



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1210810
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1210810

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Adam Eldani Geo-Log/Report

WellSight Systems

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

Measured Depth Log

Well Name: #1 Frink 32C
Location: SEC 32-TOWNSHIP 28S- RANGE 23W FORD COUNTY
License Number: API 15-057-20925 Region: KANSAS
Spud Date: 03/05/2014 Drilling Completed: 03/18/2014
Surface Coordinates: 1380' FSL & 480' FWL
60' N & 150' E of W/2 W/2 SW
Bottom Hole Deviation Surveys are detailed through out the Geo-Report.
Coordinates:
Ground Elevation (ft): 2514 K.B. Elevation (ft): 2525
Logged Interval (ft): 4000' To: 5416' Total Depth (ft): 5420'
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 VAL RIG#5)
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: N/A	Anhydrite: 1482'+1043
B/Anhydrite: N/A	B/Anhydrite: 1530'+995
Stotler: 3672'-1147	Stotler: 3649'-1124
Heebner: 4332'-1807	Heebner: 4323'-1798
Toronto: 4348'-1823	Toronto: 4330'-1805
Lansing: 4484'-1959	Lansing: 4470'-1945
Muncie Sh: 4678'-2153	Muncie Sh: 4670'-2145
Stark: 4820'-2295	Stark: 4810'-2285
Hush: 4864'-2339	Hush: 4853'-2328
BKC: 4948'-2423	BKC: 4942'-2417
Marmaton: 4967'-2442	Marmaton: 4964'-2439
Altamont: 4982'-2457	Altamont: 4982'-2457
Pawnee: 5050'-2525	Pawnee: 5046'-2521
Cherokee Sh: 5100'-2575	Cherokee Sh: 5092'-2567
Huck: 5192'-2667	Huck: 5184'-2659
Atoka: 5201'-2676	Atoka: 5198'-2673
Morrow: 5234'-2709	Morrow: 5224'-2699
Mississippian: 5252'-2727	Mississippian: 5284'-2759
RTD: 5420'-2895	LTD: 5416'-2891

DAILY DRILLING REPORT:

DATE DEPTH:

3/5	Spud
3/6	338'
3/7	1100'
3/8	2025'
3/9	2900'
3/10	3530'
3/11	4180'
3/12	4630'
3/13	5032'
3/14	5072'
3/15	5135'
3/16	5200'
3/17	5250'
3/18	5420'

Misc

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

RIG: VAL RIG #5

TOOL PUSHER: Randy Smith

MUD: MUD CO. (Terry Ison)

GAS DETECTOR: MBC Well Services

DRILL STEM TEST'S: Superior Testing, Inc.

LOGS: NABORS (Ian Nabb)

OFFICE: Peter Fiorini

Comments

Ran 8 jts new 23# 8-5/8" surface casing. Tally at 338', set at 352'. Cemented with 225 sacks common, 2% gel, 3% cc. Cement did circulate. Plug down at 8:15 a.m. Drilled out plug at 4:15 p.m.

AFTER THE RESULTS OF SAMPLE LOGGING, ELECTRIC LOGGING, AND ALL DST TESTS ANALYSIS & CALCULATIONS; It was elected to Plug & Abandon-

RTD 5420'. Ran Electric Log. LTD 5416'. Plug and Abandon. 1st plug set at 1530' with 50 sacks 60/40 Poz, 4% gel, 1/4# flocele; 2nd plug set at 600' with 50 sacks; 3rd plug set at 380' with 50 sacks; 4th plug set at 60' with 20 sacks; 170 total sacks. Plugged the rat hole with 30 sacks and the mouse hole with 20 sacks. Job complete at 10:30 p.m. Plugging orders by Dan Sellers with the KCC.

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

SAMPLES WILL BE DEPOSITED WITH KANSAS GEOLOGICAL SURVEY.

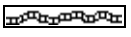
RESPECTFULLY SUBMITTED

Adam M. A. Eldani

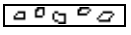
ROCK TYPES



Anhy



Bent



Brec



Carb sh



Cht



Clyst



Coal



Congl



Dol



Gyp



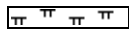
Igne



Lmst



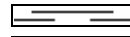
Meta



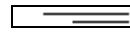
Mrlst



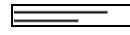
Salt



Shale



Shcol



Shgy



Sltst



Ss



Till

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- 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
- Wackest

OTHER SYMBOLS

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint

- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

- Even
- Spotted
- Ques
- Dead

INTERVAL

- Core
- Dst

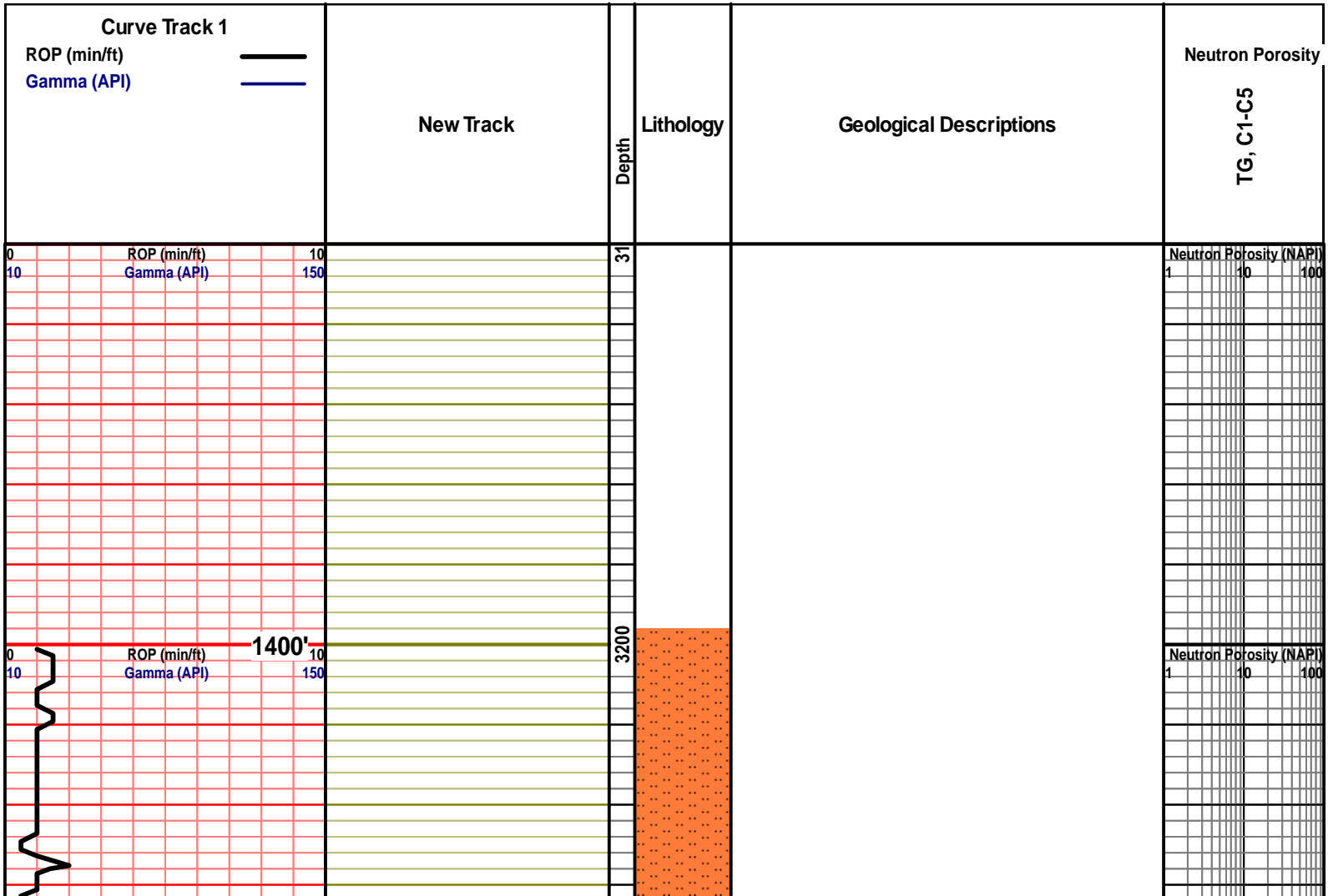
- Dst_alt
- Dst

EVENT

- Rft
- Sidewall

OIL SHOW

- aimimg_1



1450'

3250

NO SAMPLES AVAILABLE

←-----
Top of
Anhydrite
(1500'+1018)

1500'

3300

e-log Anhy Tops:
Anhy: 1482+1043 // B/Anhy: 1530+995

←-----
B/ Anhydrite
(1496'+966)

1550'

3350

NO SAMPLES AVAILABLE

ROP (min/ft)
Gamma (API)

0 10 150

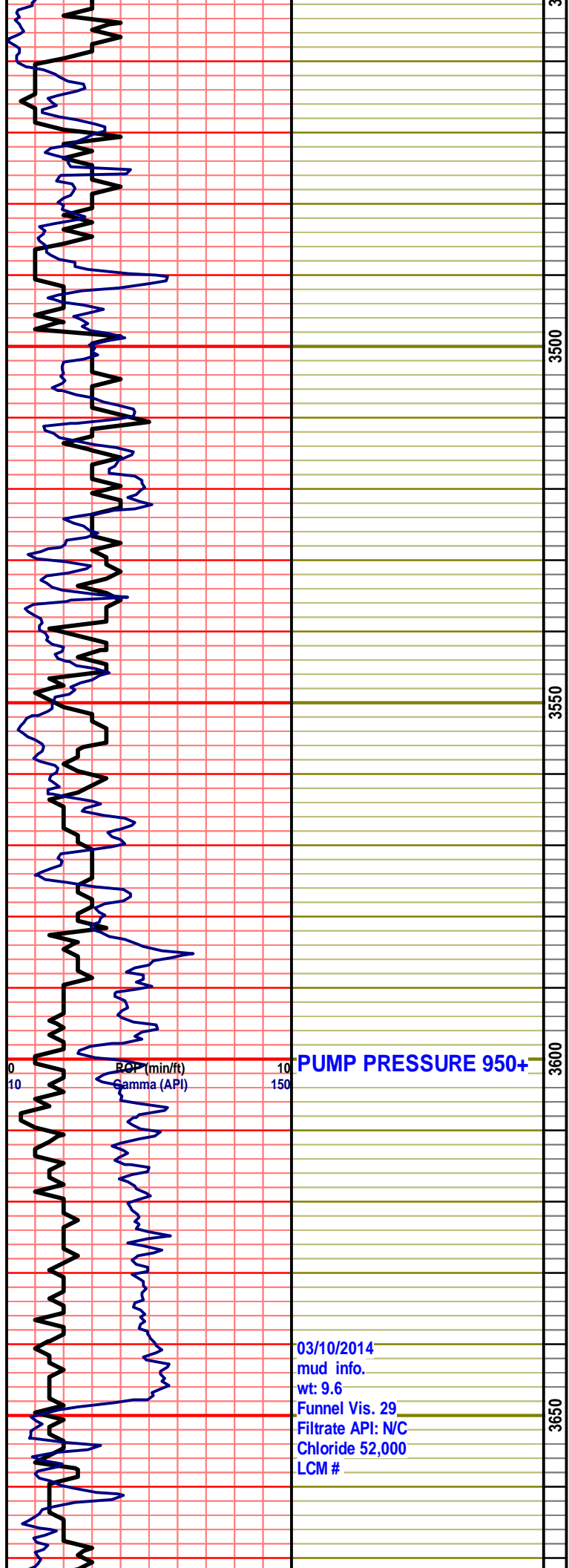
Neutron Porosity (NAPI)

1 10 100

**GEOLOGIST ON
LOCATION @ 4677'**

3400

3450



PUMP PRESSURE 950+

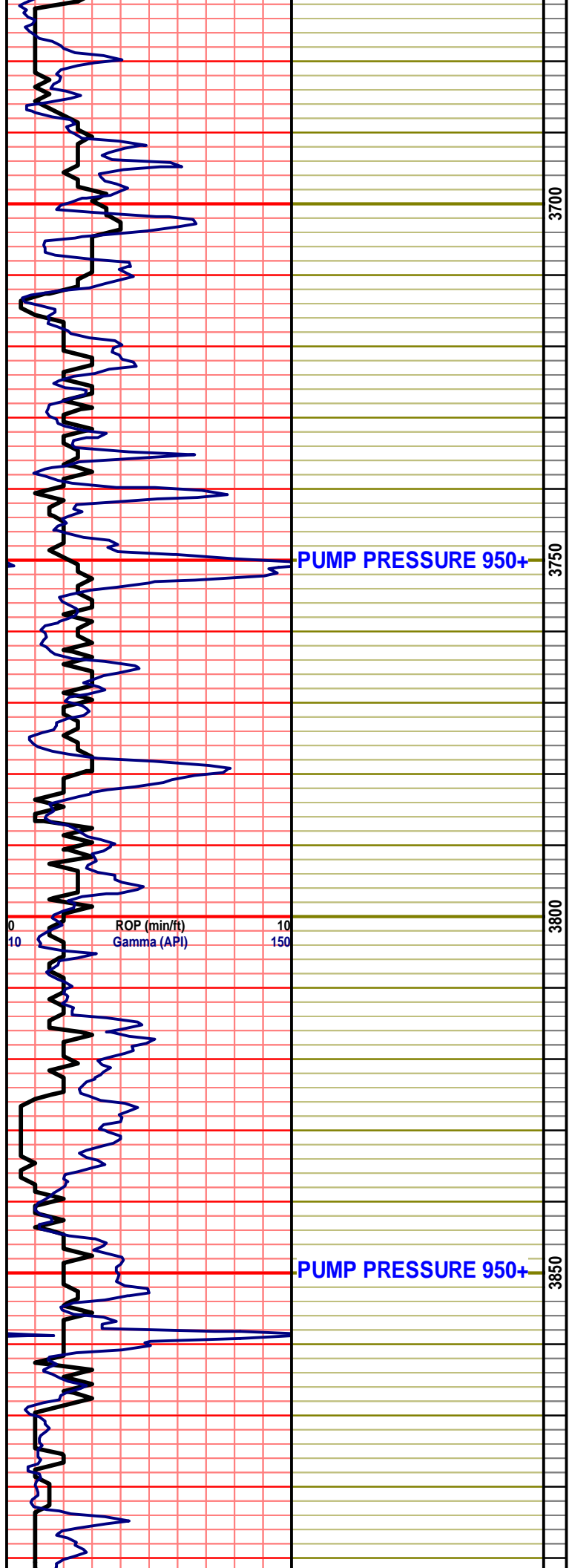
03/10/2014
mud info.
wt: 9.6
Funnel Vis. 29
Filtrate API: N/C
Chloride 52,000
LCM #

NO SAMPLES AVAILABLE

NO SAMPLES AVAILABLE

NO SAMPLES AVAILABLE

Neutron Porosity (NAPI)
1 10 100



NO SAMPLES AVAILABLE

NO SAMPLES AVAILABLE

NO SAMPLES AVAILABLE

Neutron Porosity (NAPI)
1 10 100

MUD DISPLACMENT @
3900

3900

NO SAMPLES AVAILABLE

3950

4000

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

Neutron Porosity (NAPI)
1 10 100

4050

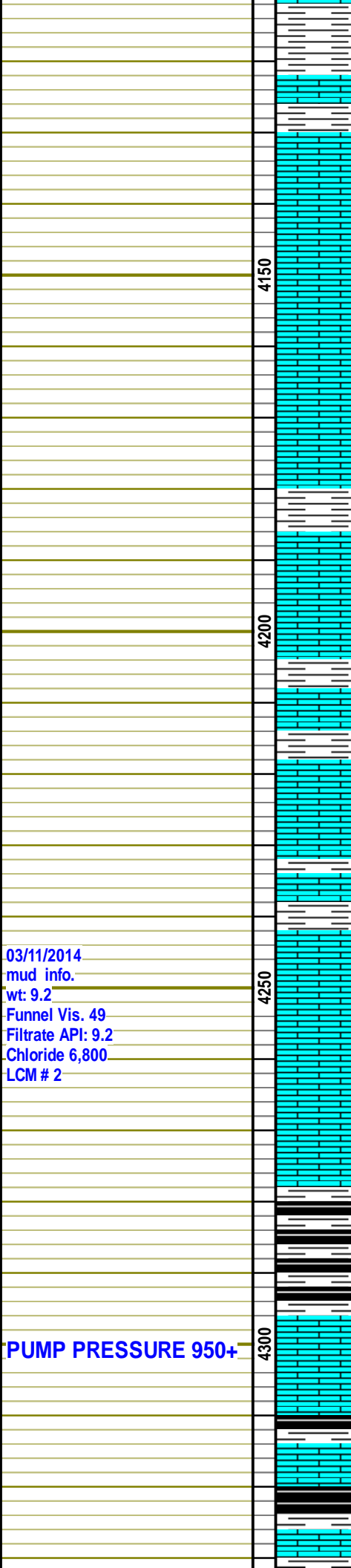
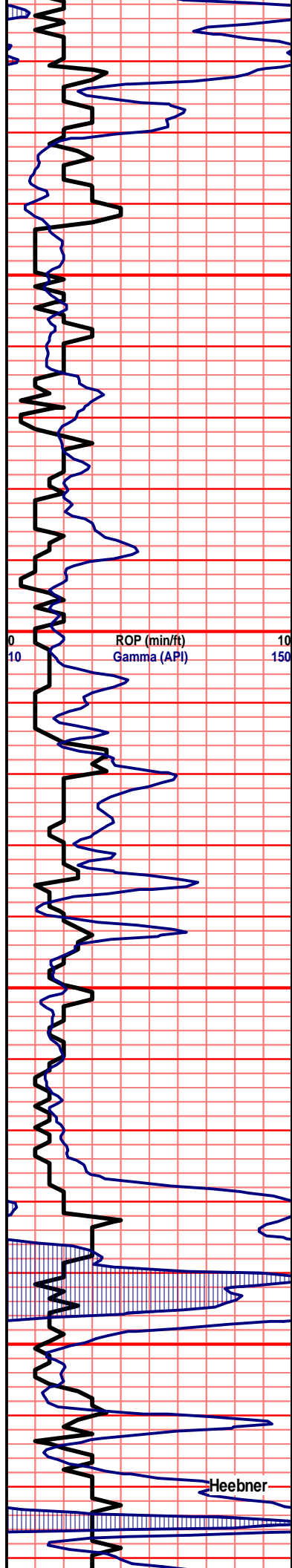
4100

4100: mstly ramroon & gry sh, mstly crm xln lm, poor-no por, few tan ool lm, poor ool cast por, no odr, ns.

4110: aa, incrs in maroon & gry (slty) sh, incrs tan ool lm aa, shw of wht-crm chrty lm, foss, no vis por, no odr, ns.

4120: sig incrs in wht chlk, lots crm-lght tan foss lm, no odr, ns.

4130: sig slght incrs in maroon sh no odr, ns.



4130: aa, slight incrs in maroon sh no odr, ns.

4140: lots of gry & maroon sh, chlk, tan-lght brwn xln lm cemnt flooded, sli micrtic, poor-no por, no odr, ns.

4150: aa, no sig change.

4160: incrs in maroon & gry sh, mostly tan crm micrtic-chlky lm, few crm xln lm, no vis por, no odr, ns.

4170: aa, incrs in crm xln lm, poor-no xln por, no odr, ns.

4180: lots of xln lm aa, incrs in chlk-chlky lm, few crm ool cast lm, super por, no odr, ns.

4190: sig incrs in aqua & gry sh, tan ool lm, cemnt flooded, no vis por, sli chrtly, no odr, ns.

4200: crm cors xln lm, v. foss, cemnt flooded, poor no por, lots of chlk, no omdr, ns.

4210: mstly crm xln lm, poor por, lots of gry inxln lm, dense, no vis por, o odr, ns.

4220: sig incrs in maroon sh, incrs in chlky lm, lots of tan foss lm, poor foss por, no odr, ns.

4230: lots of crm xln lm, aa, poor por, few tan pack stnlm, fair intr prtcl por, no odr, ns.

4240: sig incrs in wht chlk, incrs in crm xln lm, dense, no vlis por, no odr, ns.

4250: aa, incrs in crm chlky lm, incrs in crm-tan pack stn lm, poor intr prtcl por, no odr, ns.

4260: incrs in gry slty & maroon sh, mstly tan-crm fn xln lm, no vis por, no odr, ns.

4270: drk crm-nrwm chrtly lm no vis por, no odr, ns.

4280: incrs in gry-brwn sh, lots of micrtic lm, few brwn-crm fn xln lm, cmnt flooded por, no odr, ns.

4290: crm xln lm, cemnt flooded, sli chrtly, lots of crm chlky-sub chlky lm, no odr, ns.

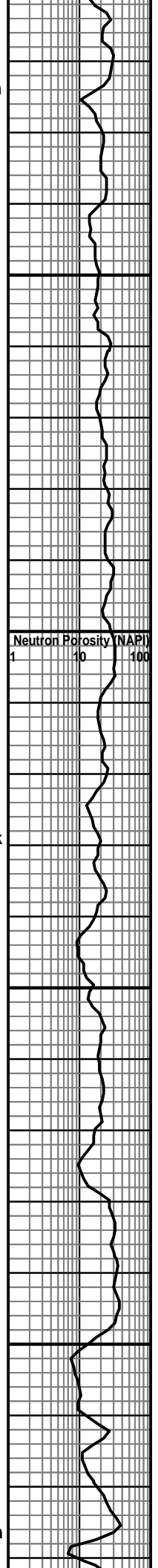
4300: incrs in drk slty sh, incrs in wht chlk, lots of crm-tan fn-cors xln lm, dense, no vis por, no odr, ns.

4310: lots of gry & moroon sh, lots of crm dese xln lm, no vis por no odr, ns.

4320: shw of blk carb sh, lots of chlk, lght crm xln lm, v. dense, no vis por, no odr, ns.

4330: mstly blk carb sh, lots of wht chlk, no odr, ns.

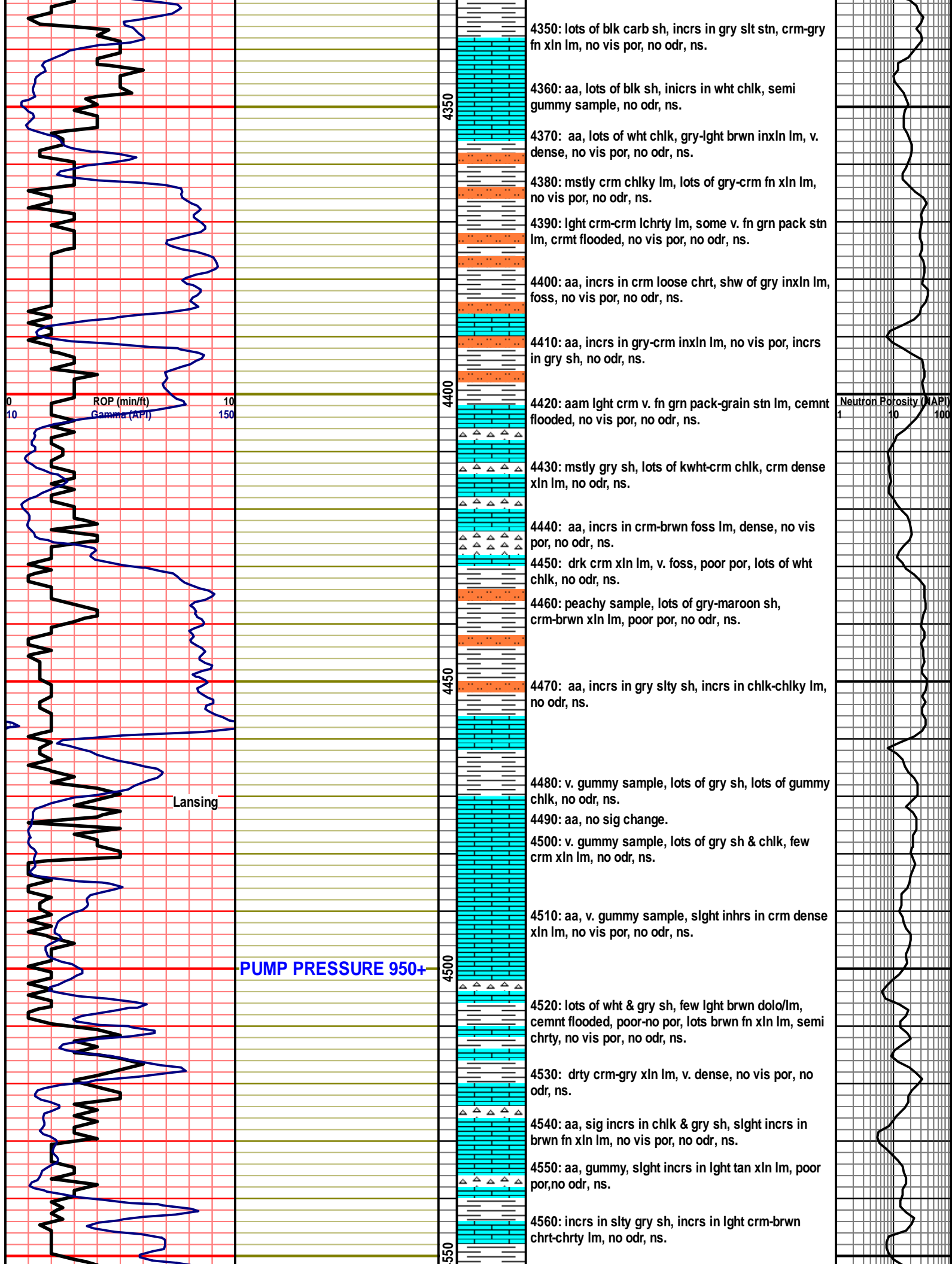
4340: mstly blk carb sh, lots of wht chlk, lght crm xln lm, dense, no odr, ns.

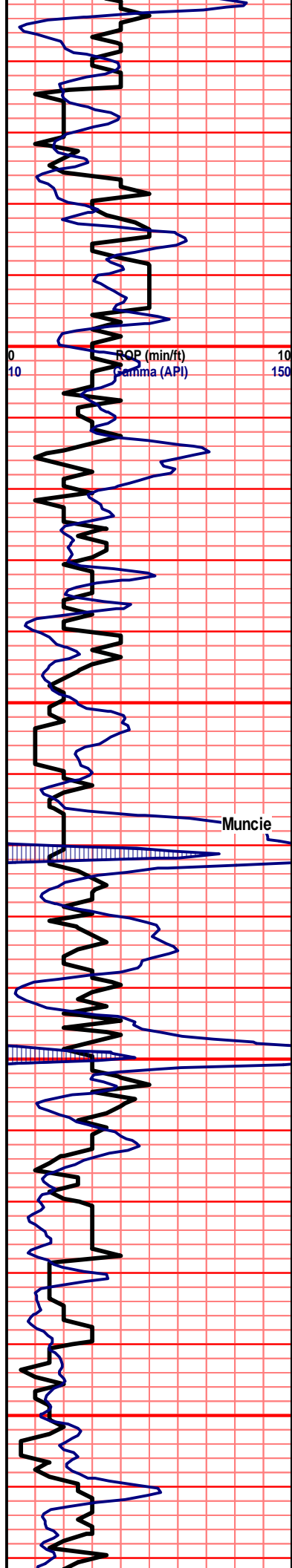


03/11/2014
mud info.
wt: 9.2
Funnel Vis. 49
Filtrate API: 9.2
Chloride 6,800
LCM # 2

PUMP PRESSURE 950+

Heebner





PUMP RESSURE 950+



4570: aa, incrs in wht chlk-chlky lm, crm xln lm, sli foss, no odr, ns.

4580: aa, incrs in gry & blk carb sh, incrs in transclnt chrt, incrs in brwn-gry xln lm, no vis por, no odr, ns.

4590: chrt aa, brwn xln lm, sli foss, cemnt flooded por, no odr, ns.

4600: incrs in chlk, brwn-gry xln lm, dense, no vis por, no odr, ns.

4610: sig incrs in chlk-chlky lm, gry-brwn xln lm, v. dense, no odr, ns.

4620: incrs in gry slty sh, brwn dense xln lm, no vis por, no odr, ns.

4630: shw of blk carb sh, brwn xln lm, foss, v. dense, well cemntd, no vis por, no odr, ns.

4640: incrs in gry & blk sh, mstly brwn-crm/gry inxln lm, poor inxln por, no odr, ns.

4650: lots of drk gry sh, brwn-gry foss inxln lm, v. dense, no vis por, no odr, ns.

4660: sh aa, lots of crm-brwn inxln lm, dense, no odr, ns.

4670: aa, incrs in chlky lm, incrs in drty crm micrtic lm, no odr, ns.

4680: mstly wht chlk, lots of gry inxln lm, dense, foss, no vis por, no odr, ns.

4690: crm-gry fn xln-inxln lm, poor-no por, no odr, ns.

4700: aa, incrs in blk & gry sh, incrs in crm xln lm, few brwn chrty lm, no vis por, no odr, ns.

4710: aa, brwn xln lm, pyrtzd, v. dense, no odr, ns.

4720: incrs in crmy chlky lm, lots crm-tan xln lm, v. dense, no vis por, no odr, ns.

4730: crm-gry xln lm, pyrtzd, dense, no vis por, no odr, ns.

4740: incrs in drk gry sh, brwn-gry inxln lm, no inxln por, dense, no vis por, no odr, ns.

4750: incrs in aqua & blk sh, crm inxln lm, dense no vis por, no odr, ns.

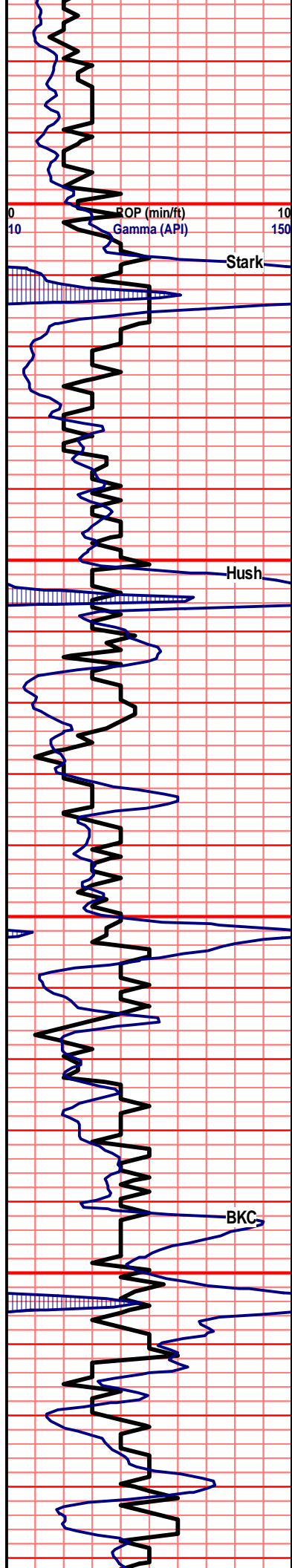
4760: incrs in blk carb sh, tan-crm xln lm, dense, poor-no por, lots of crm chlky lm, no odr, ns.

4770: aa, brwn-tan fn xln-inxln lm, v. poor-no por, no odr, ns.

4780: tan ool lm, cemnt rich, v. poor ool cast por, no odr, ns.

4790: aa, tan-brwn xln lm, v. dense, no vis por, no

Neutron Porosity (NAPI)



03/12/2014
 mud info.
 wt: 9.3
 Funnel Vis. 44
 Filtrate API: 10.8
 Chloride 8,000
 LCM # 2

03/13/2014
 mud info.
 wt: 9.3
 Funnel Vis. 50
 Filtrate API: 8.8
 Chloride 7,200
 LCM # 2



odr, ns.

4800: incrs in chlk, incrs in gry & aqua sh, mstly tan xln lm, no vis por, no odr, ns.

4810: aa, brwn xln lm, v. dense, no vis por, wht&gry chrt, no vis por, no odr, ns.

4820: brwn xln lm, v. dense, no vis por, few crm-gry chrtly lm, no vis por, no odr, ns.

4830: incrs in gry & aqua sh, brwn-tan xln lm, v. dene, no vis por, no odr, ns.

4840: sig incrs in blk carb & gry sh, brwn xln lm, cemnt flooded, fracs, no odr, ns.

4850: sig incrs in chlk-chlky lm, crm xln lm, dense, few wht pyrtzd chrt, no odr, ns.

4860: mstly crm xln lm, fn xln in prt, v. poor por, no odr, ns.

4870: aa, shw of blk carb sh, incrs in gry inxln lm, foss, dense, no odr, ns.

4880: aa, sig incrs in gry & aqua sh, no odr, ns.

4890: incrs in blk carb sh, mostly crm-gry xln lm, fn xln in prt, dense, no vis por, no odr, ns.

4900: sig incrs in wht chlk, sig incrs in wht chrt, no vis por, no odr, ns.

4910: aa, lots of chrt, mstly tan/crm chrtly lm, no vis por, no odr, ns.

4920: sig incrs in blk-drk gry sh, lots of lght gry inxln lm, cemnt overgrowth, lots of blk chrt, no odr, ns.

4930: aa, incrs in chlky-sub chlky lm, no odr, ns.

4940: v. gummy sample, lots of wht chlk, gry & blk sh, no odr, ns.

4950: lots of chlk-gry sh, mstly gry inxln lm, v. dense, no odr, ns.

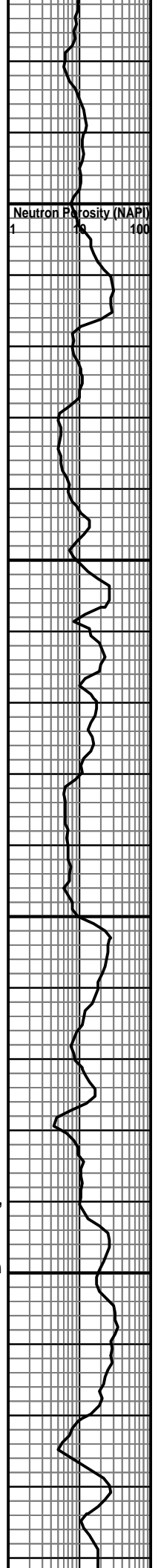
4960: sig incrs in gry-tan brwn inxln lm, poor-no inxln por, no odr, ns.

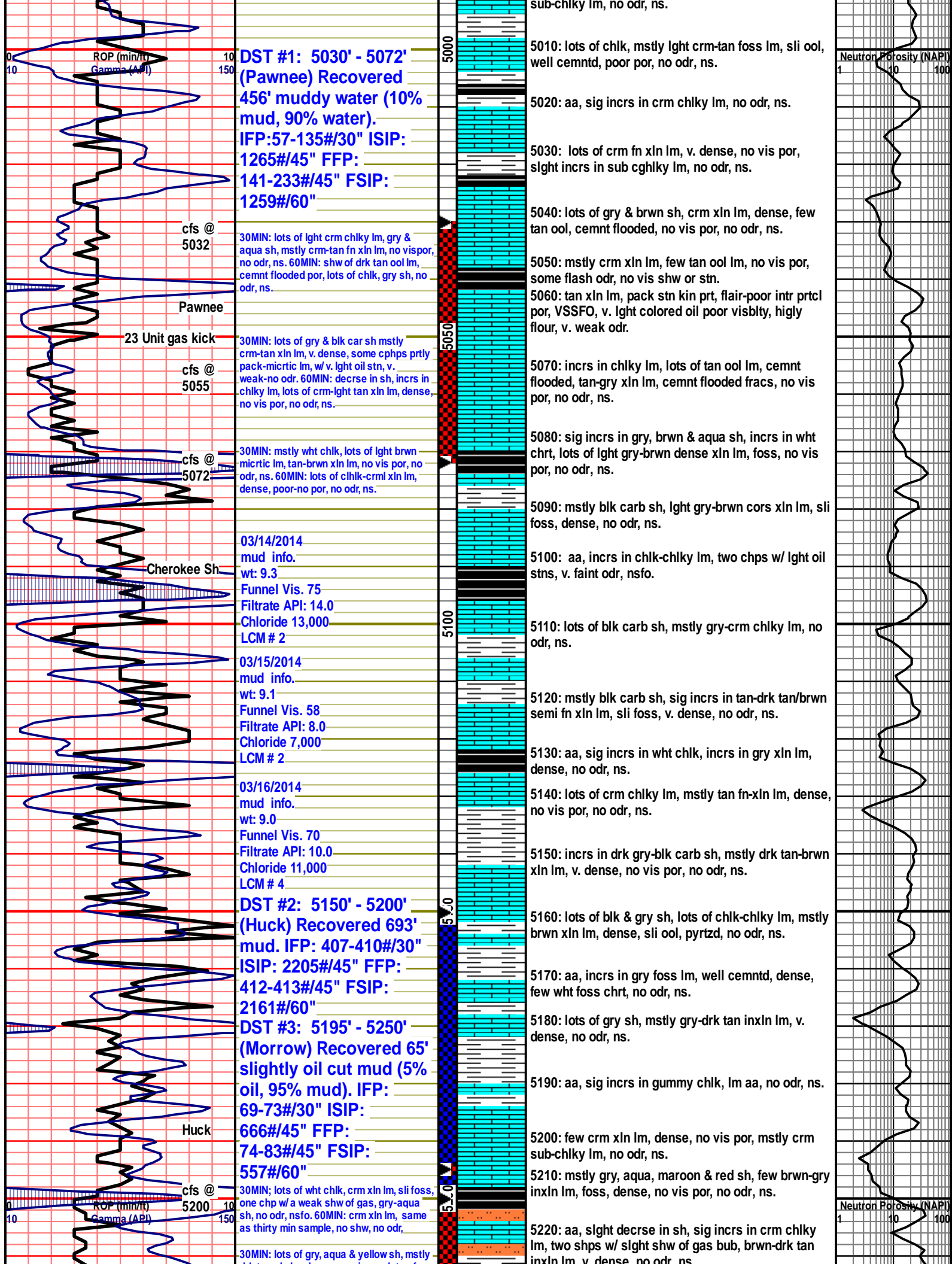
4970: aa, sig incrs in gry sh-gry shly lm, incrs in drk gry chrt, no vis por, no odr, ns.

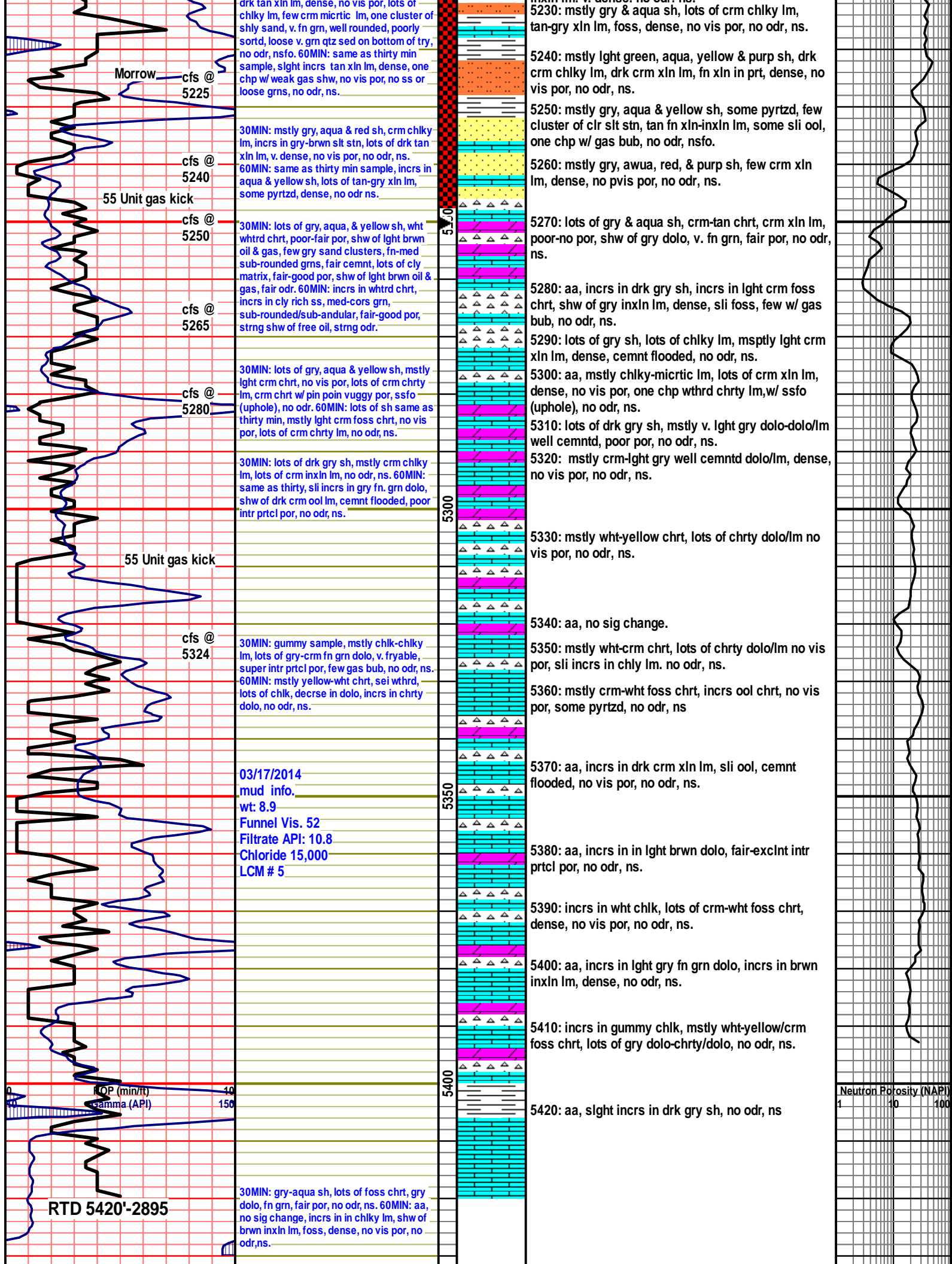
4980: v. gummy sample, lots of gummy chlk, few gry inxln lm, no odr, ns.

4990: incrs in gummy chlk, no sig change

5000: v. gummy, incrs in gry & aqua sh, incrs in crm







Morrow
cfs @
5225

drk tan xln lm, dense, no vis por, lots of chlky lm, few crm micrtic lm, one cluster of shly sand, v. fn grn, well rounded, poorly sortd, loose v. grm qtz sed on bottom of try, no odr, nsfo. 60MIN: same as thirty min sample, slight incrs tan xln lm, dense, one chp w/ weak gas shw, no vis por, no ss or loose grns, no odr, ns.

5230: mstly gry & aqua sh, lots of crm chlky lm, tan-gry xln lm, foss, dense, no vis por, no odr, ns.

cfs @
5240

30MIN: mstly gry, aqua & red sh, crm chlky lm, incrs in gry-brwn slt stn, lots of drk tan xln lm, v. dense, no vis por, no odr, ns. 60MIN: same as thirty min sample, incrs in aqua & yellow sh, lots of tan-gry xln lm, some pyrtzd, dense, no odr, ns.

5240: mstly lght green, aqua, yellow & purp sh, drk crm chlky lm, drk crm xln lm, fn xln in prt, dense, no vis por, no odr, ns.

5250: mstly gry, aqua & yellow sh, some pyrtzd, few cluster of clr slt stn, tan fn xln-inxln lm, some sli ool, one chp w/ gas bub, no odr, nsfo.

55 Unit gas kick
cfs @
5250

30MIN: lots of gry, aqua, & yellow sh, wht whtrd chrt, poor-fair por, shw of lght brwn oil & gas, few gry sand clusters, fn-med sub-rounded grns, fair cemnt, lots of cly matrix, fair-good por, shw of lght brwn oil & gas, fair odr. 60MIN: incrs in whtrd chrt, incrs in cly rich ss, med-cors grn, sub-rounded/sub-andular, fair-good por, strng shw of free oil, strng odr.

5260: mstly gry, awua, red, & purp sh, few crm xln lm, dense, no pviz por, no odr, ns.

5270: lots of gry & aqua sh, crm-tan chrt, crm xln lm, poor-no por, shw of gry dolo, v. fn grn, fair por, no odr, ns.

cfs @
5265

30MIN: lots of gry, aqua & yellow sh, mstly lght crm chrt, no vis por, lots of crm chrt lm, crm chrt w/ pin poin vuggy por, ssfo (uphole), no odr. 60MIN: lots of sh same as thirty min, mstly lght crm foss chrt, no vis por, lots of crm chrt lm, no odr, ns.

5280: aa, incrs in drk gry sh, incrs in lght crm foss chrt, shw of gry inxln lm, dense, sli foss, few w/ gas bub, no odr, ns.

5290: lots of gry sh, lots of chlky lm, msptly lght crm xln lm, dense, cemnt flooded, no odr, ns.

cfs @
5280

30MIN: lots of drk gry sh, mstly crm chlky lm, lots of crm inxln lm, no odr, ns. 60MIN: same as thirty, sli incrs in gry fn. grn dolo, shw of drk crm ool lm, cemnt flooded, poor intr prtcl por, no odr, ns.

5300: aa, mstly chlky-micrtic lm, lots of crm xln lm, dense, no vis por, one chp wthrd chrt lm, w/ ssfo (uphole), no odr, ns.

5310: lots of drk gry sh, mstly v. lght gry dolo-dolo/lm well cemntd, poor por, no odr, ns.

5320: mstly crm-lght gry well cemntd dolo/lm, dense, no vis por, no odr, ns.

55 Unit gas kick

5330: mstly wht-yellow chrt, lots of chrt dolo/lm no vis por, no odr, ns.

cfs @
5324

30MIN: gummy sample, mstly chlck-chlky lm, lots of gry-crm fn grn dolo, v. fryable, super intr prtcl por, few gas bub, no odr, ns. 60MIN: mstly yellow-wht chrt, sei whtrd, lots of chlck, decrse in dolo, incrs in chrt dolo, no odr, ns.

5340: aa, no sig change.

5350: mstly wht-crm chrt, lots of chrt dolo/lm no vis por, sli incrs in chlky lm. no odr, ns.

5360: mstly crm-wht foss chrt, incrs ool chrt, no vis por, some pyrtzd, no odr, ns

03/17/2014
mud info.
wt: 8.9
Funnel Vis. 52
Filtrate API: 10.8
Chloride 15,000
LCM # 5

5350

5370: aa, incrs in drk crm xln lm, sli ool, cemnt flooded, no vis por, no odr, ns.

5380: aa, incrs in in lght brwn dolo, fair-exclnt intr prtcl por, no odr, ns.

5390: incrs in wht chlck, lots of crm-wht foss chrt, dense, no vis por, no odr, ns.

5400: aa, incrs in lght gry fn grn dolo, incrs in brwn inxln lm, dense, no odr, ns.

5410: incrs in gummy chlck, mstly wht-yellow/crm foss chrt, lots of gry dolo-chrt/dolo, no odr, ns.

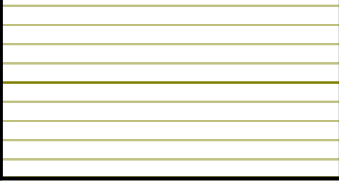
ROP (min/ft)
gamma (API)

RTD 5420'-2895

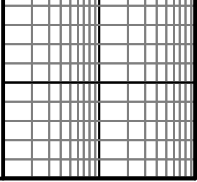
30MIN: gry-aqua sh, lots of foss chrt, gry dolo, fn grn, fair por, no odr, ns. 60MIN: aa, no sig change, incrs in in chlky lm, shw of brwn inxln lm, foss, dense, no vis por, no odr, ns.

5420: aa, slight incrs in drk gry sh, no odr, ns

Neutron Porosity (NAPI)
1 10 100



50





#1 Frink 32C

1380' FSL & 480' FWL

60' N & 150' E of W/2 W/2 SW Section 32-28S-23W

Ford County, Kansas

API# 15-057-20925-0000

Elevation: 2514' GL, 2525' KB

Sample Tops		Ref.	Well
Anhydrite	N/A		
B/Anhydrite	N/A		
Stotler	3672'	-1147	-11
Heebner	4332'	-1807	-8
Toronto	4348'	-1823	-9
Lansing	4484'	-1959	-13
Muncie Shale	4678'	-2153	-22
Stark	4820'	-2295	-11
Hush	4864'	-2339	-13
BKC	4948'	-2423	-15
Marmaton	4967'	-2442	-16
Altamont	4982'	-2457	-16
Pawnee	5050'	-2525	-17
Cherokee Shale	5100'	-2575	-17
Huck	5192'	-2667	-19
Atoka	5201'	-2676	-18
Morrow	5234'	-2709	-15
Mississippian	5252'	-2727	+91
RTD	5420'	-2895	

ALLIED OIL & GAS SERVICES, LLC 062876

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Great Bend

DATE <u>3-18-14</u>	SEC <u>32</u>	TWP. <u>28</u>	RANGE <u>23</u>	CALLED OUT	ON LOCATION	JOB START <u>10 am</u>	JOB FINISH <u>11 am</u>
LEASE <u>Frink 32L</u>		WELL # <u>1</u>	LOCATION <u>Kingdom North to Wilborn Rd</u>		COUNTY <u>Ford</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)			<u>Lowest North into</u>				

CONTRACTOR <u>Y&I #5</u>	OWNER
TYPE OF JOB <u>Rotary Plug</u>	CEMENT
HOLE SIZE <u>7 7/8</u> T.D.	AMOUNT ORDERED <u>220 60/40 44 gal</u>
CASING SIZE <u>1 1/2</u> DEPTH	<u>Vu flo.</u>
TUBING SIZE DEPTH	
DRILL PIPE <u>4 1/2</u> DEPTH <u>1530</u>	
TOOL DEPTH	
PRES. MAX MINIMUM	COMMON <u>132</u> @ <u>17.90</u> <u>2,362.80</u>
MEAS. LINE SHOE JOINT	POZMIX <u>88</u> @ <u>9.35</u> <u>822.80</u>
CEMENT LEFT IN CSG. <u>All</u>	GEL <u>8</u> @ <u>23.40</u> <u>187.20</u>
PERFS.	CHLORIDE @
DISPLACEMENT <u>Freshwater</u>	ASC @

EQUIPMENT

PUMP TRUCK CEMENTER <u>Josh Isaac</u>
<u>366</u> HELPER <u>Kevin Eddy</u>
BULK TRUCK
<u>871-112</u> DRIVER <u>Don Casper</u>
BULK TRUCK
DRIVER

COMMON	<u>132</u>	@	<u>17.90</u>	<u>2,362.80</u>
POZMIX	<u>88</u>	@	<u>9.35</u>	<u>822.80</u>
GEL	<u>8</u>	@	<u>23.40</u>	<u>187.20</u>
CHLORIDE		@		
ASC		@		
<u>Flow-sol</u>	<u>55</u>	@	<u>2.97</u>	<u>163.35</u>
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>236.27</u>	@	<u>2.48</u>	<u>585.84</u>
MILEAGE	<u>9.86 X 50 Y</u>		<u>2.60</u>	<u>1281.80</u>
TOTAL				<u>5,403.89</u>

REMARKS:

On location - rig up - hook safety, mixing
run 4 1/2" drill pipe - fill back w/ fly mud
#1 - 1530 - 50 SKS
#2 - 600 - 50 RH - 30 SKS
#3 - 380 - 50 RH - 20
#4 60 - 20
plug down
Kingdom

SERVICE

DEPTH OF JOB	
PUMP TRUCK CHARGE	<u>2249.84</u>
EXTRA FOOTAGE	@
MILEAGE <u>Hum 50</u>	@ <u>7.70</u> <u>385.00</u>
MANIFOLD	@
<u>Hum 50</u>	@ <u>4.40</u> <u>220.00</u>
	@

CHARGE TO: Ritchie Exploration

STREET _____

CITY _____ STATE _____ ZIP _____

TOTAL 2,854.84

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL _____		

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____

TOTAL CHARGES 8,258.73

DISCOUNT 1,651.75 IF PAID IN 30 DAYS

6,606.98

PRINTED NAME Jeff Hood

SIGNATURE Jeff Hood

Thank you!

FRANK 32C91

ALLIED OIL & GAS SERVICES, LLC 062337

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: MEOLd9E Ks

DATE <u>3-6-14</u>	SEC <u>32</u>	TWP <u>28</u>	RANGE <u>23</u>	CALLED OUT <u>1:30 AM</u>	ON LOCATION <u>4:15</u>	JOB START <u>7:00</u>	JOB FINISH <u>8:00</u>
LEASE <u>Frank</u>	WELL # <u>32C</u>	LOCATION <u>Kingsdown Ks</u>				COUNTY <u>FORD</u>	STATE <u>Ks</u>
OLD OR <u>NEW</u> (circle one)			<u>11 do W. Burns Rd 6W N in 10</u>				

CONTRACTOR <u>Val Rig '3</u>	OWNER <u>Ritchie Expl. Inc</u>
TYPE OF JOB <u>85/3 SURFACE</u>	CEMENT AMOUNT ORDERED <u>225 SX A</u>
HOLE SIZE <u>12 1/4</u> TD. <u>358</u>	<u>2% GEL 3% CL</u>
CASING SIZE <u>8 5/8</u> 23' DEPTH <u>350-352</u>	
TUBING SIZE _____ DEPTH _____	
DRILL PIPE _____ DEPTH _____	
TOOL _____ DEPTH _____	
PRES. MAX _____ MINIMUM _____	
MEAS. LINE _____ SHOE JOINT _____	
CEMENT LEFT IN CSG. _____	
PERFS. _____	
DISPLACEMENT _____	

EQUIPMENT

PUMP TRUCK # <u>548-545</u>	CEMENTER <u>T. SEBA</u>
BULK TRUCK # <u>819-923</u>	HELPER <u>Justin B. Finkelband</u>
BULK TRUCK # _____	DRIVER <u>DOUG K (TWS)</u>
BULK TRUCK # _____	DRIVER _____

COMMON <u>A</u>	<u>225 SX @ 17.90</u>	<u>4027.50</u>
POZMIX _____	@ _____	_____
GEL <u>4.23</u>	@ <u>23.40</u>	<u>98.98</u>
CHLORIDE <u>8</u>	@ <u>64.00</u>	<u>512.00</u>
ASC _____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
HANDLING <u>243.38</u>	@ <u>2.48</u>	<u>603.58</u>
MILEAGE <u>11.10/50/2.60</u>	@ _____	<u>1443.00</u>
TOTAL		<u>6685.06</u>

REMARKS:

Rn 8 #'s 23" CSG set @ 352.58
Mix Pump 225 SX A 2% GEL 3% CL
15.2% gel
Disp 21 bbls H2O total
Good size flow 103 circ out to Rt
Plug down @ 8115 200'

SERVICE

DEPTH OF JOB <u>358'</u>		
PUMP TRUCK CHARGE <u>1512.75</u>		
EXTRA FOOTAGE _____	@ _____	_____
MILEAGE <u>50</u>	@ <u>7.70</u>	<u>385.00</u>
MANIFOLD _____	@ _____	_____
<u>6V 50</u>	@ <u>4.40</u>	<u>220.00</u>
_____	@ _____	_____

TOTAL 2392.75

CHARGE TO: Ritchie Expl. Inc
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

<u>Rubber plug</u>	@ _____	<u>131.00</u>
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
_____	@ _____	_____
TOTAL		<u>131.00</u>

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____
 TOTAL CHARGES 9208.81
 DISCOUNT _____ IF PAID IN 30 DAYS
NET 7393.24

PRINTED NAME Randy Smith
 SIGNATURE Randy Smith