

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

FINAL

CORE ANALYSIS REPORT

FOR

USGS/HUSKY OIL COMPANY, OPR.

**SOUTH BARROW #20
WILDCAT**

NORTH SLOPE, ALASKA - NPRA

USGS/HUSKY OIL COMPANY, OPR. DATE 23-APR-80
 SOUTH BARROW #20 FORMATION :
 WILDCAT DRLG. FLUID: WBM
 NORTH SLOPE, ALASKA - NPRA LOCATION :

FILE NO : BP-3-589
 ANALYSTS : WSP, TLS
 LABORATORY: ANCHORAGE

CORE ANALYSIS RESULTS

| SAMPLE NUMBER | DEPTH FEET | PERMEABILITY (MD) | | POR % | GRAIN DEN. | FLUID SATS. | | DESCRIPTION |
|---------------|------------|-------------------|-----------------|-------|------------|-------------|------|-------------------------|
| | | MAXIMUM | 90 DEG VERTICAL | | | OIL | WTR | |
| 1 | 2247.0 | 0.35 | | 12.4 | 0.00 | 12.3 | 65.2 | sslvfsl cly sl calc sid |
| 2 | 2248.0 | 0.24 | | 12.3 | 0.00 | 1.8 | 73.3 | sslvfsl cly sl calc |
| 3 | 2249.0 | 0.14 | | 12.0 | 0.00 | 0.9 | 78.5 | same |
| 4 | 2250.0 | 0.48 | | 11.8 | 0.00 | 1.5 | 81.2 | same |
| 5 | 2251.0 | 21. | | 21.7 | 0.00 | 17.7 | 58.7 | sslvf-fsl cly sl calc |
| 6 | 2252.0 | 13. | | 13.2 | 0.00 | 18.6 | 56.5 | sslvf-mgr foss sid |
| 7 | 2253.0 | 1.25 | | 18.9 | 0.00 | 6.3 | 73.3 | sslvf-csl slauc foss |
| 8 | 2254.0 | 1.99 | | 11.8 | 0.00 | 1.6 | 84.3 | sslvf-mgr foss sid |
| 9 | 2255.0 | 27. | | 12.3 | 0.00 | 12.1 | 62.1 | same |
| 10 | 2256.0 | 4.40 | | 15.5 | 0.00 | 9.1 | 63.9 | sslvf-fmgr cly calc |
| 11 | 2257.0 | 26. | | 21.1 | 0.00 | 14.8 | 54.0 | sslvf-mgr cly calc |
| 12 | 2258.0 | 4.95 | | 18.0 | 0.00 | 8.6 | 61.3 | same |
| 13 | 2259.0 | 5.96 | | 18.5 | 0.00 | 8.5 | 63.7 | same |
| 14 | 2260.0 | 0.28 | | 10.4 | 0.00 | 17.8 | 60.4 | same/sid |
| 15 | 2261.0 | 155. | | 22.6 | 0.00 | 17.8 | 46.7 | sslvf-mgr calc |
| 16 | 2262.0 | 192. | | 24.2 | 0.00 | 26.6 | 43.0 | same |
| 17 | 2263.0 | 7.36 | | 11.2 | 0.00 | 14.4 | 50.4 | ls slauc foss |
| 18 | 2264.0 | 30. | | 22.0 | 0.00 | 15.6 | 63.5 | sslvf-mgr cly sl calc |
| 19 | 2265.0 | 1.59 | | 15.7 | 0.00 | 21.0 | 54.0 | sslvf-mgr calc sid |
| 20 | 2266.0 | 1.98 | | 12.8 | 0.00 | 9.7 | 58.1 | ls slauc foss |
| 21 | 2269.0 | 20. | | 18.4 | 0.00 | 29.6 | 44.9 | sslvf-mgr calc sid |
| 22 | 2270.0 | 0.82 | | 13.5 | 0.00 | 28.4 | 44.6 | same |
| 23 | 2271.0 | 1.01 | | 7.5 | 0.00 | 13.7 | 44.6 | ls slauc foss |
| 24 | 2272.0 | 128. | | 21.6 | 0.00 | 35.0 | 38.0 | sslvf-fsl cly sl calc |
| 25 | 2273.0 | 35. | | 19.6 | 0.00 | 29.8 | 44.2 | same |
| 26 | 2274.0 | 25. | | 19.5 | 0.00 | 23.2 | 55.6 | same |
| 27 | 2275.0 | 16. | | 18.6 | 0.00 | 19.1 | 53.7 | same |
| 28 | 2276.0 | 0.71 | | 10.5 | 0.00 | 13.8 | 64.4 | same/sid |

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USGS/HUSKY OIL COMPANY, OPR. DATE : 23-APR-80
 SOUTH BARROW #20 FORMATION :

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| | | MAXIMUM | 90 DEG VERTICAL | | | OIL | WTR | |
| 29 | 2277.0 | 5.18 | | 15.5 | 0.00 | 15.8 | 51.0 | sslvf-fgr clay sl calc |
| 30 | 2278.0 | 21. | | 18.7 | 0.00 | 27.0 | 48.9 | same |
| 31 | 2279.0 | 4.86 | | 14.4 | 0.00 | 20.5 | 50.6 | same |
| 32 | 2280.0 | 15. | | 19.4 | 0.00 | 18.5 | 56.5 | same |
| 33 | 2281.0 | 7.67 | | 16.1 | 0.00 | 20.7 | 50.6 | same |
| 34 | 2282.0 | 25. | | 18.9 | 0.00 | 25.4 | 48.6 | same |
| 35 | 2283.0 | 7.32 | | 16.3 | 0.00 | 23.6 | 46.1 | same |
| 36 | 2284.0 | 36. | | 19.8 | 0.00 | 21.2 | 52.9 | same |
| 37 | 2285.0 | 0.57 | | 9.5 | 0.00 | 15.3 | 52.5 | same |
| 38 | 2286.0 | 57. | | 21.1 | 0.00 | 23.4 | 51.0 | sslvf-fgr clay sl calc |
| 39 | 2287.0 | 8.83 | | 17.7 | 0.00 | 21.0 | 57.4 | same |
| 40 | 2288.0 | 7.01 | | 15.8 | 0.00 | 20.9 | 61.1 | same |
| 41 | 2289.0 | 6.31 | | 16.4 | 0.00 | 14.8 | 66.0 | same |
| 42 | 2290.0 | 24. | | 19.2 | 0.00 | 20.9 | 65.6 | same |
| 43 | 2291.0 | 6.19 | | 14.6 | 0.00 | 15.3 | 53.6 | same |
| 44 | 2292.0 | 1.43 | | 14.0 | 0.00 | 16.0 | 57.8 | same |
| 45 | 2293.0 | 0.19 | | 7.0 | 0.00 | 11.0 | 58.3 | sslvf-fgr clay sl calc |
| 46 | 2294.0 | 14. | | 18.9 | 0.00 | 17.3 | 60.7 | sslvf-fgr clay sl calc |
| 47 | 2295.0 | 45. | | 18.7 | 0.00 | 29.6 | 37.0 | lsfslay foss |
| 48 | 2296.0 | 694. | | 27.0 | 0.00 | 37.3 | 45.0 | sslvf-mgr foss |
| 49 | 2297.0 | 0.06 | | 5.0 | 0.00 | 10.6 | 48.5 | lsfslay lams |
| 50 | 2299.0 | 484. | | 25.5 | 0.00 | 27.0 | 43.8 | sslvf-mgr foss |
| 51 | 2300.0 | 4.95 | | 13.4 | 0.00 | 34.7 | 33.6 | sslvf-fgr clay sl foss |
| 52 | 2301.0 | 52. | | 21.5 | 0.00 | 27.4 | 47.2 | sslvf-mgr foss |
| 53 | 2302.0 | 9.65 | | 15.4 | 0.00 | 27.9 | 27.9 | sslvf-mgr clay foss |
| 54 | 2303.0 | 3.45 | | 15.9 | 0.00 | 6.7 | 66.8 | sslvf-mgr clay foss sid |
| 55 | 2304.0 | 46. | | 21.5 | 0.00 | 23.9 | 53.5 | sslvf-mgr clay foss |
| 56 | 2305.0 | 449. | | 24.4 | 0.00 | 28.2 | 37.9 | sslvf-mgr clay foss |
| 57 | 2306.0 | 0.14 | | 5.5 | 0.00 | 5.8 | 46.6 | lsfifoss |
| 58 | 2307.0 | 5.43 | | 6.7 | 0.00 | 4.3 | 71.0 | same |

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| | | MAXIMUM | 90 DEG VERTICAL | | | OIL | WTR | |
| 59 | 2308.0 | 4.12 | | 14.4 | 0.00 | 7.6 | 53.9 | lsifoss |
| 60 | 2309.0 | 609. | | 23.9 | 0.00 | 40.5 | 23.7 | ssif-msr foss |
| 61 | 2310.0 | 0.33 | | 9.6 | 0.00 | 8.6 | 46.8 | lsifoss |
| 62 | 2311.0 | 50. | | 15.1 | 0.00 | 1.4 | 54.3 | lsifoss slauc sdw #horiz. frac.* |
| 63 | 2312.0 | 35. | | 10.7 | 0.00 | 24.5 | 37.4 | lsifoss sid sdw #horiz. frac.* |
| 64 | 2313.0 | 46. | | 4.8 | 0.00 | 14.1 | 47.1 | lsifoss #horiz. frac.* |

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