

WAUKIVORY 12

Project AGL
Organization
Site
Hole Type

Easting 402748.92
Northing 6452883.77
Grid GDA-94
Accuracy
Datum Australian Height Datum

Collar 99.03
Total Depth 755
Inclination 0
Azimuth 0

Commenced 07/10/12
Completed 15/10/12

Drilling Company Ensign
Drill Rig Type 67

Plug Depth 0
Logging Company
Logged By
Encoded By
Core Type
Drill Bit Type

Cased Depth 0
Casing Type
Size of Casing 0
Fluid
Upper Standing Water Level 0 Lower 0
Downhole Logging Company
Lease PEL 258

- Gamma Log
- Neutron Log
- Density Log
- Bed Resolution Log
- Self Potential Log
- Resistivity Log
- Dip Log
- Caliper Log
- Sonic Log
- Photographed
- X Rayed
- Geotechnical Log

From	To	Description
15.4	18	SANDSTONE, fine-medium grained, grey, carbonaceous in part lithic; moderately weathered, moderately strong, MI, CRA
18	21	COAL, black, sandy throughout; fresh, weak, CRA. 001DA Taken at 11:50, 001DB Taken at 15:15
21	24	SANDSTONE 90%, medium grained, grey, lithic occasional coal,banded; intermixed with SIDERITE 10%, green; fresh, moderately strong, secondary calcite, CRA
24	27	SANDSTONE, medium grained, grey, coal,banded quartzo- feldspathic lithic; fresh, strong, siderite, CRA
27	30	SANDSTONE 80%, fine-medium grained, grey, coal,banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh, strong, siderite, CRA
30	33	SANDSTONE 70%, fine-medium grained, grey, quartzo- feldspathic lithic coal,banded; intermixed with SILTSTONE 30%, grey; fresh, strong, siderite, CRA
33	36	SANDSTONE 80%, fine-medium grained, grey, quartzo- feldspathic lithic coal,banded; intermixed with SILTSTONE 20%, grey; fresh, strong, siderite, CRA
36	42	SANDSTONE, medium grained, grey, quartzo- feldspathic lithic; fresh, strong, siderite, CRA
42	45	SANDSTONE, fine grained, grey, quartzo- feldspathic lithic; fresh, strong, siderite, CRA
45	48	SANDSTONE, fine-medium grained, grey, quartzo- feldspathic lithic coal,banded; fresh, strong, siderite, CRA

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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

From	To	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**

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces									
												GAMMA api			Compensated			Limestone Neutron			
												50	100	150	200	1	2	3	30	60	90
Craven Subgroup						26				SANDSTONE, medium grained, grey, coal banded quartzo- feldspathic lithic; fresh											
						27				SANDSTONE 80%, fine-medium grained, grey, coal banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh											
						28				SANDSTONE 70%, fine-medium grained, grey, quartzo- feldspathic lithic coal banded; intermixed with SILTSTONE 30%, grey; fresh											
						29				SANDSTONE 80%, fine-medium grained, grey, coal banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh											
						30				SANDSTONE 70%, fine-medium grained, grey, quartzo- feldspathic lithic coal banded; intermixed with SILTSTONE 30%, grey; fresh											
						31				SANDSTONE 80%, fine-medium grained, grey, coal banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh											
						32				SANDSTONE 70%, fine-medium grained, grey, quartzo- feldspathic lithic coal banded; intermixed with SILTSTONE 30%, grey; fresh											
						33				SANDSTONE 80%, fine-medium grained, grey, coal banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh											
						34				SANDSTONE 70%, fine-medium grained, grey, quartzo- feldspathic lithic coal banded; intermixed with SILTSTONE 30%, grey; fresh											
						35				SANDSTONE 80%, fine-medium grained, grey, coal banded quartzo- feldspathic lithic; intermixed with SILTSTONE 20%, grey; fresh											
36				SANDSTONE, medium grained, grey, quartzo- feldspathic lithic; fresh																	

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces						
												GAMMA api		Compensated			Limestone Neutron	
												50		1			30	
												100		2			60	
												150		3			90	
												200						
Craven Subgroup						37				SANDSTONE, medium grained, grey, quartzo-feldspathic; lithic; fresh								
						41				SANDSTONE, fine grained, grey, quartzo-feldspathic; lithic; fresh								
						43				SANDSTONE, fine-medium grained, grey, quartzo-feldspathic; lithic coal banded; fresh								
						44				SANDSTONE, fine-medium grained, grey, quartzo-feldspathic; lithic coal banded; fresh								
						46				SANDSTONE, 90% fine-medium grained, grey, quartzo-feldspathic; lithic coal banded; intermixed with SILTSTONE 10% grey; fresh								
						47												
						48												

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces									
												GAMMA api			Compensated			Limestone Neutron			
												50	100	150	200	1	2	3	30	60	90
Craven Subgroup										<p>SANDSTONE 90%, fine-medium grained, grey, quartzo-feldspathic lithic coal banded; Intermixed with SILTSTONE 10%, grey; fresh</p> <p>SANDSTONE 60%, fine-medium grained, grey, lithic; Intermixed with COAL 40%, black; fresh</p> <p>SANDSTONE 60%, fine-medium grained, grey, lithic occasional coal banded; Intermixed with SILTSTONE 40%, grey; fresh</p>											
												51									
												50									
												49									
												52									
												53									
												54									
												55									
												56									
												57									
58																					
59																					

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION	Geophysical Traces								
Craven Subgroup											GAMMA api		Compensated			Limestone Neutron			
						60				SANDSTONE 60%, fine-medium grained, grey, lithic occasional coal banded; intermixed with SILTSTONE 40%, grey; fresh	50				30				
						61				SANDSTONE 50%, fine-medium grained, grey, lithic coal banded; intermixed with SILTSTONE 50%, grey; fresh	100				60				
						62					150				90				
						63				SANDSTONE 70%, fine-medium grained, grey, lithic; intermixed with COAL 30%, black; fresh	200								
						64					1								
						65				2									
						66				3									
						67				SANDSTONE 60%, fine-medium grained, grey, coal banded lithic; intermixed with COAL 40%, black, dull (<1% bright); fresh									
						68													
						69				SANDSTONE 90%, fine grained, grey, lithic micaceous moderately sorted; intermixed with SILTSTONE 10%, green-brown, carbonaceous in part; fresh									
						70													

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces						
												GAMMA api		Compensated			Limestone Neutron	
												50		1			30	
												100		2			60	
												150		3			90	
												200						
Craven Subgroup										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, carbonaceous sandy; Intermixed with COAL 10% black dull(<1% bright) stringers of coal; fresh								
												SILTSTONE 80%, grey dark grey, stringers of coal carbonaceous in part; Intermixed with SANDSTONE 20%, fine grained, grey, lithic iron stained rare; fresh						

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION	Geophysical Traces						
											GAMMA api		Compensated			Limestone Neutron	
Craven Subgroup						84				SILTSTONE 80%, grey dark grey, stringers of coal carbonaceous in part; intermixed with SANDSTONE 20%, fine grained, grey, lithic iron stained rare, fresh	50		1			30	
						83					100		2			60	
						85				SILTSTONE 60%, grey green-brown, sandy carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, light grey, feldspathic- lithic moderately sorted; fresh	150		3			90	
						86					200						
						87				SANDSTONE 70%, light grey, feldspathic- lithic moderately sorted; intermixed with SILTSTONE 30%, dark grey; fresh							
						88											
						89				SANDSTONE 90%, fine grained, grey, feldspathic- lithic moderately sorted; intermixed with SILTSTONE 10%, dark grey, carbonaceous rare; fresh							
						90											
						91											
						92											
						93											

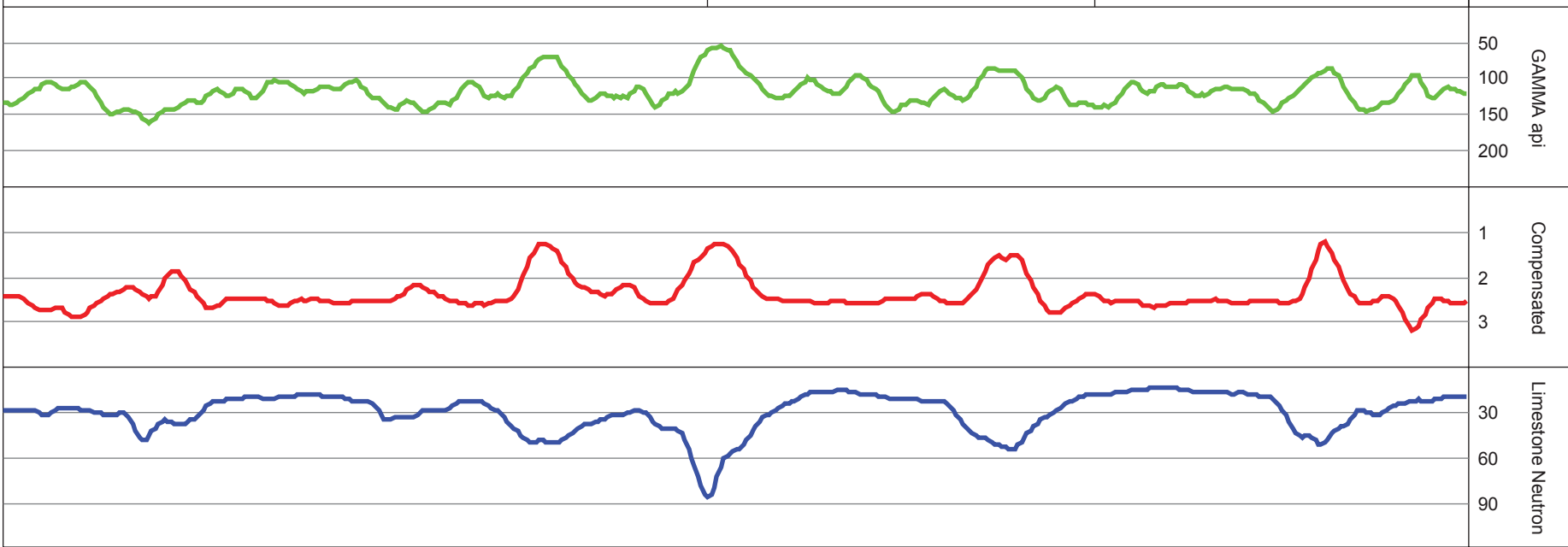
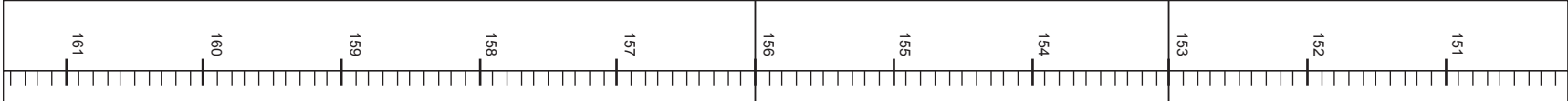
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
105 SILTSTONE 70%, grey green-brown, coal banded rare; intermixed with SANDSTONE 30%, fine grained, grey, feldspathic- lithic moderately sorted; fresh	50	1	30
106 SILTSTONE 80%, green-brown dark grey carbonaceous lamellations; intermixed with SANDSTONE 20%, fine-medium grained, grey, feldspathic- lithic; fresh	100	2	60
107 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh	150	3	90
108 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh	200		
109 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh			
110 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh			
111 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh			
112 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh			
113 SILTSTONE 80%, grey, carbonaceous rare; intermixed with SANDSTONE 40%, fine grained, dark grey, feldspathic- lithic moderately sorted; fresh			
114 SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey, lithic; fresh			
115 SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey, lithic; fresh			
116 SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey, lithic; fresh			

Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
DESCRIPTION	Geophysical Traces	
<p>SILTSTONE, dark grey, rare carbonaceous laminations; fresh</p>	<p>GAMMA api</p> <p>Compensated</p> <p>Limestone Neutron</p>	<p>117</p>
<p>SILTSTONE 80%, dark grey green-brown, carbonaceous in part sandy; intermixed with SANDSTONE 20%, fine grained, grey; lithic; fresh</p>		<p>118</p>
<p>SILTSTONE 80%, dark grey, rare carbonaceous laminations; fresh</p>		<p>119</p>
<p>SILTSTONE 80%, dark grey, rare carbonaceous laminations; fresh</p>		<p>120</p>
<p>SILTSTONE 80%, dark grey, rare carbonaceous laminations; fresh</p>		<p>121</p>
<p>SILTSTONE 80%, dark grey, rare carbonaceous laminations; fresh</p>		<p>122</p>
<p>SILTSTONE 80%, dark grey, rare carbonaceous laminations; fresh</p>		<p>123</p>
<p>NO RECOVERY</p>		<p>124</p>
<p>SANDSTONE 80%, fine-medium grained, grey; S lithic quartzo- feldspathic; intermixed with COAL 20%, black, W dull(<1% bright); fresh</p>		<p>125</p>
<p>SANDSTONE 80%, fine-medium grained, grey; S lithic quartzo- feldspathic; intermixed with COAL 20%, black, W dull(<1% bright); fresh</p>		<p>126</p>
<p>SANDSTONE 80%, fine-medium grained, grey; S lithic quartzo- feldspathic; intermixed with COAL 20%, black, W dull(<1% bright); fresh</p>		<p>127</p>

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
SANDSTONE 80%, fine-medium grained, grey. S lithic quartzo- feldspathic; intermixed with COAL 20%, black. W dull (<1% bright); fresh	50 100 150 200	1 2 3	30 60 90
SANDSTONE, fine-medium grained, grey. S lithic quartzo- feldspathic occasional coal banded; fresh			
SANDSTONE 80%, fine-medium grained, grey. S lithic quartzo- feldspathic; intermixed with COAL 20%, black. W dull, minor bright bands(>1%); fresh			
SANDSTONE 70%, dark grey, MS; intermixed with TUFF 30%, cream, white mica; fresh			
SILTSTONE 60%, fine-medium grained, grey, MS quartzo- feldspathic; lithic occasional coal banded; intermixed with SANDSTONE 40%, dark grey, MS possibly lutraceous; fresh			
128 129 130 131 132 133 134 135 136 137 138			

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	<p>SILTSTONE 60%, fine-medium grained, grey, MS quartzo- feldspathic lithic occasional coal banded; intermixed with SANDSTONE 40% dark grey, MS possibly tuffaceous; fresh</p> <p>SANDSTONE 50%, fine-medium grained, grey, MS lithic quartzo- feldspathic coal banded; intermixed with SILTSTONE 50%, grey, MS possibly tuffaceous; fresh</p> <p>SANDSTONE 60%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, grey, MS stringers of coal; fresh</p>	<p>GAMMA api</p>	<p>Compensated</p>

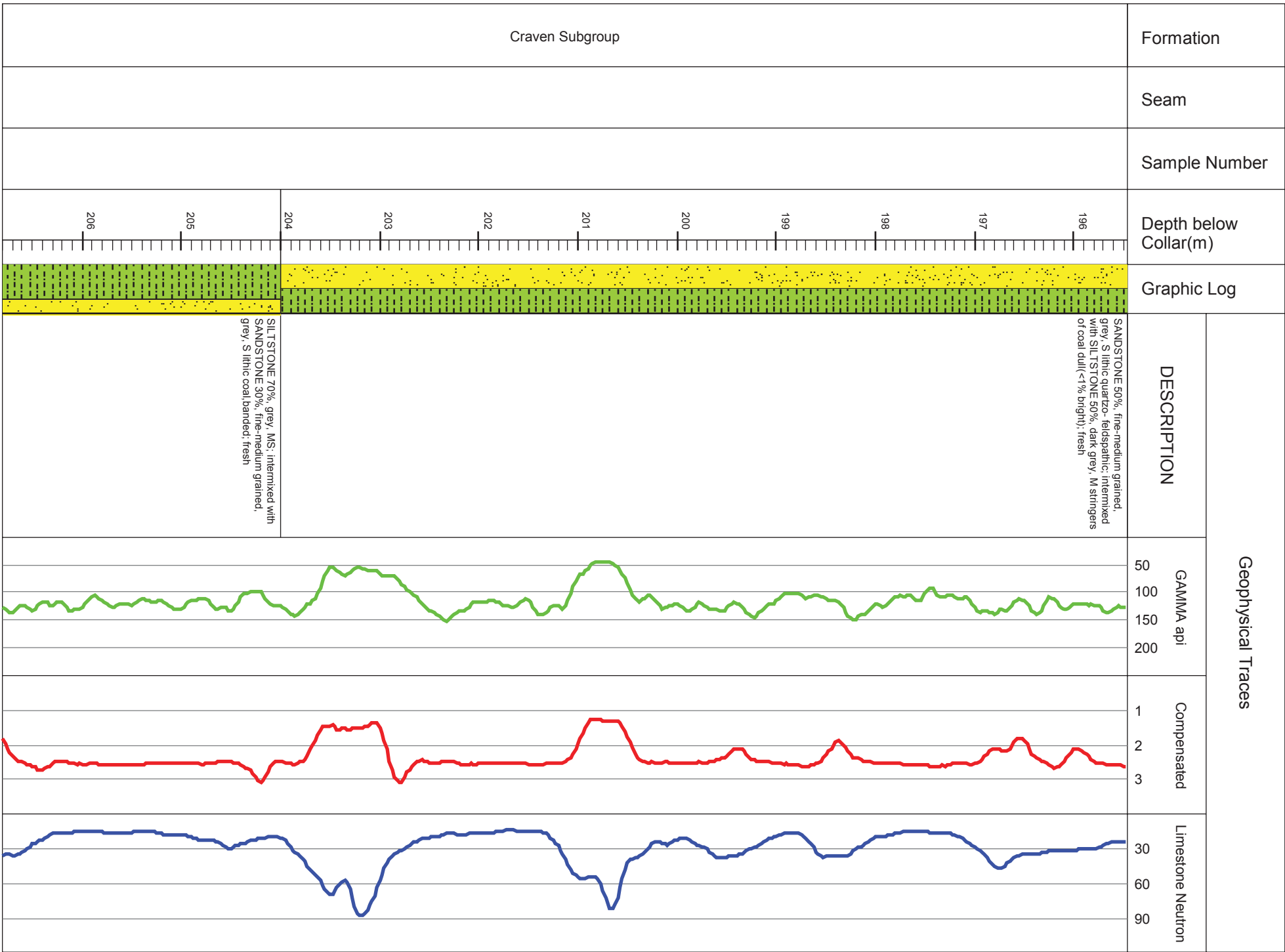
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
<p>SANDSTONE 60%, fine-medium grained, dark grey, S lithic quartzo- feldspathic tuffaceous in part; intermixed with SILTSTONE 40%, dark grey; MS stringers of coal dull (<1% bright); fresh</p>			GAMMA api
<p>SANDSTONE 60%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, grey; MS stringers of coal; fresh</p>			Compensated
<p>SANDSTONE 50%, fine-medium grained, grey, S quartzo- feldspathic lithic; intermixed with SILTSTONE 50%, dark grey; MS stringers of coal dull (<1% bright); fresh</p>			Limestone Neutron



Formation		Craven Subgroup	
Seam			
Sample Number			
Depth below Collar(m)			
Graphic Log			
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>162 SANDSTONE 50%, fine-medium grained, grey, S quartzo- feldspathic lithic; intermixed with SILSTONE 50%, dark grey, MS stringers of coal dull (<1% bright); fresh</p> <p>163 SILSTONE 60%, grey, MS stringers of coal dull, minor bright bands(<1%); intermixed with SANDSTONE 40%, fine-medium grained, grey, S quartzo- feldspathic lithic; fresh</p> <p>164 SANDSTONE 60%, fine-medium grained, grey, S lithic quartzo- feldspathic buffaceous in part, intermixed with SILSTONE 40%, grey, MS stringers of coal dull (<1% bright); fresh</p> <p>165 SANDSTONE 60%, dark grey, MS; intermixed with SANDSTONE 40%, fine-medium grained, grey, S lithic quartzo- feldspathic occasional coal banded; fresh</p> <p>166 SANDSTONE 50%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILSTONE 50%, dark grey, MS stringers of coal dull, minor bright bands (<1%); fresh</p> <p>167</p> <p>168</p> <p>169</p> <p>170</p> <p>171</p> <p>172</p>			

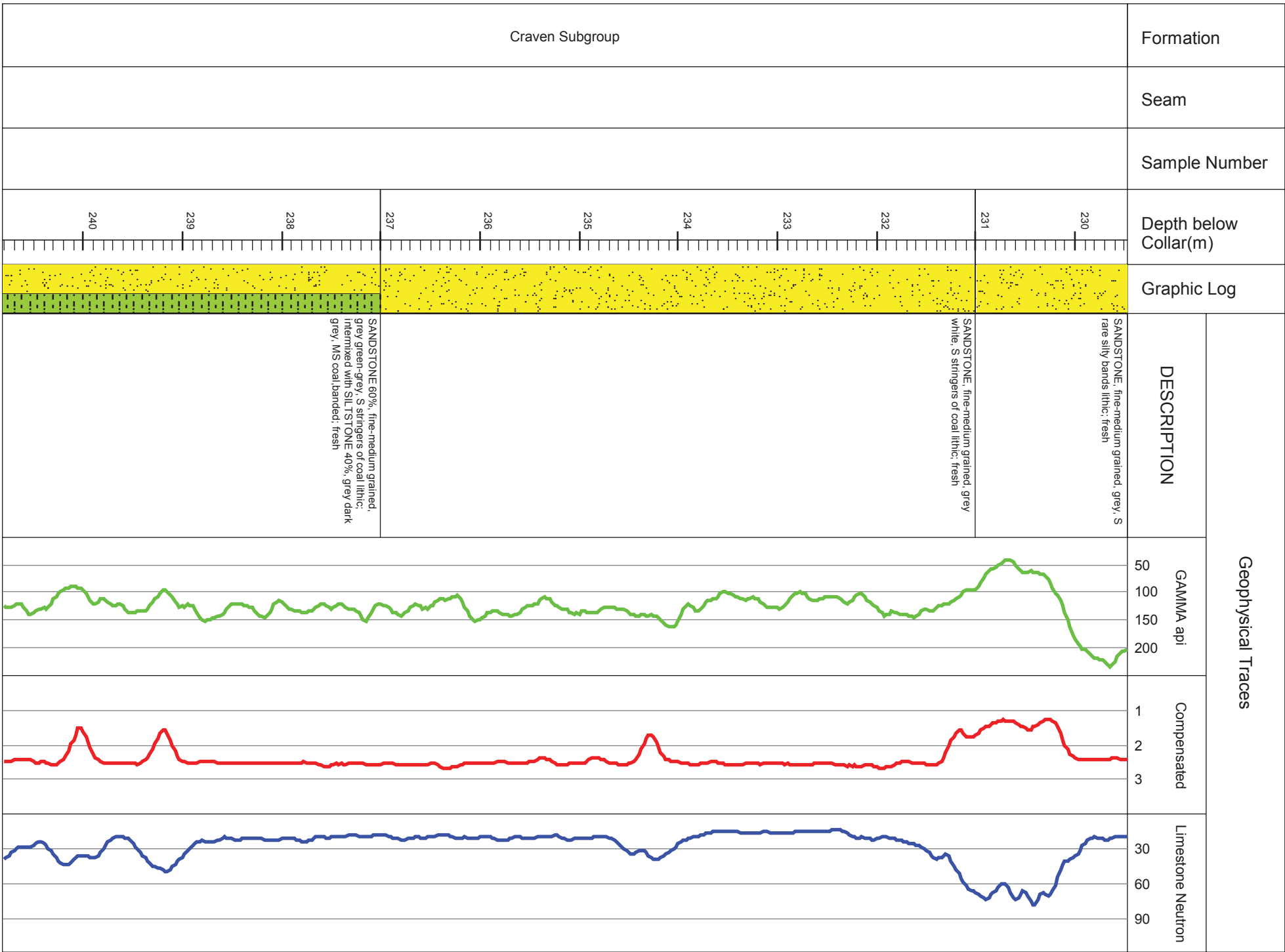
Formation		Craven Subgroup	
Seam			
Sample Number			
Depth below Collar(m)		173 174 175 176 177 178 179 180 181 182 183 184	
Graphic Log			
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>173-174m: SANDSTONE 50%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILTSTONE 50%, dark grey, MS stringers of coal dull, minor bright bands (<1%); fresh</p> <p>174-177m: SANDSTONE 60%, fine-medium grained, dark grey, S lithic quartzo- feldspathic, coal banded lutefaceous; intermixed with SILTSTONE 40%, dark grey, MS; fresh</p> <p>177-183m: SILTSTONE 50%, dark grey, MS; intermixed with SANDSTONE 50%, grey, S lithic coal banded occasional lutefaceous; fresh</p> <p>183-184m: SANDSTONE 60%, fine-medium grained, grey, S lithic quartzo- feldspathic lutefaceous in part; intermixed with SILTSTONE 40%, dark grey, MS stringers of coal dull (<1% bright); fresh</p>			

Craven Subgroup		Formation			
		Seam			
		Sample Number			
		Depth below Collar(m)			
		Graphic Log			
		DESCRIPTION			
		Geophysical Traces			
195		<p>SANDSTONE 60%, fine-medium grained, grey, S ilithic quartzo-feldspathic luffaceous in part; intermixed with SILTSTONE 40%, dark grey, MS stringers of coal dull (<1% bright); fresh</p>	<p>GAMMA api</p> <p>50 100 150 200</p>	<p>Compensated</p> <p>1 2 3</p>	<p>Limestone Neutron</p> <p>30 60 90</p>
189					
188		<p>SANDSTONE 50%, fine-medium grained, grey, S ilithic quartzo-feldspathic; intermixed with SILTSTONE 50%, dark grey, M stringers of coal dull (<1% bright); fresh</p>			
194					
193					
192					
191					
190					




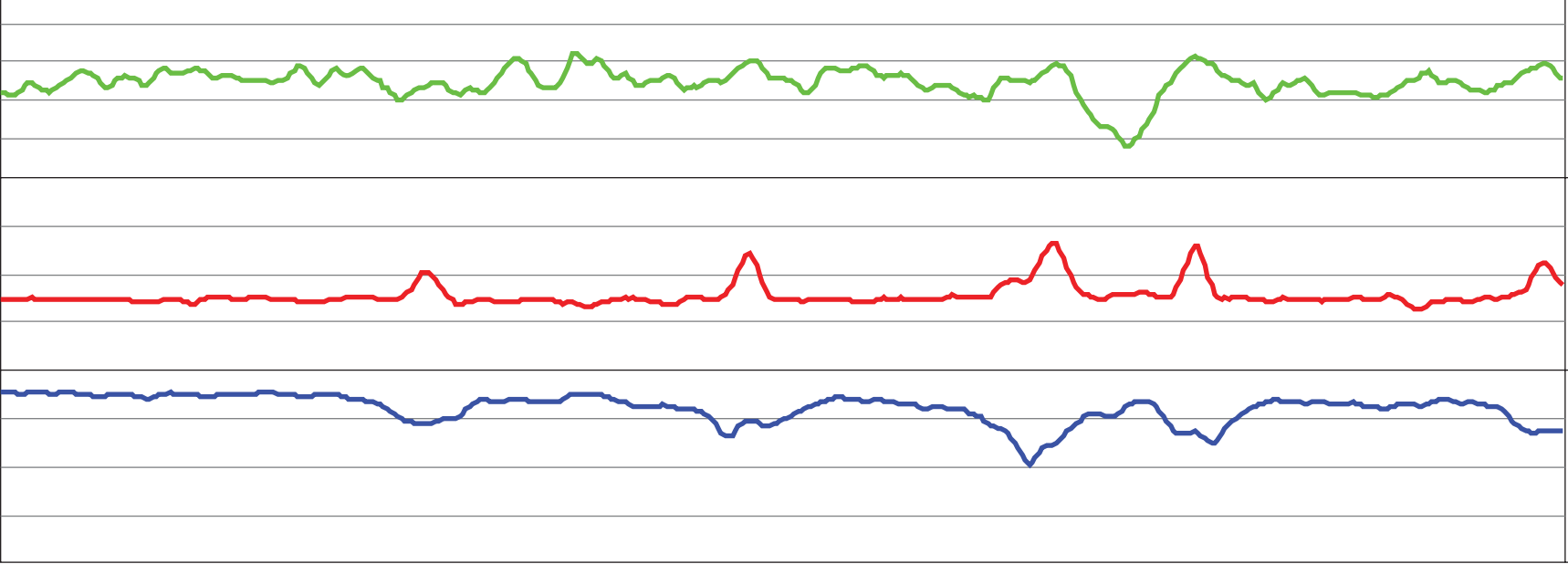
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
SILTSTONE 70%, grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, grey, S lithic coal, banded; fresh			
SANDSTONE 60%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, grey, MS stringers of coal dull, minor bright bands(<1%); fresh			
SANDSTONE 40%, grey, MS; intermixed with SANDSTONE 60%, fine-medium grained, grey, S lithic stringers of coal dull, minor bright bands(<1%); fresh			
SANDSTONE 70%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILTSTONE 30%, grey, MS stringers of coal dull, minor bright bands(<1%); fresh			

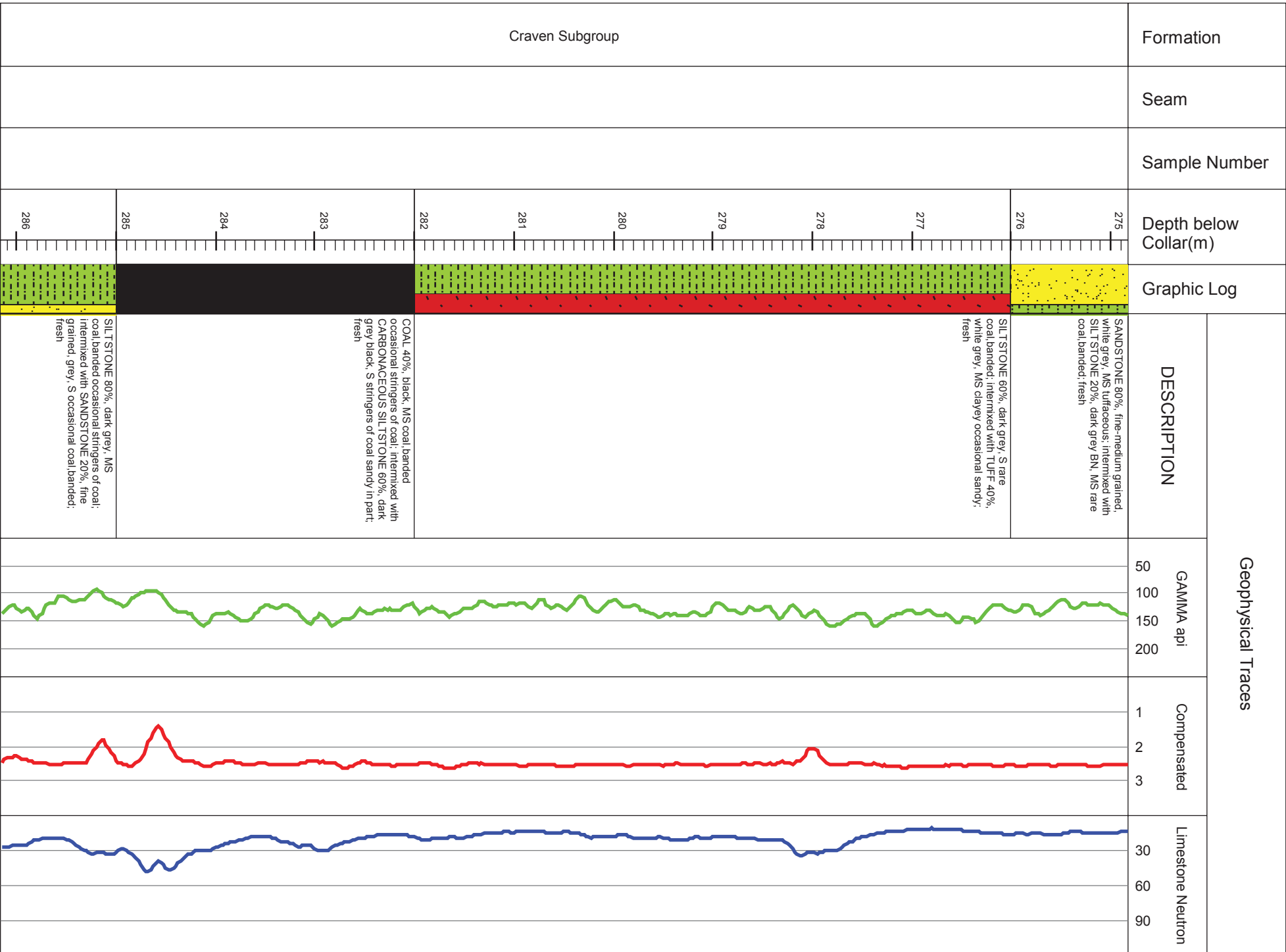
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
SANDSTONE 70%, fine-medium grained, grey, S lithic quartzo- feldspathic; intermixed with SILSTONE 30%, grey, MS stringers of coal dull, minor bright bands(<1%); fresh	50	1	30
SANDSTONE 60%, fine-medium grained, grey, S quartzo- feldspathic lithic; intermixed with SILSTONE 40%, grey, MS stringers of coal dull, minor bright bands(<1%); fresh	100	2	60
SANDSTONE 80%, fine-medium grained, grey, S quartzo- feldspathic lithic occasional coal banded; intermixed with SILSTONE 20%, grey, MS, fresh	150	3	90
SANDSTONE, fine-medium grained, grey, S rare silty bands lithic; fresh	200		



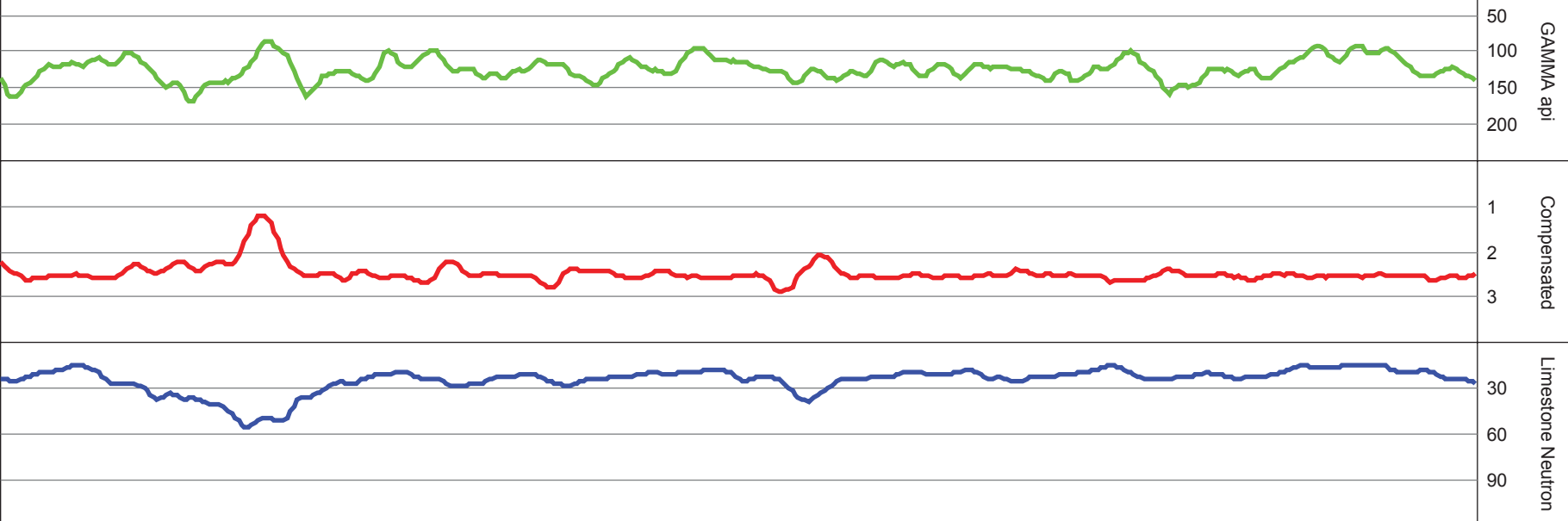
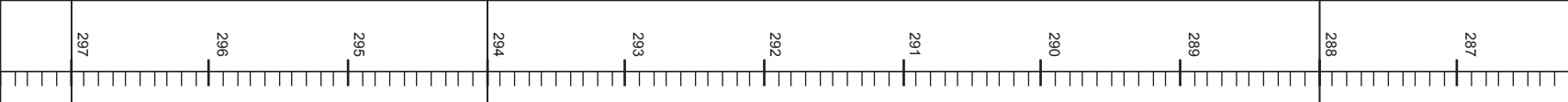
Formation		Craven Subgroup	
Seam			
Sample Number		002DA_DB	
Depth below Collar(m)		241 242 243 244 245 246 247 248 249 250 251 252	
Graphic Log			
DESCRIPTION		<p>SANDSTONE 60%, fine-medium grained, grey green-grey, S stringers of coal lithic; intermixed with SILTSTONE 40%, grey dark grey, MS coal;banded; fresh</p> <p>SANDSTONE 80%, fine-medium grained, grey white, S stringers of coal tuffaceous; intermixed with SILTSTONE 20%, grey green-grey, MS coal;banded; fresh</p> <p>CARBONACEOUS SILTSTONE; grey dark grey, S bands of coal; fresh</p> <p>CARBONACEOUS SILTSTONE 70%, dark grey green-brown, S silty; intermixed with SANDSTONE 30%, fine-medium grained, dark grey black, S; fresh</p>	
Geophysical Traces			
		50 100 150 200 1 2 3 30 60 90	

Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
DESCRIPTION		Geophysical Traces
<p>253-255: CARBONACEOUS SILTSTONE 70%, dark grey green-brown, S silty; intermixed with SANDSTONE 30%, fine-medium grained, dark grey black, S, fresh</p> <p>255-261: SILTSTONE; grey dark grey, S coal banded sandy; fresh</p> <p>261-263: SILTSTONE 90%, dark grey, S sandy in part; intermixed with COAL 10%, dark grey black, MS coal banded silty in part; fresh</p>		

Craven Subgroup		Formation
		Seam
003DA_DB		Sample Number
		Depth below Collar(m)
		Graphic Log
<p>SILTSTONE 90%, dark grey, S sandy in part; intermixed with COAL 10%, dark grey black, MS coal, banded silty in part; fresh</p>		DESCRIPTION
<p>SILTSTONE 80%, dark grey, S sandy coal, banded stringers of coal; intermixed with COAL 20%, dark grey black, MS coal, banded silty in part; fresh</p>		
<p>SANDSTONE 80%, fine-medium grained, white grey, MS lufaceous; intermixed with SILTSTONE 20%, dark grey BN, MS rare coal, banded; fresh</p>		
		Geophysical Traces



Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
<p>SILTSTONE 80%, dark grey, MS coal banded occasional stringers of coal; intermixed with SANDSTONE 20%, fine grained, grey, S occasional coal banded; fresh</p>			GAMMA api
<p>SILTSTONE 80%, dark grey, S stringers of coal; intermixed with COAL 20%, dark grey B, MS occasional coal banded silty; fresh</p>			Compensated
<p>SANDSTONE 70%, fine grained, dark grey, S silty stringers of coal dull (<1% bright); intermixed with SILTSTONE 30%, black, MS coal banded; fresh</p>			Limestone Neutron
<p>SILTSTONE 80%, dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, MS; fresh</p>			

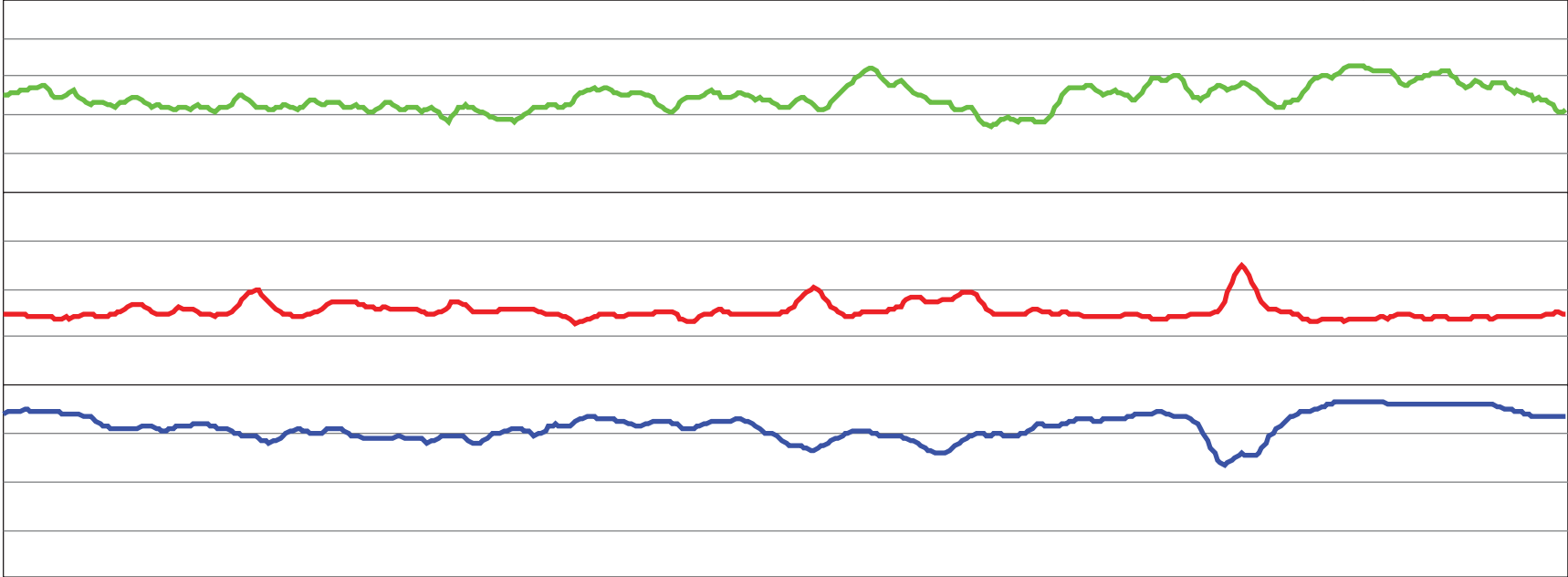
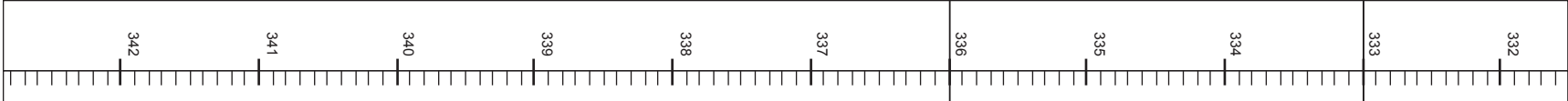


Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
298 SILTSTONE 80%, dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, MS; fresh	50	1	30
299 SILTSTONE 90%, grey dark grey, S coal banded stringers of coal sandy; with COAL 10%, dark grey black, MS occasional coal banded silty; fresh	100	2	60
300 SILTSTONE 90%, dark grey/black, S coal banded; with SANDSTONE 10%, fine grained, grey, S silty; fresh	150	3	90
301 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
302 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
303 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
304 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
305 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
306 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
307 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			
308 SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh			

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces		
Craven Subgroup				006DA_DB						<p>SILTSTONE 90%, grey, S sandy rare coal banded; with COAL 10%, dark grey black, MS dull, minor bright bands (>1%); fresh</p> <p>COAL 80%, black, MS dull, minor bright bands (>1%); with CARBONACEOUS SILTSTONE 20%, dark grey BN, S sandy in part; fresh</p> <p>SANDSTONE 80%, fine grained, dark grey grey, S silty coal banded sandy, with COAL 20%, black, MS occasional coal banded silty; fresh</p> <p>SANDSTONE 60%, fine-medium grained, grey light grey, S stringers of coal siliceous; with SILTSTONE 40%, dark grey, S coal banded throughout; fresh</p> <p>SANDSTONE 80%, fine-medium grained, light grey, MS quartz-lithic moderately sorted stringers of coal, with SILTSTONE 20%, dark grey grey, S occasional coal banded; fresh</p>				
						309						50		
						310						100		
						311						150		
						312						200		
						313						1		
						314						2		
						315						3		
						316						30		
						317						60		
						318						90		
						319								
						320								

Craven Subgroup		Formation						
		Seam						
		Sample Number						
		Depth below Collar(m)						
		Graphic Log						
DESCRIPTION	Geophysical Traces							
	<p>SANDSTONE 80%, fine-medium grained, light grey, MS quartz-lithic moderately sorted stringers of coal; with SILTSTONE 20%, dark grey grey, S occasional coal banded, fresh</p> <p>SILTSTONE 70%, dark grey BN, S coal banded FG; with SANDSTONE 30%, fine-medium grained, grey, S silty, fresh</p> <p>CARBONACEOUS SILTSTONE 80%, dark grey, MS bands with COAL 20%, black, MS dull, minor bright bands< 1%, fresh</p> <p>SANDSTONE, fine-medium grained, grey, S quartz-lithic silty rare coal banded, fresh</p>							
	50 100 150 200	1 2 3	30 60 90					
324	323	322	321					
325	326	327	328	329	330	331		

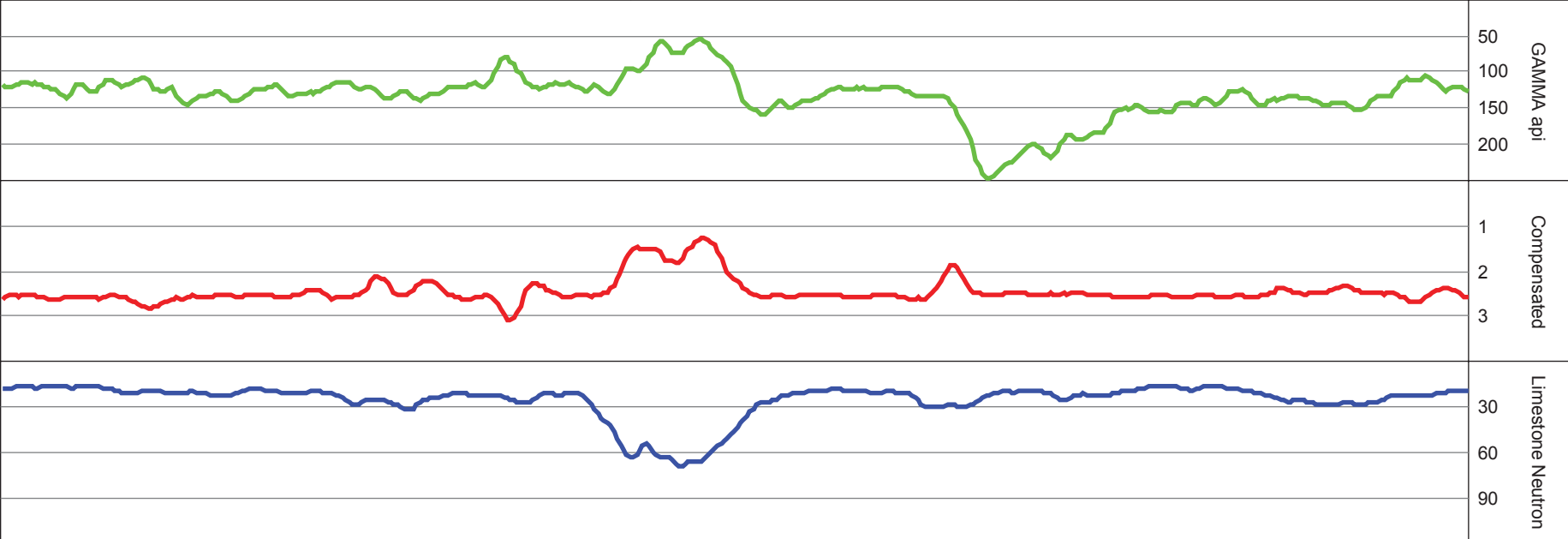
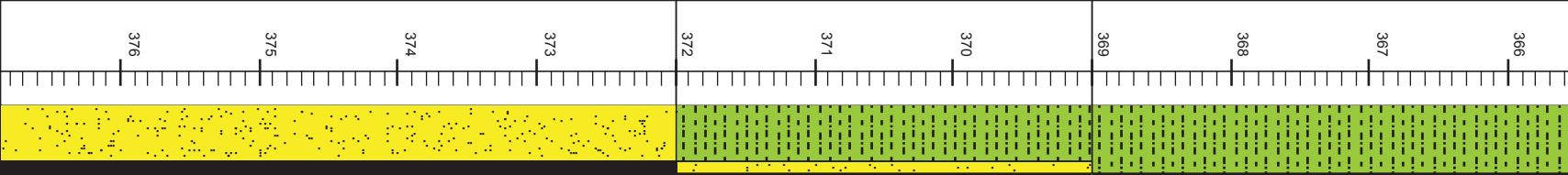
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
<p>SANDSTONE, fine-medium grained, grey, S quartz-lithic silty/rare coal banded; fresh</p>			<p>GAMMA api</p> <p>50 100 150 200</p>
<p>SANDSTONE 80%, fine-medium grained, grey/light grey, S quartz-lithic moderately sorted; with SILTSTONE 20%, grey, MS/rare coal banded; fresh</p>			<p>Compensated</p> <p>1 2 3</p>
<p>SILTSTONE 70%, grey dark grey, S occasional coal banded; with SANDSTONE 30%, fine-medium grained, grey, S quartz-lithic, fresh</p>			<p>Limestone Neutron</p> <p>30 60 90</p>

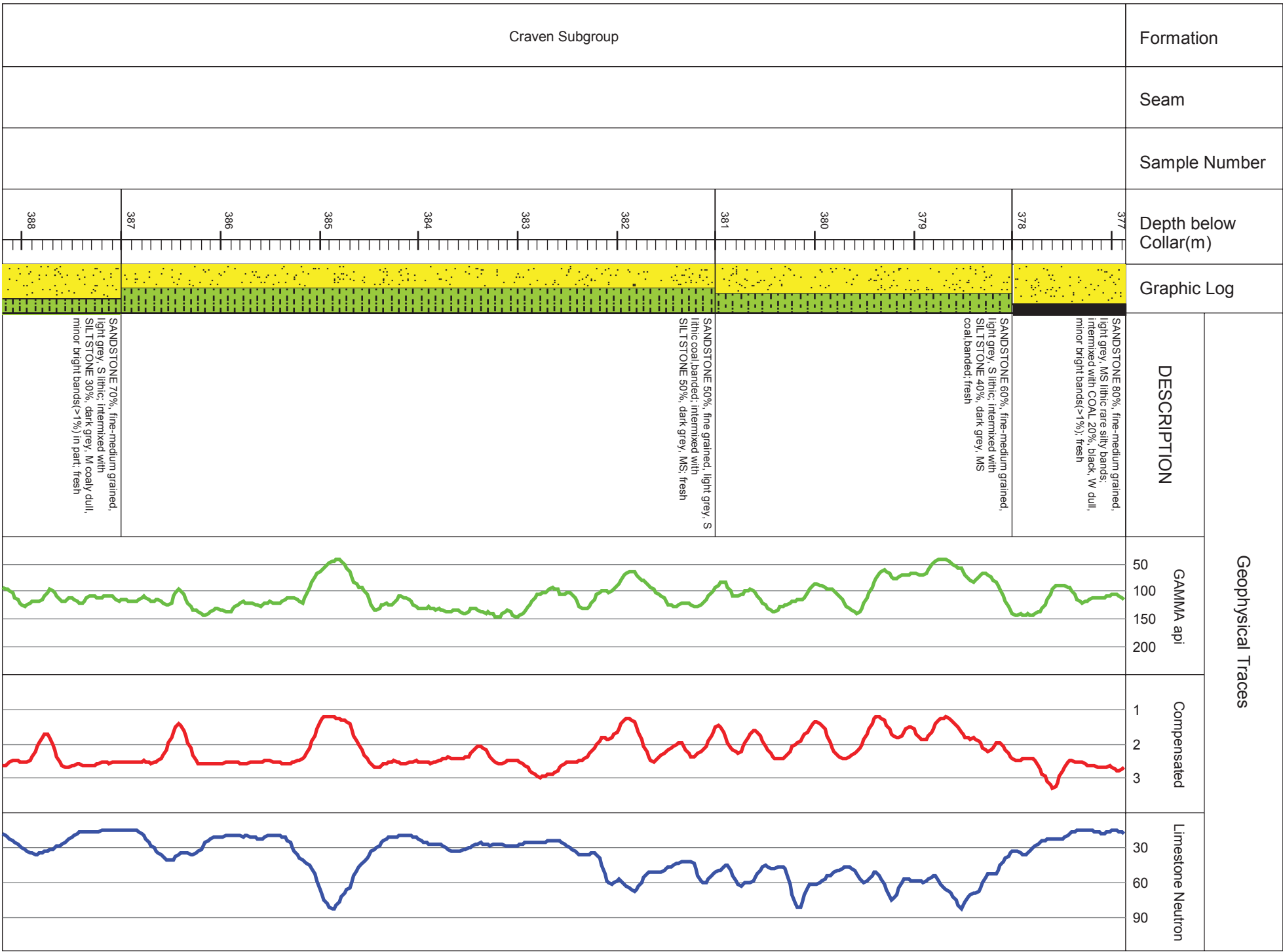


Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces		
Craven Subgroup						343				SILTSTONE 70%, grey dark grey, S occasional coal banded; with SANDSTONE 30%, fine-medium grained, grey, S quartz-lithic; fresh		GAMMA api		
												50 100 150 200		
Craven Subgroup						344				SILTSTONE 90%, dark grey black, S coal banded throughout; intermixed with SANDSTONE 10%, fine-medium grained, grey, S quartz-lithic; fresh		Compensated		
												1 2 3		
Craven Subgroup						345				SILTSTONE 70%, grey dark grey, S occasional coal banded; with SANDSTONE 30%, fine-medium grained, grey, S quartz-lithic; fresh		Limestone Neutron		
												30 60 90		
Craven Subgroup						346				SANDSTONE 70%, fine grained, light grey, S carbonaceous rare stringers of coal; intermixed with SILTSTONE 30%, grey dark grey, S coal banded; fresh		1 2 3		
												1 2 3		
Craven Subgroup						347				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						348				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						349				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						350				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						351				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						352				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						353				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		
Craven Subgroup						354				SANDSTONE 80%, grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh		1 2 3		
												1 2 3		

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	<p>SILTSTONE 80% grey dark grey, S coal banded stringers of coal; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh</p> <p>SILTSTONE 70% DE. Sparse coal banded; intermixed with SANDSTONE 30%, fine-medium grained, grey, S quartz-illitic; fresh</p> <p>SILTSTONE, EY OG, S rare coal banded occasional sandy; fresh</p>	<p>GAMMA api</p>	<p>Compensated</p>
<p>365</p> <p>364</p> <p>363</p> <p>362</p> <p>361</p> <p>360</p> <p>359</p> <p>358</p> <p>357</p> <p>356</p> <p>355</p>			

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
<p>SILTSTONE, EY OG, S rare coal/banded occasional sandy; fresh</p>			GAMMA api
<p>SILTSTONE 80%, grey dark grey, S coal/banded FG; intermixed with SANDSTONE 20%, fine-medium grained, grey, S quartz-lithic rare stringers of coal; fresh</p>			Compensated
<p>SANDSTONE 80%, fine-medium grained, light grey, MS lithic rare silty bands; intermixed with COAL 20%, black, W dull, minor bright bands(<1%); fresh</p>			Limestone Neutron



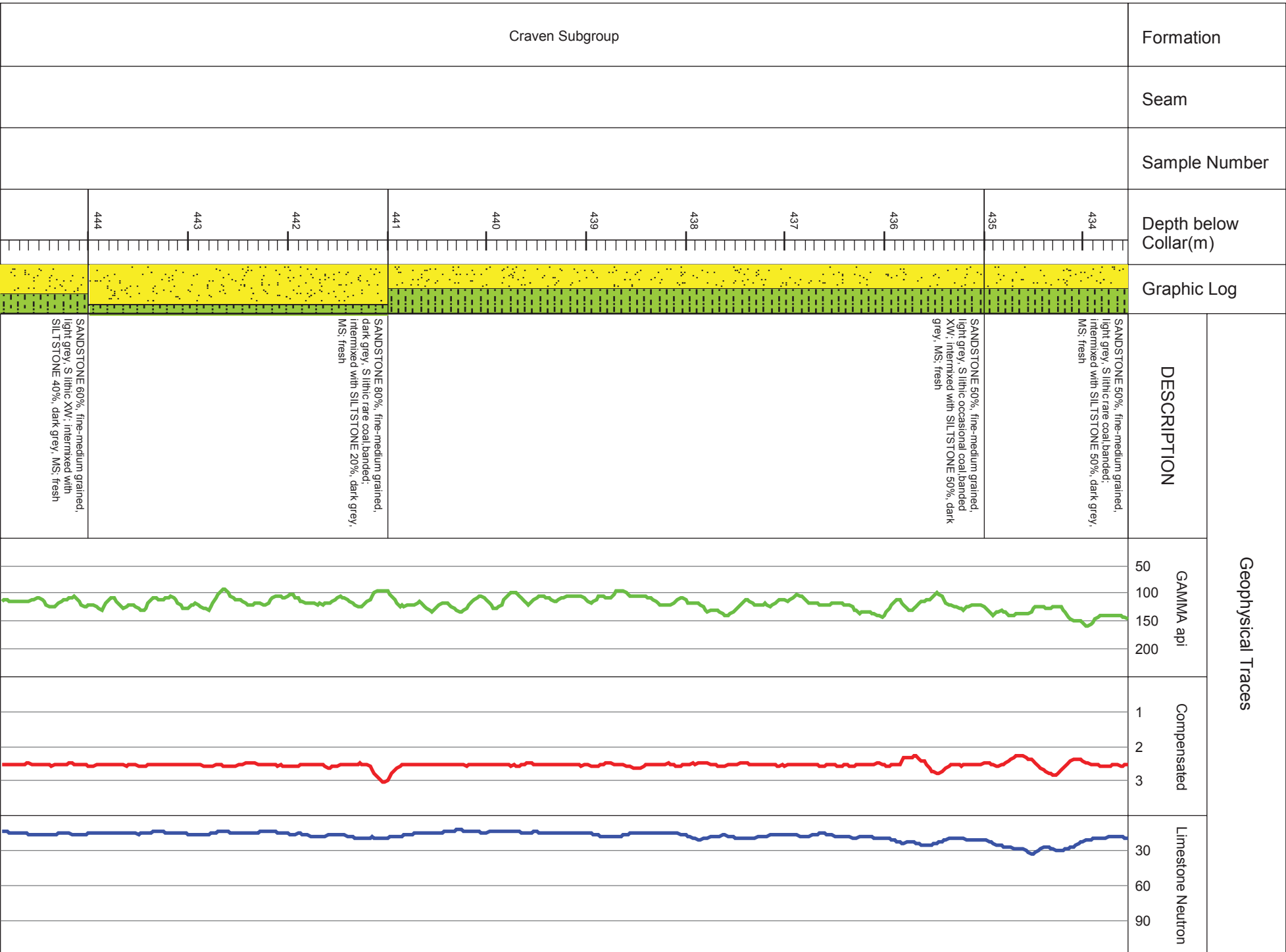


Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
<p>SANDSTONE 60%, fine grained, light grey, S lithic; intermixed with SILTSTONE 40%, dark grey, MS coaly dull (<1% bright) in part; fresh</p>		<p>SANDSTONE 70%, fine-medium grained, light grey, S lithic; intermixed with SILTSTONE 30%, dark grey, M coaly dull, minor bright bands (>1%) in part; fresh</p>
<p>DESCRIPTION</p>		
		Geophysical Traces
		50
		100
		150
		200
		1
		2
		3
		30
		60
		90

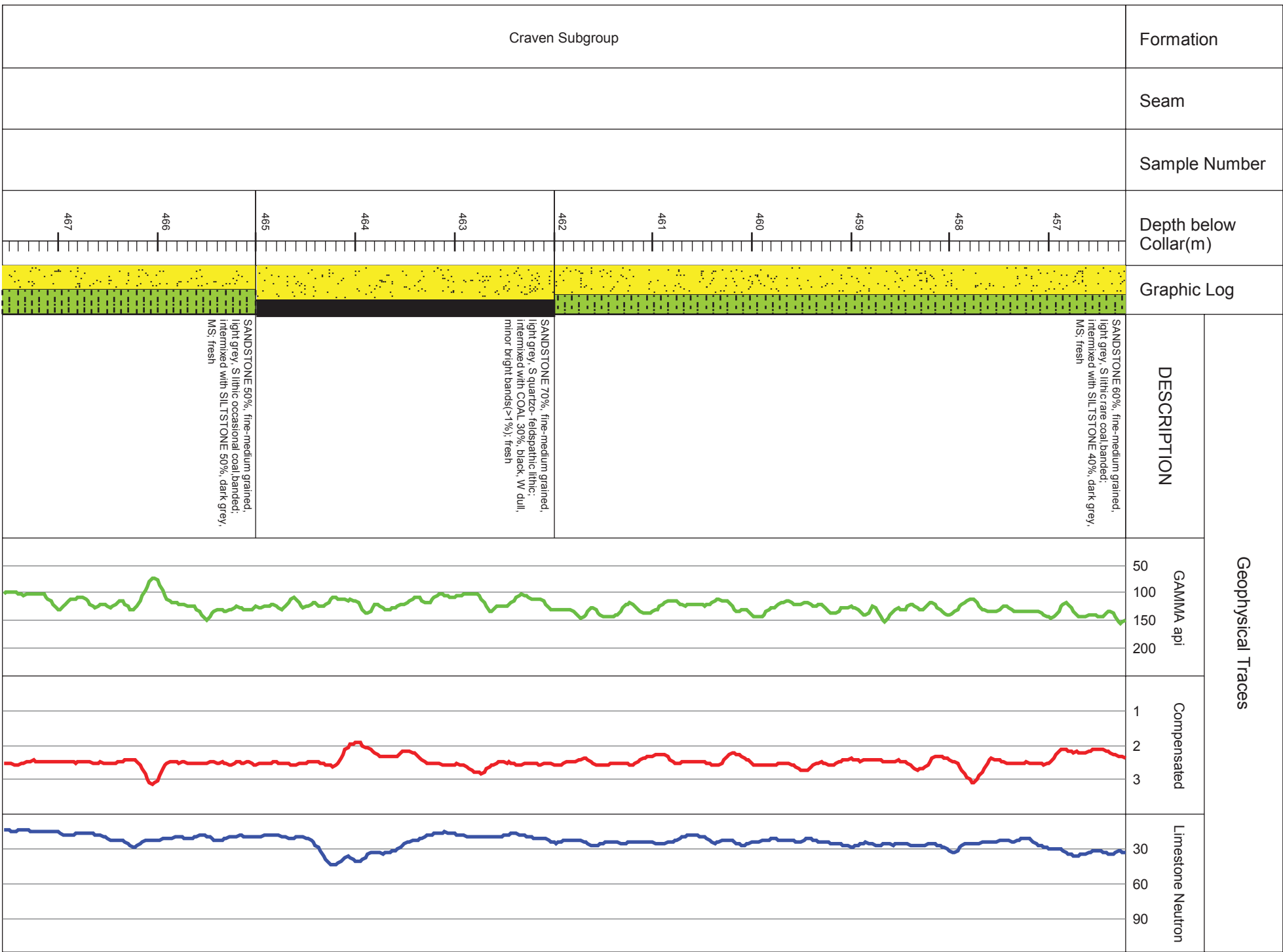
Craven Subgroup		Formation			
		Seam			
		Sample Number			
		Depth below Collar(m)			
		Graphic Log			
		DESCRIPTION			
			Geophysical Traces		
410	409	<p>SANDSTONE 60%, fine-grained, light grey, S lithic; intermixed with SILTSTONE 40%, dark grey, MS coaly dull (<1% bright) in part; fresh</p>		<p>GAMMA api</p>	<p>Compensated</p>
408	407		<p>SANDSTONE 60%, fine-medium grained, light grey, S lithic quartzo-feldspathic occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh</p>		
406	405				
404	403				
402	401				
400					

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>SANDSTONE 60%, fine-medium grained, light grey, silty occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh</p>			
<p>SILTSTONE 60%, dark grey, MS; intermixed with SANDSTONE 40%, fine-medium grained, dark grey, silty coal banded; fresh</p>			
<p>SANDSTONE 60%, fine-medium grained, light grey, silty occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh</p>			

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
423	SANDSTONE 60%, fine-medium grained, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh		GAMMA api
424	SANDSTONE 60%, fine-medium grained, light grey, MS; intermixed with COAL 40% black, W dull; minor bright bands(<1%); fresh		Compensated
425	SANDSTONE 70%, fine-medium grained, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 30%, dark grey, MS XV; fresh		Limestone Neutron
426	SANDSTONE 60%, fine-medium grained, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh		
427			
428			
429			
430			
431			
432	SANDSTONE 50%, fine-medium grained, light grey, S lithic rare coal banded; intermixed with SILTSTONE 50%, dark grey, MS; fresh		
433			



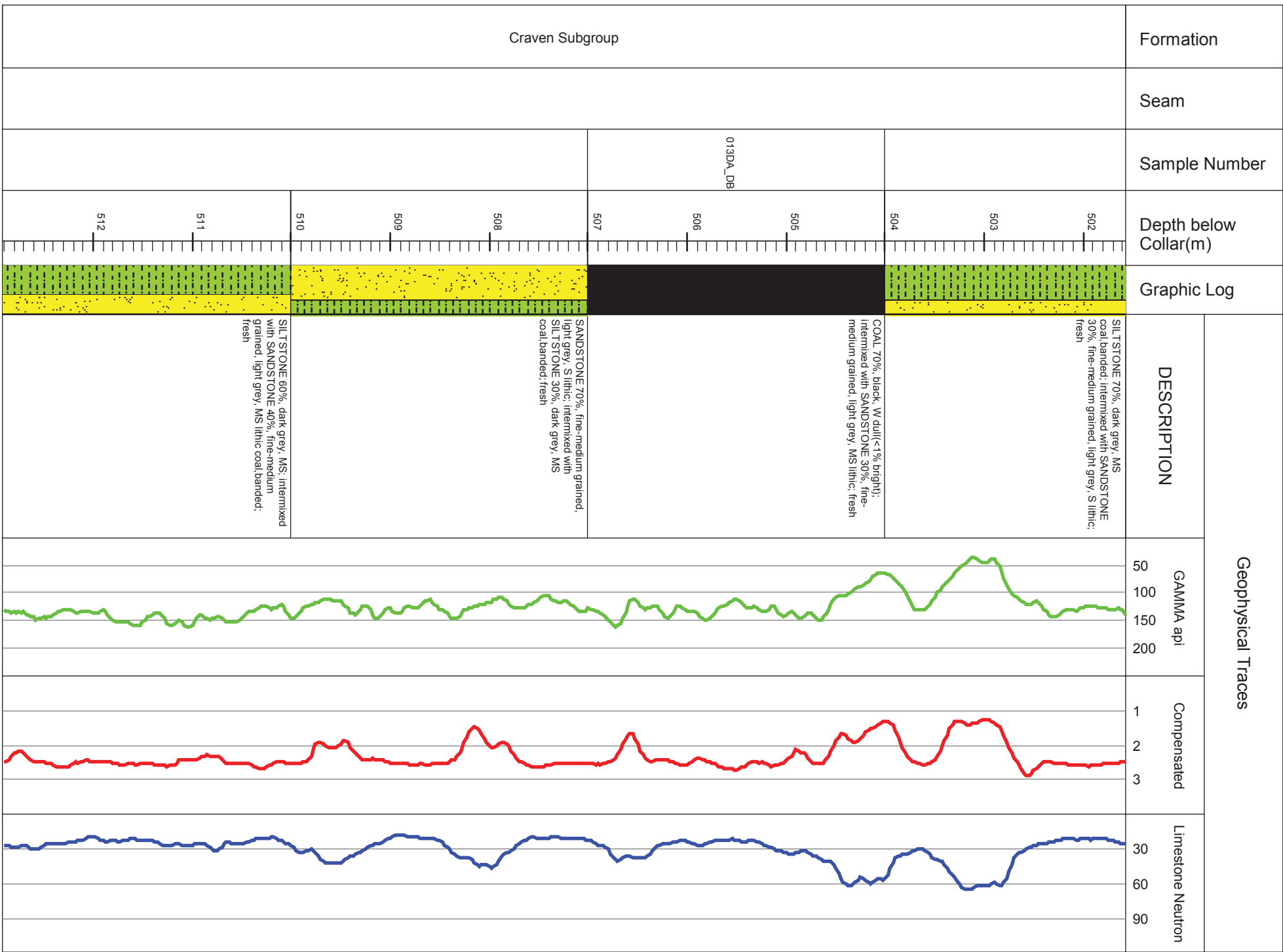
Formation		Craven Subgroup		
Seam				
Sample Number				
Depth below Collar(m)				
Graphic Log				
DESCRIPTION				
GAMMA api				
Compensated				
Limestone Neutron				
445	SANDSTONE 60%, fine-medium grained, light grey, S lithic XV; intermixed with SILTSTONE 40%, dark grey, MS; fresh	50	1	30
446		100	2	60
447	SANDSTONE 95%, fine-medium grained, light grey, S lithic; intermixed with COAL 5%, black, W dull (<1% bright); fresh	150	3	90
448				
449				
450	SANDSTONE 60%, fine-medium grained, light grey, S lithic rare coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh			
451				
452				
453	SANDSTONE 60%, light grey, M lithic; intermixed with COAL 40%, black, W dull, minor bright bands (<1%); fresh			
454				
455				
456	SANDSTONE 60%, fine-medium grained, light grey, S lithic rare coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh			

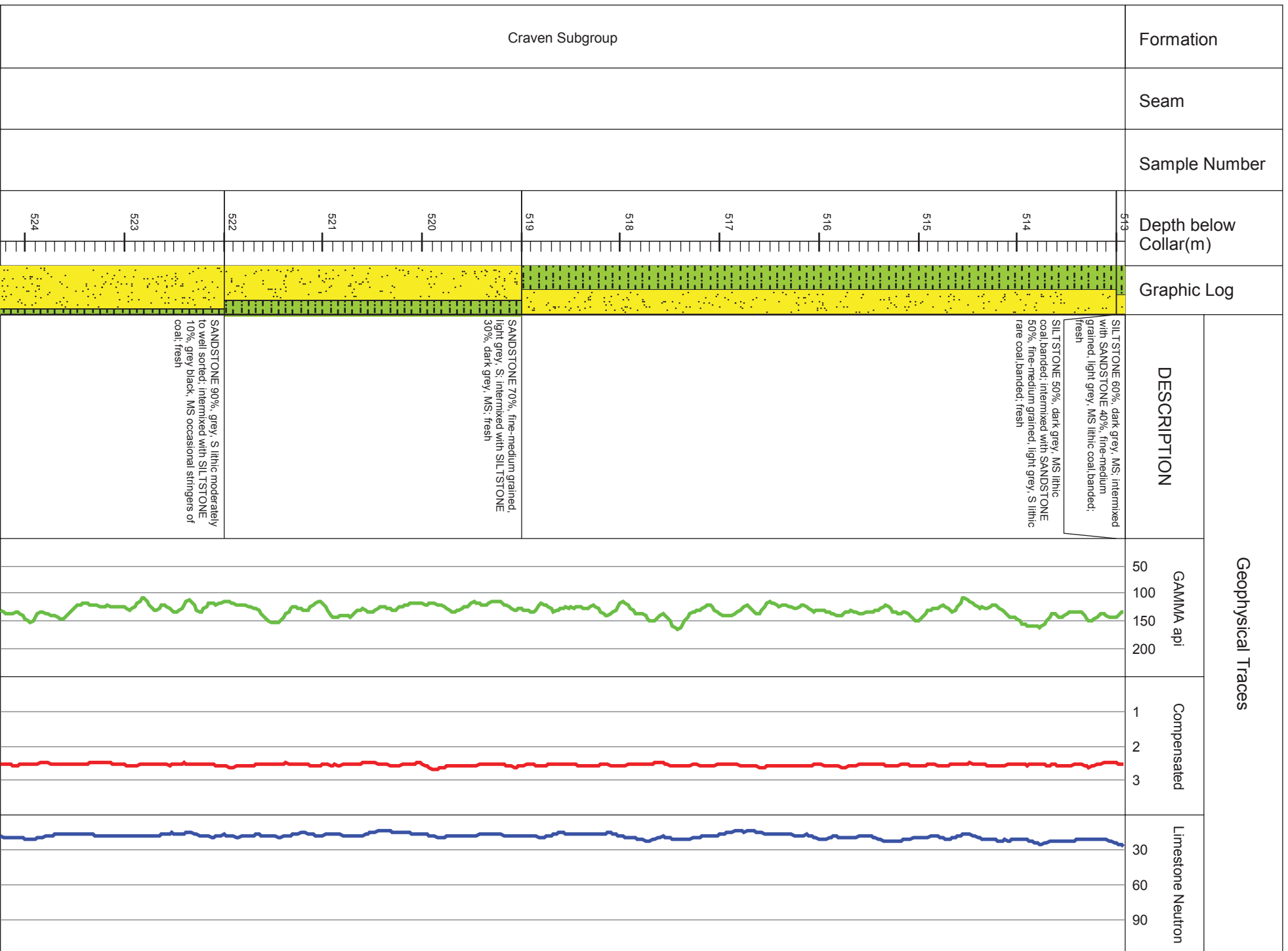


Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>468-471: SANDSTONE 50%, fine-medium grained, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 50%, dark grey, MS; fresh</p> <p>471-472: SANDSTONE 80%, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 20%, dark grey, MS; fresh</p> <p>472-474: SANDSTONE 60%, fine-medium grained, light grey, S lithic occasional coal banded; intermixed with SILTSTONE 40%, dark grey, MS; fresh</p> <p>474-477: SANDSTONE, fine-medium grained, light grey, MS quartz-lithic occasional silty coal banded; fresh</p> <p>477-478: SANDSTONE, fine-medium grained, light grey, MS quartz-lithic occasional silty coal banded; fresh</p>			

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
479	SANDSTONE, fine-medium grained, light grey, MS quartz-lithic occasional coal banded; fresh		GAMMA api
480	SANDSTONE 70%, fine-medium grained, light grey, S quartz-lithic occasional coal banded; intermixed with SILTSTONE 30%, dark grey, MS; fresh		Compensated
481	SANDSTONE, fine grained, light grey, M quartz-lithic occasional silty coal banded; fresh		Limestone Neutron
482			
483			
484			
485			
486	COAL 50%, black, W dull, minor bright bands (>1%); intermixed with SANDSTONE 50%, fine-medium grained, light grey, M lithic; fresh		
487			
488			
489	SANDSTONE 50%, fine-medium grained, light grey, S lithic rare coal banded; intermixed with SILTSTONE 50%, dark grey, MS; fresh		
490			

Craven Subgroup		Formation			
		Seam			
		Sample Number			
		Depth below Collar(m)			
		Graphic Log			
		DESCRIPTION			
		Geophysical Traces			
		SANDSTONE 50%, fine-medium grained, light grey, S lithic rare coal banded; intermixed with SILTSTONE 50%, dark grey, MS; fresh			
491		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic coal, banded; fresh			
492		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic coal, banded; fresh			
493		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic coal, banded; fresh			
494		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic coal, banded; fresh			
495		COAL 80%, black, W; intermixed with SANDSTONE 20%, fine grained, light grey, MS lithic; fresh			
496		COAL 80%, black, W; intermixed with SANDSTONE 20%, fine grained, light grey, MS lithic; fresh			
497	012DA_DB	COAL 80%, black, W; intermixed with SANDSTONE 20%, fine grained, light grey, MS lithic; fresh			
498		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic coal, banded; fresh			
499		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic; fresh			
500		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic; fresh			
501		SILTSTONE 70%, dark grey, MS; intermixed with SANDSTONE 30%, fine-medium grained, light grey, S lithic; fresh			





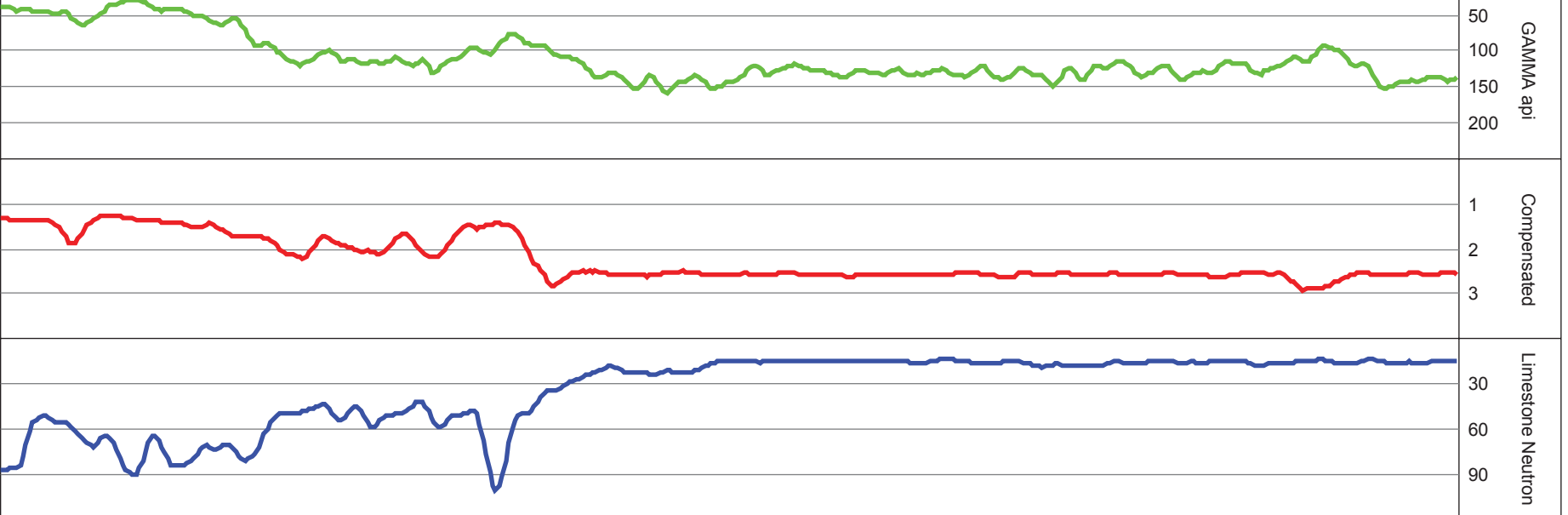
Formation		Craven Subgroup	
Seam			
Sample Number		014DA_DB	
Depth below Collar(m)		525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535	
Graphic Log			
DESCRIPTION		<p>SANDSTONE 90%, grey, S lithic moderately to well sorted; intermixed with SILTSTONE 10%, grey/black, MS occasional stringers of coal; fresh</p> <p>SANDSTONE 70%, fine grained, grey dark grey, S quartz-lithic stringers of coal; intermixed with COAL 30%, black; W occasional coal banded dull (<1% bright); fresh</p> <p>SANDSTONE 90%, fine grained, grey dark grey, S quartz-lithic coal banded; intermixed with COAL 10%, black; W dull (<1% bright); fresh</p>	
Geophysical Traces			
GAMMA api		50, 100, 150, 200	
Compensated		1, 2, 3	
Limestone Neutron		30, 60, 90	

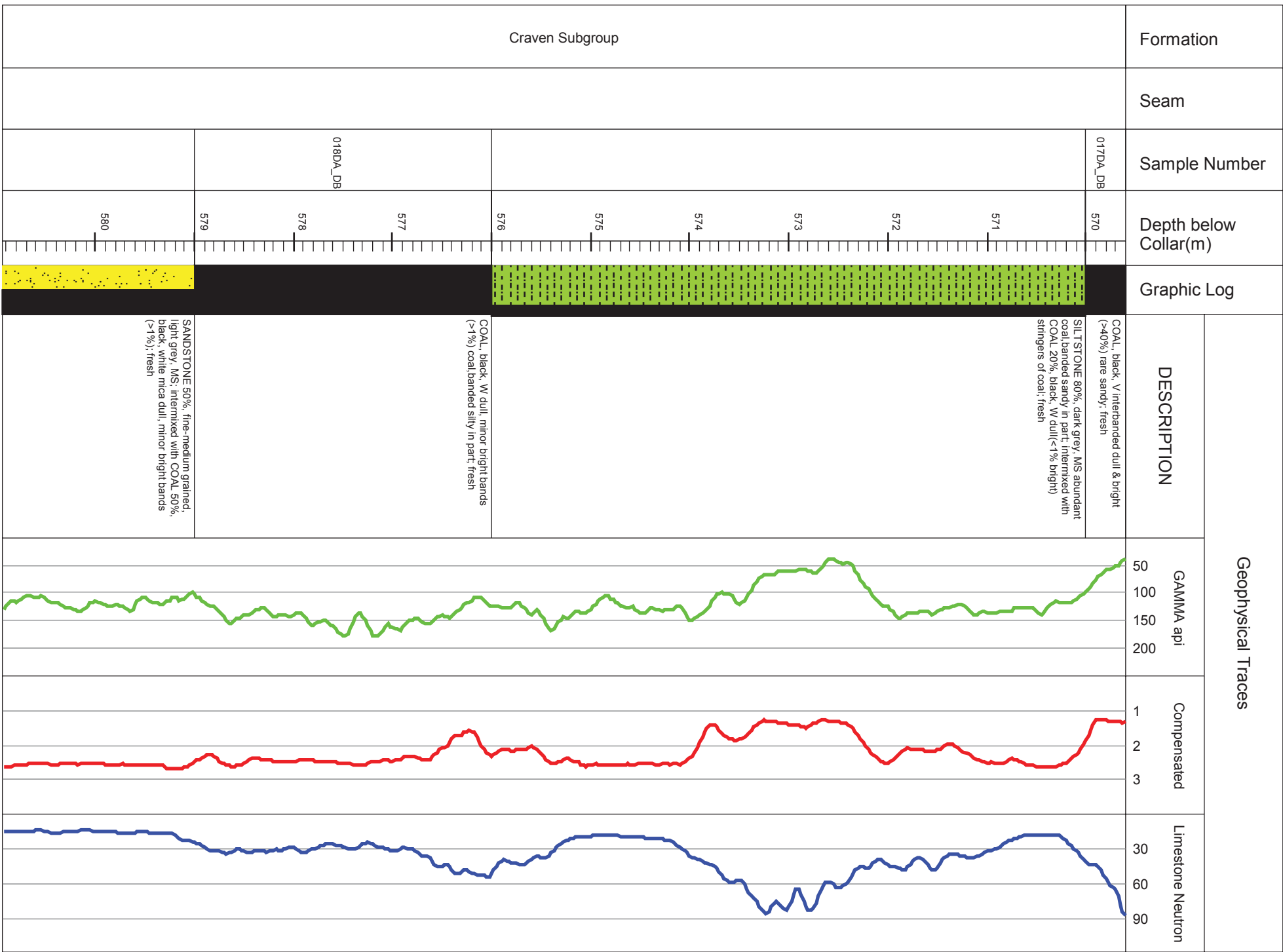
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
SANDSTONE 90%, fine grained, grey dark grey, S quartz-lithic rare coal banded; intermixed with COAL 10%, black, W dull (<1% bright); fresh	50	1	30
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	100	2	60
SILTSTONE 80%, dark grey BN, S coal banded laminations; intermixed with SANDSTONE 20%, fine grained, light grey grey, S quartz-lithic; fresh	150	3	90
SANDSTONE 90%, fine grained, light grey, S quartz-lithic moderately sorted; intermixed with SILTSTONE 10%, dark grey, MS occasional coal banded; fresh			
SANDSTONE, fine-medium grained, light grey grey, S quartz-lithic rare silty; fresh			

Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
DESCRIPTION		Geophysical Traces
<p>SANDSTONE, fine-medium grained, light grey, S quartz-illitic rare silty; fresh</p> <p>SANDSTONE 80%, fine grained, light grey, S illitic moderately sorted; intermixed with SILTSTONE 20%, dark grey, S rare coal banded; fresh</p> <p>SANDSTONE 70%, grey, S illitic moderately sorted; intermixed with SILTSTONE 30%, grey dark grey, MS stringers of coal occasional coal banded; fresh</p>		
		<p>GAMMA api</p>
		<p>Compensated</p>
		<p>Limestone Neutron</p>

Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
		DESCRIPTION
017DA_DB	569 568	<p>SANDSTONE 70%, grey, S lithic moderately sorted; intermixed with SILTSTONE 30%, grey dark grey, MS stringers of coal occasional coal banded; fresh</p>
016DA_DB	567 566 565	
	564 563 562	<p>SANDSTONE 90%, fine grained, light grey grey, S quartz-lithic moderately sorted rare stringers of coal; intermixed with SILTSTONE 10% dark grey black, S occasional coal banded; fresh</p>
	564	<p>COAL 60%, black, W dull, minor bright bands (<1%) occasional coal banded silty; intermixed with SANDSTONE 40%, fine grained, grey, S lithic moderately sorted occasional coal banded; fresh</p>
		<p>COAL, black, V interbanded dull & bright (<40%) rare sandy; fresh</p>

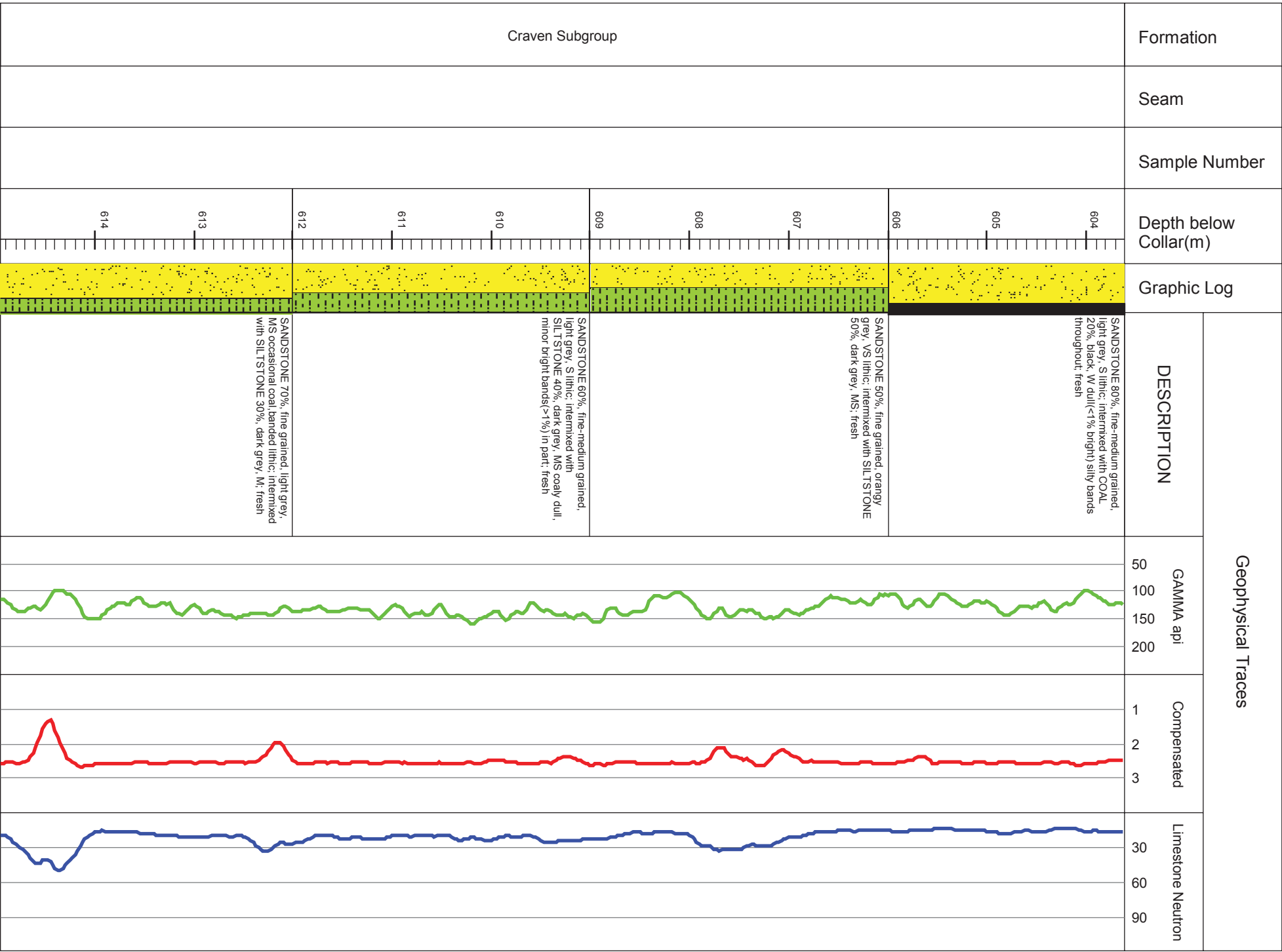
Geophysical Traces



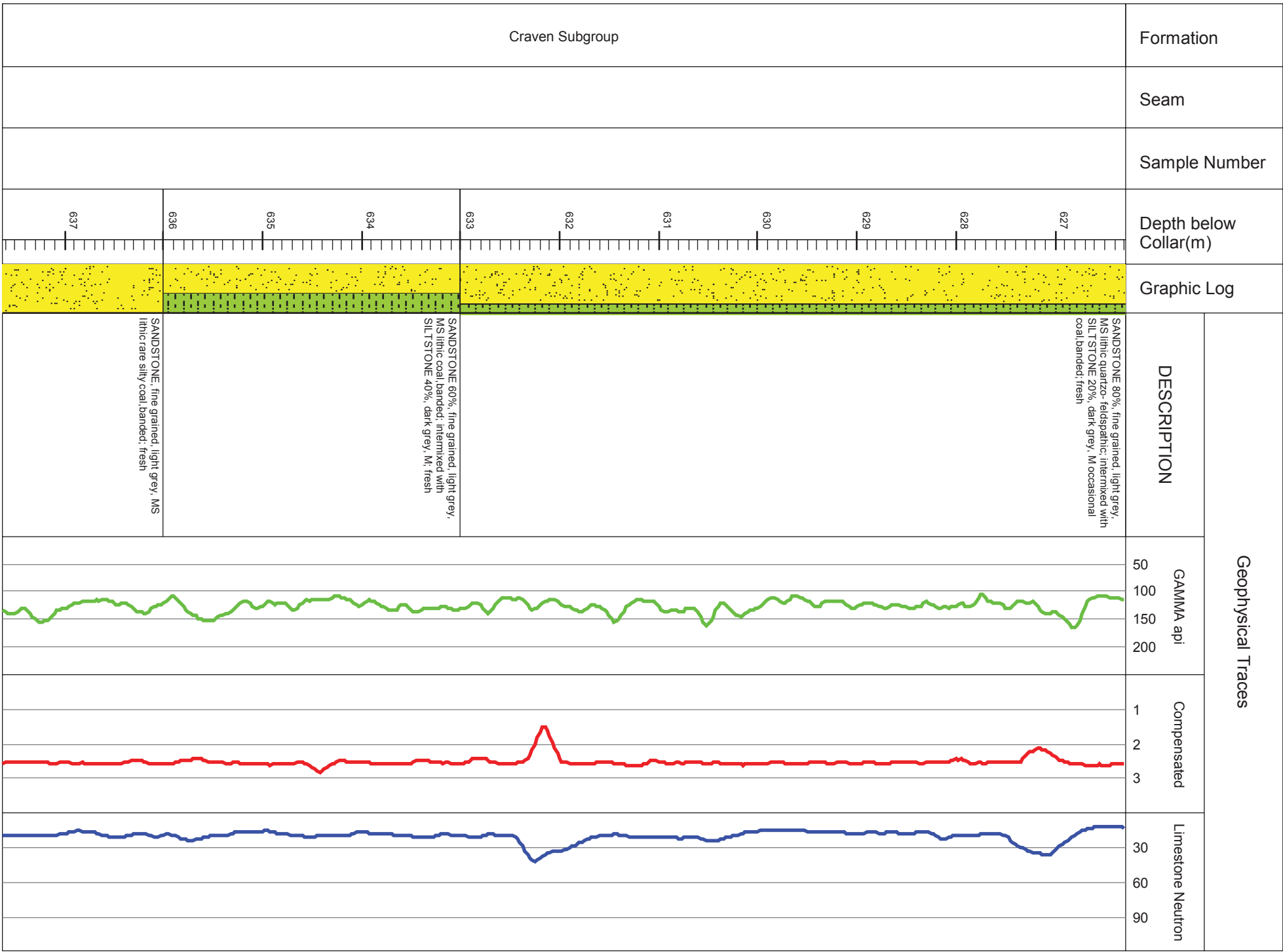


Craven Subgroup		Formation			
		Seam			
		Sample Number			
		Depth below Collar(m)			
		Graphic Log			
		DESCRIPTION			
		Geophysical Traces			
581		SANDSTONE 50%, fine-medium grained, light grey, MS; intermixed with COAL 50%, black, white mica dull, minor bright bands (>1%); fresh	GAMMA api	Compensated	Limestone Neutron
582		COAL, black, W dull, minor bright bands (>1%) sandy throughout; fresh	50	1	30
583			100	2	60
584	019DA_DB		150	3	90
585		COAL 70%, black, W silty bands throughout dull, minor bright bands(<1%); intermixed with SANDSTONE 30%, fine-medium grained, light grey, S; fresh			
586					
587					
588		COAL 80%, black, W dull, minor bright bands (<1%) silty bands throughout; intermixed with SANDSTONE 20%, fine-medium grained, light grey, MS; fresh			
589					
590					
591		COAL 50%, black, white mica dull, minor bright bands(<1%) silty bands throughout; intermixed with SANDSTONE 50%, fine-medium grained, light grey, MS lithic; fresh			
592					

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
COAL 50%, black, white mica dull, minor bright bands(<1%) silty bands throughout; intermixed with SANDSTONE 50%, fine-medium grained, light grey, MS lithic, fresh			
SANDSTONE 50%, fine-medium grained, light grey, MS lithic; intermixed with COAL 50%, black, W dull, minor bright bands(>1%) silty bands throughout; fresh			
SANDSTONE 80%, fine-medium grained, light grey, S lithic; intermixed with COAL 20%, black, W dull(<1% bright) silty bands throughout; fresh			



Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
SANDSTONE 70%, fine grained, light grey, MS occasional coal banded lithic; intermixed with SILSTONE 30%, dark grey, M, fresh	50	1	30
SANDSTONE 80%, fine grained, light grey, MS lithic occasional coal banded; intermixed with SILSTONE 20%, dark grey, M, fresh	100	2	60
SANDSTONE 80%, fine grained, light grey, MS micaceous coal banded dull, minor bright bands(>1%); intermixed with SILSTONE 20% dark grey, M, fresh	150	3	90
SANDSTONE 70%, fine grained, light grey, MS occasional coal banded; intermixed with SILSTONE 30%, dark grey, M, fresh			
SANDSTONE 80%, fine grained, light grey, MS lithic quartzo-feldspathic; intermixed with SILSTONE 20%, dark grey, M occasional coal banded; fresh			



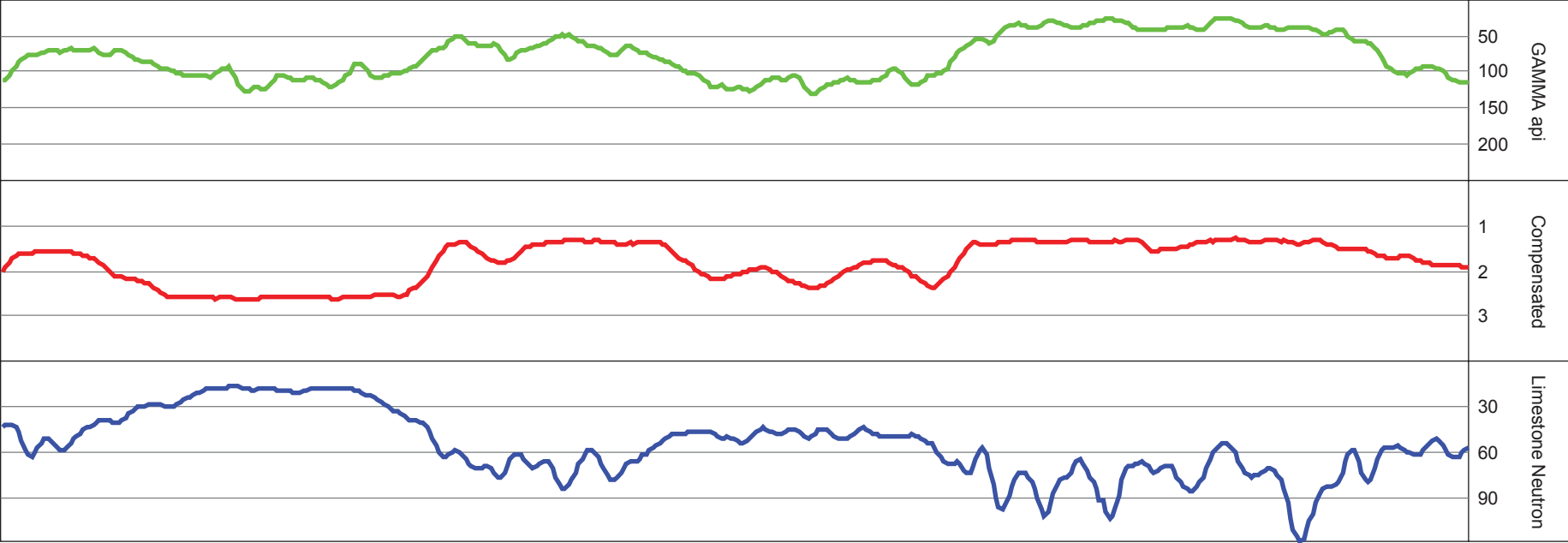
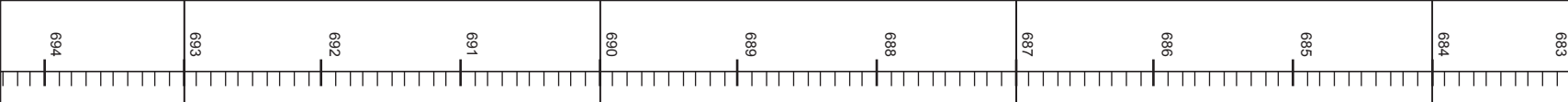
Craven Subgroup		Formation									
		Seam									
		Sample Number									
		Depth below Collar(m)									
		Graphic Log									
DESCRIPTION	Geophysical Traces										
	GAMMA api	Compensated	Limestone Neutron								
SANDSTONE, fine grained, light grey, MS lithic rare silty coal, banded; fresh											
SANDSTONE 70%, fine grained, light grey, MS lithic; intermixed with COAL 30%, black, W dull; minor bright bands(>1%); fresh											
SANDSTONE 70%, fine grained, light grey, MS lithic rare coal banded; intermixed with SILTSTONE 30%, dark grey, M, fresh											
SANDSTONE, fine grained, light grey, MS lithic occasional coal banded; fresh											
020DA_DB	648	647	646	645	644	643	642	641	640	639	638

Craven Subgroup		Formation			
		Seam			
021DA_DB		Sample Number			
		Depth below Collar(m)			
		Graphic Log			
		DESCRIPTION			
		Geophysical Traces			
649		SANDSTONE, fine grained, light grey, MS lithic occasional coal banded; fresh	GAMMA api	Compensated	Limestone Neutron
650			50	1	30
651		SANDSTONE 90%, fine grained, light grey, MS lithic; intermixed with COAL, 10%, black, W dull; minor bright bands(>1%); fresh	100	2	60
652			150	3	90
653					
654		SANDSTONE 60%, fine grained, light grey, MS lithic; intermixed with SILTSTONE 40%, dark grey, W; fresh			
655					
656					
657					
658					
659					
660		COAL 40%, black, W mainly dull; frequent bright bands(<10%); intermixed with SANDSTONE 60%, fine grained, light grey, W lithic; fresh			





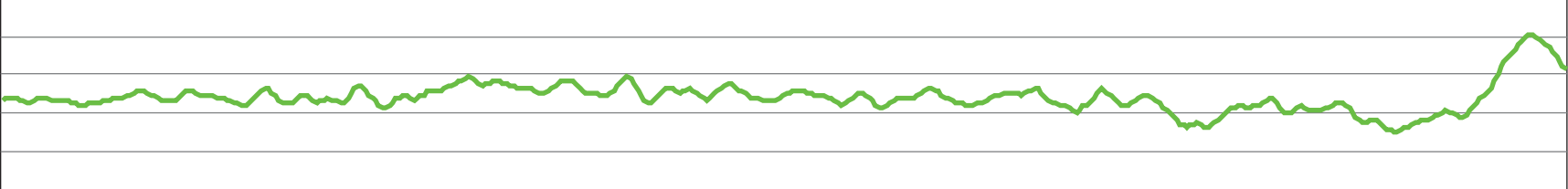
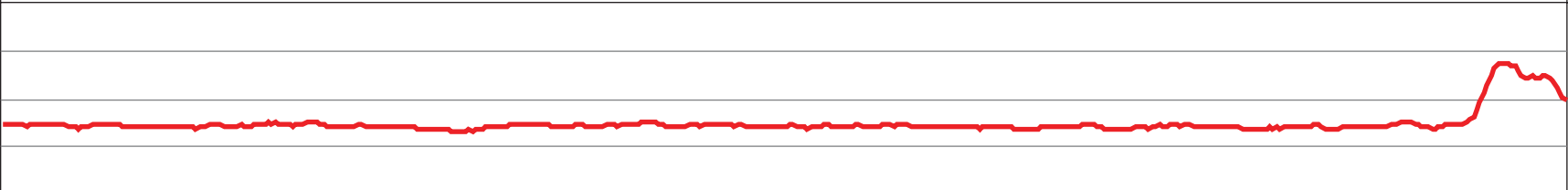
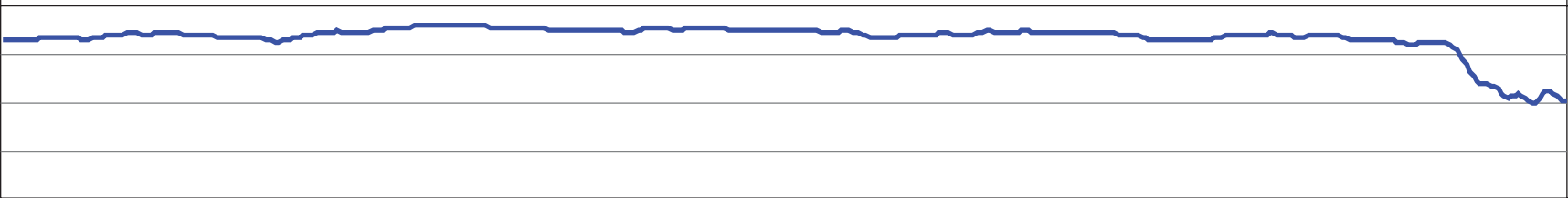
Craven Subgroup		Formation
		Seam
		Sample Number
		Depth below Collar(m)
		Graphic Log
DESCRIPTION		Geophysical Traces
		Compensated
		Limestone Neutron
663	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands(>1%); fresh	50
664	SANDSTONE 90%, fine grained, light grey, M lithic, intermixed with COAL 10%, black; W dull, minor bright bands (>1%); fresh	100
665	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands(>1%); fresh	150
666	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	200
667	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	
668	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	
669	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	
670	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	
671	SANDSTONE 80%, fine grained, light grey, M lithic, intermixed with COAL 20%, black; W dull, minor bright bands (>1%); fresh	

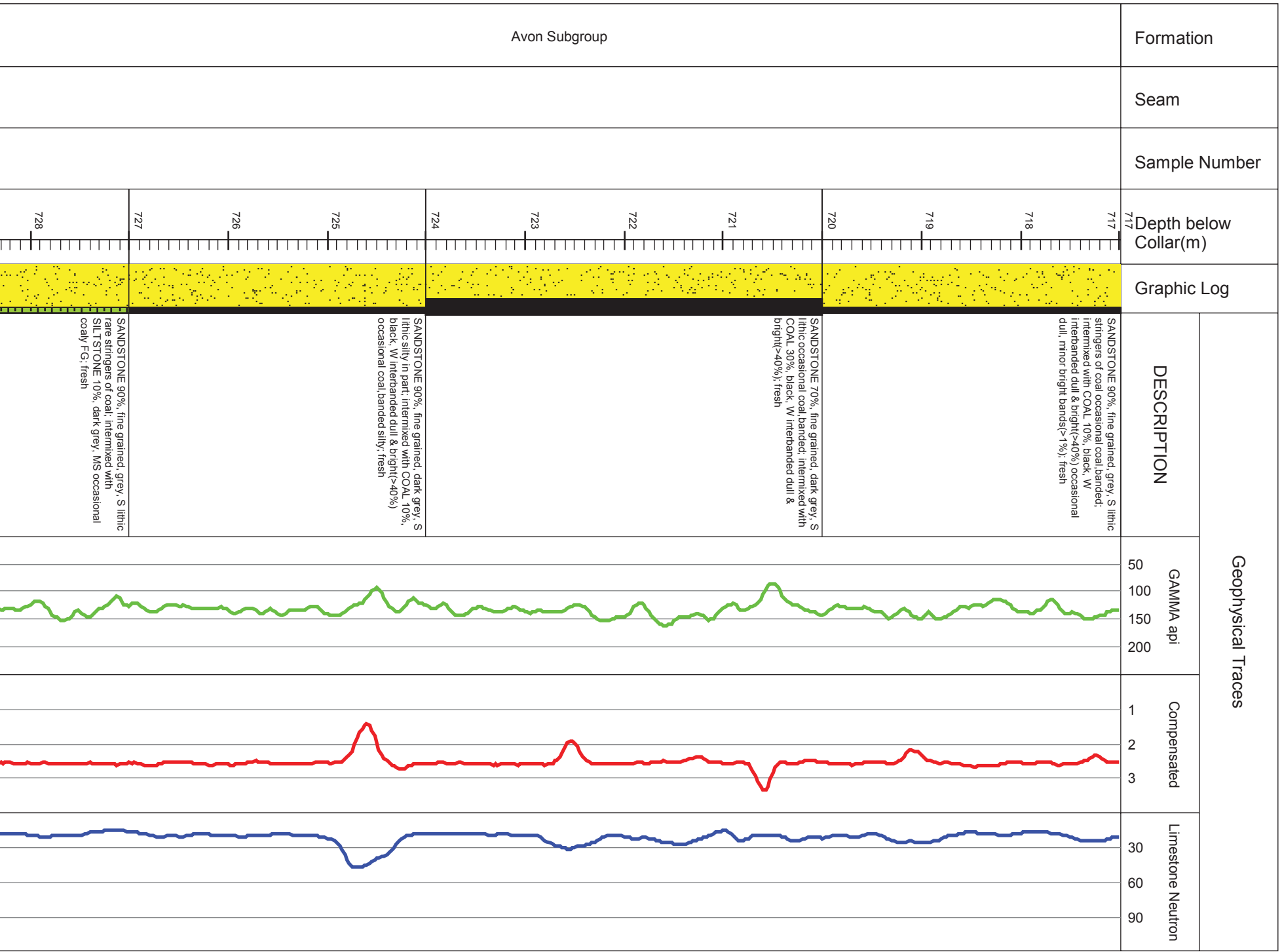
Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	<p>672 SANDSTONE 80%, fine grained, light grey, MS lithic quartzo- feldspathic; intermixed with COAL 20%, black, W dull, minor bright bands (>1%); fresh</p> <p>673 SANDSTONE 60%, fine grained, light grey, MS lithic quartzo- feldspathic; intermixed with COAL 40%, black, W dull, minor bright bands (>1%) silty bands throughout; fresh</p> <p>674 SANDSTONE 60%, fine-medium grained, light grey, MS lithic quartzo- feldspathic; intermixed with SILTSTONE 40%, dark grey, M coal banded; fresh</p> <p>675</p> <p>676</p> <p>677</p> <p>678</p> <p>679</p> <p>680</p> <p>681 COAL 50%, black, W dull, minor bright bands (>1%); intermixed with SANDSTONE 50%, fine-medium grained, light grey, MS lithic; fresh</p> <p>682</p>		

Craven Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
COAL 50%, black, W interbanded dull & bright(>40%); intermixed with SANDSTONE 50%, fine-medium grained, light grey, MS lithic: fresh	COAL 70%, black, W; intermixed with SANDSTONE 30%, fine-medium grained, light grey, MS lithic: fresh		GAMMA api
COAL 80%, black, W interbanded dull & bright(>40%); intermixed with SANDSTONE 20%, fine grained, light grey, MS lithic: fresh	SANDSTONE 50%, fine grained, light grey, S; intermixed with COAL 50%, black, W interbanded dull & bright(>40%); fresh		Compensated
			Limestone Neutron



Craven Subgroup		Formation	
		Seam	
025DA_DB		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION		Geophysical Traces	
695	COAL 50%, black, W interbanded dull & bright(>40%); intermixed with SANDSTONE 50%, fine-medium grained, light grey, MS; fresh		GAMMA api
696	SANDSTONE 50%, fine grained, grey, S lithic; intermixed with COAL 50%, black, W occasional coal banded silty; fresh		Compensated
697	SANDSTONE 60%, fine grained, grey, S lithic; intermixed with COAL 40%, black, W occasional coal; banded silty; fresh		Limestone Neutron
698	SANDSTONE 60%, fine grained, grey, S lithic; intermixed with COAL 40%, black, W occasional coal; banded silty; fresh		
699	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
700	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
701	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
702	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
703	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
704	SANDSTONE 70%, fine grained, dark grey, S lithic; intermixed with COAL 30%, black, W interbanded dull & bright(>40%); fresh		
705	COAL 60%, black, W; intermixed with SANDSTONE 40%, fine grained, grey, S lithic poorly to moderately sorted; fresh		

Avon Subgroup	Craven Subgroup		Formation
			Seam
			Sample Number
			Depth below Collar(m)
			Graphic Log
			DESCRIPTION
			Geophysical Traces
			
<p>SANDSTONE 90%, fine grained, grey; S lithic stringers of coal occasional coal banded; intermixed with COAL 10%, black, W interbanded dull & bright(>40%) occasional dull, minor bright bands(< 1%); fresh</p>	<p>COAL 70%, black, W bright with dull bands (<60%) abundant stringers of coal; intermixed with SANDSTONE 30%, fine grained, grey; S lithic moderately sorted coal banded; fresh</p>	<p>SANDSTONE 80%, grey dark grey; S lithic stringers of coal; intermixed with COAL 20%, black, W bright with dull bands(<60%); fresh</p>	<p>COAL 60%, black, W; intermixed with SANDSTONE 40%, fine grained, grey; S lithic poorly to moderately sorted; fresh</p>
			<p>GAMMA api</p> 
			<p>Compensated</p> 
			<p>Limestone Neutron</p> 



Formation		Avon Subgroup	
Seam			
Sample Number			
Depth below Collar(m)		729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739	
Graphic Log			
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>SANDSTONE 90%, fine grained, grey. S lithic rare stringers of coal; intermixed with SILTSTONE 10%, dark grey, MS occasional coaly FG; fresh</p> <p>SANDSTONE 90%, fine grained, grey dark grey, S lithic occasional quartzose moderately sorted; intermixed with COAL 10%, black, W/ interbanded dull & bright (>40%) occasional coal/banded silty; fresh</p> <p>SANDSTONE 80%, fine grained, grey, S lithic moderately sorted occasional coal banded; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey BN, MS occasional coaly FG; fresh</p> <p>SANDSTONE 80%, fine grained, grey dark grey, S lithic stringers of coal, intermixed with COAL 20%, dark grey black, S abundant coal banded silty mainly dull, frequent bright bands(>10%); fresh</p>			

Avon Subgroup		Formation	
		Seam	
		Sample Number	
		Depth below Collar(m)	
		Graphic Log	
DESCRIPTION	Geophysical Traces		
	GAMMA api	Compensated	Limestone Neutron
<p>SANDSTONE 80%, fine grained, grey dark grey, S lithic stringers of coal; intermixed with COAL 20%, dark grey black, S abundant coal banded silty mainly dull, frequent bright bands(>10%); fresh</p>			
<p>SANDSTONE 90%, fine grained, dark grey, S lithic stringers of coal silty in part; intermixed with COAL 10%, dark grey black, MS abundant coal banded silty interbanded dull & bright(<40%); fresh</p>			
<p>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</p>			
740			
741			
742			
743			
744			
745			
746			
747			
748			
749			
750			
751			

		Avon Subgroup	Formation	
		Seam		
		Sample Number		
		Depth below Collar(m)	Graphic Log	
		DESCRIPTION		
		Geophysical Traces		
751			<p>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</p>	<p>GAMMA api</p> <p>50 100 150 200</p> <p>Compensated</p> <p>1 2 3</p> <p>Limestone Neutron</p> <p>30 60 90</p>
752				
753				
754				
755				
756				
757				
758				
759				
760				
761				
762				