

Waukivory 13

Project	AGL	Easting	402416.74	Collar	100.3
Organization		Northing	6452164.46	Total Depth	1100
Site		Grid	GDA-94	Inclination	0
Hole Type	Open hole	Accuracy		Azimuth	0
		Datum	Australian Height Datum		

Commenced 03/11/12
 Completed 10/11/12

Drilling Company
 Drill Rig Type

Plug Depth	0	Cased Depth	0
Logging Company		Casing Type	
Logged By		Size of Casing	0
Encoded By		Fluid	
Core Type		Upper Standing Water Level	0
Drill Bit Type		Lower	0
		Downhole Logging Company	
		Lease	PEL 258

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|--------------------------------------|--------------------------------------|---------------------------------------|---|---|--|----------------------------------|
| <input type="checkbox"/> Gamma Log | <input type="checkbox"/> Neutron Log | <input type="checkbox"/> Density Log | <input type="checkbox"/> Bed Resolution Log | <input type="checkbox"/> Self Potential Log | <input type="checkbox"/> Resistivity Log | <input type="checkbox"/> Dip Log |
| <input type="checkbox"/> Caliper Log | <input type="checkbox"/> Sonic Log | <input type="checkbox"/> Photographed | <input type="checkbox"/> X Rayed | <input type="checkbox"/> Geotechnical Log | | |

From	To	
14	17	SANDSTONE 80%, fine grained, light grey, occasional coal,banded fragments moderately sorted; intermixed with SILTSTONE 20%, grey brown, stringers of coal with stone bands in part; slightly weathered, strong, carbonaceous fragments
17	20	COAL 50%, black, coal,banded sandy throughout mainly dull, frequent bright bands(>10%); intermixed with SANDSTONE 30%, fine grained, dark grey brown, moderately sorted coal,banded occasional silty; with TUFF 20%, cream white, silty occasional clayey; fresh, weak
20	23	SILTSTONE 60%, dark grey brown, sandy coal,banded throughout; intermixed with SANDSTONE 30%, fine grained, grey dark grey, moderately sorted occasional micaceous; with COAL 10%, dark brown black, dull, minor bright bands(>1%) silty in part stringers of coal; fresh, moderately strong, carbonaceous fragments
23	26	SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal,banded fragments; fresh, strong, carbonaceous laminae
26	29	COAL 50%, black, coal,banded silty throughout dull, minor bright bands(>1%); intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted; with SILTSTONE 20%, dark grey brown, sandy in part coal,banded in part; fresh, moderately strong
29	32	SILTSTONE 70%, dark grey, occasional coal,banded sandy; intermixed with SANDSTONE 30%, fine grained, light grey grey, moderately sorted lithic tuffaceous in part; fresh, strong, carbonaceous fragments
32	38	SANDSTONE 60%, fine grained, grey, moderately sorted lithic rare coal,banded; intermixed with SILTSTONE 40%, dark grey brown, rare coal,banded; fresh, strong

From	To	Description
38	41	SILTSTONE 60%, dark grey, coal,banded occasional sandy; intermixed with SANDSTONE 30%, fine grained, grey dark grey, lithic rare tuffaceous; with COAL 10%, black, occasional sandy dull, minor bright bands(>1%); fresh, moderately strong, carbonaceous laminae
41	44	SILTSTONE 70%, dark grey brown, rare coaly; intermixed with SANDSTONE 30%, fine grained, grey, moderately sorted lithic rare micaceous; fresh, moderately strong, carbonaceous fragments
44	47	CARBONACEOUS SILTSTONE 80%, dark grey black, shaly coaly in part; intermixed with SANDSTONE 20%, fine grained, grey, silty in part moderately sorted; fresh, moderately strong
47	50	SANDSTONE 80%, fine grained, dark grey, lithic moderately sorted rare coal,banded; intermixed with SILTSTONE 20%, dark grey brown, rare coaly occasional coal,banded; fresh, strong, carbonaceous fragments
50	56	SANDSTONE 60%, fine grained, grey, occasional quartzose moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, coal,banded throughout; fresh, strong
56	62	SANDSTONE 80%, fine grained, grey, moderately sorted lithic possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, rare coal,banded laminations; fresh, strong, secondary calcite
62	65	SANDSTONE 90%, fine grained, green grey, moderately sorted lithic tuffaceous throughout; intermixed with SILTSTONE 10%, grey, sandy; fresh, strong
65	74	TUFF, green grey, sandy occasional lithic; fresh, strong
74	77	SILTSTONE 60%, grey, occasional sandy rare coal,banded; intermixed with TUFF 40%, green grey, silty throughout occasional lithic; fresh, moderately strong, carbonaceous fragments
77	80	SILTSTONE 70%, dark grey brown, rare coal,banded; intermixed with TUFF 20%, grey white, sandy; with SANDSTONE 10%, fine grained, grey dark grey, lithic moderately sorted; fresh, moderately strong
80	86	SANDSTONE 60%, fine grained, light grey grey, lithic moderately sorted silty; intermixed with SILTSTONE 40%, dark grey, rare shaly; fresh, strong
86	89	SILTSTONE 80%, dark grey brown, coaly fragments throughout coal,banded; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh, moderately strong, carbonaceous bands
89	92	SANDSTONE 70%, fine grained, dark grey grey, lithic moderately to well sorted rare coal,banded; intermixed with SILTSTONE 30%, dark grey brown, occasional coal,banded laminations; fresh, strong
92	95	SANDSTONE 90%, fine grained, grey dark grey, litho- feldspathic moderately to well sorted rare coal,banded; intermixed with SILTSTONE 10%, dark grey, sandy in part; fresh, strong
95	101	SAND 90%, fine grained, dark grey brown, coal,banded throughout; intermixed with CARBONACEOUS SHALE 10%, dark grey black, occasional coaly fragments; fresh, weak, carbonaceous bands
101	104	SILTSTONE 80%, dark grey brown, coal,banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey, lithic moderately sorted high sphericity, sub-rounded to sub-angular; fresh, strong
104	107	SAND 50%, fine grained, dark grey grey, coal,banded; intermixed with SILTSTONE 30%, EY brown, coal,banded throughout coaly fragments; with COAL 20%, dark grey black, occasional silty dull, minor bright bands(>1%); fresh, strong
107	113	SILTSTONE 80%, dark grey brown, rare coal,banded rare coaly; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh, strong

From	To	Description
113	116	SANDSTONE 60%, fine grained, dark grey, lithic moderately sorted rare coal,banded; intermixed with SILTSTONE 40%, grey, occasional coal,banded; fresh, strong
116	122	SILTSTONE 80%, dark grey brown, coaly ferruginous coal,banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh, moderately strong
122	124.5	SANDSTONE 90%, fine grained, dark grey black, lithic moderately sorted coal,banded throughout; intermixed with COAL 10%, black brown, silty in part clayey matrix; fresh, strong
124.5	127.5	SANDSTONE 80%, very fine-fine grained, grey, lithic low sphericity, sub-rounded moderately to well sorted; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous fragments; fresh, moderately strong
127.5	130	SANDSTONE 60%, fine grained, grey, lithic low sphericity, sub-rounded moderately to well sorted; intermixed with SILTSTONE 30%, brownish grey, occasional carbonaceous laminations; with COAL 10%, black, stony in part dull, tends to stony; fresh, moderately strong
130	133	SANDSTONE 60%, fine grained, grey, lithic occasional carbonaceous fragments; intermixed with SILTSTONE 40%, brownish grey, occasional carbonaceous laminations; fresh, moderately strong
133	136	SANDSTONE 80%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey; fresh, moderately strong
136	140	SILTSTONE 60%, dark grey brown, occasional carbonaceous laminations; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong
140	143	SANDSTONE 70%, fine grained, grey, lithic silty in part; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations; fresh, moderately strong
143	146	SANDSTONE 50%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 50%, brownish grey, sandy in part; fresh, moderately strong
146	150	SANDSTONE 60%, fine-medium grained, greyish off-white, lithic occasional coaly laminations; intermixed with SILTSTONE 30%, brownish grey, occasional carbonaceous laminations; with COAL 10%, black, dull, tends to stony; fresh, moderately strong
150	153	SILTSTONE 60%, brownish grey, occasional carbonaceous laminations; intermixed with SANDSTONE 40%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong, platy
153	157	SILTSTONE 70%, brownish grey, micaceous in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong, platy
157	160	SANDSTONE 70%, fine-medium grained, greyish off-white, lithic occasional carbonaceous laminations; intermixed with SILTSTONE 30%, brownish grey, occasional micaceous; fresh, moderately strong
160	163	SILTSTONE 50%, brownish grey, occasional carbonaceous laminations; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; with COAL 20%, black, dull, tends to stony; fresh, strong, platy
163	166	SANDSTONE 60%, fine-medium grained, greyish off-white, lithic carbonaceous laminations in part; intermixed with SILTSTONE 40%, brownish grey, clayey in part; fresh, moderately strong
166	171	SANDSTONE 60%, fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, occasional carbonaceous laminations; intermixed with COAL 10%, black, dull, tends to stony; fresh, moderately strong

From	To	Description
171	174	SANDSTONE 70%, fine grained, grey dark grey, lithic moderately sorted coal,banded in part; intermixed with SILTSTONE 30%, dark grey brown, coal,banded throughout sandy; fresh, strong, carbonaceous fragments
174	177	SILTSTONE 80%, dark grey brown, occasional coal,banded; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted rare coal,banded; fresh, strong
177	183	SANDSTONE 70%, fine grained, grey, lithic moderately sorted high sphericity, sub-rounded; intermixed with SILTSTONE 30%, dark grey brown, rare coal,banded; fresh, strong
183	186	SANDSTONE, grey dark grey, rare coal,banded silty; fresh, moderately strong, carbonaceous fragments
186	189	SANDSTONE 80%, fine grained, grey dark grey, coal,banded high sphericity, sub-rounded; intermixed with SILTSTONE 20%, dark grey brown, stringers of coal coal,banded throughout; fresh, strong, carbonaceous bands
189	195	SANDSTONE 60%, fine grained, light grey grey, lithic occasional micaceous moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, occasional coal,banded coaly fragments; fresh, strong, carbonaceous fragments
195	198	SANDSTONE 80%, fine grained, dark grey grey, silty in part lithic; intermixed with SILTSTONE 20%, grey brown, coal,banded throughout occasional stringers of coal; fresh, strong, carbonaceous laminae
198	201	SILTSTONE 70%, brown dark grey, stringers of coal coal,banded throughout sandy; intermixed with SANDSTONE 30%, fine grained, dark grey, coal,banded lithic; fresh, moderately strong
201	204	SANDSTONE 50%, fine grained, grey, lithic moderately sorted coal,banded fragments; intermixed with SILTSTONE 50%, dark grey brown, occasional coal,banded coaly fragments; fresh, strong
204	207	SILTSTONE 50%, dark grey brown, coal,banded throughout coaly fragments; intermixed with SANDSTONE 30%, fine grained, dark grey, coal,banded silty stringers of coal; intermixed with COAL 20%, dark grey black, dull, minor bright bands(>1%) sandy coal,banded; fresh, moderately strong
207	210	SANDSTONE 60%, fine grained, dark grey, coal,banded lithic moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, coal,banded throughout coaly fragments; fresh, strong
210	213	SANDSTONE 70%, fine grained, dark grey brown, coal,banded coaly fragments high sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, dark grey black, coaly fragments throughout stringers of coal; fresh, moderately strong, carbonaceous fragments
213	220.6	SANDSTONE 90%, fine grained, grey, clayey fragments possibly tuffaceous in part; intermixed with SILTSTONE 10%, dark grey brown, coaly fragments coal,banded throughout; fresh, strong
220.6	221.1	COAL, brown black, sandy coal,banded silty throughout; fresh, weak, sandy, carbonaceous bands
221.1	221.36	SANDSTONE, fine grained, dark grey black, coaly fragments coal,banded; fresh, moderately strong, carbonaceous fragments
221.36	222	COAL, brown black, sandy coal,banded silty throughout; fresh, weak, sandy, carbonaceous bands
222	224.08	SANDSTONE 80%, fine grained, dark grey brown, coal,banded throughout rare tuffaceous; intermixed with SILTSTONE 20%, dark grey black, coal,banded coaly sandy throughout; fresh, strong, carbonaceous bands
224.08	224.52	COAL UNDIFF., black; fresh, weak
224.52	228	SANDSTONE 80%, fine grained, dark grey brown, coal,banded throughout rare tuffaceous; intermixed with SILTSTONE 20%, dark grey black, coal,banded coaly sandy throughout; fresh, strong, carbonaceous bands

From	To	Description
228	231	SANDSTONE 90%, fine grained, light grey grey, litho- feldspathic rare micaceous moderately sorted; intermixed with SILTSTONE 10%, dark grey brown, sandy coaly fragments in part; fresh, strong
231	234	SANDSTONE 70%, fine grained, grey dark grey, litho- feldspathic occasional coal,banded fragments; intermixed with SILTSTONE 30%, dark grey, sandy occasional coal,banded; fresh, strong
234	237	SANDSTONE, fine grained, light grey, basaltic silty tuffaceous litho- feldspathic; fresh, strong
237	240	SANDSTONE 90%, fine grained, grey, silty in part rare coal,banded; intermixed with SILTSTONE 10%, dark grey brown, occasional coal,banded; fresh, strong
240	243	SANDSTONE 60%, fine grained, dark grey, litho- feldspathic occasional coal,banded; intermixed with SILTSTONE 40%, dark grey brown, coal,banded throughout coaly fragments; fresh, strong
243	246	SANDSTONE 50%, fine grained, grey brown, coal,banded throughout occasional silty; intermixed with CARBONACEOUS SILTSTONE 50%, dark grey brown, coaly fragments throughout; fresh, strong, carbonaceous fragments
246	249	SANDSTONE 70%, fine grained, grey brown, coal,banded in part lithic; intermixed with SILTSTONE 30%, dark grey brown, coal,banded throughout coaly fragments; fresh, strong
249	252	SILTSTONE 80%, dark grey brown, occasional coal,banded coaly fragments; intermixed with SANDSTONE 20%, fine grained, grey dark grey, occasional coal,banded lithic; fresh, strong, carbonaceous fragments
252	258	SANDSTONE 60%, fine grained, dark grey brown, silty in part coal,banded sandy; intermixed with SILTSTONE 40%, dark grey brown, occasional coal,banded coaly fragments; fresh, strong
258	261	SILTSTONE 80%, grey white, clayey in part coal,banded in part; intermixed with SANDSTONE 20%, fine grained, dark grey brown, coal,banded moderately sorted; fresh, moderately strong
261	267	SANDSTONE, fine grained, grey dark grey, clayey in part rare stringers of coal; fresh, moderately strong, carbonaceous fragments
267	273	SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coal,banded fragments; fresh, strong
273	276	CARBONACEOUS SILTSTONE 50%, dark grey brown, stringers of coal coaly fragments; intermixed with SILTSTONE 30%, dark grey, sandy in part; intermixed with SANDSTONE 20%, fine grained, dark grey brown, lithic coal,banded throughout; fresh, moderately strong, carbonaceous bands
276	286.83	SANDSTONE 60%, fine grained, grey, occasional micaceous occasional coal,banded; intermixed with SILTSTONE 40%, dark grey brown, occasional coal,banded occasional coaly; fresh, moderately strong
286.83	287.63	COAL, dark grey black, sandy mainly dull, frequent bright bands(>10%) occasional silty; fresh, weak
287.63	288.26	SANDSTONE, fine grained, dark grey brown, coal,banded throughout moderately sorted; fresh, strong, carbonaceous bands
288.26	288.61	COAL, dark grey black, sandy mainly dull, frequent bright bands(>10%) occasional silty; fresh, weak
288.61	291	SANDSTONE, fine grained, dark grey brown, coal,banded throughout moderately sorted; fresh, strong, carbonaceous bands
291	294	SANDSTONE 60%, fine grained, dark grey black, coal,banded throughout occasional silty; intermixed with COAL 40%, dark grey black, coal,banded silty dull, minor bright bands(>1%); fresh, moderately strong, carbonaceous bands

From	To	Description
294	297	SANDSTONE 70%, fine grained, grey dark grey, litho- feldspathic high sphericity, sub-rounded; intermixed with SILTSTONE 30%, dark grey brown, rare coaly fragments coal,banded; fresh, moderately strong
297	299.45	SANDSTONE 80%, fine grained, grey dark grey, litho- feldspathic occasional feldspathic OT; intermixed with SILTSTONE 20%, dark grey black, occasional coal,banded fragments; fresh, strong
299.45	300	COAL UNDIFF., black; fresh, weak
300	306	SANDSTONE 80%, fine grained, grey dark grey, silty in part coal,banded; intermixed with SILTSTONE 10%, dark grey brown, coal,banded throughout coaly fragments; intermixed with COAL 10%, dark grey black, stringers of coal dull, minor bright bands(>1%); fresh, strong
306	307.41	SANDSTONE, fine grained, dark grey brown, occasional silty coal,banded throughout; fresh, moderately strong, carbonaceous bands
307.41	308.48	COAL, dark grey black, sandy occasional silty dull, minor bright bands(>1%); fresh, weak
308.48	308.83	SANDSTONE, fine grained, dark grey brown, occasional silty coal,banded throughout; fresh, moderately strong, carbonaceous bands
308.83	309.85	COAL UNDIFF., black; fresh, weak
309.85	310.3	SILTSTONE 20%, dark grey black, coaly fragments; fresh, moderately strong, carbonaceous bands
310.3	311.1	COAL UNDIFF., black; fresh, weak
311.1	315	SILTSTONE 20%, dark grey black, coaly fragments; fresh, moderately strong, carbonaceous bands
315	318	SANDSTONE 60%, fine-medium grained, grey, poorly to moderately sorted lithic low sphericity, sub-angular to angular; intermixed with SILTSTONE 40%, dark grey brown, sandy in part rare coal,banded; fresh, strong
318	321	SANDSTONE 80%, fine grained, dark grey, silty in part lithic; intermixed with SILTSTONE 20%, dark grey brown, rare coal,banded; fresh, strong
321	322.88	SANDSTONE 50%, fine grained, dark grey brown, coal,banded throughout; intermixed with SILTSTONE 50%, dark grey, sandy in part coal,banded; fresh, strong, carbonaceous bands
322.88	323.32	COAL, dark grey black, dull, minor bright bands(>1%) coal,banded silty in part; fresh, weak
323.32	323.81	SANDSTONE 80%, fine grained, dark grey, lithic occasional coal,banded fragments; intermixed with SILTSTONE 20%, dark grey brown, occasional coaly fragments; fresh, strong, carbonaceous fragments
323.81	324.21	COAL UNDIFF., black; fresh, weak
324.21	332.26	SANDSTONE 80%, fine grained, dark grey, lithic occasional coal,banded fragments; intermixed with SILTSTONE 20%, dark grey brown, occasional coaly fragments; fresh, strong, carbonaceous fragments
332.26	332.88	COAL, black, mainly dull, frequent bright bands(>10%) sandy in part; fresh, weak
332.88	336	SILTSTONE 60%, grey brown, coal,banded throughout sandy in part; intermixed with SANDSTONE 40%, fine grained, dark grey, lithic rare coal,banded; fresh, moderately strong, platy, carbonaceous fragments
336	339	CARBONACEOUS SILTSTONE 50%, dark grey brown, coaly fragments in part; intermixed with SILTSTONE 30%, dark grey, sandy in part rare clayey; intermixed with COAL 20%, black, dull, minor bright bands(>1%) silty; fresh, moderately strong
339	343.95	SILTSTONE 70%, dark grey brown, coaly fragments throughout coal,banded; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted; fresh, moderately strong, carbonaceous fragments

From	To	Description
343.95	344.12	COAL UNDIFF., black; fresh, weak
344.12	348	SILTSTONE 70%, dark grey brown, coaly fragments throughout coal,banded; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted; fresh, moderately strong, carbonaceous fragments
348	354	SANDSTONE 80%, fine grained, dark grey brown, coal,banded lithic DSL fragments; intermixed with COAL 20%, dark grey black, silty in part dull, minor bright bands(>1%); fresh, moderately strong, carbonaceous bands
354	363	SILTSTONE 70%, dark grey, rare coal,banded fragments; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted; fresh, moderately strong
363	366	SILTSTONE 80%, dark grey brown, sandy in part rare coal,banded; intermixed with SANDSTONE 20%, fine grained, light grey grey, lithic moderately sorted high sphericity, sub-rounded; fresh, strong, platy
366	369	SILTSTONE 80%, dark grey brown, sandy throughout coal,banded fragments; intermixed with COAL 20%, dark grey black, dull, minor bright bands (>1%) stringers of coal; fresh, moderately strong, carbonaceous fragments
369	372	SILTSTONE 90%, dark grey, rare coal,banded; intermixed with SANDSTONE 10%, fine grained, light grey grey, lithic clayey in part; fresh, strong
372	378	SILTSTONE 50%, dark grey, rare coal,banded; intermixed with SANDSTONE 50%, fine grained, light grey grey, occasional clayey lithic moderately sorted; fresh, strong, platy
378	384	SANDSTONE 70%, fine grained, grey, lithic moderately sorted occasional coal,banded; intermixed with SILTSTONE 30%, dark grey brown, occasional coal,banded fragments; fresh, strong
384	387	SANDSTONE 80%, fine grained, grey dark grey, poorly to moderately sorted lithic rare coal,banded; intermixed with SILTSTONE 20%, dark grey brown, coaly fragments occasional coal,banded; fresh, strong
387	393	SILTSTONE 40%, dark grey, rare sandy; intermixed with CARBONACEOUS SILTSTONE 40%, dark grey brown, occasional coaly fragments; intermixed with COAL 20%, dark grey black, silty throughout dull, minor bright bands(>1%); fresh, moderately strong, platy
393	396	SANDSTONE 70%, fine grained, grey light grey, lithic moderately sorted high sphericity, sub-rounded clayey; intermixed with SILTSTONE 30%, dark grey brown, occasional coal,banded fragments; fresh, strong
396	399	SILTSTONE 80%, dark grey, rare sandy coal,banded fragments; intermixed with CARBONACEOUS SILTSTONE 20%, grey brown, occasional coaly fragments; fresh, moderately strong, carbonaceous fragments
399	406.66	SANDSTONE 40%, fine grained, grey brown, silty in part coal,banded; intermixed with SILTSTONE 30%, dark grey, coal,banded throughout stringers of coal; intermixed with COAL 30%, dark grey black, dull, minor bright bands(>1%) coal,banded silty throughout; fresh, moderately strong, carbonaceous bands
406.66	406.92	COAL, dark grey black, coal,banded silty throughout; fresh, weak
406.92	408	SILTSTONE, dark grey brown, sandy in part coal,banded; fresh, moderately strong, carbonaceous bands
408	411	SILTSTONE 50%, dark grey brown, sandy in part coal,banded in part; intermixed with CARBONACEOUS SILTSTONE 40%, dark grey black, coaly fragments throughout; intermixed with SANDSTONE 10%, fine grained, dark grey, coal,banded occasional lithic; fresh, moderately strong, carbonaceous fragments
411	414	SANDSTONE 60%, fine grained, light grey grey, litho- feldspathic occasional silty high sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, dark grey brown, rare coal,banded; fresh, strong

From	To	Description
414	417	SANDSTONE 70%, fine grained, grey, litho- feldspathic carbonaceous stringers of coal; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey brown, rare coaly fragments; fresh, strong
417	420	SILTSTONE 60%, dark grey brown, rare coal,banded; intermixed with SANDSTONE 40%, fine grained, grey dark grey, litho- feldspathic rare coaly fragments; fresh, moderately strong
420	423	SANDSTONE 80%, fine grained, light grey grey, litho- feldspathic silty in part; intermixed with SILTSTONE 20%, dark grey, rare coaly fragments coal,banded; fresh, strong
423	426	SANDSTONE 60%, fine grained, grey, litho- feldspathic occasional coal,banded fragments; intermixed with SILTSTONE 40%, dark grey brown, occasional coal,banded fragments; fresh, strong
426	432	SANDSTONE 80%, fine grained, grey, lithic moderately sorted; intermixed with SILTSTONE 20%, dark grey brown, coal,banded throughout rare coaly; fresh, strong
432	441	SILTSTONE 70%, dark grey brown, occasional coal,banded occasional sandy; intermixed with SANDSTONE 30%, fine grained, grey light grey, lithic clayey in part; fresh, moderately strong, carbonaceous fragments
441	444	SANDSTONE 60%, fine grained, grey white, clayey lithic; intermixed with SILTSTONE 40%, dark grey, clayey in part rare coal,banded; fresh, strong
444	447	SANDSTONE 70%, fine grained, dark grey, coal,banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly fragments throughout coal,banded; fresh, moderately strong
447	450	SILTSTONE 80%, dark grey brown, coal,banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh, moderately strong, clayey, carbonaceous fragments
450	451.32	SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh, moderately strong
451.32	451.72	COAL UNDIFF., black; fresh, weak
451.72	453.9	SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh, moderately strong
453.9	454.52	COAL UNDIFF., black; fresh, weak
454.52	455	SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh, moderately strong
455	456.12	SILTSTONE 60%, dark grey brown, clayey in part carbonaceous laminations; intermixed with SANDSTONE 40%, fine grained, greyish white, lithic occasional carbonaceous fragments; fresh, strong, carbonaceous lamellae
456.12	456.83	COAL, black, dull, tends to stony; fresh, weak
456.83	463	SILTSTONE 60%, dark grey brown, clayey in part carbonaceous laminations; intermixed with SANDSTONE 40%, fine grained, greyish white, lithic occasional carbonaceous fragments; fresh, strong, carbonaceous lamellae
463	465	SILTSTONE 70%, brownish black, coaly in part; intermixed with SANDSTONE 30%, greyish white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong
465	468	SANDSTONE 80%, very fine-fine grained, grey, lithic clayey; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations; fresh, moderately strong

From	To	Description
468	471	SANDSTONE 60%, very fine-fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, sandy in part; with COAL 10%, brownish black, dull, tends to stony occasional shaly; fresh, moderately strong
471	472.83	SANDSTONE 50%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular silty; intermixed with SILTSTONE 50%, greyish grey, rare carbonaceous laminations; fresh, moderately strong
472.83	473.23	COAL, black, dull, tends to stony; fresh, weak
473.23	473.63	SANDSTONE 50%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular silty; intermixed with SILTSTONE 50%, greyish grey, rare carbonaceous laminations; fresh, moderately strong
473.63	474.03	COAL, black, dull, tends to stony; fresh, weak
474.03	481	SANDSTONE 80%, fine grained, greyish off-white, abundant carbonaceous fragments silty; intermixed with SILTSTONE 20%, brownish black, occasional carbonaceous siltstone; fresh, moderately strong
481	486	SANDSTONE 70%, fine-medium grained, greyish off-white, lithic silty throughout poorly sorted; intermixed with COAL 30%, black, dull, tends to stony; fresh, weak
486	490	SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, brownish grey, sandy in part; fresh, moderately strong
490	494	SANDSTONE 60%, very fine-fine grained, grey, clayey throughout lithic; intermixed with SILTSTONE 40%, brownish grey, occasional micaceous; fresh, strong
494	497	SANDSTONE 80%, fine grained, greyish off-white, lithic silty in part; intermixed with SILTSTONE 20%, brownish grey, occasional sandy; fresh, moderately strong, carbonaceous fragments
497	500	SILTSTONE 60%, brownish grey, sandy; intermixed with SANDSTONE 40%, very fine-fine grained, brownish grey, lithic clayey in part poorly to moderately sorted; fresh, moderately strong
500	508	SANDSTONE 80%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous laminations in part; fresh, moderately strong, carbonaceous fragments
508	511	SANDSTONE 60%, fine grained, greyish off-white, silty in part poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, sandy in part; fresh, LI
511	514.34	SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 60%, brownish black, occasional carbonaceous siltstone; fresh, moderately strong, carbonaceous fragments
514.34	515.49	COAL, black, dull, tends to stony; fresh, weak
515.49	517	SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 60%, brownish black, occasional carbonaceous siltstone; fresh, moderately strong, carbonaceous fragments
517	517.94	STONY COAL, brownish black, carbonaceous; fresh, moderately strong
517.94	522	SANDSTONE 70%, fine-medium grained, greyish off-white, lithic occasional carbonaceous laminations; intermixed with SILTSTONE 20%, brownish black, occasional carbonaceous siltstone; fresh, moderately strong
522	522.34	SILTSTONE 70%, brownish black, occasional carbonaceous siltstone; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh, strong

From	To	Description
522.34	523.37	COAL UNDIFF., black; fresh, weak
523.37	526	SILTSTONE 70%, brownish black, occasional carbonaceous siltstone; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh, strong
526	529	SILTSTONE 80%, grey, micaceous in part; intermixed with SANDSTONE 20%, very fine-fine grained, greyish off-white, lithic moderately to well sorted low sphericity, sub-rounded; fresh, strong
529	532	SANDSTONE 60%, fine grained, greyish off-white, lithic silty in part poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, rare carbonaceous siltstone; fresh, moderately strong
532	535	SILTSTONE 50%, grey, micaceous throughout; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous; with SANDSTONE 20%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, strong, carbonaceous lamellae
535	538	SANDSTONE 60%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, occasional sandy; fresh, moderately strong
538	541	SANDSTONE 70%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, sandy in part carbonaceous laminations; fresh, moderately strong
541	545	CARBONACEOUS SILTSTONE 40%, brownish black, abundant carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, silty throughout moderately sorted; with COAL 30%, black, dull, tends to stony; fresh, strong
545	547.85	SANDSTONE 60%, fine grained, greyish off-white, clayey in part poorly sorted lithic; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; fresh, moderately strong
547.85	548.16	COAL UNDIFF., black; fresh, weak
548.16	552	SANDSTONE 80%, fine grained, greyish off-white, lithic clayey in part; intermixed with SILTSTONE 20%, brownish black, micaceous carbonaceous siltstone in part; fresh, moderately strong
552	556	SANDSTONE 60%, fine grained, greyish off-white, silty throughout lithic; intermixed with SILTSTONE 40%, grey, micaceous throughout; fresh, moderately strong
556	560	SANDSTONE 70%, very fine-fine grained, greyish off-white, silty in part lithic moderately sorted; intermixed with SILTSTONE 30%, brownish black, micaceous carbonaceous siltstone in part; fresh, moderately strong
560	566	SANDSTONE 50%, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 50%, grey, micaceous throughout; fresh, moderately strong
566	568.43	SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh, moderately strong
568.43	569.63	COAL, black, dull, minor bright bands(>1%); fresh, weak
569.63	574.12	SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh, moderately strong
574.12	574.52	COAL UNDIFF., black; fresh, weak
574.52	574.78	SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh, moderately strong
574.78	575.05	COAL UNDIFF., black; fresh, weak

From	To	Description
575.05	582	SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh, moderately strong
582	586	SILTSTONE 30%, brownish grey, micaceous throughout; fresh, strong
586	591	SILTSTONE 70%, brownish grey, carbonaceous in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh, strong
591	594	SANDSTONE 80%, fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations micaceous in part; fresh, moderately strong
594	597	SANDSTONE 70%, fine grained, greyish off-white, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, micaceous throughout; fresh, moderately strong
597	600	SANDSTONE 90%, fine grained, greyish off-white, lithic silty throughout poorly sorted; intermixed with SILTSTONE 10%, brownish grey, carbonaceous laminations; fresh, moderately strong
600	603	SANDSTONE, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, moderately strong
603	606	SANDSTONE 70%, very fine-fine grained, grey, lithic moderately sorted silty throughout; intermixed with SILTSTONE 30%, brownish grey, micaceous throughout; fresh, moderately strong
606	610	SILTSTONE 60%, dark grey grey, micaceous; intermixed with SANDSTONE 40%, fine grained, brownish grey, lithic poorly to moderately sorted carbonaceous laminations; fresh, strong
610	612.07	SANDSTONE 50%, fine grained, brownish grey, lithic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 50%, brownish black, carbonaceous siltstone in part; fresh, moderately strong, XG
612.07	612.92	COAL UNDIFF., black; fresh, weak
612.92	615.32	CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh, moderately strong, carbonaceous lamellae
615.32	616.34	COAL, black, dull, tends to stony in part dull, minor bright bands(>1%); fresh, weak
616.34	617.63	CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh, moderately strong, carbonaceous lamellae
617.63	618.38	COAL UNDIFF., black; fresh, weak
618.38	619.58	CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh, moderately strong, carbonaceous lamellae
619.58	620.07	COAL UNDIFF., black; fresh, weak
620.07	621	CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh, moderately strong, carbonaceous lamellae
621	624.87	SANDSTONE, fine grained, grey, lithic occasional laminations; fresh, moderately strong
624.87	625.14	COAL, black, dull, tends to stony; fresh, weak
625.14	626.87	SANDSTONE 80%, fine grained, grey, lithic abundant carbonaceous XF; intermixed with SILTSTONE 20%, brownish black, carbonaceous siltstone in part; fresh, moderately strong
626.87	627.46	COAL UNDIFF., black; fresh, weak

From	To	Description
627.46	628.03	SANDSTONE 80%, fine grained, grey, lithic abundant carbonaceous XF; intermixed with SILTSTONE 20%, brownish black, carbonaceous siltstone in part; fresh, moderately strong
628.03	628.88	COAL UNDIFF., black; fresh, weak
628.88	633	SANDSTONE 60%, fine grained, brownish off-white, lithic poorly to moderately sorted silty throughout; intermixed with SILTSTONE 40%, brownish grey, carbonaceous siltstone in part laminations; fresh, moderately strong
633	638	SANDSTONE 60%, fine grained, greyish off-white, lithic poorly to moderately sorted silty in part; intermixed with SILTSTONE 30%, brownish grey, abundant carbonaceous laminations; with CARBONACEOUS SILTSTONE 10%, brownish black, carbonaceous; fresh, moderately strong
638	641	SANDSTONE 80%, fine grained, grey, lithic occasional carbonaceous XF; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous siltstone; fresh, moderately strong
641	645	SILTSTONE 60%, brownish grey, sandy in part; intermixed with SANDSTONE 40%, very fine-fine grained, greyish off-white, lithic occasional silty; fresh, strong, carbonaceous fragments
645	648	SANDSTONE 70%, very fine-fine grained, greyish off-white, lithic poorly to moderately sorted silty; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations micaceous in part; fresh, moderately strong
648	652	SANDSTONE 80%, fine grained, grey, lithic silty in part poorly to moderately sorted; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; fresh, moderately strong
652	656	SILTSTONE 70%, greyish brown, micaceous throughout; intermixed with SANDSTONE 30%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong
656	662	SILTSTONE 60%, brownish grey, abundant carbonaceous XF; intermixed with SANDSTONE 40%, fine grained, grey, lithic silty throughout poorly to moderately sorted; fresh, strong, carbonaceous lamellae
662	665	SANDSTONE 70%, fine grained, greyish off-white, lithic moderately sorted high sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, micaceous throughout carbonaceous XF; fresh, moderately strong
665	668	SILTSTONE 60%, brownish black, carbonaceous XF carbonaceous siltstone in part; intermixed with SANDSTONE 40%, fine grained, grey, lithic moderately sorted high sphericity, sub-rounded to sub-angular silty; fresh, strong, carbonaceous lamellae
668	671	SILTSTONE 80%, brownish grey, carbonaceous siltstone in part sandy throughout; intermixed with SANDSTONE 20%, very fine-fine grained, greyish off-white, lithic carbonaceous XF silty; fresh, strong, carbonaceous lamellae
671	675	SANDSTONE 70%, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, clayey laminations; fresh, moderately strong
675	680	SANDSTONE 70%, very fine-fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations micaceous in part; with CLAYSTONE 10%, brownish black, shaly in part; fresh, moderately strong
680	683	SANDSTONE 80%, very fine-fine grained, brownish grey, carbonaceous laminations; intermixed with SILTSTONE 20%, brownish grey, carbonaceous siltstone in part micaceous; fresh, moderately strong, carbonaceous fragments
683	687	SILTSTONE 80%, brownish grey, carbonaceous laminations carbonaceous laminations; intermixed with SANDSTONE 20%, fine grained, grey, lithic silty throughout poorly to moderately sorted; fresh, strong

From	To	Description
687	690	SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular silty; intermixed with SILTSTONE 30%, brownish grey, carbonaceous in part; with STONY COAL 10%, brownish black, dull, tends to stony; fresh, moderately strong
690	693	SANDSTONE 40%, fine grained, grey, lithic silty throughout moderately sorted; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations carbonaceous siltstone in part; with STONY COAL 30%, brownish black, dull, tends to stony; fresh, moderately strong
693	694.07	SILTSTONE 60%, brownish black, carbonaceous siltstone in part carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; with TUFF 10%, Yellow Brown, carbonaceous XF; fresh, strong
694.07	694.61	COAL UNDIFF., black; fresh, weak
694.61	698	SILTSTONE 60%, brownish black, carbonaceous siltstone in part carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; with TUFF 10%, Yellow Brown, carbonaceous XF; fresh, strong
698	701	SILTSTONE 50%, brownish black, carbonaceous XF carbonaceous siltstone in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic silty throughout poorly to moderately sorted; with STONY COAL 20%, black, dull, tends to stony dull(<1% bright) coaly; fresh, strong
701	705	CARBONACEOUS SILTSTONE 60%, brownish black, shaly in part; intermixed with SANDSTONE 40%, very fine-fine grained, grey, lithic poorly to moderately sorted silty in part; fresh, moderately strong, carbonaceous lamellae
705	706.07	CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh, moderately strong
706.07	706.74	STONY COAL, black, dull, minor bright bands(>1%); fresh, moderately strong
706.74	706.83	CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh, moderately strong
706.83	707.08	COAL UNDIFF., black; fresh, weak
707.08	709	CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh, moderately strong
709	710.03	SILTSTONE 50%, brownish black, carbonaceous siltstone in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh, strong, carbonaceous lamellae
710.03	710.25	COAL, black, dull, minor bright bands(>1%) dull(<1% bright); fresh, weak
710.25	714	SILTSTONE 50%, brownish black, carbonaceous siltstone in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh, strong, carbonaceous lamellae
714	715.14	SANDSTONE 60%, very fine-fine grained, grey, silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations micaceous in part; with CARBONACEOUS SILTSTONE 20%, brownish black, carbonaceous; fresh, moderately strong
715.14	715.5	COAL UNDIFF., black; fresh, weak
715.5	718	SANDSTONE 60%, very fine-fine grained, grey, silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations micaceous in part; with CARBONACEOUS SILTSTONE 20%, brownish black, carbonaceous; fresh, moderately strong

From	To	Description
718	721	SANDSTONE 60%, very fine-fine grained, greyish off-white, silty throughout poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, carbonaceous; fresh, moderately strong
721	725	SILTSTONE 70%, brownish grey, micaceous throughout; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong
725	731	SANDSTONE 90%, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular silty; intermixed with SILTSTONE 10%, brownish grey, occasional carbonaceous XF micaceous; fresh, moderately strong
731	735	SANDSTONE, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular; fresh, weak, carbonaceous fragments
735	735.77	SANDSTONE, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular silty; fresh, weak
735.77	736.43	COAL UNDIFF., black; fresh, weak
736.43	737.98	SILTSTONE 60%, greyish brown, micaceous throughout; intermixed with SANDSTONE 40%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, strong
737.98	738.8	COAL UNDIFF., black; fresh, weak
738.8	742	SILTSTONE 60%, greyish brown, micaceous throughout; intermixed with SANDSTONE 40%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, strong
742	745	SILTSTONE 70%, brownish grey, carbonaceous siltstone in part micaceous; intermixed with SANDSTONE 30%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, strong, carbonaceous lamellae
745	750	SILTSTONE 60%, brownish black, carbonaceous siltstone in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic silty tuffaceous fragments; with TUFF 10%, Yellow Brown, carbonaceous XF laminations; fresh, strong
750	756	SILTSTONE 50%, grey, carbonaceous siltstone in part carbonaceous laminations; intermixed with SANDSTONE 50%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh, strong
756	760	SANDSTONE 80%, very fine-fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular silty; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; fresh, moderately strong
760	763	SANDSTONE, very fine-fine grained, greyish off-white, lithic silty throughout poorly to moderately sorted; fresh, moderately strong, carbonaceous fragments
763	765.72	SILTSTONE 60%, brownish grey, sandy in part; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-angular to angular; fresh, strong
765.72	766.3	COAL UNDIFF., black; fresh, weak
766.3	767	SILTSTONE 60%, brownish grey, sandy in part; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-angular to angular; fresh, strong
767	768.48	SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part carbonaceous siltstone in part; fresh, moderately strong
768.48	769.1	COAL, black, dull, minor bright bands(>1%); fresh, weak
769.1	771	SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part carbonaceous siltstone in part; fresh, moderately strong

From	To	Description
771	775	CARBONACEOUS SILTSTONE 70%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh, moderately strong, carbonaceous lamellae
775	776.52	CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh, strong, carbonaceous lamellae
776.52	777.19	COAL UNDIFF., black; fresh, weak
777.19	778	CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh, strong, carbonaceous lamellae
778	781	CARBONACEOUS SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with SILTSTONE 50%, brownish black, sandy throughout; fresh, moderately strong
781	785	SANDSTONE 40%, fine grained, brownish off-white, lithic poorly to moderately sorted silty throughout; intermixed with STONY COAL 30%, brownish black, dull, minor bright bands(>1%); with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh, moderately strong
785	789	CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh, moderately strong
789	792	SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; fresh, moderately strong
792	795	SILTSTONE 90%, dark grey black, occasional sandy rare coal,banded; intermixed with SANDSTONE 10%, fine grained, grey brown, feldspathic clayey in part; fresh, strong, carbonaceous fragments
795	801	SILTSTONE 70%, grey brown, rare tuffaceous rare coal,banded; intermixed with SANDSTONE 30%, fine grained, grey light grey, lithic poorly to moderately sorted clayey; fresh, strong, carbonaceous fragments
801	807	SANDSTONE 80%, fine grained, GN grey, litho- feldspathic rare tuffaceous; intermixed with SILTSTONE 20%, dark brown black, occasional coal,banded sandy in part; fresh, strong
807	812.21	SILTSTONE 90%, dark grey brown, rare sandy rare coal,banded; intermixed with SANDSTONE 10%, fine grained, grey, lithic rare clayey; fresh, strong, carbonaceous fragments
812.21	813.37	COAL UNDIFF., black; fresh, weak
813.37	815.9	SILTSTONE 90%, dark grey brown, rare sandy rare coal,banded; intermixed with SANDSTONE 10%, fine grained, grey, lithic rare clayey; fresh, strong, carbonaceous fragments
815.9	816.92	COAL, black, feldspathic occasional silty sandy; fresh, moderately strong
816.92	822	SILTSTONE 90%, dark grey brown, coal,banded in part; intermixed with SANDSTONE 10%, fine grained, grey light grey, rare tuffaceous lithic; fresh, strong, carbonaceous fragments
822	825.9	SANDSTONE 80%, fine grained, grey, lithic moderately sorted rare coal,banded; intermixed with SILTSTONE 20%, dark grey brown, occasional coal,banded fragments; fresh, strong
825.9	826.7	COAL, black, coal,banded silty throughout dull, minor bright bands(>1%); fresh, weak

From	To	Description
826.7	828	SANDSTONE, fine grained, dark grey white, silty in part lithic clayey; fresh, moderately strong
828	831	COAL 70%, black, dull, minor bright bands(>1%) coal,banded silty in part; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey brown, sandy in part clayey in part; fresh, weak
831	834	SANDSTONE 80%, fine grained, black, lithic moderately sorted rare clayey; intermixed with SILTSTONE 20%, dark grey brown, coal,banded in part; fresh, strong
834	837	SILTSTONE 50%, dark grey brown, coal,banded in part; intermixed with COAL 30%, black, dull, minor bright bands(>1%) coal,banded silty in part; intermixed with SANDSTONE 20%, fine grained, grey dark grey, lithic poorly to moderately sorted; fresh, moderately strong, carbonaceous fragments
837	849	SILTSTONE 90%, dark grey brown, coal,banded rare coaly fragments; intermixed with SANDSTONE 10%, fine grained, dark grey, lithic moderately sorted clayey in part; fresh, strong, carbonaceous fragments
849	858	SILTSTONE 70%, dark grey brown, rare sandy coal,banded laminations; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey black, coaly fragments; fresh, strong, carbonaceous laminae
858	861	SILTSTONE, dark grey brown, occasional coal,banded rare sandy; fresh, moderately strong
861	864	SILTSTONE 60%, dark grey brown, coaly fragments mainly dull, frequent bright bands(>10%) XM; intermixed with SANDSTONE 20%, grey brown, coal,banded fragments lithic; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey black; fresh, moderately strong, carbonaceous laminae
864	867	SILTSTONE 50%, dark grey brown, rare coal,banded occasional moderately sorted; intermixed with SANDSTONE 50%, dark grey, lithic moderately sorted rare clayey; fresh, moderately strong
867	878.21	SILTSTONE 60%, dark grey brown, occasional moderately sorted coal,banded in part; intermixed with SANDSTONE 20%, dark grey, lithic occasional clayey; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey black, rare coaly fragments; fresh, moderately strong, carbonaceous fragments
878.21	879.32	COAL, black, interbanded dull & bright(>40%); fresh, weak
879.32	879.41	SANDSTONE 80%, fine grained, light grey brown, lithic moderately sorted possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, coal,banded in part; fresh, strong
879.41	880.03	COAL, black, dull, minor bright bands(>1%); fresh, weak
880.03	885	SANDSTONE 80%, fine grained, light grey brown, lithic moderately sorted possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, coal,banded in part; fresh, strong
885	888	SANDSTONE 80%, grey light grey, quartz-lithic silty in part; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey brown, rare coaly fragments; fresh, very strong
888	895.01	SANDSTONE 70%, grey brown, litho- feldspathic rare quartzose; intermixed with SILTSTONE 30%, brown, quartzo- feldspathic; fresh, strong
895.01	895.94	COAL, black, coal,banded silty in part dull, minor bright bands(>1%); fresh, moderately strong, carbonaceous fragments
895.94	897.32	SANDSTONE, grey brown, lithic moderately sorted stringers of coal; fresh, strong
897.32	897.86	COAL, black, interbanded dull & bright(>40%); fresh, weak

From	To	Description
897.86	898.66	COAL 90%, black, bright with dull bands(>60%) rare coal,banded silty; intermixed with SANDSTONE 10%, grey brown, lithic moderately sorted; fresh, weak
898.66	898.97	COAL, black, dull, minor bright bands(>1%); fresh, weak
898.97	900.92	SANDSTONE, grey brown, lithic moderately sorted; fresh, strong
900.92	903.01	COAL, black, dull, minor bright bands(>1%); fresh, weak
903.01	903.28	SANDSTONE, grey brown, lithic moderately sorted; fresh, strong
903.28	904.39	COAL, black, bright with dull bands(>60%) rare coal,banded silty; fresh, weak
904.39	904.92	SANDSTONE, grey brown, lithic moderately sorted; fresh, strong
904.92	905.68	COAL, black, dull, minor bright bands(>1%); fresh, weak
905.68	906	COAL 90%, black, bright with dull bands(>60%) rare coal,banded silty; intermixed with SANDSTONE 10%, grey brown, lithic moderately sorted; fresh, weak
906	906.88	CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh, moderately strong
906.88	907.28	COAL, black, dull, minor bright bands(>1%); fresh, weak
907.28	907.37	CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh, moderately strong
907.37	908.43	COAL, black, dull, minor bright bands(>1%); fresh, weak
908.43	909	CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh, moderately strong
909	910.74	CARBONACEOUS SILTSTONE 50%, dark grey black, coaly in part; intermixed with SILTSTONE 50%, brown, occasional sandy tending to inferior laminations; fresh, moderately strong
910.74	911.5	COAL, black, dull, minor bright bands(>1%); fresh, weak
911.5	914.66	CARBONACEOUS SILTSTONE 50%, dark grey black, coaly in part; intermixed with SILTSTONE 50%, brown, occasional sandy tending to inferior laminations; fresh, moderately strong
914.66	914.92	COAL, black, dull, minor bright bands(>1%); fresh, weak
914.92	918	SANDSTONE, fine grained, brown grey, silty in part rare clayey; fresh, moderately strong
918	921	CARBONACEOUS SILTSTONE 40%, dark grey black, silty in part; intermixed with COAL 30%, black, dull, minor bright bands(>1%) coal,banded silty in part; intermixed with SANDSTONE 30%, fine grained, grey brown, lithic occasional clayey; fresh, moderately strong
921	924	CARBONACEOUS SILTSTONE 80%, black, coaly in part; intermixed with SILTSTONE 20%, grey black, occasional coal,banded tuffaceous in part; fresh, weak
924	927	SANDSTONE 90%, fine grained, grey white, litho- feldspathic occasional coal,banded fragments; intermixed with COAL 10%, black, coal,banded silty in part; fresh, strong
927	930	SANDSTONE, fine grained, grey light grey, coal,banded silty fragments litho- feldspathic; fresh, strong
930	933	SANDSTONE 90%, fine grained, grey light grey, litho- feldspathic moderately sorted; intermixed with COAL 10%, black, coal,banded in part; fresh, moderately strong

From	To	Description
933	934.21	SILTSTONE 50%, dark grey brown, coal,banded throughout; intermixed with SANDSTONE 50%, fine grained, dark grey brown, lithic occasional coal,banded laminations; fresh, moderately strong
934.21	934.7	COAL, black, dull, minor bright bands(>1%); fresh, weak
934.7	936	SILTSTONE 50%, dark grey brown, coal,banded throughout; intermixed with SANDSTONE 50%, fine grained, dark grey brown, lithic occasional coal,banded laminations; fresh, moderately strong
936	939	SANDSTONE 60%, fine grained, greyish brown, lithic moderately sorted low sphericity, sub-rounded; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, partly carbonaceous throughout laminations; with STONY COAL 10%, black, dull, minor bright bands(>1%) laminations; fresh, moderately strong
939	942	SILTSTONE 60%, brownish black, partly carbonaceous laminations occasional carbonaceous siltstone; intermixed with SANDSTONE 20%, fine-medium grained, greyish brown, lithic moderately sorted low sphericity, sub-rounded silty; with STONY COAL 20%, black, dull, minor bright bands(>1%) dull(<1% bright); fresh, strong, pelletoidal
942	945.19	SANDSTONE 90%, fine grained, greyish brown, lithic silty carbonaceous XF; intermixed with SILTSTONE 10%, grey, carbonaceous siltstone in part occasional sandy; fresh, moderately strong, carbonaceous fragments
945.19	945.5	COAL, black, dull, tends to stony dull(<1% bright); fresh, weak
945.5	945.99	SANDSTONE 50%, fine grained, greyish brown, lithic poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 50%, brownish black, laminations shaly in part; fresh, moderately strong
945.99	946.26	COAL, black, dull, tends to stony dull(<1% bright); fresh, weak
946.26	951	SANDSTONE 40%, fine grained, greyish brown, lithic tuffaceous XF poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, laminations shaly in part; with STONY COAL 30%, brownish black, dull, tends to stony dull(<1% bright); fresh, moderately strong
951	953	CARBONACEOUS SILTSTONE 80%, brownish black, dull, tends to stony shaly in part; intermixed with SANDSTONE 20%, very fine-fine grained, brownish grey, tuffaceous XF lithic poorly to moderately sorted; fresh, strong, pelletoidal
953	957	CARBONACEOUS SILTSTONE 60%, black, partly carbonaceous laminations; intermixed with SANDSTONE 40%, very fine-fine grained, brownish grey, lithic silty poorly sorted; fresh, strong
957	960	SILTSTONE 60%, grey, micaceous TH sandy in part; intermixed with CARBONACEOUS SILTSTONE 20%, brownish black, shaly in part; with SANDSTONE 20%, very fine-fine grained, grey, silty throughout poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong, pelletoidal
960	963	SILTSTONE 70%, brownish grey, carbonaceous siltstone in part laminations; intermixed with SANDSTONE 30%, very fine-fine grained, brownish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong
963	966	SANDSTONE 60%, fine grained, brownish grey, lithic poorly sorted silty throughout; intermixed with SILTSTONE 40%, brownish black, carbonaceous siltstone shaly in part; fresh, weak, carbonaceous lamellae
966	969	SANDSTONE 50%, very fine-fine grained, grey, lithic poorly to moderately sorted high sphericity, sub-rounded to sub-angular; intermixed with CARBONACEOUS SILTSTONE 50%, brownish grey, sandy in part laminations; fresh, moderately strong

From	To	Description
969	972	CARBONACEOUS SILTSTONE 40%, brownish black, laminations sandy in part; intermixed with SANDSTONE 40%, very fine-fine grained, greyish off-white, lithic laminations in part poorly to moderately sorted; with STONY COAL 20%, black, dull, minor bright bands(>1%); fresh, moderately strong, pelletoidal
972	975	SILTSTONE 70%, brownish grey, laminations carbonaceous siltstone in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic poorly to moderately sorted silty throughout; fresh, strong, pelletoidal
975	978	SANDSTONE 80%, fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular silty; intermixed with SILTSTONE 20%, brownish grey, shaly in part laminations; fresh, moderately strong
978	981	SANDSTONE 60%, fine grained, greyish off-white, lithic poorly to moderately sorted silty throughout; intermixed with SILTSTONE 40%, brownish grey, shaly in part laminations; fresh, moderately strong
981	984	SANDSTONE, fine-medium grained, whitish grey, lithic silty poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, weak
984	987	SANDSTONE 90%, fine-medium grained, whitish grey, lithic silty poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 10%, brownish grey, shaly in part rare micaceous; fresh, weak
987	990	SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted silty; intermixed with SILTSTONE 20%, brownish grey, carbonaceous siltstone in part micaceous in part; fresh, weak
990	993	SANDSTONE, fine grained, whitish grey, lithic silty throughout poorly sorted; fresh, weak, carbonaceous fragments
993	996	SANDSTONE 90%, fine grained, whitish grey, lithic silty throughout moderately sorted; intermixed with SILTSTONE 10%, brownish grey, sandy in part; fresh, weak, carbonaceous fragments
996	999	SANDSTONE 70%, very fine-fine grained, whitish grey, lithic moderately sorted high sphericity, sub-angular; intermixed with SILTSTONE 30%, brownish grey, laminations; fresh, weak, carbonaceous fragments
999	1002	SILTSTONE 50%, brownish grey, laminations sandy in part; intermixed with SANDSTONE 50%, whitish grey, lithic silty throughout; fresh, strong, sandy
1002	1005	SANDSTONE 90%, fine grained, whitish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 10%, brownish grey, carbonaceous siltstone in part; fresh, weak
1005	1008	SANDSTONE 60%, very fine-fine grained, whitish grey, lithic silty throughout; intermixed with SILTSTONE 40%, fine grained, whitish grey, partly carbonaceous XF lithic moderately sorted; fresh, weak, carbonaceous fragments
1008	1011	SILTSTONE 40%, brownish grey, sandy in part; intermixed with CARBONACEOUS SILTSTONE 30%, black, shaly in part; with SANDSTONE 30%, fine grained, whitish grey, lithic moderately sorted moderately sorted; fresh, strong, sandy, carbonaceous lamellae
1011	1014	SANDSTONE 70%, very fine-fine grained, whitish grey, lithic poorly to moderately sorted silty in part; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; with STONY COAL 10%, black, dull, tends to stony dirty; fresh, weak, carbonaceous fragments
1014	1017	SANDSTONE 60%, very fine-fine grained, whitish grey, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, micaceous throughout laminations; fresh, weak, carbonaceous fragments
1017	1022.39	SANDSTONE 80%, very fine-fine grained, whitish grey, lithic clayey in part; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; fresh, weak
1022.39	1022.66	COAL, black, dull, minor bright bands(>1%); fresh, weak

From	To	Description
1022.66	1026	SILTSTONE 50%, brownish grey, micaceous throughout sandy in part; intermixed with SANDSTONE 30%, very fine-fine grained, whitish grey, clayey throughout lithic; with CARBONACEOUS SILTSTONE 20%, brownish black, partly carbonaceous shaly in part; fresh, strong
1026	1030	SILTSTONE 70%, brownish grey, carbonaceous siltstone in part; intermixed with SANDSTONE 30%, very fine-fine grained, greyish off-white, lithic silty in part moderately sorted; fresh, moderately strong, carbonaceous lamellae
1030	1033	SILTSTONE 60%, brownish grey, carbonaceous siltstone in part; intermixed with SANDSTONE 40%, whitish grey, clayey in part lithic; fresh, strong, carbonaceous lamellae
1033	1036	SANDSTONE 60%, fine grained, whitish grey, lithic poorly to moderately sorted high sphericity, sub-angular; intermixed with SILTSTONE 30%, brownish grey, carbonaceous siltstone in part micaceous in part; with STONY COAL 10%, black, dull, minor bright bands(>1%); fresh, moderately strong
1036	1040	SILTSTONE 70%, brownish black, occasional shaly carbonaceous siltstone in part; intermixed with SANDSTONE 30%, whitish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh, strong, shaly
1040	1043	SILTSTONE 70%, brownish grey, sandy in part micaceous; intermixed with SANDSTONE 20%, fine grained, whitish grey, lithic occasional silty; with STONY COAL 10%, brownish black, carbonaceous stony; fresh, strong, sandy
1043	1046	SANDSTONE 70%, fine grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, laminations micaceous; fresh, moderately strong, carbonaceous fragments
1046	1050	SANDSTONE 40%, fine-medium grained, whitish grey, rare tuffaceous lithic poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, partly carbonaceous laminations; with STONY COAL 20%, black, coaly in part; fresh, moderately strong
1050	1053	SANDSTONE 80%, fine grained, whitish grey, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 20%, brownish grey, laminations clayey; fresh, moderately strong
1053	1056	SANDSTONE 50%, fine grained, whitish grey, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, laminations sandy in part; with CARBONACEOUS SILTSTONE 20%, black, shaly in part; fresh, weak
1056	1059.12	SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh, strong
1059.12	1059.67	COAL, black, stony in part; fresh, weak
1059.67	1060	SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh, strong
1060	1063	SANDSTONE 40%, fine grained, whitish grey, lithic moderately sorted; intermixed with SILTSTONE 30%, brownish grey, sandy in part; with STONY COAL 30%, black, coaly; fresh, moderately strong
1063	1070	SANDSTONE 40%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, brownish black, occasional carbonaceous siltstone laminations; with STONY COAL 20%, black, coaly stony; fresh, moderately strong
1070	1073	SILTSTONE 60%, brownish grey, occasional carbonaceous siltstone; intermixed with SANDSTONE 40%, very fine-fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular silty; fresh, strong
1073	1076	SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted; intermixed with SILTSTONE 20%, brownish grey, RR carbonaceous siltstone sandy; fresh, moderately strong

From	To	Description
1076	1080	SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 40%, brownish grey, laminations in part micaceous; fresh, moderately strong
1080	1084	SANDSTONE, fine-medium grained, whitish grey, lithic silty throughout; fresh, weak
1084	1088	SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, rare carbonaceous siltstone sandy in part; fresh, moderately strong
1088	1091	SANDSTONE, fine-medium grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh, weak
1091	1094	SANDSTONE 90%, fine-medium grained, whitish grey, silty in part lithic; intermixed with SILTSTONE 10%, brownish grey, laminations micaceous in part; fresh, weak, silty
1094	1097	SANDSTONE 60%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 40%, brownish grey, micaceous in part laminations; fresh, moderately strong
1097	1100	SILTSTONE 70%, brownish grey, rare micaceous; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, lithic moderately sorted high sphericity, sub-rounded to sub-angular; fresh, strong

End of Hole **Waukivory 13**

GPAC

AGL

Borehole Number: Waukivory 13

Drilling Method:

Logged by:

Date Drilled: 10/11/2012

Sheet: 1 of 55

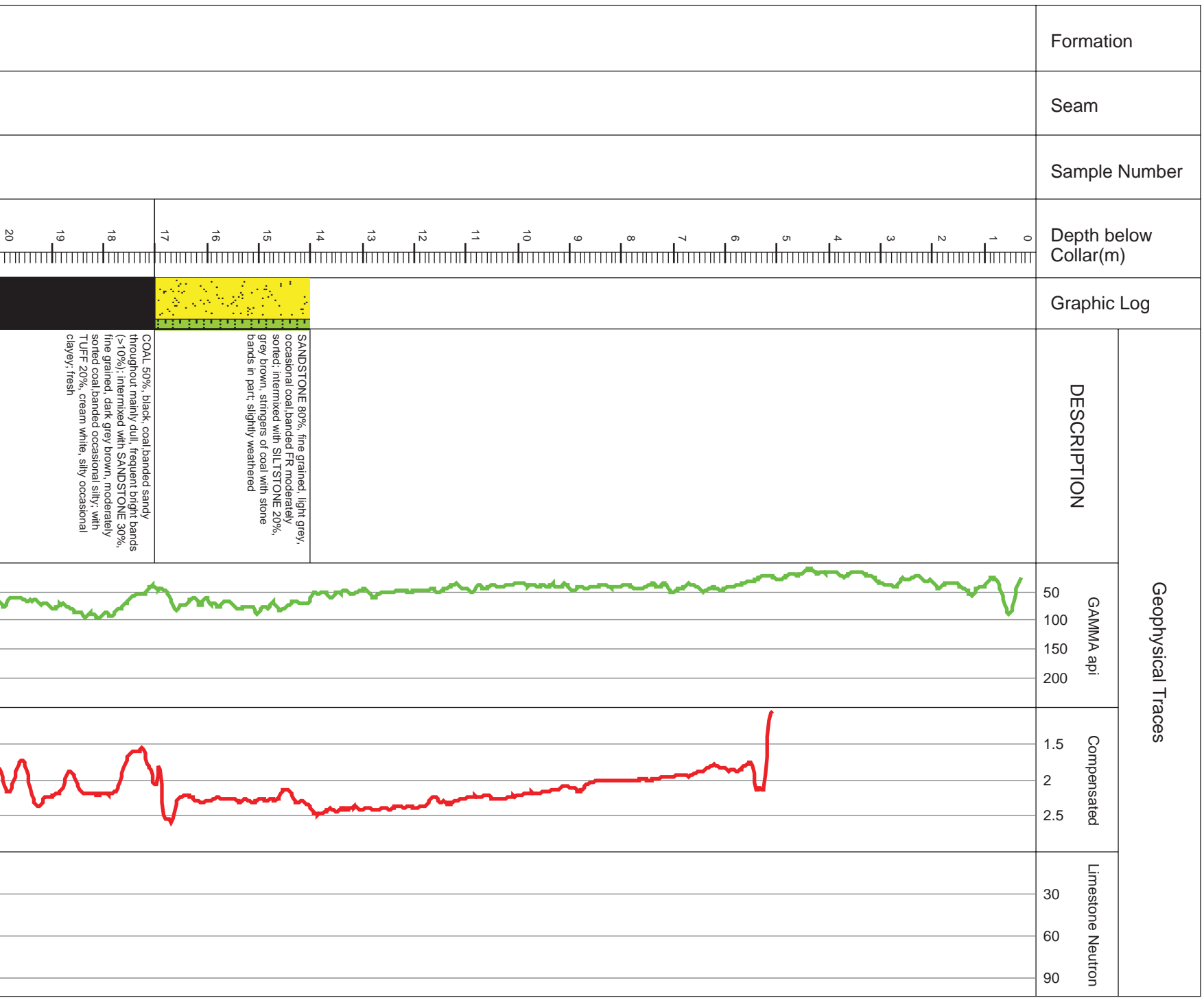
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Northing: 6452164.46

R.L.: 100.3

Dip: 0

Dir: 0



Geophysical Traces

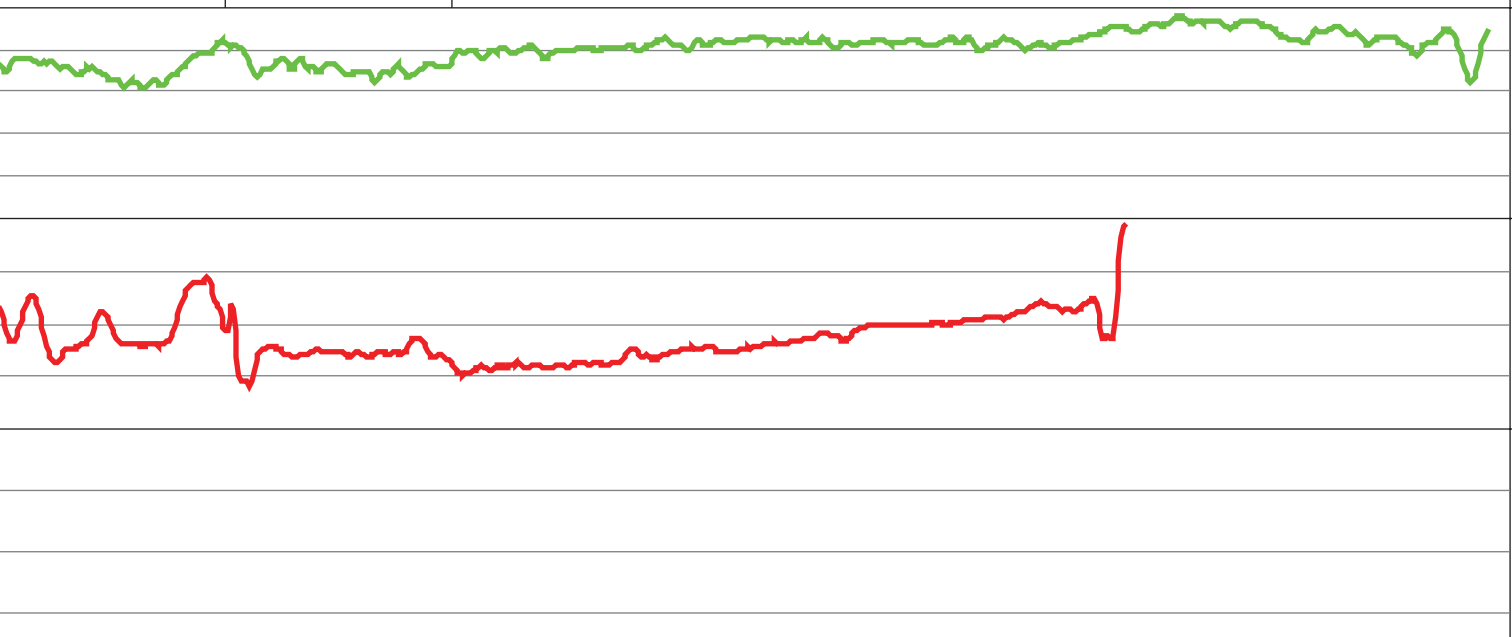
GAMMA api: 50, 100, 150, 200

Compensated: 1.5, 2, 2.5

Limestone Neutron: 30, 60, 90


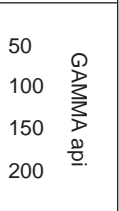
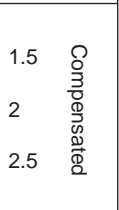
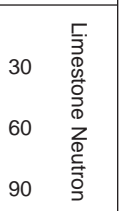

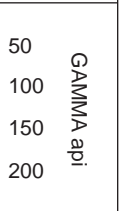
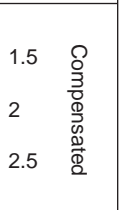
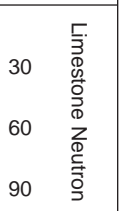

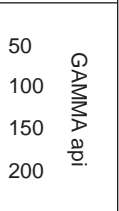
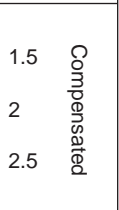
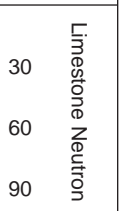


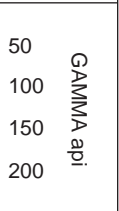
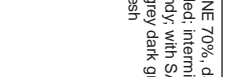

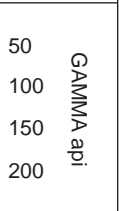
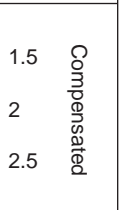


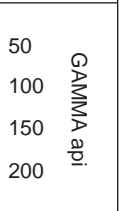
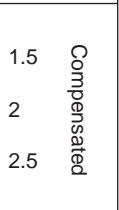
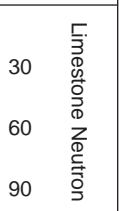


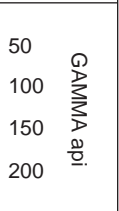
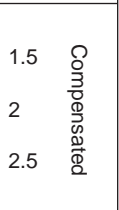
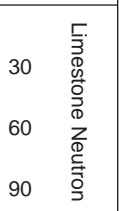
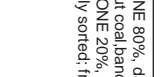


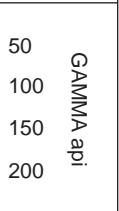
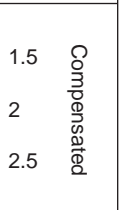
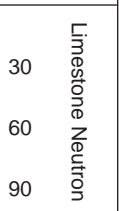

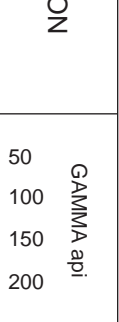
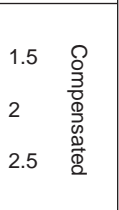
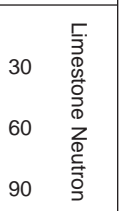
SANDSTONE 80%, fine grained, light grey, occasional coal banded FR moderately sorted, intermixed with SILTSTONE 20%, grey brown, stringers of coal with stone bands in part, slightly weathered

COAL 50%, black, coal banded sandy throughout mainly dull, frequent bright bands (>10%); intermixed with SANDSTONE 30%, fine grained, dark grey brown, moderately sorted coal banded occasional silty; with TUFF 20%, cream white, silty occasional clayey; fresh



Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces			
												GAMMA api	Compensated	Limestone Neutron	
						20				SILTSTONE 60%, dark grey brown, sandy coal banded throughout; intermixed with SANDSTONE 30%, fine grained, grey dark grey, moderately sorted occasional micaceous; with COAL 10%, dark brown black, dull, minor bright bands(>1%) silty in part stringers of coal; fresh		50	1.5	30	
						21				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh		100	2.0	60	
						22				SILTSTONE 60%, dark grey brown, sandy coal banded throughout; intermixed with SANDSTONE 30%, fine grained, grey dark grey, moderately sorted occasional micaceous; with COAL 10%, dark brown black, dull, minor bright bands(>1%) silty in part stringers of coal; fresh		150	2.5	90	
						23				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh		200			
						24				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						25				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						26				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						27				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						28				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						29				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						30				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						31				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						32				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						33				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						34				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						35				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						36				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						37				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						38				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						39				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						40				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						41				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					
						42				SILTSTONE 70%, grey brown, rare stringers of coal possibly tuffaceous in part; intermixed with SANDSTONE 30%, fine grained, dark grey, moderately sorted rare coal banded FR; fresh					

		Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
								GAMMA api	Compensated	Limestone Neutron
					43		SILTSTONE 70%, dark grey brown, rare coaly; intermixed with SANDSTONE 30%, fine grained, grey, moderately sorted lithic rare micaceous; fresh	50	1.5	
					44		CARBONACEOUS SILTSTONE 80%, dark grey black, shaly coaly in part; intermixed with SANDSTONE 20%, fine grained, grey, silty in part moderately sorted; fresh	50	2.0	
					45			50	2.2	
					46			50	2.2	
					47		SANDSTONE 80%, fine grained, dark grey, lithic moderately sorted rare coal banded; intermixed with SILTSTONE 20%, dark grey brown, rare coaly occasional coal banded; fresh	50	2.2	
					48			50	2.2	
					49			50	2.2	
					50		SANDSTONE 60%, fine grained, grey, occasional quartzose moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, coal banded throughout; fresh	50	2.2	
					51			50	2.2	
					52			50	2.2	
					53			50	2.2	
					54			50	2.2	
					55			50	2.2	
					56		SANDSTONE 80%, fine grained, grey, moderately sorted lithic possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, rare coal banded laminations; fresh	50	2.2	
					57			50	2.2	
					58			50	2.2	
					59			50	2.2	
					60			50	2.2	
					61			50	2.2	
					62		SANDSTONE 90%, fine grained, green grey, moderately sorted lithic tuffaceous throughout; intermixed with SILTSTONE 10%, grey, sandy; fresh	50	2.2	
					63			50	2.2	
					64			50	2.2	
					65		TUFF, green grey, sandy occasional lithic; fresh	50	2.2	

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces													
						GAMMA api	Compensated	Limestone Neutron											
			66		TUFF, green grey, sandy occasional lithic: fresh														
			67						SILTSTONE 60%, grey, occasional sandy rare coal banded; intermixed with TUFF 40%, green grey, silty throughout occasional lithic: fresh										
			74										SILTSTONE 70%, dark grey brown, rare coal banded; intermixed with TUFF 20%, grey white, sandy; with SANDSTONE 10%, fine grained, grey dark grey, lithic moderately sorted; fresh						
			77															SANDSTONE 60%, fine grained, light grey grey, lithic moderately sorted sily; intermixed with SILTSTONE 40%, dark grey, rare shaly; fresh	
			81			SILTSTONE 80%, dark grey brown, coaly FR throughout coal banded; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh													
			82							SILTSTONE 80%, dark grey brown, coaly FR throughout coal banded; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh									
			85												SILTSTONE 80%, dark grey brown, coaly FR throughout coal banded; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh				
			86																
			87																
			88																

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			111		SILTSTONE 80%, dark grey brown, rare coal banded rare coaly; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh	50		
			112		SILTSTONE 80%, dark grey brown, rare coal banded rare coaly; intermixed with SANDSTONE 20%, fine grained, grey, lithic moderately sorted; fresh	100		
			113		SANDSTONE 60%, fine grained, dark grey, lithic moderately sorted rare coal banded; intermixed with SILTSTONE 40%, grey, occasional coal banded; fresh	150		
			114		SANDSTONE 60%, fine grained, dark grey, lithic moderately sorted rare coal banded; intermixed with SILTSTONE 40%, grey, occasional coal banded; fresh	200		
			115		SANDSTONE 60%, fine grained, dark grey, lithic moderately sorted rare coal banded; intermixed with SILTSTONE 40%, grey, occasional coal banded; fresh	250		
			116		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	300		
			117		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	350		
			118		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	400		
			119		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	450		
			120		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	500		
			121		SILTSTONE 80%, dark grey brown, coaly ferruginous coal banded throughout; intermixed with SANDSTONE 20%, fine grained, dark grey grey, lithic moderately sorted; fresh	550		
			122		SANDSTONE 90%, fine grained, dark grey black, lithic moderately sorted coal banded throughout; intermixed with COAL 10%, black brown, silty in part clayey matrix; fresh	600		
			123		SANDSTONE 90%, fine grained, dark grey black, lithic moderately sorted coal banded throughout; intermixed with COAL 10%, black brown, silty in part clayey matrix; fresh	650		
			124		SANDSTONE 90%, fine grained, dark grey black, lithic moderately sorted coal banded throughout; intermixed with COAL 10%, black brown, silty in part clayey matrix; fresh	700		
			125		SANDSTONE 80%, very fine-fine grained, grey, lithic low sphericity, sub-rounded moderately to moderately to well sorted; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous FR; fresh	750		
			126		SANDSTONE 80%, very fine-fine grained, grey, lithic low sphericity, sub-rounded moderately to moderately to well sorted; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous FR; fresh	800		
			127		SANDSTONE 80%, very fine-fine grained, grey, lithic low sphericity, sub-rounded moderately to moderately to well sorted; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous FR; fresh	850		
			128		SANDSTONE 60%, fine grained, grey, lithic low sphericity, sub-rounded moderately to well sorted; intermixed with SILTSTONE 30%, brownish grey, occasional carbonaceous laminations; with COAL 10%, black, stony in part dull, tends to stony; fresh	900		
			129		SANDSTONE 60%, fine grained, grey, lithic low sphericity, sub-rounded moderately to well sorted; intermixed with SILTSTONE 30%, brownish grey, occasional carbonaceous laminations; with COAL 10%, black, stony in part dull, tends to stony; fresh	950		
			130		SANDSTONE 60%, fine grained, grey, lithic occasional carbonaceous FR; intermixed with SILTSTONE 40%, brownish grey, occasional carbonaceous laminations; fresh	1000		
			131		SANDSTONE 60%, fine grained, grey, lithic occasional carbonaceous FR; intermixed with SILTSTONE 40%, brownish grey, occasional carbonaceous laminations; fresh	1050		
			132		SANDSTONE 80%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey; fresh	1100		
			133		SANDSTONE 80%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey; fresh	1150		

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			134		SANDSTONE 80%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey; fresh	100	2.2	30
			135			100	2.2	30
			136		SILTSTONE 60%, dark grey brown, occasional carbonaceous laminations; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh	100	2.2	30
			137			100	2.2	30
			138			100	2.2	30
			139			100	2.2	30
			140		SANDSTONE 70%, fine grained, grey, lithic silty in part; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations; fresh	100	2.2	30
			141			100	2.2	30
			142			100	2.2	30
			143		SANDSTONE 50%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 50%, brownish grey, sandy in part; fresh	100	2.2	30
			144			100	2.2	30
			145			100	2.2	30
			146		SANDSTONE 60%, fine-medium grained, greyish off-white, lithic occasional coaly laminations; intermixed with SILTSTONE 30%, brownish grey; occasional carbonaceous laminations; with COAL 10%, black, dull, tends to stony; fresh	100	2.2	30
			147			100	2.2	30
			148			100	2.2	30
			149			100	2.2	30
			150		SILTSTONE 60%, brownish grey, occasional carbonaceous laminations; intermixed with SANDSTONE 40%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh	100	2.2	30
			151			100	2.2	30
			152			100	2.2	30
			153		SILTSTONE 70%, brownish grey, micaceous in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh	100	2.2	30
			154			100	2.2	30
			155			100	2.2	30
			156			100	2.2	30

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces		
				001DA_DB										
179												50		
180												100		
181												150		
182												200		
183													1.5	
184													2.0	
185													2.5	
186														30
187														60
188														90
189														
190														
191														
192														
193														
194														
195														
196														
197														
198														
199														
200														
201														

SANDSTONE 70%, fine grained, grey, lithic moderately sorted high sphericity, sub-rounded; intermixed with SILTSTONE 30%, dark grey brown, rare coal banded; fresh

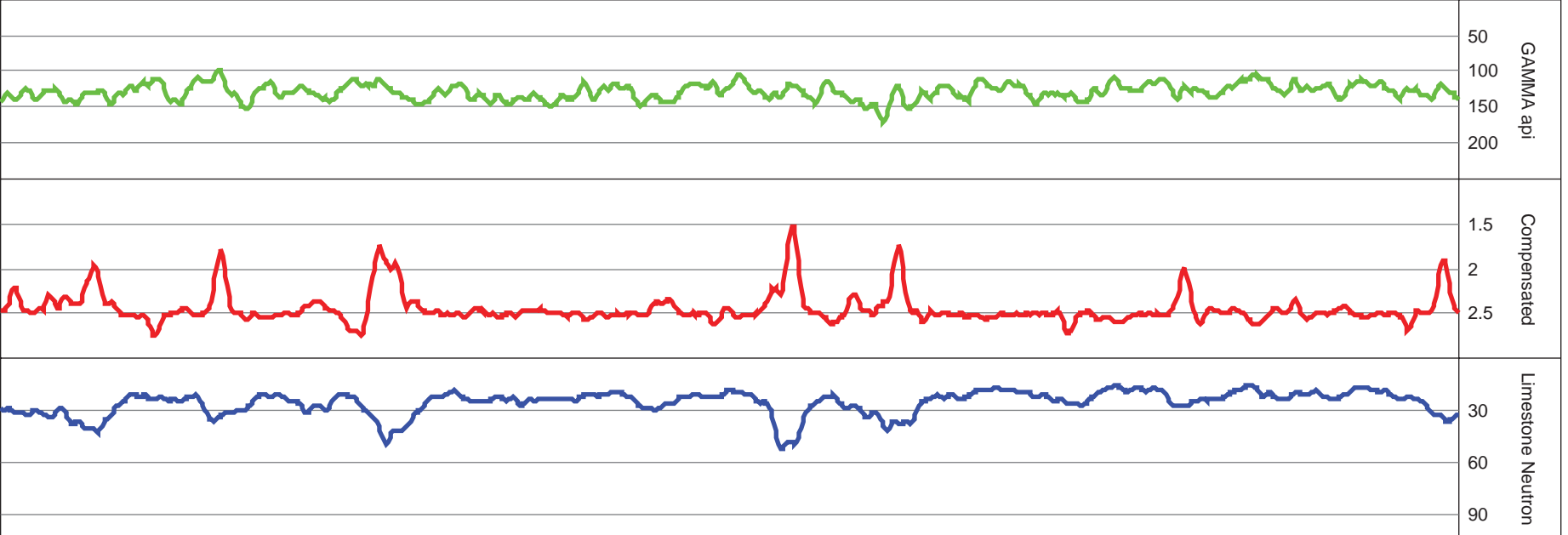
SANDSTONE 80%, fine grained, grey dark grey, coal banded high sphericity, sub-rounded; intermixed with SILTSTONE 20%, dark grey brown, stringers of coal coal banded throughout; fresh

SANDSTONE 60%, fine grained, light grey grey, lithic occasional micaceous moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, occasional coal banded coaly FR; fresh

SANDSTONE 80%, fine grained, dark grey grey, silty in part lithic; intermixed with SILTSTONE 20%, grey brown, coal banded throughout occasional stringers of coal; fresh

SANDSTONE 70%, brown dark grey, stringers of coal coal banded throughout sandy; intermixed with SANDSTONE 30%, fine grained, dark grey, coal banded lithic; fresh

SANDSTONE 50%, fine grained, grey, lithic moderately sorted coal banded FR; intermixed with SILTSTONE 50%, dark grey brown, occasional coal banded coaly FR; fresh



Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces									
				202								50									
				203								100									
				204								150									
				205								200									
				206									1.5								
				207									2.0								
				208									2.5								
				209																	
				210																	
				211																	
				212																	
				213																	
				214																	
				215																	
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				218																	
				219																	
				220																	
				221																	
				222																	
				223																	
				224																	
				206																	
				203DA_DB																	
				2138																	

SANDSTONE 50%, fine grained, grey, lithic moderately sorted coal banded FR; intermixed with SILTSTONE 50%, dark grey brown, occasional coal banded coaly FR; fresh

SILTSTONE 50%, dark grey brown, coal banded throughout coaly FR; intermixed with SANDSTONE 30%, fine grained, dark grey, coal banded silty stringers of coal; intermixed with COAL 20%, dark grey black, dull, minor bright bands(>1%) sandy coal banded; fresh

SANDSTONE 60%, fine grained, dark grey, coal banded lithic moderately sorted; intermixed with SILTSTONE 40%, dark grey brown, coal banded throughout coaly FR; fresh

SANDSTONE 70%, fine grained, dark grey brown, coal banded coaly FR high sphericity, sub-rounded to sub-angular, intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout stringers of coal; fresh

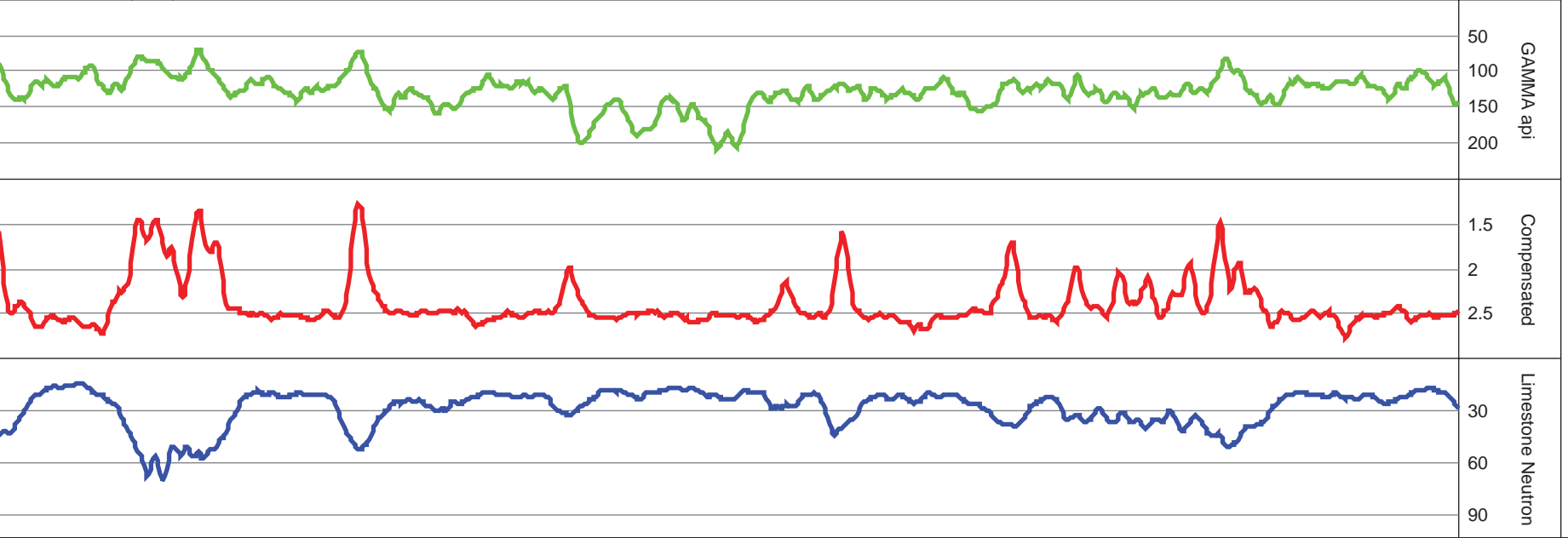
SANDSTONE 90%, fine grained, grey, clayey FR possibly tuffaceous in part; intermixed with SILTSTONE 10%, dark grey brown, coaly FR coal banded throughout; fresh

COAL, brown black, sandy coal banded silty throughout; fresh

SANDSTONE, fine grained, dark grey/black, coaly FR coal banded; fresh

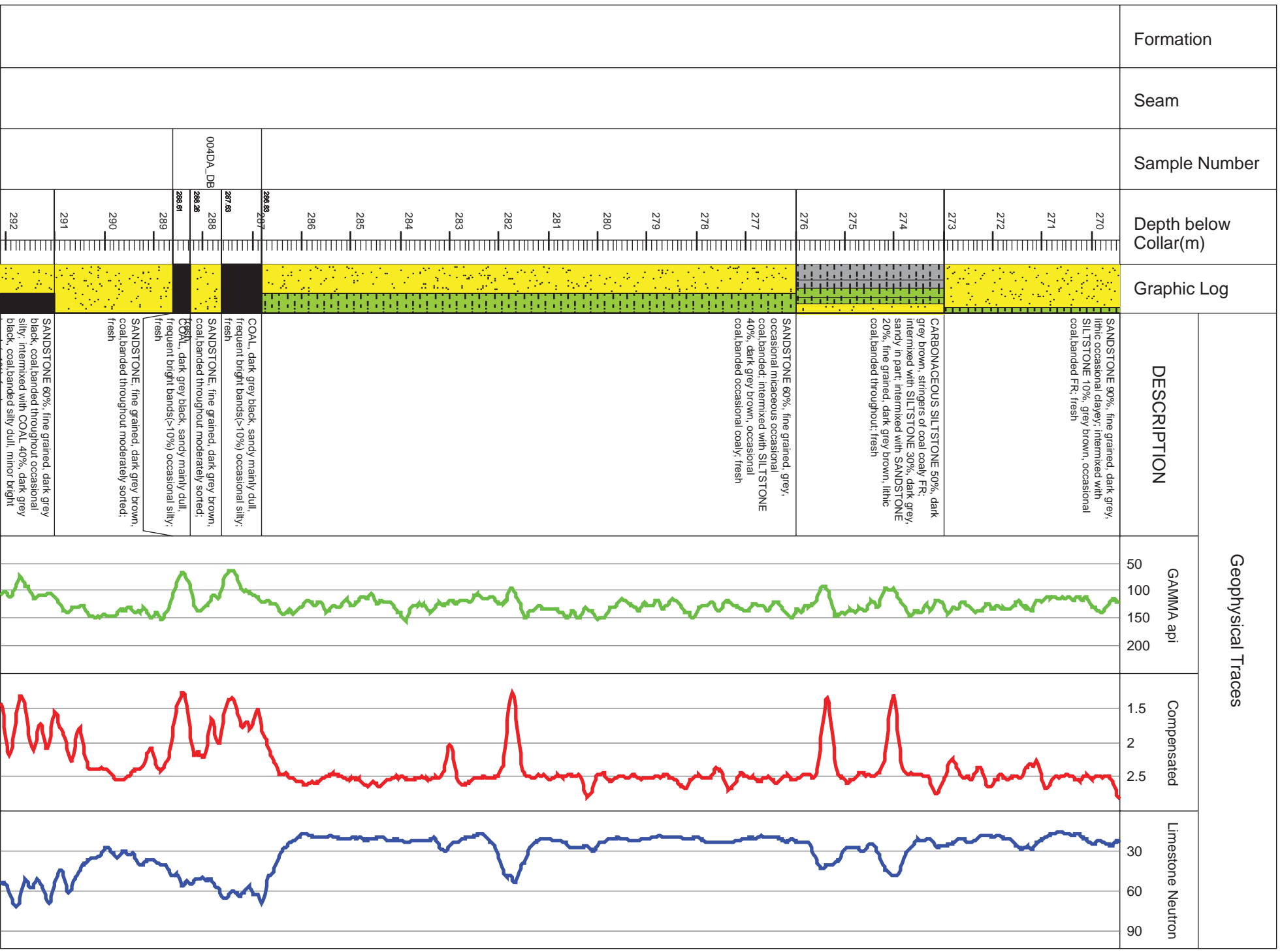
COAL, brown black, sandy coal banded silty throughout; fresh

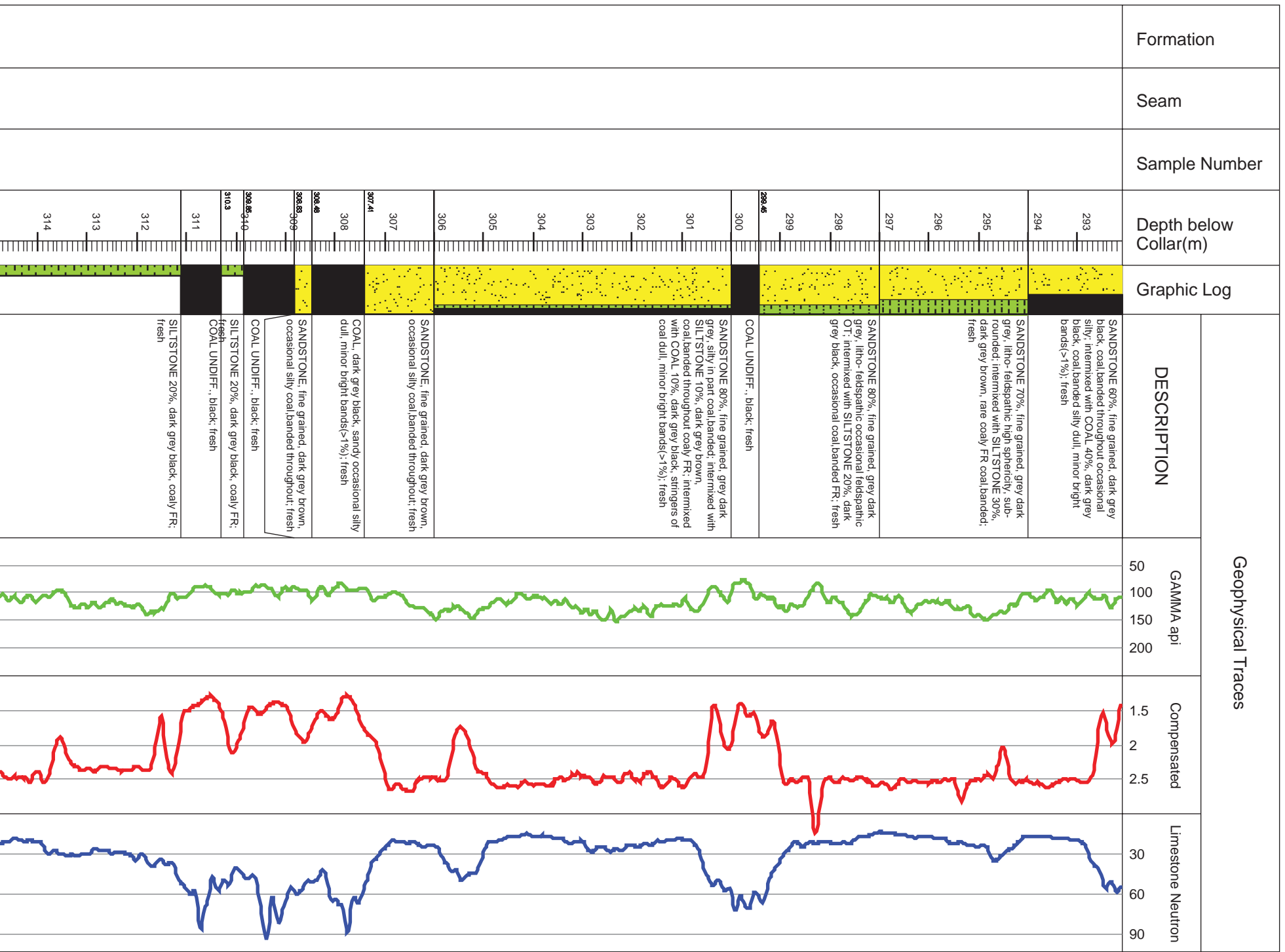
SANDSTONE 80%, fine grained, dark grey brown, coal banded throughout rare tuffaceous; intermixed with SILTSTONE 20%, dark grey black, coal banded coaly sandy throughout; fresh

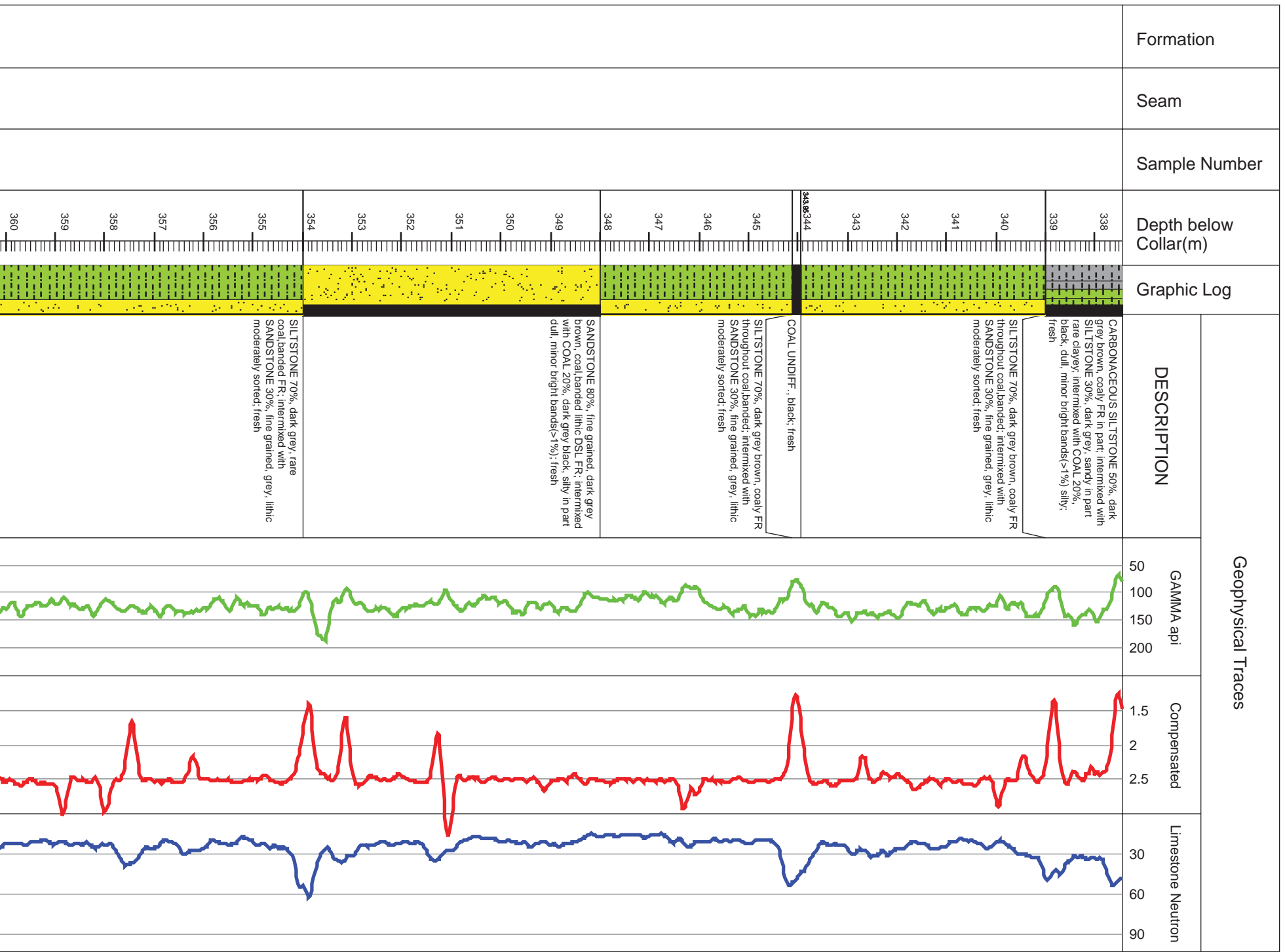


Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			246		SANDSTONE 70%, fine grained, grey brown, coal banded in part lithic; intermixed with SILTSTONE 30%; dark grey brown, coal banded throughout coaly FR; fresh			
			245		SANDSTONE 50%, dark grey brown, coaly FR throughout; fresh			
			244		SANDSTONE 50%, dark grey brown, coaly FR throughout; fresh			
			243		SANDSTONE 50%, fine grained, grey brown, coal banded throughout occasional silty; intermixed with CARBONACEOUS SILTSTONE 50%; dark grey brown, coaly FR throughout; fresh			
			242		SANDSTONE 60%, fine grained, dark grey, litho- feldspathic occasional coal banded; intermixed with SILTSTONE 40%; dark grey brown, coal banded throughout coaly FR; fresh			
			241		SANDSTONE 60%, fine grained, dark grey, litho- feldspathic occasional coal banded; intermixed with SILTSTONE 40%; dark grey brown, coal banded throughout coaly FR; fresh			
			240		SANDSTONE 60%, fine grained, dark grey, litho- feldspathic occasional coal banded; intermixed with SILTSTONE 40%; dark grey brown, coal banded throughout coaly FR; fresh			
			239		SANDSTONE 90%, fine grained, grey; silty in part rare coal banded; intermixed with SILTSTONE 10%; dark grey brown, occasional coal banded; fresh			
			238		SANDSTONE 90%, fine grained, grey; silty in part rare coal banded; intermixed with SILTSTONE 10%; dark grey brown, occasional coal banded; fresh			
			237		SANDSTONE 90%, fine grained, grey; silty in part rare coal banded; intermixed with SILTSTONE 10%; dark grey brown, occasional coal banded; fresh			
			236		SANDSTONE 90%, fine grained, grey; silty in part rare coal banded; intermixed with SILTSTONE 10%; dark grey brown, occasional coal banded; fresh			
			235		SANDSTONE, fine grained, light grey, basaltic silty ufraceous litho- feldspathic; fresh			
			234		SANDSTONE, fine grained, light grey, basaltic silty ufraceous litho- feldspathic; fresh			
			233		SANDSTONE 80%, fine grained, dark grey, litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 30%; dark grey, sandy occasional coal banded; fresh			
			232		SANDSTONE 80%, fine grained, dark grey, litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 30%; dark grey, sandy occasional coal banded; fresh			
			231		SANDSTONE 70%, fine grained, grey dark grey, litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 30%; dark grey, sandy occasional coal banded; fresh			
			230		SANDSTONE 70%, fine grained, grey dark grey, litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 30%; dark grey, sandy occasional coal banded; fresh			
			229		SANDSTONE 90%, fine grained, light grey, litho- feldspathic rare micaceous moderately sorted; intermixed with SILTSTONE 10%; dark grey brown, sandy coaly FR in part; fresh			
			228		SANDSTONE 90%, fine grained, light grey, litho- feldspathic rare micaceous moderately sorted; intermixed with SILTSTONE 10%; dark grey brown, sandy coaly FR in part; fresh			
			227		SANDSTONE 80%, fine grained, dark grey brown, coal banded throughout rare ufraceous; intermixed with SILTSTONE 20%; dark grey black, coal banded coaly sandy throughout; fresh			
			226		SANDSTONE 80%, fine grained, dark grey brown, coal banded throughout rare ufraceous; intermixed with SILTSTONE 20%; dark grey black, coal banded coaly sandy throughout; fresh			
			225		SANDSTONE 80%, fine grained, dark grey brown, coal banded throughout rare ufraceous; intermixed with SILTSTONE 20%; dark grey black, coal banded coaly sandy throughout; fresh			
			242a		SANDSTONE 80%, fine grained, dark grey brown, coal banded throughout rare ufraceous; intermixed with SILTSTONE 20%; dark grey black, coal banded coaly sandy throughout; fresh			
					COAL UNDIFF.; black; fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			247		SANDSTONE 70%, fine grained, grey brown, coalbanded in part lithic; intermixed with SILTSTONE 30%, dark grey brown, coalbanded throughout coaly FR; fresh	GAMMA api	Compensated	Limestone Neutron
			248					
			249		SILTSTONE 80%, dark grey brown, occasional coalbanded coaly FR; intermixed with SANDSTONE 20%, fine grained, grey dark grey, occasional coalbanded lithic; fresh	GAMMA api	Compensated	Limestone Neutron
			250					
			251		SANDSTONE 60%, fine grained, dark grey brown, silty in part coalbanded sandy; intermixed with SILTSTONE 40%, dark grey brown, occasional coalbanded coaly FR; fresh	GAMMA api	Compensated	Limestone Neutron
			252					
			253		SILTSTONE 80%, grey white, clayey in part coalbanded in part; intermixed with SANDSTONE 20%, fine grained, dark grey brown, coalbanded moderately sorted; fresh	GAMMA api	Compensated	Limestone Neutron
			254					
			255		SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coalbanded FR; fresh	GAMMA api	Compensated	Limestone Neutron
			256					
			257		SANDSTONE, fine grained, grey dark grey, clayey in part rare stringers of coal; fresh	GAMMA api	Compensated	Limestone Neutron
			258					
			259		SANDSTONE 80%, fine grained, grey dark grey, lithic occasional clayey; intermixed with SILTSTONE 20%, dark grey brown, coalbanded throughout coaly FR; fresh	GAMMA api	Compensated	Limestone Neutron
			260					
			261		SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coalbanded FR; fresh	GAMMA api	Compensated	Limestone Neutron
			262					
			263		SANDSTONE 80%, fine grained, grey dark grey, lithic occasional clayey; intermixed with SILTSTONE 20%, dark grey brown, coalbanded throughout coaly FR; fresh	GAMMA api	Compensated	Limestone Neutron
			264					
			265		SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coalbanded FR; fresh	GAMMA api	Compensated	Limestone Neutron
			266					
			267		SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coalbanded FR; fresh	GAMMA api	Compensated	Limestone Neutron
			268					
			269		SANDSTONE 90%, fine grained, dark grey, lithic occasional clayey; intermixed with SILTSTONE 10%, grey brown, occasional coalbanded FR; fresh	GAMMA api	Compensated	Limestone Neutron







Formation		Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
							GAMMA api	Compensated	Limestone Neutron
			361			SILTSTONE 70%, dark grey, rare coal banded FR.; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted, fresh	50	1.5	30
			362				100	2.5	30
			363			SILTSTONE 80%, dark grey brown, sandy in part rare coal banded; intermixed with SANDSTONE 20%, fine grained, light grey, lithic moderately sorted high sphericity, sub-rounded; fresh	150	2.5	30
			364				200	2.5	30
			365					2.5	30
			366			SILTSTONE 80%, dark grey brown, sandy throughout coal banded FR; intermixed with COAL 20%, dark grey black, dull, minor bright bands(>1%) stringers of coal; fresh		2.5	30
			367					2.5	30
			368					2.5	30
			369					2.5	30
			370			SILTSTONE 90%, dark grey, rare coal banded; intermixed with SANDSTONE 10%, fine grained, light grey grey, lithic clayey in part; fresh		2.5	30
			371					2.5	30
			372			SILTSTONE 50%, dark grey, rare coal banded; intermixed with SANDSTONE 50%, fine grained, light grey grey, occasional clayey lithic moderately sorted; fresh		2.5	30
			373					2.5	30
			374					2.5	30
			375					2.5	30
			376					2.5	30
			377					2.5	30
			378			SANDSTONE 70%, fine grained, grey, lithic moderately sorted occasional coal banded; intermixed with SILTSTONE 30%, dark grey brown, occasional coal banded FR.; fresh		2.5	30
			379					2.5	30
			380					2.5	30
			381					2.5	30
			382					2.5	30

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			389			50	1.5	30
			388					
			387			150	2.5	90
			386					
			385					
			384					
			393					
			392					
			391					
			390					
			389					
			388					
			387					
			386					
			385					
			384					
			399					
			398					
			397					
			396					
			395					
			394					
			400					
			401					
			402					
			403					
			404					
			405					

Formation

Seam

Sample Number

Depth below Collar(m)

Graphic Log

DESCRIPTION

Geophysical Traces

GAMMA api

Compensated

Limestone Neutron

SANDSTONE 70%, fine grained, grey; lithic moderately sorted occasional coal banded; intermixed with SILTSTONE 30%, dark grey brown, occasional coal banded FR; fresh

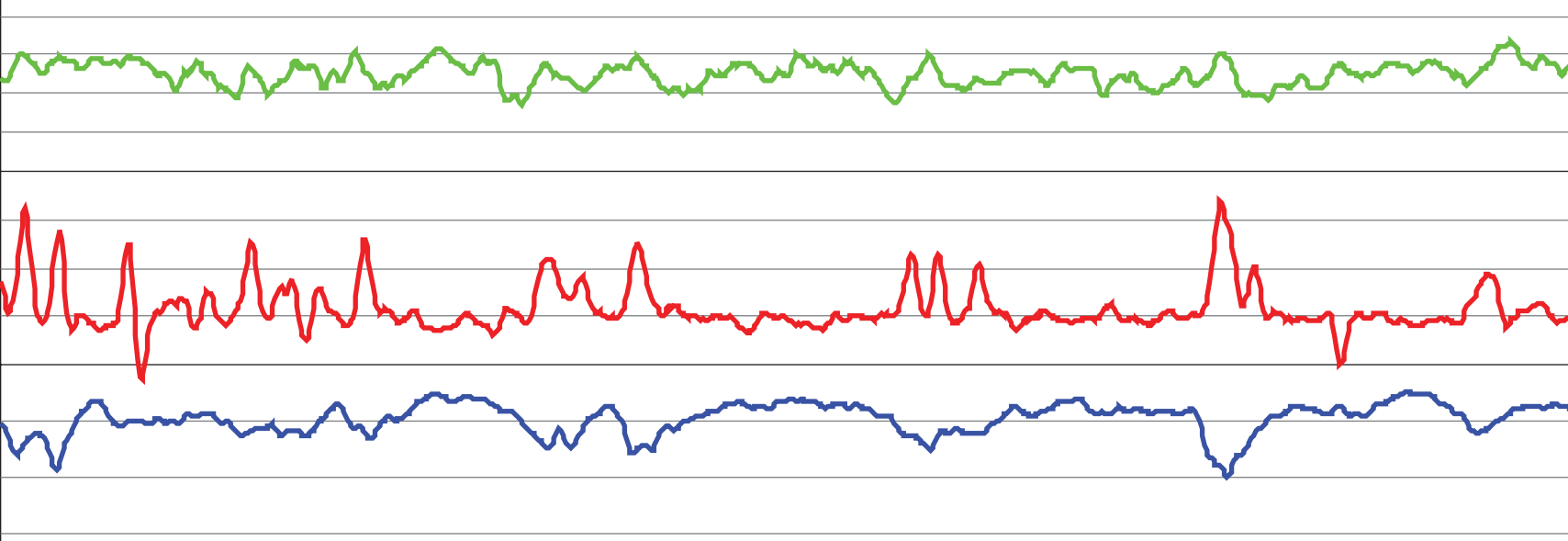
SANDSTONE 80%, fine grained, grey dark grey, poorly to moderately sorted lithic rare coal banded; intermixed with SILTSTONE 20%, dark grey brown, coaly FR occasional coal banded; fresh

SILTSTONE 40%, dark grey, rare sandy; intermixed with CARBONACEOUS SILTSTONE 40%, dark grey brown, occasional coaly FR; intermixed with COAL 20%, dark grey black, silty throughout dull, minor bright bands(<1%), fresh

SANDSTONE 70%, fine grained, grey/light grey, lithic moderately sorted high sphericity, sub-rounded clayey; intermixed with SILTSTONE 30%, dark grey brown, occasional coal banded FR; fresh

SILTSTONE 80%, dark grey, rare sandy coal banded FR; intermixed with CARBONACEOUS SILTSTONE 20%, grey brown, occasional coaly FR; fresh

SANDSTONE 40%, fine grained, grey brown, silty in part coal banded; intermixed with SILTSTONE 30%, dark grey; coal banded throughout stringers of coal; intermixed with COAL 30%, dark grey black, dull, minor bright bands(>1%) coal banded silty throughout; fresh



Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			406		SANDSTONE 40%, fine grained, grey brown, silty in part coal banded; intermixed with SILTSTONE 30%, dark grey, coal banded throughout; stringers of coal; intermixed with COAL 30%, dark grey/black, dull, minor bright bands(>1%) coal banded silty throughout; fresh	50	1.5	30
			406.66		COAL, dark grey/black, coal banded silty throughout; fresh	100	2.0	50
			406.82-407		SILTSTONE, dark grey brown, sandy in part coal banded; fresh	150	2.2	55
			408		SILTSTONE 50%, dark grey brown, sandy in part coal banded in part; intermixed with CARBONACEOUS SILTSTONE 40%, dark grey/black, coaly FR throughout; intermixed with SANDSTONE 10%, fine grained, dark grey, coal banded occasional lithic; fresh	200	2.3	60
			409		SANDSTONE 60%, fine grained, light grey grey, litho- feldspathic occasional silty high sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, dark grey brown, rare coal banded; fresh	250	2.4	65
			410		SANDSTONE 70%, fine grained, grey/ litho- feldspathic carbonaceous stringers of coal; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey brown, rare coaly FR; fresh	300	2.5	70
			411		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	350	2.6	75
			412		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	400	2.7	80
			413		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	450	2.8	85
			414		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	500	2.9	90
			415		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	550	3.0	95
			416		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	600	3.1	100
			417		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	650	3.2	105
			418		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	700	3.3	110
			419		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	750	3.4	115
			420		SILTSTONE 60%, dark grey brown, rare coal banded; intermixed with SANDSTONE 40%, fine grained, grey/ litho- feldspathic rare coaly FR; fresh	800	3.5	120
			421		SANDSTONE 80%, fine grained, light grey grey, litho- feldspathic silty in part; intermixed with SILTSTONE 20%, dark grey; rare coaly FR coal banded; fresh	850	3.6	125
			422		SANDSTONE 80%, fine grained, light grey grey, litho- feldspathic silty in part; intermixed with SILTSTONE 20%, dark grey; rare coaly FR coal banded; fresh	900	3.7	130
			423		SANDSTONE 60%, fine grained, grey/ litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 40%, dark grey brown, occasional coal banded FR; fresh	950	3.8	135
			424		SANDSTONE 60%, fine grained, grey/ litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 40%, dark grey brown, occasional coal banded FR; fresh	1000	3.9	140
			425		SANDSTONE 60%, fine grained, grey/ litho- feldspathic occasional coal banded FR; intermixed with SILTSTONE 40%, dark grey brown, occasional coal banded FR; fresh	1050	4.0	145
			426		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted, intermixed with SILTSTONE 20%, dark grey brown, coal banded throughout rare coaly; fresh	1100	4.1	150
			427		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted, intermixed with SILTSTONE 20%, dark grey brown, coal banded throughout rare coaly; fresh	1150	4.2	155
			428		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted, intermixed with SILTSTONE 20%, dark grey brown, coal banded throughout rare coaly; fresh	1200	4.3	160

Formation		Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
							GAMMA api	Compensated	Limestone Neutron
				429		SANDSTONE 80%, fine grained, grey, lithic moderately sorted; intermixed with SILTSTONE 20%, dark grey brown, coal banded throughout rare coaly; fresh	50	1.5	30
				430			SANDSTONE 70%, dark grey brown, occasional coal banded occasional sandy; intermixed with SANDSTONE 30%, fine grained, grey light grey, lithic clayey in part fresh	100	2.0
				431			SANDSTONE 60%, fine grained, grey white, clayey lithic; intermixed with SILTSTONE 40%, dark grey, clayey in part rare coal banded; fresh	150	2.2
				432			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	200	2.5
				433			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	50	1.5
				434			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	100	2.0
				435			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	150	2.2
				436			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	200	2.5
				437			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	50	1.5
				438			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	100	2.0
				439			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	150	2.2
				440			SANDSTONE 70%, fine grained, dark grey, coal banded throughout occasional micaceous; intermixed with SILTSTONE 30%, dark grey black, coaly FR throughout coal banded; fresh	200	2.5
				441			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	50	1.5
				442			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	100	2.0
				443			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	150	2.2
				444			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	200	2.5
				445			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	50	1.5
				446			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	100	2.0
				447			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	150	2.2
				448			SANDSTONE 80%, dark grey brown, coal banded in part rare moderately sorted; intermixed with SANDSTONE 20%, fine grained, grey white, clayey throughout lithic; fresh	200	2.5
				449			SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh	50	1.5
				450			SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh	100	2.0

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			451					
			461.22					
			452					
			453					
			453.9					
			454					
			464.02					
			455					
			456					
			456.83					
			457					
			458					
			459					
			460					
			461					
			462					
			463					
			464					
			465					
			466					
			467					
			468					
			469					
			470					
			471					
			472					
			472.83					
			473.23					
			473.23					

SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh

COAL UNDIFF., black; fresh

SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh

COAL UNDIFF., black; fresh

SANDSTONE 60%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, grey, clayey in part; fresh

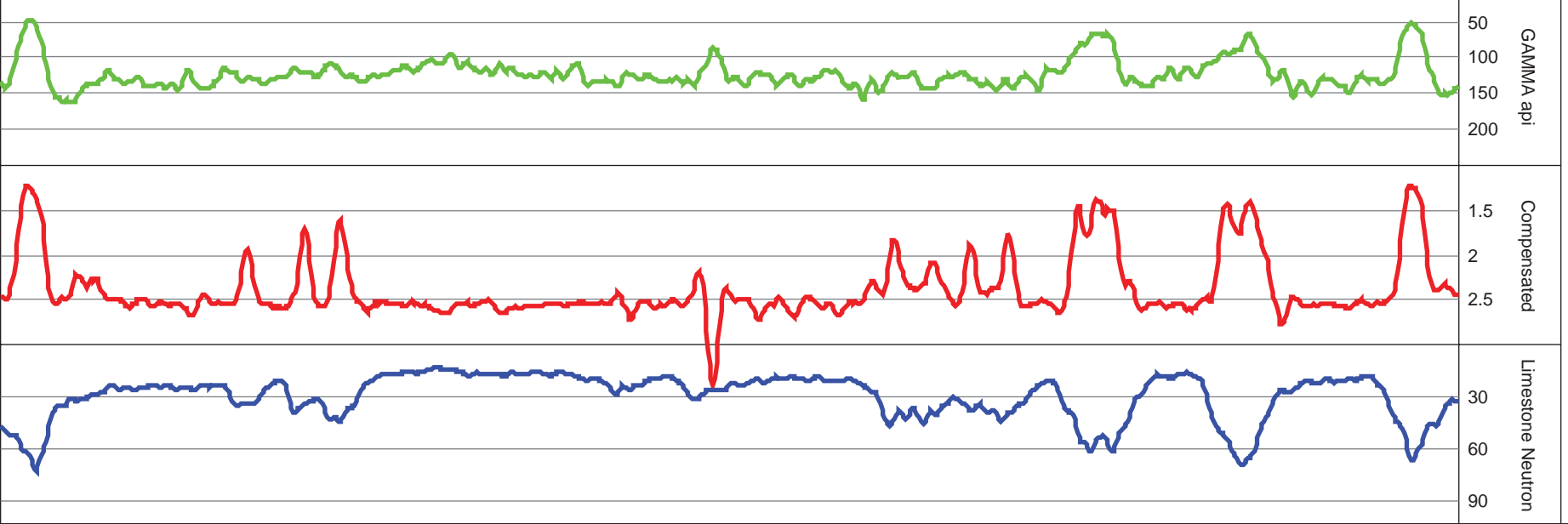
COAL UNDIFF., black; fresh

SANDSTONE 50%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular sily; intermixed with SILTSTONE 50%, greyish grey, rare carbonaceous laminations; fresh

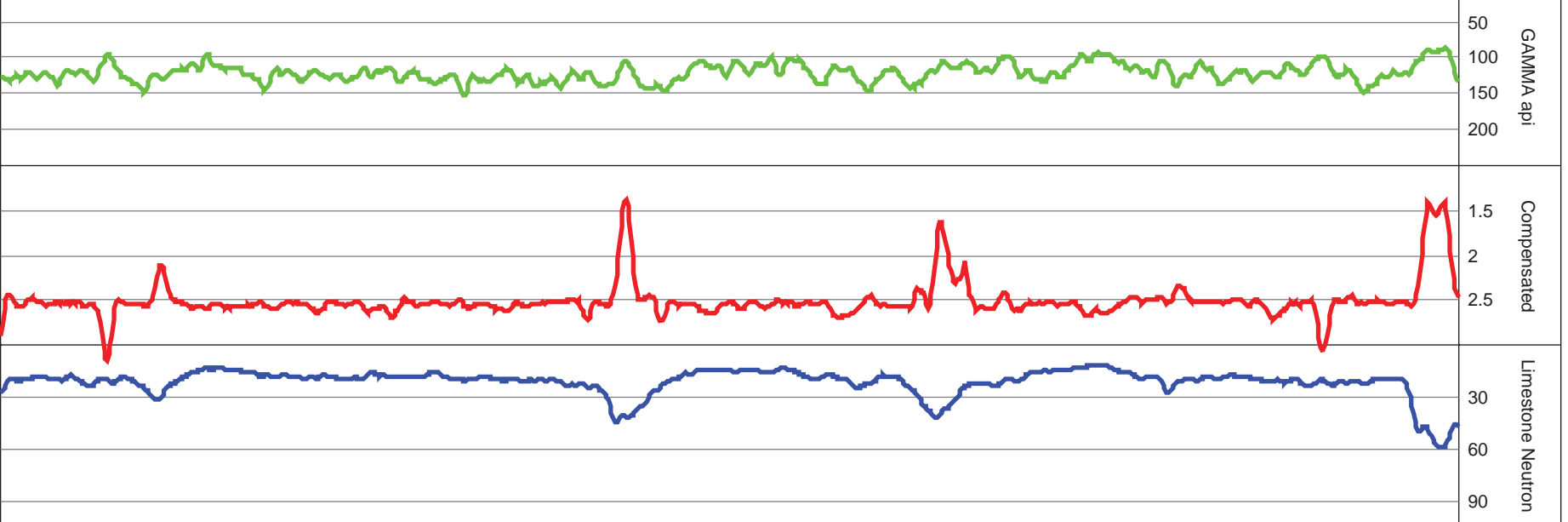
COAL, black, dull; tends to stony; fresh

SANDSTONE 50%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular sily; intermixed with SILTSTONE 50%, greyish grey, rare carbonaceous laminations; fresh

Geophysical Traces

























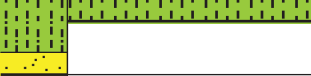
Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			473-489					
			474		SANDSTONE 50%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular silty; intermixed with SILTSTONE 50%, greyish grey, rare carbonaceous laminations; fresh			
			475		COAL, black, dull; tends to stony; fresh			
			476		SANDSTONE 80%, fine grained, greyish off-white, abundant carbonaceous FR silty; intermixed with SILTSTONE 20%, brownish black, occasional XS; fresh			
			477					
			478					
			479					
			480					
			481					
			482		SANDSTONE 70%, fine-medium grained, greyish off-white, lithic silty throughout poorly sorted; intermixed with COAL 30%, black, dull, tends to stony; fresh			
			483					
			484					
			485					
			486					
			487		SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, brownish grey, sandy in part; fresh			
			488					
			489					
			490					
			491		SANDSTONE 60%, very fine-fine grained, grey, clayey throughout lithic; intermixed with SILTSTONE 40%, brownish grey, occasional micaceous; fresh			
			492					
			493					
			494					
			495		SANDSTONE 80%, fine grained, greyish off-white, lithic silty in part; intermixed with SILTSTONE 20%, brownish grey, occasional sandy; fresh			
			496					



Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces				
			497		SANDSTONE 80%, fine grained, greyish off-white, lithic silty in part; intermixed with SILTSTONE 20%, brownish grey, occasional sandy; fresh		GAMMA api	Compensated	Limestone Neutron	
			498		SILTSTONE 60%, brownish grey, sandy; intermixed with SANDSTONE 40%, very fine-grained, brownish grey, lithic clayey in part poorly to moderately sorted; fresh					
			499							
			500		SANDSTONE 80%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, occasional carbonaceous laminations in part; fresh					
			501							
			502							
			503							
			504							
			505							
			506							
			507							
			508							
			509		SANDSTONE 60%, fine grained, greyish off-white, silty in part poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, sandy in part; fresh					
			510							
			511		SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 60%, brownish black, occasional XS; fresh					
			512							
			513							
			514							
			514.24							
			515		COAL, black, dull, tends to stony; fresh					
			516.49							
			516		SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 60%, brownish black, occasional XS; fresh					
			517		STONY COAL, brownish black, carbonaceous; fresh					
			517.518		SANDSTONE 70%, fine-medium grained, greyish off-white, lithic occasional carbonaceous laminations; intermixed with SILTSTONE 20%, brownish black, occasional XS; fresh					























Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			519			GAMMA api	Compensated	Limestone Neutron
			520		SANDSTONE 70%, fine-medium grained, greyish off-white, lithic occasional carbonaceous laminations; intermixed with SILTSTONE 20%, brownish black, occasional XS; fresh	50	1.5	30
			521			100	2.0	50
			522			150	2.5	60
			523		SILTSTONE 70%, brownish black, occasional XS; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh	200	1.5	70
			524		COAL UNDIFF., black; fresh		2.0	80
			525		SILTSTONE 70%, brownish black, occasional XS; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh		2.5	90
			526					
			527		SILTSTONE 80%, grey, micaceous in part; intermixed with SANDSTONE 20%, very fine-grained, greyish off-white, lithic moderately to well sorted low sphericity, sub-rounded; fresh			
			528					
			529					
			530		SANDSTONE 60%, fine grained, greyish off-white, lithic silty in part poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, rare XS; fresh			
			531					
			532		SILTSTONE 50%, grey, micaceous throughout; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous; with SANDSTONE 20%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh			
			533					
			534					
			535		SANDSTONE 60%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 40%, brownish grey, occasional sandy; fresh			
			536					
			537					
			538		SANDSTONE 70%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, sandy in part carbonaceous laminations; fresh			
			539					
			540					
			541		CARBONACEOUS SILTSTONE 40%, brownish black, abundant carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, silty throughout moderately sorted; with COAL 30%, black, dull, tends to stony; fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			542		CARBONACEOUS SILTSTONE 40%, brownish black, abundant carbonaceous laminae; intermixed with SANDSTONE 30%, fine grained, greyish off-white, silty throughout moderately sorted, with COAL 30%, black, dull, tends to stony, fresh	GAMMA api	Compensated	Limestone Neutron
			543			50	1.5	30
			544			100	2.0	40
			545		SANDSTONE 60%, fine grained, greyish off-white, clayey in part poorly sorted lithic; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; fresh	150	2.5	50
			546			200	2.5	60
			547				2.5	60
			547.25-549		COAL UNDIFF., black; fresh		2.5	60
			549		SANDSTONE 80%, fine grained, greyish off-white, lithic clayey in part; intermixed with SILTSTONE 20%, brownish black, micaceous XS in part; fresh		2.5	60
			550				2.5	60
			551				2.5	60
			552		SANDSTONE 60%, fine grained, greyish off-white, silty throughout lithic; intermixed with SILTSTONE 40%, grey, micaceous throughout; fresh		2.5	60
			553				2.5	60
			554				2.5	60
			555				2.5	60
			556		SANDSTONE 70%, very fine-fine grained, greyish off-white, silty in part lithic moderately sorted; intermixed with SILTSTONE 30%, brownish black, micaceous XS in part; fresh		2.5	60
			557				2.5	60
			558				2.5	60
			559				2.5	60
			560		SANDSTONE 50%, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 50%, grey, micaceous throughout; fresh		2.5	60
			561				2.5	60
			562				2.5	60
			563				2.5	60
			564				2.5	60

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			565		SANDSTONE 50%, very fine-grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 50%, grey, micaceous throughout; fresh	50	1.5	30
			566		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	100	2.0	30
			567		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	150	2.0	30
			568		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	200	2.0	30
		011DA_DB	569		COAL, black, dull, minor bright bands(<1%); fresh	150	1.8	30
			570		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	50	1.5	30
			571		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	100	1.5	30
			572		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	150	1.5	30
			573		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	200	1.5	30
			574		SANDSTONE, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	250	1.5	30
			575		COAL UNDIFF., black; fresh	200	1.8	30
			576		COAL UNDIFF., black; fresh	150	1.8	30
			577		COAL UNDIFF., black; fresh	100	1.8	30
			578		SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh	50	1.5	30
			579		SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh	100	1.5	30
			580		SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh	150	1.5	30
			581		SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh	200	1.5	30
			582		SANDSTONE 80%, fine grained, greyish off-white, lithic carbonaceous wisps; intermixed with SILTSTONE 15%, brownish grey, micaceous throughout; with TUFF 5%, brownish Yellow Brown, carbonaceous XF; fresh	250	1.5	30
			583		SILTSTONE 30%, brownish grey, micaceous throughout; fresh	50	1.5	30
			584		SILTSTONE 30%, brownish grey, micaceous throughout; fresh	100	1.5	30
			585		SILTSTONE 30%, brownish grey, micaceous throughout; fresh	150	1.5	30
			586		SILTSTONE 30%, brownish grey, micaceous throughout; fresh	200	1.5	30
			586		SILTSTONE 70%, brownish grey, carbonaceous in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white; lithic moderately sorted silty in part; fresh	50	1.5	30

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			587		SILTSTONE 70%, brownish grey, carbonaceous in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted silty in part; fresh	GAMMA api	Compensated	Limestone Neutron
			588			50	1.5	30
			589			100	2	60
			590			150	2.5	90
			591		SANDSTONE 80%, fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations micaceous in part; fresh			
			592					
			593					
			594		SANDSTONE 70%, fine grained, greyish off-white, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, micaceous throughout; fresh			
			595					
			596					
			597		SANDSTONE 90%, fine grained, greyish off-white, lithic silty throughout poorly sorted; intermixed with SILTSTONE 10%, brownish grey, carbonaceous laminations; fresh			
			598					
			599					
			600		SANDSTONE, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh			
			601					
			602					
			603		SANDSTONE 70%, very fine-fine grained, grey, lithic moderately sorted silty throughout; intermixed with SILTSTONE 30%, brownish grey, micaceous throughout; fresh			
			604					
			605					
			606		SILTSTONE 60%, dark grey grey, micaceous; intermixed with SANDSTONE 40%, fine grained, brownish grey, lithic poorly to moderately sorted carbonaceous laminations; fresh			
			607					
			608					
			609					

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			610		SILTSTONE 60%, dark grey grey, micaceous; intermixed with SANDSTONE 40%, fine grained, brownish grey, illitic poorly to moderately sorted carbonaceous laminations, fresh	50	1.5	30
			611		SANDSTONE 50%, fine grained, brownish grey, illitic moderately sorted low sphericity, sub-rounded; intermixed with SILTSTONE 50%, brownish black, XS in part, fresh	100	2.0	60
			612			150	2.5	90
			612.6g13		COAL UNDIFF., black; fresh			
			614		CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh			
			615					
			616.2c		COAL, black, dull; tends to stony in part dull, minor bright bands(<1%); fresh			
		012-	616.3k		CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh			
			617					
			617.8b					
			618		COAL UNDIFF., black; fresh			
			618.2b					
			619		CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh			
			619.2b					
			620		COAL UNDIFF., black; fresh			
			621		CARBONACEOUS SILTSTONE, brownish black, carbonaceous sandy in part; fresh			
			622		SANDSTONE, fine grained, grey, illitic occasional laminations; fresh			
			623					
			624					
			624.2f, 624.5		COAL, black, dull; tends to stony; fresh			
			626		SANDSTONE 80%, fine grained, grey, illitic abundant carbonaceous XF; intermixed with SILTSTONE 20%, brownish black, XS in part; fresh			
			626.2f, 627					
			627.4b		COAL UNDIFF., black; fresh			
			628		SANDSTONE 80%, fine grained, grey, illitic abundant carbonaceous XF; intermixed with SILTSTONE 20%, brownish black, XS in part; fresh			
			628.2b, 629		COAL UNDIFF., black; fresh			
			630		SANDSTONE 60%, fine grained, brownish of -white, illitic poorly to moderately sorted silty throughout; intermixed with SILTSTONE 40%, brownish grey, XS in part laminations; fresh			
			631					
			632					

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			655			GAMMA api	Compensated	Limestone Neutron
			656		SILTSTONE 70%, greyish brown, micaceous throughout; intermixed with SANDSTONE 30%, fine grained, grey, lithic, poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh	50	1.5	30
			657		SILTSTONE 60%, brownish grey, abundant carbonaceous XF; intermixed with SANDSTONE 40%, fine grained, grey, lithic silty throughout poorly to moderately sorted; fresh	100	2.0	40
			658			150	2.5	50
			659			200	2.5	60
			660				2.5	60
			661				2.5	60
			662		SANDSTONE 70%, fine grained, greyish off-white, lithic moderately sorted high sphericity, sub-rounded to sub-angular, intermixed with SILTSTONE 30%, brownish grey, micaceous throughout carbonaceous XF; fresh		2.5	60
			663				2.5	60
			664				2.5	60
			665		SILTSTONE 60%, brownish black, carbonaceous XF; XS in part; intermixed with SANDSTONE 40%, fine grained, grey, lithic moderately sorted high sphericity, sub-rounded to sub-angular silty; fresh		2.5	60
			666				2.5	60
			667				2.5	60
			668				2.5	60
			669		SILTSTONE 80%, brownish grey, XS in part sandy throughout; intermixed with SANDSTONE 20%, very fine-fine grained, greyish off-white, lithic carbonaceous XF; fresh		2.5	60
			670				2.5	60
			671				2.5	60
			672		SANDSTONE 70%, very fine-fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, clayey laminations; fresh		2.5	60
			673				2.5	60
			674				2.5	60
			675				2.5	60
			676		SANDSTONE 70%, very fine-fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations micaceous in part; with CLAYSTONE 10%, brownish black, shaly in part; fresh		2.5	60
			677				2.5	60

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			678		SANDSTONE 70%, very fine-fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, carbonaceous laminations micaceous in part, with CLASTONE 10%, brownish black, shaly in part; fresh	50	1.5	30
			679			100	2.0	60
			680		SANDSTONE 80%, very fine-fine grained, brownish grey, carbonaceous laminations; intermixed with SILTSTONE 20%, brownish grey, XS in part micaceous; fresh	150	2.5	90
			681					
			682					
			683		SILTSTONE 80%, brownish grey, carbonaceous laminations; carbonaceous laminations; intermixed with SANDSTONE 20%, fine grained, grey, lithic silty throughout poorly to moderately sorted; fresh			
			684					
			685					
			686					
			687		SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular silty, intermixed with SILTSTONE 30%, brownish grey, carbonaceous in part, with STONY COAL 10%, brownish black, dull, tends to stony; fresh			
			688					
			689					
			690		SANDSTONE 40%, fine grained, grey, lithic silty throughout moderately sorted, intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminations XS in part, with STONY COAL 30%, brownish black, dull, tends to stony; fresh			
			691					
			692					
			693		SILTSTONE 60%, brownish black, XS in part carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; with TUFF 10%, Yellow Brown, carbonaceous XF; fresh			
			694					
			695		COAL UNDIFF., black; fresh			
			696		SILTSTONE 60%, brownish black, XS in part carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-rounded to sub-angular; with TUFF 10%, Yellow Brown, carbonaceous XF; fresh			
			697					
			698		SILTSTONE 50%, brownish black, carbonaceous XF XS in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic silty throughout poorly to moderately sorted; with STONY COAL 20%, black, dull, tends to stony dull (<1% bright) coaly; fresh			
			699					
			700					

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			701		SILTSTONE 50%, brownish black, carbonaceous XF XS in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic silty throughout; poorly to moderately sorted; with STONY COAL 20%, black, dull, tends to stony dull (<1% bright) coaly; fresh	50	1.5	30
			702		CARBONACEOUS SILTSTONE 60%, brownish black, shaly in part; intermixed with SANDSTONE 40%, very fine-fine grained, grey, lithic poorly to moderately sorted silty in part; fresh	100	2.0	30
			703		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminations; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	150	2.0	30
			704		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	200	2.0	30
			705		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	250	2.0	30
			706		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	300	2.0	30
			707		STONY COAL, black, dull, minor bright bands (<1%); fresh	350	1.5	30
			708		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	400	2.0	30
			709		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	450	2.0	30
			710		COAL UNDIFF., black; fresh	500	1.5	30
			711		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	550	2.0	30
			712		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	600	2.0	30
			713		CARBONACEOUS SILTSTONE 70%, brownish black, carbonaceous throughout carbonaceous laminaitions; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic abundant carbonaceous XF; fresh	650	2.0	30
			714		SILTSTONE 50%, brownish black, XS in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh	700	2.0	30
			715		COAL, black, dull, minor bright bands(<1%) dull (<1% bright); fresh	750	1.5	30
			716		SILTSTONE 50%, brownish black, XS in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh	800	2.0	30
			717		SILTSTONE 50%, brownish black, XS in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh	850	2.0	30
			718		SILTSTONE 50%, brownish black, XS in part; intermixed with SANDSTONE 50%, fine grained, brownish off-white, lithic abundant carbonaceous XF; fresh	900	2.0	30
			719		COAL UNDIFF., black; fresh	950	1.5	30
			720		SILTSTONE 60%, very fine-fine grained, grey, silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, carbonaceous laminaitions micaceous in part; with CARBONACEOUS SILTSTONE 20%, brownish black, carbonaceous; fresh	1000	2.0	30
			721		SANDSTONE 60%, very fine-fine grained, greyish off-white, silty throughout poorly to moderately sorted, intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, carbonaceous; fresh	1050	2.0	30
			722		SANDSTONE 70%, brownish grey, micaceous throughout; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh	1100	2.0	30

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces		
						723						GAMMA api	Compensated	Limestone Neutron
						724					SILTSTONE 70%, brownish grey, micaceous throughout; intermixed with SANDSTONE 30%, fine grained, grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh			
						725					SANDSTONE 90%, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular silty; intermixed with SILTSTONE 10%, brownish grey, occasional carbonaceous XF micaceous; fresh			
						726								
						727								
						728								
						729								
						730								
						731					SANDSTONE, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular; fresh			
						732								
						733								
						734								
						735					SANDSTONE, fine-medium grained, greyish off-white, lithic poorly sorted low sphericity, sub-angular silty; fresh			
						736								
						736.43					COAL UNDIFF., black; fresh			
						737					SILTSTONE 60%, greyish brown, micaceous throughout; intermixed with SANDSTONE 40%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh			
						738.8					COAL UNDIFF., black; fresh			
						739								
						740					SILTSTONE 60%, greyish brown, micaceous throughout; intermixed with SANDSTONE 40%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh			
						741								
						742					SILTSTONE 70%, brownish grey, XS in part micaceous; intermixed with SANDSTONE 30%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh			
						743								
						744								
						745					SILTSTONE 60%, brownish black, XS in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic silty micaceous FR; with TUFF 10%, Yellow Brown, carbonaceous XF laminations; fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			746		<p>SILTSTONE 60%, brownish black, XS in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic silty tuffaceous FR; with TUFF 10%, Yellow Brown, carbonaceous XF laminations; fresh</p> <p>SILTSTONE 50%, grey, XS in part carbonaceous laminations; intermixed with SANDSTONE 50%, fine grained, greyish off-white, silty throughout lithic poorly to moderately sorted; fresh</p> <p>SILTSTONE 80%, very fine-fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular silty; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; fresh</p> <p>SANDSTONE, very fine-fine grained, greyish off-white, lithic silty throughout poorly to moderately sorted; fresh</p> <p>SILTSTONE 60%, brownish grey, sandy in part; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-angular to angular; fresh</p> <p>COAL UNDIFF., black; fresh</p> <p>SILTSTONE 60%, brownish grey, sandy in part; intermixed with SANDSTONE 40%, fine grained, greyish off-white, lithic moderately sorted low sphericity, sub-angular to angular; fresh</p> <p>SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part XS in part; fresh</p>	50	1.5	30
			747			100	2.0	60
			748			150	2.5	90
			749			200	2.5	
			750				2.5	
			751				2.5	
			752				2.5	
			753				2.5	
			754				2.5	
			755				2.5	
			756				2.5	
			757				2.5	
			758				2.5	
			759			2.5		
			760			2.5		
			761			2.5		
			762			2.5		
			763			2.5		
			764			2.5		
			765			2.5		
			766			2.5		
			767			2.5		
			768			2.5		

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			789.8		SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part XS in part; fresh	50	1.5	30
			769		COAL, black, dull, minor bright bands(<1%); fresh	100	2.5	60
			770		SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part XS in part; fresh	150	2.5	60
			771		SANDSTONE 50%, fine grained, grey, lithic silty throughout; intermixed with SILTSTONE 50%, grey, micaceous in part XS in part; fresh	200	2.5	60
			772		CARBONACEOUS SILTSTONE 70%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	50	2.5	30
			773		CARBONACEOUS SILTSTONE 70%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine grained, grey, lithic poorly to moderately sorted silty throughout; fresh	100	2.5	30
			774		CARBONACEOUS SILTSTONE 70%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	150	2.5	30
			775		CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	200	2.5	30
			776		CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	50	2.5	30
			777		COAL UNDIFF., black; fresh	100	1.5	60
			778		CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	150	2.5	60
			779		CARBONACEOUS SILTSTONE 40%, brownish black, shaly in part; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, moderately sorted low sphericity, sub-angular tuffaceous XF; with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	200	2.5	60
			780		CARBONACEOUS SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with SILTSTONE 50%, brownish black, sandy throughout; fresh	50	2.5	30
			781		CARBONACEOUS SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with SILTSTONE 50%, brownish black, sandy throughout; fresh	100	2.5	30
			782		CARBONACEOUS SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with SILTSTONE 50%, brownish black, sandy throughout; fresh	150	2.5	30
			783		SANDSTONE 40%, fine grained, brownish off-white, lithic poorly to moderately sorted silty throughout; intermixed with STONY COAL 30%, brownish black, dull, minor bright bands (<1%); with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	200	2.5	30
			784		SANDSTONE 40%, fine grained, brownish off-white, lithic poorly to moderately sorted silty throughout; intermixed with STONY COAL 30%, brownish black, dull, minor bright bands (<1%); with CARBONACEOUS SILTSTONE 30%, brownish black, carbonaceous XF laminations; fresh	50	2.5	30
			785		CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh	100	2.5	30
			786		CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh	150	2.5	30
			787		CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh	200	2.5	30
			788		CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh	50	2.5	30
			789		CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; intermixed with SANDSTONE 45%, greyish off-white, lithic poorly to moderately sorted tuffaceous XF; with TUFF 5%, Yellow Brown, carbonaceous XF laminations; fresh	100	2.5	30
			790		SILTSTONE 50%, brownish black, carbonaceous XF laminations; intermixed with CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; fresh	150	2.5	30

Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces		
						791						50	1.5	30
						791						100	1.5	30
						792						150	1.5	30
						793						200	1.5	30
						794						250	1.5	30
						795						300	1.5	30
						796						350	1.5	30
						797						400	1.5	30
						798						450	1.5	30
						799						500	1.5	30
						800						550	1.5	30
						801						600	1.5	30
						802						650	1.5	30
						803						700	1.5	30
						804						750	1.5	30
						805						800	1.5	30
						806						850	1.5	30
						807						900	1.5	30
						808						950	1.5	30
						809						1000	1.5	30
						810						1050	1.5	30
						811						1100	1.5	30
						812						1150	1.5	30
						812a						1200	1.5	30
						813						1250	1.5	30
						813a						1300	1.5	30

SILTSTONE 50%, brownish black, carbonaceous Xf laminations; intermixed with CARBONACEOUS SILTSTONE 50%, brownish black, shaly in part; fresh

SILTSTONE 90%, dark grey black, occasional sandy rare coal banded; intermixed with SANDSTONE 10%, fine grained, grey brown, feldspathic clayey in part; fresh

SILTSTONE 70%, grey brown, rare tuffaceous rare coal banded; intermixed with SANDSTONE 30%, fine grained, grey light grey, lithic poorly to moderately sorted clayey; fresh

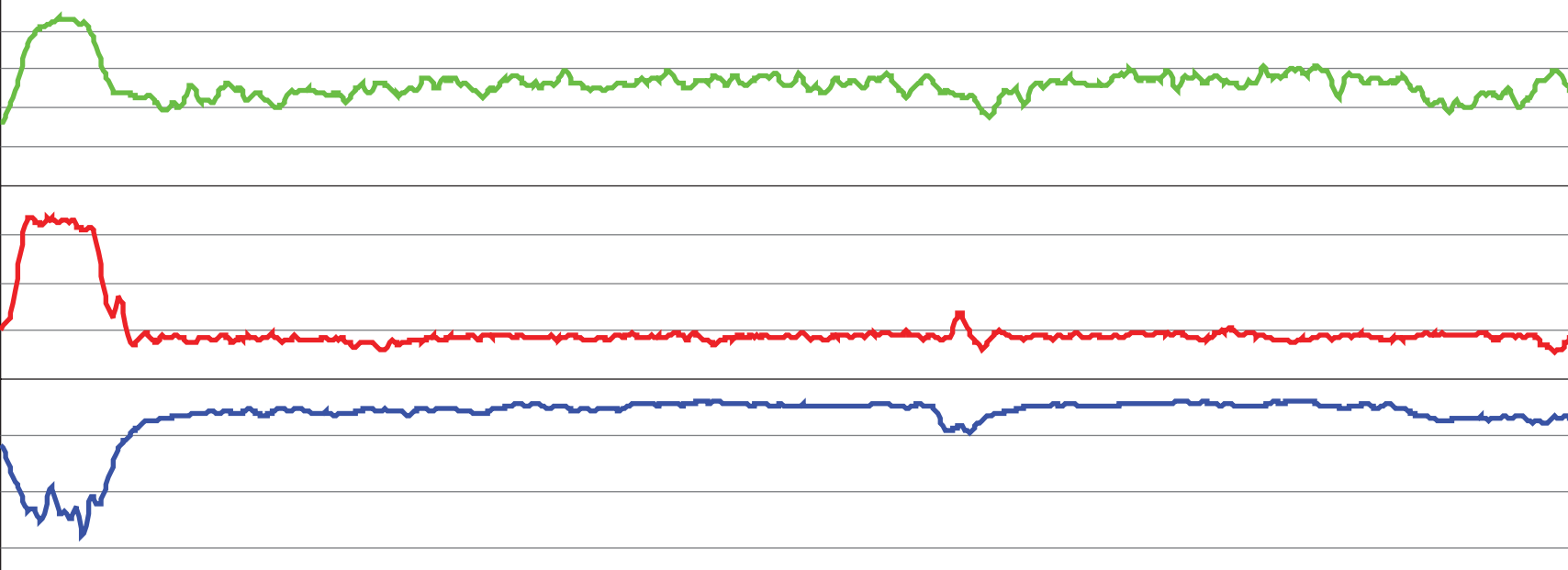
SANDSTONE 80%, fine grained, GN grey, litho- feldspathic rare tuffaceous; intermixed with SILTSTONE 20%, dark brown black, occasional coal banded sandy in part; fresh

SILTSTONE 90%, dark grey brown, rare sandy rare coal banded; intermixed with SANDSTONE 10%, fine grained, grey lithic rare clayey; fresh

COAL UNDIFF., black; fresh

SILTSTONE 90%, dark grey brown, rare sandy rare coal banded; intermixed with SANDSTONE 10%, fine grained, grey lithic rare clayey; fresh

GAMMA api
Compensated
Limestone Neutron



Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			814		SILTSTONE 90%, dark grey brown, rare sandy/rare coal banded; intermixed with SANDSTONE 10%, fine grained, grey/ lithic rare clayey; fresh	50	1.5	30
			815		SILTSTONE 90%, dark grey brown, rare sandy/rare coal banded; intermixed with SANDSTONE 10%, fine grained, grey/ lithic rare clayey; fresh	100	2.0	30
		816	816		COAL, black; feldspathic occasional silty sandy; fresh	150	2.2	60
		017DA_DB	817		COAL, black; feldspathic occasional silty sandy; fresh	200	2.2	60
			818		SILTSTONE 90%, dark grey brown, coal banded in part; intermixed with SANDSTONE 10%, fine grained, grey/ light grey, rare tuffaceous lithic; fresh	250	2.2	30
			819		SILTSTONE 90%, dark grey brown, coal banded in part; intermixed with SANDSTONE 10%, fine grained, grey/ light grey, rare tuffaceous lithic; fresh	300	2.2	30
			820		SILTSTONE 90%, dark grey brown, coal banded in part; intermixed with SANDSTONE 10%, fine grained, grey/ light grey, rare tuffaceous lithic; fresh	350	2.2	30
			821		SILTSTONE 90%, dark grey brown, coal banded in part; intermixed with SANDSTONE 10%, fine grained, grey/ light grey, rare tuffaceous lithic; fresh	400	2.2	30
			822		SILTSTONE 90%, dark grey brown, coal banded in part; intermixed with SANDSTONE 10%, fine grained, grey/ light grey, rare tuffaceous lithic; fresh	450	2.2	30
			823		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted rare coal banded; intermixed with SILTSTONE 20%, dark grey brown, occasional coal banded FR; fresh	500	2.2	30
			824		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted rare coal banded; intermixed with SILTSTONE 20%, dark grey brown, occasional coal banded FR; fresh	550	2.2	30
			825		SANDSTONE 80%, fine grained, grey/ lithic moderately sorted rare coal banded; intermixed with SILTSTONE 20%, dark grey brown, occasional coal banded FR; fresh	600	2.2	30
		826	826		COAL, black; coal banded silty throughout dull, minor bright bands(<1%); fresh	650	2.2	30
		827	827		COAL, black; coal banded silty throughout dull, minor bright bands(<1%); fresh	700	2.2	30
			828		SANDSTONE, fine grained, dark grey white, silty in part lithic clayey; fresh	750	2.2	30
			829		COAL 70%, black, dull, minor bright bands (<1%) coal banded silty in part; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey brown, sandy in part clayey in part; fresh	800	2.2	30
			830		COAL 70%, black, dull, minor bright bands (<1%) coal banded silty in part; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey brown, sandy in part clayey in part; fresh	850	2.2	30
			831		SANDSTONE 80%, fine grained, black, lithic moderately sorted rare clayey; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh	900	2.2	30
			832		SANDSTONE 80%, fine grained, black, lithic moderately sorted rare clayey; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh	950	2.2	30
			833		SANDSTONE 80%, fine grained, black, lithic moderately sorted rare clayey; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh	1000	2.2	30
			834		SANDSTONE 80%, fine grained, black, lithic moderately sorted rare clayey; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh	1050	2.2	30
			835		SILTSTONE 50%, dark grey brown, coal banded in part; intermixed with COAL 30%, black, dull, minor bright bands(<1%) coal banded silty in part; intermixed with SANDSTONE 20%, fine grained, grey/ dark grey, lithic poorly to moderately sorted fresh	1100	2.2	30
			836		SILTSTONE 50%, dark grey brown, coal banded in part; intermixed with COAL 30%, black, dull, minor bright bands(<1%) coal banded silty in part; intermixed with SANDSTONE 20%, fine grained, grey/ dark grey, lithic poorly to moderately sorted fresh	1150	2.2	30

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			837		SILTSTONE 50%, dark grey brown, coal banded in part; intermixed with COAL 30%, black, dull, minor bright bands(>1%) coal banded silty in part; intermixed with SANDSTONE 20%, fine grained, grey dark grey, lithic poorly to moderately sorted, fresh			
			838		SILTSTONE 90%, dark grey brown, coal banded rare coaly FR; intermixed with SANDSTONE 10%, fine grained, dark grey, lithic moderately sorted clayey in part; fresh			
			839		SILTSTONE 70%, dark grey brown, rare sandy coal banded laminations; intermixed with CARBONACEOUS SILTSTONE 30%, dark grey black, coaly FR; fresh			
			840					
			841					
			842					
			843					
			844					
			845					
			846					
			847					
			848					
			849					
			850					
			851					
			852					
			853					
			854					
			855					
			856					
			857					
			858		SILTSTONE, dark grey brown, occasional coal banded rare sandy; fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			859		SILTSTONE, dark grey brown, occasional coal banded rare sandy; fresh	50	1.5	30
			860			100	2.0	60
			861		SILTSTONE 80%, dark grey brown, coaly FR mainly dull, frequent bright bands(>10% XM; intermixed with SANDSTONE 20%, grey brown, coal banded FR lithic; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey black; fresh	150	2.5	90
			862					
			863					
			864		SILTSTONE 50%, dark grey brown, rare coal banded occasional moderately sorted; intermixed with SANDSTONE 50%, dark grey, lithic moderately sorted rare clayey; fresh			
			865					
			866					
			867					
			868		SILTSTONE 60%, dark grey brown, occasional moderately sorted coal banded in part; intermixed with SANDSTONE 20%, dark grey, lithic occasional clayey; intermixed with CARBONACEOUS SILTSTONE 20%, dark grey black, rare coaly FR; fresh			
			869					
			870					
			871					
			872					
			873					
			874					
			875					
			876					
			877					
			878					
			878.21					
			879		COAL, black, interbanded dull & bright (>40%); fresh			
			879.21					
			880		SANDSTONE 80%, fine grained, light grey brown, lithic moderately sorted possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh			
			881		COAL, black, dull, minor bright bands(<1%); fresh			

SANDSTONE 80%, fine grained, light grey brown, lithic moderately sorted possibly tuffaceous in part; intermixed with SILTSTONE 20%, dark grey brown, coal banded in part; fresh

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			904.98		COAL, black, bright with dull bands(<50%) rare coal banded silty; fresh	50	1.5	30
			904.9905					
			906.89		SANDSTONE, grey brown, lithic moderately sorted; fresh	50	1.5	30
			906		COAL, black, dull; minor bright bands(<1%); fresh	50	1.5	30
			908.9907		COAL 90%, black, bright with dull bands (<50%) rare coal banded silty; intermixed with SANDSTONE 10%, grey brown, lithic moderately sorted; fresh	50	1.5	30
			908					
			908.43		CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh	50	1.5	30
			909					
			910		COAL, black, dull; minor bright bands(<1%); fresh	50	1.5	30
			910.74		CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh	50	1.5	30
			911		COAL, black, dull; minor bright bands(<1%); fresh	50	1.5	30
			911.5		CARBONACEOUS SILTSTONE 10%, brown black, rare sandy occasional silty; fresh	50	1.5	30
			912					
			913		CARBONACEOUS SILTSTONE 50%, dark grey black, coaly in part; intermixed with SILTSTONE 50%, brown, occasional sandy tending to inferior laminations; fresh	50	1.5	30
			914		COAL, black, dull; minor bright bands(<1%); fresh	50	1.5	30
			914.89					
			914.9915		CARBONACEOUS SILTSTONE 50%, dark grey black, coaly in part; intermixed with SILTSTONE 50%, brown, occasional sandy tending to inferior laminations; fresh	50	1.5	30
			916		COAL, black, dull; minor bright bands(<1%); fresh	50	1.5	30
			917		SANDSTONE, fine grained, brown grey, silty in part rare clayey; fresh	50	1.5	30
			918					
			919		CARBONACEOUS SILTSTONE 40%, dark grey, black, silty in part; intermixed with COAL 30%, black, dull; minor bright bands(<1%) coal banded silty in part; intermixed with SANDSTONE 30%, fine grained, grey brown, lithic occasional clayey; fresh	50	1.5	30
			920					
			921		CARBONACEOUS SILTSTONE 80%, black, coaly in part; intermixed with SILTSTONE 20%, grey black, occasional coal banded tuffaceous in part; fresh	50	1.5	30
			922					
			923					
			924					
			925		SANDSTONE 90%, fine grained, grey white, lithic- feldspathic occasional coal banded FR; intermixed with COAL 10%, black, coal banded silty in part; fresh	50	1.5	30
			926					
			927					

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			927		SANDSTONE, fine grained, grey light grey, coal banded silty FR litho- feldspathic; fresh	50	1.5	30
			928			100	2.0	60
			929			150	2.2	90
			930		SANDSTONE 90%, fine grained, grey light grey, litho- feldspathic moderately sorted; intermixed with COAL 10%, black, coal banded in part; fresh			
			931					
			932					
			933		SILTSTONE 50%, dark grey brown, coal banded throughout; intermixed with SANDSTONE 50%, fine grained, dark grey brown, lithic occasional coal/banded laminations; fresh			
			934					
			934.21		COAL, black, dull, minor bright bands (>1%); fresh			
			935		SILTSTONE 50%, dark grey brown, coal banded throughout; intermixed with SANDSTONE 50%, fine grained, dark grey brown, lithic occasional coal/banded laminations; fresh			
			936		SANDSTONE 60%, fine grained, greyish brown, lithic moderately sorted low sphericity, sub-rounded; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, partly carbonaceous throughout laminations; with STONY COAL 10%, black, dull, minor bright bands(>1%) laminations; fresh			
			937					
			938					
			939		SILTSTONE 80%, brownish black, partly carbonaceous laminations occasional XS; intermixed with SANDSTONE 20%, fine-medium grained, greyish brown, lithic moderately sorted low sphericity, sub-rounded silty; with STONY COAL 20%, black, dull, minor bright bands(>1%); dull(<1% bright); fresh			
			940					
			941					
			942		SANDSTONE 90%, fine grained, greyish brown, lithic silty carbonaceous XF; intermixed with SILTSTONE 10%, grey, XS in part occasional sandy; fresh			
			943					
			944					
			945					
			945.5		COAL, black, dull; tends to stony dull(<1% bright); fresh			
			946					
			946.28		SANDSTONE 50%, fine grained, greyish brown, lithic poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 50%, brownish black, laminations shaly in part; fresh			
			947					
			948		COAL, black, dull; tends to stony dull(<1% bright); fresh			
			949		SANDSTONE 40%, fine grained, greyish brown, lithic tuffaceous XF poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 30%, brownish black, laminations shaly in part; with STONY COAL 30%, brownish black, dull; tends to stony dull(<1% bright); fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces			
			950		SANDSTONE 40%, fine grained, greyish brown, lithic tuffaceous XF poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 30% brownish black, laminations shaly in part; with STONY COAL 30%, brownish black, dull, tends to stony dull (<1% bright); fresh		50	1.5	30
			951		SANDSTONE 40%, fine grained, greyish brown, lithic tuffaceous XF poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 30% brownish black, laminations shaly in part; with STONY COAL 30%, brownish black, dull, tends to stony dull (<1% bright); fresh		100	2.0	45
			952		CARBONACEOUS SILTSTONE 80% brownish black, dull, tends to stony shaly in part; intermixed with SANDSTONE 20%, very fine-grained, brownish grey, tuffaceous XF lithic poorly to moderately sorted; fresh		150	2.5	60
			953		CARBONACEOUS SILTSTONE 60%, black, partly carbonaceous laminations; intermixed with SANDSTONE 40%, very fine-grained, brownish grey, lithic silty poorly sorted; fresh		200	2.5	75
			954		CARBONACEOUS SILTSTONE 60%, black, partly carbonaceous laminations; intermixed with SANDSTONE 40%, very fine-grained, brownish grey, lithic silty poorly sorted; fresh		250	2.5	90
			955		CARBONACEOUS SILTSTONE 60%, black, partly carbonaceous laminations; intermixed with SANDSTONE 40%, very fine-grained, brownish grey, lithic silty poorly sorted; fresh		300	2.5	90
			956		CARBONACEOUS SILTSTONE 60%, black, partly carbonaceous laminations; intermixed with SANDSTONE 40%, very fine-grained, brownish grey, lithic silty poorly sorted; fresh		350	2.5	90
			957		SILTSTONE 60%, grey, micaceous TH sandy in part; intermixed with CARBONACEOUS SILTSTONE 20%, brownish black, shaly in part; with SANDSTONE 20%, very fine-grained, grey, silty throughout poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh		400	2.5	90
			958		SILTSTONE 60%, grey, micaceous TH sandy in part; intermixed with CARBONACEOUS SILTSTONE 20%, brownish black, shaly in part; with SANDSTONE 20%, very fine-grained, grey, silty throughout poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh		450	2.5	90
			959		SILTSTONE 60%, grey, micaceous TH sandy in part; intermixed with CARBONACEOUS SILTSTONE 20%, brownish black, shaly in part; with SANDSTONE 20%, very fine-grained, grey, silty throughout poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh		500	2.5	90
			960		SILTSTONE 70%, brownish grey, XS in part laminations; intermixed with SANDSTONE 30%, very fine-grained, brownish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh		550	2.5	90
			961		SILTSTONE 70%, brownish grey, XS in part laminations; intermixed with SANDSTONE 30%, very fine-grained, brownish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh		600	2.5	90
			962		SILTSTONE 70%, brownish grey, XS in part laminations; intermixed with SANDSTONE 30%, very fine-grained, brownish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh		650	2.5	90
			963		SANDSTONE 60%, fine grained, brownish grey, lithic poorly sorted silty throughout; intermixed with SILTSTONE 40%, brownish black, XS shaly in part; fresh	700	2.5	90	
			964		SANDSTONE 60%, fine grained, brownish grey, lithic poorly sorted silty throughout; intermixed with SILTSTONE 40%, brownish black, XS shaly in part; fresh	750	2.5	90	
			965		SANDSTONE 60%, fine grained, brownish grey, lithic poorly sorted silty throughout; intermixed with SILTSTONE 40%, brownish black, XS shaly in part; fresh	800	2.5	90	
			966		SANDSTONE 50%, very fine-grained, grey, lithic poorly to moderately sorted high sphericity, sub-rounded to sub-angular; intermixed with CARBONACEOUS SILTSTONE 50%, brownish grey, sandy in part laminations; fresh	850	2.5	90	
			967		SANDSTONE 50%, very fine-grained, grey, lithic poorly to moderately sorted high sphericity, sub-rounded to sub-angular; intermixed with CARBONACEOUS SILTSTONE 50%, brownish grey, sandy in part laminations; fresh	900	2.5	90	
			968		SANDSTONE 50%, very fine-grained, grey, lithic poorly to moderately sorted high sphericity, sub-rounded to sub-angular; intermixed with CARBONACEOUS SILTSTONE 50%, brownish grey, sandy in part laminations; fresh	950	2.5	90	
			969		CARBONACEOUS SILTSTONE 40%, brownish black, laminations sandy in part; intermixed with SANDSTONE 40%, very fine-grained, greyish off-white, lithic laminations in part poorly to moderately sorted; with STONY COAL 20%, black, dull, minor bright bands(>1%); fresh	1000	2.5	90	
			970		CARBONACEOUS SILTSTONE 40%, brownish black, laminations sandy in part; intermixed with SANDSTONE 40%, very fine-grained, greyish off-white, lithic laminations in part poorly to moderately sorted; with STONY COAL 20%, black, dull, minor bright bands(>1%); fresh	1050	2.5	90	
			971		CARBONACEOUS SILTSTONE 40%, brownish black, laminations sandy in part; intermixed with SANDSTONE 40%, very fine-grained, greyish off-white, lithic laminations in part poorly to moderately sorted; with STONY COAL 20%, black, dull, minor bright bands(>1%); fresh	1100	2.5	90	
			972		SILTSTONE 70%, brownish grey, laminations XS in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic poorly to moderately sorted silty throughout; fresh	1150	2.5	90	

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			973		SILTSTONE 70%, brownish grey, laminations XS in part; intermixed with SANDSTONE 30%, fine grained, greyish off-white, lithic poorly to moderately sorted silty throughout;	50	1.5	30
			974		poorly to moderately sorted silty throughout; fresh	100	2.5	30
			975		SANDSTONE 80%, fine grained, greyish off-white, lithic poorly to moderately sorted low sphericity, sub-angular silty, intermixed with SILTSTONE 20%, brownish grey, shaly in part laminations; fresh	150	2.5	30
			976			200	2.5	30
			977				2.5	30
			978		SANDSTONE 60%, fine grained, greyish off-white, lithic poorly to moderately sorted silty throughout; intermixed with SILTSTONE 40%, brownish grey, shaly in part laminations; fresh		2.5	30
			979				2.5	30
			980				2.5	30
			981		SANDSTONE, fine-medium grained, whitish grey, lithic silty poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh		2.5	30
			982				2.5	30
			983				2.5	30
			984		SANDSTONE 90%, fine-medium grained, whitish grey, lithic silty poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 10%, brownish grey, shaly in part rare micaceous; fresh		2.5	30
			985				2.5	30
			986				2.5	30
			987		SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted silty; intermixed with SILTSTONE 20%, brownish grey, XS in part micaceous in part; fresh		2.5	30
			988				2.5	30
			989				2.5	30
			990		SANDSTONE, fine grained, whitish grey, lithic silty throughout poorly sorted; fresh		2.5	30
			991				2.5	30
			992				2.5	30
			993		SANDSTONE 90%, fine grained, whitish grey, lithic silty throughout moderately sorted; intermixed with SILTSTONE 10%, brownish grey, sandy in part; fresh		2.5	30
			994				2.5	30
			995				2.5	30

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
			1018		SANDSTONE 80%, very fine-fine grained, whitish grey, lithic clayey in part; intermixed with SILTSTONE 20%, brownish grey, micaceous throughout; fresh	GAMMA api	Compensated	Limestone Neutron
			1019			50	1.5	30
			1020			100	2.0	60
			1021			150	2.5	90
			1022					
			1022.8		COAL, black, dull, minor bright bands(<1%); fresh			
			1023					
			1024		SILTSTONE 50%, brownish grey, micaceous throughout sandy in part; intermixed with SANDSTONE 30%, very fine-fine grained, whitish grey, clayey throughout lithic; with CARBONACEOUS SILTSTONE 20%, brownish black, partly carbonaceous shaly in part; fresh			
			1025					
			1026					
			1027		SILTSTONE 70%, brownish grey, XS in part; intermixed with SANDSTONE 30%, very fine-fine grained, greyish off-white, lithic silty in part moderately sorted; fresh			
			1028					
			1029					
			1030					
			1031		SILTSTONE 60%, brownish grey, XS in part; intermixed with SANDSTONE 40%, whitish grey, clayey in part lithic; fresh			
			1032					
			1033		SANDSTONE 60%, fine grained, whitish grey, lithic poorly to moderately sorted high sphericity, sub-angular; intermixed with SILTSTONE 30%, brownish grey, XS in part micaceous in part; with STONY COAL 10%, black, dull, minor bright bands(>1%); fresh			
			1034					
			1035					
			1036		SILTSTONE 70%, brownish black, occasional shaly XS in part; intermixed with SANDSTONE 30%, whitish grey, lithic moderately sorted low sphericity, sub-rounded to sub-angular; fresh			
			1037					
			1038					
			1039					
			1040		SILTSTONE 70%, brownish grey, sandy in part micaceous; intermixed with SANDSTONE 20%, fine grained, whitish grey, lithic occasional silty; with STONY COAL 10%, brownish black, carbonaceous stony; fresh			

Formation	Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
						GAMMA api	Compensated	Limestone Neutron
			1041		SILTSTONE 70%, brownish grey, sandy in part micaceous; intermixed with SANDSTONE 20%, fine grained, whitish grey, lithic occasional silty; with STONY COAL 10%, brownish black, carbonaceous stony; fresh	50	1.5	30
			1042		SANDSTONE 70%, fine grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 30%, brownish grey, laminations micaceous; fresh	100	2.0	40
			1043		SANDSTONE 40%, fine-medium grained, whitish grey, rare lutefaceous lithic poorly to moderately sorted; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, partly carbonaceous laminations; with STONY COAL 20%, black, coaly in part; fresh	150	2.2	50
			1044		SANDSTONE 80%, fine grained, whitish grey, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 20%, brownish grey, laminations clayey; fresh	200	2.4	60
			1045		SANDSTONE 50%, fine grained, whitish grey, lithic silty throughout poorly to moderately sorted; intermixed with SILTSTONE 30%, brownish grey, laminations sandy in part; with CARBONACEOUS SILTSTONE 20%, black, shaly in part; fresh	250	2.5	70
			1046		SANDSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	300	2.5	80
			1047		COAL, black, stony in part; fresh	350	2.5	85
			1048		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	400	2.5	90
			1049		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	450	2.5	90
			1050		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	500	2.5	90
			1051		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	550	2.5	90
			1052		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	600	2.5	90
			1053		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	650	2.5	90
			1054		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	700	2.5	90
			1055		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	750	2.5	90
			1056		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	800	2.5	90
			1057		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	850	2.5	90
			1058		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	900	2.5	90
			1059		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	950	2.5	90
			1060		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	1000	2.5	90
			1061		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	1050	2.5	90
			1062		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	1100	2.5	90
			1063		SILTSTONE 60%, brownish grey, laminations; intermixed with CARBONACEOUS SILTSTONE 40%, brownish black, laminations shaly in part; fresh	1150	2.5	90

SANDSTONE 40%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular, intermixed with SILTSTONE 40%, brownish black, occasional XS laminations; with STONY COAL 20%, black, coaly stony; fresh

Formation		Seam	Sample Number	Depth below Collar(m)	Graphic Log	DESCRIPTION	Geophysical Traces		
							GAMMA api	Compensated	Limestone Neutron
			1064			<p>SANDSTONE 40%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 40%, brownish black, occasional XS laminations; with STONY COAL 20%, black, coaly stony, fresh</p> <p>SANDSTONE 60%, fine grained, grey, lithic moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 40%, brownish grey, laminations in part micaceous; fresh</p> <p>SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted; intermixed with SILTSTONE 20%, brownish grey, RR XS sandy; fresh</p> <p>SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, rare XS sandy in part; fresh</p>	50	1.5	30
			1065				100	2.0	60
			1066				150	2.2	90
			1067				200	2.3	
			1068					2.4	
			1069					2.5	
			1070					2.5	
			1071					2.5	
			1072					2.5	
			1073					2.5	
			1074				2.5		
			1075				2.5		
			1076				2.5		
			1077				2.5		
			1078				2.5		
			1079				2.5		
			1080				2.5		
			1081				2.5		
			1082				2.5		
			1083				2.5		
			1084				2.5		
			1085				2.5		

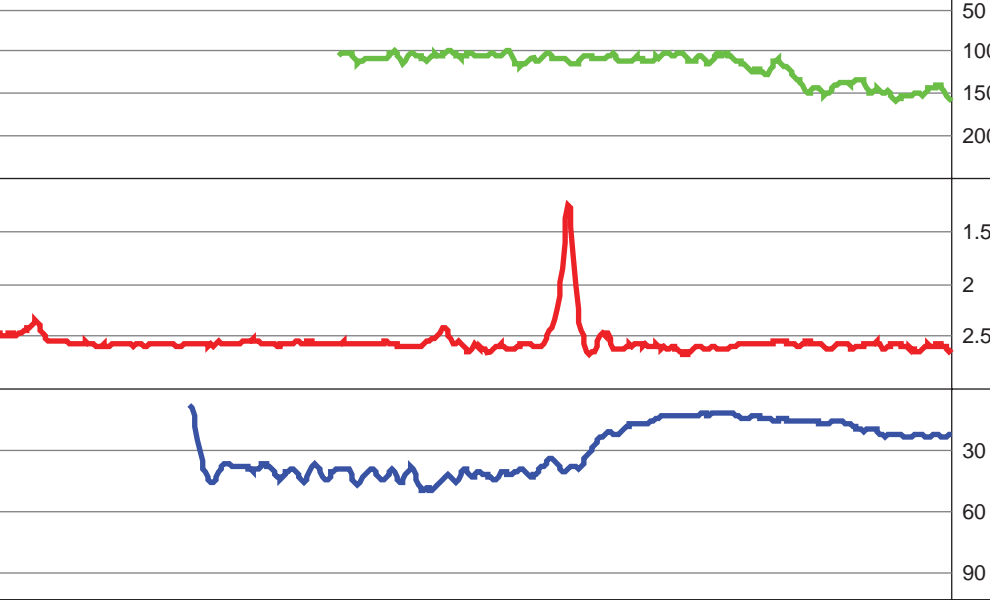
Formation		Seam		Sample Number		Depth below Collar(m)		Graphic Log		DESCRIPTION		Geophysical Traces									
				1086								50									
				1087								100									
				1088								150									
				1089								200									
				1090																	
				1091																	
				1092																	
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				1101																	
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				1103																	
				1104																	
				1105																	
				1106																	
				1107																	
				1108																	

Geophysical Traces

GAMMA api

Compensated

Limestone Neutron



1086 SANDSTONE 80%, fine grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; intermixed with SILTSTONE 20%, brownish grey, rare XS sandy in part; fresh

1087 SANDSTONE, fine-medium grained, whitish grey, lithic poorly to moderately sorted low sphericity, sub-rounded to sub-angular; fresh

1088 SANDSTONE 90%, fine-medium grained, whitish grey, silty in part lithic, intermixed with SILTSTONE 10%, brownish grey, laminations micaceous in part; fresh

1091 SANDSTONE 60%, fine grained, grey, lithic poorly to moderately sorted low sphericity, sub-angular; intermixed with SILTSTONE 40%, brownish grey, micaceous in part laminations; fresh

1092 SANDSTONE 70%, brownish grey, rare micaceous; intermixed with SANDSTONE 30%, fine-medium grained, greyish off-white, lithic moderately sorted high sphericity, sub-rounded to sub-angular; fresh