GPAC AGL energy V12 11/03/2013 14:05:48

			V	VAUKIVO	RY 12		
	Project AG Organization Site Hole Type	L		Northing Grid Accuracy	402748.92 6452883.77 GDA-94 Australian Height Datum	Collar Total Depth Inclination Azimuth	755 0
	Commenced 07/ Completed 15/			Drilling Company Drill Rig Type			
	Plug Depth Logging Company Logged By Encoded By Core Type Drill Bit Type				Cased Depth 0 Casing Type Size of Casing 0 Fluid Standing Water Level 0 ole Logging Company Lease F	) Lower	0
	Gamma Log Caliper Log	☐ Neutron Log ☐ Sonic Log	Density Log Photographed	Bed Resolution Lo	og Self Potentia	I Log Resistivity Log Geotechnical	<u> </u>
F	From To						
1	5.4 18	SANDSTONE, fine-med	dium grained, grey, car	bonaceous in part lithic	; moderately weathered,	moderately strong, MI, CRA	
1	8 21	COAL, black, sandy thro	oughout; fresh, weak, 0	CRA. 001DA Taken at	11:50, 001DB Taken at 1	5:15	
2	21 24	SANDSTONE 90%, me secondary calcite, CRA		nic occasional coal,ban	ded; intermixed with SIDI	ERITE 10%, green; fresh, mo	oderately strong,
2	24 27	SANDSTONE, medium	grained, grey, coal,ba	nded quartzo- feldspath	nic lithic; fresh, strong, sid	derite, CRA	
2	27 30	SANDSTONE 80%, fine siderite, CRA	e-medium grained, gre	y, coal,banded quartzo	- feldspathic lithic; interm	ixed with SILTSTONE 20%,	grey; fresh, strong,
3	33	SANDSTONE 70%, fine siderite, CRA	e-medium grained, gre	y, quartzo- feldspathic l	ithic coal,banded; interm	ixed with SILTSTONE 30%,	grey; fresh, strong,
3	33 36	SANDSTONE 80%, fine siderite, CRA	e-medium grained, gre	y, quartzo- feldspathic l	ithic coal,banded; interm	ixed with SILTSTONE 20%,	grey; fresh, strong,
3	36 42	SANDSTONE, medium	grained, grey, quartzo	- feldspathic lithic; fresh	n, strong, siderite, CRA		
4	2 45	SANDSTONE, fine grain	ned, grey, quartzo- felo	dspathic lithic; fresh, str	ong, siderite, CRA		
4	5 48	SANDSTONE, fine-med	dium grained, grev. gua	artzo- feldspathic lithic	coal.banded: fresh. stron	a. siderite. CRA	

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
48	51	SANDSTONE 90%, fine-medium grained, grey, quartzo- feldspathic lithic coal,banded; intermixed with SILTSTONE 10%, grey; fresh, moderately strong, siderite, CRA
51	54	SANDSTONE, fine-medium grained, grey, carbonaceous in part lithic; fresh, strong, CRA
54	57	SANDSTONE 60%, fine-medium grained, grey, lithic; intermixed with COAL 40%, black; fresh, moderately strong, CRA
57	60	SANDSTONE 60%, fine-medium grained, grey, lithic occasional coal,banded; intermixed with SILTSTONE 40%, grey; fresh, moderately strong, CRA
60	63	SANDSTONE 50%, fine-medium grained, grey, lithic coal, banded; intermixed with SILTSTONE 50%, grey; fresh, strong, siderite, CRA
63	66	SANDSTONE 70%, fine-medium grained, grey, lithic; intermixed with COAL 30%, black; fresh, strong, siderite, CRA
66	69	SANDSTONE 60%, fine-medium grained, grey, coal, banded lithic; intermixed with COAL 40%, black, dull(<1% bright); fresh, strong, CRA
69	72	SANDSTONE 90%, fine grained, grey, lithic micaceous moderately sorted; intermixed with SILTSTONE 10%, green-brown, carbonaceous in part; fresh, strong, CRA
72	75	SILTSTONE, dark grey green-brown, bands of coal carbonaceous sandy; fresh, moderately strong, CRA
75	81	SILTSTONE 90%, grey dark grey, carbonaceous sandy; intermixed with COAL 10%, black, dull(<1% bright) stringers of coal; fresh, strong, CRA
81	84	SILTSTONE 80%, grey dark grey, stringers of coal carbonaceous in part; intermixed with SANDSTONE 20%, fine grained, grey, lithic iron stained rare; fresh, moderately strong, CRA
84	90	SILTSTONE 60%, grey green-brown, sandy carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, light grey, feldspathic- lithic moderately sorted; fresh, strong, CRA
90	93	SANDSTONE 70%, light grey, feldspathic- lithic moderately sorted; intermixed with SILTSTONE 30%, dark grey; fresh, strong, siderite, CRA
93	102	SANDSTONE 90%, fine grained, grey, feldspathic- lithic moderately sorted; intermixed with SILTSTONE 10%, dark grey, carbonaceous rare; fresh, strong, siderite, CRA
102	108	SILTSTONE 70%, grey green-brown, coal, banded rare; intermixed with SANDSTONE 30%, fine grained, grey, feldspathic- lithic moderately sorted; fresh, strong, CRA
108	111	SILTSTONE 80%, green-brown dark grey, carbonaceous laminations; intermixed with SANDSTONE 20%, fine-medium grained, grey, feldspathic-lithic; fresh, strong, CRA
111	114	SILTSTONE 60%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh, strong, CRA
114	117	SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey, lithic; fresh, strong, CRA
117	123	SILTSTONE, dark grey, rare carbonaceous laminations; fresh, strong, CRA
123	126	NO RECOVERY, CRA
126	129	SANDSTONE 80%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with COAL 20%, black dull(<1% bright); fresh, strong, CRA
129	132.24	SANDSTONE, fine-medium grained, grey lithic quartzo- feldspathic occasional coal,banded; fresh, strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
132.24	132.47	COAL, black, dull, tends to stony; fresh, weak, CRA
132.47	135	SANDSTONE 80%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with COAL 20%, black dull, minor bright bands(>1%); fresh, strong, CRA
135	137.71	SILTSTONE 70%, dark grey; intermixed with TUFF 30%, cream; fresh, moderately strong, CRA
137.71	137.9	COAL, black dull, tends to stony; fresh, weak, CRA
137.9	140.73	SILTSTONE 60%, fine-medium grained, grey quartzo- feldspathic lithic occasional coal,banded; intermixed with SANDSTONE 40%, dark grey possibly tuffaceous; fresh, moderately strong, CRA
140.73	140.89	COAL, black dull, tends to stony; fresh, weak, CRA
140.89	145.28	SILTSTONE 60%, fine-medium grained, grey quartzo- feldspathic lithic occasional coal,banded; intermixed with SANDSTONE 40%, dark grey possibly tuffaceous; fresh, moderately strong, CRA
145.28	145.58	COAL, black dull, tends to stony; fresh, weak, CRA
145.58	148.24	SANDSTONE 50%, fine-medium grained, grey lithic quartzo- feldspathic coal, banded; intermixed with SILTSTONE 50%, grey possibly tuffaceous; fresh, moderately strong, CRA
148.24	148.44	COAL, black dull, tends to stony; fresh, weak, CRA
148.44	151.13	SANDSTONE 50%, fine-medium grained, grey lithic quartzo- feldspathic coal,banded; intermixed with SILTSTONE 50%, grey possibly tuffaceous; fresh, moderately strong, CRA
151.13	151.32	COAL, black dull, tends to stony; fresh, weak, CRA
151.32	153.55	SANDSTONE 60%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, grey stringers of coal; fresh, strong, secondary calcite, CRA
153.55	153.83	COAL, black dull, tends to stony; fresh, weak, CRA
153.83	155.73	SANDSTONE 60%, fine-medium grained, dark grey lithic quartzo- feldspathic tuffaceous in part; intermixed with SILTSTONE 40%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
155.73	156.11	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
156.11	157.1	SANDSTONE 50%, fine-medium grained, grey quartzo- feldspathic lithic; intermixed with SILTSTONE 50%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
157.1	157.4	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
157.4	164.8	SILTSTONE 60%, grey stringers of coal dull, minor bright bands(>1%); intermixed with SANDSTONE 40%, fine-medium grained, grey quartzo-feldspathic lithic; fresh, moderately strong, CRA
164.8	165.1	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
165.1	168	SANDSTONE 60%, fine-medium grained, grey lithic quartzo- feldspathic tuffaceous in part; intermixed with SILTSTONE 40%, grey stringers of coal dull(<1% bright); fresh, strong, CRA
168	171	SILTSTONE 60%, dark grey; intermixed with SANDSTONE 40%, fine-medium grained, grey lithic quartzo- feldspathic occasional coal, banded; fresh, moderately strong, CRA
-		

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
171	174.78	SANDSTONE 50%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 50%, dark grey stringers of coal dull, minor bright bands(>1%); fresh, strong, CRA
174.78	174.94	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
174.94	176.47	SANDSTONE 60%, fine-medium grained, dark grey lithic quartzo- feldspathic coal, banded tuffaceous; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
176.47	176.58	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
176.58	178.73	SILTSTONE, CRA
178.73	178.89	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
178.89	178.98	SILTSTONE, CRA
178.98	179.12	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
179.12	182.88	SILTSTONE 50%, dark grey; intermixed with SANDSTONE 50%, grey lithic coal, banded occasional tuffaceous; fresh, moderately strong, CRA
182.88	183.04	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
183.04	185.16	SANDSTONE 60%, fine-medium grained, grey lithic quartzo- feldspathic tuffaceous in part; intermixed with SILTSTONE 40%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
185.16	185.5	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
185.5	189	SANDSTONE 60%, fine-medium grained, grey lithic quartzo- feldspathic tuffaceous in part; intermixed with SILTSTONE 40%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
189	189.11	COAL, weak, CRA
189.11	189.3	SILTSTONE, CRA
189.3	189.7	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
189.7	195	SANDSTONE 60%, fine-medium grained, grey lithic rare coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
195	200.51	SANDSTONE 50%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 50%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
200.51	200.93	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
200.93	202.98	SANDSTONE 50%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 50%, dark grey stringers of coal dull(<1% bright); fresh, strong, CRA
202.98	203.62	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
203.62	209.12	SILTSTONE 70%, grey; intermixed with SANDSTONE 30%, fine-medium grained, grey lithic coal, banded; fresh, moderately strong, CRA
209.12	209.3	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
209.3	209.5	SILTSTONE, brownish black, CRA
209.5	209.91	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
209.91	213	SILTSTONE 60%, grey; intermixed with SANDSTONE 40%, fine-medium grained, grey lithic stringers of coal dull, minor bright bands(>1%); fresh, moderately strong, CRA
213	215.26	SANDSTONE 60%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, grey stringers of coal dull, minor bright bands(>1%); fresh, strong, CRA
215.26	215.41	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
215.41	219	SANDSTONE 70%, fine-medium grained, grey lithic quartzo- feldspathic; intermixed with SILTSTONE 30%, grey stringers of coal dull, minor bright bands(>1%); fresh, strong, CRA
219	222	SANDSTONE 60%, fine-medium grained, grey quartzo- feldspathic lithic; intermixed with SILTSTONE 40%, grey stringers of coal dull, minor bright bands(>1%); fresh, strong, CRA
222	225	SANDSTONE 80%, fine-medium grained, grey quartzo- feldspathic lithic occasional coal, banded; intermixed with SILTSTONE 20%, grey; fresh, strong, CRA
225	230.12	SANDSTONE, fine-medium grained, grey rare silty bands lithic; fresh, strong, CRA
230.12	230.98	COAL, black dull, tends to stony dull, minor bright bands(>1%); fresh, weak, CRA
230.98	231.12	SANDSTONE, CRA
231.12	231.21	COAL, black dull, tends to stony; fresh, weak, CRA
231.21	237	SANDSTONE, fine-medium grained, grey white stringers of coal lithic; fresh, strong, CRA
237	239.14	SANDSTONE 60%, fine-medium grained, grey green-grey stringers of coal lithic; intermixed with SILTSTONE 40%, grey dark grey coal,banded; fresh, strong, CRA
239.14	239.23	COAL, black dull, tends to stony; fresh, weak, CRA
239.23	239.97	SANDSTONE 60%, fine-medium grained, grey green-grey stringers of coal lithic; intermixed with SILTSTONE 40%, grey dark grey coal,banded; fresh, strong, CRA
239.97	240.09	COAL, black dull, tends to stony; fresh, weak, CRA
240.09	240.98	SANDSTONE 60%, fine-medium grained, grey green-grey stringers of coal lithic; intermixed with SILTSTONE 40%, grey dark grey coal,banded; fresh, strong, CRA
240.98	241.17	COAL, black dull, tends to stony; fresh, weak, CRA
241.17	244.72	SANDSTONE 80%, fine-medium grained, grey white stringers of coal tuffaceous; intermixed with SILTSTONE 20%, grey green-grey coal,banded; fresh, strong, CRA
244.72	244.91	COAL, DULL <1% BRIGHT, black; fresh, CRA
244.91	246.89	CARBONACEOUS SILTSTONE, grey dark grey bands of coal; fresh, strong, CRA
246.89	247	STONY COAL, black; fresh, CRA
247	247.21	CARBONACEOUS SILTSTONE; fresh, CRA
247.21	247.27	COAL, DULL <1% BRIGHT, black; fresh, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
247.27	247.41	CARBONACEOUS SILTSTONE, brownish black; fresh, CRA
247.41	247.5	COAL, DULL <1% BRIGHT, black; fresh, CRA
247.5	248.53	CARBONACEOUS SILTSTONE, brownish black, CRA
248.53	248.74	COAL, DULL <1% BRIGHT, black, CRA
248.74	250.78	CARBONACEOUS SILTSTONE, brownish black, CRA
250.78	250.96	COAL, DULL <1% BRIGHT, black, CRA
250.96	255	CARBONACEOUS SILTSTONE 70%, dark grey green-brown silty; intermixed with SANDSTONE 30%, fine-medium grained, dark grey black; fresh, strong, CRA
255	260.35	SILTSTONE, grey dark grey coal,banded sandy; fresh, strong, CRA
260.35	260.46	COAL, DULL <1% BRIGHT, black, CRA
260.46	266.086	SILTSTONE 90%, dark grey sandy in part; intermixed with COAL 10%, dark grey black coal, banded silty in part; fresh, strong, CRA
266.086	266.23	COAL, DULL <1% BRIGHT, black; fresh, CRA
266.23	267.11	SILTSTONE, brownish black, CRA
267.11	267.28	COAL UNDIFF., black, CRA
267.28	273	SILTSTONE 80%, dark grey sandy coal, banded stringers of coal; intermixed with COAL 20%, dark grey black coal, banded silty in part; fresh, strong, CRA
273	276	SANDSTONE 80%, fine-medium grained, white grey tuffaceous; intermixed with SILTSTONE 20%, dark grey rare coal, banded; fresh, moderately strong, CRA
276	282	SILTSTONE 60%, dark grey rare coal, banded; intermixed with TUFF 40%, white grey clayey occasional sandy; fresh, strong, CRA
282	284.49	COAL 40%, black coal, banded occasional stringers of coal; intermixed with CARBONACEOUS SILTSTONE 60%, dark grey black stringers of coal sandy in part; fresh, moderately strong, CRA
284.49	284.65	COAL UNDIFF., black, CRA
284.65	288	SILTSTONE 80%, dark grey coal, banded occasional stringers of coal; intermixed with SANDSTONE 20%, fine grained, grey occasional coal, banded; fresh, moderately strong, CRA
288	295.36	SILTSTONE 80%, dark grey stringers of coal; intermixed with COAL 20%, dark grey black occasional coal, banded silty; fresh, strong, CRA
295.36	295.59	COAL UNDIFF., black, CRA
295.59	297	SANDSTONE 70%, fine grained, dark grey silty stringers of coal dull(<1% bright); intermixed with SILTSTONE 30%, black coal,banded; fresh, strong, CRA
297	300	SILTSTONE 80%, dark grey coal, banded stringers of coal; intermixed with COAL 20%, black; fresh, strong, CRA
300	303	SILTSTONE 90%, grey dark grey coal, banded stringers of coal sandy; with COAL 10%, dark grey black occasional coal, banded silty; fresh, strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
303	306	SILTSTONE 90%, dark grey black coal, banded; with SANDSTONE 10%, fine grained, grey silty; fresh, strong, CRA
306	310.46	SILTSTONE 90%, grey sandy rare coal, banded; with COAL 10%, dark grey black dull, minor bright bands(>1%); fresh, strong, CRA
310.46	310.63	COAL UNDIFF., black, CRA
310.63	310.94	SILTSTONE, grey, CRA
310.94	311.1	COAL UNDIFF., black, CRA
311.1	312.54	COAL 80%, black dull, minor bright bands(>1%); with CARBONACEOUS SILTSTONE 20%, dark grey sandy in part; fresh, moderately strong, CRA
312.54	312.73	COAL, black, CRA
312.73	313.98	SANDSTONE 80%, fine grained, dark grey grey silty coal, banded sandy; with COAL 20%, black occasional coal, banded silty; fresh, strong, CRA
313.98	314.25	COAL, black dull, tends to stony; fresh, weak, CRA
314.25	318	SANDSTONE 60%, fine-medium grained, grey light grey stringers of coal siliceous; with SILTSTONE 40%, dark grey coal, banded throughout; fresh, strong, CRA
318	325.93	SANDSTONE 80%, fine-medium grained, light grey quartz-lithic moderately sorted stringers of coal; with SILTSTONE 20%, dark grey grey occasional coal,banded; fresh, moderately strong, CRA
325.93	326.02	COAL, black dull, tends to stony; fresh, weak, CRA
326.02	327	SILTSTONE 70%, dark grey coal, banded high sphericity, well-rounded; with SANDSTONE 30%, fine-medium grained, grey silty; fresh, strong, CRA
327	330	CARBONACEOUS SILTSTONE 80%, dark grey bands; with COAL 20%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
330	333.82	SANDSTONE, fine-medium grained, grey quartz-lithic silty rare coal,banded; fresh, strong, CRA
333.82	333.93	COAL UNDIFF., black, CRA
333.93	336	SANDSTONE 80%, fine-medium grained, grey light grey quartz-lithic moderately sorted; with SILTSTONE 20%, grey rare coal, banded; fresh, strong, CRA
336	345	SILTSTONE 70%, grey dark grey occasional coal, banded; with SANDSTONE 30%, fine-medium grained, grey quartz-lithic; fresh, strong, CRA
345	351	SILTSTONE 90%, dark grey black coal, banded throughout; intermixed with SANDSTONE 10%, fine-medium grained, grey quartz-lithic; fresh, strong, CRA
351	354	SANDSTONE 70%, fine grained, light grey carbonaceous rare stringers of coal; intermixed with SILTSTONE 30%, grey dark grey coal, banded; fresh, strong, CRA
354	357	SILTSTONE 60%, grey dark grey coal, banded stringers of coal; intermixed with COAL 40%, black dull, minor bright bands(>1%); fresh, strong, CRA
357	363	SILTSTONE 70%, dark grey rare coal, banded; intermixed with SANDSTONE 30%, fine-medium grained, grey quartz-lithic; fresh, strong, CRA
363	369	SILTSTONE, grey Orange Brown rare coal, banded occasional sandy; fresh, strong, CRA
369	371.3	SILTSTONE 80%, grey dark grey coal, banded high sphericity, well-rounded; intermixed with SANDSTONE 20%, fine-medium grained, grey quartz-lithic rare stringers of coal; fresh, strong, CRA
371.3	371.59	COAL, DULL <1% BRIGHT, black dull, tends to stony; fresh, weak, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
371.59	371.74	SILTSTONE, grey; fresh, strong, CRA
371.74	372.04	COAL, DULL <1% BRIGHT, black dull, tends to stony; fresh, weak, CRA
372.04	378.5	SANDSTONE 80%, fine-medium grained, light grey lithic rare silty bands; intermixed with COAL 20%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
378.5	378.84	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%); fresh, weak, CRA
378.84	378.96	SILTSTONE, grey; fresh, strong, CRA
378.96	379.12	COAL UNDIFF., black, CRA
379.12	379.22	SANDSTONE, light grey; fresh, moderately strong, CRA
379.22	379.45	COAL, black, CRA
379.45	379.86	SILTSTONE, grey; fresh, weak, CRA
379.86	380.07	COAL, black; fresh, weak, CRA
380.07	380.55	SILTSTONE, brownish grey; fresh, strong, CRA
380.55	380.66	COAL UNDIFF., black; fresh, weak, CRA
380.66	380.91	SANDSTONE, grey; fresh, strong, CRA
380.91	381.02	COAL, black; fresh, weak, CRA
381.02	381.75	SANDSTONE 60%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey coal, banded; fresh, strong, CRA
381.75	382.01	COAL, black; fresh, weak, CRA
382.01	383	SANDSTONE 60%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey coal, banded; fresh, strong, CRA
383	384.64	SANDSTONE 50%, fine grained, light grey lithic coal, banded; intermixed with SILTSTONE 50%, dark grey; fresh, strong, CRA
384.64	385.06	COAL, DULL <1% BRIGHT, black dull, tends to stony dull, minor bright bands(>1%); fresh, weak, CRA
385.06	386.35	SANDSTONE 70%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 30%, dark grey coaly dull, minor bright bands(>1%) in part; fresh, strong, CRA
386.35	386.46	COAL UNDIFF.; fresh, CRA
386.46	390	SANDSTONE 70%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 30%, dark grey coaly dull, minor bright bands(>1%) in part; fresh, strong, CRA
390	395.7	SANDSTONE 60%, fine grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey coaly dull(<1% bright) in part; fresh, strong, CRA
395.7	395.86	COAL, black; fresh, weak, CRA
395.86	405.98	SANDSTONE 60%, fine grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey coaly dull(<1% bright) in part; fresh, strong, CRA
405.98	406.21	COAL, black dull(<1% bright); fresh, weak, CRA
406.21	406.34	SANDSTONE, grey; fresh, strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
406.34	406.63	COAL, black dull, minor bright bands(>1%) dull, tends to stony; fresh, weak, CRA
406.63	416	SANDSTONE 60%, fine-medium grained, light grey lithic quartzo- feldspathic occasional coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
416	416.21	COAL, black dull(<1% bright); fresh, weak, CRA
416.21	416.45	SANDSTONE, grey; fresh, moderately strong, CRA
416.45	416.85	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%); fresh, weak, CRA
416.85	417.1	SANDSTONE, grey; fresh, moderately strong, CRA
417.1	417.43	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) dull, tends to stony; fresh, weak, CRA
417.43	419.91	SILTSTONE 60%, dark grey; intermixed with SANDSTONE 40%, fine-medium grained, dark grey lithic coal, banded; fresh, moderately strong, CRA
419.91	420.08	COAL UNDIFF., black; fresh, weak, CRA
420.08	420.86	SANDSTONE, fine grained, grey lithic silty throughout; fresh, moderately strong, CRA
420.86	421.76	COAL, DULL <1% BRIGHT, black mainly dull, frequent bright bands(>10%) dull, tends to stony; fresh, weak, CRA
421.76	423.27	SANDSTONE 60%, fine-medium grained, light grey lithic occasional coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
423.27	423.43	COAL UNDIFF., black; fresh, weak, CRA
423.43	423.58	SANDSTONE, light grey; fresh, moderately strong, CRA
423.58	424.12	COAL, DULL <1% BRIGHT, black mainly dull, frequent bright bands(>10%) dull, tends to stony; fresh, weak, CRA
424.12	426	SANDSTONE 60%, fine-medium grained, light grey; intermixed with COAL 40%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
426	432	SANDSTONE 70%, fine-medium grained, light grey lithic occasional coal,banded; intermixed with SILTSTONE 30%, dark grey XW; fresh, strong, CRA
432	435	SANDSTONE 50%, fine-medium grained, light grey lithic rare coal, banded; intermixed with SILTSTONE 50%, dark grey; fresh, strong, secondary calcite, CRA
435	441	SANDSTONE 50%, fine-medium grained, light grey lithic occasional coal, banded XW; intermixed with SILTSTONE 50%, dark grey; fresh, strong, CRA
441	444	SANDSTONE 80%, fine-medium grained, dark grey lithic rare coal, banded; intermixed with SILTSTONE 20%, dark grey; fresh, strong, CRA
444	447	SANDSTONE 60%, fine-medium grained, light grey lithic XW; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
447	451.51	SANDSTONE 95%, fine-medium grained, light grey lithic; intermixed with COAL 5%, black dull(<1% bright); fresh, strong, CRA
451.51	451.71	COAL UNDIFF., black; fresh, weak, CRA
451.71	451.86	SILTSTONE, dark grey; fresh, strong, CRA
451.86	451.98	COAL UNDIFF., black; fresh, weak, CRA
451.98	452.17	SANDSTONE, light grey; fresh, moderately strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
452.17	452.47	COAL, DULL <1% BRIGHT, black dull(<1% bright); fresh, weak, CRA
452.47	452.78	SANDSTONE, light grey; fresh, moderately strong, CRA
452.78	453.01	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
453.01	456	SANDSTONE 60%, light grey lithic; intermixed with COAL 40%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
456	462	SANDSTONE 60%, fine-medium grained, light grey lithic rare coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
462	465	SANDSTONE 60%, fine-medium grained, light grey quartzo- feldspathic lithic; intermixed with COAL 40%, black dull, minor bright bands(>1%); fresh, strong, CRA
465	469.02	SANDSTONE 50%, fine-medium grained, light grey lithic occasional coal, banded; intermixed with SILTSTONE 50%, dark grey; fresh, strong, secondary calcite, CRA
469.02	469.16	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
469.16	474	SANDSTONE 80%, light grey lithic occasional coal, banded; intermixed with SILTSTONE 20%, dark grey; fresh, strong, CRA
474	477	SANDSTONE 60%, fine-medium grained, light grey lithic occasional coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, strong, CRA
477	480	SANDSTONE, fine-medium grained, light grey quartz-lithic occasional silty coal, banded; fresh, moderately strong, CRA
480	483.62	SANDSTONE 70%, fine-medium grained, light grey quartz-lithic occasional coal, banded; intermixed with SILTSTONE 30%, dark grey; fresh, strong, secondary calcite, CRA
483.62	483.72	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
483.72	485.74	SANDSTONE, fine grained, light grey quartz-lithic occasional silty coal, banded; fresh, moderately strong, secondary calcite, CRA
485.74	485.91	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
485.91	486.12	SANDSTONE, fine grained, light grey; fresh, moderately strong, CRA
486.12	486.27	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
486.27	487.05	COAL 70%, black dull, minor bright bands(>1%); intermixed with SANDSTONE 30%, fine-medium grained, light grey lithic; fresh, weak, CRA
487.05	487.18	COAL UNDIFF., black dull, tends to stony dull(<1% bright); fresh, weak, CRA
487.18	487.38	SANDSTONE, fine-medium grained, light grey; fresh, moderately strong, CRA
487.38	487.55	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
487.55	489	COAL 50%, black dull, minor bright bands(>1%); intermixed with SANDSTONE 50%, fine-medium grained, light grey lithic; fresh, weak, CRA
489	491.49	SANDSTONE 50%, fine-medium grained, light grey lithic rare coal, banded; intermixed with SILTSTONE 50%, dark grey; fresh, strong, secondary calcite, CRA
491.49	492	COAL, DULL <1% BRIGHT, black mainly dull, frequent bright bands(>10%); fresh, weak, CRA
492	492.25	SILTSTONE, dark grey; fresh, strong, CRA
492.25	492.34	COAL, DULL <1% BRIGHT, black dull, tends to stony; fresh, weak, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
492.34	492.6	SILTSTONE, dark grey; fresh, strong, CRA
492.6	492.9	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
492.9	494.21	SILTSTONE 70%, dark grey; intermixed with SANDSTONE 30%, fine-medium grained, light grey lithic coal,banded; fresh, moderately strong, CRA
494.21	494.66	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%); fresh, weak, CRA
494.66	494.99	SILTSTONE, dark grey; fresh, strong, CRA
494.99	495.12	COAL UNDIFF., black; fresh, weak, CRA
495.12	495.33	SILTSTONE, DY; fresh, strong, CRA
495.33	495.63	COAL, DULL <1% BRIGHT, black dull, tends to stony; fresh, weak, CRA
495.63	498	SANDSTONE 90%, fine grained, light grey lithic silty in part; intermixed with COAL 10%, black; fresh, moderately strong, CRA
498	502.76	SILTSTONE 70%, dark grey; intermixed with SANDSTONE 30%, fine-medium grained, light grey lithic coal, banded; fresh, moderately strong, CRA
502.76	503.36	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
503.36	503.88	SILTSTONE, dark grey sandy in part; fresh, strong, CRA
503.88	504.21	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
504.21	504.39	SILTSTONE, dark grey; fresh, strong, CRA
504.39	504.46	COAL UNDIFF., black, CRA
504.46	506.51	SANDSTONE 80%, light grey silty in part lithic; intermixed with COAL 20%, black dull(<1% bright); fresh, moderately strong, CRA
506.51	506.6	COAL UNDIFF., black; fresh, weak, CRA
506.6	508.05	SANDSTONE 70%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 30%, dark grey coal, banded; fresh, strong, CRA
508.05	508.2	COAL UNDIFF., black; fresh, weak, CRA
508.2	513	SILTSTONE 60%, dark grey; intermixed with SANDSTONE 40%, fine-medium grained, light grey lithic coal, banded; fresh, moderately strong, CRA
513	519	SILTSTONE 50%, dark grey lithic coal, banded; intermixed with SANDSTONE 50%, fine-medium grained, light grey lithic rare coal, banded; fresh, moderately strong, CRA
519	522	SANDSTONE 70%, fine-medium grained, light grey; intermixed with SILTSTONE 30%, dark grey; fresh, strong, CRA
522	531	SANDSTONE 90%, grey lithic moderately to well sorted; intermixed with SILTSTONE 10%, grey black occasional stringers of coal; fresh, strong, CRA
531	534	SANDSTONE 70%, fine grained, grey dark grey quartz-lithic stringers of coal; intermixed with COAL 30%, black occasional coal,banded dull(<1% bright); fresh, strong, CRA
534	537	SANDSTONE 90%, fine grained, grey dark grey quartz-lithic rare coal, banded; intermixed with COAL 10%, black dull(<1% bright); fresh, strong, CRA
537	540	SANDSTONE 70%, grey dark grey quartz-lithic coal, banded in part micaceous; intermixed with COAL 30%, black dull, minor bright bands(>1%); fresh, strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
540	543	SILTSTONE 80%, dark grey coal, banded laminations; intermixed with SANDSTONE 20%, fine grained, light grey grey quartz-lithic; fresh, strong, CRA
543	546	SANDSTONE 90%, fine grained, light grey quartz-lithic moderately sorted; intermixed with SILTSTONE 10%, dark grey occasional coal,banded; fresh, strong, CRA
546	552	SANDSTONE, fine-medium grained, light grey grey quartz-lithic rare silty; fresh, strong, CRA
552	558	SANDSTONE 80%, fine grained, light grey lithic moderately sorted; intermixed with SILTSTONE 20%, dark grey rare coal, banded; fresh, strong, CRA
558	561	SANDSTONE 70%, grey lithic moderately sorted; intermixed with SILTSTONE 30%, grey dark grey stringers of coal occasional coal, banded; fresh, strong, CRA
561	565.53	SANDSTONE 90%, fine grained, light grey grey quartz-lithic moderately sorted rare stringers of coal; intermixed with SILTSTONE 10%, dark grey black occasional coal, banded; fresh, strong, CRA
565.53	566.08	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
566.08	566.4	SANDSTONE, fine grained, light grey quartz-lithic; fresh, moderately strong, CRA
566.4	566.53	COAL UNDIFF., black; fresh, weak, CRA
566.53	567.6	SANDSTONE 90%, fine grained, grey lithic moderately sorted occasional coal, banded; with COAL 10%, black dull, tends to stony; fresh, strong, CRA
567.6	568.97	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
568.97	569.09	SILTSTONE, dark grey; fresh, strong, CRA
569.09	569.97	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
569.97	572.29	SILTSTONE 90%, dark grey abundant coal, banded sandy in part; intermixed with COAL 10%, black dull(<1% bright) stringers of coal; fresh, moderately strong, CRA
572.29	573.42	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
573.42	573.67	SILTSTONE, dark grey; fresh, strong, CRA
573.67	573.86	COAL UNDIFF., black; fresh, weak, CRA
573.86	576.16	SILTSTONE 90%, dark grey abundant coal, banded sandy in part; intermixed with COAL 10%, black dull(<1% bright) stringers of coal; fresh, moderately strong, CRA
576.16	576.27	COAL UNDIFF., black; fresh, weak, CRA
576.27	583.68	SANDSTONE 80%, fine-medium grained, light grey; intermixed with COAL 20%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
583.68	583.9	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
583.9	584.84	SANDSTONE, fine-medium grained, light grey; fresh, moderately strong, CRA
584.84	586.05	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
586.05	587.43	SANDSTONE 90%, fine-medium grained, light grey; with COAL UNDIFF. 10%, black; fresh, strong, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
587.43	587.83	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%); fresh, weak, CRA
587.83	588.03	SILTSTONE, dark grey; fresh, strong, CRA
588.03	588.12	COAL UNDIFF., black; fresh, weak, CRA
588.12	589.15	SANDSTONE 80%, fine-medium grained, light grey silty in part; with COAL UNDIFF. 20%, black dull(<1% bright); fresh, moderately strong, CRA
589.15	589.33	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
589.33	590.48	SANDSTONE 70%, fine-medium grained, light grey; intermixed with SILTSTONE 30%, dark grey sandy in part; fresh, moderately strong, CRA
590.48	590.54	COAL UNDIFF., black; fresh, weak, CRA
590.54	590.63	SANDSTONE, fine-medium grained, light grey; fresh, moderately strong, CRA
590.63	590.79	COAL UNDIFF., black; fresh, weak, CRA
590.79	591	SANDSTONE 90%, fine-medium grained, light grey; intermixed with COAL UNDIFF. 10%, black dull, minor bright bands(>1%); fresh, moderately strong, secondary calcite, CRA
591	594.97	SANDSTONE 80%, fine-medium grained, light grey lithic; intermixed with COAL UNDIFF. 20%, black dull(<1% bright); fresh, moderately strong, CRA
594.97	595.15	COAL UNDIFF., black dull(<1% bright); fresh, weak, CRA
595.15	596.04	SANDSTONE 70%, fine-medium grained, light grey lithic; intermixed with COAL 30%, black dull, minor bright bands(>1%) silty bands throughout; fresh, moderately strong, siderite, CRA
596.04	596.29	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
596.29	596.46	SANDSTONE, fine-medium grained, light grey quartz-lithic; fresh, moderately strong, CRA
596.46	596.91	COAL, black dull, tends to stony; fresh, weak, CRA
596.91	597	SANDSTONE 50%, fine-medium grained, light grey lithic; intermixed with COAL 50%, black dull, minor bright bands(>1%) silty bands throughout; fresh, moderately strong, siderite, CRA
597	606	SANDSTONE 80%, fine-medium grained, light grey lithic; intermixed with COAL 20%, black dull(<1% bright) silty bands throughout; fresh, strong, secondary calcite, CRA
606	609	SANDSTONE 50%, fine grained, orangy grey lithic; intermixed with SILTSTONE 50%, dark grey; fresh, very strong, CRA
609	612	SANDSTONE 60%, fine-medium grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey coaly dull, minor bright bands(>1%) in part; fresh, strong, secondary calcite, CRA
612	614.37	SANDSTONE 70%, fine grained, light grey occasional coal, banded lithic; intermixed with SILTSTONE 30%, dark grey; fresh, moderately strong, Secondary Pyrite, CRA
614.37	614.53	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
614.53	621.68	SANDSTONE 80%, fine grained, light grey lithic occasional coal, banded; intermixed with SILTSTONE 20%, dark grey; fresh, moderately strong, CRA
621.68	621.87	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
621.87	624	SANDSTONE 70%, fine grained, light grey occasional coal, banded; intermixed with SILTSTONE 30%, dark grey; fresh, moderately strong, CRA
624	633	SANDSTONE 80%, fine grained, light grey lithic quartzo- feldspathic; intermixed with SILTSTONE 20%, dark grey occasional coal,banded; fresh, moderately strong, CRA
633	636	SANDSTONE 60%, fine grained, light grey lithic coal, banded; intermixed with SILTSTONE 40%, dark grey; fresh, moderately strong, Secondary Pyrite, CRA
636	642	SANDSTONE, fine grained, light grey lithic rare silty coal, banded; fresh, moderately strong, CRA
642	645.11	SANDSTONE 70%, fine grained, light grey lithic rare coal, banded; intermixed with SILTSTONE 30%, dark grey; fresh, moderately strong, secondary calcite, CRA
645.11	645.26	COAL UNDIFF., black; fresh, weak, CRA
645.26	648	SANDSTONE 90%, fine grained, light grey lithic; intermixed with COAL 10%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
648	651	SANDSTONE, fine grained, light grey lithic occasional coal, banded; fresh, moderately strong, secondary calcite, CRA
651	655.28	SANDSTONE 90%, fine grained, light grey lithic; intermixed with COAL 10%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
655.28	655.36	COAL UNDIFF., black; fresh, weak, CRA
655.36	657.07	SANDSTONE 60%, fine grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey; fresh, moderately strong, CRA
657.07	657.15	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
657.15	660.2	SANDSTONE 60%, fine grained, light grey lithic; intermixed with SILTSTONE 40%, dark grey; fresh, moderately strong, CRA
660.2	660.52	COAL, black dull, tends to stony dull(<1% bright); fresh, weak, CRA
660.52	663	COAL 10%, black mainly dull, frequent bright bands(>10%); intermixed with SANDSTONE 90%, fine grained, light grey lithic; fresh, weak, CRA
663	666	SANDSTONE 80%, fine grained, light grey lithic; intermixed with COAL 20%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
667.59	667.76	COAL UNDIFF., black; fresh, weak, CRA
667.76	677.2	SANDSTONE 90%, fine grained, light grey lithic quartzo- feldspathic; intermixed with COAL 10%, black dull, minor bright bands(>1%); fresh, moderately strong, CRA
677.2	679.12	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
679.12	680.41	SANDSTONE 90%, fine grained, light grey lithic quartzo- feldspathic; intermixed with COAL 10%, black dull, minor bright bands(>1%); fresh, moderately strong, secondary calcite, CRA
680.41	680.9	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) dull, tends to stony; fresh, weak, CRA
680.9	682.75	SANDSTONE 80%, fine-medium grained, light grey lithic; intermixed with COAL UNDIFF. 20%, black dull, tends to stony; fresh, moderately strong, secondary calcite, CRA
682.75	682.87	COAL UNDIFF., black dull, tends to stony; fresh, weak, CRA
682.87	683.43	SANDSTONE 70%, fine-medium grained, light grey lithic; intermixed with COAL UNDIFF. 30%, black dull(<1% bright); fresh, moderately strong, secondary calcite, CRA

		AGL energy V12 11/03/2013 14:05:48
From	То	Description
683.43	686.88	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) stony; fresh, weak, CRA
686.88	689.08	SANDSTONE 80%, fine grained, light grey; intermixed with COAL UNDIFF. 20%, black stony in part; fresh, strong, CRA
689.08	690.32	COAL, DULL <1% BRIGHT, black in part dull, minor bright bands(>1%); fresh, weak, CRA
690.32	690.57	SANDSTONE, fine grained, light grey quartz-lithic; fresh, moderately strong, CRA
690.57	690.89	COAL UNDIFF., black dull(<1% bright); fresh, weak, CRA
690.89	693.65	SANDSTONE 80%, fine-medium grained, light grey; with COAL UNDIFF. 20%, black dull, tends to stony; fresh, moderately strong, CRA
693.65	694.21	COAL, DULL <1% BRIGHT, black dull(<1% bright); fresh, weak, CRA
694.21	697.07	SANDSTONE 90%, fine-medium grained, light grey; with COAL 10%, black interbanded dull & bright(>40%); fresh, moderately strong, secondary calcite, CRA
697.07	697.12	COAL UNDIFF., black; fresh, weak, CRA
697.12	698.61	SANDSTONE 80%, fine grained, light grey lithic; with COAL 20%, black interbanded dull & bright(>40%) dull, tends to stony; fresh, moderately strong, CRA
698.61	699	COAL UNDIFF., black DF dull(<1% bright); fresh, weak, CRA
699	703.75	SANDSTONE 70%, fine grained, dark grey lithic; intermixed with COAL 30%, black interbanded dull & bright(>40%); fresh, strong, CRA
703.75	703.85	COAL UNDIFF., black; fresh, weak, CRA
703.85	704.15	SANDSTONE, fine grained, light grey quartz-lithic poorly to moderately sorted; fresh, moderately strong, CRA
704.15	704.23	COAL UNDIFF., black; fresh, weak, CRA
704.23	705.13	SANDSTONE 70%, black dull, tends to stony; with COAL 30%, fine grained, grey lithic poorly to moderately sorted; fresh, weak, CRA
705.13	705.54	COAL UNDIFF., black DF dull(<1% bright); fresh, weak, CRA
705.54	705.75	SANDSTONE, grey lithic stringers of coal; fresh, moderately strong, CRA
705.75	706.22	COAL, DULL <1% BRIGHT, black dull, minor bright bands(>1%) occasional; fresh, weak, CRA
706.22	708	SANDSTONE 70%, fine grained, grey lithic poorly to moderately sorted; with COAL 30%, black dull, tends to stony; fresh, strong, CRA
708	711	SANDSTONE 80%, grey dark grey lithic stringers of coal; intermixed with COAL 20%, black bright with dull bands(>60%); fresh, strong, CRA
711	714	SANDSTONE 80%, fine grained, grey lithic moderately sorted coal, banded; with COAL 20%, black dull, tends to stony stony; fresh, strong, CRA
714	720	SANDSTONE 90%, fine grained, grey lithic stringers of coal occasional coal,banded; intermixed with COAL 10%, black interbanded dull & bright(> 40%) occasional dull, minor bright bands(>1%); fresh, strong, AVO
720	724.53	SANDSTONE 70%, fine grained, dark grey lithic occasional coal, banded; intermixed with COAL 30%, black interbanded dull & bright(>40%); fresh, strong, AVO
724.53	724.67	COAL UNDIFF., black dull, tends to stony dull(<1% bright); fresh, weak, AVO
724.67	727	SANDSTONE 90%, fine grained, dark grey lithic silty in part; intermixed with COAL 10%, black interbanded dull & bright(>40%) occasional coal, banded silty; fresh, strong, AVO

GPAC		AGL energy V12 11/03/2013 14:05:48
From	То	Description
727	731.73	SANDSTONE 90%, fine grained, grey lithic rare stringers of coal; intermixed with SILTSTONE 10%, dark grey occasional coaly high sphericity, well-rounded; fresh, strong, AVO
731.73	731.89	COAL UNDIFF., black DF; fresh, weak, AVO
731.89	736	SANDSTONE 90%, fine grained, grey dark grey lithic occasional quartzose moderately sorted; intermixed with COAL 10%, black interbanded dull & bright(>40%) occasional coal,banded silty; fresh, strong, AVO
736	739	SANDSTONE 80%, fine grained, grey lithic moderately sorted occasional coal,banded; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey occasional coaly high sphericity, well-rounded; fresh, strong, AVO
739	742	SANDSTONE 80%, fine grained, grey dark grey lithic stringers of coal; intermixed with COAL 20%, dark grey black abundant coal, banded silty mainly dull, frequent bright bands(>10%); fresh, strong, AVO
742	749	SANDSTONE 90%, fine grained, dark grey lithic stringers of coal silty in part; intermixed with COAL 10%, dark grey black abundant coal, banded silty interbanded dull & bright(>40%); fresh, strong, AVO
749	755	SANDSTONE 90%, fine grained, dark grey lithic coal, banded rare stringers of coal; intermixed with CARBONACEOUS SILTSTONE 10%, dark grey occasional silty occasional coaly; fresh, strong, AVO

End of Hole WAUKIVORY 12

Craven Subgroup	Formation	on	Easting:	q	9
	Seam		402711	7	7000
001DA_DB	Sample	Number		Drilling	
25	Depth be Collar(m	elow 1)	Nor	Drilling Method:	
	Graphic	Log	Northing:		GLOUCES
SANDSTONE, fine-medium grained, grey, carbonaceous in part lithic; moderately weathered  COAL, black, sandy FN throughout; fresh. 001DA Taken at 11:50, 001DB Taken at 15:15  SANDSTONE 90%, medium grained, grey, lithic occasional coal, banded; intermixed with SIDERITE 10%, green; fresh  SANDSTONE, medium grained, grey, coal, banded quartzo-feldspathic lithic; fresh	DESCR		6452889		IER
SANDSTONE, fine-medium grained, grey, carbonaceous in part lithic; moderately weathered  COAL, black, sandy FN throughout; fresh. 001DA Taken at 11:50, 001DB Taken at 15:15  SANDSTONE 90%, medium grained, grey, lithic occasional coal, banded; intermixed with SIDERITE 10%, green; fresh  SANDSTONE, medium grained, grey, coal, banded quartzo-feldspathic lithic; fresh	DESCRIPTION			Logged by: GEOC	PROJECT
	50 100 GAMMA api	Geophysical Traces	R.L.: 99.3	Č	
	200 월.	cal Trac		Date Dr	σ
	Compensated 3	ΦS	<b>Dip</b> : 0	Date Drilled:19/09/2012	Borenole Number: N
	Limestone Neutron 30 60 90		Dir: 0	Sheet:1 of:74	er: Waukivory 12

GLOUCESTER PROJECT

Borehole Number: Waukivory 12

Craven Subgroup				Form	nation	
				Sean	n	
				Sam	ple Nu	umber
36 35 34	33 32 33	30 29 28 	26	Dept Colla	h belo ar(m)	)W
	<u> </u>				hic Lo	pg
grey, quartzo-feldspathic lithic coal, banded; grey, quartzo-feldspathic lithic coal, banded; intermixed with SILTSTONE 20%, grey; fresh SANDSTONE, medium grained, grey, quartzo-feldspathic lithic; fresh	SANUS I ONE 70%, tine-medium grained, grey, quartzo-feldspathic lithic coal banded; intermixed with SILTSTONE 30%, grey; fresh	SANDSTONE 80%, fine-medium grained, grey, coal.banded quartzo-feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh	SANDSTONE, medium grained, grey, coal, banded quartzo-feldspathic lithic; fresh	DESCRIPTION		
				50 100 150 200	GAMMA api	Geophysical Traces
				1 2 3	Compensated	aces
				30 60 60 60 90 60	l imestone Neutron	

	Craven Subgroup	Formation	on
		Seam	
		Sample	Number
		Depth be Collar(m	elow )
		Graphic	Log
grey, quartzo-feldspathic lithic coal, landed; grey quartzo-feldspathic lithic coal, landed; intermixed with SILTSTONE 10%, grey; fresh	quartzo-feldspathic lithic; fresh  SANDSTONE; fine grained, grey, quartzo-feldspathic lithic; fresh  SANDSTONE; fine-medium grained, grey, quartzo-feldspathic lithic; fresh  quartzo- feldspathic lithic coal, banded; fresh	DESCRIPTION	
		50 GAMMA api	Geophysical Traces
		Compensated 2 3	aces
		Limestone Neutron	

Craven S	Subgroup		Form	ation
			Sean	1
			Samp	ole Number
55 55 54	53 52 51	<del></del>	Deptl Colla	n below r(m)
			Grap	hic Log
SANDSTONE 60%, fine-medium grained, grey, lithic; intermixed with COAL 40%, black; fresh  SANDSTONE 60%, fine-medium grained, grey, lithic occasional coal, banded; intermixed with SILTSTONE 40%, grey; fresh	SANDSTONE, fine-medium grained, grey, carbonaceous in part lithic; fresh	SANDSTONE 90%, fine-medium grained, grey, quartzo- feldspathic lithic coal banded; intermixed with SILTSTONE 10%, grey; fresh	DESCRIPTION	
			50 100 150 200	Geophysical Traces
			1 Company	aces
			30 e 20 00 00 00 00 00 00 00 00 00 00 00 00	

	Craven Subgroup				For	matio	n
					Sea	am	
					Sar	nple N	Number
7	8 8	\$ 		3	Dep Coll	oth be lar(m)	low
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					iphic l	_og
	SANDSTONE 60%, fine-medium grained, grey, coal, banded lithic; intermixed with COAL 40%, heach; fresh	SANDSTONE 70%, fine-medium grained, grey, lithic; intermixed with COAL 30%, black; fresh	SANDSTONE 50%, fine-medium grained, grey, lithic coal, banded; intermixed with SILTSTONE 50%, grey; fresh	SANDSTONE 60%, fine-medium grained, grey, lithic occasional coal banded; intermixed with SILTSTONE 40%, grey; fresh	DEVOCRITION		
					50 100 150 200	GAMMA api	Geophysical Traces
					2	Compensated	aces
					30 60 90	Limestone Neutron	

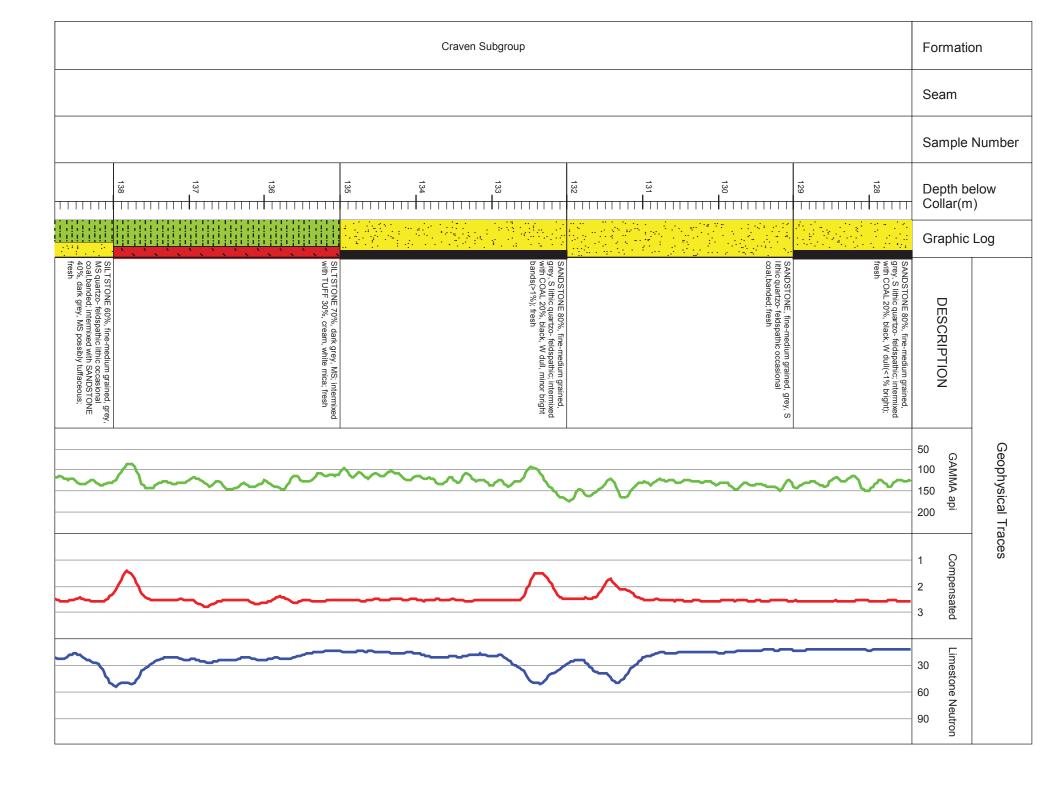
Craven Subgroup	Formation	1
	Seam	
	Sample N	umber
82 88 73 76 75 72 73 73 73 73 74 75 75 75 75 75 75 75 75 75 75 75 75 75	Depth belo	ow
	Graphic L	og
SANDSTONE 90%, fine grained, grey, lithic micaceous moderately sorted; intermixed with SILTSTONE 10%, green-brown, carbonaceous in part; fresh  SILTSTONE, dark grey green-brown, bands of coal carbonaceous sandy; fresh  SILTSTONE 90%, grey dark grey, stringers of coal carbonaceous sandy; intermixed with COAL 10%, black, duill(<1% bright) stringers of coal; fresh  SILTSTONE 90%, grey dark grey, stringers of coal; fresh  SILTSTONE 90%, grey dark grey, stringers of coal; fresh  SILTSTONE 90%, grey dark grey, stringers of coal; fresh	DESCRIPTION	
	50 GAMMA api	Geophysical Traces
	Compensated 2 3	aces
	Limestone Neutron	

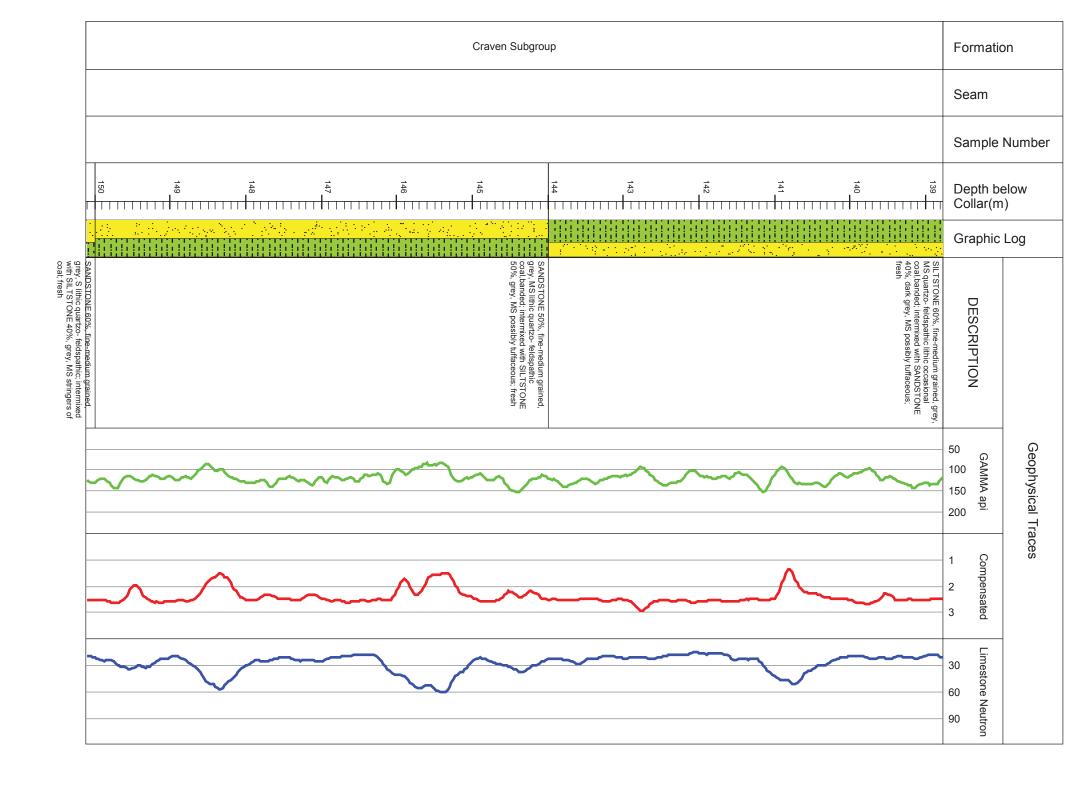
Craven Subgroup				Forn	natior	1
				Sear	m	
				Sam	ple N	lumber
		87 88 85 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Dept Colla	th bel ar(m)	ow
	To the Company of the	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Grap	hic L	.og
SANDSTONE 90%, fine grained, grey, feldspathic-lithic moderately sorted; intermixed with SLITSTONE 10%, dark grey, carbonaceous rare; fresh	SANDSTONE 70%, light grey, feldspathic- lithic moderately sorted; intermixed with SILTSTONE 30%, dark grey; fresh	SILTSTONE 60%, grey green-brown, sandy carbonaceous rare, intermixed with SANDSTONE 40%, fine grained, light grey, feldspathic- lithic moderately sorted; fresh	SILTSTONE 80%, grey dark grey, stringers of coal carbonaceous in part; intermixed with SANDSTONE 20%, fine grained, grey, lithic iron stained rare; fresh	DESCRIPTION		
				50 100 150 200	GAMMA api	Geophysical Traces
				1 2	Compensated	aces
				30 60 90	Limestone Neutron	

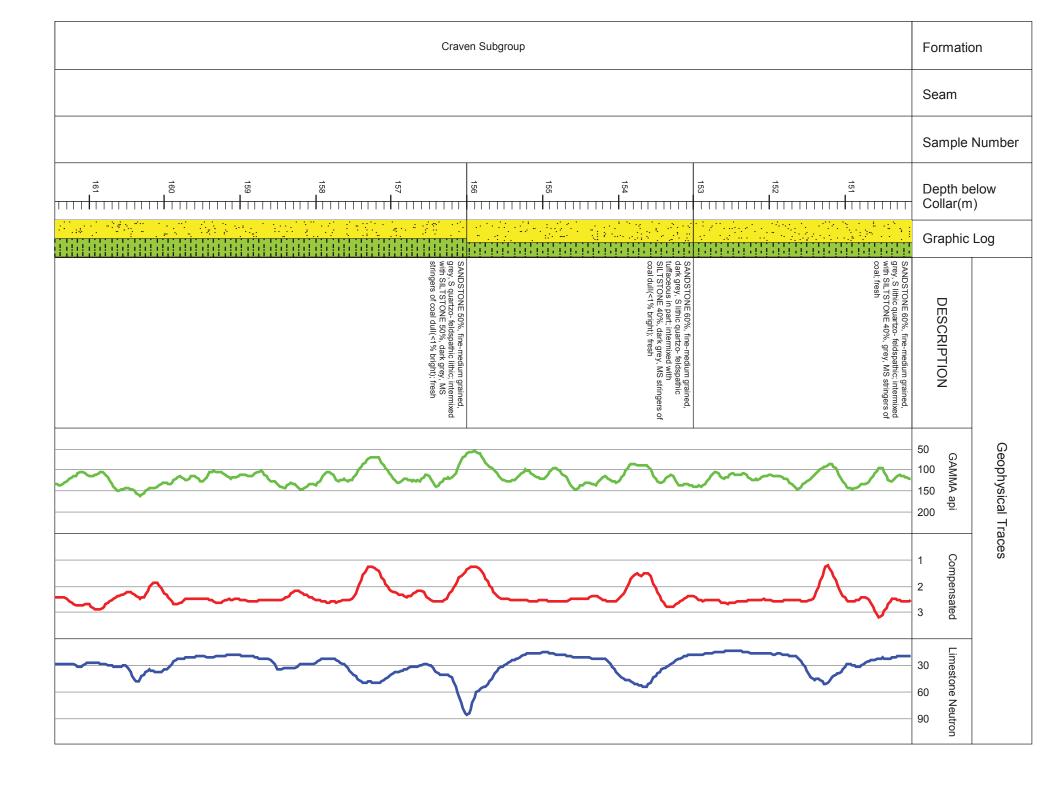
Craven Subgroup	Format	ion
	Seam	
	Sample	Number
10 10 10 10 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Depth b	pelow n)
	Graphic	Log
SANDSTONE 90%, fine grained, grey, feldspathic. lintic moderately sorted: intermixed with SILTSTONE 10%, dark grey, carbonaceous rare; fresh  SILTSTONE 70%, grey green-brown, coal, banded rare; intermixed with SANDSTONE 30%, fine grained, grey, feldspathic- lithic moderately sorted; fresh	DESCRIPTION	
	50 GAMMA api	Geophysical Traces
	Compensated	эсеs
	Limestone Neutron	

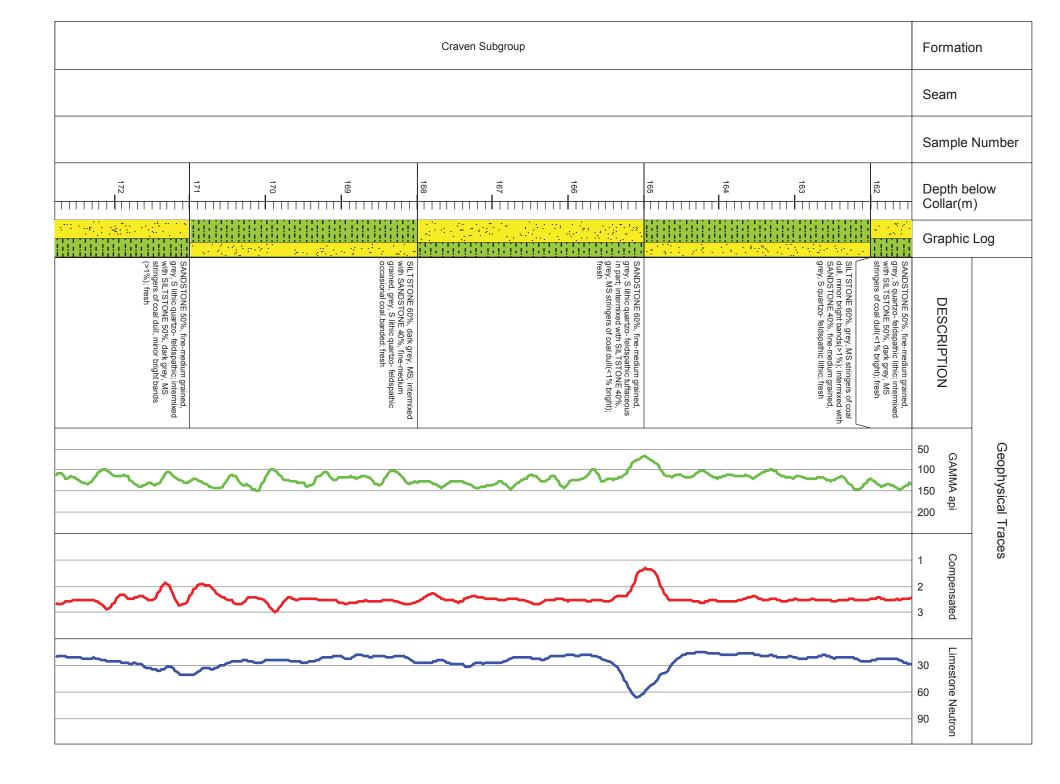
Craven Subgroup		Formation	
	Seam	Seam	
	Sample	Sample Number	
16     15     14     13     12     14     13     16     <	Depth be	elow )	
		Graphic Log	
coal banded rare; intermixed with SANDSTONE 30%, fine grained, grey, feldspathic-lithic moderately sorted; fresh feldspathic-lithic moderately sorted; fresh should be sorted;			
	50 GAMMA api 150 200	Geophysical Traces	
	Compensated 2 3	Seor	
	Limestone Neutron		

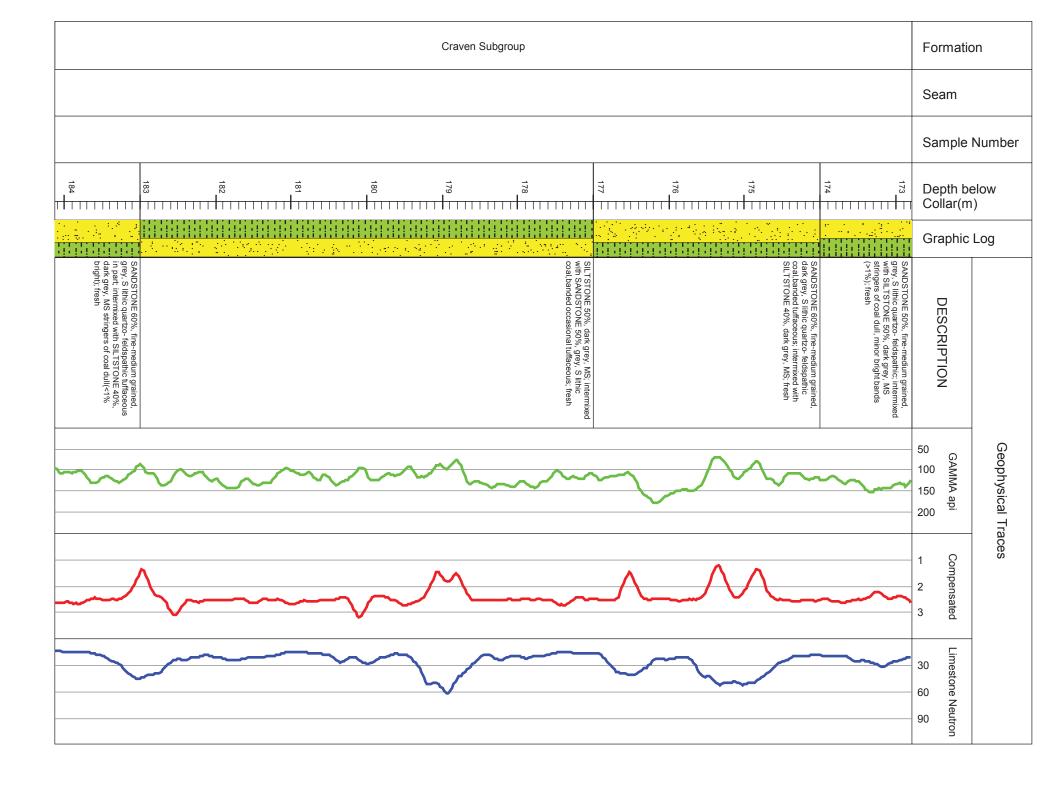
Craven Subgroup		
	Seam	
	Sample Numbe	r
127	Depth below Collar(m)	
	Graphic Log	
SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey, lithic; fresh  SILTSTONE, dark grey, rare carbonaceous laminations; fresh  SANDSTONE 80%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with COAL 20%, black, W dull(<1% bright); fresh	DESCRIPTION	
	Geophysical Traces  GAMMA api  C	
	1 Compensated	
	Limestone Neutron	

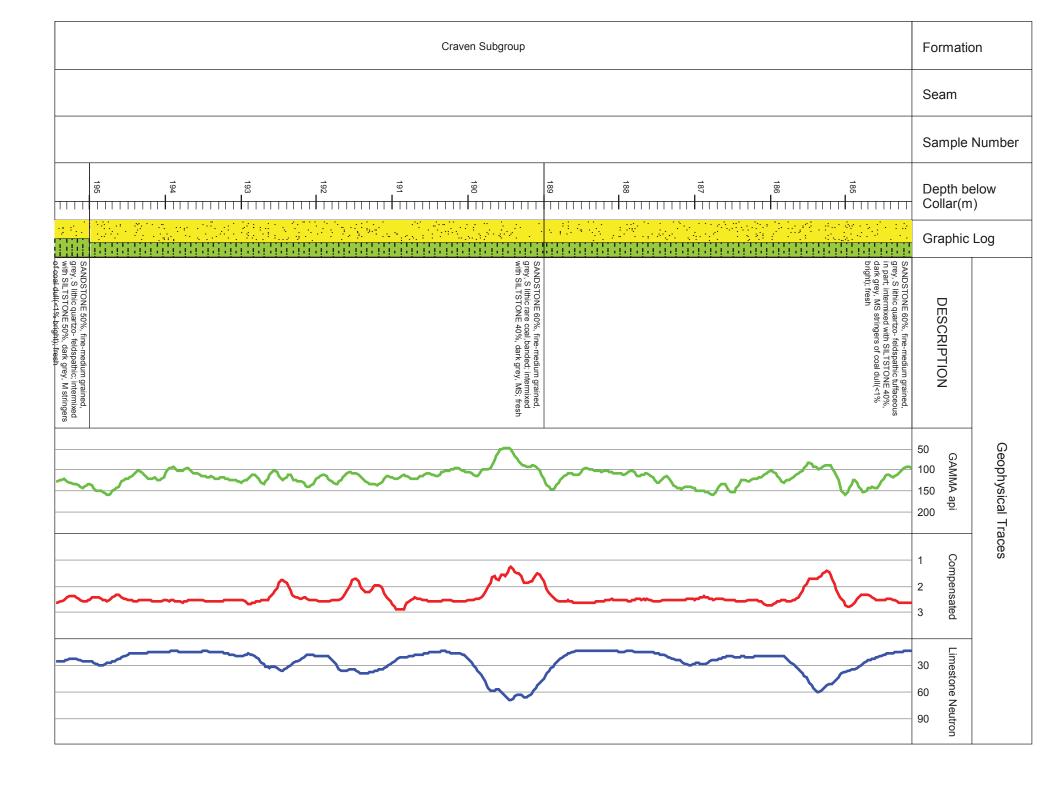


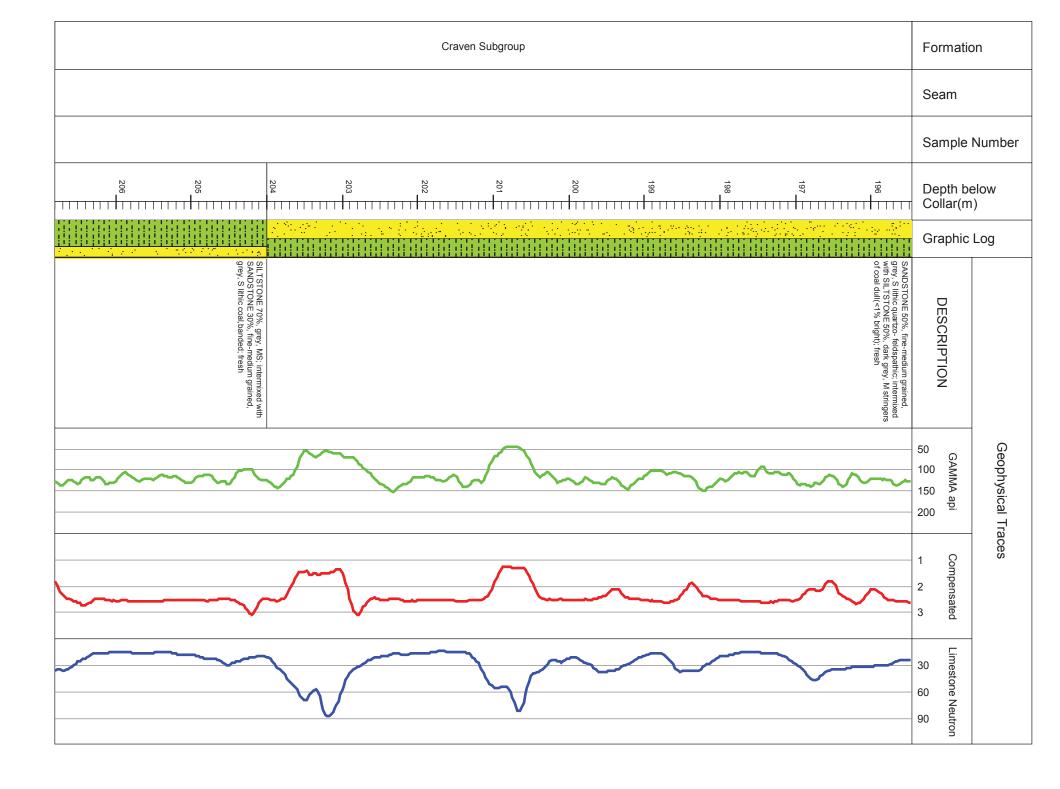


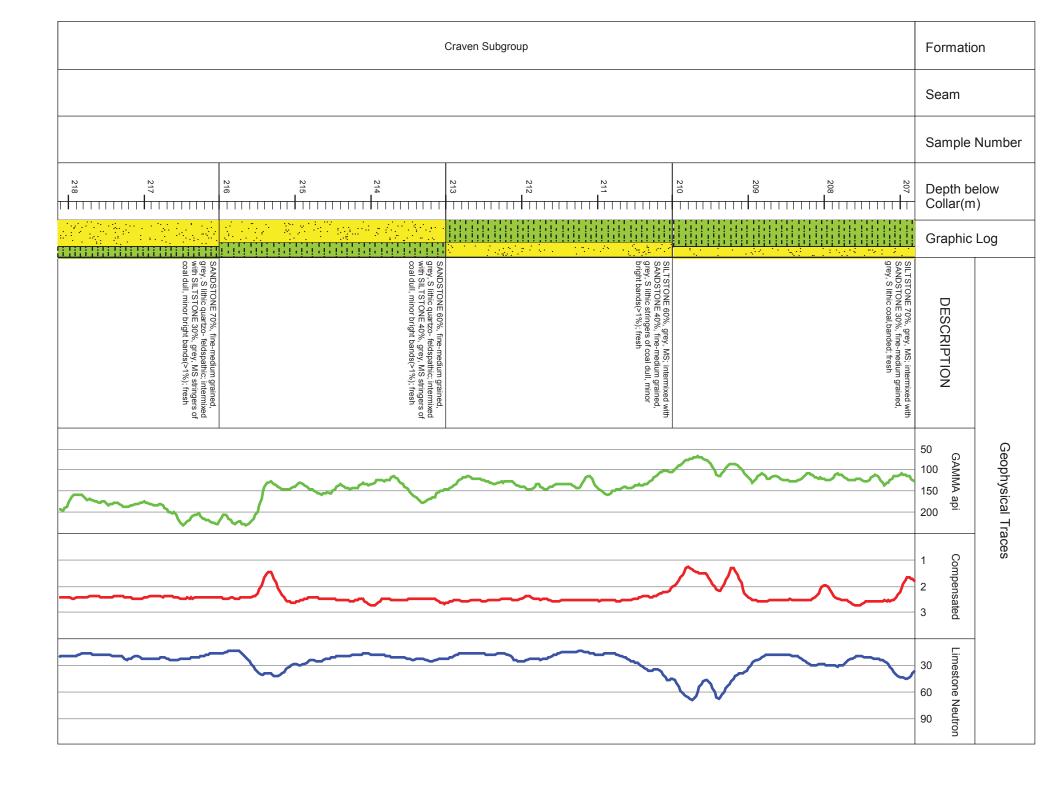




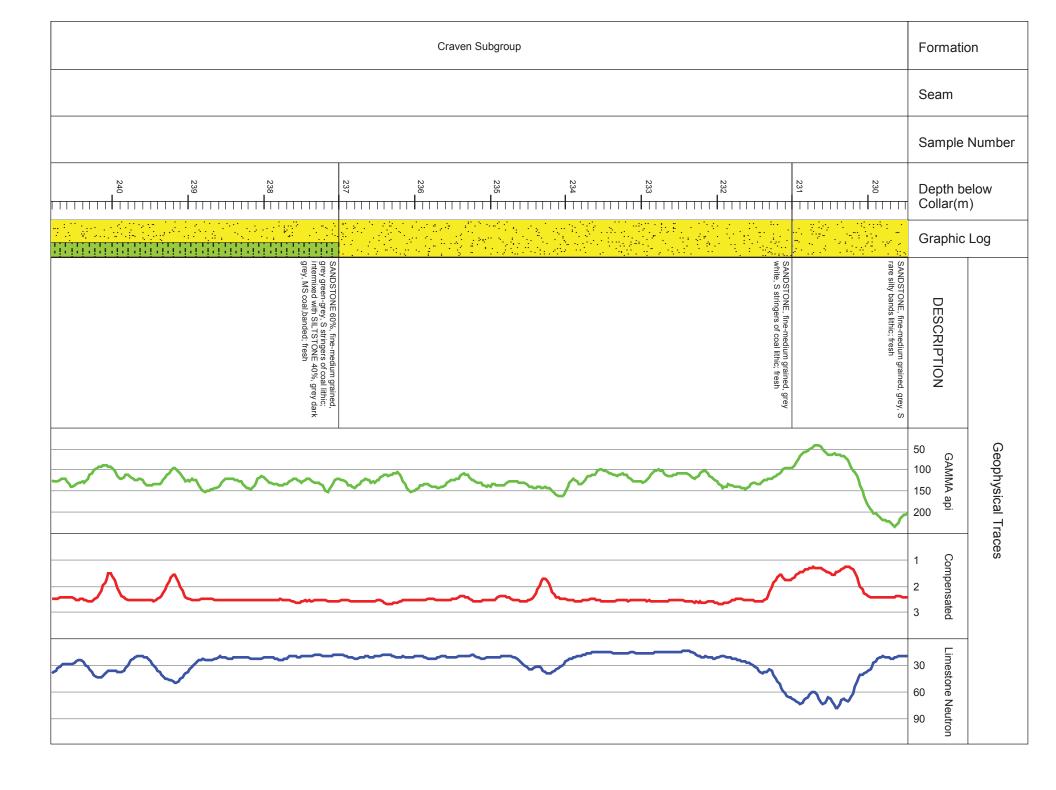


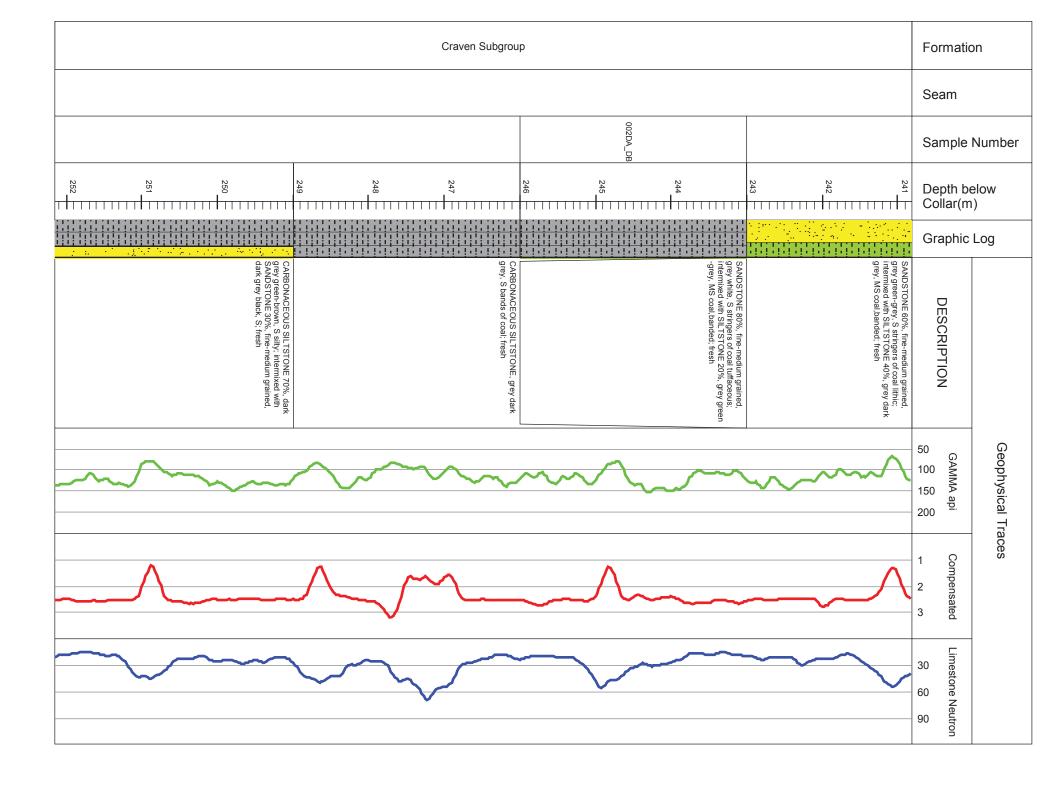


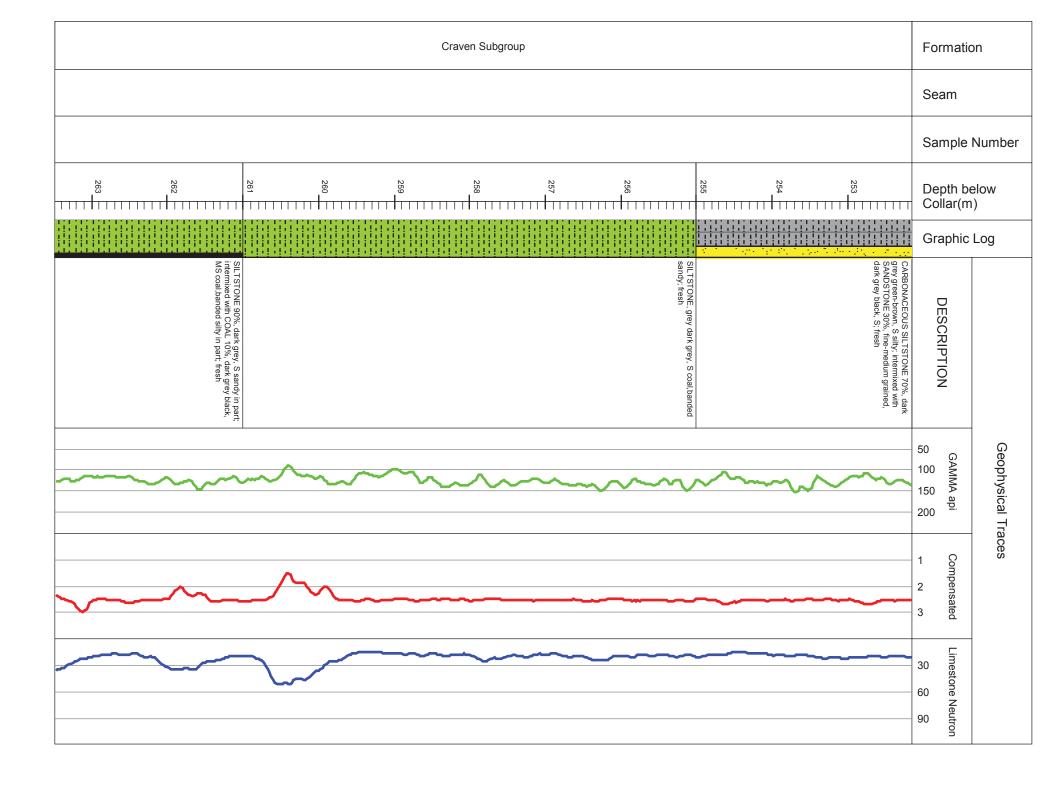


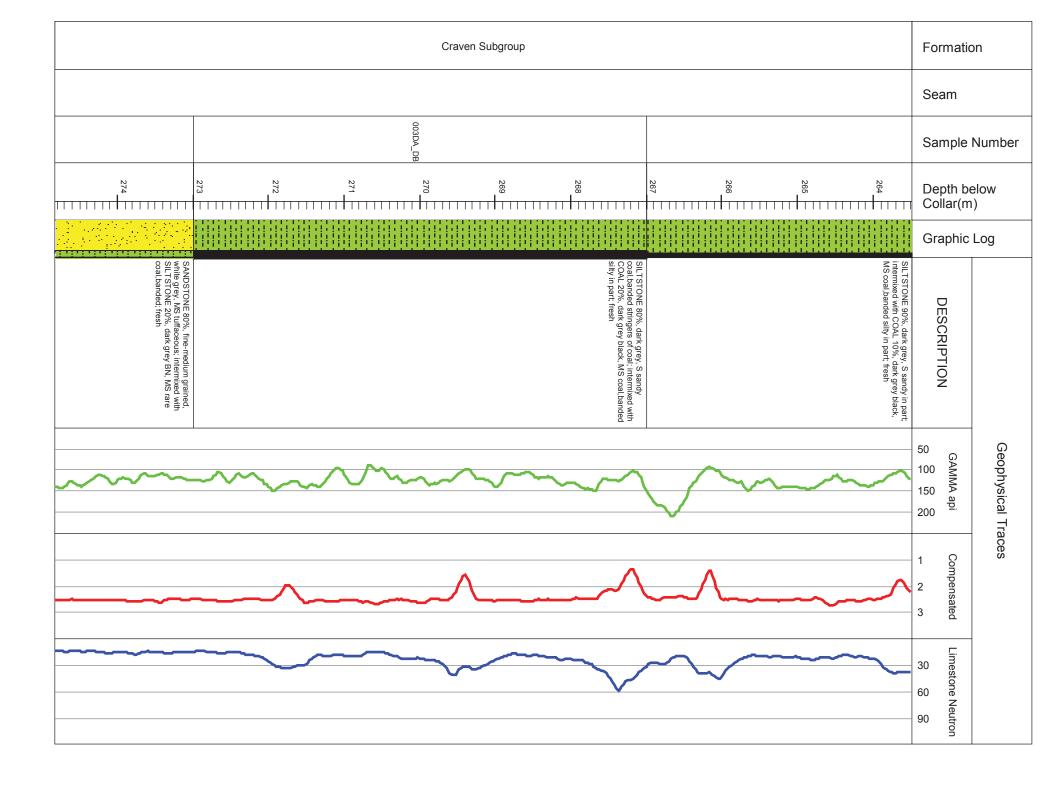


Craven Subgroup		Formation	
	Seam		
	Sample Nur	mber	
	Depth below Collar(m)	V	
	Graphic Log		
SANDSTONE 70%, fine-medium grained, girey, S lithic quartzo-feldspathic, intermixed with SILTSTONE 30%, girey, MS stringers of coal dull, minor bright bands (>1%); fresh  SANDSTONE 60%, fine-medium grained, girey, S quartzo-feldspathic lithic; intermixed with SILTSTONE 40%, grey, MS stringers of coal dull, minor bright bands (>1%); fresh  SANDSTONE, fine-medium grained, girey, S thanded; fine-medium grained, girey, S quartzo-feldspathic lithic occasional coal, banded; fine-medium grained, girey, S grey, MS; fresh	DESCRIPTION		
	50 GAMMA 150 api 200	Geophysical Traces	
	Compensated 2 3	ces	
	Limestone Neutron		

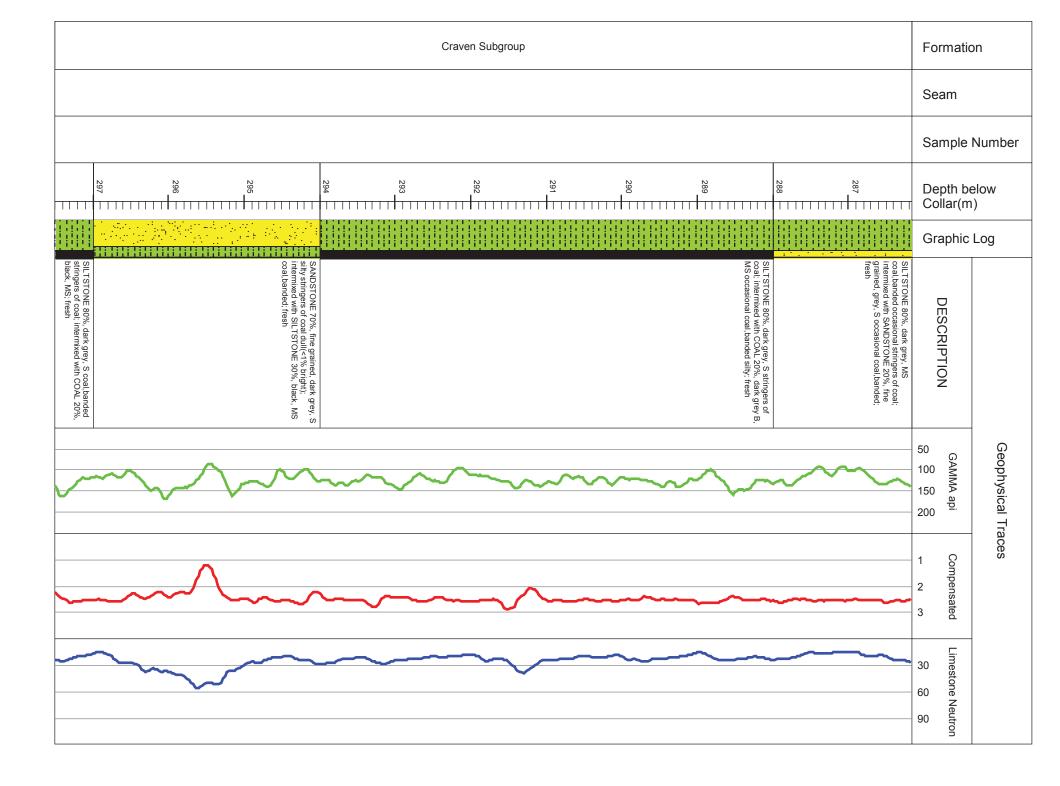


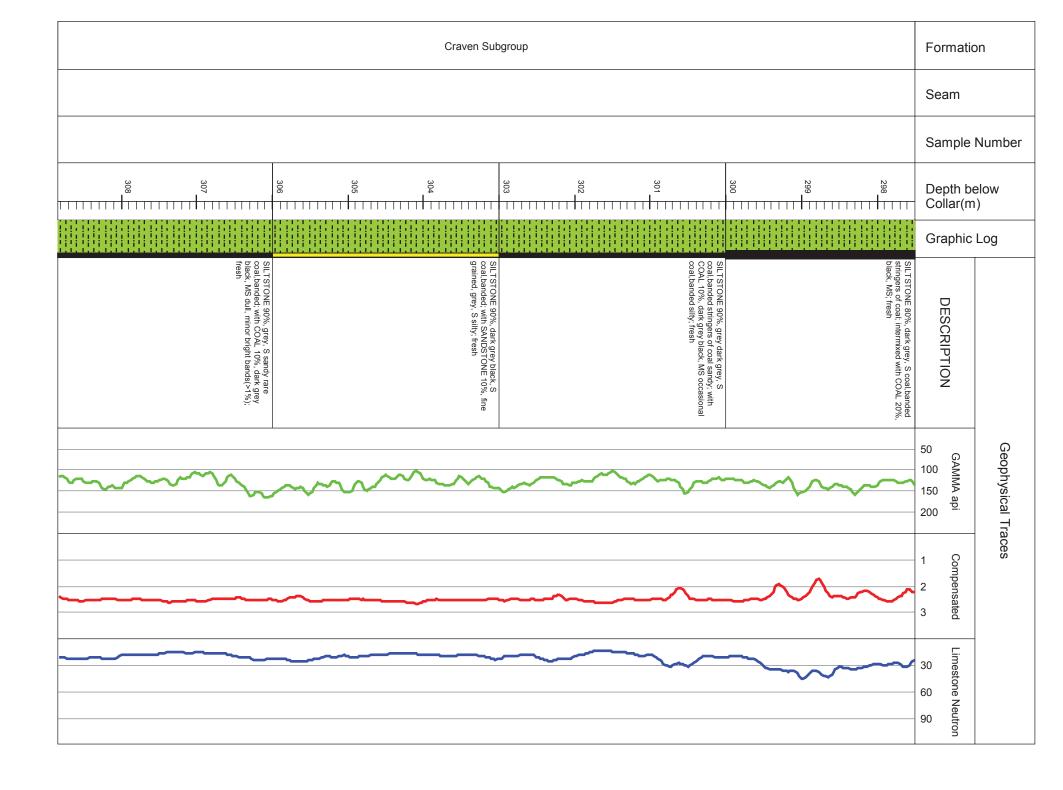


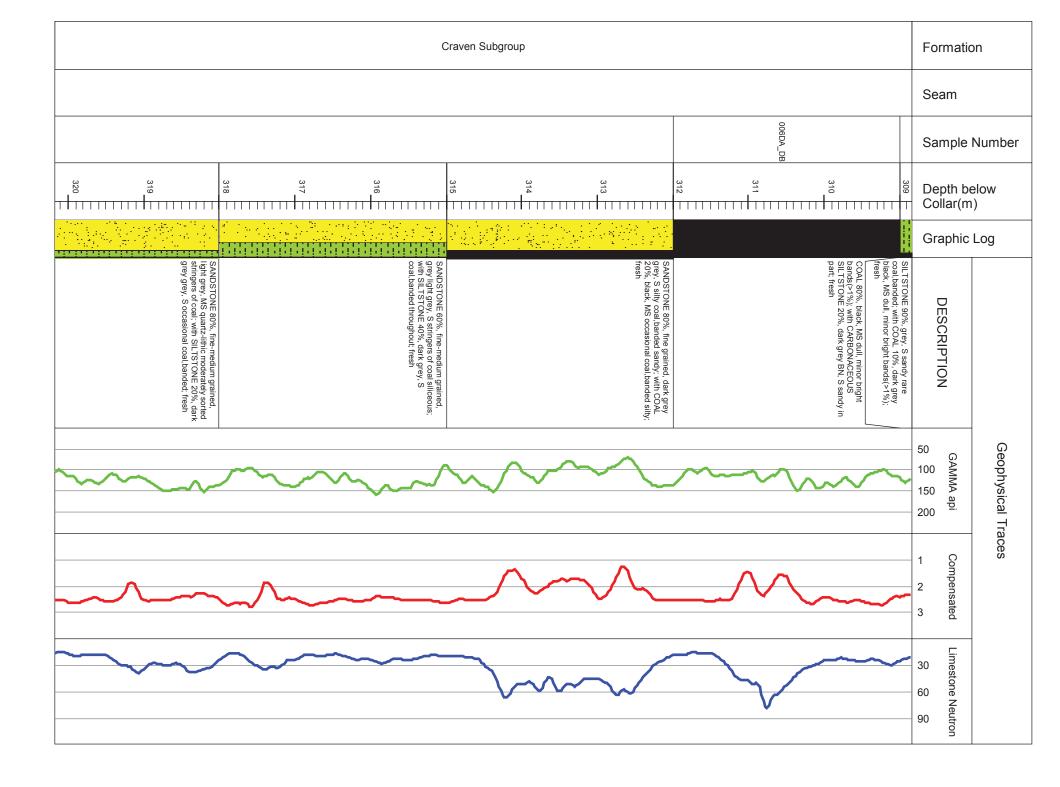


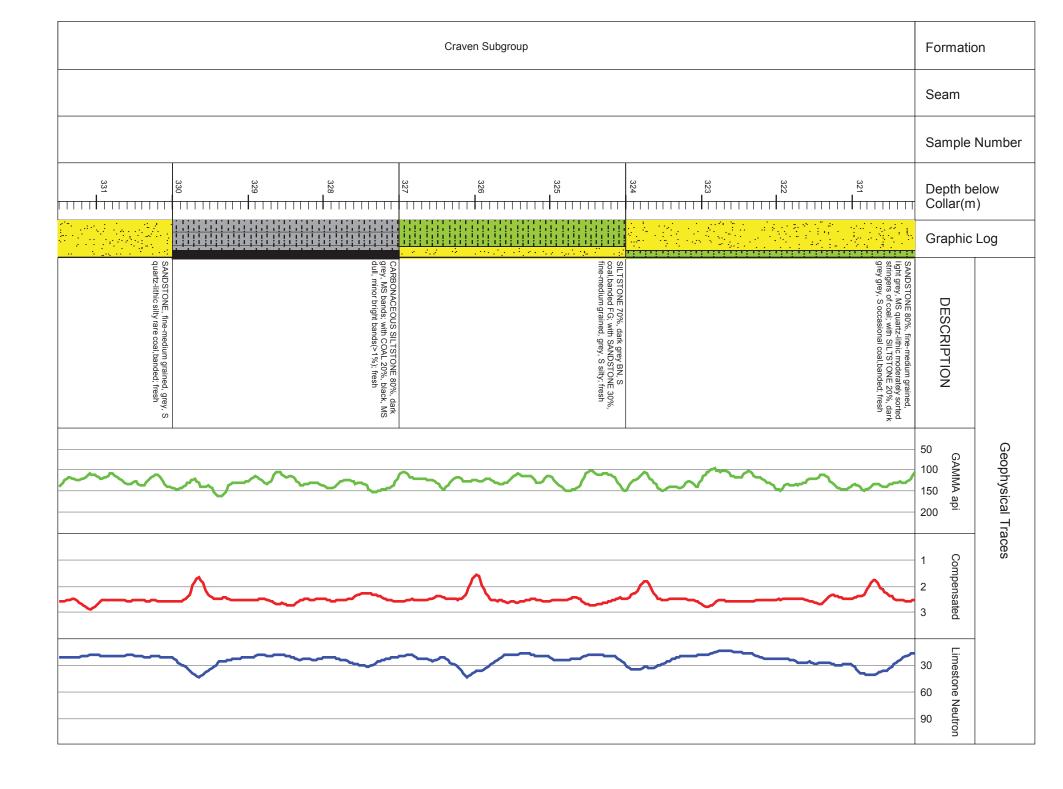


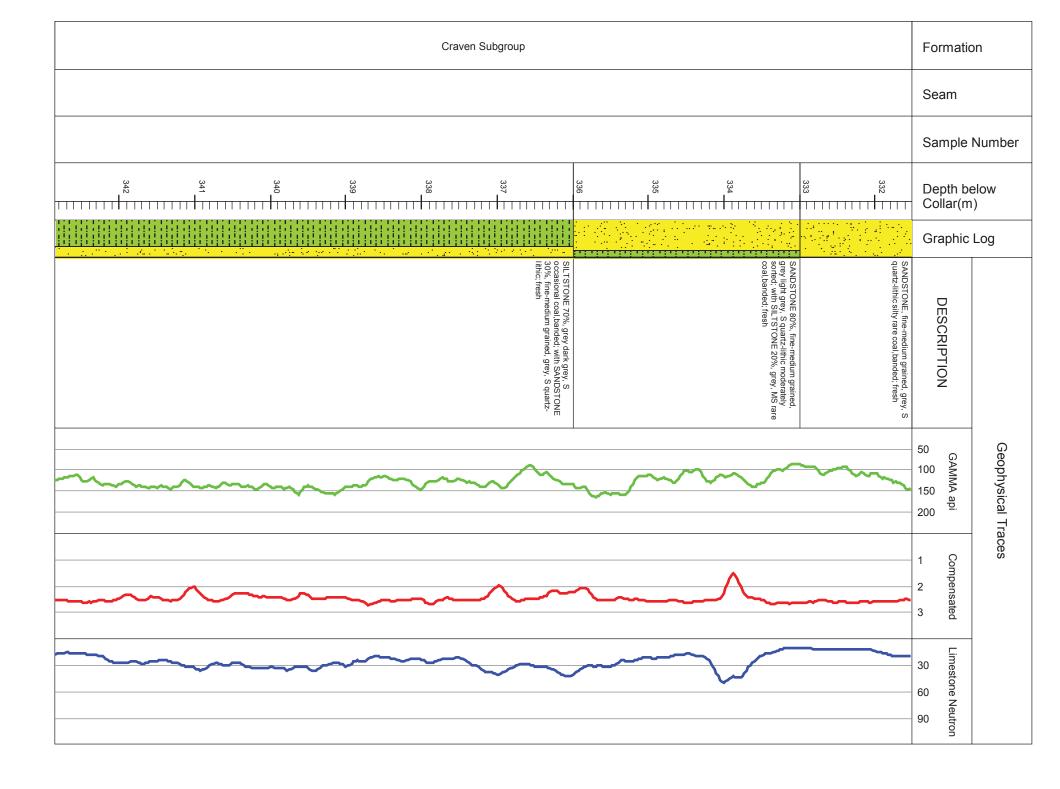
Craven Subgroup				Formation	
			Seam		
			Sample I	Number	
286 285 284 283	288 281 280 779 The second sec	277 277 277 277 277 277 277 277 277 277	Depth be Collar(m	elow )	
			Graphic	Log	
COAL 40%, black, MS coal, banded occasional stringers of coal; intermixed with CARBONACEGUS SILTSTONE 60%, dark grey black, S stringers of coal sandy in part; fresh  SILTSTONE 80%, dark grey, MS coal, banded occasional stringers of coal; intermixed with SANDSTONE 20%, fine grained, grey, S occasional coal, banded; fresh		SANDSTONE 80%, fine-medium grained, white grey, MS tuffaceous; intermixed with SILTSTONE 20%, dark grey BN, MS rare coal, banded; fresh  SILTSTONE 60%, dark grey, S rare coal, banded; intermixed with TUFF 40%, white grey, MS clayey occasional sandy; fresh	DESCRIPTION		
			50 GAMMA api	Geophysical Traces	
	~	~~	Compensated	aces	
			Limestone Neutron		

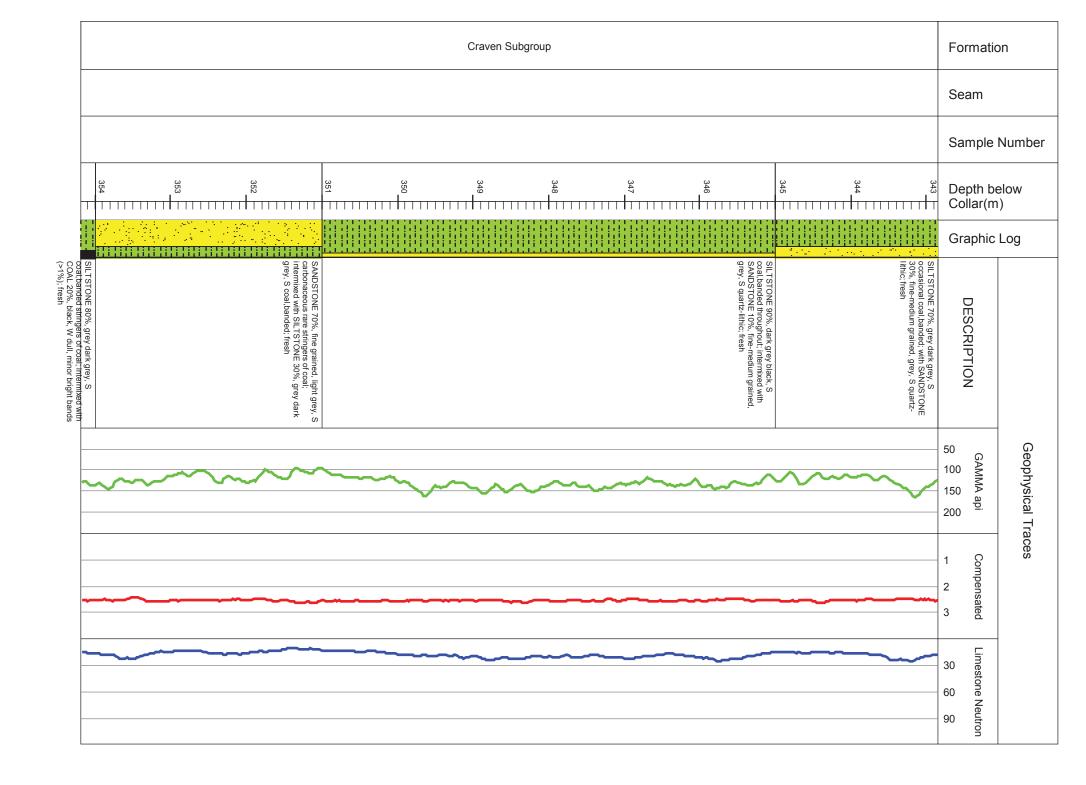




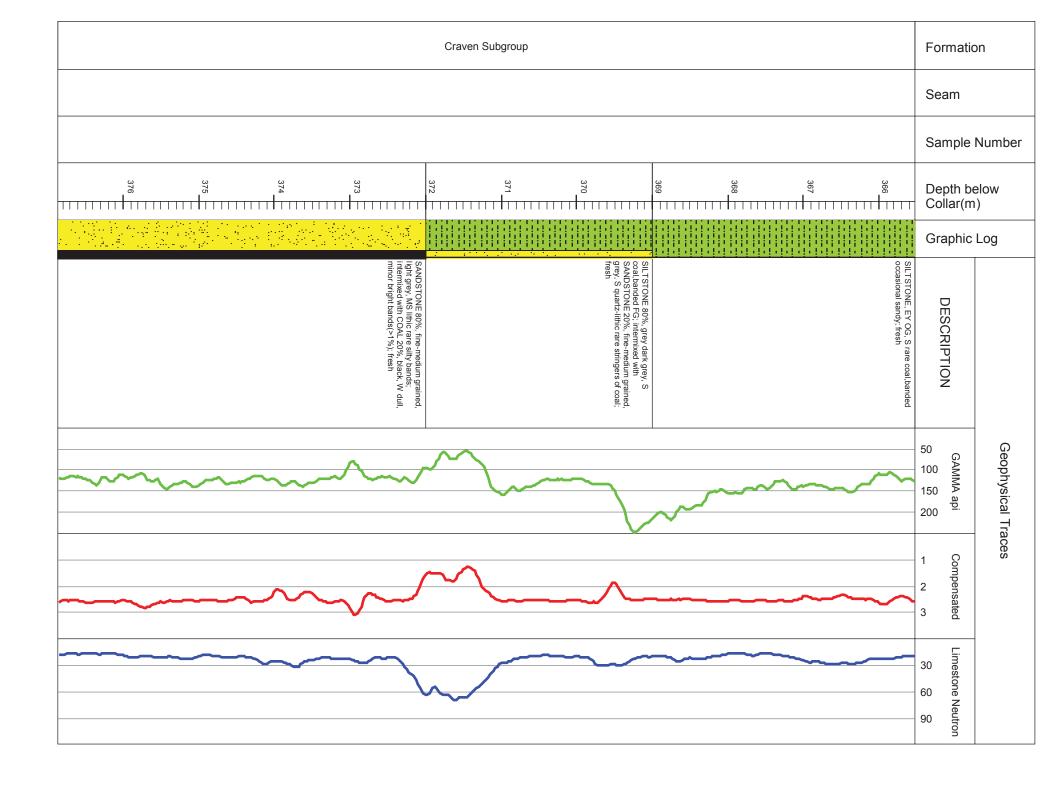


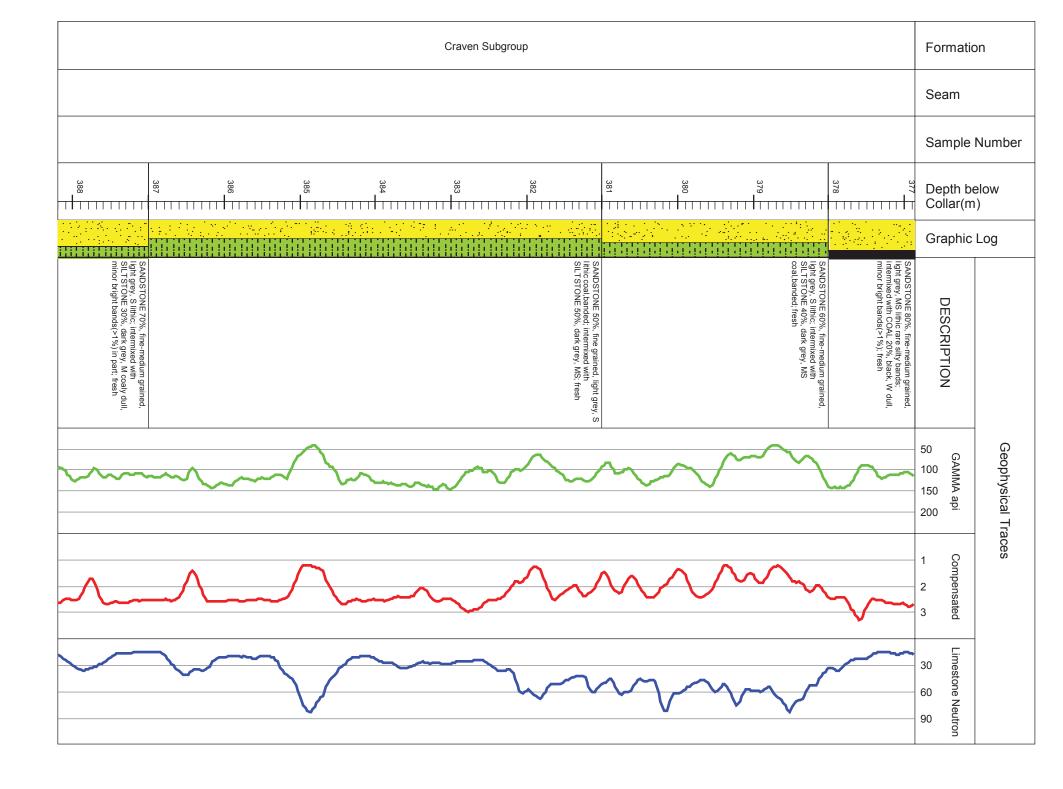


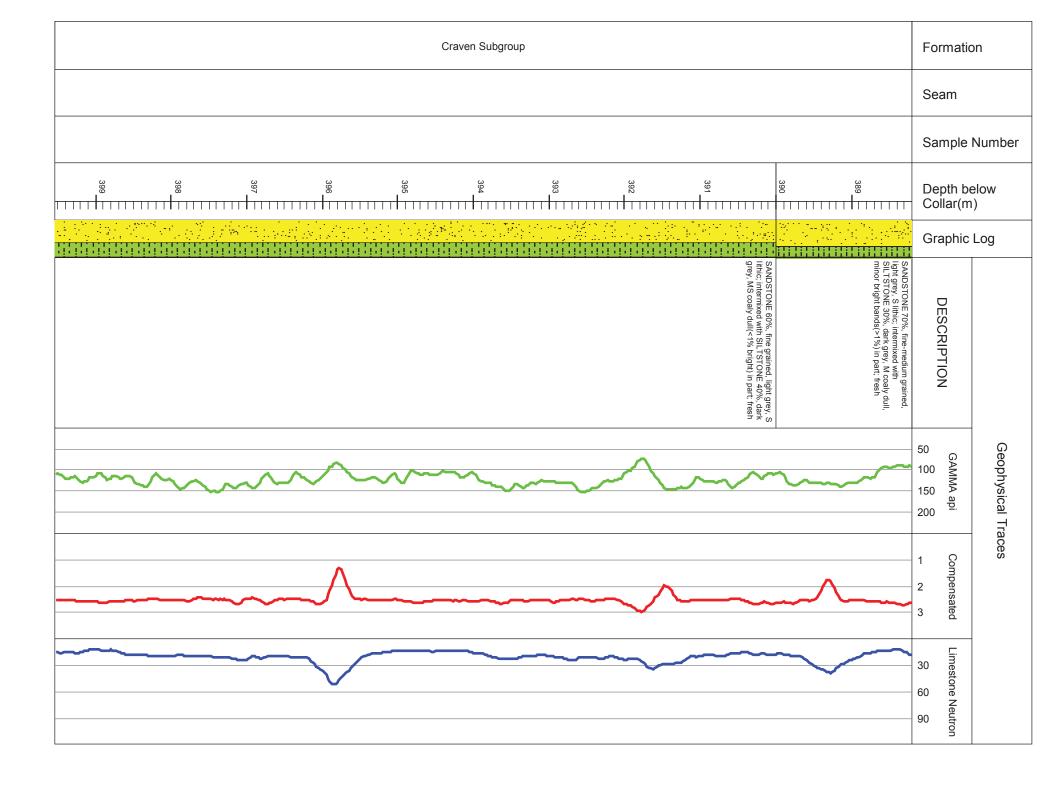


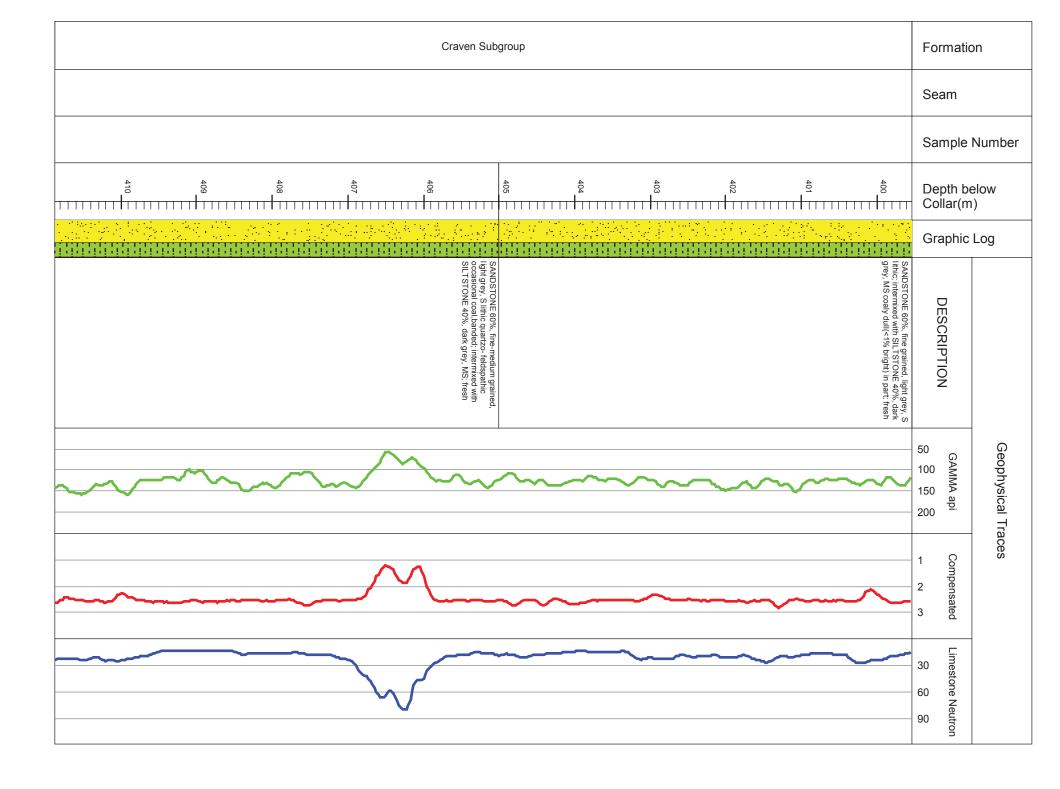


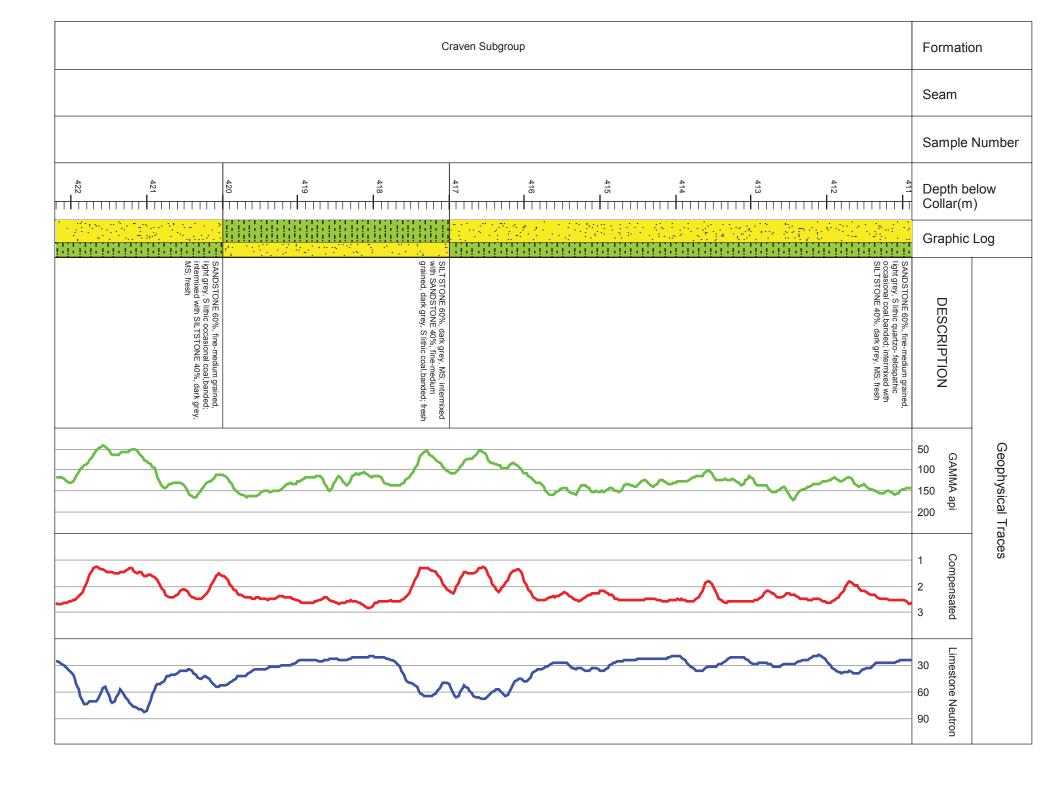
Craven Subgroup			Formation			
				Seam	Seam	
					Sample	e Number
365 364 363	362 361	389	358	355	Depth Collar(	pelow m)
					Graphi	c Log
SILTSTONE, EY OG, S rare coal, banded occasional sandy; fresh			SILTSTONE 70%, DE, S rare coal banded; intermixed with SANDSTONE 30%, fine-medium grained, grey, S quartz-lithic; fresh	SILTSTONE 80%, grey dark grey, S coal; intermixed with coal, banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh	DESCRIPTION	
	~~~~		~~~	<b>^</b>	50 GAMMA api 150 api	Geophysical Traces
				<b>^</b>	Compensated	ices
					Limestone Neutron 30 60 90	

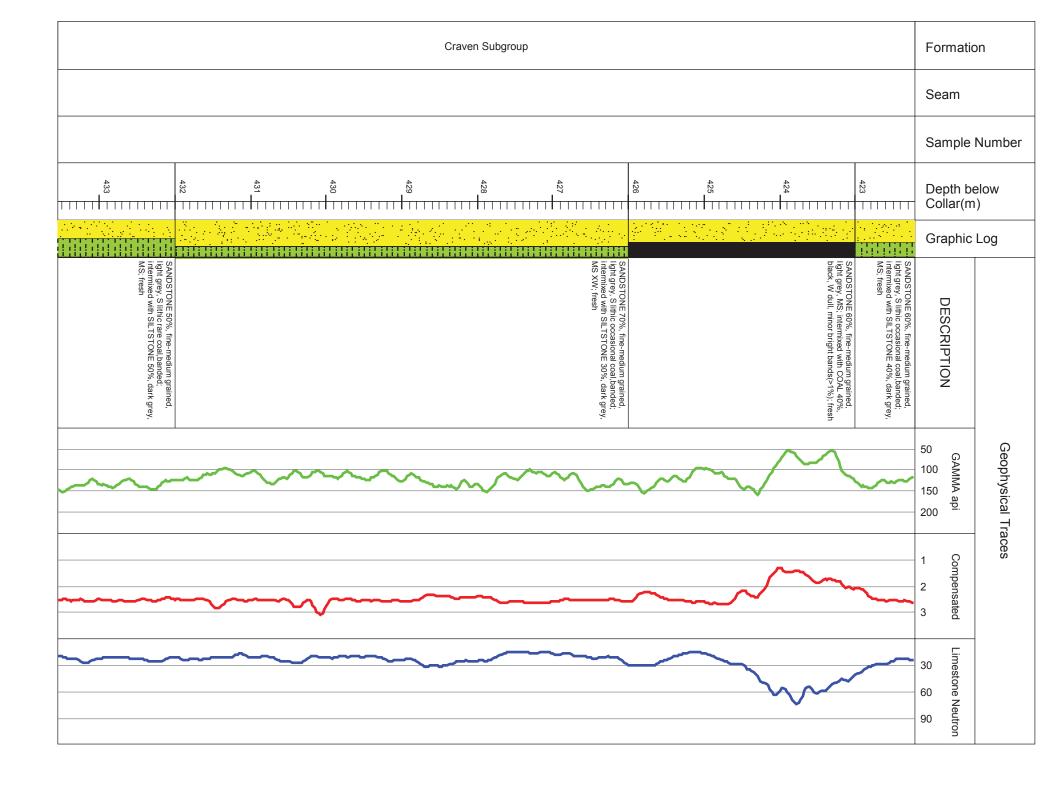


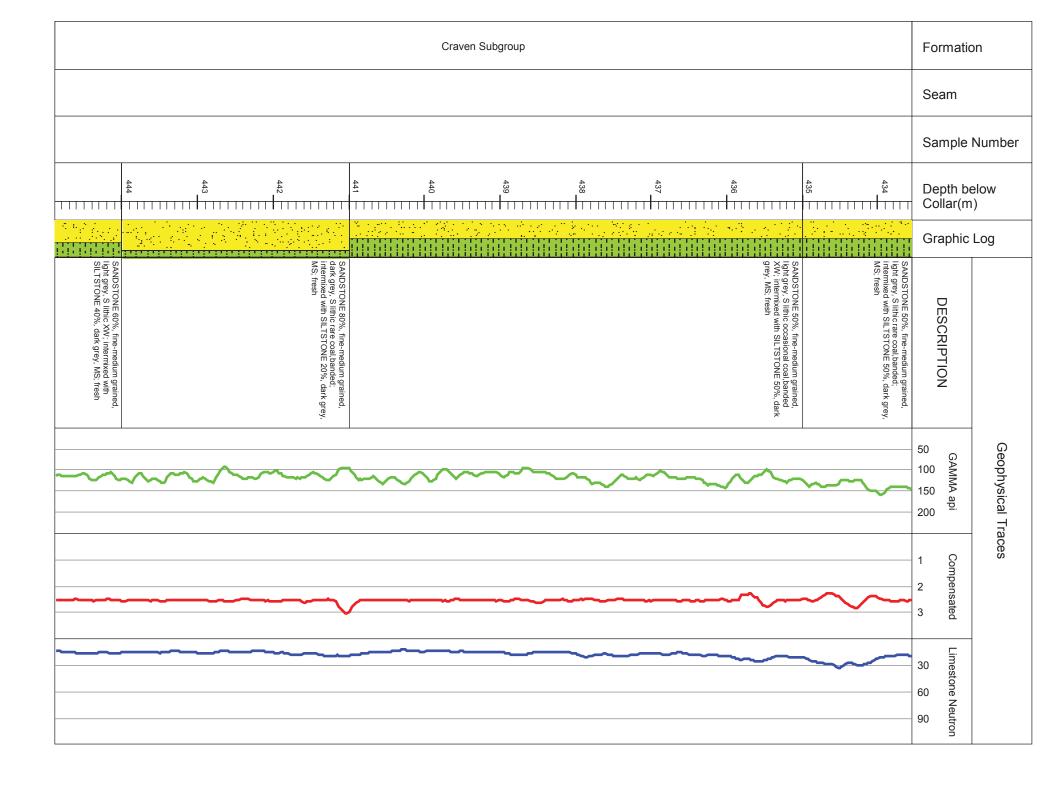


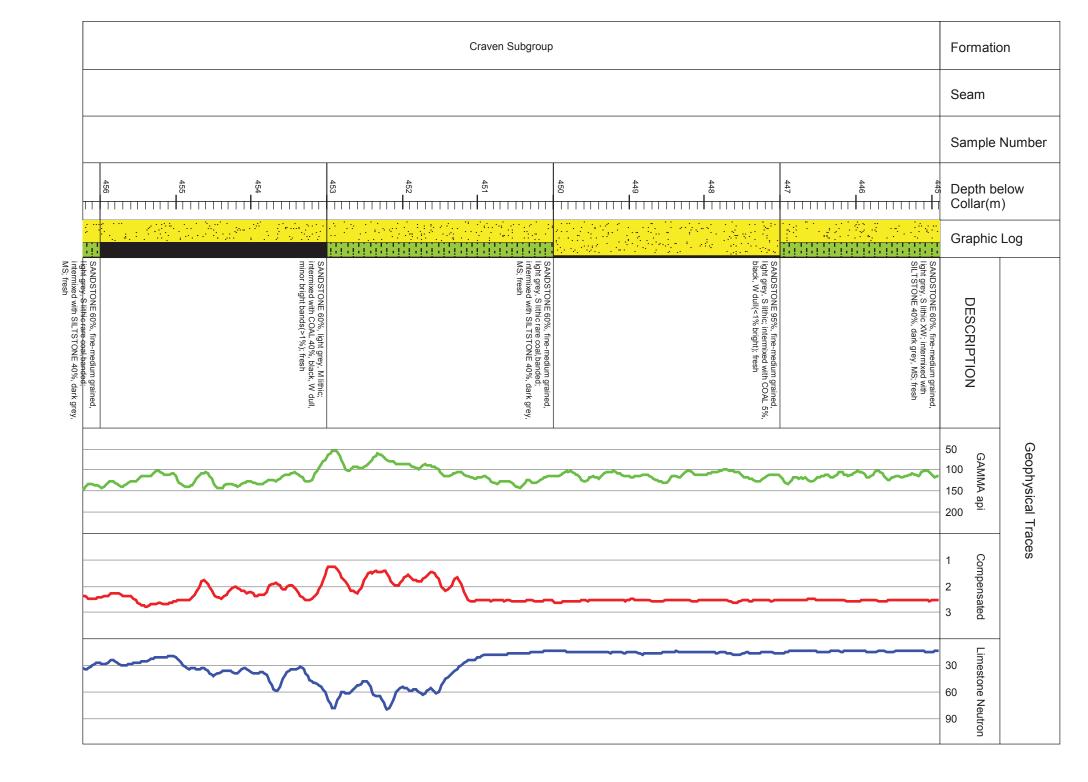


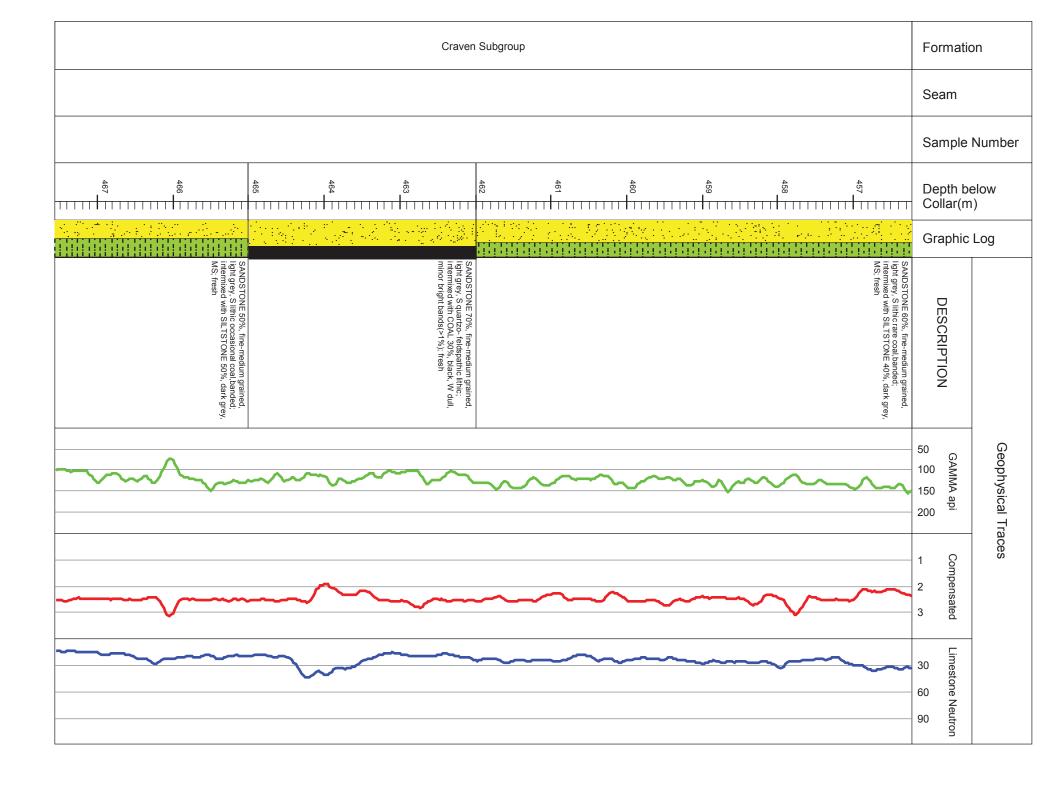


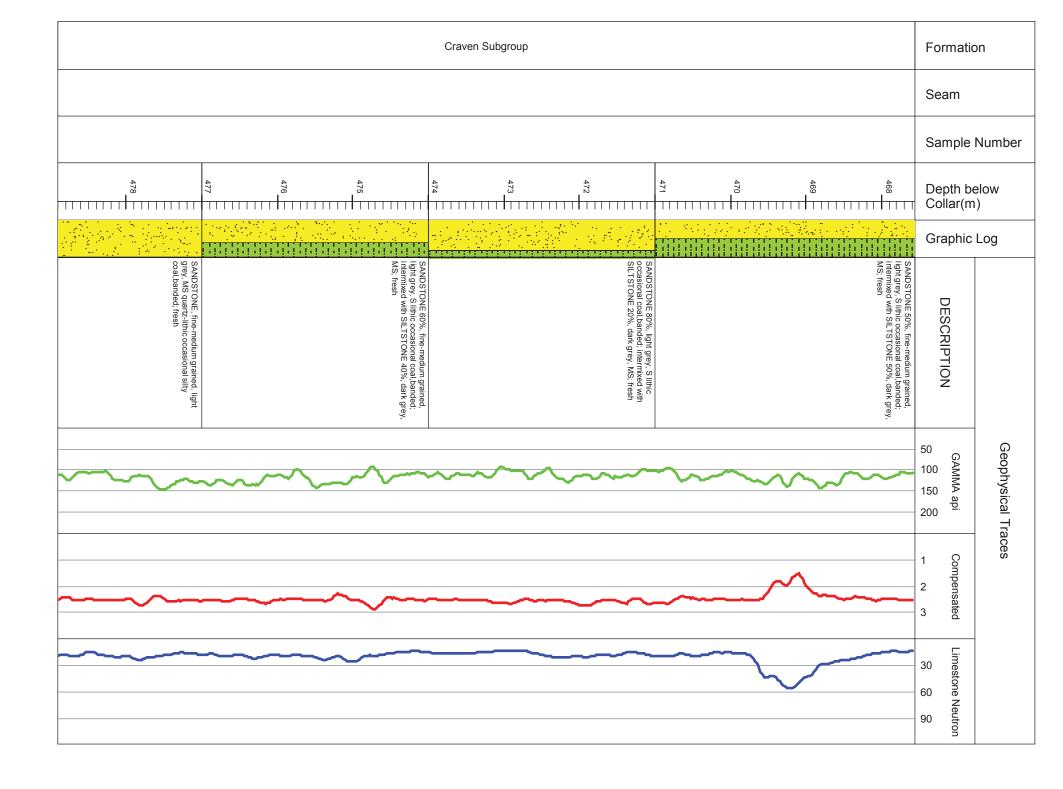


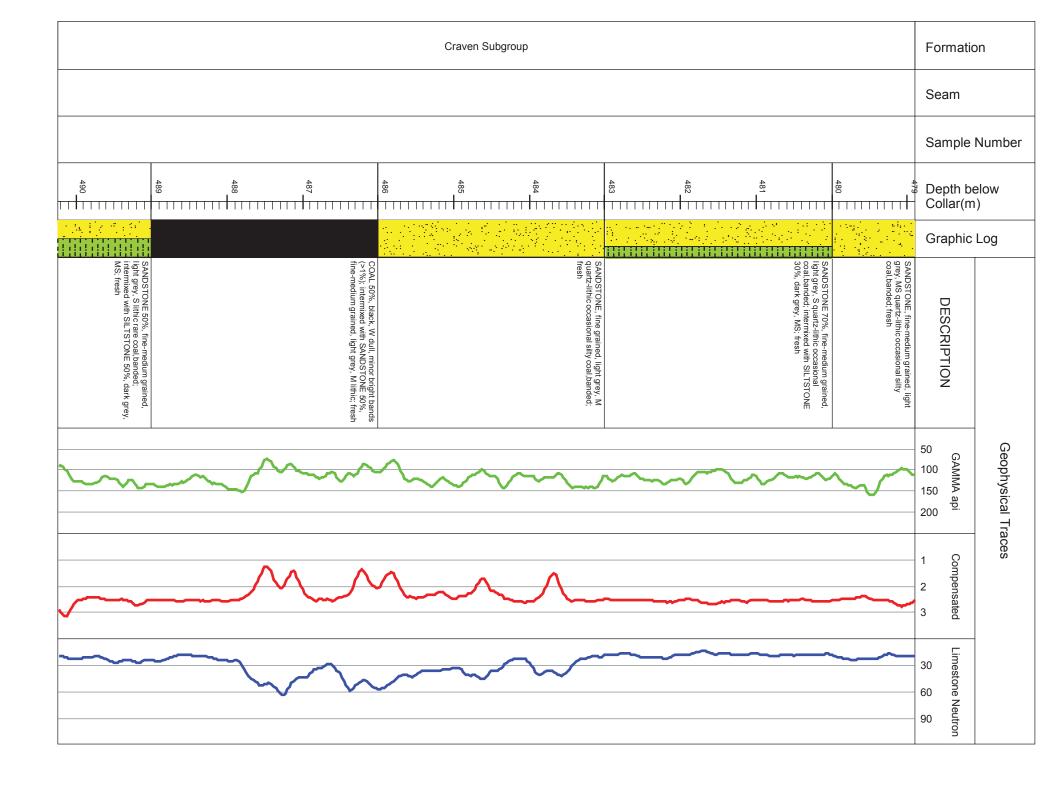


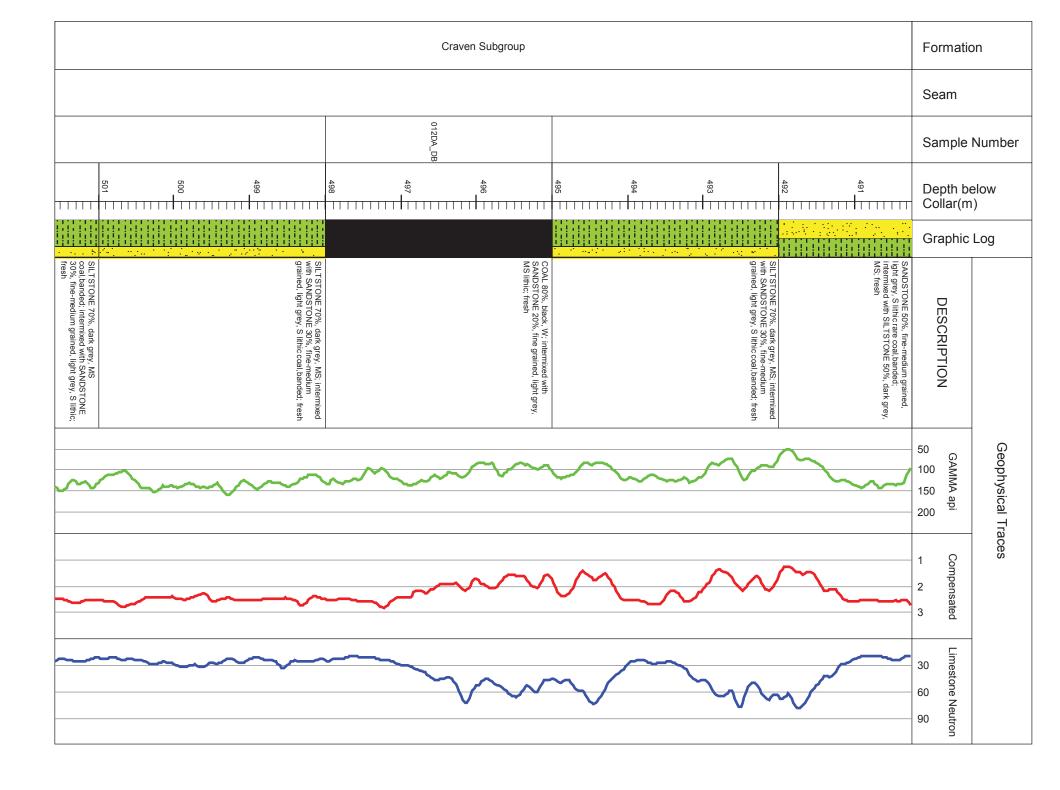


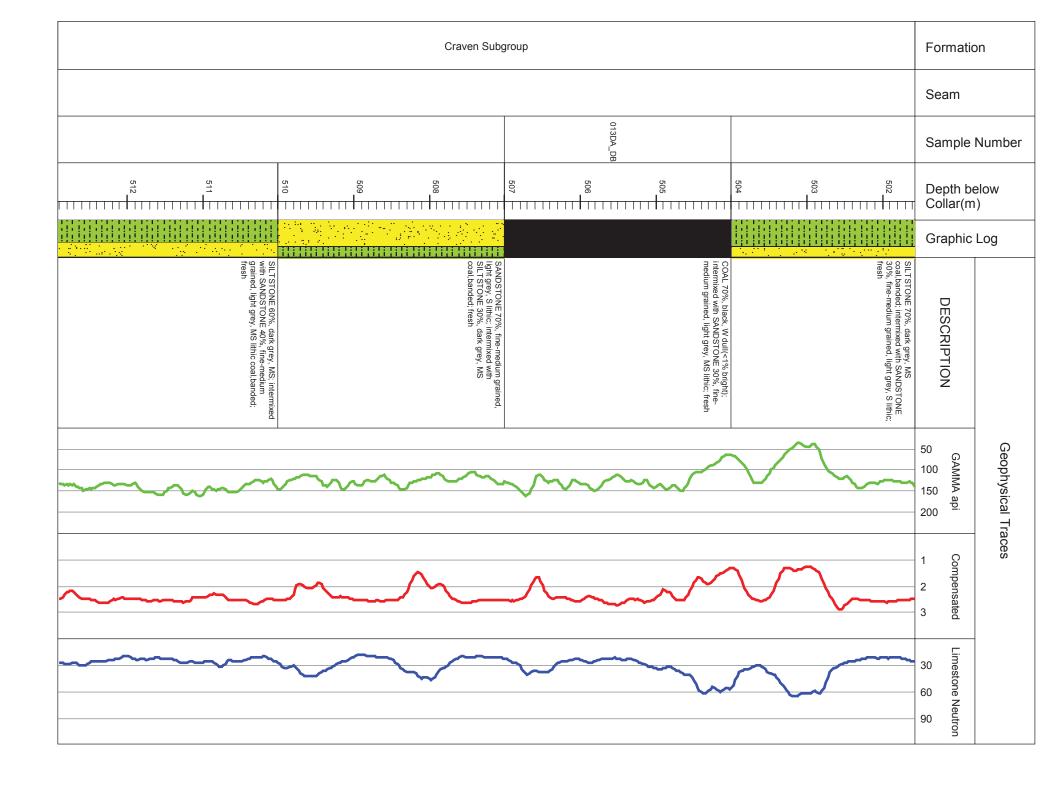


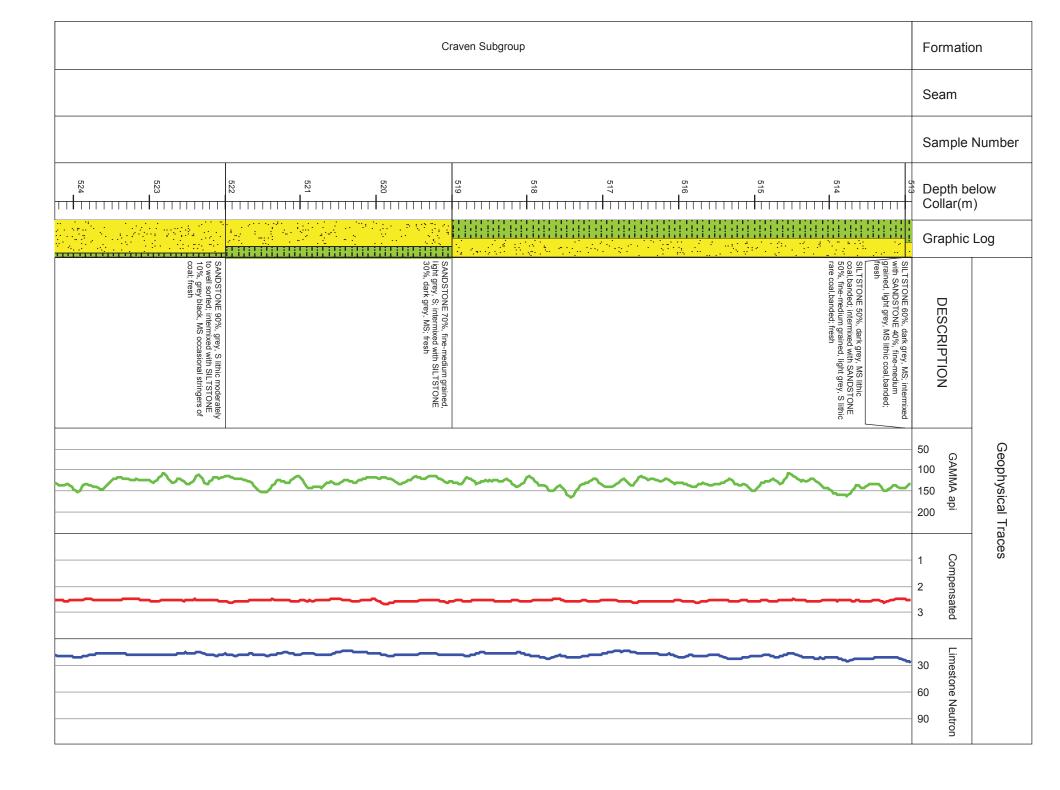


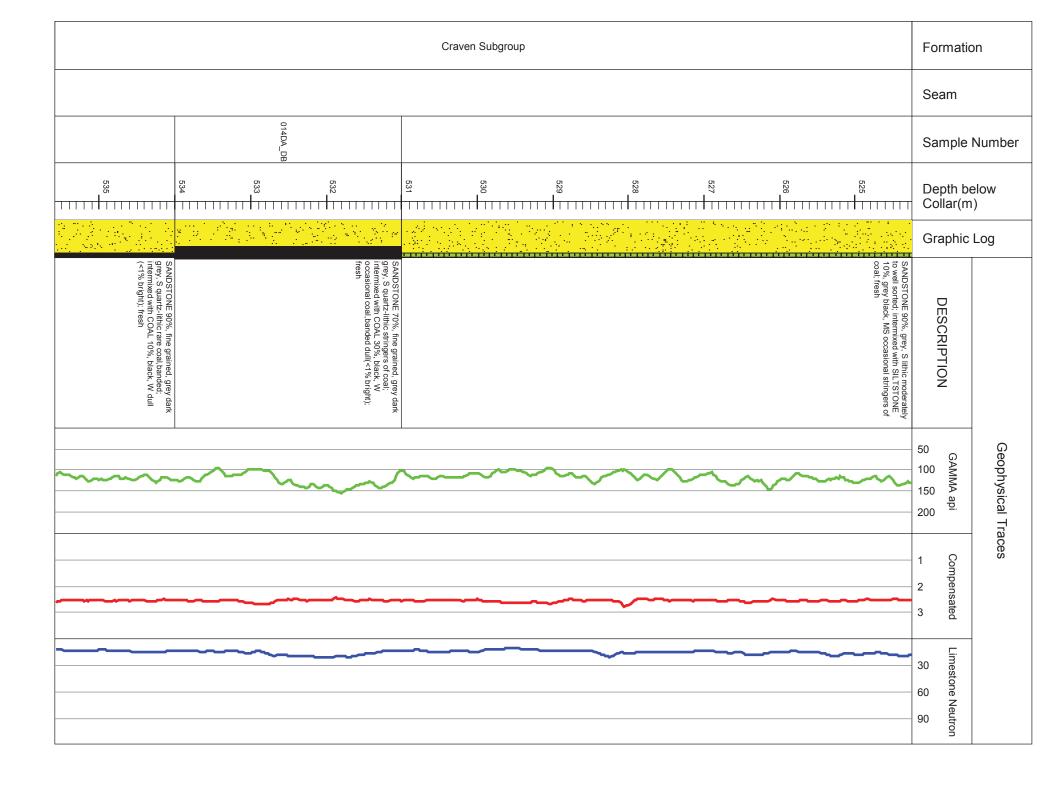




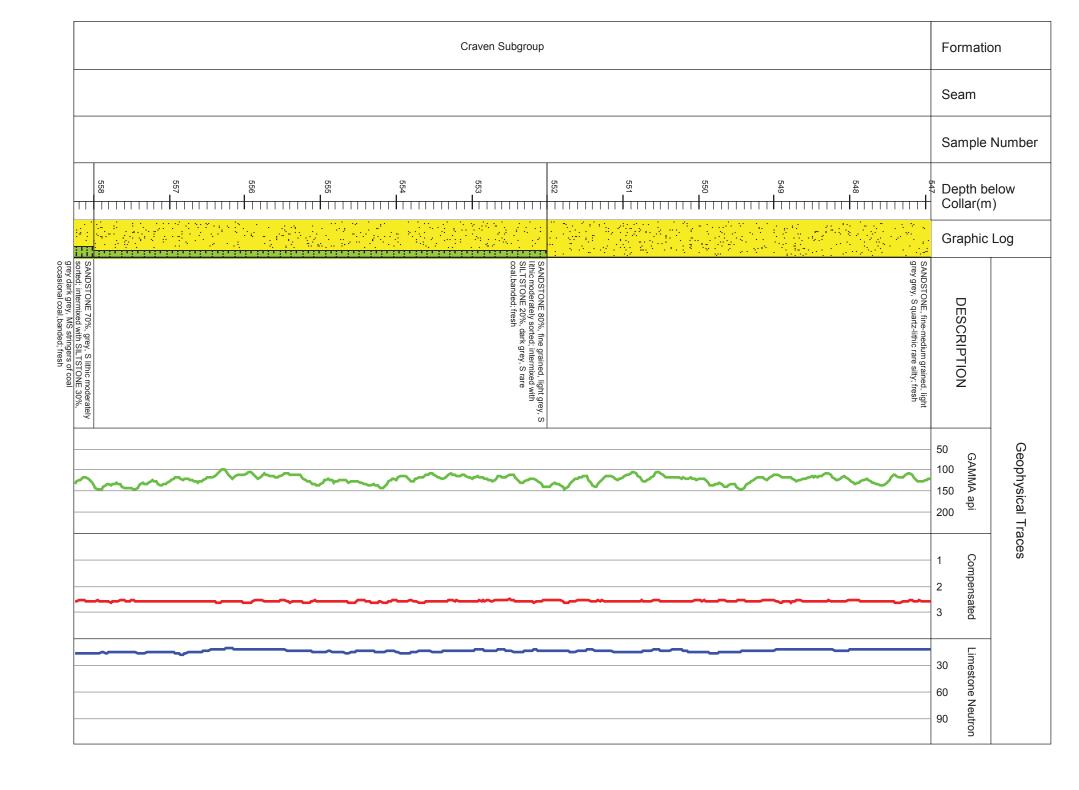


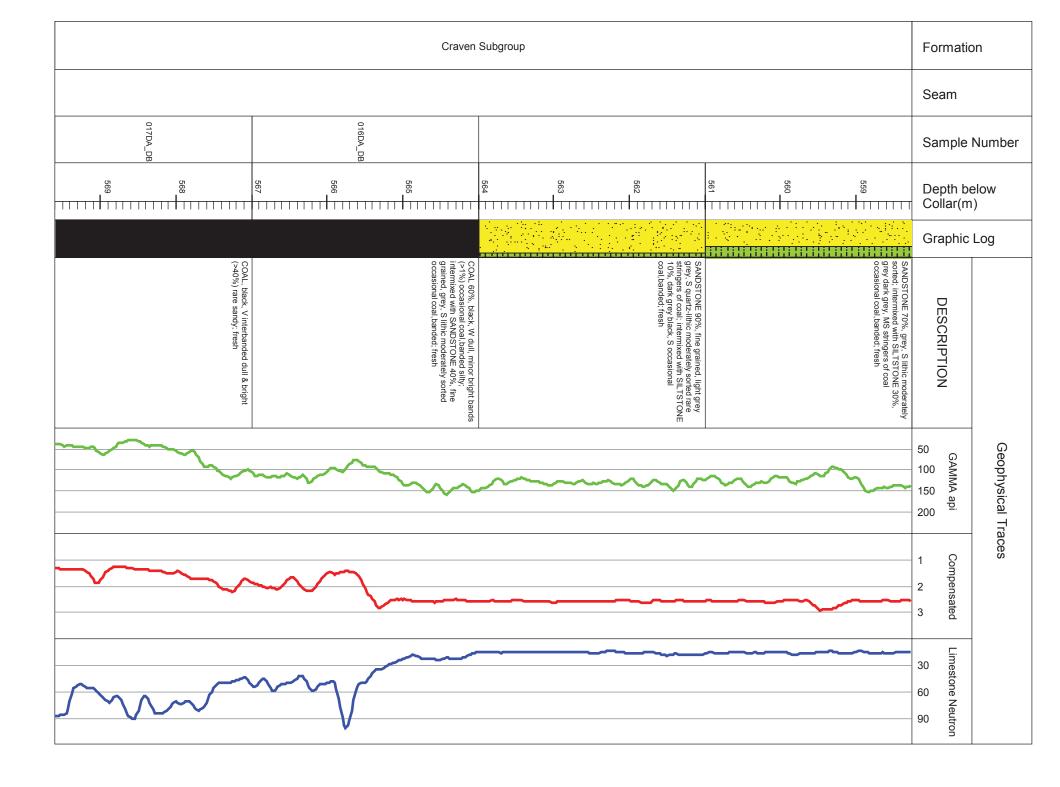


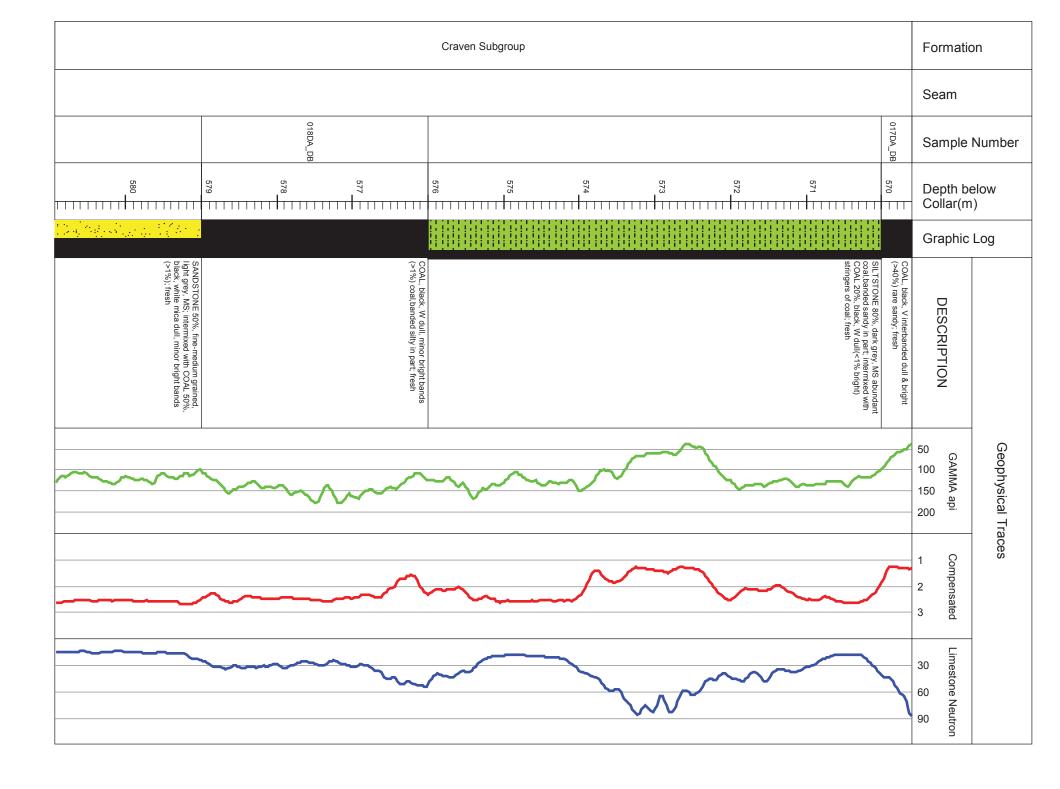


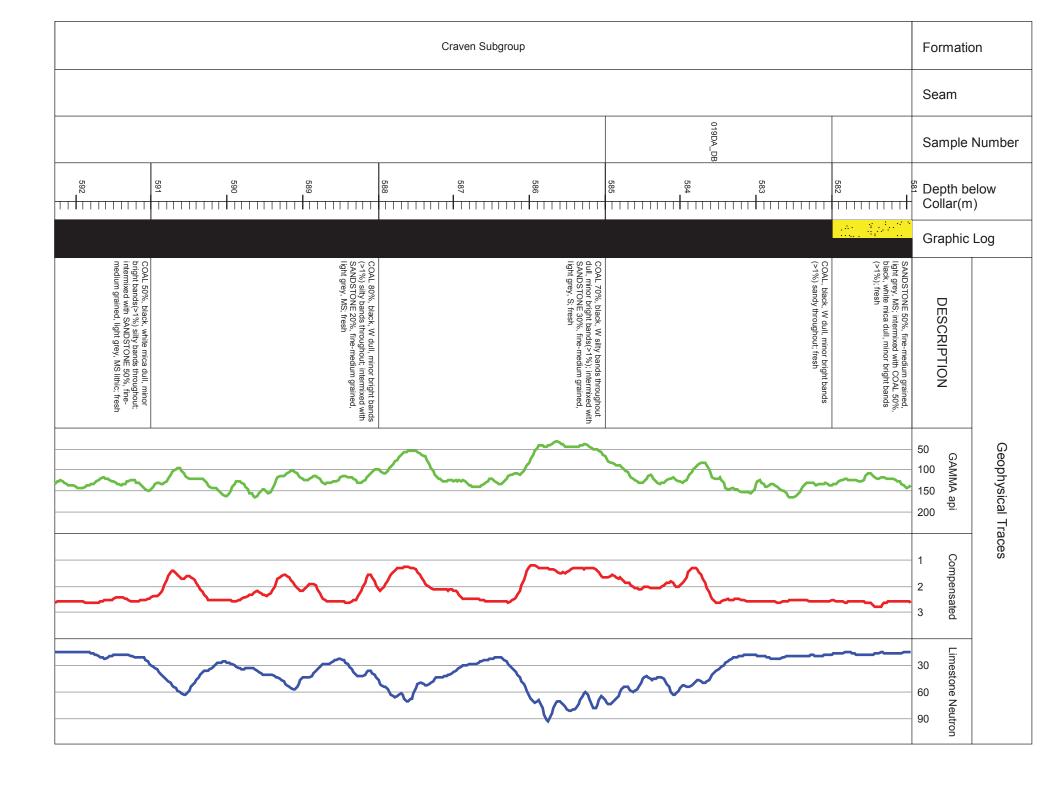


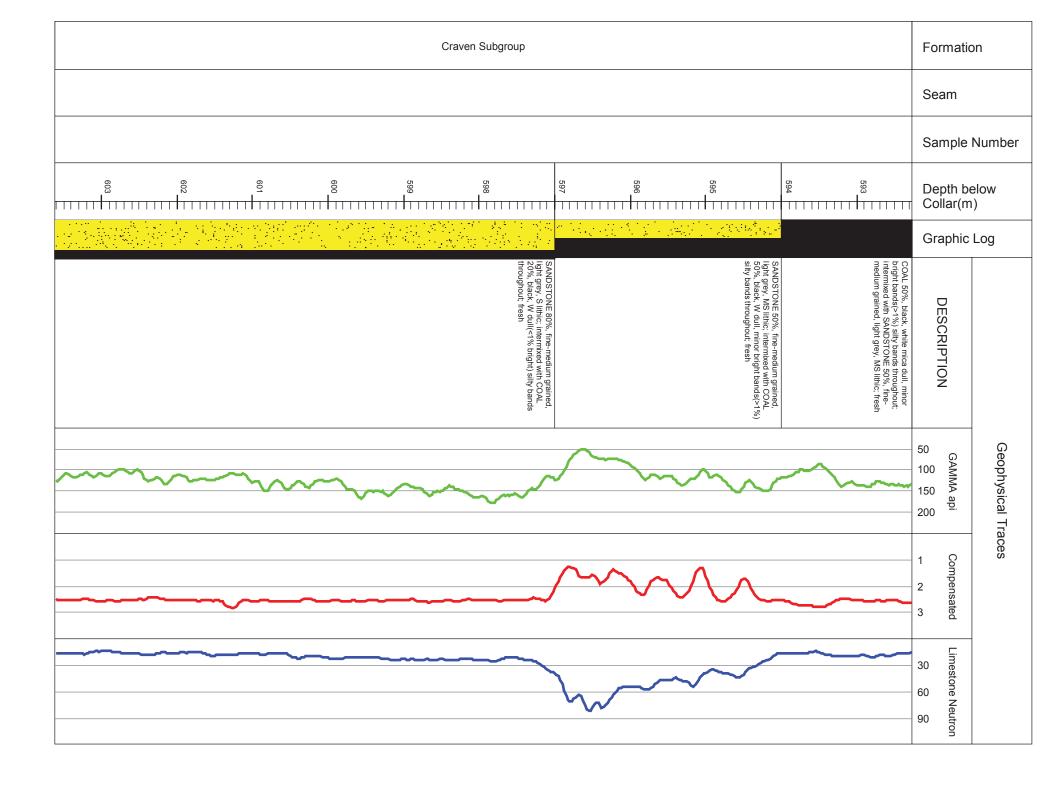
Craven Subgroup				Formation		
				Seam		
					Sample	Number
946	545 44	543	530	536	Depth b Collar(r	pelow n)
			以下是它的特殊的。 第二		Graphic	Log
SANDSTONE, fine-medium grained, light grey grey, S quartz-lithic rare silty; fresh	SANDSTONE 90%, fine grained, light grey, S quartz-lithic moderately sorted: intermixed with SILTSTONE 10%, dark grey, MS occasional coal, banded; fresh	SILTSTONE 80%, dark grey BN, S coal banded laminations; intermixed with SANDSTONE 20%, fine grained, light grey grey, S quartz-lithic; fresh	SANDSTONE 80%, grey dark grey, S quartz- lithic coal, banded in part micaceous; intermixed with COAL 20%, black, W dull, minor bright bands(>1%); fresh	SANDSTONE 90%, fine grained, grey dark grey, S quartz-lithic rare coal banded; intermixed with COAL 10%, black, W dull (<1% bright); fresh	DESCRIPTION	
				50 100 GAMMA api 150 200	Geophysical Traces	
					Compensated	aces
					Limestone Neutron	

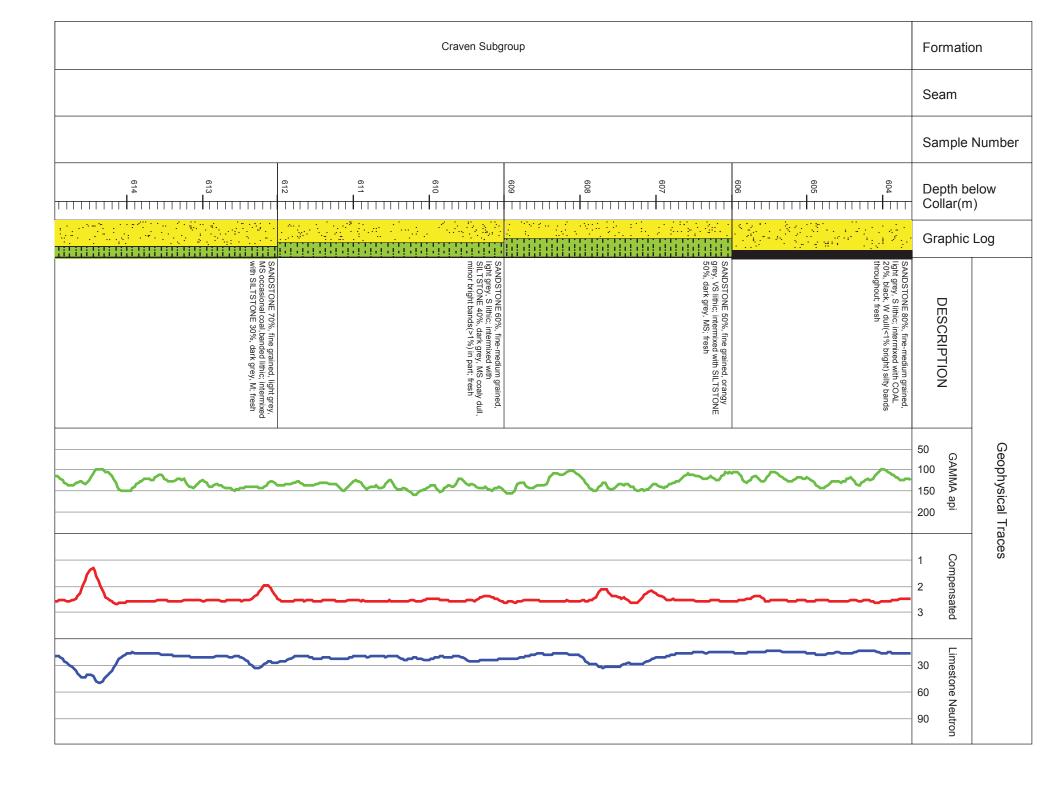


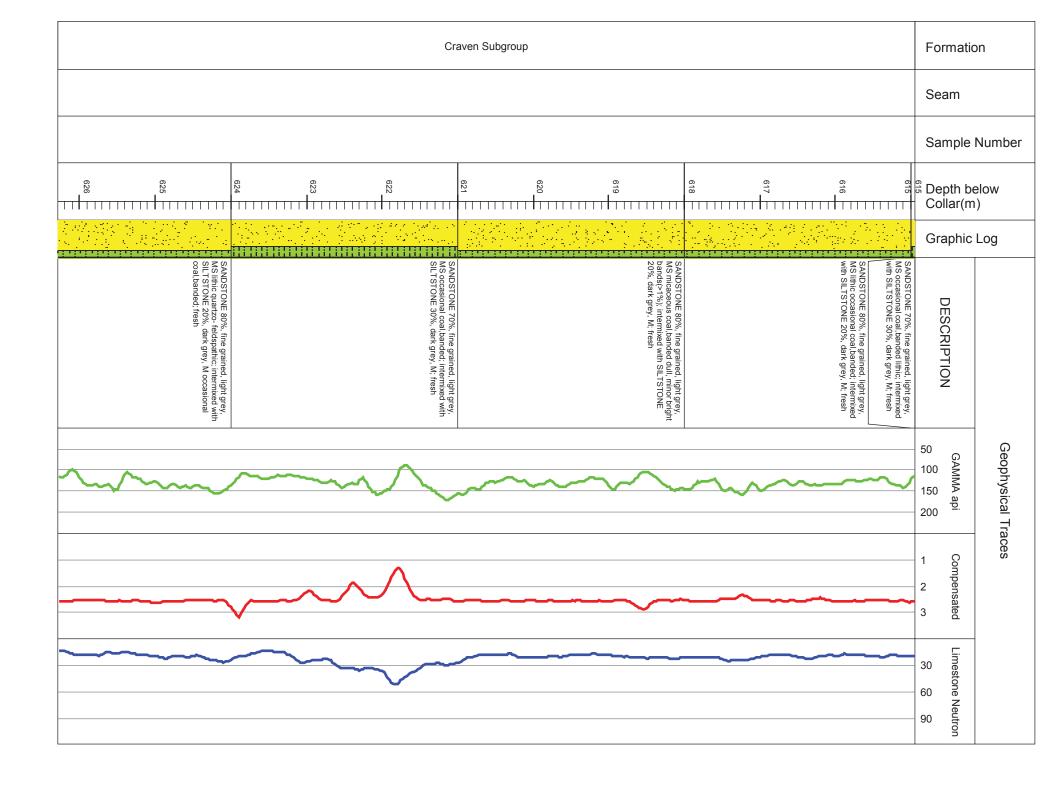


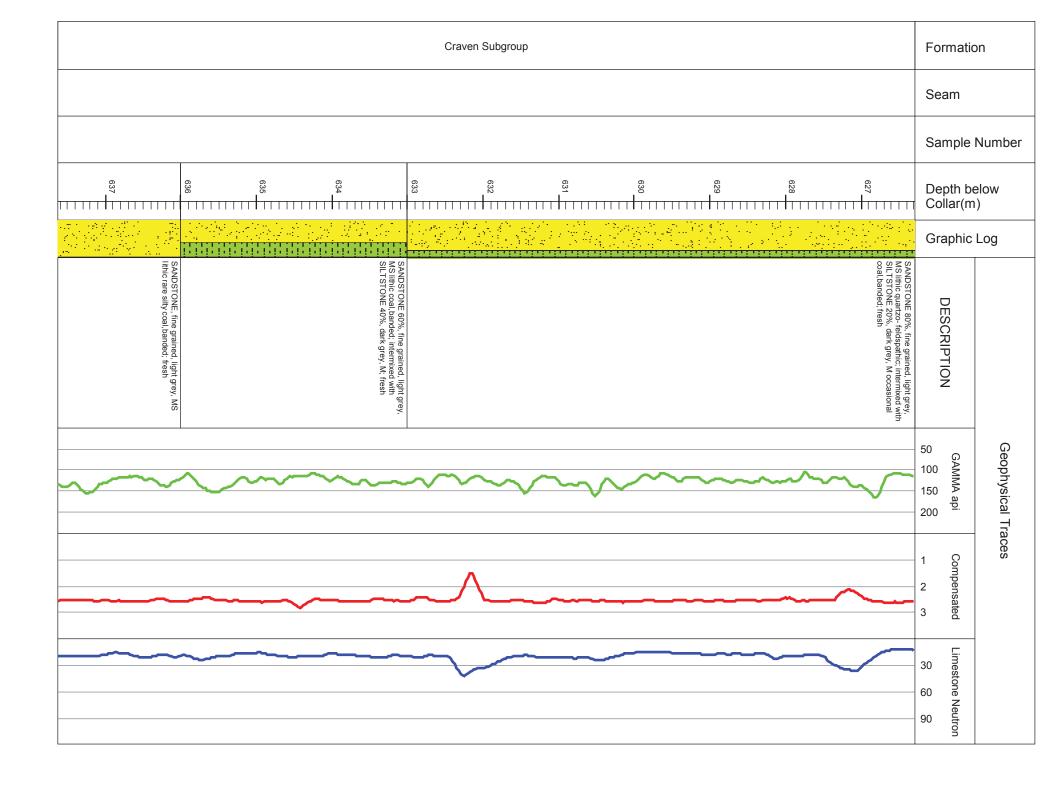


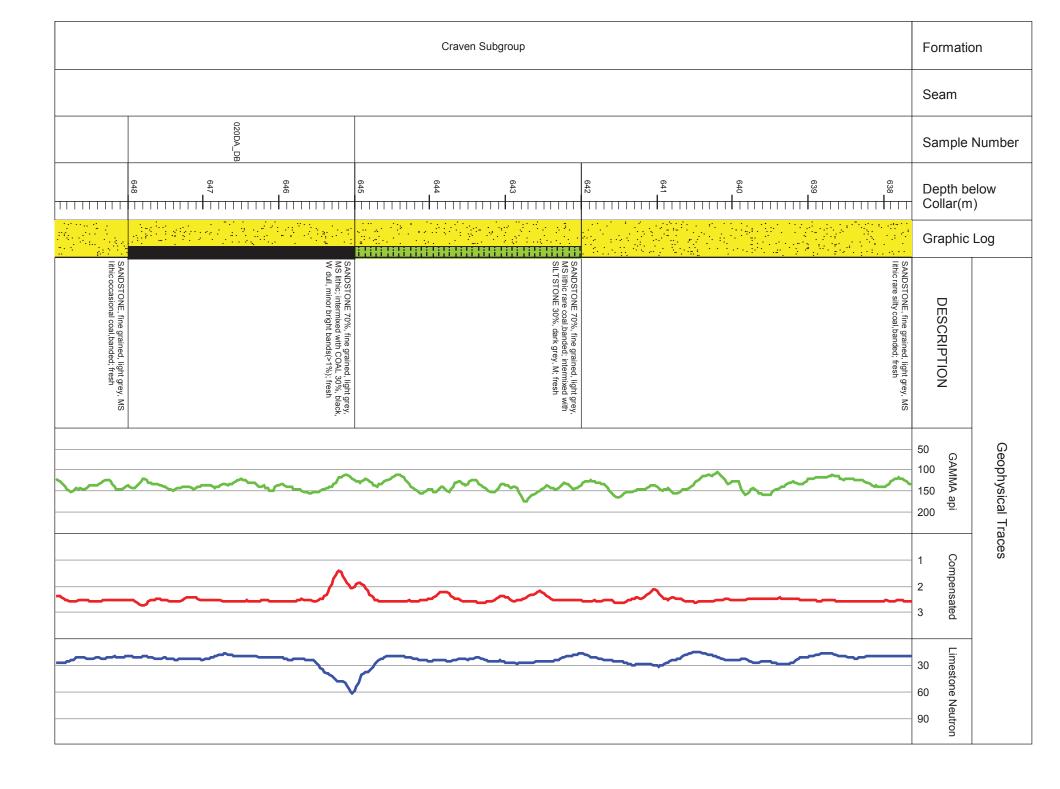


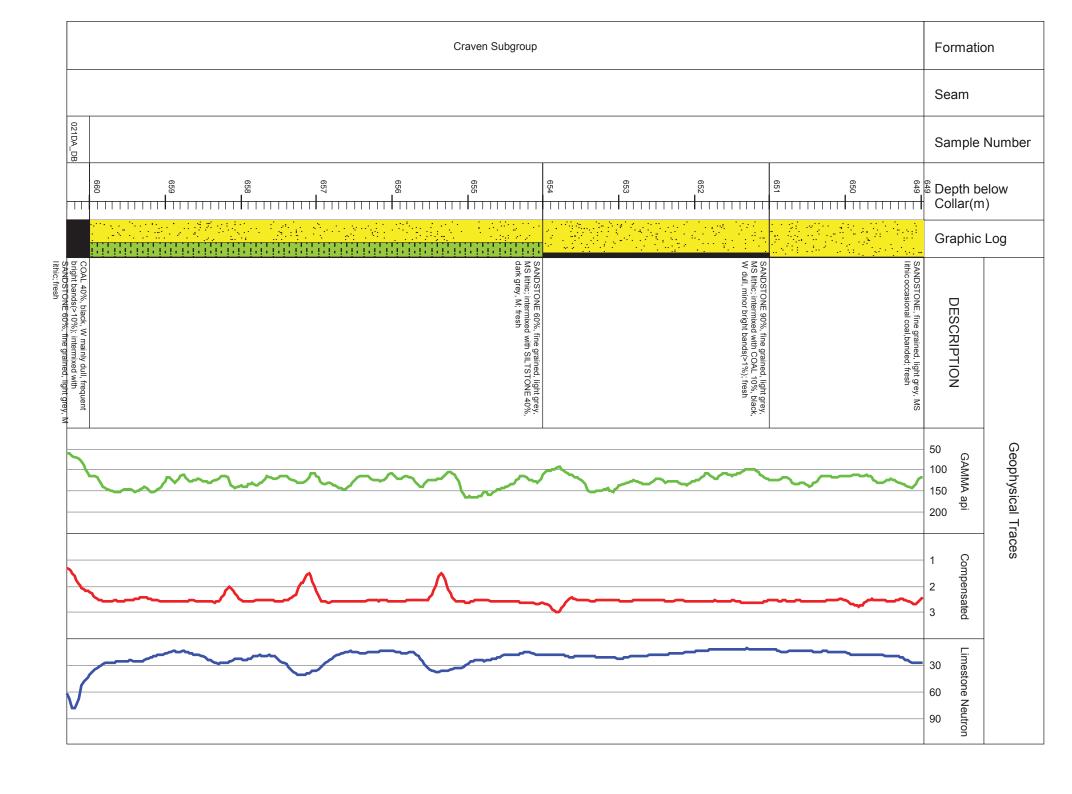


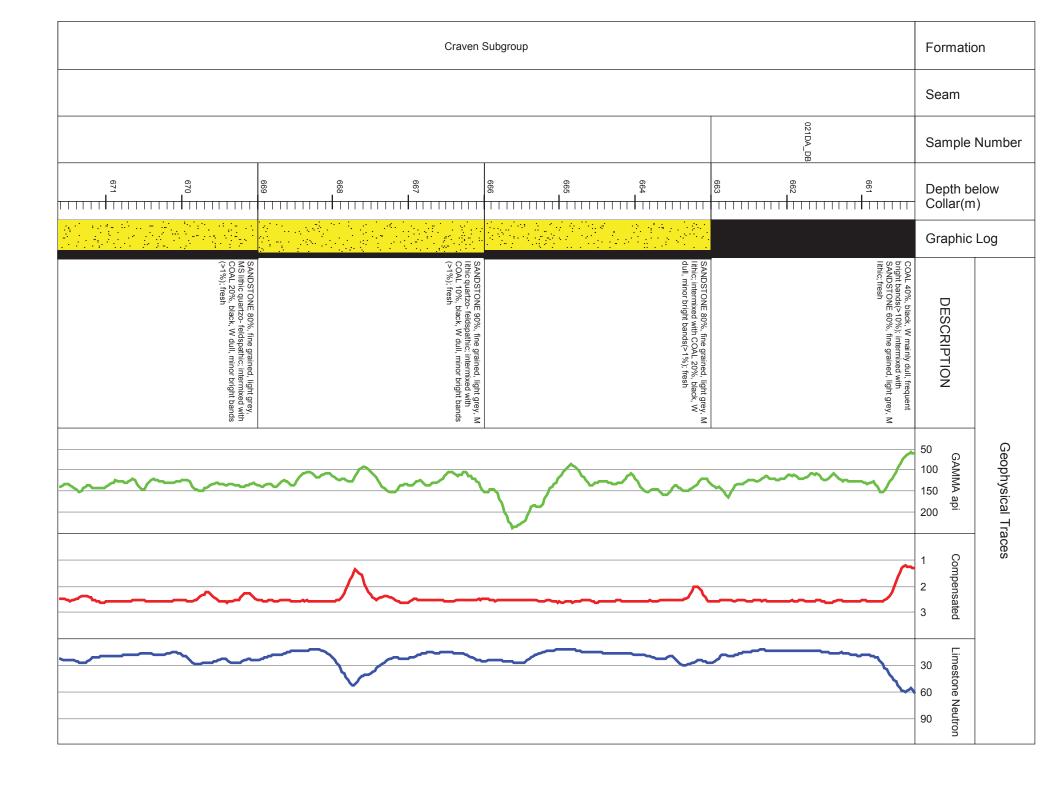


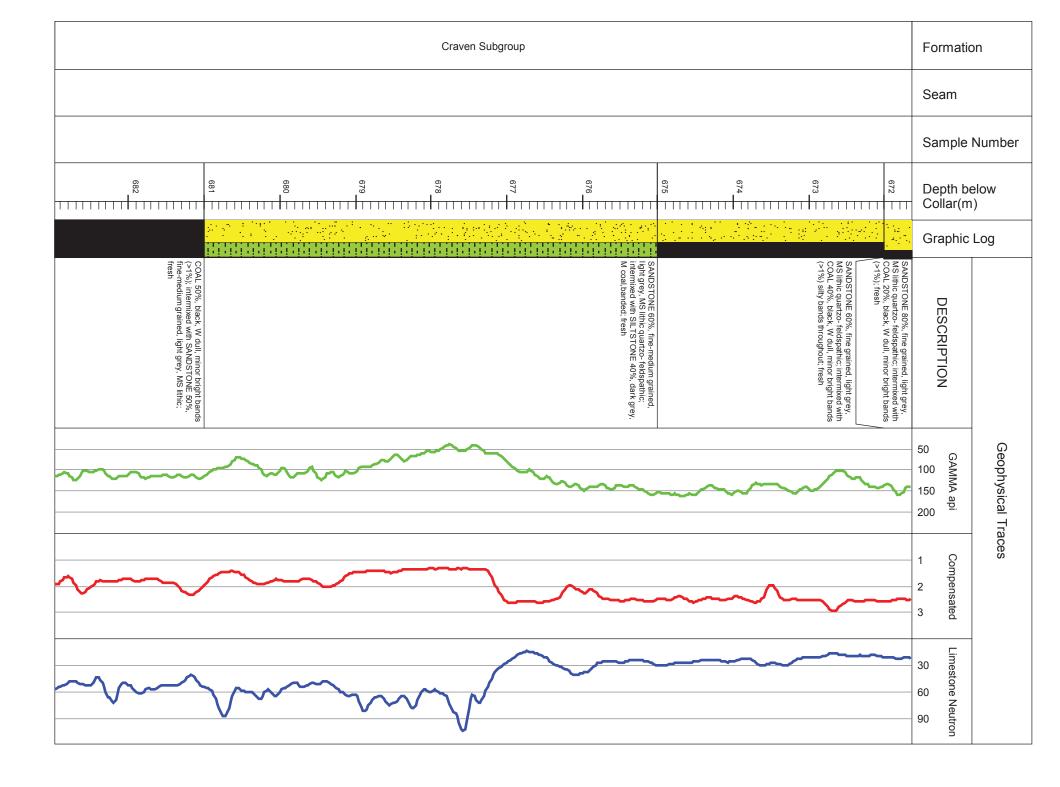


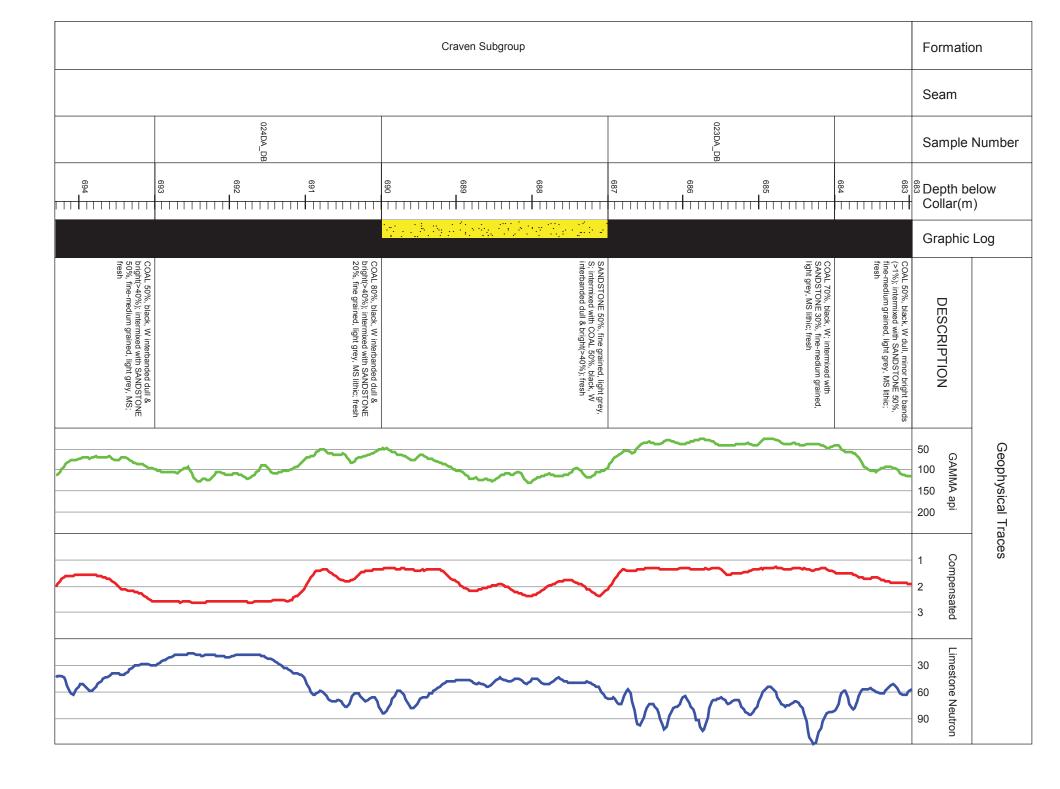


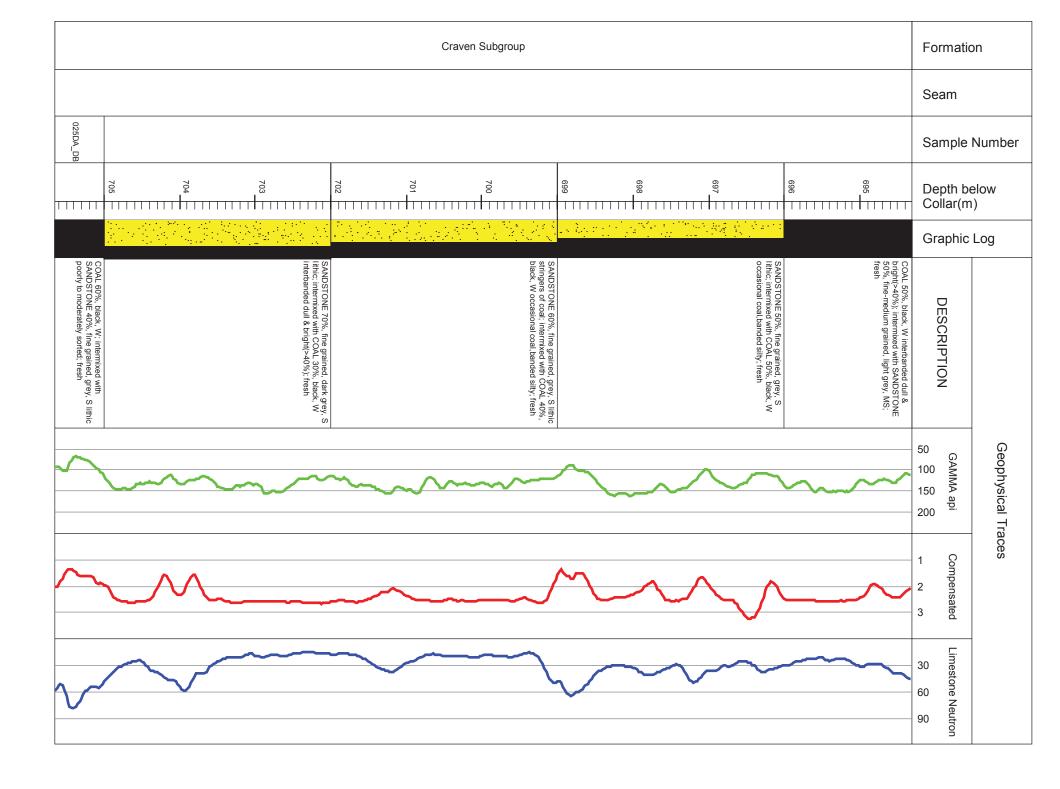


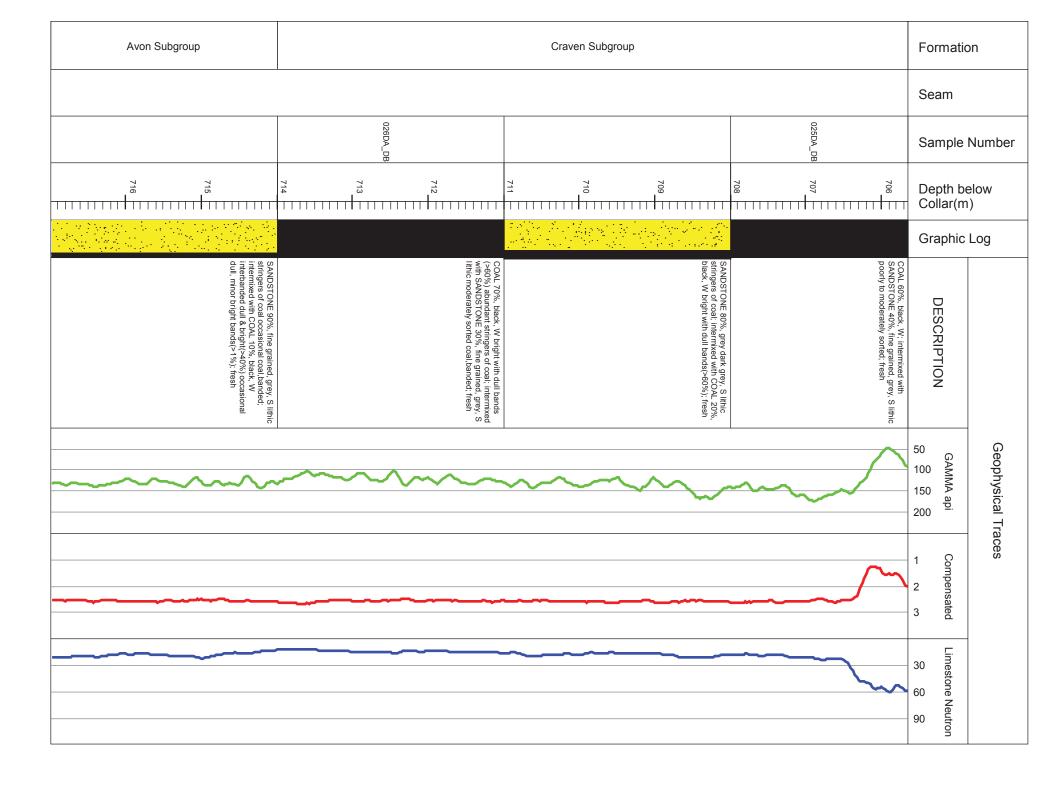




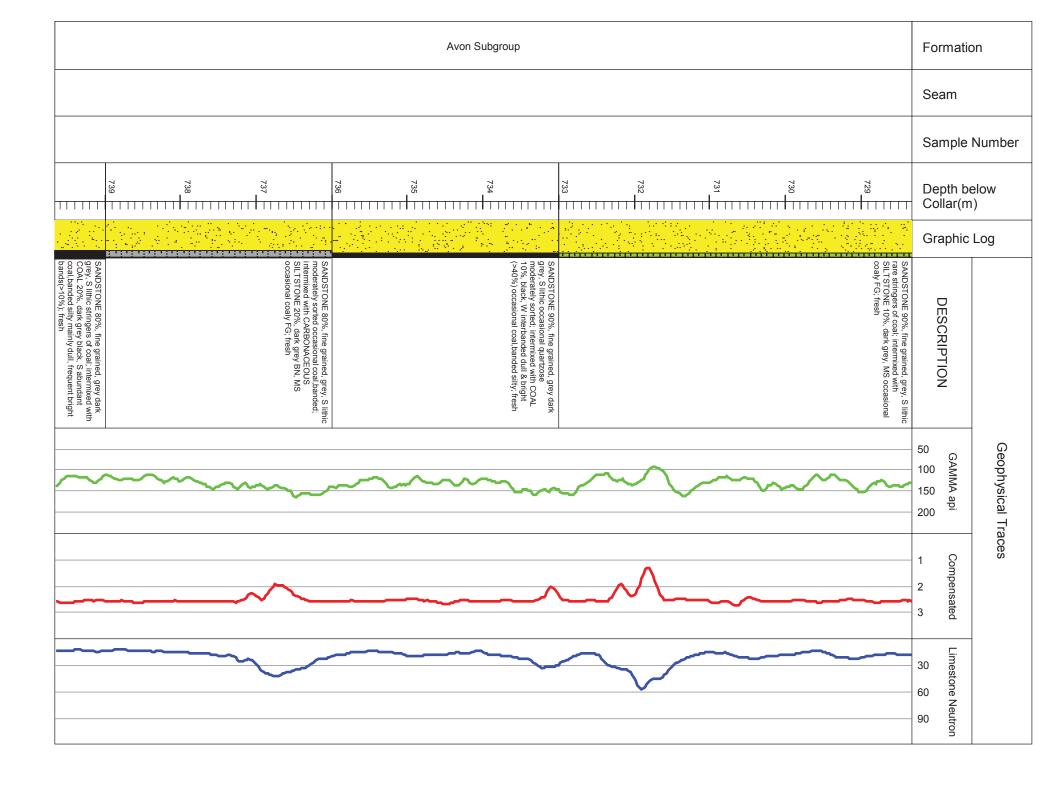


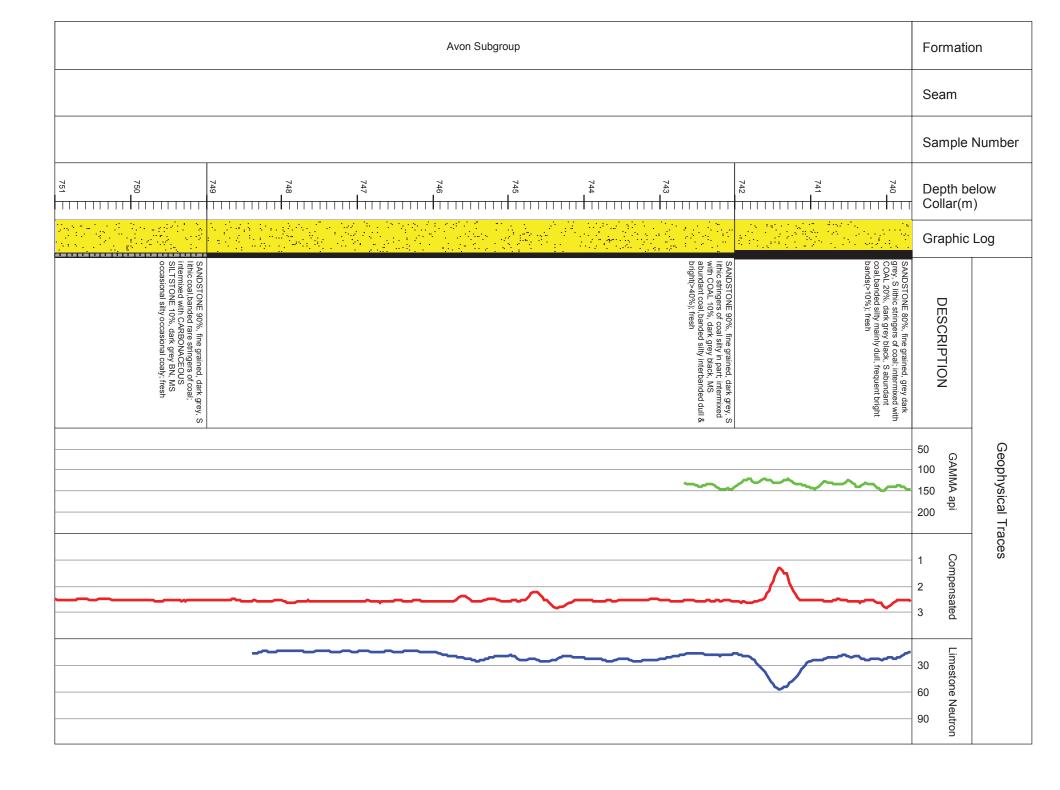






Avon Subgroup			
		Sample	Number
725	722 721 720 719 718 722 722 724 723 723 723 724 724 725 725 725 725 725 725 725 725 725 725	ਰੋ ਰੋDepth be Collar(m	elow
		Graphic	Log
SANUS I (NE 90%, fine grained, dark grey, 's lithic sitly in part; intermixed with CQAL 10%, black, W interbanded dull & bright(>40%) occasional coal, banded sitly; fresh occasional coal, banded sitly; fresh SANDSTONE 90%, fine grained, grey, S lithic rare stringers of coal; intermixed with SILTSTONE 10%, dark grey, MS occasional coaly FG; fresh	stringers of coal occasional cloal, banded; intermixed with COAL 10%, black, W interbanded dull & bright(>40%) occasional dull, minor bright bands(>1%); fresh  SANDSTONE 70%, fine grained, dark grey, S lithic occasional coal, banded; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh	DESCRIPTION	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		50 GAMMA app.	Geophysical Traces
		Compensated 3	1ces
		Limestone Neutron	





	Avon Subgroup	Formation		
		Sample Number		er
762 761 760 759 758 757 756 756 751 756 757 756 757 756 757 757 756 756 757 757	751 752 753 755	Depth below Collar(m)		
		Graphic Log		
	SANDSTONE 90%, fine grained, dark grey, S lithic coal, banded rare stringers of coal; intermixed with CARBONACEOUS SILTSTONE 10%, dark grey BN, MS occasional silty occasional coaly; fresh	DESCRIPTION		
		150 GANIWA apr	Geophysical Traces	
	-	1 Compensated	aces	
		30 estone Neuron (1900)		