

GEOLOGICAL REPORT

Noble Petroleum, Inc.

Prohaska #1

15' FNL & 2100' FWL Section 17-T28S-R4E

Butler County, Kansas

COMMENCED: 10-24-11

STATUS: Oil

COMPLETED: 10-29-11

A.P.I. #: 15-015-23925

CONTRACTOR: C & G Drilling, Inc.

OPERATOR LIC.: 31389

SIZE OF HOLE: 7 7/8"

FIELD: Augusta

SURFACE PIPE: 8 5/8"

ELEVATION: 1249 K.B.

CEMENTED WITH: N/A

LOGS: Log-Tech DIL, CDL/CNL

LONG STRING: 5 1/2"

MUD SYSTEM: Chemical

CEMENTED WITH: N/A

OTHER:

R.T.D.: 2500'

William M. Stout
10-31-11

William M. Stout
Geologist

FORMATION TOPS

1243 G.L. 1269 K.B.

	<u>Sample</u>	<u>Log</u>
Lansing	1660 -411	1665 -416
Kansas City	2006 -757	2011 -762
Base Kansas City	2212 -963	2216 -967
Marmaton	2240 -991	2245 -996
Cherokee	2370 -1121	2381 -1132
Arbuckle	2444 -1195	2450 -1201
Total Depth	2500 -1251	2504 -1255

SAMPLE SHOW DESCRIPTIONS

Lansing 1660' (-411)

1663' - 1670'

Limestone - light brown, fine crystalline, fossiliferous, some dense, fair to good odor, light stain, show free oil, scattered intercrystalline porosity, good fluorescence.

1705' - 1730'

Limestone - light brown, brown, gray, fine to medium crystalline, fossiliferous, some dense, slightly argillaceous, faint odor, show free oil with trace gas bubbles, scattered fluorescence, scattered intercrystalline porosity with a few vugs.

1753' - 1758'

Limestone - gray, light brown, fine crystalline, fossiliferous, oolitic, faint odor, scattered light stain, no show free oil, trace intercrystalline and vugular porosity, spotty fluorescence.

Kansas City 2006' (-757)

2018' - 2026'

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

2037' - 2052'

Limestone - light gray, fine to medium crystalline, fossiliferous, oolitic in part, faint odor, trace light stain, very slight show free oil, scattered intercrystalline porosity with few vugs., poor fluorescence porosity.

2076' - 2086'

Limestone - brown, fine crystalline, fossiliferous, slightly cherty, fair odor, scattered stain, show free oil, intercrystalline porosity with fair dull fluorescence.

2135' - 2140'

Limestone - brown, gray, fine crystalline, fossiliferous, fair odor, brown stain, slight show free oil, trace poor intercrystalline and pin point porosity scattered fluorescence

Arbuckle 2444' (-1195)

2444' - 2460'

Dolomite - light gray, light brown, fine to medium crystalline, dense, fair odor, scattered brown stain, slight show free oil, spotty fluorescence, trace intercrystalline porosity, with occasional vug.

2471' - 2475'

Dolomite - gray, brown, fine to medium crystalline some coarse crystals, brown stain, faint odor, slight show free oil, scattered fluorescence, some intercrystalline porosity.

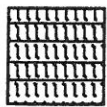
2488' - 2491'

Dolomite - brown, light gray, fine to medium crystalline, dense, with chert, white, weathered, fair odor, brown stain, slight show free oil, scattered fluorescence, some intercrystalline and vugular porosity.

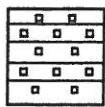
CONCLUSIONS

The decision was made to set 5 1/2" casing to further evaluate the shows of oil through perforations.

LEGEND



Anhydrite



Salt



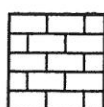
Sandstone



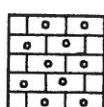
Shale



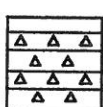
Carb sh



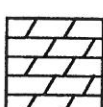
Limestone



Ool. Lime

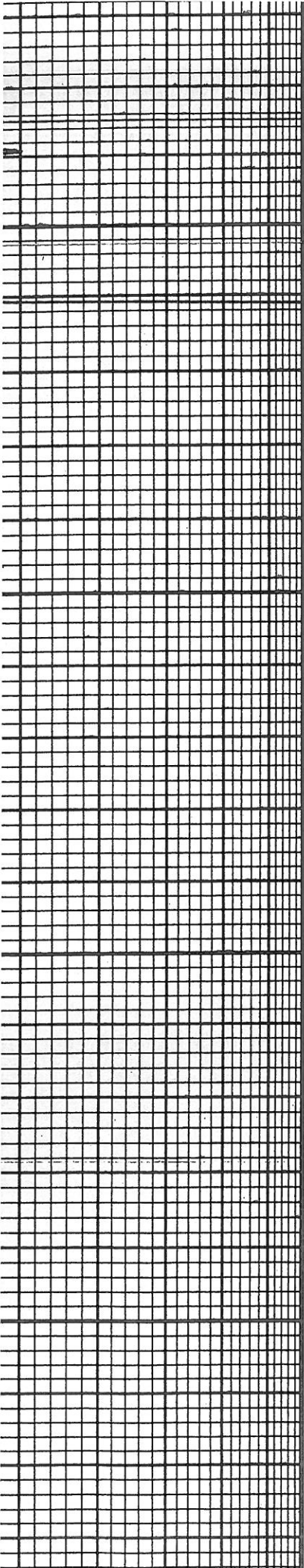


Chert



Dolomite

INING TIME IN MINUTES PER FOOT of Penetration Decreases → 5" 10" 15" 20" 25"	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
	1400		15. LI. Ben. Lt. G. F. X. F. S. DNS. N.S. N. O. P.		G.L. 1243 KB. 1249
			L2. AA. w/ S/ SCOT. EV. P. N. S.		
			15. LI. Ben. Lt. G. F. X. F. S. DNS. N.S. N. O. P. w/ S/ SCOT. BCK. CR. B. D. G.		HEEBNER 1435 (-186)



50

1500

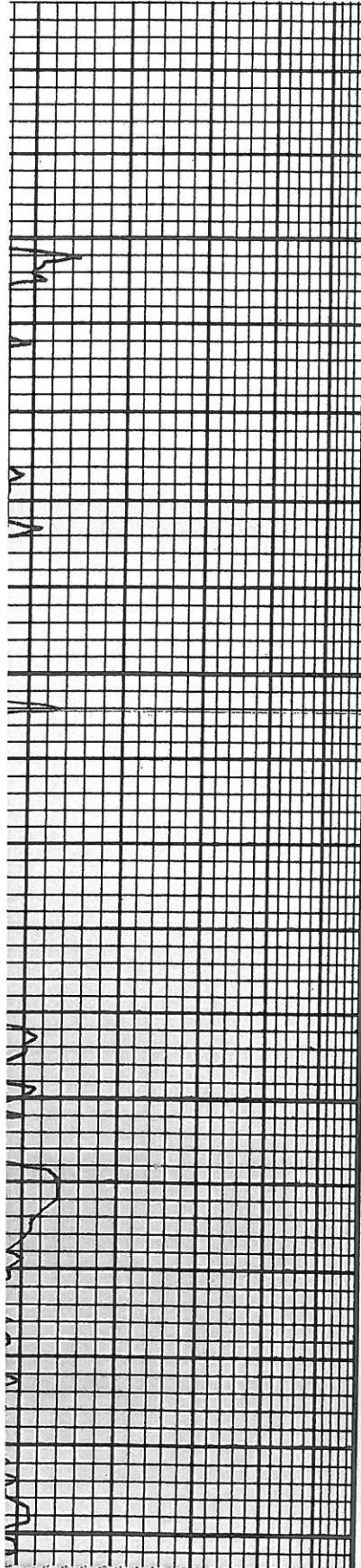
50

1600

	LS-AR. w/ S/SCOT. EV. N.S.
	LS-LI. BRN. BR. G. F-X. INS. FOR. N.S. NUP w/SH. BCKER. DNG. (2. P.F.).
	LS-WHG. LI. BRN. F-X. FOR. S/INS. N.S. NUB w/SH. AR.
	SN-GY. w/SS. LI. G. F-G. MICA. SLI. G. N.S. P.F.
	SS-AR. w/SH. G. GEN
	LS-LI. BRN. F-X. INS. FENFOR. N.S. NUP w/SH. G. GEN.
	SH. GY. M. GY. GEN. SAY
	SH-AR. w/SS. GY. F-G. ARG. MICA. N.S. P.F.
	SH-SS-AR
	SH. GY. GEN. SAY
	SH-AR.
	SH. GY. M. GY. GEN. S/SAY
	SH-AR.

HEEBNER
1435 (-186)

DOUGLAS
1461 (-212)



50

1700

50

1800

54-111.
LS-BRN. Lt. BRN. F-X FOS. DNS. N.S. NU. 4 W/SI-67.
LS-Lt. BRN. F-X FOS. S/DNS. FEGG ODOR. Lt. STN SFO. 6d FLUOR. SEAT. FXP.
LS-Lt. BRN. Lt. GY F-X FOS. DNS. FR ODOR. Lt. STN SFO. SCAT EX 6d FLUOR.
Lt. PA W/SI GY 60N
SI-67 LBN. SPA.
LS-BRN. GY Lt. BRN. F-X FOS. DNS. S/ARC. FE ODOR. Lt. PK STN SFO FR B.B. SEAT FLUOR. 2X9
LS-Lt. BRN. Lt. GY F-MX S/DNS FOS. SH CHRY FT. ODOR. SCAT. STN. S SFO FR FLUOR. SCAT EX + VUGA S/SI-67 LS-AA.
LS-Lt. GY F-X DNS. FOS. S/CHRY NS. NU. 25
LS-GY Lt. BRN F-X DNS. FOS. COL FE ODOR. SCAT. Lt. STN. NSFO FR 2X9 VUGA SPOTTY FLUOR.
LS-Lt. GY GY F-X DNS. FOS. NS NU 4 W/SI-67
LS-AA.
LS-Lt. GY Lt. BRN GY F-X DNS. FOS. NS. NU. 25
LS-AA.
LS-BN Lt. BRN. F-X FOS. DNS.

BROWN LIME
1650 (6401)

LANSING
1660 (6411)

1800

LS-LL by W. BEN GY F-XI DNS, FOS.
N.S. NUP

LS-AA.

LS-GY LI. BEN. F-X. FOS. DNS.
N.S. NUP

LS-GY BEN. F-M X DNS. FOS. S/AA
N.S. NUP

LS-AA S/CHRY N.7.

LS-GY AL. GY F-X. FOS. DNS.
N.S. NUP

LS-AA W/S/SA GY.

50

SA GY CACC HD N/LS-AA.

SA/LS-AA.

1900

LS-LI. BEN. F-X FOS DNS. NS.
W/S/SA-AA.

LS-BEN GY F-X. FOS. ABC INDI.
DNS. F/ODOR. POLI. STN. N.S.F.
SCAT FLUOR. FL. EXD

SN-GY W/AA.

SA-GY GEN. M-GY

SN-AA.

50

SN-GY M-GY CACC. IND.

SN-AA.

SN-AA.

Vis. 37
Wt. B. 9
3# LCM

2000

SNR.A.A.

SNR.A.A. LS Gy BRN. F.Y. FOS.
DNR ARQ NS. NU

LS-LI BRN BRN Gy F-Y FOS S/AR
FLOOR TO L.S. STN. NS F
NS CAT EXP W/FLOOR. SN-Sy

LS-LI Gy LI BRN F-Y FOS. DNR
S/DOR. CNEY. NS. NU

LS-AA.

LS-LI Gy F-M-X FOS DOR. NPE
CNEY. WHE OPA S/CARY FLOOR
TO L.S. STN. NS F CAT EXP
S/DOR. PR FLOOR.

LS-AA W/SSFO

LS-BRN LI BRN F-Y FOS. DNR,
SLI DOR. NS. NU

LS-BRN F-Y FOS. SLI CNEY
FB. DOR. SCAT STR S/DOR.
EXP W/FLOOR DOR. FLOOR.

LS-AA.

2100

LS-LI BRN LI Gy F-Y FOS. DNR
CNEY NS. NU

LS-LI BRN F-Y FOS. DNR
S/CARY NS. SCAT EXP

LS-BRN Gy F-M-X DNR S/
DOR. FOS. SCAT CARY. STR.
NS.

SN-BLK CARY. W/LS BRN Gy
F-Y DNR FOS. FLOOR BRN
STN. SSFO C/PTR; P/P
SCAT FLOOR.

LS-LI BRN BRN F-Y DNR FOS
CNEY. NS. NU

50

LS-Gy LI Gy LI BRN F-Y DNR,
FOS. CNEY. NS. NU W/SH
BLK CARY, Gy

LS-Gy LI Gy F-Y FOS. DNR NS.
NU

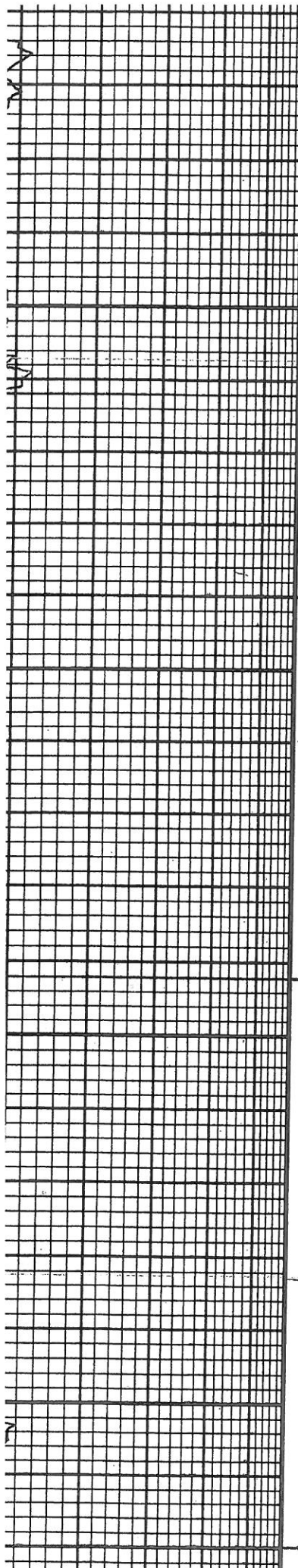
LS-AA W/SCAT Gy CAN RLY

LS-Gy F-Y DNR. ARQ. NS.
NU W/SH Gy

8:00 AM 10-27-11
KANSAS CITY
2006 (-757)

STARK
2126 (-877)

HUSHPOCKNEY
2152 (-903)



2200

50

2300

50

LS. GY. LT. G. F. X. FOS. DMS. NS.
NUG

LS. AA. W. / SAT. G. GRAN. RKG

LS. GY. F. X. DMS. ARB. NS.
NUG W/SH G

SN. GY. RKG.

LS. BRN. F. MICROX DMS, FOS
FOS. NS. NUG

LS. AA. W. / SH. GY.

SAT. GY. DKG. W/LS. AA.

SN. GY. DKG.

LS. LT. BRN. F. X. DMS, FOS NS.
NUG W/SH G, BLK.

SA. GY. GRAN. SH.

SN. GY. BRN. W/SS. GRAN. F. G
ARB. NS. POG

SAT. GY. GRAN. DKG.

LS. LT. BRN. BRN. F. X. FOS. DMS,
S/NOG. NS. NUG

LS. AA. W. / SAT. BLK. CARB.

SN. GY. W/SS. GY. F. G. AGR. ORL.
N. BRN. BRN. W/SS. FOS
BLK. CARB. POG

SN. GY. DKG.

LS. LT. BRN. BRN. F. X. FOS. DMS
NS. NUG S/SAT. GY. BLK. CARB.

LS. AIA.

LS. LT. BRN. BRN. F. X. FOS. DMS
NS. NUG

LS. AA. W. / SAT. BLK. CARB. DKG

LS. ? SAT. AA.

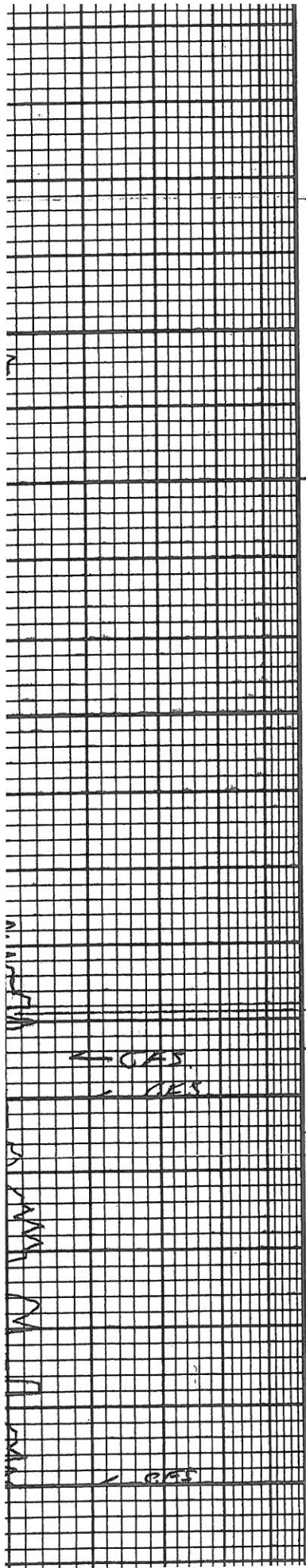
2126 (-903)

BASE KANSAS CITY
2212 (-963)

MARMATON
2240 (-991)

0

CHEROKEE



50

2400

50

2500

SN LN W/SS Gy F.G. AGE. CRLC.
N. BRN. BRN STN. VSSFO
BLK FLOR PIP

SN Gy DK Gy

LS LL. BRN BRN F. X. FOS. DNS
NS. NUP S/SAT Gy BLK CORR.

LS. AIA.

LS. LL. BRN BRN Gy F. X FOS. DNS
NS. NUP

LS. AA W/ SAT. BLK CORR. DK Gy

LS. ? S. AIA.

SAT. Gy M. Gy GRN. W/LS. XM.

SAT. Gy GRN DK Gy

SAT. AIA

SAT. AIA W/LS. BRN. Gy F. X DNS.
FOS. NS. NUP

SAT. DK Gy BLK. SAU. 2. 0. 0. 0. 0.

LS. BRN. Gy F. X FOS. DNS. SAU.
CORR. WSSO NUP W/SAT. AA.

LS. AA W/ F. DOL. LY. BRN. CORN.
FE. ORN. FOS. STN. NS. FO. F. GRN.

DOL. Gy BRN. F. X DNS. NS. NUP.
S/M. X. W/LS. SAT. F. BRN. W/LS.

LS. AA. W/LS. SAT. FLOR.
LS. STN. SFO. W/LS. SAT. EXD. W/
FLOR.

DOL. LL. BRN. LL. Gy M. X. DNS.
F. ORN. SAT. BRN. STN. SFO
SAT. FLOR. LL. BRN. ORN.

DOL. BRN. Gy F. M. X. DNS. PYD.
S/CO. ORN. F. ORN. BRN. STN.
NS. FO. SAT. FLOR. ORN. PIP

DOL. BRN. LL. BRN. LL. Gy M. X. DNS. W/LS.
W/LS. ORN. NS. NUP

DOL. AA S/CO. X W/BRN. STN. FL.
ORN. SAT. FLOR. W/LS. SAT. FLOR.

DOL. BRN. Gy F. M. X. DNS. SAT. BRN.
NS. NUP W/LS. SAT. W/LS. GRN.

DOL. BRN. Gy LL. Gy F. M. X. DNS. S/
COR. NS. P. EXD.

DOL. BRN. LL. Gy F. M. X. DNS. W/LS.
S/NEA. F. ORN. BRN. STN.
SFO SAT. FLOR. SAT. BRN. STN.

DOL. BRN. Gy F. M. X. DNS. FLOR. ORN.
NS. NUP

CHEROKEE
2370 (-1121)

6:00 AM 10-28-11

ARBUCKLE
2444 (-1195)

RTD
2500 (-1251)