

LITHOLOGIC DESCRIPTION OF USBM ROCK SPRINGS SITE 4 WELL PBC-1
SWSWNE SEC 15 T 18 N R 106 W SWEETWATER COUNTY, WYOMING

by
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Footage	Description
50.0-50.8	Oil shale, brown and gray, laminated with some dark gray, none burned.
50.8-51.3	Oil shale, medium gray to dark gray.
51.3-53.6	Oil shale, green, grayish-green, greenish-gray, abundant scattered crystal faces, hard.
53.6-54.5	Oil shale, medium gray with occasional brown streaks, hard.
54.5-55.7	Oil shale, dark gray to black, firm, hard.
55.7-58.8	Oil shale, medium gray, hard, vertical natural fracture 56.9-57.6', some dark gray shale 58.5'.
58.8-60.4	Oil shale, gray to greenish gray, abundant, crystals, purple dolomitic inclusions at 59.0' and 59.4'.
60.4-61.6	Oil shale, dark gray to black, breaks easily, sandstone injected at 61.0', buff, yellow, gray, fine-grained.
61.6-63.7	Oil shale, medium gray, some dark gray, slightly heat affected, sandstone zone at 62.9', brown, slight porosity, medium soft.
63.7-64.0	Sandstone, yellow, brown, very fine to fine-grained, soft, friable, minor fractures filled with gray shale, trace red iron stain, porous.
64.0-66.0	Oil shale, gray to greenish-gray, some dark gray, some scattered crystals, parts easily horizontally.
66.0-67.5	Oil shale, dark gray to black, breaks easily, heat affected.
67.5-68.6	Oil shale as above, mildly burned, separates easily, soft.
68.6-70.0	Missing.
70.0-70.2	Oil shale as in 67.5-68.6'.
70.2-72.0	Missing.
72.0-72.8	Oil shale, sooty black, highly burned, scattered crystals.
72.8-73.6	Missing.
73.6-74.3	Oil shale, dark gray to black, abundant pyrite crystals, heat affected, parts easily horizontally.
74.3-75.5	Oil shale, dark gray, rare scattered crystals, medium soft horizontally.
75.5-76.5	Oil shale aa, no crystals.
76.5-76.7	Ash, tuff, sandstone, light gray to gray, fine-grained, slight porosity.
76.7-78.0	Oil shale, dark gray to black, parts easily, some heat affect.
78.0-78.5	Oil shale, medium gray to dark gray, parts easily.
78.5-78.8	Oil shale as above but with numerous small diagonal fracture faces, pseudo-slickensides, two angles of fracture; high angle is medium gray; low angle is black.
78.8-79.0	Oil shale as in 78.0-78.5'.
79.0-79.8	Oil shale, dark gray, badly broken, crumbly.

Footage	Description
79.8-81.0	Oil shale, black, slightly burned, separates easily horizontally, rare brown shale layers.
81.0-81.3	Sandstone, pink, buff, fine-grained, slight porosity, <u>M-bed</u> .
81.3-81.9	Oil shale, black, slightly burned, breaks easily.
81.9-83.7	Oil shale, medium gray, greenish-gray, some dark gray, breaks easily horizontally, slight heat affect.
83.7-83.8	Limestone or dolomite inclusion, buff, brecciated, fractures contain dead oil stain.
83.8-84.1	Oil shale as in 81.9-83.7'.
84.1-84.9	Oil shale, greenish-gray, tannish-gray, veinlets and individual crystals of pyrite, tan dolomitic pod inclusion at 84.5'.
84.9-85.2	Oil shale, brown, tan and greenish-gray with purple and tan dolomitic inclusions at 84.9' and 85.1'.
85.2-86.9	Oil shale, dark gray to black, some brown shale laminae, firm, natural vertical fracture 85.6-86.1'.
86.9-87.4	Oil shale, medium gray, clayey, slight heat affected horizontally.
87.4-87.6	Ash, siltstone, white to gray, some black shale partings, chalky, soft.
87.6-90.0	Oil shale or mudstone, gray, greenish-gray with broad bands of tan, hard, dolomitic shale.