



Home  
(785) 798-3400

# Andrew Stenzel Geologist

Ness City, Kansas



Cell  
(785) 798-5977

## Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Hagans #14-4  
API: 15-135-26062-00-00  
Location: NW-NW-NW-NW Sec. 14-16S-26W (Ness County)  
License Number: 30742  
Spud Date: 3/20/19  
Surface Coordinates: 384' FNL & 355' FWL  
Region: KANSAS  
Drilling Completed: 3/28/19

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 2578  
Logged Interval (ft): 3700 To: TD  
Formation: MISSISSIPPI  
Type of Drilling Fluid: Mud-Co Chemical  
K.B. Elevation (ft): 2583  
Total Depth (ft): 3620

Printed by MudLog from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

Company: Palomino Petroleum, Inc.  
Address: 4924 SE 84th St.  
Newton, KS 67114

### GEOLOGIST

Name: Andrew Stenzel  
Company: Petroleum Geologist  
Address: 501 S. Franklin  
Ness City, KS 67560

### Drilling Report

#### DAILY DRILLING REPORT:

3/20/19 MIRU, ran surface casing  
3/21/19 Drilling @ 1355'  
3/22/19 Drilling @ 2746'  
3/23/19 Drilling @ 3453'  
3/24/19 Drilling @ 3952'  
3/25/19 Drilling @ 4327'  
3/26/19 DST #1  
3/27/19 DST #2, ran electric logs  
3/28/19 Ran production casing

### Services

RIG: WW Drilling, Rig #2

MUD: MUDCO

LOGS: Gemini Wireline; CNDL, PE, DIL, ML

### Casing Record

SURFACE Casing: Ran 5 jts new 8 5/8", 23# casing set at 209'.

PRODUCTION Casing: Ran 113 jts used 5 1/2" 14# casing set at 4617'.

### Formation Tops

Sample Tops		Log Tops	
Anhy.	2008 (+575)	Anhy.	2006 (+577)
Base Anhy.	2042 (+541)	Base Anhy.	2038 (+545)
Heebner	3852 (-1269)	Heebner	3853 (-1270)
Lansing	3893 (-1310)	Lansing	3896 (-1313)
BKC	4195 (-1612)	BKC	4194 (-1611)
Marmaton	4240 (-1559)	Marmaton	4239 (-1656)
Pawnee	4336 (-1753)	Pawnee	4334 (-1751)
Ft. Scott	4399 (-1816)	Ft. Scott	4397 (-1814)
Cher. Sh.	4422 (-1839)	Cher. Sh.	4421 (-1838)
Miss.	4500 (-1917)	Miss.	4503 (-1920)
RTD	4620 (-2037)	LTD	4617 (-2034)



# Company: Palomino Petroleum, Inc.

## Lease: Hagans "14" #4

SEC: 14 TWN: 16S RNG: 26W  
County: NESS  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 2  
Elevation: 2577 GL  
Field Name: Unice NE  
Pool: Pool Ext  
Job Number: 323

**Operation:**  
Uploading recovery & pressures

**DATE**  
March  
**26**  
2019

**DST #1**      **Formation: Mississippian**      **Test Interval: 4444 - 4523'**      **Total Depth: 4523'**  
Time On: 07:53 03/26      Time Off: 16:04 03/26  
Time On Bottom: 10:30 03/26      Time Off Bottom: 13:30 03/26

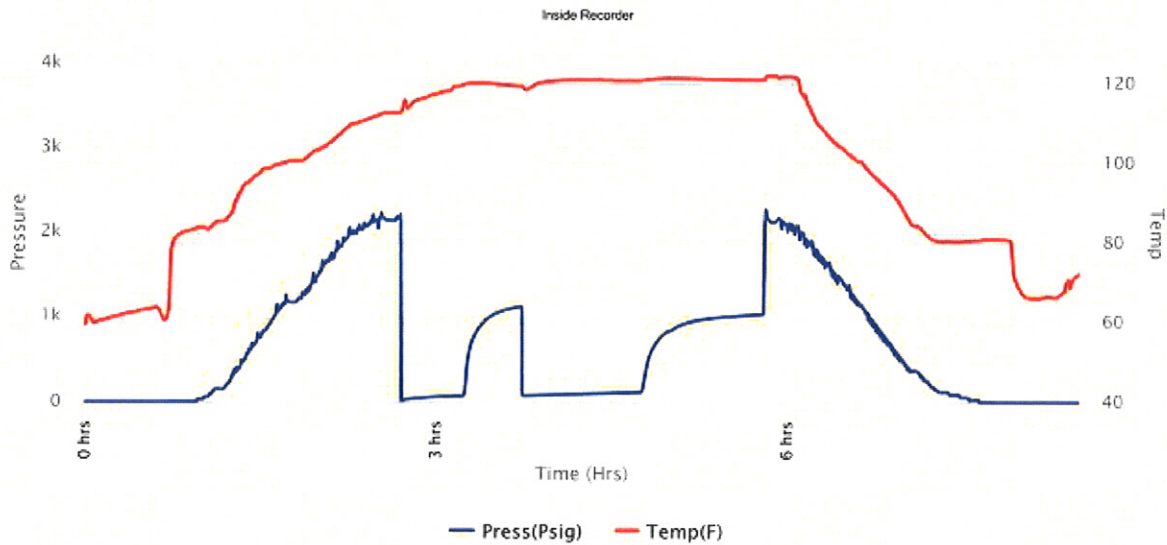
Electronic Volume Estimate:  
371'

1st Open  
Minutes: 30  
Current Reading:  
9.9" at 30 min  
Max Reading: 9.9"

1st Close  
Minutes: 30  
Current Reading:  
0" at 30 min  
Max Reading: 0"

2nd Open  
Minutes: 60  
Current Reading:  
15.4" at 60 min  
Max Reading: 15.4"

2nd Close  
Minutes: 60  
Current Reading:  
0" at 60 min  
Max Reading: 0"







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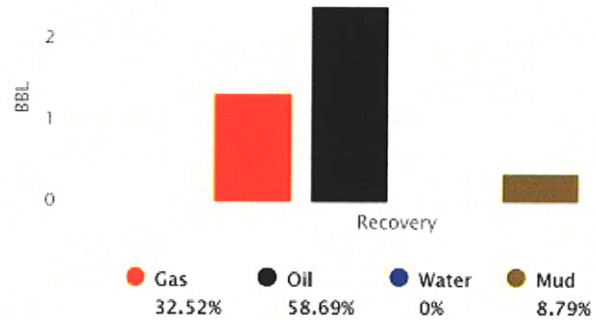
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
95	1.35185	G	100	0	0	0
145	2.06335	O	0	100	0	0
10	0.1423	SLMCO	0	96	0	4
120	0.5998031	HOCM	0	40	0	60

Total Recovered: 370 ft  
 Total Barrels Recovered: 4.1573031

Reversed Out  
 NO

Initial Hydrostatic Pressure	2147	PSI
Initial Flow	17 to 75	PSI
<b>Initial Closed in Pressure</b>	<b>1129</b>	<b>PSI</b>
Final Flow Pressure	82 to 119	PSI
<b>Final Closed in Pressure</b>	<b>1041</b>	<b>PSI</b>
Final Hydrostatic Pressure	2144	PSI
Temperature	121	°F
Pressure Change Initial Close / Final Close	7.8	%

**Recovery at a glance**



GIP cubic foot volume: 7.58996



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County: NESS  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 2  
Elevation: 2577 GL  
Field Name: Unice NE  
Pool: Pool Ext  
Job Number: 323

**Operation:**  
Uploading recovery & pressures

**DATE**  
March  
**26**  
2019

**DST #2**      **Formation: Mississippian**      **Test Interval: 4524 - 4532'**      **Total Depth: 4532'**  
Time On: 23:18 03/26      Time Off: 07:12 03/27  
Time On Bottom: 01:47 03/27      Time Off Bottom: 04:47 03/27

Electronic Volume Estimate:  
134'

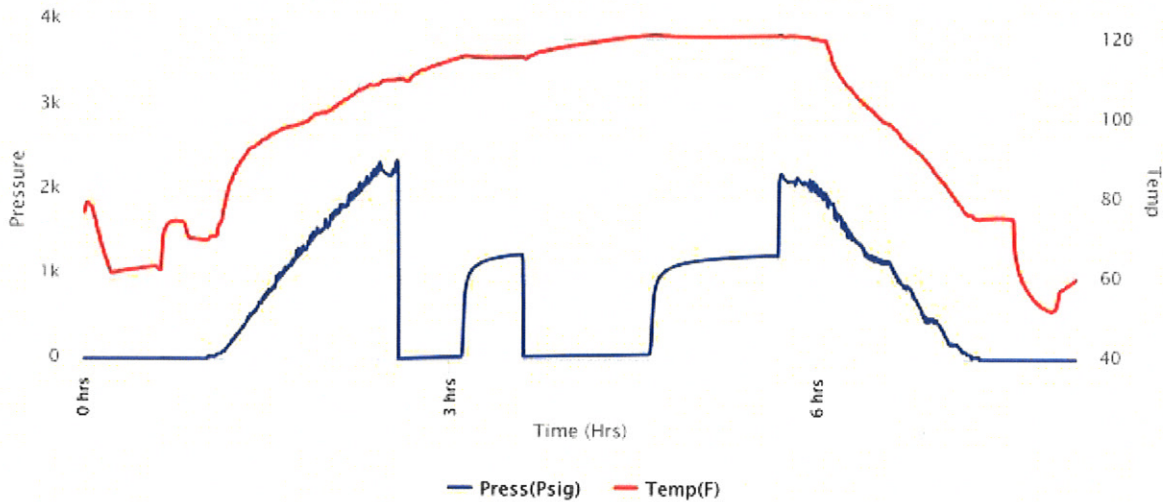
1st Open  
Minutes: 30  
Current Reading: 2.2" at 30 min  
Max Reading: 2.2"

1st Close  
Minutes: 30  
Current Reading: 0" at 30 min  
Max Reading: 0"

2nd Open  
Minutes: 60  
Current Reading: 2.5" at 60 min  
Max Reading: 2.5"

2nd Close  
Minutes: 60  
Current Reading: 0" at 60 min  
Max Reading: 0"

Inside Recorder







**Company: Palomino Petroleum, Inc.**

**Lease: Hagans "14" #4**

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 County: NESS  
 State: Kansas  
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 Elevation: 2577 GL  
 Field Name: Unice NE  
 Pool: Pool Ext  
 Job Number: 323

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 Time On: 23:18 03/26      Time Off: 07:12 03/27  
 Time On Bottom: 01:47 03/27      Time Off Bottom: 04:47 03/27

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
115	0.5658	SLMCW (trace O)	0	.1	89.9	10

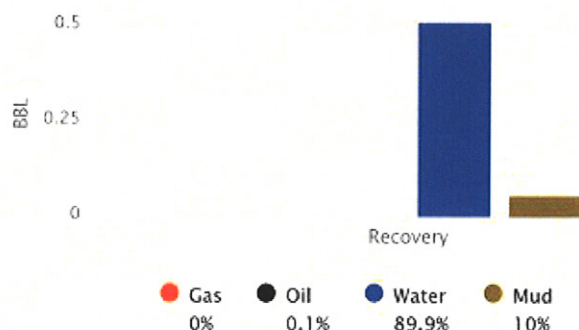
Total Recovered: 115 ft  
 Total Barrels Recovered: 0.5658

**Reversed Out**  
**NO**

Initial Hydrostatic Pressure	2209	PSI
Initial Flow	10 to 33	PSI
<b>Initial Closed in Pressure</b>	<b>1240</b>	<b>PSI</b>
Final Flow Pressure	34 to 61	PSI
<b>Final Closed in Pressure</b>	<b>1230</b>	<b>PSI</b>
Final Hydrostatic Pressure	2198	PSI
Temperature	122	°F

Pressure Change Initial Close / Final Close      0.8      %

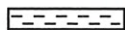



**Recovery at a glance**







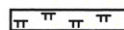


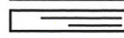
GIP cubic foot volume: 0

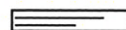


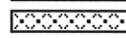
**ROCK TYPES**

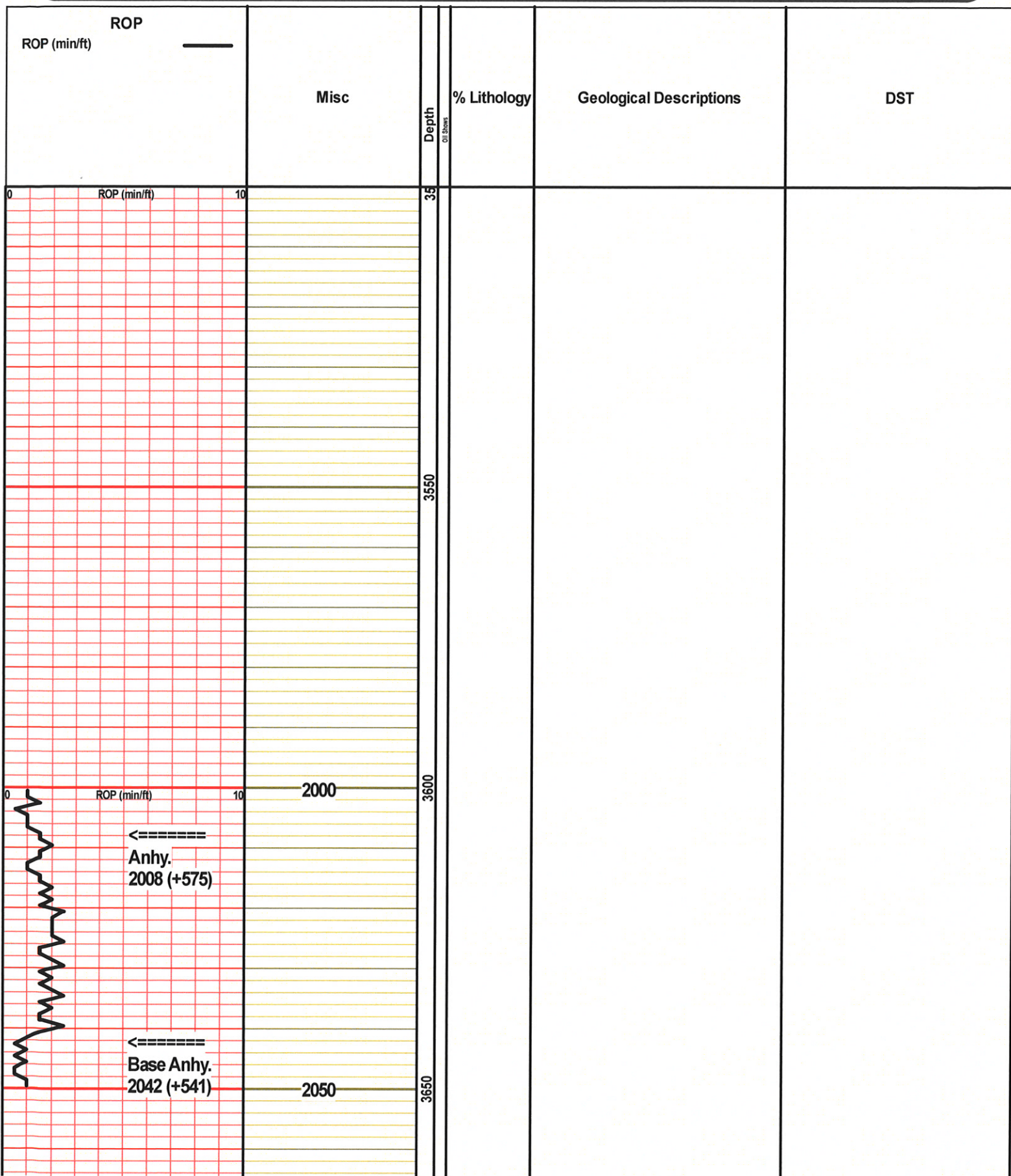
-  Anhy
-  Bent
-  Brec
-  Cht

-  Clyst
-  Carb shale
-  Congl
-  Dol

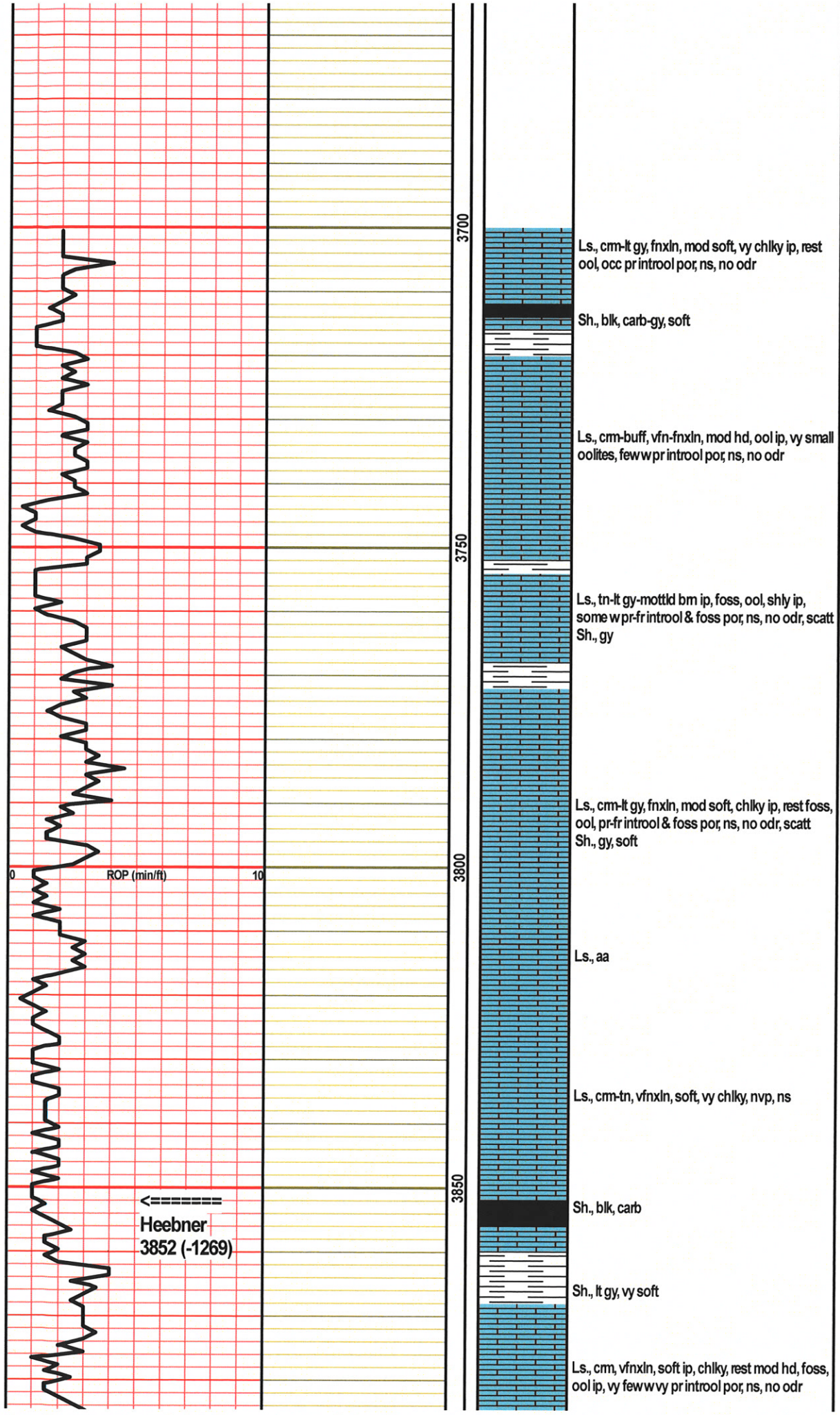
-  Gyp
-  Igne
-  Lmst
-  Meta

-  Mrlst
-  Salt
-  Shale
-  Shcol

-  Shgy
-  Slstst
-  Ss
-  Till







3700

Ls., cm-lt gy, fnxn, mod soft, vy chlky ip, rest ool, occ pr introol por, ns, no odr

Sh., blk, carb-gy, soft

3750

Ls., cm-buff, vfn-fnxln, mod hd, ool ip, vy small oolites, few w pr introol por, ns, no odr

Ls., tn-lt gy-mottld bm ip, foss, ool, shly ip, some w pr-fr introol & foss por, ns, no odr, scatt Sh., gy

3800

Ls., cm-lt gy, fnxn, mod soft, chlky ip, rest foss, ool, pr-fr introol & foss por, ns, no odr, scatt Sh., gy, soft

Ls., aa

3850

Ls., cm-tn, vfnxn, soft, vy chlky, nvp, ns

Sh., blk, carb

Sh., lt gy, vy soft

Ls., cm, vfnxn, soft ip, chlky, rest mod hd, foss, ool ip, vy few w pr introol por, ns, no odr

ROP (min/ft)

←-----  
Heebner  
3852 (-1269)



Lansing  
3893 (-1310)

ROP (min/ft)

Mud @ 3998  
Wt. 9.1  
Vis 54  
Filtrate 8.0  
Chlor 4000  
LCM Tr

3900  
3950  
4000  
4050  
4100

Sh., bm-gy, soft

Ls., cm, fn-vfnxn, mod hd, foss ip, chrt, chlky ip, nvp, ns, abund Chrt, lt gy-cm, shp

Sh., gy-dk gy-bm

Ls., cm, fnxn, mod soft, chlky ip, ool ip, vy few pcs w pr introol por, ns, no odr, scatt Chrt, tn, sli weath

Ls., cm, vfnxn, mod hd-hd, foss ip, dns, nvp, ns, scatt Sh., gy

Ls., cm-lt gy, vfnxn, mod hd-hd, foss ip, couple pcs w pr vug & foss por, ns, no odr, scatt Ls., cm, soft, vy chlky, nvp, ns

Ls., tn, vfnxn, mod hd, ool, fr-gd ooc por, ns, no odr

Ls., aa w pr ooc por, ns, some Ls., cm, vfnxn, soft, vy chlky, nvp, ns

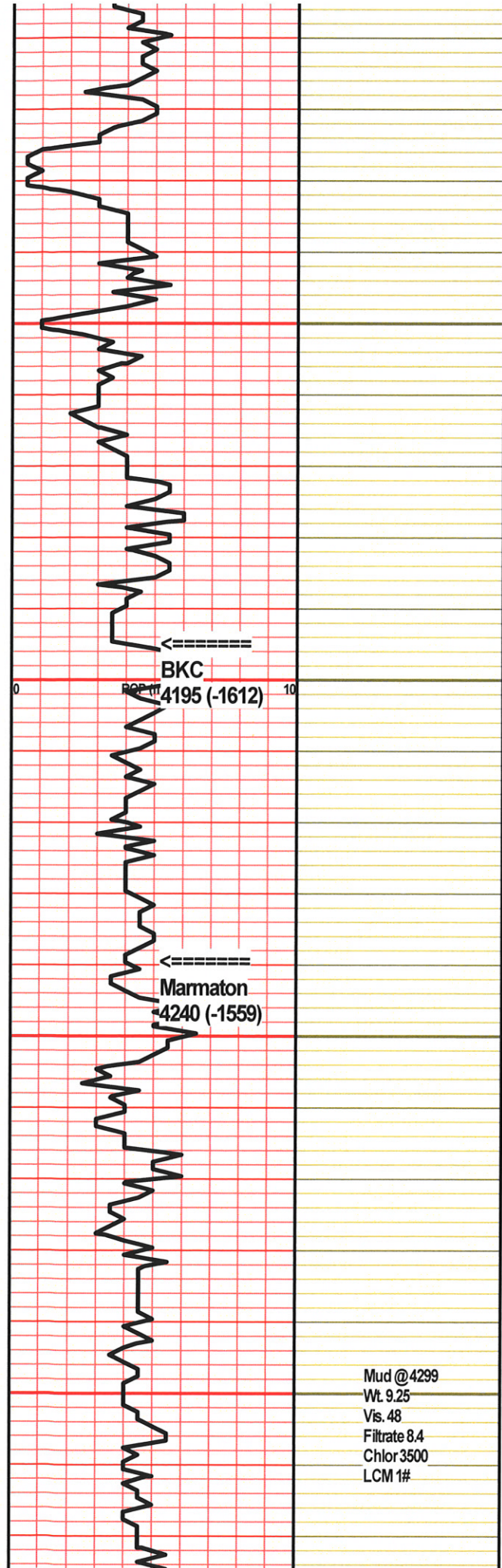
Ls., tn-lt gy, fn-vfnxn, mod hd, foss, ool ip, few pcs w vy pr introol por, ns, no odr, scatt Sh., gy-dk gy

Ls., cm, vfnxn, hd, dns, brittle, foss ip, nvp, ns, no odr, scatt Chrt, tn-lt gy, foss ip

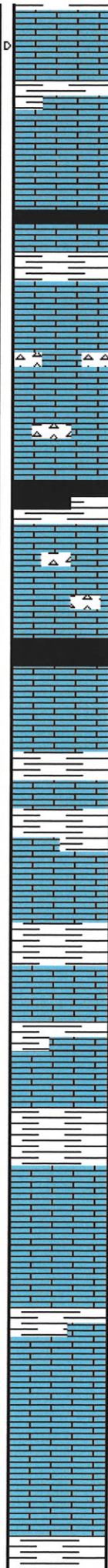
Ls., cm, fn-vfnxn, sli soft/fria, chlky ip, ool ip, scatt pcs w pr-rare fr introol por, tr rexln along por, SSFO, abund bm spot stn, wk cup odr, fr odr on brk, scatt Sh., gy

Ls., cm, fn-vfnxn, mod hd, ool ip, one pc w pr





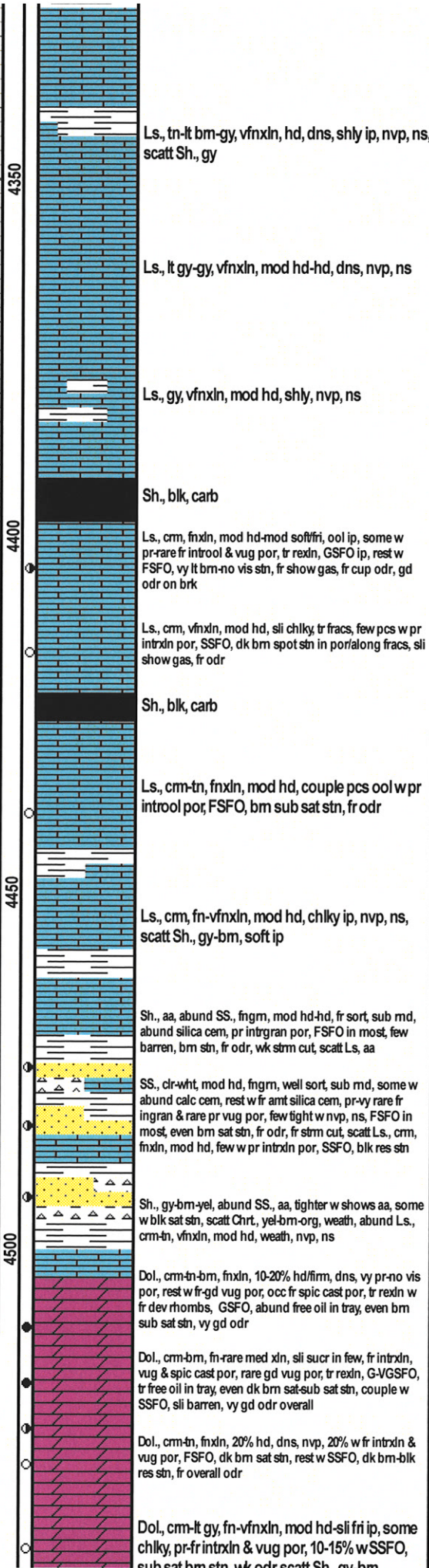
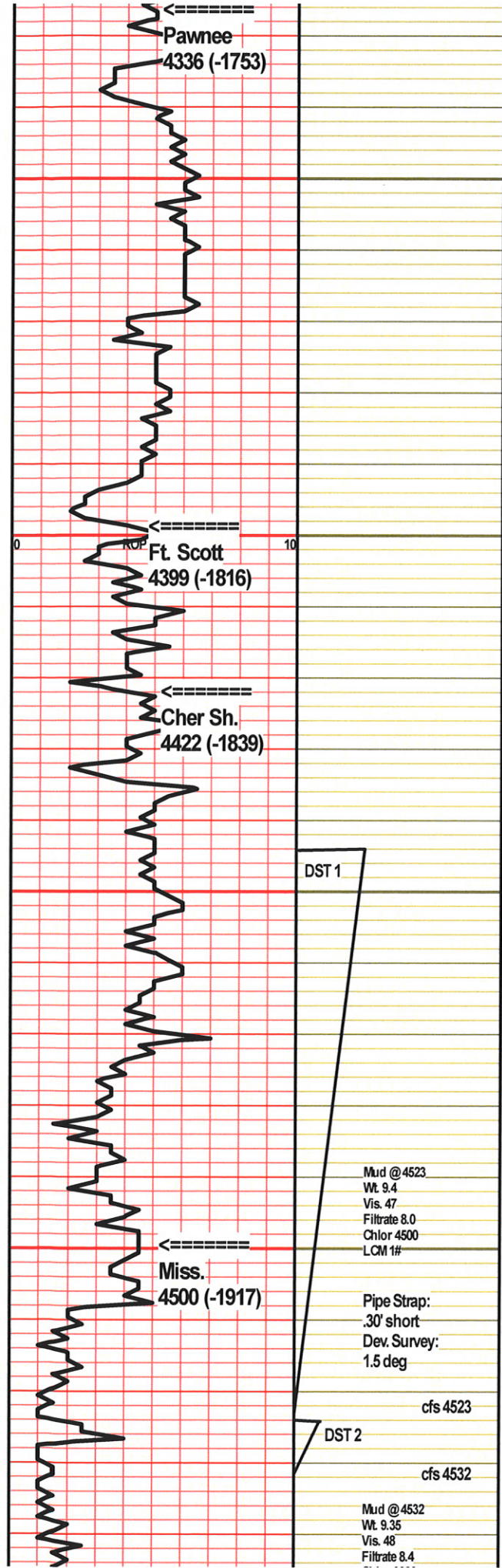
0  
 10  
 4150  
 4200  
 4250  
 4300



introol por, FSFO, bm spot str, no det cup odr,  
 fr odr on brk, scatt Sh., gy-bm  
  
 Ls., tn, fnxln, mod hd-sli soft ip, ool, fr-gd ooc  
 por, ns, no odr, no fluoro  
  
 Sh., blk, carb  
  
 Ls., tn, vfnxln, mod hd, foss ip, dns, nvp, ns,  
 scatt Sh., gy-bm  
  
 Ls., cm, fnxln, mod soft-soft, chlky, ool ip, pr  
 introol & occ fr ooc por, ns, no odr, scatt Chrt.,  
 lt gy-cm, foss, shp  
  
 Ls., cm-tn, vfnxln, mod hd, chlky ip, foss ip,  
 dns, nvp, ns, scatt Chrt, cm-tn, foss ip, sli  
 weath ip  
  
 Sh., blk-gy, carb ip  
  
 Ls., tn-lt bm, vfnxln, hd, dns, nvp, ns, scatt  
 Chrt, tn, shp  
  
 Sh., blk, carb  
  
 Sh., gy-bm, soft, Ls., cm, fnxln, mod hd, ool ip,  
 dns, nvp, ns  
  
 Ls., lt gy, vfnxln, mod hd-hd, dns, nvp, ns  
  
 Sh., gy-dk gy, bm, soft  
  
 Ls., tn-lt gy, vfnxln, hd, dns, shly ip, nvp, ns,  
 scatt Sh., gy  
  
 Sh., bm-gy, soft  
  
 Ls., cm, vfnxln, mod hd, dns, nvp, ns  
  
 Ls., cm-lt gy, vfnxln, mod hd-hd, silty ip, shly ip,  
 nvp, ns, scatt Sh., dk gy  
  
 Ls., tn-lt gy, vfnxln, mod hd-hd, dns, nvp, ns  
  
 Ls., aa, Sh., gy-lt gm-bm

Mud @ 4299  
 Wt. 9.25  
 Vis. 48  
 Filtrate 8.4  
 Chlor 3500  
 LCM 1#





**DST 1 4444-4523 (Mississippi)**

30-30-60-60  
IF: SB, built to 9.5"  
IS: No blow  
FF: SB, built to BOB in 44 min  
FS: No blow

Recovery:  
95' GIP  
145' CO (100%O)  
10' SMCW (4%M, 96%O)  
120' HOCM (60%M, 40%O)

275' TF

FP: 17-75; 82-199  
SIP: 1129-1041  
HP: 2147-2144

BHT: 121  
Gravity: 36  
Chlor: ---

**DST #2 4524-4532 (Mississippi)**

30-30-60-60  
IF: SB, built to 2.5"  
IS: No blow  
FF: SB, built to 2.5"  
FS: No blow

Recovery:  
115' SMCW wtr oil (90%W, 10%M)

115' TF



