Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1235948

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 # 4767
Name: Ritchie Exploration, Inc.
Address 1: 8100 E 22ND ST N # 700
Address 2: BOX 783188
City: WICHITA State: KS Zip: 67278 + 3188
Contact Person: Peter Fiorini
Phone: (316) 691-9500
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Adam Eldani
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 #:

09/16/2014	09/26/2014	09/26/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-145-21785-00-00
Spot Description: 15'N & 9' E of
_ SW _ SW _ NE Sec. 29 Twp. 21 S. R. 18 ☐ East ☑ West
2295 Feet from ☑ North / ☐ South Line of Section
2301 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Pawnee
Lease Name: Blake 29A Well #: 1
Field Name:
Producing Formation: none
Elevation: Ground: 2063 Kelly Bushing: 2072
Total Vertical Depth: 4500 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1184 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: 28000 ppm Fluid volume: 800 bbls
Dewatering method used: Evaporated

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: 12/23/2014
☑ **Confidential Release Date:** 12/22/2016
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/23/2014

[redacted] 1235948

Operator Name: Ritchie Exploration, Inc. Lease Name: Blake 29A Well #: 1

Sec. 29 Twp. 21 S. R. 18 ☐ East ☑ West County: Pawnee

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Dual Induction Log
Compensated Density/Neutron Log

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
See Attached		

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	1184	class A	575	2% cc, 3% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	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:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:
_____
_____

Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	Blake 29A 1
Doc ID	1235948

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1184	class A	575	2% cc, 3% gel

Adam Eldani Geo-Log/Report
WellSight Systems
Scale 1:240 (5"=100') Imperial
Measured Depth Log

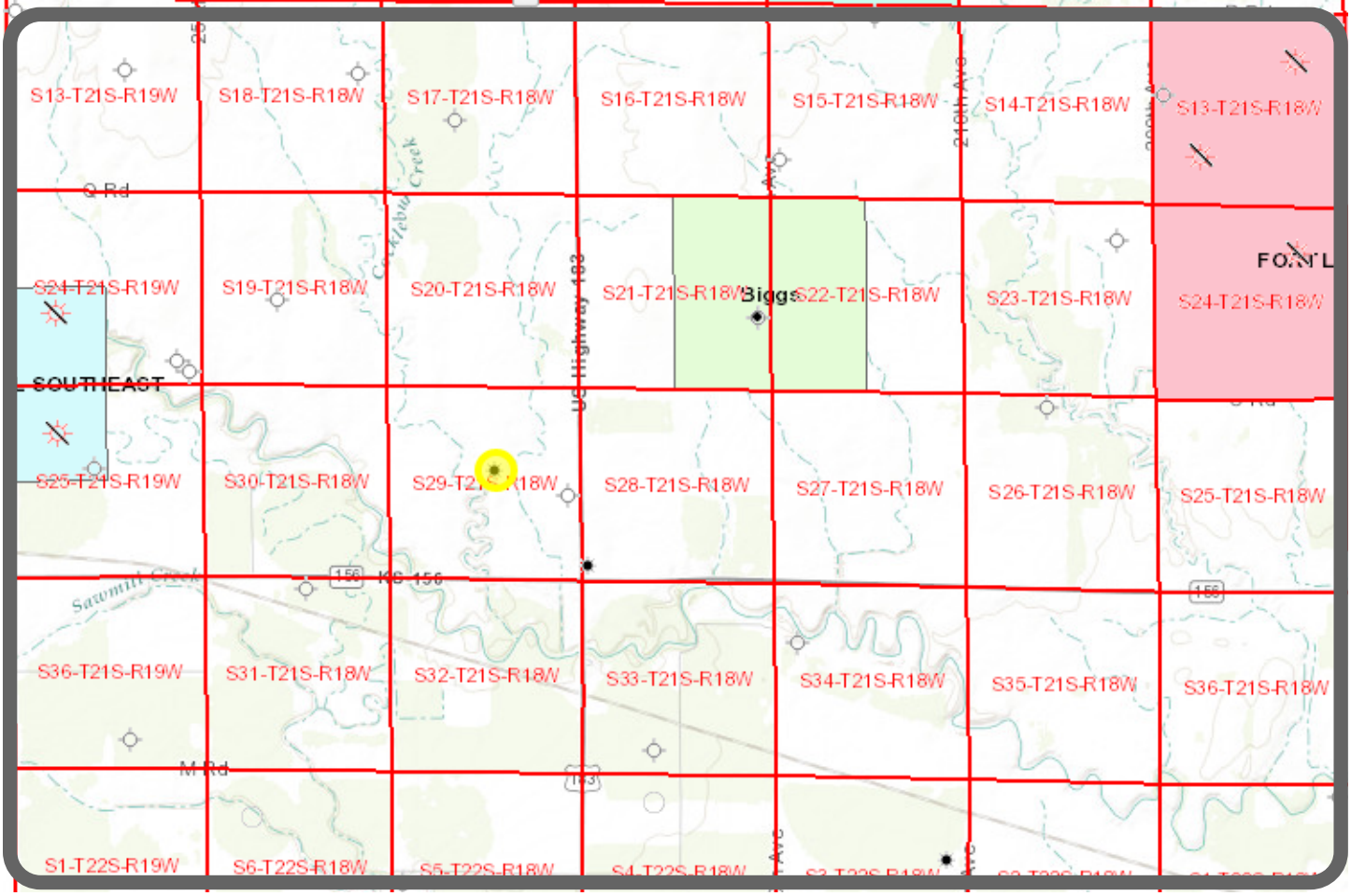
Well Name:	#1 Blake 29 A		
Location:	SEC 29-TOWNSHIP 21S- RANGE 18W PAWNEE COUNTY		
License Number:	API 15-145-21785	**Region:**	C.K.U. KANSAS
Spud Date:	09/16/2014	**Drilling Completed:**	09/26/2014
Surface Coordinates:	2295' FNL & 2301' FEL 15' N & 9' E of SW SW NE Section 29-21S-18W		
Bottom Hole Coordinates:	Deviation Surveys are detailed through out the Geo-Report.		
Ground Elevation (ft):	2063'	**K.B. Elevation (ft):**	2072'
Logged Interval (ft):	3200' **To:** 4500'	**Total Depth (ft):**	4498'
Formation:	Mississippian		
Type of Drilling Fluid:	Mud-Co Chemical		

OPERATOR

Company: Ritchie Exploration Inc. (drilled by SOUTHWIND RIG #2)
Address: 8100 E. 22nd ST. N. #700
Wichita, KS, 67278-3188

GEOLOGIST

Name: Adam M.A. Eldani (3800-TD) Mike Engelbrecht (3200-3800)
Company: Ritchie Exploration Inc.
Address: 8100 E. 22nd ST. N. #700
Wichita, KS, 67278-3188


S13-T21S-R19W
S18-T21S-R18W
S17-T21S-R18W
S16-T21S-R18W
S15-T21S-R18W
S14-T21S-R18W
S13-T21S-R18W
Q Rd
S24-T21S-R19W
S19-T21S-R18W
S20-T21S-R18W
S21-T21S-R18W
Biggs
S22-T21S-R18W
S23-T21S-R18W
S24-T21S-R18W
SOUTHEAST
S25-T21S-R19W
S30-T21S-R18W
S29-T21S-R18W
S28-T21S-R18W
S27-T21S-R18W
S26-T21S-R18W
S25-T21S-R18W
Sawmill Creek
156
KS-156
S36-T21S-R19W
S31-T21S-R18W
S32-T21S-R18W
S33-T21S-R18W
S34-T21S-R18W
S35-T21S-R18W
S36-T21S-R18W
M Rd
183
S1-T22S-R19W
S6-T22S-R18W
S5-T22S-R18W
S4-T22S-R18W

Tops & Drill Report

TOPS:
DRILLING REPORT

Sample Tops:	E-Log Tops:
Anhydrite: 1178' +894	Anhydrite: 1180'+892
B/Anhydrite: 1203'+869	B/Anhydrite: 1203'+869
Heebner: 3574'-1502	Heebner: 3574'-1502
Lansing: 3652'-1580	Lansing: 3650'-1578
Muncie Sh: 3796'-1724	Muncie Sh: 3792'-1720
Stark Sh: 3873'-1801	Stark Shale: 3870'-1798
Hush: 3912'-1840	Hush: 3910'-1838
BKC: 3947'-1875	BKC: 3942' -1870
Marmaton: 3973'-1901	Marmaton: 3962'-1890
Altamont:4000'-1928	Altamont: 3994'-1922
Pawnee: 4046'-1974	Pawnee: 4040'-1968
Fort Scott: 4066'-1994	Fort Scott: 4061'-1989
Cherokee Sh: 4082'-2010	Cherokee Sh: 4078'-2006
Cong. Sand: 4094'-2022	Cong. Sand: 4099'-2027
Arbuckle: 4116'-2076	Arbuckle: 4116'-2044
RTD: 4500'-2428	LTD: 4498'-2426

DAILY DRILLING REPORT:

DATE	DEPTH @ 7am:
09/16	Spud
09/17	1015'
09/18	1184'
09/19	2415'
09/20	3660'
09/21	3705'
09/22	4065'
09/23	4170'
09/24	4200'
09/25	4215'
09/26	4500'

Misc.

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

RIG: SouthWind Drilling RIG #2
TOOL PUSHER: BILL SANDERS
MUD: MUD CO. (JASON WHITING)
GAS DETECTOR: N/A

DRILL STEM TEST'S: Diamond Testing, Inc.

LOGS: NABORS (Jeff Groneweg)

OFFICE: Mike Engelbrecht

Comments

Drilling at 1015' at 7:00 a.m. Ran 28 jts new 23# 8-5/8" surface casing. Tally at 1173', set at 1184'. Cemented with 575 sacks class A, 2% cc, 6% gel. Cement circulated. Plug down at 6:30 p.m. 11

After review of all geologic samples as examined, Electric logs, and all Drill Stem Tests (DST) analysis & calculations; It was Elected by Ritchie Exploration to Plug & Abandon #1 Blake.

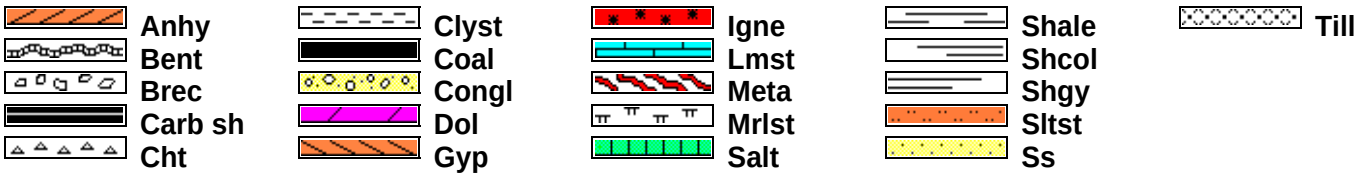
Plug and Abandon. 1st plug set at 4130' with 50 sacks 60/40 Poz, 4% gel, ¼# flocele; 2nd plug set at 1200' with 50 sacks; 3rd plug set at 270' with 40 sacks; 4th plug set at 60' with 20 sacks. 160 total sacks. Plugged rat hole with 30 sacks and mouse hole with 20 sacks. Job complete at 10:30 p.m. Plugging orders by Eric MacClaren 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



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
- Wackest

OTHER SYMBOLS

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

SORTING
- Well
- Moderate
- Poor

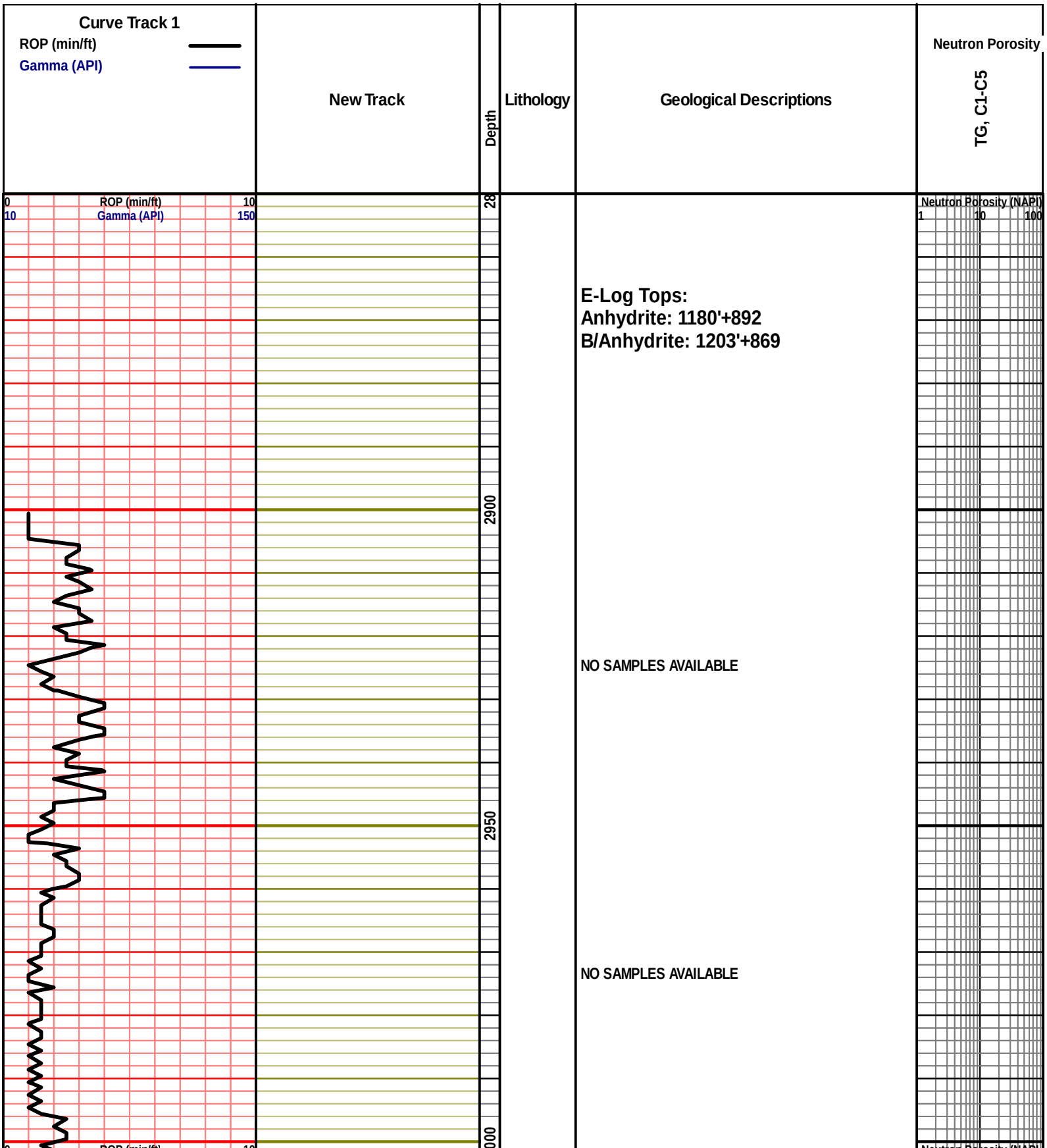
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

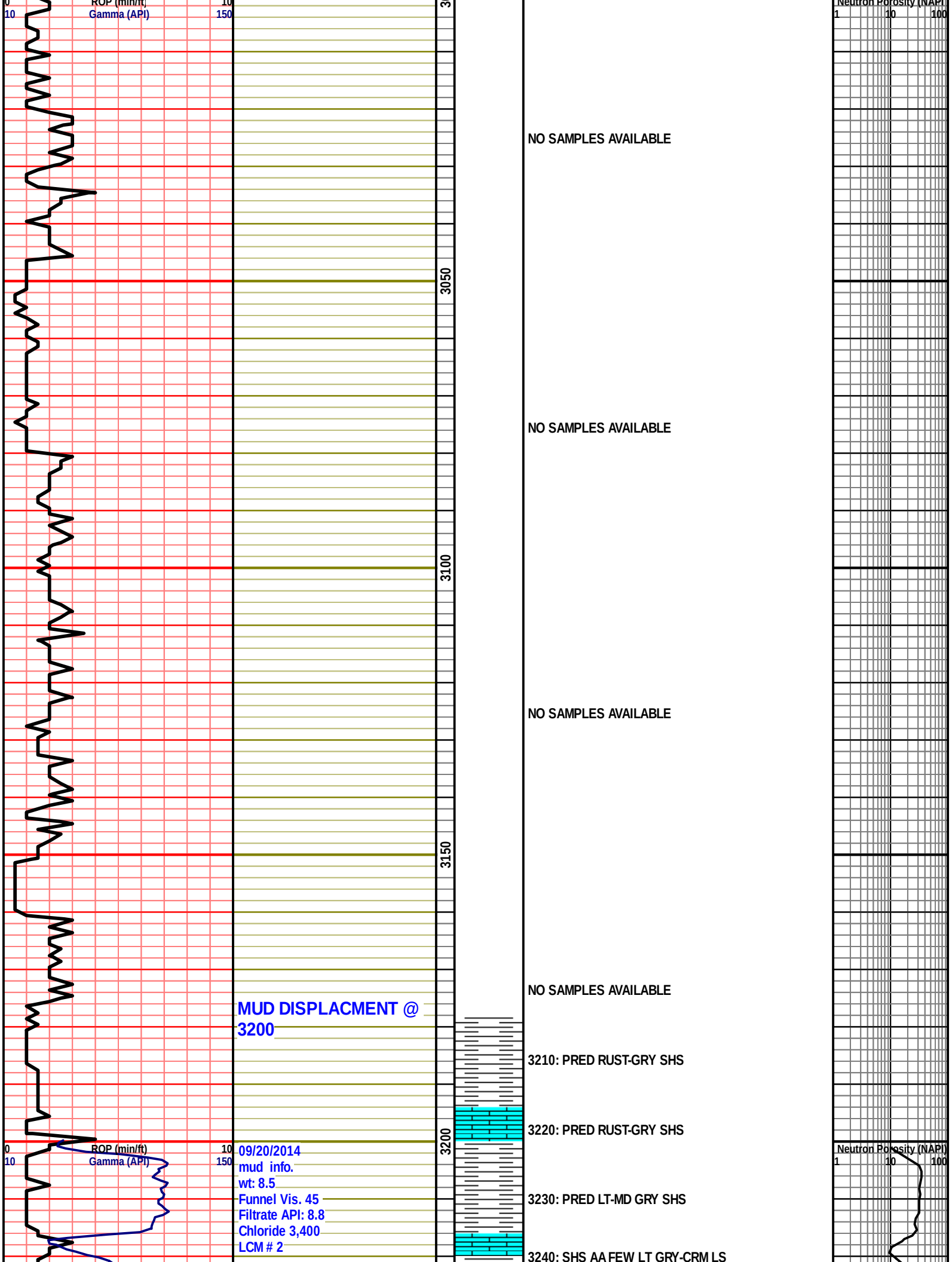
OIL SHOW
- aimimg_1

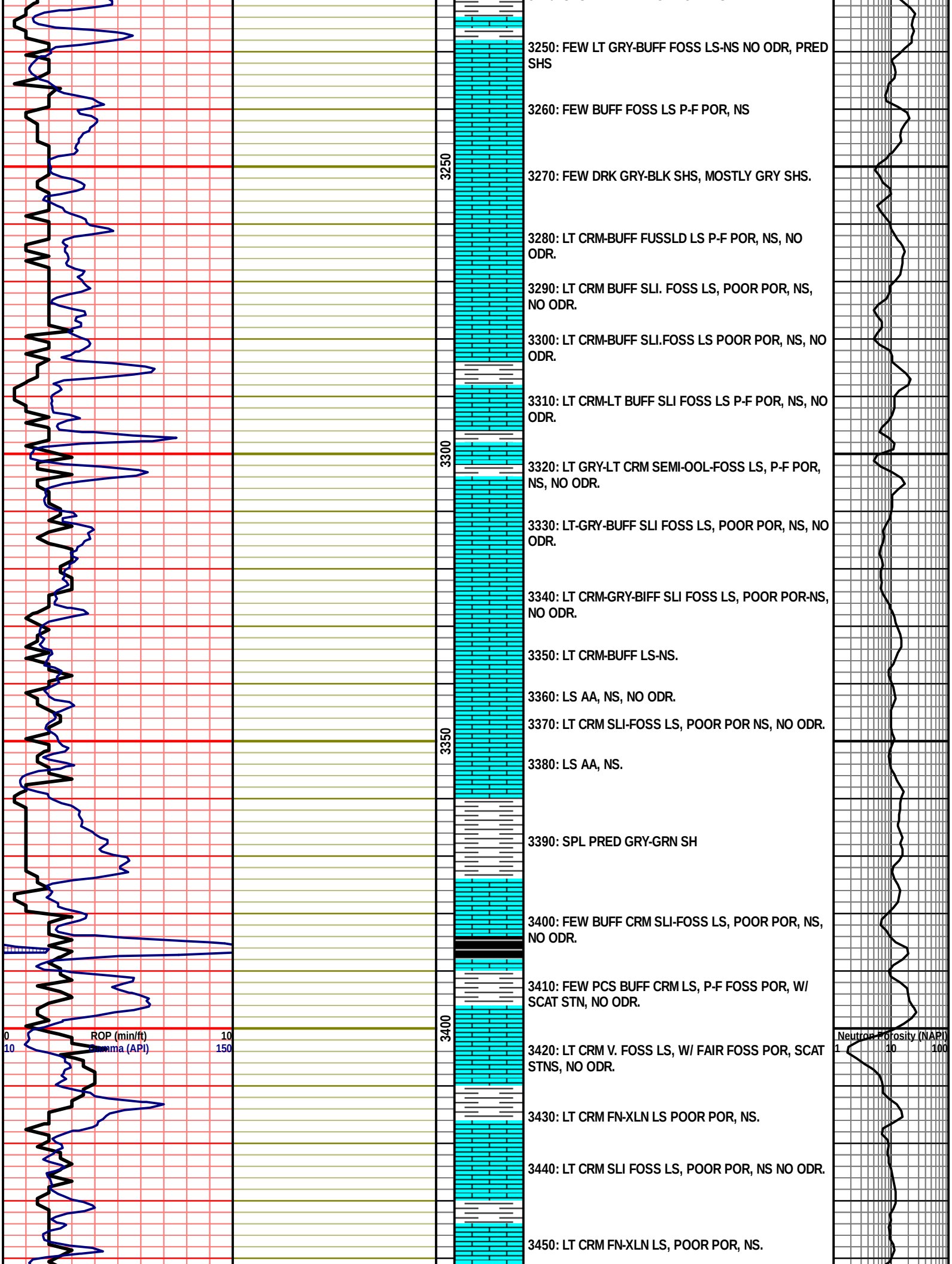
- Even
- Spotted
- Ques
- Dead

INTERVAL
- Core
- Dst
- Dst_alt
- Dst

EVENT
- Rft
- Sidewall




ROP (min/ft)
0
10
Gamma (API)
10
150
3050
3100
3150
3200
Neutron Porosity (NAPI)
1
10
100
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
MUD DISPLACMENT @ 3200
3210: PRED RUST-GRY SHS
3220: PRED RUST-GRY SHS
3230: PRED LT-MD GRY SHS
3240: SHS AA FEW LT GRY-CRM LS
09/20/2014
mud info.
wt: 8.5
Funnel Vis. 45
Filtrate API: 8.8
Chloride 3,400
LCM # 2



3250: FEW LT GRY-BUFF FOSS LS-NS NO ODR, PRED SHS

3260: FEW BUFF FOSS LS P-F POR, NS

3270: FEW DRK GRY-BLK SHS, MOSTLY GRY SHS.

3280: LT CRM-BUFF FUSSLD LS P-F POR, NS, NO ODR.

3290: LT CRM BUFF SLI. FOSS LS, POOR POR, NS, NO ODR.

3300: LT CRM-BUFF SLI.FOSS LS POOR POR, NS, NO ODR.

3310: LT CRM-LT BUFF SLI FOSS LS P-F POR, NS, NO ODR.

3320: LT GRY-LT CRM SEMI-OOL-FOSS LS, P-F POR, NS, NO ODR.

3330: LT-GRY-BUFF SLI FOSS LS, POOR POR, NS, NO ODR.

3340: LT CRM-GRY-BIFF SLI FOSS LS, POOR POR-NS, NO ODR.

3350: LT CRM-BUFF LS-NS.

3360: LS AA, NS, NO ODR.

3370: LT CRM SLI-FOSS LS, POOR POR NS, NO ODR.

3380: LS AA, NS.

3390: SPL PRED GRY-GRN SH

3400: FEW BUFF CRM SLI-FOSS LS, POOR POR, NS, NO ODR.

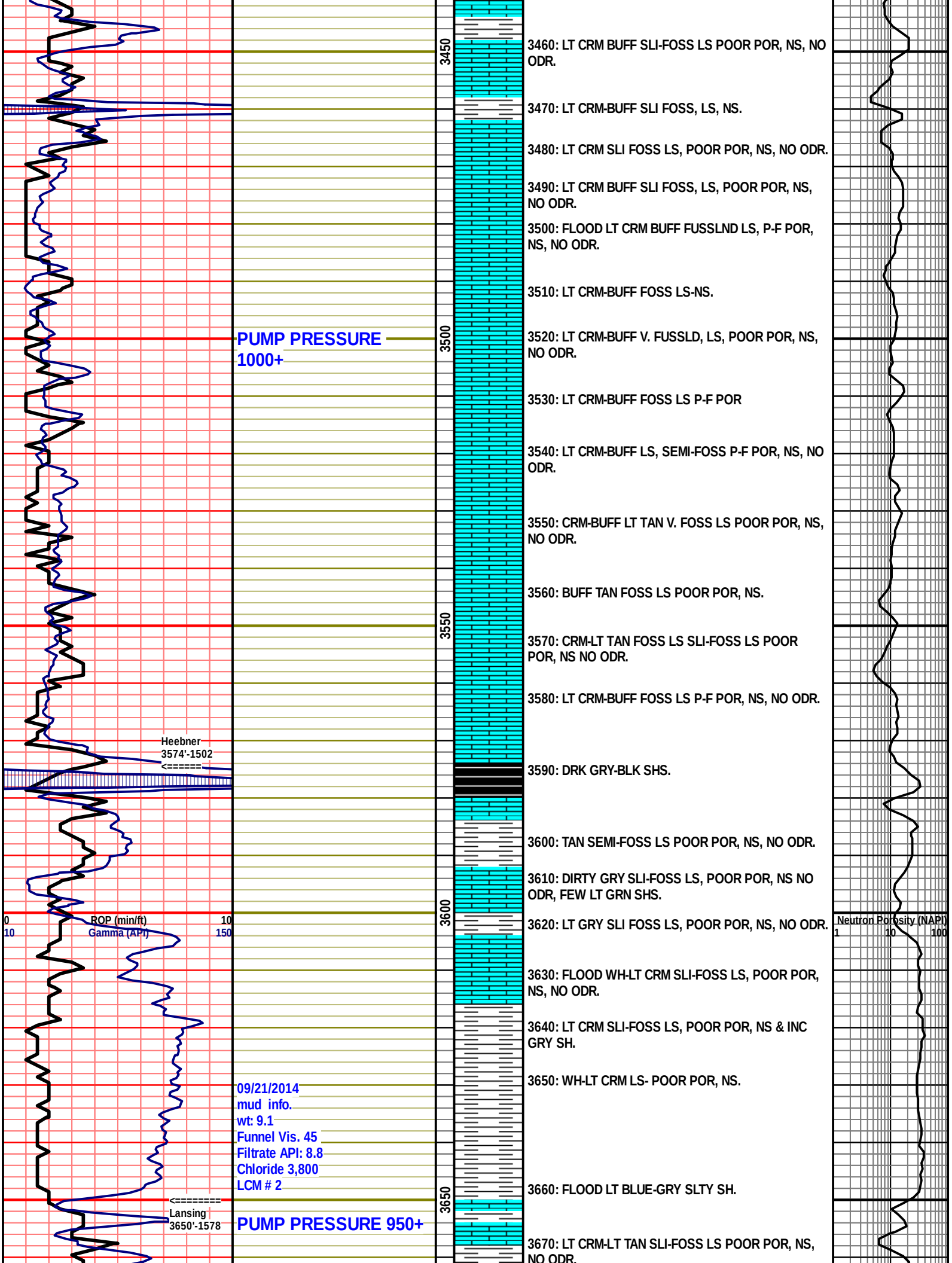
3410: FEW PCS BUFF CRM LS, P-F FOSS POR, W/ SCAT STN, NO ODR.

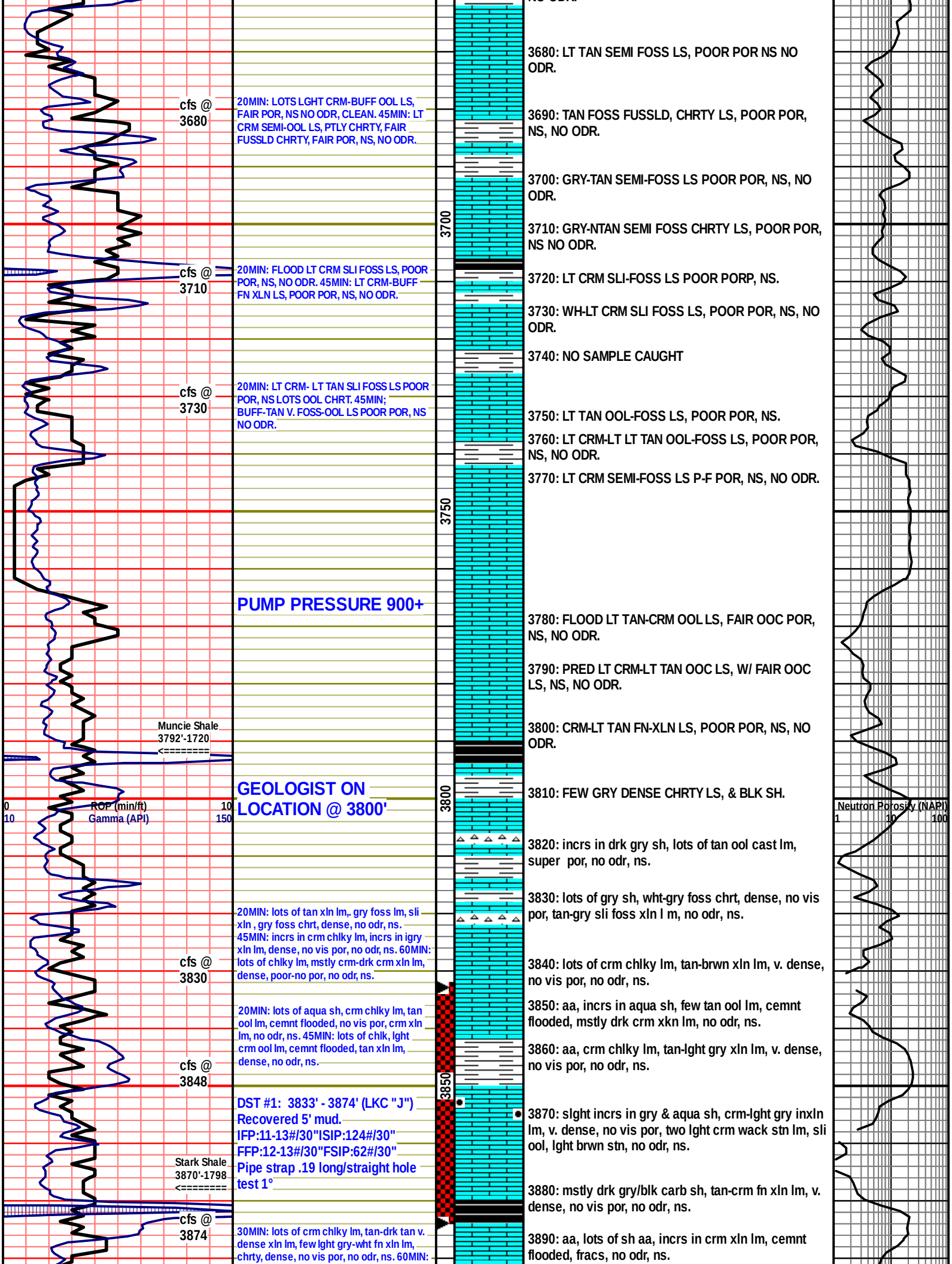
3420: LT CRM V. FOSS LS, W/ FAIR FOSS POR, SCAT STNS, NO ODR.

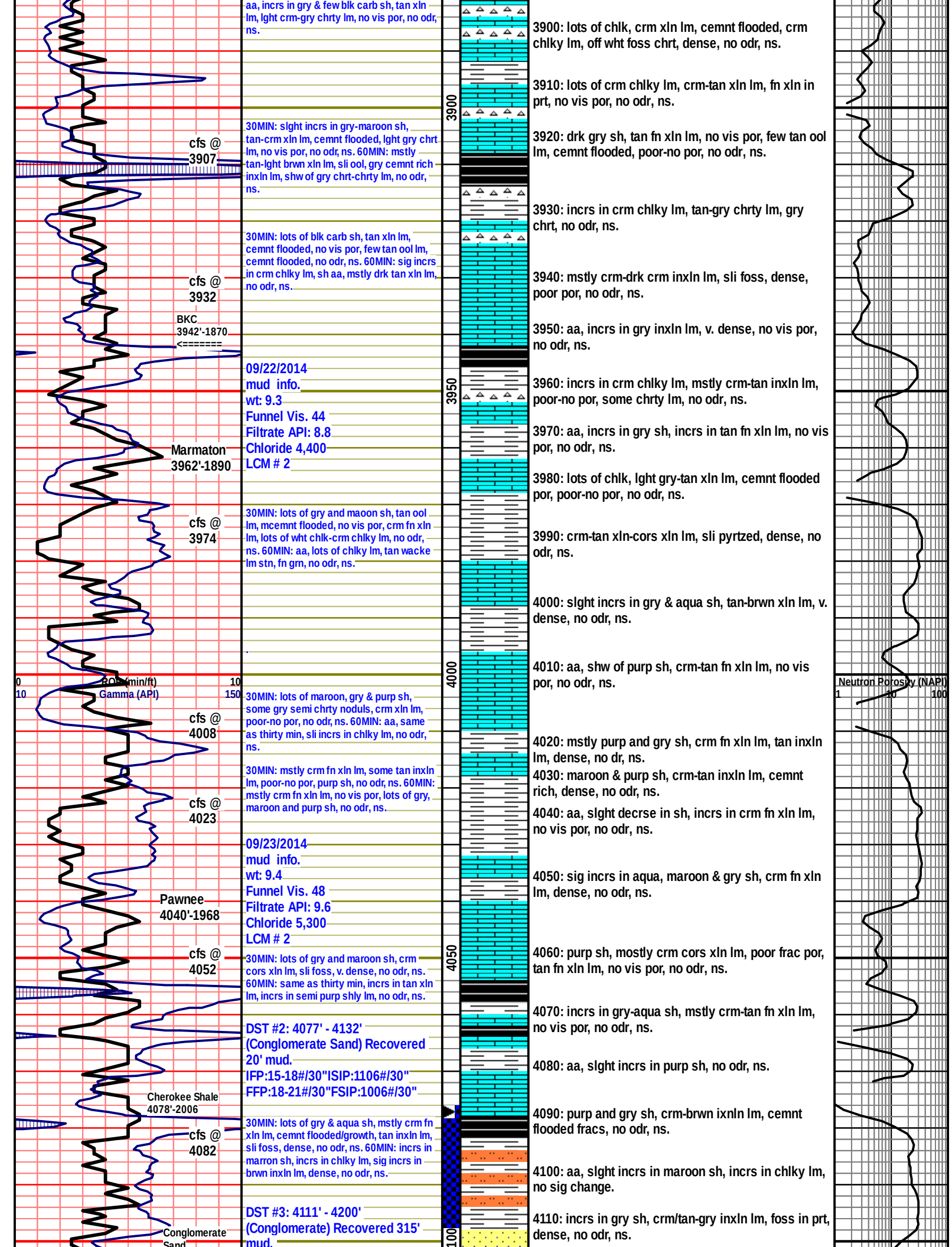
3430: LT CRM FN-XLN LS POOR POR, NS.

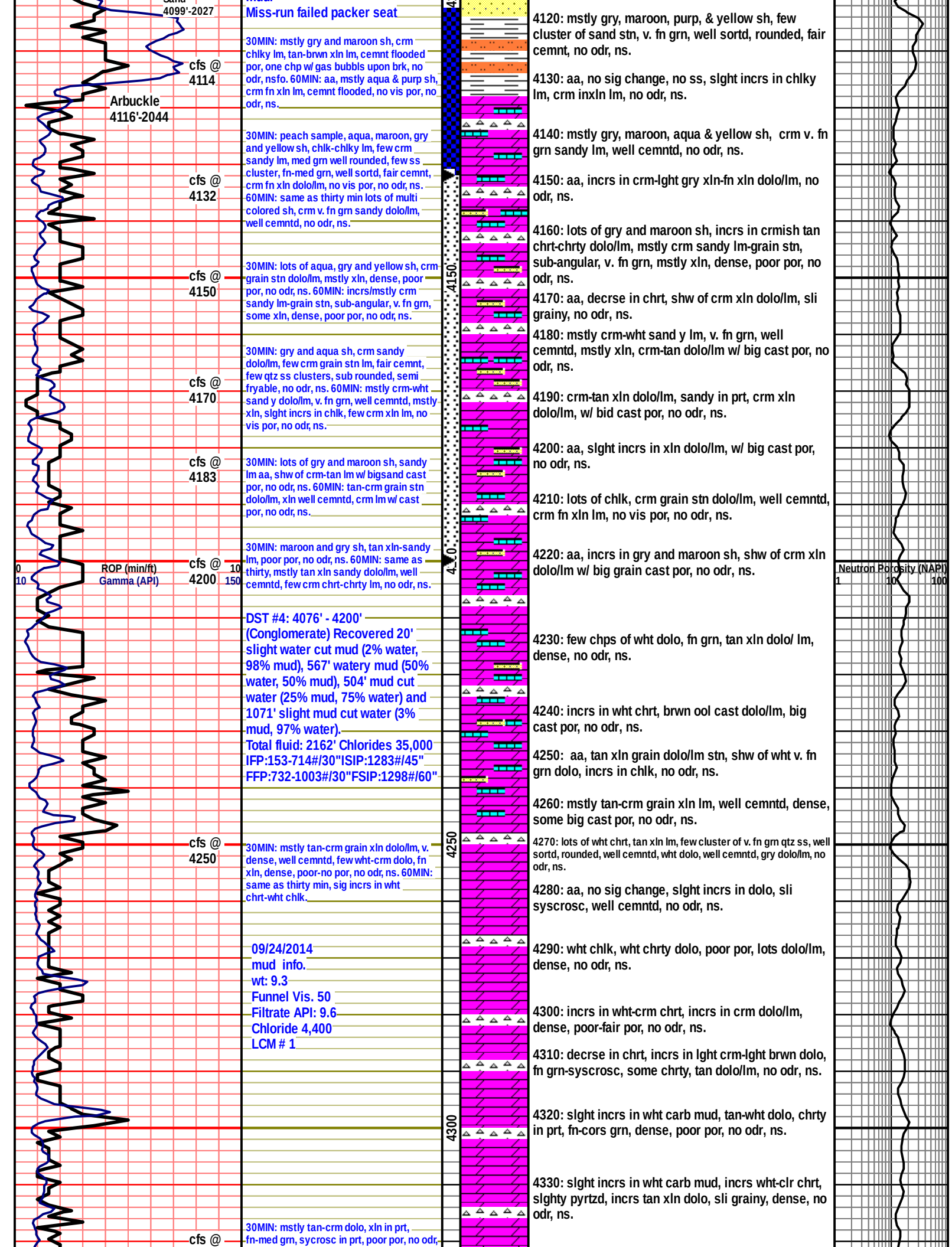
3440: LT CRM SLI FOSS LS, POOR POR, NS NO ODR.

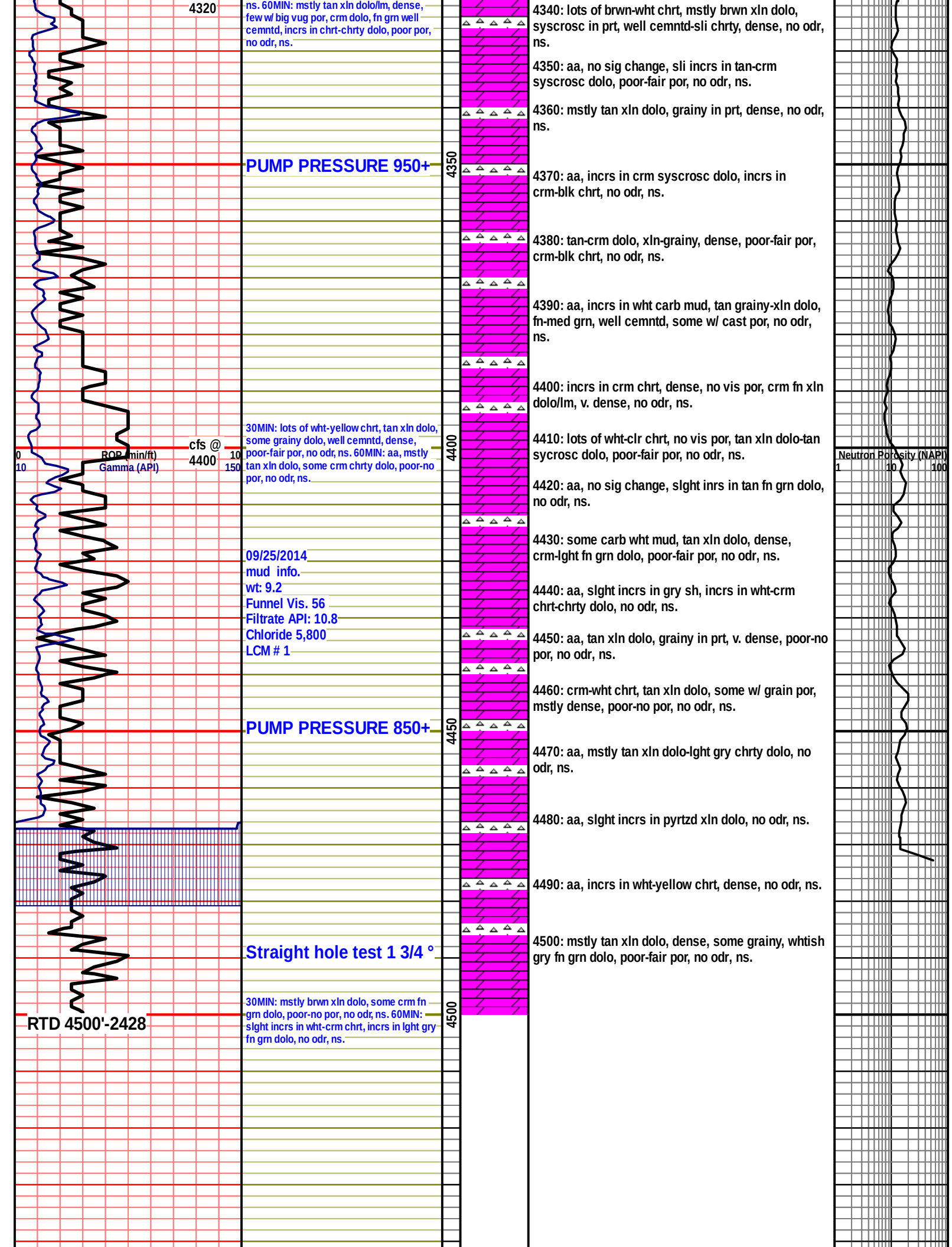
3450: LT CRM FN-XLN LS, POOR POR, NS.

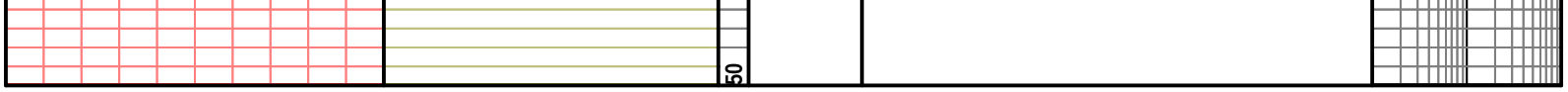

3460: LT CRM BUFF SLI-FOSS LS POOR POR, NS, NO ODR.
3470: LT CRM-BUFF SLI FOSS, LS, NS.
3480: LT CRM SLI FOSS LS, POOR POR, NS, NO ODR.
3490: LT CRM BUFF SLI FOSS, LS, POOR POR, NS, NO ODR.
3500: FLOOD LT CRM BUFF FUSSLND LS, P-F POR, NS, NO ODR.
3510: LT CRM-BUFF FOSS LS-NS.
3520: LT CRM-BUFF V. FUSSLD, LS, POOR POR, NS, NO ODR.
3530: LT CRM-BUFF FOSS LS P-F POR
3540: LT CRM-BUFF LS, SEMI-FOSS P-F POR, NS, NO ODR.
3550: CRM-BUFF LT TAN V. FOSS LS POOR POR, NS, NO ODR.
3560: BUFF TAN FOSS LS POOR POR, NS.
3570: CRM-LT TAN FOSS LS SLI-FOSS LS POOR POR, NS NO ODR.
3580: LT CRM-BUFF FOSS LS P-F POR, NS, NO ODR.
3590: DRK GRY-BLK SHS.
3600: TAN SEMI-FOSS LS POOR POR, NS, NO ODR.
3610: DIRTY GRY SLI-FOSS LS, POOR POR, NS NO ODR, FEW LT GRN SHS.
3620: LT GRY SLI FOSS LS, POOR POR, NS, NO ODR.
3630: FLOOD WH-LT CRM SLI-FOSS LS, POOR POR, NS, NO ODR.
3640: LT CRM SLI-FOSS LS, POOR POR, NS & INC GRY SH.
3650: WH-LT CRM LS- POOR POR, NS.
3660: FLOOD LT BLUE-GRY SLTY SH.
3670: LT CRM-LT TAN SLI-FOSS LS POOR POR, NS, NO ODR.
3450
3500
3550
3600
3650
PUMP PRESSURE 1000+
PUMP PRESSURE 950+
09/21/2014
mud info.
wt: 9.1
Funnel Vis. 45
Filtrate API: 8.8
Chloride 3,800
LCM # 2
Heebner
3574'-1502
Lansing
3650'-1578
0
10
ROP (min/ft)
Gamma (API)
10
150
Neutron Porosity (NAPI)
1
10
100


cfs @ 3680
20MIN: LOTS LGHT CRM-BUFF OOL LS, FAIR POR, NS NO ODR, CLEAN. 45MIN: LT CRM SEMI-OOL LS, PTLY CHRTY, FAIR FUSSLD CHRTY, FAIR POR, NS, NO ODR.
3680: LT TAN SEMI FOSS LS, POOR POR NS NO ODR.
3690: TAN FOSS FUSSLD, CHRTY LS, POOR POR, NS, NO ODR.
3700: GRY-TAN SEMI-FOSS LS POOR POR, NS, NO ODR.
3700
3710: GRY-NTAN SEMI FOSS CHRTY LS, POOR POR, NS NO ODR.
cfs @ 3710
20MIN: FLOOD LT CRM SLI FOSS LS, POOR POR, NS, NO ODR. 45MIN: LT CRM-BUFF FN XLN LS, POOR POR, NS, NO ODR.
3720: LT CRM SLI-FOSS LS POOR PORP, NS.
3730: WH-LT CRM SLI FOSS LS, POOR POR, NS, NO ODR.
3740: NO SAMPLE CAUGHT
cfs @ 3730
20MIN: LT CRM- LT TAN SLI FOSS LS POOR POR, NS LOTS OOL CHRT. 45MIN; BUFF-TAN V. FOSS-OOL LS POOR POR, NS NO ODR.
3750: LT TAN OOL-FOSS LS, POOR POR, NS.
3760: LT CRM-LT LT TAN OOL-FOSS LS, POOR POR, NS, NO ODR.
3770: LT CRM SEMI-FOSS LS P-F POR, NS, NO ODR.
3750
PUMP PRESSURE 900+
3780: FLOOD LT TAN-CRM OOL LS, FAIR OOC POR, NS, NO ODR.
3790: PRED LT CRM-LT TAN OOC LS, W/ FAIR OOC LS, NS, NO ODR.
Muncie Shale 3792'-1720
<========
3800: CRM-LT TAN FN-XLN LS, POOR POR, NS, NO ODR.
GEOLOGIST ON LOCATION @ 3800'
3800
3810: FEW GRY DENSE CHRTY LS, & BLK SH.
0 10
ROP (min/ft)
Gamma (API)
10 150
Neutron Porosity (NAPI)
1 10 100
3820: incrs in drk gry sh, lots of tan ool cast lm, super por, no odr, ns.
3830: lots of gry sh, wht-gry foss chrt, dense, no vis por, tan-gry sli foss xln l m, no odr, ns.
20MIN: lots of tan xln lm,. gry foss lm, sli xln , gry foss chrt, dense, no odr, ns. 45MIN: incrs in crm chlky lm, incrs in igry xln lm, dense, no vis por, no odr, ns. 60MIN: lots of chlky lm, mstly crm-drk crm xln lm, dense, poor-no por, no odr, ns.
cfs @ 3830
3840: lots of crm chlky lm, tan-brwn xln lm, v. dense, no vis por, no odr, ns.
20MIN: lots of aqua sh, crm chlky lm, tan ool lm, cemnt flooded, no vis por, crm xln lm, no odr, ns. 45MIN: lots of chlk, lght crm ool lm, cemnt flooded, tan xln lm, dense, no odr, ns.
3850: aa, incrs in aqua sh, few tan ool lm, cemnt flooded, mstly drk crm xkn lm, no odr, ns.
cfs @ 3848
3860: aa, crm chlky lm, tan-lght gry xln lm, v. dense, no vis por, no odr, ns.
3850
DST #1: 3833' - 3874' (LKC "J")
Recovered 5' mud.
IFP:11-13#/30"ISIP:124#/30"
FFP:12-13#/30"FSIP:62#/30"
Pipe strap .19 long/straight hole test 1°
3870: slght incrs in gry & aqua sh, crm-lght gry inxln lm, v. dense, no vis por, two lght crm wack stn lm, sli ool, lght brwn stn, no odr, ns.
Stark Shale 3870'-1798
<========
3880: mstly drk gry/blk carb sh, tan-crm fn xln lm, v. dense, no vis por, no odr, ns.
cfs @ 3874
30MIN: lots of crm chlky lm, tan-drk tan v. dense xln lm, few lght gry-wht fn xln lm, chrty, dense, no vis por, no odr, ns. 60MIN:
3890: aa, lots of sh aa, incrs in crm xln lm, cemnt flooded, fracs, no odr, ns.


aa, incrs in gry & few blk carb sh, tan xln lm, lght crm-gry chrty lm, no vis por, no odr, ns.
3900: lots of chlk, crm xln lm, cemnt flooded, crm chlky lm, off wht foss chrt, dense, no odr, ns.
3910: lots of crm chlky lm, crm-tan xln lm, fn xln in prt, no vis por, no odr, ns.
3900
cfs @ 3907
30MIN: slght incrs in gry-maroon sh, tan-crm xln lm, cemnt flooded, lght gry chrt lm, no vis por, no odr, ns. 60MIN: mstly tan-lght brwn xln lm, sli ool, gry cemnt rich inxln lm, shw of gry chrt-chrty lm, no odr, ns.
3920: drk gry sh, tan fn xln lm, no vis por, few tan ool lm, cemnt flooded, poor-no por, no odr, ns.
3930: incrs in crm chlky lm, tan-gry chrty lm, gry chrt, no odr, ns.
30MIN: lots of blk carb sh, tan xln lm, cemnt flooded, no vis por, few tan ool lm, cemnt flooded, no odr, ns. 60MIN: sig incrs in crm chlky lm, sh aa, mstly drk tan xln lm, no odr, ns.
cfs @ 3932
3940: mstly crm-drk crm inxln lm, sli foss, dense, poor por, no odr, ns.
BKC 3942'-1870 <=======
3950: aa, incrs in gry inxln lm, v. dense, no vis por, no odr, ns.
09/22/2014 mud info. wt: 9.3 Funnel Vis. 44 Filtrate API: 8.8 Chloride 4,400 LCM # 2
3950
3960: incrs in crm chlky lm, mstly crm-tan inxln lm, poor-no por, some chrty lm, no odr, ns.
3970: aa, incrs in gry sh, incrs in tan fn xln lm, no vis por, no odr, ns.
Marmaton 3962'-1890
3980: lots of chlk, lght gry-tan xln lm, cemnt flooded por, poor-no por, no odr, ns.
cfs @ 3974
30MIN: lots of gry and maoon sh, tan ool lm, mcemnt flooded, no vis por, crm fn xln lm, lots of wht chlk-crm chlky lm, no odr, ns. 60MIN: aa, lots of chlky lm, tan wacke lm stn, fn grn, no odr, ns.
3990: crm-tan xln-cors xln lm, sli pyrtzed, dense, no odr, ns.
4000: slght incrs in gry & aqua sh, tan-brwn xln lm, v. dense, no odr, ns.
4000
4010: aa, shw of purp sh, crm-tan fn xln lm, no vis por, no odr, ns.
0 ROP (min/ft) 10
10 Gamma (API) 150
Neutron Porosity (NAPI)
1 10 100
30MIN: lots of maroon, gry & purp sh, some gry semi chrty noduls, crm xln lm, poor-no por, no odr, ns. 60MIN: aa, same as thirty min, sli incrs in chlky lm, no odr, ns.
cfs @ 4008
4020: mstly purp and gry sh, crm fn xln lm, tan inxln lm, dense, no dr, ns.
4030: maroon & purp sh, crm-tan inxln lm, cemnt rich, dense, no odr, ns.
30MIN: mstly crm fn xln lm, some tan inxln lm, poor-no por, purp sh, no odr, ns. 60MIN: mstly crm fn xln lm, no vis por, lots of gry, maroon and purp sh, no odr, ns.
cfs @ 4023
4040: aa, slght decrse in sh, incrs in crm fn xln lm, no vis por, no odr, ns.
09/23/2014 mud info. wt: 9.4 Funnel Vis. 48 Filtrate API: 9.6 Chloride 5,300 LCM # 2
4050: sig incrs in aqua, maroon & gry sh, crm fn xln lm, dense, no odr, ns.
Pawnee 4040'-1968
4050
cfs @ 4052
30MIN: lots of gry and maroon sh, crm cors xln lm, sli foss, v. dense, no odr, ns. 60MIN: same as thirty min, incrs in tan xln lm, incrs in semi purp shly lm, no odr, ns.
4060: purp sh, mostly crm cors xln lm, poor frac por, tan fn xln lm, no vis por, no odr, ns.
4070: incrs in gry-aqua sh, mstly crm-tan fn xln lm, no vis por, no odr, ns.
DST #2: 4077' - 4132' (Conglomerate Sand) Recovered 20' mud. IFP:15-18#/30"ISIP:1106#/30" FFP:18-21#/30"FSIP:1006#/30"
4080: aa, slght incrs in purp sh, no odr, ns.
Cherokee Shale 4078'-2006
4090: purp and gry sh, crm-brwn ixnln lm, cemnt flooded fracs, no odr, ns.
30MIN: lots of gry & aqua sh, mstly crm fn xln lm, cemnt flooded/growth, tan inxln lm, sli foss, dense, no odr, ns. 60MIN: incrs in marron sh, incrs in chlky lm, sig incrs in brwn inxln lm, dense, no odr, ns.
cfs @ 4082
4100: aa, slght incrs in maroon sh, incrs in chlky lm, no sig change.
DST #3: 4111' - 4200' (Conglomerate) Recovered 315' mud.
4110: incrs in gry sh, crm/tan-gry inxln lm, foss in prt, dense, no odr, ns.
Conglomerate Sand
4100


Sand
4099'-2027
Miss-run failed packer seat
30MIN: mstly gry and maroon sh, crm chlky lm, tan-brwn xln lm, cemnt flooded por, one chp w/ gas bubbls upon brk, no odr, nsfo. 60MIN: aa, mstly aqua & purp sh, crm fn xln lm, cemnt flooded, no vis por, no odr, ns.
cfs @ 4114
Arbuckle
4116'-2044
30MIN: peach sample, aqua, maroon, gry and yellow sh, chlk-chlky lm, few crm sandy lm, med grn well rounded, few ss cluster, fn-med grn, well sortd, fair cemnt, crm fn xln dolo/lm, no vis por, no odr, ns. 60MIN: same as thirty min lots of multi colored sh, crm v. fn grn sandy dolo/lm, well cemntd, no odr, ns.
cfs @ 4132
30MIN: lots of aqua, gry and yellow sh, crm grain stn dolo/lm, mstly xln, dense, poor por, no odr, ns. 60MIN: incrs/mstly crm sandy lm-grain stn, sub-angular, v. fn grn, some xln, dense, poor por, no odr, ns.
cfs @ 4150
30MIN: gry and aqua sh, crm sandy dolo/lm, few crm grain stn lm, fair cemnt, few qtz ss clusters, sub rounded, semi fryable, no odr, ns. 60MIN: mstly crm-wht sand y dolo/lm, v. fn grn, well cemntd, mstly xln, slght incrs in chlk, few crm xln lm, no vis por, no odr, ns.
cfs @ 4170
30MIN: lots of gry and maroon sh, sandy lm aa, shw of crm-tan lm w/ bigsand cast por, no odr, ns. 60MIN: tan-crm grain stn dolo/lm, xln well cemntd, crm lm w/ cast por, no odr, ns.
cfs @ 4183
30MIN: maroon and gry sh, tan xln-sandy lm, poor por, no odr, ns. 60MIN: same as thirty, mstly tan xln sandy dolo/lm, well cemntd, few crm chrt-chrty lm, no odr, ns.
cfs @ 4200
ROP (min/ft)
Gamma (API)
0
10
10
150
DST #4: 4076' - 4200' (Conglomerate) Recovered 20' slight water cut mud (2% water, 98% mud), 567' watery mud (50% water, 50% mud), 504' mud cut water (25% mud, 75% water) and 1071' slight mud cut water (3% mud, 97% water). Total fluid: 2162' Chlorides 35,000 IFP:153-714#/30"ISIP:1283#/45" FFP:732-1003#/30"FSIP:1298#/60"
cfs @ 4250
30MIN: mstly tan-crm grain xln dolo/lm, v. dense, well cemntd, few wht-crm dolo, fn xln, dense, poor-no por, no odr, ns. 60MIN: same as thirty min, sig incrs in wht chrt-wht chlk.
09/24/2014
mud info.
wt: 9.3
Funnel Vis. 50
Filtrate API: 9.6
Chloride 4,400
LCM # 1
4300
cfs @
30MIN: mstly tan-crm dolo, xln in prt, fn-med grn, sycrosc in prt, poor por, no odr,
4120
4150
4200
4250
4300
4120: mstly gry, maroon, purp, & yellow sh, few cluster of sand stn, v. fn grn, well sortd, rounded, fair cemnt, no odr, ns.
4130: aa, no sig change, no ss, slght incrs in chlky lm, crm inxln lm, no odr, ns.
4140: mstly gry, maroon, aqua & yellow sh, crm v. fn grn sandy lm, well cemntd, no odr, ns.
4150: aa, incrs in crm-lght gry xln-fn xln dolo/lm, no odr, ns.
4160: lots of gry and maroon sh, incrs in crmish tan chrt-chrty dolo/lm, mstly crm sandy lm-grain stn, sub-angular, v. fn grn, mstly xln, dense, poor por, no odr, ns.
4170: aa, decrse in chrt, shw of crm xln dolo/lm, sli grainy, no odr, ns.
4180: mstly crm-wht sand y lm, v. fn grn, well cemntd, mstly xln, crm-tan dolo/lm w/ big cast por, no odr, ns.
4190: crm-tan xln dolo/lm, sandy in prt, crm xln dolo/lm, w/ bid cast por, no odr, ns.
4200: aa, slght incrs in xln dolo/lm, w/ big cast por, no odr, ns.
4210: lots of chlk, crm grain stn dolo/lm, well cemntd, crm fn xln lm, no vis por, no odr, ns.
4220: aa, incrs in gry and maroon sh, shw of crm xln dolo/lm w/ big grain cast por, no odr, ns.
Neutron Porosity (NAPI)
1
10
100
4230: few chps of wht dolo, fn grn, tan xln dolo/ lm, dense, no odr, ns.
4240: incrs in wht chrt, brwn ool cast dolo/lm, big cast por, no odr, ns.
4250: aa, tan xln grain dolo/lm stn, shw of wht v. fn grn dolo, incrs in chlk, no odr, ns.
4260: mstly tan-crm grain xln lm, well cemntd, dense, some big cast por, no odr, ns.
4270: lots of wht chrt, tan xln lm, few cluster of v. fn grn qtz ss, well sortd, rounded, well cemntd, wht dolo, well cemntd, gry dolo/lm, no odr, ns.
4280: aa, no sig change, slght incrs in dolo, sli syscrosc, well cemntd, no odr, ns.
4290: wht chlk, wht chrty dolo, poor por, lots dolo/lm, dense, no odr, ns.
4300: incrs in wht-crm chrt, incrs in crm dolo/lm, dense, poor-fair por, no odr, ns.
4310: decrse in chrt, incrs in lght crm-lght brwn dolo, fn grn-syscrosc, some chrty, tan dolo/lm, no odr, ns.
4320: slght incrs in wht carb mud, tan-wht dolo, chrty in prt, fn-cors grn, dense, poor por, no odr, ns.
4330: slght incrs in wht carb mud, incrs wht-clr chrt, slghty pyrtzd, incrs tan xln dolo, sli grainy, dense, no odr, ns.


4320
ns. 60MIN: mstly tan xln dolo/lm, dense, few w/ big vug por, crm dolo, fn grn well cemntd, incrs in chrt-chrty dolo, poor por, no odr, ns.
4340: lots of brwn-wht chrt, mstly brwn xln dolo, syscrosc in prt, well cemntd-sli chrty, dense, no odr, ns.
4350: aa, no sig change, sli incrs in tan-crm syscrosc dolo, poor-fair por, no odr, ns.
4360: mstly tan xln dolo, grainy in prt, dense, no odr, ns.
PUMP PRESSURE 950+
4350
4370: aa, incrs in crm syscrosc dolo, incrs in crm-blk chrt, no odr, ns.
4380: tan-crm dolo, xln-grainy, dense, poor-fair por, crm-blk chrt, no odr, ns.
4390: aa, incrs in wht carb mud, tan grainy-xln dolo, fn-med grn, well cemntd, some w/ cast por, no odr, ns.
4400: incrs in crm chrt, dense, no vis por, crm fn xln dolo/lm, v. dense, no odr, ns.
30MIN: lots of wht-yellow chrt, tan xln dolo, some grainy dolo, well cemntd, dense, poor-fair por, no odr, ns. 60MIN: aa, mstly tan xln dolo, some crm chrty dolo, poor-no por, no odr, ns.
cfs @ 4400
4400
4410: lots of wht-clr chrt, no vis por, tan xln dolo-tan sycrosc dolo, poor-fair por, no odr, ns.
0
10
ROP (min/ft)
Gamma (API)
10
150
Neutron Porosity (NAPI)
1
10
100
4420: aa, no sig change, slght inrs in tan fn grn dolo, no odr, ns.
4430: some carb wht mud, tan xln dolo, dense, crm-lght fn grn dolo, poor-fair por, no odr, ns.
09/25/2014
mud info.
wt: 9.2
Funnel Vis. 56
Filtrate API: 10.8
Chloride 5,800
LCM # 1
4440: aa, slght incrs in gry sh, incrs in wht-crm chrt-chrty dolo, no odr, ns.
4450: aa, tan xln dolo, grainy in prt, v. dense, poor-no por, no odr, ns.
4460: crm-wht chrt, tan xln dolo, some w/ grain por, mstly dense, poor-no por, no odr, ns.
PUMP PRESSURE 850+
4450
4470: aa, mstly tan xln dolo-lght gry chrty dolo, no odr, ns.
4480: aa, slght incrs in pyrtzd xln dolo, no odr, ns.
4490: aa, incrs in wht-yellow chrt, dense, no odr, ns.
4500: mstly tan xln dolo, dense, some grainy, whtish gry fn grn dolo, poor-fair por, no odr, ns.
Straight hole test 1 3/4 °
30MIN: mstly brwn xln dolo, some crm fn grn dolo, poor-no por, no odr, ns. 60MIN: slght incrs in wht-crm chrt, incrs in lght gry fn grn dolo, no odr, ns.
4500
RTD 4500'-2428


50

RITCHIE
EXPLORATION, INC.
Wichita, Kansas

#1 Blake 29A
2295' FNL & 2301' FEL
15' N & 9' E of SW SW NE Section 29-21S-18W
Pawnee County, Kansas
API# 15-145-21785-0000
Elevation: GL: 2063', KB: 2072'

Sample Tops			Ref. Well
Anhydrite	1178'	+894	-13
B/Anhydrite	1203'	+869	-15
Heebner	3574'	-1502	-6
Lansing	3652'	-1580	-4
Muncie Shale	3796'	-1724	-8
Stark Shale	3873'	-1801	-4
Hush	3912'	-1840	-6
BKC	3947'	-1875	-7
Marmaton	3973'	-1901	-8
Altamont	4000'	-1928	-10
Pawnee	4046'	-1974	-9
Fort Scott	4066'	-1994	-9
Cherokee Shale	4082'	-2010	-10
Conglomerate Sand	4094'	-2022	-1
Arbuckle	4148'	-2076	-3
RTD	4500'	-2428	

P.O. Box 783188
Wichita, Kansas 67278-3188

(316) 691-9500
Fax (316) 691-9550
rei@ritchie-exp.com

8100 E. 22nd St. N., Bldg. 700
Wichita, Kansas 67226-2328

ALLIED OIL & GAS SERVICES, LLC 063721

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Great Bend

DATE	SEC	TWP	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
9-17-14	29	21	18		10:00 am	5:30 pm	6:30 pm

LEASE	WELL #	LOCATION	COUNTY	STATE
Blake	29A-1	Larned 183 1N 1/2W 5 1/2 S	Pawnee	Ks

OLD OR (NEW) (Circle one)

CONTRACTOR Southwind #2
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 1185
CASING SIZE 8 5/8 24# DEPTH 1188
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX 800 MINIMUM 400
MEAS. LINE SHOE JOINT 21
CEMENT LEFT IN CSG. 21
PERFS.
DISPLACEMENT H20 74.33 BBl

OWNER same

EQUIPMENT

PUMP TRUCK #597 CEMENTER Charles King
HELPER Ben Marsh
BULK TRUCK #609-239 DRIVER Kevin Waighours
BULK TRUCK #599 DRIVER Andy Pimple

REMARKS:

Rig Ran 1188' 8 5/8 Csg Broke circ w/ Rig
Mud hook to Head pump 5 BBl H20
Mix 400 sx mix 175 sx shut down
Release plug displace 74.33 BBl H20
plug did Rand float did not Hold
cement did circulate
drop ball pump through D 900#

CHARGE TO: Pitchie exploration
STREET
CITY STATE ZIP

CEMENT
AMOUNT ORDERED 65/35 6% gel 3% cc
Class A 3% gel 2% ex gel

COMMON	175	@ 17.90	3.132.50
POZMIX		@	
GEL	329	@ .50	164.50
CHLORIDE	1537	@ 1.10	1.690.70
ASC		@	
400sx 65/35/6%		@ 19.98	7.952.00
		@	
	Materials Total		12.939.20
	Disc 20%		2 587.84
		@	
		@	
		@	
		@	
HANDLING	651.39	@ 2.48	1.615.20
MILEAGE	27.60 x 29 x	2.75	2.201.10

DEPTH OF JOB 1188
PUMP TRUCK CHARGE 2213.75
EXTRA FOOTAGE @
MILEAGE Hum 29 @ 7.70 223.30
MANIFOLD @ 275.00 275.00
Hum 29 @ 4.40 127.60
@

TOTAL 6.655.95
Disc 20% 1.331.19

PLUG & FLOAT EQUIPMENT

AFU Insert	447.00	447.00
Rubber plug	@ 131.00	131.00
	@	
	@	
	@	
	@	

TOTAL 578.00
8% 0

SALES TAX (If Any)
TOTAL CHARGES 20.173.65
DISCOUNT 3.919.13 (20/20/0) IF PAID IN 30 DAYS
$ 16.254.52

Thank you!

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.

PRINTED NAME X William Sanders

SIGNATURE X William Sanders

BLAKE 29A-1

ALLIED OIL & GAS SERVICES, LLC 063927

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Great Bend

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
9-26-14	29	21	18		4:00 pm	9:30 pm	10:30 pm

LEASE	WELL #	LOCATION	COUNTY	STATE
Blake	29A	Rascal w to 183 IN ½ W 5 clnto	Pawnee	Ks

OLD OR NEW (Circle one)

CONTRACTOR Southwind #2
TYPE OF JOB PTA
HOLE SIZE 7 7/8 T.D. 4500
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4½ DEPTH 4130
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT H20

OWNER Same

EQUIPMENT

PUMP TRUCK #366 CEMENTER Charles Kinzer
HELPER Marlyn Spongenberg
BULK TRUCK #610-170 DRIVER Kevin Weidenaar
BULK TRUCK # DRIVER

CEMENT

AMOUNT ORDERED 210 sx 60/40 4% gel ¼ Flo

COMMON	@		
POZMIX	@		
GEL	@		
CHLORIDE	@		
ASC	@		
210 sx 60/40+4%	@	18.92	3.973.20
flo 53	@	2.97	157.41
	@		
Materials Total			4.130.61
Disc		20%	826.12
	@		
Service			
	@		
HANDLING 224.08	@	2.48	555.72
MILEAGE 9.42 x 29 x		2.75	751.25

REMARKS:

1st plug @ 4130' 10 BBl H20 mix 50 sx displace 3.5 H20 @ 51.99 Mud
2nd plug @ 1200' 10 BBl H20 mix 50 sx displace 3.5 H20 @ 10.32 Mud
3rd plug @ 270' 3.5 BBl H20 mix 40 sx displace 1.25 H20 4th plug @ 60' mix 20 sx plug rat hole 30 sx & mouse hole 20 sx

DEPTH OF JOB 4130			
PUMP TRUCK CHARGE			2600.47
EXTRA FOOTAGE	@		
MILEAGE Hum 29	@	7.70	223.30
MANIFOLD	@		
Hum 29	@	4.40	127.60
	@		
TOTAL			4.258.37
Disc 20%			851.67

CHARGE TO: Ritchie exploration
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8 wooden plug		110.00	110.00
	@		
	@		
	@		
	@		
	@		
TOTAL			110.00
Disc 20%			22.00

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 8.498.95
DISCOUNT 20% 1.699.79 IF PAID IN 30 DAYS (20/20/20)
6.799.16

PRINTED NAME William Sanders

SIGNATURE William Sanders