

GEOLOGICAL REPORT

Noble Petroleum, Inc.

Haskins - Jones #1

N/2 SW NW SW Section 17-T28S-R4E

Butler County, Kansas

COMMENCED: 09-26-11

STATUS: Oil

COMPLETED: 10-02-11

A.P.I. #: 15-015-23917

CONTRACTOR: C & G Drilling, Inc.

OPERATOR LIC.: 31389

SIZE OF HOLE: 7 7/8"

FIELD: Augusta

SURFACE PIPE: 8 5/8"

ELEVATION: 1251 K.B.

CEMENTED WITH: N/A

LOGS: Superior DIL, CDL/CNL

LONG STRING: 5 1/2"

MUD SYSTEM: Chemical

CEMENTED WITH: None

OTHER:

R.T.D.: 2540'

William M. Stout
9-3-11

William M. Stout
Geologist

FORMATION TOPS

1245 G.L. 1251 K.B.

	<u>Sample</u>	<u>Log</u>
Heebner	1471 -228	1480 -229
Douglas	1510 -259	1510 -259
Lansing	1719 -468	1720 -469
Base Lansing	1884 -633	1886 -635
Kansas City	2037 -786	2042 -791
Base Kansas City	2249 -998	2252 -1001
Marmaton	2276 -1025	2280 -1029
Cherokee	2410 -1159	2413 -1162
Arbuckle	2474 -1223	2477 -1226
Total Depth	2766 -1424	2544 -1293

SAMPLE SHOW DESCRIPTIONS

Lansing 1719' (-468)

1724' - 1729'

Limestone - light brown, fine crystalline, fossiliferous, some dense, fair odor, light stain, show free oil, fair fluorescence, scattered pin point and vugular porosity.

Kansas City 2037' (-786)

2046' - 2052'

Limestone - light brown, fine crystalline, some oolitic, faint odor, scattered light stain, very slight show free oil, scattered fluorescence, some vugular and intercrystalline porosity.

2069' - 2080'

Limestone - light brown, fine crystalline, fossiliferous, some dense, faint odor, light stain, no show free oil, scattered fluorescence, trace intercrystalline porosity with few vugs.

Squirrel Sand 2415' (-1164)

2415' - 2421'

Sandstone - brown, fine grain, micaceous, calcareous, friable, faint odor, brown stain, show free oil, fair fluorescence, poor porosity.

Arbuckle 2474' (-1223)

2474' - 2479'

Dolomite - light brown, very fine to fine crystalline, some dense, faint odor, scattered light stain, slight show free oil, 20- 25% fluorescence, trace intercrystalline porosity.

2479' - 2422'

Dolomite - fine crystalline, sucrosic, friable, fair to good odor, dark stain, show free oil with few gas bubbles, fair fluorescence, scattered intercrystalline and vugular porosity. (Covered by DST's 1 & 2)

DST #1 2468' - 2482'

Tool Plugged - no test.

DST #2 2466' - 2485'

Open tool 30 min. with fair blow building to 5 1/2 inches. Close tool 45 min. Open tool 60 min. with fair blow building to 13 inches. Recovered 180' total fluid. 30' clean oil, 150' oily watery mud (15% oil, 5% water, 80% mud).

IFP 38 - 77# FFP 79 - 118#

ISIP 904# FSIP 913#

HP 1241 - 1225#

Temp 103 degrees

Open tool 60 min. with fair blow building to 13 inches. Recovered 180' total fluid. 30' clean oil, 150' oily watery mud (15% oil, 5% water, 80% mud).

IFP 38 - 77# FFP 79 - 118#

ISIP 904# FSIP 913#

HP 1241 - 1225#

Temp. 103 degrees.

2422' - 2445'

Dolomite - gray, light gray, very fine crystalline, dense, faint odor, trace light stain, no show free oil, scattered fluorescence, no visible porosity.

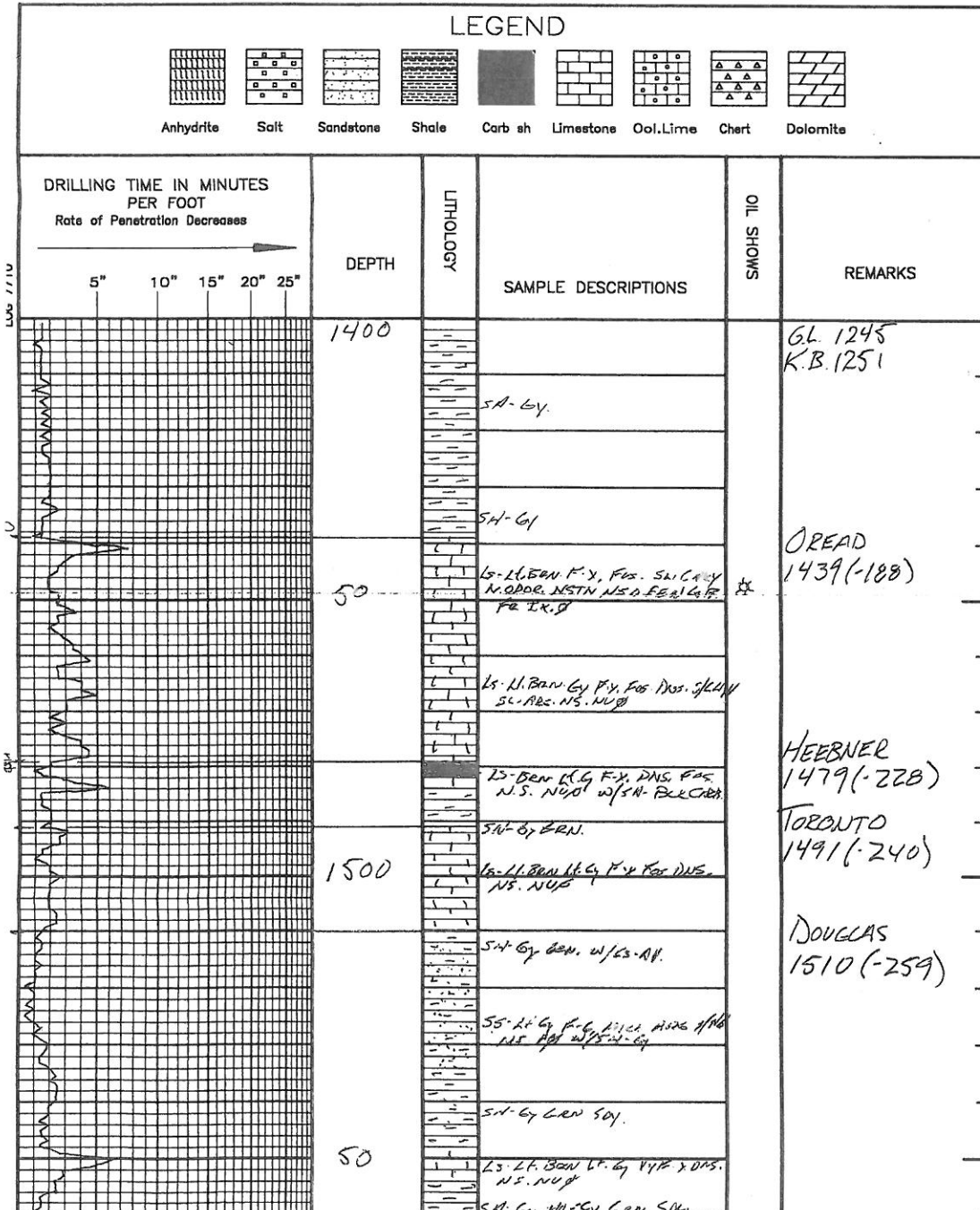
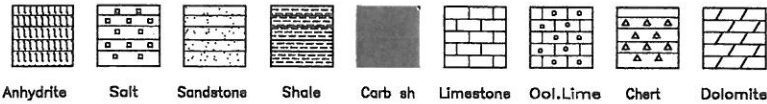
2445' - 2560'

Dolomite - light brown, light gray, fine crystalline, some sucrosic with good stain, fair odor, show free oil, scattered fluorescence, intercrystalline and vugular porosity.

CONCLUSIONS

Because of the sample shows and the oil recovery in DST #2 the decision was made to set 5 1/2" casing to further evaluate the Arbuckle through perforations.

LEGEND



SS-Lt Gy F-G F-12. ARG HD 1/16
NS. NUB w/SA. RD.

SH-GY LCN SDY.

50

LS-Lt. BAN Lt. Gy F-Y x DNS.
NS. NUB

SH-GY M-GY LCN SDY

SS-GY F-G ARG HD NS.
NS. NUB w/SA. RD.

SH-AU w/SS. RD. LCN

1600

SS-GY Lt Gy F-G MILA ARG HD
NS. NUB w/SA. RD. Gy

SH-GY DLGy SDY

50

SH-RA.

SH-RA

SH-RA.

1700

LS-BAN Lt. BAN F x 1/100
DNS. S/GANULAR NS. NUB

SH-GY w/LS. RA.

BROWN LIME
1703 (-452)

LANSING
1719 (-468)

LS-Lt BAN F-Y Fos. S/DNS.
LE. ODR IF BAN SFF
TR. G. PLU GR. SCAT FB. NUC. G.

LS-Lt BAN Gy F-Y Fw Fos.
DNS. NS. NUB

50

SH-GY

SH-GY M-GY

SH-RA.

1800

LS-BAN Lt. BAN DNS FEW Fos.
NS. NUB

LS-Lt BAN F-Y DNS. FEW Fos.
CILY NS. NUB

LS-RA.

Lc Gy Lt Gy Fx DNS. REG NS.
NUB

SH-GY CALG HD.

50

LS-Lt BAN BAN F-Y DNS S/
CILY NS. NUB

1800

LS-BRM L. BRN DNS FEW FOS.
NS. NUBS

LS-L. BRN. F-Y DNS. FEW FOS
CITY NS. NUB

LS-RR.

LS-L. BRN. F-Y DNS. FEW FOS.
NS. NUB

SM-GY CALG. HD.

50

LS-L. BRN. BRN. F-Y. DNS. SI
ENR. NS. NUBS

LS-BRM F-X DNS. FOS. CITY
NS. NUB

LS-RR.

SM-DK GY GY BK

1900

SM-RR W/S BRN. CARB.

SM-DK GY GY

SM-RR.

50

LS-L. BRN. BRN. GY F-X. DNS
FOS SCAT PUFFS CALG. XTALS.
NS. NUBS

SM-GY M-GY SM

SM-RR.

2000

SM-GY M-GY SM

SM-RR.

50

LS-BRM GY F-Y FOS DNS.
NS. NUB

LS-L. BRN. F-Y FOS S/DNS
FR. ODOR. SCAT. STN. NS. FOS
SCAT. FLUOR. S/NUB. EXH

LS-L. BRN GY F-Y. FOS. DNS.
NS. NUB

LS-RR.

LS-L. BRN. F-Y. FOS. S/DNS.
FR. ODOR. LF. STN. NS. FOS
SCAT. FLUOR. S/NUB. EXH

2100

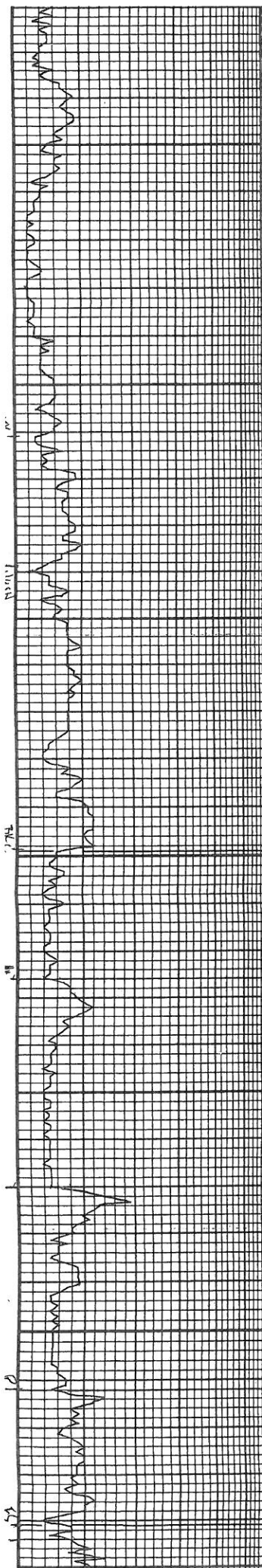
LS-L. BRN GY F-Y. FOS. DNS.
NS. NUB

LS-L. BRN. BRN. F-Y. FOS. CITY
FR. L. STN. NS. O.S.S. EXH

BASE LANSING
1884 (-633)

9:00 AM
9-29-11

KANSAS CITY
2037 (-786)



	LS - AR.
	LS - LT. BRN. F-X. FOS. DNS. FL. ODR. LT. STN. NS. F. U SCAT. FL. OD. S/UUC. & R. EX. P
2100	LS - LT. BRN. G. F-X. FOS. DNS. N.S. NU B
	LS - LT. BRN. BRN. F-X. FOS. DNS. LT. STN. N. O.S. G. EX. P
	LS - AR.
50	LS - LT. BRN. LT. G. F-X. FOS. DNS. N.S. NU B
	SH - BLC CARB.
	LS - BRN. G. F-X. FOS. DNS. S/CHE. N.S. NU B
	LS - LT. G. LT. BRN. G. P. MICRO DNS. CHE. S/CHE. N.S. NU B
2200	SH - BLC CARB. G. w/LS - LT. BRN. G. F-X. DNS. FOS. N.S. NU B
	LS - LT. G. LT. BRN. F-X. FOS. DNS. N.S. NU B
	LS - G. MICRO. F-X. DNS. FOS. N.S. NU B. w/S/SAT - G.
	SH - G. w/LS - AR.
50	LS - BRN. DE. BRN. F-X. DNS. FOS. CHE. N.S. NU B
	SH - G. DK G.
	SH - G. DK G.
2300	LS - LT. BRN. LT. G. F-X. DNS. FOS. S/CHE. N.S. NU B
	SH - GEN. LT. G. W/LS - GEN. F-G. MIL. ARB. N.S. NU B
	SH - GEN. G.
	SH - AR.
50	LS - LT. BRN. LT. G. F-X. DNS. S/CHE. N.S. NU B
	LS - AR. w/SH - DK G. & BLC.
	LS - AR. w/SH - G. GEN.
	SH - DK G. G. GEN. S.O.K.
2400	LS - LT. BRN. LT. G. F-X. DNS. FOS. N.S. NU B w/SH - AR.
	LS - BRN. G. F-X. DNS. FOS. N.S. NU B w/SH - DK G. GEN.
	LS - AR. w/SH - G. GEN. DK G. FOS.
	LS - G. BRN. LT. G. F-X. DNS. FOS. FOS. FOS. N.S. NU B w/SH - AR. BLC CARB.

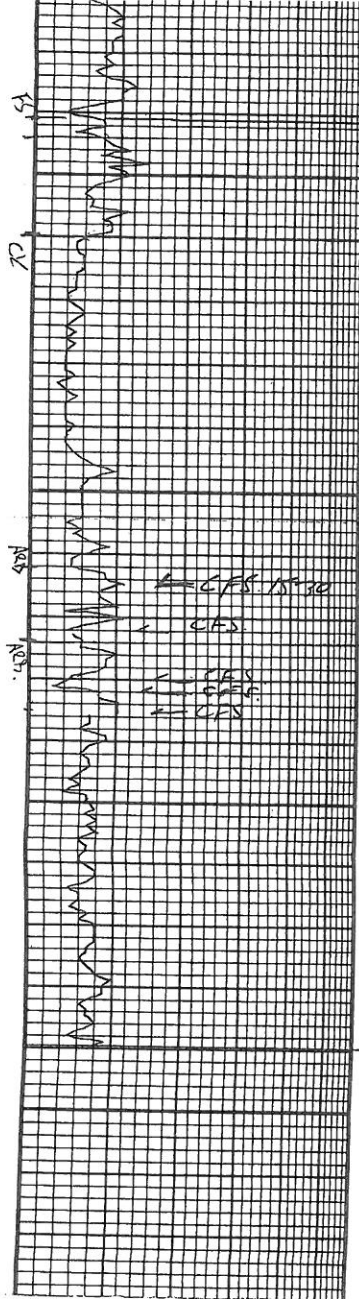
7:00 AM
9-30-11

BASE KANSAS CITY
2249 (-998)

MARMATON
2276 (-1025)

ALTAMONT
2320 (-1069)

PAWNEE
2367 (-1111)



2400	LS-BRN. GY. FX. DNS. FOC. NS NUB w/ SH-NCG GRN. LS-NA w/ SH-GY GRAN DCLG PARRY LS-GY BRN L GY FX DNS. FEW FOC. NS. NUB w/ SH BK CARB SH-BLK CARB. w/ L-NA
50	LS-BRN GY FX DNS. FOC. FEW FOC. NS. NUB w/ SH BL CARB GRN. SH-GY GRN w/ LS. BRN F-G. MCH CARB. FEW FOC. ODOR. BRN STR. SH. L. GY. GRN. SDY SH-GY M. GY. GRN. SH-NA w/ LS. GY FX DNS. NUB FEW FOC. NS. NUB SH-GY GRN. SH-NA FX DNS. NS. SH-GY GRN. LS-L. BRN BRN F-1. NUB. SCAT CLEAR BK CARB. NS NUB SH-GY GRN.
2500	2480 - NA w/ SH DCL. L. BRN. F. X. DNS. FEW FOC. SCAT. FEW SH-GY GRN. SH-GY GRN. F-1. NUB. DCL. BRN. V. F. X. DNS. FEW FOC. FEW FOC. SCAT. FEW SH-GY GRN. SCAT. FEW DCL. BRN. W/ SH. W/ SH. FOC. TO BRN. DCL. BRN. GY. FX. DNS. SCAT. FEW SH-GY GRN. SH-GY GRN.
50	DCL. BRN. L. BRN. FX. DNS. DCL SH-GY GRN. DCL. BRN. BRN. BRN. F. X. DNS. DNS. SC. CARB. NS. NUB DCL. BRN. A. Id 1480 - 2201 Id 1510 - 255 L 1720 - 4601 B/L 18810 - 635 KC 2042 - 791 BK 2252 - 1001 MM 2280 - 1020 CK 2413 - 1162 ARB 2417 - 1220 LTD 2544 - 1293

(-1111)

CHEROKEE
2410 (-1159)

ABBUCKLE
2474 (-1223)

Vis. 47
w/ 9.4
ZLLCM

BACK DCLG AFTER
DST #1 2:50 PM
10-1-11

BACK DCLG AFTER
DST #2 4:40 AM
10-2-11

*DST RESULTS
IN SAMPLE
DESCRIPTIONS
ABOVE.

R.T.D
2540 (-1289)