

Also called Watson # 2

## LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 294 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah

Surface Elevation 5,504.8 feet

Mazhagany marker 372.2

Depth (feet)		Description
From	To	
0	35	Missing.
35	35.8	Oil shale, medium, dark brown and dark gray, well defined bedding.
35.8	44.2	Oil shale, lean, light brown and dark brown, medium to well defined bedding. Thickly disseminated spots of tan marlstone impart a speckled appearance to core. A 1/2-inch fracture filled with clear calcite crystals occurs at 43.8 feet.
44.2	46.3	Oil shale, lean, light brown and dark brown, massive to well defined bedding. Rare 1/4 to 1/2 inch bands of clear calcite. 0.1-foot bands of bluegray ash occurs at 44.2 feet, 44.9 feet, and 45.2 feet.
46.3	49.4	Tuff bed, light gray to dirty white, massive to poorly defined bedding. Some slightly contorted stringers of dark brown oil shale in top one-half foot. Common minute organic fragments in top one foot. 0.1-foot bands of dark brown oil shale occur at 47.3 feet and 48.0 feet. Common inclusions of calcite.
49.4	51.8	Oil shale, lean, tan to dark brown, well defined and contorted bedding. Common 0.2-foot and less bands of tan and light gray tuff beds containing stringers of dark brown and dark gray oil shale. Abundant calcite-filled fractures and inclusions. Oil shale horizontally intruded by tan volcanic ash occurs at 49.9 feet.
51.8	62.0	Tuff bed, light gray to dirty white, generally massive to faintly bedded. Rare stringers of dark brown oil shale. Common minute organic fragments. Common calcite inclusions. A 0.1-foot band of light brown oil shale with well defined bedding occurs at 52.6 feet.
62.0	70.6	Oil shale, lean, light brown and dark brown, massive to well defined bedding. Thickly disseminated 1/4-inch and less inclusions of clear and tan calcite. A 0.3-foot band of dark brown oil shale containing 1-inch and less inclusions of calcite crystals impregnated with bitumen occurs at 68.7 feet. A 0.2-foot band of tan and light gray ash containing abundant calcite occurs at 65.7 feet.

Illustration No. SBA-2972P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
70.6	75.0	Oil shale, medium, dark brown, massive to well defined bedding. Common randomly oriented, irregular inclusions 1 inch and less of calcite crystals slightly impregnated with bitumen. Calcite crystals comprise as much as one-third of core in places.
75.0	76.9	Oil shale, medium to lean, light brown and dark brown, poorly defined to well defined bedding. Calcite partings.
76.9	78.5	Oil shale, medium to rich, dark brown and dark gray, well defined bedding.
78.5	83.7	Oil shale, medium, light brown and dark brown, massive to well defined bedding. Common randomly oriented, irregular inclusions of calcite crystals slightly impregnated with bitumen.
83.7	89.6	Oil shale, medium to lean, light brown and dark brown, massive to poorly defined bedding. Thickly disseminated spots of tan marlstone impart a speckled appearance to core. A 0.3-foot band of light gray marlstone occurs at 83.7 feet. A 1-foot band of tan to light brown siltstone containing inclusions of calcite and pyrite occurs at 86.6 feet.
89.6	93.0	Oil shale, medium, dark brown, massive to poorly defined bedding. Common inclusions and partings of calcite.
93.0	96.0	Oil shale, medium, dark brown, massive to poorly defined bedding. Thickly disseminated spots of tan marlstone impart a speckled appearance to core.
96.0	107.1	Oil shale, medium, light brown, dark brown, and dark gray, massive to well defined bedding. A 1-inch band of bluegray analcitized tuff occurs at 102.3 feet.
107.1	110.4	Oil shale, lean, tan and light brown, well defined bedding. Common inclusions and stringers of pyrite.
110.4	125.0	Oil shale, medium, dark brown and dark gray, massive to well defined bedding. A 0.2-foot band of oil shale containing abundant bitumen impregnated calcite occurs at 122.4 feet. A 0.2-foot band of oil shale containing 1/4-inch tan silty appearing, calcite enriched conglomerates occurs at 117.9 feet.

Illustration No. SBR-2973P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
125.0	143.5	Oil shale, medium, light brown and dark brown, poorly defined to well defined bedding. Rare inclusions 1/2-inch and less of calcite and pyrite.
143.5	145.5	Oil shale, medium to lean, dark brown, poorly defined bedding. Common stringers of pyrite. Common bands 1 inch and less of tan oil shale showing contorted bedding.
145.5	146.5	Oil shale, medium to rich, dark brown and dark gray, poorly defined bedding.
146.5	163.5	Oil shale, medium to lean, light brown, well defined bedding.
163.5	164.4	Oil shale, medium to rich, dark brown and dark gray, well defined bedding.
164.4	168.7	Oil shale, medium to lean, light brown, well defined bedding.
168.7	168.9	Oil shale, lean, light gray, greenish brown, and dark brown well defined alternating light and dark banding.
168.9	184.3	Oil shale, medium, light brown and dark brown, poorly defined to well defined bedding. 0.3-foot band of dark gray oil shale occurs at 168.9 and 170.0 feet.
184.3	185.3	Oil shale, medium, dark brown and dark gray, well defined bedding. A 0.2-foot band of dark brown bitumen impregnated tuff occurs at 184.8 feet.
185.3	196.7	Oil shale, medium, light brown, well defined bedding. A 0.2-foot band of light gray tuff containing some stringers of dark brown oil shale near top occurs at 191.9 feet.
196.7	197.7	Oil shale, medium to rich, dark brown and dark gray, well defined bedding.
197.7	244.3	Oil shale, medium, light brown and dark brown, poorly defined to well defined bedding. Common 1/2-inch and less bands of analcitized tuff in lower part. A 0.1-foot band of light gray tuff occurs at 225.5 feet.
244.3	245.3	Oil shale, medium to rich, dark brown and dark gray, poorly defined bedding. A 1/2-inch band of dark brown analcite occurs at 244.7 feet.

Illustration No. SSM-2974P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
245.3	255.0	Oil shale, medium to lean, light brown, well defined bedding. Common disseminated grains of pyrite.
255.0	267	Oil shale, medium, light brown and greenish brown, poorly defined to well defined bedding. Rare 1/2-inch and less bands of bluegray analcite. Six-inch bands of dark gray, rich oil shale occur at 255.6 feet and 262.4 feet.
267	268	Oil shale, medium to rich, light brown, dark brown, and dark gray, poorly defined to well defined bedding.
268	272.3	Oil shale, lean to medium, light brown and greenish brown, poorly defined to well defined bedding.
272.3	273.3	Oil shale, medium to rich, dark brown and dark gray, poorly defined to well defined bedding. A 0.1-foot band of light gray and bluegray tuff occurs at 272.7 feet.
273.3	282.6	Oil shale, lean to medium, light brown, dark brown and greenish brown, poorly defined to well defined bedding. Common 1-inch and less bands of light brown and bluegray analcite. A 3-inch band of brown bitumen impregnated analcite occurs at 279.1 feet.
282.6	283.3	Oil shale, medium to rich, dark brown and dark gray, well defined bedding. A 0.1-foot band of gray tuff occurs at 283.2 feet.
283.3	287.0	Oil shale, lean to medium, tan and light brown, well defined bedding.
287.0	293.0	Oil shale, medium, light brown and dark brown, well defined bedding. 0.2-foot bands of dark brown, bitumen impregnated analcite occur at 290.2, 292.3, and 292.8 feet.
293	298.5	Oil shale, medium, light brown and dark brown, well defined bedding. A 0.3-foot band of bluegray and dark brown analcite occurs at 294.8 feet.
298.5	299.0	Analcite tuff bed, light brown and dark brown, massive.
299.0	319.6	Oil shale, medium, light brown and dark brown, poorly defined to well defined bedding. A 0.4-foot band of bitumen impregnated analcitized tuff occurs at 305.7 feet.

Illustration No. SBA-2975P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
319.6	321.6	Tuff bed, light gray, upper six inches contains wavy stringers of dark brown oil shale.
(Upper wavy bed)		
321.6	346.2	Oil shale, medium, light brown, dark brown, and dark gray, well defined bedding. A one-foot band of dark gray, rich oil shale occurs at 337.8 feet and 0.5-foot bands of same occur at 342.7 feet and at 345.0 feet.
346.2	348.1	Oil shale, lean, light brown and greenish brown, well defined bedding.
(346.2 Top A-groove)		
348.1	355.1	Marlstone, tan and light gray, well defined bedding.
(355.1 Bottom A-groove)		
355.1	356.0	Oil shale, lean, gray to greenish gray, massive to faintly bedded.
356.0	356.8	Oil shale, medium to rich, dark brown and dark gray, well defined bedding. Common lenses and partings of light brown analcite tuff.
356.8	361.2	Oil shale, lean, tan, light gray, and light brown, well defined bedding. Common tan, bluegray and light brown bands and lenses of analcited tuff.
361.2	365.5	Oil shale, medium to rich, light brown, dark brown, and dark gray, poorly defined to well defined bedding. Common one-inch and less bands of light brown and bluegray analcite. 0.2-foot bands of bitumen impregnated analcite occur at 361.8 feet and 362.4 feet.
365.5	371.8	Oil shale, lean, light brown, and grayish brown, poorly defined to well defined bedding.
371.8	372.2	Analcitised tuff bed, tan to light gray, massive. A dull gray inclusion of pyrite one-inch in diameter occurs in center of tuff bed.
(Mahogany marker)		
372.2	374.7	Oil shale, lean, light brown and gray, well defined bedding, widely disseminated flakes of pyrite throughout.
374.7	375.6	Oil shale, lean, light brown and dark brown, good banding.
375.6	376.6	Oil shale, rich, dark brown and dark gray, poorly defined to well defined bedding.
376.6	379.0	Oil shale, medium, light gray, light brown, and dark brown.
379.0	380.2	Oil shale, rich, dark brown and dark gray, well defined bedding. A 0.1-foot band of light brown analcite occurs at 379.5 feet.

Illustration No. SER-2976P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
380.2	381	Oil shale, medium, light brown and dark brown, well defined bedding.
381	387	Oil shale, rich, dark brown and dark gray, shiny luster, well defined bedding. A 4-inch bed of rich oil shale with contorted bedding and showing evidence of movements along bedding planes occurs at 381.3 feet. A 0.2-foot band of tan and light brown tuff occurs at 386.7 feet.
(Curly bed 381.3)	381.3)	
387	392	Oil shale, medium to rich, light brown and dark brown, poorly defined to well defined bedding.
392	393	Oil shale, medium, light gray and light brown, well defined bedding.
393	393.7	Oil shale, rich, dark brown and dark gray, well defined bedding.
393.7	394.9	Oil shale, medium, light brown and dark brown, well defined bedding.
394.9	395.9	Oil shale, rich, dark gray, well defined bedding. A 0.2-foot band of light brown oil shale occurs at 395.0 feet.
395.9	396.5	Oil shale, medium, light brown, well defined bedding.
396.5	397.3	Oil shale, rich, dark brown and light brown, well defined bedding.
397.3	399.3	Oil shale, lean to medium, light brown and dark brown, well defined bedding.
399.3	400.7	Oil shale, rich, dark brown and dark gray, well defined bedding. A 1-inch analcite band occurs at 400.1 feet.
400.7	403.0	Oil shale, lean, light gray and light brown, well defined bedding.
403.0	404.4	Oil shale, medium, light brown and dark brown, well defined bedding.
404.4	405.4	Oil shale, medium to rich, dark brown and dark gray, poorly defined bedding.
405.4	407.2	Oil shale, medium, light brown and dark brown, well defined bedding.
407.2	408.4	Oil shale, medium to rich, dark brown and dark gray, poorly defined bedding.
408.4	414.3	Oil shale, lean to medium, light brown and dark brown, well defined bedding. 0.3-foot bands of dark gray, rich shale occur at 412.7 feet and 413.0 feet.

Illustration No. SBR-2977P

# LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Core samples of Skyline Oil Company's Skyline-Robertson No. 2 Corehole drilled 264 feet east of west line and 2,366.7 feet north of south line, sec. 16, T. 11 S., R. 25 E., Uintah County, Utah (Con.)

Surface Elevation 5,904.8 feet

Depth (feet)		Description
From	To	
414.3	417.0	Oil shale, lean, light gray and light brown, well defined bedding.
417.0	418.3	Oil shale, lean to medium, light brown, dark brown, and greenish brown, well defined bedding.
418.3	418.7	Analcite tuff bed, dark brown, massive, bitumen impregnated.
(Possible marker bed)		
418.7	423.4	Oil shale, lean to medium, light brown, dark brown, and greenish brown, well defined bedding, banded. A 0.3-foot bed of oil shale with brown crinkly bedding exhibiting a cork-like appearance occurs at 419.6 feet.
423.4	424.1	Oil shale, rich, dark brown and dark gray, well defined bedding. A 0.2-foot band exhibiting a cork-like appearance occurs at 423.6 feet.
424.1	426.8	Oil shale, lean, light gray and light brown, well defined bedding.
426.8	427.5	Oil shale, medium, light brown and dark brown, and dark gray, well defined bedding.
427.5	429.0	Analcitized tuff bed, dark brown, massive. Contains few stringers of dark brown oil shale near top, bitumen impregnated.
(Lower wavy bed)		
429.0	429.8	Oil shale, medium, dark brown and greenish brown, well defined bedding. Common thin analcite bands.
429.8	435.4	Oil shale, lean, tan and light brown, well defined bedding.
435.4	437.4	Marlstone, bluish-gray and brownish gray, well defined bedding, abundant scattered pyrite flakes.
437.4	452.5	Marlstone, tan, light gray, and bluish-gray, well defined bedding. 0.2-foot bands of bitumen impregnated pyrite and analcite occur at 438.6 feet and at 442.4 feet. A 0.3-foot band of bitumen impregnated analcite tuff occurs at 446.1 feet.
452.5		Bottom of hole.

Illustration No. SBR-2978P

Laramie Petroleum Research Center, Laramie, Wyoming December 28, 1959