

IND

KCC
AUG 31 2004
CONFIDENTIAL

GEOLOGIC REPORT

LAYNE ENERGY
Harriman 14-20
SE ¼ , SW ¼, 720' FSL, 2,030' FWL
Section 20-T31S-R17E
MONTGOMERY COUNTY, KANSAS

RECEIVED
KANSAS CORPORATION COMMISSION
SEP 01 2004
CONSERVATION DIVISION
WICHITA, KS

Drilled: May 5-6, 2004
Logged: May 7, 2004
A.P.I.# 15-125-30509
Ground Elevation: 822'
Depth Driller: 1,089'
Depth Logger: 1,090'
Surface Casing: 8 5/8" @ 20'
Production Casing: 4 1/2" @ 1,090'
Cemented Job: Blue Star
Open Hole Logs: Compensated density neutron log, dual induction sfl/gr log

FORMATION.....	TOPS (in feet below ground surface)
Kansas City Group.....	Surface (Cherryvale Formation)
Lenapah Lime	245
Altamont Lime.....	286
Weiser Sand.....	358
Pawnee Lime	441
Anna Shale.....	462
Peru Sand.....	497
First Oswego Lime	520
Little Osage Shale.....	554
Excello Shale	581
Mulky Coal.....	587
Iron Post Coal	615
"V" Shale	636
Croweburg Coal.....	639
Fleming Coal	650
Mineral Coal	680
Tebo Coal	744
Weir Pitt Coal	799
Bluejacket Coal.....	817
Upper Bartlesville Sand.....	882
Riverton Coal.....	980
Mississippian	993