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

Well Name:	**#1 S. ZIMMERMAN**		
Location:	**SEC 4-TOWNSHIP 28S- RANGE 23W FORD COUNTY**		
License Number:	**API 15-057-20898**	**Region:**	**KANSAS**
Spud Date:	**6/20/2013**	**Drilling Completed:**	**7/1/2013**
Surface Coordinates:	**335' FSL & 335' FWL**		
Bottom Hole Coordinates:	**Deviation Surveys are detailed through out the Geo-Report.**		
Ground Elevation (ft):	**2481**	**K.B. Elevation (ft):**	**2493**
Logged Interval (ft):	**3400 To: 5277**	**Total Depth (ft):**	**5275**
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 SOUTHWIND RIG# 70)
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:1500'+993	**Anhydrite: 1492'+1001**
B/Anhydrite: 1541'+952	**B/Anhydrite: 1526'+967**
Stotler: 3578'-1085	**Stotler: 3579'-1086**
Heebner: 4253'-1760	**Heebner: 4253'-1760**
Lansing: 4400'-1907	**Lansing: 4392'-1899**
Muncie Sh: 4576'-2103	**Muncie Sh: 4576'-2103**
Stark Sh: 4702'-2209	**Stark Sh: 4702'-2209**
Hush: 4748'-2255	**Hush: 4748'-2255**
BKC: 4786'-2393	**BKC: 4788'-2295**
Marmaton: 4802'-2309	**Marmaton: 4802'-2309**
Altamont: 4852'-2359	**Altamont: 4854'-2361**
Pawnee: 4925'2432	**Pawnee: 4925'-2432**
Cherokee Sh: 4992'-2499	**Cherokee Sh: 4970'-2477**
Morrow: 5063'-2570	**Morrow: 5070'-2577**
Mississippian: 5103'-2610	**Mississippian: 5101'-2608**
RTD: 5275'-2782	**LTD: 5277'-2784**

DAILY DRILLING REPORT:

DATE	**DEPTH:**
6/20	**351'**
6/21	**1455'**
6/22	**2432'**
6/23	**2962'**
6/24	**3550'**
6/25	**4245'**
6/26	**4635'**
6/27	**4960'**
6/28	**4977'**
6/29	**5082'**
6/30	**5148'**
7/1	**5275**

Misc.

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

RIG: SOUTHWIND RIG #70
TOOL PUSHER: SAM STAGGS
MUD: MUD CO. (JUSTIN WHITING)
GAS DETECTOR: MBC

DRILL STEM TEST'S: TRILOBITE TESTING, INC.

LOGS: NABORS (IAN MABB)

OFFICE: GEO-MIKE

Comments

Moved in and rigged up. Spud at 4:15 p.m. Ran 8 jts used 23# 8-5/8" surface casing. Tally at 351.08', set at 338'. Cemented with 225 sacks class A, 2% gel, 3% cc. Cement circulated. Plug down at 12:30 a.m. on 6/20/13.

DUE TO THE RESULTS OF SAMPLE LOGGING, ELECTRIC LOGGING, AND ALL DST TESTS ANALYSIS & CALCULATIONS; IT WAS ELECTED TO P&A #1 S. ZIMMERMAN TEST WELL.

Plug and Abandon. 1st plug set at 1530' with 50 sacks 60/40 Poz, 4% gel, ¼# flocele; 2nd plug set at 570' with 80 sacks; 3rd plug set at 240' with 50 sacks; 4th plug set at 60' with 20 sacks; 200 total sacks. Plugged the rat hole with 30 sacks. Job complete at 3:30 p.m. Plugging orders by Eric MacLaren 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
- 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

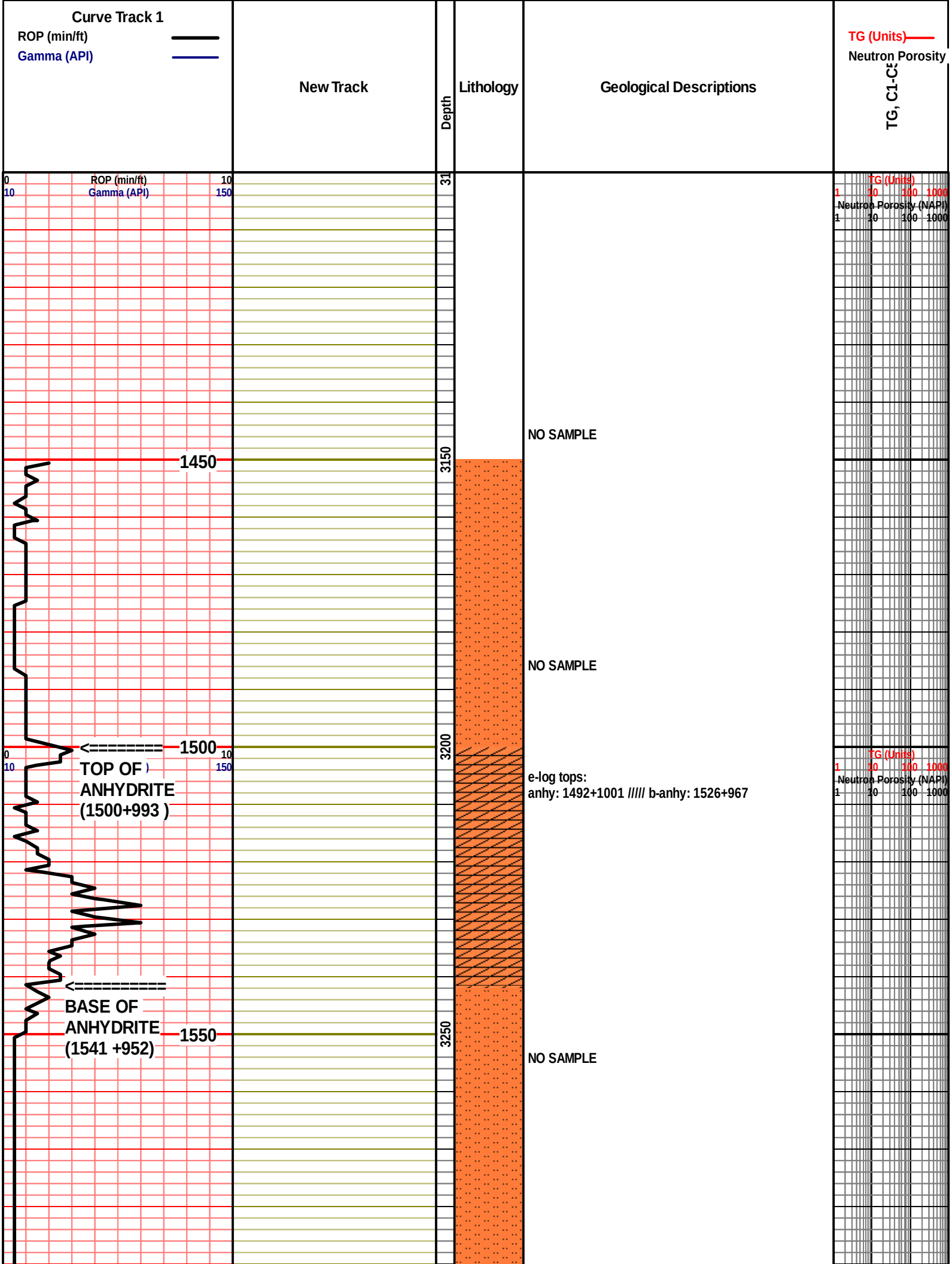
- Even
- Spotted
- Ques
- Dead

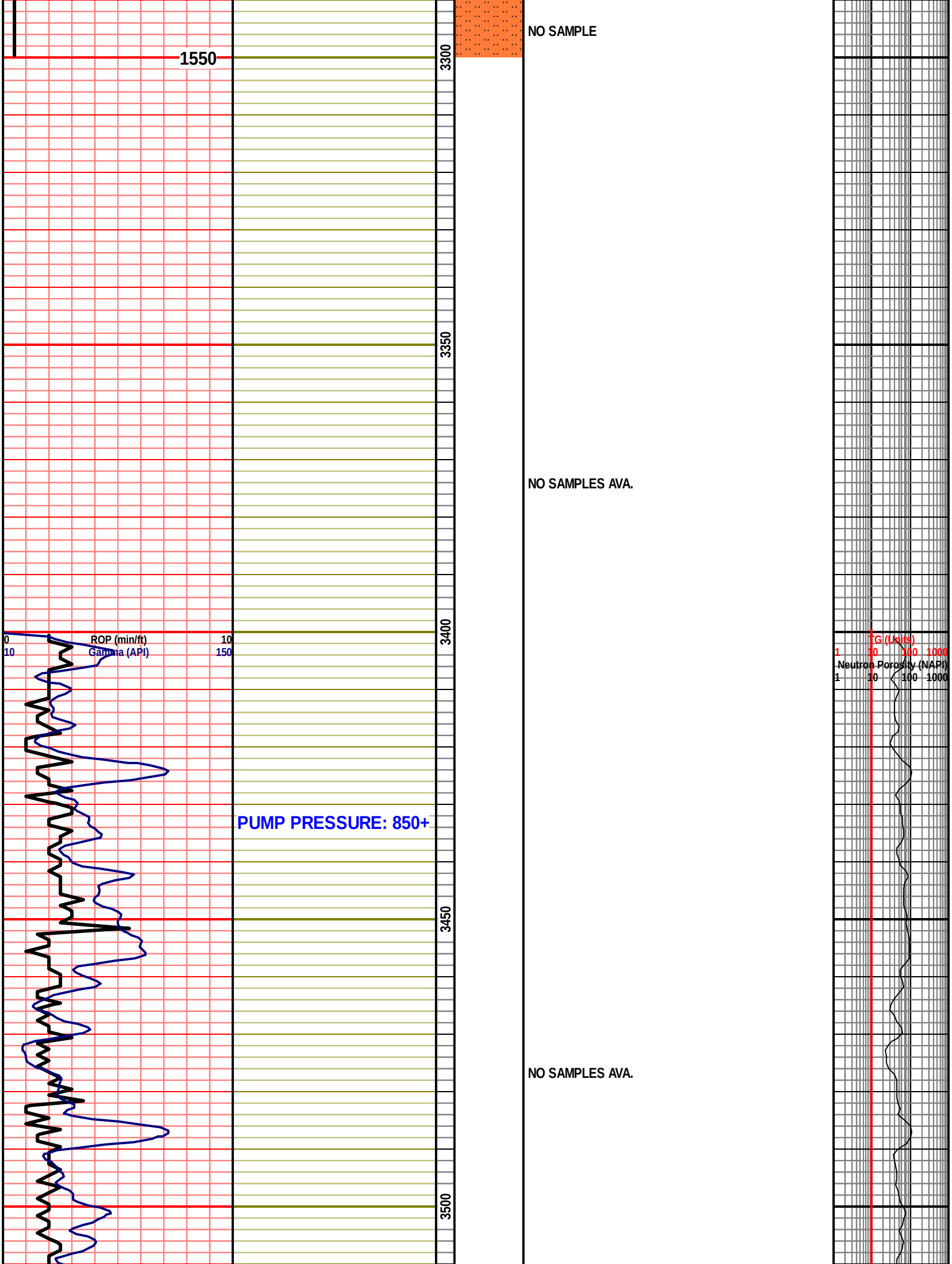
INTERVAL

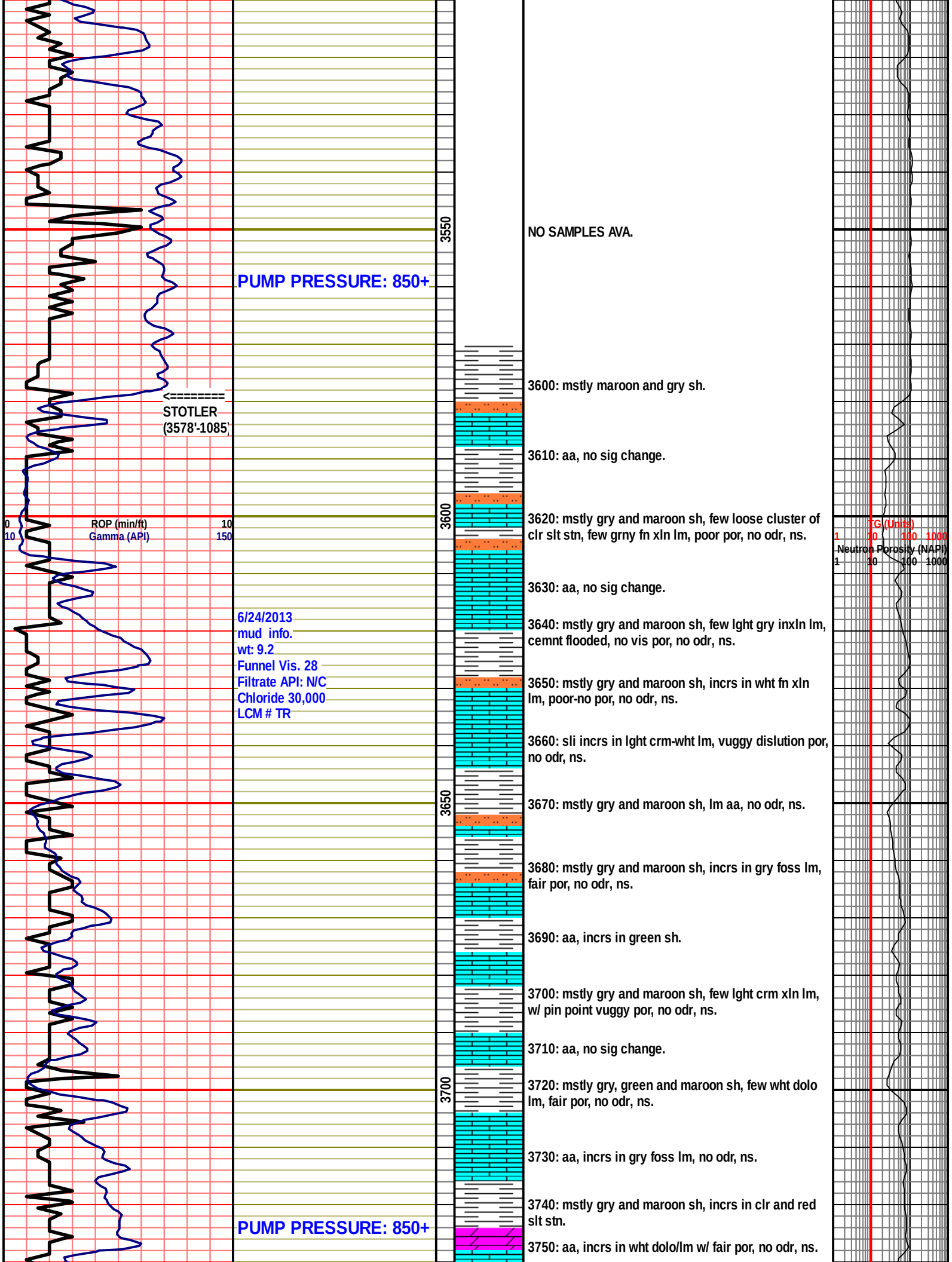
- Core
- Dst
- Dst_alt
- Dst

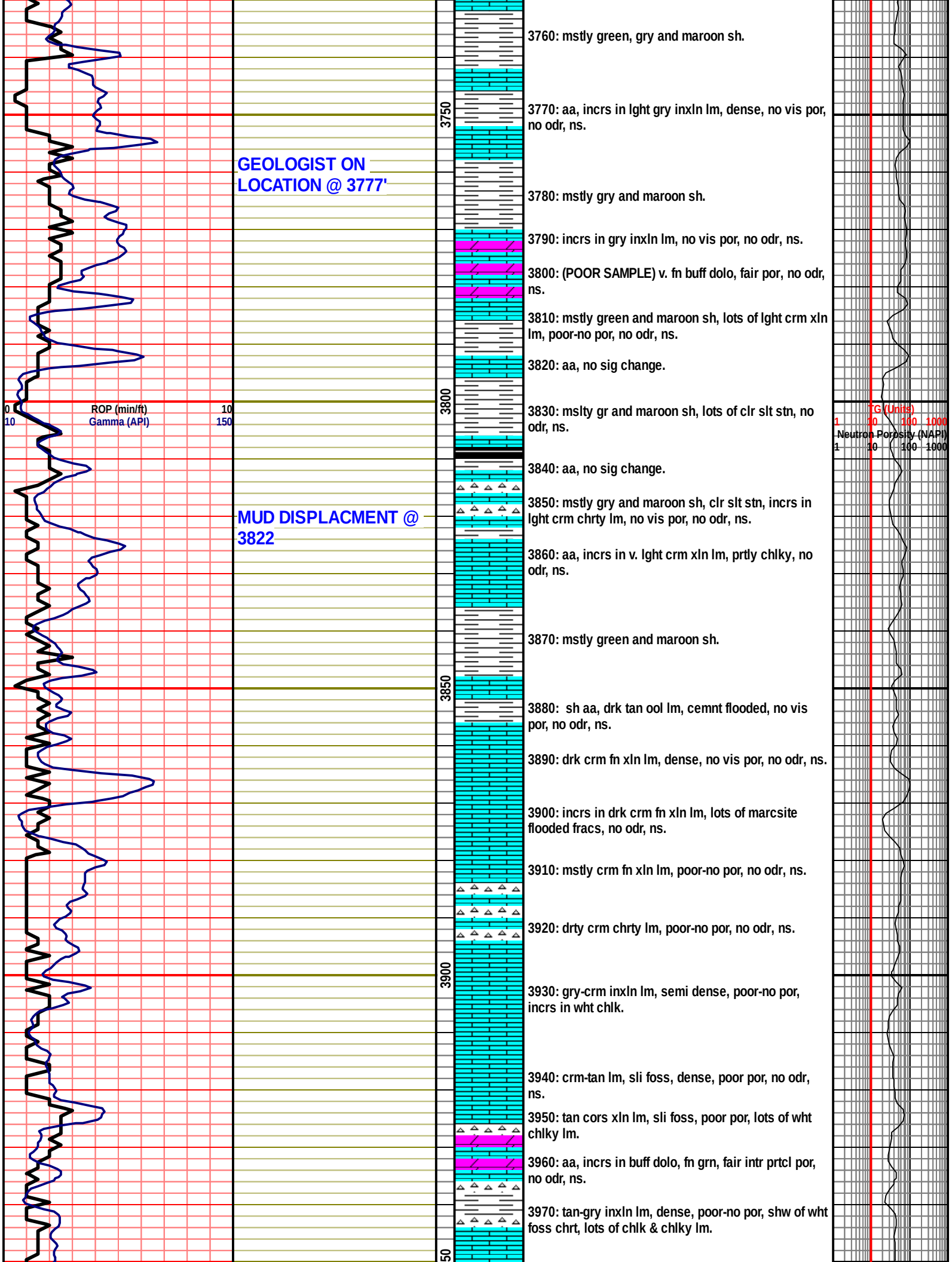
EVENT

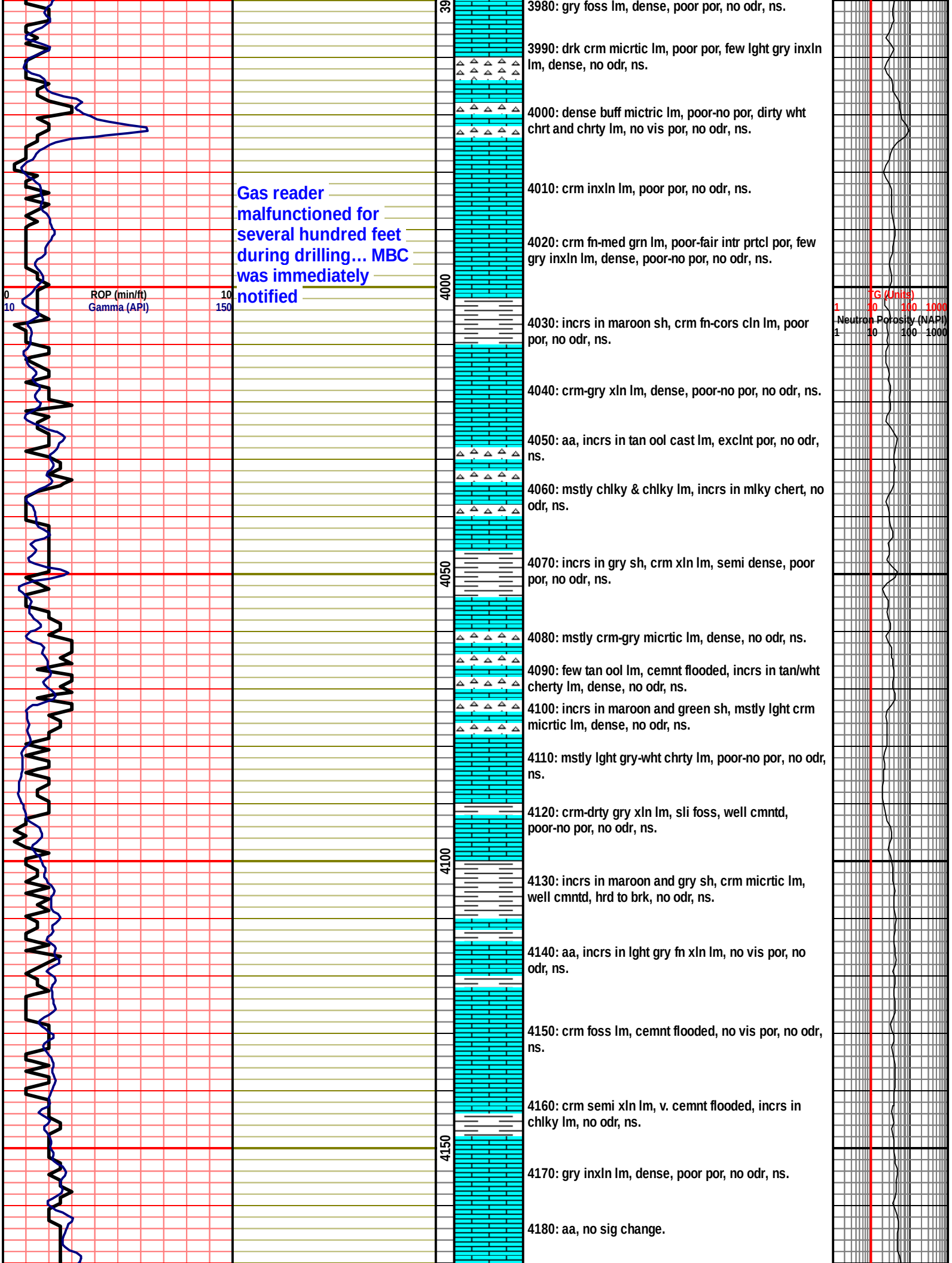
- Rft
- Sidewall

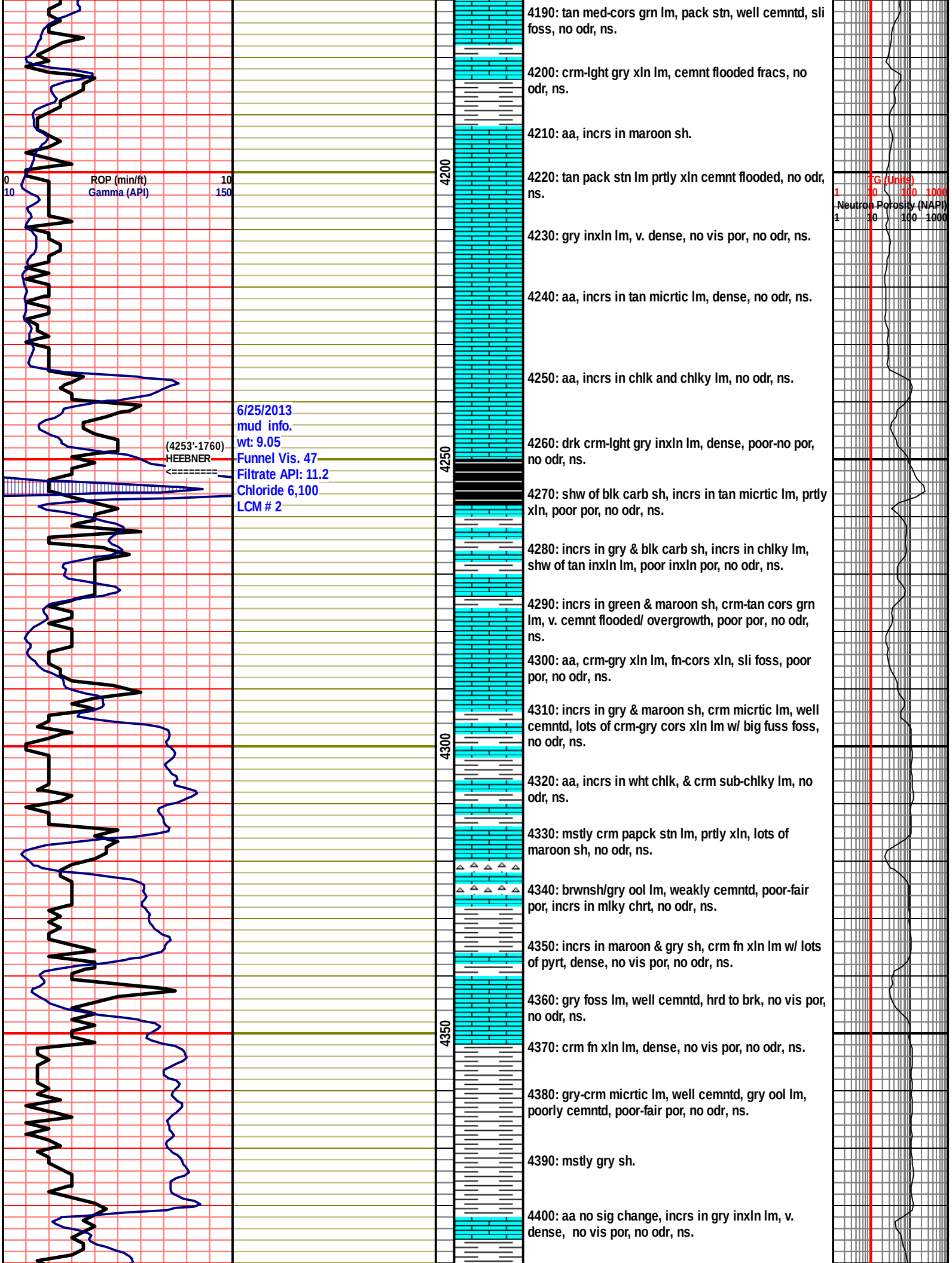

Curve Track 1
ROP (min/ft)
Gamma (API)
New Track
Depth
Lithology
Geological Descriptions
TG (Units)
Neutron Porosity
TG, C1-C5
0
10
ROP (min/ft)
10
Gamma (API)
150
1450
<========
1500
TOP OF
ANHYDRITE
(1500+993)
<==========
BASE OF
ANHYDRITE
(1541 +952)
1550
3150
3200
3250
NO SAMPLE
NO SAMPLE
e-log tops:
anhy: 1492+1001 ///// b-anhy: 1526+967
NO SAMPLE
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000

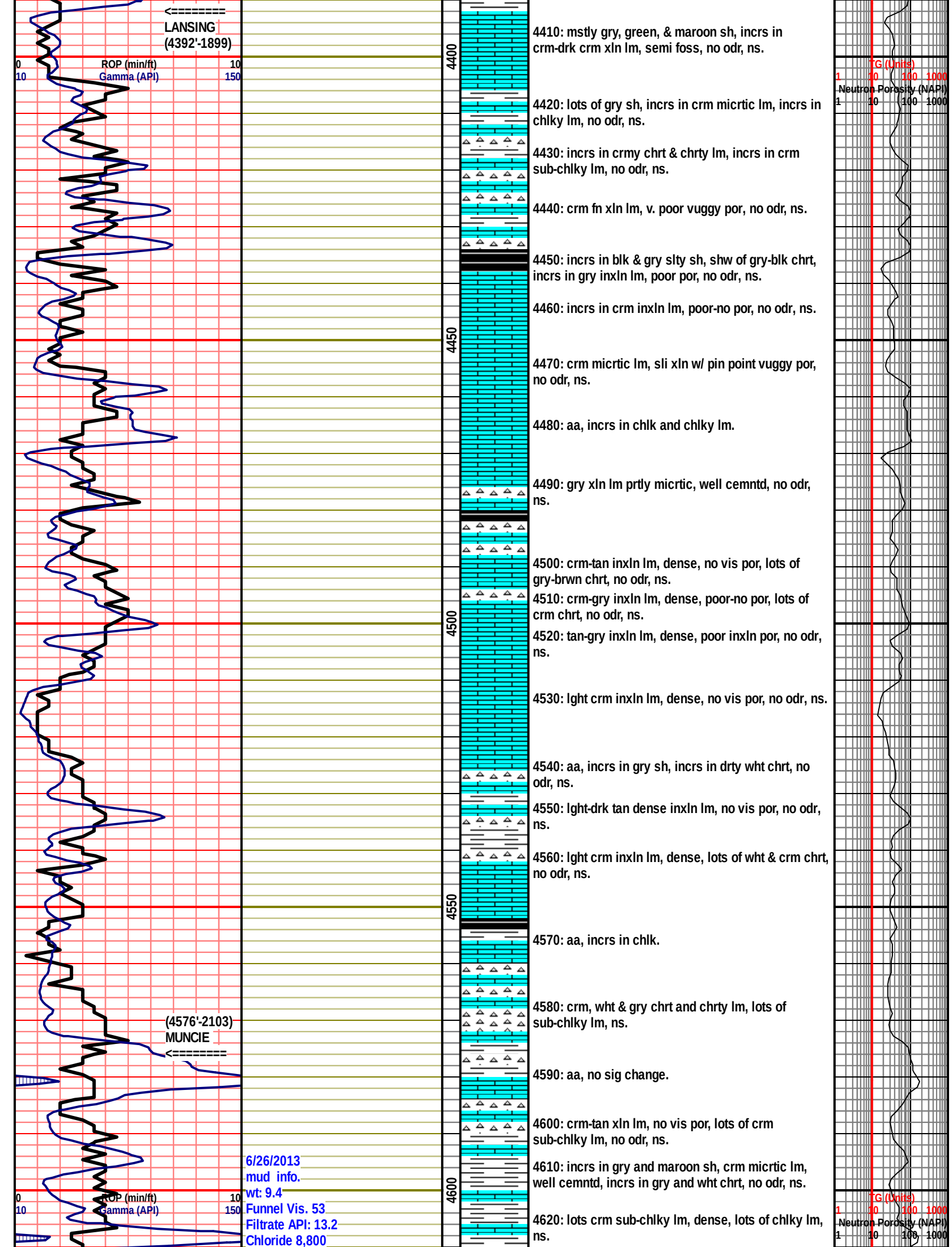

1550
3300
3350
3400
3450
3500
NO SAMPLE
NO SAMPLES AVA.
NO SAMPLES AVA.
0
10
ROP (min/ft)
Gamma (API)
10
150
PUMP PRESSURE: 850+
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000

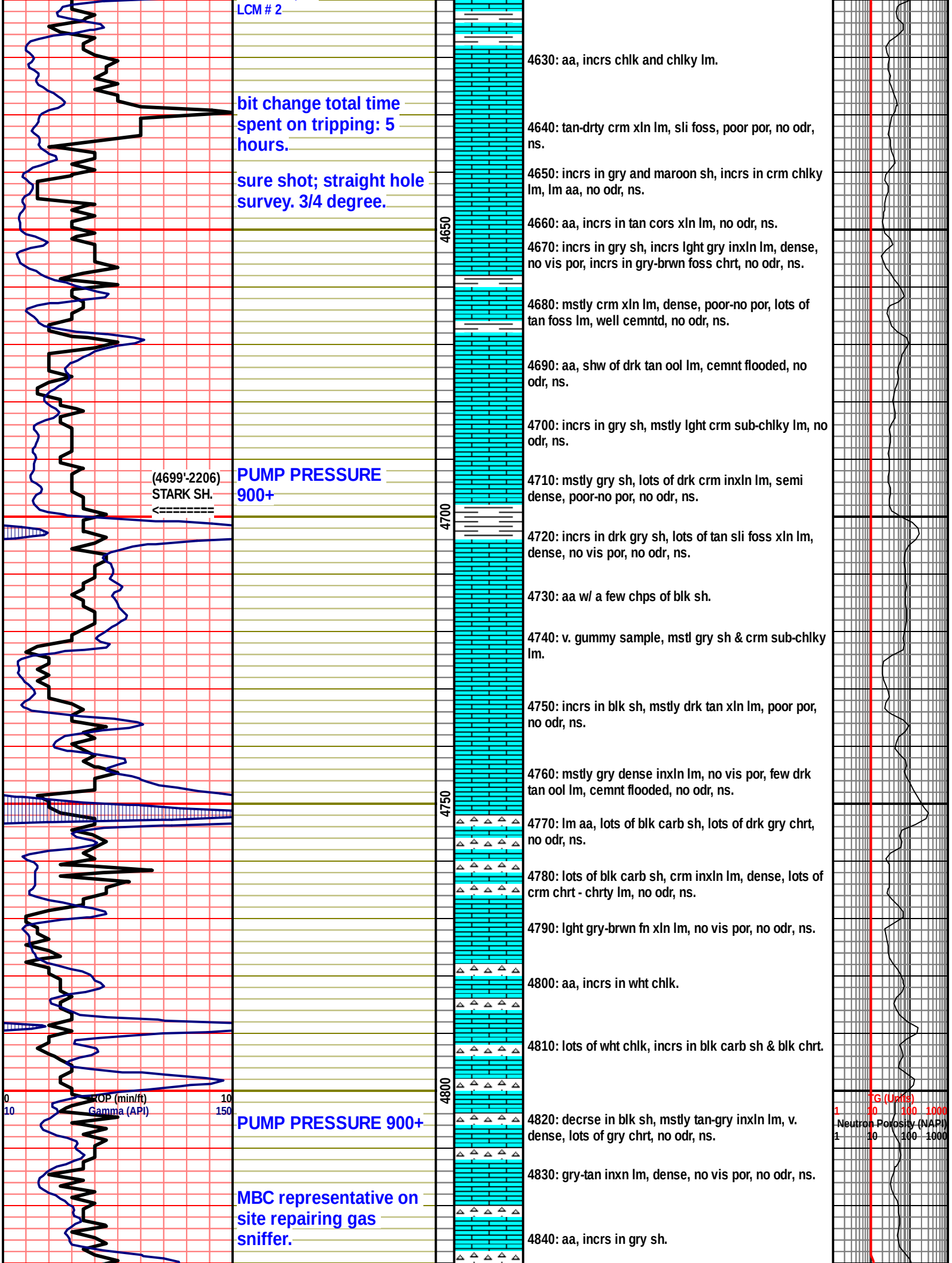

NO SAMPLES AVA.
PUMP PRESSURE: 850+
<========
STOTLER
(3578'-1085')
0
10
ROP (min/ft)
Gamma (API)
10
150
6/24/2013
mud info.
wt: 9.2
Funnel Vis. 28
Filtrate API: N/C
Chloride 30,000
LCM # TR
3550
3600
3650
3700
3600: mstly maroon and gry sh.
3610: aa, no sig change.
3620: mstly gry and maroon sh, few loose cluster of clr slt stn, few grny fn xln lm, poor por, no odr, ns.
3630: aa, no sig change.
3640: mstly gry and maroon sh, few lght gry inxln lm, cemnt flooded, no vis por, no odr, ns.
3650: mstly gry and maroon sh, incrs in wht fn xln lm, poor-no por, no odr, ns.
3660: sli incrs in lght crm-wht lm, vuggy dislution por, no odr, ns.
3670: mstly gry and maroon sh, lm aa, no odr, ns.
3680: mstly gry and maroon sh, incrs in gry foss lm, fair por, no odr, ns.
3690: aa, incrs in green sh.
3700: mstly gry and maroon sh, few lght crm xln lm, w/ pin point vuggy por, no odr, ns.
3710: aa, no sig change.
3720: mstly gry, green and maroon sh, few wht dolo lm, fair por, no odr, ns.
3730: aa, incrs in gry foss lm, no odr, ns.
3740: mstly gry and maroon sh, incrs in clr and red slt stn.
PUMP PRESSURE: 850+
3750: aa, incrs in wht dolo/lm w/ fair por, no odr, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000

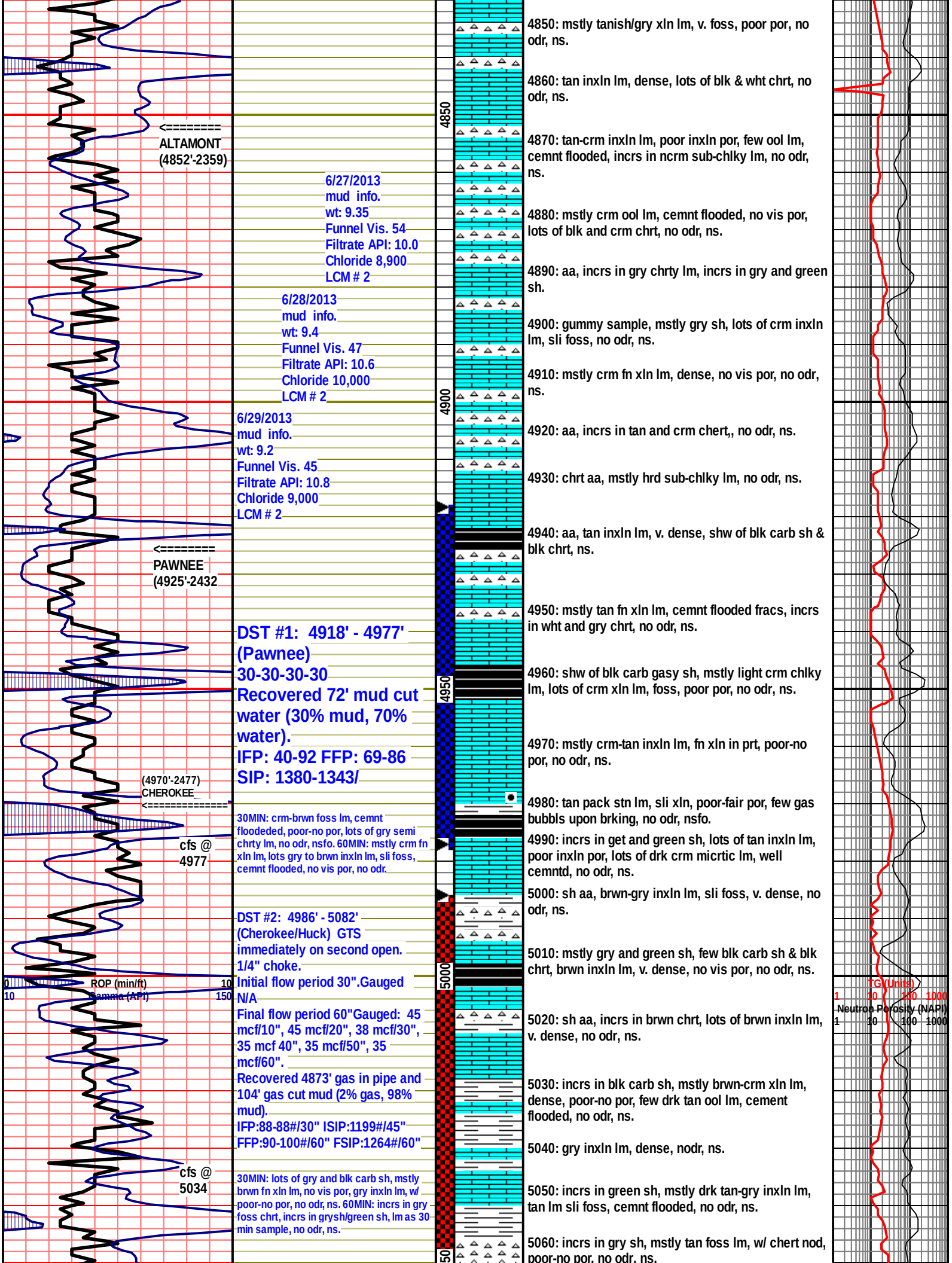

ROP (min/ft)
0
10
Gamma (API)
10
150
GEOLOGIST ON LOCATION @ 3777'
MUD DISPLACMENT @ 3822
3750
3800
3850
3900
3760: mstly green, gry and maroon sh.
3770: aa, incrs in lght gry inxln lm, dense, no vis por, no odr, ns.
3780: mstly gry and maroon sh.
3790: incrs in gry inxln lm, no vis por, no odr, ns.
3800: (POOR SAMPLE) v. fn buff dolo, fair por, no odr, ns.
3810: mstly green and maroon sh, lots of lght crm xln lm, poor-no por, no odr, ns.
3820: aa, no sig change.
3830: mslty gr and maroon sh, lots of clr slt stn, no odr, ns.
3840: aa, no sig change.
3850: mstly gry and maroon sh, clr slt stn, incrs in lght crm chrty lm, no vis por, no odr, ns.
3860: aa, incrs in v. lght crm xln lm, prtly chlky, no odr, ns.
3870: mstly green and maroon sh.
3880: sh aa, drk tan ool lm, cemnt flooded, no vis por, no odr, ns.
3890: drk crm fn xln lm, dense, no vis por, no odr, ns.
3900: incrs in drk crm fn xln lm, lots of marcsite flooded fracs, no odr, ns.
3910: mstly crm fn xln lm, poor-no por, no odr, ns.
3920: drty crm chrty lm, poor-no por, no odr, ns.
3930: gry-crm inxln lm, semi dense, poor-no por, incrs in wht chlk.
3940: crm-tan lm, sli foss, dense, poor por, no odr, ns.
3950: tan cors xln lm, sli foss, poor por, lots of wht chlky lm.
3960: aa, incrs in buff dolo, fn grn, fair intr prtcl por, no odr, ns.
3970: tan-gry inxln lm, dense, poor-no por, shw of wht foss chrt, lots of chlk & chlky lm.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


0
ROP (min/ft)
10
10
Gamma (API)
150
Gas reader malfunctioned for several hundred feet during drilling... MBC was immediately notified
3980: gry foss lm, dense, poor por, no odr, ns.
3990: drk crm micrtic lm, poor por, few lght gry inxln lm, dense, no odr, ns.
4000: dense buff mictric lm, poor-no por, dirty wht chrt and chrty lm, no vis por, no odr, ns.
4010: crm inxln lm, poor por, no odr, ns.
4020: crm fn-med grn lm, poor-fair intr prtcl por, few gry inxln lm, dense, poor-no por, no odr, ns.
4030: incrs in maroon sh, crm fn-cors cln lm, poor por, no odr, ns.
4040: crm-gry xln lm, dense, poor-no por, no odr, ns.
4050: aa, incrs in tan ool cast lm, exclnt por, no odr, ns.
4060: mstly chlky & chlky lm, incrs in mlky chert, no odr, ns.
4070: incrs in gry sh, crm xln lm, semi dense, poor por, no odr, ns.
4080: mstly crm-gry micrtic lm, dense, no odr, ns.
4090: few tan ool lm, cemnt flooded, incrs in tan/wht cherty lm, dense, no odr, ns.
4100: incrs in maroon and green sh, mstly lght crm micrtic lm, dense, no odr, ns.
4110: mstly lght gry-wht chrty lm, poor-no por, no odr, ns.
4120: crm-drty gry xln lm, sli foss, well cmntd, poor-no por, no odr, ns.
4130: incrs in maroon and gry sh, crm micrtic lm, well cmntd, hrd to brk, no odr, ns.
4140: aa, incrs in lght gry fn xln lm, no vis por, no odr, ns.
4150: crm foss lm, cemnt flooded, no vis por, no odr, ns.
4160: crm semi xln lm, v. cemnt flooded, incrs in chlky lm, no odr, ns.
4170: gry inxln lm, dense, poor por, no odr, ns.
4180: aa, no sig change.
3900
4000
4050
4100
4150
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


0
ROP (min/ft)
10
10
Gamma (API)
150
4200
4250
4300
4350
6/25/2013
mud info.
wt: 9.05
(4253'-1760)
HEEBNER
Funnel Vis. 47
<========
Filtrate API: 11.2
Chloride 6,100
LCM # 2
4190: tan med-cors grn lm, pack stn, well cemntd, sli foss, no odr, ns.
4200: crm-lght gry xln lm, cemnt flooded fracs, no odr, ns.
4210: aa, incrs in maroon sh.
4220: tan pack stn lm prtly xln cemnt flooded, no odr, ns.
4230: gry inxln lm, v. dense, no vis por, no odr, ns.
4240: aa, incrs in tan micrtic lm, dense, no odr, ns.
4250: aa, incrs in chlk and chlky lm, no odr, ns.
4260: drk crm-lght gry inxln lm, dense, poor-no por, no odr, ns.
4270: shw of blk carb sh, incrs in tan micrtic lm, prtly xln, poor por, no odr, ns.
4280: incrs in gry & blk carb sh, incrs in chlky lm, shw of tan inxln lm, poor inxln por, no odr, ns.
4290: incrs in green & maroon sh, crm-tan cors grn lm, v. cemnt flooded/ overgrowth, poor por, no odr, ns.
4300: aa, crm-gry xln lm, fn-cors xln, sli foss, poor por, no odr, ns.
4310: incrs in gry & maroon sh, crm micrtic lm, well cemntd, lots of crm-gry cors xln lm w/ big fuss foss, no odr, ns.
4320: aa, incrs in wht chlk, & crm sub-chlky lm, no odr, ns.
4330: mstly crm papck stn lm, prtly xln, lots of maroon sh, no odr, ns.
4340: brwnsh/gry ool lm, weakly cemntd, poor-fair por, incrs in mlky chrt, no odr, ns.
4350: incrs in maroon & gry sh, crm fn xln lm w/ lots of pyrt, dense, no vis por, no odr, ns.
4360: gry foss lm, well cemntd, hrd to brk, no vis por, no odr, ns.
4370: crm fn xln lm, dense, no vis por, no odr, ns.
4380: gry-crm micrtic lm, well cemntd, gry ool lm, poorly cemntd, poor-fair por, no odr, ns.
4390: mstly gry sh.
4400: aa no sig change, incrs in gry inxln lm, v. dense, no vis por, no odr, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


<========
LANSING
(4392'-1899)
0
10
ROP (min/ft)
Gamma (API)
10
150
4400
4450
4500
4550
4600
4410: mstly gry, green, & maroon sh, incrs in crm-drk crm xln lm, semi foss, no odr, ns.
4420: lots of gry sh, incrs in crm micrtic lm, incrs in chlky lm, no odr, ns.
4430: incrs in crmy chrt & chrty lm, incrs in crm sub-chlky lm, no odr, ns.
4440: crm fn xln lm, v. poor vuggy por, no odr, ns.
4450: incrs in blk & gry slty sh, shw of gry-blk chrt, incrs in gry inxln lm, poor por, no odr, ns.
4460: incrs in crm inxln lm, poor-no por, no odr, ns.
4470: crm micrtic lm, sli xln w/ pin point vuggy por, no odr, ns.
4480: aa, incrs in chlk and chlky lm.
4490: gry xln lm prtly micrtic, well cemntd, no odr, ns.
4500: crm-tan inxln lm, dense, no vis por, lots of gry-brwn chrt, no odr, ns.
4510: crm-gry inxln lm, dense, poor-no por, lots of crm chrt, no odr, ns.
4520: tan-gry inxln lm, dense, poor inxln por, no odr, ns.
4530: lght crm inxln lm, dense, no vis por, no odr, ns.
4540: aa, incrs in gry sh, incrs in drty wht chrt, no odr, ns.
4550: lght-drk tan dense inxln lm, no vis por, no odr, ns.
4560: lght crm inxln lm, dense, lots of wht & crm chrt, no odr, ns.
4570: aa, incrs in chlk.
4580: crm, wht & gry chrt and chrty lm, lots of sub-chlky lm, ns.
4590: aa, no sig change.
4600: crm-tan xln lm, no vis por, lots of crm sub-chlky lm, no odr, ns.
4610: incrs in gry and maroon sh, crm micrtic lm, well cemntd, incrs in gry and wht chrt, no odr, ns.
4620: lots crm sub-chlky lm, dense, lots of chlky lm, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000
(4576'-2103)
MUNCIE
<========
0
10
ROP (min/ft)
Gamma (API)
10
150
6/26/2013
mud info.
wt: 9.4
Funnel Vis. 53
Filtrate API: 13.2
Chloride 8,800


LCM # 2
bit change total time spent on tripping: 5 hours.
sure shot; straight hole survey. 3/4 degree.
(4699'-2206) STARK SH. <========
PUMP PRESSURE 900+
PUMP PRESSURE 900+
MBC representative on site repairing gas sniffer.
4630: aa, incrs chlk and chlky lm.
4640: tan-drty crm xln lm, sli foss, poor por, no odr, ns.
4650: incrs in gry and maroon sh, incrs in crm chlky lm, lm aa, no odr, ns.
4660: aa, incrs in tan cors xln lm, no odr, ns.
4670: incrs in gry sh, incrs lght gry inxln lm, dense, no vis por, incrs in gry-brwn foss chrt, no odr, ns.
4680: mstly crm xln lm, dense, poor-no por, lots of tan foss lm, well cemntd, no odr, ns.
4690: aa, shw of drk tan ool lm, cemnt flooded, no odr, ns.
4700: incrs in gry sh, mstly lght crm sub-chlky lm, no odr, ns.
4710: mstly gry sh, lots of drk crm inxln lm, semi dense, poor-no por, no odr, ns.
4720: incrs in drk gry sh, lots of tan sli foss xln lm, dense, no vis por, no odr, ns.
4730: aa w/ a few chps of blk sh.
4740: v. gummy sample, mstl gry sh & crm sub-chlky lm.
4750: incrs in blk sh, mstly drk tan xln lm, poor por, no odr, ns.
4760: mstly gry dense inxln lm, no vis por, few drk tan ool lm, cemnt flooded, no odr, ns.
4770: lm aa, lots of blk carb sh, lots of drk gry chrt, no odr, ns.
4780: lots of blk carb sh, crm inxln lm, dense, lots of crm chrt - chrty lm, no odr, ns.
4790: lght gry-brwn fn xln lm, no vis por, no odr, ns.
4800: aa, incrs in wht chlk.
4810: lots of wht chlk, incrs in blk carb sh & blk chrt.
4820: decrse in blk sh, mstly tan-gry inxln lm, v. dense, lots of gry chrt, no odr, ns.
4830: gry-tan inxn lm, dense, no vis por, no odr, ns.
4840: aa, incrs in gry sh.
4650
4700
4750
4800
0
10
ROP (min/ft)
Gamma (API)
10
150
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000



6/27/2013
mud info.
wt: 9.35
Funnel Vis. 54
Filtrate API: 10.0
Chloride 8,900
LCM # 2

6/28/2013
mud info.
wt: 9.4
Funnel Vis. 47
Filtrate API: 10.6
Chloride 10,000
LCM # 2

6/29/2013
mud info.
wt: 9.2
Funnel Vis. 45
Filtrate API: 10.8
Chloride 9,000
LCM # 2

DST #1: 4918' - 4977' (Pawnee)
30-30-30-30
Recovered 72' mud cut water (30% mud, 70% water).
IFP: 40-92 FFP: 69-86
SIP: 1380-1343/

30MIN: crm-brwn foss lm, cemnt floodeded, poor-no por, lots of gry semi chrty lm, no odr, nsfo. 60MIN: mstly crm fn xln lm, lots gry to brwn inxln lm, sli foss, cemnt flooded, no vis por, no odr.

DST #2: 4986' - 5082' (Cherokee/Huck) GTS immediately on second open. 1/4" choke. Initial flow period 30".Gauged N/A Final flow period 60"Gauged: 45 mcf/10", 45 mcf/20", 38 mcf/30", 35 mcf 40", 35 mcf/50", 35 mcf/60". Recovered 4873' gas in pipe and 104' gas cut mud (2% gas, 98% mud). IFP:88-88#/30" ISIP:1199#/45" FFP:90-100#/60" FSIP:1264#/60"

30MIN: lots of gry and blk carb sh, mstly brwn fn xln lm, no vis por, gry inxln lm, w/ poor-no por, no odr, ns. 60MIN: incrs in gry foss chrt, incrs in grysh/green sh, lm as 30 min sample, no odr, ns.

4850: mstly tanish/gry xln lm, v. foss, poor por, no odr, ns.

4860: tan inxln lm, dense, lots of blk & wht chrt, no odr, ns.

4870: tan-crm inxln lm, poor inxln por, few ool lm, cemnt flooded, incrs in ncrm sub-chlky lm, no odr, ns.

4880: mstly crm ool lm, cemnt flooded, no vis por, lots of blk and crm chrt, no odr, ns.

4890: aa, incrs in gry chrty lm, incrs in gry and green sh.

4900: gummy sample, mstly gry sh, lots of crm inxln lm, sli foss, no odr, ns.

4910: mstly crm fn xln lm, dense, no vis por, no odr, ns.

4920: aa, incrs in tan and crm chert,, no odr, ns.

4930: chrt aa, mstly hrd sub-chlky lm, no odr, ns.

4940: aa, tan inxln lm, v. dense, shw of blk carb sh & blk chrt, ns.

4950: mstly tan fn xln lm, cemnt flooded fracs, incrs in wht and gry chrt, no odr, ns.

4960: shw of blk carb gasy sh, mstly light crm chlky lm, lots of crm xln lm, foss, poor por, no odr, ns.

4970: mstly crm-tan inxln lm, fn xln in prt, poor-no por, no odr, ns.

4980: tan pack stn lm, sli xln, poor-fair por, few gas bubbls upon brking, no odr, nsfo.

4990: incrs in get and green sh, lots of tan inxln lm, poor inxln por, lots of drk crm micrtic lm, well cemntd, no odr, ns.

5000: sh aa, brwn-gry inxln lm, sli foss, v. dense, no odr, ns.

5010: mstly gry and green sh, few blk carb sh & blk chrt, brwn inxln lm, v. dense, no vis por, no odr, ns.

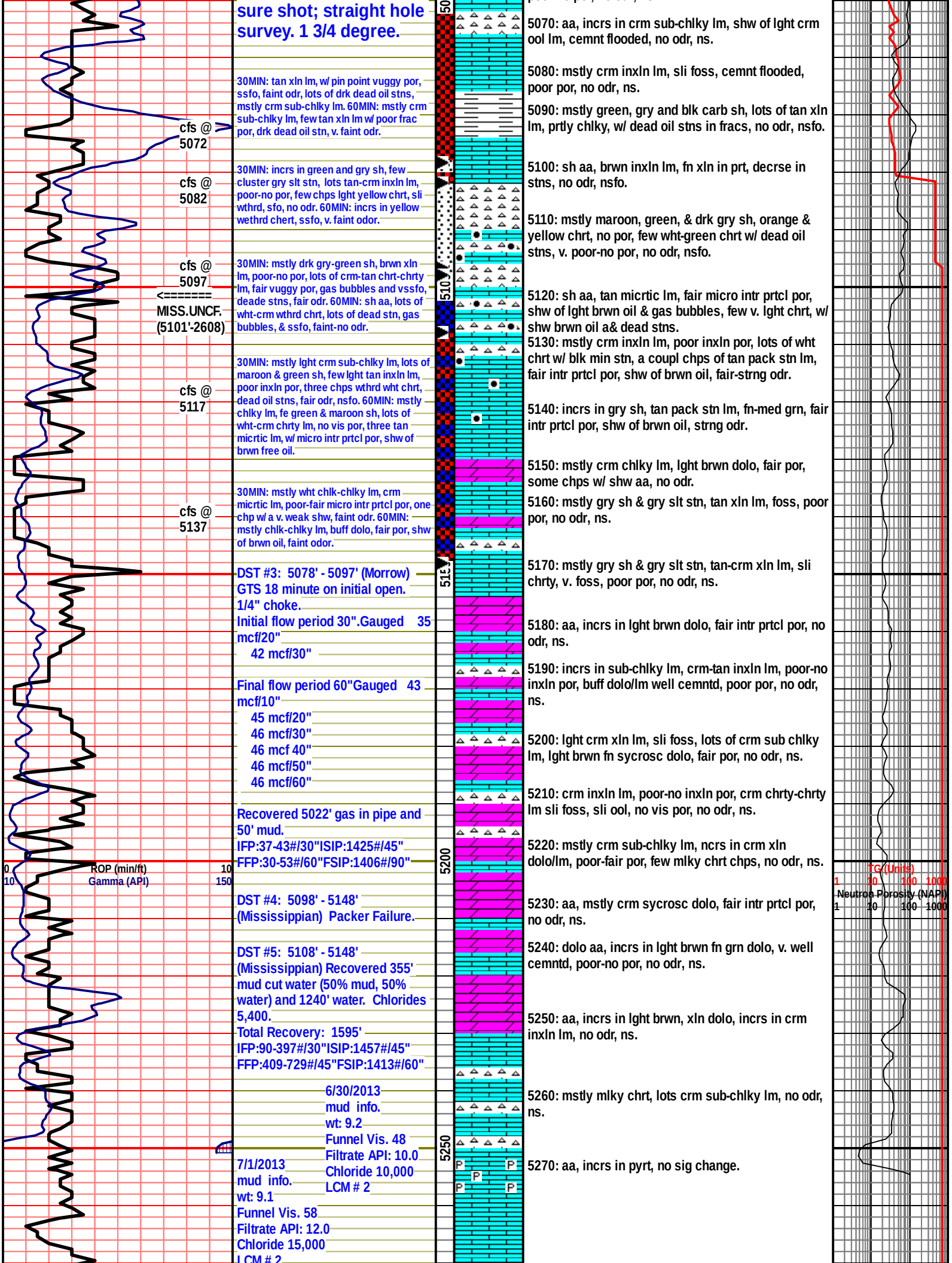
5020: sh aa, incrs in brwn chrt, lots of brwn inxln lm, v. dense, no odr, ns.

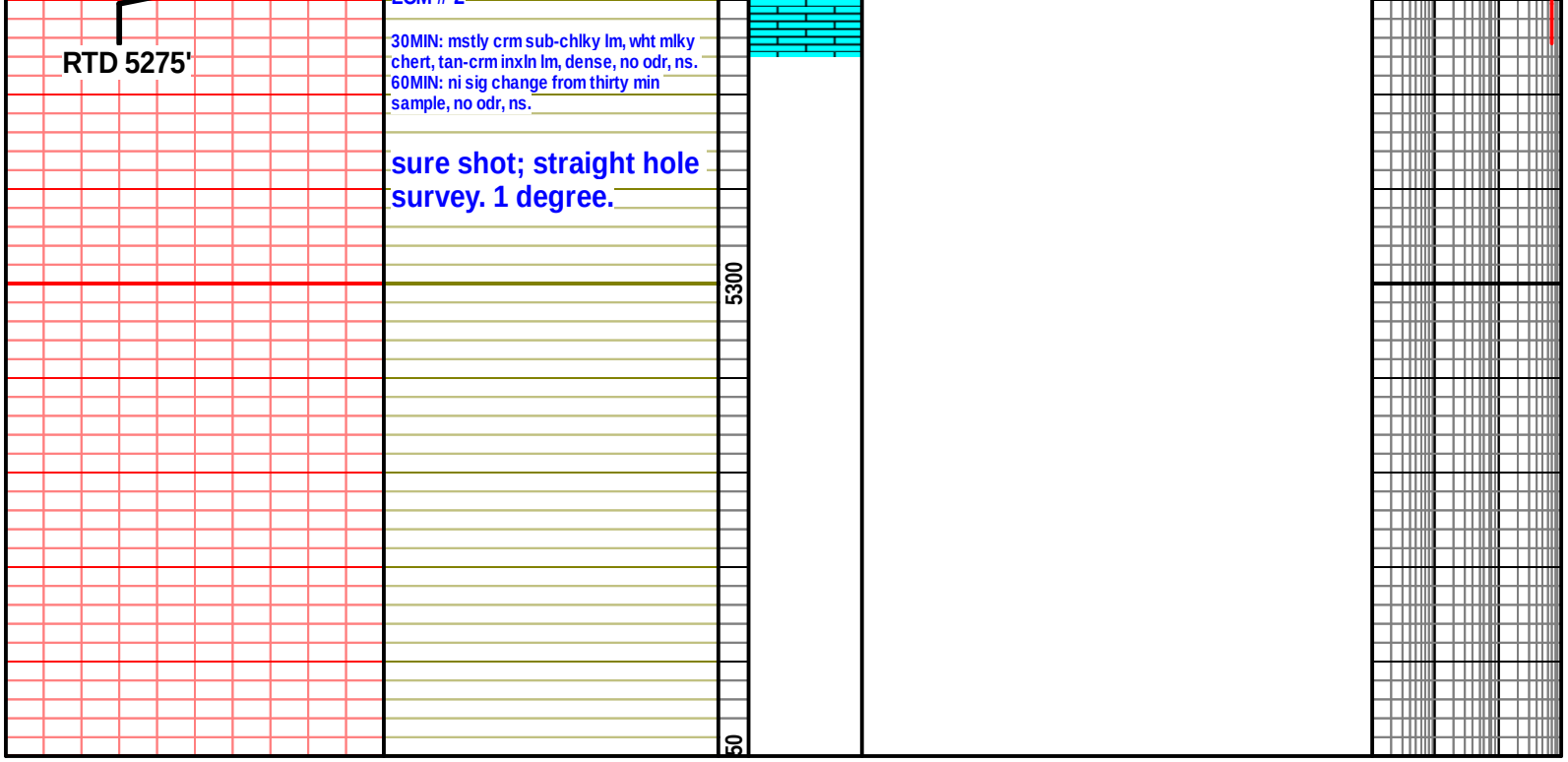
5030: incrs in blk carb sh, mstly brwn-crm xln lm, dense, poor-no por, few drk tan ool lm, cement flooded, no odr, ns.

5040: gry inxln lm, dense, nodr, ns.

5050: incrs in green sh, mstly drk tan-gry inxln lm, tan lm sli foss, cemnt flooded, no odr, ns.

5060: incrs in gry sh, mstly tan foss lm, w/ chert nod, poor-no por, no odr, ns.


sure shot; straight hole survey. 1 3/4 degree.
30MIN: tan xln lm, w/ pin point vuggy por, ssfo, faint odr, lots of drk dead oil stns, mstly crm sub-chlky lm. 60MIN: mstly crm sub-chlky lm, few tan xln lm w/ poor frac por, drk dead oil stn, v. faint odr.
cfs @ 5072
30MIN: incrs in green and gry sh, few cluster gry slt stn, lots tan-crm inxln lm, poor-no por, few chps lght yellow chrt, sli wthrd, sfo, no odr. 60MIN: incrs in yellow wethrd chert, ssfo, v. faint odor.
cfs @ 5082
30MIN: mstly drk gry-green sh, brwn xln lm, poor-no por, lots of crm-tan chrt-chrty lm, fair vuggy por, gas bubbles and vssfo, deade stns, fair odr. 60MIN: sh aa, lots of wht-crm wthrd chrt, lots of dead stn, gas bubbles, & ssfo, faint-no odr.
cfs @ 5097
<======= MISS.UNCF. (5101'-2608)
30MIN: mstly lght crm sub-chlky lm, lots of maroon & green sh, few lght tan inxln lm, poor inxln por, three chps wthrd wht chrt, dead oil stns, fair odr, nsfo. 60MIN: mstly chlky lm, fe green & maroon sh, lots of wht-crm chrty lm, no vis por, three tan micrtic lm, w/ micro intr prtcl por, shw of brwn free oil.
cfs @ 5117
30MIN: mstly wht chlk-chlky lm, crm micrtic lm, poor-fair micro intr prtcl por, one chp w/ a v. weak shw, faint odr. 60MIN: mstly chlk-chlky lm, buff dolo, fair por, shw of brwn oil, faint odor.
cfs @ 5137
DST #3: 5078' - 5097' (Morrow)
GTS 18 minute on initial open.
1/4" choke.
Initial flow period 30".Gauged 35 mcf/20"
42 mcf/30"
Final flow period 60"Gauged 43 mcf/10"
45 mcf/20"
46 mcf/30"
46 mcf 40"
46 mcf/50"
46 mcf/60"
Recovered 5022' gas in pipe and 50' mud.
IFP:37-43#/30"ISIP:1425#/45"
FFP:30-53#/60"FSIP:1406#/90"
DST #4: 5098' - 5148' (Mississippian) Packer Failure.
DST #5: 5108' - 5148' (Mississippian) Recovered 355' mud cut water (50% mud, 50% water) and 1240' water. Chlorides 5,400.
Total Recovery: 1595'
IFP:90-397#/30"ISIP:1457#/45"
FFP:409-729#/45"FSIP:1413#/60"
6/30/2013
mud info.
wt: 9.2
Funnel Vis. 48
Filtrate API: 10.0
Chloride 10,000
LCM # 2
7/1/2013
mud info.
wt: 9.1
Funnel Vis. 58
Filtrate API: 12.0
Chloride 15,000
LCM # 2
0
10
ROP (min/ft)
Gamma (API)
10
150
5070: aa, incrs in crm sub-chlky lm, shw of lght crm ool lm, cemnt flooded, no odr, ns.
5080: mstly crm inxln lm, sli foss, cemnt flooded, poor por, no odr, ns.
5090: mstly green, gry and blk carb sh, lots of tan xln lm, prtly chlky, w/ dead oil stns in fracs, no odr, nsfo.
5100: sh aa, brwn inxln lm, fn xln in prt, decrse in stns, no odr, nsfo.
5110: mstly maroon, green, & drk gry sh, orange & yellow chrt, no por, few wht-green chrt w/ dead oil stns, v. poor-no por, no odr, nsfo.
5120: sh aa, tan micrtic lm, fair micro intr prtcl por, shw of lght brwn oil & gas bubbles, few v. lght chrt, w/ shw brwn oil a& dead stns.
5130: mstly crm inxln lm, poor inxln por, lots of wht chrt w/ blk min stn, a coupl chps of tan pack stn lm, fair intr prtcl por, shw of brwn oil, fair-strng odr.
5140: incrs in gry sh, tan pack stn lm, fn-med grn, fair intr prtcl por, shw of brwn oil, strng odr.
5150: mstly crm chlky lm, lght brwn dolo, fair por, some chps w/ shw aa, no odr.
5160: mstly gry sh & gry slt stn, tan xln lm, foss, poor por, no odr, ns.
5170: mstly gry sh & gry slt stn, tan-crm xln lm, sli chrty, v. foss, poor por, no odr, ns.
5180: aa, incrs in lght brwn dolo, fair intr prtcl por, no odr, ns.
5190: incrs in sub-chlky lm, crm-tan inxln lm, poor-no inxln por, buff dolo/lm well cemntd, poor por, no odr, ns.
5200: lght crm xln lm, sli foss, lots of crm sub chlky lm, lght brwn fn sycrosc dolo, fair por, no odr, ns.
5210: crm inxln lm, poor-no inxln por, crm chrty-chrty lm sli foss, sli ool, no vis por, no odr, ns.
5220: mstly crm sub-chlky lm, ncrs in crm xln dolo/lm, poor-fair por, few mlky chrt chps, no odr, ns.
5230: aa, mstly crm sycrosc dolo, fair intr prtcl por, no odr, ns.
5240: dolo aa, incrs in lght brwn fn grn dolo, v. well cemntd, poor-no por, no odr, ns.
5250: aa, incrs in lght brwn, xln dolo, incrs in crm inxln lm, no odr, ns.
5260: mstly mlky chrt, lots crm sub-chlky lm, no odr, ns.
5270: aa, incrs in pyrt, no sig change.
5000
5050
5100
5150
5200
5250
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


RTD 5275'
30MIN: mstly crm sub-chlky lm, wht mlky chert, tan-crm inxln lm, dense, no odr, ns.
60MIN: ni sig change from thirty min sample, no odr, ns.
sure shot; straight hole survey. 1 degree.
5300
50