

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 drilled in
SE1/4NW1/4 of sec. 8, T. 10 S., R. 17 E., Duchesne County, Utah

Kelly Bushing elevation 5,798 feet

Mahogany marker 3608'

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			Water	Oil		Water	
SBR63-1087-1119	330- 660						No Oil				
SBR63-1120	670- 680						No Oil				
SBR63-1121	680- 690						b				
SBR63-1122	690- 700						Trace				
SBR63-1123-32	700- 800						No Oil				
SBR63-1133-36	810- 850						No Oil				
SBR63-1137-38	860- 880						No Oil				
SBR63-1139	880- 890						Trace				
SBR63-1140-41	900- 920						No Oil				
SBR63-1142	920- 930						c				
SBR63-1143-44	930- 950						b				
SBR63-1145	950- 960						No Oil				
SBR63-1146	960- 970						Trace				
SBR63-1147-53	970-1040						c				
SBR63-1154	1040-1050	85879	1.4	1.6	96.3	0.7	3.6a	3.8		None	
SBR63-1155	1050-1060	85880	1.4	1.5	96.5	.6	3.7a	3.6		None	
SBR63-1156	1060-1070	85881	1.2	1.7	96.6	.5	3.2a	4.1		None	
SBR63-1157	1070-1080	85882	1.5	1.3	97.2	.0	3.8a	3.1		None	
SBR63-1158	1080-1090	85883	1.2	1.1	97.3	.4	3.1a	2.6		None	
SBR63-1159	1090-1100	85884	1.4	1.1	97.2	.3	3.5a	2.6		None	
SBR63-1160	1100-1110	85885	1.3	1.1	97.3	.3	3.5a	2.6		None	
SBR63-1161	1110-1120	85886	1.3	.9	97.5	.3	3.3a	2.3		None	
SBR63-1162	1120-1130	85887	1.8	1.3	96.5	.4	4.6a	3.1		None	
SBR63-1163	1130-1140	85888	.9	.9	97.7	.5	2.4a	2.2		None	
SBR63-1164	1140-1150	85889	1.1	.8	97.7	.4	2.8a	2.0		None	
SBR63-1165	1150-1160	85890	1.0	1.0	97.2	.8	2.5a	2.4		None	
SBR63-1166	1160-1170	85891	1.1	1.0	97.1	.8	2.9a	2.4		None	
SBR63-1167-68	1170-1190						c				
SBR63-1169	1190-1200	85892	.9	1.0	97.2	.9	2.3a	2.3		None	
SBR63-1170	1200-1210	85893	.9	1.2	97.3	.6	2.4a	2.9		None	

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

Kelly bushing elevation 5,750 feet

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		
Laramie	Their		Oil	Water					Oil	Water
SBR63-1171	1210-1220	85894	0.9	1.1	97.2	0.8	2.4a	2.6		None
SBR63-1172	1220-1230						c			
SBR63-1173	1230-1240	85895	1.3	1.3	96.6	.8	3.4a	3.1		None
SBR63-1174	1240-1250	85896	1.9	1.7	95.2	1.2	5.0a	4.1		None
SBR63-1175	1250-1260	85897	2.0	1.6	95.1	1.3	5.4	3.8	0.903	None
SBR63-1176	1260-1270	85898	.9	1.0	96.8	1.3	2.3a	2.4		None
SBR63-1177-78	1270-1290						c			
SBR63-1179	1290-1300	85899	1.0	1.4	96.8	.8	2.5a	3.4		None
SBR63-1180	1300-1310	85900	.8	1.1	97.3	.8	2.2a	2.6		None
SBR63-1181	1310-1320	85901	1.0	1.6	96.6	.8	2.7a	3.8		None
SBR63-1182	1320-1330	85902	1.2	1.4	96.8	.6	3.1a	3.4		None
SBR63-1183-85	1350-1380						c			
SBR63-1186	1380-1390	85903	1.0	1.2	97.1	.7	2.6a	2.9		None
SBR63-1187	1390-1400	85904	1.1	1.2	97.1	.6	2.8a	2.9		None
SBR63-1188	1400-1410	85905	1.0	1.2	97.1	.7	2.7a	2.9		None
SBR63-1189	1410-1420	85906	1.0	1.3	97.0	.7	2.6a	3.1		None
SBR63-1190	1420-1430	85907	.9	1.1	97.2	.8	2.4a	2.6		None
SBR63-1191	1430-1440						c			
SBR63-1192	1440-1450	85908	.9	1.0	97.1	1.0	2.2a	2.4		None
SBR63-1193	1450-1460	85909	.7	1.1	97.2	1.0	1.9a	2.6		None
SBR63-1194	1460-1470	85910	.8	1.1	97.1	1.0	2.2a	2.6		None
SBR63-1195-96	1470-1490						c			
SBR63-1197	1490-1500	85911	.8	1.4	96.9	.9	2.2a	3.4		None
SBR63-1198	1500-1510	85912	1.6	1.2	96.3	.9	4.3a	2.9		None
SBR63-1199	1510-1520	85913	1.3	1.1	96.6	1.0	3.4a	2.6		None
SBR63-1200	1520-1530	85914	.9	1.4	96.8	.9	2.4a	3.4		None
SBR63-1201-02	1530-1550						c			
SBR63-1203	1550-1560						b			
SBR63-1204	1560-1570						c			
SBR63-1205-06	1570-1590						b			

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

Kelly Bushing elevation 5,790 feet

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		
Laramie	Their		Oil	Water					Oil	Water
SBR63-1207	1590-1600	85915	0.8	1.5	96.6	1.1	2.0a	3.6		None
SBR63-1208	1600-1610	85916	1.0	1.4	96.2	1.4	2.7a	3.4		None
SBR63-1209	1610-1620	85917	1.0	1.6	96.4	1.0	2.6a	3.8		None
SBR63-1210-11	1620-1640						c			
SBR63-1212	1640-1650	85918	.9	1.6	97.0	.5	2.3a	3.8		None
SBR63-1213	1650-1660	85919	1.2	1.6	96.5	.7	3.1a	3.8		None
SBR63-1214	1660-1670	85920	1.0	1.5	96.8	.7	2.5a	3.6		None
SBR63-1215	1670-1680	85921	.7	1.5	97.1	.7	1.9a	3.6		None
SBR63-1216	1680-1690						c			
SBR63-1217	1690-1700	85922	.6	1.3	97.0	1.1	1.6a	3.1		None
SBR63-1218	1700-1710	85923	.8	1.4	96.9	.9	2.0a	3.4		None
SBR63-1219	1710-1720	85924	.9	1.5	97.1	.5	2.4a	3.6		None
SBR63-1220	1720-1730	85925	1.0	1.4	97.0	.6	2.7a	3.4		None
SBR63-1221	1730-1740	85926	1.6	1.4	96.5	.5	4.1a	3.4		None
SBR63-1222	1740-1750	85927	1.6	1.4	96.4	.6	4.3a	3.4		None
SBR63-1223	1750-1760	85928	1.5	1.5	96.3	.7	3.9a	3.6		None
SBR63-1224	1760-1770	85929	1.5	1.5	96.4	.6	3.8a	3.6		None
SBR63-1225	1770-1780	85930	1.7	1.3	96.8	.2	4.4a	3.1		None
SBR63-1226	1780-1790	85931	1.7	1.1	96.5	.7	4.4a	2.6		None
SBR63-1227	1790-1800	85932	1.9	1.0	96.3	.8	4.9a	2.4		None
SBR63-1228	1800-1810	85933	2.6	1.0	95.8	.6	6.8	2.3	0.920	None
SBR63-1229	1810-1820	85934	2.3	1.0	96.1	.6	6.1	2.4	.918	None
SBR63-1230	1820-1830	85935	3.0	1.0	95.6	.4	7.9	2.4	.920	None
SBR63-1231	1830-1840	85936	3.0	1.1	95.4	.5	7.7	2.6	.922	None
SBR63-1232	1840-1850	85937	4.4	.9	93.8	.9	11.6	2.0	.917	None
SBR63-1233	1850-1860	85938	4.5	1.1	93.9	.5	11.7	2.6	.914	None
SBR63-1234	1860-1870	85939	3.6	1.2	94.9	.3	9.3	2.9	.912	None
SBR63-1235	1870-1880	85940	3.2	1.2	94.7	.9	8.4	2.9	.915	None
SBR63-1236	1880-1890	85941	.7	1.1	98.1	.1	1.9a	2.6		None
SBR63-1237-38	1890-1910						c			

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

Kelly Bushing elevation 5,798 feet

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			Tendency to coke		
Laramie	Their		Oil	Water					Oil	Water	
SBR63-1239	1910-1920	85942	0.8	1.1	97.8	0.3	2.0a	2.6		None	
SBR63-1240	1920-1930	85943	2.5	1.6	95.4	.5	6.5	3.8	0.912	None	
SBR63-1241	1930-1940	85944	2.1	1.6	95.6	.7	5.5	4.0	.912	None	
SBR63-1242	1940-1950	85945	.5	3.1	96.0	.4	1.4a	7.4		None	
SBR63-1243	1950-1960	85946	2.2	1.4	95.5	.9	5.7	3.4	.911	None	
SBR63-1244	1960-1970	85947	3.3	1.1	94.7	.9	8.8	2.6	.911	None	
SBR63-1245	1980-1990	85948	2.2	.7	96.7	.4	5.9	1.7	.907	None	
SBR63-1246	1990-2000	85949	.6	.4	98.9	.1	1.5a	1.1		None	
SBR63-1247-49	2000-2030						c				
SBR63-1250-52	2030-2060						b				
SBR63-1253-56	2060-2100						Trace				
SBR63-1257	2100-2110						c				
SBR63-1258	2110-2120						b				
SBR63-1259	2120-2130	85950	.9	.6	98.2	.3	2.3a	1.6		None	
SBR63-1260	2130-2140	85951	2.5	.8	96.2	.5	6.5	1.9	.905	None	
SBR63-1261	2140-2150	85952	2.3	.8	96.5	.4	6.2	1.9	.904	None	
SBR63-1262	2150-2160	85953	2.4	.8	96.3	.5	6.4	1.8	.909	None	
SBR63-1263	2160-2170	85954	5.9	.5	92.4	1.2	15.6	1.2	.906	None	
SBR63-1264	2170-2180	85955	6.0	.3	92.1	1.6	15.7	.8	.909	None	
SBR63-1265	2180-2190	85956	12.6	.3	84.6	2.5	33.2	.7	.906	None	
SBR63-1266	2190-2200	85957	6.0	.3	92.0	1.7	16.0	.7	.904	None	
SBR63-1267	2200-2210	85958	2.6	.3	96.0	1.1	6.8	.8	.903	None	
SBR63-1268	2210-2220	85959	3.6	.8	94.5	1.1	9.6	1.8	.909	None	
SBR63-1269	2220-2230	85960	1.6	.3	97.7	.4	4.2a	.6		None	
SBR63-1270	2230-2240	85961	1.5	.2	97.6	.7	4.0a	.4		None	
SBR63-1271	2240-2250						Trace				
SBR63-1272	2250-2260						No Oil				
SBR63-1273	2260-2270						Trace				
SBR63-1274	2270-2280						c				
SBR63-1275-76	2280-2300						b				

10' 30'

20'

25'

65' of 15'

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

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		
Laramie	Their		Oil	Water					Oil	Water	
SBR63-1277-78	2300-2320						c				
SBR63-1279	2320-2330	85962	1.7	0.9	96.9	0.5	4.4a	2.2		None	
SBR63-1280	2330-2340	85963	1.8	.9	96.5	.8	4.6a	2.2		None	
SBR63-1281	2340-2350	85964	4.2	.8	93.4	1.6	11.3	1.9	0.902	None	
SBR63-1282	2350-2360	85965	4.7	.9	93.0	1.4	12.4	2.3	.901	None	
SBR63-1283	2360-2370	85966	2.7	.8	95.4	1.1	7.3	1.9	.905	None	
SBR63-1284	2370-2380	85967	1.0	1.0	97.4	.6	2.7a	2.3		None	
SBR63-1285	2380-2390						b				
SBR63-1286	2390-2400						c				
SBR63-1287	2400-2410						No Oil				
SBR63-1288	2410-2420						c				
SBR63-1289	2420-2430						Trace				
SBR63-1290-92	2430-2460						No Oil				
SBR63-1293	2460-2470						Trace				
SBR63-1294	2470-2480						b				
SBR63-1295	2480-2490	85968	1.7	.6	96.7	1.0	4.5a	1.4		None	
SBR63-1296	2490-2500	85969	2.5	1.4	94.9	1.2	6.5	3.4	.909	None	
SBR63-1297	2500-2510	85970	1.0	1.0	96.7	1.3	2.6a	2.4		None	
SBR63-1298	2510-2520						b				
SBR63-1299-1303	2520-2570						c				
SBR63-1304-05	2570-2590						b				
SBR63-1306	2590-2600						c				
SBR63-1307	2600-2610						No Oil				
SBR63-1308-09	2610-2630						Trace				
SBR63-1310	2630-2640						b				
SBR63-1311	2640-2650						c				
SBR63-1312	2650-2660	85971	.6	.9	97.8	.7	1.5a	2.3		None	
SBR63-1313	2660-2670	85972	1.1	.8	97.5	.6	2.9a	1.8		None	
SBR63-1314	2670-2680	85973	1.4	.8	97.7	.1	3.6a	1.9		None	
SBR63-1315	2680-2690	85974	.7	.6	98.0	.7	1.7a	1.6		None	

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

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		Spent shale			Oil	Water
SBR63-1316	2690-2700						b			
SBR63-1317-20	2700-2740						Trace			
SBR63-1321-35	2740-2890						No Oil			
SBR63-1336	2890-2900						c			
SBR63-1337	2900-2910	85975	0.8	1.2	97.3	0.7	2.0a	2.9	0.893	None
SBR63-1338	2910-2920	85976	2.7	1.0	95.2	1.1	7.2	2.5		None
SBR63-1339	2920-2930	85977	1.7	1.7	95.7	.9	4.4a	4.1		None
SBR63-1340	2930-2940	85978	1.2	1.4	96.8	.6	3.2a	3.2		None
SBR63-1341	2940-2950						c			
SBR63-1342	2950-2960						b			
SBR63-1343-44	2960-2980						Trace			
SBR63-1345-46	2980-3000						No Oil			
SBR63-1347	3000-3010						Trace			
SBR63-1348-50	3010-3040						c			
SBR63-1351-52	3040-3060						Trace			
SBR63-1353-55	3060-3090						No Oil			
SBR63-1356	3090-3100						b			
SBR63-1357	3100-3110						Trace			
SBR63-1358-59	3110-3130						b			
SBR63-1360	3130-3140						Trace			
SBR63-1361-77	3140-3310						No Oil			
SBR63-1378-79	3310-3330						Trace			
SBR63-1380-94	3330-3480						No Oil			
SBR63-1395-99	3490-3540						No Oil			
SBR63-1400	3540-3550						Trace			
SBR63-1401	3550-3560						No Oil			
SBR63-1402-03	3560-3580						Trace			
SBR63-1404	3580-3590						No Oil			
SBR63-1405	3590-3600						Trace			
SBR63-1406	3600-3610						b			

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

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Kelly Bushing elevation 5,798 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60°F.		Properties of spent shale Tendency to coke	Remarks
Laramie	Their		Weight percent		Spent shale	Gas + loss	Gal. per ton			
			Oil	Water			Oil	Water		
SBR63-1407	3610-3620						Trace			
SBR63-1408	3620-3630						c			
SBR63-1409	3630-3640						b			
SBR63-1410	3640-3650						Trace			
SBR63-1411-12	3650-3670						b			
SBR63-1413-15	3670-3700						No Oil			
SBR63-1416	3700-3710						b			
SBR63-1417-18	3710-3730						Trace			
SBR63-1419	3730-3740						No Oil			
SBR63-1420	3740-3750						Trace			
SBR63-1421-30	3750-3850						No Oil			
SBR63-1431	3850-3860						b			
SBR63-1432-45	3860-4000						No Oil			
SBR63-1446	4000-4010						Trace			
SBR63-1447	4010-4020						b			
SBR63-1448	4020-4030						Trace			
SBR63-1449	4030-4040						No Oil			
SBR63-1450	4040-4050						Trace			
SBR63-1451	4050-4060						b			
SBR63-1452-54	4060-4090						Trace			
SBR63-1455-59	4090-4140						No Oil			
SBR63-1460	4140-4150						Trace			
SBR63-1461-62	4150-4170						b			
SBR63-1463	4170-4180						Trace			
SBR63-1464-67	4180-4220						No Oil			
SBR63-1468-69	4220-4240						Trace			
SBR63-1470	4240-4250						No Oil			
SBR63-1471-77	4256-4320						No Oil			
SBR63-1478-79	4320-4340						Trace			
SBR63-1480	4340-4350						No Oil			

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60°F.		Properties of spent shale Tendency to coke		Remarks
Laramie	Their		Weight percent		Spent shale	Gas + loss	Gal. per ton				
			Oil	Water			Oil	Water			
SBR63-1481-84	4350-4390						Trace				
SBR63-1485-88	4390-4430						No Oil				
SBR63-1489	4430-4440						b				
SBR63-1490	4440-4450	85979	0.5	0.6	96.9	2.0	1.2a	1.4		None	
SBR63-1491	4450-4460	85980	2.5	.9	95.3	1.3	6.8	2.2	0.881	None	
SBR63-1492	4460-4470	85981	3.4	1.0	94.0	1.6	9.2	2.4	.888	None	
SBR63-1493	4470-4480	85982	2.3	1.4	94.5	1.8	6.4	3.4	.883	None	
SBR63-1494-95	4480-4500						b				
SBR63-1496	4500-4510						c				
SBR63-1497-98	4510-4530						b				
SBR63-1499-1501	4530-4560						Trace				
SBR63-1502	4560-4570						b				
SBR63-1503-04	4570-4590						c				
SBR63-1505	4590-4600						b				
SBR63-1506	4600-4610						Trace				
SBR63-1507	4610-4620						b				
SBR63-1508	4620-4630						c				
SBR63-1509	4630-4640	85983	1.2	1.3	96.5	1.0	3.1a	3.1		None	
SBR63-1510	4640-4650	85984	3.4	1.1	94.3	1.2	9.2	2.6	.884	None	
SBR63-1511	4650-4660	85985	1.1	.6	96.8	1.5	2.8a	1.4		None	
SBR63-1512-14	4660-4690						b				
SBR63-1515	4690-4700						Trace				
SBR63-1516	4700-4710						No Oil				
SBR63-1517-19	4710-4740						Trace				
SBR63-1520	4740-4750						b				
SBR63-1521-22	4750-4770						Trace				
SBR63-1523-26	4770-4810						No Oil				
SBR63-1527-29	4810-4840						Trace				
SBR63-1530-36	4840-4910						No Oil				
SBR63-1537	4910-4920						Trace				

See footnotes at end of table.

Drill cutting samples received June 18, 1962; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mountain Fuel Supply Company's Wells Draw Unit well No. 2 (con.)

Kelly Bushing elevation 5,798 feet

Kelly Bushing elevation 5,798 feet										
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		
Laramie	Their		Oil	Water					Oil	Water
SBR63-1538-54	4920-5090						No Oil			
SBR63-1555	5090-5100	85986	0.8	1.0	97.4	0.8	2.0a	2.4		None
SBR63-1556	5100-5110	85987	1.8	1.0	96.1	1.1	4.7a	2.4		None
SBR63-1557	5110-5120	85988	2.0	.8	95.7	1.5	5.2a	1.9		None
SBR63-1558	5120-5130	85989	1.6	1.0	96.4	1.0	4.2a	2.4		None
SBR63-1559	5130-5140	85990	2.0	.7	96.3	1.0	5.1a	1.8		None
SBR63-1560	5140-5150	85991	1.1	.3	98.2	.4	2.9a	.6		None
SBR63-1561-62	5150-5170						c			
SBR63-1563-65	5170-5200						No Oil			
SBR63-1566	5200-5210						Trace			
SBR63-1567-69	5210-5240						b			
SBR63-1570-71	5240-5260						c			
SBR63-1572	5260-5270						b			
SBR63-1573-74	5270-5290						c			
SBR63-1575	5290-5300						b			
SBR63-1576-1609	5300-5640						No Oil			

a - Specific gravity estimated due to insufficient oil.

b - Less than 1.0 gallon of oil per ton of shale.

c - More than 1.0 but less than 3.0 gallons of oil per ton of shale.

Drill cutting samples received June 18, 1962; assays made on air-dried samples