

OIL-SHALE ASSAYS BY MODIFIED FISCHER RETORT METHOD

Samples from Mintech Corporation and Marathon Oil Company's E. Tomich No. 1A Well drilled in NE1/4NE1/4SE1/4
(530 feet South and 120 feet West of E1/4) sec 29, T 24 N, R 106 W, Sweetwater County, Wyoming

Collar elevation 6,591 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	Their		Oil	Water	Spent shale	Gas + loss	Oil ¹ / _{Water}	Water	coke			
SBR71-7202	480-485	60804	8.0	1.6	87.0	3.4	20.8	3.8	0.923	None		
SBR71-7203	485-490	60805	9.5	1.9	85.1	3.5	24.8	4.6	.920	None		
SBR71-7204	490-495	60806	7.3	1.5	88.9	2.3	19.0	3.7	.916	None		
SBR71-7205	495-500	60807	6.3	1.7	89.8	2.2	16.4	4.1	.917	None		
SBR71-7206	500-505	60808	3.5	1.6	93.5	1.4	9.1	4.0	.916	None		
SBR71-7207	505-510	60809	3.3	1.4	94.1	1.2	8.6	3.2	.924	None		
SBR71-7208	510-515	60810	3.5	1.6	93.3	1.6	9.3	3.8	.913	None		
SBR71-7209	515-520	60811	6.0	2.3	89.0	2.7	15.9	5.5	.911	None		
SBR71-7210	520-525	60812	4.4	2.1	91.3	2.2	11.5	5.0	.916	None		
SBR71-7211	525-530	60813	3.9	2.5	91.3	2.3	10.2	6.0	.919	None		
SBR71-7212	530-535	60814	1.9	1.0	95.0	2.1	5.0a	2.4		None		
SBR71-7213	535-540	60815	3.5	1.2	93.3	2.0	9.2	2.9	.922	None		
SBR71-7214	540-545	60816	3.4	2.0	92.9	1.7	8.8	4.8	.924	None		
SBR71-7215	545-550	60817	2.0	1.7	94.1	2.2	5.2a	4.1		None		
SBR71-7216	550-555	60818	3.9	1.7	92.7	1.7	10.3	4.1	.921	None		
SBR71-7217	555-560	60819	3.2	1.5	93.8	1.5	8.2	3.6	.926	None		
SBR71-7218	560-565	60820	3.7	1.6	93.1	1.6	9.7	3.9	.928	None		
SBR71-7219	565-570	60821	1.0	2.5	94.7	1.8	2.6a	6.0		None		
SBR71-7220	570-575	60822	.9	2.1	94.2	2.8	2.4a	5.0		None		
SBR71-7221	575-580	60823	2.6	2.0	94.2	1.2	6.6	4.8	.921	None		
SBR71-7222	580-585	60824	.9	1.8	95.7	1.6	2.4a	4.3		None		
SBR71-7223	585-590	60825	1.0	2.2	95.1	1.7	2.5a	5.3		None		
SBR71-7224	590-595	60826	1.9	2.0	94.6	1.5	5.1a	4.8		None		
SBR71-7225	595-600	60827	1.6	2.0	95.1	1.3	4.2a	4.8		None		
SBR71-7226	600-605	60828	.4	2.8	95.7	1.1	.9a	6.7		None		
SBR71-7227	605-610	60829	3.3	2.1	93.0	1.6	8.7a	5.0		None		
SBR71-7228	610-615	60830	1.7	2.2	95.3	.8	4.3a	5.3		None		
SBR71-7229	615-620	60831	.8	2.0	96.3	.9	2.1a	4.8		None		
SBR71-7230	620-625	60832	.1	3.7	95.3	.9	.2a	8.9		None		
SBR71-7231	625-630	60833	3.6	2.7	92.2	1.5	9.3	6.5	.920	None		

See footnote at end of table.

Drill cutting samples received August 4, 1971; Assays made on air-dried samples

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Samples from Mintech Corporation and Marathon Oil Company's E. Tomich No. 1A Well (con.)

Collar elevation 6,591 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 ¹ /	Water
SBR71-7232	630-635	60834	1.3	2.4	95.3	1.0	3.3a	5.8		None
SBR71-7233	635-640	60835	.5	2.6	95.9	1.0	1.3a	6.2		None
SBR71-7234	640-645	60836	.1	2.9	96.4	.6	.2a	7.1		None
SBR71-7235	645-650	60837	.1	2.8	96.6	.5	.2a	6.7		None
SBR71-7236	650-655	60838	.0	2.2	97.1	.7	No oil	5.2		None
SBR71-7237	655-660	60839	.0	3.0	96.7	.3	No oil	7.1		None
SBR71-7238	660-665	60840	.2	2.8	96.7	.3	.5a	6.7		None
SBR71-7239	665-670	60841	2.6	1.8	94.8	.8	6.7	4.3	0.916	None
SBR71-7240	670-675	60842	2.4	2.0	94.7	.9	6.3	4.9	.916	None
SBR71-7241	675-680	60843	5.1	2.2	91.1	1.6	13.3	5.3	.919	None
SBR71-7242	680-685	60844	3.6	2.0	93.0	1.4	9.3	4.9	.913	None
SBR71-7243	685-690	60845	4.9	1.6	91.3	2.2	12.8	3.8	.914	None
SBR71-7244	690-695	60846	1.6	2.8	94.6	1.0	4.2a	6.7		None
SBR71-7245	695-700	60847	2.2	2.3	94.4	1.1	11.8	5.5	.915	None
SBR71-7246	700-705	60848	2.7	2.5	93.8	1.0	7.0	6.0	.907	None
SBR71-7247	705-710	60849	.2	1.7	97.6	.5	.5a	4.1		None
SBR71-7248	710-715	60850	.2	1.1	97.5	1.2	.4a	2.6		None
SBR71-7249	715-720	60851	.0	1.7	96.4	1.9	Trace	4.0		None
SBR71-7250	720-725	60852	.3	1.7	96.4	1.6	.8a	4.1		None
SBR71-7251	725-730	60853	.5	1.9	96.1	1.5	1.4a	4.5		None
SBR71-7252	730-735	60854	.0	1.1	94.7	4.2	No oil	2.7		None
SBR71-7253	735-740	60855	.0	1.1	91.7	7.2	No oil	2.6		None
SBR71-7254	740-745	60856	.2	1.2	97.2	1.4	.6a	2.8		None
SBR71-7255	745-750	60857	.0	.2	93.0	6.8	No oil	.6		None
SBR71-7256	750-755	60858	.0	.4	95.9	3.7	No oil	1.0		None
SBR71-7257	755-760	60859	.3	1.0	97.5	1.2	.8a	2.4		None
SBR71-7258	760-765	60860	.3	1.4	96.7	1.6	.9a	3.2		None
SBR71-7259	765-770	60861	.2	1.0	97.4	1.4	.6a	2.3		None
SBR71-7260	770-775	60862	.1	1.5	98.1	.3	.4a	3.6		None
SBR71-7261	775-780	60863	.4	1.5	98.0	.1	.9a	3.7		None

See footnote at end of table.

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elevation 6,591 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		
Their	No.	Oil	Water	Spent shale	Gas + loss	Oil ¹ /	Water	coke	
1-7262	780-785	60864	0.0	0.8	89.2	10.0	No oil	2.0	None
1-7263	790-795	60865	.5	1.8	97.5	.2	1.3a	4.2	None
1-7264	795-800	60866	.5	1.7	97.4	.4	1.2a	4.2	None
1-7265	800-805	60867	.4	1.7	97.0	.9	1.1a	4.0	None
1-7266	805-810	60868	.3	1.7	97.3	.7	.8a	4.1	None
1-7267	810-815	60869	.3	1.6	97.4	.7	.9a	3.8	None
1-7268	815-820	60870	.4	1.7	97.0	.9	1.0a	4.0	None
1-7269	820-825	60871	.4	1.1	98.3	.2	1.0a	2.6	None
1-7270	825-830	60872	.7	1.1	98.0	.2	1.7a	2.6	None
1-7271	830-835	60873	.4	1.4	98.0	.2	1.0a	3.4	None
1-7272	835-840	60874	.0	.4	93.6	6.0	No oil	1.0	None

^a indicates specific gravity estimated as 0.92.

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