

**LITHOLOGY STRIP LOG**  
**WellSight Systems**  
 Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Shakespeare Oil	Company, Inc. #3-26 Janzen	Region: Scott County, KS
Location: 1000' FSL, 1200' FSL	FEL SE4, Sec. 26-16S-34W	Completed: 6-24-2014
License Number: API #15-171-21067	FEL SE4A, Sec. 26-16S-34W	
Spud Date: 6-14-2014		
Surface Coordinates: 1000' FSL, 1200		

Bottom Hole Coordinates: Vertical hole  
 Ground Elevation (ft): 3107' To: RTD K.B. Elevation (ft): 3119'  
 Landed Interval (ft): 3800' To: RTD Total Depth (ft): 5030'  
 Type of Drilling Fluid: Chemical - Dispersed by MUD.LOG from WellSight Systems  
 Type of Drilling Fluid: Chemical - Dispersed by MUD.LOG from WellSight Systems

**OPERATOR**  
 Company: Shakespeare Oil Company, Inc.  
 Address: 202 West Main Street, Salem, IL 62881

**GEOLOGIST**  
 Name: Wesley D. Hansen  
 Company: Wesley D. Hansen - Consulting Petroleum Geologist  
 Address: 212 N. Market, Suite 257, Wichita, KS 67202  
 Office: 316-263-7313 Cellular: 316-772-6188

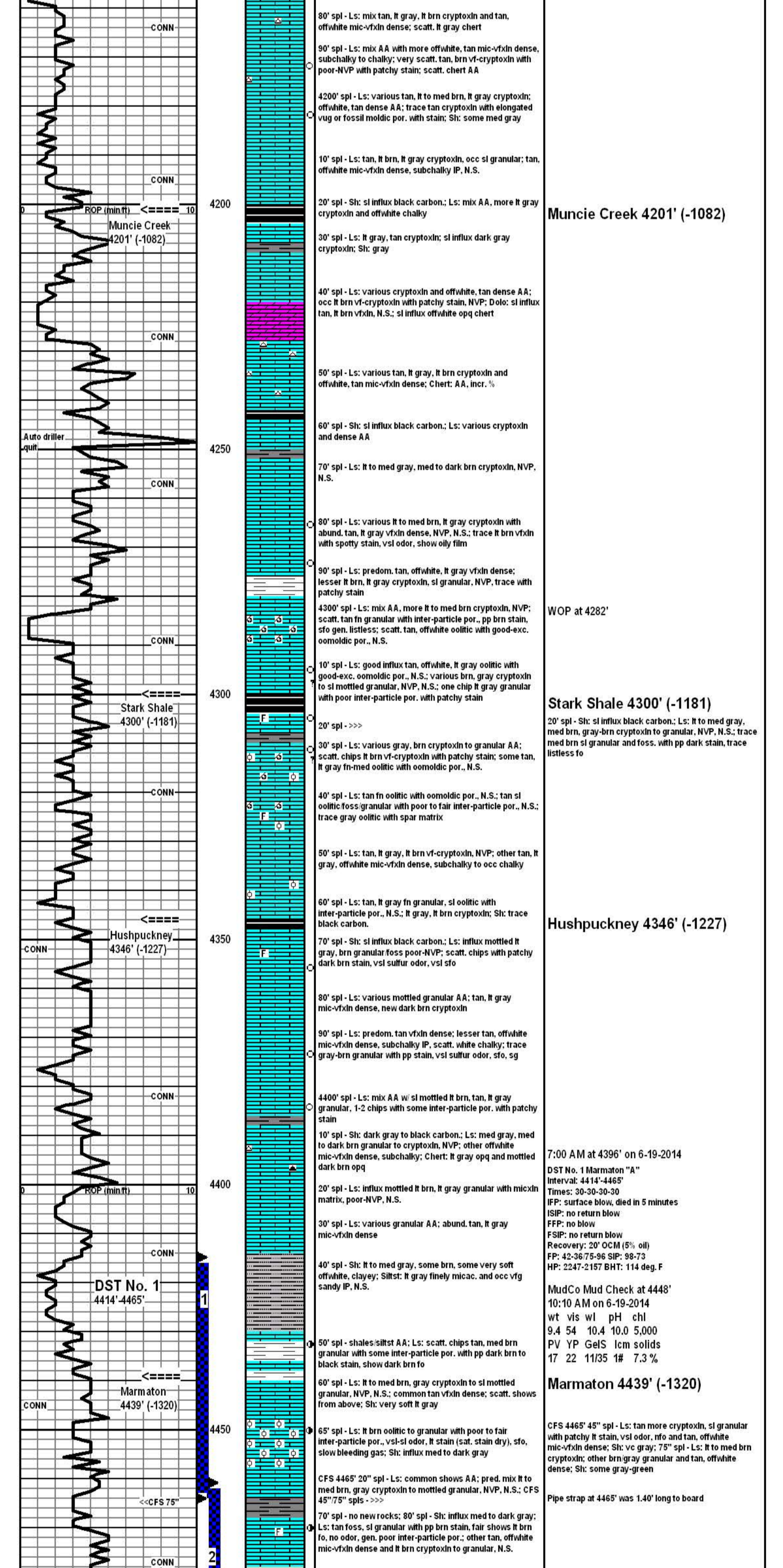
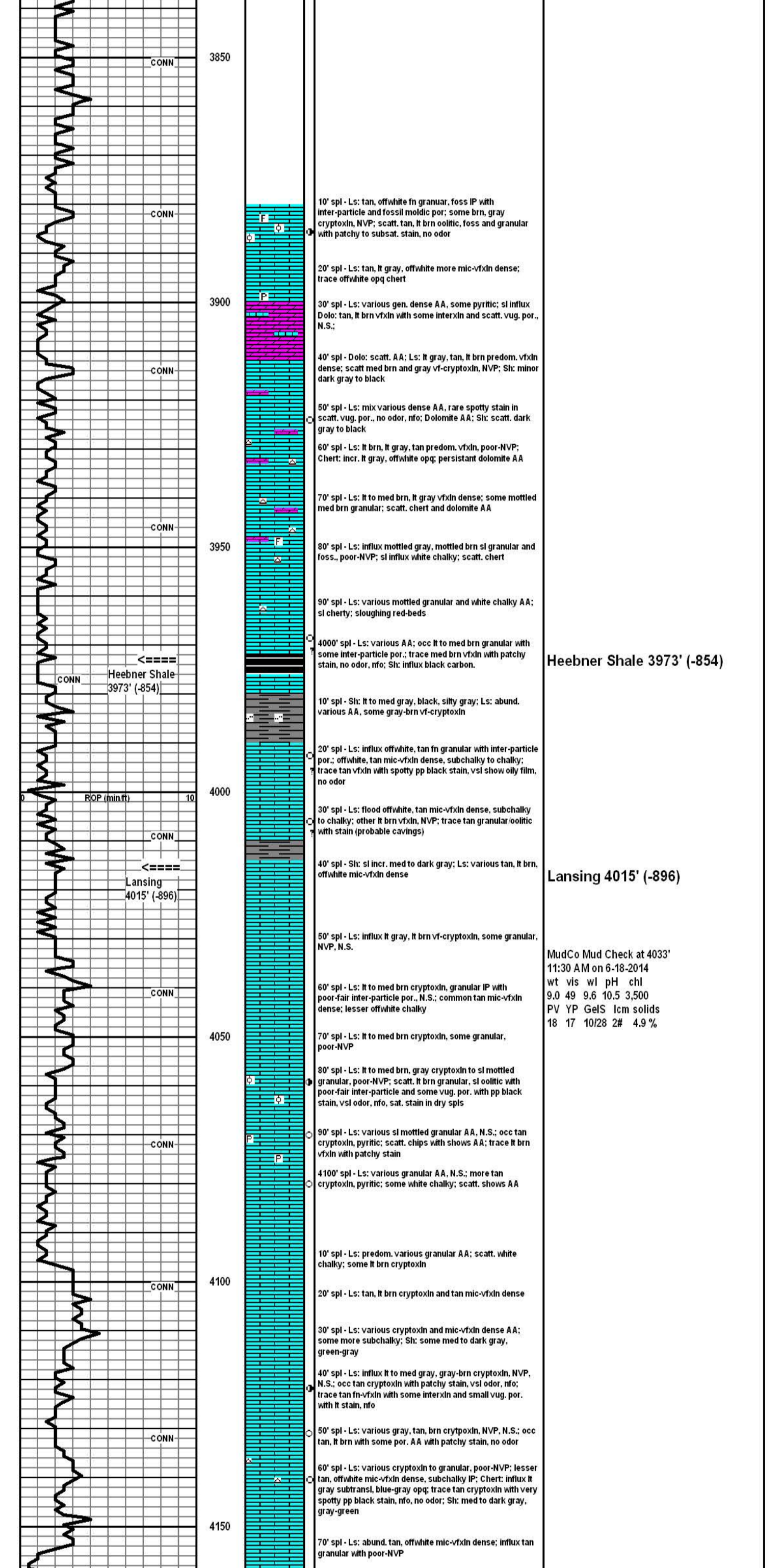
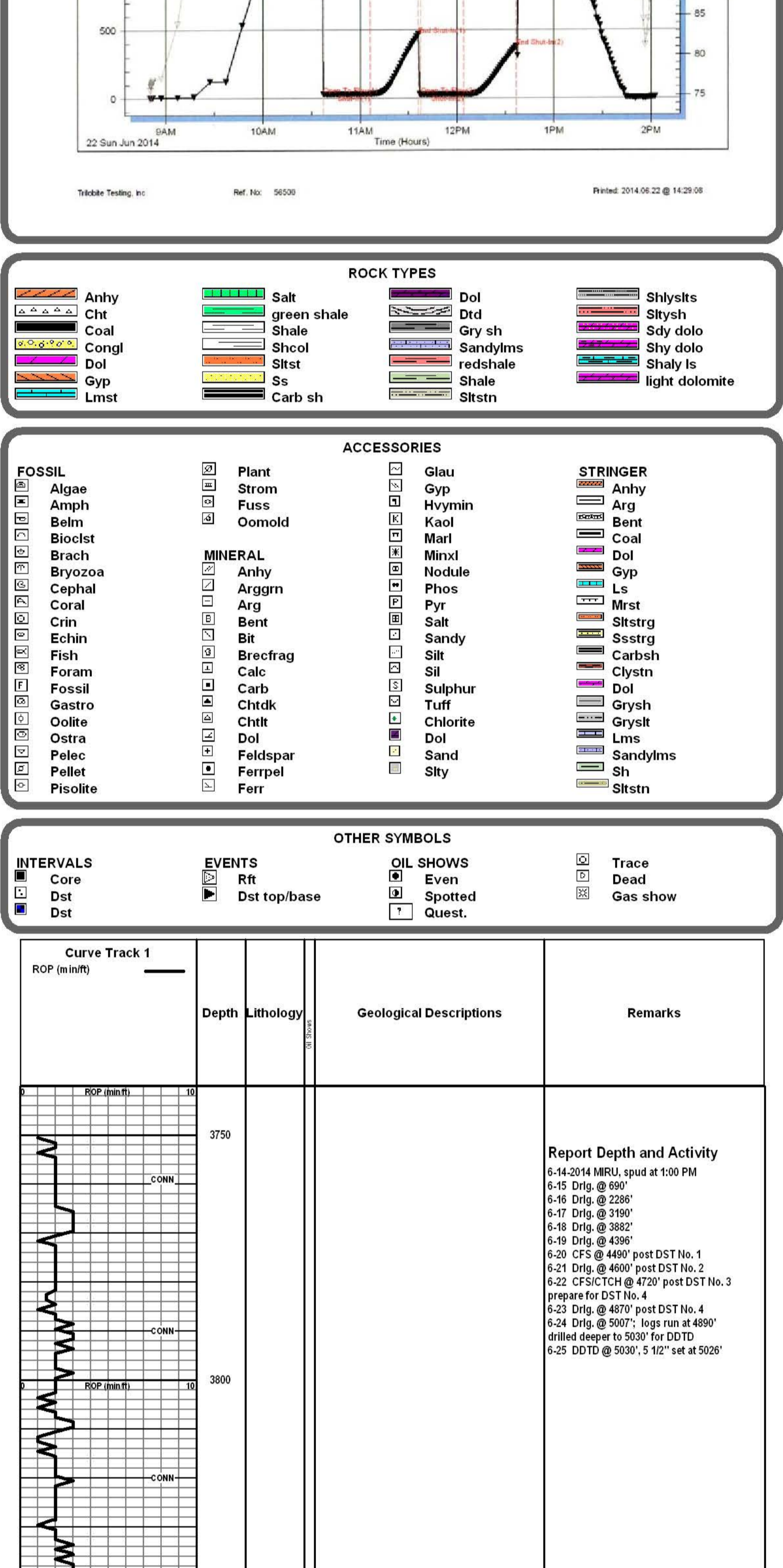
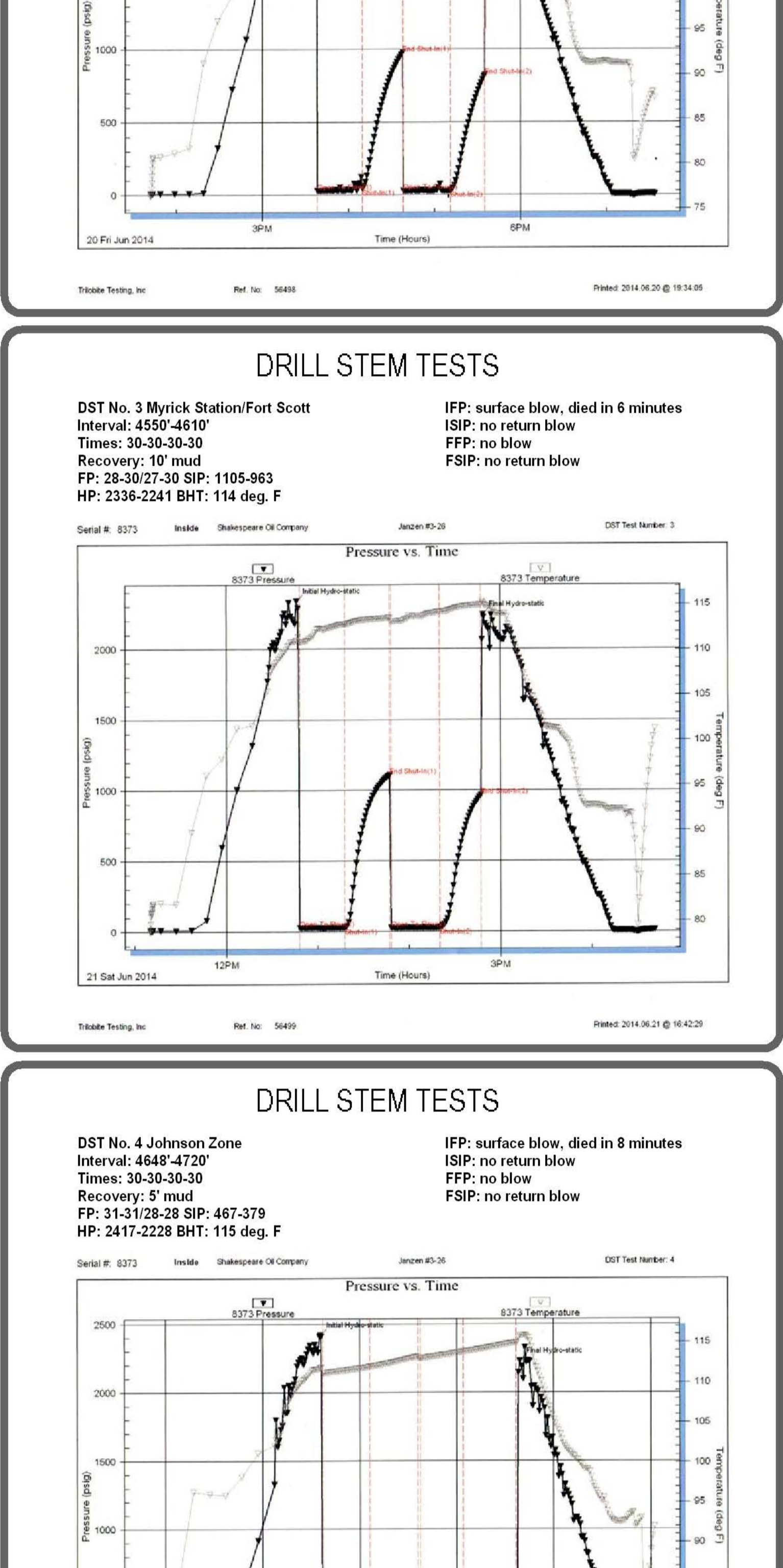
**COMMENTS**  
 Contractor: Southwind Drilling Rig #70  
 Pusher: Sam Staggs  
 Surface Casing: 8 5/8" set at 265' w/180 sx  
 Production Casing: 5 1/2" casing set at 5026' w/175 sx  
 Mud by: MudCo - Reid Atkins was the engineer  
 DST's by: Trilobite - Brandon Turley was the tester  
 Logs by: Weatherford - MAI/MFE, MPD/MDN, MML, Sonic  
 Deviation Surveys: 3/4 deg. @ 265'; 2 1/2 deg. @ 4890'; 2 1/2 deg. @ 5030'

**BIT REC'D**

Bit #	Size	MFG	Type	Depth	Footage	Hours on bit
1	12 1/4"	Reed	S52	265'	265'	123
2	7 7/8"	Reed	S52	5030'	4765'	2

**FORMATION TOPS AND STRUCTURAL COMPARISON**

FORMATION	SAMPLE TOPS		LOG TOPS		COMPARISON WELLS		
	Depth	Datum	Depth	Datum	A)	B)	C)
B/Anhydrite	2456'	+663	2454'	+665	+669	+667	+663
Heebner	3973'	-854	3972'	-854	-856	-856	-861
Lansing	4015'	-896	4014'	-895	-899	-898	-904
Muncie Creek Shale	4201'	-1082	4200'	-1081	-1084	-1081	-1090
Stark Shale	4300'	-1181	4300'	-1181	-1183	-1180	-1185
Hushpuckney Shale	4346'	-1227	4346'	-1227	-1225	-1225	-1235
Pawnee	4523'	-1404	4522'	-1403	-1405	-1400	-1410
Lower Cherokee Sh.	4601'	-1482	4600'	-1481	-1484	-1478	-1487
Johnson Zone	4644'	-1525	4647'	-1528	-1531	-1526	-1530
Ostrin	4802'	-1683	4800'	-1681	-1672	-1656	-1652
Mississippian	4890'	-1771					
RTD			4890'				
LTD			4900'				
Spergen	4956'	-1837	N/E	-1771			
DDTD	5030'	-1911	N/E				



**ROCK TYPES**

- Anhy (Anhydrite)
- Brach (Brachiopods)
- Coal
- Congl (Conglomerate)
- Dol (Dolomite)
- Gyp (Gypsum)
- Lm (Limestone)
- Salt shale
- Shale
- Shst (Shale with sandstone)
- Sls (Siltstone)
- Carb sh (Carbonaceous shale)
- Dol (Dolomite)
- Gry sh (Gypsiferous shale)
- Marl (Marl)
- Mvsl (Manganese shale)
- Sandshls (Sandstone)
- redshals (Reddish shale)
- Shale
- Sstn (Siltstone)
- Shlyslts (Shaly siltstone)
- Shydl (Shaly dolomite)
- Shaly ls (Shaly limestone)
- Shly ls (Shaly limestone)
- light dolomite

**ACCESSORIES**

- Plant Strom
- Fossil
- Oomold
- MINERAL: Anhy, Arg, Bent, Bit, Brefracg, Calc, Chtdk, Chrt, Feldspar, Ferr
- Glaup
- Hymyn
- Kaoln
- Mart
- Nodule
- Phos
- Salt
- Sand
- Silt
- Sil
- Sulphur
- Chlort
- Dol
- Sand
- Silty
- STRINGER: Anhy, Arg, Bent, Coal, Dol, Gyp, Ls, Mrst, Sstn, Sstn, Sstn, Carbgt, Clystn, Dol, Grysh, Gryslt, Lm, Sandylms, Shlyls, Sstn

**OTHER SYMBOLS**

- Trace
- Dust
- Gas show
- OIL SHOWS: Rte, Spotted, Quest.

**INTERVALS**

- ROP (min/ft)
- Dst
- Dst

**Curve Track 1**

ROP (min/ft)

Depth

Lithology

Geological Descriptions

Remarks

Report Depth and Activity

6-14-2014 MRU, spud at 1:00 PM  
 6-15 Dlg @ 690'  
 6-16 Dlg @ 2280'  
 6-17 Dlg @ 3190'  
 6-18 Dlg @ 3882'  
 6-19 Dlg @ 4580'  
 6-20 CFS @ 4900' post DST No. 1  
 6-21 Dlg @ 4600' post DST No. 2  
 6-22 CFS/TC @ 4720' post DST No. 3  
 prepare for DST No. 4  
 6-23 Dlg @ 4870' post DST No. 4  
 6-24 Dlg @ 5007' logs ran at 4890' drilled deeper to 5030' for DDTD  
 6-25 DDTD @ 5030', 5 1/2" set @ 5026'

Heebner Shale 3973' (-854)

Lansing 4015' (-896)

Muncie Creek 4201' (-1082)

Stark Shale 4300' (-1181)

Hushpuckney 4346' (-1227)

Stark Shale 4300' (-1181)

WOP at 4282'

Stark Shale 4300' (-1181)

Hushpuckney 4346' (-1227)

Marmaton 4439' (-1320)

DST No. 1 4414-4465'

DST No. 2 4460-4520'

DST No. 3 4550-4610'

DST No. 4 4648-4720'

Morrow Shale 4720' (-1601)

Mississippian 4802' (-1683)

DDTD 5030' (-1911)

Johnson Zone 4644' (-1525)

DDT No. 70

Morrow Shale 4720' (-1601)

Mississippian 4802' (-1683)

DDTD 5030' (-1911)

DDTD reached at 8:20 AM on 6-24-2014

After review of samples, DST results and open hole logs, the decision was made to run 5 1/2" casing for production testing in the Marmaton. Possible use of this well for saltwater disposal was the basis for drilling the well down into the Spergen after open hole logs were run at 4890'.

Wesley D. Hansen  
 Consulting Petroleum Geologist  
 Kansas License # 418