



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

MORGANTOWN RESEARCH CENTER

P. O. BOX 880
COLLINS FERRY ROAD
MORGANTOWN, WEST VIRGINIA

May 4, 1961

Memorandum

To: William E. Eckard, Assistant Chief, Morgantown
Petroleum Research Laboratory

From: William M. Nabors, Petroleum and Natural Gas Engineer,
Morgantown Petroleum Research Laboratory

Subject: Coring operation at the Eastern Interior Oil Company's
Well No. 2-A on the W. B. Wright farm in the Spruce
Creek Field near Newburn, West Virginia. (Reservoir
Evaluation Well No. 3)

The following information is for record:

Company - Eastern Interior Oil Company
Well location and number -
State - West Virginia
County - Ritchie
District - Union
Field - Spruce Creek
Farm - W. B. Wright
Well No. - 2-A
Rig floor elevation - 1130.7

Reference datum

Coring operation - rig floor
Logging operation - rig floor
Top of rig floor to ground level - 1.67'
Depth of 10-3/4 inch csg. - 245'
Depth of 8-5/8 inch csg. - 1125'
Interval cored (4" core)
2015.67 - 2128.02
2256.33 - 2351.62
2424.55 - 2444.20
T. D. 8 inch hole (reamed) - 2424.55
T. D. cored hole - 2444.20
T. D. when logged (after cave) - 2427

1975.19
1319.60
-
155.59

Interval cored:

Run	From	To	Total	Recovery	Percent
1	2015.67	2034.09	18.42	18.00	
2	2034.09	2052.55	18.46	18.02	
3	2052.55	2072.38	19.83	20.1	
4	2072.38	2091.25	18.87	18.74	
5	2091.25	2108.67	17.42	17.68	
6	2108.67	2128.02	19.35	19.0	
			<u>112.35</u>	<u>111.54</u>	<u>99.28</u>
7	2256.33	2275.53	19.20	17.4	
8	2275.53	2292.21	16.68	14.8	
9	2292.21	2309.45	17.24	19.16	
10	2309.45	2328.31	18.86	19.3	
11	2328.31	2347.62	19.31	20.0	
12	2347.62	2351.62	4.0	2.5	
			<u>95.29</u>	<u>93.16</u>	<u>97.77</u>
13	2424.55	2444.20	19.65	19.15	
14	2444.20	-----	-----	.50	
			<u>19.65</u>	<u>19.65</u>	<u>100</u>

Total cored - 226.29
 Total recovered - 224.35
 Total percent recovered - 99.14

Remarks:

Run made before No. 1 run, barrel partially plugged, circulation pressure too high (700-900 p.s.i.), pulled out to clean barrel.

- Run 1 - Rate of penetration slow time - 8 hrs., 40 min.
- Run 2 - Rate of penetration slow time - 6 hrs., 11 min.
- Run 3 - Rate of penetration moderate time - 4 hrs., 3 min.
- Run 4 - Rate of penetration slow time - 7 hrs., 15 min.
- Run 5 - Rate of penetration moderate time - 3 hrs., 23 min.
- Run 6 - Rate of penetration slow time - 6 hrs., 35 min.
- Run 7 - Rate of penetration slow time - 5 hrs., 54 min.
- Run 8 - Rate of penetration fast time - 2 hrs., 10 min.
- Run 9 - Rate of penetration fast time - 2 hrs., 30 min.
- Run 10 - Rate of penetration moderate time - 3 hrs., 5 min.
- Run 11 - Rate of penetration moderate time - 4 hrs., 23 min.
- Run 12 - Rate of penetration slow, pulled out after 4.0' as depth was below best interval of Weir ss. time - 2 hrs., 17 min.
- Run 13 - Rate of penetration in shale 30 min/ft
 Rate of penetration in sandstone 4-1/2 min/ft
 Time - 5 hrs., 22 min.

Run 14 - Broken cavings in bottom of hole, twisted core lifter, couldn't penetrate, hole then caved in, pulled out when circulation wouldn't clean hole time - 4 hrs.

Description of core material:

- Run 1
- 2015.67-2019.25 - l.s., light grey in color, very fine grained with black laminations
 - 2019.25-2019.85 - l.s., light grey in color, fine to med. grained, small vugs
 - 2019.85-2020.9 - l.s., light grey in color, with dark grey laminations
 - 2020.9 - 2024.0 - l.s., light grey in color, with dark grey laminations, med. grained, small vertical fractures, 1/4" to 1" white fossils (may be crynoid stems) scattered throughout
 - 2024.0-2025.0 - l.s., light grey in color, with fossils
 - 2025.0-2029.2 - l.s., light grey in color, fine grained
 - 2029.2-2029.4 - shale, dark grey
 - 2029.4-2034.09 - l.s., light grey in color, with dark grey laminations, fine to med. grained, small vertical and horizontal fractures
- Run 2
- 2034.09-2035.0 - Shaley l.s., light grey in color with green shale streaks, fine grained, some fossils
 - 2035.0-2037.65 - l.s., light grey in color, fine to med. grained, green shale streaks
 - 2037.65-2043.75 - l.s., light grey in color with black stylolites, slight oil bleeding (dark brown oil)
 - 2043.75 - shale break, thin
 - 2043.75-2048.1 - l.s., light grey in color, fine grained, gritty, oil bleeding (dark brown oil)
 - 2048 - top of Keener
 - 2048.1-2052.55 - sandy ls., light grey in color, fine to med. grained, shale breaks 2048.1 & 2050.25

- Run 3
- 2052.5-2052.8 - limey shale, dark grey in color
 - 2052.8-2056.4 - sandy l.s., light grey in color, fine to med. grained, green shale 2056.4
 - 2056.4-2069.0 - sandy l.s., light grey in color, fine to med. grained
 - 2069.0-2072.38 - sandy l.s., light grey in color, med. grained
- Run 4
- 2072.38-2080.1 - limey ss., light grey in color, fine grained, hard, oil show 2072.3-2078.5 (light yellow)
 - 2080.1-2082.3 - shaley ss., grading to shale then to sandy shale, light to dark grey in color, fine to med. grained
 - 2082.3-2085.4 - ss., light grey in color, fine grained, hard, thin shale streaks
 - 2085.0 - top Big Injun sand
 - 2085.4-2086.3 - shaley ss., light grey in color, coarse grained
 - 2086.3-2086.85 - ss., light grey in color, fine to med. grained
 - 2086.5-2087.0 - shale break, dark grey in color
 - 2087.0-2091.25 - ss., light grey in color, fine to med. grained, hard
- Run 5 & 6
- 2091.25-2116.65 - ss., light grey grading to light tan in color, fine to med. grained, random shale pebbles 3/16" diameter, oil show 2092.2 - 2108.67, slight bleeding, good show with oil bleeding 2108.67-2116.65 (light yellow oil)
- Run 6
- 2116.65-2116.97 - shaley ss. grading to sandy shale, light to dark grey
 - 2117 - bottom Big Injun
 - 2116.97-2128.02 - shale, black in color, dense, clean

- Run 7 2256.33-2275.53 - shale, dark grey, gritty grading into shaley sand
- 2273 - top of Weir sand
- Run 8 2275.53-2292.21 - shaley ss., light to med. grey color, random laminations and shale streaks darker in color, fine grained, hard, dirty ss., random horizontal bedding fractures, show of oil and gas bubbling 2077-2292
- Run 9 2292.21-2309.45 - same as run 8
- Run 10, 11, & 12 - shaley, dirty ss., random laminations and shale streaks, random horizontal bedding fractures, becoming more shaley at a depth of 2345
- bottom of Weir ss. 2345
- Run 13 2424.55-2433.5 - shale, dark grey in color, dense, clean
- 2433.5 - top of Berea to ss
- 2433.5-2444.2 - ss., light grey in color, fine to med. grained, oil shows and bleeding 2433.5-2434.4 2436.2-2439.5 2440-2444.2
- Estimated bottom of sand 2446
Some random shale pebbles dark grey.
Considered moderate clean sand

William M. Nabors

William M. Nabors

cc: Marchant
Allamong