

Company: Noble Energy, Inc.									
Well Name: Shable Federal LB33-78HN									
UWI or LSD: 05-123-86789									
Rig Id: Precision 828									
State: Colorado									
County/Parish: Weld									
County: USA									
Survey Company: Ensign Directional									
Job number: 828-08									
Company Man 1: Cliff Kresner									
Directional Driver 1: Nick Brownwood									
Directional Driver 2: Tanner Schwartz									
MWD 1: Matt Mason									
MWD 2: Joel Alcala									
Log measurements: KB				Start: 642 ft 03-30-2013					
Depth measured from: KB				End: 10621 ft 04-12-2013					
Maximum temperature:									
Casing Depth		Size		Mud Type:		Elevations			
Surface: 632		9.625		Viscosity:		KB: 4956			
Intermediate: 5670		7		Density:		GL: 4940			
Inflowrate: 5670				Rm:		DF: 4956			
Rm:				Rmt:					
Rmt:									
Offsets									
Run	Bit Size	Gamma Survey	Start	Depths	End	Start	End		
1	8.75	564.11	49.11	642	5690	03-30-2013	04-01-2013		
2	8.75	564.11	48.11	5690	6742	04-05-2013	04-08-2013		
3	6.125	553.84	48.84	6742	10621	04-09-2013	04-12-2013		
4									
5									
6									
7									
8									
9									
10									

Ensign Directional uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

Gamma

API

150.0

300.0

0.0

150.0

6000.0

7200.0

TVD

ft

7200.0

14400.0

ROP

0

500.0

1000.0

0.0

500.0

1100

1200

VS

ft

0.0

5000.0

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