



Home  
(785) 798-3400

# Andrew Stenzel Geologist

Ness City, Kansas



Cell  
(785) 798-8977

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

Well Name: Tombstone #1  
API: 15-135-26083-00-00  
Location: SW-SE-NW-NE Sec. 32-16S-26W (Ness County)  
License Number: 30742  
Spud Date: 9/26/19  
Surface Coordinates: 1247' FNL & 1750' FEL  
Region: KANSAS  
Drilling Completed: 10/6/19

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 2652  
Logged Interval (ft): 2500 To: TD  
Formation: MISSISSIPPIAN  
Type of Drilling Fluid: Mud-Co Chemical  
K.B. Elevation (ft): 2657  
Total Depth (ft): 4695

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:

9/26/19 MIRU, ran surface casing  
9/27/19 Waiting on cement  
9/28/19 Drilling @ 1861'  
9/29/19 Drilling @ 2945'  
9/30/19 Drilling @ 3640'  
10/1/19 DST #1  
10/2/19 DST #2  
10/3/19 DST #3, tripping in with bit after DST #3  
10/4/19 Circulating for samples at 4598', DST #4  
10/5/19 Ran electric logs, DST #5  
10/6/19 Ran production casing

### Services

RIG: Murfin Drilling, DBA WW Drilling, Rig #102

MUD: MUDCO

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

### Casing Record

SURFACE Casing: Ran 5 jts new 8 5/8", 23# casing @ 220'

PRODUCTION Casing: Ran 110 jts used 5 1/2", 14# casing @ 4691'.

### Formation Tops

Sample Tops		LogTops	
Anhy.	2067 (+590)	Anhy.	2065 (+592)
Base Anhy.	2099 (+558)	Base Anhy.	2096 (+561)
Topeka	3662 (-1005)	Topeka	3660 (-1003)
Heebner	3919 (-1262)	Heebner	3918 (-1261)
Lansing	3958 (-1301)	Lansing	3959 (-1302)
Stark Sh	4210 (-1553)	Stark Sh	4208 (-1551)
BKC	4276 (-1619)	BKC	4270 (-1613)
Pawnee	4404 (-1747)	Pawnee	4406 (-1749)
Ft. Scott	4468 (-1811)	Ft. Scott	4468 (-1811)
Cher. Sh.	4495 (-1838)	Cher. Sh.	4493 (-1836)
Miss.	4576 (-1919)	Miss.	4576 (-1919)
RTD	4695 (-2038)	LTD	4695 (-2038)



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc

**32-16S-26W Ness,KS**

4924 SE 58th St  
Newton, KS 67114

**Tombstone #1**

Job Ticket: 65560

**DST#: 1**

ATTN: Andrew Stenzel

Test Start: 2019.10.01 @ 13:08:00

### GENERAL INFORMATION:

Formation: **LKC "H-1"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:21:00

Time Test Ended: 20:44:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 82

Interval: **4110.00 ft (KB) To 4179.00 ft (KB) (TVD)**

Reference Elevations: 2657.00 ft (KB)

Total Depth: 4179.00 ft (KB) (TVD)

2652.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

### Serial #: 8734

### Outside

Press@RunDepth: 148.19 psig @ 4111.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.10.01

End Date:

2019.10.01

Last Callb.: 2019.10.01

Start Time: 13:08:01

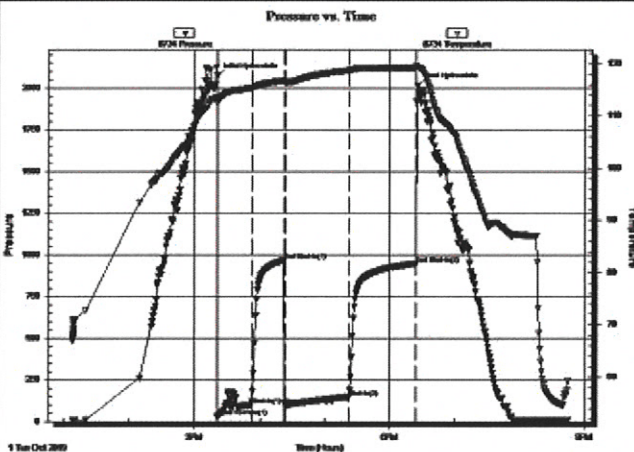
End Time:

20:44:00

Time On Btm: 2019.10.01 @ 15:20:50

Time Off Btm: 2019.10.01 @ 18:25:39

**TEST COMMENT:** 30-IF-1/4" blow built to B.O.B(11 inches) @ 20 mins (blow increased to 19 1/2")  
30-ISI-S.blow back @ 2 mins built to 1/4" @ 15 mins & decreased to surface blow  
60-FF-1/2" blow built to B.O.B(11 inches) @ 10 mins (blow increased to 52 3/4")  
60-FSI-S.blow back ASASI built to 7"



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2074.63	113.55	Initial Hydro-static
1	32.12	112.58	Open To Flow (1)
31	100.30	115.30	Shut-in(1)
61	966.24	116.66	End Shut-in(1)
63	99.71	116.37	Open To Flow (2)
122	148.19	118.67	Shut-in(2)
184	947.76	119.21	End Shut-in(2)
185	2013.68	119.28	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
60.00	GSOWM 30%G,5%O,25%W,40%M	0.30
185.00	GSWMO 40%G,15%W,22%M,23%O	2.08
55.00	CGO 30%G, 70%O	0.77
0.00	900' GIP	0.00

### Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc

**32-16S-26W Ness,KS**

4924 SE 58th St  
New ton, KS 67114

**Tombstone #1**

Job Ticket: 65561

**DST#: 2**

ATTN: Andrew Stenzel

Test Start: 2019.10.02 @ 04:25:00

### GENERAL INFORMATION:

Formation: **LKC " J "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:06:10

Time Test Ended: 10:57:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: **4178.00 ft (KB) To 4214.00 ft (KB) (TVD)**

Reference Elevations: 2657.00 ft (KB)

Total Depth: 4214.00 ft (KB) (TVD)

2652.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8734**

**Outside**

Press@RunDepth: 34.81 psig @ 4179.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.10.02

End Date:

2019.10.02

Last Callb.: 2019.10.02

Start Time: 04:25:01

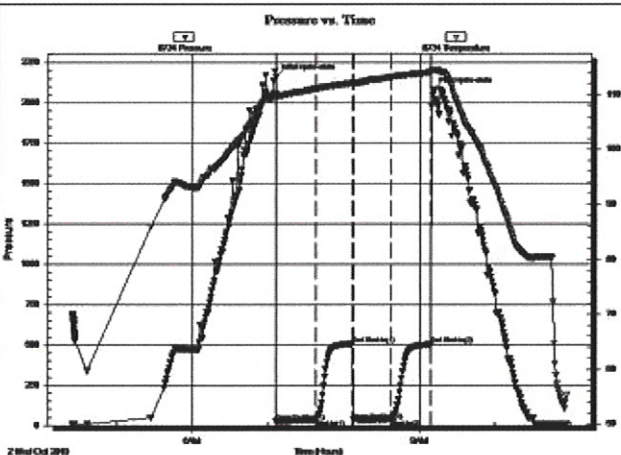
End Time:

10:57:30

Time On Btrr: 2019.10.02 @ 07:06:00

Time Off Btrr: 2019.10.02 @ 09:10:30

**TEST COMMENT:** 30-IF-Surface blow built to 1"  
30-IS-Surface blow back  
30-FF-No blow  
30-FSH-No blow



### PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2161.32	110.08	Initial Hydro-static
1	27.52	109.33	Open To Flow (1)
33	37.34	111.04	Shut-in(1)
62	507.06	112.07	End Shut-in(1)
62	33.41	111.91	Open To Flow (2)
92	34.81	113.15	Shut-in(2)
123	502.33	114.01	End Shut-in(2)
125	2079.78	114.43	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% Mud	0.10
0.00	Oil spots in tool	0.00

\* Recovery from multiple tests

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 65561

Printed: 2019.10.08 @ 09:08:21





**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc

**32-16S-26W Ness,KS**

4924 SE 58th St  
Newton, KS 67114

**Tombstone #1**

Job Ticket: 65562

**DST#: 3**

ATTN: Andrew Stenzel

Test Start: 2019.10.02 @ 22:19:00

### GENERAL INFORMATION:

Formation: **LKC "L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:42:50

Time Test Ended: 05:19:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: **4238.00 ft (KB) To 4278.00 ft (KB) (TVD)**

Reference Elevations: 2657.00 ft (KB)

Total Depth: 4278.00 ft (KB) (TVD)

2652.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8734**

**Outside**

Press@RunDepth: 47.07 psig @ 4239.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.10.02

End Date:

2019.10.03

Last Callb.: 2019.10.03

Start Time: 22:19:01

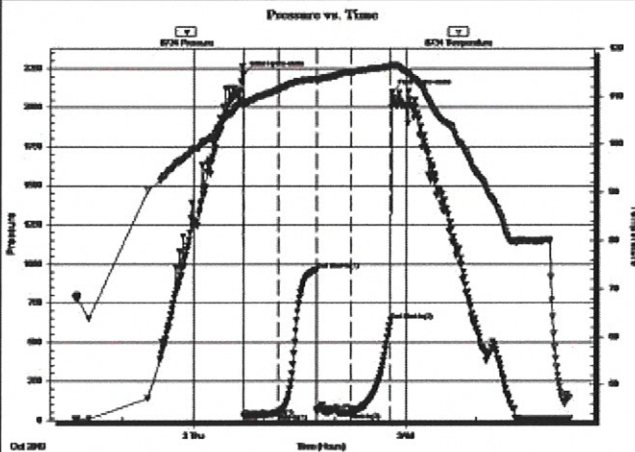
End Time:

05:19:50

Time On Btrr: 2019.10.03 @ 00:42:40

Time Off Btrr: 2019.10.03 @ 02:48:20

**TEST COMMENT:** 30-IF-Surface blow built to 2"  
30-ISI-No blow back  
30-FF-Surface blow built to 1"  
30-FSI-No blow back



### PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2214.39	109.06	Initial Hydro-static
1	27.63	107.94	Open To Flow (1)
29	43.18	111.35	Shut-in(1)
62	962.85	113.56	End Shut-in(1)
62	61.09	113.13	Open To Flow (2)
91	47.07	115.04	Shut-in(2)
124	641.77	116.17	End Shut-in(2)
126	2099.97	116.52	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
40.00	OSM 5%O, 95%M	0.20
0.00	Heavy oil spots in tool	0.00

\* Recovery from multiple tests

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 65562

Printed: 2019.10.08 @ 09:07:46



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Palomino Petroleum Inc

**32-16S-26W Ness,KS**

4924 SE 58th St  
New ton, KS 67114

**Tombstone #1**

Job Ticket: 65563

**DST#: 4**

ATTN: Andrew Stenzel

Test Start: 2019.10.04 @ 11:51:00

**GENERAL INFORMATION:**

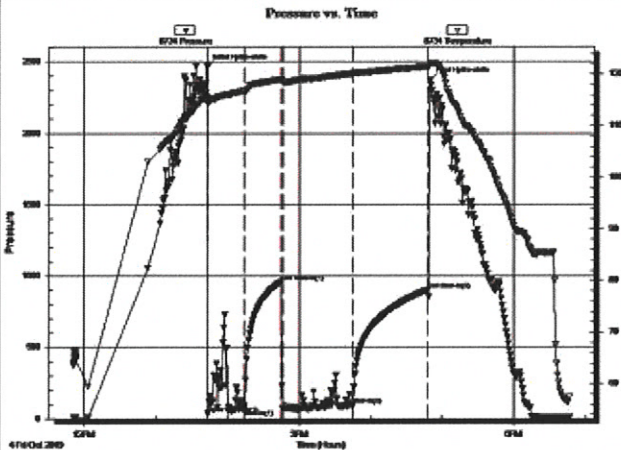
Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 13:43:30 Tester: Martine Salinas  
 Time Test Ended: 18:46:39 Unit No: 82  
 Interval: 4514.00 ft (KB) To 4605.00 ft (KB) (TVD) Reference Elevations: 2657.00 ft (KB)  
 Total Depth: 4605.00 ft (KB) (TVD) 2652.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

**Serial #: 8734**

**Outside**

Press@RunDepth: 94.65 psig @ 4515.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.10.04 End Date: 2019.10.04 Last Callb.: 2019.10.04  
 Start Time: 11:51:01 End Time: 18:46:40 Time On Btmr: 2019.10.04 @ 13:43:20  
 Time Off Btmr: 2019.10.04 @ 16:50:00

**TEST COMMENT:** 30-IF-Surface blow built to 4"  
 30-ISI-No blow back  
 30-FF-Surface blow built to 7"  
 30-FSI-No blow back



**PRESSURE SUMMARY**

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2464.57	115.37	Initial Hydro-static
1	34.29	114.21	Open To Flow (1)
31	66.30	116.73	Shut-in(1)
62	958.72	118.98	End Shut-in(1)
63	69.47	118.50	Open To Flow (2)
121	94.65	120.09	Shut-in(2)
185	902.51	121.42	End Shut-in(2)
187	2374.42	122.00	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
120.00	GOSM 15%G, 3%O, 82%M	0.62
30.00	OGO 30%G, 70%O	0.42

\* Recovery from multiple tests

**Gas Rates**

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc

**32-16S-26W Ness,KS**

4924 SE 58th St  
New ton, KS 67114

**Tombstone #1**

Job Ticket: 65564

**DST#: 5**

ATTN: Andrew Stenzel

Test Start: 2019.10.05 @ 10:35:00

### GENERAL INFORMATION:

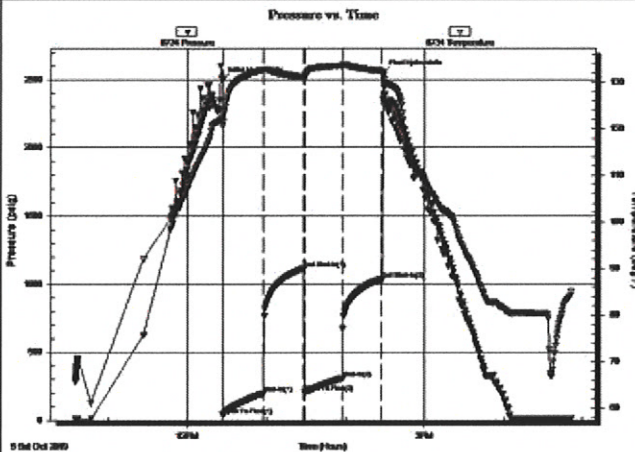
Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Straddle (Reset)  
 Time Tool Opened: 12:26:50  
 Tester: Martine Salinas  
 Time Test Ended: 16:51:30  
 Unit No: 82  
 Interval: **4604.00 ft (KB) To 4624.00 ft (KB) (TVD)**  
 Reference Elevations: 2657.00 ft (KB)  
 Total Depth: 4695.00 ft (KB) (TVD) 2652.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

### Serial #: 8734

### Outside

Press@RunDepth: 309.31 psig @ 4604.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.10.05 End Date: 2019.10.05 Last Calb.: 2019.10.05  
 Start Time: 10:35:01 End Time: 16:51:30 Time On Btrr: 2019.10.05 @ 12:26:30  
 Time Off Btrr: 2019.10.05 @ 14:29:00

**TEST COMMENT:** 30-IF-1/2" blow built to B.O.B (11 inches) @ 9 mins (blow increased to 28 1/2")  
 30-ISI-No blow back  
 30-FF-Surface blow built to B.O.B (11 inches) @ 15 mins (blow increased to 20")  
 30-FSH-No blow back



### PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2501.24	122.23	Initial Hydro-static
1	39.70	121.56	Open To Flow (1)
31	197.89	132.69	Shut-in(1)
62	1114.59	131.10	End Shut-in(1)
62	203.58	130.75	Open To Flow (2)
92	309.31	133.62	Shut-in(2)
122	1037.31	132.43	End Shut-in(2)
123	2549.73	131.38	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
620.00	MSW 4%M, 96%W	7.63

\* Recovery from multiple tests

### Gas Rates


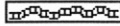
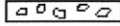

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

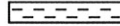



Trilobite Testing, Inc





Ref. No: 65564

Printed: 2019.10.08 @ 09:06:53

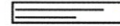



ROCK TYPES

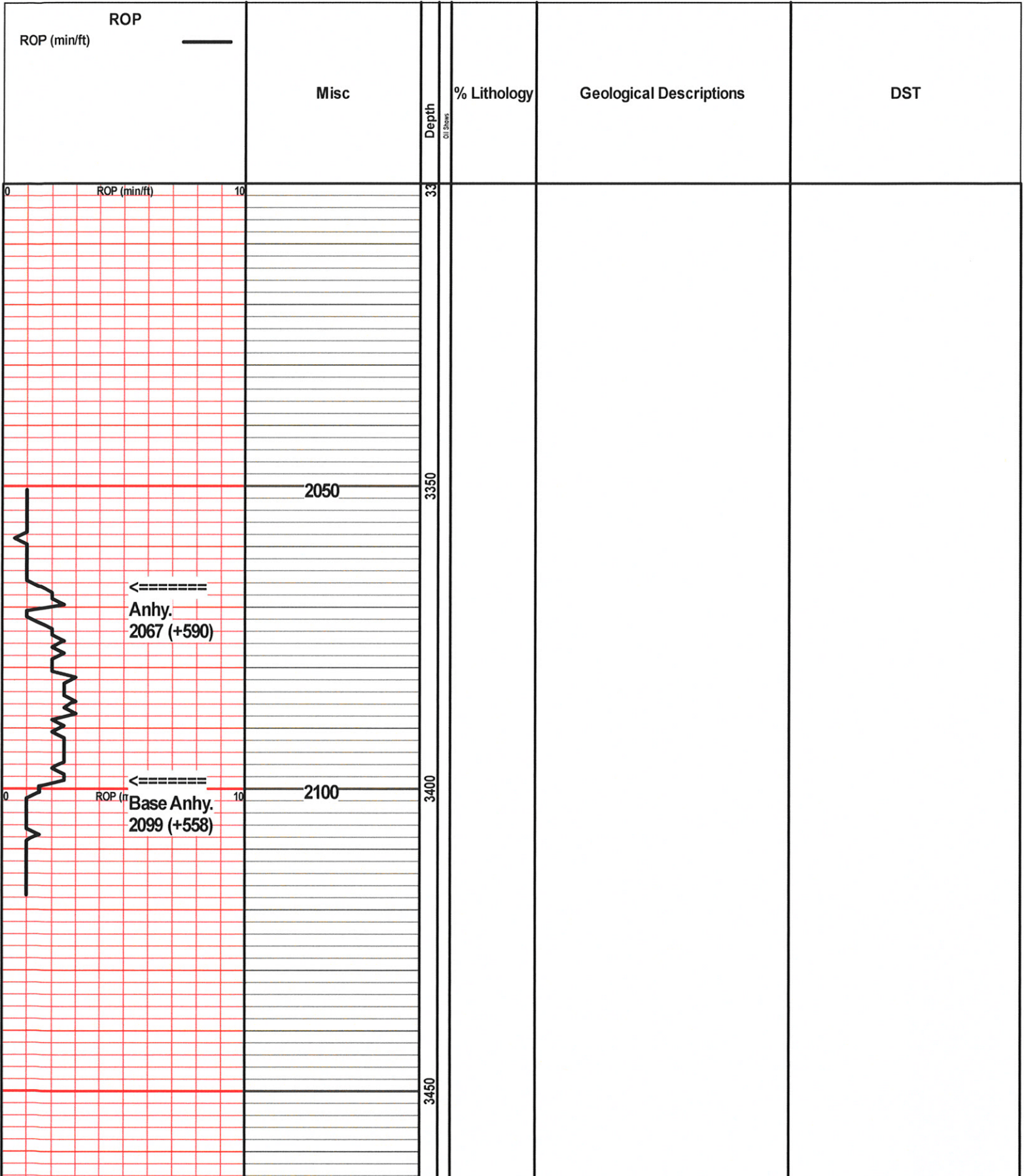
-  Anhy
-  Bent
-  Brec
-  Cht

-  Clyst
-  Carb shale
-  Congl
-  Dol

-  Gyp
-  Igne
-  Lmst
-  Meta

-  Mrlst
-  Salt
-  Shale
-  Shcol

-  Shgy
-  Sltst
-  Ss
-  Till





Dev. Surveys:  
220' 3/4 Deg  
1515' 3/4 Deg  
3997' 1 Deg  
4179' 1 3/4 Deg  
4695' 1 1/4 Deg

3500

Sh., gy-dk gy, Ls., tn, fnxn, mod soft, foss,  
chky ip, nvp, ns

Ls., tn-lt bm, fnxn, mod hd, ool/foss, few pcs w  
pr introol por, ns, no odr, scatt Sh., aa

3550

Sh., gy, hd, Ls., cm-lt gy, vfnxn, mod hd-hd,  
dns, nvp, ns

Ls., tn, fnxn, mod soft, foss, pr foss por, ns, no  
odr

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

3600

Ls., cm-lt gy, fnxn, mod hd-mod soft, foss/ool  
ip, dk gy ooids, few pcs w pr foss por, ns, no  
odr, scatt Sh., aa

Sh., gy, silty, Ls., aa

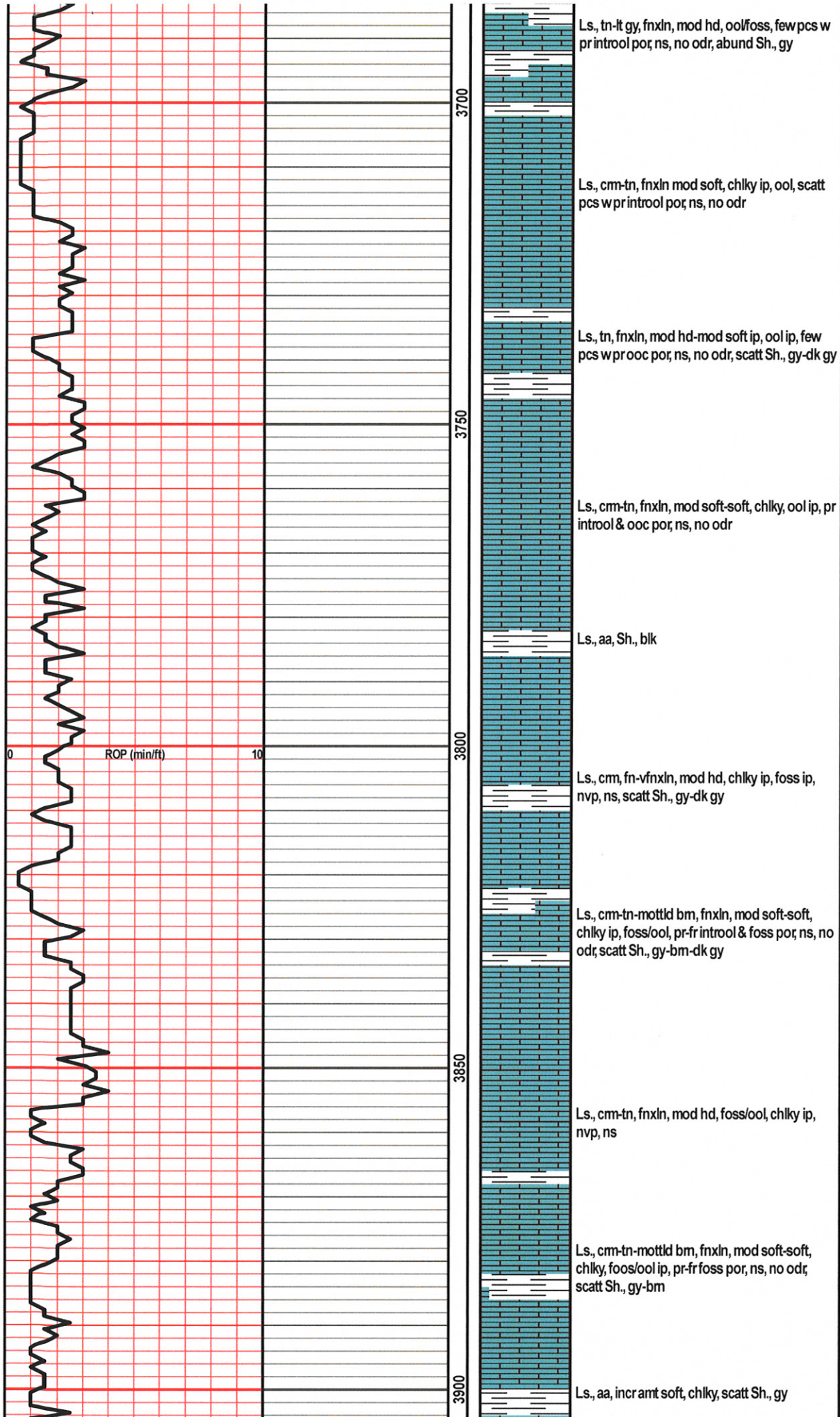
3650

Ls., cm, vfnxn, mod hd, sli chky ip, foss ip,  
nvp, ns

ROP (min/ft)

←=====  
Topeka  
3662 (-1005)







Heebner  
3919 (-1262)

Lansing  
3958 (-1301)

ROP (min/ft)

DST 1

3950

4000

4050

4100

Sh., blk, carb

Sh., lt gm, soft, Ls., cm, fn-vfnxn, mod hd-mod soft, sli chky ip, foss ip, nvp, ns

Ls., tn, fnxn, mod hd-mod soft ip, chky ip, couple pcs wvy pr intrxn por, ns, no odr, scatt Sh., gy-bm

Ls., cm, fnxn, mod hd-mod soft ip, chky ip, one pc chky w blk res strn, VSSFO, sli dead oil, no det odr, scatt Chrt., lt gy, shp

Ls., cm-lt gy, fnxn, mod hd-hd, foss ip, dns, nvp, ns, chrty ip, scatt Chrt., aa

Ls., aa, abund Sh., gy-bm

Ls., cm, fn-vfnxn, mod hd-hd, foss ip, dns, nvp, ns, abund Chrt., cm-tn-org, weath, trip ip

Ls., aa, scatt Sh., gy, fiss

Ls., cm, fnxn, mod soft, chky, few pcs wpr intrxn por, ns, no odr

Ls., cm, fnxn, mod hd-mod soft, chky ip, ool ip, few pcs w pr ooc por, ns, no odr, scatt Sh., bm-lt gy

Ls., cm-lt gy, vfn-fnxn, mod hd-hd, chky ip, foss ip, nvp, ns, scatt Sh., aa

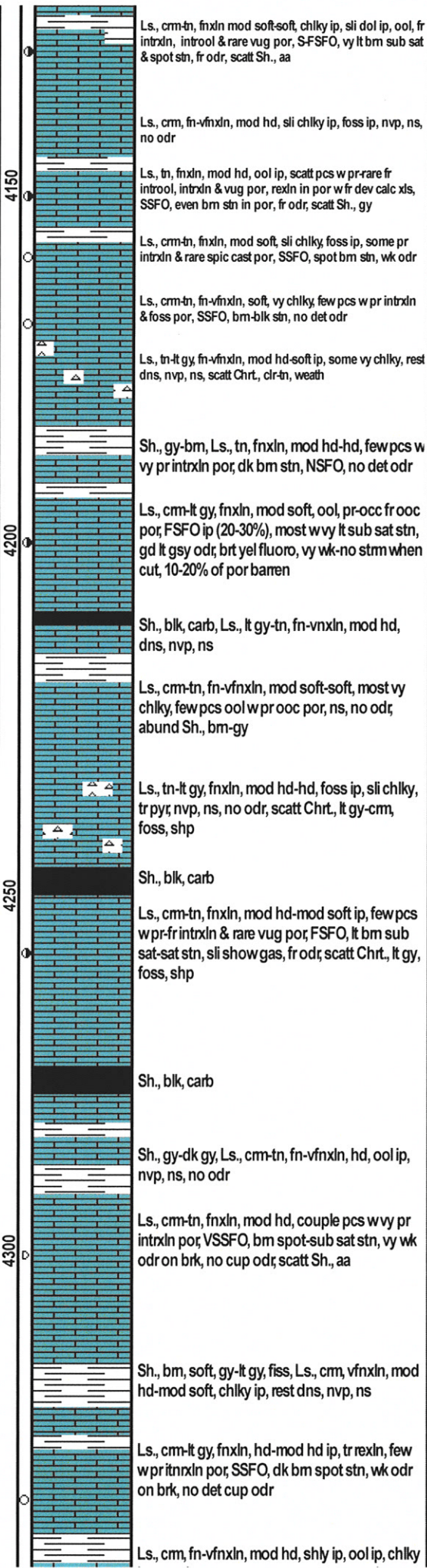
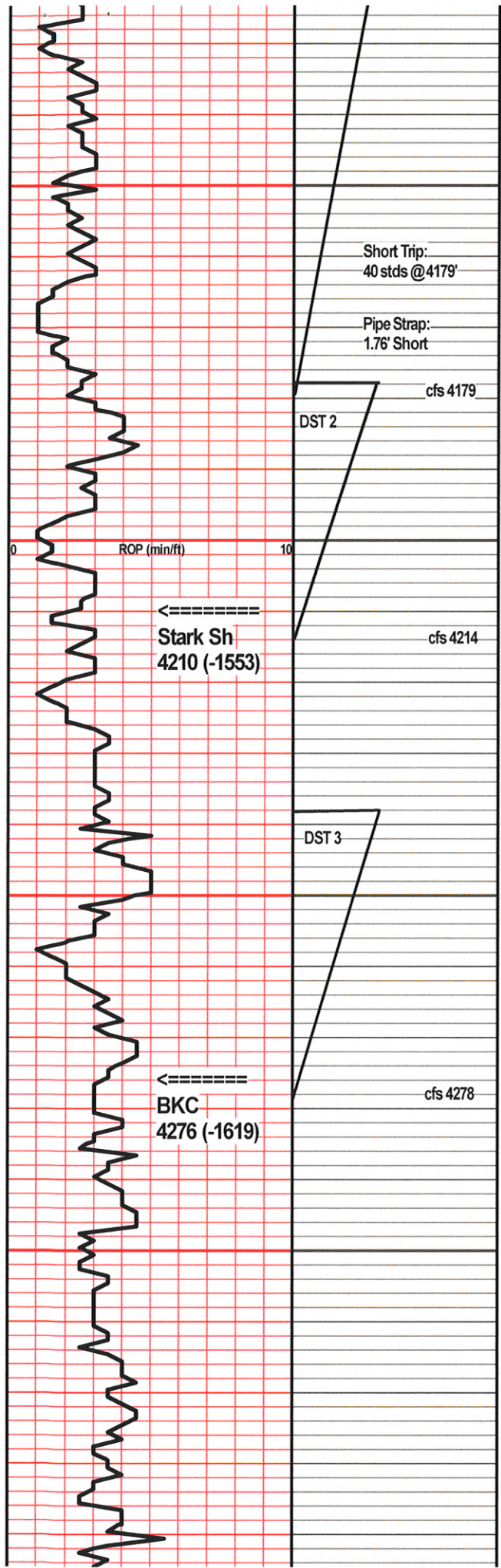
Sh., gy-bm, Ls., tn, fnxn, mod hd, shly, foss ip, nvp, ns

DST #1 4110-4179  
(LKC H, I)

30-30-60-60  
IF: BOB in 20 min  
IS: SB, built to 1/4"  
FF: BOB in 10 min  
FS: SB, built to 7"

Recovery:  
900' GIP  
55' CGO (30%G, 70%O)  
185' GSWMO (40%G, 23%O, 15%W, 22%M)  
60' GSOWM (30%G, 5%O, 25%W, 40%M)



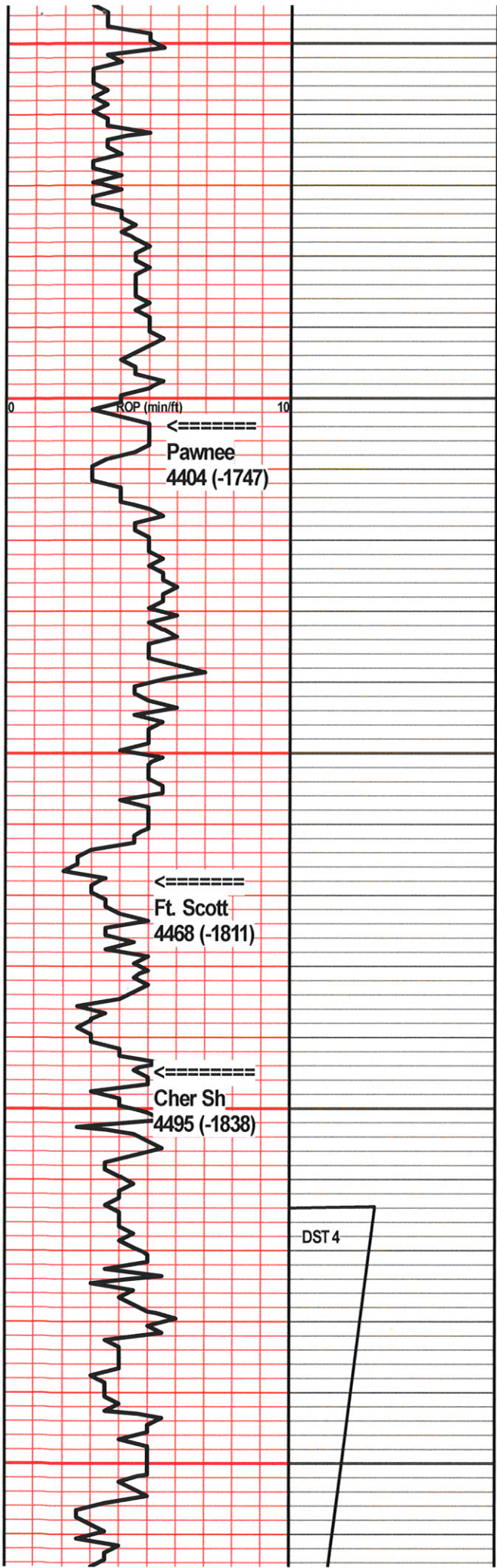


300' TF  
 FP: 32-100; 100-148  
 SIP: 966-948  
 HP: 2075-2014  
 BHT: 119  
 Gravity: 37  
 Chlor: 38000

**DST #2 4178-4214 (LKC J)**  
 30-30-30-30  
 IF: SB, built to 1"  
 IS: SB (thermal expansion)  
 FF: No blow  
 FS: No blow  
 Recovery: 20' mud woi spots in tool  
 FP: 28-37; 33-35  
 SIP: 507-502  
 HP: 2161-2080  
 BHT: 114  
 Gravity: -  
 Chlor: ---

**DST #3 4238-4278 (LKC L)**  
 30-30-30-30  
 IF: SB, built to 2"  
 IS: No blow  
 FF: SB, built to 1"  
 FS: No blow  
 Recovery: 40' OSM (5%O, 95%M)  
 FP: 28-43; 61-47  
 SIP: 963-642  
 HP: 2214-2100  
 BHT: 117  
 Gravity: -  
 Chlor: ---





4350  
 ip, couple pcs wvy pr ooc por, ns, no odr, scatt Sh., gy-bm

4400  
 Ls., cm, vfnxn, mod hd, brittle, couple pcs sli chky wvy pr intrxn por, NSFO, dk bm spot-sub sat stn in one pc, wk stm cut, no det odr

Ls., cm-lt gy, vfnxn, mod soft-mod hd, vy chky, nvp, ns

Sh., gy-blk

Ls., cm-tn, fn-vfnxn, mod hd-mod soft, vy chky in most, rest dns, trfracs, nvp, ns, no odr

Ls., cm-lt gy, vfnxn, mod hd-mod soft, chky ip, rest dns, nvp, ns

4450  
 Ls., lt gy-gy, vfnxn, mod soft, shly, nvp, ns, scatt Sh., gy

Sh., blk, carb

Ls., cm-tn, fnxn, mod hd-hd, ool ip, couple pcs wvy pr intrxn por, VSSFO, lt bm spot stn, vy wk odr, scatt Sh., gy

Ls., cm-lt gy, fnxn, mod soft-soft, chky ip, foss ip, few pcs w pr intrxn por, VSSFO, lt bm spot stn, wk odr

Sh., blk, carb

4500  
 Ls., cm-lt gy, vfnxn, mod hd-mod soft ip, chky ip, foss ip, couple pcs wvy pr intrxn & foss por, VSSFO, bm-blk spot stn, wk odr on brk, scatt Sh., dk gy-blk

Ls., & Sh., aa

Ls., cm, fnxn, mod hd, few pcs w pr intrxn por, SSFO, dk bm-blk spot stn, wk odr, abund Chrt., cm-tn-yel, weath, abund Sh., vari col

4550  
 Chrt, aa, few pcs w pr intrgran por, SSFO, blk stn, abund SS clstrs, whtclr, mod hd, frgm, abund calc cem, SSFO, abund sub sat stn, sat ip, wk odr, scatt Sh.,

**DST #4 4514-4605 (Mississippian)**  
 30-30-60-60  
 IF: SB, built to 4"  
 IS: No blow  
 FF: SB, built to 7"  
 FS: No blow

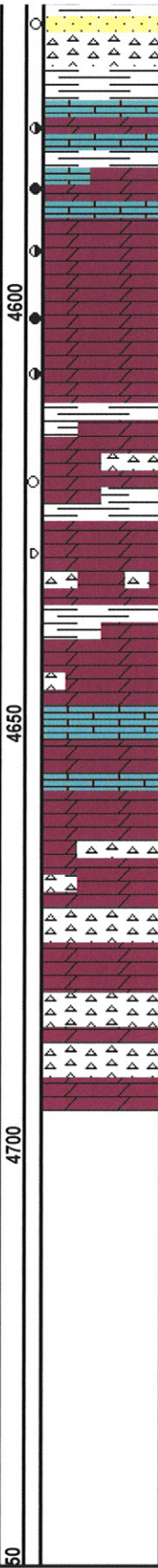
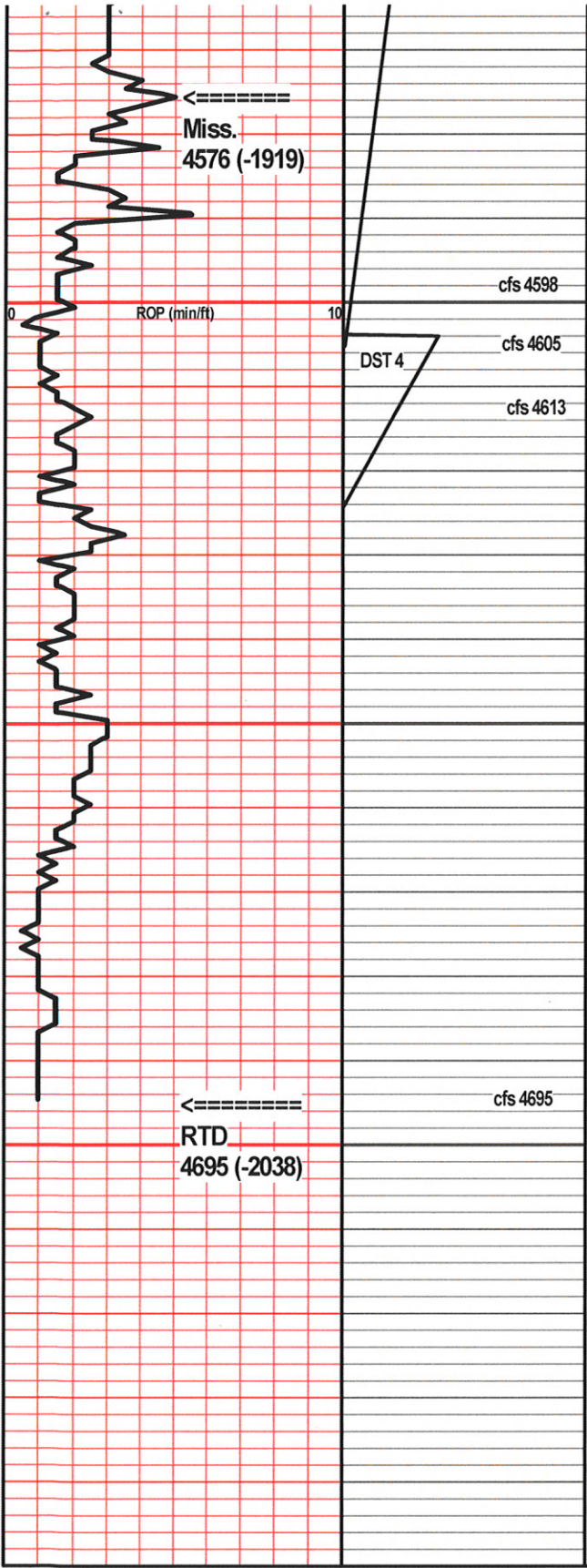
Recovery:  
 30' GCO (30%G, 70%O)  
 120' GOSM (15%G, 3%O, 82%M)

150' TF

FP: 34-66; 69-95  
 SIP: 959-903  
 HP: 2365-2374

BHT: 122  
 Gravity: 26.5





Ls., crm, vfxdn, mod soft, chky, pr intrxn por, SSFO, abund blk sub sat stn, few pcs Dol., tn, fxdn, mod soft, sli weath ip, pr intrxn, ppt & vug por, GSFO, sli show gas, gd odr, scatt Sh., gy

4598 20 min Dol., tn, fn-vfxdn ip, mod hd, sucr ip, pr intrxn & ppt por, rare fr sucr/intrxn por, GSFO, bm sat ip, rest w spot bm stn, fr show gas ip, gd odr, scatt Ls., aa, few pcs SS, fngm, mod soft, pr intrgran por, FSFO sat bm stn, poss sluff from above

4598 60 min, Dol., crm-tn, fxdn, mod soft, sucr ip, pr-fr intrxn & occ fr vug por, FSFO, lt bm sub sat-spot stn, fr odr, scatt SS clstrs, aa, likely sluff

4505 Dol, tn, fxdn, mod soft/fri, sucr ip, fr intrxn/sucr & occ fr vug por, rare spic cast por, GSFO, even bm sat in most, some w spot stn, gd odr

4613 Dol., tn-crm, fn-vfxdn ip, mod soft-mod hd ip, 10-20% pcs dns w nvp, ns, rest sucr ip, pr-fr intrxn/sucr por, pr vug & occ spic cast por, FSFO, spot stn, sub sat in few, few pcs (10-20%) barren or VSSFO, no stn, fr cup odr, sli show gas on brk, gd odr on brk, abund Sh., gy-bm-lt gm, poss sluff

Dol., crm, fxdn, mod hd, many dns, nvp, pr vug & intrxn por ip, SSFO in some, rest barren, tr dk bm-blk stn, wk odr, scatt Chrt, clr, weath, tr blk stn in fracs, abund Sh. aa

Dol., crm-tn, fxdn, mod soft, sucr ip, fr intrxn por, couple pcs w VSSFO, lt br stn, wk odr on brk, scatt Sh., gy-bm

Dol., crm, vfxdn, mod hd, dns/firm, pr vug por, ns, no odr, scatt Chrt, aa, abund Ls., lt gy vfxdn, mod hd, dns, nvp, ns

Dol., crm, fn-vfxdn, mod hd, pr vug por, ns, no odr, scatt Chrt, clr-wht, weath ip, tr fracs, nvp, ns

Chrt., wht-clr, trip ip, tr fracs, ns, Dol, crm, vfxdn, mod hd-hd, dns, nvp, ns, no odr

Gravity: ---  
Chlor: ---

**DST #4 4604-4624**  
**(Mississippian)**

30-30-30-30  
IF: BOB in 9 min  
IS: No blow  
FF: BOB in 15 min  
FS: No blow

Recovery:  
620' MSW (96%W, 4%M)

FP: 40-198; 204-309  
SIP: 1115-1037  
HP: 2501-2550

BHT: 131  
Gravity: -  
Chlor: 22000