



ST. JAMES

MS #DDOK-110466

**Larson Farms 4-24
Weld County, Colorado
Cade 22**

September 19, 2011

**Prepared By:
Megan Pope**

Actual Well & Surveys 1

Daily Reports 2

BHA's 3

Job Performance Charts 4

Support Staff 5

St. James

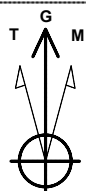
Company: St. James
Site: Larson Farms
Well: 4-24
Project: Weld County, Colorado (NAD 83)
Rig Name: Cade 22



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
722.00	1.50	2.30	721.89	11.29	0.89	-0.37	0.00	Last Survey
800.00	1.50	2.30	799.87	13.33	0.97	-0.51	2.04	Begin 2.00°/100' Build & Turn
2370.19	31.24	97.26	2293.51	-18.38	416.17	415.65	421.21	Begin 31.24° Tangent
4967.49	31.24	97.26	4514.16	-188.58	1752.48	1762.58	1768.32	Begin 2.00°/100' Drop
6529.59	0.00	0.00	6000.00	-241.07	2164.59	2177.97	2183.76	Begin Vertical Hold
7479.59	0.00	0.00	6950.00	-241.07	2164.59	2177.97	2183.76	PBHL

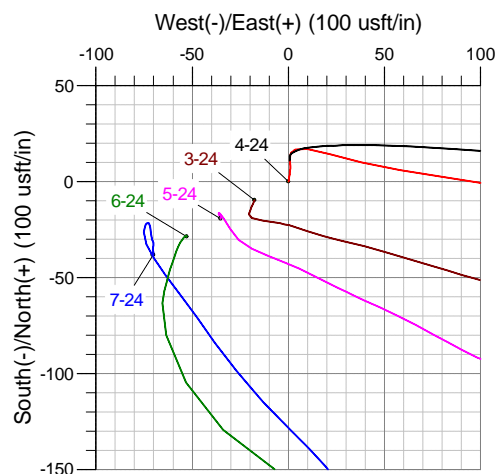
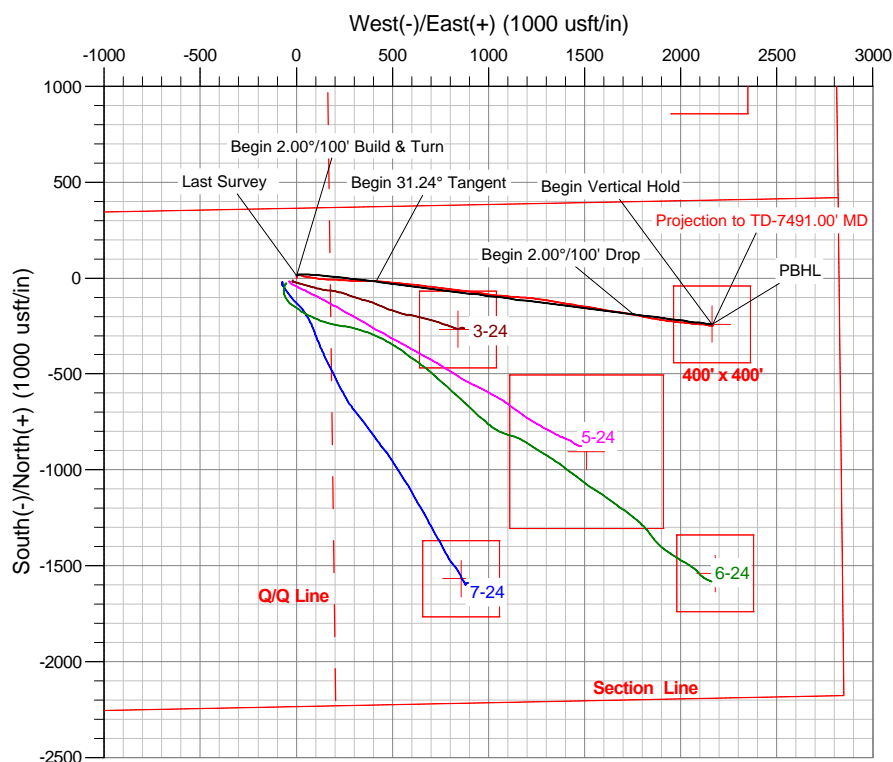
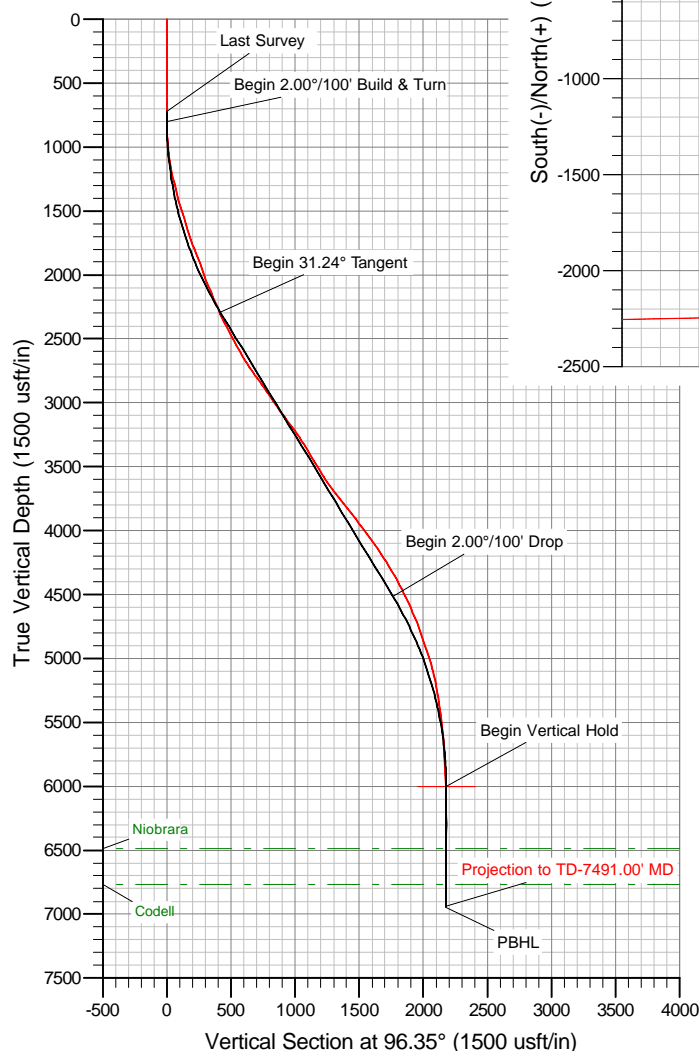


Azimuths to Grid North
True North: -0.65°
Magnetic North: 8.04°

Magnetic Field
Strength: 53181.2snT
Dip Angle: 67.14°
Date: 09/15/2011
Model: WMM_2010

US State Plane 1983
Colorado Northern Zone

Created By: Megan Pope
Date: 10:13, September 19 2011
Plan: Design #3



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

4-24

Wellbore #1

Survey: MS MWD

Standard Survey Report

19 September, 2011

Company:	St. James	Local Co-ordinate Reference:	Well 4-24
Project:	Weld County, Colorado (NAD 83)	TVD Reference:	WELL @ 4656.00usft (Cade 22)
Site:	Larson Farms	MD Reference:	WELL @ 4656.00usft (Cade 22)
Well:	4-24	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	Southern Region

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

Well	4-24				
Well Position	+N/-S	0.00 usft	Northing:	1,415,944.11 usft	Latitude: 40° 28' 15.0697 N
	+E/-W	0.00 usft	Easting:	3,278,510.08 usft	Longitude: 104° 29' 56.161 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level: 4,643.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	09/15/11	8.69	67.14	53,181

Design	Surveys				
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		96.35

Survey Program	Date	09/19/11			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
170.00	7,491.00	MS MWD (Wellbore #1)			

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	
170.00	0.90	14.70	169.99	1.29	0.34	0.19	0.53	0.53	0.00	
261.00	0.90	358.90	260.98	2.70	0.51	0.21	0.27	0.00	-17.36	
351.00	0.80	22.20	350.97	3.99	0.73	0.28	0.40	-0.11	25.89	
443.00	0.90	1.20	442.96	5.30	0.99	0.40	0.35	0.11	-22.83	
534.00	0.90	8.90	533.95	6.72	1.11	0.36	0.13	0.00	8.46	
625.00	1.60	351.50	624.93	8.69	1.04	0.07	0.87	0.77	-19.12	
722.00	1.50	2.30	721.89	11.29	0.89	-0.37	0.32	-0.10	11.13	
818.00	1.90	9.70	817.85	14.12	1.21	-0.36	0.47	0.42	7.71	
912.00	2.80	60.30	911.78	16.79	3.46	1.58	2.31	0.96	53.83	
1,007.00	5.30	100.60	1,006.55	17.13	9.79	7.84	3.84	2.63	42.42	
1,102.00	9.20	105.40	1,100.78	14.31	21.43	19.72	4.15	4.11	5.05	
1,196.00	11.70	103.00	1,193.21	10.17	37.97	36.61	2.70	2.66	-2.55	
1,291.00	13.30	99.00	1,285.96	6.29	58.15	57.09	1.91	1.68	-4.21	
1,386.00	15.00	100.50	1,378.07	2.34	81.03	80.27	1.83	1.79	1.58	

Company:	St. James	Local Co-ordinate Reference:	Well 4-24
Project:	Weld County, Colorado (NAD 83)	TVD Reference:	WELL @ 4656.00usft (Cade 22)
Site:	Larson Farms	MD Reference:	WELL @ 4656.00usft (Cade 22)
Well:	4-24	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)	
1,477.00	16.60	96.90	1,465.63	-1.37	105.51	105.02	2.06	1.76	-3.96	
1,572.00	17.40	94.70	1,556.48	-4.16	133.14	132.79	1.08	0.84	-2.32	
1,665.00	18.10	94.00	1,645.05	-6.31	161.41	161.12	0.79	0.75	-0.75	
1,759.00	18.90	91.20	1,734.20	-7.64	191.20	190.88	1.27	0.85	-2.98	
1,855.00	20.20	96.10	1,824.67	-9.73	223.23	222.94	2.18	1.35	5.10	
1,950.00	20.90	91.20	1,913.63	-11.83	256.48	256.22	1.95	0.74	-5.16	
2,045.00	20.40	91.40	2,002.52	-12.59	289.98	289.59	0.53	-0.53	0.21	
2,140.00	22.30	90.60	2,091.00	-13.18	324.56	324.02	2.02	2.00	-0.84	
2,234.00	23.40	91.60	2,177.62	-13.89	361.05	360.37	1.24	1.17	1.06	
2,328.00	23.50	93.40	2,263.86	-15.52	398.42	397.69	0.77	0.11	1.91	
2,420.00	25.00	93.90	2,347.74	-17.93	436.13	435.43	1.65	1.63	0.54	
2,514.00	27.30	93.70	2,432.11	-20.68	477.46	476.82	2.45	2.45	-0.21	
2,610.00	28.40	95.70	2,516.99	-24.36	522.15	521.64	1.50	1.15	2.08	
2,704.00	30.10	96.20	2,599.01	-29.13	567.83	567.57	1.83	1.81	0.53	
2,798.00	31.20	95.90	2,679.87	-34.18	615.48	615.49	1.18	1.17	-0.32	
2,892.00	34.40	96.80	2,758.88	-39.83	666.08	666.40	3.44	3.40	0.96	
2,986.00	36.70	98.10	2,835.35	-46.93	720.26	721.03	2.58	2.45	1.38	
3,079.00	34.00	97.90	2,911.20	-54.42	773.54	774.81	2.91	-2.90	-0.22	
3,174.00	35.00	97.00	2,989.49	-61.39	826.89	828.61	1.18	1.05	-0.95	
3,270.00	36.40	97.30	3,067.45	-68.37	882.48	884.62	1.47	1.46	0.31	
3,364.00	37.60	97.30	3,142.52	-75.55	938.59	941.19	1.28	1.28	0.00	
3,458.00	35.20	97.40	3,218.17	-82.69	993.91	996.95	2.55	-2.55	0.11	
3,554.00	33.00	97.50	3,297.66	-89.67	1,047.27	1,050.76	2.29	-2.29	0.10	
3,647.00	31.30	95.10	3,376.40	-95.12	1,096.45	1,100.24	2.29	-1.83	-2.58	
3,742.00	30.00	93.10	3,458.13	-98.60	1,144.75	1,148.63	1.74	-1.37	-2.11	
3,836.00	31.80	94.70	3,538.79	-101.90	1,192.90	1,196.85	2.10	1.91	1.70	
3,929.00	34.00	98.70	3,616.88	-107.84	1,243.04	1,247.34	3.32	2.37	4.30	
4,022.00	37.40	98.40	3,692.39	-115.90	1,296.69	1,301.56	3.66	3.66	-0.32	
4,115.00	38.20	98.50	3,765.87	-124.28	1,353.08	1,358.52	0.86	0.86	0.11	
4,208.00	39.00	98.40	3,838.55	-132.80	1,410.47	1,416.50	0.86	0.86	-0.11	
4,303.00	38.10	99.50	3,912.85	-142.01	1,468.95	1,475.64	1.19	-0.95	1.16	
4,397.00	35.40	100.00	3,988.16	-151.52	1,524.37	1,531.78	2.89	-2.87	0.53	
4,492.00	35.30	99.80	4,065.65	-160.97	1,578.52	1,586.64	0.16	-0.11	-0.21	
4,586.00	34.90	99.10	4,142.55	-169.85	1,631.83	1,640.61	0.60	-0.43	-0.74	
4,681.00	33.60	98.90	4,221.08	-178.22	1,684.64	1,694.02	1.37	-1.37	-0.21	
4,775.00	31.10	100.00	4,300.48	-186.46	1,734.25	1,744.24	2.73	-2.66	1.17	
4,869.00	28.90	100.70	4,381.88	-194.89	1,780.49	1,791.12	2.37	-2.34	0.74	
4,964.00	27.70	102.00	4,465.53	-203.74	1,824.64	1,835.98	1.42	-1.26	1.37	
5,058.00	25.10	100.40	4,549.72	-211.89	1,865.63	1,877.62	2.87	-2.77	-1.70	
5,151.00	22.10	99.00	4,634.93	-218.19	1,902.32	1,914.78	3.28	-3.23	-1.51	
5,245.00	21.60	98.20	4,722.18	-223.42	1,936.91	1,949.74	0.62	-0.53	-0.85	
5,339.00	20.30	95.90	4,809.96	-227.56	1,970.26	1,983.34	1.64	-1.38	-2.45	
5,432.00	18.50	95.50	4,897.68	-230.64	2,000.99	2,014.23	1.94	-1.94	-0.43	
5,526.00	17.20	96.70	4,987.15	-233.69	2,029.64	2,043.04	1.44	-1.38	1.28	

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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)	
5,619.00	14.90	94.10	5,076.52	-236.15	2,055.23	2,068.74	2.59	-2.47	-2.80	
5,713.00	12.20	92.60	5,167.90	-237.46	2,077.21	2,090.73	2.90	-2.87	-1.60	
5,807.00	9.90	98.50	5,260.15	-239.11	2,095.13	2,108.72	2.72	-2.45	6.28	
5,903.00	8.40	93.40	5,354.93	-240.74	2,110.29	2,123.97	1.77	-1.56	-5.31	
5,998.00	7.50	100.60	5,449.02	-242.29	2,123.31	2,137.08	1.41	-0.95	7.58	
6,091.00	6.20	102.60	5,541.35	-244.51	2,134.18	2,148.13	1.42	-1.40	2.15	
6,186.00	4.40	95.10	5,635.94	-245.95	2,142.82	2,156.87	2.03	-1.89	-7.89	
6,281.00	3.30	93.70	5,730.73	-246.45	2,149.17	2,163.25	1.16	-1.16	-1.47	
6,377.00	2.60	96.60	5,826.60	-246.88	2,154.09	2,168.18	0.75	-0.73	3.02	
6,471.00	1.80	104.80	5,920.53	-247.50	2,157.64	2,171.78	0.91	-0.85	8.72	
6,565.00	1.60	83.80	6,014.49	-247.74	2,160.37	2,174.52	0.69	-0.21	-22.34	
6,660.00	1.20	74.00	6,109.46	-247.32	2,162.65	2,176.73	0.49	-0.42	-10.32	
6,755.00	1.00	88.30	6,204.44	-247.02	2,164.43	2,178.47	0.36	-0.21	15.05	
6,849.00	0.30	348.60	6,298.44	-246.75	2,165.20	2,179.21	1.16	-0.74	-106.06	
6,944.00	0.50	324.90	6,393.44	-246.17	2,164.92	2,178.86	0.27	0.21	-24.95	
7,038.00	0.50	260.40	6,487.43	-245.90	2,164.27	2,178.19	0.57	0.00	-68.62	
7,133.00	0.40	154.30	6,582.43	-246.27	2,164.01	2,177.97	0.76	-0.11	-111.68	
7,229.00	0.70	221.70	6,678.43	-247.01	2,163.77	2,177.81	0.69	0.31	70.21	
7,324.00	0.40	246.30	6,773.42	-247.58	2,163.08	2,177.19	0.40	-0.32	25.89	
7,418.00	0.40	223.30	6,867.42	-247.95	2,162.55	2,176.71	0.17	0.00	-24.47	
7,491.00	0.40	223.30	6,940.42	-248.32	2,162.20	2,176.40	0.00	0.00	0.00	
Projection to TD-7491.00' MD										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
7,491.00	6,940.42	-248.32	2,162.20	Projection to TD-7491.00' MD	



JOB NO.:	DDOK-110466	Report Time:	2400	1 of 5
Company:	St. James	API JOB #	05-123-34148-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbauge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTRANGE:	24	64W
WELL NAME:	Larson Farms 4-24			

From Tuesday, September 13, 2011 at 0000 to Tuesday, September 13, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters																	
Start Depth		0.00		Rotary Hours		4.92		WOB		10		Pick UP		48		Slack Off		40		SPM			
End Depth		784.00		Circulating Hours		1.18		RAB		45		SPP		1200		FlowRate		0 - 440		105			
Total Drilled:		784.00		Avg. Total ROP:		157.32		Mud Data															
Total Rotary Drilled:		774.00		Avg. Rotary ROP:		157.42		Type		Water				PV		0		SOLID		0			
Total Drilled Sliding:		10.00		Avg. Slide ROP:		150.00		Weight		8.7		GAS		0		YP		0		BHT°		0	
Slide Hours:		0.07		Percent Rotary:		98.72		Viscosity		45		SAND		0		PH		0		Flow T°		0	
Below Rotary Hrs.		11.50		Percent Slide:		1.28		Chlorides		0		WL		0				Oil %		0			
PERSONNEL						CASING						BHA											
Lead Directional :		David Cathey				Size		Lb/ft		Set Depth		BHA # 1:12 1/4" WLS R193M Jets 3/22, 8" 4/5 _ 5.3 Stage 1.83 ABH, 4 1/2" XH Box - 6 5/8 Reg Pin, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 3 Jts 6 1/2 Drill Collars, 18 Jts 4 1/2" HWDP, 4 1/2 Drill Pipe,											
Second Directional :		Ronnie Garcia & Coty Jeane				8 5/8		36		760													
MWD Operator1		Cody Hart																					
MWD Operator2																							
Directional Company:		MS Energy																					
Geologist:						Signature:																	
Company Man:		Eric Geiger																Daily Cost		\$8,885.00			
Incl. In:		0		Azm. In:		0		Incl. Out:		1.5		Azm. Out:		2.3		Cummulative Cost:		\$8,885.00					

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
13-Sep-11	00:00	06:00	6.00	0	0	Standby	Stand By While Rig Crew Rig Down Off Of Larson Farms 3-24.
13-Sep-11	06:00	11:00	5.00	0	0	Standby	Stand By While Rig Crew Skidds Rig Off Larson Farms 3-24 On To 4-24.
13-Sep-11	11:00	12:00	1.00	0	0	Standby	Drill Rat Hole & Mouse Hole.
13-Sep-11	12:00	13:00	1.00	0	131	Drilling	Rototary Drill Surface To 131'.
13-Sep-11	13:00	13:30	0.50	131	131	L/D DP	Lay Down 3 - 6 1/2" Drill Collars
13-Sep-11	13:30	14:38	1.13	131	131	Change BHA	Pick Up BHA #1
13-Sep-11	14:38	15:00	0.37	131	131	Reaming	Make Up Kelly & Wash & Ream F/107' T/131'
13-Sep-11	15:00	15:28	0.47	131	237	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
13-Sep-11	15:28	15:34	0.10	237	237	Survey & Conn.	Survey & Conn @ 170' - .90 Inc - 14.7 Azm14.70
13-Sep-11	15:34	16:09	0.58	237	328	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
13-Sep-11	16:09	16:24	0.25	328	328	Survey & Conn.	Survey & Conn@261- .90 Inc- 358.90 Azm
13-Sep-11	16:24	16:54	0.50	328	418	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
13-Sep-11	16:54	17:02	0.13	418	418	Survey & Conn.	Survey & Conn@351- .80 Inc- 22.20 Azm
13-Sep-11	17:02	17:34	0.53	418	510	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
13-Sep-11	17:34	17:42	0.13	510	510	Survey & Conn.	Survey & Conn @ 443' - .90 Inc - 1.20 Azm
13-Sep-11	17:42	18:22	0.67	510	601	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
13-Sep-11	18:22	18:30	0.13	601	601	Survey & Conn.	Survey & Conn @ 534' - .90 Inc - 8.9 Azm
13-Sep-11	18:30	19:06	0.60	601	692	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
13-Sep-11	19:06	19:16	0.17	692	692	Survey & Conn.	Survey & Conn 625' - 1.6 Inc - 351.5 Azm
13-Sep-11	19:16	19:20	0.07	692	702	Sliding	Drilling - (WOB:10;GPM :440;TFO:96)
13-Sep-11	19:20	19:54	0.57	702	784	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
13-Sep-11	19:54	20:00	0.10	784	784	Survey & Conn.	Survey & Conn @ 722' - 1.5 Inc - 2.3 Azm
13-Sep-11	20:00	20:15	0.25	784	784	Circulating	Circulating
13-Sep-11	20:15	21:31	1.27	784	784	Short Trip	Short Trip
13-Sep-11	21:31	22:05	0.57	784	784	Circulating	Circulating
13-Sep-11	22:05	22:30	0.42	784	784	POOH	POOH
13-Sep-11	22:30	23:30	1.00	784	784	Change BHA	Pull MWD & Rack Back NMDC & Drain & L/D MTR.
13-Sep-11	23:30	24:00	0.50	784	784	Other	Rig Up & Run Surface 8 5/8" CSG.



JOB NO.:	DDOK-110466	Report Time:	2400	2 of 5
Company:	St. James	API JOB #	05-123-34148-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbauge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTRANGE:	24	64W
WELL NAME:	Larson Farms 4-24			

From Wednesday, September 14, 2011 at 0000 to Wednesday, September 14, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters											
Start Depth		784.00	Rotary Hours		4.93	WOB		15	Pick UP		65	Slack Off		60	SPM		
End Depth		2395.00	Circulating Hours		0.00	RAB		62	SPP		1250	FlowRate		440 - 440	105		
Total Drilled:		1611.00	Avg. Total ROP:		208.32	Mud Data											
Total Rotary Drilled:		1213.00	Avg. Rotary ROP:		245.88	Type	Water					PV	0	SOLID		0	
Total Drilled Sliding:		398.00	Avg. Slide ROP:		142.14	Weight		8.7	GAS		0	YP	0	BHT°		0	
Slide Hours:		2.80	Percent Rotary:		75.29	Viscosity		45	SAND		0	PH	0	Flow T°		0	
Below Rotary Hrs.		21.00	Percent Slide:		24.71	Chlorides		0	WL		0			Oil %		0	
PERSONNEL						CASING						BHA					
Lead Directional :		David Cathey				Size		Lb/ft		Set Depth		BHA # 2:7 7/8" Hughes HCD405Z, 6 1/4" 7/8 _ 4.8 Stage 1.5 FBH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,					
Second Directional :		Ronnie Garcia & Coty Jeane				8 5/8		36		760							
MWD Operator1		Cody Hart				Signature:											
MWD Operator2																	
Directional Company:		MS Energy															
Geologist:																	
Company Man:		Eric Geiger										Daily Cost		\$7,500.00			
Incl. In:		1.5	Azm. In:		2.3	Incl. Out:		23.5	Azm. Out:		93.4	Cummulative Cost:		\$16,385.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
14-Sep-11	00:00	03:00	3.00	784	784	Other	Rig Up & Run Surface CSG & Cement Same.
14-Sep-11	03:00	06:00	3.00	784	784	Other	Cementing
14-Sep-11	06:00	07:30	1.50	784	784	N/U BOPS	N/U BOPS
14-Sep-11	07:30	09:00	1.50	784	784	Test BOPS	Test BOPS
14-Sep-11	09:00	10:35	1.58	784	784	Change BHA	Pick Up BHA 2
14-Sep-11	10:35	11:15	0.67	784	784	TIH	TIH
14-Sep-11	11:15	11:45	0.50	784	784	Drilling Cement	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	11:45	12:25	0.67	784	880	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	12:25	12:35	0.17	880	895	Sliding	Sliding - (WOB:10;GPM :440;TFO:96)
14-Sep-11	12:35	12:45	0.17	895	912	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	12:45	12:53	0.13	912	912	Survey & Conn.	Conn.
14-Sep-11	12:53	12:58	0.08	912	943	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	12:58	13:02	0.07	943	943	Survey & Conn.	Conn.
14-Sep-11	13:02	13:07	0.08	943	958	Sliding	Sliding - (WOB:10;GPM :440;TFO:96)
14-Sep-11	13:07	13:09	0.03	958	974	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	13:09	13:15	0.10	974	974	Survey & Conn.	Survey & Conn@912- 2.8 Inc- 60.30 Azm
14-Sep-11	13:15	13:18	0.05	974	989	Sliding	Sliding - (WOB:10;GPM :440;TFO:140)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
14-Sep-11	13:18	13:21	0.05	989	1006	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	13:21	13:23	0.03	1006	1006	Survey & Conn.	Conn.
14-Sep-11	13:23	13:27	0.07	1006	1037	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	13:27	13:34	0.12	1037	1037	Survey & Conn.	Conn.
14-Sep-11	13:34	13:41	0.12	1037	1052	Sliding	Sliding - (WOB:10;GPM :440;TFO:97)
14-Sep-11	13:41	13:43	0.03	1052	1069	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	13:43	13:50	0.12	1069	1069	Survey & Conn.	Survey & Conn@1007- 5.3 Inc- 100.60 Azm
14-Sep-11	13:50	13:55	0.08	1069	1084	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
14-Sep-11	13:55	13:57	0.03	1084	1100	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	13:57	14:00	0.05	1100	1100	Survey & Conn.	Conn.
14-Sep-11	14:00	14:04	0.07	1100	1132	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	14:04	14:12	0.13	1132	1132	Survey & Conn.	Conn.
14-Sep-11	14:12	14:17	0.08	1132	1142	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	14:17	14:20	0.05	1142	1164	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	14:20	14:28	0.13	1164	1164	Survey & Conn.	Survey & Conn@1102- 9.2 Inc- 105.1 Azm
14-Sep-11	14:28	14:31	0.05	1164	1174	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	14:31	14:33	0.03	1174	1195	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	14:33	14:36	0.05	1195	1195	Survey & Conn.	Conn.
14-Sep-11	14:36	14:40	0.07	1195	1227	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	14:40	14:45	0.08	1227	1227	Survey & Conn.	Conn.
14-Sep-11	14:45	14:50	0.08	1227	1237	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	14:50	14:52	0.03	1237	1258	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	14:52	15:01	0.15	1258	1258	Survey & Conn.	Survey & Conn@1196- 11.7 Inc- 103.00 Azm
14-Sep-11	15:01	15:04	0.05	1258	1268	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	15:04	15:07	0.05	1268	1290	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	15:07	15:09	0.03	1290	1290	Survey & Conn.	Conn.
14-Sep-11	15:09	15:13	0.07	1290	1321	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	15:13	15:20	0.12	1321	1321	Survey & Conn.	Conn.
14-Sep-11	15:20	15:23	0.05	1321	1331	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	15:23	15:26	0.05	1331	1353	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	15:26	15:34	0.13	1353	1353	Survey & Conn.	Survey & Conn@1291- 13.30 Inc- 99.00 Azm
14-Sep-11	15:34	15:38	0.07	1353	1363	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
14-Sep-11	15:38	15:41	0.05	1363	1385	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	15:41	15:42	0.02	1385	1385	Survey & Conn.	Conn.
14-Sep-11	15:42	15:48	0.10	1385	1416	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	15:48	15:54	0.10	1416	1416	Survey & Conn.	Conn.
14-Sep-11	15:54	16:00	0.10	1416	1431	Sliding	Sliding - (WOB:10;GPM :440;TFO:300)
14-Sep-11	16:00	16:02	0.03	1431	1448	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	16:02	16:11	0.15	1448	1448	Survey & Conn.	Survey & Conn@1386- 15.00 Inc- 100.50 Azm
14-Sep-11	16:11	16:13	0.03	1448	1458	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	16:13	16:20	0.12	1458	1479	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	16:20	16:22	0.03	1479	1479	Survey & Conn.	Conn.
14-Sep-11	16:22	16:27	0.08	1479	1510	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	16:27	16:36	0.15	1510	1510	Survey & Conn.	Conn.
14-Sep-11	16:36	16:38	0.03	1510	1520	Sliding	Sliding - (WOB:10;GPM :440;TFO:330)
14-Sep-11	16:38	16:42	0.07	1520	1539	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	16:42	16:49	0.12	1539	1539	Survey & Conn.	Survey & Conn@1477- 16.60 Inc- 96.90 Azm
14-Sep-11	16:49	16:54	0.08	1539	1549	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
14-Sep-11	16:54	16:58	0.07	1549	1571	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
14-Sep-11	16:58	17:00	0.03	1571	1571	Survey & Conn.	Conn.
14-Sep-11	17:00	17:06	0.10	1571	1602	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	17:06	17:17	0.18	1602	1602	Survey & Conn.	Conn.
14-Sep-11	17:17	17:21	0.07	1602	1612	Sliding	Sliding - (WOB:10;GPM :440;TFO:HS)
14-Sep-11	17:21	17:25	0.07	1612	1634	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	17:25	17:34	0.15	1634	1634	Survey & Conn.	Survey & Conn@1572- 17.40 Inc- 94.70 Azm
14-Sep-11	17:34	17:40	0.10	1634	1644	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	17:40	17:45	0.08	1644	1664	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	17:45	17:47	0.03	1664	1664	Survey & Conn.	Conn.
14-Sep-11	17:47	17:55	0.13	1664	1695	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	17:55	18:05	0.17	1695	1695	Survey & Conn.	Survey & Conn.
14-Sep-11	18:05	18:15	0.17	1695	1705	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	18:15	18:23	0.13	1705	1727	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	18:23	18:32	0.15	1727	1727	Survey & Conn.	Survey & Conn@1665- 18.1 Inc- 94.00 Azm
14-Sep-11	18:32	18:39	0.12	1727	1737	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	18:39	18:50	0.18	1737	1758	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	18:50	18:54	0.07	1758	1758	Survey & Conn.	Conn.
14-Sep-11	18:54	19:02	0.13	1758	1790	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	19:02	19:11	0.15	1790	1790	Survey & Conn.	Survey & Conn.
14-Sep-11	19:11	19:17	0.10	1790	1800	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	19:17	19:22	0.08	1800	1821	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	19:22	19:30	0.13	1821	1821	Survey & Conn.	Survey & Conn@1759- 18.9 Inc- 91.2 Azm
14-Sep-11	19:30	19:35	0.08	1821	1835	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
14-Sep-11	19:35	19:39	0.07	1835	1853	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	19:39	19:43	0.07	1853	1853	Survey & Conn.	Conn.
14-Sep-11	19:43	19:49	0.10	1853	1885	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	19:49	19:54	0.08	1885	1885	Survey & Conn.	Survey & Conn.
14-Sep-11	19:54	20:01	0.12	1885	1895	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
14-Sep-11	20:01	20:06	0.08	1895	1917	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	20:06	20:15	0.15	1917	1917	Survey & Conn.	Survey & Conn@1855- 20.2 Inc- 96.1 Azm
14-Sep-11	20:15	20:18	0.05	1917	1927	Sliding	Sliding - (WOB:10;GPM :440;TFO:350)
14-Sep-11	20:18	20:23	0.08	1927	1948	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	20:23	20:29	0.10	1948	1948	Survey & Conn.	Conn.
14-Sep-11	20:29	20:34	0.08	1948	1980	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	20:34	20:40	0.10	1980	1980	Survey & Conn.	Survey & Conn.
14-Sep-11	20:40	20:46	0.10	1980	1990	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
14-Sep-11	20:46	20:50	0.07	1990	2012	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	20:50	20:58	0.13	2012	2012	Survey & Conn.	Survey & Conn@1950- 20.9 Inc- 91.2 Azm
14-Sep-11	20:58	21:03	0.08	2012	2026	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
14-Sep-11	21:03	21:07	0.07	2026	2043	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	21:07	21:09	0.03	2043	2043	Rig repair	Rig repair, Work On Kelly Spinners
14-Sep-11	21:09	21:12	0.05	2043	2043	Survey & Conn.	Conn.
14-Sep-11	21:12	21:19	0.12	2043	2075	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	21:19	21:28	0.15	2075	2075	Survey & Conn.	Survey & Conn.
14-Sep-11	21:28	21:33	0.08	2075	2090	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
14-Sep-11	21:33	21:36	0.05	2090	2107	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	21:36	21:39	0.05	2107	2107	Rig repair	Rig repair, Work On Kelly Spinners.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
14-Sep-11	21:39	21:47	0.13	2107	2107	Survey & Conn.	Survey & Conn@2045- 20.4 Inc- 91.4 Azm
14-Sep-11	21:47	21:53	0.10	2107	2122	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
14-Sep-11	21:53	21:57	0.07	2122	2139	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	21:57	21:59	0.03	2139	2139	Survey & Conn.	Conn.
14-Sep-11	21:59	22:04	0.08	2139	2170	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	22:04	22:11	0.12	2170	2170	Survey & Conn.	Survey & Conn.
14-Sep-11	22:11	22:17	0.10	2170	2185	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
14-Sep-11	22:17	22:21	0.07	2185	2202	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	22:21	22:29	0.13	2202	2202	Survey & Conn.	Survey & Conn@2140- 22.3 Inc- 90.6 Azm
14-Sep-11	22:29	22:35	0.10	2202	2217	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
14-Sep-11	22:35	22:39	0.07	2217	2233	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	22:39	22:41	0.03	2233	2233	Survey & Conn.	Conn.
14-Sep-11	22:41	22:46	0.08	2233	2264	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	22:46	22:54	0.13	2264	2264	Survey & Conn.	Survey & Conn.
14-Sep-11	22:54	22:59	0.08	2264	2279	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
14-Sep-11	22:59	23:04	0.08	2279	2296	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	23:04	23:12	0.13	2296	2296	Survey & Conn.	Survey & Conn@2234- 23.4 Inc- 91.6 Azm
14-Sep-11	23:12	23:17	0.08	2296	2311	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
14-Sep-11	23:17	23:23	0.10	2311	2328	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	23:23	23:25	0.03	2328	2328	Survey & Conn.	Conn.
14-Sep-11	23:25	23:31	0.10	2328	2358	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	23:31	23:39	0.13	2358	2358	Survey & Conn.	Survey & Conn.
14-Sep-11	23:39	23:44	0.08	2358	2373	Sliding	Sliding - (WOB:10;GPM :440;TFO:20)
14-Sep-11	23:44	23:49	0.08	2373	2390	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
14-Sep-11	23:49	23:57	0.13	2390	2390	Survey & Conn.	Survey & Conn@2328- 23.5 Inc- 93.4 Azm
14-Sep-11	23:57	24:00	0.05	2390	2395	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)



JOB NO.:	DDOK-110466	Report Time:	2400	3 of 5
Company:	St. James	API JOB #	05-123-34148-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbauge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTRANGE:	24	64W
WELL NAME:	Larson Farms 4-24			

From Thursday, September 15, 2011 at 0000 to Thursday, September 15, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters											
Start Depth		2395.00	Rotary Hours		10.32	WOB		10	Pick UP		75	Slack Off		65	SPM		
End Depth		5309.00	Circulating Hours		0.82	RAB		70	SPP		1500	FlowRate		440 - 440	105		
Total Drilled:		2914.00	Avg. Total ROP:		195.57	Mud Data											
Total Rotary Drilled:		2408.00	Avg. Rotary ROP:		233.41	Type	Water					PV	0	SOLID		0	
Total Drilled Sliding:		506.00	Avg. Slide ROP:		110.40	Weight		8.7	GAS		0	YP	0	BHT°		129.2	
Slide Hours:		4.58	Percent Rotary:		82.64	Viscosity		45	SAND		0	PH	0	Flow T°		0	
Below Rotary Hrs.		24.00	Percent Slide:		17.36	Chlorides		0	WL		0			Oil %		0	
PERSONNEL						CASING						BHA					
Lead Directional :		David Cathey				Size		Lb/ft		Set Depth		BHA # 2:7 7/8" Hughes HCD405Z, 6 1/4" 7/8 _ 4.8 Stage 1.5 FBH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,					
Second Directional :		Ronnie Garcia & Coty Jeane				8 5/8		36		760							
MWD Operator1		Cody Hart															
MWD Operator2																	
Directional Company:		MS Energy				Signature:											
Geologist:																	
Company Man:		Eric Geiger										Daily Cost		\$7,500.00			
Incl. In:		23.5	Azm. In:		93.4	Incl. Out:		21.6	Azm. Out:		98.2	Cummulative Cost:		\$23,885.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	00:00	00:03	0.05	2395	2407	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	00:03	00:07	0.07	2407	2420	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	00:07	00:09	0.03	2420	2420	Survey & Conn.	Conn.
15-Sep-11	00:09	00:15	0.10	2420	2450	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	00:15	00:22	0.12	2450	2450	Survey & Conn.	Conn.
15-Sep-11	00:22	00:26	0.07	2450	2465	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	00:26	00:30	0.07	2465	2482	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	00:30	00:38	0.13	2482	2482	Survey & Conn.	Survey & Conn. @ 2420' - 25.0 Inc - 93.9 Azm
15-Sep-11	00:38	00:45	0.12	2482	2502	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	00:45	00:48	0.05	2502	2514	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	00:48	00:50	0.03	2514	2514	Survey & Conn.	Conn.
15-Sep-11	00:50	00:55	0.08	2514	2545	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	00:55	01:02	0.12	2545	2545	Survey & Conn.	Conn.
15-Sep-11	01:02	01:07	0.08	2545	2560	Sliding	Sliding - (WOB:15;GPM :440;TFO:10)
15-Sep-11	01:07	01:11	0.07	2560	2576	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	01:11	01:19	0.13	2576	2576	Survey & Conn.	Survey & Conn @ 2514' - 27.3 Inc - 93.7 Azm
15-Sep-11	01:19	01:27	0.13	2576	2596	Sliding	Sliding - (WOB:15;GPM :440;TFO:0)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	01:27	01:29	0.03	2596	2608	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	01:29	01:31	0.03	2608	2608	Survey & Conn.	Conn.
15-Sep-11	01:31	01:37	0.10	2608	2640	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	01:37	02:00	0.38	2640	2640	Rig Service-Inhole	Rig Service-Inhole
15-Sep-11	02:00	02:07	0.12	2640	2640	Survey & Conn.	Conn.
15-Sep-11	02:07	02:14	0.12	2640	2655	Sliding	Sliding - (WOB:15;GPM :440;TFO:0)
15-Sep-11	02:14	02:17	0.05	2655	2672	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	02:17	02:25	0.13	2672	2672	Survey & Conn.	Survey & Conn @ 2610' - 28.4 Inc - 95.7 Azm
15-Sep-11	02:25	02:31	0.10	2672	2692	Sliding	Sliding - (WOB:15;GPM :440;TFO:0)
15-Sep-11	02:31	02:34	0.05	2692	2704	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	02:34	02:36	0.03	2704	2704	Survey & Conn.	Conn.
15-Sep-11	02:36	02:41	0.08	2704	2735	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	02:41	02:49	0.13	2735	2735	Survey & Conn.	Conn.
15-Sep-11	02:49	02:55	0.10	2735	2750	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	02:55	02:58	0.05	2750	2766	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	02:58	03:07	0.15	2766	2766	Survey & Conn.	Survey & Conn @ 2704' - 30.1 Inc - 96.2 Azm
15-Sep-11	03:07	03:12	0.08	2766	2786	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	03:12	03:17	0.08	2786	2796	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	03:17	03:19	0.03	2796	2796	Survey & Conn.	Conn.
15-Sep-11	03:19	03:25	0.10	2796	2828	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	03:25	03:32	0.12	2828	2828	Survey & Conn.	Conn.
15-Sep-11	03:32	03:37	0.08	2828	2843	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	03:37	03:40	0.05	2843	2860	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	03:40	03:48	0.13	2860	2860	Survey & Conn.	Survey & Conn @ 2798' - 31.2 Inc - 96.9 Azm
15-Sep-11	03:48	03:54	0.10	2860	2870	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	03:54	04:00	0.10	2870	2891	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	04:00	04:08	0.13	2891	2891	Survey & Conn.	Conn.
15-Sep-11	04:08	04:12	0.07	2891	2906	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	04:12	04:14	0.03	2906	2923	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	04:14	04:16	0.03	2923	2923	Survey & Conn.	Conn.
15-Sep-11	04:16	04:22	0.10	2923	2954	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	04:22	04:30	0.13	2954	2954	Survey & Conn.	Survey & Conn @ 2892' - 34.4 Inc - 96.8 Azm
15-Sep-11	04:30	04:34	0.07	2954	2964	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	04:34	04:39	0.08	2964	2984	Drilling	Drilling - (WOB:15;GPM :440;RPM:78)
15-Sep-11	04:39	04:41	0.03	2984	2984	Survey & Conn.	Conn.
15-Sep-11	04:41	04:46	0.08	2984	3016	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	04:46	04:48	0.03	3016	3016	Survey & Conn.	Conn.
15-Sep-11	04:48	04:54	0.10	3016	3048	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	04:54	05:02	0.13	3048	3048	Survey & Conn.	Survey & Conn @ 2986' - 36.7 Inc - 98.1 Azm
15-Sep-11	05:02	05:13	0.18	3048	3077	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	05:13	05:23	0.17	3077	3077	Survey & Conn.	Conn.
15-Sep-11	05:23	05:31	0.13	3077	3109	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	05:31	05:33	0.03	3109	3109	Survey & Conn.	Conn.
15-Sep-11	05:33	05:41	0.13	3109	3141	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	05:41	05:49	0.13	3141	3141	Survey & Conn.	Survey & Conn@3079- 34.0 Inc- 97.90 Azm
15-Sep-11	05:49	05:51	0.03	3141	3151	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	05:51	05:59	0.13	3151	3172	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	05:59	06:08	0.15	3172	3172	Survey & Conn.	Survey & Conn@3174- 33.70 Inc- 97.60 Azm

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	06:08	06:14	0.10	3172	3187	Sliding	Sliding - (WOB:10;GPM :440;TFO:HS)
15-Sep-11	06:14	06:19	0.08	3187	3205	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	06:19	06:21	0.03	3205	3205	Survey & Conn.	Conn.
15-Sep-11	06:21	06:31	0.17	3205	3236	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	06:31	06:39	0.13	3236	3236	Survey & Conn.	Survey & Conn@3174- 35.00 Inc- 97.00 Azm
15-Sep-11	06:39	06:44	0.08	3236	3246	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	06:44	06:50	0.10	3246	3268	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	06:50	06:53	0.05	3268	3268	Survey & Conn.	Conn.
15-Sep-11	06:53	07:02	0.15	3268	3300	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	07:02	07:09	0.12	3300	3300	Survey & Conn.	Conn.
15-Sep-11	07:09	07:17	0.13	3300	3310	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	07:17	07:21	0.07	3310	3332	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	07:21	07:29	0.13	3332	3332	Survey & Conn.	Survey & Conn@3270- 36.40 Inc- 97.30 Azm
15-Sep-11	07:29	07:37	0.13	3332	3342	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	07:37	07:42	0.08	3342	3363	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	07:42	07:44	0.03	3363	3363	Survey & Conn.	Conn.
15-Sep-11	07:44	07:53	0.15	3363	3395	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	07:53	07:55	0.03	3395	3395	Survey & Conn.	Conn.
15-Sep-11	07:55	08:00	0.08	3395	3426	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	08:00	08:08	0.13	3426	3426	Survey & Conn.	Survey & Conn@3364- 37.60 Inc- 97.30 Azm
15-Sep-11	08:08	08:15	0.12	3426	3436	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	08:15	08:40	0.42	3436	3520	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	08:40	08:48	0.13	3520	3520	Survey & Conn.	Survey & Conn@3458- 35.20 Inc- 97.40 Azm
15-Sep-11	08:48	08:58	0.17	3520	3535	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	08:58	09:31	0.55	3535	3616	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	09:31	09:39	0.13	3616	3616	Survey & Conn.	Survey & Conn@3554- 33.00 Inc- 97.50 Azm
15-Sep-11	09:39	09:52	0.22	3616	3631	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	09:52	09:57	0.08	3631	3647	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	09:57	09:59	0.03	3647	3647	Survey & Conn.	Conn.
15-Sep-11	09:59	10:06	0.12	3647	3678	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	10:06	10:13	0.12	3678	3678	Survey & Conn.	Conn.
15-Sep-11	10:13	10:22	0.15	3678	3693	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	10:22	10:26	0.07	3693	3709	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	10:26	10:35	0.15	3709	3709	Survey & Conn.	Survey & Conn@3647- 31.30 Inc- 95.10 Azm
15-Sep-11	10:35	10:40	0.08	3709	3719	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	10:40	10:46	0.10	3719	3741	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	10:46	10:48	0.03	3741	3741	Survey & Conn.	Conn.
15-Sep-11	10:48	10:58	0.17	3741	3772	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	10:58	11:08	0.17	3772	3772	Survey & Conn.	Conn.
15-Sep-11	11:08	11:15	0.12	3772	3787	Sliding	Sliding - (WOB:10;GPM :440;TFO:10)
15-Sep-11	11:15	11:19	0.07	3787	3804	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	11:19	11:27	0.13	3804	3804	Survey & Conn.	Survey & Conn@3742- 30.00 Inc- 93.10 Azm
15-Sep-11	11:27	11:35	0.13	3804	3819	Sliding	Sliding - (WOB:10;GPM :440;TFO:30R)
15-Sep-11	11:35	11:39	0.07	3819	3835	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	11:39	11:41	0.03	3835	3835	Survey & Conn.	Conn.
15-Sep-11	11:41	11:49	0.13	3835	3866	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	11:49	11:56	0.12	3866	3866	Survey & Conn.	Conn.
15-Sep-11	11:56	12:01	0.08	3866	3876	Sliding	Sliding - (WOB:10;GPM :440;TFO:30)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	12:01	12:06	0.08	3876	3898	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	12:06	12:14	0.13	3898	3898	Survey & Conn.	Survey & Conn @ 3836' - 31.8 Inc - 94.7 Azm
15-Sep-11	12:14	12:21	0.12	3898	3913	Sliding	Sliding - (WOB:10;GPM :440;TFO:30)
15-Sep-11	12:21	12:35	0.23	3913	3959	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	12:35	12:42	0.12	3959	3959	Survey & Conn.	Conn.
15-Sep-11	12:42	12:47	0.08	3959	3969	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	12:47	12:52	0.08	3969	3991	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	12:52	12:59	0.12	3991	3991	Survey & Conn.	Survey & Conn@3929- 34.00 Inc- 98.70 Azm
15-Sep-11	12:59	13:16	0.28	3991	4055	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	13:16	13:22	0.10	4055	4055	Survey & Conn.	Conn.
15-Sep-11	13:22	13:30	0.13	4055	4084	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	13:30	13:38	0.13	4084	4084	Survey & Conn.	Survey & Conn@4022- 37.40 Inc- 98.40 Azm
15-Sep-11	13:38	13:43	0.08	4084	4116	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	13:43	13:57	0.23	4116	4116	Survey & Conn.	Conn.
15-Sep-11	13:57	14:06	0.15	4116	4147	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	14:06	14:11	0.08	4147	4147	Survey & Conn.	Conn.
15-Sep-11	14:11	14:19	0.13	4147	4177	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	14:19	14:27	0.13	4177	4177	Survey & Conn.	Survey & Conn@4115- 38.20 Inc- 98.50 Azm
15-Sep-11	14:27	14:33	0.10	4177	4208	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	14:33	14:39	0.10	4208	4208	Survey & Conn.	Conn.
15-Sep-11	14:39	14:48	0.15	4208	4239	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	14:48	14:57	0.15	4239	4239	Survey & Conn.	Conn.
15-Sep-11	14:57	15:02	0.08	4239	4244	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	15:02	15:08	0.10	4244	4270	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	15:08	15:17	0.15	4270	4270	Survey & Conn.	Survey & Conn@4208- 39.20 Inc- 98.40 Azm
15-Sep-11	15:17	15:24	0.12	4270	4302	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	15:24	15:34	0.17	4302	4302	Survey & Conn.	Conn.
15-Sep-11	15:34	15:40	0.10	4302	4307	Sliding	Sliding - (WOB:180;GPM :440;TFO:0)
15-Sep-11	15:40	15:47	0.12	4307	4333	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	15:47	15:50	0.05	4333	4333	Survey & Conn.	Conn.
15-Sep-11	15:50	15:59	0.15	4333	4365	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	15:59	16:07	0.13	4365	4365	Survey & Conn.	Survey & Conn.@4303- 38.10 Inc- 99.50 Azm
15-Sep-11	16:07	16:15	0.13	4365	4397	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	16:15	16:21	0.10	4397	4397	Survey & Conn.	Conn.
15-Sep-11	16:21	16:30	0.15	4397	4428	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	16:30	16:40	0.17	4428	4428	Survey & Conn.	Conn.
15-Sep-11	16:40	16:50	0.17	4428	4443	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	16:50	16:54	0.07	4443	4459	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	16:54	17:03	0.15	4459	4459	Survey & Conn.	Survey & Conn@4397- 35.40 Inc- 100.00 Azm
15-Sep-11	17:03	17:09	0.10	4459	4491	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	17:09	17:12	0.05	4491	4491	Survey & Conn.	Conn.
15-Sep-11	17:12	17:19	0.12	4491	4522	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	17:19	17:26	0.12	4522	4522	Survey & Conn.	Conn.
15-Sep-11	17:26	17:45	0.32	4522	4537	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	17:45	17:51	0.10	4537	4554	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	17:51	17:59	0.13	4554	4554	Survey & Conn.	Survey & Conn@4492- 35.30 Inc- 99.80 Azm
15-Sep-11	17:59	18:09	0.17	4554	4584	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	18:09	18:11	0.03	4584	4584	Survey & Conn.	Conn.

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	18:11	18:21	0.17	4584	4617	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	18:21	18:28	0.12	4617	4617	Survey & Conn.	Survey & Conn.
15-Sep-11	18:28	18:34	0.10	4617	4627	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	18:34	18:40	0.10	4627	4648	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	18:40	18:46	0.10	4648	4648	Survey & Conn.	Survey & Conn@4586- 34.90 Inc- 99.10 Azm
15-Sep-11	18:46	18:55	0.15	4648	4680	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	18:55	18:57	0.03	4680	4680	Survey & Conn.	Conn.
15-Sep-11	18:57	19:05	0.13	4680	4711	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	19:05	19:12	0.12	4711	4711	Survey & Conn.	Survey & Conn.
15-Sep-11	19:12	19:18	0.10	4711	4743	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	19:18	19:24	0.10	4743	4743	Survey & Conn.	Survey & Conn@4681- 33.60 Inc- 98.90 Azm
15-Sep-11	19:24	19:31	0.12	4743	4751	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	19:31	19:33	0.03	4751	4751	Survey & Conn.	Conn.
15-Sep-11	19:33	19:38	0.08	4751	4774	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	19:38	19:40	0.03	4774	4774	Survey & Conn.	Conn.
15-Sep-11	19:40	19:46	0.10	4774	4806	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	19:46	19:48	0.03	4806	4806	Survey & Conn.	Survey & Conn.
15-Sep-11	19:48	19:54	0.10	4806	4837	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	19:54	20:02	0.13	4837	4837	Survey & Conn.	Survey & Conn@4775- 31.10 Inc- 100.10 Azm
15-Sep-11	20:02	20:10	0.13	4837	4849	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	20:10	20:14	0.07	4849	4868	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	20:14	20:16	0.03	4868	4868	Survey & Conn.	Conn.
15-Sep-11	20:16	20:21	0.08	4868	4901	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	20:21	20:47	0.43	4901	4901	Rig Service-Inhole	Rig Service-Inhole
15-Sep-11	20:47	20:56	0.15	4901	4933	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	20:56	21:03	0.12	4933	4933	Survey & Conn.	Survey & Conn@4869- 78.80 Inc- 100.70 Azm
15-Sep-11	21:03	21:12	0.15	4933	4948	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	21:12	21:17	0.08	4948	4964	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	21:17	21:19	0.03	4964	4964	Survey & Conn.	Conn.
15-Sep-11	21:19	21:26	0.12	4964	4996	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	21:26	21:28	0.03	4996	4996	Survey & Conn.	Conn.
15-Sep-11	21:28	21:36	0.13	4996	5028	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	21:36	21:43	0.12	5028	5028	Survey & Conn.	Survey & Conn@4964- 27.70 Inc- 102.00 Azm
15-Sep-11	21:43	21:50	0.12	5028	5038	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	21:50	21:55	0.08	5038	5059	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	21:55	21:57	0.03	5059	5059	Survey & Conn.	Conn.
15-Sep-11	21:57	22:05	0.13	5059	5091	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	22:05	22:07	0.03	5091	5091	Survey & Conn.	Conn.
15-Sep-11	22:07	22:14	0.12	5091	5122	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	22:14	22:21	0.12	5122	5122	Survey & Conn.	Survey & Conn@5058- 25.10 Inc- 100.40 Azm
15-Sep-11	22:21	22:31	0.17	5122	5134	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
15-Sep-11	22:31	22:38	0.12	5134	5153	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	22:38	22:40	0.03	5153	5153	Survey & Conn.	Conn.
15-Sep-11	22:40	22:49	0.15	5153	5185	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	22:49	22:51	0.03	5185	5185	Survey & Conn.	Conn.
15-Sep-11	22:51	23:01	0.17	5185	5215	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	23:01	23:09	0.13	5215	5215	Survey & Conn.	Survey & Conn@5151- 22.10 Inc- 98.80 Azm
15-Sep-11	23:09	23:22	0.22	5215	5227	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
15-Sep-11	23:22	23:28	0.10	5227	5247	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	23:28	23:30	0.03	5247	5247	Survey & Conn.	Conn.
15-Sep-11	23:30	23:41	0.18	5247	5278	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	23:41	23:43	0.03	5278	5278	Survey & Conn.	Conn.
15-Sep-11	23:43	23:54	0.18	5278	5309	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
15-Sep-11	23:54	24:00	0.10	5309	5309	Survey & Conn.	Survey & Conn@5245- 21.60 Inc- 98.20 Azm



JOB NO.:	DDOK-110466	Report Time:	2400	4 of 5
Company:	St. James	API JOB #	05-123-34148-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbauge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTRANGE:	24	64W
WELL NAME:	Larson Farms 4-24			

From Friday, September 16, 2011 at 0000 to Friday, September 16, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters					
Start Depth	5309.00	Rotary Hours	16.20	WOB	10	Pick UP	140	Slack Off	85	SPM	
End Depth	7343.00	Circulating Hours	0.00	RAB	115	SPP	1800	FlowRate	440 - 440	105	
Total Drilled:	2034.00	Avg. Total ROP:	108.67	Mud Data							
Total Rotary Drilled:	1944.00	Avg. Rotary ROP:	120.00	Type	Water Base			PV	75	SOLID	5
Total Drilled Sliding:	90.00	Avg. Slide ROP:	35.76	Weight	9.4	GAS	0	YP	6	BHT°	0
Slide Hours:	2.52	Percent Rotary:	95.58	Viscosity	45	SAND	0	PH	8	Flow T°	0
Below Rotary Hrs.	24.00	Percent Slide:	4.42	Chlorides	650	WL	14.4			Oil %	0
PERSONNEL				CASING				BHA			
Lead Directional :	David Cathey			Size	Lb/ft	Set Depth		BHA # 2:7 7/8" Hughes HCD405Z, 6 1/4" 7/8 _ 4.8 Stage 1.5 FBH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,			
Second Directional :	Ronnie Garcia & Coty Jeane			8 5/8	36	760					
MWD Operator1	Cody Hart			Signature:							
MWD Operator2											
Directional Company:	MS Energy										
Geologist:											
Company Man:	Junior Loya						Daily Cost		\$7,500.00		
Incl. In:	21.6	Azm. In:	98.2	Incl. Out:	0.7	Azm. Out:	221.7	Cummulative Cost:		\$31,385.00	

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
16-Sep-11	00:00	00:01	0.02	5309	5309	Survey & Conn.	Survey & Conn@5245- 21.60 Inc- 98.20 Azm
16-Sep-11	00:01	00:09	0.13	5309	5317	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	00:09	00:15	0.10	5317	5340	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	00:15	00:17	0.03	5340	5340	Survey & Conn.	Conn.
16-Sep-11	00:17	00:26	0.15	5340	5372	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	00:26	00:28	0.03	5372	5372	Survey & Conn.	Conn.
16-Sep-11	00:28	00:36	0.13	5372	5403	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	00:36	00:38	0.03	5403	5403	Survey & Conn.	Survey & Conn@5339- 20.30 Inc- 95.90 Azm
16-Sep-11	00:38	00:45	0.12	5403	5418	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	00:45	00:51	0.10	5418	5418	Survey & Conn.	Survey
16-Sep-11	00:51	00:54	0.05	5418	5434	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	00:54	00:56	0.03	5434	5434	Survey & Conn.	Conn.
16-Sep-11	00:56	01:05	0.15	5434	5466	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	01:05	01:07	0.03	5466	5466	Survey & Conn.	Conn.
16-Sep-11	01:07	01:14	0.12	5466	5496	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	01:14	01:22	0.13	5496	5496	Survey & Conn.	Survey & Conn@5432- 18.50 Inc- 95.50 Azm
16-Sep-11	01:22	01:28	0.10	5496	5528	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
16-Sep-11	01:28	01:30	0.03	5528	5528	Survey & Conn.	Conn.
16-Sep-11	01:30	01:40	0.17	5528	5558	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	01:40	01:42	0.03	5558	5558	Survey & Conn.	Conn.
16-Sep-11	01:42	01:50	0.13	5558	5590	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	01:50	01:58	0.13	5590	5590	Survey & Conn.	Survey & Conn@5526- 17.20 Inc- 96.70 Azm
16-Sep-11	01:58	02:06	0.13	5590	5621	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	02:06	02:08	0.03	5621	5621	Survey & Conn.	Conn.
16-Sep-11	02:08	02:16	0.13	5621	5653	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	02:16	02:18	0.03	5653	5653	Survey & Conn.	Conn.
16-Sep-11	02:18	02:27	0.15	5653	5683	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	02:27	02:34	0.12	5683	5683	Survey & Conn.	Survey & Conn@5619- 14.90 Inc- 94.10 Azm
16-Sep-11	02:34	02:46	0.20	5683	5714	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	02:46	02:48	0.03	5714	5714	Survey & Conn.	Conn.
16-Sep-11	02:48	02:58	0.17	5714	5745	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	02:58	03:00	0.03	5745	5745	Survey & Conn.	Conn.
16-Sep-11	03:00	03:10	0.17	5745	5776	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	03:10	03:18	0.13	5776	5776	Survey & Conn.	Survey & Conn@5713- 12.20 Inc- 92.60 Azm
16-Sep-11	03:18	03:30	0.20	5776	5788	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	03:30	03:39	0.15	5788	5806	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	03:39	03:41	0.03	5806	5806	Survey & Conn.	Conn.
16-Sep-11	03:41	03:50	0.15	5806	5838	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	03:50	03:52	0.03	5838	5838	Survey & Conn.	Conn.
16-Sep-11	03:52	04:01	0.15	5838	5869	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	04:01	04:09	0.13	5869	5869	Survey & Conn.	Survey & Conn@5807- 9.90 Inc- 98.50 Azm
16-Sep-11	04:09	04:11	0.03	5869	5872	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	04:11	04:35	0.40	5872	5872	Rig repair	Rig repair, Change 2" Ball Valve On Stand Pipe.
16-Sep-11	04:35	04:45	0.17	5872	5879	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	04:45	04:59	0.23	5879	5901	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	04:59	05:01	0.03	5901	5901	Survey & Conn.	Conn.
16-Sep-11	05:01	05:16	0.25	5901	5932	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	05:16	05:18	0.03	5932	5932	Survey & Conn.	Conn.
16-Sep-11	05:18	05:29	0.18	5932	5965	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	05:29	05:35	0.10	5965	5965	Survey & Conn.	Survey & Conn@5903- 8.4 Inc- 93.40 Azm
16-Sep-11	05:35	05:45	0.17	5965	5997	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	05:45	05:47	0.03	5997	5997	Survey & Conn.	Conn.
16-Sep-11	05:47	05:57	0.17	5997	6029	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	05:57	05:59	0.03	6029	6029	Survey & Conn.	Conn.
16-Sep-11	05:59	06:22	0.38	6029	6060	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	06:22	06:32	0.17	6060	6060	Survey & Conn.	Survey & Conn@5998- 7.5 Inc- 95.40 Azm
16-Sep-11	06:32	07:16	0.73	6060	6070	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	07:16	07:23	0.12	6070	6091	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	07:23	07:26	0.05	6091	6091	Survey & Conn.	Conn.
16-Sep-11	07:26	07:34	0.13	6091	6123	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	07:34	07:43	0.15	6123	6123	Survey & Conn.	Conn.
16-Sep-11	07:43	07:48	0.08	6123	6131	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	07:48	08:12	0.40	6131	6131	Rig repair	Rig repair
16-Sep-11	08:12	08:21	0.15	6131	6153	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	08:21	08:28	0.12	6153	6153	Survey & Conn.	Survey & Conn@6091- 6.2 Inc- 102.6 Azm

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
16-Sep-11	08:28	09:07	0.65	6153	6178	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	09:07	09:15	0.13	6178	6185	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	09:15	09:17	0.03	6185	6185	Survey & Conn.	Conn.
16-Sep-11	09:17	09:29	0.20	6185	6216	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	09:29	09:39	0.17	6216	6216	Survey & Conn.	Conn.
16-Sep-11	09:39	09:58	0.32	6216	6248	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	09:58	10:11	0.22	6248	6248	Rig repair	Rig repair
16-Sep-11	10:11	10:20	0.15	6248	6248	Survey & Conn.	Survey & Conn@6186- 4.4 Inc- 95.10 Azm
16-Sep-11	10:20	10:56	0.60	6248	6273	Sliding	Sliding - (WOB:10;GPM :440;TFO:0)
16-Sep-11	10:56	10:59	0.05	6273	6280	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	10:59	11:08	0.15	6280	6280	Survey & Conn.	Conn.
16-Sep-11	11:08	11:17	0.15	6280	6311	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	11:17	11:24	0.12	6311	6311	Survey & Conn.	Conn.
16-Sep-11	11:24	11:35	0.18	6311	6343	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	11:35	11:46	0.18	6343	6343	Survey & Conn.	Survey & Conn@6281- 3.30 Inc- 93.70 Azm
16-Sep-11	11:46	12:29	0.72	6343	6439	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	12:29	12:35	0.10	6439	6439	Survey & Conn.	Survey & Conn@6377- 2.6 Inc- 96.60 Azm
16-Sep-11	12:35	13:09	0.57	6439	6533	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	13:09	13:18	0.15	6533	6533	Survey & Conn.	Survey & Conn@6471- 1.8 Inc- 104.80 Azm
16-Sep-11	13:18	13:55	0.62	6533	6627	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	13:55	14:08	0.22	6627	6627	Survey & Conn.	Survey & Conn@6565- 1.60 Inc- 83.80 Azm
16-Sep-11	14:08	14:39	0.52	6627	6722	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	14:39	14:47	0.13	6722	6722	Survey & Conn.	Survey & Conn@6660- 1.2 Inc- 74.00 Azm
16-Sep-11	14:47	15:17	0.50	6722	6817	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	15:17	15:27	0.17	6817	6817	Survey & Conn.	Survey & Conn@6755- 1.0 Inc- 88.30 Azm
16-Sep-11	15:27	16:25	0.97	6817	6911	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	16:25	16:35	0.17	6911	6911	Survey & Conn.	Survey & Conn@6849- .30 Inc- 348.60 Azm
16-Sep-11	16:35	18:45	2.17	6911	7006	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	18:45	18:55	0.17	7006	7006	Survey & Conn.	Survey & Conn. @ 6944- .5 Inc Azm 324.9.
16-Sep-11	18:55	19:49	0.90	7006	7100	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	19:49	19:59	0.17	7100	7100	Survey & Conn.	Survey & Conn @ 7038- .5 Inc 260.4 Azm.
16-Sep-11	19:59	21:42	1.72	7100	7195	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	21:42	21:49	0.12	7195	7195	Survey & Conn.	Survey & Conn @ 7133- .4 Inc 154.3 Azm.
16-Sep-11	21:49	23:13	1.40	7195	7291	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
16-Sep-11	23:13	23:23	0.17	7291	7291	Survey & Conn.	Survey & Conn @ 7229- .7 Inc 221.7 Azm.
16-Sep-11	23:23	24:00	0.62	7291	7343	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)



JOB NO.:	DDOK-110466	Report Time:	2400	5 of 5
Company:	St. James	API JOB #	05-123-34148-00	
LOCATION:	Weld County	WORK ORDER#	MS#110463RR	
RIG NAME:	Cade 22	FIELD:	Wattenbauge	
STATE:	Colorado	Township:		
COUNTY:	Weld County	SECTRANGE:	24	64W
WELL NAME:	Larson Farms 4-24			

From Saturday, September 17, 2011 at 0000 to Saturday, September 17, 2011 at 2400

DRILLING SUMMARY						Drilling Parameters											
Start Depth		7343.00	Rotary Hours		3.58	WOB		10	Pick UP		180	Slack Off		100	SPM		
End Depth		7491.00	Circulating Hours		1.43	RAB		135	SPP		1800	FlowRate		440 - 440	105		
Total Drilled:		148.00	Avg. Total ROP:		41.30	Mud Data											
Total Rotary Drilled:		148.00	Avg. Rotary ROP:		41.30	Type	Water Base				PV	8	SOLID		5		
Total Drilled Sliding:		0.00	Avg. Slide ROP:		NA	Weight		9	GAS		0	YP	6	BHT°		0	
Slide Hours:		0.00	Percent Rotary:		100.00	Viscosity		30	SAND		0	PH	8	Flow T°		0	
Below Rotary Hrs.		7.22	Percent Slide:		.00	Chlorides		650	WL		14.4			Oil %		0	
PERSONNEL						CASING						BHA					
Lead Directional :		David Cathey				Size		Lb/ft		Set Depth		BHA # 2:7 7/8" Hughes HCD405Z, 6 1/4" 7/8 _ 4.8 Stage 1.5 FBH, 6 9/16" FLT Sub, 6 1/8" NMPC, 6 1/2" UBHO, 5 15/16" NMDC, 6 3/16" NMDC, 18 Jts 4 1/2" HWDP, 4 1/2" Drill Pipe,					
Second Directional :		Ronnie Garcia & Coty Jeane				8 5/8		36		760							
MWD Operator1		Cody Hart				4 1/2		11.6		7491							
MWD Operator2																	
Directional Company:		MS Energy				Signature:											
Geologist:																	
Company Man:		Junior Loya															
Incl. In:		0.7	Azm. In:		221.7	Incl. Out:		0.4	Azm. Out:		223.3	Daily Cost		\$8,885.00			
												Cummulative Cost:		\$40,270.00			

GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
17-Sep-11	00:00	01:08	1.13	7343	7386	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
17-Sep-11	01:08	01:18	0.17	7386	7386	Survey & Conn.	Survey & Conn @ 7324- .4 Inc 246.3 Azm.
17-Sep-11	01:18	03:35	2.28	7386	7480	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
17-Sep-11	03:35	03:45	0.17	7480	7480	Survey & Conn.	Survey & Conn @ 7418- .4 Inc 223.3 Azm.
17-Sep-11	03:45	03:55	0.17	7480	7491	Drilling	Drilling - (WOB:10;GPM :440;RPM:78)
17-Sep-11	03:55	04:05	0.17	7491	7491	Survey & Conn.	Survey @ TD 7429- .6 Inc 296.9 Azm.
17-Sep-11	04:05	04:14	0.15	7491	7491	Circulating	Circulating
17-Sep-11	04:14	05:30	1.27	7491	7491	Short Trip	Short Trip
17-Sep-11	05:30	06:47	1.28	7491	7491	Circulating	Circulating
17-Sep-11	06:47	11:45	4.97	7491	7491	L/D DP	POOH L/D DP To BHA.
17-Sep-11	11:45	12:11	0.43	7491	7491	Change BHA	Pull MWD & Lay Down BHA.
17-Sep-11	12:11	24:00	11.82	7491	7491	Standby	Standby While Rig Runs Wire Line Loggs & Run & Cement CSG.

BHA # 1

JOB NO.: DDOK-110466 **Work Order:** MS#110463RR **FIELD:** Wattenbauge
Company: St. James **Township:**
LOCATION: Weld County **SECT. RANGE:** 24 64W
RIG NAME: Cade 22 **Lead DD:** David Cathey
STATE: Colorado **Co. Man:** Eric Geiger
COUNTY: Weld County **BHA TYPE:** Steerable Assembly
WELL NAME: Larson Farms 4-24 **BHA WT:** 22223 **Wt @ Jars:** N/A

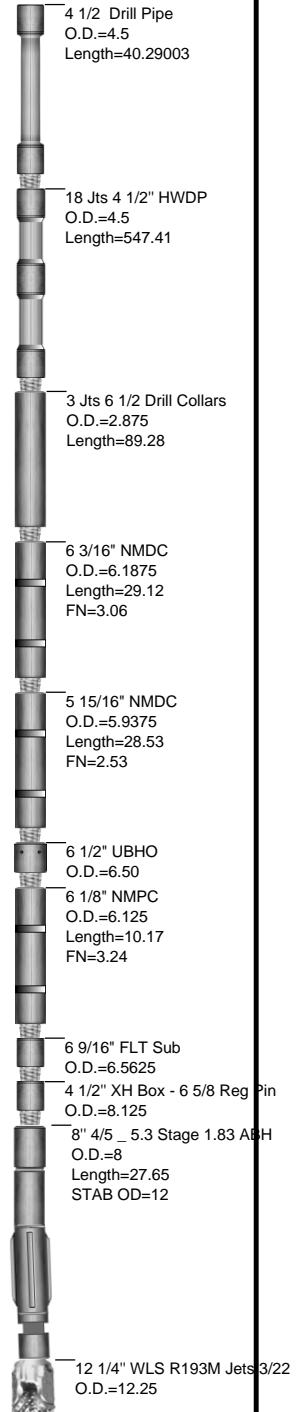
Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 13-Sep-11 @ 14:38	XL PERFORMANCE	SO/PU: 10 - 40 / 10-48
Date Out: 13-Sep-11 @ 23:30	MFG.: Mpac	Rot Strg Wt: 10-45
Hrs In Hole: 8.87	Pad OD: .25	WOB: 10 - 10
Start Depth: 131.00	NB Stab: 12	TORQ: 2 - 2
End Depth: 784.00	Bit to Bend: 6.88	SPP: 1050 - 1200
Total Drilled: 653.00	Bent Hsg/Sub°: 1.83 /	Motor RPM: 110
Avg. Total ROP: 163.93	Lobe/Stage: 4/5 / 5.3	Rotary RPM: 78 - 78
Circ Hrs: Tot/Only 5.17 / 1.18	Rev/GAL: 0.25	Flow Rate: 440 - 440
Percent Slide: 1.53	Rotor Jet: 0	Avg Diff: 300
Percent Hrs: 1.67	Prop BUR: 6	Stall Pres.: 2100
Slide Hours: .07	Act BUR: 2	Off Bot Pres.: 1200
Total Sliding: 10.00		
Avg. Slide ROP: 150.00		
Percent Rotary: 98.47		
Percent Hrs: 98.33		
Rotary Hours: 3.92		
Total Rotary: 643.00		
Avg. Rotary ROP: 164.17		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 61.58	Last Casing	O.D.
	GYRO: 0	DNSC: 0	Sonic: 0	Shoe @:	Hanger @:

INC IN: .7 **INC OUT:** 1.5 **AZM IN:** 11.33 **AZM OUT:** 2.30

BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
12 1/4" WLS R193M Jets 3/22	22020406		12.25	1.00	1.00	6 5/8 REGP	WLS
8" 4/5 _ 5.3 Stage 1.83 ABH	MSD77D116D		8	27.65	28.65	6 5/8 REGB	MPACT
4 1/2" XH Box - 6 5/8 Reg Pin	SD107921	2.8125	8.125	3.71	32.36	4 1/2 XHB	StabilDrill
6 9/16" FLT Sub	SD105679	2.9375	6.5625	3.05	35.41	4 1/2 XHB	Stabil Drill
6 1/8" NMPC	SD38939	2.8125	6.125	10.17	45.58	4 1/2 XHB	Stabil Drill
6 1/2" UBHO	5121	3.00	6.50	3.79	49.37	4 1/2 XHB	MS Energy
5 15/16" NMDC	SD39672	2.875	5.9375	28.53	77.90	4 1/2 XHB	Stabil Drill
6 3/16" NMDC	SD41167	2.875	6.1875	29.12	107.02	4 1/2 XHB	Stabil Drill
3 Jts 6 1/2 Drill Collars	Rig	6.25	2.875	89.28	196.30	4 1/2 XHB	
18 Jts 4 1/2" HWDP	Rig	2.75	4.5	547.41	743.71	4 1/2 XHB	Rig
4 1/2 Drill Pipe	Rig	3.64	4.5	40.29	784.00	X.H.B	Rig



BHA # 2



JOB NO.: DDOK-110466 Work Order: MS#110463RR FIELD: Wattenbauge
 Company: St. James Township:
 LOCATION: Weld County SECT. RANGE: 24 64W
 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 4-24 BHA WT: 156346 Wt @ Jars: N/A

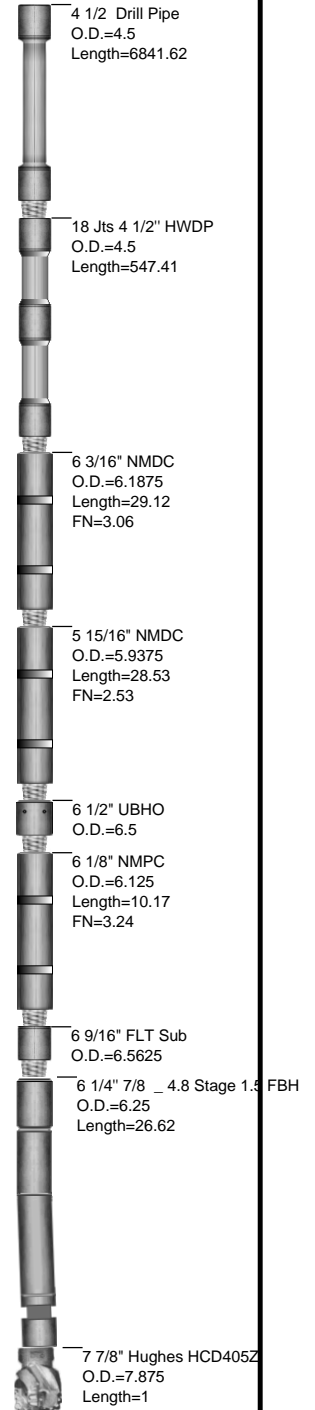
Time and Depths	MOTOR DATA	Drilling Parameters
Date In: 14-Sep-11 @ 10:35	PERFORMANCE	SO/PU: 40 - 100 / 48-180
Date Out: 17-Sep-11 @ 12:11	MFG.: BICO	Rot Strg Wt: 45-135
Hrs In Hole: 68.63	Pad OD: .25	WOB: 10 - 15
Start Depth: 784.00	NB Stab: 0	TORQ: 2 - 2
End Depth: 7491.00	Bit to Bend: 6.47	SPP: 1000 - 1800
Total Drilled: 6707.00	Bent Hsg/Sub°: 1.5 / 0	Motor RPM: 150
Avg. Total ROP: 149.27	Lobe/Stage: 7/8 / 4.8	Rotary RPM: 78 - 78
Circ Hrs: Tot/Only 47.18 / 2.25	Rev/GAL: 0.34	Flow Rate: 440 - 440
Percent Slide: 14.82	Rotor Jet: 0	Avg Diff: 550
Percent Hrs: 22.03	Prop BUR: 10	Stall Pres.: 2500
Slide Hours: 9.90	Act BUR: 12	Off Bot Pres.: 1500
Total Sliding: 994.00		
Avg. Slide ROP: 100.40		
Percent Rotary: 85.18		
Percent Hrs: 77.97		
Rotary Hours: 35.03		
Total Rotary: 5713.00		
Avg. Rotary ROP: 163.07		
Reason POOH: TD		

MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 56.49	Last Casing O.D.
	GYRO: 0	DNSC: 0	Sonic: 0	Shoe @: Hanger @:

INC IN: 1.8 INC OUT: .4 AZM IN: 7.08 AZM OUT: 223.30

BHA Detail

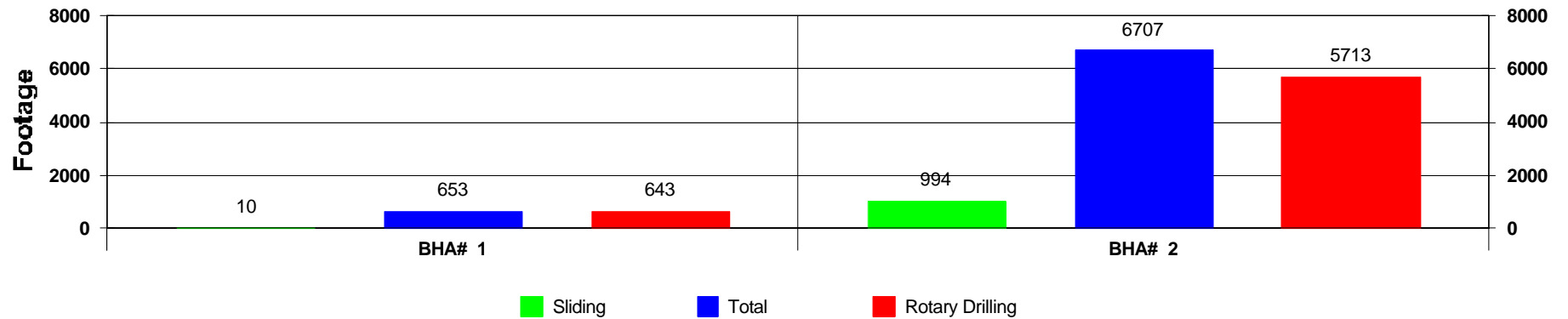
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
7 7/8" Hughes HCD405Z	7021792		7.875	1.00	1.00	4 1/2 REGP	BAKER
6 1/4" 7/8 _ 4.8 Stage 1.5 FBH	K079		6.25	26.62	27.62	4 1/2 XHB	BICO
6 9/16" FLT Sub	SD105679	2.9375	6.5625	3.05	30.67	4 1/2 XHB	Stabil Drill
6 1/8" NMPC	SD38939	2.8125	6.125	10.17	40.84	4 1/2 XHB	Stabil Drill
6 1/2" UBHO	MS6523	2.9375	6.5	3.48	44.32	4 1/2 XHB	MS
5 15/16" NMDC	SD39672	2.875	5.9375	28.53	72.85	4 1/2 XHB	Stabil Drill
6 3/16" NMDC	SD41167	2.875	6.1875	29.12	101.97	4 1/2 XHB	Stabil Drill
18 Jts 4 1/2" HWDP	Rig	2.75	4.5	547.41	649.38	4 1/2 XHB	Rig
4 1/2 Drill Pipe	Rig	3.64	4.5	6,841.62	7491.00	X.H.B	Rig



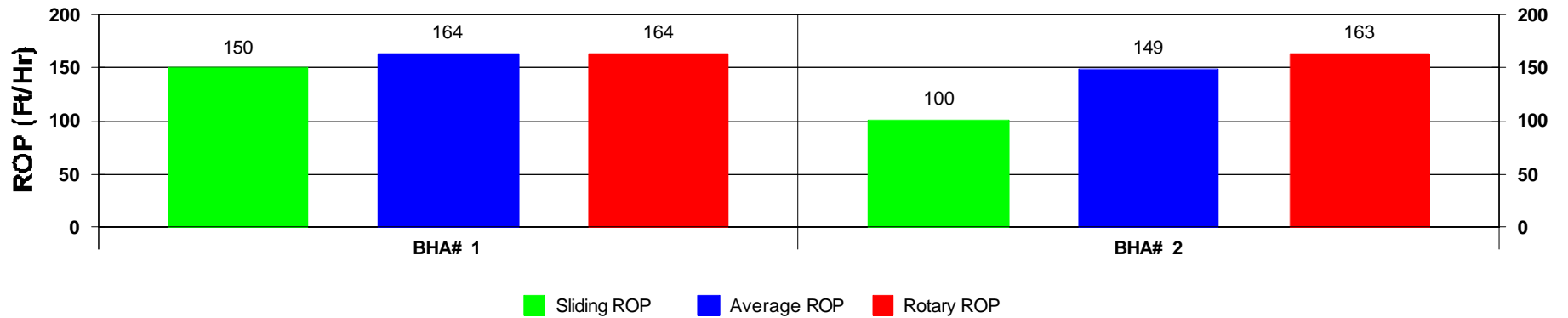


JOB NO.:	DDOK-110466	FIELD:	Wattenbauge	
Company:	St. James	Township:		
LOCATION:	Weld County	SECT/RANGE:	24	64W
RIG NAME:	Cade 22	COMMENT		
STATE:	Colorado			
COUNTY:	Weld County			
WELL NAME:	Larson Farms 4-24			

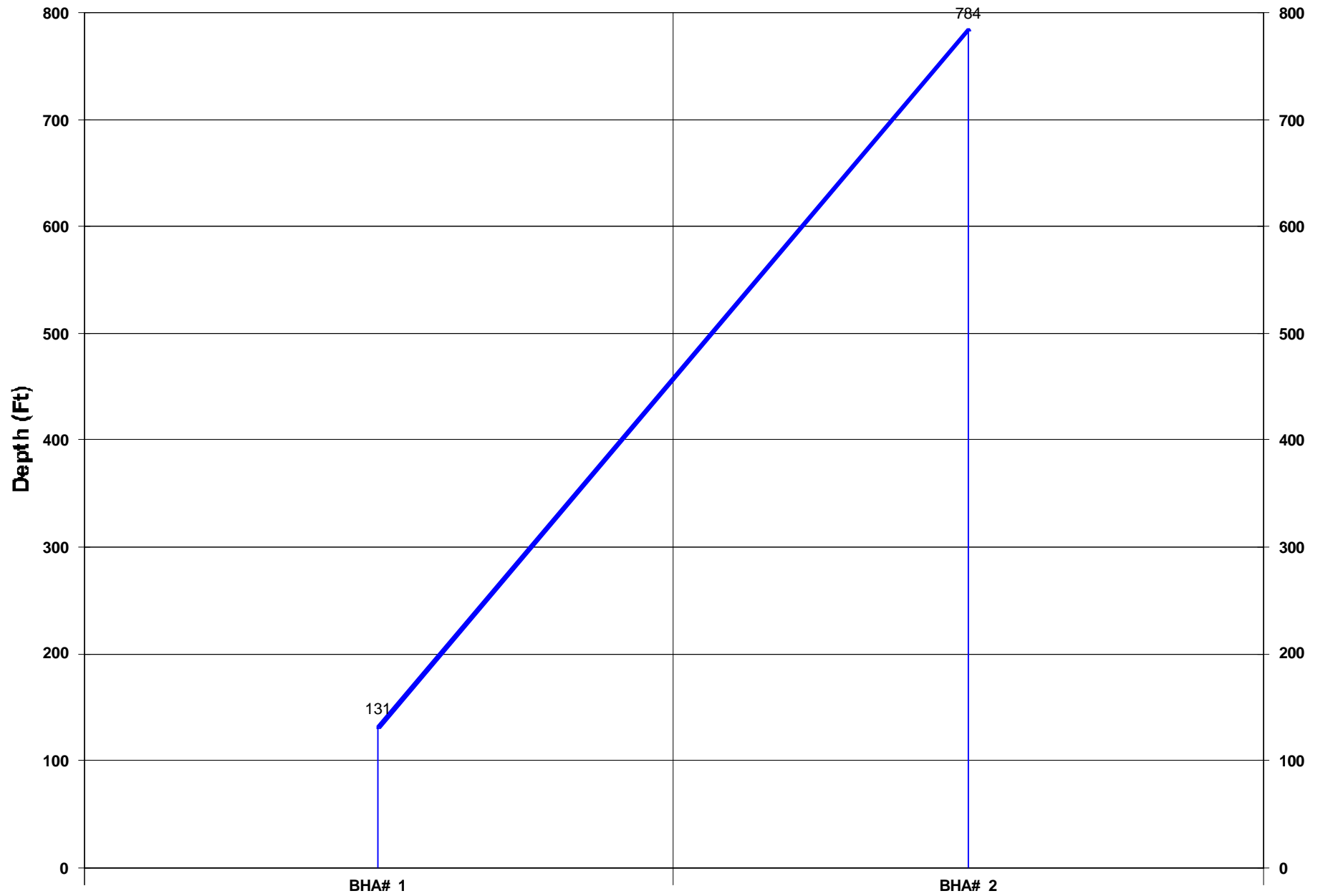
Footage Drilled with BHA



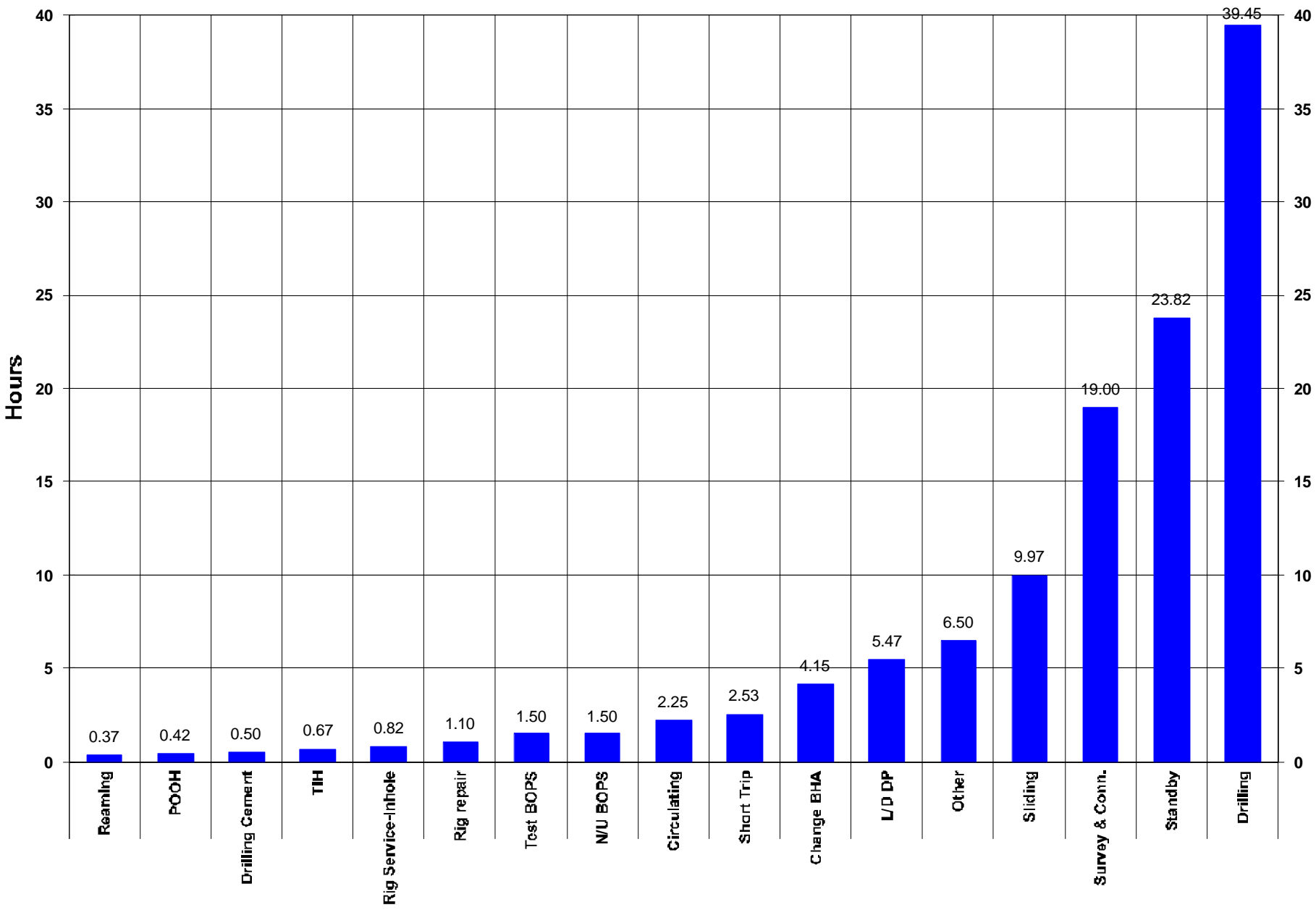
ROP vs BHA



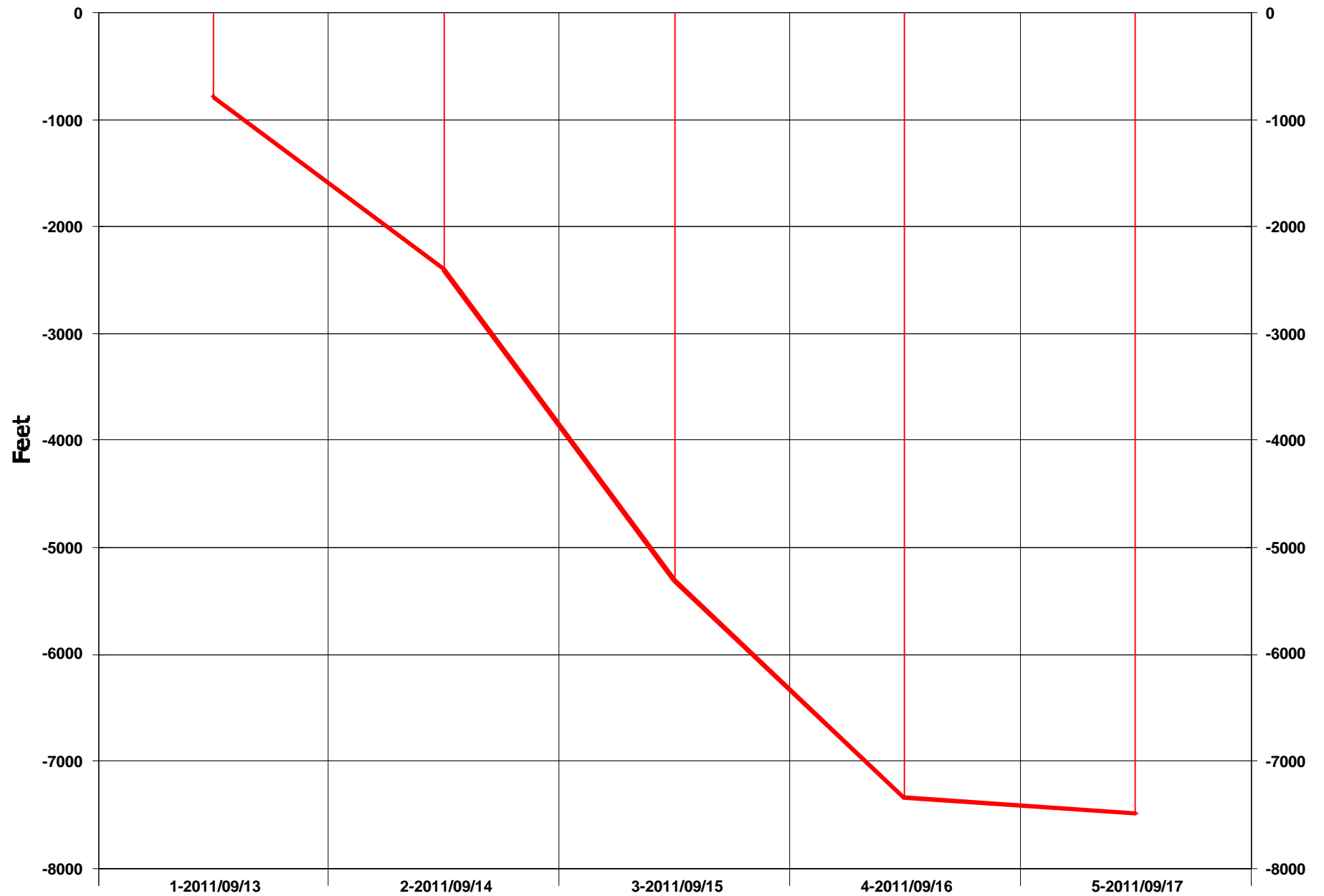
Depth vs BHA



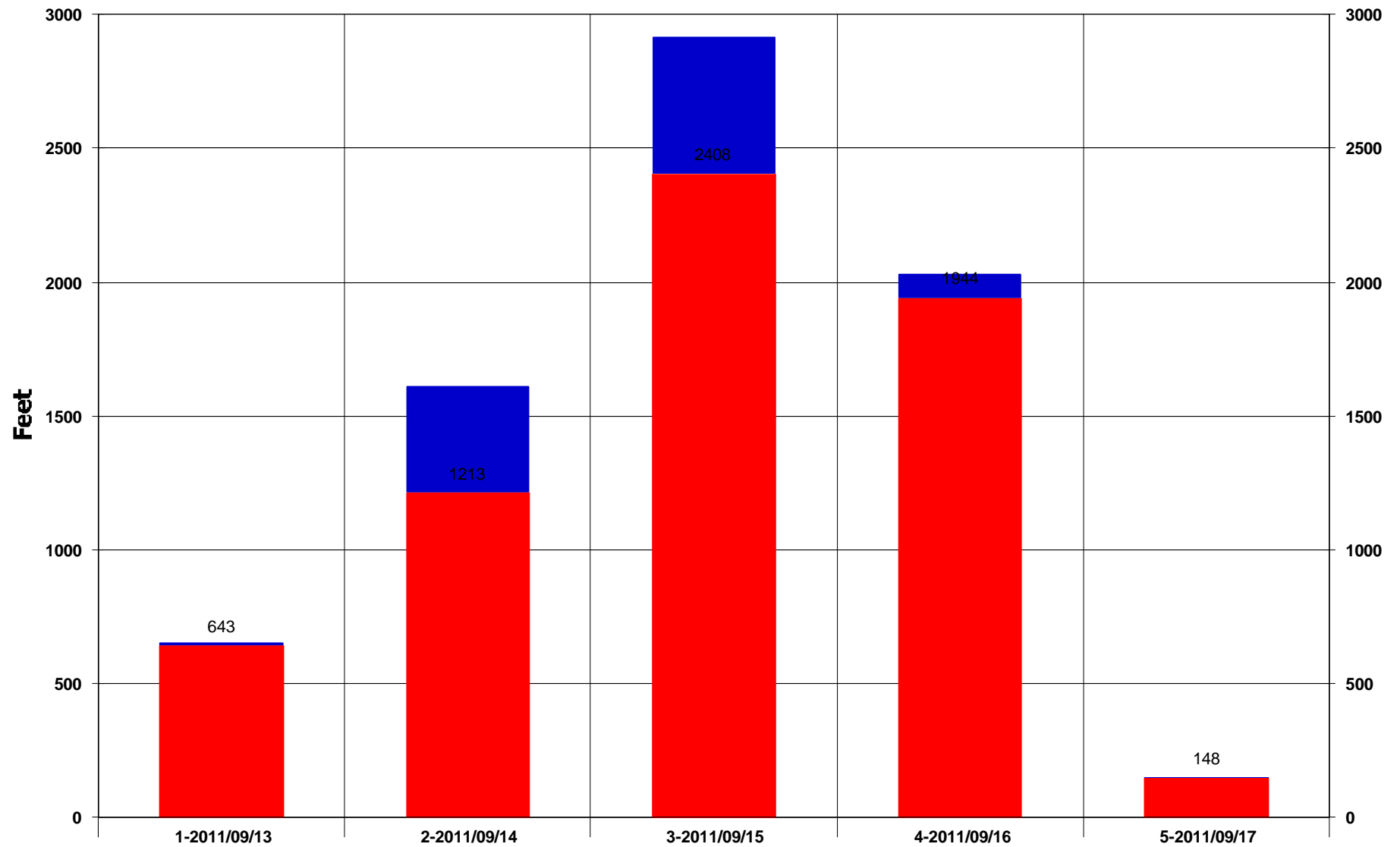
Activity Histogram



Measured Depth vs Days

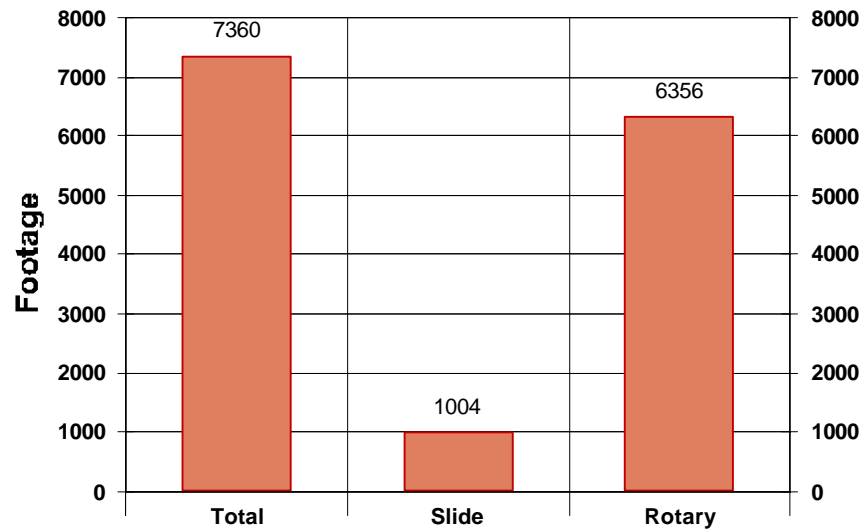


Daily Footage

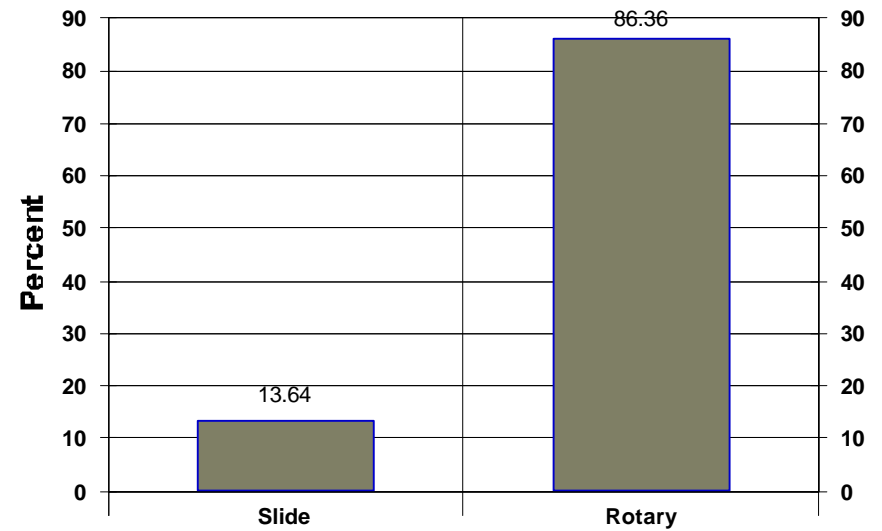


Rotary Drilling Sliding

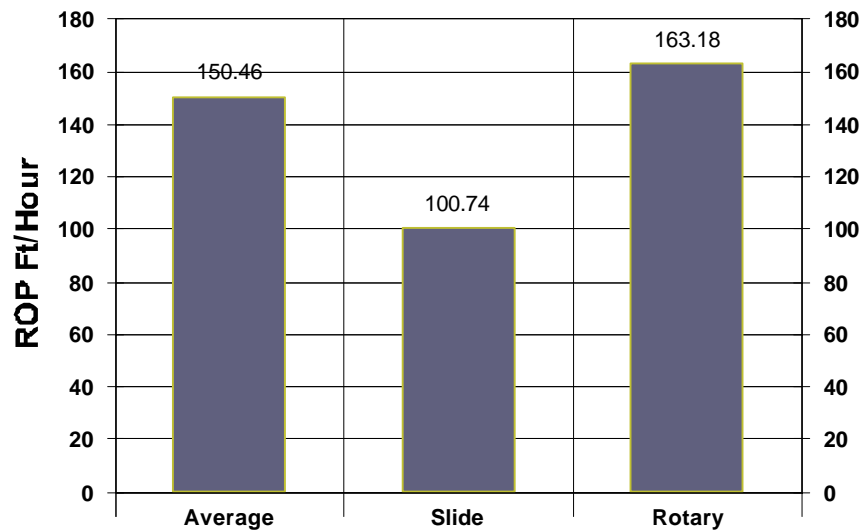
Footage Drilled Totals



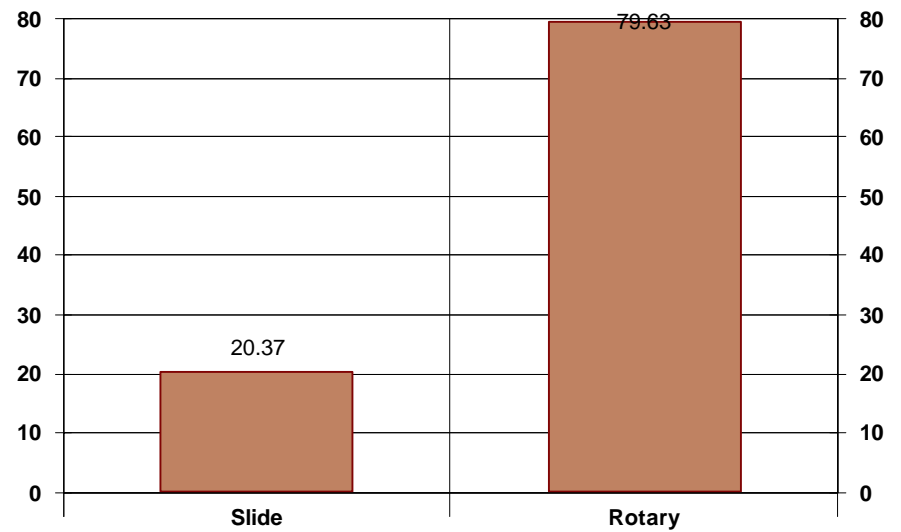
Footage Percent



Rate of Penetration Totals



Time Percent



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