

LITHOLOGIC DESCRIPTION OF USBM ROCK SPRINGS SITE 4 WELL PBC-8
SWSWNE SEC 15 T 18 N R 106 W SWEETWATER COUNTY, WYOMING

by
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Footage	Description
60.0-60.7	Oil shale, medium to dark gray, blocky fracturing, firm.
60.7-60.8	Ash, siltstone, buff, yellow, some very fine sand grains, porous.
60.8-64.4	Oil shale, dark gray to black, crumbly, parts easily horizontally, platy fracturing.
64.4-65.6	Oil shale, gray, greenish-gray, brownish-gray, hard, firm, occasional pod or layer dolomitic shale, brown to tan, very hard.
65.6-70.0	Oil shale as in 60.8-64.4, badly broken in part.
70.0-70.7	Oil shale, gray to black, parts easily horizontally, medium soft.
70.7-71.8	Missing core, assumed mostly burned.
71.8-72.1	Oil shale, dark gray to black, rubblized, slightly burned.
72.1-73.7	Oil shale, gray to black, some sooty black, burned along horizontal separations, partial retorting of shale chips, strongest burn from 73.2-73.6 ft.
73.7-73.8	Dolomite, gray, buff, microcrystalline, dense, some fractures containing oil stains of recent source.
73.8-74.3	Oil shale, gray to dark gray, dark brown, abundant crystals, highly fractured, some heat affect but not burned.
74.3-75.6	Oil shale, dark gray, brownish-gray, rare large crystal faces, large tan and purple dolomite inclusion at 75.2 ft.
75.6-77.3	Oil shale, dark gray to black, badly fractured, strong heat affect but not burned, diagonal natural fracture at 75.6-75.7 ft, occasional purple dolomite layers at 76.7 and 77.2 ft.
77.3-77.4	Missing core.
77.4-77.6	Ash, tuff, sandstone, gray, very fine-grained, porous, slightly friable fractures and some black tarry residue.
77.6-77.9	Oil shale, black distinctly interbedded with brown to dark brown, firm hard.
77.9-81.3	Oil shale, gray to dark gray, parts easily horizontally, probably slight heat affect, thin sandstone stringer, buff, very fine-grained, soft at 79.7 ft.
81.3-81.8	Oil shale, dark gray to black, separates very easily horizontally, partially burned.
81.8-82.1	Oil shale, medium to dark gray, some light gray, rubblized, strongly burned.
82.1-82.2	Missing core.
82.2-82.4	Sandstone, brown, gray, maroon, containing contorted shale layers, dark brown, oil stain, upper part brecciated. <u>M-Bed</u> .
82.4-82.5	Oil shale, black to sooty black, slightly burned.
82.5-82.7	Oil shale, dark gray to black, rubblized, burned.
82.7-83.9	Oil shale, gray, light brown to brown, some dark gray, parts easily horizontally.
83.9-85.5	Oil shale, tan to brownish-gray, gray to dark gray, firm, rare veinlet of crystals, scattered individual crystals, injection of white siltstone at 84.3 ft with associated pyrite crystals.

Footage	Description
85.5-85.9	Oil shale, black distinctly laminated with brown layers and pods, breaks easily horizontally.
85.9-86.1	Tuff, sandstone, gray, purple, very fine-grained, slight porosity.
86.1-86.3	Oil shale, dark gray, black with dolomite layer, brown, microcrystalline at 86.2 ft.
86.3-87.9	Oil shale, gray to black, platy fracturing, clayey.
87.9-88.0	Ash, tuff, sandstone, white, gray with gray and black shale partings and associated pyrite, soft, chalky, slight porosity.
88.0-90.7	Oil shale or mudstone, light gray to gray, tan, greenish-gray, soft when wet.