ROGER L. MARTIN

INDEPENDENT PETROLEUM GEOLOGIST 316.250.9570

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY	VESS OIL CORPORATION
LEASE	SCULLY A #25
FIELD	AUGUSTA
LOCATION	1297 FSL & 2027 FEL
SECTION 7	TOWNSHIP 26S RANGE 04E
COUNTY	BUTLER STATE KANSAS

ELEVATIONS	
KB 1318'	GL 1312'

Measurements Are All From: KB 1318'

API: 15-015-24089-00-00

CONTRACTOR	C & S DRILLING CO., RIG#1
SPUD	08/30/17 JOB 08/06/17
TD	2487' (1287) LTD 2484' (1286)
COMPLETION	09/07/17

CASING

SURFACE: 8625" (23.00#) @ 252' W/ 4 sx. ~ Hilco Class A, 250 gal. ~ Lake Chloride

PRODUCTION: 5½" (17.00#) @ 2484' W/ 150 sacks EA-2 Lite Class Cement

DST (0) & CORES (0) NONE TESTED

FORMATION TOPS	LOG	SAMPLES
TOPEKA	1180 (138)	1180 (138)
HEEBNER	1400 (-082)	1400 (-082)
DOUGLAS GR	1522 (-204)	1522 (-204)
BROWN LIME	1622 (-304)	1622 (-304)
LANSING	1630 (-312)	1630 (-312)
KANSAS CITY	1880 (-562)	1880 (-562)
MARMATON	2000 (-682)	2000 (-682)
PAWNEE GR	2114 (-796)	2114 (-796)
PAWNEE LS	2131 (-813)	2131 (-813)
FORT SCOTT	2180 (-862)	2180 (-862)
CHEROKEE SHALE	2200 (-882)	2200 (-882)
MISSISSIPPIAN	2300 (-982)	2300 (-982)
KINDERHOOK	2367 (-1049)	2367 (-1049)
VIOLA	2380 (-1062)	2380 (-1062)
SIMPSON SAND	2447 (-1129)	2447 (-1129)
SIMPSON DOLOMITE	2461 (-1143)	2461 (-1143)
ARBUCKLE	2480 (-1162)	2480 (-1162)
TOTAL DEPTH (LOGGER)	2487 (-1169)	2487 (-1169)

CHRONOLOGY

08/30	MOVE IN RIG, RIG UP, SPUD 8:00 PM, DRILL TO 252', TRIP, RUN 6 JTS 8 5/8" NEW CASTLE 23# CSG, TALLY 252.00', TEAM CEMENT TO CASING, MIX 250 SACKS CLASS A COMMON CEMENT, 2% GEL, 3% CC, 250 GAL LAKE CHLORIDE, PLUG DOWN 1:00 AM, CIRCULATED 5 BBLS CEMENT TO PITS, CEMENT DID FALL, WELL TENDER TO CONTACT KCC, SHUT IN 8:00 AM
08/31	DRILL TO 1000', TRIP OUT FOR BIT, TRIP, DRILL TO 1180', SHUT DOWN 8:00 PM, DRILL TO 1200', SHUT DOWN 10:00 PM
09/01	DRILL TO 1400', TRIP OUT FOR BIT, TRIP, DRILL TO 1500', SHUT DOWN 8:00 PM
09/02	DRILL TO 1622', TRIP OUT FOR BIT, TRIP, DRILL TO 1630', SHUT DOWN 8:00 PM
09/03	DRILL TO 1880', TRIP OUT FOR BIT, TRIP, DRILL TO 1900', SHUT DOWN 8:00 PM
09/04	DRILL TO 2000', TRIP OUT FOR BIT, TRIP, DRILL TO 2114', SHUT DOWN 8:00 PM
09/05	DRILL TO 2180', TRIP OUT FOR BIT, TRIP, DRILL TO 2200', SHUT DOWN 8:00 PM
09/06	DRILL TO 2300', TRIP OUT FOR BIT, TRIP, DRILL TO 2367', SHUT DOWN 8:00 PM
09/07	DRILL TO 2487' (LTD), CIRCULATE, TRIP OUT, RIG UP WIRELINE, RUN DIPOLE SONIC, RIG DOWN WIRELINE, TRIP IN, CIRCULATE, TRIP OUT, RUN 5½" NEW CASTLE 17# CSG, TALLY 2484.00', TEAM CEMENT TO CASING, MIX 150 SACKS EA-2 LITE CLASS A CEMENT, PLUG DOWN 10:00 PM, CIRCULATED 10 BBLS CEMENT TO PITS, CEMENT DID FALL, WELL TENDER TO CONTACT KCC, SHUT IN 10:00 PM

REMARKS: (4-0-28) TOPS BASED ON FULL PAWNEE DATA, SEE BELOW FOR DETAILS

CONTRACTOR: C & S DRILLING CO., RIG#1 (316.250.9570) ~ DRILLER: DAVID SCHMIDT

DRILLING FLUID: Chemical Mud, Gel, Lime, Lake Chloride

DRILLING TIME: Kelly Down

SAMPLES: Bagged, Washed, Dried, Lightly Bagged

DEVIATION: 1/4 @ 252'

MUD PROPERTIES: 8.6 PPG, 28 VISC, 7.0 WL

DRILLING TIME: 5:00 AM 08/30 TO 10:00 AM 09/07

ELECTRIC LOGS: DUAL INDUCTION, DENSITY/NEUTRON, DIPOLE SONIC

DST'S: NONE

CORES: NONE

SAMPLE DESCRIPTION: 1180' TOPEKA (+138) TO 2487' RTD (-1169)

1180-1200 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1200-1220 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1220-1240 Limestone: tan, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1240-1260 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1260-1280 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1280-1300 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1300-1320 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1320-1340 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1340-1360 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1360-1380 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1380-1400 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1400-1420 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1420-1440 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1440-1460 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1460-1480 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1480-1500 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1500-1520 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1520-1540 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1540-1560 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1560-1580 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1580-1600 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1600-1620 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1620-1640 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1640-1660 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1660-1680 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1680-1700 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1700-1720 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1720-1740 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1740-1760 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1760-1780 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1780-1800 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1800-1820 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1820-1840 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1840-1860 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1860-1880 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1880-1900 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1900-1920 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1920-1940 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1940-1960 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1960-1980 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

1980-2000 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2000-2020 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2020-2040 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2040-2060 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2060-2080 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2080-2100 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2100-2120 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2120-2140 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2140-2160 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2160-2180 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2180-2200 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2200-2220 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2220-2240 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2240-2260 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2260-2280 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2280-2300 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2300-2320 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2320-2340 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2340-2360 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2360-2380 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2380-2400 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2400-2420 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2420-2440 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2440-2460 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2460-2480 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

2480-2487 Limestone: cream, microcrystalline to sub-lithographic, scattered fossil fragments, chalky in part, no visible porosity, no show of oil, no show of gas, no show of water

REMARKS

[illegible] Log on DIGI-TAL LAS FORMAT, Log Run Date: 09/07/2017, Log Run Time: 0000 Hours, Log Run Number: 1, Log Run Type: Primary Run, Log Run Comments: Log Run Comments, Log Run Comments: Log Run Comments, Log Run Comments: Log Run Comments