LITHOLOGIC DESCRIPTION OF USBM ROCK SPRINGS SITE 4 WELL PBC-15 SWSWNE SEC 15 T 18 N R 105 W SWEETWATER COUNTY, WYOMING

by George F. (Pete) Dana

Footage	Description
60.0-61.3	Oil shale, dark gray to black, badly broken, parts easily horizontally.
61.3-61.4	Tuff, brown, dark brown, dolomitic, impregnated and saturated with dead oil stain.
61.4-63.0	Oil shale, gray to dark gray, badly broken.
63.0-64.8	Oil shale, gray, greenish-gray, some dark gray, abundant crystal faces. rare layers brown dolomitic shale.
64.8 - 65.2	Missing.
65.2 - 65.6	Oil shale, dark gray to black, badly broken.
65.6-70.3	Oil shale, as above, platy fracturing, strong heat affect but not burned, natural vertical fracture 66.8-67.6 ft, natural diagonal fracture containing oil stain at 69.9-70.0 ft.
70.3-74.8	Oil shale, gray to black, greenish-gray, tannish-gray, abundant crystals, purple and tan dolomite inclusions, pods, and streaks at 72.5, 72.6, 73.9, 74.3, and 74.7 ft, natural vertical and diagonal fractures at 71.0-71.6 ft, burned oil stain in these fractures, diagona fractures 72.7-73.2 ft.
74.8-76.0	Oil shale, dark gray to black, blocky fracturing in upper part, brown dolomite inclusion at 75.0 ft, parts easily horizontally below 75.5 ft.
76.0-76.2	Tuff, dolomite, gray to black, microcrystalline, oil stained, interbedde with underlying oil shale.
76.2-78.3	Oil shale, dark gray to black, some medium gray, platy fracturing, broken.
78.3-78.4	Ash or tuff, dolomitic, buff to brown, some red mineral stain, granular texture.
78.4-79.5	Oil shale, gray to dark gray, laminated in part with brown, zone of algal (?) material or tan dolomitic shale, hard at 79.2-79.5 ft.
79.5-80.4	Oil shale, black, some dark brown, parts easily horizontally, heat affected but not burned.
80.4-80.5	Missing.
80.5-80.9	Sandstone, pink, brown, maroon, very fine-grained, fractures of two kinds; one is fine, containing tan silty shale, the other kind is natural fractures, vertical, containing oil stain and a thin white mineral sheath.
80.9-81.8	Oil shale, dark gray to black, soft when wet, parts easily horizontally heat affected but not burned.
81.8-82.6	Missing.
82.6-83.2	Oil shale, gray, brownish-gray, badly broken, dark brown dolomite inclusion at 82.6 ft.
83.2-83.8	Oil shale, dark brown, broadly banded with tan dolomitic shale and some brown, badly broken.
83.8-84.7	Oil shale, gray to dark gray, greenish-gray, algal (?) zones at 84.1-84.3, and 84.6 ft, common scattered pyrite (?) crystal faces.

Footage	Description
84.7-85.4	Oil shale, black and brown, laminated and interbedded, parts easily horizontally.
85.4-85.5	Ash, tuff, gray, maroon, some yellow, silty minor gray shale laminae.
85.5-86.8	Oil shale, gray to dark gray, some brownish-gray, badly broken.
86.8-86.9	Ash, siltstone, white, with black shale and dark dolomite filling numerous fractures and partings, red iron stain (?), chalky in part.
86.9-89.9	Oil shale (?) or mudstone, tan to light brown, light gray to gray, clayey, soft when wet and parts easily horizontally.