

Cmaster_Code	English
001	Casing Or Surface
002	Open Space
003	Zero Thickness Tag
004	Core Lost
005	Open Mine
010	Deformed Rock
011	Slump Or Mudflow
012	Slump Deposits
013	Slumped Shale
014	Slumped Sandy Shale
015	Slumped Sandstone
016	Mudflow Deposits
017	Shale Mudflows
018	Sandy Shale Mudflow
019	Sandstone Mudflow
020	Coal
021	Common Banded Coal
022	Coal with Bone Layers
023	Coal with Bone Streaks
024	Dull Or Cannel Coal
027	Coal with Shale Layers
028	Coal with Shale Streaks
029	Coal with Pyrite Streaks
030	Impure Coal
032	Bone with Coal Layers
033	Bone with Coal Streaks
034	Bone
037	Bone with Shale Layers
038	Bone with Shale Streaks
039	Bone with Pyrite Streaks
070	Ironstone
073	Streaked Ironstone
074	Massive Ironstone
076	Nodular Ironstone
077	Oolitic Ironstone
079	Ironstone with Fossil Shells
090	Flint Clay
091	Brecciated Flint Clay
092	Layered Flint Clay
094	Massive Flint Clay
095	Mosaic Flint Clay
096	Nodular Flint Clay
097	Oolitic Flint Clay
100	Shale
112	Black Layered Shale
113	Black Shale with Coal Streaks
114	Black Shale
115	Black Churned Shale

117	Black Fireclay
119	Black Shale with Fossil Shells
122	Dark Gray Layered Shale
123	Dark Gray Shale with Coal Streaks
124	Dark Gray Shale
125	Dark Gray Churned Shale
127	Dark Gray Fireclay
129	Dark Gray Shale with Fossil Shells
132	Layered Light Gray Green Shale
133	Light Gray Green Shale with Coal Streaks
134	Light Gray Green Shale
135	Light Gray Churned Shale
137	Light Gray Green Fireclay
139	Light Gray Green Shale with Fossil Shells
144	Green Shale
147	Green Claystone
149	Green Shale with Fossil Shells
150	Red and Green Shale (Undif)
154	Red and Green Shale
157	Red and Green Claystone
159	Red and Green Shale with Fossil Shells
164	Red Shale
167	Red Claystone
169	Red Shale with Fossil Shells
174	Gray/Green Shale
177	Gray/Green Fireclay
179	Gray/Green Shale with Fossil Shells
184	Red/Red Green Shale
187	Red/Red Green Claystone
189	Red/Red Green Shale with Fossil Shells
200	Shale with Limestone Nodules
224	Dark Gray Shale with Limestone Nodules
225	Dark Gray Churned Shale with Limestone Nodules
227	Dark Gray Fireclay with Limestone Nodules
229	Dark Gray Shale with Limestone Nodules and Fossil Shells
234	Light Gray Green Shale with Limestone Nodules
237	Light Gray Green Fireclay with Limestone Nodules
239	Light Gray Green Shale with Limestone Nodules and Fossil Shells
244	Green Shale with Limestone Nodules
247	Green Claystone with Limestone Nodules
249	Green Shale with Limestone Nodules and Fossil Shells
254	Red and Green Shale with Limestone Nodules
257	Red and Green Claystone with Limestone Nodules
264	Red Shale with Limestone Nodules
267	Red Claystone with Limestone Nodules
274	Gray/Green Shale with Limestone Nodules
277	Gray/Green Fireclay with Limestone Nodules
279	Gray/Green Shale with Limestone Nodules and Fossil Shells
284	Red/Red Green Shale with Limestone Nodules
287	Red/Red Green Claystone with Limestone Nodules
300	Sandy Shale
312	Black Shale and Interbedded Sandstone
312.5	Black Shale and Interbedded Rippled Sandstone

312.6	Black Shale and Interbedded Flat Sandstone
312.8	Black Shale and Interbedded Sandstone with Burrows
313	Black Shale with Sandstone Streaks
313.8	Black Shale with Sandstone Streaks and Burrows
314	Black Massive Sandy Shale
314.3	Black Sandy Shale with Coal Streaks
315	Black Massive Churned Sandy Shale
316	Black Churned Sandy Shale
317	Black Sandy Fireclay
318	Black Burrowed Sandy Shale
319	Black Sandy Shale with Fossil Shells
322	Dark Gray Shale and Interbedded Sandstone
322.5	Dark Gray Shale and Interbedded Rippled Sandstone
322.6	Dark Gray Shale and Interbedded Flat Sandstone
322.8	Dark Gray Shale and Interbedded Sandstone with Burrows
323	Dark Gray Shale with Sandstone Streaks
323.8	Dark Gray Shale with Sandstone Streaks and Burrows
324	Dark Gray Massive Sandy Shale
324.3	Dark Gray Sandy Shale with Coal Streaks
325	Dark Gray Massive Churned Sandy Shale
326	Dark Gray Churned Sandy Shale
327	Dark Gray Sandy Fireclay
328	Dark Gray Burrowed Sandy Shale
329	Dark Gray Sandy Shale with Fossil Shells
332	Light Gray Green Shale and Interbedded Sandstone
332.5	Light Gray Green Shale and Interbedded Rippled Sandstone
332.6	Light Gray Green Shale and Interbedded Flat Sandstone
332.8	Light Gray Green Shale and Interbedded Sandstone with Burrows
333	Light Gray Green Shale with Sandstone Streaks
333.8	Light Gray Green Shale with Sandstone Streaks and Burrows
334	Light Gray Green Massive Sandy Shale
334.3	Light Gray Carb Shaley Siltstone
335	Light Gray Green Massive Churned Sandy Shale
336	Light Gray Green Churned Sandy Shale
337	Light Gray Green Sandy Fireclay
338	Light Gray Green Burrowed Sandy Shale
339	Light Gray Green Sandy Shale with Fossil Shells
342	Green Shale and Interbedded Sandstone
342.5	Green Shale and Interbedded Rippled Sandstone
342.6	Green Shale and Interbedded Flat Sandstone
342.8	Green Shale and Interbedded Sandstone with Burrows
343	Green Shale with Sandstone Streaks
343.8	Green Shale with Sandstone Streaks and Burrows
344	Green Massive Sandy Shale
345	Green Massive Churned Sandy Shale
347	Green Sandy Claystone
349	Green Sandy Shale with Fossil Shells
354	Red and Green Sandy Shale
357	Red and Green Sandy Claystone
367	Red Sandy Claystone
372	Gray/Green Shale and Interbedded Sandstone
373	Gray/Green Shale with Sandstone Streaks
374	Gray/Green Sandy Shale
377	Gray/Green Sandy Fireclay
379	Gray/Green Sandy Shale with Fossil Shells

400	Sandy Shale with Limestone Nodules
424	Dark Gray Sandy Shale with Limestone Nodules
427	Dark Gray Sandy Fireclay with Limestone Nodules
434	Light Gray Green Sandy Shale with Limestone Nodules
437	Light Gray Green Sandy Fireclay with Limestone Nodules
444	Green Sandy Shale with Limestone Nodules
447	Green Sandy Claystone with Limestone Nodules
457	Red and Green Sandy Claystone with Limestone Nodules
467	Red Sandy Claystone with Limestone Nodules
474	Gray/Green Sandy Shale with Limestone Nodules
477	Gray/Green Sandy Fireclay with Limestone Nodules
500	Sandstone
511	Crossbed Lime Sandstone
512	Layered Lime Sandstone
513	Streaked Lime Sandstone
514	Massive Lime Sandstone
519	Lime Sandstone with Fossil Shells
521	Volcanic Crossbed Sandstone
523	Volcanic Sandstone with Shale Streaks
524	Volcanic Massive Sandstone
541	Gray Crossbed Sandstone
543	Gray Sandstone with Shale Streaks
543.5	Gray Rippled Sandstone with Shale Streaks
543.6	Gray Sandstone with Flat Shale Streaks
543.8	Gray Sandstone with Shale Streaks and Burrows
544	Gray Massive Sandstone
545	Gray Massive Churned Sandstone
546	Gray Churned Sandstone
547	Gray Rooted Sandstone
548	Gray Burrowed Sandstone
549	Gray Sandstone with Fossil Shells
551	Crystallized Crossbed Sandstone
553	Crystallized Sandstone with Shale Streaks
553.5	Crystallized Rippled Sandstone with Shale Streaks
553.6	Crystallized Sandstone with Flat Shale Streaks
553.8	Crystallized Sandstone with Shale Streaks and Burrows
554	Crystallized Massive Sandstone
555	Crystallized Massive Churned Sandstone
556	Crystallized Churned Sandstone
557	Crystallized Rooted Sandstone
558	Crystallized Burrowed Sandstone
559	Crystallized Sandstone with Fossil Shells
561	Hard Crossbed Sandstone
563	Hard Sandstone with Shale Streaks
563.5	Hard Rippled Sandstone with Shale Streaks
563.6	Hard Sandstone with Flat Shale Streaks
563.8	Hard Sandstone with Shale Streaks and Burrows
564	Hard Massive Sandstone
569	Hard Sandstone with Fossil Shells
600	Carbonate Cemented Sandstone
641	Gray Crossbed Carbonate Cemented Sandstone
643	Gray Carbonate Cemented Sandstone with Shale Streaks

644	Gray Massive Carbonate Cemented Sandstone
646	Gray Churned Carbonate Cemented Sandstone
647	Gray Rooted Carbonate Cemented Sandstone
648	Gray Burrowed Carbonate Cemented Sandstone
649	Gray Carbonate Cemented Sandstone with Fossil Shells
700	Pebbly Sandstone and Conglomerate
712	Shale Pebble Lime Sandstone Conglomerate
716	Shale and Limestone Pebble Lime Sandstone Conglomerate
717	Limestone Pebble Lime Sandstone Conglomerate
725	Volcanic Rock Pebble Conglomerate
741	Gray Shale and /Or Ironstone Pebble Conglomerate
742	Gray Shale Pebble Conglomerate
743	Gray Ironstone Pebble Conglomerate
744	Gray Quartz Pebble Conglomerate
745	Gray Rock Pebble Conglomerate
747	Gray Limestone Pebble Conglomerate
748	Gray Sandstone with Coal Bands
749	Gray Sandstone with Coal Spars
751	Crystallized Shale and /Or Ironstone Pebble Conglomerate
752	Crystallized Shale Pebble Conglomerate
753	Crystallized Ironstone Pebble Conglomerate
754	Crystallized Quartz Pebble Conglomerate
758	Crystallized Sandstone with Coal Bands
759	Crystallized Sandstone with Coal Spars
761	Hard Shale and /Or Ironstone Pebble Conglomerate
762	Hard Shale Pebble Conglomerate
763	Hard Ironstone Pebble Conglomerate
764	Hard Quartz Pebble Conglomerate
768	Hard Sandstone with Coal Bands
769	Hard Sandstone with Coal Spars
772	Shale Breccia
782	Shale Pebble Shaley Limestone Breccia
786	Shell and Limestone Pebble Shaley Limestone Breccia
787	Limestone Pebble Shaley Limestone Breccia
792	Shale Pebble Limestone Breccia
796	Shell and Limestone Pebble Limestone Breccia
797	Limestone Breccia
800	Shaley Limestone
802	Layered Fine Grained Shaley Limestone
804	Massive Fine Grained Shaley Limestone
805	Mosaic Fine Grained Shaley Limestone
806	Fine Grained Shaley Limestone with Limestone Nodules
807	Rooted Shaley Limestone
890	Shaley Limestone with Fossil Shells
892	Layered Fine Grained Shaley Limestone with Fossil Shells
894	Massive Fine Grained Shaley Limestone with Fossil Shells
896	Fine Grained Shaley Limestone with Limestone Nodules and Fossil She
900	Limestone
902	Layered Fine Grained Limestone
903	Streaked Fine Grained Limestone
904	Massive Fine Grained Limestone
905	Mosaic Fine Grained Limestone

906	Nodular Fine Grained Limestone
907	Rooted Limestone
990	Limestone with Fossil Shells
992	Layered Fine Grained Limestone with Fossil Shells
994	Massive Fine Grained Limestone with Fossil Shells
996	Nodular Fine Grained Limestone with Fossil Shells