

Adam Eldani Geo-Log/Report

WellSight Systems

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

Measured Depth Log

Well Name: #1 Smith 19D

Location: SEC 19- twp 12S- rge 31W GOVE COUNTY

License Number: API 15-063-22035

Region: KANSAS

Spud Date: 08/14/2012

Drilling Completed: 8/24/2012

Surface Coordinates: 2085' FNL 365' FWL

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

Coordinates:

Ground Elevation (ft): 2900

K.B. Elevation (ft): 2910

Logged Interval (ft): 3600 To: 4674

Total Depth (ft): 4670

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 MURFIN #14)

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:

E-LOG:

ANHY: 2410 +500
B/ANHY: 2430 +480
HEEBNER: 3917-1007
LANSING: 3964-1054
MUNCIE: 4109-1216
STARK: 4188-1278
ALTAMONT: 4294-1382
PAWNEE: 4370--1364
CHEROKEE: 4454-1544
MISS: 4544-1634

SAMPLE TOPS:

ANHY: 2413 +497
B/ANHY: 2436 +474
HEEBNER: 3918-1008
LANSING: 3968-1058
MUNCIE: 4110-1200
STARK: 4188-1278
ALTAMONT: 4288-1378
PAWNEE: 4374-1464
CHEROKEE: 4456-1546
MISS: 4548-1638

DAILY MORNING DRILLING REPORT

7/15 SPUD'
7/16 1120'
7/17 2950'
7/18 3694'
7/19 3896'
7/20 4018'
7/21 4177'
7/22 4245'
8/23 4512'
8/24 4578'

Misc. Info.

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

RIG: MURFIN CO. #14
DRILLPIPE: 4-1/2" XH

TOOLPUSHER: GREG UNRUH
MUD: MUDCO (REID ATKINS)
GAS DETECTOR: NONE
DRILL STEM TESTS: TRILOBITE TESTING
LOGS: SUPERIOR

OFFICE: PETER FIORINI
FIELD: N/A

Comments

SURFACE Casing: 8 5/8" @ 224'

Well Log Surveys BY SUPERIOR: Compensated Density/ Neutron Log, & Dual Induction.

STRUCTURALLY, THIS WELL RAN HIGHER TO OFFSET, ALL SHOWS WERE TESTED.


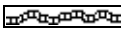
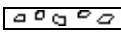
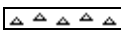
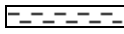







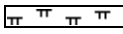

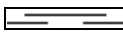
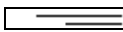
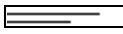



After evaluation of electrical logs and drill stem test results, the operator's determined #1 SMITH 19D to non-commercial and elected to plug and abandon the well as a dry hole.

SAMPLES WILL BE DEPOSITED WITH KANSAS GEOLOGICAL SURVEY.








































































RESPECTFULLY SUBMITTED

Adam M. A. Eldani
























ROCK TYPES

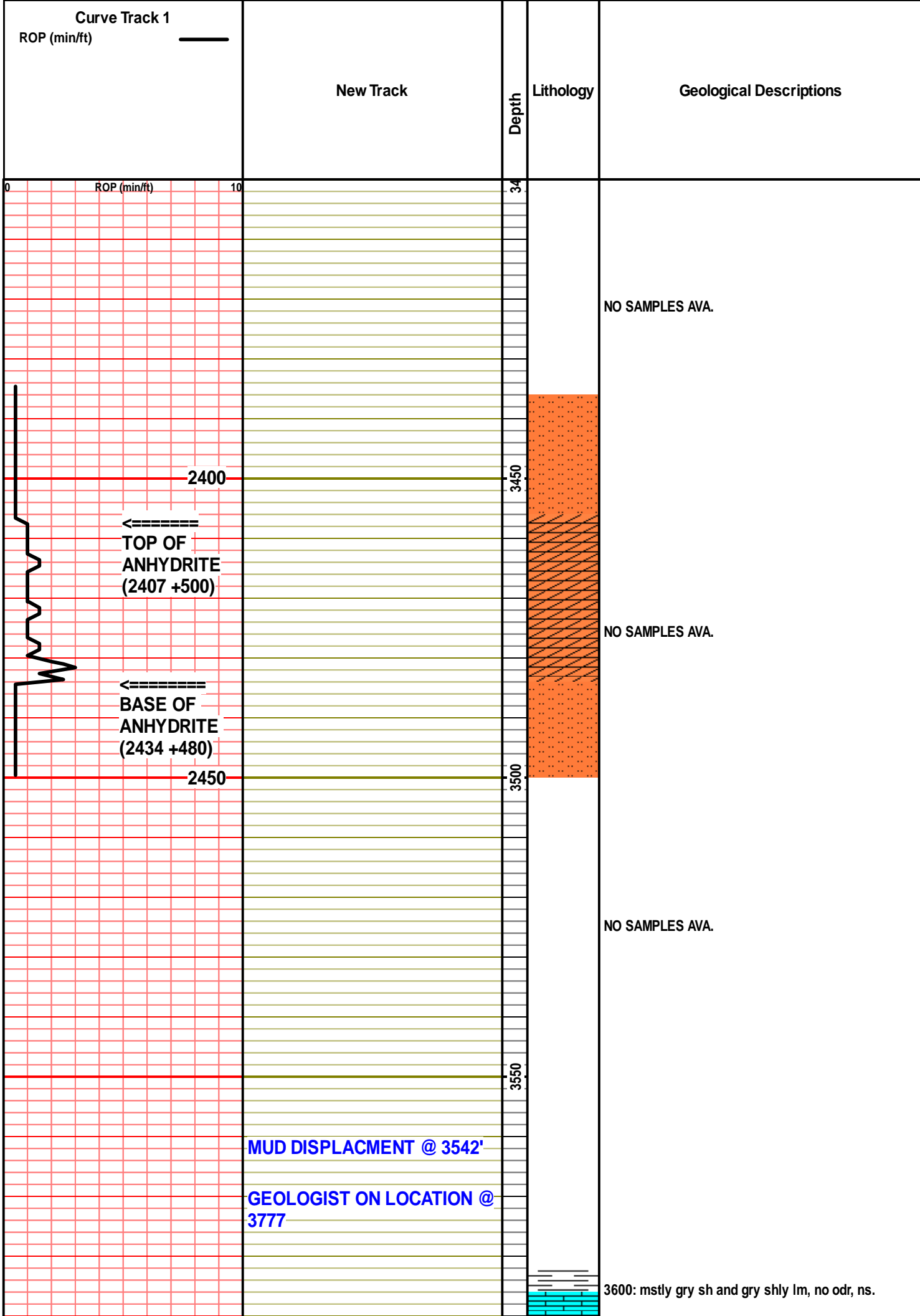
 Anhy  Bent  Brec  Cht	 Clyst  Coal  Congl  Dol	 Gyp  Igne  Lmst  Meta	 Mrlst  Salt  Shale  Shcol	 Shgy  Sltst  Ss  Till
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ACCESSORIES

MINERAL  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau	 Gyp  Hvymin  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff	FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite	 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
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OTHER SYMBOLS

POROSITY  Earthy  Fenest  Fracture  Inter  Moldic  Organic  Pinpoint	 Vuggy SORTING  Well  Moderate  Poor	ROUNDING  Rounded  Subrnd  Subang  Angular OIL SHOW  Even	 Spotted  Ques  Dead INTERVAL  Core  Dst	EVENT  Rft  Sidewall
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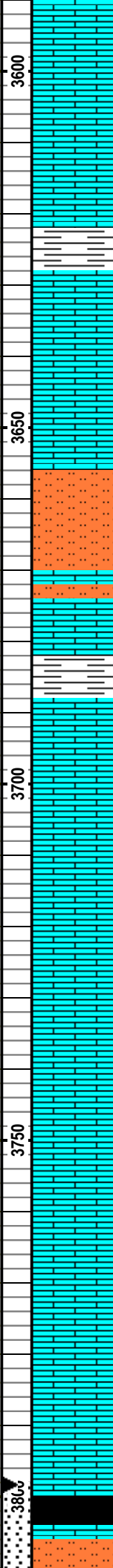


**DEVIATION SURVEY ONE
DEGREE. STRAIT HOLE.**

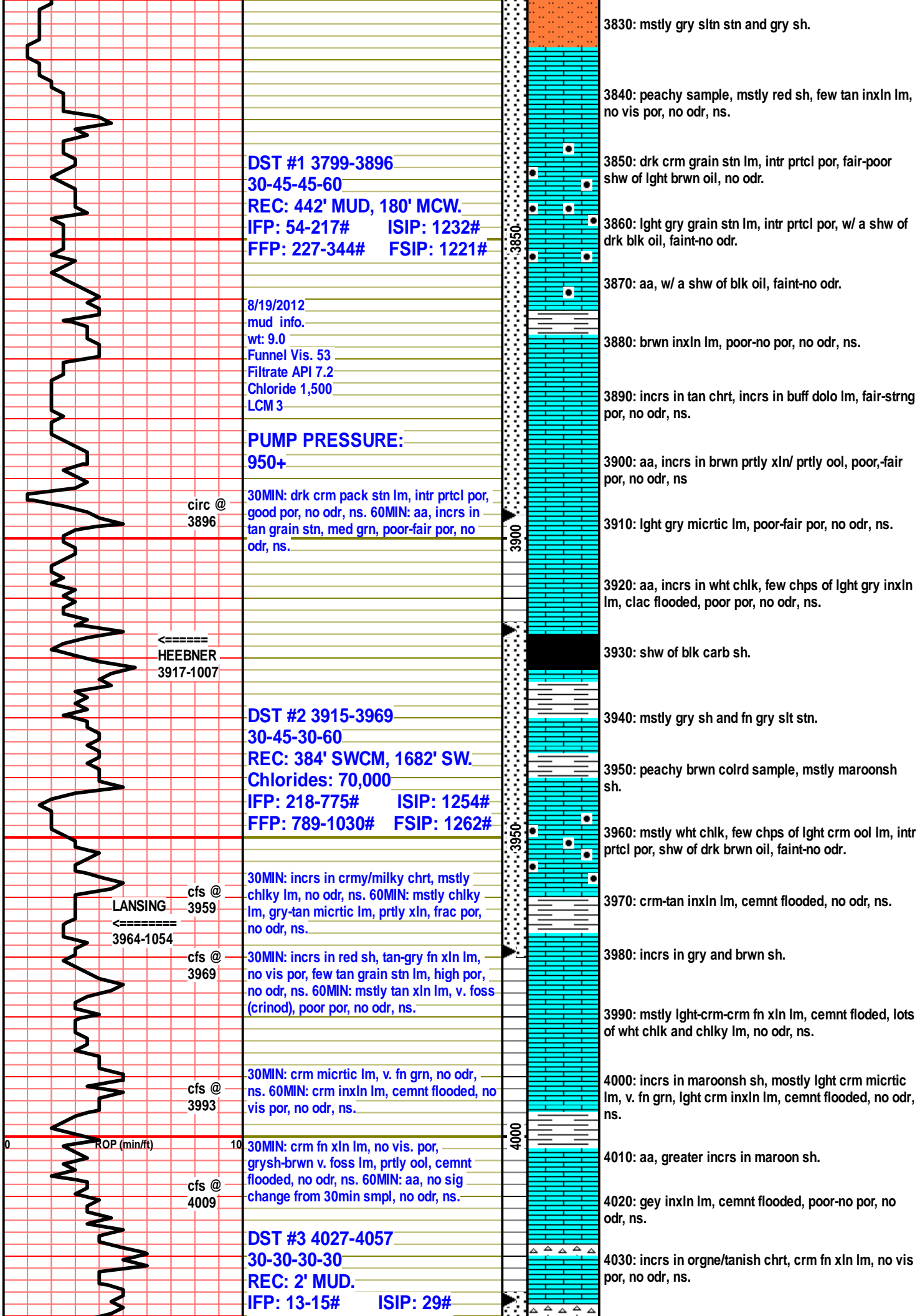
8/17/2012
mud info.
wt: 8.9
Funnel Vis. 55
Filtrate API 7.6
Chloride 1,500
LCM 2

**PUMP PRESSURE:
950+**

**PUMP PRESSURE:
950+**



- 3610: lght brwn pack stn lm, fair por, no odr, ns.
- 3620: lght crm ool lm, poor-fair por, no odr, ns.
- 3630: drk crm wacke stn lm, poor por, no odr, ns.
- 3640: incrs in red sh.
- 3650: lght crm inxln lm, fn xln lm, poor por, no odr, ns.
- 3660: gry inxln lm, inxln por, no odr, ns
- 3670: incrs in brwn and grysh brwn slt stn.
- 3680: lots of brwn and gry slt stn, incrs in crm chlky lm.
- 3690: crm wacke stn lm, poor-fair por, no odr, ns.
- 3700: peach colrd sample, incrs in red sh, incrs in wht chlk.
- 3710: drty crm inxln lm, cors xln in prt, no odr, ns.
- 3720: lm aa, incrs in crm chlky lm.
- 3730: crm-drk tan inxln lm, inxln por, lght brwn mott lm, no odr, ns.
- 3740: incrs in wht chlk.
- 3750: crm-drk tan mud stn lm, poor-fair por, no odr, ns.
- 3760: aa, incrs in wht chlk.
- 3770: incrs in wht chlk, incrs in tan grain stn, no odr, ns.
- 3780: aa, no sig change.
- 3790: more tha 90% of sample try, wht chlk.
- 3800: aa, incrs in pyrt.
- 3810: drk crm fn xln lm, poor por, no odr, ns.
- 3820: shw of blk carb sh.



DST #1 3799-3896
 30-45-45-60
 REC: 442' MUD, 180' MCW.
 IFP: 54-217# ISIP: 1232#
 FFP: 227-344# FSIP: 1221#

8/19/2012
 mud info.
 wt: 9.0
 Funnel Vis. 53
 Filtrate API 7.2
 Chloride 1,500
 LCM 3

PUMP PRESSURE:
 950+

circ @
 3896

30MIN: drk crm pack stn lm, intr prtcl por, good por, no odr, ns. 60MIN: aa, incrs in tan grain stn, med grn, poor-fair por, no odr, ns.

←=====
 HEEBNER
 3917-1007

DST #2 3915-3969
 30-45-30-60
 REC: 384' SWCM, 1682' SW.
 Chlorides: 70,000
 IFP: 218-775# ISIP: 1254#
 FFP: 789-1030# FSIP: 1262#

30MIN: incrs in crmy/milky chrt, mstly chlky lm, no odr, ns. 60MIN: mstly chlky lm, gry-tan micrtic lm, prtly xln, frac por, no odr, ns.

cfs @
 LANSING 3959
 ←=====
 3964-1054

cfs @
 3969

30MIN: incrs in red sh, tan-gry fn xln lm, no vis por, few tan grain stn lm, high por, no odr, ns. 60MIN: mstly tan xln lm, v. foss (crinod), poor por, no odr, ns.

cfs @
 3993

30MIN: crm micrtic lm, v. fn grn, no odr, ns. 60MIN: crm inxln lm, cemnt flooded, no vis por, no odr, ns.

cfs @
 4009

30MIN: crm fn xln lm, no vis. por, grysh-brwn v. foss lm, prtly ool, cemnt flooded, no odr, ns. 60MIN: aa, no sig change from 30min smpl, no odr, ns.

DST #3 4027-4057
 30-30-30-30
 REC: 2' MUD.
 IFP: 13-15# ISIP: 29#

3830: mstly gry sltn stn and gry sh.
 3840: peachy sample, mstly red sh, few tan inxln lm, no vis por, no odr, ns.
 3850: drk crm grain stn lm, intr prtcl por, fair-poor shw of lght brwn oil, no odr.
 3860: lght gry grain stn lm, intr prtcl por, w/ a shw of drk blk oil, faint-no odr.
 3870: aa, w/ a shw of blk oil, faint-no odr.
 3880: brwn inxln lm, poor-no por, no odr, ns.
 3890: incrs in tan chrt, incrs in buff dolo lm, fair-strng por, no odr, ns.
 3900: aa, incrs in brwn prtly xln/ prtly ool, poor-fair por, no odr, ns.
 3910: lght gry micrtic lm, poor-fair por, no odr, ns.
 3920: aa, incrs in wht chlk, few chps of lght gry inxln lm, clac flooded, poor por, no odr, ns.
 3930: shw of blk carb sh.
 3940: mstly gry sh and fn gry slt stn.
 3950: peachy brwn colrd sample, mstly maroonsh sh.
 3960: mstly wht chlk, few chps of lght crm ool lm, intr prtcl por, shw of drk brwn oil, faint-no odr.
 3970: crm-tan inxln lm, cemnt flooded, no odr, ns.
 3980: incrs in gry and brwn sh.
 3990: mstly lght-crm-crm fn xln lm, cemnt floded, lots of wht chlk and chlky lm, no odr, ns.
 4000: incrs in maroonsh sh, mostly lght crm micrtic lm, v. fn grn, lght crm inxln lm, cemnt flooded, no odr, ns.
 4010: aa, greater incrs in maroon sh.
 4020: gey inxln lm, cemnt flooded, poor-no por, no odr, ns.
 4030: incrs in orgne/tanish chrt, crm fn xln lm, no vis por, no odr, ns.

FFP: 14-15# FSIP: 24#

cfs @ 4038

30MIN: lots of lght crm chlky lm, gry fn xln lm, no vis por, no odr, ns. 60MIN: tan-gry inxln lm, cemnt flooded, no vis por, no odr, ns.

4040: aa, decrease in chrt.

4050: gry packstn lm, foss, poor-fair por, no odr, ns.

cfs @ 4047

30MIN: incrs maroon sh, drk crm-tan lm, vuggy por, shw of brwn free oil, faint-no odr. 60MIN: tan wthrd chrt, vuggy wthrd por, shw of brown oil, faint odr, ns.

4060: tan inxln lm, cemnt flooded por, no odr, ns.

cfs @ 4057

30MIN: crm-lght tan micrtic lm, prtly chlky, questionable stn, no odr, nsfo. 60MIN: gry inxln lm, dense, poor por, two pices crmsh gry lm, pin point vuggy por, w/ a weak sfo, no odr.

4070: v. lght crm inxln lm, no vis por, no odr, ns.

4080: aa, incrs in chlk and chlky lm.

8/20/2012 mud info. wt: 8.9 Funnel Vis. 67 Filtrate API 8.8 Chloride 3,000 LCM 3

4090: lots of chlky lm, drty gry fn xln lm, no vis por, no odr, ns.

4100: aa, incrs maroon sh.

PUMP PRESSURE: 950+

MUNCIE 4109-1199

4110: gry inxln lm, poor inxln lm, no odr, ns.

4120: shw of blk carb sh.

4130: brwn cors inxln lm, v. foss, poor por, incrs in mlky chert, no odr, ns.

4140: incrs in wht chlk, drk crm fn xln lm, no vis por, no odr, ns.

cfs @ 4142

30MIN: brwn inxln lm, foss, dense, no vis por, no odr, ns. 60MIN: gry sh, gry fn xln lm, no vis por, no odr, ns.

4150: gry inxln lm, v, dense, no odr, ns.

4160: tan pack stn lm, med-cors grn, intr prtcl por, no odr, ns.

8/21/2012 mud info. wt: 9.0 Funnel Vis. 61 Filtrate API 6.4 Chloride 2,500 LCM 2

4170: aa, incrs in crm chlky lm, crm inxln lm, inxln por, no odr, ns.

4180: peachy colr smpl, mostly maroon sh.

cfs @ 4177

30MIN: mstly greenish/gry micrtic lm, few chps of ool lm, semi fryble, no odr, ns. 60MIN: gry inxln lm, highly pyrtzd, poor por, no odr, ns.

4190: gry fn xln lm, prtly foss, no vis por, no odr, ns.

STARK 4188-1278

4200: shw of blk carb sh.

cfs @ 4198

30MIN: brwn-gry inxln lm, v. dense, hrd to brk, no vis por, no odr, ns. 60MIN: aa, no sig change, icrs in chlky lm/ highly pyrtzd, no odr, ns.

4210: drk tan-brwn ool lm, cemnt flooded, no vis por, no odr, ns.

DST #4 4217-4245

30-30-30-30

REC: 1' MUD.

IFP: 14-15# ISIP: 45#

FFP: 14-15# FSIP: 34#

4220: incrs in mlky foss chrt, lght gry chrtly xln lm, v. dense, no odr, ns.

4230: incrs in gry/blk sh and gry shly lm.

cfs @ 4224

30MIN: shw of blk carb sh, lots of gry sh, gry v. foss xln lm, dense, no vis por, no odr, ns. 60MIN: lots of blk carb sh, brwn xln v. foss lm, dense, no odr, ns.

4240: brwn micrtic lm, pin point por (intr prtcl), v. weak shw of oil, few gry xln lm, vug cast por w/ drk oil stn.

cfs @ 4242

30MIN: lght gry inxln lm, poor inxln por, no odr, ns. 60MIN: crm inxln lm, inxln por, tan pack stn, intr prtcl por, two chps w/ a weak shw of free brwn oil, no odr.

4250: mstly gry, maroon and green sh.

BKC 4246-1336

4260: crm-lght gry inxln lm, inxln por, no odr, ns.



Table with 3 columns: Depth (ft) on the left, Log Description in the middle, and Lithology/Notes on the right. The table covers depths from approximately 4038 ft to 4260 ft. Key features include pump pressure data, mud logs, and detailed lithological descriptions for various intervals.

8/22/2012
mud info.
wt: 9.3
Funnel Vis. 63
Filtrate API 8.0
Chloride 3,000
LCM 2

←=====
ALTAMONT
4292-1382

PUMP PRESSURE:
950+

←=====
PAWNEE
4470-1460

ROP (min/ft) 0 10

←=====
MYRICK
4408-1498

8/23/2012
mud info.
wt: 9.2
Funnel Vis. 53
Filtrate API 7.2
Chloride 3,000
LCM 2

cfs @
4445

30MIN: shw of tan-milky chrt, crm inxln lm, poor por, lots of crm chiky lm, no odr, ns.
60MIN: crm xln lm, dense, no odr, ns.

←=====
CHEROKEE
4454-1544

cfs @
4465

30MIN: brwn inxln lm, v. dense, no vis por, few cluster of ool lm, matrix fill, well cemntd, no odr, ns. 60MIN: incrs in gry sh, tan-crm ool lm, poor por, no odr, ns.

4270: gummy smple, maroon/brown dolo, execlnt por, no odr, ns. lots of chiky lm.

4280: aa, brwn colrd sampl, lots of gummy chlk, dolo aa, no odr, ns.

4290: gry inxln lm, calcite floded fracs, no vis por, no odr, ns.

4300: incrs in maroon and gry sh, crm-drk tan inxln lm, poor xln por, no odr, ns.

4310: grysh/purp inxln lm, v. dense, hrd to brk, gry micrtic lm, v. fn grn, no odr, ns.

4320: incrs in gry, purp, and maroon sh.

4330: mstly gry sh, crm micrtic lm, execlnt por, no odr, ns.

4340: lght crm inxln lm, foss, poor-no por, no odr, ns.

4350: lm aa (chng in colr: gry), incrs in gry and aqua green sh.

4360: tan foss lm, cemnt floded, no vis por, no odr, ns.

4370: drk crm fn xln lm, no vis por, no odr, ns.

4380: mstly gry sh, brwn wacke stn lm, fair intra clst por, no odr, ns.

4390: incrs in translucnt chrt, lght crm fn xln lm, no vis por, no odr, ns.

4400: aa, tan-crm grain stn lm, med grn, cemnt floded, poor-no por, no odr, ns.

4410: shw of blk carb sh.

4420: crm-gry inxln lm, dense, no vis por, no odr, ns.

4430: tan fn xln lm, hghly pyrtzd, no vis por, no odr, ns.

4440: shw of blk carb sh, tan ool lm, cemnt floded no odr, ns.

4450: tan inxln lm, no vis por, no odr, ns.

4460: brwn inxln lm, dense, no vis por, no odr, ns.

4470: shw of blk carb sh, tan ool lm, poor por, brwn-drk crm fn xln lm, semi foss, no vis por, no odr, ns.

4480: incrs in gry sh. tan-brwn inxln lm. v. dense. no

JOHNSON

DST #5 4469-4512
30-45-45-60
REC: 15' OCM (2%O).
IFP: 21-27# ISIP: 855#
FFP: 33-37# FSIP: 823#

cfs @
4500

30MIN: drk tan xln lm, w/ pin point vuggy disloution por, fair odr, shw of brwn free oil. 60MIN: incrs in gry sh, tan inxln lm, pin point vuggy por, shw of brwn free oil, faint-odr.

cfs @
4512

30MIN: tan inxln lm, frac por, cemnt floded frac, crm xln lm, pin point vuggy por, strng odr, shw of brwn oil. 60MIN: sample aa, strong odr, lots of free brwn oil shws.

cfs @
4530

30MIN: incrs in brwn and gry sh, clustrs of qtz ss, fn grn, clr, gry and brwn, subrounded, well sortd, nsfo. 60MIN: mstly brwn, yellow and green sh, ss aa, nsfo.

MISS
4544-1634

cfs @
4542

30MIN: mstly sh: brwn, gry, yellow and green, 60MIN: mstly sh aa, few cluster of ss, fryable, no shw or odr, med grn sub rounded, well sorted, sub-rounded, no odr, ns.

8/24/2012
mud info.
wt: 9.4
Funnel Vis. 55
Filtrate API 8.0
Chloride 3,000
LCM 2

PUMP PRESSURE:
950+

cfs @
4670

30MIN: v. gummy smple, lots of gry shly lm, ns.

DEVIATION SURVEY 1 3/4
DEGREE. STRAIT HOLE.

odr, ns.

4490: incrs in blk, gry and maroon sh, crm fn xln lm, dense, no odr, ns.

4500: lm aa, decrease in sh.

4510: tan xln lm, vuggy por, strng shw of brwn oil, strng odr.

4520: lght crm semi xln lm, fenstl por, fair-strng odr, show of drk brwn free oil.

4530: incrs in gry and green sh, ss, fn-med grn, mod sortd, sub-rounded, semi fryble, lm aa w/ sfo.

4540: mstly sh: brwn, gry, and yellow

4550: mstly sh aa, ss aa, no odr, ns.

4560: crm grain stn lm, poor por, no odr, ns.

4570: aa, incrs in por, no odr, ns.

4580: crm grain stn, well cemntd, hrd to brk, no odr, ns.

4590: aa, no sig chnge.

4600: crm grain stn lm, fn-med grn, intr prtcl por, some semi xln, no odr, ns.

4610: incrs in yellow and green sh.

4620: incrs in tan/mlky chrt, drk tan cors inxln lm, poor-no por, no odr, ns.

4630: tan ool lm, matrix fill, mod cemntd, poor-fair por, no odr, ns.

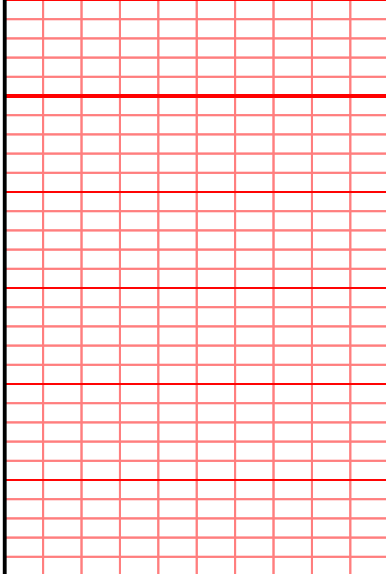
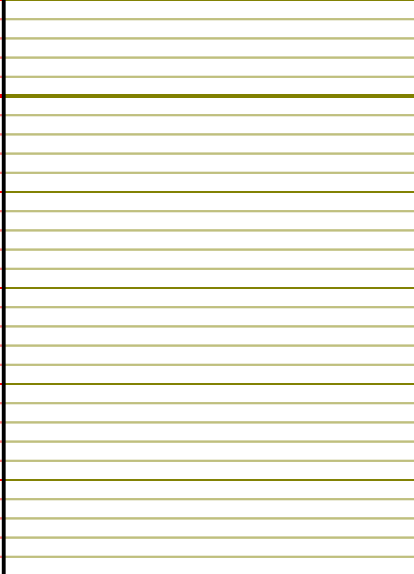
4640: mstly chlk and sub-chlky lm.

4650: aa, no sig change.

4660: gry shly lm (mott), sli ool, poor-fair por, no odr, ns.

4670: aa lm, incrs in gry sh.

0 10
BOR (min/ft)

		50	4700	
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