



Precision Directional Services, Inc.

27610 Commerce Oaks Drive
Oak Ridge North, TX 77385
713-435-6250

O'Hare 2-29-11-57

Scale 2":100' - TVD

10/10/2014 12:46 AM

Oper. Company: Carrizo Oil & Gas, Inc.

Well: O'Hare 2-29-11-57

Field: Niobrara CONZ'83

Rig: Xtreme 19

Well ID: 05-123-40082-00

Job Number: DL2405

State: Colorado

County: Weld

Country: USA

Location: Kimball

Start Date: 09/30/2014 03:00:00

End Date: 10/10/2014 00:00:15

Latitude: 40.891822222222

Longitude: -103.773969444444

Elev KB: 17'

Elev DF: 4944'

Elev GL: 4927'

Operator 1: Paul Brown

Operator 2: Kyle Elliott

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	G2030	G1527	G2030	G1527	G1527
Bit Size	8 3/4	8 3/4	6 1/8	6 1/8	6 1/8
Cal Factor	3.99	3.94	1.62	1.59	1.59
Gamma Offset	42.00	50.00	56.00	56.00	56.00
Resistivity Offset	0.00	0.00	0.00	0.00	0.00
Start Depth	1493.00	5187.00	6001.00	10888.00	12450.00
StartDate	9/30/2014	10/1/2014	10/3/2014	10/7/2014	10/9/2014
StartTime	1:07 PM	5:23 AM	5:25 AM	5:27 AM	4:04 AM
EndDepth	5188.00	6001.00	10888.00	12450.00	13287.00
EndDate	10/1/2014	10/2/2014	10/7/2014	10/9/2014	10/10/2014
EndTime	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM
Mud Type	WBM	WBM	WBM	WBM	WBM
Mud Weight	8.4 - 9.6	9.6	9.6	9.6	9.6
Funnel Viscosity	58	43	42	41	41 - 43
Plastic Viscosity	10	16	12	15	15
Yield Point	8	13	15	19	19
Gel Strength	12	7	8	10	9 - 10
Solids Content	1.9	6.8	5.5	5.0	5.0 - 5.4
Sand Content	Trace	0.5	0.25	0.5	0.5
Mud Alkalinity	0.6	0.5	0.3	0.4	0.3 - 0.4
Filtrate Alkalinity	0.4 / 0.9	0.4 / 1.0	0.2 / 1.2	0.3 / 1.2	0.3 / 1.2
Chlorides	700	600	800	800	800
Mud RM	N/A	N/A	N/A	N/A	N/A
Mud RMF	N/A	N/A	N/A	N/A	N/A
Mud RMC	N/A	N/A	N/A	N/A	N/A
Mud RM at BHT	N/A	N/A	N/A	N/A	N/A
Temperature	78	94	99	175 - 200	190 - 205
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	1493.00	9 5/8	0.00	1473.00
8 3/4	1493.00	6001.00	7	0.00	5981.00
6 1/8	6001.00	13287.00	4.5	5981.00	13287.00

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.

















