

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from National Farmer's Union Exploration Company's corchhole No. 2 drilled in the SW 1/4 of Sec. 32, T. 9 S., R. 25 E., Uintah County, Utah

Surface elevation - 5507
- 5,420 feet

Mahogany marker at 500.3 feet

Sample number		Run No.	Yield of product				Gal. per ton		Specific gravity of oil at 60°/60°F.	Properties of spent shale		Remarks
Laramie	Thair		Weight percent		Gas + loss	Oil	Water	Tendency to				
			Oil	Water				shale				
SBR58-8669	30.0-31.9	58915	3.9	0.5	95.1	0.5	10.2	1.2	0.917		none	
SBR58-8670	34.9-39.7	58916	2.3	1.8	95.7	.2	6.0	4.3			none	
SBR58-8671	39.7-44.7	58917	2.9	1.2	95.3	.6	7.2	3.0	.955		none	
SBR58-8672	41.0-46.0	58918	2.4	1.2	95.6	.8	6.0	3.0	.953		none	
SBR58-8673	43.0-48.0	58919	1.9	.8	97.0	.3	4.9	1.9			none	
SBR58-8674	45.0-50.5	58950	2.2	.6	96.8	.4	5.7	1.3	.943		none	
SBR58-8675	46.5-51.1	58951	2.2	2.7	94.7	.4	5.7	6.5	.940		none	
SBR58-8676	47.1-52.0	58952	2.6	1.2	95.5	.7	6.4	3.0	.958		none	
SBR58-8677	48.0-53.0	58953	2.5	1.1	95.9	.5	6.3	2.6	.938		none	
SBR58-8678	49.0-54.0	58954	4.8	.8	93.3	1.1	12.2	1.9	.936		none	
SBR58-8679	50.0-55.0	58955	6.4	.9	91.5	1.2	16.4	2.0	.935		none	
SBR58-8680	51.0-56.2	58956	8.8	1.2	88.2	1.8	22.8	2.8	.928		none	
SBR58-8681	52.2-57.0	58957	2.5	1.2	95.7	.6	6.4	3.0	.930		none	
SBR58-8682	53.0-58.0	58958	2.8	1.0	95.5	.7	7.1	2.4	.954		none	
SBR58-8683	54.0-59.0	58959	2.6	.8	95.7	.9	6.5	2.0	.953		none	
SBR58-8684	56.0-61.0	58960	2.2	.7	96.4	.7	5.7	1.7	.948		none	
SBR58-8685	58.0-63.0	58961	2.3	.4	96.8	.5	5.9	1.0	.927		none	
SBR58-8686	60.0-65.0	58962	2.8	.3	95.8	1.1	7.3	.6	.934		none	
SBR58-8687	62.0-67.0	58963	4.0	.5	94.3	1.2	10.2	1.2	.936		none	
SBR58-8688	64.0-69.0	58964	4.3	.6	93.7	1.4	11.0	1.6	.938		none	
SBR58-8689	66.0-71.0	58965	8.3	1.1	88.2	2.4	21.4	2.6	.926		none	
SBR58-8690	67.0-72.0	58966	2.6	.5	96.2	.7	6.7	1.1	.945		none	
SBR58-8691	69.0-74.3	58967	1.4	.6	97.5	.5	3.7	1.3			none	
SBR58-8692	71.3-76.3	58968	1.3	.1	98.2	.4	3.5	.1			none	
SBR58-8693	73.3-78.3	58969	1.5	.0	98.0	.5	3.8	.1			none	
SBR58-8694	75.3-80.3	58970	1.2	.2	98.2	.4	3.2	.4			none	
SBR58-8695	77.3-82.3	58971	1.8	.2	97.4	.6	4.6	.6			none	
SBR58-8696	79.3-84.3	58972	1.5	.1	97.6	.8	3.9	.2			none	
SBR58-8697	81.3-86.3	58973	1.7	.3	97.7	.3	4.5	.6			none	
SBR58-8698	83.3-88.3	58974	1.3	.1	98.2	.4	3.3	.4			none	

a. - Specific gravity estimated due to insufficient oil.

Core samples received November 7, 1958; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from National Farmer's Union Exploration Company's corehole No. 2 drilled in the SW1/4 of
Sec. 32, T. 9 S., R. 25 E., Uintah County, Utah

Surface elevation - 5,420 feet

Mahogany marker at 500.3 feet

Sample number Laramie	✓ Their	Run No.	Yield of product				Gal. per ton Oil	Water	Specific gravity of oil at 60°/60°F.	Properties of spent shale		Remarks
			Weight percent		Spent shale	Gas + loss				Tendency to coke		
			Oil	Water								
SPR58-8699	85.3-87.3	58975	1.3	0.2	98.1	0.4	3.4	0.5			none	
SPR58-8700	87.3-89.3	58976	1.4	.2	97.6	.8	3.8a	.4			none	
SPR58-8701	89.3-91.4	58977	1.3	.2	98.1	.4	3.4a	.4			none	
SPR58-8702	91.4-93.0	58978	2.5	.2	96.8	.5	6.6	.4	0.920		none	
SPR58-8703	93.0-95.0	58979	2.6	.2	96.5	.7	6.6	.5	.923		none	
SPR58-8704	95.0-97.0	58980	1.7	.1	97.4	.8	4.3a	.4			none	
SPR58-8705	97.0-99.0	58981	2.1	.4	96.6	.9	5.4	1.0	.930		none	
SPR58-8706	99.0-101.0	58982	2.3	.7	96.3	.7	5.9	1.7	.936		none	
SPR58-8707	101.0-102.0	58983	9.5	1.1	87.6	1.8	24.5	2.6	.927		none	
SPR58-8708	102.0-102.8	58984	3.5	.7	94.8	1.0	8.9	1.7	.946		none	
SPR58-8709	102.8-104.0	58985	2.2	.4	96.8	.6	5.7	.8	.938		none	
SPR58-8710	104.0-106.0	58986	2.2	.3	96.5	1.0	5.5	.8	.941		none	
SPR58-8711	106.0-108.0	58987	2.0	.2	97.2	.6	5.2	.5	.920		none	
SPR58-8712	108.0-110.4	58988	1.6	.2	97.6	.6	4.2	.4	.925		none	
SPR58-8713	110.4-112.0	58989	1.7	.5	97.0	.8	4.2	1.2	.943		none	
SPR58-8714	112.0-114.0	58990	1.7	.6	97.2	.5	4.5	1.4			none	
SPR58-8715	114.0-116.0	58991	1.3	.3	96.1	2.3	3.3	.7			none	
SPR58-8716	116.0-118.0	58992	1.7	.3	97.2	.8	4.5	.6			none	
SPR58-8717	118.0-120.0	58993	3.7	.3	94.9	1.1	9.4	.7	.942		none	
SPR58-8718	120.0-121.8	58994	2.4	.2	96.5	.9	6.1	.6	.935		none	
SPR58-8719	121.8-124.0	58995	2.4	.2	96.4	1.0	6.2	.5	.933		none	
SPR58-8720	124.0-125.0	58996	2.6	.3	95.9	1.2	6.6	.7	.930		none	
SPR58-8721	125.0-126.7	58997	2.2	.4	96.6	.8	5.8	.8	.933		none	
SPR58-8722	126.7-127.7	58998	5.7	.3	92.9	1.1	14.9	.7	.921		none	
SPR58-8723	127.7-128.7	58999	13.3	.7	83.2	2.8	34.5	1.7	.923		slight	
SPR58-8724	128.7-130.0	59000	4.3	.2	94.3	1.2	11.1	.4	.938		slight	
SPR58-8725	130.0-132.0	59001	2.9	.2	96.0	.9	7.4	.5	.935		none	
SPR58-8726	132.0-133.4	59002	2.7	.1	96.5	.7	6.9	.4	.931		none	
SPR58-8727	133.4-134.4	59003	2.9	.3	96.0	.8	7.3	.7	.934		none	
SPR58-8728	135.0-136.0	59004	3.0	.3	95.9	.8	7.7	.7	.934		none	

a. - Specific gravity estimated due to insufficient oil.

Core samples received November 7, 1958; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from National Farmer's Union Exploration Company's corehole No. 2 drilled in the SW1/4 of
Sec. 32, T. 9 S., R. 25 E., Uintah County, Utah

Surface elevation - 5,420 feet

Mahogany marker at 500.3 feet

Sample number		Run No.	Yield of product				Specific gravity of oil at 60°/60°F.	Properties of spent shale		Remarks
			Weight percent		Gal. per ton			Tendency to		
Laramie	Thier		Oil	Water	Spent shale	Gas + loss	Oil	Water	coke	
SPR58-8729	135.0-137.0	59005	3.3	0.3	95.5	0.9	8.1	0.7	.942	none
SPR58-8730	137.0-138.0	59006	3.6	.2	95.5	.7	9.1	.6	.938	none
SPR58-8731	138.0-139.0	59007	3.3	.4	95.7	.6	8.4	.8	.938	none
SPR58-8732	139.0-140.0	59008	3.2	.2	95.7	.9	8.2	.6	.935	none
SPR58-8733	140.0-141.0	59009	3.0	.3	96.0	.7	7.7	.6	.933	none
SPR58-8734	141.0-142.0	59010	3.1	.6	95.4	.9	8.0	1.3	.942	none
SPR58-8735	142.0-143.0	59011	4.2	.3	94.5	1.0	10.5	.7	.948	none
SPR58-8736	143.0-144.0	59012	4.2	.3	94.5	1.0	10.5	.7	.957	none
SPR58-8737	144.0-145.0	59013	4.1	.4	94.6	.9	10.3	.8	.954	none
SPR58-8738	145.0-146.0	59014	4.2	.1	94.8	.9	10.5	.4	.951	none
SPR58-8739	146.0-147.0	59015	4.1	.3	94.7	.9	10.3	.7	.948	none
SPR58-8740	147.0-148.3	59016	3.4	.2	95.5	.9	8.7	.4	.945	none
SPR58-8741	149.5-150.5	59017	4.6	.2	94.1	1.1	11.5	.5	.946	none
SPR58-8742	150.5-151.5	59018	4.6	.3	94.1	1.0	11.7	.6	.947	none
SPR58-8743	151.5-152.5	59019	5.1	.4	93.2	1.3	13.0	1.0	.947	none
SPR58-8744	152.5-153.5	59020	3.4	.3	95.4	.9	8.6	.7	.943	none
SPR58-8745	153.5-154.5	59021	2.8	.3	96.1	.8	7.2	.6	.934	none
SPR58-8746	154.5-155.5	59022	2.9	.1	96.4	.6	7.4	.4	.930	none
SPR58-8747	155.5-156.5	59023	2.9	.2	96.4	.5	7.5	.5	.931	none
SPR58-8748	156.5-157.5	59024	3.0	.1	96.3	.6	7.7	.4	.928	none
SPR58-8749	157.5-158.5	59025	3.4	.3	95.6	.7	8.8	.6	.936	none
SPR58-8750	158.5-159.5	59026	3.5	.3	95.5	.7	8.9	.7	.940	none
SPR58-8751	159.5-160.5	59027	5.6	.3	93.2	.9	14.3	.8	.936	none
SPR58-8752	160.5-161.5	59028	6.0	.3	92.2	1.5	15.5	.6	.934	none
SPR58-8753	161.5-162.9	59029	3.1	.3	95.9	.7	8.0	.6	.936	none
SPR58-8754	162.9-164.2	59030	1.8	.2	97.7	.3	4.74	.4		none
SPR58-8755	164.2-165.2	59031	3.0	.2	96.1	.7	7.6	.6	.926	none
SPR58-8756	165.2-166.2	59032	3.0	.2	96.3	.5	7.8	.4	.928	none
SPR58-8757	166.2-167.0	59033	3.2	.3	95.6	.9	8.2	.7	.936	none
SPR58-8758	167.0-168.0	59034	3.6	.3	95.2	.9	9.2	.7	.939	none

a. - Specific gravity estimated due to insufficient oil.

Core samples received November 7, 1958; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from National Farmer's Union Exploration Company's corehole No. 2 drilled in the SW1/4 of
Sec. 32, T. 9 S., R. 25 E., Uintah County, Utah

Surface elevation - 5,420 feet

Mahogany marker at 500.3 feet

Sample number		Run No.	Yield of product				Gal. per ton		Specific gravity of oil at 60°/60°F.	Properties of	Remarks
			Weight percent		Spent shale	Gas + loss				Tendency to coke	
Laramie	Ther		Oil	Water					Oil		Water
SBR58-8759	168.0-169.0	59035	3.5	0.4	95.1	1.0	9.0	1.0	0.941	none	
SBR58-8760	169.0-170.0	59036	3.8	.4	94.9	.9	9.7	.8	.943	none	
SBR58-8761	170.0-171.0	59037	4.4	.4	94.0	1.2	11.3	1.0	.943	none	
SBR58-8762	171.0-172.0	59038	4.1	.3	94.6	1.0	10.5	.6	.942	none	
SBR58-8763	172.0-173.0	59039	4.2	.4	94.5	.9	10.5	1.0	.947	none	
SBR58-8764	173.0-174.0	59040	3.5	.3	95.1	1.1	8.8	.8	.940	none	
SBR58-8765	174.0-175.0	59041	3.4	.3	95.2	1.1	8.7	.7	.940	none	
SBR58-8766	175.0-176.0	59042	4.1	.2	94.2	1.2	10.4	.6	.937	none	
SBR58-8767	176.0-176.9	59043	4.7	.2	93.8	1.3	12.1	.5	.934	none	
SBR58-8768	176.9-178.6	59044	3.5	.3	95.2	1.0	9.0	.7	.926	none	
SBR58-8769	178.6-179.6	59045	3.8	.2	95.1	.9	9.8	.5	.926	none	
SBR58-8770	179.6-180.6	59046	3.7	.1	95.3	.9	9.5	.4	.928	none	
SBR58-8771	180.6-181.6	59047	3.4	.3	95.5	.8	8.7	.7	.931	none	
SBR58-8772	181.6-182.6	59048	3.6	.1	95.0	1.3	9.2	.4	.935	none	
SBR58-8773	182.6-183.6	59049	4.5	.3	94.0	1.2	11.5	.7	.938	none	
SBR58-8774	183.6-184.6	59050	4.1	.3	94.5	1.1	10.5	.7	.938	none	
SBR58-8775	184.6-185.6	59051	4.0	.4	94.5	1.1	10.3	.8	.930	none	
SBR58-8776	185.6-186.6	59052	3.1	.4	95.1	1.4	7.8	1.0	.936	none	
SBR58-8777	186.6-187.6	59053	3.0	.4	95.4	1.2	7.6	1.0	.939	none	
SBR58-8778	187.6-188.6	59054	3.3	.4	95.4	.9	8.6	1.0	.934	none	
SBR58-8779	188.6-189.6	59055	3.4	.4	95.4	.8	8.7	1.1	.930	none	
SBR58-8780	189.6-191.7	59056	3.1	.5	95.3	1.1	7.9	1.2	.934	none	
SBR58-8781	191.7-192.7	59057	6.9	.6	91.0	1.5	17.8	1.3	.934	none	
SBR58-8782	192.7-193.7	59058	3.3	.4	95.3	1.0	8.4	1.0	.931	none	
SBR58-8783	193.7-195.1	59059	2.9	.5	95.8	.8	7.3	1.2	.934	none	
SBR58-8784	195.1-196.3	59060	1.7	.2	97.5	.6	4.4	.6		none	
SBR58-8785	196.3-197.3	59061	3.1	.4	95.7	.8	8.0	.8	.937	none	
SBR58-8786	197.3-198.3	59062	4.1	.3	94.5	1.1	10.5	.7	.942	none	
SBR58-8787	198.3-199.3	59063	4.2	.4	94.5	.9	10.8	.8	.940	none	
SBR58-8788	199.3-200.3	59064	4.1	.2	94.8	.9	10.5	.5	.941	none	

a. - Specific gravity estimated due to insufficient oil.

Core samples received November 7, 1958; assays made on air-dried samples.

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from National Farmer's Union Exploration Company's corehole No. 2 drilled in the SW1/4 of
Sec. 32, T. 9 S., R. 25 E., Uintah County, Utah

Surface elevation - 5,420 feet

Mahogany marker at 500.3 feet

Sample number		Run	Yield of product				Specific gravity		Properties of		Remarks
Laramie	Air	No.	Weight percent		Spent	Gas +	Cal. per ton		of oil at	spent shale	
			Oil	Water	shale	loss	Oil	Water	60°/60°F.	Tendency to	
SPR58-8789	200.3-201.3	59065	3.6	0.4	95.2	0.8	9.1	1.0	0.937	coke	
SPR58-8790	201.3-202.3	59066	3.0	.4	95.9	.7	7.6	1.0	.934	none	
SPR58-8791	202.3-203.3	59067	2.3	.5	96.6	.6	6.0	1.1	.934	none	
SPR58-8792	203.3-204.3	59068	2.7	.5	96.0	.8	7.0	1.2	.935	none	
SPR58-8793	204.3-205.3	59069	2.9	.5	96.0	.6	7.2	1.2	.949	none	
SPR58-8794	205.3-206.3	59070	2.9	.5	95.7	.9	7.5	1.1	.937	none	
SPR58-8795	206.3-207.6	59071	2.6	.4	96.2	.8	6.6	1.0	.934	none	
SPR58-8796	207.6-208.6	59072	5.6	.4	92.7	1.3	14.3	1.1	.936	none	
SPR58-8797	208.6-209.6	59073	3.0	.4	95.8	.8	7.7	1.0	.937	none	
SPR58-8798	209.6-210.6	59074	2.9	.4	95.9	.8	7.4	1.0	.940	none	
SPR58-8799	210.6-211.6	59075	2.6	.4	96.3	.7	6.5	1.1	.940	none	
SPR58-8800	211.6-212.6	59076	2.4	.4	96.5	.7	6.2	1.0	.941	none	
SPR58-8801	212.6-213.6	59077	2.5	.6	96.2	.7	6.4	1.3	.937	none	
SPR58-8802	213.6-214.6	59078	2.6	.2	96.5	.7	6.7	.6	.933	none	
SPR58-8803	214.6-215.6	59079	2.7	.4	96.1	.8	6.8	1.1	.933	none	
SPR58-8804	215.6-216.6	59080	2.6	.4	96.2	.8	6.5	1.0	.938	none	
SPR58-8805	216.6-217.6	59081	2.3	.5	96.4	.8	5.9	1.1	.935	none	
SPR58-8806	217.6-218.6	59082	2.5	.4	96.2	.9	6.5	1.0	.941	none	
SPR58-8807	218.6-219.6	59083	2.3	.6	96.4	.7	6.0	1.3	.933	none	
SPR58-8808	219.6-220.6	59084	2.5	.4	96.0	1.1	6.4	.8	.943	none	
SPR58-8809	220.6-221.6	59085	2.8	.5	95.8	.9	7.0	1.2	.943	none	
SPR58-8810	221.6-222.6	59086	2.7	.5	96.0	.8	7.0	1.1	.932	none	
SPR58-8811	222.6-223.6	59087	2.2	.5	96.3	1.0	5.6	1.3	.932	none	
SPR58-8812	223.6-224.6	59088	1.7	.6	96.8	.9	4.54	1.4		none	
SPR58-8813	224.6-225.6	59089	2.4	.5	96.0	1.1	6.3	1.2	.931	none	
SPR58-8814	225.6-226.6	59090	3.0	.4	95.5	1.1	7.7	1.1	.930	none	
SPR58-8815	226.6-227.6	59091	5.0	.5	92.9	1.6	12.8	1.3	.928	none	
SPR58-8816	227.6-228.4	59092	10.9	.9	85.8	2.4	26.3	2.0	.925	slight	
SPR58-8817	228.4-229.4	59093	3.2	.7	95.0	1.1	8.2	1.8	.931	none	
SPR58-8818	229.4-230.4	59094	2.7	.4	95.9	1.0	6.9	1.1	.925	none	

a. - Specific gravity estimated due to insufficient oil.

Core samples received November 7, 1958; assays made on air-dried samples.