grey	C&F gr	56°	Mostly Intact	10 - 15% sandstone interbeds fine grained not evenly spaced throughout core. 85 - 90% siltstone coarse grained to medium grained. Interbedded, disturbed moderately, showing a few rip ups and load casts. At 32° calcite fracturing closed up to .5" long. Plant fossils in fracture surfaces.
1212.1	1247					MST	Dk grey	F gr	71°	Mostly Intact	Fracture set at 40° up to 20% siltstone in this interval but it is not differentiated. Fracture surfaces are coaly, planar but rough. Some calcite seen on fracture surfaces, some slickensided surfaces. Quite coaly (shaley) near end of interval

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

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Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1247	1248.7					COAL	Black	F gr	—	Broken	Moderate lustre, mostly broken, breaks irregularly, fractured and sheared by drill.
1248.7	1312.7					SLT/SST	Dk&M grey	M gr	61°	Mod. Intact	Banded siltstone and sandstone but not evenly. Bedded fractures are rough and mostly carbonaceous. Beds are mildly disturbed generally regular. Siltstone 80% gets progressively coarser with depth. Sandstone 20% fine to very fine grained has local concentrations. At 1278.6' - 1280.5 & 1292' - 1294' of about 40% sandstone. Rubble 1292 - 1294'. 1292 - 1303' some thick planar closed calcite joints at 32° and 63°. Quantity of carbonaceous fractures decreases with depth and they get progressively cleaner or contain calcite.
1312.7	1322					SST/SLT	M&Dk grey	F-M gr	73°	Mod. Intact	Coarse silt 20% at beginning of interval decreases to 5% by end of interval. Sandstone varies from fine grained to medium grained, they are intermixed 80% → 95%. Two cemented by calcite breccia zones at 1314.4' and 1316.2'. Calcite jointing ranged from 22° to 70°, mostly planar and up to 1" wide, bituminous veins throughout which are discontinuous and irregular.

Diamond Drill Geological Log

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FORDING RIVER OPERATIONS

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1322	1327					SLT/SST	Dk&M grey	C gr	54°	Mod. Intact	Bituminous fracture surfaces which are polished, jointing at 18° open, clean and planar. Siltstone 80%, sandstone fine grained 20%. Beds are bioturbated, many rip ups and some slump structures. One calcite vein along bedding plane ½" thick. A few minor worm burrows.
1327	1400					SST	Lt grey	M gr	69°	Mod. Intact	Massive with clean fractures till 1356' then fractures are bituminous and a faint bedding appears. A few clean planar fractures running subparallel to core axis. Massive and intact from 1365.5 to 1372', clean fractures. 1373.4' interbeds begin showing up (siltstone). These are at irregular intervals and show some disturbance. Fractures are again coaly. Minor amounts of calcite occur on bedding fractures. Banding of silt and sand becomes more evenly distrubuted after 1379' till 1391.5' there rock becomes massive again.
1400	1401.4					MST/COAL	Black	F gr	—	Broken	Coal 40%, mudstone 60% displays some fissility. Fractures irregularly. Some lustre shown. Slightly fissile.
1401.4	1403.4					SST	Lt grey	M gr	—	Mod. Intact	Several mud rip ups in this interval and some minor discontinuous coal veins in the core.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1403.4	1405.1					MST	Dk grey	F gr	--	Broken	Coaly mudstone, fairly well indurated, slight lustre. About 50/50 mudstone/coal.
1405.1	1449.7					SST	Lt grey	M gr	70°	Mod. Intact	Series of calcite fractures at 38° both closed and open. Bedding fractures are dull black and coaly, bedding is very faint. Some of the bituminous fractures are very irregular. After 1445' many rip ups and coal lenses. Pyrite @ 1439.8'.
1449.7	1482			441.9	451.7	COAL	Black	F gr	--	Broken to powder	Very highly sheared by drill, powdery in most areas or fractures in slabs. 1465.2 - 1467.0' siltstone interbed, also roughly 2' core loss in the interval marked (presumed to be coal). RECOVERY 19.2' of 32.3'. Core is most dull only a few small portions have minor lustre. Parting not sampled, excessive core loss through beginning of interval. 9.8m - 0.55 = 9.2m coal
1482	1487					MST	Dk grey	F gr	--	Blocky	Bituminous mudstone about 20% coaly, plant fossils found on break surfaces recurring fracture set at 62°, grades to fine grained silt.
1487	1520					SLT	Dk grey	FtoM gr	56°	Mod. Intact	Very minor amounts of sandstone interbedding. Fractures at bedding angle are bituminous and a few show faint slickensiding. Breaks reveal plant fossils (fairly intact). Starts as fine grained silt, grades to med. silt. Minor amounts of MST, coarse grained

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Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 22, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1520	1531					SLT/SST	Dk&Lt grey	C&F gr	61°	Blocky to Mod. Intact	50% fine grained sandstone getting more prevalent near end of interval, 50% coarse siltstone. Many of the fractures are coaly and contain minor amounts of calcite. Interbeds are mildly disturbed.
1531	1577.9					SLT	Dk grey	FtoM gr	--	Mod. Intact	Fine to medium grained silt, a few coaly fractures in the beginning 14.5' of core, then they are clean. Joint set @ 15°. Long, clean, planar fractures (may contain some patchy calcite)
1577.9	1605					SLT/SST	Dk&M grey	C&F gr	68°	Mod. Intact	65% coarse grained SLT, 35% fine SST Most fractures along bedding plane are clean. Beds are undisturbed. Calcite joint set at 35°. Mostly closed, planar continuous.
1605	1617					SST	Lt grey	M gr	71°	Mod. Intact	Faint bedding for first 1.5' after which core becomes massive. Many discontinuous coaly veins throughout. Fractures are coaly and show irregular fracture surfaces.
1617	1635.7					SLT/SST	Dk&M grey	CtoF gr	62°	Mostly Intact	65% SLT coarse grained; fine grained sandstone 35% and a very minor amount of medium grained sandstone near end of interval. One calcite joint at 17° planar, closed. A few bituminous fractures are clean.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 22, 1981

LATITUDE	DEPARTURE	ELEVATION

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COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1635.7	1657					SLT/SST	Dk grey	MtoC gr	66°	Mod. Intact	90% medium to coarse grained siltstone, 10% fine grained sandstone. A few areas that are coal rich. Most fractures are bituminous. 1638.6 slickensided surface @ 34°. 1649.3 - 1649.5' coal, 1651.2 - 1651.5 coal.
1657	1686.4					SLT/SST	Dk grey	C&F gr	58°	Mod. Intact	Coarse grained silt 70% fine grained sand 10%. Interbeds are fairly regular and show little disturbance. Calcite jointing at 25° planar and closed. Bedding fractures are bituminous planar, polished.
1686.4	1690.2					MST	Dk grey	F gr	—	Blocky	Bituminous mudstone. Recurring fracture set at 66°. Grades to coal. Most fractures contain coaly material which is loose and fractures angularly.
1690.2	1694.7			515.2	516.5	COAL	Black	F gr	—	Blocky	Mostly clarain. Fractures angularly, banded shiny and dull coal. RECOVERY 3.3' of 4.5'. 1.3m coal
1694.7	1703.5					SLT/SST	Dk&Lt grey	F gr	68°	Mod. Intact	90% medium to fine grained siltstone, 10% fine grained sandstone Some of the fractures are bituminous, some are clean. One calcite joint at 27° planar, closed.
1703.5	1706			519.2	520.0	COAL	Black	F gr	—	Blocky to Broken	High lustre, breaks angularly, broken by drill. RECOVERY 2.5' of 2.5'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

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LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1706	1724.8					SLT/SST	Dk&Lt grey	FtoM gr	57°	Blocky to Mod. Intact	Fine to medium grained silt 85%, fine grained sandstone 15%. Some coaly layers. Most fractures, Sandstone content decreases near end of interval but silt gets coarser grained. No joints.
1724.8	1731.7			525.7	527.8	COAL	Black	F gr	—	Blocky to Mod. Intact	High lustre, mostly clarain, some vitrain. Recurring fracture set 63° beginning and end of interval produces duller more blocky coal. RECOVERY 6.7' of 6.9'. 2.1 m Coal
1731.7	1740.5					SLT/SST	Dk&Lt grey	C gr	62°	Mod. Intact	About 25% fine grained sandstone, 75% coarse grained silt. Bedding fractures are bituminous with minor amounts of calcite. Beds are faint and mildly disturbed.
1740.5	1745.7			530.5	532.1	COAL	Black	F gr	—	Mod. Intact	Mostly Vitrain, quite intact, some clarain, a few minor mudstone interbeds. RECOVERY 4.3' of 5.2'. Breaks in angular small pieces. High lustre. 1.6 m coal
1745.7	1763.4					SLT/SST	Dk&Lt grey	C&F gr	52°	Mod. Intact	20% fine grained sandstone. 80% coarse grained silt. Interbeds are undisturbed (show even bedding), fossiliferous (plant fossils) on bedding fractures, a few discontinuous calcite fractures.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 23, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1763.4	1764.4					COAL	Black	F gr	—	Broken	Broken by drill, high lustre fractures angularly.
1764.4	1792					SLT/SST	Dk&Lt grey	C&F gr	53°	Mod. Intact	35% fine grained sandstone, 65% coarse grained siltstone. Calcite fractures ranging from 35° to 42° planar, up to ½" wide contains some crystals of calcite. Many of the fractures are coaly and polished. A bit of crossbedding at 1787'.
1792	1805.6					SST/SLT	Lt&Dk grey	F gr	70°	Mod. Intact	60% fine grained sandstone, 40% coarse silt. Many very polished bituminous surfaces. Only portions of the bedding show disturbance, minor crossbeds. Calcite and bituminous rough fracture at 38°. 1805' cemented (by calcite) breccia zone 1" thick.
1805.6	1846					SLT/SST	Dk&Lt grey	C gr	66°	Mod. Intact	85% coarse grained siltstone, 15% fine grained sandstone. Regular, fairly even interbeds of sandstone. Bituminous bedding fractures with fossils.
1846	1849.7					MST	Dk grey	F gr	—	Blocky	Recurring fracture set 68°, bituminous mudstone, a fair bit of coal in it. Fractures are bituminous.
1849.7	1867			563.8	569.1	COAL	Black	F gr	—	Blocky	Recurring fractures set at 52°, high lustre. Breaks regularly. Angulat pieces. Fairly hard. A few minor mudstone interbeds. Quite a bit of clarain coal, the rest is Vitrain. RECOVERY 17.3' 5.3 m coal

Hole No. D.D.H. 1758 Page 20 of 17.3'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 23, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1867	1871.7					SLT	Dk grey	F gr	52°	Blocky	Many bituminous fractures. Is a coarse mud to fine silt. Minor amounts of calcite on some fracture surfaces.
1871.7	1873					COAL	Black	F gr	—	Blocky	Powdery, dull breaks sub angularly, shows some fissility. RECOVERY 1.3' of 1.3'.
1873	1898					MST	Dk grey	C gr	54°	Mod. Intact	Bituminous mudstone. Shows some fissility. It is a coarse grained mudstone bordering on fine silt. A few slickensided surfaces with coaly material and some calcite. Surfaces are generally irregular. Coal veins at 1879.2 - 1879.7' 1884.3 - 1884.6' Contains minor amounts of siltstone.
1898	1910.8					SST/SLT	Lt&Dk grey	F gr	32°-68°	Mod. Intact	Bedding varies quite a bit due to slump structures. A few slickensided surfaces at just more than 80°. Contains calcite and polished bituminous material. Sandstone 70% fine grained, siltstone 30% coarse grained.
1910.8	1915					MST	Dk grey	C gr	—	Blocky	Coarse grained mud to fine grained silt, slickensided surfaces are found throughout at 28° and 62°. Bituminous fractures.
1915	1917					COAL	Black	F gr	—	Blocky	Breaks angularly, high lustre. Mostly Clarain coal. RECOVERY 1.8' of 1.8'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn. Total Depth: COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1917	1931.5					MST	Dk grey	F gr	66°	Mod. Intact	Some portions are quite coaly and display fissility 1923-1924'. At 30° slickensided surfaces, recurring bituminous fracture set at 62°.
1931.5	1941.6			588.7	591.8	COAL	Black	F gr	—	Mod. Intact to Blocky	Mostly clarain, some vitrain, fractures angularly in slabs. RECOVERY 10.1' of 10.1'. 3.1 m coal
1941.6	2011.5					SLT/SST	Dk grey	M gr	65°	Mod. Intact	Interbeds are fairly regularly bedded. Sandstone fine grained 30%, siltstone medium grained (some coarse) 70%. Most fractures are clean, some contain dull coaly material. Several long planar fractures at 22° clean surfaces. Interbeds get more disturbed near end of interval. Rip ups evident @ end of interval.
2011.5	2038					SST	Lt grey	M gr	68°	Mostly Intact	2030.7' - 2032' siltstone interbed. Sandstone is medium grained with bituminous veins. Bedding fractures are coaly. Beds are faint. A few very irregular fractures. Bituminous veins are not regular throughout.
2038	2048.1					SLT	Dk grey	FtoM gr	—	Mod. Intact	First .8' are quite coaly, then quantity of coal veins decrease and most fractures are clean. At 42° a few bituminous joints. Rock is quite homogeneous. Recurring fracture set at 64°.

Diamond Drill Geological Log

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2048.1	2093.8					SLT/SST	Lt&Dk grey	F&C gr	51°	Mostly Intact	Sandstone 60% fine grained. Siltstone 40%, coarse grained. Beds are mildly disturbed. Minor amounts of crossbedding and a few worm burrows. Calcite fractures are hairline, range from 0° to 56°. Sandstone gets coarser throughout interval, gradually grades almost to medium grained. Most of the bedding fractures are clean. Some are slightly coaly.
2093.8	2118.2					SST	Lt grey	M gr	64°	Mostly Intact.	Very faint bedding. Minor bituminous interbeds with some coaly fractures, a few closed planar calcite fractures at 20°, abrupt contact with siltstone.
2118.2	2124.5					SLT/SST	Dk&Lt grey	C gr	—	Mod. Intact	10% sandstone fine grained interbeds. Most fractures clean. Minor rip ups found throughout. Some bituminous fractures, 3 of them, 2 @ 67°, one at 81°.
2124.5	2134					SST/SLT	Lt&Dk grey	M gr	68°	Mod. Intact	85% medium grained sandstone, 15% coarse siltstone. Rip ups found throughout. Siltstone interbeds have irregular fracture surfaces. Fracturing at 25° irregular, contains calcite on fracture surfaces. Bedding fractures are bituminous.
2134	2138.5			650.4	651.8	COAL	Black	F gr	—	Blocky	Fractures @ all angles, no predominant fracture sets. Mostly clarain. Fractures angularly. Clean, no mud. RECOVERY 4.5' of 4.5'. 1.4 m coal

Hole No. D.D.H. 1758 Page 23 of

NDM

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 26, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: Eagle Mtn.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
2138.5	2143					SLT/SST	Dk&M grey	M gr	74°	Blocky	20% fine grained sandstone interbedding. 80% fine to medium grained silt. Polished bituminous surfaces and many plant fossils. Joint set at 36° clean.
2143	2149					SST/SLT	Lt&Dk grey	M gr	74°	Mostly Intact	Beds are slightly bioturbated. Siltstone 10% medium grained. Sandstone 90% medium grained. Fracture surfaces are bituminous and polished bedding fractures only, no joints.
2149	2156			655.0	657.2	COAL	Black	F gr	—	Broken	Moderate lustre, a few minor mud interbed. No predominant fracture sets. Some clarain coal, the rest has been sheared by the drill. RECOVERY 6.2' of 7.0'. 2.2 m coal
2156	2158.4					SLT/SST	Dk&Lt grey	F gr	58°	Blocky	One sandstone interval .7' long at beginning of interval, the rest is siltstone, fine grained. Bituminous polished fracture surfaces.
2158.4	2247.					SST	Lt grey	M gr	62°	Mostly Intact	Faint bedding throughout, a few coaly veins in beginning 25' resulting in coaly fracture surfaces. Then they become clean. Pyrite crystals up to ⅓" wide each, @ 2186.5' and 2190'. Very Intact core after 2197'.
											END OF DRILL HOLE 1758 2247' 684.9 m

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	40				12.1	OVERBURDEN					
40	66.4					SLT	Dk grey	C gr	—	Broken	Most fractures highly oxidized trace amounts of calcite. Predominant fracture sets are at 31° and 69°. A few bituminous fractures running subparallel to core axis. Siltstone is very coarse grained except near end of interval where it is medium grained. Quite homogeneous.
66.4	74.0			20.2	22.6	COAL	Black	F gr	—	Powdery to broken	Only a slight lustre. Most is completely broken by drill. A few mudstone intervals. Intact portions of coal are clarain banded, high lustre and dull coal. 2.4 m coal RECOVERY 4.2 of 7.6'.
74.0	80.0					MST/COAL	Dk grey	F gr	—	Blocky to shaley	Coal content gets as high at 50% in more shaley portions. Some fissility displayed. A few portions of banded coal and mudstone. Recurring fracture set at 43° displays polished planar bituminous surfaces.
80.0	96.0					SLT/SST	Dk & Lt grey	M&F gr	49°	Mod. Intact	A gradational contact with above sequence about 30% fine grained sandstone, 70% medium grained silt. Beginning 2.5' slightly finer grained silt with coaly veins up to 2" wide. Fractures are coaly and planar. Beds are slightly disturbed showing a few crossbeds.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Oct. 28, 1981

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
96.0	109.1					SLT	Dk grey	F gr	46°	Blocky	Bituminous fine grained siltstone tending towards mudstone but gritty. Fractures occur frequently at 46° giving a fissile appearance. Bituminous fractures are mostly rough but a few polished fractures contain calcite.
109.1	110.2					COAL	Black	F gr	—	Mod. Intact	Mostly clarain coal. High lustre. Fractures angularly. A few portions show evidence of shearing. RECOVERY 1.1' of 1.1'.
110.2	126.9					SLT	Dk grey	M gr	--	Mod. Intact	Most fractures are clean, a few are bituminous. Recurring fracture set at 53°. Fractures also exist at 10°. Very minor amounts of mud.
126.9	139.2					SLT/SST	Dk & Lt grey	M&F gr	44°	Mod. Intact	Bedding is mildly disturbed with a few rip ups and a few worm burrows. Also evidence of erosional truncation. Fractures are clean. Planar joint set at 20° clean. Snadstone fine grained comprises 40% of core. Siltstone medium grained 60% of core.
139.2	152.3					SLT	Dk grey	M gr	—	Mod. Intact	Medium grained silt grading to coarse silt. Recurring fracture set at 60°. Fractures are clean. Rock is quite homogeneous.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
152.3	180.6					SLT/SST	Dk & Lt grey	C&F gr	54°	Mod. Intact	Sandstone, fine grained 20% of core siltstone, coarse grained 80% of core. Fractures are coaly with minor amounts of calcite. Beds are bioturbated, minor discontinuous calcite veins.
180.6	199					SST	M grey	M gr	53°	Mostly Intact	Bedding angle varies slightly. Many discontinuous coaly fractures. Silt rip ups found in core. Fractures are along bedding plane polished and coaly.
199	223.8					MST	Dk grey	C gr	50°	Mod. Intact and broken	201-203.2' fractured and coaly mudstone about 50/50 mudstone coal. One sandstone interbed at 203.6' - 204.1'. Minor amounts of bubbly pyrite found in core. Fractures are generally coaly and rough. Gradually grades to a fine silt. Almost all fracture occur between 45°-50°.
223.8	235.7					SLT/SST	Dk & Lt grey	C&F gr	52°	Mostly Intact	Sandstone banded 40% of core, it is fine grained. Siltstone 60% coarse grained interbeds are even and undisturbed fractures are clean. No joints only bedding fractures.
235.7	268.6					SLT	Dk grey	F gr	59°	Blocky to Mod. Intact	Fine grained silt borderline mudstone contains some portions that are quite bituminous. Sandstone interbeds up to 5% of core. Fracture set at 48°. A few calcite closed fractures with wags @ 42° breaks reveal broken plant fossils, some fractures are very curved but smooth (shearing?).

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
268.6	283.3					SLT/SST	Dk & Lt grey	C&F gr	52°	Mostly Intact	50% fine grained sandstone, 50% coarse silt. The silt is fining downwards. Beds are bioturbated. A few worm burrows. A bleb of calcite ½" x ½" found in core. Fractures are mostly clean with minor amounts of coaly material. A few very broken fossils found on some break surfaces.
283.3	286.6					SLT/MST	Dk grey	F gr	—	Intact	Breaks planarly at 64°. Fractures are fossiliferous. Fine grained siltstone to coarse mud. Near end of interval definitely tending more to a bituminous mudstone. Fractures concoidally, scratches brown but is slightly gritty.
286.6	300.8			87.4	91.7	COAL	Black	F gr	—	Blocky	Beginning of interval mostly clarain coal with a few slightly muddy portions. 295-298' quite a bit of vitrain coal blocky fractures, very high lustre. Then 298-300.8' 2.8 mixture of coal and minor mud interbeds. RECOVERY 12.5' of 14.2'. 4.3 - 0.85 = 3.4 coal
300.8	324					SLT	Dk grey	F gr	53°	Mod. Intact	Borderline mudstone fine grained bituminous in some portions. Coaly plant fossils occur on fracture surfaces, some fracture surfaces are quite rough. A few minor discontinuous coal veins occuring @ bedding angle. No jointing.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 28, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
324	341.6			98.8	104.1	COAL	Black	F gr	—	Slightly Intact	Only one mudstone interbed at 339.9'-340.3', moderate lustre, portions have been sheared by drill. Mostly clarain coal or dull powdery coal. RECOVERY 15.6' of 17.6'. 5.3 m - 0.12 = 5.2m coal
341.6	350.5					SLT	Dk grey	M gr	43°	Mod. Intact	Very minor amounts of sandstone interbedding approx. 5% of core. No joints only bedding fractures. These are polished bituminous surfaces with trace amounts of calcite. A few closed bituminous veins along bedding plane.
350.5	516.8					SLT/SST	Dk & Lt grey	C&F gr	47°	Mod. Intact	35% fine grained sandstone, 65% coarse grained siltstone. Banding is not at regular intervals, interbeds are mostly undisturbed. A few worm burrows, some minor slump structures. 2 dominant joint sets, one at 22°, one subparallel to core axis. Both calcite filled planar both open and closed. Ripple trains found from 404' - 410'.
516.8	546.5			157.5	166.6	COAL	Black	F gr	—	Blocky to powder	Moderate lustre. Fractures in flat pieces sheared by drill. A few intact pieces which are clarain coal. RECOVERY 21.0' of 29.7 A few muddy portions but they are broken up and mixed @ coal. 9.1 m coal
546.5	571					SLT	Dk grey	M gr	—	Blocky	Medium to fine grained silt. Many irregular coaly fractures which show evidence of shearing. One prominent joint set at 25° open, planar, bituminous. 564.5' rubble till 566', trace amounts

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 29, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	of calcite. Plant fossils on break surface.
571	584.8			174.0	178.2	COAL	Black	F gr	—	Blocky to powder	Moderate lustre, several pieces are slightly intact. No regular fracture surfaces. Several rubble zones, some sheared. Some clarain coal in intact pieces about 30% of core. The rest is broken by drill. RECOVERY 13' of 13.8'. 4.2m. coal
584.8	628					SLT/SST	Dk & Lt grey	F gr	58°	Mod. Intact	5% fine grained sandstone 626.3'-626.6' breccia zone cemented by calcite. Joint set at 45° mostly clean slight amounts of coaly material. Minor amounts of plant fossils 95% fine to medium grained silt.
628	630.5					SLT/SST	Dk & Lt grey	C&F gr	50°	Mostly Intact	Fractures 50°-55°. These are clean. 40% fine grained sandstone, 60% coarse silt. Beds are gently undulating and slightly crossbedded.
630.5	642.5					SLT	Dk grey	M gr	—	Mod. Intact	Recurring fracture set at 45°. Plant fossils are found on fracture and break surfaces. Only trace amounts of sandstone.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Oct. 30, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
642.5	696.0					SLT/SST	Lt & Dk grey	C&F gr	55°	Mod. Intact	Coarse grained silt 60% fine grained sand 40%. Beds are disturbed showing slump structures. A few minor worm burrows. Calcite joint sets at 19°. Most fractures clean but some minor bituminous fractures which are polished. Some slump structures and a ripple train. At 670' evidence of crossbedding. 674' calcite fracture zone with vugs containing calcite crystals. Fractures are erratic and discontuous in all directions. Sandstone interbeds getting coarser grained near end of interval. Calcite joint set subperpendicular to beds at 74°.
696	696.7					COAL	Black	F gr	—	Broken	Moderate lustre sheared by drill. Mostly clarain but contains some mudstone, too small an interval to sample.
696.7	711					SLT/SST	Dk & Lt grey	FtoM gr	52°	Mostly Intact	Banded siltstone and sandstone. The sandstone is medium grained and comprises 45% of the core. The siltstone is medium grained and comprises 55% of the core. There are zones of rip ups with angular silt fragments in the sandstone. Bedding fractures are clean, little jointing.
711	808.8					SST	Lt grey	M gr	48°	Mod. Intact	Beds are very faint, quite even and regular. Fractures are slightly bituminous with minor amounts of calcite. Joint set at 15° some open some closed, contain calcite. A few bituminous veins at about 65°. Calcite joint set at 45° subperpendicular

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Nov. 2, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	to bedding. Bituminous veins cause undulating fractures. A few mudstone rip ups near end of interval.
808.8	832.5			246.5	253.8	COAL	Black	F gr	—	Blocky to Powder	At 818' to 819' about 50/50 coal mudstone sheared by drill. Fracture is uneven and irregular. Some clarain coal but most of interval is poor quality. Preferential fracturing at about 60° but these are irregular fractures. Many of the fracture surfaces are polished. 7.3m coal -.3 = 7.0m coal
832.5	833.8					MST/COAL	Black Dk grey	F gr	—	Broken	Coal rich about 40% coal, 60% mudstone recurring fracture set at 53°. Mostly polished. Evidence of some shearing. Joint set subparallel to core axis.
833.8	836					COAL	Black	F gr	—	Powder	Slight lustre completely fractured. Probably quite a bit lost but it is not possible to tell. RECOVERY 2.2' of 2.2'.
836	1051					SST	Lt. grey	M gr	53°	Mostly Intact	Beginning of interval till 841' contains many discontinuous irregular coaly veinlets. Fractures are bituminous and irregular. A few calcite planar joints at 15° up to 1' long. At 860' very intact fractures are clean. This is basal sandstone. 856'-857' vugs with calcite crystallization. 966' traces of siltstone in core till 966.3'. Sandstone gets slightly finer grained at 940'. 990' calcite veins in core at 20-25° for

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Nov. 3, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	rest of interval at 994.5', 2 calcite fractures at 20° with well defined calcite crystals and pyrite (disseminated). After 970' bedding fractures are bituminous and polished and may contain minor amounts of calcite. 996'-1003' siltstone banding and rip ups in sandstone minor amounts 10% of core. Approaches fine grained sandstone near end of interval.
1051	1082					SST/SLT	M grey	M gr	53°	Blocky to Mod. Intact	Gradational contact so this is arbitrary. Most bedding fractures are polished and bituminous. Siltstone medium grained, dark grey. 20% of core, sandstone fine to medium grained 80%. Calcite joint set at 35° closed and planar. A few rip ups but beds are fairly regular and even to mildly bioturbated.
1082	1263					SLT/SST	Dk grey	CtoM gr	43°	Mod. Intact	25% fine grained sandstone, 75% medium to coarse grained silt. Bedding fractures are bituminous polished and contain minor amounts of calcite. Fining downward sequence very bioturbated. Many rip ups and many slump structures. At 41° subperpendicular to bedding are planar calcite fractures. Calcite joint set at 20° 1114' - 1115.3' planar rough joint parallel to core axis. 1118.8' fracture zone .1' thick at 40° calcite filled. 1138' SLT/SST 90/10, 1160' SLT/SST 95/5%. Most bedding fractures bituminous and polished. 1166.9' calcite fracture zone. Many discontinuous fractures in all directions

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS.

Objective:

LATITUDE	DEPARTURE	ELEVATION

Logged By: Beth Manning Date: Nov. 3, 1981

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
										(con't)	for .3'. 1195.8'-1196.5' rubble zone. 1184' many tiny rounded rip ups in core. Fine hairline calcite planar fractures occuring at all angles. 1226' slickensided surfaces begin to occur. 1235.5'-1238.3' rubble zone with a core loss of 1.5'. 1238.3' numerous discontinuous calcite fractures. Most fractures slickensided bituminous with calcite. Range in angle from 9 - 65° (NOT unidirectional fault). Beds are irregular and completely disturbed. Fracture zone ends at 1263'.
1263	1288.8					SST	Lt grey	M gr	5°-56°	Mod. Intact	Several irregular discontinuous fractures filled with silty material. Most bedding fractures are bituminous and polished and may contain minor amounts of calcite. Beds are disturbed and some slump structures are evident.
1288.8	1294					MST/COAL	Dk grey	F gr	—	Blocky	About 50/50 mudstone coal. Many of the surfaces are polished and bituminous, quite sheared by the drill. Displays some fissility almost shaley.
1294	1301			394.4	396.5	COAL	Black	F gr	—	Broken	Poor quality several portions of mudstone, what intact coal there is is clarain. RECOVERY 6.0' of 7.0'. 2.1 m coal

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Beth Manning Date: Nov. 5, 1981

LATITUDE	DEPARTURE	ELEVATION

Area: South Eagle

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1301	1317.5					SST	Lt grey	M gr	—	Mod. Intact	Massive, no bedding evident. Many discontinuous bituminous fractures near the beginning of the interval. Joint set at 20° fractures are clean. A few silty, muddy rip ups in the core.
1317.5	1318.4					COAL	Black	F gr	—	Broken	Some clarain coal mostly muddy, moderate lustre. Interval not sampled.
1318.4	1320					MST	Dk grey	F gr	—	Blocky	Many bituminous polished surfaces recurring fracture set at 43°, grades back to coal.
1320	1327.8					COAL,MST	Dk grey	F gr	—	Broken	Sheared by drill. 50/50 coal mudstone, maybe marginally more coal. Fissile. Polished surfaces on many of the fractures. Beginning 1' of interval mostly coal. Moderate to dull lustre. RECOVERY 6.5' of 7.8'.
1327.8						SST	Lt grey	M gr	65°	Mostly Intact	Bituminous veinlets till 1336'. A few bituminous fractures with polished surfaces till 1356'. Then fractures become clean and rock becomes massive. Jointing calcite planar 15-20°.
											END OF LOGGING 1420' = 432.8 m

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: S.F. Date: Jan. 16/82

LATITUDE	DEPARTURE	ELEVATION
149,238.5 N.	27,011.5 E.	2007.6 m.

Area: EAGLE MTN.

Total Depth: 1635 ft.

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
0	15					-	-	-	-	-	Casing.
15	18					Sst.	Lt.Gy.	M.Cr	35°	Blocky	Medium grain sandstone grading finer towards 18'.
											Mst. banding throughout.
18	28					Mst/sst	M	Fgr.	35°	Broken along bedding.	60% Mst. 40 Sst. Sst. interbedded Mst.
28	35					Sst.	Lt.Gy.	M.Cr.	45°	Intact well indurated.	Sst. with interbedded mst. some calcite infilling.
35	40					Sst.	Lt.Gy.	Cr.	45°	Intact well indurated.	Sst. with bituminous infilling about 1%.
40	41					Slt.	Lt.Gy.	Fgr,	-	Intact well indurated.	Slt. break with sst. matrix some bituminous infilling by mineralization.
41	46					Sst.	Lt.Gy.	Fgr.	-	Broken.	Some limonite staining.
46	88.5					Mst./Sst.	Dk.Gy.	Fgr.	-	Broken.	Some bituminous infilling 1' band of interbedded Mst. and sst. at 59.5.
88.5	94					Sst.	Lt.Gy.	Fgr.	-	Broken	
94	102					Mst./Sst.	Dk.Gy.	Fgr.	55°	Broken	70% mst. 30% sst. some calcite infilling.
102	118					Mst./Sst.	Gy.	F gr.	55°	Broken	50% mst. sst. grading to massive mst. with bituminous and calcite infilling also noted limonite staining.
118	138.5					Slt./Sst.	M.	F gr.	55°	Broken	Sandy siltstone with bituminous infilling some limonite staining.
138.5	155					Sst./Slt.	Lt.Gy.	Fgr.	61°	Intact	Bituminous infilling sst. 70% slt. 30% grading to massive slt.

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Diamond Drill Geolcgical Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: S.F. Date: Jan. 16/82

LATITUDE	DEPARTURE	ELEVATION

Area: EAGLE MTN.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
155	179					Slt.	Dk.Gy.	Fgr.	-	Intact	Bituminous and calcite infilling.
179	186					Slt./ Sst.	Gy.	Fgr.	45°	Broken	Sandy siltstone with bituminous infilling.
186	194.5					Coal/Shale	Dk.	Fgr.	-	Rubble	Coaly shale.
194.5	198					Sst.	Lt.Gy.	Fgr.	35°	Intact	Medium to fine grain sst.
198	206					Sst./ Slt.	Dk.Gy.	Fgr.	-	Intact	Sandy slt. grading to 100% slt bituminous infilling.
						Slt/ Mst.	Dk.				
206	210					Slt./ Mst.	Dk.Gy.	Fine		Intact	2' band of mudstone grading to a slt. bituminous
											infilling.
210	217.5					Sst./ Slt.	Lt.Gy.	Fgr.	52°	Intact	Interbedded sand and siltstone.
217.5	227.5					Mst.	Dk.Gy.	Fgr.	-	Intact	Mudstone with interbedded coaly shale.
227.5	253					Slt./ Sand	Lt.Gy.	Fgr.	55°	Intact	Sandy siltstone with interbedded sst.
253	256					Coal Shale	Dk.Gy.	Fgr.	-	Broken	Coaly shale.
256	269					Sst.	Lt.Gy.	Fgr.	55°	Intact	Sandstones co_3 infilling.
269	283					Slt./ Sst.	Lt.Gy.	Fgr.	52°	Intact	Sandy slt. with some co_3 infilling.
283	297			86.2	90.5	Coal	Dk.Gy.	Fgr.	54	Broken	Coal with 1' parting at 285 and 6" parting at 295.
											100% recovery. 4.32m − 0.46 = 3.8 m coal
297	307					Slt.	Dk.Gy.	Fgr.	-	Broken -	1' band of coaly shale grading to 100% slt.
										intact.	
307	324			93.6	98.8	Coal	DK.Gy.	-	-	Broken	55% recovery. 5.2 m coal
324	326					Slt.	Dk.Gy.	Fgr.	-		Coaly shale grading to slt.
326	440					Slt./ Sst.	Lt.Gy.	Fgr.	58	Intact	Interbedded slt. and sst. with 1' of coal shale at 348' calcite infilling, and bituminous infilling.
440	453					Slt.	DK.Gy.	Fgr.	53	Intact	Carbonaceous siltstone.

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: S.F. Date: Jan 16/82

LATITUDE	DEPARTURE	ELEVATION

Area: EAGLE MTN.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
453	453.5					Mst.	Dk.Gy.	Fgr.		Intact	6" of mudstone above coal.
453.5	469.5			138.2	143.1	Coal	-	-	-	Broken	81% recovery.
469.5	476					Slt./Sst.	Lt.	Fgr.	52°	Intact	Interbedded slt. and sst. 50% of each.
476	479					Coal	-	-	-	Broken	100% recovery.
479	489					Slt./Sst.	Lt.	Fgr.	40°	Intact well	60% slt. 40% sst. calcite infilling.
										indurated.	
489	492					Slt.	Dk.	Fgr.	-	Intact	Siltstone layer.
492	507					Slt./Sand	Lt.	Fgr.	50°	Intact	Interbedded slt. sandstone.
507	513					Mst.	Dk.	Fgr.	-	Intact	Mudstone.
513	519					Slt./Sst.	Lt.	Fgr.	38°	Intact	Interbedded slt. and sst. 50% each.
519	537					Slt./Mst.	Dk.	Fgr.	-	Broken	Slt. at start grading to mudstone at end
											80% bituminous infilling. core body broken 1½' section
											representing 10'.
537	541			163.7	164.9	Coal	-	-	-	Body broken	100% recovery slightly rocky. 1.2 m coal
541	574					Slt./	Dk.-Lt.	Fgr.	52°	Intact well	100% slt. at start grading to 50%/ 50% slt. and sst.
						Sst.				indurated.	bituminous infilling and well bedded with no disruption.
574	584					Slt.	Dk.	Fgr.	-	Intact well	Bituminous infilling at contacts but 100% slt.
										indurated.	
584	639					Slt./	Lt. to	Fgr.	55°	Intact	Interbedded silt and sand stone bituminous and
						Sst.	Dk.				calcite infilling beds seem slightly disturbed,
											a coaly shale band at 624.
639	649					Sst./	Lt.	Cr.	55°	Intact	Interbedded sandstone and slt. grading into 100%
						Slt.				well indurated.	sandstone, bituminous and calcite infilling, many grey
											joints throughout 3/foot.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: S.F. Date: Jan. 16/82

LATITUDE	DEPARTURE	ELEVATION

Area: EAGLE MTN.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
649	651					Shale	Dkgy.	Fgr.	-	Broken	2' band of coaly shale.
651	653					Slt.	Dk.	Fgr.	55°	Intact	2' band of siltstone, bituminous infilling.
653	6[illegible]					Sst.	Lt.	Cr.	48°	Intact	Sandstone with sections of interbedded siltstone,
											beds seem slightly disturbed with some cross
											bedding apparent.
660	669					Slt.	Lt.	Fgr.	40°	Intact	Interbedded slt. and sst. beds mod. disturbed
						Sst.					about 75% slt.
669	746					Sst./	Lt.	Cgr.	40°	Very well	Coarse grain sandstone with sections of interbedded
						Slt.				intact	siltstone or mudstone. Evidence of crossbedding at
											687' also sections of 100% pure sandstone but overall
											about 70% sst. 30% slt. Calcite and bituminous infilling
											Section between 704 and 706 badly broken. Sst.
											was well sorted.
746	747					Slt.	Dk.	Fgr.	-	Intact.	1' of siltstone.
747	756					Sst.	Lt.	Cgr.	40°	Intact	Well sorted sst. with bituminous infilling near 756
											no crossbedding evident. Some calcite infilling.
756	765					Mst.	Dk.	Fgr.	-	Broken	Coaly shale high in bituminous
765	767.5					Coal	Dk.	-	-	Broken	100% recovery.
767.5	775					Sst.	Lt.	Fgr.	40°	Broken pieces	Fine grained sandstone.
										4" and less.	
775	778					Coal	Dk.	-	-	Broken	100% recovery.

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Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: S.F. Date: Jan. 16/82

LATITUDE	DEPARTURE	ELEVATION

Area: EAGLE MTN.

Total Depth:

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
778	925					Sst.	Lt.	Cgr.	55°	Intact well indurated.	Coarse grain sandstone with bituminous infilling from 778 to 786 then clean sandstone with alternating light and darkbands. Crossbedding noted at 835.5 some calcite infilling near 916, sandstone looks very clean and well sorted, some mudstone banding at 915.
925	926					Sst.	M/Lt.	Cgr.	55°	Broken	Fractures 150°. Continuous joints 150°. Calcite infilling.
926	929					Slt.	M/Lt.	Mgr.	60°	Broken	Some polished surfaces. Mudstone/siltstone interbedding - infilling of Fe oxide. Fracture 53°.
929	935					Sst.	M/Lt.	Cgr.	60°	Intact	Cross bedding 929 - 932.5. 60° and horizontal. Fe oxide infilling. Discontinuous joints around 929 (calcite infilling).
935	937					Sst.	Lt.	Cgr.	60°	Broken	Cross-bedding. Fe oxide infilling. Mudstone/siltstone interbedding commences around 937.
937	939					Slt./Mst.	M/Dk.	Fgr.	57°	Broken	Mudstone/siltstone interbedding (well defined). Some polished surfaces. Fractured at 60°.
939	943					Mst./Slt.	M.	Mgr.	58°	Broken	Fractures 58°. 3" to 6" apart. Slt. and mudstone interbedded. Bedding plane disturbed.
943	946					Sst.	Lt.	Cgr.	62°	Broken	
946	954					Slt./Mst.	M./Lt.	Fgr.	50°	Broken	Fractures at 50°. Calcite infilling. Polished surfaces. Joints at 50°. 950-954 joints are from 3" to 4" apart. Fossils appear occasionally throughout this footage.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 5/82

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
954	964.5					Sst./	Lt.	Cgr./	60°	intact	Slt. and sandstone interbedding. 954-959 is
						Slt.		Mgr.			dominantly sandstone. 959 - 961.5 is dominantly
											siltstone. 961.5 - 964.5 is dominantly sandstone.
											There are joints (25°-30°) between the different
											beds. Crossbedding in the siltstone.
964.5	966					Slt./	M.	Cgr.	45°	Intact	Large calcite infilling.
						Sst.					
966	968					Slt./	M.	Mgr.	55°	Broken	Polished surfaces. Calcite infilling. Small bands
						Sst.					of mudstone. 3 joints in first 6". Disconinuous
											fractures.
968	969					Slt./	M/	Fgr.	60°	Broken	Sandsone, siltstone, mudstone banding. Polished
						Mst.	Dk.				surfaces. Fracture 57°.
969	976					Slt./	M./	Mgr.	57°	Broken	Polished surfaces. Broken wheresiltstone and
						Mst.	Dk.				mudstone bands meet calcite filling in continuous
											and discontinuous fractures. Mudstone bands of
											approx. 1" occur at 969, 971.1, 974 and 975.3.
											Slickensides are present at 976. Many small mudstone
											bands through this footage.
976	979					Slt.	Lt.	Mgr.	65°	Intact	976 - 977 small (1mm.) bands of mudstone.
979	983					Slt.	Lt.	Mgr.	60°	Broken	One joint at 980.5 (60°). No infilling or fractures
											Slight sandstone/siltstone banding throughout.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 5/82

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
983	990.5					SSt./	Lt.	Mgr./	55°	Intact	Cgr. sandstone until around 987'. Gradually changes
						Slt.		Cgr.			to siltstone at 987' to 990.5'. Basically intacted
											with only one break at 989. Discontinuous at 983'
											- 984'. Broken around 985' - 986'.
990.5	991					Slt./	Dk.	Fgr.	60°	Broken	Small area of thin mudstone bedding (2"). Polished
						Mst.					surfaces. Joints 65° and about 1" to 2" apart.
991	992.5					Sst.	M.	Cgr.	60°	Broken	Fractures.(discontinuous). 3" apart (22°).
											Calcite infilling.
992.5	993					Mst.	Dk.	Fgr.	65°	Broken	Polished surfaces. Disturbed bedding. Mudstone
											and slt./sst. interbedding. Joints at 65° 1" and
											2" between joints.
993	996.5					Sst.	M.	Cgr.	60°	Intact	One joint at 994' (35°). Calcite infilling.
											Discontinuous joint (45°).
996.5	998					Mst./	M./	Fgr.	70°	Broken	Polished surfaces. Mst./Slt. stone interbedding.
						Slt.	Dk.				Disturbed bedding.
998	999					Sst.	Lt.	Cgr.	60°	Broken	Continuous and discontinuous joints approx. 1"-2"
											apart. Large amount of calcite infilling. Joints
											35° (145°) crossing the bedding plane.
999	1005					Mst./	M./	Fgr.	40°	Broken	Fractures about 6" apart until 1002' then number of
						Slt.	Dk.				fractures increase. Before 1002' fractures are
											straight (40°) from 1002-1005 fractures are not
											clean. Rock broken along disturbed bedding planes
											calcite infilling in twisted lines, polished surfaces

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 5, 1982

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1005	1007					SSt./	M.	Cgr./	60°	Broken	Cross-bedding in the sandstone (last foot) in first
						Slt.		Mgr.			foot mudstone/slt. interbedding. Cross bedding
											also in mudstone/slt. Polished surfaces, fractures
											2" apart in first 6" only.
1007.0	1009.5					Slt./	M./	Fgr.	58°	Broken	Cross-bedding. Fractures (5 approx. 1" apart) (60°)
						Mst.	Dk.				then 3 fractures 3" apart. Polished surfaces.Joints
											both continuous and discontinuous 5° - 30°, cutting
											across the bedding plane. Calcite infilling.
1009.5	1017					Sst.	Lt.	Cgr.	60°	Intact	Joints (continuous) about 3" apart 40° calcite
											infilling.
1017	1020.5					Sst.	Lt.	Cgr.	64°	Broken	Continuous and discontinuous joints 140° calcite
											infilling. Joints cut across bedding plane,
											1017-1018 fractures along bedding plane, 1014.5-
											1015 fractures along bedding plane. Polished
											surfaces, mudstone interbedding.
1020.5	1025					Slt./	M./	Fgr.	64°	Broken	Very narrow Slt./Mst. interbedding, discontinuous
						Mst.	Dk.				joints, calcite interbedding.
1025	1026					Slt.	M.	Mgr.	56°	Broken	Polished surfaces. Fracture 56'.
1026	1035					Slt./	Dk.	Fgr.	58°	Broken	Continuous and Discontinuous joints 25° to c.a.
						Mst.					calcite infilling, polished surfaces (becoming more
											polished) mudstone/siltstone interbedding.
1035	1049					Slt./	Dk/	Fgr.	52°	Broken	Slickensides, polished surfaces, Fe oxide infilling,
						Sst.	M.				There are uneven bedding fractures throughout cont.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 5, 1982

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Litho-logy	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1035	1049										Cont. 1037' there is a joint infilled with calcite
											48° to c.a., 1042'-1042.5'-1041'- fractures 47° to
											c.a., at 1045' there is a 1" bed (55° to c.a.) of
											sst. with 10-15 small discontinuous joints. At
											1046'-1048' continuous joints spaced about 2" apart.
1049	1063					Slt.	M.	Mgr.	50°	Broken	Polished surfaces along bedding fractures,
											bedding 50° to c.a., fractures along sandstone
											interbedding 1052'-1052.5', fractures about 3".
											apart from 1053.5' to 1054.5'. After 1057' the
											bedding angle changes from about 50° to 60° c.a.
											The bedding from 1057' to 1063' is disturbed.
											Continues to have sandstone/siltstone interbedding
											between 1056' to 1063' fractures are found about
											6" apart.
1063	1091					Slt.	M./	Mgr.	60°	Broken	From 1063-1065 joints have calcite infilling (at
							DK.				40° to c.a.), the core is fractured every 6" to
											7" throughout, continuous joints are found at 1088'
											1089.5' and 1078' each joint is at 15° to the c.a.
											and are about 7" long. Colour of core becomes
											progressively darker.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 6, 1982

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1091	1102					Slt.	M.	Mgr.	-	Intact	Siltstone is gradually becoming more coarse grained. One major joint at 10° to the c.a. - is approx. 2' long, also fractured every 5" along joint. Polished surface at about 1100'. No distinct bedding planes visible.
1102	1105					Sst.	Lt.	Cgr.	-	Intact	Strong sst./slt. interface at 1102' at 60° to c.a. Calcite filled joints crossing each other at 1102.5' at 55° to c.a. At 1104' - 2 parallel filled joints about 1" apart. (60° to c.a.).
1105	1116					Sst.	Lt.	Cgr.	-	Massive	Siltstone/sandstone interbedding. Large presence of fossils. After 1106' no bedding is visible. 1109' - 1111' darker siltstone band (no banding within). This area fractures at 1110' and 1110.5'. After siltstone band, coarse massive sandstone continues.
1116'	1132'					Slt./ Sst.	M./ Dk.	Mgr.	-	Massive	1116' - 1117' fractures with polished surfaces. Fe oxide infilling at these fractures. (3 fractures). Fractures every 1-2' after until 1132'. Joints at 1121.5' and 1130' they both are 20° to c.a. Generally massive with slight evidence of horizontal (90°) bedding.
1132'	1155'					Slt./ Sst.	M. Dk.	Mgr.	-	Massive	No distinct bedding planes. No joints. Presence of fossils replaced by Fe oxide. Small pockets of sandstone. Fractures occur every foot.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 6, 1982

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1155'	1160'					Slt.	M.	Mgr.	-	Fragmented	Highly jointed. The majority are non-continuous with
											continuous joints at 1155' and 1156' and 1157' (35° at c.a.)
											Some surfaces are polished, some have calcite infilling.
											Rocks around 1156' and 1157' are into pieces about 2" by
											2" or smaller.
1160'	1175'					Slt.	M.	Mgr.	-	Massive	Relatively coarse grained siltstone. Continuous and non-
											continuous joints infilled with calcite. The joints have no
											common orientation. However contiuous joints are about 1'
											long at 15°-20° to c.a. (these occur at 1166', 1167.5',
											1169', and 1172'). Fractures occur every foot and a half.
											Joints are also highly polished.
1175	1191					Slt.	M.	Fgr.	-	Broken	Undulating bedding. Carby in places. Calcite infilling.
											Polished surfaces.
1191	1196.5					Sst.	M.	Fgr.	65		Cross-bedding.
1196.5	1200					Sst.	Lt.	Fgr.	70	Broken	Polished surfaces along bedding fractures. 8 bedding
											fractures in first 3.0'. Calcite infilled joint at 1199.5'
											(continuous joint).
1200	1214					Sst.	Lt.	Mgr.	70	Broken	Jointed at 1200. Joint is contuous at 30° to c.a. Bedding
											fractures every 6" from 1200' to 1208'. Calcite infilling
											in joint at 1206', joint is continuous at 10° to c.a..
											Sandstone interbedding at 1210' - 1212'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 6/82

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1214	1229					Sst.	M.	Mgr.	55°	Broken	Medium grained siltstone. Some sandstone interbedding from
											1214' to 1217'. A continuous calcite infilled joint at
											1216' - 1226' and 20° to c.a. Bedding fractures at 1217'
											and 1225'.
1229	1236					Sst.	Lt.	Cgr.	75°	Intact	Light, coarse grained sandstone. Siltstone interbedding.
											bedding fracture is calcite infilled.
1236	1246					Sst.	Lt.	Cgr.	80°	Broken	Mudstone clasts throughout. 1243' - 1246' fractures along
											bedding plane. These fractures are 1" apart. Appears to
											have bands of coal bedded at 60° to c.a.
1246	1256					Sst.	Lt.	Cgr.	55°	Intact	Coarse grained sandstone. Fractured, broken zone at 1251'.
1256	1280					Sst.	Lt.	Cgr.	55°	Intact	Coarse grained sandstone. A few fractures 2' apart.
											Fractures are infilled with coal. A few joints
											(discontinuous) infilled with coal. More joints around
											1281'.
1280	1281					Slt.	M.	Mgr.	65°	Broken	Polished surfaces. Siltstone/sandstone interbedding. 8
											fractures within this foot.
1281	1339					Sst.	Lt.	Cgr.	65°		Coarse grained sandstone, throughout there are fractures
											averaging a foot and a half apart. Some bedding planes
											(fractures) are polished. 1283' to 1283.5' siltstone bed.
											Siltstone bed is highly fractured. (7 fractures). There
											is mudstone infilling at 1313'. Mudstone clasts from
											1325' to 1327'

Diamond Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 11/82

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1339	1348					Sst.	Lt.	Cgr.	-	Broken	Crossbedding. Fractures throughout. 1342' - 1344' fracture zone. In this zone fractures occur every 1". From 1345 to 1346 fractures occur every 3". Coal and mudstone clasts throughout.
1348	1392					Sst.	Lt.	Cgr.	55°	Massive	Coarse, light sandstone. 5 bedding fractures 1360' - 1348'. From 1360' to 1366' there are 10 fractures. From 1367'-1392', The sandstone is massive. It has one joint that is continuous at 55° to the c.a. It is at 1380' and infilled with calcite. Sandstone continues to get darker in colour.
1392	1394.5					Coal	Dk.	Fgr.	-	-	Had been removed and sent to assay office.
1394.5	1397					Mst.	Dk.	Fgr.	70°	Broken	10 bedding fractures within this footage. Polished surfaces with coal infilling.
1397	1405			425.8	428.2	Coal	Dk.	Fgr.	-	-	Had been removed and sent to assay office. 2.4m coal
1405	1424					Sst.	Lt.	Cgr.	70°	Broken	Bedding fractures occur at 1414', 1415', 1416', 1417', 1418' and 1419', then sandstone is massive. Gradually darkens in colour.
1424	1466					Sst.	Lt.	Cgr.	70°	Broken	From 1424' to 1442', narrow banding is visible. From 1442 to 1466' sandstone is intacted. Bedding angle changes from 70° at 1426' to 65° at 1449' to 55° at 1460'. Between 1424' and 1442' core is broken along bedding planes about every 6". Cross-bedding is visible from 1444' to 1456'.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 11, 1982

LATITUDE	DEPARTURE	ELEVATION

Area | Total Depth | COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1466	1509					Sst.	Lt.	Cgr.	70°	Intact	Coarse grained sandstone. Sandstone becomes lighter from
											1496' - 1509'. Crossbedding from 1496' - 1509'. No joints.
											Fractured (non-continuous) at 1486' at 10° to c.a.
1509	1537					Sst.	Lt.	Cgr.	65°	Intact	No fractures or joints. Coarse sandstone. Planar bedding.
1537	1570					Sst.	M.	Cgr.	70°	Broken	Crossbedding at 1561'. Sandstone is gradually becoming
											finer. Very fine grained sandstone at 1570' to 1575'. Light
											and dark planar bedding. Bedding fractures approximately
											6' apart from 1541' to 1552'. 5 bedding fractures from
											1552' to 1560'. Fractures 6" apart from 1560' to 1566'.
											Two calcite infilled joints at 65° to c.a. at 1565' and 1567'
1570	1575					Sst.	M.	Fgr.	70°	Intact	Unbroken, dark, fine grained sandstone.
1575	1584					Sst.	Lt.	Mgr.	65°	Broken	1575' - 1580' is unbroken. This section shows crossbedding
											(planar) from 1580' to 1584' core is fractured 20 times. All
											fractures occur at 65° to c.a. and along bedding planes.
											There is banding and some of the bedding fractures are polished
1584	1607					Sst.	Lt.	Cgr.	75°	Broken	1584' - 1591' intact sandstone. Bedding is practically
											horizontal. 1591' to 1592' core is broken. Bedding fractures
											1" apart. Some slickensides and polished surfaces.
											1591' - 1607' unbroken coarse grained sandstone. Occasional
											joint 30° to c.a. Joint is calcite infilled. At 1606'
											fracture with coal infilling. Bedding angle remains constant.

Diamond Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date: May 11, 1982

LATITUDE	DEPARTURE	ELEVATION

Area

Total Depth

COAL INTERSECTIONS CORRECTED BY GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO
DIRECTIONAL SURVEY DONE ☐ YES ☐ NO

Core (Ft.) From	Core (Ft.) To	Rad. Log (Ft.) From	Rad. Log (Ft.) To	Rad. Log (Meters) From	Rad. Log (Meters) To	Lithology	Color	Grain Size	Core Bedding Angle (°)	Core Status	Additional Information
1607	1621					Sst.	M.	Mgr.	70°	Broken	1607' is a joint 0° to c.a. - calcite infilled. Bedding fractures occur approximately every 5". This is much darker sandstone than from 1584' to 1607'. There are some polished surfaces. Some bands of mudstone.
1621	1635					Sst.	M./ DK.	Fgr.	65°	Broken	Fossils present. Long (1') joints running at 0° to c.a. (discontinuous). Calcite infilling. Fossils have been replaced by coal. Bedding fractures every 7" with coal infilling.
											END OF HOLE. T_D = 498.4m

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: March 26/82

LATITUDE	DEPARTURE	ELEVATION
151801.1	24064.5	1927.5

Ore Classes & Aver.

0.0

Block: Sect: Place: TURNBULL MTN. App. Bear: App. Dip.: Length: 198.1 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	5.4			Sandstone.				
5.4	13.8			Siltstone.				
13.8	16.4	45.3	53.8	COAL. - 2.6 m. (8.5'). Seam 11u.	11u	1914.2	2.6	
16.4	30.0			Sandy siltstone.				
30.0	32.0			Silty - mudstone.				
32.0	54.3			Sandstone.				
54.3	60.6	178.1	198.8	COAL- 6.3 m. (20.7'). Seam 9.	9	1873.2	6.3	
60.6	63.6			Siltstone with bands of sandstone.				
63.6	69.0			Siltstone.				
69.0	102.0			Sandstone.				
102.0	158.4			Siltstone.				
158.4	159.6	519.7	523.6	COAL - 1.2 m. (3.9'). Seam 7u.	7u	1774.1	1.2	
159.6	162			Mudstone - slightly silty.				
162.0	166.8	531.5	547.2	COAL - 4.8 m. (15.7'). Seam 7.	7	1765.5	4.8	
166.8	175.8			Siltstone with shale bands.				
175.8	177.6			COAL. 1.8 m. (5.9'). Seam 5.	5	1752.2	1.8	
177.6	180.0			Mudstone - interburden.				
180.0	183.4	590.6	601.7	COAL. 3.4 m. (11.1'). Seam 5.	5	1747.5	3.4	
183.4	191			Siltstone.				
				END OF HOLE.				

Hole No. RH 287 Page 1 of 1

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW

Date: MAR. 26/82

LATITUDE	DEPARTURE	ELEVATION
151,868.9 m. N.	23,998.6 m. E.	1940.6 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		TURNBULL MTN.			212.2 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0	3.0			Overburden.				
3.0	5.3			Siltstone.				
5.3	8.1	17.4	26.6	COAL. 2.8 m. (9.2'). Seam 12.	12	1935.3	2.8	
8.1	16.9			Siltstone with interbedded sandstone.				
16.9	18.5	55.4	60.7	COAL. 1.6 m. (5.3'). Seam 11u.	11u	1923.7	1.6	
18.5	35.4			Siltstone with interbedded sandstone.				
35.4	60.0			Sandstone (massive).				
60.0	66.0	196.8	216.5	COAL. 6.0 m. (19.7'). Seam 9.		1880.6	6.0	
66.0	68.8			Siltstone with sandstone bands.				
68.8	74.7			Siltstone.				
74.7	111.5			Sandstone (massive).				
111.5	117.0			Siltstone with sandstone bands.				
117.0	119.5			Sandstone.				
119.5	125.0			Siltstone.				
125.0	129.9			Sandstone.				
129.9	166.0			Siltstone with sandstone bands.				
166.0	166.9	544.6	547.6	COAL. 0.9 m. (3.0'). Seam 7u.	7u	1774.6	0.9	
166.9	169.8			Siltstone.				
169.8	175.8	557.1	576.8	COAL. 6.0 m. (19.7'). Seam 7.	7	1770.8	6.0	
175.8	185.4			Shaley siltstone.				
185.4	197.3	608.3	647.3	COAL. 11.9 m. (39.0). Seam 5. (situated in fault zone).	5	1743.3	11.9	

Hole No. RH 288

2307 — MDN

...y Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: RTDW Date:

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
197.3	199.2			Shaley siltstone.				
199.2	204.6	653.5	671.3	COAL. 5.4 m. (17.7'). Seam 5.	5	1741.4	5.4	
204.6	212.2			Sandy siltstone.				
				END OF HOLE.				

Hole No. RH 288

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2907 — NDH

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 26/82

LATITUDE	DEPARTURE	ELEVATION
144,478.4 M. N.	22,997.6 M. E.	1769.6 M.

Ore Classes & Aver. 0.0

Block: Sect: Place: South Greenhills App. Bear: App. Dip.: Length: 217.8 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ✓ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	1.8			Overburden.				
1.8	7.8			Sandy siltstone.				
7.8	9.4			Sandstone.				
9.4	45.1			Siltstone with sandstone interbeds.				
45.1	50.4	148.0	165.3	Coal 5.3 M. (17.3') seam $\overline{Ro}$ 0.9826		1724.5	5.3	
50.4	59.7			Sandstone with siltstone banding.				
59.7	91.2			Sandy siltstone (massive)				
91.2	98.7	299.2	323.8	Coal 7.5 M. (24.6') Seam. $\overline{Ro}$ 1.0268		1678.4	7.5	
98.7	104.4			Siltstone.				
104.4	106.2			Mudstone.				
106.2	117.0			Shaley Siltstone.				
117.0	119.7			Mudstone with siltstone band.				
119.7	123.6			Siltstone.				
123.6	132.6			Sandstone with siltstone banding.				
132.6	134.4			Bituminous siltstone.				
134.4	136.8			Siltstone with bituminous bands.				
136.8	140.7	448.8	461.6	Coal 3.9 M. (12.8'). Seam $\overline{Ro}$ 1.0646		1632.8	3.9	
140.7	142.0			Shaley siltstone.				
142.0	148.4			Coal 6.4 M. (21.0) Seam $\overline{Ro}$ 1.0608		1627.6	6.4	
148.4	149.5			Shaley siltstone.				
149.5	150.5	490.5	493.8	Coal 1.0 M. (3.3')		1620.1	1.0	

Hole No. 1300

2607 — NDN

...ary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
150.5	156			Sandstone				
156.0	165.6			Sandy siltstone.				
165.6	170.4			Shaley siltstone.				
170.4	190.2			Massive siltstone.				
190.2	192.8	624.0	632.5	Coal 2.6 M. (8.5') Seam.		1579.4	2.6	
192.8	205.0			Muddy siltstone.				
205.0	211.5	672.5	694.0	Coal. 6.5 M. (21.5') Seam.		1564.6	6.5	
211.5	217.8			Muddy siltstone.				
				END OF HOLE.				

Hole No. 1300

Page 2 of 2

2507 — NDM

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:					
Logged By: RTDW	Date: MAR 29/82	LATITUDE 150,899.4 M. N.	DEPARTURE 22,095.2 M. E	ELEVATION 1761.4 M.	Ore Classes & Aver. 0.0
Block:	Sect:	Place: LAKE MTN.	App. Bear:	App.: Dip.:	Length: 165.9 M.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	3.0			Overburden.				
3.0	9.9			Mudstone with siltstone bands.				
9.9	25.2			Siltstone with bands of mudstone.				
25.2	33.3			Sandstone with silty bands.				
33.3	35.0			Mudstone.				
35.0	41.5			Siltstone.				
41.5	45.0	136.2	149.3	Coal 4.0 M. (13') seam. $\overline{Ro}$ 1.2348		1719.9	4.0	
45.0	55.7			Siltstone evenly interbedded with mudstone.				
55.7	59.4	182.7	194.9	Coal 3.7 M. (12.2') seam $\overline{Ro}$ 1.2750		1705.7	3.7	
59.4	66.5			Siltstone with thin mudstone bands.				
66.5	67.8	218.2	222.4	Coal 1.3 M. (4.3') seam		1694.9	1.3	
67.8	74.4			Siltstone interbedded with mudstone.				
74.4	78.8			Sandy siltstone.				
78.8	96.3			Massive sandstone.				
96.3	101.0			Sandstone with siltstone bands.				
101.0	103.6			Sandstone.				
103.6	107.5			Interbedded sandstone and siltstone.				
107.5	115.2			Siltstone with small mudstone bands.				
115.2	118.2			Sandstone.				
118.2	122.7	387.8	402.6	Coal 4.5 M. (14.8') seam $\overline{Ro}$ 1.3076		1643.2	4.5	
122.7	128.4			Siltstone with 2.0 M. thick band of sandstone.				

Hole No. Rh 1320 Page 1 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW

Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
128.4	140.7			Sandstone with intermittent, small bands of siltstone.				
140.7	144.0			Silty sandstone.				
144.0	146.3			Siltstone.				
146.3	154.3			Siltstone interbedded with siltstone.				
154.3	165.9			Massive sandstone.				
				END OF HOLE.				

Hole No. 1320

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2507 — NON

Rotary Drill Geological Log

Fording Coal Limited — FORDING RIVER OPERATIONS

Objective:		LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: RTDW	Date: Mar. 29/82	150,937.1 M. N.	21,847.1 M. E.	1728.3 M.	0.0
Block:	Sect:	Place: LAKE MTN.	App. Bear:	App.: Dip.:	Length: 200.0 M.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES NO

From m.	To m.	From Ft.	To Ft.	Description		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.1			Overburden - gravel.					
6.1	9.0			Siltstone.					
9.0	16.8			Sandstone.					
16.8	28.8			Sandstone fairly evenly interbedded with siltstone.					
28.8	31.2			Sandstone.					
31.2	39.0			Sandstone with thin siltstone interbeds.					
39.0	44.4	128.0	145.7	Coal 5.4 M. (17.7') seam 'H'	$\overline{Ro}$ 0.9996	'H'	1689.3	5.4	
44.4	46.0			Mudstone.					
46.0	57.0			Sandstone with thinly interbedded siltstone.					
57.0	58.8	187.0	192.9	Coal 1.8 M. (5.9') seam 'HL'	$\overline{Ro}$ 1.0078	'HL'	1671.3	1.8	
58.8	59.5			Siltstone parting.					
59.5	60.0	195.2	196.8	Coal 0.5 M. (1.6') Seam 'HL'.		'HL'	1668.8	0.5	
60.0	68.7			Siltstone with thin sandstone bands.					
68.7	79.5			Sandstone evenly interbedded with siltstone.					
79.5	81.6			Sandstone.					
81.6	84.0			Sandy siltstone.					
84.0	94.2			Sandstone with thin bands of siltstone.					
94.2	98.0	309.1	321.5	Coal 3.8 M. (12.5') seam 'G'	$\overline{Ro}$ 1.0244	'G'	1634.1	3.8	
98.0	120.4			Sandstone fairly evenly interbedded with siltstone.					
120.4	131.0			Sandy siltstone.					
131.0	140.0			Sandstone with 1.5 M. thick bands of siltstone.					

Hole No. RH 1322

2607 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: RTDW Date:

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
140.0	148.2			Siltstone with thin bands of sandstone.				
148.2	155.2			Sandstone with siltstone interbeds.				
155.2	161.8	509.2	530.8	Coal 6.6 M. (21.6') Seam 'E' $\overline{Ro}$ 1.1424	'E'	1573.1	6.6	
161.8	167.4			Siltstone with sandstone bands.				
167.4	185.3			Sandstone.				
185.3				Interbedded siltstone/sandstone (70/30).				
191.7	200.0			Sandstone.				
				END OF HOLE.				

Hole No. RH 1322

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:					
Logged By: RTDW	Date: Mar.29/82	LATITUDE 151,113.6 M N.	DEPARTURE 22,310.9 M. E.	ELEVATION 1732.9 M.	Ore Classes & Aver. 0.0
Block:	Sect:	Place: LAKE MTN.	App. Bear:	App.: Dip.:	Length: 169.5

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.1			Overburden - Gravel.				
6.1	13.7			Interbedded siltstone/mudstone (75/25)				
13.7	22.8	45.0	74.8	Coal 9.1 M. (29.8') seam 'E'	'E'	1719.2	9.1	
22.8	30.6			Interbedded siltstone/mudstone (55/45)				
30.6	39.9			Interbedded sandstone/siltstone (65/35)				
39.9	46.2			Siltstone.				
46.2	61.3			Sandy siltstone.				
61.3	71.7	201.1	235.2	Coal 10.4 M. (34.1) Seam 'D'	D	1671.6	10.4	
71.7	84.3			Siltstone				
84.3	86.5	276.6	283.8	Coal 2.2 M. (7.2') Seam 'DL'	DL	1648.6	2.2	
86.5	92.7			Interbedded siltstone/mudstone (60/40)				
92.7	98.6			Siltstone.				
98.6	105.0			Sandstone with minor siltstone bands.				
105.0	120.8			Silty sandstone.				
120.8	136.8	396.3	448.8	Coal 16.0 M. (52.5) Seam 'B'.	B	1612.1	16.0	
136.8	143.4			Sandy siltstone.				
143.4	156.0			Silty Sandstone.				
156.0	169.5			Siltstone with minor mudstone bands.				
				END OF HOLE.				

Hole No. RH 1323

2807 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
			LATITUDE	DEPARTURE	ELEVATION		
Logged By: RTDW	Date: MAR. 29/82		151,294.4 M. N.	22,338.1 M. E.	1732.3 M.		0.0
Block:	Sect:	Place: LAKE MTN.	App. Bear:	App.: Dip.:	Length: 168.7 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	5.8			Overburden - gravel.				
5.8	8.8			Sandstone.				
8.8	15.7			Siltstone.				
15.7	31.2			Sandstone with minor siltstone bands.				
31.2	53.4			Interbedded siltstone/mudstone (50/50).				
53.4	60.3			Siltstone.				
60.3	68.4			Interbedded siltstone/mudstone (65/35).				
68.4	81.6			Siltstone to sandy siltstone @ bottom of the interval.				
81.6	83.8	267.7	274.9	Coal 2.2 M. (7.2'). Seam 'GU'.	'GU'	1650.7	2.2	
83.8	94.2			Interbedded sandstone/siltstone (50/50).				
94.2	96.1	309.1	315.3	Coal 1.9 m. (6.2') Seam 'GL'.	'GL'	1638.1	1.9	
96.1	102.7			Siltstone.				
102.7	109.8			Slaley siltstone.				
109.8				Fault zone.				
109.8	168.7			Siltstone - Fernie Group.				
				END OF HOLE.				

Hole No. RH 1324 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 31/82

LATITUDE	DEPARTURE	ELEVATION
150,799.3 m. N.	22,087.5 m. E.	1746.5 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		LAKE MTN.			151.7 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.1			Overburden.				
6.1	13.0			Sandstone/siltstone interbeds. (70/30).				
13.0	17.2	42.7	56.4	Coal. 4.2 m. (13.7'). Seam PT. 'D'.	Pt.D	1733.5	4.2	
17.2	28.2			Muddy siltstone.				
28.2	30.0	92.5	98.4	COAL. 1.8 m. (5.9'). Seam 'DL'.	'DL'	1718.3	1.8	
30.0	33.0			Siltstone.				
33.0	46.8			Sandstone.				
46.8	61.8			Siltstone/sandstone interbeds. (65/35).				
61.8	69.8	202.8	229.0	COAL. 8.0 m. (26.2'). Seam 'B'.	'B'	1684.7	8.0	
69.8				Siltstone parting.				
70.6	71.5	231.6	234.5	COAL. 0.9 m. (2.9'). Seam 'B'.	'B'	1675.9	0.9	
71.5	77.4			Muddy siltstone.				
77.4	151.7			Basal sandstone - Fernie group.				
				END OF HOLE.				

Hole No. RH 1325 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 31/82

LATITUDE	DEPARTURE	ELEVATION
150,802.1 m. N.	21,975.5 m. E.	1730.3 m.

Ore Classes & Aver.: 0.0

Block: Sect: Place: LAKE MTN. App. Bear: App. Dip.: Length: 117.8 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	12.2			Overburden - gravel.				
12.2	21.3			Siltstone.				
21.3	25.8	70.0	84.6	COAL. 4.5 m. (14.8'). Seam 'F'?.	F?	1709.0	4.5	
25.8	28.2			Sandstone.				
28.2	32.4			Sandy siltstone.				
32.4	43.2			Siltstone.				
43.2	49.0	141.7	160.8	COAL. 5.8 m. (19.1) Seam 'E'. $\overline{Ro}$ 1.3130	'E'	1687.1	5.8	
49.0	59.4			Sandstone.				
59.4	81.2			Siltstone/sandstone interbeds (70/30).				
81.2	89.4	266.4	293.3	COAL. 8.2 m. (27.0). Seam 'D'. $\overline{Ro}$ 1.2896	'D'	1649.1	8.2	
89.4	91.5			Mudstone.				
91.5	97.3			Siltstone.				
97.3	117.8			Sandstone.				
				END OF HOLE.				

Hole No. RH 1327 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW

Date: APR. 1/82

LATITUDE	DEPARTURE	ELEVATION
150,707.9 m. N.	22,200.9 m. E.	1718.7 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		LAKE MTN.			84.7 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	3.0			Overburden.				
3.0	84.7			Basal sandstone - Fernie group.				
				END OF HOLE (No coal in this hole).				

Hole No. RH 1328

Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW

Date: MAR. 29/82

LATITUDE	DEPARTURE	ELEVATION
150,880.1 M. N.	22,344.3 M. E.	1709.9 M.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		LAKE MTN.			90.8

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.1			Overburden - gravel.				
6.1	16.2			Sandy siltstone to siltstone.				
16.2	17.7			Sandstone.				
17.7	35.8			Shaley Siltstone.				
35.8	90.8			Siltstone - Fernie FM.				
				END OF HOLE (NO COAL IN THIS HOLE).				

Hole No. RH 1329

Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Cre Classes & Aver.

0.0

Logged By: RK Date: FEBRUARY 1981

Block:	Sect:	Place: Greenhills M. Spoil Area - Lake Mt. West	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	5.5	0	18.0	Overburden (Driller reported 22'/6.7m till and gravel)				
5.5	13.3			Siltstone, sandy near top, shaley siltstone near bottom				
13.3	13.6			Coal 0.3m				
13.6	15			Mudstone				
15	19.7			Siltstone, sandstone bands				
19.7	20			Coal 0.3m				
20	23.5			Mudstone				
23.5	30.7			Siltstone				
30.7	33			Sandstone				
33	37			Siltstone, sandy near top				
37	40			Mudstone				
40	47.2			Sandstone, siltstone interbeds				
47.2	52			Siltstone, mudstone bands				
52	56.7			Sandstone				
56.7	62.4			Mudstone with siltstone bands				
62.4	63			Coal 0.6m				
63	76			Sandstone, mudstone bands, silty in lower half interval				
76	76.6	249.5	251.5	Coal 0.6m 2'				
76.6	77.5			0.9m 3' mudstone				
77.5	79	254	259	Coal 1.5m 5'				
79	85.7			Sandstone				
85.7	87.4	281	286.5	Coal 1.7m 5.5' seam - M				
87.4	92.3			Mudstone band at top and sandstone				

Hole No. RH 1381 Page 1 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
92.3	93.3	303	306	Coal 1.0m 3'				
93.3	106			Mudstone with siltstone bands				
106	116			Sandstone				
116	120			Siltstone at top and mudstone				
120	123	393.5	403.5	Coal with 0.5m/2' shale band at 121.9m 3(2.5)m 10(8)' seam - ~~B~~ Km2				
123	129.7			Siltstone with bands of sandstone and mudstone				
129.7	150.5			Sandstone				
150.5	158.9			Mudstone				
158.9	159.7			Coal 0.8m 2.5'				
159.7	171.3			Mostly mudstone some siltstone bands of sandstone				
171.3	173	562	567.5	Coal 1.7m 5.5'				
173	175.2			Siltstone at top and mudstone				
175.2	175.5			Coal 0.3m				
175.5	178.3			Mudstone				
178.3	180	585	590.5	Coal 1.7m 5.5' seam - X ?				
180	189		620	Siltstone				
				End of hole - February 8, 1981				

Hole No. RH 1381

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: RK Date: Feb./81

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		Greenhills N. Spoil -	Lake Mtn. West		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	13.7	0	45	Overburden.				
13.7	22.5			Siltstone, mudstone band at top.				
22.5	26.4			Mudstone.				
26.4	27	86.5	88.5	Coal 0.6m 2'				
27	27.7			0.7m 2' Mudstone.				
27.7	29.4	91	96.5	Coal 1.7m 5.5' Seam - K				
29.4	39.5			Siltstone.				
39.5	44.3			Mudstone.				
44.3	50			Siltstone.				
50	51.8			Mudstone.				
51.8	52.4	170	172	Coal 0.6m 2'				
52.4	56.3			Mudstone with siltstone band.				
56.3	65.3			Sandstone band at top, siltstone, sandy siltstone 62.3 - 65.3m.				
65.3	68.7			Mudstone.				
68.7	69.5	225.5	228	Coal 0.8m 2.5'				
69.5	72.5			Silty sandstone, mudstone band at top.				
72.5	77			Mudstone.				
77	77.6	252.5	254.5	Coal 0.6m 2'				
77.6	81.3			Sandstone.				
81.3	91.5			Siltstone.				
91.5	116			Sandstone, silty towards bottom.				
116	122.5	380.5	402	Coal with 0.6m/2' shale band at 119.4m 6.5(5.9)m 21.5(19.5)' Seam - I				

Hole No. 1384

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☐ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
122.5	125.3			Mudstone.				
125.3	128			Siltstone, mudstone band at bottom.				
128	131.3	420	430.5	Coal 3.3m 10.5' Seam - Hm1.				
131.3	131.7			0.4m 1.5' Mudstone.				
131.7	132			Coal 0.3m 1'				
132	137.4			Mudstone.				
137.4	155			Mostly siltstone, sandstone and mudstone bands.				
155	169			Sandstone.				
169	170			Mudstone.				
170	175	557.5	574.0	Coal 5m 16.5' Seam = H				
175	177.5			Mudstone.				
177.5	181.1		594	Siltstone, sandstone near bottom.				

END OF HOLE FEBRUARY 5/81

Hole No. 1384

2507 – NCIN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: RK Date: March 1981

Block: Sect: Place: Greenhills N. Spoil Area App. Bear: App.: Dip.: Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	11.3	0	37	Overburden, bottom 2m could be coal, casing 40'/12.2m				
11.3	15			Mudstone				
15	17.7	49	58	Coal 2.7m 9' seam - L ??				
17.7	21.5			Mudstone				
21.5	40.5			Silty sandstone and siltstone				
40.5	43.8			Mudstone				
43.8	45.5	143.5	149	Coal 1.7m 5.5' seam - K ?				
45.5	49.8			Mudstone, siltstone bands				
49.8	70			Siltstone, shaley intervals in upper half interval, sandy in lower half interval				
70	71.3			Mudstone				
71.3	72.1	234	236.5	Coal 0.8m 2.5'				
72.1	73			0.9m 3' mudstone				
73	73.8	239.5	242	Coal 0.8m 2.5'				
73.8	81			Mudstone				
81	82	265.5	269	Coal 1.0m 3.5'				
82	83			1m 3' mudstone				
83	84.2	272	276	Coal 1.2m 4'				
84.2	90			Mudstone				
90	115.4			Siltstone mudstone band at bottom				
115.4	118.9	378.5	390	Coal 3.5m 11.5' seam - I				
118.9	120.2			1.3m 4.5' mudstone				
120.2	122	394.5	400.5	Coal 1.8m 6'				
122	127.3			Mudstone				

Hole No. RH 1385 Page 1 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
127.3	130.8	417.5	429	Coal 3.5m 11.5' seam - Hml				
130.8	146			Mudstone, some siltstone in the middle				
146	159			Siltstone with sandstone interbeds				
159	170.7		560	Mudstone, siltstone near bottom				
				End of hole - March 3, 1981				

Hole No. RH 1385

2807 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: C. Poulin Date: Nov./82	151,501.2	21,716.3	1733.8m	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
				-90	162.5m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ▨ YES ▭ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	19.2			overburden				
19.2	22.2			mudstone				
22.2	28.0			siltstone				
28.0	31.3			mudstone				
31.3	35.0	102.5	114.5	coal, 3.7m, 12', seam KM2	KM2	1702.5	3.7	3.4
35.0	61.4			sandstone with minor siltstone and mudstone bands				
61.4	62.3	201.5	204.5	coal, 0.9m, 3', seam K pt	Kpt	1672.4	0.9	0.9
62.3	63.2			mudstone				
63.2	64.0	207.5	210.0	coal, 0.8m, 2.5', seam Kpt	Kpt		0.8	0.8
64.0	65.1			sandstone				
65.1	73.3			siltstone with two mudstone bands				
73.3	75.0	240.5	246.0	coal, 1.7m, 5.5', J3	J3	1660.5	1.7	1.4
75.0	82.5			siltstone with minor sandstone				
82.5	83.1	270.5	272.5	coal, 0.6m, 2.0', J2	J2	1651.3	0.6	0.6
83.1	88.7			siltstone with minor sandstone				
88.7	91.0	291.0	298.5	coal, 2.3m, 7.5', seam J1	ptJ1	1645.1	2.3	2.3
91.0	92.0			mudstone				
92.0	93.0	302.0	305.0	coal, 1.0m, 3', pt J1	ptJ1		1.0	1.0
93.0	107.0			siltstone				
107.0	110.2	351.0	361.5	coal, 3.2m, 10.5', seam I pt	pt I	1626.8	3.2	3.2
110.2	113.3			mudstone	pt I		1.5	1.5
113.3	114.8	371.5	376.5	coal, 1.5m, 5', seam I pt				
114.8	132.0			sandstone with siltstone				

Hole No. RH 1386 Page 1 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: C. Poulin Date: Nov./82

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
					162.5m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
132.0	133.0			mudstone				
133.0	135.7	436.0	445.0	coal, 2.7m, 9'. seam HM1				
135.7	139.0			siltstone	HM1	1600.8	2.7	2.7
139.0	140.0			mudstone				
140.0	152.5			siltstone grading into sandstone				
152.5	154.5			mudstone				
154.5	162.0			sandstone grading into siltstone				
162.0				END OF HOLE				

Hole No. RH 1360

2507 — NDH

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: John Stokmans Date: Nov.16,1982

LATITUDE	DEPARTURE	ELEVATION
151,714.6 m	21,708.1 m	1728.4 m

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
					170.2 m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ▨ YES ▭ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION m	TTL. TH. m	NET TH. m
0.0	6.0	0.0	19.5	overburden				
6.0	8.8	19.5	28.8	coal seam 2.2 m (7.0')	M	1722.4	2.2	
8.8	12.6	28.5	--	sandstone				
12.6	16.0			siltstone				
16.0	18.7			mudstone				
18.7	21.0			coal 2.3 m (7.5')	L	1709.7	2.3	
21.0	23.5			mudstone				
23.5	23.7			coal stringer				
23.7	25.4			siltstone				
25.4	26.6	83.5	87.5	coal seam 1.2 m (4.0') part of L seam				
26.6	28.5			mudstone				
28.5	30.3			siltstone				
30.3	34.8			mudstone				
34.8	39.5			sandstone				
39.5	44.0			mudstone				
44.0	46.7			siltstone				
46.7	48.7			mudstone				
48.7	52.0			coal seam 3.3 m (2.8 m) 11' (9.5')	Km2	1679.7	3.3	2.8
52.0	53.0			siltstone				
53.0	55.5			mudstone				
55.5	58.2			sandy siltstone				
58.2	59.3			mudstone				

Hole No RH 1387

2507 — NON

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: John Stokmans Date: Nov. 16, 1982

LATITUDE	DEPARTURE	ELEVATION
151,714.6 m	21,708.1 m	1728.4

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
					170.2 m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION m	TTL TH. m	NET TH. m
59.3	66.8			sandstone				
66.8	71.0			mudstone				
71.0	73.3			sandstone				
73.3	83.8			mudstone with minor siltstone bands				
83.3	84.7	275.0	278.0	coal seam 0.9 m (3.0')	K	1644.6	0.9	
84.7	87.0			mudstone				
87.0	88.0			silty sandstone				
88.0	89.5			siltstone				
89.5	91.3			mudstone				
91.3	94.0			muddy siltstone				
94.0	95.4	308.5	313.0	coal seam 1.4 m (4.5')	J3	1634.4	1.4	
95.4	97.9			mudstone				
97.9	99.0			sandstone				
99.0	100.9			siltstone degrading to mudstone				
100.9	101.2	331.0	332.0	coal stringer	J2	1627.5	0.3	
101.2	106.3			mudstone				
106.3	108.2	349.0	355.0	coal seam 1.9 m (6.0')	J1	1622.1	1.9	
108.2	109.9			mudstone				
109.9	110.8	360.5	363.5	coal seam 0.9 m (3.0')				
110.8	111.6			sandstone				
111.6	113.5			siltstone				
113.5	122.4			starts mudstone, grades into siltstone				
122.4	126.4			mudstone				

Hole No. RH 1387 Page 2 of 3

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: John Stokman Date: Nov. 16, 1982

LATITUDE	DEPARTURE	ELEVATION
151,714.6 m	21,708.1 m	1728.4

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
					170.2 m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [xxx] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
126.4	130.4	414.5	427.5	coal seam 4.0 m (13.0')	I	1602.0	4.0	
130.4	134.3			mudstone				
134.3	135.4	440.5	444.0	coal seam 1.1 m (3.5') part of I seam				
135.4	137.2			mudstone				
137.2	139.2			siltstone				
139.2	141.0			mudstone				
141.0	150.5			interbedded sandstone and siltstone, fining downwards				
150.5	158.3			sandstone				
158.3	159.4			mudstone				
159.4	161.7			coal seam 2.3 m (7.5')	Hm1	1569.0	2.3	
161.7	170.0			siltstone				
				E.O.H.				

Hole No. RH 1387

2507 – NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: C. Poulin Date: Nov/82	151,922.3 N	21,731.6 E	1733.6 m	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
				-90°	177.5m

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [xxx] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0	8.2	0	27'	overburden, till and gravel				
8.2	32.8			interbedded mudstone and siltstone				
32.8	37.0			sandstone				
37.0	40.7			siltstone with mudstone near the bottom				
40.7	43.0			sandstone				
43.0	46.7			siltstone				
46.7	48.2			sandstone				
48.2	48.8	158.0	160.0	coal, 0.6m, 2', seam?		stringer		
48.8	54.8			sandstone with minor siltstone band				
54.8	56.6	179.5	185.5	coal, 1.8m, 6', seam L ?	L	1678.8	1.8	1.8
56.6	59.5			siltstone with minor mudstone band near the bottom				
59.5	63.3			sandstone				
63.3	65.9			mudstone				
65.9	66.2	216.2	217.2	coal, 0.3m, 1'		stringer		
66.2	72.3			mudstone with minor siltstone band				
72.3	92.4			sandstone with minor siltstone band				
92.4	94.6	303.0	310.0	coal, 2.2m, 7', seam - KM2	KM2	1641.2	2.2	2.2
94.6	95.6			mudstone				
95.6	95.9	313.5	314.5	coal, 0.3m, 1'		stringer		
95.9	98.0			siltstone				
98.0	99.3			mudstone				
99.3	100.6			sandstone				
100.6	111.0			siltstone with minor mudstone bands				

Hole No. RH 1388

2507 — NON

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: C. Poulin Date: Nov/82

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXXXXYES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
111.0	119.3			sandstone				
119.3	130.6			siltstone with minor mudstone band				
130.6	131.4	428.5	431.0	coal 0.8m, 2.5', seam J3	J3	1603.0	0.8	0.8
131.4	141.7			siltstone with two minor sandstone bands				
141.7	143.3	465.0	470.0	coal, 1.6m, 5', seam J2	J2	1591.9	1.6	1.6
143.3	145.3			sandstone				
145.3	145.6	476.5	477.5	coal, 0.3m, 1'		stringer		
145.6	149.3			siltstone				
149.3	151.3	490.0	496.5	coal, 2.0m, 6.5', seam J1	J1	1584.3	2.0	2.0
151.3	154.0			siltstone				
154.0	154.7	505.0	507.0	coal, 0.7m, 2.0'	U	1579.6	0.7	0.7
154.7	164.4			siltstone with minor mudstone band				
164.4	168.4	539.5	552.5	coal, 4.0m,13', seam I	I	1569.2	4.0	4.0
168.4	172.2			siltstone with minor mudstone band near the top				
172.2	173.3	565.0	568.5	coal, 1.1m, 3.5'	U	1561.4	1.1	1.1
173.3	177.0			mudstone				
177.0				END OF HOLE				

Hole No. RH 1388 Page 2 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:								Ore Classes & Aver.
			LATITUDE	DEPARTURE	ELEVATION			
Logged By: RTDW	Date: APR. 1/82		151,202.5 m. N.	25,354.8 m. E.	1890.4 m.			0.0
Block:	Sect:	Place: UPPER CLODE	App. Bear:	App.: Dip.:	Length: 175.5			

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	3.0			Overburden.				
3.0	16.8			Siltstone with minor sandstone interbed @ 8.0 M.				
16.8	9.2			Sandstone with minor siltstone interbeds @ 22.0 m. & 28.0 m.				
29.2	31.2			Mudstone.				
31.2	39.2			Sandstone/siltstone interbeds. (55/45).				
39.2	40.7	128.6	133.5	COAL. 1.5 m. (4.9'). Seam R14L.	R14L	1851.2	1.5	
40.7	64.8			Siltstone.				
64.8	89.6			Siltstone/mudstone interbeds (60/40).				
89.6	92.5	294.0	303.5	COAL. 2.9 m. (9.5). Seam R13.	R13	1800.8	2.9	
92.5	122.7			Siltstone/mudstone interbeds (55/45).				
122.7	127.8			Sandstone.				
127.8	130.0	419.3	426.5	COAL. 2.2 m. (7.2'). Seam R12.	R12	1762.6	2.2	
130.0	130.7			Mudstone parting.				
130.7	132.4	428.8	434.4	COAL. 1.7 m. (5.6'). Seam R12.	R12	1759.7	1.7	
132.4	134.0			Mudstone parting.				
134.0	135.8	439.6	445.5	COAL. 1.8 m. (5.9'). Seam R12.	R12	1756.4	1.8	
135.8	155.5			Mudstone/siltstone interbeds (60/40).				
155.5	157.8	510.2	517.7	COAL. 2.3 m. (7.5'). Seam R11u.	R11u	1734.9	2.3	
157.8	159.7			Mudstone.				
159.7	166.0			Siltstone.				
166.0	170.5	544.6	559.4	COAL. 4.5 m.(14.8'). Seam R11.				
170.5	171.6			Mudstone.				
171.6	175.5			Sandstone.				
				END OF HOLE.				

Hole No. RH 1587 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: RTDW Date: MAR 29/82	151,196.0 m. N.	25,523.7 m. E.	1896.6 m.	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		UPPER CLODE			145.5

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☑ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.1			Overburden.				
6.1	8.8			Siltstone.				
8.8	15.0			Sandstone with thin bands of siltstone.				
15.0	32.8			Interbedded sandstone/siltstone (60/40).				
32.8	34.0	107.6	111.5	Coal 1.2 m. (3.9') Seam R14L	R14L	1863.8	1.2	
34.0	50.0			Siltstone with minor sandstone beds.				
50.0	67.2			Interbedded siltstone sandstone (60/40).				
67.2	74.6			Siltstone.				
74.6	77.1			Coal 2.5 m. (8.2') Seam R13.	R13	1822.0	2.5	
77.1	84.0			Sandstone with minor siltstone bands.				
84.0	92.5			Sandy siltstone.				
92.5	112.8			Sandstone/siltstone interbeds (50/50).				
112.8	114.0	370.0	374.0	Coal 1.2 m. (4.0') seam R12. $\overline{Ro}$ 1.0470	R12	1783.8	1.2	
114.0	114.7			Siltstone parting.				
114.7	116.4	376.3	382.0	Coal 1.7 m. (5.6') Seam R12.	R12	1781.9	1.7	
116.4	117.5			Siltstone parting.				
117.5	118.7	385.5	389.4	Coal 1.2m. (3.9') Seam R12.	R12	1779.1	1.2	
118.7	126.0			Siltstone to sandy siltstone.				
126.0	141.5			Siltstone/sandstone interbeds (65/35).				
141.5	144.7	464.2	474.7	Coal 3.2 m. (10.5') Seam R11u $\overline{Ro}$ 1.0980.	R11u	1755.1	3.2	
144.7	145.5			Siltstone.				
				END OF HOLE.				

Hole No. RH 1588 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 1/82

LATITUDE	DEPARTURE	ELEVATION
150,747.8 m. N.	25,549.1 m. E.	2019.5 m.

Ore Classes & Aver. 0.0

Block: Sect: Place: NO NAME GULCH App. Bear: App. Dip.: Length: 151.4 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	4.6			Overburden.				
4.6	5.0			Interbedded siltstone/sandstone (65/35).				
5.0	1.5			Siltstone.				
31.5	32.2	103.3	105.6	COAL. 0.7 m. (2.3'). Seam 12.	12	1988.0	0.7	
32.2	33.6			Mudstone parting.				
33.6	34.2	110.2	112.2	COAL. 0.6 m. (2.0'). Seam 12.	12	1985.9	0.6	
34.2	35.0			Mudstone parting.				
35.0	36.0	114.8	118.1	COAL. 1.0 m. (3.3'). Seam 12.	12	1984.5	1.0	
36.0	41.7			Muddy siltstone.				
41.7	45.0			Sandstone.				
45.0	47.4			Mudstone.				
47.4	64.2			Interbedded siltstone/sandstone (75/25).				
64.2	67.0	21 0.6	219.8	COAL. 2.8 m. (9.2'). Seam 11u.	11u	1955.3	2.8	
67.0	69.0			Mudstone.				
69.0	77.4			Siltstone.				
77.4	80.7	254.0	264.7	COAL. 3.3 m. (10.7'). Seam 11.	11	1942.1	3.3	
80.7	81.3			Mudstone parting.				
81.3	82.4	266.7	270.3	COAL. 1.1 m . (3.6'). Seam 11.	11	1938.2	1.1	
82.4	83.2			Mudstone.				
83.2	84.6	273.0	277.5	COAL. 1.4 m. (4.5'). Seam 11.	11	1936.3	1.4	
84.6	87.0			Mudstone/siltstone interbed (70/30).				

Hole No. RH 1591

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 1/82

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
87.0	96.0			Sandstone/siltstone interbeds (60/40).				
96.0	103.5			Mudstone.				
103.5	105.2			COAL. 1.7 m. (5.6'). Seam 9.	9	1916.0	1.7	
105.2	106.0			Mudstone parting.				
106.0	109.2	347.8	358.3	COAL. 3.2 m. (10.5'). Seam 9.	9	1913.5	3.2	
109.2	114.6			Mudstone.				
114.6	122.5			Sandstone.				
122.5	131.4			Mudstone with minor siltstone bands.				
131.4	140.0			Siltstone/sandstone interbeds.				
140.0	141.1	459.3	463.0	COAL. 1.1 m. (3.6').				
141.1	151.4			Mudstone siltstone interbeds. (70/30).				
				END OF HOLE.				

Hole No. 1591

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 29/82

LATITUDE	DEPARTURE	ELEVATION
150,886.6 m. N.	26,036.9 m. E.	2017.8 m.

Ore Classes & Aver. 0.0

Block: Sect: Place: UPPER CLODE App. Bear: App.: Dip.: Length: 221.5 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.			TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	3.7			Overburden.					
3.7	6.6			Sandstone.					
6.6	17.1			Siltstone/sandstone interbeds (70/30)					
17.1	20.6	56.1	67.6	Coal 3.5 m. (11.5') Seam R14L.		R14L	2000.7	3.5	
20.6	31.0			Siltstone.					
31.0	51.8			Interbedded sandstone/siltstone (60/40).					
51.8	57.0			Sandstone with minor siltstone banding.					
57.0	68.4			Interbedded siltstone/sandstone. (70/30).					
68.4	72.5	224.4	238.0	Coal 4.1 m. (13.5'). Seam R13.	$\overline{Ro}$ 1.0260	R13	1949.4	4.1	
72.5	74.0			Siltstone parting.					
74.0	75.5	243.0	247.7	Coal 1.5 m. (4.9'). Seam R13.		R13	1943.8	1.5	
75.5	78.8			Siltstone.					
78.8	83.0			Sandstone with minor siltstone bands.					
83.0	95.8			Siltstone with minor sandstone bands to sandy siltstone.					
95.8	100.5	314.3	330.0	Coal 4.7 m. (15.4'). Seam R12.	$\overline{Ro}$ 1.0660	R12	1922.0	4.7	
100.5	109.0			Interbedded siltstone/sandstone (70/30).					
109.9	116.7			Shaley siltstone.					
116.7	122.3	383.0	401.2	Coal, 5.6 m. (18.4'), Seam R11u.	$\overline{Ro}$ 1.0650	R11u	1901.1	5.6	
122.3	138.6			Sandstone with minor siltstone bands.					
138.6	143.4			Sandy siltstone.					
143.4	151.5	470.5	497.0	Coal. 8.1 m. (26.6'), Seam R11.		R11	1874.4	8.1	

Hole No. RH 1592 Page 1 of 2

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear.	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXXX YES ____ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
151.5	152.4			Siltstone parting.				
152.4	154.2	500.0	505.9	Coal. 1.8 m. (5.9'). Seam R11.				
					R11	1865.4	1.8	
154.2	158.2			Siltstone.				
158.2	168.2			Interbedded siltstone/sandstone (60/40).				
168.2	170.2	551.8	558.4	Coal 2.0 m. (6.6'). Seam		1849.6	2.0	
170.2	184.8			Interbedded sandstone/siltstone (50/50).				
184.4	193.4			Siltstone.				
193.4	196.6	634.5	645.0	Coal. 3.2 m. (10.5'). Seam R9.	R9	1824.4	3.2	
196.6	221.5			Sandy siltstone with some sandstone bands.				
				END OF HOLE.				

Hole No. RH 1592 Page 2 of 2

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 1/82

LATITUDE	DEPARTURE	ELEVATION
148,327.9 m. N.	25,206.4 m. E.	1990.5 m.

Ore Classes & Aver. 0.0

Block: Sect: Place: BLACKWOOD App. Bear: App.: Dip.: Length: 164.9 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	34.8			Sandstone with siltstone band @ 22.0 m.				
34.8	36.0	114.2	118.1	COAL 1.2 m. (3.9'). Seam		1955.7	1.2	
36.0	46.8			Siltstone.				
46.8	48.0	153.5	157.5	COAL. 1.2 (3.9'). Seam		1943.7	1.2	
48.0	57.2			Siltstone.				
57.2	57.8	187.7	189.6	COAL. 0.6 m. (2.0').		1933.3	0.6	
57.8	64.6			Siltstone.				
64.6	65.3	211.9	214.2	COAL. 0.7 m. (2.3').		1925.9	0.7	
65.3	68.3			Siltstone.				
68.3	69.2	224.1	227.0	COAL. 0.9m. (2.9').		1922.2	0.9	
69.2	81.0			Siltstone.				
81.0	96.6			Sandstone with siltstone band @ 86.0 m.				
96.6	107.0			Siltstone.				
107.0	126.8			Sandstone.				
126.8	138.1	416.0	453.0	COAL. 11.3 m. (37.1). Seam 4.	4	1863.7	11.3	
138.1	139.8			Siltstone parting.				
139.8	143.7	458.7	471.5	COAL. 3.9 m. (12.8'). Seam 4L.	4L	1850.7	3.9	
143.7	153.0			Siltstone.				
153.0	156.0			COAL. 3.0 m. (9.8'). Seam 2.	2	1837.5	3.0	
156.0	157.6			Siltstone parting.				

Hole No. RH 1645 Page 1 of 2

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
157.6	159.0	517.1	521.7	COAL. 1.4 m. (4.6'). Seam 1.	1	1832.9	1.4	
159.0	164.9			Basal Sandstone.				
				END OF HOLE.				

Hole No. RH 1645 Page 2 of 2

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 1/82

LATITUDE	DEPARTURE	ELEVATION
148,358.6	25,162.8	2011.4

Ore Classes & Aver.

0.0

Block: Sect: Place: BLACKWOOD App. Bear: App.: Dip.: Length: 176.0

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	2.4			Overburden - gravel.				
2.4	10.2			Mudstone.				
10.2	16.8			Siltstone.				
16.8	27.0			Sandstone.				
27.0	33.0			Siltstone.				
33.0	46.0			Sandstone.				
46.0	47.3	151.0	155.2	COAL. 1.3 m. (4.2').		1965.4	1.3	
47.3	75.5			Mudstone/siltstone interbeds (70/30).				
75.5	76.2	247.7	250.0	COAL. 0.7 m. (2.3'). Seam Pt. 5.	Pt.5	1935.9	0.7	
76.2	79.2			Siltstone.				
79.2	80.0	259.8	262.5	COAL. 0.8 m. (2.6'). Seam Pt. 5.	Pt.5	1932.2	0.8	
80.0	86.2			Mudstone/siltstone interbeds. (60/40).				
86.2	94.0			Siltstone.				
94.0	118.2			Sandstone/siltstone interbeds (60/40).				
118.2	133.0			Sandstone.				
133.0	139.4			Siltstone.				
139.4	149.5	457.3	490.5	COAL. 10.1 m. (33.1) Seam 4.	4	1872.0	10.1	
149.5	151.5			Mudstone.				
151.5	152.5			COAL. 1.0 m. (3.3'). Seam 4L.				
152.5	153.5			Siltstone.				
153.5	154.5			COAL.				
154.5	167.0			Siltstone.				

Hole No. RH 1646 Page 1 of 2

...ary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
167.0	169.6	548.0	556.4	COAL. 2.6 m. (8.5'). Seam 2.	2	1844.0	2.6	
169.6	171.4			Siltstone.				
171.4	172.3	562.3	565.3	COAL. 0.9 m. (2.9'). Seam 1.	1	1840.0	0.9	
172.3	176.0			Basal sandstone.				
				END OF HOLE.				

Hole No. RH 1646

2607 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
Logged By: RTDW	Date: APR. 2/82	LATITUDE 148,316.3 m. N.	DEPARTURE 25,284.8 m. E.	ELEVATION 1952.8 m.			0.0
Block:	Sect:	Place: BLACKWOOD	App. Bear:	App.: Dip.:	Length: 157.9 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.2			Sandstone.				
6.2	10.8			Siltstone.				
10.8	24.8			Sandstone.				
24.8	52.2			Mudstone/siltstone interbeds (70/30).				
52.2	52.8	171.3	173.2	COAL. 0.6 m. (2.0'). Seam		1900.6	0.6	
52.8	56.4			Mudstone/siltstone interbeds (60/40).				
56.4	57.0	185.0	187.0	COAL. 0.6 m. (2.0'). Seam				
57.0	78.0			Siltstone/mudstone interbeds (70/30).				
78.0	116.0			Sandstone with minor siltstone bands.				
116.0	125.5	380.6	411.7	COAL. 9.5 m. (31.1'). Seam 4.	4	1836.8	9.5	
125.5	128.7			Siltstone/mudstone. (50/50).				
128.7	132.3			COAL. 3.6 m. (11.4'). Seam 4L.	4L	1824.1	3.6	
132.3	141.3			Siltstone with mudstone interbeds.				
141.3	144.0	463.6	472.4	COAL. 2.7 m. (8.8'). Seam 2.	2	1811.5	2.7	
144.0	145.8			Siltstone.				
145.8	147.0	478.3	482.3	COAL. 1.2 m. (4.0'). Seam 1.	1	1807.0	1.2	
147.0	157.9			Basal Sandstone.				
				END OF HOLE.				

Hole No. RH 1648 Page 1 of 1

2507 — NON

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
Logged By: RTDW	Date: MAR. 30/82	LATITUDE 150,400.1 m. N.	DEPARTURE 27,326.1 m. E.	ELEVATION 2408.9 m.			0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App.: Dip.:	Length: 335.7 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	50			Sandstone with minor siltstone interbeds.				
50.3	[illegible].0	165.0	167.3	Coal 0.7 m. (2.3') Seam R5u.	R5u	2358.6	0.7	
51.0	56.6			Sandstone parting.				
56.6	57.2	185.6	187.7	Coal. 0.6 m. (2.0) Seam R5u.	R5u	2352.3	0.6	
57.2	70.0			Silty sandstone.				
70.0	154.4			Sandstone with minor siltstone interbeds.				
154.4	160.8	506.6	527.6	Coal. 6.2 m. (21.0) Seam R9.	R9	2254.5	6.2	
160.8	168.7			Sandstone.				
168.7	181.5			Sandy siltstone.				
181.5	183.4	595.5	601.7	Coal. 1.9 m. (6.2'). Seam R7. $\overline{Ro}$ 1.2690	R7	2227.4	1.9	
183.4	184.4			Siltstone parting.				
184.4	187.8	604.9	616.1	Coal. 3.4 m. (11.2'). Seam R7. Ro 1.2690	R7	2224.5	3.4	
187.8	239.0			Siltstone with some minor sandstone bands.				
239.0	240.0	784.1	787.4	Coal. 1.0 m. (3.3') Seam R5u.	R5u	2169.9	1.0	
240.0	241.6			Siltstone parting.				
241.6	242.5	792.7	795.6	Coal. 0.9 m. (2.9').Seam R5u.	R5u	2167.3	0.9	
242.5	252.0			Siltstone.				
252.0	253.9	826.8	833.0	Coal. 1.9 m. (6.2'). Seam R5L.	R5L	2156.9	1.9	
253.9	258.0			Siltstone.				
258.0	275.4			Sandstone.				

Hole No. RH 1759

...ary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXXX YES ____ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
275.4	279.5			Siltstone.				
279.5	300.6			Sandstone turning silty towards the bottome of the interval.				
300.6	305.4	986.2	1001.9	Coal. 4.8 m. (15.8'). Seam R4u. $\overline{Ro}$ 1.3482	R4u	2108.3	4.8	
305.4	325.0			Siltstone turning sandy towards the bottom of the interval.				
325.0	329.0	1062.9	1079.4	Coal 4.0 m. (13.1). Seam R4L. $\overline{Ro}$ 1.3678	R4l	2083.9	4.0	
329.0	335.7			Sandy siltstone.				
				END OF HOLE.				

Hole No. RH1759

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 30/82

LATITUDE	DEPARTURE	ELEVATION
149,915.3 m. N.	27,387.3 m. E.	2245.6

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			236.4 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	12.2			Overburden.				
12.2	46.0			Siltstone.				
46.0	52.8	150.9	173.2	COAL. 6.8 m. (22.3') Seam R9. $\overline{Ro}$ 1.2410.	R9	2199.6	6.8	
52.8	60.0			Siltstone.				
60.0	63.0			Sandstone.				
63.0	68.5			Sandy siltstone changing to siltstone.				
68.5	70.7	224.7	231.9	COAL. 2.2 m. (7.2') Seam R7	R7	2177.1	2.2	
70.7	73.0			Siltstone parting.				
73.0	76.2	239.5	250.0	COAL. 3.2 m. (10.5'). Seam R7. $\overline{Ro}$ 1.2468.	R7	2172.6	3.2	
76.2	87.8			Siltstone.				
87.8	96.6			Siltstone/sandstone interbeds. (50/50).				
96.6	105.8			Siltstone.				
105.8	111.0			Sandstone.				
111.0	129.4			Siltstone with 2.0 m. sandstone band.				
129.4	131.0	424.5	429.8	COAL. 1.6 m. (5.3'). Seam R5u.	R5u	2116.2	1.6	
131.0	132.8			Siltstone parting.				
132.8	133.9	435.7	439.3	COAL. 1.1 m. (3.6') Seam R5u.	R5u	2112.8	1.1	
133.9	141.7			Sandstone/siltsone interbeds. (65/35).				
141.7	144.1	464.9	472.8	COAL. 2.4 m. (7.9'). R5L.	R5L	2103.9	2.4	
144.1	159.0			Siltstone.				
159.0	172.0			Sandstone.				
172.0	175.4			Siltstone.				

Hole No. RH 1760 Page 1 of 2

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
175.4	181.1			Sandstone with minor siltstone bands.				
181.1	197.7			Siltstone.				
197.7	200.9	648.6	659.1	COAL. 3.2 m. (10.5'). Seam R4u. $\overline{Ro}$ 1.3044.	R4u	2047.9	3.2	
200.9	211.8			Siltstone.				
211.8	214.0			Sandstone.				
214.0	216.5			Mudstone.				
216.5	217.0	710.3	711.9	COAL. 0.5 m. (1.6').		2029.1		
217.0	220.8			Siltstone.				
220.8	222.9	724.4	731.3	COAL. 2.1 m. (6.9'). Seam R4L.		2024.8		
222.9	236.4			Siltstone.				
				END OF HOLE.				

Hole No. RH 1760

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: RTDW Date: MAR. 30/82	149,572.3 m. N.	27,448.8 m. N.	2214.0 m.	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			280.2 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	2.4			Overburden.				
2.4	30.6			Silty sandstone.				
30.6	38.8			COAL. 8.2 m. (26.9'). Seam R9. $\bar{R}o$ 1.2722.	R9	2183.4	8.2	
38.8	42.6			Siltstone.				
42.6	45.0			Sandstone.				
45.0	54.6			Sandy siltstone.				
54.6	57.0	179.1	187.0	COAL. 2.4 m. (7.9'). Seam R7u.	R7u	2159.4	2.4	
57.0	60.6			Siltstone parting.				
60.6	65.0			COAL. 4.4m. (14.4'). Seam R7.	R7	2153.4	4.4	3.9
65.0	81.0			Siltstone.				
81.0	87.3			Sandstone.				
87.3	118.0			Siltstone with some minor sandstone bands.				
118.0	119.8	387.1	393.0	COAL. 1.8 m. (5.9'). Seam R5u.	R5u	2096.0	1.8	
119.8	121.1			Siltstone parting.				
121.1	122.5	398.1	401.9	COAL. 1.1 m. (3.6'). Seam R5u	R5u	2092.9	1.1	
122.5	130.4			Muddy siltstone.				
130.4	133.8	427.8	439.0	COAL. 3.4 m. (11.2'). Seam R5L.	R5L	2083.6	3.4	
133.8	136.0			Siltstone band.				
136.0	137.0	446.2	449.5	COAL. 1.0 m. (3.3'). Seam R5L.	R5L	2078.0	1.0	
137.0	149.7			Siltstone.				
149.7	176.8			Siltstone sandstone interbeds. (60/40).				

Hole No. RH 1761 Page 1 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
176.8	181.8			COAL 5.0 m. (16.4'). Seam R4u. $\overline{Ro}$ 1.3252	R4u	2037.2	5.0	
181.8	199.6			Siltstone with some sandstone bands.				
199.6	200.4	654.9	657.5	COAL. 0.8 m. (2.6'). Seam		2014.4	0.8	
200.4	203.0			Siltstone band.				
203.0	206.4	666.0	677.2	COAL. 3.4 m. (11.2). Seam R4L. $\overline{Ro}$ 1.3464.	R4l	2011.0	3.4	
206.4	213.0			Siltstone.				
213.0	225.9			Sandstone/siltstone interbeds. (70/30).				
225.9	240.0			Sandstone..				
240.0	244.8			Siltstone.				
244.8	254.9			Sandstone.				
254.9	258.0			Siltstone.				
258.0	271.0			Sandstone.				
271.0	272.2	889.1	893.0	COAL. 1.2 m. (3.9'). Seam R2.	R2	1943.0	1.2	
272.2	273.6			Siltstone interburden.				
273.6	276.0	897.6	905.5	COAL. 2.4 m. (7.9'). Seam R1.	R1	1940.4	2.4	
276.0	280.2			Sandstone.				
				END OF HOLE.				

Hole No. RH 1761

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 30/82

LATITUDE	DEPARTURE	ELEVATION
149,565.5 m. N.	27,062.3 m. E.	2094.8 m.

Ore Classes & Aver.

0.0

Block: Sect: EAGLE MTN. Place: App. Bear: App.: Dip.: Length: 279.5 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	3.0			Overburden.				
3.0	25.2			Siltstone/sandstone interbeds. (50/50).				
25.2	34.2			Siltstone.				
34.2	36.8			Sandstone.				
36.8	95.0			Siltstone with minor sandstone bands.				
95.0	96.1	311.7	315.3	COAL. 1.1 m. (3.6'). Seam R5u.	R5u	1999.8	1.1	
96.1	97.0			Mudstone parting.				
97.0	98.8	318.2	324.2	COAL. 1.8 m. (6.0'). Seam R5u.	R5u	1997.8	1.8	
98.8	101.1			Mudstone.				
101.1	105.4	331.7	345.8	COAL. 4.3 m. (14.1). Seam R5L.	R5L	1993.7	4.3	
105.4	113.7			Siltstone/sandstone interbeds (70/30)				
113.7	129.2			Silty sandstone.				
129.2	134.3	423.9	440.6	COAL. 5.1 m. (16.7'). Seam R4u.	R4u	1965.6	5.1	
134.3	167.6			Siltstone with minor sandstone band at 147.0 m.				
167.6	168.4	549.9	552.5	COAL. 0.8 m. (2.6'). Seam R4L.	R4L	1927.2	0.8	
168.4	169.2			Mudstone parting.				
169.2	173.6	555.1	569.6	COAL. 4.4 (14.5). Seam R4L.	R4L	1925.6	4.4	
173.6	188.6			Siltstone with minor sandstone bands.				
188.6	235.0			Sandstone with minor siltstone band @ 205.0 m.				
235.0	236.0	771.0	774.3	COAL. 1.0 m. (3.3'). Seam R2.	R2	1906.2	1.0	
236.0	237.5			Siltstone interburden.				

Hole No. RH 1762 Page 1 of 2

2507 — NON

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Logged By: RTDW Date:

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
237.5	238.1	779.2	781.2	COAL. 0.6 m. (2.0'). Seam.		1857.3	0.6	
238.1	239.0			Siltstone.				
239.0	239.8	784.1	786.7	COAL. 0.8 m. (2.6'). Seam R1.	R1	1855.8	0.8	
239.8	279.5			Basal Sandstone.				
				END OF HOLE.				

Hole No. RH 1762

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:						
Logged By: RTDW	Date: MAR. 30/82	LATITUDE 149,226.4 m. N.	DEPARTURE 27,477.2 m. E.	ELEVATION 2183.5		Ore Classes & Aver. 0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App. Dip.:	Length: 212.5	

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [xxx] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	22.3			Sandstone with minor siltstone band.				
22.3	46.4			Siltstone.				
46.4	54.0	152.2	177.2	COAL. 7.6 m. (25.0). Seam R9.	R9	2137.1	7.6	
54.0	74.4			Siltstone.				
74.4	76.6	244.1	251.3	COAL. 2.2 m. (7.2'). Seam R7u.	R7u	2109.1	2.2	
76.6	81.2			Siltstone interbed.				
81.2	82.2	266.4	269.7	COAL. 1.0 m. (3.3'). Seam R7.	R7	2102.3	1.0	
82.2	83.4			Mudstone parting.				
83.4	84.7	273.6	277.9	COAL. 1.3 m. (4.3'). Seam R7.	R7	2100.1	1.3	
84.7	122.5			Mudstone/siltstone interbeds (70/30).				
122.5	123.5	401.9	405.2	COAL. 1.0 m. (3.3'). Seam R5u.	R5u	2061.0	1.0	
123.5	124.8			Mudstone parting.				
124.8	125.9	409.4	413.1	COAL.1.1 m. (3.6'). Seam R5u.	R5u	2058.7	1.1	
125.9	134.4			Siltstone.				
134.4	136.2	440.9	446.9	COAL. 1.8 m. (6.0'). Seam R5L.	R5L	2049.1	1.8	
136.2	137.3			Mudstone parting.				
137.3	138.3	450.5	453.7	COAL. 1.0 m. (3.3'). Seam R5L.	R5L	2046.2	1.0	
138.3	165.0			Siltstone/mudstone interbeds. (50/50).				
165.0	169.5	541.3	556.1	COAL. 4.5 m. (14.8'). Seam R4u.	R4u	2018.5	4.5	
169.5	191.5			Mudstone/siltstone interbeds. (70/30).				
191.5	192.2	628.3	630.6	COAL. 0.7 m. (2.3'). Seam		1992.0	0.7	

Hole No. RH 1763 Page 1 of 2

2607 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
192.2	194.2			Mudstone parting.				
194.2	197.3	637.1	647.3	COAL. 3.1 m. (10.2'). Seam R4L Ro 1.3438	R4L	1989.3	3.1	
197.3	212.5			Mudstone/siltstone interbeds. (50/50).				
				END OF HOLE.				

Hole No. RH 1763 Page 2 of 2

2507 — NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 30/82

LATITUDE	DEPARTURE	ELEVATION
149,232.8 m. N.	27,261.8 m. E.	2118.1 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			258.7

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	7.4			Mudstone.				
7.4	12.4	24.3	40.7	COAL. 5.0 m. (16.4'). Seam R5L. $\overline{Ro}$ 1.3162	R5L	2110.7	5.0	
12.4	49.8			Mudstone with some siltstone bands.				
49.8	55.4	163.7	181.7	COAL. 5.5 m. (18.0'). Seam R4u.	R4u	2068.3	5.5	
55.4	76.9			Mudstone/Siltstone interbeds (75/25).				
76.9	81.4	252.3	267.1	COAL. 4.5 m. (14.7'). Seam R4L. $\overline{Ro}$ 1.3180	R4L	2041.2	4.5	
81.4	99.0			Silty mudstone.				
99.0	140.4			Sandstone with minor siltstone band @ 134.0 m.				
140.4	141.8	460.6	465.2	COAL. 1.4 m. (4.6'). Seam R2.	R2	1977.7	1.4	
141.8	145.9			Shaley siltstone interburden.				
145.9	147.0	478.6	482.3	COAL. 1.1 m. (3.6'). Seam R1.	R1	2972.2	1.1	
147.0	163.8			Sandstone.				
163.8	171.0			Thrust Fault Zone -Mudstone.				
171.0	172.8			Mudstone.				
172.8	176.8	566.9	580.0	COAL. 4.0 m. (13.1). Seam R7.	R7	1945.3	4.0	
176.8	177.6			Mudstone parting.				
177.6	179.5	582.7	588.9	COAL. 1.9 m. (6.2'). Seam R7. $\overline{Ro}$ 1.2114	R7	1940.5	1.9	
179.5	231.2			Mudstone/Siltstone interbeds. (65/35).				
231.2	232.7			COAL. 1.5 m. (5.0'). Seam R5u.	R5u	1886.9	1.5	
232.7	234.1			Mudstone parting.				

Hole No. RH 1764

...tary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
234.1	236.0			COAL. 1.9 m. (6.3'). Seam R5u.	R5u	1884.0	1.9	
236.0	239.7			Mudstone.				
239.7	243.8			Muddy siltstone.				
243.8	248.4	799.9	814.9	COAL. 4.6 m. (15.0). Seam R5L. $\overline{Ro}$ 1.3512.	R5L	1874.3	4.6	
248.4	258.7			Mudstone.				
				END OF HOLE.				

Hole No. RH 1764

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: RTDW Date: MAR. 30/82	148,945.7 m. N.	27,261.6 m. E.	2041.6 m.	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			163.5 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	3.0			Overburden.				
3.0	13.5			Siltstone/sandstone interbeds (65/35).				
13.5	[illegible].2			Sandstone.				
22.2	24.8			Silty mudstone.				
24.8	28.9	81.4	94.8	COAL. 4.1 m. (13.5'). Seam R4u.	R4u	2016.8	4.1	
28.9	38.8			Silty mudstone with minor sandstone band.				
38.8	39.6	127.3	130.0	COAL. 0.8 m. (2.7'). Seam		2002.8	0.8	
39.6	40.4			Mudstone parting.				
40.4	46.2	132.5	151.6	COAL. 5.8 m. (19.0'). Seam R4L.	R4L	2001.2	5.8	
46.2	66.0			Siltstone with minor mudstone bands.				
66.0	102.8			Sandstone.				
102.8	109.2			Sandstone / Mudstone interbeds. (60/40).				
109.2	111.3	358.3	365.2	COAL. 2.1 m. (6.9'). Seam R2.	R2	1932.4	2.1	
111.3	111.6			Mudstone parting.				
111.6	112.2	366.1	368.1	COAL. 0.6 m. (2.0'). Seam R2.	R2	1930.0	0.6	
112.2	112.7			Mudstone parting.				
112.7	113.8	368.7	373.3	COAL. 1.1 m. (3.6'). Seam R2.	R2	1928.9	1.1	
113.8	115.2			Mudstone parting.				
115.2	116.2	378.0	381.2	COAL. 1.0 m. (3.2'). Seam R1.	R1	1926.4	1.0	
116.2	163.5			Basal Sandstone.				
				END OF HOLE.				

Hole No. RH 1766 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
			LATITUDE	DEPARTURE	ELEVATION		
Logged By: RTDW	Date: MAR. 31/82		148,488.3 N.	27,207.5 E.	1808.1 m.		0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App.: Dip.:	Length: 157.7		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	4.0			Overburden - Gravel.				
4.0	7.0			Sandstone.				
7.0	9.4	23.0	31.0	COAL. 2.4 m. (7.9'). Seam R2.	R2	1801.1	2.4	
9.4	10.6			Siltstone interburden.				
10.6	11.7			COAL. 1.1 m. (3.6'). Seam R1.	R1	1797.5	1.1	
11.7	14.8			Siltstone.				
14.8	157.7			Basal Sandstone - Fernie FM				
				END OF HOLE.				

Hole No. RH 1768

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							
Logged By: RTDW	Date: APR. 2/82	LATITUDE	DEPARTURE	ELEVATION			Ore Classes & Aver.
		148,506.4 m. N.	26,998.8 m. E.	1807.2 m.			0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App.: Dip.:	Length: 263.7 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	1.8			Overburden.				
1.8	15.6			Sandstone.				
15.6	31.2			Siltstone.				
31.2	39.2			Siltstone/mudstone interbed (60/40).				
39.2	43.5			COAL. 4.3 m. (14.1) Seam R5u.	R5u	1768.0	4.3	
43.5	62.0			Siltstone with minor mudstone bands.				
62.0	67.8	203.4	222.4	COAL. 5.8 m. (19.0'). Seam R5L.	R5L	1745.2	5.8	
67.8	70.6			Mudstone.				
70.6	100.2			Muddy siltstone.				
100.2	156.7			Siltstone.				
156.7	166.2	514.1	545.3	COAL. 9.5 m. (31.2'). Seam R4.	R4	1650.5	9.5	
166.2	195.0			Siltstone.				
195.0	196.8	639.8	645.7	COAL. 1.8 m. (5.9'). Seam R3.	R3	1612.2	1.8	
196.8	201.8			Siltstone.				
201.8	237.5			Sandstone.				
237.5	239.5	779.2	785.8	COAL. 2.0 m. (6.6'). Seam R2.	R2	1569.7	2.0	
239.5	243.5			Siltstone.				
243.5	244.4	798.9	801.8	COAL. 0.9 m. (2.9'). Seam R1.	R1	1563.7	0.9	
244.4	263.7			Basal sandstone.				
				END OF HOLE.				

Hole No. RH 1769 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:	LATITUDE	DEPARTURE	ELEVATION	Ore Classes & Aver.
Logged By: RTDW Date: MAR. 31/82	148315.9 m. N.	27,080.7 m. E.	1742.7	0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			147.7

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	6.4			Overburden.				
6.4	10.8			Coal Bloom? (R5L?).				
10.8	.2			Overburden - gravel.				
15.2	63.0			Siltstone with minor sandstone bands.				
63.0	66.0	206.7	216.5	COAL. 3.0 m. (9.8'). Seam R4u.	R4u	1679.7	3.0	
66.0	67.2			Siltstone interburden.				
67.2	70.2	220.5	230.3	COAL. 3.0 m. (9.8'). Seam R4L $\overline{Ro}$ 1.2938.	R4L	1675.5	3.0	
70.2	100.4			Mudstone with minor siltstone bands.				
100.4	102.2	329.4	335.3	COAL. 1.8 m. (5.9) Seam R3.	R3	1642.3	1.8	
102.2	114.0			Siltstone.				
114.0	138.2			Sandstone.				
138.2	139.2	453.4	456.7	COAL. 1.0 m. (3.3'). Seam R2.	R2	1604.5	1.0	
139.2	141.2			Siltstone.				
141.2	144.5			Mudstone.				
144.5	145.5	474.1	477.3	COAL. 1.0 m. (3.3'). Seam R1	R1	1598.2	1.0	
145.5	147.7			Basal sandstone.				
				END OF HOLE.				

Hole No. RH 1770 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
			LATITUDE	DEPARTURE	ELEVATION		
Logged By: RTDW	Date: MAR. 31/82		148,066.5 m. N.	27,137.4 m. E.	1702.9 m.		0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App.: Dip.:	Length: 139.3 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	10.6			Overburden - gravel.				
10.6	57.7			Siltstone/sandstone interbeds. (65/35).				
57.7	67.7	189.3	221.1	COAL. 10.0 m. (32.8'). Seam R4. $\overline{Ro}$ 1.3136.	R4	1645.2	10.0	
67.7	81.0			Siltstone/mudstone interbeds. (55/45).				
81.0	93.4			Mudstone with siltstone interbed.				
93.4	94.4	306.4	309.7	COAL. 1.0 m. (3.3'). Seam R3.	R3	1609.5	1.0	
94.4	111.3			Sandstone.				
111.3	116.4			Siltstone/sandstone interbeds. (60/40).				
116.4	119.4			Mudstone.				
119.4	121.8			Sandstone.				
121.8	123.0	399.6	403.5	COAL. 1.2 m. (3.9) Seam R2.	R2	1581.1	1.2	
123.0	129.5			Mudstone/sandstone interbed (70/30).				
129.5	131.2	424.9	430.4	COAL. 1.7 m. (5.5'). Seam R1.	R1	1573.4	1.7	
131.2	139.3			Basal Sandstone.				
				END OF HOLE.				

Hole No. RH 1771 Page 1 of 1

2507 – NDN

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 2/82

LATITUDE	DEPARTURE	ELEVATION
147,913.6 m. N.	27,031.6 m. E.	1698.4

Ore Classes & Aver.

0.0

Block: Sect: Place: KILMARNOCK CR. App. Bear: App.: Dip.: Length: 245.1

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	6.1			Overburden - gravel.				
6.1	13.9			Sandstone.				
13.9	30.3			Sandy siltstone with mudstone band @ 23.0 m.				
30.3	31.0	99.4	101.7	COAL. 0.7 m. (2.3'). Seam R5u.	R5u	1668.1	0.7	
31.0	48.2			Siltstone.				
48.2	54.6	158.1	179.1	COAL. 6.4 m. (21.0'). Seam R5L.	R5L	1650.2	6.4	
54.6	62.0			Siltstone.				
62.0	63.2			Coal. 1.2 m. (3.9'). Seam		1636.4	1.2	
63.2	66.5			Mudstone.				
66.5	107.0			Sandstone/siltstone interbeds (60/40).				
107.0	117.0			Mudstone/siltstone interbeds (70/30).				
117.0	120.0	383.8	393.7	COAL. 3.0 m. (9.8'). Seam R5u.	R5u	1581.4	3.0	
120.0	148.4			Siltstone with minor sandstone bands.				
148.4	152.3	486.9	499.7	COAL. 3.9 m. (12.8'). Seam R5L.	R5L	1550.0	3.9	
152.3	165.0			Mudstone/siltstone interbed (65/35).				
165.0	214.8			Siltstone with 2.0 m. Sandstone band @ 178.0 m.				
214.8	217.5			Mudstone.				
217.5	221.0			Siltstone.				
221.0	225.0	725.1	738.2	COAL. 4.0 m. (13.1) Seam R4	R4	1477.4	4.0	
225.0	226.2			Siltstone parting.				
226.2	234.0			COAL. 7.8 m. (25.6').				

Hole No. RH 1772 Page 1 of 2

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 2/82

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
234.0	235.2			Mudstone parting.				
235.2	[illegible]	771.7	791.0	COAL. 5.9 m. (19.3'). Seam R4.	R4	1463.2	5.9	
241.1	245.1			Siltstone.				
				END OF HOLE.				

Hole No. RH 1772 Page 2 of 2

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 31/82

LATITUDE	DEPARTURE	ELEVATION
148,493.7 m. N.	27,072.2 m. E.	1797.4

Ore Classes & Aver. 0.0

Block: Sect: Place: EAGLE MTN. App. Bear: App.: Dip.: Length: 151.9 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG [XXX] YES [ ] NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	1.5			Overburden.				
1.5				Siltstone with minor sandstone bands.				
28.9	29.7	94.8	95.5	COAL.		1768.5	0.8	
29.7	53.4			Siltstone.				
53.4	61.0	175.2	200.1	COAL. 7.6 m. (24.9). Seam R4. $\overline{Ro}$ 1.2984.	R4	1744	7.6	
61.0	63.2			Siltstone.				
63.2	70.2	207.3	230.3	COAL. 7.0 m. (23.0').	R4	1734.2	7.0	
70.2	101.4			Siltstone.				
101.4	103.2	332.7	338.6	COAL. 1.8 m. (5.9'). Seam R3.	R3	1696.0	1.8	
103.2	107.8			Siltstone..				
107.8	134.2			Sandstone with siltstone band @ 127.0 m.				
134.2	137.0	440.3	449.5	Coal. 2.8 m. (9.2'). Seam R2.	R2	1663.2	2.8	
137.0	144.0			Interbedded mudstone/siltstone. (50/50).				
144.0	145.2	472.4	476.4	COAL. 1.2 m. (4.0'). Seam R1.	R1	1653.4	1.2	
145.2	151.9			Basal sandstone.				
				END OF HOLE.				

Hole No. RH 1773

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 2/82

LATITUDE	DEPARTURE	ELEVATION
148,756.7 m. N.	27,013.0 m. E.	1909.4 m.

Ore Classes & Aver.: 0.0

Block: Sect: Place: BROWNIE RIDGE App. Bear: App. Dip.: Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	2.1			Overburden.				
2.1	15.6			Mudstone.				
15.6	17.3	51.2	57.1	COAL. 1.7 m. (5.9'). Seam Pt. R7.	Pt.R7	1893.8	1.7	
17.3	27.0			Mudstone/siltstone interbeds (75/25).				
27.0	27.7	88.6	91.0	COAL. 0.7 m. (2.3'). Seam R7.	R7	1882.4	0.7	
27.7	28.9			Mudstone parting.				
28.9	29.8	95.1	97.8	COAL. 0.9 m. (2.6'). Seam R7.	R7	1880.5	0.9	
29.8	31.8			Mudstone.				
31.8	56.6			Siltstone.				
57.6	64.4			Mudstone/siltstone interbeds (70/30).				
64.4	81.7			Siltstone.				
81.7	82.6	268.0	271.0	COAL. 0.9 m. (2.9'). Seam R5u.	R5u	1827.7	0.9	
82.6	83.3			Siltstone parting.				
83.3	84.4	273.3	276.9	COAL. 1.1 m. (3.6'). Seam R5u.	R5u	1826.1	1.1	
84.4	93.7			Muddy siltstone.				
93.7	98.3	307.4	322.5	COAL. 4.6 m. (15.1) Seam R5L.	R5L	1815.7	4.6	
98.3	114.4			Siltstone/mudstone interbeds. (65/35).				
114.4	126.6			Siltstone.				
126.6	127.6	415.4	418.6	COAL. 1.0 m. (3.2'). Seam			1.0	
127.6	144.4			Siltstone.				
144.4	146.8	473.8	481.6	COAL. 2.4 m. (7.9'). Seam R4.	R4	1765.0	2.4	
146.8	150.0			Siltstone/mudstone interbed (60/40).				

Hole No. RH 1774 Page 1 of 2

..otary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date:

LATITUDE	DEPARTURE	ELEVATION

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ~~XXX~~ YES ____ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
150.0	152.2	492.1	499.3	COAL. 2.2 m. (7.2'). Seam R4.	R4	1759.4	2.2	
152.2	152.8			Siltstone parting.				
152.8	155.7	501.3	510.8	COAL. 2.9 m. (9.5'). Seam R4.	R4	1756.6	2.9	
155.7	158.3			Siltstone parting.				
158.3	162.1	519.4	531.8	COAL. 3.8 m. (12.5'). Seam R4.				
162.1	193.5			Siltstone/mudstone interbeds. (60/40).				
193.5	194.2	634.8	637.1	COAL. 0.7 m. (2.3'). Seam R3.	R3	1715.9	0.7	
194.2	203.4			Sandstone/siltstone interbeds (75/25).				
203.4	221.4			Sandstone.				
221.4	224.1			Siltstone.				
224.1	226.5	735.2	743.1	COAL. 2.4 m. (7.9'). Seam R2.	R2	1685.3	2.4	
226.5	227.1			Siltstone parting.				
227.1	227.8	745.1	747.4	COAL. 0.7 m. (2.3'). Seam R2.				
227.8	230.4			Siltstone.				
230.4	231.2	756.0	758.5	COAL. 0.8 m. (2.6'). Seam R1.	R1	1679.0	0.8	
231.2	243.0			Basal sandstone.				
				END OF HOLE.				

Hole No. RH 1774

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:							Ore Classes & Aver.
Logged By: RTDW	Date: APR. 5/82	LATITUDE 150,181.8 m. N.	DEPARTURE 26,755.7 m. E.	ELEVATION 2363.7 m.			0.0
Block:	Sect:	Place: EAGLE MTN.	App. Bear:	App.: Dip.:	Length: 212.5 m.		

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.			TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	1.8			Overburden - gravel.					
1.8	3.6	6.0	12.0	COAL. 1.8 m. (6.0') Seam			2361.9	1.8	
3.6	14.2			Sandy siltstone.					
14.2	58.8			Sandstone with minor siltstone band @ 34.0 m.					
58.8	63.6			Sandy siltstone.					
63.6	68.4			Sandstone.					
68.4	76.5			Sandy siltstone.					
76.5	77.1	251.0	253.0	COAL. 0.6 m. (2.0'). Seam			2287.2	0.6	
77.1	86.8			Sandstone.					
86.8	98.7			Sandstone/siltstone interbeds (70/30).					
98.7	99.6	324.0	327.0	COAL. 0.9 (3.0).			2265.0	0.9	
99.6	120.3			Sandstone.					
120.3	121.4	394.7	398.3	COAL. 1.1 m. (3.6'). Seam			2243.4	1.1	
121.4	133.1			Sandstone.					
133.1	136.6	437.0	449.0	COAL. 3.5 m. (12.0). Seam R14L.	$\overline{Ro}$ 1.0210	R14L	2230.6	3.5	
136.6	146.5			Sandstone/siltstone interbeds. (60/40).					
146.5	161.2			Siltstone.					
161.2	164.9	529.0	541.0	COAL. 3.7 m. (12.0'). Seam R13.	$\overline{Ro}$ 1.0430	R13	2202.5	3.7	
164.9	191.1			Siltstone with shaley band @ 185.0 m.					
191.1	201.0	627.0	659.4	COAL. 9.9 m. (32.4'). Seam R12.	$\overline{Ro}$ 1.0828	R12	2172.6	9.9	
201.0	212.5			Mudstone/siltstone interbeds (65/35).					
				END OF HOLE					

Hole No. RH 1776 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED

FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 5/82

LATITUDE	DEPARTURE	ELEVATION
150,383.9 m. N.	27,052.7 m. E.	2377.5 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			211.9 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	2.7			Siltstone.				
2.7	8.0	8.8	19.6	COAL. 3.3 m. (10.8'). Seam R9.	R9	2374.8	3.3	
6.0	42.0			Siltstone.				
42.0	51.6			Sandstone.				
51.6	97.8			Sandy siltstone.				
97.8	102.8	320.8	337.3	COAL. 5.0 m. (16.5'). Seam R7. $\overline{Ro}$ 1.2322	R7	2279.7	5.0	
102.8	111.2			Siltstone.				
111.2	111.8	364.8	366.8	COAL. 0.6 m. (2.0').		2266.3	0.6	
111.8	122.5			Siltstone.				
122.5	124.8	400.3	409.5	COAL. 2.3 m. (9.6'). Seam $\overline{Ro}$ 1.2380		2255.0	2.3	
124.8	154.0			Sandy siltstone.				
154.0	211.9			Siltstone.				
				END OF HOLE				

Hole No. RH 1777 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: MAR. 31/82

LATITUDE	DEPARTURE	ELEVATION
150,452.1 m. N.	27,235.1 m. E.	2391.8 m.

Ore Classes & Aver. 0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			212.0 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG XXX YES ___ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL TH.	NET TH.
0.0	1.2			Overburden - gravel.				
1.2	69.1			Sandstone.				
69.1	70.4	227.0	231.0	COAL. 1.3 m. (4.0'). Seam R5u.	R5u	2322.7	1.3	
70.4	74.5			Sandstone.				
74.5	76.0	244.4	249.3	COAL. 1.5 m. (4.9'). Seam R5u. $\overline{Ro}$ 1.2202.	R5u.	2317.3	1.5	
76.0	89.0			Sandstone.				
89.0	91.3			COAL. 2.3 m. (7.5') Seam R5L. $\overline{Ro}$ 1.2870.	R5L	2302.8	2.3	
91.3	91.9			Sandstone.				
91.9	102.1			COAL. 10.2 m. (33.5'). Seam R4u. $\overline{Ro}$ 1.2870.	R4u	2391.8	10.2	
102.1	145.0			Sandstone.				
145.0	160.2			Sandstone/siltstone interbeds. (70/30).				
160.2	190.1			Sandstone.				
190.1	197.1	623.7	646.7	COAL. 7.0 m. (23.0'). Seam R9.	R9	2201.7	7.0	
197.1	212.0			Siltstone.				
				END OF HOLE.				

Hole No. RH 1778 Page 1 of 1

Rotary Drill Geological Log

Fording COAL LIMITED — FORDING RIVER OPERATIONS

Objective:

Logged By: RTDW Date: APR. 5/82

LATITUDE	DEPARTURE	ELEVATION
149,864.3 m. N.	26,543.7 m. E.	2311.3 m.

Ore Classes & Aver.

0.0

Block:	Sect:	Place:	App. Bear:	App.: Dip.:	Length:
		EAGLE MTN.			101.2 m.

INTERSECTIONS TAKEN FROM GAMMA RAY — NEUTRON LOG ☒ YES ☐ NO

From m.	To m.	From Ft.	To Ft.		TOP OF SEAM	ELEVATION	TTL. TH.	NET TH.
0.0	4.8			Silty sandstone.				
4.8	17.0			Sandstone.				
17.0	18.5	55.8	60.7	COAL. 1.3 m. (4.2'). Seam $\overline{Ro}$ 0.9034		2294.3	1.3	
18.5	30.9			Siltstone/sandstone interbeds. (60/40).				
30.9	51.0			Sandstone.				
51.0	57.3			Siltstone/sandstone interbeds (60/40).				
57.3	58.0	187.9	190.2	COAL. 0.7 m. (2.3) Seam		2254.0	0.7	
58.0	77.6			Sandstone/siltstone interbeds (70/30)				
77.6	78.5	254.6	257.5	COAL. 0.9 m. (3.0'). Seam $\overline{Ro}$ 0.9464		2233.7	0.9	
78.5	89.6			Sandstone/siltstone interbeds (65/35)				
89.6	90.2	293.9	295.9	COAL.				
90.2	94.2			Siltstone.				
94.2	95.2	309.1	312.3	COAL. 1.0 m. (3.2'). Seam		2217.1	1.0	
95.2	101.2			Siltstone.				
				END OF HOLE.				

Hole No. RH 1779 Page 1 of 1