

## **ST. JAMES**

**MS #DDOK-110480**

**Larson Farms 2-24  
Weld County, Colorado  
Cade 22**

*September 22, 2011*

**Prepared By:  
Megan Pope**

***Actual Well & Surveys 1***

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***Daily Reports 2***

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***BHA's 3***

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***Job Performance Charts 4***

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***Support Staff 5***

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# St. James

Company: St. James  
Site: Larson Farms  
Well: 2-24  
Project: Weld County, Colorado (NAD 83)  
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
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
2128.51	19.57	110.75	2109.59	-58.62	154.76	165.49	165.49	Begin 19.57° Tangent
5132.88	19.57	110.75	4940.41	-415.08	1095.86	1171.84	1171.84	Begin 2.00°/100' Drop
6111.39	0.00	0.00	5900.00	-473.70	1250.62	1337.33	1337.33	Begin Vertical Hold
7161.39	0.00	0.00	6950.00	-473.70	1250.62	1337.33	1337.33	PBHL

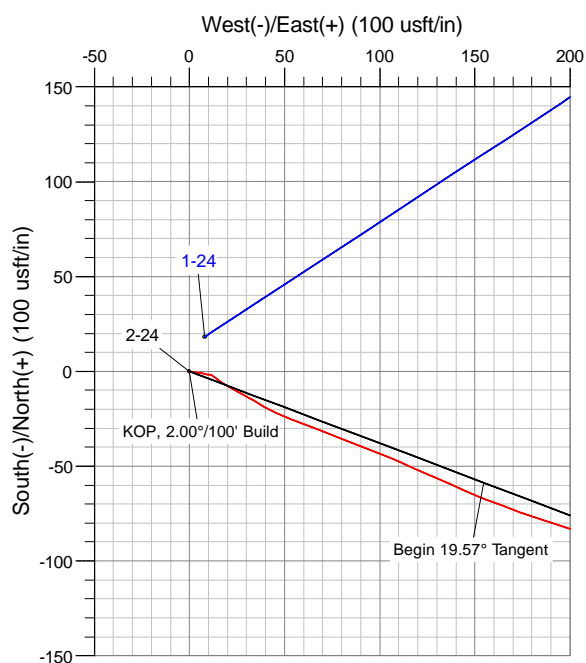
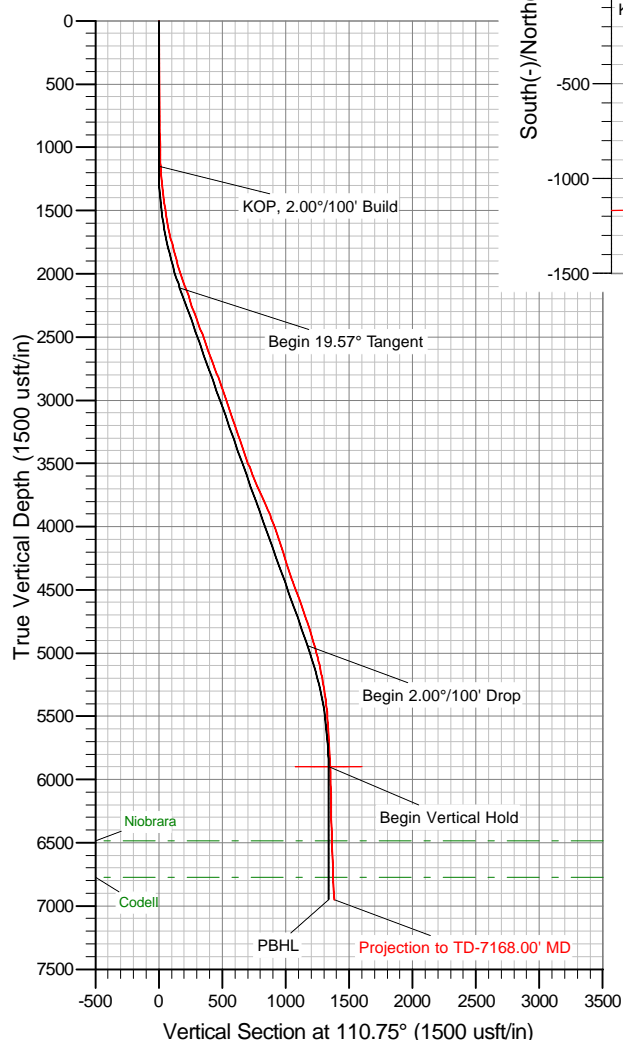
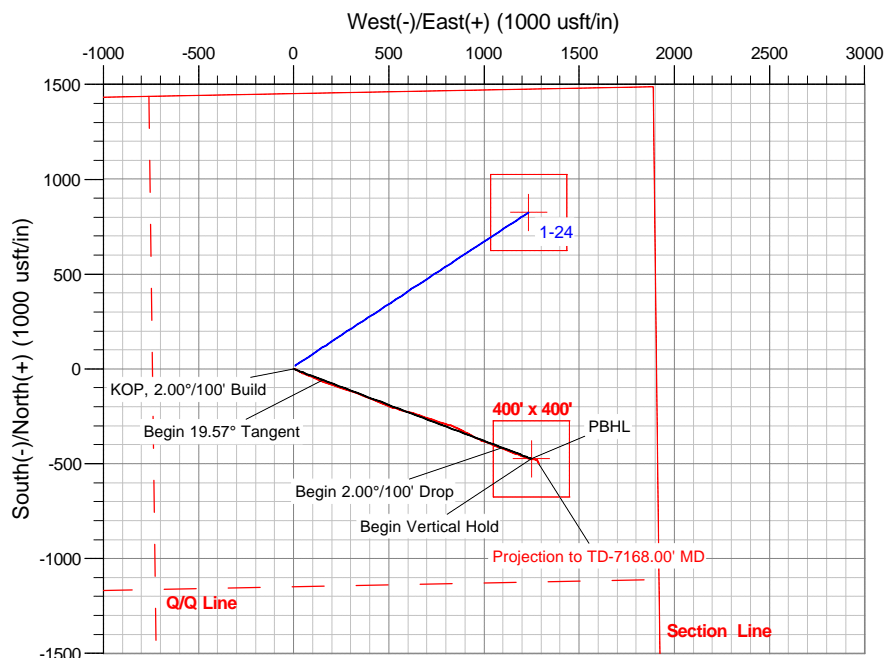


Azimuths to Grid North  
True North: -0.65°  
Magnetic North: 8.04°

Magnetic Field  
Strength: 53182.8nT  
Dip Angle: 67.15°  
Date: 09/18/2011  
Model: WMM\_2010

US State Plane 1983  
Colorado Northern Zone

Created By: Megan Pope  
Date: 9:27, September 22 2011  
Plan: Design #2



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.

# **St. James**

**Weld County, Colorado (NAD 83)**

**Larson Farms**

**2-24**

**Wellbore #1**

**Design: Surveys**

## **Standard Survey Report**

**22 September, 2011**

<b>Company:</b>	St. James	<b>Local Co-ordinate Reference:</b>	Well 2-24
<b>Project:</b>	Weld County, Colorado (NAD 83)	<b>TVD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Site:</b>	Larson Farms	<b>MD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Well:</b>	2-24	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys	<b>Database:</b>	Southern Region

<b>Project</b>	Weld County, Colorado (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Well	2-24					
Well Position	+N/-S	0.00 usft	Northing:	1,417,476.80 usft	Latitude:	40° 28' 30.1143 N
	+E/-W	0.00 usft	Easting:	3,279,407.52 usft	Longitude:	104° 29' 44.324 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,644.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	WMM_2010	09/18/11	8.68	67.15	53,183

<b>Design</b>	Surveys				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	110.75	

<b>Survey Program</b>	<b>Date</b>	09/22/11			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
803.00	7,168.00	MS MWD (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>									
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
803.00	1.00	98.80	802.96	-1.07	6.92	6.86	0.12	0.12	0.00
878.00	0.90	98.80	877.95	-1.26	8.15	8.07	0.13	-0.13	0.00
972.00	1.00	102.70	971.94	-1.56	9.68	9.61	0.13	0.11	4.15
1,065.00	0.90	96.50	1,064.92	-1.82	11.20	11.12	0.15	-0.11	-6.67
1,158.00	3.60	130.40	1,157.85	-3.79	14.15	14.58	3.11	2.90	36.45
1,253.00	5.10	118.70	1,252.57	-7.75	20.13	21.57	1.83	1.58	-12.32
1,347.00	6.70	118.90	1,346.07	-12.41	28.59	31.13	1.70	1.70	0.21
1,443.00	8.40	120.80	1,441.23	-18.71	39.52	43.58	1.79	1.77	1.98
1,537.00	9.50	110.50	1,534.09	-24.94	52.68	58.10	2.06	1.17	-10.96
1,631.00	10.20	111.20	1,626.71	-30.67	67.71	74.18	0.76	0.74	0.74
1,726.00	13.40	111.40	1,719.69	-37.73	85.81	93.61	3.37	3.37	0.21
1,820.00	14.90	112.60	1,810.83	-46.35	107.11	116.58	1.63	1.60	1.28
1,914.00	15.80	114.50	1,901.48	-56.30	129.91	141.43	1.10	0.96	2.02
2,007.00	18.00	112.40	1,990.46	-67.03	154.72	168.43	2.45	2.37	-2.26
2,102.00	19.80	108.00	2,080.34	-77.59	183.59	199.18	2.42	1.89	-4.63

<b>Company:</b>	St. James	<b>Local Co-ordinate Reference:</b>	Well 2-24
<b>Project:</b>	Weld County, Colorado (NAD 83)	<b>TVD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Site:</b>	Larson Farms	<b>MD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Well:</b>	2-24	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys	<b>Database:</b>	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)
2,197.00	19.30	107.80	2,169.86	-87.36	213.85	230.93	0.53	-0.53	-0.21
2,291.00	19.00	108.10	2,258.66	-96.87	243.18	261.73	0.34	-0.32	0.32
2,385.00	20.50	109.00	2,347.13	-106.98	273.29	293.46	1.63	1.60	0.96
2,477.00	21.30	110.00	2,433.07	-117.94	304.22	326.28	0.95	0.87	1.09
2,572.00	19.40	110.70	2,522.14	-129.42	335.20	359.31	2.02	-2.00	0.74
2,668.00	19.60	111.40	2,612.63	-140.93	365.11	391.35	0.32	0.21	0.73
2,763.00	19.60	111.40	2,702.13	-152.56	394.78	423.22	0.00	0.00	0.00
2,858.00	21.40	112.30	2,791.11	-164.95	425.65	456.48	1.92	1.89	0.95
2,953.00	19.20	112.90	2,880.20	-177.61	456.08	489.42	2.33	-2.32	0.63
3,047.00	19.60	111.80	2,968.87	-189.48	484.96	520.63	0.58	0.43	-1.17
3,142.00	19.80	110.50	3,058.31	-201.03	514.82	552.65	0.51	0.21	-1.37
3,236.00	17.40	107.30	3,147.39	-210.78	543.16	582.61	2.77	-2.55	-3.40
3,329.00	19.10	105.80	3,235.71	-219.06	571.08	611.65	1.90	1.83	-1.61
3,422.00	17.90	104.40	3,323.91	-226.76	599.56	641.01	1.38	-1.29	-1.51
3,517.00	19.80	105.20	3,413.81	-234.61	629.23	671.54	2.02	2.00	0.84
3,612.00	20.50	108.70	3,503.00	-244.16	660.52	704.18	1.47	0.74	3.68
3,706.00	22.90	109.00	3,590.33	-255.40	693.41	738.91	2.56	2.55	0.32
3,800.00	23.50	107.70	3,676.73	-267.05	728.55	775.91	0.84	0.64	-1.38
3,893.00	24.00	106.40	3,761.85	-278.03	764.36	813.28	0.78	0.54	-1.40
3,985.00	23.70	108.50	3,846.00	-289.18	799.85	850.42	0.98	-0.33	2.28
4,079.00	21.20	113.50	3,932.87	-301.95	833.36	886.28	3.34	-2.66	5.32
4,174.00	19.30	115.10	4,022.00	-315.46	863.33	919.09	2.08	-2.00	1.68
4,269.00	19.40	114.30	4,111.63	-328.61	891.93	950.50	0.30	0.11	-0.84
4,363.00	17.40	117.60	4,200.82	-341.55	918.61	980.04	2.40	-2.13	3.51
4,457.00	16.80	119.40	4,290.67	-354.73	942.90	1,007.42	0.85	-0.64	1.91
4,549.00	18.90	116.50	4,378.24	-367.91	967.83	1,035.39	2.48	2.28	-3.15
4,644.00	20.70	111.90	4,467.62	-381.04	997.18	1,067.49	2.50	1.89	-4.84
4,738.00	20.00	110.00	4,555.76	-392.73	1,027.70	1,100.18	1.02	-0.74	-2.02
4,831.00	18.70	110.00	4,643.50	-403.27	1,056.65	1,130.99	1.40	-1.40	0.00
4,925.00	19.20	112.30	4,732.41	-414.29	1,085.11	1,161.51	0.96	0.53	2.45
5,019.00	16.50	112.20	4,821.87	-425.20	1,111.78	1,190.31	2.87	-2.87	-0.11
5,113.00	16.60	111.50	4,911.98	-435.17	1,136.63	1,217.08	0.24	0.11	-0.74
5,208.00	15.40	111.80	5,003.30	-444.83	1,160.97	1,243.26	1.27	-1.26	0.32
5,303.00	12.80	109.60	5,095.43	-453.04	1,182.60	1,266.40	2.79	-2.74	-2.32
5,398.00	10.60	110.60	5,188.45	-459.65	1,200.70	1,285.66	2.33	-2.32	1.05
5,492.00	9.00	110.60	5,281.07	-465.28	1,215.67	1,301.66	1.70	-1.70	0.00
5,587.00	7.70	109.20	5,375.07	-469.98	1,228.64	1,315.45	1.38	-1.37	-1.47
5,682.00	5.40	110.50	5,469.44	-473.64	1,238.84	1,326.29	2.43	-2.42	1.37
5,775.00	4.00	109.60	5,562.12	-476.26	1,245.99	1,333.91	1.51	-1.51	-0.97
5,870.00	3.30	92.80	5,656.93	-477.51	1,251.84	1,339.82	1.34	-0.74	-17.68
5,964.00	3.00	90.60	5,750.79	-477.67	1,257.01	1,344.70	0.34	-0.32	-2.34
6,060.00	2.20	93.80	5,846.69	-477.81	1,261.36	1,348.82	0.85	-0.83	3.33
6,153.00	1.80	91.10	5,939.63	-477.96	1,264.60	1,351.91	0.44	-0.43	-2.90
6,246.00	1.50	90.10	6,032.60	-477.99	1,267.28	1,354.42	0.32	-0.32	-1.08

<b>Company:</b>	St. James	<b>Local Co-ordinate Reference:</b>	Well 2-24
<b>Project:</b>	Weld County, Colorado (NAD 83)	<b>TVD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Site:</b>	Larson Farms	<b>MD Reference:</b>	WELL @ 4657.00usft (Cade 22)
<b>Well:</b>	2-24	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys	<b>Database:</b>	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)	
6,341.00	1.50	94.10	6,127.56	-478.08	1,269.76	1,356.78	0.11	0.00	4.21	
6,436.00	1.10	92.70	6,222.54	-478.21	1,271.91	1,358.84	0.42	-0.42	-1.47	
6,529.00	1.40	92.10	6,315.52	-478.30	1,273.94	1,360.76	0.32	0.32	-0.65	
6,624.00	1.40	103.80	6,410.49	-478.62	1,276.22	1,363.01	0.30	0.00	12.32	
6,720.00	1.30	105.30	6,506.46	-479.18	1,278.41	1,365.26	0.11	-0.10	1.56	
6,815.00	2.00	144.80	6,601.42	-480.82	1,280.41	1,367.71	1.36	0.74	41.58	
6,910.00	2.70	156.10	6,696.34	-484.22	1,282.27	1,370.65	0.88	0.74	11.89	
7,003.00	3.50	158.90	6,789.21	-488.87	1,284.18	1,374.09	0.88	0.86	3.01	
7,098.00	4.10	163.30	6,884.00	-494.83	1,286.20	1,378.09	0.70	0.63	4.63	
7,168.00	4.10	163.30	6,953.82	-499.63	1,287.64	1,381.13	0.00	0.00	0.00	
Projection to TD-7168.00' MD										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
7,168.00	6,953.82	-499.63	1,287.64	Projection to TD-7168.00' MD	



JOB NO.:	DDOK-110480	Report Time:	2400	1 of 5
Company:	St. James	API JOB #	05-123-34360-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbaurge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECT\ RANGE:		
WELL NAME:	Larson Farms 2-24			

From Sunday, September 18, 2011 at 0000 to Sunday, September 18, 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.	0.00	Percent Slide:	NA	Chlorides	0	WL	0			Oil %	0

PERSONNEL						CASING			BHA	
Lead Directional :		David Cathey				Size	Lb/ft	Set Depth	N/A	
Second Directional :		Ronne Garcia & Coty Jeane				8 5/8	36	774		
MWD Operator1		Cody Hart								
MWD Operator2										
Directional Company:		MS Energy				Signature:				
Geologist:										
Company Man:		Junior Loya							Daily Cost	\$3,750.00
Incl. In:	0	Azm. In:	0	Incl. Out:	0	Azm. Out:	0	Cummulative Cost:	\$3,750.00	

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
18-Sep-11	00:00	04:00	4.00	0	0	Standby	Rig Down Off Of Larson Wells 4-24 Well.
18-Sep-11	04:00	13:00	9.00	0	0	Standby	Move Rig To New Location Larson Wells 2-24.
18-Sep-11	13:00	15:00	2.00	0	0	Standby	Rig Up & Drill Mouse Hole & Rat Hole.
18-Sep-11	15:00	24:00	9.00	0	702	Standby	Drill Surface With Rotary Assembly.





JOB NO.:	DDOK-110480	Report Time:	2400	2 of 5
Company:	St. James	API JOB #	05-123-34360-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbaurge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTORANGE:		
WELL NAME:	Larson Farms 2-24			

From Monday, September 19, 2011 at 0000 to Monday, September 19, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters														
Start Depth		702.00	Rotary Hours		5.23	WOB	10		Pick UP		55		Slack Off		55		SPM			
End Depth		1693.00	Circulating Hours		0.48	RAB	55		SPP		1450		FlowRate		0 - 444		106			
Total Drilled:		991.00	Avg. Total ROP:		164.71	Mud Data														
Total Rotary Drilled:		895.00	Avg. Rotary ROP:		171.02	Type	Water					PV	0	SOLID		0				
Total Drilled Sliding:		96.00	Avg. Slide ROP:		122.55	Weight		8.7		GAS	0	YP	0	BHT°		0				
Slide Hours:		0.78	Percent Rotary:		90.31	Viscosity		45		SAND	0	PH	0	Flow T°		0				
Below Rotary Hrs.		16.50	Percent Slide:		9.69	Chlorides		0		WL	0			Oil %		0				
PERSONNEL						CASING						BHA								
Lead Directional :		David Cathey				Size		Lb/ft		Set Depth		BHA # 1:7 7/8" Hughes HCD 405Z, 6 1/4" 7/8 .4.8 Stage 1.83 ABH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 6 1/2" DC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,								
Second Directional :		Ronne Garcia & Coty Jeane				8 5/8		36		774										
MWD Operator1		Cody Hart																		
MWD Operator2																				
Directional Company:		MS Energy																		
Geologist:						Signature:														
Company Man:		Junior Loya																Daily Cost		\$7,500.00
Incl. In:		0	Azm. In:		0	Incl. Out:		10.2	Azm. Out:		111.2		Cummulative Cost:		\$11,250.00					

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
19-Sep-11	00:00	00:41	0.68	702	785	Drilling	Con't Drilling Surface
19-Sep-11	00:41	00:55	0.23	785	785	Circulating	Circulating
19-Sep-11	00:55	01:15	0.33	785	785	Short Trip	Short Trip
19-Sep-11	01:15	01:30	0.25	785	785	Circulating	Circulating
19-Sep-11	01:30	02:00	0.50	785	785	POOH	POOH
19-Sep-11	02:00	06:00	4.00	785	785	Standby	Rig Up & Run Surface CSG & Cement.
19-Sep-11	06:00	07:00	1.00	785	785	Other	Cementing Surface
19-Sep-11	07:00	10:00	3.00	785	785	Other	Waiting On Cement
19-Sep-11	10:00	11:45	1.75	785	785	N/U BOPS	N/U BOPS
19-Sep-11	11:45	13:30	1.75	785	785	Test BOPS	Test BOPS
19-Sep-11	13:30	15:08	1.63	785	785	Change BHA	Pick Up BHA#1
19-Sep-11	15:08	16:45	1.62	785	785	TIH	TIH T/588'
19-Sep-11	16:45	18:00	1.25	785	785	Drilling Cement	Drilling - (WOB:10;GPM :444;RPM:40)
19-Sep-11	18:00	18:02	0.03	785	785	Survey & Conn.	Conn.
19-Sep-11	18:02	18:08	0.10	785	814	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
19-Sep-11	18:08	18:10	0.03	814	814	Survey & Conn.	Conn.
19-Sep-11	18:10	18:15	0.08	814	846	Drilling	Drilling - (WOB:10;GPM :440;RPM:0)
19-Sep-11	18:15	18:20	0.08	846	846	Survey & Conn.	Survey & Conn@ 803-1.0 Inc Azm 98.8.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
19-Sep-11	18:20	18:25	0.08	846	877	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	18:25	18:27	0.03	877	877	Survey & Conn.	Conn.
19-Sep-11	18:27	18:44	0.28	877	908	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	18:44	18:46	0.03	908	908	Survey & Conn.	Conn.
19-Sep-11	18:46	18:55	0.15	908	940	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	18:55	19:01	0.10	940	940	Survey & Conn.	Survey & Conn @ 878- .9 Inc 98.8 Azm.
19-Sep-11	19:01	19:10	0.15	940	972	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	19:10	19:12	0.03	972	972	Survey & Conn.	Conn.
19-Sep-11	19:12	19:21	0.15	972	1002	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	19:21	19:23	0.03	1002	1002	Survey & Conn.	Conn.
19-Sep-11	19:23	19:31	0.13	1002	1034	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	19:31	19:39	0.13	1034	1034	Survey & Conn.	Survey & Conn @ 972- 1.0 Inc 102.7 Azm.
19-Sep-11	19:39	19:48	0.15	1034	1065	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	19:48	19:50	0.03	1065	1065	Survey & Conn.	Conn.
19-Sep-11	19:50	19:57	0.12	1065	1096	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	19:57	19:59	0.03	1096	1096	Survey & Conn.	Conn.
19-Sep-11	19:59	20:05	0.10	1096	1127	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	20:05	20:13	0.13	1127	1127	Survey & Conn.	Survey & Conn @ 1065- .9 Inc 96.5 Azm.
19-Sep-11	20:13	20:18	0.08	1127	1137	Sliding	Sliding (WOB:10;GPM:440;TFO:120).
19-Sep-11	20:18	20:22	0.07	1137	1159	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	20:22	20:30	0.13	1159	1159	Survey & Conn.	Conn & Survey.
19-Sep-11	20:30	20:35	0.08	1159	1169	Sliding	Sliding - (WOB:10;GPM :440;TFO:115)
19-Sep-11	20:35	20:40	0.08	1169	1189	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	20:40	20:42	0.03	1189	1189	Survey & Conn.	Conn.
19-Sep-11	20:42	20:49	0.12	1189	1220	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	20:49	20:55	0.10	1220	1220	Survey & Conn.	Survey & Conn @ 1158- 3.6 Inc 130.4 Azm.
19-Sep-11	20:55	21:02	0.12	1220	1230	Sliding	Sliding - (WOB:10;GPM :440;TFO:110)
19-Sep-11	21:02	21:06	0.07	1230	1253	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:06	21:08	0.03	1253	1253	Survey & Conn.	Conn.
19-Sep-11	21:08	21:17	0.15	1253	1283	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:17	21:19	0.03	1283	1283	Survey & Conn.	Conn.
19-Sep-11	21:19	21:26	0.12	1283	1315	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:26	21:32	0.10	1315	1315	Survey & Conn.	Survey & Conn @ 1253- Inc 5.1 Azm 118.7.
19-Sep-11	21:32	21:37	0.08	1315	1327	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
19-Sep-11	21:37	21:41	0.07	1327	1347	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:41	21:43	0.03	1347	1347	Survey & Conn.	Conn.
19-Sep-11	21:43	21:50	0.12	1347	1378	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:50	21:52	0.03	1378	1378	Survey & Conn.	Conn.
19-Sep-11	21:52	21:59	0.12	1378	1409	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	21:59	22:05	0.10	1409	1409	Survey & Conn.	Survey & Conn @ 1347- Inc 6.7 Azm 118.9.
19-Sep-11	22:05	22:10	0.08	1409	1423	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
19-Sep-11	22:10	22:14	0.07	1423	1441	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	22:14	22:16	0.03	1441	1441	Survey & Conn.	Conn.
19-Sep-11	22:16	22:24	0.13	1441	1473	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	22:24	22:26	0.03	1473	1473	Survey & Conn.	Conn.
19-Sep-11	22:26	22:34	0.13	1473	1505	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	22:34	22:40	0.10	1505	1505	Survey & Conn.	Survey & Conn @ 1443- 8.4 Inc 120.8 Azm.
19-Sep-11	22:40	22:45	0.08	1505	1520	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
19-Sep-11	22:45	22:50	0.08	1520	1537	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	22:50	22:52	0.03	1537	1537	Survey & Conn.	Conn.
19-Sep-11	22:52	23:00	0.13	1537	1568	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	23:00	23:02	0.03	1568	1568	Survey & Conn.	Conn.
19-Sep-11	23:02	23:09	0.12	1568	1599	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	23:09	23:17	0.13	1599	1599	Survey & Conn.	Survey & Conn @ 1537- Inc 9.5 Azm 110.5.
19-Sep-11	23:17	23:24	0.12	1599	1614	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
19-Sep-11	23:24	23:27	0.05	1614	1631	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	23:27	23:29	0.03	1631	1631	Survey & Conn.	Conn.
19-Sep-11	23:29	23:37	0.13	1631	1662	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	23:37	23:44	0.12	1662	1662	Survey & Conn.	Conn. & Survey.
19-Sep-11	23:44	23:52	0.13	1662	1672	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
19-Sep-11	23:52	23:55	0.05	1672	1693	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
19-Sep-11	23:55	24:00	0.08	1693	1693	Survey & Conn.	Survey & Conn @ 1631- Inc 10.2 Azm 111.2



JOB NO.:	DDOK-110480	Report Time:	2400	3 of 5
Company:	St. James	API JOB #	05-123-34360-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbaurge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTORANGE:		
WELL NAME:	Larson Farms 2-24			

From Tuesday, September 20, 2011 at 0000 to Tuesday, September 20, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters							
Start Depth	1693.00	Rotary Hours	9.80	WOB	10	Pick UP	120	Slack Off	80	SPM			
End Depth	4926.00	Circulating Hours	0.98	RAB	55	SPP	1450	FlowRate	440 - 440	106			
Total Drilled:	3233.00	Avg. Total ROP:	224.25	Mud Data									
Total Rotary Drilled:	2755.00	Avg. Rotary ROP:	281.12	Type	Water			PV	0	SOLID	0		
Total Drilled Sliding:	478.00	Avg. Slide ROP:	103.54	Weight	8.7	GAS	0	YP	0	BHT°	0		
Slide Hours:	4.62	Percent Rotary:	85.21	Viscosity	45	SAND	0	PH	0	Flow T°	0		
Below Rotary Hrs.	24.00	Percent Slide:	14.79	Chlorides	0	WL	0			Oil %	0		
PERSONNEL				CASING					BHA				
Lead Directional :	David Cathey			Size	Lb/ft	Set Depth		BHA # 1:7 7/8" Hughes HCD 405Z, 6 1/4" 7/8 .4.8 Stage 1.83 ABH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 6 1/2" DC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,					
Second Directional :	Ronne Garcia & Coty Jeane			8 5/8	36	774							
MWD Operator1	Cody Hart												
MWD Operator2													
Directional Company:	MS Energy												
Geologist:				Signature:									
Company Man:	Junior Loya												
						Daily Cost		\$7,500.00					
Incl. In:	10.2	Azm. In:	111.2	Incl. Out:	18.7	Azm. Out:	110	Cummulative Cost:		\$18,750.00			

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	00:00	00:04	0.07	1693	1693	Survey & Conn.	Survey & Conn.
20-Sep-11	00:04	00:12	0.13	1693	1708	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	00:12	00:14	0.03	1708	1725	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	00:14	00:16	0.03	1725	1725	Survey & Conn.	Conn.
20-Sep-11	00:16	00:24	0.13	1725	1757	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	00:24	00:32	0.13	1757	1757	Survey & Conn.	Survey & Conn.
20-Sep-11	00:32	00:38	0.10	1757	1788	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	00:38	00:45	0.12	1788	1788	Survey & Conn.	Survey & Conn @ 1726- Inc 13.4 Azm 111.4.
20-Sep-11	00:45	00:52	0.12	1788	1803	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	00:52	00:56	0.07	1803	1819	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	00:56	00:58	0.03	1819	1819	Survey & Conn.	Conn.
20-Sep-11	00:58	01:04	0.10	1819	1850	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	01:04	01:06	0.03	1850	1850	Survey & Conn.	Conn.
20-Sep-11	01:06	01:13	0.12	1850	1882	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	01:13	01:20	0.12	1882	1882	Survey & Conn.	Survey & Conn @ 1820- Inc 14.9 Azm 112.6.
20-Sep-11	01:20	01:26	0.10	1882	1897	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
20-Sep-11	01:26	01:29	0.05	1897	1913	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	01:29	01:31	0.03	1913	1913	Survey & Conn.	Conn.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	01:31	01:38	0.12	1913	1945	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	01:38	01:40	0.03	1945	1945	Survey & Conn.	Survey & Conn.
20-Sep-11	01:40	01:48	0.13	1945	1952	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	01:48	01:53	0.08	1952	1976	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	01:53	02:01	0.13	1976	1976	Survey & Conn.	Survey & Conn @ 1914- Inc 15.8 Azi 114.5.
20-Sep-11	02:01	02:07	0.10	1976	1991	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
20-Sep-11	02:07	02:11	0.07	1991	2006	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	02:11	02:13	0.03	2006	2006	Survey & Conn.	Conn.
20-Sep-11	02:13	02:21	0.13	2006	2038	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	02:21	02:29	0.13	2038	2038	Survey & Conn.	Survey & Conn.
20-Sep-11	02:29	02:32	0.05	2038	2043	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	02:32	02:38	0.10	2043	2069	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	02:38	02:45	0.12	2069	2069	Survey & Conn.	Survey & Conn @ 2007- Inc 18.0 Azm 112.4.
20-Sep-11	02:45	02:51	0.10	2069	2084	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
20-Sep-11	02:51	02:54	0.05	2084	2101	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	02:54	02:56	0.03	2101	2101	Survey & Conn.	Conn.
20-Sep-11	02:56	03:03	0.12	2101	2133	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	03:03	03:05	0.03	2133	2133	Survey & Conn.	Conn.
20-Sep-11	03:05	03:12	0.12	2133	2165	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	03:12	03:36	0.40	2165	2165	Rig Service-Inhole	Rig Service-Inhole
20-Sep-11	03:36	03:42	0.10	2165	2165	Survey & Conn.	Survey & Conn @ 2102- Inc
20-Sep-11	03:42	03:47	0.08	2165	2177	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	03:47	03:53	0.10	2177	2196	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	03:53	03:56	0.05	2196	2196	Survey & Conn.	Conn.
20-Sep-11	03:56	04:03	0.12	2196	2228	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	04:03	04:07	0.07	2228	2228	Survey & Conn.	Conn.
20-Sep-11	04:07	04:13	0.10	2228	2259	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	04:13	04:21	0.13	2259	2259	Survey & Conn.	Survey & Conn @ 2197- Inc 19.3 Azm 107.8.
20-Sep-11	04:21	04:28	0.12	2259	2274	Sliding	Sliding - (WOB:10;1GPM :440;TFO:0)
20-Sep-11	04:28	04:31	0.05	2274	2289	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	04:31	04:33	0.03	2289	2289	Survey & Conn.	Conn.
20-Sep-11	04:33	04:41	0.13	2289	2321	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	04:41	04:43	0.03	2321	2321	Survey & Conn.	Conn.
20-Sep-11	04:43	04:51	0.13	2321	2353	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	04:51	04:59	0.13	2353	2353	Survey & Conn.	Survey & Conn @ 2291- iNC 19.0 aZM 108.1.
20-Sep-11	04:59	05:09	0.17	2353	2368	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	05:09	05:13	0.07	2368	2384	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	05:13	05:20	0.12	2384	2384	Survey & Conn.	Conn.
20-Sep-11	05:20	05:24	0.07	2384	2389	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	05:24	05:29	0.08	2389	2416	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	05:29	05:31	0.03	2416	2416	Survey & Conn.	Conn.
20-Sep-11	05:31	05:40	0.15	2416	2447	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	05:40	05:48	0.13	2447	2447	Survey & Conn.	Survey & Conn@2358- 20.5 Inc- 109.0 Azm
20-Sep-11	05:48	05:51	0.05	2447	2457	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
20-Sep-11	05:51	05:56	0.08	2457	2476	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	05:56	05:58	0.03	2476	2476	Survey & Conn.	Conn.
20-Sep-11	05:58	06:04	0.10	2476	2508	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	06:04	06:06	0.03	2508	2508	Survey & Conn.	Conn.



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	06:06	06:11	0.08	2508	2539	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	06:11	06:18	0.12	2539	2539	Survey & Conn.	Survey & Conn@2477- 21.30 Inc- 110.00 Azm
20-Sep-11	06:18	06:25	0.12	2539	2571	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	06:25	06:27	0.03	2571	2571	Survey & Conn.	Conn.
20-Sep-11	06:27	06:32	0.08	2571	2602	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	06:32	06:39	0.12	2602	2602	Survey & Conn.	Conn.
20-Sep-11	06:39	06:45	0.10	2602	2634	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	06:45	06:54	0.15	2634	2634	Survey & Conn.	Survey & Conn@2572- 19.40 Inc- 110.70 Azm
20-Sep-11	06:54	07:02	0.13	2634	2644	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
20-Sep-11	07:02	07:05	0.05	2644	2666	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	07:05	07:07	0.03	2666	2666	Survey & Conn.	Conn.
20-Sep-11	07:07	07:12	0.08	2666	2698	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	07:12	07:20	0.13	2698	2698	Survey & Conn.	Conn.
20-Sep-11	07:20	07:26	0.10	2698	2708	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	07:26	07:29	0.05	2708	2730	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	07:29	07:37	0.13	2730	2730	Survey & Conn.	Survey & Conn@2668- 19.6 Inc- 111.40 Azm
20-Sep-11	07:37	07:49	0.20	2730	2793	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	07:49	07:56	0.12	2793	2793	Survey & Conn.	Conn.
20-Sep-11	07:56	08:02	0.10	2793	2803	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
20-Sep-11	08:02	08:05	0.05	2803	2825	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	08:05	08:12	0.12	2825	2825	Survey & Conn.	Survey & Conn@2763- 19.60 Inc- 111.40 Azm
20-Sep-11	08:12	08:23	0.18	2825	2888	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	08:23	08:29	0.10	2888	2888	Survey & Conn.	Conn.
20-Sep-11	08:29	08:34	0.08	2888	2920	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	08:34	08:41	0.12	2920	2920	Survey & Conn.	Survey & Conn@2858- 21.4 Inc- 112.30 Azm
20-Sep-11	08:41	08:56	0.25	2920	2983	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	08:56	09:05	0.15	2983	2983	Survey & Conn.	Conn.
20-Sep-11	09:05	09:40	0.58	2983	2983	Rig Service-Inhole	Rig Service-Inhole
20-Sep-11	09:40	09:45	0.08	2983	3015	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	09:45	09:52	0.12	3015	3015	Survey & Conn.	Survey & Conn@2953- 19.2 Inc- 112.9 Azm
20-Sep-11	09:52	10:02	0.17	3015	3025	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	10:02	10:07	0.08	3025	3047	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	10:07	10:09	0.03	3047	3047	Survey & Conn.	Conn.
20-Sep-11	10:09	10:15	0.10	3047	3078	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	10:15	10:22	0.12	3078	3078	Survey & Conn.	Conn.
20-Sep-11	10:22	10:27	0.08	3078	3088	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	10:27	10:31	0.07	3088	3109	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	10:31	10:38	0.12	3109	3109	Survey & Conn.	Survey & Conn@3047- 19.6 Inc- 111.8 Azm
20-Sep-11	10:38	10:54	0.27	3109	3173	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	10:54	10:58	0.07	3173	3173	Survey & Conn.	Conn.
20-Sep-11	10:58	11:02	0.07	3173	3204	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	11:02	11:10	0.13	3204	3204	Survey & Conn.	Survey & Conn@3142- 19.8 Inc- 110.5 Azm
20-Sep-11	11:10	11:16	0.10	3204	3209	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	11:16	11:30	0.23	3209	3267	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	11:30	11:39	0.15	3267	3267	Survey & Conn.	Conn.
20-Sep-11	11:39	11:46	0.12	3267	3277	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	11:46	11:51	0.08	3277	3298	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	11:51	11:58	0.12	3298	3298	Survey & Conn.	Survey & Conn@3236- 17.4 Inc- 107.3 Azm

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	11:58	12:07	0.15	3298	3308	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
20-Sep-11	12:07	12:19	0.20	3308	3361	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	12:19	12:28	0.15	3361	3361	Survey & Conn.	Conn.
20-Sep-11	12:28	12:35	0.12	3361	3391	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	12:35	12:44	0.15	3391	3391	Survey & Conn.	Survey & Conn@3329- 19.1 Inc- 105.8 Azm
20-Sep-11	12:44	12:52	0.13	3391	3401	Sliding	Sliding - (WOB:10;GPM :440;TFO:340)
20-Sep-11	12:52	13:03	0.18	3401	3452	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	13:03	13:14	0.18	3452	3452	Survey & Conn.	Conn.
20-Sep-11	13:14	13:20	0.10	3452	3462	Sliding	Sliding - (WOB:10;GPM :440;TFO:30)
20-Sep-11	13:20	13:24	0.07	3462	3484	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	13:24	13:32	0.13	3484	3484	Survey & Conn.	Survey & Conn@3422- 17.9 Inc- 104.4 Azm
20-Sep-11	13:32	13:40	0.13	3484	3499	Sliding	Sliding - (WOB:10;GPM :440;TFO:30)
20-Sep-11	13:40	13:52	0.20	3499	3547	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	13:52	13:59	0.12	3547	3547	Survey & Conn.	Conn.
20-Sep-11	13:59	14:07	0.13	3547	3557	Sliding	Sliding - (WOB:10;GPM :440;TFO:30)
20-Sep-11	14:07	14:11	0.07	3557	3579	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	14:11	14:19	0.13	3579	3579	Survey & Conn.	Survey & Conn@3517- 19.8 Inc- 105.2 Azm
20-Sep-11	14:19	14:23	0.07	3579	3584	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
20-Sep-11	14:23	14:35	0.20	3584	3642	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	23:58	24:00	0.03	4924	4926	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	14:35	14:41	0.10	3642	3642	Survey & Conn.	Conn.
20-Sep-11	14:41	14:47	0.10	3642	3674	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	14:47	14:56	0.15	3674	3674	Survey & Conn.	Survey & Conn@3612- 20.5 Inc- 108.7 Azm
20-Sep-11	14:56	15:07	0.18	3674	3689	Sliding	Sliding - (WOB:10;GPM :440;TFO:90)
20-Sep-11	15:07	15:09	0.03	3689	3705	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	15:09	15:11	0.03	3705	3705	Survey & Conn.	Conn.
20-Sep-11	15:11	15:17	0.10	3705	3736	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	15:17	15:26	0.15	3736	3736	Survey & Conn.	Conn.
20-Sep-11	15:26	15:30	0.07	3736	3768	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	15:30	15:37	0.12	3768	3768	Survey & Conn.	Survey & Conn@3706- 22.90 Inc- 109.00 Azm
20-Sep-11	15:37	15:49	0.20	3768	3830	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	15:49	15:57	0.13	3830	3830	Survey & Conn.	Conn.
20-Sep-11	15:57	16:01	0.07	3830	3862	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	16:01	16:08	0.12	3862	3862	Survey & Conn.	Survey & Conn@3800- 23.5 Inc- 107.7 Azm
20-Sep-11	16:08	16:22	0.23	3862	3923	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	16:22	16:30	0.13	3923	3923	Survey & Conn.	Conn.
20-Sep-11	16:30	16:35	0.08	3923	3955	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
20-Sep-11	16:35	16:38	0.05	3955	3955	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	16:38	16:45	0.12	3955	3955	Survey & Conn.	Survey & Conn@3893- 24.00 Inc- 106.40 Azm
20-Sep-11	16:45	16:58	0.22	3955	4016	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	16:58	17:06	0.13	4016	4016	Survey & Conn.	Conn.
20-Sep-11	17:06	17:17	0.18	4016	4026	Sliding	Sliding - (WOB:10;GPM :440;TFO:80)
20-Sep-11	17:17	17:21	0.07	4026	4047	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	17:21	17:26	0.08	4047	4047	Survey & Conn.	Survey & Conn@3985- 23.70 Inc- 108.50 Azm
20-Sep-11	17:26	17:32	0.10	4047	4052	Sliding	Sliding - (WOB:10;GPM :440;TFO:80)
20-Sep-11	17:32	17:44	0.20	4052	4110	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	17:44	17:50	0.10	4110	4110	Survey & Conn.	Conn.
20-Sep-11	17:50	17:56	0.10	4110	4141	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	17:56	18:05	0.15	4141	4141	Survey & Conn.	Survey & Conn@4079- 21.20 Inc- 113.50 Azm
20-Sep-11	18:05	18:11	0.10	4141	4151	Sliding	Sliding - (WOB:10;GPM :440;TFO:110)
20-Sep-11	18:11	18:14	0.05	4151	4173	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	18:14	18:16	0.03	4173	4173	Survey & Conn.	Conn.
20-Sep-11	18:16	18:24	0.13	4173	4204	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	18:24	18:31	0.12	4204	4204	Survey & Conn.	Survey & Conn.
20-Sep-11	18:31	18:36	0.08	4204	4236	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	18:36	18:42	0.10	4236	4236	Survey & Conn.	Survey & Conn@ 4174- Inc 19.3 Azm 115.
20-Sep-11	18:42	18:47	0.08	4236	4251	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
20-Sep-11	18:47	18:51	0.07	4251	4268	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	18:51	18:53	0.03	4268	4268	Survey & Conn.	Conn.
20-Sep-11	18:53	19:00	0.12	4268	4300	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	19:00	19:07	0.12	4300	4300	Survey & Conn.	Survey & Conn.
20-Sep-11	19:07	19:15	0.13	4300	4331	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	19:15	19:23	0.13	4331	4331	Survey & Conn.	Survey & Conn@ 4269- Inc 19.4 Azm 114.3.
20-Sep-11	19:23	19:31	0.13	4331	4346	Sliding	Sliding - (WOB:10;GPM :440;TFO:360)
20-Sep-11	19:31	19:34	0.05	4346	4362	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	19:34	19:36	0.03	4362	4362	Survey & Conn.	Conn.
20-Sep-11	19:36	19:42	0.10	4362	4393	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	19:42	19:44	0.03	4393	4393	Survey & Conn.	Conn.
20-Sep-11	19:44	19:51	0.12	4393	4425	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	19:51	19:59	0.13	4425	4425	Survey & Conn.	Survey & Conn@ 4363- Inc 17.4 Azm 117.6.
20-Sep-11	19:59	20:09	0.17	4425	4440	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
20-Sep-11	20:09	20:13	0.07	4440	4455	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	20:13	20:23	0.17	4455	4455	Survey & Conn.	Survey & Conn.
20-Sep-11	20:23	20:28	0.08	4455	4465	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	20:28	20:33	0.08	4465	4487	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	20:33	20:35	0.03	4487	4487	Survey & Conn.	Conn.
20-Sep-11	20:35	20:43	0.13	4487	4519	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	20:43	20:52	0.15	4519	4519	Survey & Conn.	Survey & Conn@ 4457- Inc 16.8 Azm 119.4.
20-Sep-11	20:52	21:00	0.13	4519	4534	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	21:00	21:04	0.07	4534	4550	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	21:04	21:11	0.12	4550	4550	Survey & Conn.	Survey & Conn.
20-Sep-11	21:11	21:15	0.07	4550	4560	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
20-Sep-11	21:15	21:21	0.10	4560	4582	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	21:21	21:23	0.03	4582	4582	Survey & Conn.	Conn.
20-Sep-11	21:23	21:30	0.12	4582	4611	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	21:30	21:39	0.15	4611	4611	Survey & Conn.	Survey & Conn.
20-Sep-11	21:39	21:47	0.13	4611	4626	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	21:47	21:51	0.07	4626	4643	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	21:51	21:53	0.03	4643	4643	Survey & Conn.	Conn.
20-Sep-11	21:53	22:00	0.12	4643	4674	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	22:00	22:02	0.03	4674	4674	Survey & Conn.	Conn.
20-Sep-11	22:02	22:09	0.12	4674	4706	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	22:09	22:19	0.17	4706	4706	Survey & Conn.	Survey & Conn@ 4644- Inc 20.7 Azm 111.9.
20-Sep-11	22:19	22:26	0.12	4706	4718	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	22:26	22:30	0.07	4718	4737	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	22:30	22:32	0.03		4737	Survey & Conn.	Conn.



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
20-Sep-11	22:32	22:40	0.13	4737	4768	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	22:40	22:42	0.03	4768	4768	Survey & Conn.	Conn.
20-Sep-11	22:42	22:51	0.15	4768	4800	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	22:51	22:59	0.13	4800	4800	Survey & Conn.	Survey & Conn@ 4738- Inc 20.0 Azm 110.0.
20-Sep-11	22:59	23:09	0.17	4800	4815	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	23:09	23:13	0.07	4815	4830	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	23:13	23:15	0.03	4830	4830	Survey & Conn.	Conn.
20-Sep-11	23:15	23:24	0.15	4830	4861	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	23:24	23:26	0.03	4861	4861	Survey & Conn.	Conn.
20-Sep-11	23:26	23:34	0.13	4861	4893	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	23:34	23:43	0.15	4893	4893	Survey & Conn.	Survey & Conn@ 4831- Inc 18.7 Azm 110.0.
20-Sep-11	23:43	23:52	0.15	4893	4908	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
20-Sep-11	23:52	23:56	0.07	4908	4924	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
20-Sep-11	23:56	24:00	0.03	4924	4926	Survey & Conn.	Drilling - (WOB:10;GPM :440;RPM:78)



<b>JOB NO.:</b>	DDOK-110480	<b>Report Time:</b>	2400	4 of 5
<b>Company:</b>	St. James	<b>API JOB #</b>	05-123-34360-00	
<b>LOCATION:</b>	Weld County	<b>WORK ORDER#</b>	MS#110463RR	
<b>RIG NAME:</b>	Cade 22	<b>FIELD:</b>	Wattenbaurge	
<b>STATE:</b>	Colorado	<b>Township:</b>		
<b>COUNTY:</b>	Weld County	<b>SECTORANGE:</b>		
<b>WELL NAME:</b>	Larson Farms 2-24			

From Wednesday, September 21, 2011 at 0000 to Wednesday, September 21, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters							
Start Depth	4926.00	Rotary Hours	14.38	WOB	10	Pick UP	140	Slack Off	100	SPM			
End Depth	7168.00	Circulating Hours	0.83	RAB	110	SPP	2000	FlowRate	440 - 440	106			
Total Drilled:	2178.00	Avg. Total ROP:	134.58	Mud Data									
Total Rotary Drilled:	2099.00	Avg. Rotary ROP:	145.93	Type	Water Base			PV	0	SOLID	0		
Total Drilled Sliding:	79.00	Avg. Slide ROP:	43.89	Weight	8.7	GAS	0	YP	0	BHT°	0		
Slide Hours:	1.80	Percent Rotary:	96.37	Viscosity	45	SAND	0	PH	0	Flow T°	0		
Below Rotary Hrs.	24.00	Percent Slide:	3.63	Chlorides	0	WL	0			Oil %	0		
PERSONNEL				CASING					BHA				
Lead Directional :	David Cathey			Size	Lb/ft	Set Depth	BHA # 1:7 7/8" Hughes HCD 405Z, 6 1/4" 7/8 .4.8 Stage 1.83 ABH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 6 1/2" DC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,						
Second Directional :	Ronne Garcia & Coty Jeane			8 5/8	36	774							
MWD Operator1	Cody Hart												
MWD Operator2													
Directional Company:	MS Energy												
Geologist:				Signature:									
Company Man:	Junior Loya											Daily Cost	
Incl. In:	18.7	Azm. In:	110	Incl. Out:	4.1	Azm. Out:	163.3	Cummulative Cost:		\$26,250.00			

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
21-Sep-11	00:00	00:06	0.10	4926	4956	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	00:06	00:08	0.03	4956	4956	Survey & Conn.	Conn.
21-Sep-11	00:08	00:19	0.18	4956	4987	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	00:19	00:28	0.15	4987	4987	Survey & Conn.	Survey & Conn@ 4925- Inc 19.2 Azm 112.3.
21-Sep-11	00:28	00:34	0.10	4987	4997	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
21-Sep-11	00:34	00:39	0.08	4997	5018	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	00:39	01:09	0.50	5018	5018	Survey & Conn.	Conn, Install Rotating Head.
21-Sep-11	01:09	01:18	0.15	5018	5050	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	01:18	01:20	0.03	5050	5050	Survey & Conn.	Survey & Conn.
21-Sep-11	01:20	01:28	0.13	5114	5081	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	01:28	01:38	0.17	5081	5081	Survey & Conn.	Survey & Conn@ 5019- Inc 16.5 Azm 112.2.
21-Sep-11	01:38	01:48	0.17	5081	5093	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
21-Sep-11	01:48	01:51	0.05	5093	5111	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	01:51	01:53	0.03	5111	5111	Survey & Conn.	Conn.
21-Sep-11	01:53	02:00	0.12	5111	5144	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	02:00	02:02	0.03	5144	5144	Survey & Conn.	Conn.
21-Sep-11	02:02	02:09	0.12	5144	5175	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	02:09	02:16	0.12	5175	5175	Survey & Conn.	Survey & Conn@ 5113- Inc 16.6 Azm 111.5.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
21-Sep-11	02:16	02:21	0.08	5175	5206	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	02:21	02:23	0.03	5206	5206	Survey & Conn.	Conn.
21-Sep-11	02:23	02:31	0.13	5206	5238	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	02:31	02:33	0.03	5238	5238	Survey & Conn.	Conn.
21-Sep-11	02:33	02:43	0.17	5238	5270	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	02:43	02:52	0.15	5270	5270	Survey & Conn.	Survey & Conn@ 5208- Inc 15.4 Azm 111.8.
21-Sep-11	02:52	02:58	0.10	5270	5277	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
21-Sep-11	02:58	03:08	0.17	5277	5302	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	03:08	03:10	0.03	5302	5302	Survey & Conn.	Conn.
21-Sep-11	03:10	03:22	0.20	5302	5333	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	03:22	03:24	0.03	5333	5333	Survey & Conn.	Conn.
21-Sep-11	03:24	03:35	0.18	5333	5365	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	03:35	03:42	0.12	5365	5365	Survey & Conn.	Survey & Conn@ 5303- Inc 12.8 Azm 109.6.
21-Sep-11	03:42	03:50	0.13	5365	5396	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	03:50	03:52	0.03	5396	5396	Survey & Conn.	Conn.
21-Sep-11	03:52	04:05	0.22	5396	5428	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	04:05	04:08	0.05	5428	5428	Survey & Conn.	Conn.
21-Sep-11	04:08	04:20	0.20	5428	5460	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	04:20	04:27	0.12	5460	5460	Survey & Conn.	Survey & Conn@ 5398- Inc 10.6 Azm 110.6.
21-Sep-11	04:27	04:38	0.18	5460	5491	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	04:38	05:03	0.42	5491	5491	Rig Service-Inhole	Rig Service-Inhole
21-Sep-11	05:03	05:05	0.03	5491	5491	Survey & Conn.	Conn.
21-Sep-11	05:05	05:18	0.22	5491	5523	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	05:18	05:20	0.03	5523	5523	Survey & Conn.	Conn.
21-Sep-11	05:20	05:33	0.22	5523	5554	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	05:33	05:42	0.15	5554	5554	Survey & Conn.	Survey & Conn@ 5492- Inc 9.0 Azm 110.6.
21-Sep-11	05:42	05:58	0.27	5554	5585	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	05:58	06:00	0.03	5585	5585	Survey & Conn.	Conn.
21-Sep-11	06:00	06:12	0.20	5585	5617	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	06:12	06:14	0.03	5617	5617	Survey & Conn.	Conn.
21-Sep-11	06:14	06:23	0.15	5617	5649	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	06:23	06:31	0.13	5649	5649	Survey & Conn.	Survey & Conn@5587- 7.7 INC- 109.2 Azm
21-Sep-11	06:31	06:43	0.20	5649	5680	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	06:43	06:52	0.15	5680	5680	Survey & Conn.	Conn.
21-Sep-11	06:52	07:29	0.62	5680	5705	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
21-Sep-11	07:29	07:33	0.07	5705	5712	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	07:33	07:35	0.03	5712	5712	Survey & Conn.	Conn.
21-Sep-11	07:35	07:47	0.20	5712	5744	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	07:47	07:56	0.15	5744	5744	Survey & Conn.	Survey & Conn@5682- 5.40 Inc- 110.50 Azm
21-Sep-11	07:56	08:28	0.53	5744	5837	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	08:28	08:37	0.15	5837	5837	Survey & Conn.	Survey & Conn@5775- 4.00 Inc- 109.6 Azm
21-Sep-11	08:37	09:08	0.52	5837	5847	Sliding	Sliding - (WOB:10;GPM :440;TFO:180)
21-Sep-11	09:08	09:14	0.10	5847	5869	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	09:14	09:16	0.03	5869	5869	Survey & Conn.	Conn.
21-Sep-11	09:16	09:38	0.37	5869	5932	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	09:38	09:46	0.13	5932	5932	Survey & Conn.	Survey & Conn@5870- 3.30 Inc- 92.80 Azm
21-Sep-11	09:46	10:15	0.48	5932	6026	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	10:15	10:35	0.33	6026	6026	Rig Service-Inhole	Rig Service-Inhole

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
21-Sep-11	10:35	10:43	0.13	6026	6026	Survey & Conn.	Survey & Conn@5964- 3.1 Inc- 90.6 Azm
21-Sep-11	10:43	10:51	0.13	6026	6058	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	10:51	11:00	0.15	6058	6058	Survey & Conn.	Conn.
21-Sep-11	11:00	11:18	0.30	6058	6073	Sliding	Sliding - (WOB:10;GPM :440;TFO:180)
21-Sep-11	11:18	11:33	0.25	6073	6122	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	11:33	11:46	0.22	6122	6122	Rig repair	Rig repair
21-Sep-11	11:46	11:50	0.07	6122	6122	Survey & Conn.	Survey & Conn@6060- 2.2 Inc- 93.8 Azm
21-Sep-11	11:50	12:25	0.58	6122	6215	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	12:25	12:31	0.10	6215	6215	Survey & Conn.	Survey & Conn@6135- 1.8 Inc- 91.1 Azm
21-Sep-11	12:31	13:06	0.58	6215	6308	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	13:06	13:15	0.15	6308	6308	Survey & Conn.	Survey & Conn@6246- 1.5 Inc- 90.1 Azm
21-Sep-11	13:15	13:57	0.70	6308	6403	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	13:57	14:06	0.15	6403	6403	Survey & Conn.	Survey & Conn@6341- 1.5 Inc- 94.1 Azm
21-Sep-11	14:06	14:43	0.62	6403	6498	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	14:43	14:52	0.15	6498	6498	Survey & Conn.	Survey & Conn@6436- 1.1 Inc- 92.7 Azm
21-Sep-11	14:52	15:39	0.78	6498	6591	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	15:39	15:47	0.13	6591	6591	Survey & Conn.	Survey & Conn@6529- 1.4 Inc- 92.1 Azm
21-Sep-11	15:47	16:27	0.67	6591	6686	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	16:27	16:35	0.13	6686	6686	Survey & Conn.	Survey & Conn@6624- 1.4 Inc- 103.8 Azm
21-Sep-11	16:35	17:25	0.83	6686	6782	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	17:25	17:34	0.15	6782	6782	Survey & Conn.	Survey & Conn@ 6720- Inc 1.3 Azm 105.3.
21-Sep-11	17:34	18:23	0.82	6782	6877	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	18:23	18:32	0.15	6877	6877	Survey & Conn.	Survey & Conn@ 6815- Inc 2.0 Azn 144.8.
21-Sep-11	18:32	19:19	0.78	6877	6972	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	19:19	19:27	0.13	6972	6972	Survey & Conn.	Survey & Conn@ 6910- Inc 2.7 Azm 156.1.
21-Sep-11	19:27	20:25	0.97	6972	7065	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	20:25	20:33	0.13	7065	7065	Survey & Conn.	Survey & Conn@ 7003- Inc 3.5 Azm 158.9.
21-Sep-11	20:33	21:30	0.95	7065	7160	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	21:30	21:38	0.13	7160	7160	Survey & Conn.	Survey & Conn@ 7098- iNC 4.1 aZM 163.3.
21-Sep-11	21:38	21:45	0.12	7160	7168	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
21-Sep-11	21:45	21:53	0.13	7168	7168	Survey & Conn.	Survey @ 7168- Inc 3.9 Azm 160.4.
21-Sep-11	21:53	21:58	0.08	7168	7168	Circulating	Circulating
21-Sep-11	21:58	24:00	2.03	7168	7168	Short Trip	Short Trip



JOB NO.:	DDOK-110480	Report Time:	2400	5 of 5
Company:	St. James	API JOB #	05-123-34360-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbaurge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECT\ RANGE:		
WELL NAME:	Larson Farms 2-24			

From Thursday, September 22, 2011 at 0000 to Thursday, September 22, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters					
Start Depth	0.00	Rotary Hours	0.00	WOB	10	Pick UP	140	Slack Off	100	SPM	
End Depth	0.00	Circulating Hours	1.92	RAB	110	SPP	2000	FlowRate	440 - 440	106	
Total Drilled:	0.00	Avg. Total ROP:	NA	Mud Data							
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type	Water Base			PV	0	SOLID	0
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	8.7	GAS	0	YP	0	BHT°	0
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	45	SAND	0	PH	0	Flow T°	0
Below Rotary Hrs.	1.92	Percent Slide:	NA	Chlorides	0	WL	0			Oil %	0
PERSONNEL				CASING				BHA			
Lead Directional :	David Cathey			Size	Lb/ft	Set Depth	BHA # 1:7 7/8" Hughes HCD 405Z, 6 1/4" 7/8 .4.8 Stage 1.83 ABH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 6 1/2" DC, 18 Jts 4 1/2" HWDP, 4 1/2 Drill Pipe,				
Second Directional :	Ronne Garcia & Coty Jeane			8 5/8	36	774					
MWD Operator1	Cody Hart										
MWD Operator2											
Directional Company:	MS Energy										
Geologist:											
Company Man:	Junior Loya			Signature:			Daily Cost		\$7,500.00		
Incl. In:	4.1	Azm. In:	163.3				Incl. Out:	0	Azm. Out:	0	Cummulative Cost:

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
22-Sep-11	00:00	01:55	1.92	7168	7168	Circulating	Circulating
22-Sep-11	01:55	06:00	4.08	7168	7168	L/D DP	POOH L/D DP.

## BHA # 1

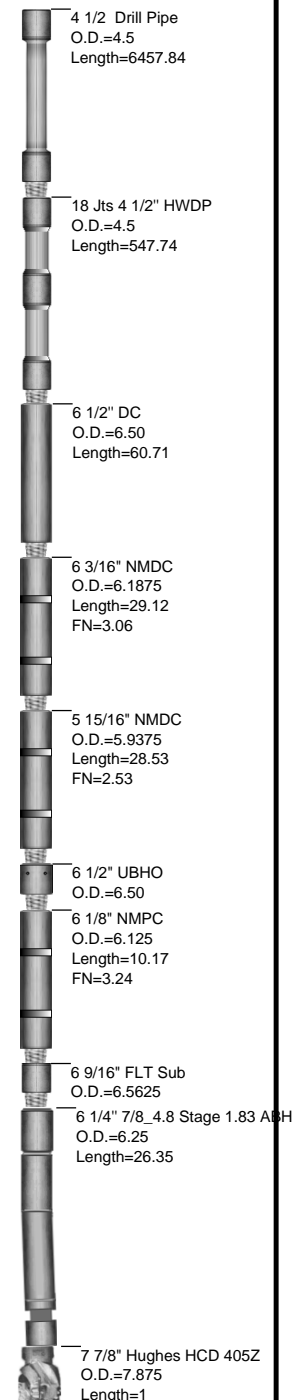


JOB NO.: DDOK-110480      Work Order: MS#110463RR      FIELD: Wattenbauge  
 Company: St. James      Township:  
 LOCATION: Weld County      SECT. RANGE:  
 RIG NAME: Cade 22      Lead DD: David Cathey  
 STATE: Colorado      Co. Man: Junior Loya  
 COUNTY: Weld County      BHA TYPE: Steerable Assembly  
 WELL NAME: Larson Farms 2-24      BHA WT: 155034      Wt @ Jars: N/A

Time and Depths		MOTOR DATA	Drilling Parameters	
Date In:	19-Sep-11 @ 15:08	Performance	SO/PU:	55 - 100 / 55-140
Date Out:	22-Sep-11 @ 06:00	MFG.: Mpact	Rot Strg Wt:	55-110
Hrs In Hole:	58.78	Pad OD:	WOB:	10 - 10
Start Depth:	785.00	NB Stab:	TORQ:	2 - 2
End Depth:	7168.00	Bit to Bend:	SPP:	1050 - 2000
Total Drilled:	6319.00	Bent Hsg/Sub°: 1.83 /	Motor RPM:	150
Avg. Total ROP:	175.85	Lobe/Stage: 7/8 / 4.8	Rotary RPM:	78 - 78
Circ Hrs: Tot/Only	39.67 / 3.73	Rev/GAL:	Flow Rate:	440 - 440
Percent Slide:	10.33	Rotor Jet:	Avg Diff:	
Percent Hrs:	20.04	Prop BUR:	Stall Pres.:	
Slide Hours:	7.20	Act BUR:	Off Bot Pres.:	
Total Sliding:	653.00	Mud Data		Bit Record
Avg. Slide ROP:	90.69	Type	BAKER / 7 7/8" Hughes HCD 405Z	
Percent Rotary:	89.67	WT: 8.7	GAS:	0
Percent Hrs:	79.96	Vis: 45	PV:	0
Rotary Hours:	28.73	WL: 0	PH:	0
Total Rotary:	5666.00	SOL: 0	SAND:	0
Avg. Rotary ROP:	197.19	Oil %: 0	T °: 0	
Reason POOH:		Chlor: 0	YP: 0	
MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 56.67	Last Casing O.D.
	GYRO: 0	DNCS: 0	Sonic: 0	Shoe @: Hanger @:
INC IN: 1.0	INC OUT: 4.1	AZM IN: 96.59	AZM OUT: 163.30	

## BHA Detail

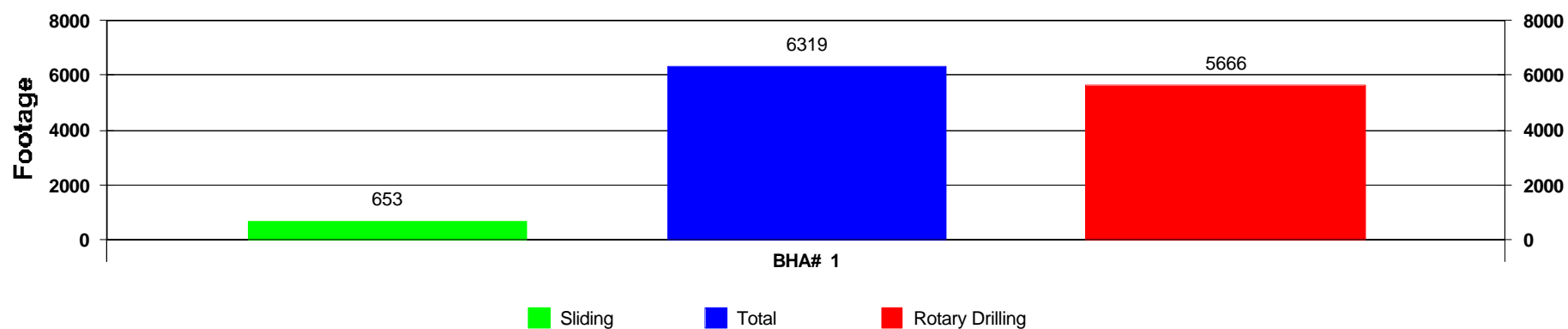
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
7 7/8" Hughes HCD 405Z	7128434		7.875	1.00	1.00	4 1/2 REGP	BAKER
6 1/4" 7/8_4.8 Stage 1.83 ABH	MSD62D245S		6.25	26.35	27.35	4 1/2 XHB	Mpact
6 9/16" FLT Sub	SD105679	2.9375	6.5625	3.05	30.40	4 1/2 XHB	Stabil Drill
6 1/8" NMPC	SD38939	2.8125	6.125	10.17	40.57	4 1/2 XHB	Stabil Drill
6 1/2" UBHO	6548	3.00	6.50	3.49	44.06	4 1/2 XHB	MS Energy
5 15/16" NMDC	SD39672	2.875	5.9375	28.53	72.59	4 1/2 XHB	Stabil Drill
6 3/16" NMDC	SD41167	2.875	6.1875	29.12	101.71	4 1/2 XHB	Stabil Drill
6 1/2" DC	SERNO	2.25	6.50	60.71	162.42	4 1/2 XHB	
18 Jts 4 1/2" HWDP	Rig	2.75	4.5	547.74	710.16	4 1/2 XHB	Rig
4 1/2" Drill Pipe	Rig	3.64	4.5	6,457.84	7168.00	X.H.B	Rig



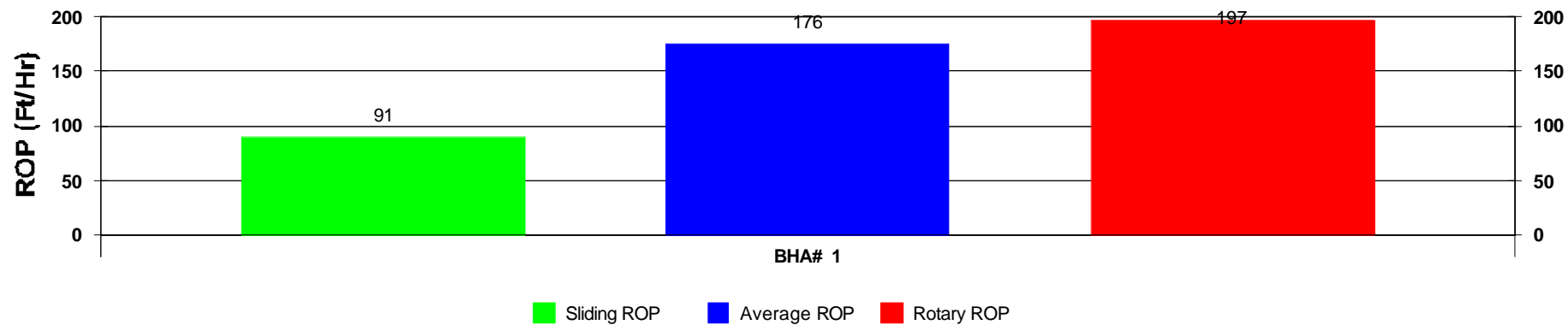


JOB NO.:	DDOK-110480	FIELD:	Wattenbauge
Company:	St. James	Township:	
LOCATION:	Weld County	SECT/RANGE:	
RIG NAME:	Cade 22	COMMENT	
STATE:	Colorado		
COUNTY:	Weld County		
WELL NAME:	Larson Farms 2-24		

### Footage Drilled with BHA

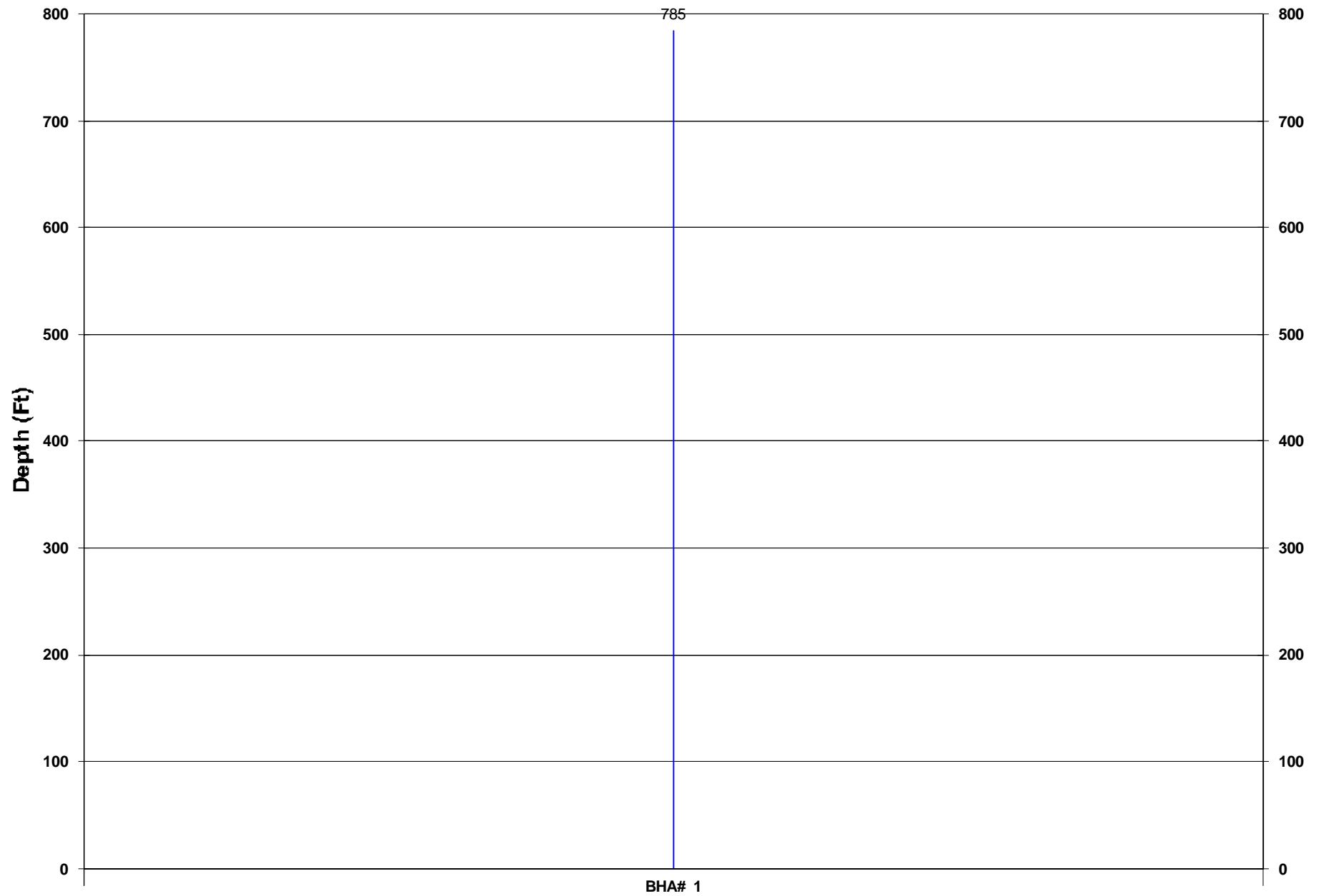


### ROP vs BHA



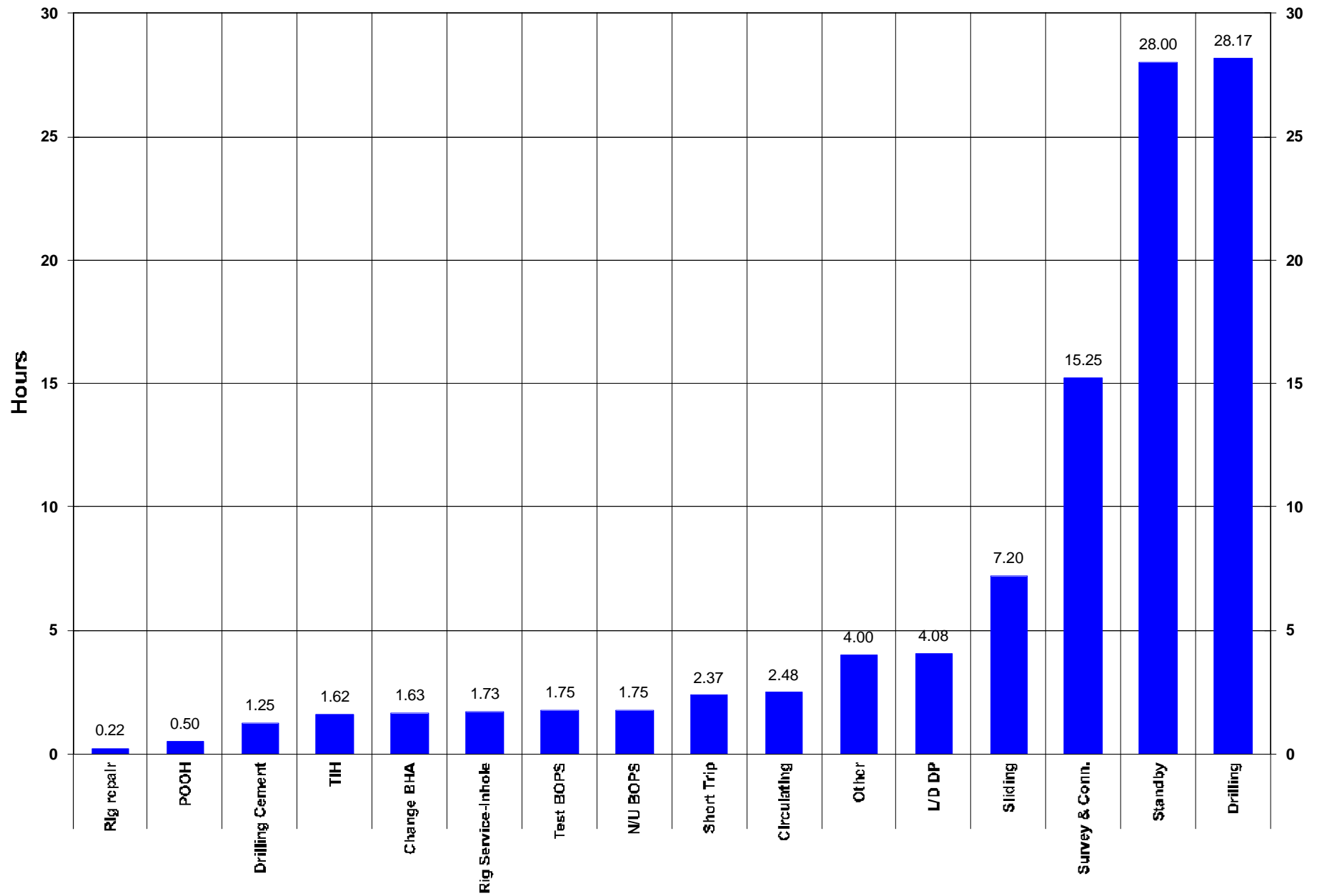


## Depth vs BHA

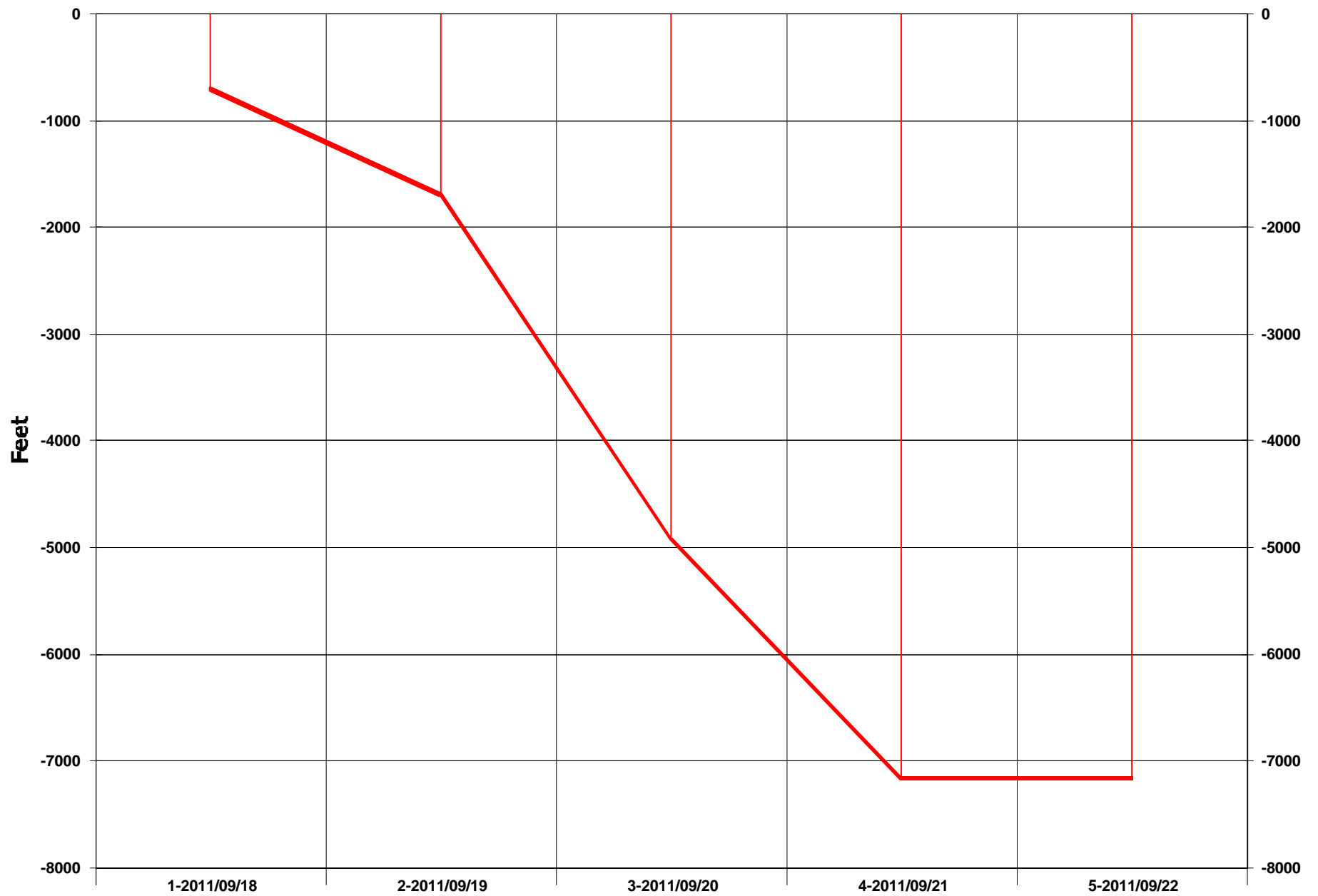




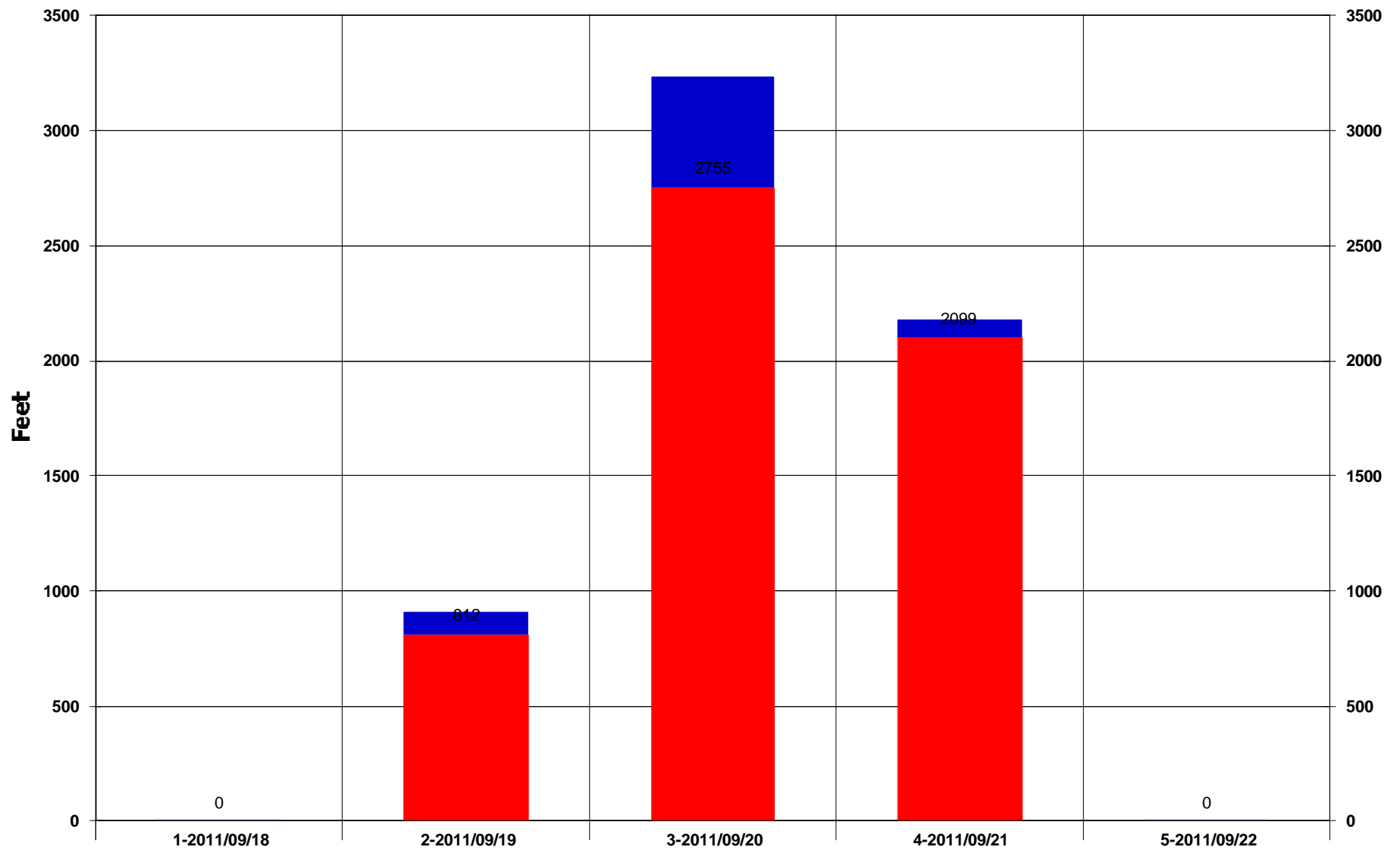
## Activity Histogram



Measured Depth vs Days



## Daily Footage



Rotary Drilling Sliding

**Baker, MT**

22 S. 4th St. W.  
Baker, MT 59313  
Phone: 406.778.3983  
Watts: 877.844.9850  
Fax: 406.778.3982

**Conroe, TX**

3335 Pollok Drive  
Conroe, TX 77303  
Phone: 936.442.2500  
Watts: 800.769.5988  
Fax: 936.442.2599

**Corpus Christi, TX**

1579 N. Lexington  
Corpus Christi, TX 78409  
Phone: 361.289.7272  
Watts: 800.880.7468  
Fax: 361.289.7320

**Dallas, TX**

307 W. 7th St. Ste 1230  
Ft. Worth, TX 76102  
Phone: 817.870.4847  
Fax: 817.870.4829

**Denver, CO**

1600 Broadway St. 2400  
Denver, CO 80202  
Phone: 303.542.1957  
Fax: 303.542.1958

**Ft. Worth, TX**

7821 Will Rogers Blvd.  
Ft. Worth, TX 76140  
Phone: 817.568.1038

**Grand Junction, CO**

742 W. White Ave.  
Grand Junction, CO 81501  
Phone: 970.257.1911  
Watts: 970.257.1946  
Fax: 970.257.1947

**Houston, TX**

1030 Regional Park Dr.  
Houston, TX 77060  
Phone: 281.951.4346  
Fax: 281.951.4342

**Lafayette, LA**

301 Marcon Drive  
Lafayette, LA 70507  
Phone: 337.267.7468  
Watts: 800.259.2867  
Fax: 337.267.9409

**Odessa, TX**

1620 South Marlin Dr  
Odessa, TX 79763  
Phone: 432.339.0360  
Fax: 432.570.8385

**Oklahoma City, OK**

3800 S. Thomas Rd  
Oklahoma City, OK 73179  
Phone: 800.769.5988

**West Alexander, PA**

903 Old Brick Rd.  
West Alexander, PA 15376  
Phone: 724.484.7550  
Fax: 724.484.0326