



DDC
3222 North 6th Mile Road
Casper, WY 82604

RM-140833

1":100' - MD

8/26/2014 12:06:37 AM

Oper. Company: Noble Energy
Country: United States
State / Province: Colorado
County / Parish: Weld
Started: 08/22/2014 05:30 PM

API/UWI: 05-123-38848
Field: Wattenberg
Well: Rainbow LC28-78-1HNA
Rig: H&P #326
Ended: 08/25/2014 11:30 PM

Personnel

Day Hand: Bob Kubistek
Night Hand: Chris Abbott
Comp. Emp: Bob Kubistek

Location

Latitude: 40° 42' 53.964 N
Longitude: 103° 59' 14.064 W
Elev. GL: 4861
Elev. DF: 30
Elev. KB: 4891

Hole Data

Size	From	To
13 3/4	0	640
8 3/4	640	6432
6 1/8	6432	10339

Casing Data

Size	From	To
9 5/8	0	640
7	0	6432
4 1/2	6432	10339

Bit Sizes

Size	From	To
12 3/4	0	640
8 3/4	640	6432
6 1/8	6432	10339

Mud Data

Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
LSND	10.5		38				640	10339

Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
424	32	0	8/22/2014 5:30:57 PM	640	8/23/2014 9:30:57 PM	6432
424	40	0	8/24/2014 4:30:29 PM	6432	8/25/2014 11:30:29 PM	10339

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost damages or expenses incurred or sustained by anyone resulting from an interpretation made by any of our officers, agents, or employees.



















