

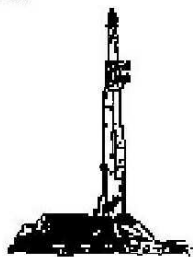
# **GOOLSBY BROTHERS** and associates, inc.

575 Union Blvd, Suite 208  
Lakewood, CO 80228  
303-945-2860 Office



**Geological Wellsite  
Supervision**

[www.goolsbybrothers.com](http://www.goolsbybrothers.com)



**Scale 1:240 (5"=100') Imperial  
True Vertical Depth Log**

**Well Name:** HENRICKSON FEDERAL 36C-18HZ (Vertical Hole Section)

**Location:** Section 7, T3N, R66W, WELD County, CO.

**License Number:** API: 05-123-37670

**Region:** DJ Basin - Wattenberg

**Spud Date:** September 15, 2013

**Drilling Completed:** September 22, 2013

**Surface Coordinates:** NESW Sec 7 T3N R66W; 1885' FSL 2078' FWL

Lat N 40.236993 Long W -104.822440

**Bottom Hole Coordinates:** SESW Sec 18 T3N R66W; 490' FSL 2496' FWL

**Ground Elevation (ft):** 4794'

**K.B. Elevation (ft):** 4810'

**Logged Interval (ft):** 6790' **To:** 14528' **Total Depth (ft):** 14528' DMTD

**Formation:** Pierre Sands/Shales, Niobrara, Codell Target

**Type of Drilling Fluid:** Water & Poly to 6674', LSND 6674' - 14528'

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

## **OPERATOR**

**Company:** Kerr-McGee Oil & Gas Onshore LP

**Address:** Granite Tower - 1099 18th St. Ste 1800

Denver, CO 80202

CO Geologist, John Morgan

## **E-Logs**

**MWD GR - 1017'-14481'**

**MWD RES - 7815'-14481'**

## **Contractors**

**1) Drilling Contractor:** XTREME, Rig #20

**2) Company Man:** Marvin Hackworth & Ricky Carrol

**3) Mud Comapny :** AES Drilling Fluids

**Engineer:** Ray Brewer

**4) Directional Drilling:** Baker Huges

**Pulse Tool**

**Drillers:** Barry Combs, Scott Stanford


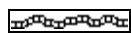
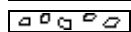

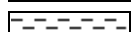

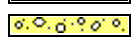
**MWD:** Greg Dore & David Campbell




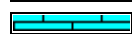

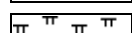

**5) Gas Equipment:** Mudlogging Systems Inc.

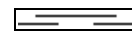
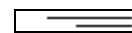
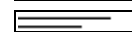
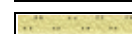
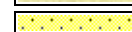
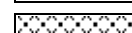
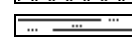
**by Terra Services**




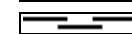
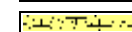
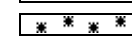
**Redbox # ML-462 & Ratcliff Agitator**

## ROCK TYPES

 Anhy  
 Bent  
 Brec  
 Cht  
 Clyst  
 Coal  
 Congl




















 Dol  
 Gyp  
 Igne  
 Lmst  
 Meta  
 Mrlst  
 Salt











 Shale  
 Shcol  
 Shgy  
 Sltst  
 Ss  
 Till  
 Sltly sh

 Arg ss  
 Fracture  
 Chalk  
 Carb sh  
 Arg lmy ss  
 Cmt









## 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

## 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

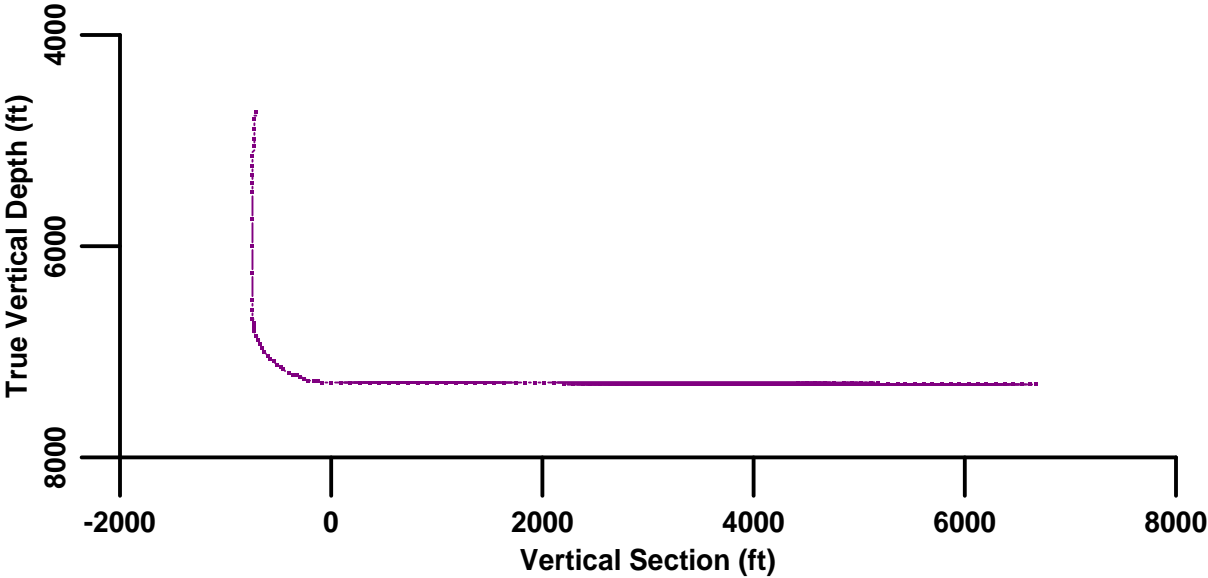
### INTERVAL

 Core  
 Dst

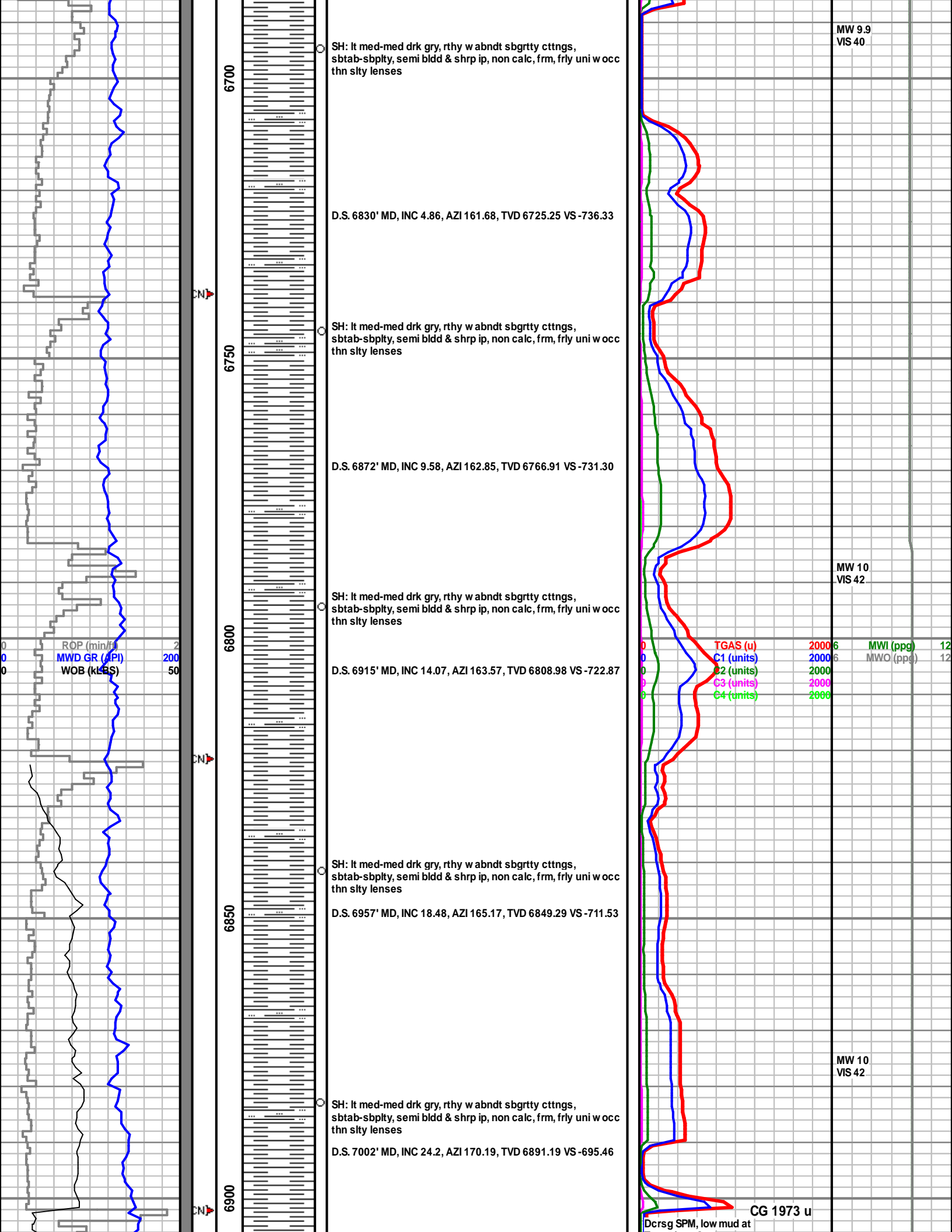
### EVENT

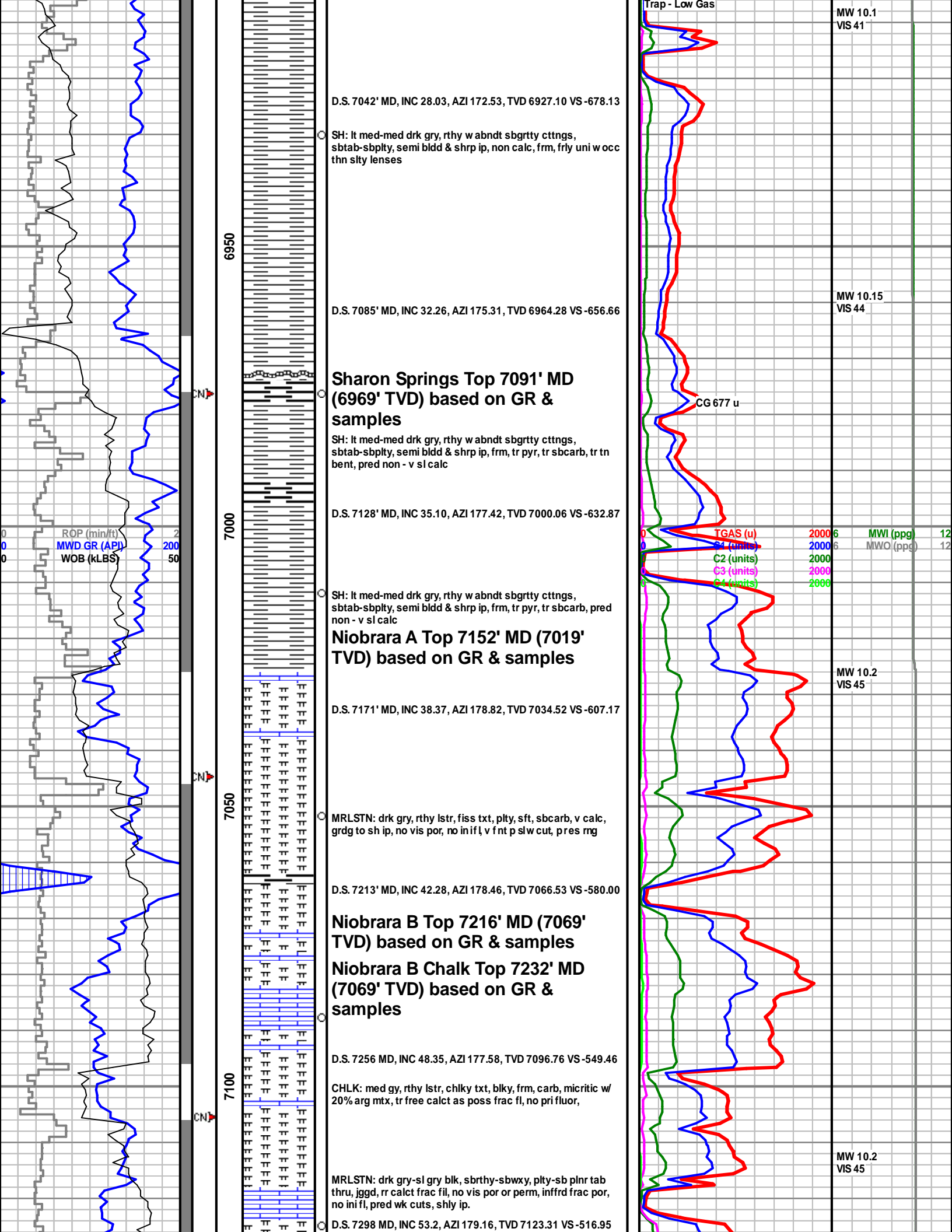
 New bit  
 Rft  
 Off btm  
 Conn  
 Casing  
 Casing\_right

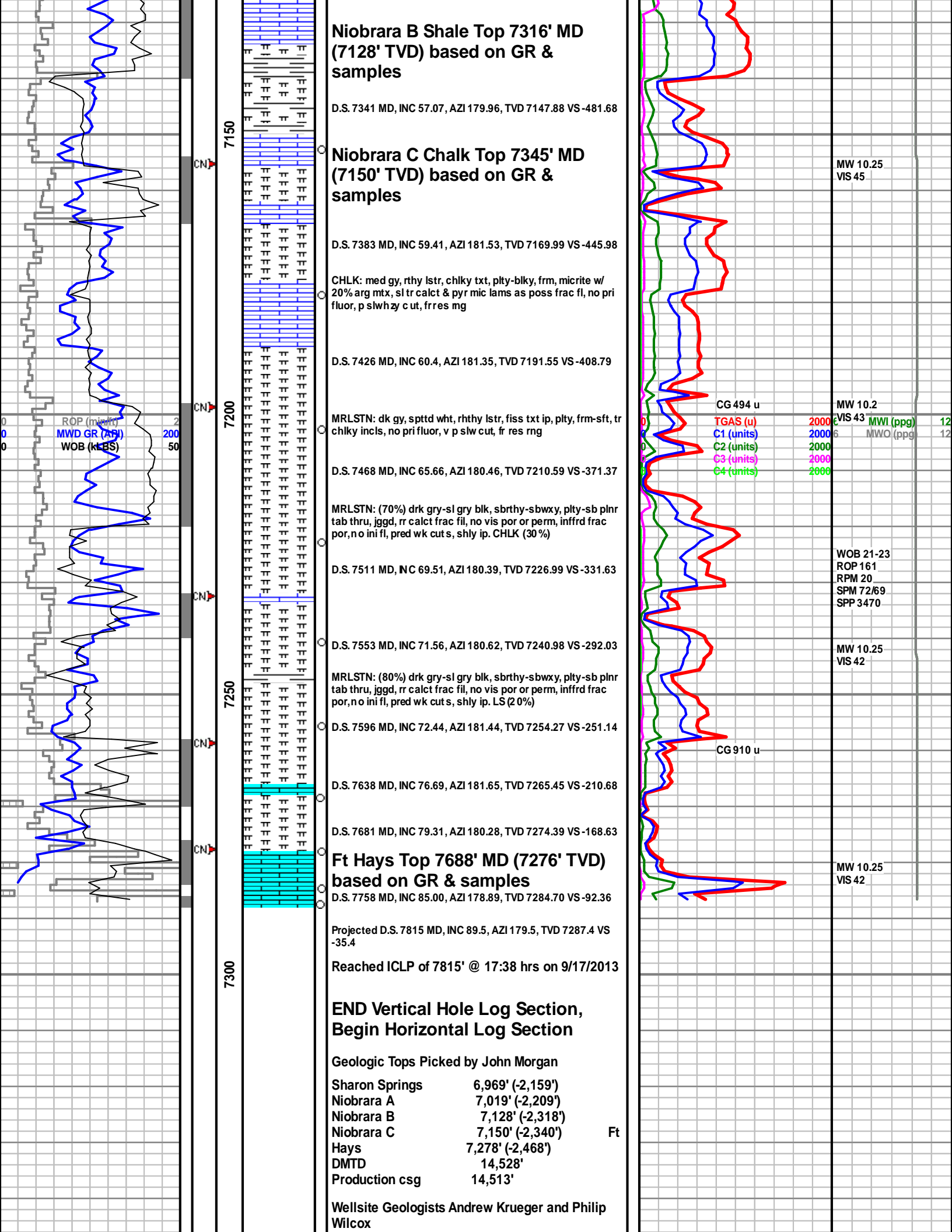
Elevation



<div>ROP (min/ft) _____</div> <div>MWD GR (API) _____</div> <div>WOB (kLBS) _____</div>			<div>Slide / Rotate</div>	Conn	Depth	Lithology	<div>Oil Show</div>	Geological Descriptions	S	<div>TG, C1-C4</div> <div>TGAS (u) _____</div> <div>C1 (units) _____</div> <div>C2 (units) _____</div> <div>C3 (units) _____</div> <div>C4 (units) _____</div>			<div>Porosity</div> <div>MWI (ppg) _____</div> <div>MWO (ppg) _____</div>		
0	ROP (min/ft)	2			6650			NB #1, 8 3/4", Smith SDI611, JH4401, 3x14 3x15, 9 5/8" Casing set @ 1017'		0	TGAS (u)	2000	6	MWI (ppg)	12
0	MWD GR (API)	200								0	C1 (units)	2000	6	MWO (ppg)	12
0	WOB (kLBS)	50								0	C2 (units)	2000			
2 man wellsite geology team on location and rigged up Sept 16, 2013										0	C3 (units)	2000			
Begin drilling curve F/6790'(KOP) @ 00:30hrs on 9/17/2013								D.S. 6787' MD, INC 0.876, AZI 133.24, TVD 6682.31 VS -738.28		0	C4 (units)	2000			







[illegible]