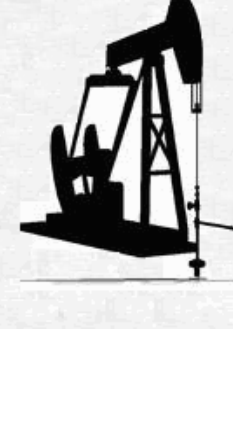
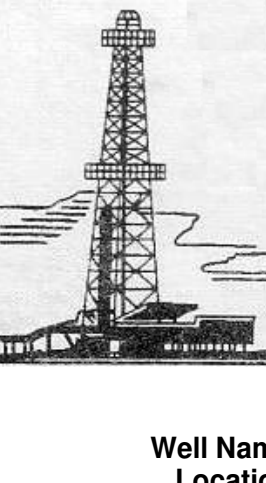


WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST

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



Well Name: Trost #1-31
 Location: NW SE NW SE SEC. 31-18S-27W
 Licence Number: API: 15-101-22489
 Spud Date: January 25, 2014
 Surface Coordinates: 1898' FSL & 1783' FEL
 Y= 651820, X= 1471669

Region: Lane Co., KS
 Drilling Completed: February 5, 2014

Bottom Hole Coordinates:
 Ground Elevation (ft): 2720' K.B. Elevation (ft): 2727'
 Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4692'
 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 (Company Tools)

DP 4.5" XH (16.6#); DC 8.25" x 2.25" x 553', Kelly 40.30', Tool Joint 5.5" ; Bit: JZ-HA20-Q, 7-7/8" ; jets 15-15 standard nozzels; rpm 80, WOB 35k; Kelly Bushing 7' above ground level; LeWayne "Lew" Tresner (tool pusher).

Drill collars were hard-banded prior to drilling this well. One might expect additional turbulence and abrasion and that could be a possible cause of sample quality problems?

DRILL STEM TEST #1:

LKC "K-zone": Interval: 4260-4275 (15'); Blow: BOB 3 min IFF, weak surf RB ISIP, BOB 3 min FFP, RB 3-1/2" FSIP; Times: 5-15-15-30; Recovery: 63' GIP, 283' TF; Grindout: 10' CO (100%O, 27.6 grav), 126' GMO (85-90%O), 147' GMO (15%G, 75%O, 5%W, 5%M) (no visible water during T.O.H. may be contamination or filtrate?); Pressures: HP: 2088-2084; SIP: 510-505; FP: 43-63, 72-103; BHT: 120 F; Trilobite Testing Co., Inc., Ellis, KS, Bob Hamel.

DRILL STEM TEST #2:

LKC "Mid Creek, L-zone": Interval: 4296-4314 (17'); Blow: weak 1/4" IFF, RB weak surf ISIP, weak incr 1/2" FFP, RB weak surf FSIP; Times: 5-15-15-30; Recovery: 5' mud (100%M); Pressures: HP: 2110-2082; SIP: 405-400; FP: 14-16, 17-22; BHT: 109 F; Trilobite Testing Co., Inc., Ellis, KS, Bob Hamel.

DRILL STEM TEST #3:

Pleasanton: Interval: 4343-4389 (46'); Blow: weak incr 3/4" IFF, RB weak surf ISIP, weak surf FFP, RB weak surf FSIP; Times: 5-15-30-60; Recovery: 3' mud (100%M); Pressures: HP: 2124-2114, SIP: 66-108, FP: 32-32, 32-32; BHT: 116 F; Trilobite Testing Co., Inc., Ellis, KS, Bob Hamel.

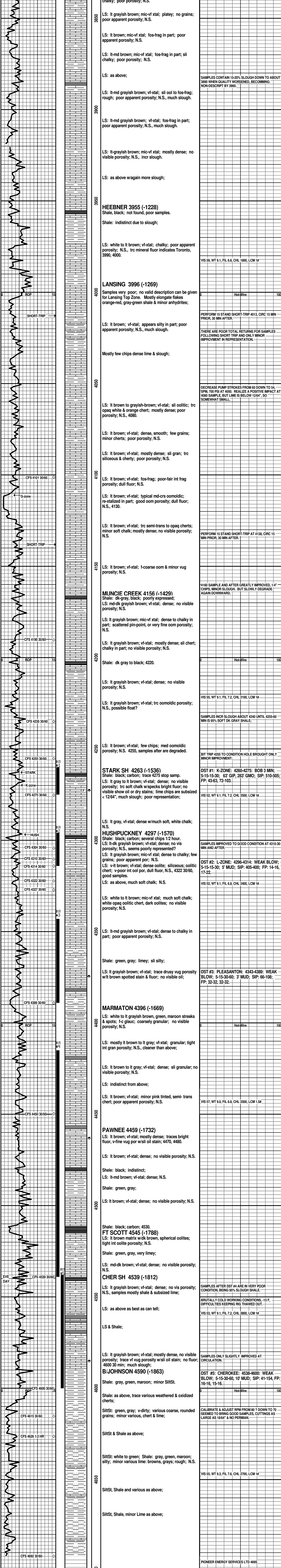
DRILL STEM TEST #4:

Pawnee thru Ft. Scott: Interval: 4415-4539 (124'); Blow: no blow IFF, no RB, weak surf FFP, no RB; Times: 5-15-15-30; Recovery: 5' mud (100%M); Pressures: HP: 2255-2214, SIP: 1995-452, FP: 1894-1918, 69-203; BHT: 115 F; Trilobite Testing Co., Inc., Ellis, KS, Bob Hamel.

Pressures are abnormal probably due to plugging. Roughnecks say there was a 2' plug of ice that fell out of one of the test stands during T.I.H.

DRILL STEM TEST #5:

Cherokee/Johnson: Interval: 4538-4600 (62'); Blow: 1/4" IFF, no RB, weak surf FFP, no RB; Times: 5-15-30-60; Recovery: 10' mud (100%M); Pressures: HP: 2282-2214, SIP: 41-154, FP: 16-16, 15-16; BHT: 113 F; Trilobite Testing Co., Inc., Ellis, KS, Sam Esparza.



RTD 02/05/2014 1:55 pm
OIL WELL