

OIL PRODUCERS, INC. OF KANSAS

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

Well Name: Craig J #1
Well Id:
Location: 1815' FSL, 335' FEL, 36-20S-21W, Ness County, Kansas
License Number: API: 15-135-25742 **Region:** Ness County
Spud Date: 05/05/2014 **Drilling Completed:** 05/14/2014
Surface Coordinates: Lat: 38.2670688
Long: -99.5849889
Bottom Hole Vertical hole
Coordinates:
Ground Elevation (ft): 2243' **K.B. Elevation (ft):** 2253'
Logged Interval (ft): 3700' **To:** RTD **Total Depth (ft):** 4470'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

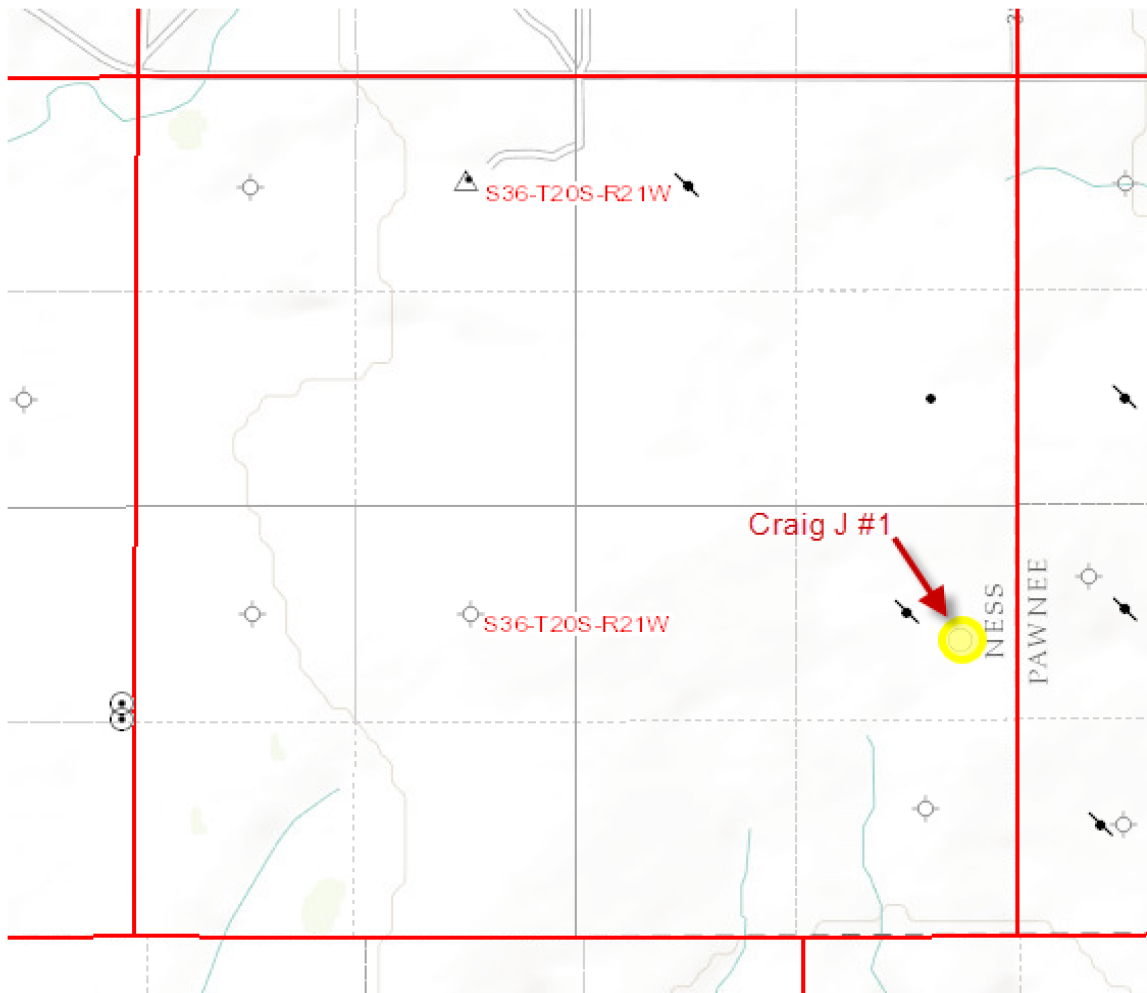
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Oil Producers, Inc. of Kansas (OPIK)
Address: 1710 N. Waterfront Parkway
Wichita, KS 67206-6603
316-681-0231

GEOLOGIST

Name: Kent R. Matson
Company: Matson Geological Services, LLC
Address: 33300 W. 15th Street S.
Garden Plain, Kansas 67050
316-644-1975



COMMENTS

Contractor: Pickrell Drilling Company, Rig #1.

Tool Pusher: Mike Kern.

Surface Casing: 8 5/8" set at 223' (KB) w/150sx cement.

Production Casing: Based on field observations of drill cuttings, DST results and electric log review, production casing was not installed and the hole was plugged and abandoned.

Mud by: MudCo.

DST's by: Trilobite Testing - Brett Dickinson.

Logs by: Nabors Production Service (DIL w/SP, CN-CD, ML, Sonic).

RTD= 4470'.

LTD= 4470'.

05/13, DST #2 @ 4390'.
05/14, DST #4 @ 4410', TD @ 4470'.

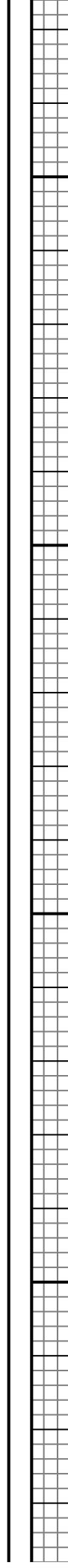
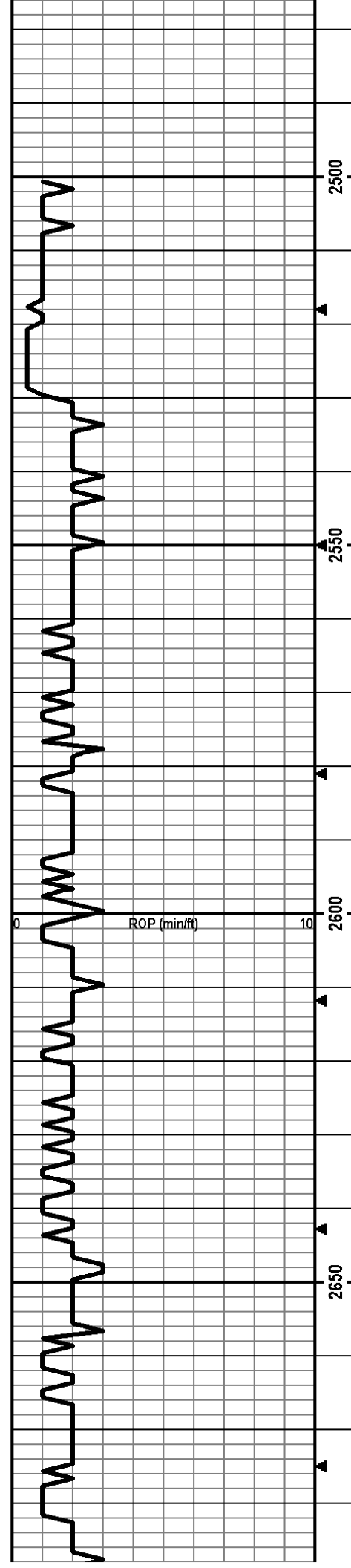
n/c 0

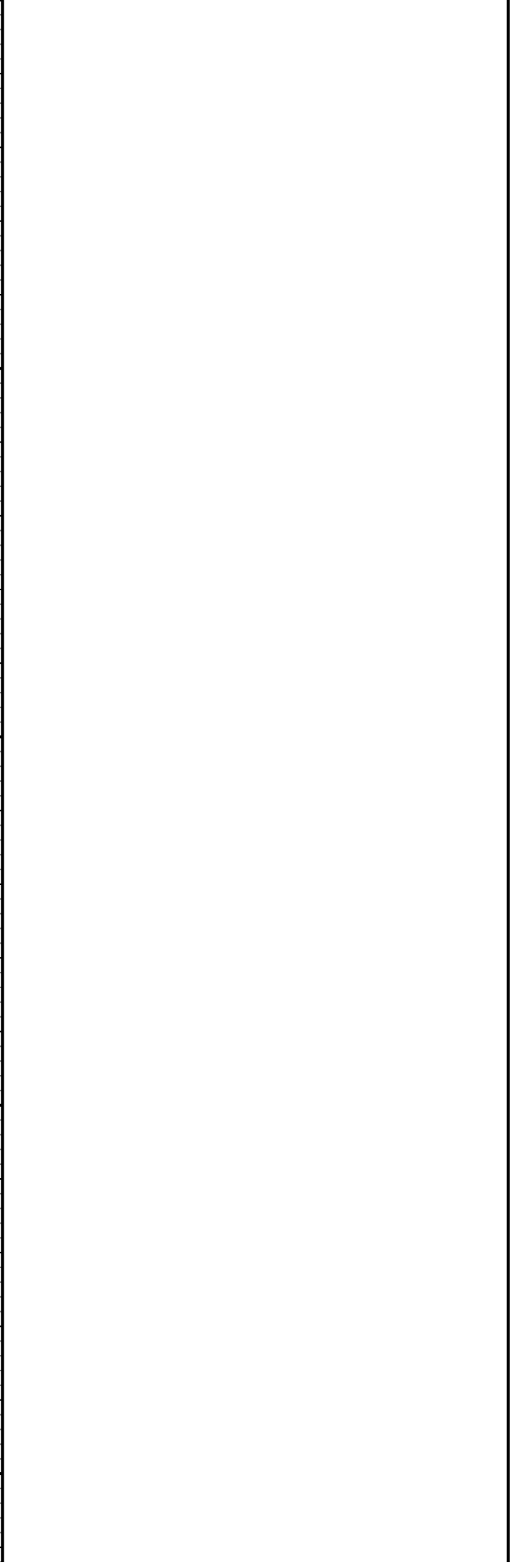
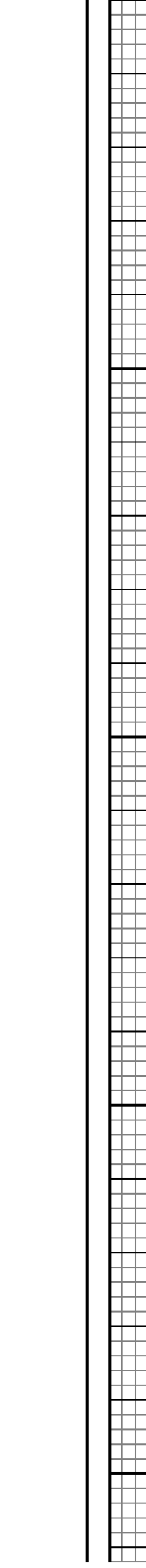
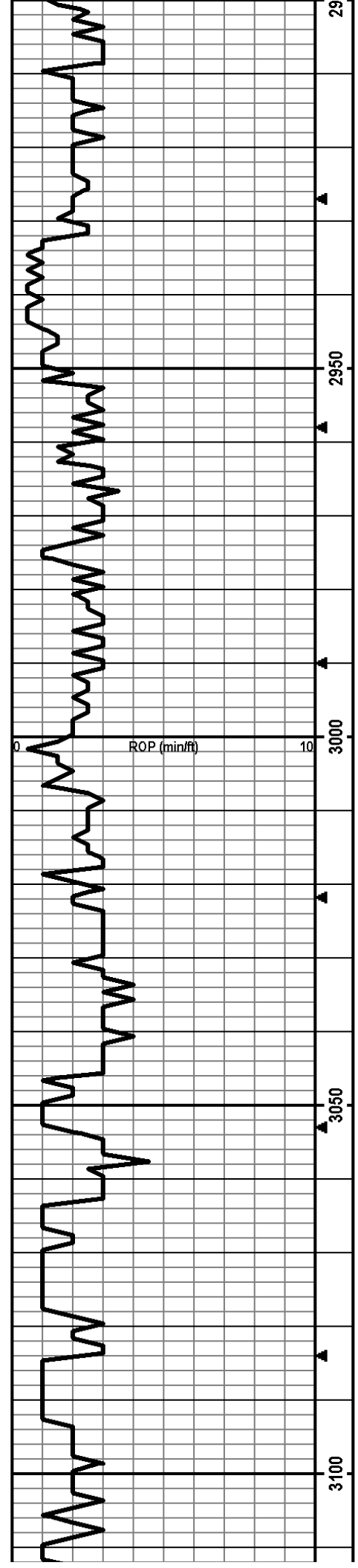
Mudco Check #3 @ 1768'
05/07/14 12:35pm
wt vis pH chl
9.4 29 7.0 5800
Filt LCM
n/c 0

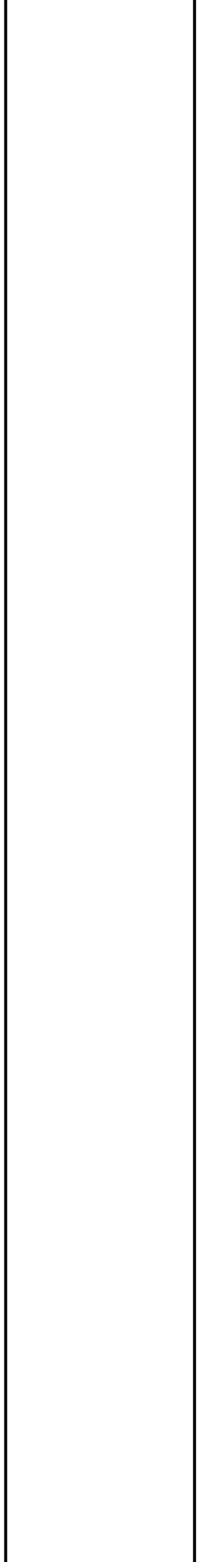
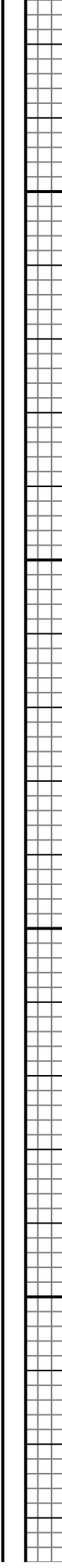
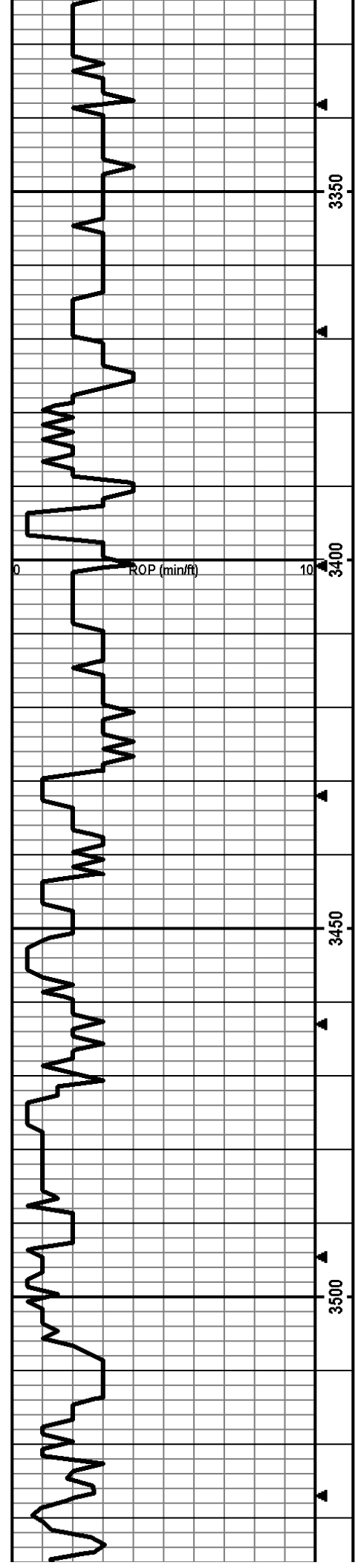
Anhydrite: Top @ 1409', Bottom @ 1435'

ROP Data begins @ 2500' on 05/08/2014

Mudco Check #4 @ 2566'
05/08/14 12:20pm
wt vis pH chl
9.9 29 7.0 76000
Filt LCM
n/c 0







Larsh 3550
(-1297)

3550

ROP (min/ft)

3600

Queen Hill
3626 (-1373)

3626

3650

3700

Heebner
3744
(-1491)

3744

Drill cutting samples at 10' intervals start at 3700'.

LS: crm/lt brn/lt gry, micro-med xtal, some foss frags/fusln, vry silty/sndy, min ppt-fn in-xtal por, no odor, ns.

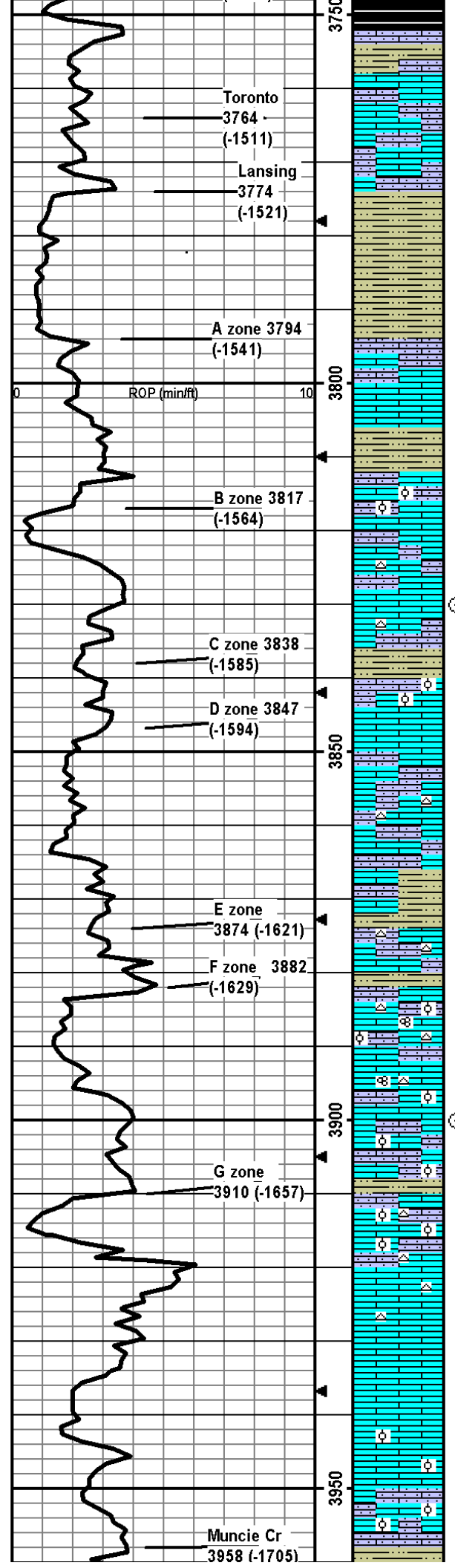
LS: crm/lt-med brn, micro-fn xtal, some foss frags, some vry silty, some ppt in-xtal por, no odor, ns.

LS: lt-med brn/lt-med gry, micro-med xtal w/min 2ndry crs xtal, some foss frags, vry silty/sndy, some ppt-fn in-xtal por, no odor, ns

LS: same as above, no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, min foss frags, vry silty/sndy, some ppt-fn in-xtal por, no odor, ns.

SU: med-dk grn/blk some silty carb firm fissile



Cr: med-dk gry/brn, some silty, carb, firm, fissile.

LS: crm/lt brn/ltgry, micro-fn xtal, min foss frags, some vry silty, ppt-fn in-xtal por, no odor, ns. Some med-dk gry firm silty SH.

LS: crm/lt-med brn, micro-fn xtal, some silty, min ppt in-xtal and frac por, no odor, ns.

SH: med-dk gry/red brn, some silty, some carb, firm, fissile.

SH: med-dk gry/brn/red brn, greenish gry, some silty, some carb, firm, fissile.

LS: crm/lt gryish brn, micro-fn xtal, min foss frags, some vry silty, no vis por, no odor, ns.

LS: crm/lt brn/red brn, micro-fn xtal, min foss frags, some vry silty, min ppt-fn in-xtal por, ns.

SH: med-dk gry/brn/red brn/green gry, silty, carb, soft-firm, fissile.

LS: crm/lt brn/gry, micro-med xtal, foss frags/ool, some vry silty, ppt-fn in-xtal/oo-castic por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, min foss frags, some vry silty, min wht/lt gry chert, min ppt in-xtal por, no odor, ns.

LS: crm/lt brn, micro-med xtal, some foss frags, some silty, min lt brn chert, min ppt in-xtal por, no odor, ns.

SH: med-dk gry/brn/red brn, silty, carb, soft-firm, fissile.

LS: crm/lt-med brn, micro-med xtal, foss frags/ool clusters w/SH matrix, some silty, min ppt in-xtal por, no odor, ns.

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags, some vry silty, some wht/lt gry chert, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags, some vry silty, min ppt in-xtal por, no odor, ns.

SH: med-dk gry/green gry/red brn, carb, silty, firm, fissile.

LS: crm/lt-med brn, micro-med xtal, some foss frags, some vry silty, some lt brn chert, min ppt in-xtal por, no odor, ns.

SH: gry/green gry/brn, silty, slt carb, firm, fissile.

LS: lt brn, micro-med xtal, foss frags/fusln/ool, some vry silty, some lt brn chert, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt-med brn/lt gryish brn, micro-med xtal, foss frags/fusln/ool, some silty, some wht/lt brn chert, some ppt-fn in-xtal/frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags/some ool, some silty, min ppt in-xtal por, no odor, ns. Some lt-med gry/brn silty SH.

LS: crm/lt brn, micro-med xtal, foss frags/abund ool, some silty, lt brn chert, ppt-fn in-xtal and fn-med oo-castic por, no odor, ns.

LS: crm/lt brn, micro-fn xtal, foss frags, some lt brn chert, min frac por, no odor, ns.

LS: crm, micro-fn xtal w/some med 2ndry xtal, min foss frags, some chalky, some frac por, no odor, ns.

LS: crm/lt gry, micro-fn xtal, min foss frags/some dense ool pcs, some chalky, some frac por, no odor, ns.

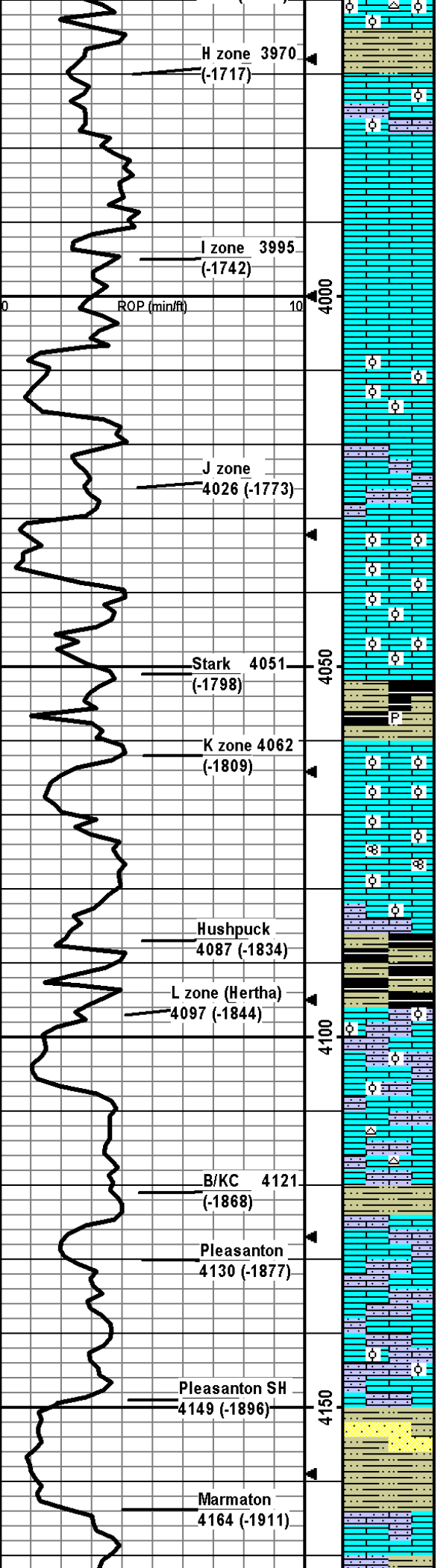
LS: crm/lt brn/lt gry, micro-fn xtal, foss frags w/abund ool, some silty, some chalky, ppt-med in-xtal/oo-castic por, no odor, ns.

SH: med-dk gry, silty, stly carb, soft-firm, fissile.

CFS @ 3830'
30"60"

Mudco Check #6 @ 3850'
05/10/14 01:45pm
wt vis pH chl
9.2 56 10.0 4000
Filt LCM
9.6 0

CFS @ 3900'
30"60"



LS: crm/lt brn/lt gry, micro-med xtal, foss frags/abund ool, some chaly, some lt brn chert, ppt-fn in-xtal and fn-med oo-castic por, no odor, ns.

SH: med-dk gry, silty, stly carb, soft-firm, fissile.

LS: crm/lt gry, micro-fn xtal, min foss frags/dense ool pcs, some silty, some stly chalky, min ppt in-xtal/frac por, no odor, ns.

CFS @ 3980'
30" / 60"

LS: crm/lt gryish brn, micro-fn, min foss frags, some frac por, no odor, ns.

LS: crm/lt gryish brn/lt gry, micro-fn xtal w/some med 2ndry xtal, some chalky, min foss frags, some frac por, no odor, ns.

LS: lt brn/lt gryish brn, micro-med xtal, min foss frags w/abund ool, fn-med oo-castic por, no odor, ns.

CFS @ 4020'
30" / 60"

LS: wht/crm/lt brn, micro-fn xtal, min foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags/abund ool, fn-crs oo-castic por, no odor, ns.

LS: crm/lt gryish brn/lt gry, micro-med xtal, foss frags/abund ool pcs, some chalky, fn-med oo-castic por, no odor, ns.

SH: med-dk gry/blk/greenish gry, silty, pyritic, carb, firm, fissile.

LS: crm/lt-med brn/lt gry, micro-med xtal, foss frags/ool, some chalky, fn-med oo-castic por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, some chalky, foss frags/fusln/ool, fn-med oo-castic por, no odor, ns.

CFS @ 4080'
30" / 60"

LS: crm/lt brn, micro-med xtal, foss frags/ool, grainy, silty, chalky, some ppt-fn in-xtal por, no odor, ns.

SH: med-dk gry/blk, silty, stly carb, firm, fissile.

LS: crm/lt-med brn, micro-med xtal, foss frags/ool, some vry silty, some chalky, ppt-med in-xtal/oo-castic por, no odor, ns.

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags w/some ool, some silty, some chalky, min ppt-fn in-xtal por w/fn-med oo-castic por, no odor, ns.

CFS @ 4111'
30" / 60"

LS: crm/lt-med brn, micro-med xtal, foss frags, some silty, some wht chert, min frac por, no odor, ns.

SH: med-dk gry/brn/maroon brn, vry silty, carb, soft-firm, fissile.

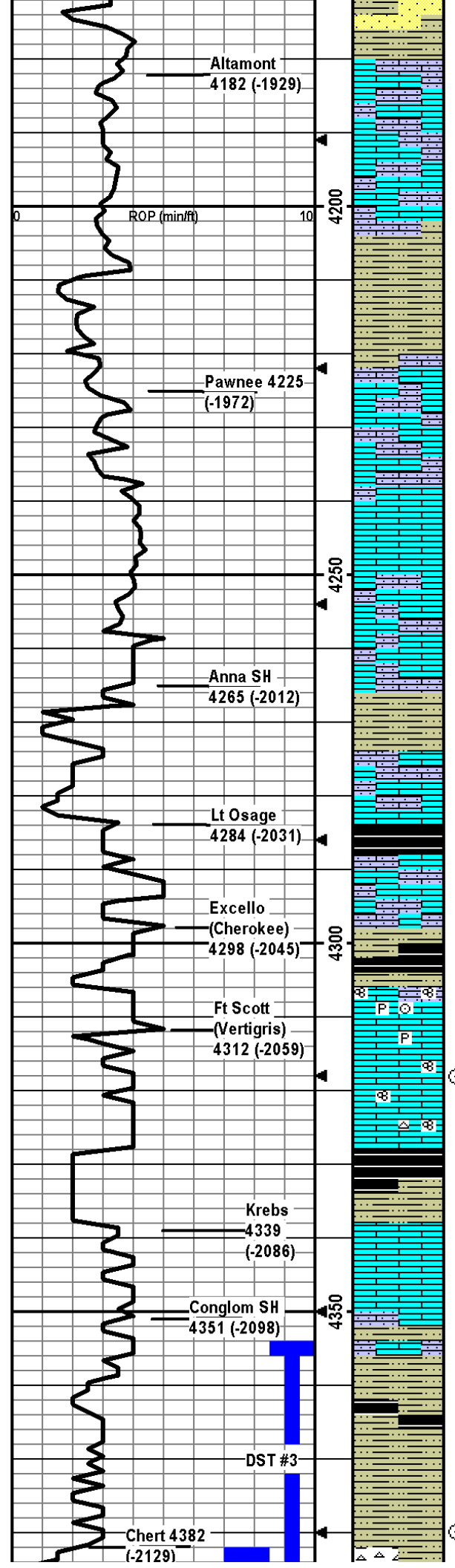
LS: crm/lt-med brn, micro-med xtal, foss frags, grainy, some silty, min frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt gryish brn, micro-med xtal, foss frags/dense ool, some vry silty, some chalky, some frac por, no odor, ns.

SH: lt-dk gry/green gry/brn, some vry silty, slt carb, soft-firm, fissile; some SS: brn/gry, vf-f, sa-sr, pred qtz; no odor, ns.

LS: crm/lt gryish brn, micro-med xtal, foss frags, some silty, min frac por, no odor, ns.



SH: med-dk gry/green gry/brn, stly carb, silty, firm, soft-firm, fissile; some SS: gry, vf-f, sr-wr, pred qtz, friable; no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt-med brn/lt gry, micro-fn xtal, silty, some chalky, min ppt in-xtal/frac por, no odor, ns.

SH: med-dk gry/green gry/red brn/maroon, stly carb, silty, firm, fissile.

SH: same as above.

LS: crm/lt-med brn/lt gry, micro-med xtal, min foss frags, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, some silty, min frac por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal w/2ndry xtals, min foss frags, some frac por, no odor, ns.

LS: crm/lt gry, micro-fn w/some 2ndry xtal, min foss frags, some silty, min ppt in-xtal por, no odor, ns.

SH: med-dk gry/gryish brn/red brn, silty, slt carb, soft-firm, fissile.

LS: crm/lt brn-dk brn, micro-med xtal w/some 2ndry xtal, some foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

SH: dk gry/blk, slt silty, stly carb, firm, fissile.

LS: crm/lt brn-dk brn, micro-med xtal, some foss frags, some silty, min ppt in-xtal/frac por, no odor, ns.

SH: med-dk gry/green gry/red brn/blk, silty, some slt carb, firm, fissile.

LS: crm/lt brn/lt-med gry, micro-med xtal, foss frags/fusln/crin, stly pyritic, some chalky, some silty, min frac por, no odor, ns.

LS: crm/lt brn/lt-med gry, micro-fn xtal, some foss frags/fusln, some lt brn chert, some chalky, min frac por, no odor, ns.

SH: med-dk gry/green gry/blk, some silty, carb, firm, fissile.

LS: crm/lt brn, micro-fn w/med 2ndry xtals, some foss frags, min ppt in-xtal/frac por, no odor, ns.

LS: crm/lt brn/lt gry, micro-fn xtal, some foss frags, some silty, some chalky, min frac por, no odor, ns.

SH: med-dk gry/green gry/maroon, some silty, some carb, firm, fissile, no odor, ns.

SH: same as above, no odor, ns.

Mudco Check #7 @ 4213'
05/11/14 01:50pm
wt vis pH chl
9.3 70 10.0 3500
Filt LCM
11.6 0

**DST1: 4382-4390
Mississippian
(Failed Test,
Plugged Tool)**

30/45/45/60
1st) 3" blow built to 3 1/4"
then reduced to 3", no BB.
2nd) No blow, no BB.
IFP 135# (tool plugged)
ISIP n/a
FFP n/a
FSIP n/a
IHP 2211#
Recvd: 65' OS mud.

NOTE: After DST #1, shut
down due to high winds from
approx 5pm to 9pm Monday
05/12/14.

**DST2: 4382-4390
Mississippian
(Failed Test,
Packer Failure)**

NOTE: Prior to TIH for DST
#3, sample box continued to
be full after 1.5 hrs of cir.
Slowed pump from 60 to 45
strokes/min and cutting vol in
box decreased significantly.
Continued this process at all
circulation points.

CFS @ 4318'
30"60"

**DST3: 4355-4390
Mississippian**

30/45/30/90
1st) BOB in 5 min, 1/2" BB.
2nd) BOB in 5 min, BOB in 23
min BB.
IFP 80-328#
ISIP 1082#
FFP 307-490#
FSIP 1088#
HP 2256-2103#
Recvd: 420' GIP, 95'
GSOWCM (15%G, 20%O),
180' GVSOWCM (20%G,
10%O), 420' GVSOMCW
(20%G, 10%O), 360' Water.

CFS @ 4380'
30"60"

DST #1 & #2

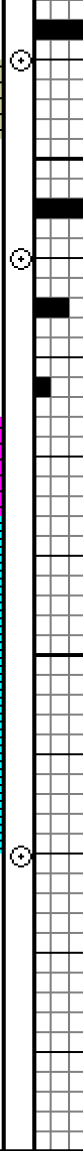
ROP (min/ft)

DST #4

MISS 4427 (-2174)

RTD 4470', -2217
LTD 4470', -2217

4400
4450
00



Chert: wht/lt yel/lt brn, opa, some ppt-fn in-xtal/frac por, oil staining and free oil, yel flor, gd cup odor, vgsfo.

SH: crm/gry/green gry/maroon/mustard yel, some vry silty, some LS nod, some chert, some carb, firm, fissile, slt odor, nsfo.

Chert: wht/crm/lt yel/lt brn, micro-fn xtal, staining, 28 pcs in 30 min and 16 pcs in 60 min smpls w/ppt-med in-xtal por w/sfo, brn oil and blk tar oil, yel flor/cut, gd cup odor, vgsfo.

Chert: same as above w/11 pcs w/fo, thick dk brn/blk, dul yel flor/yel cut, slt cup odor, gsfo.

Chert: same as above w/4 pcs w/fo.

DOLO: wht/crm, micro-fn xtal, some glau, suger tex, mostly dense w/some friable, ppt in-xtal por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, min foss frags w/some dense ool, min frac por, no odor, ns.

LS: crm/lt-med brn, micro-med xtal, foss frags, frac por, no odor, ns.

LS: crm/lt brn, micro-med xtal, min foss frags w/some dense ool pcs, frac por, no odor, ns.

TD @ 4470'.

CFS @ 4390'
30"60"

Mudco Check #8 @ 4390'
05/12/14 12:50pm
wt vis pH chl
9.4 55 10.0 3500
Filt LCM
11.2 0

CFS @ 4410'
30"60"

Mudco Check #9 @ 4390'
05/13/14 01:05pm
wt vis pH chl
9.4 75 9.0 4600
Filt LCM
11.6 0

DST4: 4398-4410
Mississippian
30/45/30/90
1st) BOB in 10 min, very weak surface BB.
2nd) BOB in 19 min, very weak surface BB.
IFP 23-118#
ISIP 1129#
FFP 122-173#
FSIP 1127#
HP 2206-2130#
Recvd: 120' GIP, 1' Oil, 44' VSGOWCM (10%G, 2%O), 305' VSGMCW (5%G).

Mudco Check #10 @ 4410'
05/14/14 01:05pm
wt vis pH chl
9.1 58 9.0 6600
Filt LCM
12.4 0

CFS @ 4470' 30"60";
Cir 1.5 hrs to clean hole.