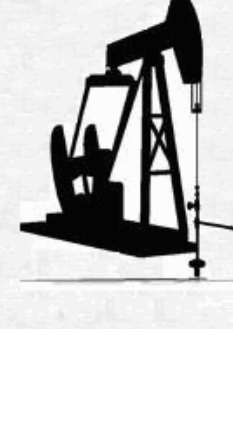
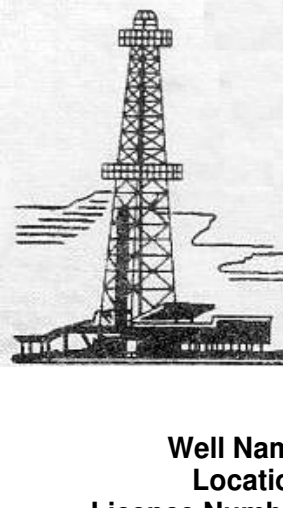


WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



Scale 1:240 (5"=100') Imperial

Well Name: **MCKENNA UNIT #1-9**
 Location: **SE NE NE SEC. 09-18S-29W**
 Licence Number: **API: 15-101-22465** Region: **Lane Co., KS**
 Spud Date: **March 07, 2014** Drilling Completed: **March 17, 2014**
 Surface Coordinates: **2290' FSL & 155' FEL**

Bottom Hole Coordinates:
 Ground Elevation (ft): **2797'** K.B. Elevation (ft): **2804'**
 Logged Interval (ft): **3800'** To: **RTD** Total Depth (ft): **4625'**
 Formation: **Mississippi**
 Type of Drilling Fluid: **Chemical Premix (Displaced)**

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company: **Larson Engineering Inc.**
 Address: **562 West State Road 4**
Olmitz, KS 67564-8561

DRILLING CONTRACTOR:

H. D. Drilling, LLC, Rig #3 (Co. Tools)

DP 4.5" XH (16.6#); DC 6.25" x 2.25" x 645', hardbanded; Kelly 40.30", Tool Joint 5.5" ; Bit: JZ-HA20-Q, 7-7/8", standard jets 14-14-14 down to 4120, 15-15-15 after; rpm 80, WOB 35k; Kelly Bushing 7' above ground level; LeWayne "Lew" Tresner (tool pusher).

CASING:

Set 8-5/8" casing at 264'

CIRCULATION SYSTEM:

Continental EMSCO D-300, duplex, 6 x 14, 56-58 spm, Chemical, premix, earth pits, Morgan Mud, Inc., Cade Lines.

OPEN HOLE LOGS:

GR-CAL (no radioactive source), LTD 4117, RTD 4120, to check hole conditions & gauge.

DN, DI (SP) (Run-1); ML (Run-2); No Sonic; 5" detail LTD-3600; 2" DI to surface casing; LogTech-Pioneer Wireline, Hays, KS, Chris Desaire, Log total depth (4625') was even with rotary total depth (4625').

Initially on Run-1 logger found LTD at 4622', then corelated the curves from GR-CAL run, and thereby determined LTD at 4625'.

DRILL STEM TEST #1:

LKC "I-zone": Interval: 4159-4185 (26') : Blow: weak surf IFP, no RB, weak surf died 11 min FFP, no RB; Times: 5-15-15-30; Recovery: 5' mud (100%M); Pressures: HP: 2130-2112, SIP: 20-30, FP: 14-15, 13-13; BHT: 106 F; Trilobite Testing, Inc., Scott City, KS, Sam Esparza.

DRILL STEM TEST #2:

LKC "L-zone": Interval: 4250-4268 (18') : Blow: weak surf IFP, no RB, no blow FFP, no RB; Times: 5-15-15-30; Recovery: 5' mud (100%M); Pressures: HP: 2149-2134, SIP: 747-908, FP: 15-16, 16-17; BHT: 107 F; Trilobite Testing, Inc., Scott City, KS, Sam Esparza.

DRILL STEM TEST #3:

Pleasanton ~ Mamaton: Interval: 4297-4395 (98') : Blow: weak incr 3/4" IFP, no RB, weak incr 1-3/4" FFP, no RB; Times: 5-15-30-60; Recovery: 90' WM (10%W, 90%M); Pressures: HP: 2205-2195, SIP: 1055-1052, FP: 17-21, 24-51; BHT: 117 F; Trilobite Testing, Inc., Scott City, KS, Sam Esparza.

DRILL STEM TEST #4:

Myrick Station thru Cherokee: Interval: 4439-4553 (114') : Blow: weak surf IFP, no RB, weak surf FFP, no RB; Times: 5-15-15-30; Recovery: 5' mud (100%M); Pressures: HP: 2205-2195, SIP: 1055-1052, FP: 17-20, 20-22; BHT: 106 F; Trilobite Testing, Inc., Scott City, KS, Sam Esparza.

