

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Amoco Production Company's Whiskey Buttes Unit Well 2 drilled in the NW1/4SW1/4
(1,980 feet FSL, 660 feet FWL) of sec 11, T 21 N, R 112 W, Lincoln County, Wyoming

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks
			Weight percent		Gas + loss	Gal per ton		Tendency to coke		
Laramie	Their		Oil	Water		shale			Oil ^{1/}	Water
SBR75-20045-54	40-110						No Oil			
SBR75-20055	110-120						Trace			
SBR75-20056-67	120-210						No Oil			
SBR75-20068	210-220						Trace			
SBR75-20069-80	220-310						No Oil			
SBR75-20081	310-340						b			
SBR75-20082	310-320						No Oil			
SBR75-20083	330-340						b			
SBR75-20084	340-370						No Oil			
SBR75-20085	340-350						b			
SBR75-20086-92	350-420						No Oil			
SBR75-20093	420-430						b			
SBR75-20094-110	430-560						No Oil			
SBR75-20111	560-570	12829	0.0	1.6	97.1	1.3	No Oil	3.9		None
SBR75-20112	560-590						Trace			
SBR75-20113-20	570-630						No Oil			
SBR75-20121	630-640						b			
SBR75-20122	640-650						No Oil			
SBR75-20123	650-680	12830	1.6	2.6	94.8	1.0	4.1a	6.2		None
SBR75-20124-5	650-670						No Oil			
SBR75-20126	680-690	12831	.4	2.5	96.3	.8	1.2a	6.0		None
SBR75-20127	690-700	12832	.4	2.5	96.5	.6	1.1a	6.0		None
SBR75-20128	680-710	12833	.5	2.4	96.3	.8	1.4a	5.8		None
SBR75-20129	700-710	12834	.4	2.5	96.4	.7	1.1a	6.1		None
SBR75-20130	710-740						No Oil			
SBR75-20131-2	710-730						b			
SBR75-20133-5	740-760						No Oil			
SBR75-20136	760-770	12835	.0	1.6	96.6	1.8	No Oil	3.8		None
SBR75-20137	770-780	12836	.0	2.4	97.2	.4	.1a	5.8		None
SBR75-20138	730-740	12837	.0	1.5	97.0	1.5	No Oil	3.5		None

See footnote at end of table.

Drill cuttings received September 26, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Amoco Production Company's Whiskey Buttes Unit Well 2 (con.)

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent spent		Remarks
			Weight percent		Gas + loss	Gal per ton		Tendency to		
Laramie	Their		Oil	Water		shale		Oil ^{1/}	Water	coke
SBR75-20139	790- 800	12838	0.0	2.2	97.2	0.6	No Oil	5.3	None	
SBR75-20140	800- 810						No Oil			
SBR75-20141-2	800- 820						c			
SBR75-20143-4	820- 860						No Oil			
SBR75-20145-8	830- 870						Trace			
SBR75-20149-53	860- 920						No Oil			
SBR75-20154	900- 910						Trace			
SBR75-20155-63	910- 980						No Oil			
SBR75-20164	980- 990						Trace			
SBR75-20165	980-1010						No Oil			
SBR75-20166-8	990-1040						Trace			
SBR75-20169-70	1010-1030						No Oil			
SBR75-20171-4	1030-1060						Trace			
SBR75-20175-91	1060-1190						No Oil			
SBR75-20192	1190-1220						b			
SBR75-20193-8	1190-1240						No Oil			
SBR75-20199	1240-1250	12839	.0	2.0	97.4	.6	No Oil	4.7	None	
SBR75-20200	1250-1260						No Oil			
SBR75-20201	1250-1280	12840	8.2	1.0	88.4	2.4	21.6	2.4	0.910	None
SBR75-20202	1260-1270	12841	4.2	.8	92.4	2.6	11.0	1.9	.909	None
SBR75-20203	1270-1280	12842	7.4	.8	88.7	3.1	19.6	1.9	.907	None
SBR75-20204	1280-1290	12843	6.0	1.1	90.7	2.2	15.9	2.6	.911	None
SBR75-20205	1280-1310	12844	.3	1.2	97.7	.8	.7a	2.9		None
SBR75-20206	1290-1300	12845	1.5	1.2	96.0	1.3	3.8a	2.9		None
SBR75-20207	1300-1310	12846	.3	.9	97.9	.9	.7a	2.2		None
SBR75-20208	1310-1340	12847	3.6	1.7	92.9	1.8	9.6	4.1	.899	None
SBR75-20209	1310-1320	12848	8.9	1.7	86.9	2.5	23.4	4.1	.909	None
SBR75-20210	1320-1330	12849	2.0	1.2	94.8	2.0	5.1a	2.9		None
SBR75-20211	1330-1340	12850	3.6	1.7	93.2	1.5	9.6	4.1	.899	None
SBR75-20212	1340-1350	12851	3.6	1.7	93.0	1.7	9.5	4.1	.903	None

See footnote at end of table.

Drill cuttings received September 26, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Amoco Production Company's Whiskey Buttes Unit Well 2 (con.)

Sample number	Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent shale		Remarks		
		Weight percent		Spent shale	Gas + loss		Gal per ton			Tendency to coke	
Laramie	Their	Oil	Water					Oil ^{1/}	Water		
SBR75-20213	1350-1360	12852	3.4	1.9	93.4	1.3	9.1	4.6	0.897	None	
SBR75-20214	1350-1380	12853	1.4	1.8	95.6	1.2	3.6a	4.3		None	
SBR75-20215	1360-1370	12854	2.4	2.1	93.7	1.8	6.4	5.0	.894	None	
SBR75-20216	1370-1380	12855	3.1	1.4	94.4	1.1	8.3	3.4	.892	None	
SBR75-20217	1380-1390	12856	.2	.8	97.7	1.3	.6a	1.9		None	
SBR75-20218	1390-1400	12857	1.5	1.9	95.6	1.0	3.9a	4.5		None	
SBR75-20219	1380-1410	12858	1.4	1.0	96.1	1.5	3.6a	2.4		None	
SBR75-20220	1400-1410	12859	1.6	1.7	95.9	.8	4.0a	4.0		None	
SBR75-20221	1410-1420	12860	1.3	1.8	95.4	1.5	3.3a	4.3		None	
SBR75-20222	1410-1440	12861	1.2	1.9	96.1	.8	3.0a	4.6		None	
SBR75-20223	1430-1440	12862	1.3	1.7	96.1	.9	3.5a	4.1		None	
SBR75-20224	1440-1450	12863	1.4	1.8	96.0	.8	3.5a	4.3		None	
SBR75-20225	1440-1470	12864	.7	.8	97.3	1.2	1.7a	1.9		None	
SBR75-20226	1450-1460	12865	.7	1.6	97.2	.5	1.9a	3.8		None	
SBR75-20227	1460-1470	12866	.9	1.2	92.9	5.0	2.4a	2.8		None	
SBR75-20228	1470-1500	12869	.6	1.2	98.0	.2	1.5a	2.9		None	
SBR75-20229	1470-1480	12870	.7	1.4	96.6	1.3	1.9a	3.4		None	
SBR75-20230	1480-1490	12871	.6	1.2	97.4	.8	1.6a	2.9		None	
SBR75-20231	1490-1500	12872	.4	1.3	96.1	2.2	1.1a	3.1		None	
SBR75-20232	1500-1510	12873	.5	1.2	97.4	.9	1.2a	2.9		None	
SBR75-20233	1510-1520	12874	.5	1.9	97.1	.5	1.2a	4.6		None	
SBR75-20234	1550-1560	12875	.0	1.4	98.4	.2	Trace	3.4		None	
SBR75-20235	1560-1570	12876	.0	.7	98.5	.8	Trace	1.6		None	
SBR75-20236	1570-1580						c				
SBR75-20237	1610-1620	12877	.0	1.2	98.6	.2	No Oil	2.9		None	
SBR75-20238	1620-1630	12878	.0	.4	96.9	2.7	No Oil	1.1		None	
SBR75-20239	1630-1640	12879	.0	1.4	98.3	.3	No Oil	3.4		None	
SBR75-20240-3	1640-1680						c				
SBR75-20244-5	1700-1720						No Oil				
SBR75-20246-7	1740-1760						No Oil				

See footnote at end of table.

Drill cuttings received September 26, 1975; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Amoco Production Company's Whiskey Buttes Unit Well 2 (con.)

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60° F	Properties of spent shale Tendency to coke	Remarks
			Weight percent		Spent shale	Gas + loss			
Laramie	Their		Oil	Water				Oil ^{1/}	Water
SBR75-20248	1780-1790					No Oil			
SBR75-20249-50	1800-1820					No Oil			
SBR75-20251	1840-1850					No Oil			
SBR75-20252	1850-1860					Trace			
SBR75-20253-7	1910-1960					No Oil			
SBR75-20258	1960-1970					c			
SBR75-20259-61	1970-2000					No Oil			
SBR75-20262-88	2020-2290					No Oil			
SBR75-20289-91	2300-2330					No Oil			
SBR75-20292	2330-2340					Trace			
SBR75-20293-8	2340-2400					No Oil			
SBR75-20299	2400-2410					Trace			
SBR75-20300-18	2410-2600					No Oil			
SBR75-20319	2600-2610					Trace			
SBR75-20320-3	2610-2650					No Oil			
SBR75-20324	2660-2670					No Oil			
SBR75-20325-6	2690-2710					No Oil			
SBR75-20327-32	2720-2780					No Oil			
SBR75-20333	2790-2800					No Oil			
SBR75-20334	2820-2830					Trace			
SBR75-20335-6	2840-2860					No Oil			
SBR75-20337-8	2870-2890					No Oil			
SBR75-20339	2900-2910					No Oil			
SBR75-20340-7	2920-3000					No Oil			

^{1/} "a"--indicates specific gravity estimated as 0.92. Oil yields were estimated by a rapid test-tube method: "No oil," "Trace," "b"--less than 1 gal oil/ton, "c"--1 to 3 gal oil/ton.

Drill cuttings received September 26, 1975; assays made on air-dried samples