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

Well Name:	**#1BLEW**		
Location:	**SEC 11-TOWNSHIP 28S- RANGE 23W FORD COUNTY**		
License Number:	**API 15-057-20902**	**Region:**	**KANSAS**
Spud Date:	**7/05/2013**	**Drilling Completed:**	**7/16/2013**
Surface Coordinates:	**1700' FNL & 985' FWL**		
Bottom Hole Coordinates:	**Deviation Surveys are detailed through out the Geo-Report.**		
Ground Elevation (ft):	**2430'**	**K.B. Elevation (ft):**	**2430'**
Logged Interval (ft):	**3400 To: 5210**	**Total Depth (ft):**	**5210**
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 ENERGY RIG# 1)
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: 1440'+1000	**Anhydrite: 1438'+1002**
B/Anhydrite: 1470'+970	**B/Anhydrite: 1468'+972**
Stotler: 3546'-1106	**Stotler: 3546'-1106**
Heebner: 4215'-1775	**Heebner: 4215'-1775**
Lansing: 43859'-1919	**Lansing: 4359'-1919**
Muncie Sh: 4548'-2108	**Muncie Sh: 4548'-2108**
Stark Sh: 4698'-2258	**Stark Sh: 4695'-2255**
Hush Sh: 4743'-2303	**Hush Shale: 4740'-2300**
BKC: 4773'-2333	**BKC: 4768'-2328**
Marmaton: 4830'-2390	**Marmaton: 4831'-2391**
Altamont: 4860'-2420	**Altamont: 4860'-2420**
Pawnee: 4903'-2463	**Pawnee: 4901'-2461**
Cherokee Sh: 4951'-2511	**Cherokee Sh: 4947'-2507**
Huck: 5032'-2592	**Huck: 5032'-2592**
Atoka: 5045'-2605	**Atoka: 5043'-2603**
Morrow: 5061'-2621	**Morrow: 5046'-2606**
Miss: 5087'-2647	**Miss: 5083'-2643**
RTD: 5210'-2770	**LTD: 5210'-2770**

DAILY DRILLING REPORT:

DATE	**DEPTH:**
7/05	**364'**
7/06	**750'**
7/07	**2470'**
7/08	**3210'**
7/09	**3845'**
7/10	**4510'**
7/11	**4900'**
7/12	**4918'**
7/13	**4980'**
7/14	**5053'**
7/15	**5082'**
7/16	**5210**

Misc.

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

RIG: VAL ENERGY, INC. #1
TOOL PUSHER: RICK SMITH
MUD: MUD CO. (JUSTIN WHITING)
GAS DETECTOR: MBC

DRILL STEM TEST'S: SUPERIOR TESTERS INC.

LOGS: NABORS (JASON CAPPELLUCCI)

OFFICE: PETER FIORINI

Comments

Moved in and rigged up. Spud at 7:00 a.m. Ran 8 jts new 23# 8-5/8" surface casing. Tally at 351.08', set at 364'. Cemented with 250 sacks common, 2% gel, 3% cc. Cement circulated. Plug down at 3:15 p.m. Drilled out plug at 11:15 p.m.

AFTER THE RESULTS OF SAMPLE LOGGING, ELECTRIC LOGGING, AND ALL DST TESTS ANALYSIS & CALCULATIONS; IT WAS DECIDED TO RUN 5 1/2 INCH PRODUCTION CASING TO FURTHER TEST THE #1 BLEW FOR GAS & OIL COMMERICAL QUANTITIES.

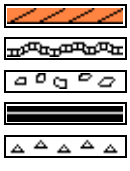
Ran 5 ½" 15.5# new production casing, set at 5207'. Port collar at 1388'. Insert at 5186'. Pumped 500 gallons mud flush. Cemented casing with 250 sacks OWC
+ 10% Salt + 2% Gel + 0.25% CDI-26 + 5# per sack KolSeal. Plug down at 12:30 p.m. Plugged rat hole with 30 sacks, and mouse hole with 20 sacks.

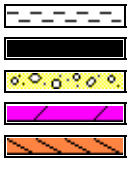
Well Log Surveys BY: NABORS. Compensated Denisty/ Neutron Log, Dual Induction.

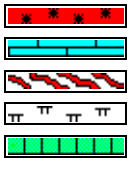
SAMPLES WILL BE DEPOSITED WITH KANSAS GEOLOGICAL SURVEY.

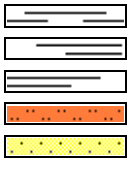
RESPECTFULLY SUBMITTED
Adam M. A. Eldani

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

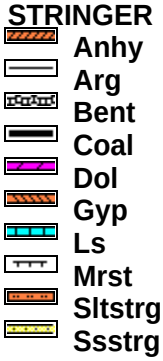
FOSSIL


Algae
Amph

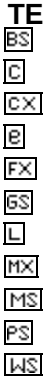

Belm
Bioclst
Brach
Bryozoa
Cephal
Coral
Crin
Echin
Fish
Foram
Fossil
Fuss
Gastro
Oolite
Oomold
Ostra
Pelec

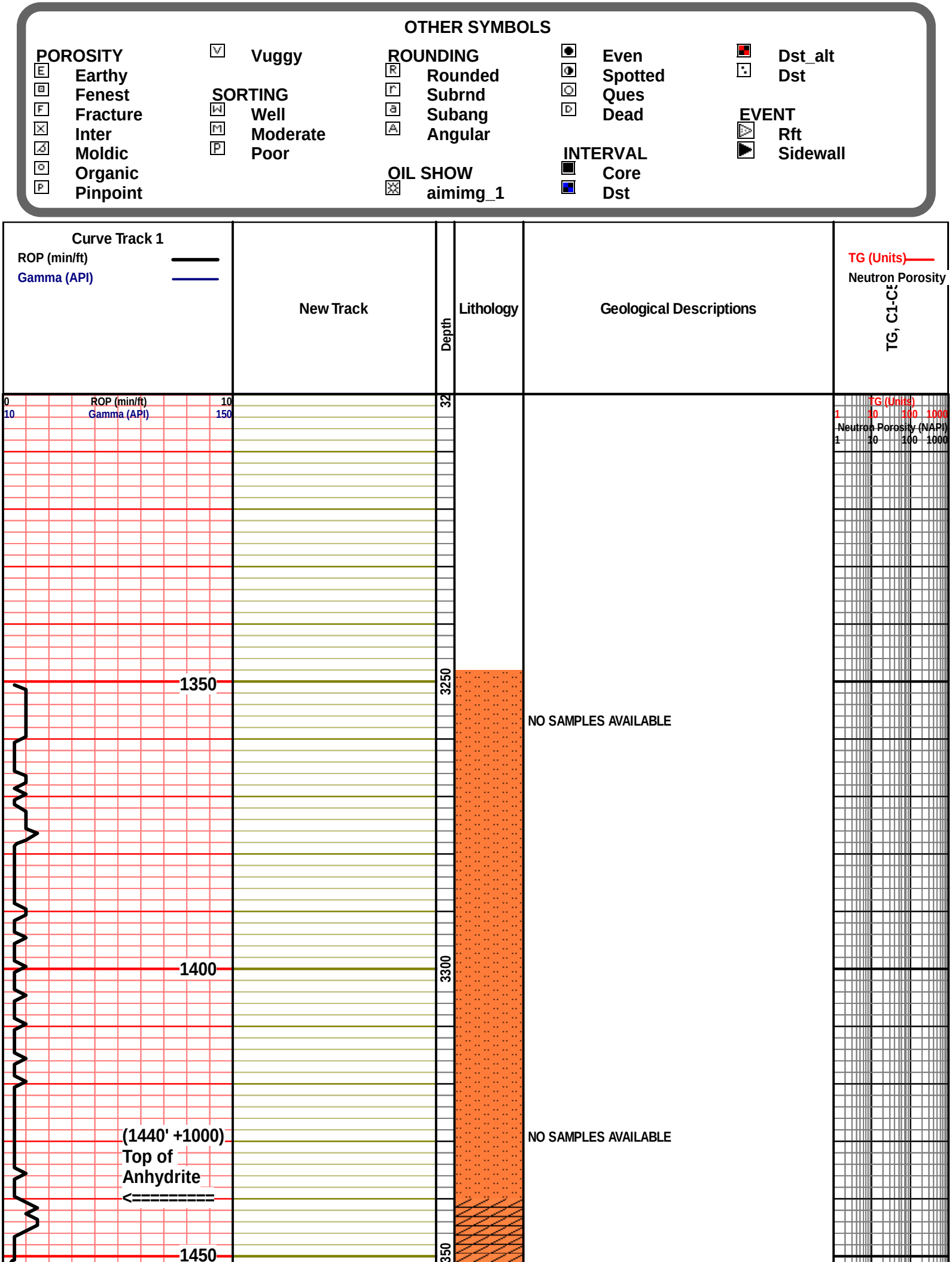

Pellet
Pisolite
Plant
Strom

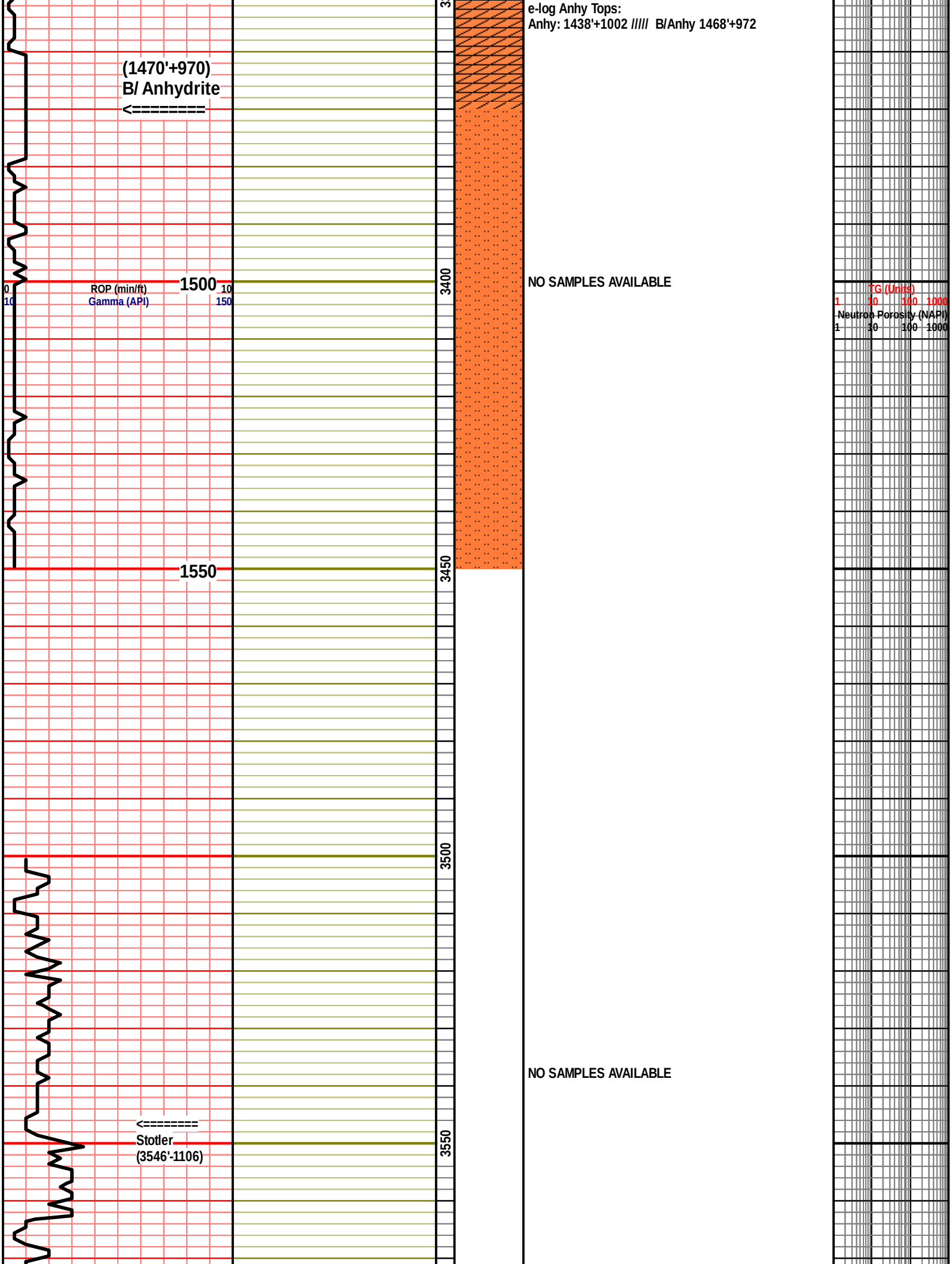
STRINGER

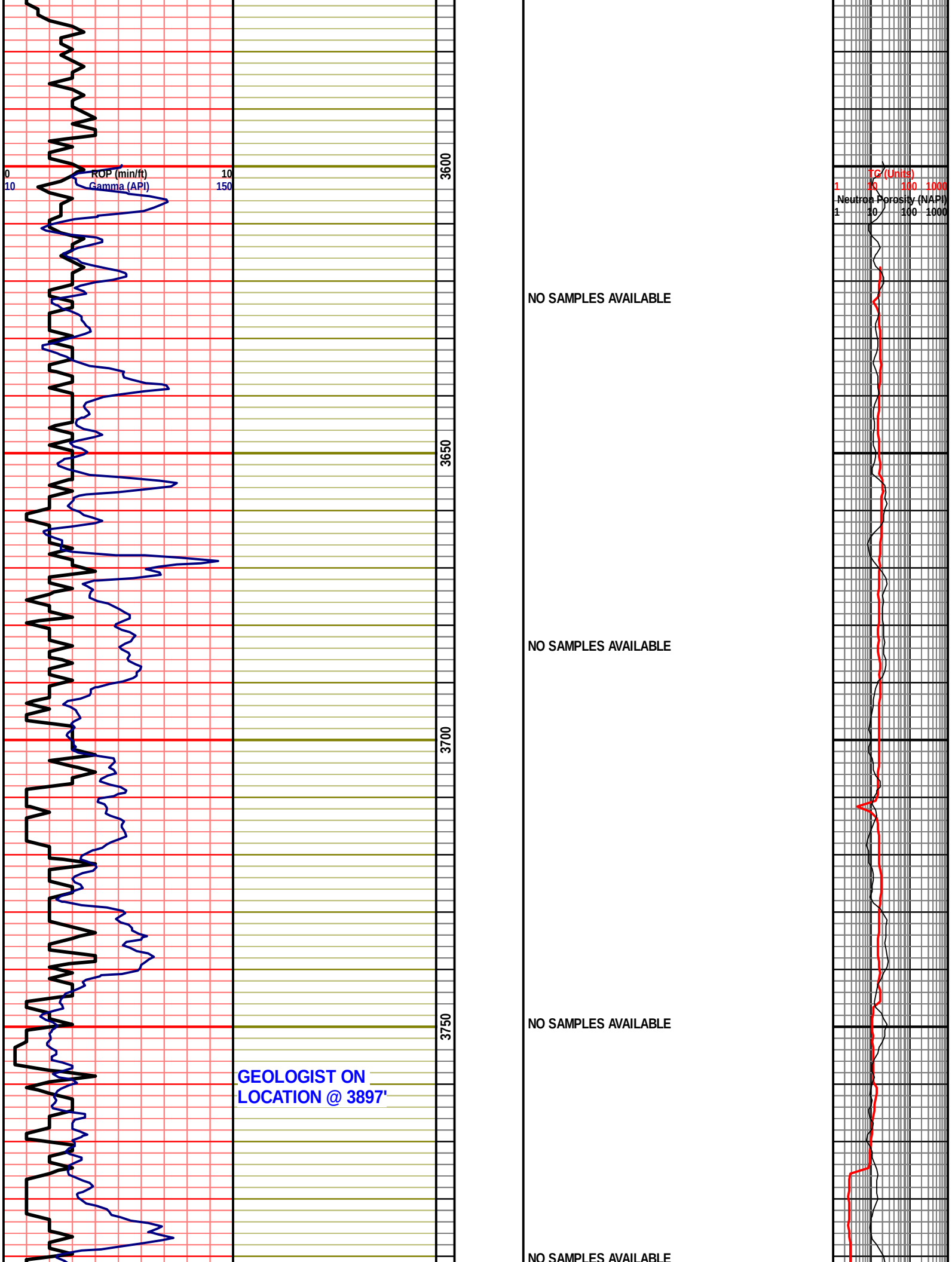

Anhy
Arg
Bent
Coal
Dol
Gyp
Ls
Mrst
Sltstrg
Ssstrg

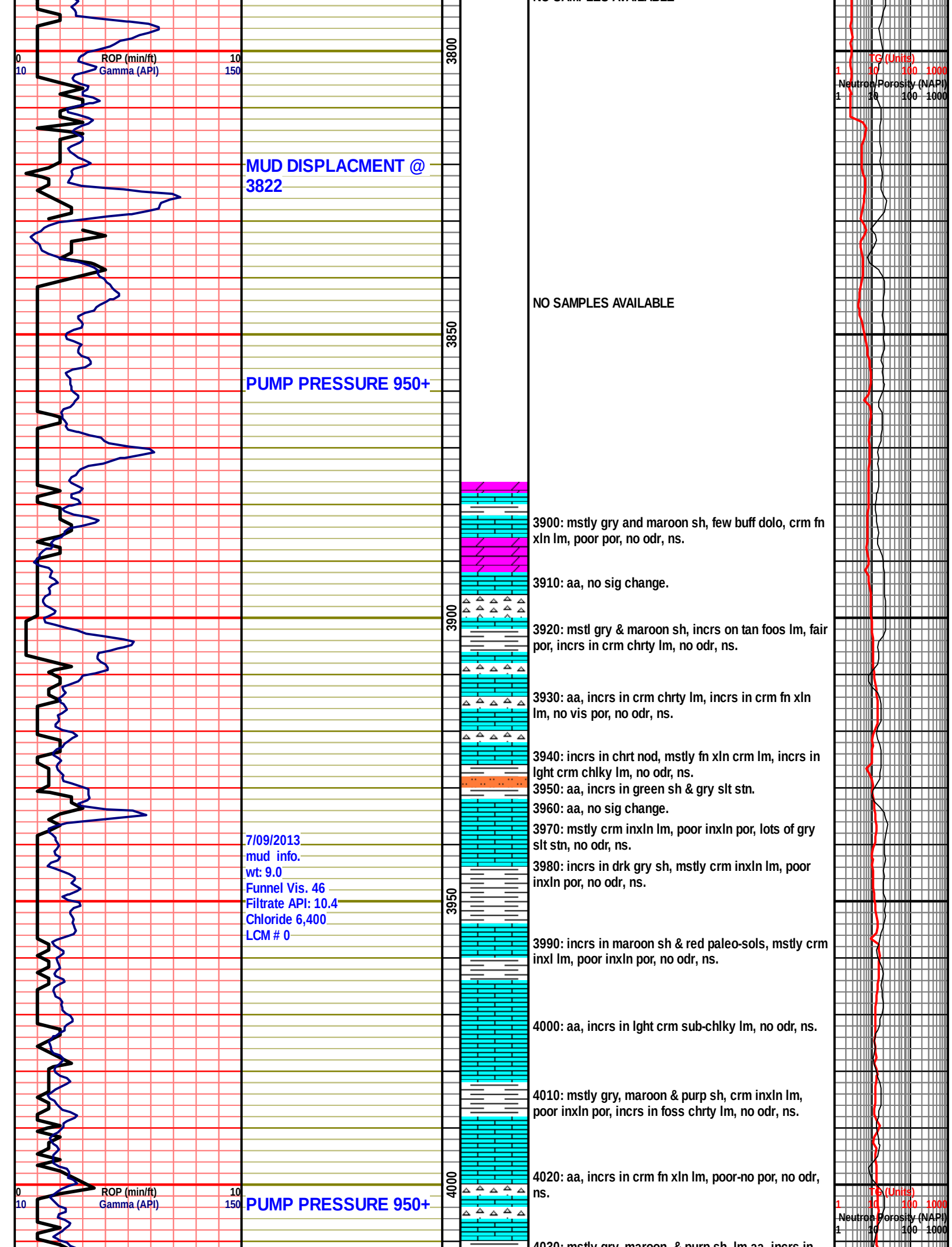
TEXTURE

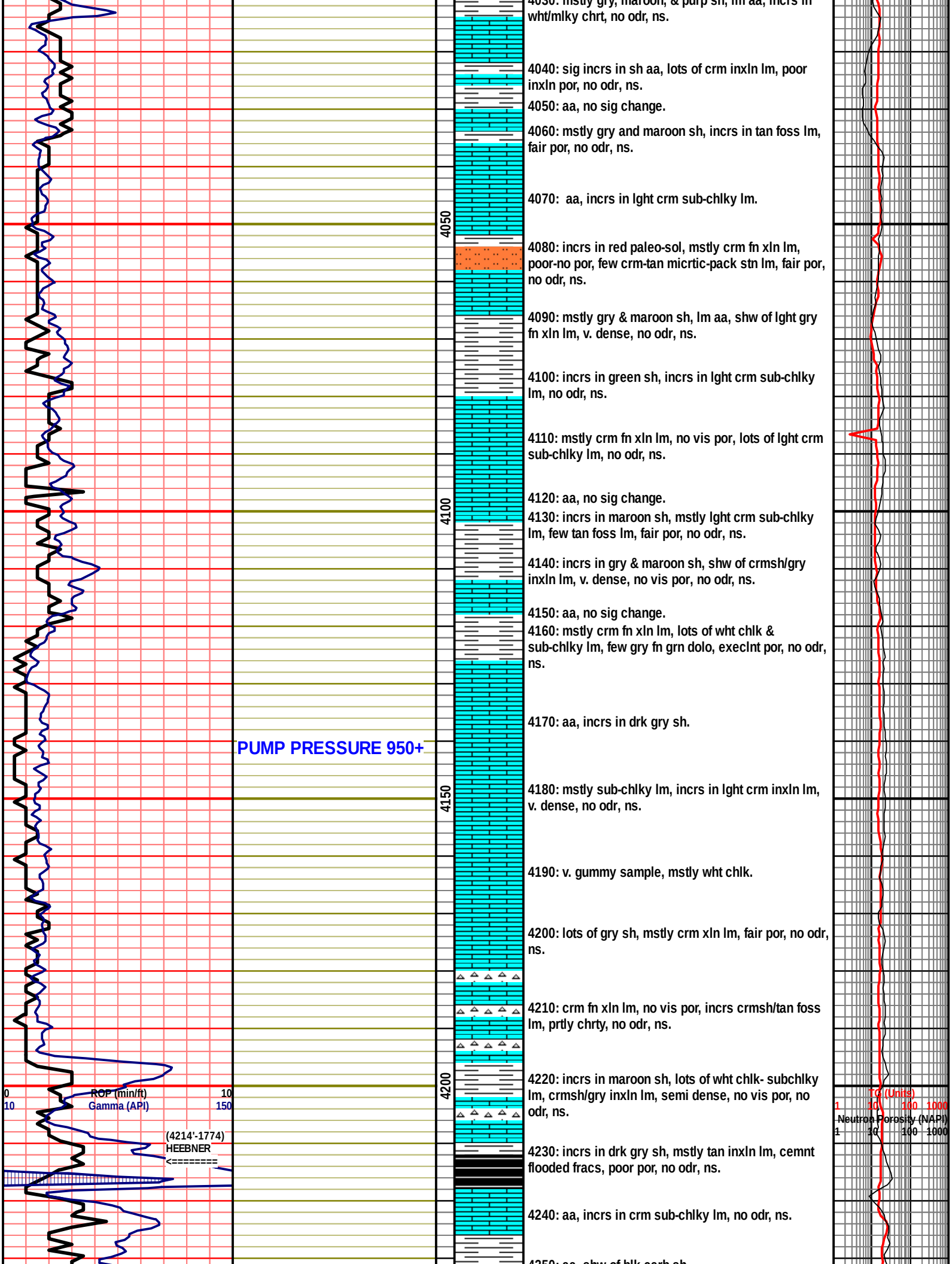

Boundst
Chalky
Cryxln
Earthy
Finexln
Grainst
Lithogr
Microxln
Mudst
Packst
Wackest

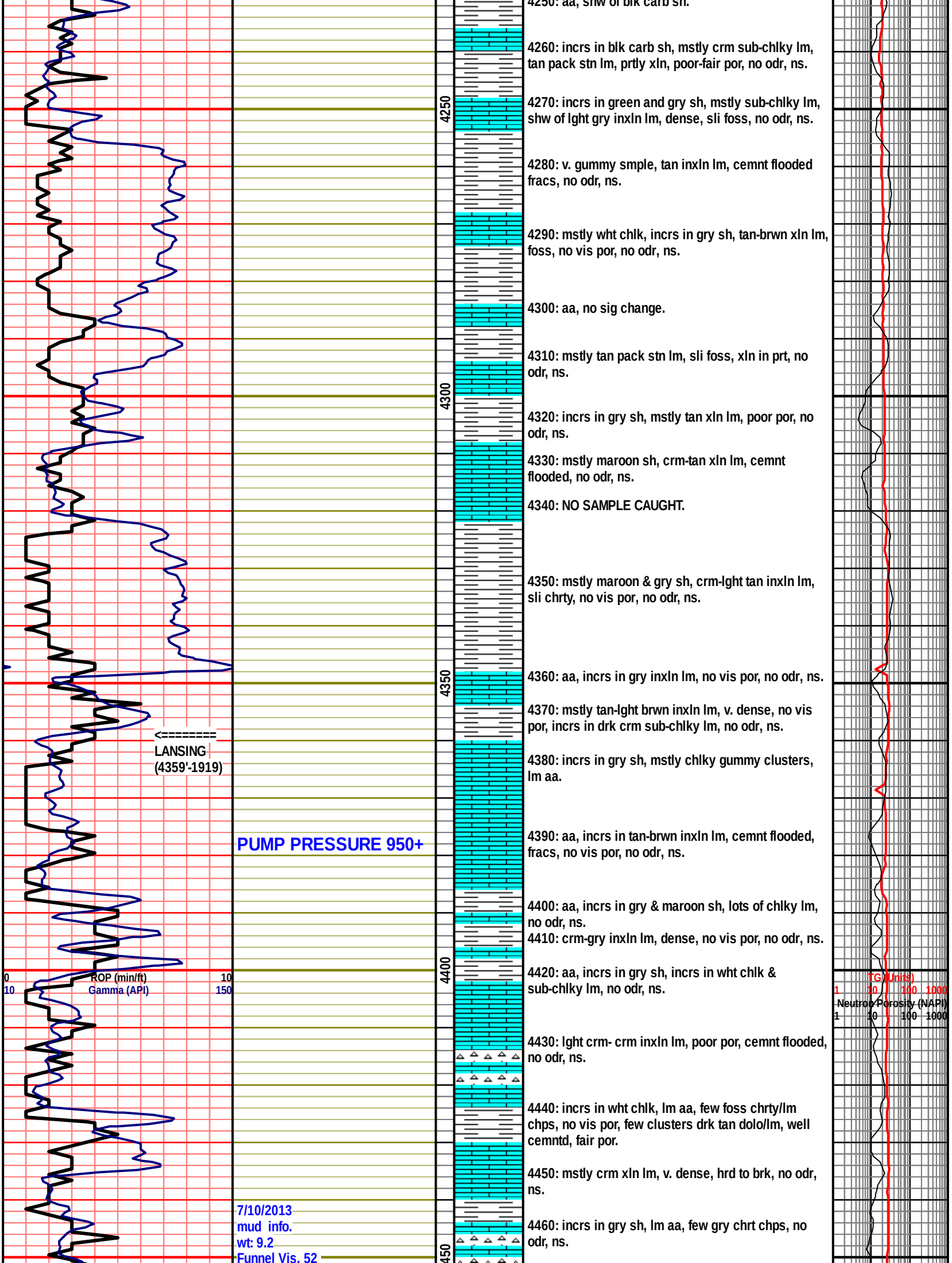

OTHER SYMBOLS
POROSITY
Earthy
Fenest
Fracture
Inter
Moldic
Organic
Pinpoint
Vuggy
SORTING
Well
Moderate
Poor
ROUNDING
Rounded
Subrnd
Subang
Angular
OIL SHOW
aimimg_1
Even
Spotted
Ques
Dead
INTERVAL
Core
Dst
Dst_alt
Dst
EVENT
Rft
Sidewall
Curve Track 1
ROP (min/ft)
Gamma (API)
New Track
Depth
Lithology
Geological Descriptions
TG (Units)
Neutron Porosity
TG, C1-C5
0
10
ROP (min/ft)
Gamma (API)
10
150
32
3250
3300
350
1350
1400
1450
(1440' +1000)
Top of
Anhydrite
<=========
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000

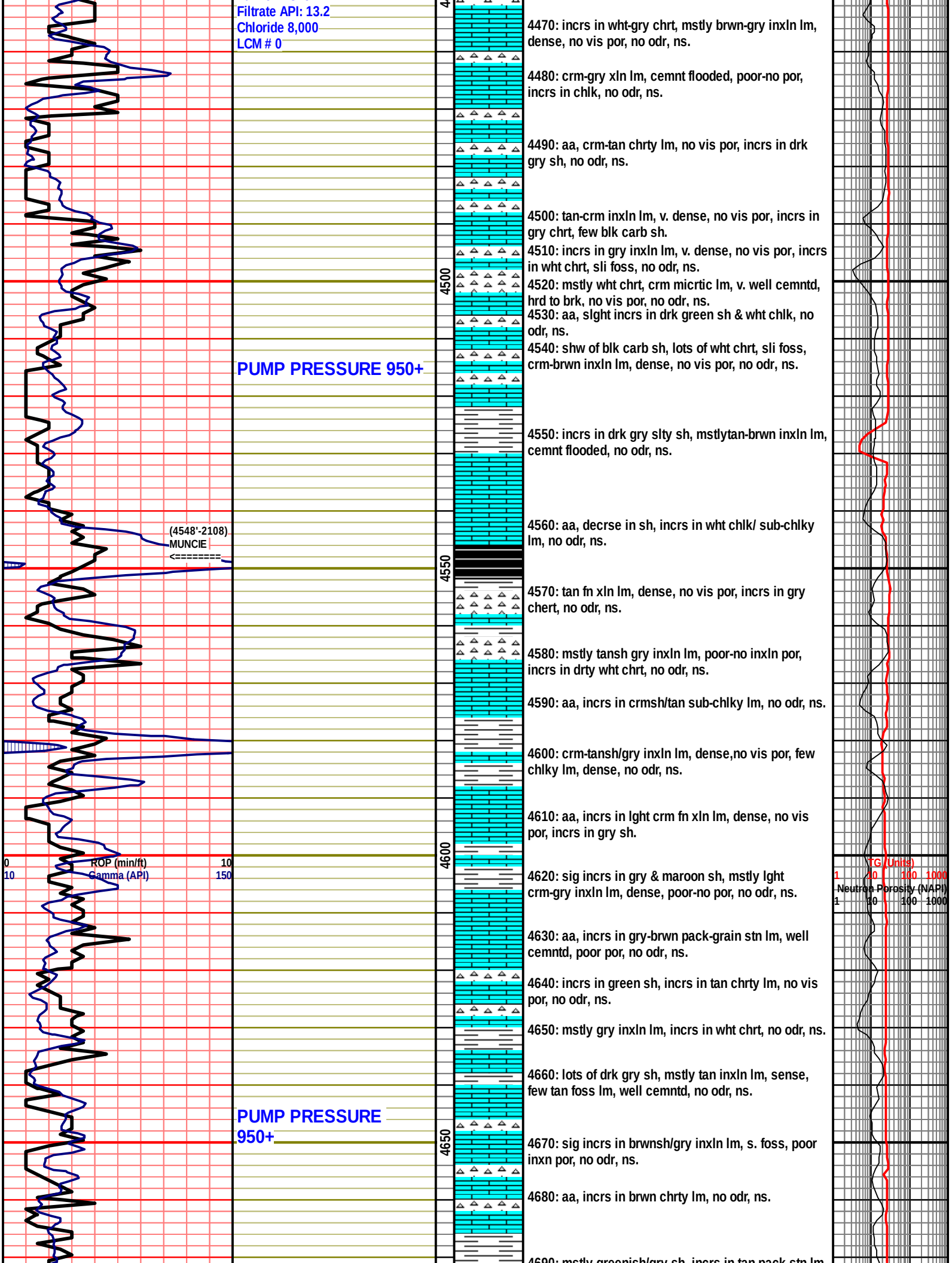

e-log Anhy Tops:
Anhy: 1438'+1002 ///// B/Anhy 1468'+972
(1470'+970)
B/ Anhydrite
<========
NO SAMPLES AVAILABLE
0
10
ROP (min/ft)
Gamma (API)
1500
10
150
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000
1550
3400
3450
3500
3550
NO SAMPLES AVAILABLE
<========
Stotler
(3546'-1106)

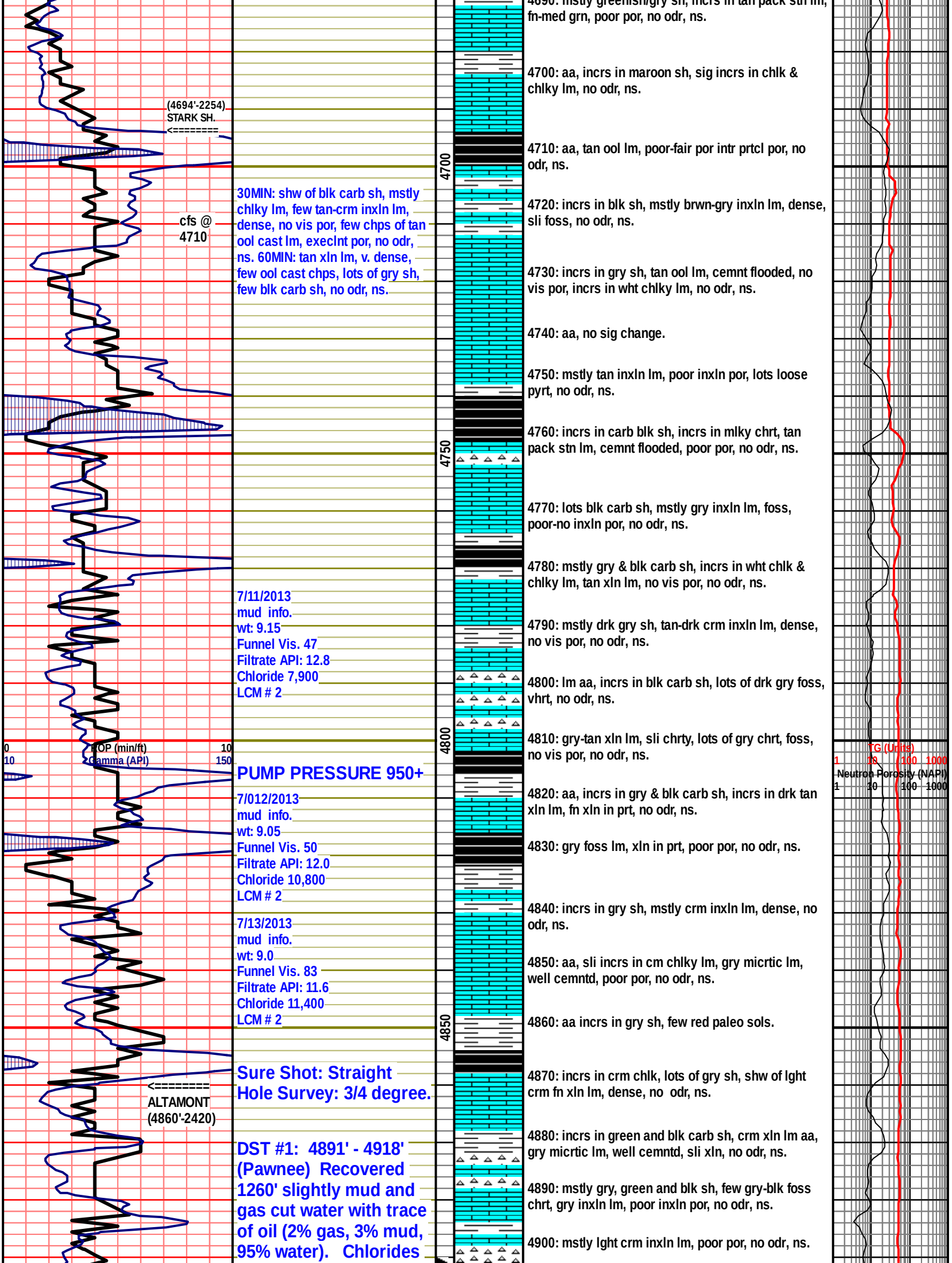

0
ROP (min/ft)
10
10
Gamma (API)
150
3600
3650
3700
3750
GEOLOGIST ON
LOCATION @ 3897'
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
NO SAMPLES AVAILABLE
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000

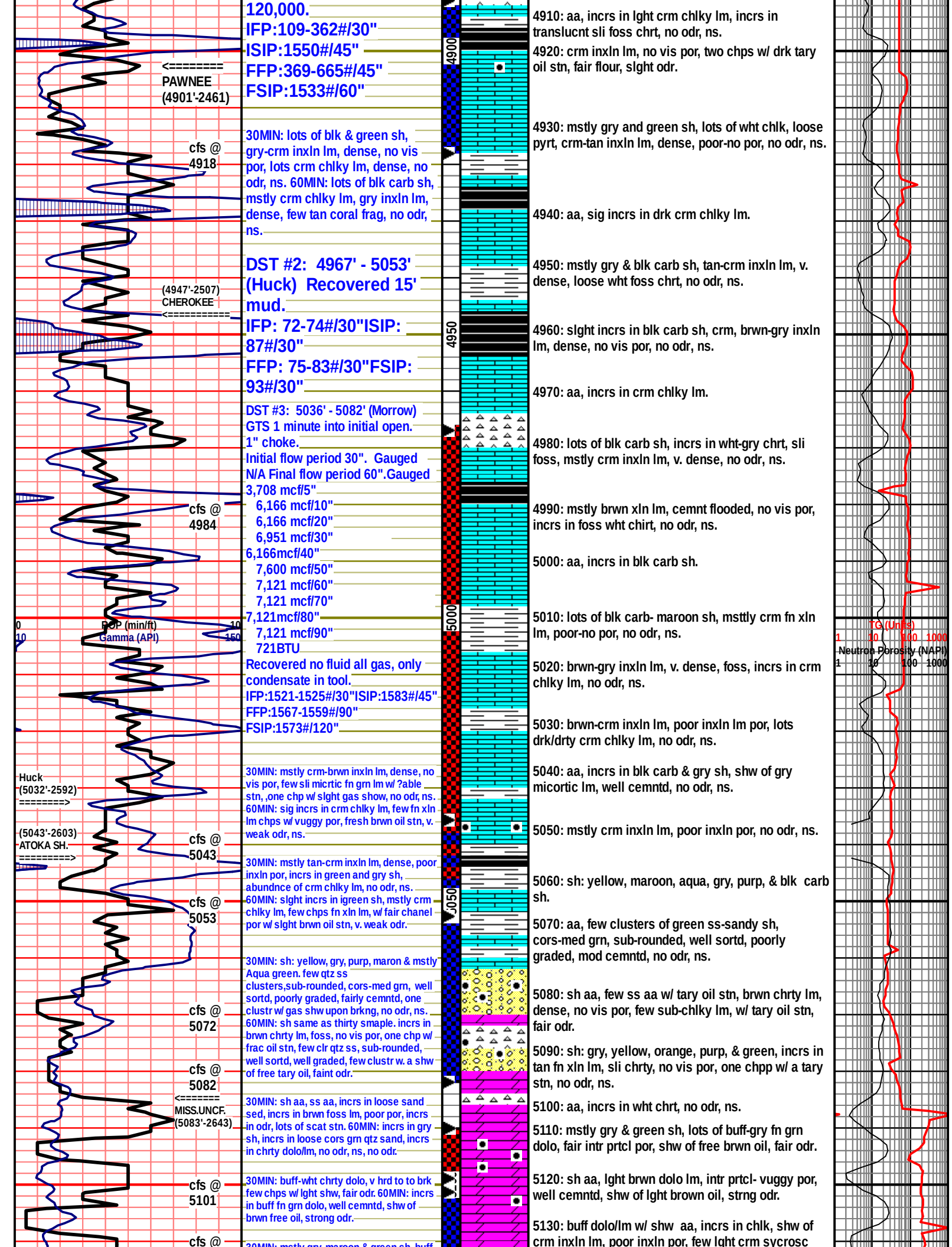

0
10
ROP (min/ft)
Gamma (API)
10
150
3800
3850
3900
3950
4000
MUD DISPLACMENT @ 3822
PUMP PRESSURE 950+
7/09/2013
mud info.
wt: 9.0
Funnel Vis. 46
Filtrate API: 10.4
Chloride 6,400
LCM # 0
PUMP PRESSURE 950+
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000
NO SAMPLES AVAILABLE
3900: mstly gry and maroon sh, few buff dolo, crm fn xln lm, poor por, no odr, ns.
3910: aa, no sig change.
3920: mstl gry & maroon sh, incrs on tan foos lm, fair por, incrs in crm chrty lm, no odr, ns.
3930: aa, incrs in crm chrty lm, incrs in crm fn xln lm, no vis por, no odr, ns.
3940: incrs in chrt nod, mstly fn xln crm lm, incrs in lght crm chlky lm, no odr, ns.
3950: aa, incrs in green sh & gry slt stn.
3960: aa, no sig change.
3970: mstly crm inxln lm, poor inxln por, lots of gry slt stn, no odr, ns.
3980: incrs in drk gry sh, mstly crm inxln lm, poor inxln por, no odr, ns.
3990: incrs in maroon sh & red paleo-sols, mstly crm inxl lm, poor inxln por, no odr, ns.
4000: aa, incrs in lght crm sub-chlky lm, no odr, ns.
4010: mstly gry, maroon & purp sh, crm inxln lm, poor inxln por, incrs in foss chrty lm, no odr, ns.
4020: aa, incrs in crm fn xln lm, poor-no por, no odr, ns.

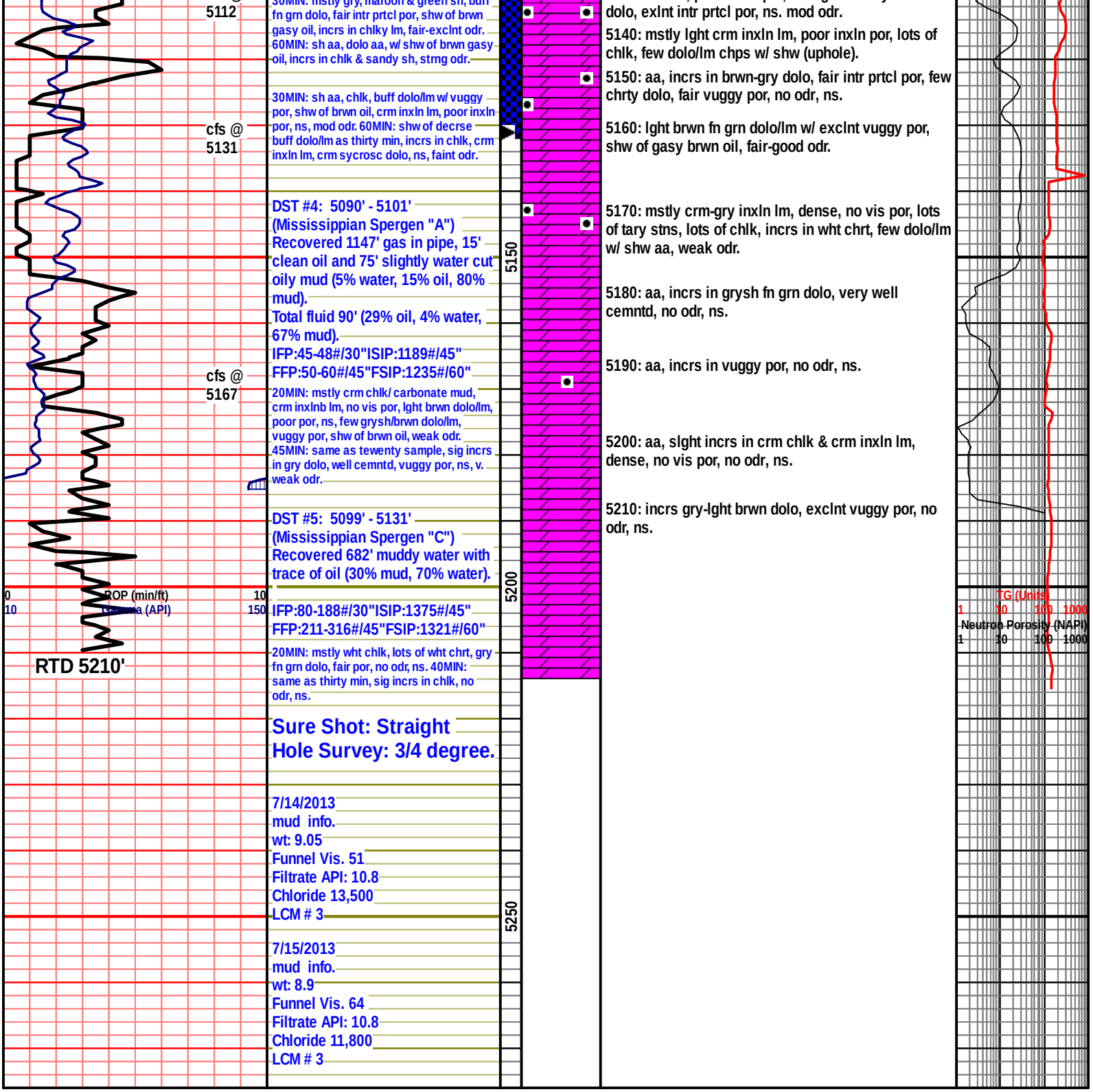

4030: mstly gry, maroon, & purp sh, lm aa, incrs in wht/mlky chrt, no odr, ns.
4040: sig incrs in sh aa, lots of crm inxln lm, poor inxln por, no odr, ns.
4050: aa, no sig change.
4060: mstly gry and maroon sh, incrs in tan foss lm, fair por, no odr, ns.
4070: aa, incrs in lght crm sub-chlky lm.
4080: incrs in red paleo-sol, mstly crm fn xln lm, poor-no por, few crm-tan micrtic-pack stn lm, fair por, no odr, ns.
4090: mstly gry & maroon sh, lm aa, shw of lght gry fn xln lm, v. dense, no odr, ns.
4100: incrs in green sh, incrs in lght crm sub-chlky lm, no odr, ns.
4110: mstly crm fn xln lm, no vis por, lots of lght crm sub-chlky lm, no odr, ns.
4120: aa, no sig change.
4130: incrs in maroon sh, mstly lght crm sub-chlky lm, few tan foss lm, fair por, no odr, ns.
4140: incrs in gry & maroon sh, shw of crmsh/gry inxln lm, v. dense, no vis por, no odr, ns.
4150: aa, no sig change.
4160: mstly crm fn xln lm, lots of wht chlk & sub-chlky lm, few gry fn grn dolo, execInt por, no odr, ns.
4170: aa, incrs in drk gry sh.
4180: mstly sub-chlky lm, incrs in lght crm inxln lm, v. dense, no odr, ns.
4190: v. gummy sample, mstly wht chlk.
4200: lots of gry sh, mstly crm xln lm, fair por, no odr, ns.
4210: crm fn xln lm, no vis por, incrs crmsh/tan foss lm, prtly chrty, no odr, ns.
4220: incrs in maroon sh, lots of wht chlk- subchlky lm, crmsh/gry inxln lm, semi dense, no vis por, no odr, ns.
4230: incrs in drk gry sh, mstly tan inxln lm, cemnt flooded fracs, poor por, no odr, ns.
4240: aa, incrs in crm sub-chlky lm, no odr, ns.
4050
4100
4150
4200
PUMP PRESSURE 950+
0
10
ROP (min/ft)
Gamma (API)
10
150
(4214'-1774)
HEEBNER
<========
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


4250: aa, shw of blk carb sh.
4260: incrs in blk carb sh, mstly crm sub-chlky lm, tan pack stn lm, prtly xln, poor-fair por, no odr, ns.
4270: incrs in green and gry sh, mstly sub-chlky lm, shw of lght gry inxln lm, dense, sli foss, no odr, ns.
4280: v. gummy smple, tan inxln lm, cemnt flooded fracs, no odr, ns.
4290: mstly wht chlk, incrs in gry sh, tan-brwn xln lm, foss, no vis por, no odr, ns.
4300: aa, no sig change.
4310: mstly tan pack stn lm, sli foss, xln in prt, no odr, ns.
4320: incrs in gry sh, mstly tan xln lm, poor por, no odr, ns.
4330: mstly maroon sh, crm-tan xln lm, cemnt flooded, no odr, ns.
4340: NO SAMPLE CAUGHT.
4350: mstly maroon & gry sh, crm-lght tan inxln lm, sli chrty, no vis por, no odr, ns.
4360: aa, incrs in gry inxln lm, no vis por, no odr, ns.
4370: mstly tan-lght brwn inxln lm, v. dense, no vis por, incrs in drk crm sub-chlky lm, no odr, ns.
4380: incrs in gry sh, mstly chlky gummy clusters, lm aa.
4390: aa, incrs in tan-brwn inxln lm, cemnt flooded, fracs, no vis por, no odr, ns.
4400: aa, incrs in gry & maroon sh, lots of chlky lm, no odr, ns.
4410: crm-gry inxln lm, dense, no vis por, no odr, ns.
4420: aa, incrs in gry sh, incrs in wht chlk & sub-chlky lm, no odr, ns.
4430: lght crm- crm inxln lm, poor por, cemnt flooded, no odr, ns.
4440: incrs in wht chlk, lm aa, few foss chrty/lm chps, no vis por, few clusters drk tan dolo/lm, well cemntd, fair por.
4450: mstly crm xln lm, v. dense, hrd to brk, no odr, ns.
4460: incrs in gry sh, lm aa, few gry chrt chps, no odr, ns.
4250
4300
4350
4400
4450
<========
LANSING
(4359'-1919)
PUMP PRESSURE 950+
7/10/2013
mud info.
wt: 9.2
Funnel Vis. 52
0
ROP (min/ft)
10
10
Gamma (API)
150
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


Filtrate API: 13.2
Chloride 8,000
LCM # 0
PUMP PRESSURE 950+
(4548'-2108)
MUNCIE
<========
PUMP PRESSURE
950+
0
10
ROP (min/ft)
Gamma (API)
10
150
4500
4550
4600
4650
4470: incrs in wht-gry chrt, mstly brwn-gry inxln lm, dense, no vis por, no odr, ns.
4480: crm-gry xln lm, cemnt flooded, poor-no por, incrs in chlk, no odr, ns.
4490: aa, crm-tan chrty lm, no vis por, incrs in drk gry sh, no odr, ns.
4500: tan-crm inxln lm, v. dense, no vis por, incrs in gry chrt, few blk carb sh.
4510: incrs in gry inxln lm, v. dense, no vis por, incrs in wht chrt, sli foss, no odr, ns.
4520: mstly wht chrt, crm micrtic lm, v. well cemntd, hrd to brk, no vis por, no odr, ns.
4530: aa, slght incrs in drk green sh & wht chlk, no odr, ns.
4540: shw of blk carb sh, lots of wht chrt, sli foss, crm-brwn inxln lm, dense, no vis por, no odr, ns.
4550: incrs in drk gry slty sh, mstlytan-brwn inxln lm, cemnt flooded, no odr, ns.
4560: aa, decrse in sh, incrs in wht chlk/ sub-chlky lm, no odr, ns.
4570: tan fn xln lm, dense, no vis por, incrs in gry chert, no odr, ns.
4580: mstly tansh gry inxln lm, poor-no inxln por, incrs in drty wht chrt, no odr, ns.
4590: aa, incrs in crmsh/tan sub-chlky lm, no odr, ns.
4600: crm-tansh/gry inxln lm, dense,no vis por, few chlky lm, dense, no odr, ns.
4610: aa, incrs in lght crm fn xln lm, dense, no vis por, incrs in gry sh.
4620: sig incrs in gry & maroon sh, mstly lght crm-gry inxln lm, dense, poor-no por, no odr, ns.
4630: aa, incrs in gry-brwn pack-grain stn lm, well cemntd, poor por, no odr, ns.
4640: incrs in green sh, incrs in tan chrty lm, no vis por, no odr, ns.
4650: mstly gry inxln lm, incrs in wht chrt, no odr, ns.
4660: lots of drk gry sh, mstly tan inxln lm, sense, few tan foss lm, well cemntd, no odr, ns.
4670: sig incrs in brwnsh/gry inxln lm, s. foss, poor inxn por, no odr, ns.
4680: aa, incrs in brwn chrty lm, no odr, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


(4694'-2254)
STARK SH.
<========
cfs @
4710
30MIN: shw of blk carb sh, mstly chlky lm, few tan-crm inxln lm, dense, no vis por, few chps of tan ool cast lm, execInt por, no odr, ns. 60MIN: tan xln lm, v. dense, few ool cast chps, lots of gry sh, few blk carb sh, no odr, ns.
7/11/2013
mud info.
wt: 9.15
Funnel Vis. 47
Filtrate API: 12.8
Chloride 7,900
LCM # 2
0
10
ROP (min/ft)
Gamma (API)
10
150
PUMP PRESSURE 950+
7/012/2013
mud info.
wt: 9.05
Funnel Vis. 50
Filtrate API: 12.0
Chloride 10,800
LCM # 2
7/13/2013
mud info.
wt: 9.0
Funnel Vis. 83
Filtrate API: 11.6
Chloride 11,400
LCM # 2
Sure Shot: Straight Hole Survey: 3/4 degree.
<========
ALTAMONT
(4860'-2420)
DST #1: 4891' - 4918' (Pawnee) Recovered 1260' slightly mud and gas cut water with trace of oil (2% gas, 3% mud, 95% water). Chlorides
4700
4750
4800
4850
4690: mstly greenish/gry sh, incrs in tan pack stn lm, fn-med grn, poor por, no odr, ns.
4700: aa, incrs in maroon sh, sig incrs in chlk & chlky lm, no odr, ns.
4710: aa, tan ool lm, poor-fair por intr prtcl por, no odr, ns.
4720: incrs in blk sh, mstly brwn-gry inxln lm, dense, sli foss, no odr, ns.
4730: incrs in gry sh, tan ool lm, cemnt flooded, no vis por, incrs in wht chlky lm, no odr, ns.
4740: aa, no sig change.
4750: mstly tan inxln lm, poor inxln por, lots loose pyrt, no odr, ns.
4760: incrs in carb blk sh, incrs in mlky chrt, tan pack stn lm, cemnt flooded, poor por, no odr, ns.
4770: lots blk carb sh, mstly gry inxln lm, foss, poor-no inxln por, no odr, ns.
4780: mstly gry & blk carb sh, incrs in wht chlk & chlky lm, tan xln lm, no vis por, no odr, ns.
4790: mstly drk gry sh, tan-drk crm inxln lm, dense, no vis por, no odr, ns.
4800: lm aa, incrs in blk carb sh, lots of drk gry foss, vhrt, no odr, ns.
4810: gry-tan xln lm, sli chrty, lots of gry chrt, foss, no vis por, no odr, ns.
4820: aa, incrs in gry & blk carb sh, incrs in drk tan xln lm, fn xln in prt, no odr, ns.
4830: gry foss lm, xln in prt, poor por, no odr, ns.
4840: incrs in gry sh, mstly crm inxln lm, dense, no odr, ns.
4850: aa, sli incrs in cm chlky lm, gry micrtic lm, well cemntd, poor por, no odr, ns.
4860: aa incrs in gry sh, few red paleo sols.
4870: incrs in crm chlk, lots of gry sh, shw of lght crm fn xln lm, dense, no odr, ns.
4880: incrs in green and blk carb sh, crm xln lm aa, gry micrtic lm, well cemntd, sli xln, no odr, ns.
4890: mstly gry, green and blk sh, few gry-blk foss chrt, gry inxln lm, poor inxln por, no odr, ns.
4900: mstly lght crm inxln lm, poor por, no odr, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


120,000.
IFP:109-362#/30"
ISIP:1550#/45"
FFP:369-665#/45"
FSIP:1533#/60"
<========
PAWNEE
(4901'-2461)
30MIN: lots of blk & green sh, gry-crm inxln lm, dense, no vis por, lots crm chlky lm, dense, no odr, ns. 60MIN: lots of blk carb sh, mstly crm chlky lm, gry inxln lm, dense, few tan coral frag, no odr, ns.
cfs @ 4918
DST #2: 4967' - 5053' (Huck) Recovered 15' mud.
IFP: 72-74#/30"ISIP: 87#/30"
FFP: 75-83#/30"FSIP: 93#/30"
(4947'-2507)
CHEROKEE
<==========
DST #3: 5036' - 5082' (Morrow)
GTS 1 minute into initial open.
1" choke.
Initial flow period 30". Gauged N/A Final flow period 60".Gauged
3,708 mcf/5"
6,166 mcf/10"
6,166 mcf/20"
6,951 mcf/30"
6,166mcf/40"
7,600 mcf/50"
7,121 mcf/60"
7,121 mcf/70"
7,121mcf/80"
7,121 mcf/90"
721BTU
Recovered no fluid all gas, only condensate in tool.
IFP:1521-1525#/30"ISIP:1583#/45"
FFP:1567-1559#/90"
FSIP:1573#/120"
cfs @ 4984
0
10
ROP (min/ft)
Gamma (API)
10
150
Huck
(5032'-2592)
========>
30MIN: mstly crm-brwn inxln lm, dense, no vis por, few sli micrtic fn grn lm w/ ?able stn, ,one chp w/ slght gas show, no odr, ns. 60MIN: sig incrs in crm chlky lm, few fn xln lm chps w/ vuggy por, fresh brwn oil stn, v. weak odr, ns.
(5043'-2603)
ATOKA SH.
=========>
cfs @ 5043
30MIN: mstly tan-crm inxln lm, dense, poor inxln por, incrs in green and gry sh, abundnce of crm chlky lm, no odr, ns. 60MIN: slght incrs in igreen sh, mstly crm chlky lm, few chps fn xln lm, w/ fair chanel por w/ slght brwn oil stn, v. weak odr.
cfs @ 5053
30MIN: sh: yellow, gry, purp, maron & mstly Aqua green. few qtz ss clusters,sub-rounded, cors-med grn, well sortd, poorly graded, fairly cemntd, one clustr w/ gas shw upon brkng, no odr, ns. 60MIN: sh same as thirty smaple. incrs in brwn chrty lm, foss, no vis por, one chp w/ frac oil stn, few clr qtz ss, sub-rounded, well sortd, well graded, few clustr w. a shw of free tary oil, faint odr.
cfs @ 5072
cfs @ 5082
<=======
MISS.UNCF.
(5083'-2643)
30MIN: sh aa, ss aa, incrs in loose sand sed, incrs in brwn foss lm, poor por, incrs in odr, lots of scat stn. 60MIN: incrs in gry sh, incrs in loose cors grn qtz sand, incrs in chrty dolo/lm, no odr, ns, no odr.
30MIN: buff-wht chrty dolo, v hrd to to brk few chps w/ lght shw, fair odr. 60MIN: incrs in buff fn grn dolo, well cemntd, shw of brwn free oil, strong odr.
cfs @ 5101
4900
4950
5000
5050
4910: aa, incrs in lght crm chlky lm, incrs in translucnt sli foss chrt, no odr, ns.
4920: crm inxln lm, no vis por, two chps w/ drk tary oil stn, fair flour, slght odr.
4930: mstly gry and green sh, lots of wht chlk, loose pyrt, crm-tan inxln lm, dense, poor-no por, no odr, ns.
4940: aa, sig incrs in drk crm chlky lm.
4950: mstly gry & blk carb sh, tan-crm inxln lm, v. dense, loose wht foss chrt, no odr, ns.
4960: slght incrs in blk carb sh, crm, brwn-gry inxln lm, dense, no vis por, no odr, ns.
4970: aa, incrs in crm chlky lm.
4980: lots of blk carb sh, incrs in wht-gry chrt, sli foss, mstly crm inxln lm, v. dense, no odr, ns.
4990: mstly brwn xln lm, cemnt flooded, no vis por, incrs in foss wht chirt, no odr, ns.
5000: aa, incrs in blk carb sh.
5010: lots of blk carb- maroon sh, msttly crm fn xln lm, poor-no por, no odr, ns.
5020: brwn-gry inxln lm, v. dense, foss, incrs in crm chlky lm, no odr, ns.
5030: brwn-crm inxln lm, poor inxln lm por, lots drk/drty crm chlky lm, no odr, ns.
5040: aa, incrs in blk carb & gry sh, shw of gry micortic lm, well cemntd, no odr, ns.
5050: mstly crm inxln lm, poor inxln por, no odr, ns.
5060: sh: yellow, maroon, aqua, gry, purp, & blk carb sh.
5070: aa, few clusters of green ss-sandy sh, cors-med grn, sub-rounded, well sortd, poorly graded, mod cemntd, no odr, ns.
5080: sh aa, few ss aa w/ tary oil stn, brwn chrty lm, dense, no vis por, few sub-chlky lm, w/ tary oil stn, fair odr.
5090: sh: gry, yellow, orange, purp, & green, incrs in tan fn xln lm, sli chrty, no vis por, one chpp w/ a tary stn, no odr, ns.
5100: aa, incrs in wht chrt, no odr, ns.
5110: mstly gry & green sh, lots of buff-gry fn grn dolo, fair intr prtcl por, shw of free brwn oil, fair odr.
5120: sh aa, lght brwn dolo lm, intr prtcl- vuggy por, well cemntd, shw of lght brown oil, strng odr.
5130: buff dolo/lm w/ shw aa, incrs in chlk, shw of crm inxln lm, poor inxln por, few lght crm sycrosc
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000


0
ROP (min/ft)
10
10
Gamma (API)
150
RTD 5210'
5112
cfs @
5131
cfs @
5167
30MIN: mstly gry, maroon & green sh, buff fn grn dolo, fair intr prtcl por, shw of brwn gasy oil, incrs in chlky lm, fair-exclnt odr. 60MIN: sh aa, dolo aa, w/ shw of brwn gasy oil, incrs in chlk & sandy sh, strng odr.
30MIN: sh aa, chlk, buff dolo/lm w/ vuggy por, shw of brwn oil, crm inxln lm, poor inxln por, ns, mod odr. 60MIN: shw of decrse buff dolo/lm as thirty min, incrs in chlk, crm inxln lm, crm sycrosc dolo, ns, faint odr.
DST #4: 5090' - 5101'
(Mississippian Spergen "A")
Recovered 1147' gas in pipe, 15' clean oil and 75' slightly water cut oily mud (5% water, 15% oil, 80% mud).
Total fluid 90' (29% oil, 4% water, 67% mud).
IFP:45-48#/30"ISIP:1189#/45"
FFP:50-60#/45"FSIP:1235#/60"
20MIN: mstly crm chlk/ carbonate mud, crm inxlnb lm, no vis por, lght brwn dolo/lm, poor por, ns, few grysh/brwn dolo/lm, vuggy por, shw of brwn oil, weak odr. 45MIN: same as tewenty sample, sig incrs in gry dolo, well cemntd, vuggy por, ns, v. weak odr.
DST #5: 5099' - 5131'
(Mississippian Spergen "C")
Recovered 682' muddy water with trace of oil (30% mud, 70% water).
IFP:80-188#/30"ISIP:1375#/45"
FFP:211-316#/45"FSIP:1321#/60"
20MIN: mstly wht chlk, lots of wht chrt, gry fn grn dolo, fair por, no odr, ns. 40MIN: same as thirty min, sig incrs in chlk, no odr, ns.
Sure Shot: Straight Hole Survey: 3/4 degree.
7/14/2013
mud info.
wt: 9.05
Funnel Vis. 51
Filtrate API: 10.8
Chloride 13,500
LCM # 3
7/15/2013
mud info.
wt: 8.9
Funnel Vis. 64
Filtrate API: 10.8
Chloride 11,800
LCM # 3
5150
5200
5250
dolo, exlnt intr prtcl por, ns. mod odr.
5140: mstly lght crm inxln lm, poor inxln por, lots of chlk, few dolo/lm chps w/ shw (uphole).
5150: aa, incrs in brwn-gry dolo, fair intr prtcl por, few chrty dolo, fair vuggy por, no odr, ns.
5160: lght brwn fn grn dolo/lm w/ exclnt vuggy por, shw of gasy brwn oil, fair-good odr.
5170: mstly crm-gry inxln lm, dense, no vis por, lots of tary stns, lots of chlk, incrs in wht chrt, few dolo/lm w/ shw aa, weak odr.
5180: aa, incrs in grysh fn grn dolo, very well cemntd, no odr, ns.
5190: aa, incrs in vuggy por, no odr, ns.
5200: aa, slght incrs in crm chlk & crm inxln lm, dense, no vis por, no odr, ns.
5210: incrs gry-lght brwn dolo, exclnt vuggy por, no odr, ns.
TG (Units)
1
10
100
1000
Neutron Porosity (NAPI)
1
10
100
1000