



CARRIZO OIL AND GAS

MS #DDOK-110361

**Wickstrom 5-44-5-60
Morgan County, Colorado
Cade 22**

August 8, 2011

**Prepared By:
Megan Pope**

Actual Well & Surveys 1

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Support Staff 5



Company: Carrizo Oil & Gas
Site: Wickstrom
Well: 5-44-5-60
Project: Morgan County, Colorado (NAD83)
Rig Name: Cade 22



Planning: 936.442.2510 Fax: 936.442.2515
Operations: 936.442.2500 Fax: 936.442.2599

ANNOTATIONS

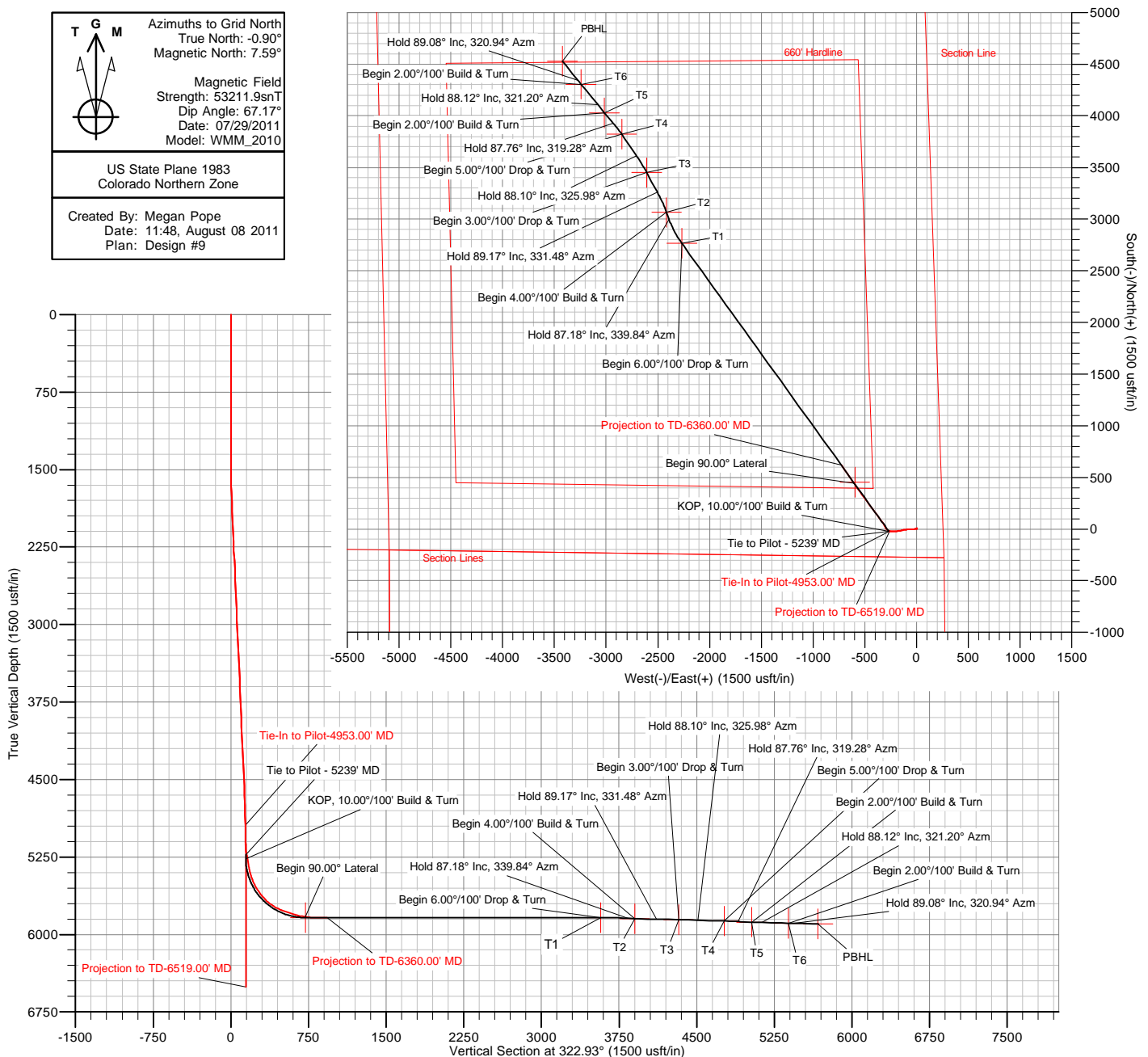
MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Departure	Annotation
5239.00	0.30	343.50	5227.38	-22.08	-268.67	144.31	0.00	Tie to Pilot - 5239' MD
5278.15	0.25	335.17	5266.53	-21.91	-268.73	144.49	0.19	KOP, 10.00°/100' Build & Turn
6175.67	90.00	324.34	5837.00	443.89	-602.36	717.26	573.14	Begin 90.00° Lateral
9034.27	90.00	324.34	5837.00	2766.50	-2268.83	3575.01	3431.75	Begin 6.00°/100' Drop & Turn
9296.73	87.18	339.84	5843.49	2997.62	-2391.28	3833.23	3694.10	Hold 87.18° Inc, 339.84° Azm
9368.06	87.18	339.84	5847.00	3064.50	-2415.83	3901.39	3765.34	Begin 4.00°/100' Build & Turn
9582.89	89.17	331.48	5853.85	3259.94	-2504.26	4110.64	3980.05	Hold 89.17° Inc, 331.48° Azm
9799.80	89.17	331.48	5857.00	3450.50	-2607.83	4325.13	4196.94	Begin 3.00°/100' Drop & Turn
9986.37	88.10	325.98	5861.45	3609.85	-2704.61	4510.62	4383.45	Hold 88.10° Inc, 325.98° Azm
10244.27	88.10	325.98	5870.00	3823.50	-2848.83	4768.02	4641.22	Begin 5.00°/100' Drop & Turn
10378.43	87.76	319.28	5874.86	3929.98	-2930.16	4902.01	4775.28	Hold 87.76° Inc, 319.28° Azm
10509.84	87.76	319.28	5880.00	4029.50	-3015.83	5033.05	4906.59	Begin 2.00°/100' Build & Turn
10607.77	88.12	321.20	5883.53	4104.72	-3078.42	5130.80	5004.46	Hold 88.12° Inc, 321.20° Azm
10865.52	88.12	321.20	5892.00	4305.50	-3239.83	5388.29	5262.07	Begin 2.00°/100' Build & Turn
10915.55	89.08	320.94	5893.22	4344.41	-3271.26	5438.29	5312.09	Hold 89.08° Inc, 320.94° Azm
11151.37	89.08	320.94	5897.00	4527.50	-3419.83	5673.93	5547.87	PBHL

Azimuths to Grid North
True North: -0.90°
Magnetic North: 7.59°

Magnetic Field
Strength: 53211.9snT
Dip Angle: 67.17°
Date: 07/29/2011
Model: WMM_2010

US State Plane 1983
Colorado Northern Zone

Created By: Megan Pope
Date: 11:48, August 08 2011
Plan: Design #9



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer. MS Energy is not responsible for the accuracy of this schematic or the information contained herein.



Carrizo Oil & Gas

Morgan County, Colorado (NAD83)

Wickstrom

5-44-5-60

Pilot Hole

Survey: MS MWD

Standard Survey Report

08 August, 2011

Company:	Carrizo Oil & Gas	Local Co-ordinate Reference:	Well 5-44-5-60
Project:	Morgan County, Colorado (NAD83)	TVD Reference:	WELL @ 4559.80usft (Cade 22)
Site:	Wickstrom	MD Reference:	WELL @ 4559.80usft (Cade 22)
Well:	5-44-5-60	North Reference:	Grid
Wellbore:	Pilot Hole	Survey Calculation Method:	Minimum Curvature
Design:	Pilot Hole	Database:	Southern Region

Project	Morgan County, Colorado (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Well	5-44-5-60				
Well Position	+N/-S	0.00 usft	Northing:	1,400,103.50 usft	Latitude: 40° 25' 24.0598 N
	+E/-W	0.00 usft	Easting:	3,387,216.83 usft	Longitude: 104° 6' 32.940 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level: 4,543.80 usft

Wellbore	Pilot Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	07/29/11	8.49	67.17	53,212

Design	Pilot Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		322.93

Survey Program	Date	08/08/11			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
1,471.00	6,519.00	MS MWD (Pilot Hole)	MWD	MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,471.00	0.70	51.50	1,470.96	5.59	7.03	0.22	0.05	0.05	0.00	
1,563.00	2.10	272.30	1,562.95	6.01	5.79	1.31	2.90	1.52	-151.30	
1,656.00	5.00	257.90	1,655.76	5.23	0.12	4.10	3.24	3.12	-15.48	
1,719.00	5.50	254.90	1,718.49	3.87	-5.48	6.39	0.91	0.79	-4.76	
1,814.00	5.10	257.40	1,813.09	1.76	-13.99	9.84	0.49	-0.42	2.63	
1,909.00	4.50	264.10	1,907.76	0.46	-21.82	13.52	0.86	-0.63	7.05	
2,005.00	4.40	257.60	2,003.47	-0.72	-29.17	17.01	0.54	-0.10	-6.77	
2,100.00	4.30	255.60	2,098.19	-2.39	-36.17	19.90	0.19	-0.11	-2.11	
2,195.00	5.10	275.00	2,192.88	-2.91	-43.83	24.10	1.86	0.84	20.42	
2,290.00	4.80	273.70	2,287.52	-2.28	-52.00	29.53	0.34	-0.32	-1.37	
2,385.00	4.70	277.10	2,382.20	-1.55	-59.83	34.83	0.31	-0.11	3.58	
2,480.00	5.00	267.90	2,476.86	-1.22	-67.83	39.92	0.88	0.32	-9.68	
2,576.00	4.80	268.10	2,572.51	-1.50	-76.03	44.63	0.21	-0.21	0.21	
2,671.00	4.60	266.00	2,667.19	-1.90	-83.80	49.00	0.28	-0.21	-2.21	

Company:	Carrizo Oil & Gas	Local Co-ordinate Reference:	Well 5-44-5-60
Project:	Morgan County, Colorado (NAD83)	TVD Reference:	WELL @ 4559.80usft (Cade 22)
Site:	Wickstrom	MD Reference:	WELL @ 4559.80usft (Cade 22)
Well:	5-44-5-60	North Reference:	Grid
Wellbore:	Pilot Hole	Survey Calculation Method:	Minimum Curvature
Design:	Pilot Hole	Database:	Southern Region

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,766.00	4.80	257.90	2,761.87	-3.00	-91.49	52.75	0.73	0.21	-8.53	
2,861.00	4.60	253.90	2,856.55	-4.89	-99.03	55.80	0.40	-0.21	-4.21	
2,955.00	5.80	261.10	2,950.16	-6.67	-107.35	59.39	1.45	1.28	7.66	
3,050.00	5.60	261.10	3,044.69	-8.13	-116.67	63.84	0.21	-0.21	0.00	
3,146.00	5.60	259.10	3,140.24	-9.74	-125.90	68.12	0.20	0.00	-2.08	
3,241.00	5.70	258.60	3,234.77	-11.55	-135.07	72.21	0.12	0.11	-0.53	
3,336.00	5.80	258.40	3,329.30	-13.45	-144.40	76.31	0.11	0.11	-0.21	
3,431.00	5.50	263.20	3,423.84	-14.95	-153.62	80.67	0.59	-0.32	5.05	
3,526.00	5.40	263.50	3,518.41	-15.99	-162.58	85.24	0.11	-0.11	0.32	
3,621.00	5.10	263.90	3,613.01	-16.95	-171.22	89.69	0.32	-0.32	0.42	
3,717.00	5.20	259.10	3,708.62	-18.23	-179.74	93.80	0.46	0.10	-5.00	
3,812.00	5.00	256.30	3,803.24	-20.02	-187.99	97.34	0.34	-0.21	-2.95	
3,907.00	5.00	257.90	3,897.88	-21.87	-196.06	100.73	0.15	0.00	1.68	
4,002.00	4.50	264.10	3,992.56	-23.12	-203.81	104.41	0.75	-0.53	6.53	
4,097.00	4.80	270.60	4,087.24	-23.46	-211.49	108.77	0.64	0.32	6.84	
4,192.00	4.70	269.30	4,181.92	-23.47	-219.36	113.50	0.15	-0.11	-1.37	
4,287.00	4.50	268.60	4,276.61	-23.61	-226.98	117.99	0.22	-0.21	-0.74	
4,382.00	4.20	268.80	4,371.34	-23.77	-234.18	122.20	0.32	-0.32	0.21	
4,477.00	3.90	267.70	4,466.10	-23.97	-240.89	126.08	0.33	-0.32	-1.16	
4,572.00	3.70	267.70	4,560.89	-24.22	-247.18	129.67	0.21	-0.21	0.00	
4,668.00	3.50	270.00	4,656.70	-24.35	-253.20	133.20	0.26	-0.21	2.40	
4,763.00	3.30	269.00	4,751.54	-24.40	-258.84	136.56	0.22	-0.21	-1.05	
4,858.00	1.80	267.90	4,846.44	-24.50	-263.06	139.02	1.58	-1.58	-1.16	
4,953.00	1.10	300.40	4,941.41	-24.09	-265.34	140.72	1.11	-0.74	34.21	
5,048.00	1.10	291.70	5,036.39	-23.29	-266.97	142.34	0.18	0.00	-9.16	
5,143.00	0.60	309.20	5,131.38	-22.64	-268.21	143.61	0.59	-0.53	18.42	
5,239.00	0.30	343.50	5,227.38	-22.08	-268.67	144.33	0.41	-0.31	35.73	
5,334.00	0.20	317.10	5,322.38	-21.72	-268.85	144.73	0.16	-0.11	-27.79	
5,429.00	0.40	298.00	5,417.38	-21.45	-269.26	145.19	0.23	0.21	-20.11	
5,524.00	0.40	320.10	5,512.37	-21.04	-269.76	145.83	0.16	0.00	23.26	
5,619.00	0.40	338.60	5,607.37	-20.47	-270.10	146.48	0.14	0.00	19.47	
5,714.00	0.70	26.20	5,702.37	-19.64	-269.96	147.06	0.55	0.32	50.11	
5,809.00	0.50	43.10	5,797.36	-18.82	-269.42	147.39	0.28	-0.21	17.79	
5,904.00	0.70	59.60	5,892.36	-18.22	-268.64	147.39	0.28	0.21	17.37	
6,000.00	0.70	47.80	5,988.35	-17.53	-267.70	147.38	0.15	0.00	-12.29	
6,095.00	0.90	57.90	6,083.34	-16.75	-266.64	147.36	0.26	0.21	10.63	
6,190.00	0.80	63.50	6,178.33	-16.05	-265.41	147.18	0.14	-0.11	5.89	
6,285.00	0.70	79.70	6,273.32	-15.65	-264.25	146.79	0.25	-0.11	17.05	
6,380.00	0.80	78.40	6,368.31	-15.42	-263.03	146.25	0.11	0.11	-1.37	
6,461.00	0.70	90.40	6,449.31	-15.31	-261.98	145.70	0.23	-0.12	14.81	
6,519.00	0.70	90.40	6,507.30	-15.31	-261.27	145.27	0.00	0.00	0.00	
Projection to TD-6519.00' MD										



Company:	Carrizo Oil & Gas	Local Co-ordinate Reference:	Well 5-44-5-60
Project:	Morgan County, Colorado (NAD83)	TVD Reference:	WELL @ 4559.80usft (Cade 22)
Site:	Wickstrom	MD Reference:	WELL @ 4559.80usft (Cade 22)
Well:	5-44-5-60	North Reference:	Grid
Wellbore:	Pilot Hole	Survey Calculation Method:	Minimum Curvature
Design:	Pilot Hole	Database:	Southern Region

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,519.00	6,507.30	-15.31	-261.27	Projection to TD-6519.00' MD



Carrizo Oil & Gas

Morgan County, Colorado (NAD83)

Wickstrom

5-44-5-60

Wellbore #1

Survey: MS MWD

Standard Survey Report

08 August, 2011

Company:	Carrizo Oil & Gas	Local Co-ordinate Reference:	Well 5-44-5-60
Project:	Morgan County, Colorado (NAD83)	TVD Reference:	WELL @ 4559.80usft (Cade 22)
Site:	Wickstrom	MD Reference:	WELL @ 4559.80usft (Cade 22)
Well:	5-44-5-60	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	Southern Region

Project	Morgan County, Colorado (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Well	5-44-5-60				
Well Position	+N/-S	0.00 usft	Northing:	1,400,103.50 usft	Latitude: 40° 25' 24.0598 N
	+E/-W	0.00 usft	Easting:	3,387,216.83 usft	Longitude: 104° 6' 32.940 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level: 4,543.80 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	07/29/11	8.49	67.17	53,212

Design	Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	4,953.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		322.93

Survey Program	Date	08/08/11			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
1,471.00	4,953.00	MS MWD (Pilot Hole)	MWD	MWD - Standard	
5,058.00	6,360.00	MS MWD (Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,953.00	1.10	300.40	4,941.41	-24.09	-265.34	140.72	0.00	0.00	0.00	
Tie-In to Pilot-4953.00' MD										
5,058.00	1.10	289.90	5,046.39	-23.24	-267.16	142.50	0.19	0.00	-10.00	
5,090.00	1.40	293.70	5,078.38	-22.98	-267.80	143.10	0.97	0.94	11.88	
5,122.00	1.30	288.80	5,110.37	-22.70	-268.51	143.74	0.48	-0.31	-15.31	
5,153.00	2.40	302.60	5,141.36	-22.24	-269.39	144.64	3.80	3.55	44.52	
5,185.00	4.80	312.60	5,173.29	-20.97	-270.94	146.58	7.72	7.50	31.25	
5,217.00	8.10	321.30	5,205.09	-18.31	-273.33	150.16	10.73	10.31	27.19	
5,248.00	9.50	321.40	5,235.72	-14.60	-276.29	154.90	4.52	4.52	0.32	
5,280.00	9.50	320.00	5,267.28	-10.52	-279.64	160.17	0.72	0.00	-4.38	
5,312.00	9.50	320.30	5,298.84	-6.46	-283.02	165.45	0.15	0.00	0.94	
5,344.00	9.10	317.40	5,330.42	-2.57	-286.42	170.61	1.93	-1.25	-9.06	
5,375.00	11.30	319.40	5,360.93	1.54	-290.06	176.08	7.19	7.10	6.45	
5,407.00	14.90	324.80	5,392.09	7.29	-294.47	183.32	11.87	11.25	16.88	
5,439.00	17.60	329.80	5,422.81	14.83	-299.28	192.24	9.50	8.44	15.63	

Company:	Carrizo Oil & Gas	Local Co-ordinate Reference:	Well 5-44-5-60
Project:	Morgan County, Colorado (NAD83)	TVD Reference:	WELL @ 4559.80usft (Cade 22)
Site:	Wickstrom	MD Reference:	WELL @ 4559.80usft (Cade 22)
Well:	5-44-5-60	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	Southern Region

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,470.00	20.00	330.40	5,452.16	23.50	-304.26	202.15	7.77	7.74	1.94	
5,502.00	22.90	328.00	5,481.94	33.54	-310.26	213.78	9.47	9.06	-7.50	
5,534.00	25.40	326.40	5,511.14	44.53	-317.36	226.83	8.08	7.81	-5.00	
5,566.00	28.50	325.60	5,539.66	56.55	-325.47	241.31	9.75	9.69	-2.50	
5,597.00	31.80	325.60	5,566.46	69.40	-334.27	256.87	10.65	10.65	0.00	
5,629.00	35.30	324.10	5,593.13	83.85	-344.45	274.54	11.24	10.94	-4.69	
5,661.00	38.60	323.60	5,618.69	99.38	-355.80	293.77	10.36	10.31	-1.56	
5,693.00	42.20	323.50	5,643.06	116.06	-368.12	314.50	11.25	11.25	-0.31	
5,724.00	45.80	323.50	5,665.36	133.36	-380.93	336.03	11.61	11.61	0.00	
5,756.00	49.70	323.20	5,686.87	152.36	-395.07	359.71	12.21	12.19	-0.94	
5,788.00	53.50	322.80	5,706.74	172.39	-410.16	384.79	11.92	11.88	-1.25	
5,820.00	57.50	323.20	5,724.86	193.45	-426.03	411.15	12.54	12.50	1.25	
5,851.00	61.50	323.60	5,740.59	214.89	-441.95	437.86	12.95	12.90	1.29	
5,883.00	65.60	324.20	5,754.84	238.03	-458.82	466.50	12.92	12.81	1.88	
5,915.00	69.10	324.10	5,767.16	261.96	-476.11	496.02	10.94	10.94	-0.31	
5,947.00	70.50	324.30	5,778.21	286.32	-493.68	526.04	4.41	4.38	0.63	
5,978.00	71.10	324.30	5,788.41	310.10	-510.76	555.31	1.94	1.94	0.00	
6,010.00	71.60	324.40	5,798.64	334.73	-528.44	585.62	1.59	1.56	0.31	
6,042.00	72.70	324.70	5,808.45	359.55	-546.10	616.07	3.55	3.44	0.94	
6,074.00	76.40	325.10	5,816.97	384.78	-563.83	646.89	11.63	11.56	1.25	
6,105.00	80.20	325.10	5,823.26	409.67	-581.20	677.22	12.26	12.26	0.00	
6,137.00	81.90	325.00	5,828.24	435.58	-599.31	708.80	5.32	5.31	-0.31	
6,169.00	83.40	325.20	5,832.33	461.61	-617.46	740.52	4.73	4.69	0.63	
6,201.00	85.70	325.10	5,835.37	487.75	-635.67	772.35	7.19	7.19	-0.31	
6,232.00	87.30	325.00	5,837.26	513.11	-653.39	803.27	5.17	5.16	-0.32	
6,263.00	87.70	325.10	5,838.61	538.49	-671.13	834.21	1.33	1.29	0.32	
6,295.00	88.50	325.00	5,839.68	564.71	-689.45	866.18	2.52	2.50	-0.31	
6,310.00	88.90	324.90	5,840.02	576.98	-698.07	881.16	2.75	2.67	-0.67	
6,360.00	90.20	324.90	5,840.41	617.89	-726.81	931.13	2.60	2.60	0.00	
Projection to TD-6360.00' MD										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
4,953.00	4,941.41	-24.09	-265.34	Tie-In to Pilot-4953.00' MD	
6,360.00	5,840.41	617.89	-726.81	Projection to TD-6360.00' MD	



JOB NO.:	DDOK-110361	Report Time:	2400	1 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Friday, July 29, 2011 at 0000 to Friday, July 29, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters																	
Start Depth		0.00		Rotary Hours		0.00		WOB		0		Pick UP		0		Slack Off		0		SPM			
End Depth		0.00		Circulating Hours		0.00		RAB		0		SPP		0		FlowRate		0 - 0		0			
Total Drilled:		0.00		Avg. Total ROP:		NA		Mud Data															
Total Rotary Drilled:		0.00		Avg. Rotary ROP:		NA		Type								PV		0		SOLID		0	
Total Drilled Sliding:		0.00		Avg. Slide ROP:		NA		Weight		0		GAS		0		YP		0		BHT°		0	
Slide Hours:		0.00		Percent Rotary:		NA		Viscosity		0		SAND		0		PH		0		Flow T°		0	
Below Rotary Hrs.		3.00		Percent Slide:		NA		Chlorides		0		WL		0						Oil %		0	
PERSONNEL								CASING								BHA							
Lead Directional :				Kenneth Reed				Size		Lb/ft		Set Depth				BHA # 1:8 3/4 Ulterra MS1955BC, 6 3/4, 6/7, 5.0 Perf Fxd @ 1.5, Crossover float sub, 8 1/2 String Stab, UBHO sub, NMDC Slick, NMDC Flex, 8 1/4 String Stab, 3 Stds 6.5 Drill Collars, X/O 4.5 XH (P) x XT39 (B), 41 Jts XT-39 HWDP,							
Second Directional :				Randy Lee				Signature:															
MWD Operator1				Mike Valentine																			
MWD Operator2				Kevin Clarey																			
Directional Company:				MS Guidance																			
Geologist:																							
Company Man:				Phil Davis																			
Incl. In:		0		Azm. In:		0		Incl. Out:		0		Azm. Out:		0		Daily Cost				\$23,780.00			
																Cummulative Cost:				\$23,780.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
29-Jul-11	00:00	20:30	20.50	0	0	Standby	Standby
29-Jul-11	20:30	23:30	3.00	0	0	Change BHA	Change BHA-Scribe, Orient, and Test Tool
29-Jul-11	23:30	24:00	0.50	0	0	P/U DP	P/U DC and HWDP



JOB NO.:	DDOK-110361	Report Time:	2400	2 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Saturday, July 30, 2011 at 0000 to Saturday, July 30, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters					
Start Depth	1407.00	Rotary Hours	15.00	WOB	15	Pick UP	70	Slack Off	70	SPM	
End Depth	2665.00	Circulating Hours	0.75	RAB	70	SPP	2100	FlowRate	0 - 494	185	
Total Drilled:	1258.00	Avg. Total ROP:	76.24	Mud Data							
Total Rotary Drilled:	1173.00	Avg. Rotary ROP:	78.20	Type	Water			PV	2	SOLID	3.5
Total Drilled Sliding:	85.00	Avg. Slide ROP:	56.67	Weight	8.8	GAS	0	YP	8	BHT°	102
Slide Hours:	1.50	Percent Rotary:	93.24	Viscosity	32	SAND	0.25	PH	9	Flow T°	0
Below Rotary Hrs.	20.50	Percent Slide:	6.76	Chlorides	900	WL	14			Oil %	0
PERSONNEL				CASING					BHA		
Lead Directional :	Kenneth Reed			Size	Lb/ft	Set Depth		BHA # 1:8 3/4 Ulterra MS1955BC, 6 3/4, 6/7, 5.0 Perf Fxd @ 1.5, Crossover float sub, 8 1/2 String Stab, UBHO sub, NMDC Slick, NMDC Flex, 8 1/4 String Stab, 3 Stds 6.5 Drill Collars, X/O 4.5 XH (P) x XT39 (B), 41 Jts XT-39 HWDP,			
Second Directional :	Randy Lee			Signature:							
MWD Operator1	Mike Valentine										
MWD Operator2	Kevin Clarey										
Directional Company:	MS Guidance										
Geologist:											
Company Man:	Phil Davis						Daily Cost		\$10,095.00		
Incl. In:	0	Azm. In:	0	Incl. Out:	4.8	Azm. Out:	268.1	Cummulative Cost:		\$33,875.00	

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
30-Jul-11	00:00	03:30	3.50	0	0	P/U DP	P/U DC & HWDP
30-Jul-11	03:30	05:00	1.50	1407	1428	Drilling Cement	Drilling Cement and Casing Shoe
30-Jul-11	05:00	06:30	1.50	1428	1529	Drilling	Drilling - (WOB:10;GPM:400;RPM:40;DIFF:300)
30-Jul-11	06:30	06:45	0.25	1529	1529	Survey & Conn.	Survey & Conn. @ 1471' - 0.7 Inc 51.5 Azm
30-Jul-11	06:45	07:15	0.50	1529	1554	Sliding	Sliding - (WOB:10;GPM:494;TFO:264 MTF;DIFF:150)
30-Jul-11	07:15	08:00	0.75	1554	1621	Drilling	Drilling - (WOB:10;GPM:494;RPM:60;DIFF:200)
30-Jul-11	08:00	08:15	0.25	1621	1621	Survey & Conn.	Survey & Conn. @ 1563' - 2.1 Inc 272.3 Azm
30-Jul-11	08:15	08:30	0.25	1621	1646	Sliding	Sliding - (WOB:10;GPM:494;TFO:264M;DIFF:150)
30-Jul-11	08:30	08:45	0.25	1646	1652	Drilling	Drilling - (WOB:10;GPM:494;RPM:60;DIFF:200)
30-Jul-11	08:45	09:30	0.75	1652	1652	Rig Service-Inhole	Rig Service-Inhole
30-Jul-11	09:30	10:15	0.75	1652	1714	Drilling	Drilling - (WOB:10;GPM:494;RPM:60;DIFF:200)
30-Jul-11	10:15	10:30	0.25	1714	1714	Survey & Conn.	Survey & Conn. @ 1656' - 5.0 Inc 257.9 Azm
30-Jul-11	10:30	10:45	0.25	1714	1777	Drilling	Drilling - (WOB:10;GPM:494;RPM:60;DIFF:200)
30-Jul-11	10:45	11:00	0.25	1777	1777	Survey & Conn.	Survey & Conn. @ 1719' - 5.5 Inc 254.9 Azm
30-Jul-11	11:00	11:15	0.25	1777	1787	Sliding	Sliding - (WOB:10;GPM:494;TFO:30M;DIFF:150)
30-Jul-11	11:15	12:15	1.00	1787	1872	Drilling	Drilling - (WOB:10;GPM:494;RPM:60;DIFF:200)
30-Jul-11	12:15	12:30	0.25	1872	1872	Survey & Conn.	Survey & Conn. @ 1814' - 5.1 Inc 257.4 Azm

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
30-Jul-11	12:30	13:45	1.25	1872	1967	Drilling	Drilling - (WOB:15;GPM:494;RPM:60;DIFF:200)
30-Jul-11	13:45	14:00	0.25	1967	1967	Survey & Conn.	Survey & Conn. @ 1909' - 4.5 Inc 264.1 Azm
30-Jul-11	14:00	15:15	1.25	1967	2063	Drilling	Drilling - (WOB:15;GPM:494;RPM:60;DIFF:200)
30-Jul-11	15:15	15:30	0.25	2063	2063	Survey & Conn.	Survey & Conn. @ 2005' - 4.4 Inc 257.6 Azm
30-Jul-11	15:30	16:45	1.25	2063	2158	Drilling	Drilling - (WOB:15;GPM:494;RPM:60;DIFF:200)
30-Jul-11	16:45	17:00	0.25	2158	2158	Survey & Conn.	Survey & Conn. @ 2100' - 4.3 Inc 255.6 Azm
30-Jul-11	17:00	17:15	0.25	2158	2173	Sliding	Sliding - (WOB:18;GPM:494;TFO:315M;DIFF:175)
30-Jul-11	17:15	18:15	1.00	2173	2253	Drilling	Drilling - (WOB:15;GPM:494;RPM:60;DIFF:200)
30-Jul-11	18:15	18:30	0.25	2253	2253	Survey & Conn.	Survey & Conn. @ 2195' - 5.1 Inc. 275.0 Azm
30-Jul-11	18:30	19:45	1.25	2253	2348	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:300)
30-Jul-11	19:45	20:00	0.25	2348	2348	Survey & Conn.	Survey & Conn. @ 2290' - 4.8 Inc. 273.7 Azm
30-Jul-11	20:00	21:00	1.00	2348	2443	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:300)
30-Jul-11	21:00	21:15	0.25	2443	2443	Survey & Conn.	Survey & Conn. @ 2385' - 4.7 Inc. 277.1 Azm
30-Jul-11	21:15	21:30	0.25	2443	2453	Sliding	Sliding - (WOB:18;GPM :494;TFO:190M;DIFF:150)
30-Jul-11	21:30	22:30	1.00	2453	2538	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
30-Jul-11	22:30	22:45	0.25	2538	2538	Survey & Conn.	Survey & Conn. @ 2480' - 5.0 Inc 267.9 Azm
30-Jul-11	22:45	23:30	0.75	2538	2634	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
30-Jul-11	23:30	23:45	0.25	2634	2634	Survey & Conn.	Survey & Conn. @ 2576' - 4.8 Inc 268.1 Azm
30-Jul-11	23:45	24:00	0.25	2634	2665	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)



JOB NO.:	DDOK-110361	Report Time:	2400	3 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Sunday, July 31, 2011 at 0000 to Sunday, July 31, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters											
Start Depth		2665.00	Rotary Hours		16.00	WOB		10	Pick UP		95	Slack Off		93	SPM		
End Depth		4775.00	Circulating Hours		1.00	RAB		93	SPP		2100	FlowRate		494 - 494	185		
Total Drilled:		2110.00	Avg. Total ROP:		122.32	Mud Data											
Total Rotary Drilled:		2045.00	Avg. Rotary ROP:		127.81	Type	Water					PV	2	SOLID	3.5		
Total Drilled Sliding:		65.00	Avg. Slide ROP:		52.00	Weight		8.8	GAS	0	YP	8	BHT°	102			
Slide Hours:		1.25	Percent Rotary:		96.92	Viscosity		32	SAND	0.25	PH	9	Flow T°	0			
Below Rotary Hrs.		23.75	Percent Slide:		3.08	Chlorides		900	WL	14			Oil %	0			
PERSONNEL						CASING						BHA					
Lead Directional :		Kenneth Reed				Size		Lb/ft		Set Depth		BHA # 1:8 3/4 Ulterra MS1955BC, 6 3/4, 6/7, 5.0 Perf Fxd @ 1.5, Crossover float sub, 8 1/2 String Stab, UBHO sub, NMDC Slick, NMDC Flex, 8 1/4 String Stab, 3 Stds 6.5 Drill Collars, X/O 4.5 XH (P) x XT39 (B), 41 Jts XT-39 HWDP,					
Second Directional :		Randy Lee				Signature:											
MWD Operator1		Mike Valentine															
MWD Operator2		Kevin Clarey															
Directional Company:		MS Guidance															
Geologist:																	
Company Man:		Phil Davis										Daily Cost		\$10,095.00			
Incl. In:		4.8	Azm. In:		268.1	Incl. Out:		3.5	Azm. Out:		270	Cummulative Cost:		\$43,970.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
31-Jul-11	00:00	00:30	0.50	2665	2729	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	00:30	00:45	0.25	2729	2729	Survey & Conn.	Survey & Conn. @ 2671' - 4.6 Inc 266.0 Azm
31-Jul-11	00:45	01:00	0.25	2729	2739	Sliding	Sliding - (WOB:18;GPM :494;TFO:190M;DIFF:150)
31-Jul-11	01:00	01:45	0.75	2739	2824	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	01:45	02:00	0.25	2824	2824	Survey & Conn.	Survey & Conn. @ 2766' - 4.8 Inc 257.9 Azm
31-Jul-11	02:00	02:45	0.75	2824	2919	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	02:45	03:00	0.25	2919	2919	Survey & Conn.	Survey & Conn. @ 2861' - 4.6 Inc 253.9 Azm
31-Jul-11	03:00	03:15	0.25	2919	2934	Sliding	Sliding - (WOB:18;GPM :494;TFO:230M;DIFF:150)
31-Jul-11	03:15	04:00	0.75	2934	3013	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	04:00	04:15	0.25	3013	3013	Survey & Conn.	Survey & Conn. @ 2955' - 5.8 Inc 261.1 Azm
31-Jul-11	04:15	05:00	0.75	3013	3108	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	05:00	05:15	0.25	3108	3108	Survey & Conn.	Survey & Conn. @ 3050' - 5.6 Inc 261.1 Azm
31-Jul-11	05:15	06:00	0.75	3108	3204	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	06:00	06:15	0.25	3204	3204	Survey & Conn.	Survey & Conn. @ 3146' - 5.6 Inc 259.1 Azm
31-Jul-11	06:15	07:00	0.75	3204	3299	Drilling	Drilling - (WOB:15;GPM:494;RPM:60;DIFF:400)
31-Jul-11	07:00	07:15	0.25	3299	3299	Survey & Conn.	Survey & Conn. @ 3241' - 5.7 Inc 258.6 Azm
31-Jul-11	07:15	08:00	0.75	3299	3394	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
31-Jul-11	08:00	08:15	0.25	3394	3394	Survey & Conn.	Survey & Conn. @ 3336' - 5.8 Inc 258.4 Azm
31-Jul-11	08:15	08:30	0.25	3394	3409	Sliding	Sliding - (WOB:7;GPM :494;TFO:20M;DIFF:150)
31-Jul-11	08:30	09:00	0.50	3409	3489	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	09:00	09:15	0.25	3489	3489	Survey & Conn.	Survey & Conn. @ 3431' - 5.5 Inc 263.2 Azm
31-Jul-11	09:15	10:00	0.75	3489	3584	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:400)
31-Jul-11	10:00	10:15	0.25	3584	3584	Survey & Conn.	Survey & Conn. @ 3526' - 5.4 Inc 263.5 Azm
31-Jul-11	10:15	11:00	0.75	3584	3679	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:450)
31-Jul-11	11:00	11:15	0.25	3679	3679	Survey & Conn.	Survey & Conn. @ 3621' - 5.1 Inc 263.9 Azm
31-Jul-11	11:15	12:15	1.00	3679	3775	Drilling	Drilling - (WOB:15;GPM :494;RPM:60;DIFF:450)
31-Jul-11	12:15	12:30	0.25	3775	3775	Survey & Conn.	Survey & Conn. @ 3717' - 5.2 Inc 259.1 Azm
31-Jul-11	12:30	13:15	0.75	3775	3870	Drilling	Drilling - (WOB:12;GPM :494;RPM:60;DIFF:450)
31-Jul-11	13:15	13:30	0.25	3870	3870	Survey & Conn.	Survey & Conn. @ 3812' - 5.0 Inc 256.3 Azm
31-Jul-11	13:30	14:30	1.00	3870	3965	Drilling	Drilling - (WOB:12;GPM :494;RPM:60;DIFF:450)
31-Jul-11	14:30	14:45	0.25	3965	3965	Survey & Conn.	Survey & Conn. @ 3907' - 5.0 Inc 257.9 Azm
31-Jul-11	14:45	15:00	0.25	3965	3980	Sliding	Sliding - (WOB:7;GPM :494;TFO:350M;DIFF:150)
31-Jul-11	15:00	15:30	0.50	3980	4060	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:450)
31-Jul-11	15:30	15:45	0.25	4060	4060	Survey & Conn.	Survey & Conn. @ 4002' - 4.5 Inc 264.1 Azm
31-Jul-11	15:45	16:00	0.25	4060	4070	Sliding	Sliding - (WOB:5;GPM :494;TFO:305M;DIFF:150)
31-Jul-11	16:00	16:15	0.25	4070	4092	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	16:15	16:45	0.50	4092	4092	Rig Service-Inhole	Rig Service-Inhole
31-Jul-11	16:45	17:15	0.50	4092	4155	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	17:15	17:30	0.25	4155	4155	Survey & Conn.	Survey & Conn. @ 4097' - 4.8 Inc 270.3 Azm
31-Jul-11	17:30	18:00	0.50	4155	4250	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	18:00	18:15	0.25	4250	4250	Survey & Conn.	Survey & Conn. @ 4192' - 4.7 Inc 269.3 Azm
31-Jul-11	18:15	18:45	0.50	4250	4345	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	18:45	19:00	0.25	4345	4345	Survey & Conn.	Survey & Conn. @ 4287' - 4.5 Inc 268.6 Azm
31-Jul-11	19:00	19:30	0.50	4345	4440	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	19:30	19:45	0.25	4440	4440	Survey & Conn.	Survey & Conn. @ 4382' - 4.2 Inc 268.8 Azm
31-Jul-11	19:45	20:15	0.50	4440	4535	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	20:15	20:30	0.25	4535	4535	L/D DP	L/D 1 Jt DP (washed out)
31-Jul-11	20:30	20:45	0.25	4535	4535	Survey & Conn.	Survey & Conn. @ 4477' - 3.9 Inc 267.7 Azm
31-Jul-11	20:45	21:30	0.75	4535	4630	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	21:30	21:45	0.25	4630	4630	Survey & Conn.	Survey & Conn. @ 4572' - 3.7 Inc 267.7 Azm
31-Jul-11	21:45	22:45	1.00	4630	4726	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
31-Jul-11	22:45	23:15	0.50	4726	4726	Rig Service-Inhole	Rig Service-Inhole
31-Jul-11	23:15	23:30	0.25	4726	4726	Survey & Conn.	Survey & Conn. @ 4668' - 3.5 Inc 270.0 Azm
31-Jul-11	23:30	24:00	0.50	4726	4775	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)



JOB NO.:	DDOK-110361	Report Time:	2400	4 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Monday, August 01, 2011 at 0000 to Monday, August 01, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters							
Start Depth	4775.00	Rotary Hours	17.00	WOB	10	Pick UP	120	Slack Off	110	SPM			
End Depth	6400.00	Circulating Hours	0.75	RAB	115	SPP	2100	FlowRate	494 - 494	185			
Total Drilled:	1625.00	Avg. Total ROP:	90.28	Mud Data									
Total Rotary Drilled:	1598.00	Avg. Rotary ROP:	94.00	Type	Water				PV	2	SOLID	3.5	
Total Drilled Sliding:	27.00	Avg. Slide ROP:	27.00	Weight	8.8	GAS	0	YP	8	BHT°	102		
Slide Hours:	1.00	Percent Rotary:	98.34	Viscosity	32	SAND	0.25	PH	9	Flow T°	0		
Below Rotary Hrs.	24.00	Percent Slide:	1.66	Chlorides	900	WL	14			Oil %	0		
PERSONNEL				CASING					BHA				
Lead Directional :	Kenneth Reed			Size	Lb/ft	Set Depth		BHA # 1:8 3/4 Ulterra MS1955BC, 6 3/4, 6/7, 5.0 Perf Fxd @ 1.5, Crossover float sub, 8 1/2 String Stab, UBHO sub, NMDC Slick, NMDC Flex, 8 1/4 String Stab, 3 Stds 6.5 Drill Collars, X/O 4.5 XH (P) x XT39 (B), 41 Jts XT-39 HWDP,					
Second Directional :	Randy Lee/Jimbo Fisher			Signature:									
MWD Operator1	Mike Valentine												
MWD Operator2	Kevin Clarey												
Directional Company:	MS Guidance												
Geologist:													
Company Man:	Phil Davis						Daily Cost		\$10,095.00				
Incl. In:	3.5	Azm. In:	270	Incl. Out:	0.7	Azm. Out:	79.7	Cummulative Cost:		\$54,065.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
1-Aug-11	00:00	00:30	0.50	4775	4821	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	00:30	00:45	0.25	4821	4821	Survey & Conn.	Survey & Conn. @ 4763' - 3.3 Inc 269.0 Azm
1-Aug-11	00:45	01:00	0.25	4821	4831	Sliding	Sliding - (WOB:5;GPM :494;TFO:85M;DIFF:150)
1-Aug-11	01:00	01:45	0.75	4831	4916	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	01:45	02:00	0.25	4916	4916	Survey & Conn.	Survey & Conn. @ 4858' - 1.8 Inc 267.9 Azm
1-Aug-11	02:00	02:15	0.25	4916	4916	Rig repair	Rig repair- Work on Pump
1-Aug-11	02:15	02:45	0.50	4916	4926	Sliding	Sliding - (WOB:5;GPM :494;TFO:80M;DIFF:150)
1-Aug-11	02:45	03:15	0.50	4926	4980	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	03:15	03:45	0.50	4980	4980	Other	Install Rotating Head
1-Aug-11	03:45	04:00	0.25	4980	5011	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	04:00	04:15	0.25	5011	5011	Survey & Conn.	Survey & Conn. @ 4953' - 1.1 Inc 300.4 Azm
1-Aug-11	04:15	04:30	0.25	5011	5011	Rig repair	Rig repair - Work on Pump
1-Aug-11	04:30	05:30	1.00	5011	5106	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	05:30	05:45	0.25	5106	5106	Survey & Conn.	Survey & Conn. @ 5048' - 1.1 Inc 291.7 Azm
1-Aug-11	05:45	06:00	0.25	5106	5113	Sliding	Sliding - (WOB:5;GPM :494;TFO:115M;DIFF:150)
1-Aug-11	06:00	07:00	1.00	5113	5201	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	07:00	07:15	0.25	5201	5201	Survey & Conn.	Survey & Conn. @ 5143' - 0.6 Inc 309.2 Azm

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
1-Aug-11	07:15	08:00	0.75	5201	5297	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	08:00	08:15	0.25	5297	5297	Survey & Conn.	Survey & Conn. @ 5239' - 0.3 Inc 343.5 Azm
1-Aug-11	08:15	09:15	1.00	5297	5392	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	09:15	09:30	0.25	5392	5392	Survey & Conn.	Survey & Conn. @ 5334' - 0.2 Inc 317.1 Azm
1-Aug-11	09:30	09:45	0.25	5392	5423	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	09:45	10:30	0.75	5423	5423	Rig Service-Inhole	Rig Service-Inhole
1-Aug-11	10:30	11:15	0.75	5423	5487	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	11:15	11:30	0.25	5487	5487	Survey & Conn.	Survey & Conn. @ 5429' - 0.4 Inc 298.0 Azm
1-Aug-11	11:30	12:15	0.75	5487	5582	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	12:15	12:30	0.25	5582	5582	Survey & Conn.	Survey & Conn. @ 5524' - 0.4 Inc 320.1 Azm
1-Aug-11	12:30	13:30	1.00	5582	5677	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	13:30	13:45	0.25	5677	5677	Survey & Conn.	Survey & Conn. @ 5619' - 0.4 Inc 338.6 Azm
1-Aug-11	13:45	14:45	1.00	5677	5772	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	14:45	15:00	0.25	5772	5772	Survey & Conn.	Survey & Conn. @ 5714' - 0.7 Inc 26.2 Azm
1-Aug-11	15:00	16:15	1.25	5772	5867	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	16:15	16:30	0.25	5867	5867	Survey & Conn.	Survey & Conn. @ 5809' - 0.5 Inc 43.1 Azm
1-Aug-11	16:30	17:30	1.00	5867	5962	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:500)
1-Aug-11	17:30	17:45	0.25	5962	5962	Survey & Conn.	Survey & Conn. @ 5904' - 0.7 Inc 59.6 Azm
1-Aug-11	17:45	19:00	1.25	5962	6058	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
1-Aug-11	19:00	19:15	0.25	6058	6058	Survey & Conn.	Survey & Conn. @ 6000' - 0.7 Inc 47.8 Azm
1-Aug-11	19:15	20:00	0.75	6058	6153	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
1-Aug-11	20:00	20:15	0.25	6153	6153	Survey & Conn.	Survey & Conn. @ 6095' - 0.9 iNC 57.9 Azm
1-Aug-11	20:15	21:30	1.25	6153	6248	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
1-Aug-11	21:30	21:45	0.25	6248	6248	Survey & Conn.	Survey & Conn. @ 6190' - 0.8 Inc 63.5 Azm
1-Aug-11	21:45	23:00	1.25	6248	6343	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
1-Aug-11	23:00	23:15	0.25	6343	6343	Survey & Conn.	Survey & Conn. @ 6285 0.7 Inc 79.7 Azm
1-Aug-11	23:15	24:00	0.75	6343	6400	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)



JOB NO.:	DDOK-110361	Report Time:	2400	5 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECT\	RANGE:	
WELL NAME:	Wickstrom 5-44-5-60			

From Tuesday, August 02, 2011 at 0000 to Tuesday, August 02, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters											
Start Depth		6400.00	Rotary Hours		1.50	WOB		0	Pick UP		120	Slack Off		110	SPM		
End Depth		6519.00	Circulating Hours		0.75	RAB		115	SPP		2100	FlowRate		494 - 494	185		
Total Drilled:		119.00	Avg. Total ROP:		79.33	Mud Data											
Total Rotary Drilled:		119.00	Avg. Rotary ROP:		79.33	Type	Water					PV	2	SOLID	3.5		
Total Drilled Sliding:		0.00	Avg. Slide ROP:		NA	Weight		8.8	GAS	0	YP	8	BHT°	102			
Slide Hours:		0.00	Percent Rotary:		100.00	Viscosity		32	SAND	0.25	PH	9	Flow T°	0			
Below Rotary Hrs.		7.50	Percent Slide:		.00	Chlorides		900	WL	14			Oil %	0			
PERSONNEL						CASING						BHA					
Lead Directional :		Kenneth Reed				Size		Lb/ft		Set Depth		BHA # 1:8 3/4 Ulterra MS1955BC, 6 3/4, 6/7, 5.0 Perf Fxd @ 1.5, Crossover float sub, 8 1/2 String Stab, UBHO sub, NMDC Slick, NMDC Flex, 8 1/4 String Stab, 3 Stds 6.5 Drill Collars, X/O 4.5 XH (P) x XT39 (B), 41 Jts XT-39 HWDP,					
Second Directional :		Randy Lee / Jimbo Fisher				Signature:											
MWD Operator1		Mike Valentine															
MWD Operator2		Kevin Clarey															
Directional Company:		MS Guidance															
Geologist:																	
Company Man:		Phil Davis										Daily Cost		\$10,095.00			
Incl. In:	0.7	Azm. In:	79.7	Incl. Out:	0.7	Azm. Out:		90.4	Cummulative Cost:		\$64,160.00						

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
2-Aug-11	00:00	00:15	0.25	6400	6438	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
2-Aug-11	00:15	00:30	0.25	6438	6438	Survey & Conn.	Survey & Conn. @ 6380' - 0.8 Inc 78.4 Azm
2-Aug-11	00:30	01:45	1.25	6438	6519	Drilling	Drilling - (WOB:10;GPM :494;RPM:60;DIFF:400)
2-Aug-11	01:45	02:00	0.25	6519	6519	Survey & Conn.	Survey & Conn. @ 6461' - 0.7 Inc 90.4 Azm
2-Aug-11	02:00	02:45	0.75	6519	6519	Circulating	Circulating Sweep around
2-Aug-11	02:45	06:00	3.25	6519	6519	POOH	POOH to L/D
2-Aug-11	06:00	07:30	1.50	6519	6519	Other	L/D Directional Tools
2-Aug-11	07:30	12:00	4.50	6519	6519	Standby	Standby for logging operations
2-Aug-11	12:00	19:00	7.00	6519	6519	Standby	Wiper trip
2-Aug-11	19:00	24:00	5.00	6519	6519	Standby	Standby for logging operations



JOB NO.:	DDOK-110361	Report Time:	2400	6 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Wednesday, August 03, 2011 at 0000 to Wednesday, August 03, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters													
Start Depth	0.00		Rotary Hours	0.00		WOB	0		Pick UP	0		Slack Off	0		SPM				
End Depth	0.00		Circulating Hours	0.00		RAB	0		SPP	0		FlowRate	0 - 0		0				
Total Drilled:	0.00		Avg. Total ROP:	NA		Mud Data													
Total Rotary Drilled:	0.00		Avg. Rotary ROP:	NA		Type	0				PV	0		SOLID	0				
Total Drilled Sliding:	0.00		Avg. Slide ROP:	NA		Weight	0		GAS	0		YP	0		BHT°	0			
Slide Hours:	0.00		Percent Rotary:	NA		Viscosity	0		SAND	0		PH	0		Flow T°	0			
Below Rotary Hrs.	0.00		Percent Slide:	NA		Chlorides	0		WL	0				Oil %	0				
PERSONNEL						CASING						BHA							
Lead Directional :		Kenneth Reed				Size		Lb/ft		Set Depth		N/A							
Second Directional :		Randy Lee / Jimbo Fisher																	
MWD Operator1		Mike Valentine																	
MWD Operator2		Kevin Clarey																	
Directional Company:		MS Guidance																	
Geologist:						Signature:													
Company Man:		Phil Davis																	
Incl. In:		0.7		Azm. In:		90.4		Incl. Out:		0.7		Azm. Out:		90.4		Daily Cost		\$7,275.00	
														Cummulative Cost:		\$71,435.00			

GENERAL COMMENT

The rig has made 2 wiper trips to fix tight spot that was keeping the logging tool from going to bottom.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
3-Aug-11	00:00	22:00	22.00	6519	6519	Standby	Standby during wiper trip and mud conditioning
3-Aug-11	22:00	24:00	2.00	6519	6519	Standby	Standby during logging operations



JOB NO.:	DDOK-110361	Report Time:	2400	7 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Thursday, August 04, 2011 at 0000 to Thursday, August 04, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters															
Start Depth		0.00		Rotary Hours		0.00		WOB		0		Pick UP		0		Slack Off		0		SPM	
End Depth		0.00		Circulating Hours		0.00		RAB		0		SPP		0		FlowRate		0 - 0		0	
Total Drilled:		0.00		Avg. Total ROP:		NA		Mud Data													
Total Rotary Drilled:		0.00		Avg. Rotary ROP:		NA		Type	0				PV	0		SOLID	0				
Total Drilled Sliding:		0.00		Avg. Slide ROP:		NA		Weight	0		GAS	0		YP	0		BHT°	0			
Slide Hours:		0.00		Percent Rotary:		NA		Viscosity	0		SAND	0		PH	0		Flow T°	0			
Below Rotary Hrs.		0.00		Percent Slide:		NA		Chlorides	0		WL	0				Oil %	0				
PERSONNEL								CASING						BHA							
Lead Directional :		Kenneth Reed						Size		Lb/ft		Set Depth		N/A							
Second Directional :		Randy Lee / Jimbo Fisher																			
MWD Operator1		Mike Valentine																			
MWD Operator2		Kevin Clarey																			
Directional Company:		MS Guidance																			
Geologist:																					
Company Man:		Phil Davis						Signature:				Daily Cost		\$7,275.00							
Incl. In:		0.7		Azm. In:		90.4						Incl. Out:		0.7		Azm. Out:		90.4		Cummulative Cost:	

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
4-Aug-11	00:00	24:00	24.00	6519	6519	Standby	Standby during logging and cementing operations



JOB NO.:	DDOK-110361	Report Time:	2400	8 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECT\	RANGE:	
WELL NAME:	Wickstrom 5-44-5-60			

From Friday, August 05, 2011 at 0000 to Friday, August 05, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters															
Start Depth		0.00		Rotary Hours		0.00		WOB		0		Pick UP		0		Slack Off		0		SPM	
End Depth		0.00		Circulating Hours		1.50		RAB		0		SPP		0		FlowRate		0 - 0		0	
Total Drilled:		0.00		Avg. Total ROP:		NA		Mud Data													
Total Rotary Drilled:		0.00		Avg. Rotary ROP:		NA		Type	0					PV	0		SOLID	0			
Total Drilled Sliding:		0.00		Avg. Slide ROP:		NA		Weight		0		GAS	0		YP	0		BHT°	0		
Slide Hours:		0.00		Percent Rotary:		NA		Viscosity		0		SAND	0		PH	0		Flow T°	0		
Below Rotary Hrs.		22.00		Percent Slide:		NA		Chlorides		0		WL	0				Oil %	0			
PERSONNEL						CASING						BHA									
Lead Directional :		Kenneth Reed				Size		Lb/ft		Set Depth		BHA # 2:8 3/4 Ulterra UD 513, 6 3/4, 6/7, 5.0 Perf Fxd @ 2.12, Crossover float sub, UBHO sub, NMDC Slick, NMDC Flex, X/O 4.5 XH (P) x XT39 (B), 16 stds XT-39 DP, 41 Jts XT-39 HWDP, ,									
Second Directional :		Randy Lee / Jimbo Fisher				Signature:															
MWD Operator1		Mike Valentine																			
MWD Operator2		Kevin Clarey																			
Directional Company:		MS Guidance																			
Geologist:																					
Company Man:		Phil Davis										Daily Cost		\$11,930.00							
Incl. In:		0.7		Azm. In:		90.4		Incl. Out:		0.7		Azm. Out:		90.4		Cummulative Cost:		\$90,640.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Aug-11	00:00	02:00	2.00	6519	6519	Standby	Standby- While finishing cementing operations
5-Aug-11	02:00	04:30	2.50	6519	6519	POOH	POOH- and L/D 1500 Ft of DP
5-Aug-11	04:30	06:30	2.00	6519	6519	Change BHA	P/U BHA 2, orient, scribe, and test MWD tool
5-Aug-11	06:30	07:00	0.50	6519	6519	TIH	TIH 15 stands
5-Aug-11	07:00	20:00	13.00	6519	6519	Other	Wait on cement
5-Aug-11	20:00	21:45	1.75	6519	6519	TIH	TIH to tag cement
5-Aug-11	21:45	22:00	0.25	5048	5048	Other	Tag cement @5090
5-Aug-11	22:00	22:30	0.50	5048	5048	Other	Instal rotating head
5-Aug-11	22:30	24:00	1.50	5048	5048	Circulating	Circulating while waiting on cement



JOB NO.:	DDOK-110361	Report Time:	2400	9 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Saturday, August 06, 2011 at 0000 to Saturday, August 06, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters					
Start Depth	5048.00	Rotary Hours	3.75	WOB	10	Pick UP	120	Slack Off	115	SPM	
End Depth	5853.00	Circulating Hours	0.75	RAB	115	SPP	2350	FlowRate	0 - 494	0	
Total Drilled:	805.00	Avg. Total ROP:	57.50	Mud Data							
Total Rotary Drilled:	207.00	Avg. Rotary ROP:	55.20	Type	0	PV	15	SOLID	7.2		
Total Drilled Sliding:	598.00	Avg. Slide ROP:	58.34	Weight	9.3	GAS	0	YP	9	BHT°	0
Slide Hours:	10.25	Percent Rotary:	25.71	Viscosity	45	SAND	0.25	PH	0	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	74.29	Chlorides	600	WL	9.5		Oil %	0	
PERSONNEL				CASING				BHA			
Lead Directional :	Kenneth Reed			Size	Lb/ft	Set Depth	BHA # 2:8 3/4 Ulterra UD 513, 6 3/4, 6/7, 5.0 Perf Fxd @ 2.12, Crossover float sub, UBHO sub, NMDC Slick, NMDC Flex, X/O 4.5 XH (P) x XT39 (B), 16 stds XT-39 DP, 41 Jts XT-39 HWDP, ,				
Second Directional :	Randy Lee / Jimbo Fisher			Signature:							
MWD Operator1	Mike Valentine										
MWD Operator2	Kevin Clarey										
Directional Company:	MS Guidance										
Geologist:											
Company Man:	Phil Davis						Daily Cost	\$10,895.00			
Incl. In:	0.7	Azm. In:	90.4	Incl. Out:	53.5	Azm. Out:	322.8	Cummulative Cost:	\$101,535.00		

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Aug-11	00:00	00:15	0.25	5048	5048	Circulating	Circulating- Wash to top of cement
6-Aug-11	00:15	01:00	0.75	5048	5075	Drilling	Drilling - ((WOB:8;GPM :280;RPM:50;DIFF:100)
6-Aug-11	01:00	03:15	2.25	5075	5075	Rig repair	Work on Pumps
6-Aug-11	03:15	03:45	0.50	5075	5108	Sliding	Sliding - (WOB:5;GPM :494;TFO:324M;DIFF:150)
6-Aug-11	03:45	04:00	0.25	5108	5108	Survey & Conn.	Survey & Conn. @ 5058' - 1.1 Inc 289.9 Azm
6-Aug-11	04:00	04:45	0.75	5108	5125	Sliding	Sliding - (WOB:6;GPM :494;TFO:324M;DIFF:150)
6-Aug-11	04:45	05:15	0.50	5125	5140	Drilling	Drilling - (WOB:10;GPM :494;RPM:50;DIFF:350)
6-Aug-11	05:15	05:30	0.25	5140	5140	Survey & Conn.	Survey & Conn. @ 5090' - 1.4 Inc 293.7 Azm
6-Aug-11	05:30	06:15	0.75	5140	5172	Drilling	Drilling - (WOB:6;GPM :494;RPM:45;DIFF:350)
6-Aug-11	06:15	06:30	0.25	5172	5172	Survey & Conn.	Survey & Conn. @ 5122' - 1.3 Inc 288.8 Azm
6-Aug-11	06:30	07:15	0.75	5172	5203	Sliding	Sliding - (WOB:6;GPM :494;TFO:324M;DIFF:100)
6-Aug-11	07:15	07:30	0.25	5203	5203	Survey & Conn.	Survey & Conn. @ 5153' - 2.4 Inc 302.6 Azm
6-Aug-11	07:30	08:00	0.50	5203	5235	Sliding	Sliding - (WOB:9;GPM :494;TFO:324M;DIFF:200)
6-Aug-11	08:00	08:15	0.25	5235	5235	Survey & Conn.	Survey & Conn. @ 5185' - 4.8 Inc 312.6 Azm
6-Aug-11	08:15	08:45	0.50	5235	5267	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:400)
6-Aug-11	08:45	09:00	0.25	5267	5267	Survey & Conn.	Survey & Conn. @ 5217' - 8.1 Inc 321.3 Azm
6-Aug-11	09:00	09:15	0.25	5267	5298	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:400)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Aug-11	09:15	09:30	0.25	5298	5298	Survey & Conn.	Survey & Conn. @ 5248' - 9.5 Inc 321.4 Azm
6-Aug-11	09:30	09:45	0.25	5298	5330	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:400)
6-Aug-11	09:45	10:00	0.25	5330	5330	Survey & Conn.	Survey & Conn. @ 5280' - 9.5 Inc 320.0 Azm
6-Aug-11	10:00	10:30	0.50	5330	5362	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:400)
6-Aug-11	10:30	10:45	0.25	5362	5362	Survey & Conn.	Survey & Conn. @ 5312' - 9.5 Inc 320.3 Azm
6-Aug-11	10:45	11:00	0.25	5362	5394	Sliding	Sliding - (WOB:9;GPM :494;TFO:30R;DIFF:150)
6-Aug-11	11:00	11:15	0.25	5394	5394	Survey & Conn.	Survey & Conn. @ 5344' - 9.1 Inc 317.4 Azm
6-Aug-11	11:15	11:45	0.50	5394	5425	Sliding	Sliding - (WOB:9;GPM :494;TFO:30R;DIFF:200)
6-Aug-11	11:45	12:00	0.25	5425	5425	Survey & Conn.	Survey & Conn. @ 5375' - 11.3 Inc 319.4 Azm
6-Aug-11	12:00	12:30	0.50	5425	5457	Sliding	Sliding - (WOB:7;GPM :494;TFO:20R;DIFF:350)
6-Aug-11	12:30	12:45	0.25	5457	5457	Survey & Conn.	Survey & Conn. @ 5407' - 14.9 Inc 324.8 Azm
6-Aug-11	12:45	13:00	0.25	5457	5457	Other	Work on pumps - pressure fluctuation
6-Aug-11	13:00	13:15	0.25	5457	5463	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:250)
6-Aug-11	13:15	13:30	0.25	5463	5489	Sliding	Sliding - (WOB:9;GPM :494;TFO:0;DIFF:200)
6-Aug-11	13:30	13:45	0.25	5489	5489	Survey & Conn.	Survey & Conn. @ 5439' - 17.6 Inc 329.8 Azm
6-Aug-11	13:45	14:15	0.50	5489	5520	Sliding	Sliding - (WOB:11;GPM :494;TFO:20L;DIFF:300)
6-Aug-11	14:15	14:30	0.25	5520	5520	Survey & Conn.	Survey & Conn. @ 5470' - 20.0 Inc 330.4 Azm
6-Aug-11	14:30	15:00	0.50	5520	5552	Sliding	Sliding - (WOB:11;GPM :494;TFO:20L;DIFF:200)
6-Aug-11	15:00	15:15	0.25	5552	5552	Survey & Conn.	Survey & Conn. @ 5502' - 22.9 Inc 328 Azm
6-Aug-11	15:15	15:45	0.50	5552	5584	Sliding	Sliding - (WOB:8;GPM :494;TFO:0;DIFF:150)
6-Aug-11	15:45	16:00	0.25	5584	5584	Survey & Conn.	Survey & Conn. @ 5534' - 25.4 Inc 326.4 Azm
6-Aug-11	16:00	16:45	0.75	5584	5616	Sliding	Sliding - (WOB:8;GPM :494;TFO:0;DIFF:150)
6-Aug-11	16:45	17:00	0.25	5616	5616	Survey & Conn.	Survey & Conn. @ 5566' - 28.5 Inc 325.6 Azm
6-Aug-11	17:00	17:30	0.50	5616	5647	Sliding	Sliding - (WOB:10;GPM :494;TFO:10L;DIFF:150)
6-Aug-11	17:30	17:45	0.25	5647	5647	Survey & Conn.	Survey & Conn. @ 5597' - 31.8 Inc 325.6 Azm
6-Aug-11	17:45	18:00	0.25	5647	5647	Other	Work on pumps - air compressor shutting off
6-Aug-11	18:00	18:30	0.50	5647	5679	Sliding	Sliding - (WOB:10;GPM :494;TFO:0;DIFF:150)
6-Aug-11	18:30	18:45	0.25	5679	5679	Survey & Conn.	Survey & Conn. 5629' - 35.3 Inc 324.1 Azm
6-Aug-11	18:45	19:15	0.50	5679	5711	Sliding	Sliding - (WOB:10;GPM :494;TFO:0;DIFF:200)
6-Aug-11	19:15	19:45	0.50	5711	5711	Circulating	Circulating- treating mud for Sharon Springs
6-Aug-11	19:45	20:00	0.25	5711	5711	Survey & Conn.	Survey & Conn. 5661' - 38.6 Inc 323.6 Azm
6-Aug-11	20:00	20:30	0.50	5711	5743	Sliding	Sliding - (WOB:10;GPM :494;TFO:0;DIFF:200)
6-Aug-11	20:30	20:45	0.25	5743	5743	Survey & Conn.	Survey & Conn. @ 5693' - 42.2 Inc 323.5 Azm
6-Aug-11	20:45	21:00	0.25	5743	5774	Sliding	Sliding - (WOB:10;GPM :494;TFO:0;DIFF:200)
6-Aug-11	21:00	21:30	0.50	5774	5774	Other	L/D Jt DP (washed out)
6-Aug-11	21:30	21:45	0.25	5774	5774	Survey & Conn.	Survey & Conn. @ 5724 - 45.8 Inc 323.5 Azm
6-Aug-11	21:45	22:15	0.50	5774	5806	Sliding	Sliding - (WOB:10;GPM :494;TFO:10R;DIFF:200)
6-Aug-11	22:15	22:30	0.25	5806	5806	Survey & Conn.	Survey & Conn. @ 5756' - Inc Azm
6-Aug-11	22:30	23:15	0.75	5806	5838	Sliding	Sliding - (WOB:10;GPM :494;TFO:10R;DIFF:200)
6-Aug-11	23:15	23:30	0.25	5838	5838	Survey & Conn.	Survey & Conn. @ 5788' - 53.5 Inc 322.8 Azm
6-Aug-11	23:30	24:00	0.50	5838	5853	Sliding	Sliding - (WOB:10;GPM :494;TFO:20R)



JOB NO.:	DDOK-110361	Report Time:	2400	10 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Sunday, August 07, 2011 at 0000 to Sunday, August 07, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters									
Start Depth	5853.00		Rotary Hours		7.75	WOB	0		Pick UP	120		Slack Off	108		SPM
End Depth	6360.00		Circulating Hours		0.75	RAB	115		SPP	0		FlowRate	494 - 494		0
Total Drilled:	507.00		Avg. Total ROP:		32.19	Mud Data									
Total Rotary Drilled:	321.00		Avg. Rotary ROP:		41.42	Type	0				PV	21	SOLID	6.5	
Total Drilled Sliding:	186.00		Avg. Slide ROP:		23.25	Weight	9.3		GAS	0	YP	24	BHT°	0	
Slide Hours:	8.00		Percent Rotary:		63.31	Viscosity	50		SAND	0.25	PH	0	Flow T°	0	
Below Rotary Hrs.	24.00		Percent Slide:		36.69	Chlorides	600		WL	5.6			Oil %	0	
PERSONNEL						CASING						BHA			
Lead Directional :		Kenneth Reed				Size		Lb/ft		Set Depth		BHA # 2:8 3/4 Ulterra UD 513, 6 3/4, 6/7, 5.0 Perf Fxd @ 2.12, Crossover float sub, UBHO sub, NMDC Slick, NMDC Flex, X/O 4.5 XH (P) x XT39 (B), 16 stds XT-39 DP, 41 Jts XT-39 HWDP, ,			
Second Directional :		Randy Lee / Jimbo Fisher				Signature:									
MWD Operator1		Mike Valentine													
MWD Operator2		Kevin Clarey													
Directional Company:		MS Guidance													
Geologist:															
Company Man:		Phil Davis										Daily Cost		\$10,895.00	
Incl. In:	53.5	Azm. In:	322.8	Incl. Out:	90.2	Azm. Out:	324.9	Cummulative Cost:		\$112,430.00					

GENERAL COMMENT

TVD target dropped from 5837' to 5842'.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
7-Aug-11	00:00	00:15	0.25	5853	5870	Sliding	Sliding - (WOB:10;GPM :494;TFO:20R;DIFF:100)
7-Aug-11	00:15	01:00	0.75	5870	5870	Rig repair	Work on mud pumps and Rig service
7-Aug-11	01:00	01:15	0.25	5870	5870	Survey & Conn.	Survey & Conn. @ 5820' - Inc Azm
7-Aug-11	01:15	02:00	0.75	5870	5901	Sliding	Sliding - (WOB:10;GPM :494;TFO:10R;DIFF:200)
7-Aug-11	02:00	02:15	0.25	5901	5901	Survey & Conn.	Survey & Conn. @ 5851' - 61.5 Inc 323.6 Azm
7-Aug-11	02:15	02:30	0.25	5901	5916	Sliding	Sliding - (WOB:15;GPM :494;TFO:20R;DIFF:200)
7-Aug-11	02:30	03:00	0.50	5916	5933	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:300)
7-Aug-11	03:00	03:15	0.25	5933	5933	Survey & Conn.	Survey & Conn. @ 5883' - 65.6 Inc 324.2 Azm
7-Aug-11	03:15	03:45	0.50	5933	5943	Sliding	Sliding - (WOB:15;GPM :494;TFO:20R;DIFF:200)
7-Aug-11	03:45	04:15	0.50	5943	5965	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:300)
7-Aug-11	04:15	04:30	0.25	5965	5965	Survey & Conn.	Survey & Conn. @ 5915' - 69.1 Inc 324.1 Azm
7-Aug-11	04:30	05:00	0.50	5965	5997	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:300)
7-Aug-11	05:00	05:15	0.25	5997	5997	Survey & Conn.	Survey & Conn. @ 5947' - 70.5 Inc 324.3 Azm
7-Aug-11	05:15	06:00	0.75	5997	6028	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:300)
7-Aug-11	06:00	06:15	0.25	6028	6028	Survey & Conn.	Survey & Conn. @ 5978' - 71.1 Inc 324.3 Azm
7-Aug-11	06:15	06:45	0.50	6028	6043	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:200)
7-Aug-11	06:45	07:30	0.75	6043	6060	Sliding	Sliding - (WOB:15;GPM :494;TFO:20R;DIFF:150)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
7-Aug-11	07:30	07:45	0.25	6060	6060	Survey & Conn.	Survey & Conn. @ 6010' - 71.6 Inc 324.4 Azm
7-Aug-11	07:45	09:45	2.00	6060	6092	Sliding	Sliding - (WOB:21;GPM :494;TFO:0;DIFF:150)
7-Aug-11	09:45	10:00	0.25	6092	6092	Survey & Conn.	Survey & Conn. @ 6042' - 72.7 Inc 324.7 Azm
7-Aug-11	10:00	11:45	1.75	6092	6124	Sliding	Sliding - (WOB:21;GPM :494;TFO:0;DIFF:150)
7-Aug-11	11:30	11:45	0.25	6124	6124	Other	Replace gasket on pump
7-Aug-11	12:00	12:15	0.25	6124	6124	Survey & Conn.	Survey & Conn. @ 6074' - 76.4 Inc 325.1 Azm
7-Aug-11	12:15	13:00	0.75	6124	6155	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:200)
7-Aug-11	13:00	13:15	0.25	6155	6155	Survey & Conn.	Survey & Conn. @ 6105' - 80.2 Inc 325.1 Azm
7-Aug-11	13:15	13:30	0.25	6155	6155	Rig Service-Inhole	Rig Service
7-Aug-11	13:30	13:45	0.25	6155	6165	Drilling	Drilling - (WOB:10;GPM :494;RPM:45;DIFF:200)
7-Aug-11	13:45	14:30	0.75	6165	6175	Sliding	Sliding - (WOB:21;GPM :494;TFO:0;DIFF:150)
7-Aug-11	14:30	14:45	0.25	6175	6187	Drilling	Drilling - (WOB:14;GPM :494;RPM:45;DIFF:250)
7-Aug-11	14:45	15:00	0.25	6187	6187	Survey & Conn.	Survey & Conn. @ 6137' - 81.9 Inc 325.0 Azm
7-Aug-11	15:00	15:15	0.25	6187	6197	Drilling	Drilling - (WOB:14;GPM :494;RPM:45;DIFF:200)
7-Aug-11	15:15	16:15	1.00	6197	6219	Sliding	Sliding - (WOB:21;GPM :494;TFO:10L;DIFF:150)
7-Aug-11	16:15	16:30	0.25	6219	6219	Survey & Conn.	Survey & Conn. @ 6169' - 83.4 Inc 325.2 Azm
7-Aug-11	16:30	17:15	0.75	6219	6251	Drilling	Drilling - (WOB:15;GPM :494;RPM:45;DIFF:200)
7-Aug-11	17:15	17:30	0.25	6251	6251	Survey & Conn.	Survey & Conn. @ 6201' - 85.7 Inc 325.1 Azm
7-Aug-11	17:30	18:15	0.75	6251	6282	Drilling	Drilling - (WOB:15;GPM :494;RPM:45)
7-Aug-11	18:15	18:30	0.25	6282	6282	Survey & Conn.	Survey & Conn. @ 6232' - 87.3' Inc 325.0 Azm
7-Aug-11	18:30	19:15	0.75	6282	6313	Drilling	Drilling - (WOB:15;GPM :494;RPM:45;DIFF:200)
7-Aug-11	19:15	19:30	0.25	6313	6313	Survey & Conn.	Survey & Conn. @ 6263' - 87.7 Inc 325.1 Azm
7-Aug-11	19:30	20:15	0.75	6313	6345	Drilling	Drilling - (WOB:15;GPM :494;RPM:45;DIFF:200)
7-Aug-11	20:15	20:30	0.25	6345	6345	Survey & Conn.	Survey & Conn. @ 6295' - 88.5 Inc 325.0 Azm
7-Aug-11	20:30	21:00	0.50	6345	6360	Drilling	Drilling - (WOB:15;GPM :494;RPM:45;DIFF:200)
7-Aug-11	21:00	21:15	0.25	6360	6360	Survey & Conn.	Survey & Conn. @ 6010' - 88.9 Inc 324.9 Azm
7-Aug-11	21:15	21:45	0.50	6360	6360	Circulating	Circulating sweep around
7-Aug-11	21:45	24:00	2.25	6360	6360	Short Trip	Short Trip



JOB NO.:	DDOK-110361	Report Time:	2400	11 of 11
Company:	Carrizo Oil and Gas	API JOB #	050870815900	
LOCATION:	Morgan County	WORK ORDER#		
RIG NAME:	Cade 22	FIELD:	Niobrara	
STATE:	Colorado	Township:		
COUNTY:	Morgan County	SECTRANGE:		
WELL NAME:	Wickstrom 5-44-5-60			

From Monday, August 08, 2011 at 0000 to Monday, August 08, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters					
Start Depth	0.00	Rotary Hours	0.00	WOB	0	Pick UP	120	Slack Off	108	SPM	
End Depth	0.00	Circulating Hours	5.50	RAB	115	SPP	0	FlowRate	494 - 494	0	
Total Drilled:	0.00	Avg. Total ROP:	NA	Mud Data							
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type	0			PV	21	SOLID	6.5
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	9.3	GAS	0	YP	24	BHT°	0
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	50	SAND	0.25	PH	0	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	NA	Chlorides	600	WL	5.6			Oil %	0
PERSONNEL				CASING					BHA		
Lead Directional :	Kenneth Reed			Size	Lb/ft	Set Depth	BHA # 2:8 3/4 Ulterra UD 513, 6 3/4, 6/7, 5.0 Perf Fxd @ 2.12, Crossover float sub, UBHO sub, NMDC Slick, NMDC Flex, X/O 4.5 XH (P) x XT39 (B), 16 stds XT-39 DP, 41 Jts XT-39 HWDP, ,				
Second Directional :	Randy Lee			Signature:							
MWD Operator1	Mike Valentine										
MWD Operator2	Kevin Clarey										
Directional Company:	MS Guidance										
Geologist:											
Company Man:	Phil Davis							Daily Cost		\$10,895.00	
Incl. In:	90.2	Azm. In:	324.9	Incl. Out:	90.2	Azm. Out:	324.9	Cummulative Cost:		\$123,325.00	

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
8-Aug-11	00:00	03:00	3.00	6360	6360	Short Trip	Short Trip
8-Aug-11	03:00	07:30	4.50	6360	6360	Circulating	Circulating sweep around
8-Aug-11	07:30	08:30	1.00	6360	6360	Circulating	Pump out of curve
8-Aug-11	08:30	11:00	2.50	6360	6360	POOH	POOH
8-Aug-11	11:00	12:00	1.00	6360	6360	POOH	L/D directional tools
8-Aug-11	12:00	13:00	1.00	6360	6360	Other	Load truck
8-Aug-11	13:00	24:00	11.00	6360	6360	Other	Secure location, travel

BHA # 1



JOB NO.: DDOK-110361 Work Order:
 Company: Carrizo Oil and Gas
 LOCATION: Morgan County
 RIG NAME: Cade 22
 STATE: Colorado
 COUNTY: Morgan County
 WELL NAME: Wickstrom 5-44-5-60

FIELD: Niobrara
 Township:
 SECT. RANGE:
 Lead DD: Kenneth Reed
 Co. Man: Phil Davis
 BHA TYPE: Steerable Assembly
 BHA WT: 514376 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 29-Jul-11 @ 23:30	6 3/4 Performance Motor	SO/PU: 0 - 110 / 0-120
Date Out: 02-Aug-11 @ 07:30	MFG.: MPact	Rot Strg Wt: 0-115
Hrs In Hole: 75.75	Pad OD: 7.1825	WOB: 0 - 18
Start Depth: 1407.00	NB Stab: 8.5	TORQ: 0 - 0
End Depth: 6519.00	Bit to Bend: 5.01	SPP: 700 - 2100
Total Drilled: 5112.00	Bent Hsg/Sub°: 1.5 /	Motor RPM: 138
Avg. Total ROP: 96.00	Lobe/Stage: 6/7 / 5	Rotary RPM: 40 - 60
Circ Hrs: Tot/Only 56.50 / 3.25	Rev/GAL: 0.28	Flow Rate: 400 - 494
Percent Slide: 3.46	Rotor Jet: 0	Avg Diff: 400
Percent Hrs: 7.04	Prop BUR: 11	Stall Pres.: Off Bot Pres.:
Slide Hours: 3.75	Act BUR: 11	
Total Sliding: 177.00		
Avg. Slide ROP: 47.20		
Percent Rotary: 96.54		
Percent Hrs: 92.96		
Rotary Hours: 49.50		
Total Rotary: 4935.00		
Avg. Rotary ROP: 99.70		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 55	Last Casing	O.D.
	GYRO: 0	DNSC: 1428	Sonic: 0	Shoe @:	Hanger @:

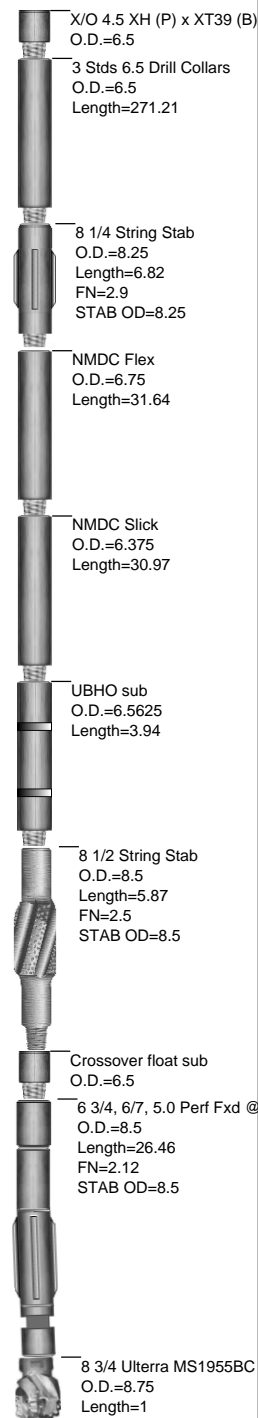
INC IN: .0 INC OUT: .3 AZM IN: .00 AZM OUT: 264.50

6 3/4" Performance Motor, 6/7 Lobe, 5.0 Stage, fixed @ 1.5° w/8 1/2" Stab
 Rev/gal = 0.28
 Flow range - 300 - 600 GPM
 Max Diff - 839 PSI
 Bit to sensor - 55'
 Survey distance - 58'

This assembly performed as expected with no stalling and BUR's of 8 -11"/100. The motor drained well on surface with no excessive slack in bearings. The bit was in gauge and had worn cutters in the gauge and nose rows.

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
8 3/4 Ulterra MS1955BC	M9861		8.75	1.00	1.00	4 1/2 REGP	
6 3/4, 6/7, 5.0 Perf Fxd @ 1.5	67D425		8.5	26.46	27.46	4 1/2 IFB	MPact
Crossover float sub	SD103627	2.875	6.5	3.97	31.43	4 1/2 XHB	SDI
8 1/2 String Stab	SD23316	6.4375	8.5	5.87	37.30	4 1/2 XHB	SDI
UBHO sub	5129	3	6.5625	3.94	41.24	4 1/2 XHB	Tensor
NMDC Slick	SD38288	2.875	6.375	30.97	72.21	4 1/2 XHB	SDI
NMDC Flex	SD46294	2.875	6.75	31.64	103.85	4 1/2 XHB	SDI
8 1/4 String Stab	SD22065	2.3125	8.25	6.82	110.67	4 1/2 XHB	SDI
3 Stds 6.5 Drill Collars	Rig	2.875	6.5	271.21	381.88	4 1/2 XHB	RIG
X/O 4.5 XH (P) x XT39 (B)	Rig	2.875	6.5	3.94	385.82	XT39B	RIG
41 Jts XT-39 HWDP	Rlg	2.875	6.5	6,133.18	6519.00	XT39	Rig



BHA # 2



JOB NO.: DDOK-110361 Work Order: FIELD: Niobrara
 Company: Carrizo Oil and Gas Township:
 LOCATION: Morgan County SECT. RANGE:
 RIG NAME: Cade 22 Lead DD: Kenneth Reed
 STATE: Colorado Co. Man: Phil Davis
 COUNTY: Morgan County BHA TYPE: Slick Assembly
 WELL NAME: Wickstrom 5-44-5-60 BHA WT: 126131 Wt @ Jars: N/A

Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 05-Aug-11 @ 06:30	6 3/4 Performance Motor	SO/PU: 0 - 115 / 0-120
Date Out: 08-Aug-11 @ 12:00	MFG.: MPact	Rot Strg Wt: 0-115
Hrs In Hole: 77.50	Pad OD: 7.125	WOB: 0 - 21
Start Depth: 5048.00	NB Stab: 0	TORQ: 0 - 0
End Depth: 6360.00	Bit to Bend: 5.67	SPP: 0 - 2350
Total Drilled: 1312.00	Bent Hsg/Sub°: 2.12 /	Motor RPM: 138
Avg. Total ROP: 44.10	Lobe/Stage: 6/7 / 5	Rotary RPM: 45 - 50
Circ Hrs: Tot/Only 38.25 / 8.50	Rev/GAL: 0.28	Flow Rate: 0 - 494
Percent Slide: 59.76	Rotor Jet: 0	Avg Diff: 300
Percent Hrs: 61.34	Prop BUR: 0	Stall Pres.: 300
Slide Hours: 18.25	Act BUR: 12	Off Bot Pres.:
Total Sliding: 784.00		
Avg. Slide ROP: 42.96		
Percent Rotary: 40.24		
Percent Hrs: 38.66		
Rotary Hours: 11.50		
Total Rotary: 528.00		
Avg. Rotary ROP: 45.91		
Reason POOH: TD		

MWD Spacing	Gamma: 42	Restiv: 0	Sensor: 47	Last Casing	O.D.
	GYRO: 0	DNSC: 5075	Sonic: 0	Shoe @:	Hanger @:

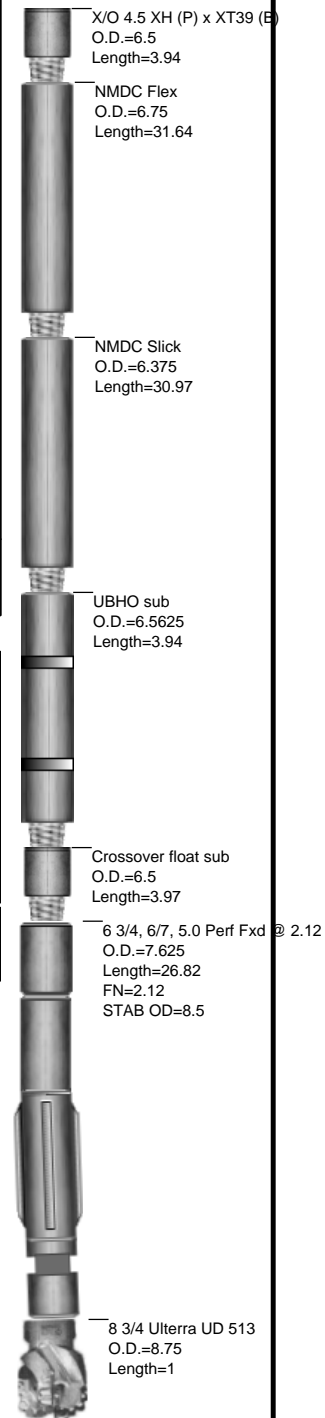
INC IN: .0 INC OUT: .0 AZM IN: .00 AZM OUT: .00

6 3/4" Performance Motor, 6/7 Lobe, 5.0 Stage, fixed @ 2.12° w/SS
 Rev/gal = 0.28
 Flow range - 300 - 600 GPM
 Max Diff - 839 PSI
 Bit to sensor - 47'
 Bit to gamma - 42'
 Survey distance - 50'

This assembly performed as expected with no stalling and BUR's of 9-13°/100. The motor drained well on surface with no excessive slack in bearings. The bit was in gauge and had worn cutters in the gauge and nose rows.

BHA Detail

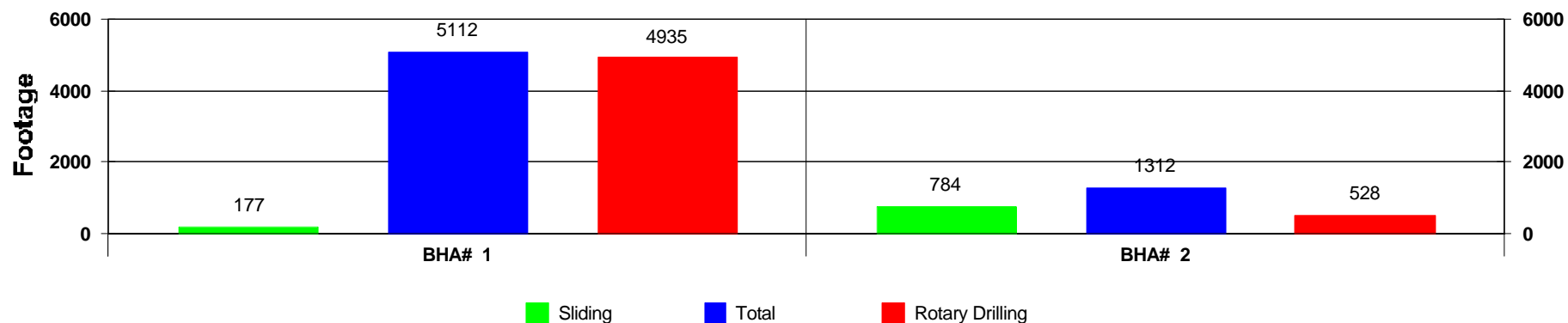
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
8 3/4 Ultrerra UD 513	6102		8.75	1.00	1.00	4 1/2 IFP	Ultrerra
6 3/4, 6/7, 5.0 Perf Fxd @ 2.12	67D1278SR		7.625	26.82	27.82	4 1/2 IFB	MPact
Crossover float sub	SD103627	2.875	6.5	3.97	31.79	4 1/2 XHB	SDI
UBHO sub	5129	3	6.5625	3.94	35.73	4 1/2 XHB	Tensor
NMDC Slick	SD38288	2.875	6.375	30.97	66.70	4 1/2 XHB	SDI
NMDC Flex	SD46294	2.875	6.75	31.64	98.34	4 1/2 XHB	SDI
X/O 4.5 XH (P) x XT39 (B)	Rig	2.875	6.5	3.94	102.28	XT39B	RIG
16 stds XT-39 DP	Rig	3.826	4.5	1,521.31	1623.59	XT39	Rig
41 Jts XT-39 HWD	Rlg	2.875	6.5	1,255.10	2878.69	XT39	Rig
				0.00	2878.69		



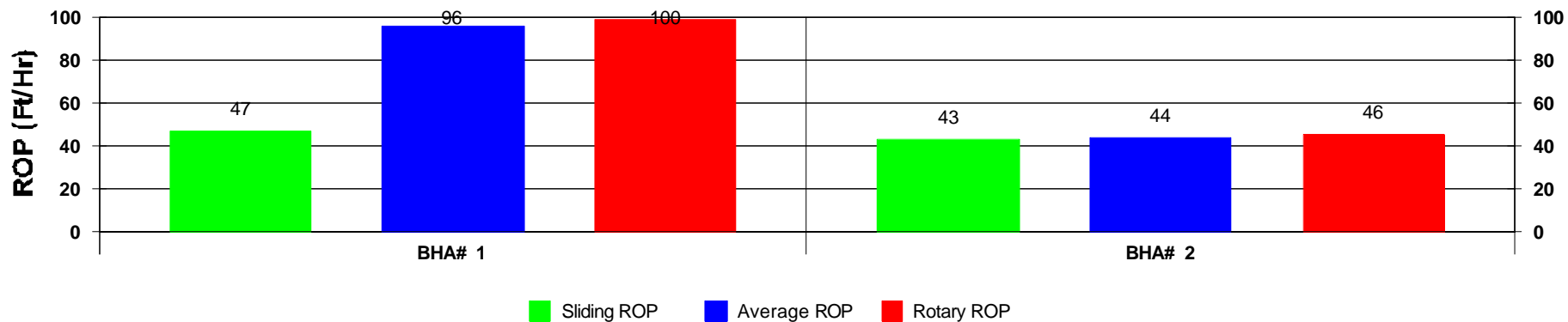


JOB NO.:	DDOK-110361	FIELD:	Niobrarra
Company:	Carrizo Oil and Gas	Township:	
LOCATION:	Morgan County	SECT/RANGE:	
RIG NAME:	Cade 22	COMMENT	
STATE:	Colorado		
COUNTY:	Morgan County		
WELL NAME:	Wickstrom 5-44-5-60		

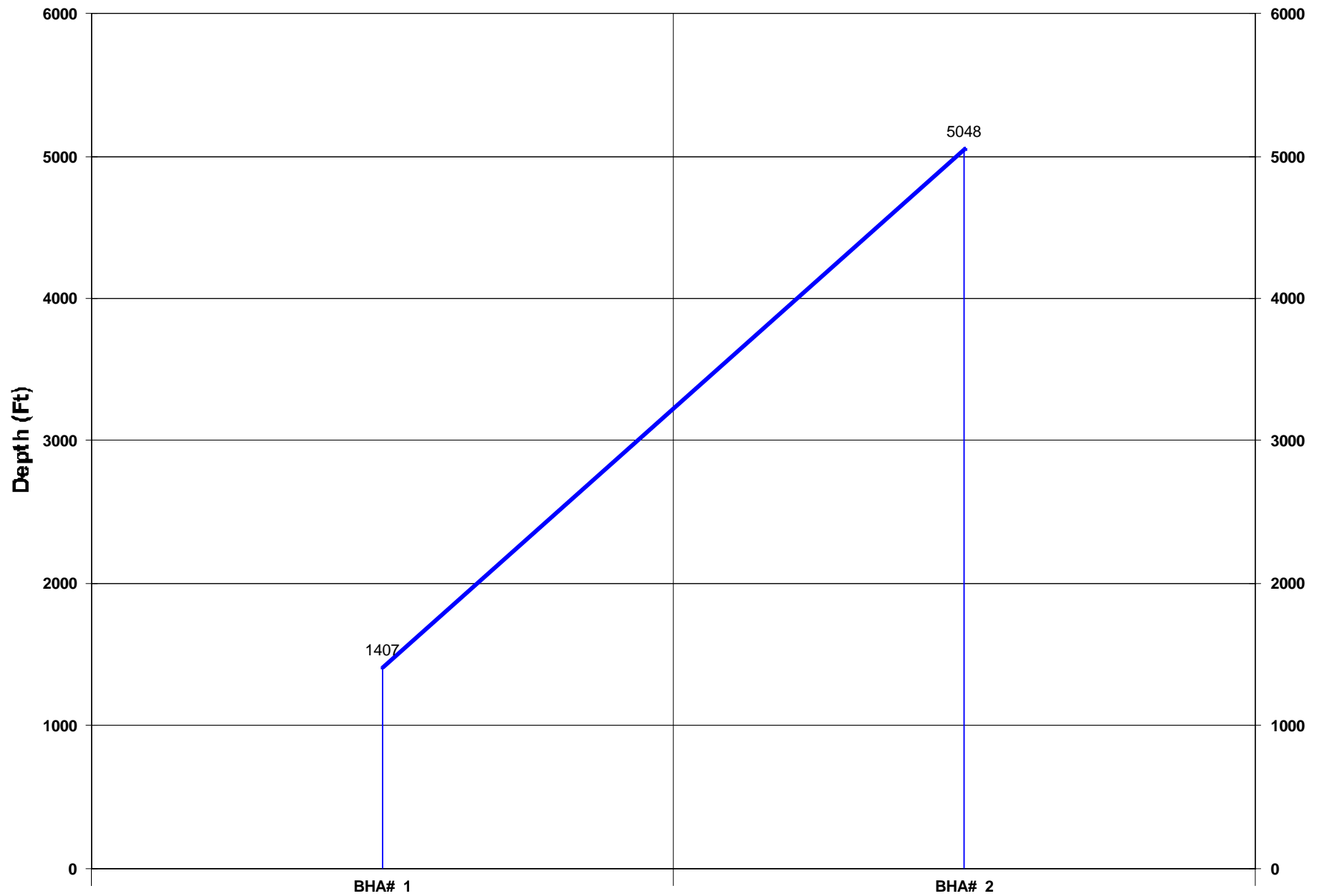
Footage Drilled with BHA



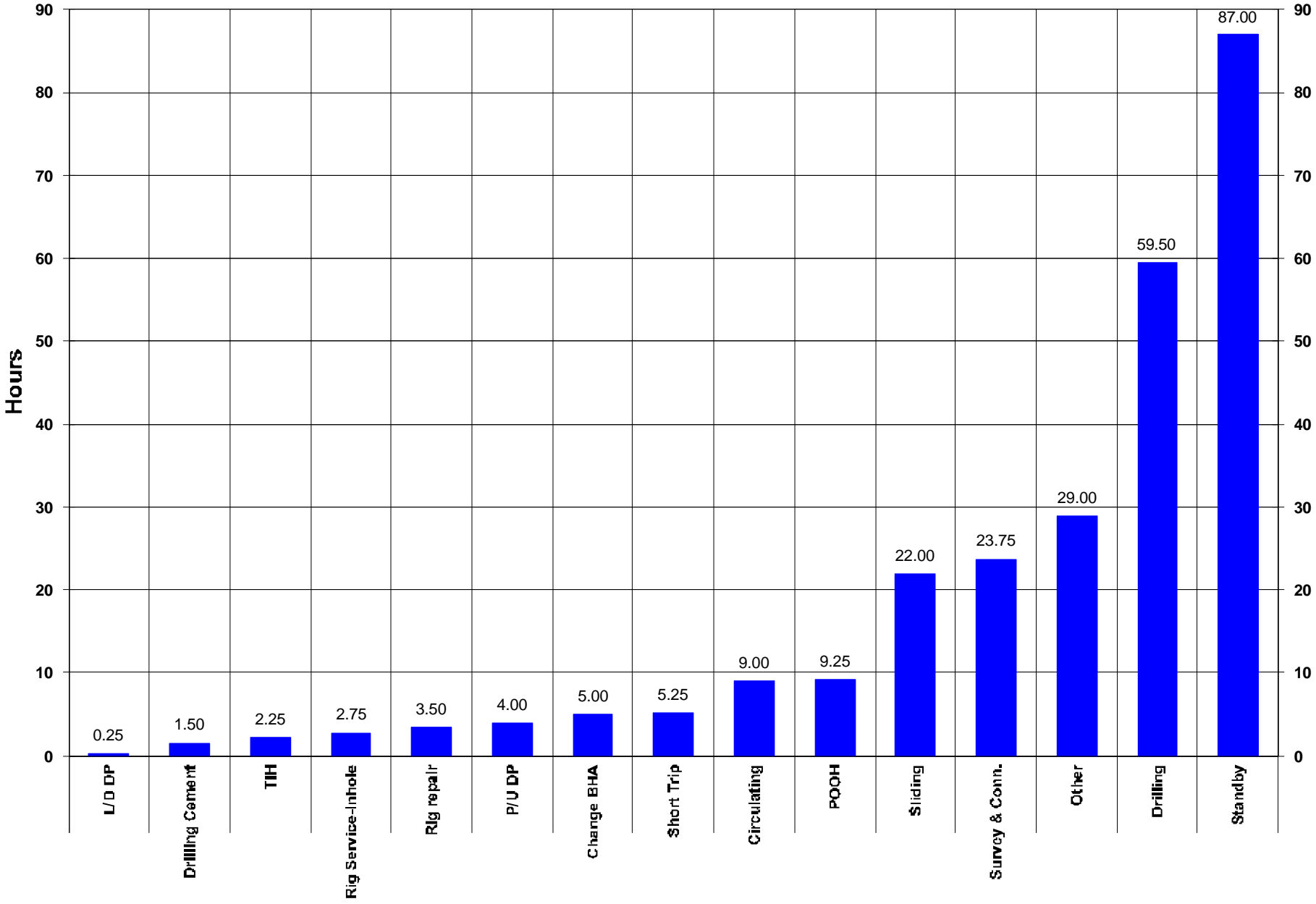
ROP vs BHA



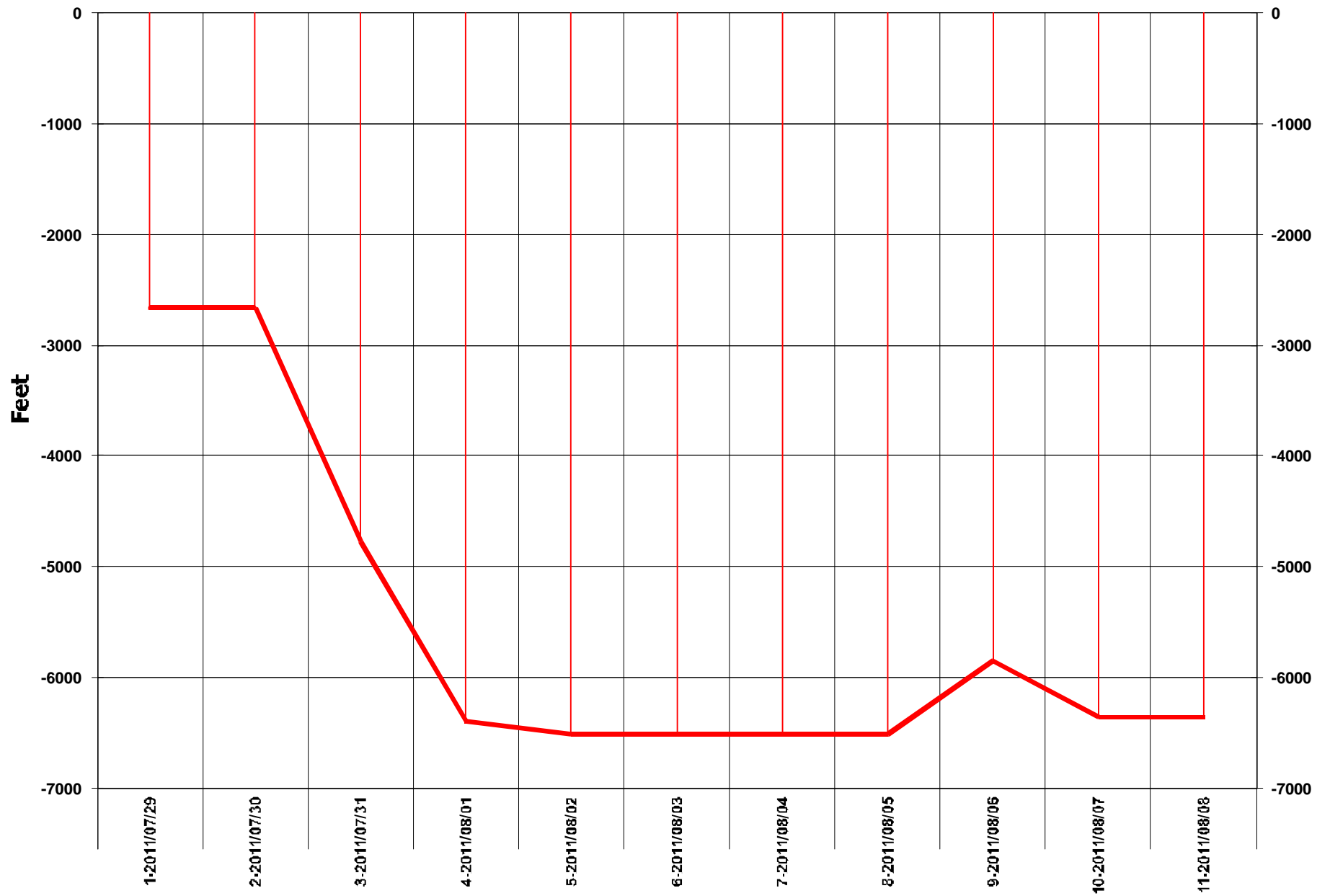
Depth vs BHA



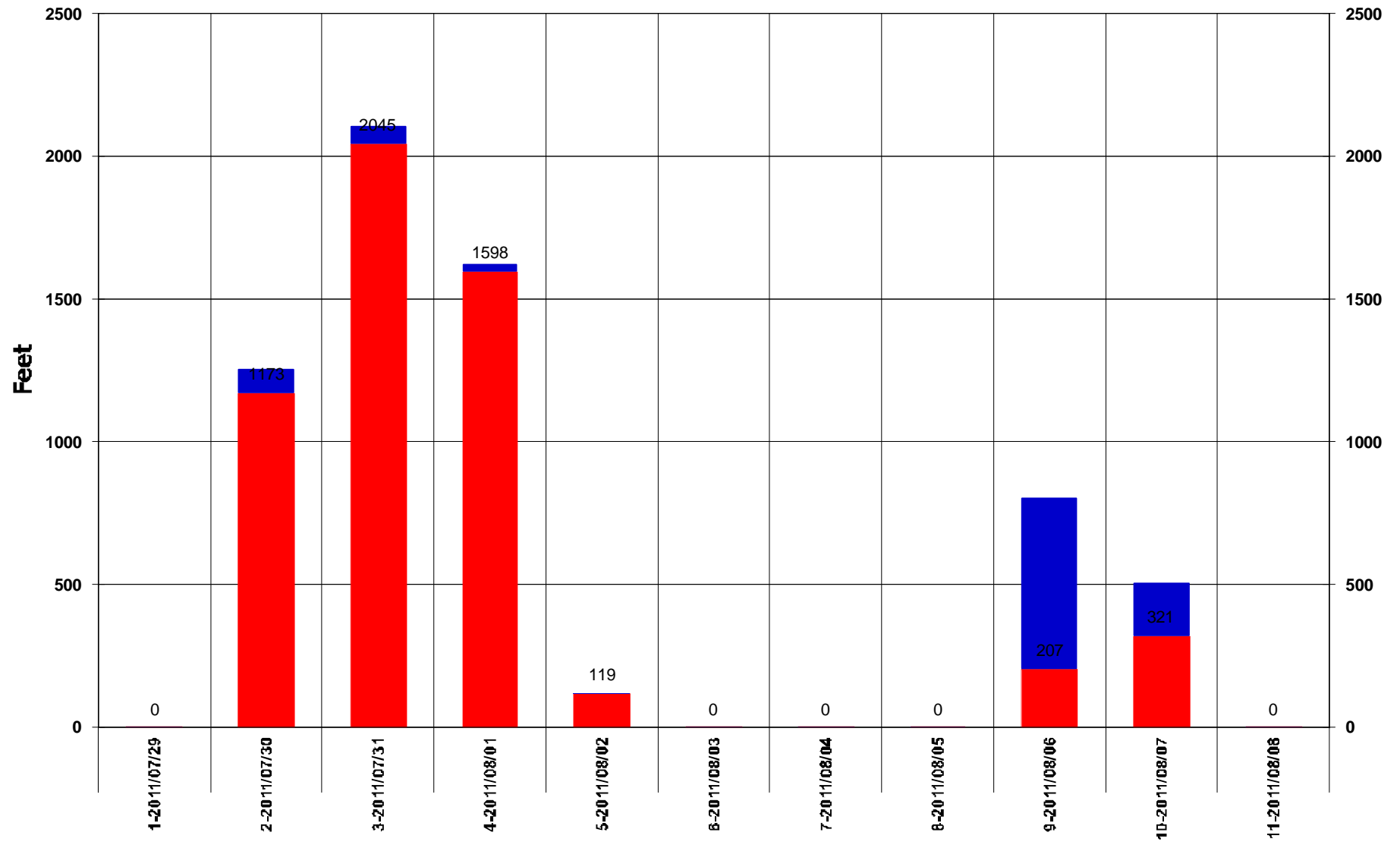
Activity Histogram



Measured Depth vs Days

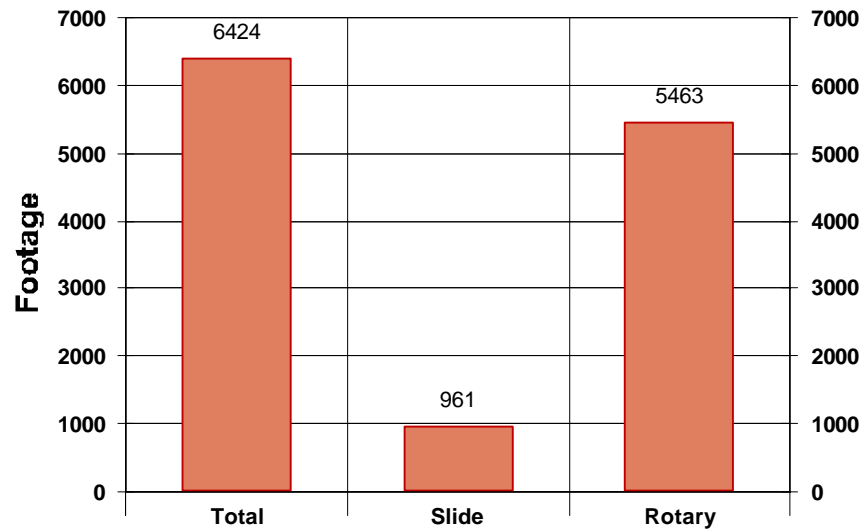


Daily Footage

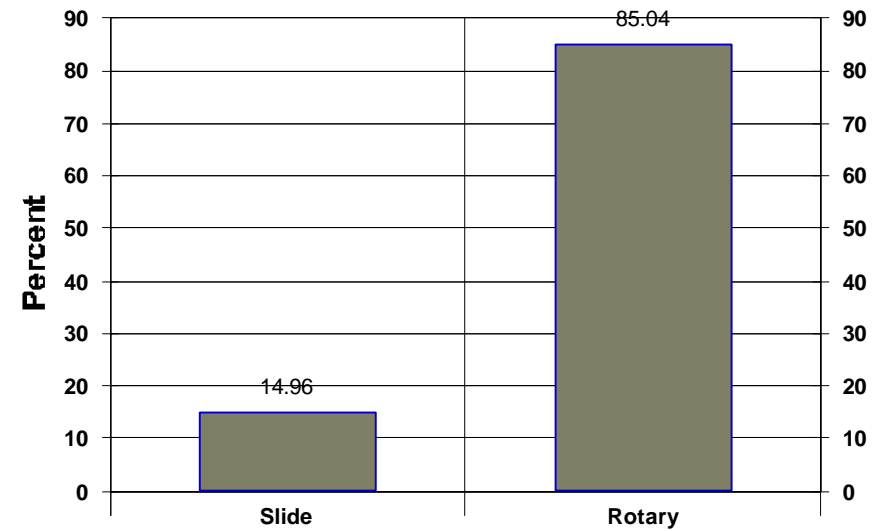


Rotary Drilling Sliding

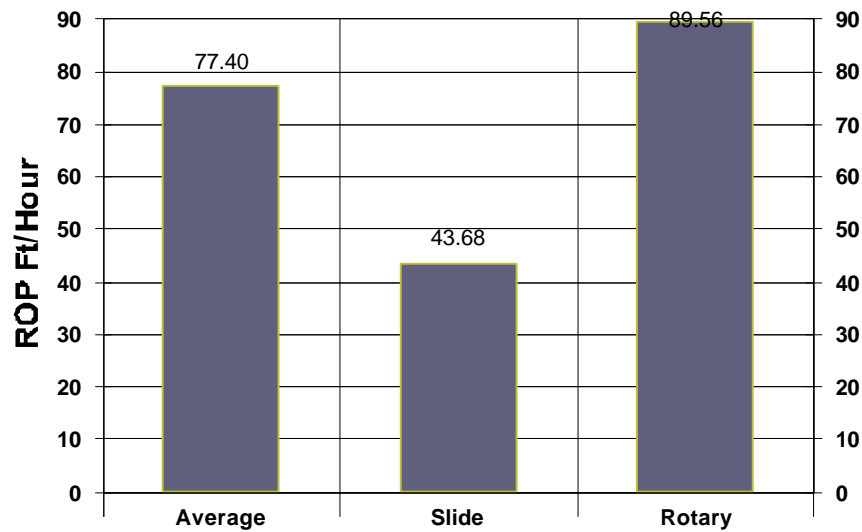
Footage Drilled Totals



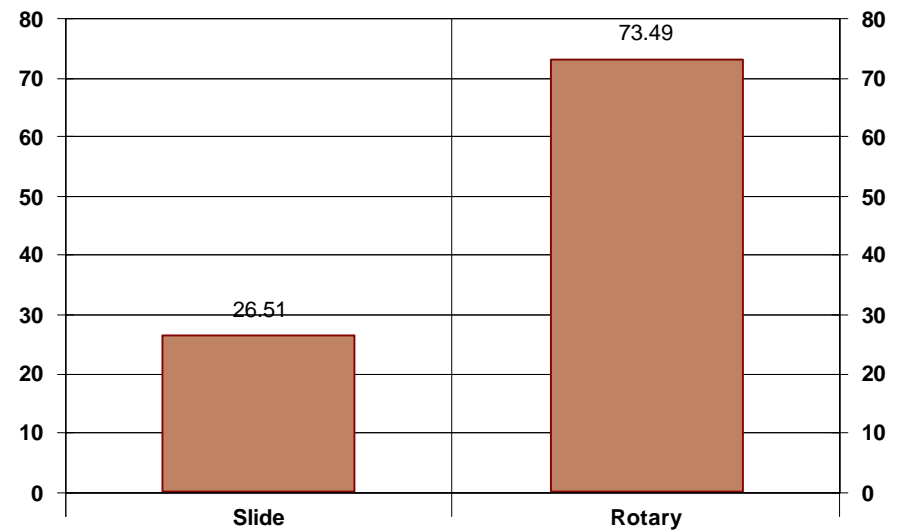
Footage Percent



Rate of Penetration Totals



Time Percent



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