



Titan Directional Services, Inc.
20302 Park Row Suite 1200
Katy, TX 77449

Shull 8-25-9-60
Scale 1":100' - MD
2/2/2015 3:20 AM

Oper. Company: Carrizo Oil & Gas, Inc.
Well: Shull 8-25-9-60
Field: Niobrara CONZ'83
Rig: Xtreme 19
Well ID: 05-123-40496-00
Job Number: TL15006

State: Colorado
County: Weld
Country: USA
Location: Keota
Start Date: 01/29/2015 01:45:00
End Date: 02/02/2015 03:00:00

Latitude: 40.7146861111111
Longitude: -104.035997222222

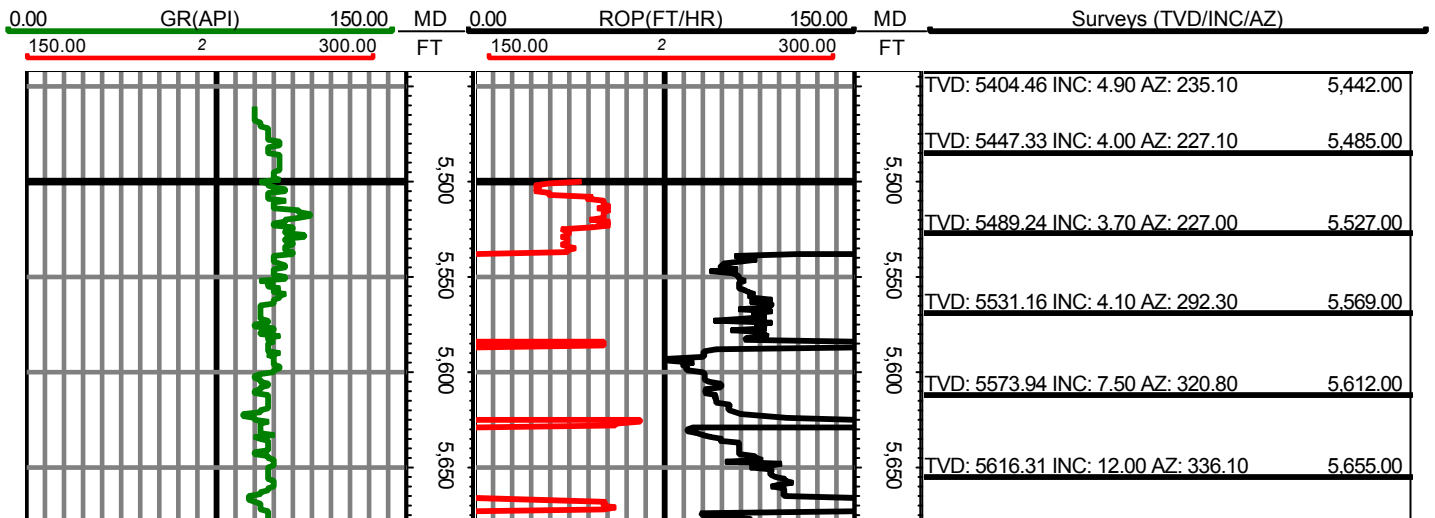
Elev KB: 17'
Elev DF: 4894'
Elev GL: 4877'

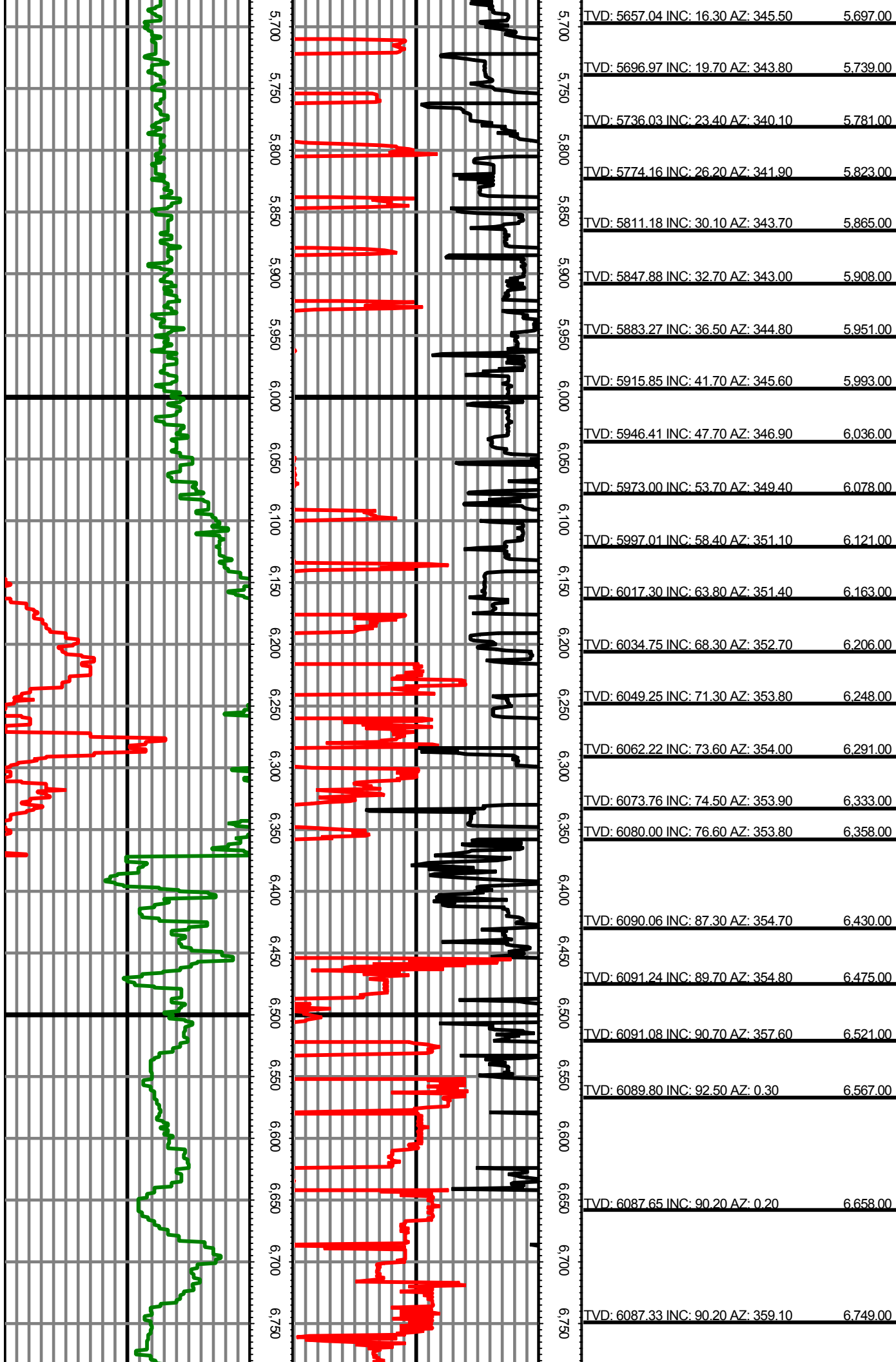
Operator 1: Skylar Thompson

Operator 2: Paul Brown

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	N/A	N/A	N/A	G2008	G2008
Bit Size	12 1/4	8 3/4	8 3/4	8 3/4	6 1/8
Cal Factor	N/A	N/A	N/A	4.92	2.15
Survey Offset:	54.00	50.00	51.00	51.00	53.00
Gamma Offset	0.00	0.00	0.00	39.00	41.00
Resisitivity Offset	0.00	0.00	0.00	0.00	0.00
Start Depth	0.00	1482.00	2231.00	5498.00	6412.00
StartDate	1/25/2015	1/27/2015	1/27/2015	1/28/2015	1/30/2015
StartTime	15:15	09:00	21:00	22:30	13:00
EndDepth	1482.00	2231.00	5498.00	6412.00	10807.00
EndDate	1/26/2015	1/27/2015	1/28/2015	1/29/2015	2/2/2015
EndTime	06:30	20:30	21:15	22:00	03:00
Mud Type	WBM	WBM	WBM	WBM	WBM
Temperature	66	73	115	138	175
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	1482.00	9 5/8	0.00	1462.00
8 3/4	1482.00	6412.00	7	0.00	6390.00
6 1/8	6412.00	10807.00	4.5	0.00	10807.00

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.





TVD: 5657.04 INC: 16.30 AZ: 345.50 5.697.00

TVD: 5696.97 INC: 19.70 AZ: 343.80 5.739.00

TVD: 5736.03 INC: 23.40 AZ: 340.10 5.781.00

TVD: 5774.16 INC: 26.20 AZ: 341.90 5.823.00

TVD: 5811.18 INC: 30.10 AZ: 343.70 5.865.00

TVD: 5847.88 INC: 32.70 AZ: 343.00 5.908.00

TVD: 5883.27 INC: 36.50 AZ: 344.80 5.951.00

TVD: 5915.85 INC: 41.70 AZ: 345.60 5.993.00

TVD: 5946.41 INC: 47.70 AZ: 346.90 6.036.00

TVD: 5973.00 INC: 53.70 AZ: 349.40 6.078.00

TVD: 5997.01 INC: 58.40 AZ: 351.10 6.121.00

TVD: 6017.30 INC: 63.80 AZ: 351.40 6.163.00

TVD: 6034.75 INC: 68.30 AZ: 352.70 6.206.00

TVD: 6049.25 INC: 71.30 AZ: 353.80 6.248.00

TVD: 6062.22 INC: 73.60 AZ: 354.00 6.291.00

TVD: 6073.76 INC: 74.50 AZ: 353.90 6.333.00

TVD: 6080.00 INC: 76.60 AZ: 353.80 6.358.00

TVD: 6090.06 INC: 87.30 AZ: 354.70 6.430.00

TVD: 6091.24 INC: 89.70 AZ: 354.80 6.475.00

TVD: 6091.08 INC: 90.70 AZ: 357.60 6.521.00

TVD: 6089.80 INC: 92.50 AZ: 0.30 6.567.00

TVD: 6087.65 INC: 90.20 AZ: 0.20 6.658.00

TVD: 6087.33 INC: 90.20 AZ: 359.10 6.749.00

