

Adam Eldani Geo-Log/Report

WellSight Systems

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

Measured Depth Log

Well Name: #1 MENDENHALL UNIT

Location: SEC 15 -TOWNSHIP 13S- RANGE 28W GOVE COUNTY

License Number: API 15--063-22137

Region: KANSAS

Spud Date: 9/18/2013

Drilling Completed: 9/28/2013

Surface Coordinates: 2165' FSL & 2600' FWL

Bottom Hole Deviation Surveys are detailed through out the Geo-Report.

Coordinates:

Ground Elevation (ft): 2568

K.B. Elevation (ft): 2573

Logged Interval (ft): 3300 To: 4500

Total Depth (ft): 4502

Formation: Mississippian

Type of Drilling Fluid: Mud-Co Chemical

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

OPERATOR

Company: Ritchie Exploration Inc. (drilled by WW RIG #2)

Address: 8100 E. 22nd ST. N. #700

Wichita, KS, 67278-3188

GEOLOGIST

Name: Adam M.A. Eldani

Company: Ritchie Exploration Inc.

Address: 8100 E. 22nd ST. N. #700

Wichita, KS, 67278-3188

Tops & Drill Report

TOPS: DRILLING REPORT

Sample Tops:

Anhydrite: 2051'+522	Anhydrite: 2049'+524
B/Anhydrite: 2091'+482B	Anhydrite: 2088'+485
Stotler: 3338'-765	Stotler: 3337'-764
Heebner: 3701'-1128	Heebner: 3706'-1133
Toronto: 3723'-1150	Toronto: 3724'-1151
Lansing: 3740'-1167	Lansing: 3740'-1167
Muncie Sh: 3882'-1309	Muncie Sh: 3896'-1323
Stark Sh: 3979'-1406	Stark Sh: 3979'-1406
Hush: 4011'-1438	Hush: 4010'-1437
BKC: 4032'-1459	BKC: 4032'-1459
Altamont: 4089'-1516	Altamont: 4082'-1509
Pawnee: 4157'-1584	Pawnee: 4154'-1581
Myrick: 4194'-1621	Myrick: 4196'-1623
Fort Scott: 4238'-1665	Fort Scott: 4240'-1667
Cherokee Sh: 4264'-1691	Cherokee Sh: 4265'-1692
Johnson: 4311'-1738	Johnson: 4308'-1735
Miss: 4350'-1777	Miss: 4345'-1772

DAILY DRILLING REPORT:

DATE DEPTH:

9/18	Spud
9/19	665'
9/20	2530'
9/21	3360'
9/22	3824'
9/23	3925'
9/24	4004'
9/25	4095'
9/26	4322'
9/27	4500'
9/28	4500'

Misc.

All DST's info. are NEAR the correct log depth.

RIG: WW RIG #2
TOOL PUSHER: LONNIE LANG
MUD: MUD CO. (Reid Atkins)
GAS DETECTOR: N/A

DRILL STEM TEST'S: DIAMOND TESTING, INC.

LOGS: NABORS (IAN MABB)

OFFICE: PETER FIORINI

Comments

Moved in and rigged up. Spud at 3:30 p.m. Ran 5 jts new 23# 8-5/8" surface casing. Tally at 217.44', set at 224'. Cemented with 165 sacks Common, 3% cc, 2% gel. Cement circulated. Plug down at 7:30 p.m. Drilled out plug at 3:30 a.m. on 9/19/13.

AFTER SAMPLE LOGGING, ELECTRIC LOGGING, AND ALL DST TESTS ANALYSIS & CALCULATIONS; IT WAS ELECTED TO PLUG & ABANDON THE #1 MENDENHALL UNIT.

Plug and Abandon. 1st plug set at 2070' with 25 sacks 60/40 Poz, 4% gel, ¼# flocele; 2nd plug set at 1120' with 100 sacks; 3rd plug set at 275' with 40 sacks; 4th plug set at 40' with 10 sacks; 175 total sacks. Plugged the rat hole with 30 sacks; mouse hole with 15 sacks. Job complete at 8:00 a.m. Plugging orders by David Wann with the KCC.


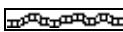
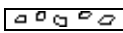


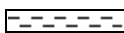







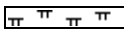
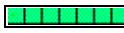
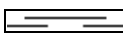
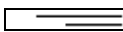
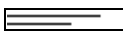



Well Log Surveys BY: NABORS. Compensated Denisty/ Neutron Log, Dual Induction.

SAMPLES WILL BE DEPOSITED WITH KANSAS GEOLOGICAL SURVEY.























































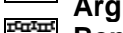


















RESPECTFULLY SUBMITTED

Adam M. A. Eldani

ROCK TYPES

 Anhy  Bent  Brec  Carb sh  Cht	 Clyst  Coal  Congl  Dol  Gyp	 Igne  Lmst  Meta  Mrlst  Salt	 Shale  Shcol  Shgy  Sltst  Ss	 Till
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ACCESSORIES

MINERAL  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau  Gyp	 Hvymin  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff FOSSIL  Algae  Amph	 Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Fuss  Gastro  Oolite  Oomold  Ostra  Pelec	 Pellet  Pisolite  Plant  Strom STRINGER  Anhy  Arg  Bent  Coal  Dol  Gyp  Ls  Mrst  Sltstrg  Ssstrg	TEXTURE  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackst
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OTHER SYMBOLS

- POROSITY**
- [E] Earthy
 - [B] Fenest
 - [F] Fracture
 - [X] Inter
 - [Z] Moldic
 - [O] Organic
 - [P] Pinpoint

[V] Vuggy

- SORTING**
- [W] Well
 - [M] Moderate
 - [P] Poor

- ROUNDING**
- [R] Rounded
 - [r] Subrnd
 - [a] Subang
 - [A] Angular

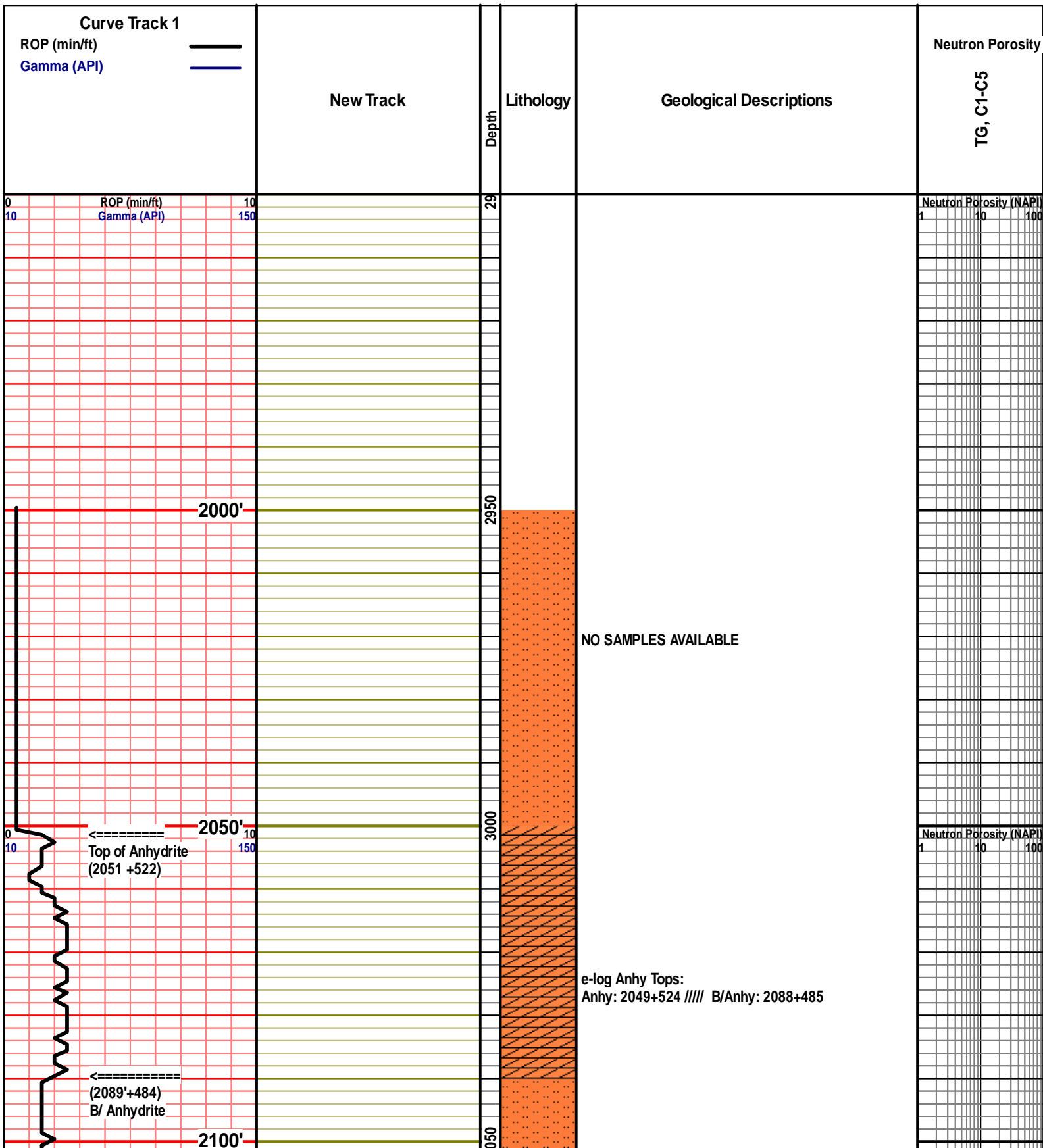
OIL SHOW
[X] aiming_1

- [●] Even
- [◉] Spotted
- [○] Ques
- [D] Dead

- INTERVAL**
- [■] Core
 - [■] Dst

[■] Dst_alt
[■] Dst

- EVENT**
- [▽] Rft
 - [▶] Sidewall





2150'

3100

3150

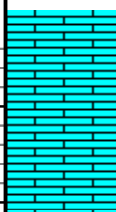
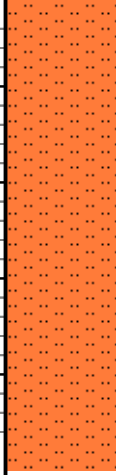
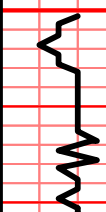
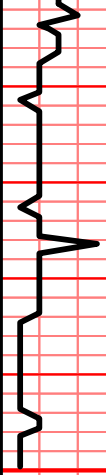
3200

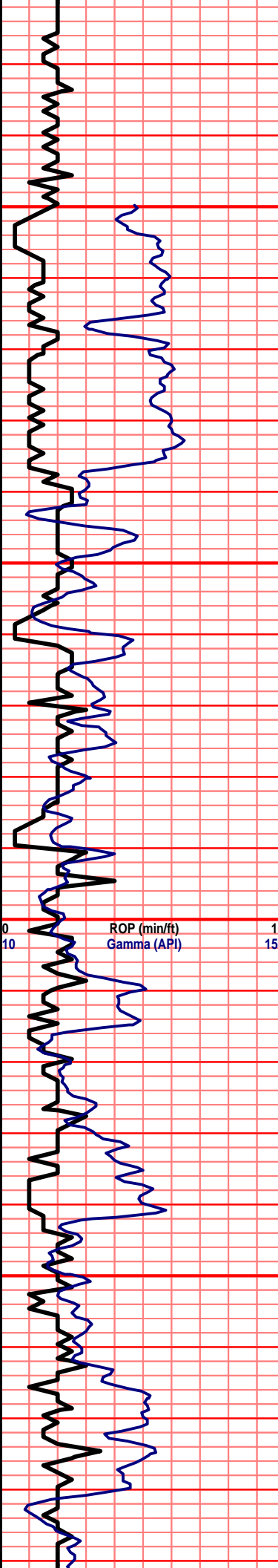
3250

NO SAMPLES AVAILABLE

ROP (min/ft) 10
Gamma (API) 150

Neutron Porosity (NAPI)
1 10 100





09/21/2013
mud info.
wt: 9.5
Funnel Vis. 30
Filtrate API: N/C
Chloride 9,000
LCM # TR

GEOLOGIST ON LOCATION @ 3488'

MUD DISPLACEMENT @ 3400

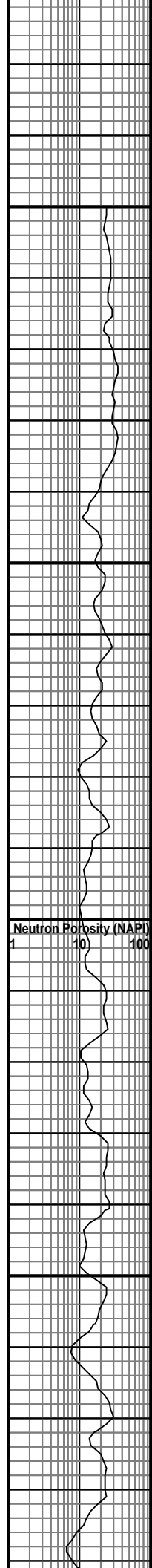


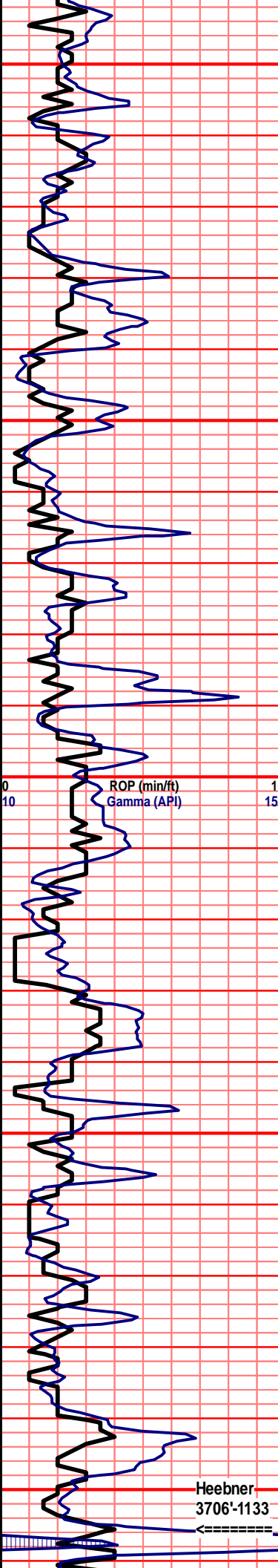
NO SAMPLES AVAILABLE

NO SAMPLES AVAILABLE

- 3410: mstly gry sh, lots of red-maroon sh, sct clusters of red & gry slit stn.
- 3420: incrs in brwn-drk brwn sh, incrs in loose pyrt, few oragne chrt nod, lno odr, ns.
- 3430: sig incrs in gry sh, shw of gry inxln lm, dense, poor inxln por, no odr, ns.
- 3440: drk crm micrtic-pack stn lm, fn grn, fair intr prtcl por, lots of tan foss lm, poor por, no odr, ns.
- 3450: aa, sig incrs in gry foss lm, poor por, incrs in gry fn inxln lm, v. dense, no vis por, no odr, ns.
- 3460: incrs in gry sh, sig incrs in crm-gry lsub-chlky lm, scat foss, no odr, ns.
- 3470: mstly drk gry inxln lm, sli foss, no vis por, no odr, scatt crm-wht chlk, no odr, ns.
- 3480: mstly gry pack sltn lm, v. fn grn, incrs in tan-gry foss lm, loose foss (fussids) in try, cemnt flooded, no odr, ns.
- 3490: gummy sample, sig incrs in slty sh, gry gummy carb mud across try, poor sample.
- 3500: gry inxln lm, dense, tan foss lm, poor-fair por, lots of loose wht chlk, gry slty sh, no odr, ns.

Neutron Porosity (NAPI)

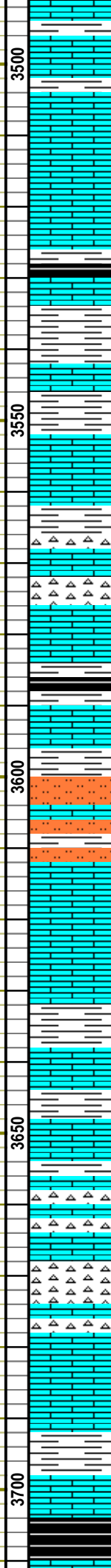




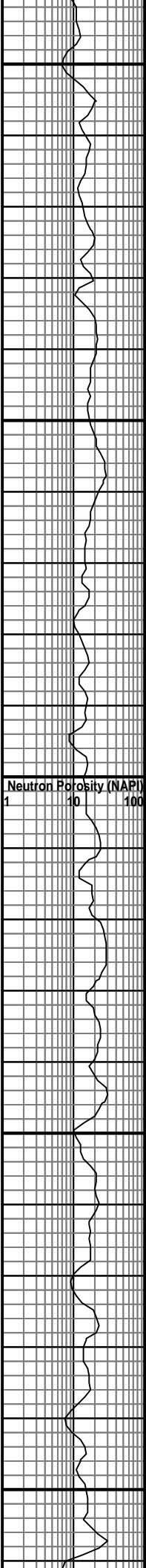
PUMP PRESSURE 950+

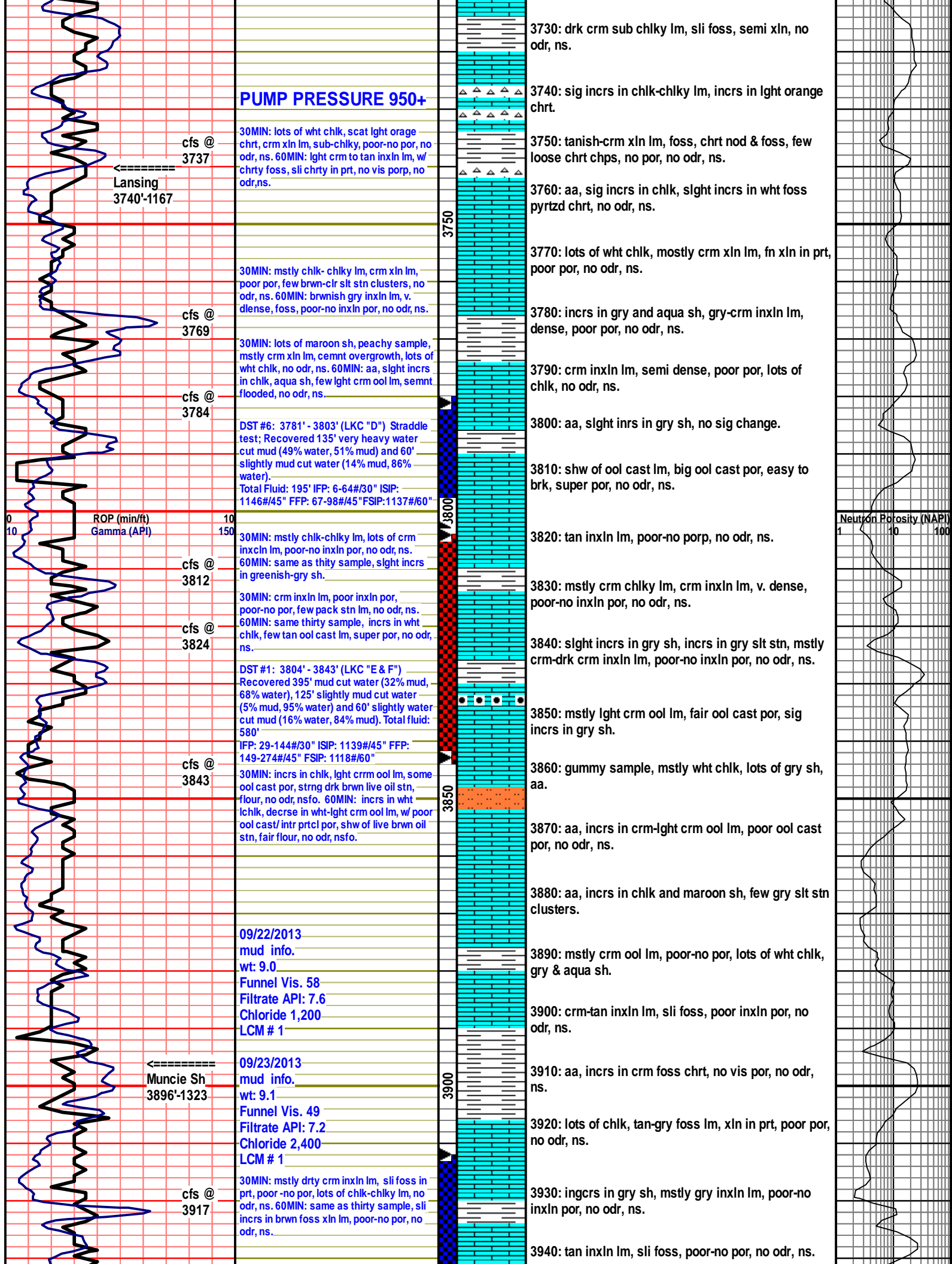
PUMP PRESSURE 950+

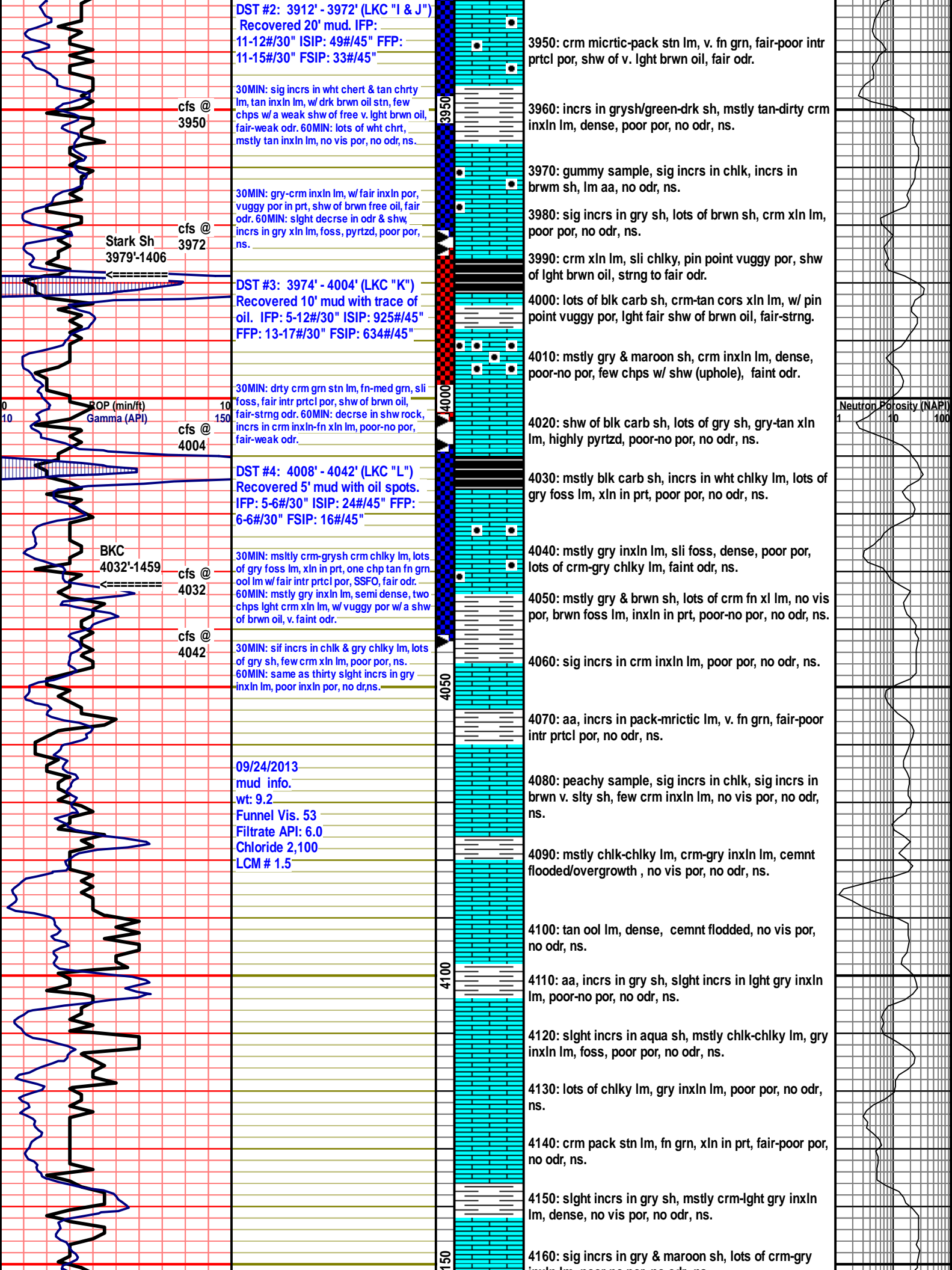
Heebner
3706'-1133

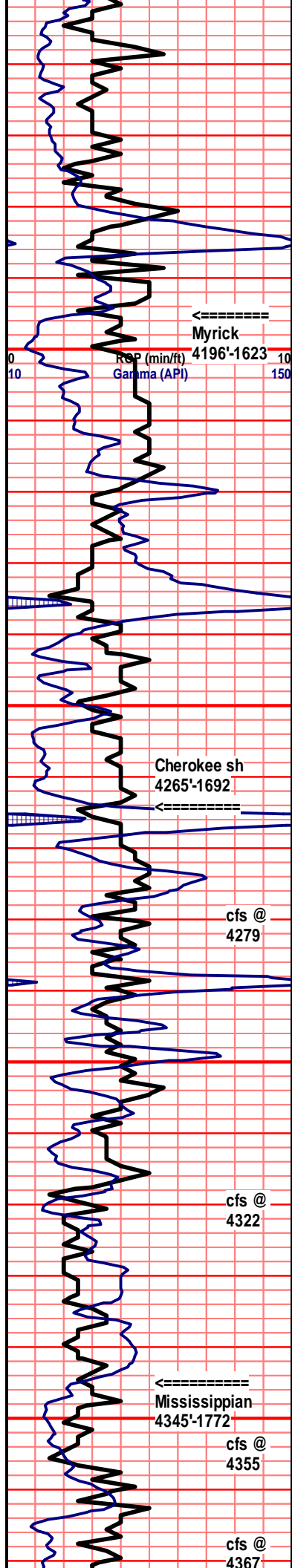


3510: crm fn xln lm, v. dense, no vis por, no odr, ns.
 3520: gry-tan inxln lm, foss in prt, semi dense, poor por, no odr, ns.
 3530: crm-tan, micrtic-pack stn, v. sli foss, poor por, no shw, few brwn slit stn clusters.
 3540: slight incrs in gry sh, mstly crm-drk crm in color, chlky-subchlky, no odr, ns.
 3550: aa, few drk gry-blk carb sh, inhcrs in gry xln lm, dense, no odr, ns.
 3560: crm-gry pack to grn stn lm, v. fn grn, xln in part, poor-fair intr prtcl por, no odr, ns.
 3570: mstly wht-crm chlk, shw of blk-drk gry sh.
 3580: lots of wht chlk, mstly tan-crm pack-grn stn lm, poor-fair intr prtcl por, well cemntd, loose crinoid disks in try, no odr, ns.
 3590: tan xln lm, dense, poor-no por, few drk crm foss chrt, no odr, ns.
 3600: aa, incrs in crm subchlky-chlky lm, no odr, ns.
 3610: shw of blk carb sh, lots of wht rounded chlk, tan-gry xln lm, semi dense, fair frac por, no odr, ns.
 3620: slight incrs in gry slit stn-sh, mstly tan-gry inxln lm, semi dense, poor-no por, no odr, ns.
 3630: drk crm-gry inxln lm, cemnt flooded, poor-no por, no odr, ns.
 3640: slight incrs in gry sh, lots of lght gry slit stn, lots of gummy crm chlk.
 3650: crm-gry pack stn lm, poor intr prtcl por, slight incrs in tan foss lm, fair por, no odr, ns.
 3660: v. lght brwn-tan pack-grn stn lm, poor intr prtcl por, well cemntd, few lght crm ool lm, cemnt flooded, no vis por, no odr, ns.
 3670: crm-lght gry xln lm, dense, no vis por, slight incrs in wht chlk.
 3680: sig incrs in wht chlk, sig incrs in wht foss chrt, no odr, ns.
 3690: incrs in chrt aa, crm xln lm, foss, poor por, no odr, ns.
 3700: sig incrs in chlk, incrs in crm-drk crem foss lm, poor-fair por, no odr, ns.
 3710: mstly drk crm-gry micrtic lm, poor-fair por, no odr, ns.
 3720: show of blk carb sh, tan micrtic lm, sli xln in prt, no odr, ns.







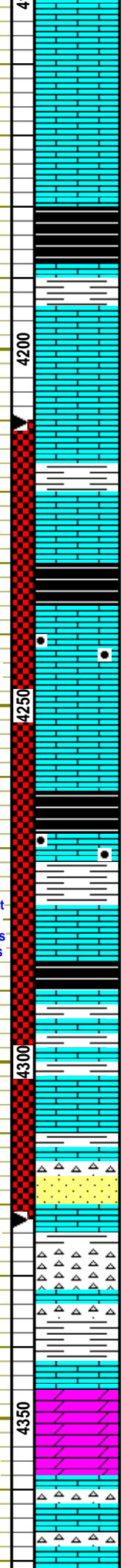


09/25/2013
 mud info.
 wt: 9.2
 Funnel Vis: 59
 Filtrate API: 7.2
 Chloride 2,400
 LCM # 1.5

DST #5: 4210' - 4322'
 (Fort Scott, Cherokee & Johnson) Recovered
 10' mud. IFP:
 10-14#/30" ISIP:
 300#/45" FFP:
 14-15#/30" FSIP:

09/26/2013
 mud info.
 wt: 9.2
 Funnel Vis: 52
 Filtrate API: 8.0
 Chloride 2,200
 LCM # 1

PUMP PRESSURE 950+



4170: lots of wmht chl, mstly crm inxln lm, dense, poor-no por, no odr, ns.

4180: aa, no sig change.

4190: shw of blk carb sh, sig incrs in gry sh, gry fn xln-inxln lm, poor por, no odr, ns.

4200: shw of blk carb sh, mstly drk gry inxln lm, foss, poor inxln por, no odr, ns.

4210: slight incrs in chl, crm-lght gry inxln lm, dense, no odr, ns.

4220: mstly gry xln lm, inxln in prt, poor-no por, no odr, ns.

4230: crm-gry xln lm, dense, poor-no por, lots of chlky-chlky lm, no odr, ns.

4240: mstly blk carb sh, lm aa, no odr, ns.

4250: lots of blk carb sh, incrs in tan inxln lm, dense, sli foss, poor-no por, no odr, ns.

4260: mstly crm-tan inxln lm, v. dense, no vis por, two chps of lght crm lm, w/ poor por w/ drk oil stn, no odr, nsfo.

4270: mstly crm inxln lm, dense, no vis por, no odr, ns.

4280: incrs in blk carb sh, incrs in gry slty sh, mstly tan-drk crm inxln lm, foss, cemnt flooded/overgrowth, incrs in chl-chlky lm, no odr, ns.

4290: tan inxln lm, dense, cemnt flooded, no odr, ns.

4300: slight incrs in gry sh, lm aa, no sig change, no odr, ns.

4310: drk crm-tan xln lm, foss, cemnt flooded, no odr, ns.

4320: aa, slight incrs in gry & aqua sh.

4330: mstly purp, aqua, yellow, gry and maroon sh.

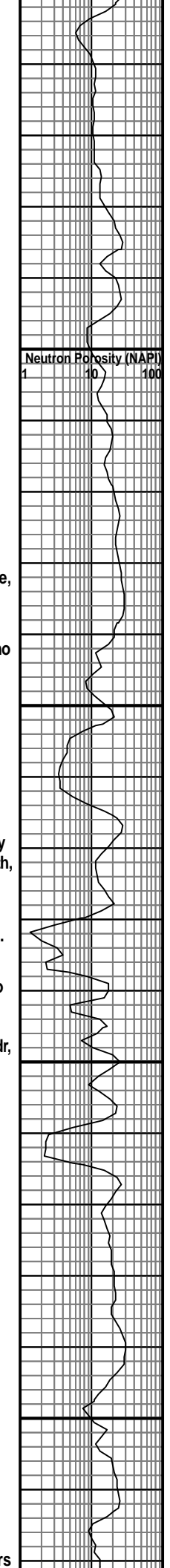
4340: incrs in yellow sh, shw of crm-wht chrt-chrty lm, no por, few yellow clusters of SS, v. fn-med grn, sub-rounded, poorly srted, well cemntd, no odr, ns.

4350: mstly crm chrt-chrty lm, shw of orange-pink chrt, no vis por, no odr, ns.

4360: mstly crm-drk crm inxln lm, few pack stn lm, poor-fair por, lots of gry sh, no odr, ns.

4370: lm aa, few gry dolo lm, well cemntd, poor por, no odr, ns.

4380: mstly drk crm inxln lm, lght crm chrty lm, incrs



ROP (min/ft) 4196'-1623'
 Gamma (API)

Myrick

Cherokee sh
 4265'-1692'

cfs @
 4279

cfs @
 4322

Mississippian
 4345'-1772'

cfs @
 4355

cfs @
 4367

