

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3B-1 drilled in NW1/4SE1/4NW1/4
of sec 15, T 18 N, R 106 W, Sweetwater County, Wyoming

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	
OSCR-RS3B-1	120.0-121.0	13792	6.2	2.9	88.9	2.0	16.0	7.0	0.938	None	
	121.0-121.5	13793	10.1	2.5	83.4	4.0	26.0	6.0	.929	None	
	121.5-121.6	13794	13.8	3.4	78.4	4.4	36.2	8.1	.917	None	
	121.6-121.8	13795	12.6	1.7	82.8	2.9	33.2	4.1	.907	None	
	121.8-121.9	13796	15.1	2.5	78.1	4.3	39.8	6.0	.911	None	
	121.9-122.1	13797	11.6	2.0	83.5	2.9	30.3	4.8	.916	None	
	122.1-122.2	13798	12.8	2.0	81.7	3.5	33.5	4.8	.913	None	
	122.2-122.3	13799	6.5	1.0	90.7	1.8	17.0	2.4	.919	None	
	122.3-123.3	13800	10.8	1.6	84.6	3.0	28.5	3.8	.911	None	
	123.3-124.1	13801	11.2	1.6	84.4	2.8	29.7	3.8	.907	None	
	124.1-125.1	13802	12.1	2.4	82.8	2.7	32.1	5.8	.909	None	
	125.1-126.2	13803	10.7	2.4	84.7	2.2	28.0	5.8	.915	None	
	126.2-126.35	13804	8.0	3.2	87.6	1.2	21.3	7.7	.902	None	
	126.35-126.8	13805	8.0	2.7	87.8	1.5	21.1	6.5	.905	None	
	126.8-127.1	13806	10.2	3.0	83.9	2.9	27.1	7.1	.906	None	
	127.1-127.8	13807	5.7	2.9	90.0	1.4	14.9	7.0	.912	None	
	127.8-127.9	13808	7.9	3.0	88.0	1.1	21.2	7.2	.894	None	
	127.9-128.9	13809	6.6	2.9	88.7	1.8	17.2	7.0	.922	None	
	128.9-129.9	13810	9.5	2.2	86.1	2.2	24.5	5.3	.925	None	
	129.9-130.1	13811	12.5	2.2	82.2	3.1	32.5	5.3	.919	None	
	130.1-130.4	13812	9.1	3.2	86.1	1.6	24.4	7.7	.898	None	
	130.4-130.8	13813	14.4	2.2	80.4	3.0	37.7	5.3	.914	None	
	130.8-131.8	13814	4.1	2.8	91.8	1.3	10.9	6.7	.906	None	
	131.8-132.1	13820	6.1	2.1	89.8	2.0	15.7	4.9	.929	None	
	132.1-133.1	13821	7.0	1.8	89.3	1.9	18.4	4.2	.916	None	
	133.1-133.5	13822	10.6	1.4	84.2	3.8	27.8	3.2	.919	None	
	133.5-134.1	13823	8.6	.9	87.9	2.6	22.3	2.2	.923	None	
	134.1-134.4	13824	3.5	2.6	91.9	2.0	9.5	6.2	.896	None	
	134.4-134.8	13825	4.6	1.9	91.9	1.6	12.4	4.6	.898	None	
	134.8-134.9	13826	3.1	1.8	93.9	1.2	8.5	3.2	.883	None	

Core samples received January 1966; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3B-1 (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	Gal per ton				
Laramie	Their		Oil	Water					Oil ^{1/}	Water	
OSGR-RS3B-1	134.9-135.9	13828	2.5	0.9	95.7	0.9	6.7	2.2	0.895	None	
	135.9-136.9	13829	2.2	1.1	95.2	1.5	5.8	2.6	.889	None	
	136.9-137.9	13830	1.6	1.7	95.7	1.0	4.1a	4.1		None	
	137.9-138.3	13831	1.7	1.8	95.2	1.3	4.4a	4.3		None	
	140.2-141.2	13832	1.1	2.2	95.7	1.0	2.8a	5.3		None	
	141.2-142.2	13833	1.7	2.1	95.1	1.1	4.5a	4.9		None	
	142.2-142.5	13834	2.7	1.7	94.0	1.6	7.0	4.1	.911	None	
	142.5-143.5	13835	5.9	1.5	90.6	2.0	15.3	3.6	.925	None	
	143.5-144.0	13836	5.2	1.8	91.0	2.0	13.6	4.3	.917	None	
	144.0-145.1	13837	5.6	2.0	90.1	2.3	14.7	4.9	.905	None	
	145.1-145.2	13838	2.9	.6	95.6	.9	7.7	1.5	.909	None	
	145.2-145.6	13839	5.5	1.8	90.9	1.8	14.3	4.3	.922	None	
	145.6-146.6	13840	9.5	1.4	86.6	2.5	24.9	3.4	.915	None	
	146.6-146.8	13841	5.1	1.2	92.0	1.7	13.0	2.9	.937	None	
	146.8-146.9	13842	9.6	3.8	84.4	2.2	25.5	9.1	.902	None	
	146.9-147.2	13843	1.6	.3	97.5	.6	4.2a	.7		None	
	147.2-147.5	13844	2.0	1.5	95.4	1.1	5.1a	3.6		None	
	147.5-147.6	13845	7.3	4.3	85.7	2.7	18.9	10.3	.921	None	
	147.6-147.7	13846	.1	6.0	92.7	1.2	.3a	14.4		None	
	147.7-147.85	13847	.0	7.5	91.5	1.0	Trace	17.9		None	
	147.85-148.8	13848	3.2	2.6	92.3	1.9	8.6	6.2	.901	None	
	148.8-149.9	13849	3.3	2.5	92.8	1.4	8.7	6.0	.903	None	
	149.9-150.0	13850	.0	9.3	90.1	.6	Trace	22.3		None	
	150.0-151.0	13852	3.5	1.2	93.7	1.6	9.2	2.9	.908	None	
	151.0-151.3	13882	4.3	3.2	90.2	2.3	11.5	7.7	.899	None	
	151.3-152.3	13883	4.8	3.3	89.5	2.4	12.8	7.9	.901	None	
	152.3-153.3	13884	6.4	3.0	87.8	2.8	17.3	7.2	.892	None	
	153.3-154.0	13885	.0	6.6	92.8	.6	Trace	15.8		None	
	154.0-154.1	13886	3.9	4.5	89.6	2.0	10.3	10.8	.902	None	
	154.1-154.2	13887	3.6	3.7	91.1	1.6	9.7	8.9	.891	None	

See footnotes at end of table.

Core samples received January 1966; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3B-1 (con.)

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 ^{1/}	Water
OSCR-RS3B-1	154.2-154.3	13888	0.8	0.8	97.9	0.5	2.2a	1.8		None
	154.3-155.1	13889	4.2	4.0	90.0	1.8	11.4	9.6	0.896	None
	155.1-155.6	13890	5.3	4.0	88.3	2.4	14.1	9.6	.900	None
	155.6-156.3	13891	3.4	2.1	93.1	1.4	9.1	5.0	.891	None
	156.3-157.3	13892	5.4	3.4	88.2	3.0	14.4	8.1	.902	None
	157.3-158.2	13893	4.7	4.0	89.2	2.1	12.7	9.5	.891	None
	160.2-160.5	13659	.1	.4	99.4	.1	.3a	1.0		None
	160.5-160.7	13660	.1	3.1	96.2	.6	.3a	7.3		None
	160.7-161.0	13661	.2	.5	99.1	.2	.4a	1.2		None
	160.0-161.1	13662	.1	3.9	94.9	1.1	.2a	9.3		None
	161.1-161.4	13663	.1	.5	98.8	.6	.3a	1.2		None
	161.4-161.9	13664	.3	2.7	95.9	1.1	.8a	6.5		None
	161.9-162.2	13665	.0	2.3	97.0	.7	No oil	5.6		None
	162.2-163.3	13666	.1	3.4	95.5	1.0	.1a	8.1		None
	163.3-163.8	13667	1.3	4.7	92.1	1.9	3.3a	11.4		None
	163.8-163.9	13668	.0	7.7	91.3	1.0	No oil	18.5		None
	163.9-164.7	13669	1.6	2.8	94.3	1.3	4.3a	6.7		None
	164.7-165.2	13670	3.7	3.7	90.8	1.8	9.8	8.9	.897	None
	165.2-165.8	13671	5.9	1.9	90.5	1.7	15.6	4.7	.905	None
	165.8-166.8	13672	2.6	1.6	94.2	1.6	7.0	3.8	.905	None
	166.8-167.2	13673	3.7	2.1	92.3	1.9	9.9	5.0	.905	None
	167.2-167.3	13674	4.7	3.1	90.9	1.3	12.5	7.4	.908	None
	167.3-168.3	13675	2.3	1.7	94.8	1.2	6.1	4.2	.902	None
	168.3-169.3	13676	2.5	1.7	94.3	1.5	6.6	4.1	.897	None
	169.3-170.3	13677	4.0	2.0	92.3	1.7	10.8	4.7	.898	None
	170.3-171.3	13678	3.5	1.8	92.3	2.4	9.2	4.3	.900	None
	171.3-172.3	13679	3.0	1.8	93.8	1.4	7.8	4.4	.903	None
	172.3-172.6	13680	4.0	3.6	90.4	2.0	10.5	8.5	.917	None
	172.6-173.0	13681	3.3	3.2	91.8	1.7	8.7	7.7	.911	None
	173.0-173.1	13682	3.6	4.5	90.3	1.6	9.5	10.8	.911	None

See footnotes at end of table.

Core samples received January 1966; assays made on air-dried samples

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Samples from USBM Rock Springs Well No. 3B-1 (con.)

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 coke		
Laramie	Their		Oil	Water	Spent shale	Gas + loss	Oil ¹ /	Water				
OSCR-RS3B-1	173.1-174.1	13683	2.6	2.0	94.3	1.1	6.8	4.8	0.900	None		
	174.1-174.7	13684	2.8	1.5	94.3	1.4	7.4	3.6	.902	None		
	174.7-175.1	13685	3.8	1.7	92.6	1.9	10.0	4.2	.899	None		
	175.1-176.1	13686	3.6	2.8	91.7	1.9	9.6	6.7	.894	None		
	176.1-176.4	13687	4.0	3.4	90.5	2.1	10.7	8.1	.890	None		
	176.4-177.4	13688	3.0	3.1	92.3	1.6	8.1	7.4	.891	None		
	177.4-178.3	13689	2.6	2.8	93.1	1.5	7.1	6.6	.893	None		
	180.2-181.2	13690	2.3	2.3	94.0	1.4	6.3	5.5	.895	None		
	181.2-181.6	13691	3.4	3.0	91.9	1.7	9.2	7.2	.888	None		
	181.6-181.9	13692	4.0	4.4	89.2	2.4	10.9	10.5	.886	None		
	181.9-182.9	13693	3.2	3.5	91.3	2.0	8.5	8.4	.889	None		
	182.9-183.1	13694	3.3	4.0	91.1	1.6	8.7	9.6	.890	None		
	183.1-183.4	13695	5.0	4.0	88.8	2.2	13.2	9.6	.910	None		
	183.4-184.2	13696	6.0	3.7	87.8	2.5	15.4	8.7	.938	None		
	184.2-184.9	13697	5.8	3.6	88.0	2.6	15.0	8.6	.922	None		
	184.9-185.1	13698	6.8	4.4	85.8	3.0	18.2	10.4	.904	None		
	185.1-186.1	13699	4.2	2.8	90.6	2.4	11.1	6.7	.916	None		
	186.1-186.7	13700	4.6	4.4	88.8	2.2	11.9	10.5	.929	None		
	186.7-186.8	13701	6.2	3.1	88.4	2.3	16.0	7.4	.925	None		
	186.8-186.9	13702	8.6	4.0	83.6	3.8	22.5	9.6	.918	None		
	186.9-187.9	13703	3.6	2.8	91.8	1.8	9.3	6.7	.927	None		
	187.9-188.9	13704	4.7	2.6	90.1	2.6	12.2	6.2	.925	None		
	188.9-189.9	13705	7.1	2.5	87.4	3.0	18.3	6.0	.925	None		
	189.9-190.1	13706	.8	.6	97.7	.9	2.2a	1.4		None		
	190.1-190.6	13707	7.0	2.7	88.5	1.8	18.0	6.6	.931	None		
	190.6-191.6	13708	7.0	2.1	88.6	2.3	17.8	5.0	.935	None		
	191.6-192.6	13709	6.9	2.1	88.5	2.5	17.7	5.0	.935	None		
	192.6-193.6	13710	6.0	2.8	89.7	1.5	15.3	6.6	.940	None		
	193.6-193.8	13711	6.4	3.1	88.3	2.2	16.4	7.4	.940	None		
	193.8-194.1	13712	2.8	.9	95.2	1.1	7.1	2.3	.936	None		

See footnotes at end of table.

Core samples received January 1966; assays made on air-dried samples

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from USBM Rock Springs Well No. 3B-1 (con.)

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 ^{1/}	Water
OSCR-RS3B-1	194.1-194.4	13713	5.0	2.2	91.1	1.7	12.8	5.3	0.936	None
	194.4-194.7	13714	1.7	.8	96.2	1.3	4.3a	1.9		None
	194.7-195.4	13715	6.4	3.0	88.3	2.3	16.4	7.1	.942	None
	195.4-195.7	13716	3.6	1.2	94.0	1.2	9.3	2.9	.939	None
	195.7-195.9	13717	9.2	3.0	85.2	2.6	23.5	7.2	.940	None
	195.9-196.9	13718	11.4	1.8	83.9	2.9	29.3	4.3	.927	None
	196.9-197.6	13719	7.0	2.2	88.6	2.2	18.3	5.3	.919	None
	197.6-198.0	13720	7.8	2.1	87.8	2.3	20.3	5.2	.918	None
	198.0-198.6	13721	3.0	.5	95.3	1.2	7.9	1.2	.908	None
	198.6-198.8	13722	5.8	1.9	90.4	1.9	15.2	4.6	.911	None
	198.8-199.2	13723	6.3	1.7	89.5	2.5	16.8	4.1	.896	None

^{1/} "a"--indicates specific gravity estimated as 0.92.
"Trace".

Core samples received January 1966; assays made on air-dried samples