



**B.P.**

**La Plata County, CO NAD83**

**Ford Pad**

**Ford H3**

**OH**

**Design: OH**

## **Standard Survey Report**

**15 January, 2016**



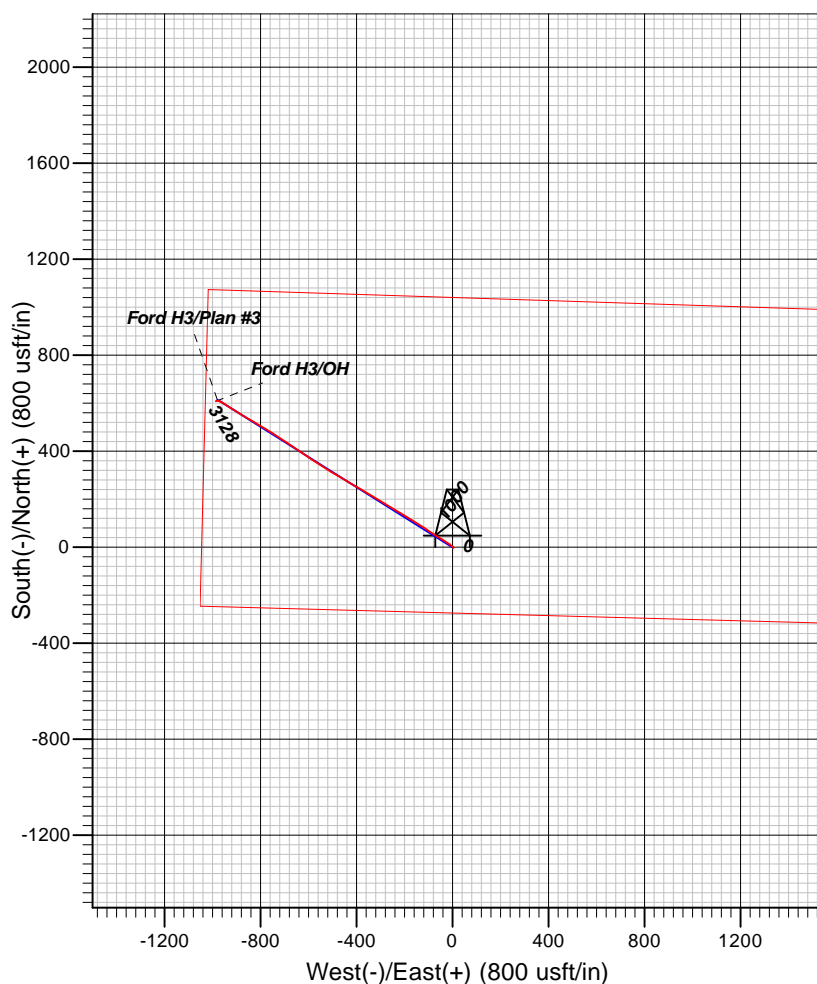
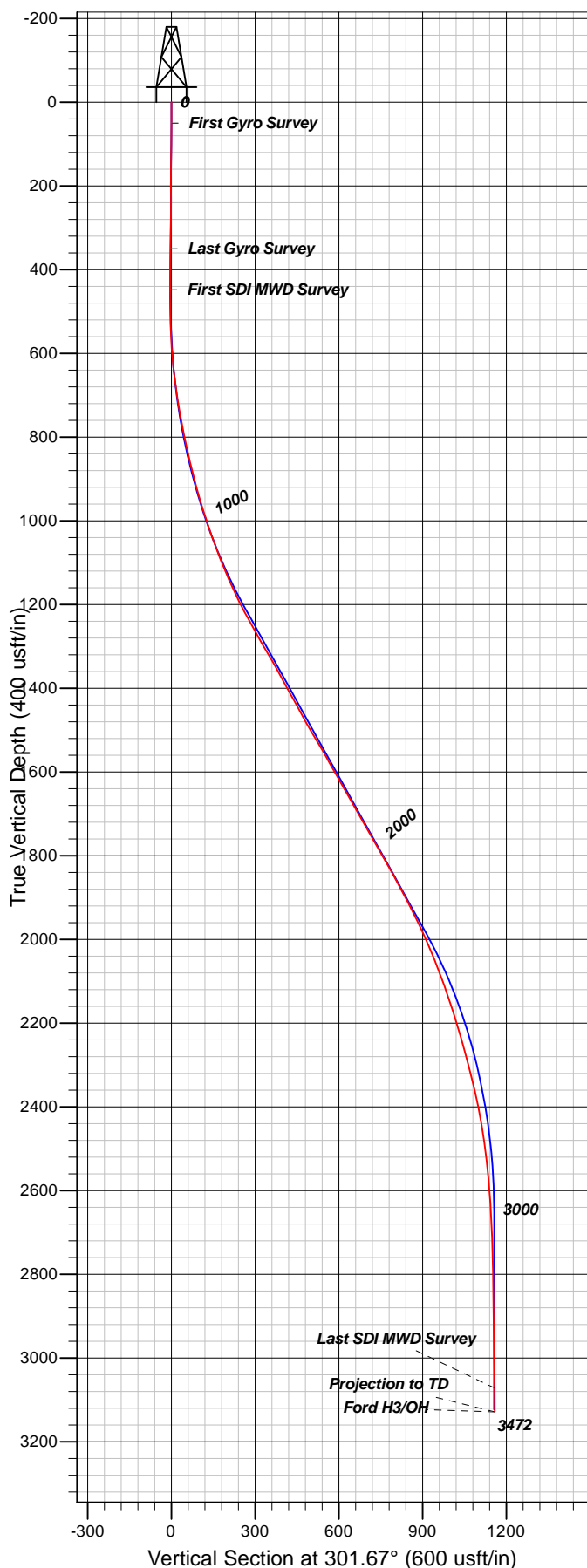
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Company: B.P.  
Project: La Plata County, CO NAD83  
Site: Ford Pad  
Well: Ford H3  
Wellbore: OH  
Design: OH



#### Well Details: Ford H3

TVD Reference: GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507) Level: 6701.27					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1173110.32	2356283.29	37.1211904	-107.7079296

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Ford H3, Grid North  
Vertical (TVD) Reference: GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)  
Calculation Method: Minimum Curvature

#### PROJECT DETAILS: La Plata County, CO NAD83

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Southern Zone

System Datum: Mean Sea Level

Plan: OH

11:04, January 15 2016  
Created By: Janie Collins



<b>Company:</b>	B.P.	<b>Local Co-ordinate Reference:</b>	Well Ford H3
<b>Project:</b>	La Plata County, CO NAD83	<b>TVD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
<b>Site:</b>	Ford Pad	<b>MD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
<b>Well:</b>	Ford H3	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

<b>Project</b>	La Plata County, CO NAD83		
<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 Southern Zone		

Site		Ford Pad					
Site Position:		Northing:	1,173,140.32	usft	Latitude:	37.1212727	
From:	Map	Easting:	2,356,283.14	usft	Longitude:	-107.7079326	
Position Uncertainty:	0.00	usft	Slot Radius:	13.20	in	Grid Convergence:	-1.35 °

Well	Ford H3					
Well Position	+N/-S	0.00 usft	Northing:	1,173,110.32 usft	Latitude:	37.1211903
	+E/-W	0.00 usft	Easting:	2,356,283.29 usft	Longitude:	-107.7079296
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,701.27 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	1/9/2016	9.27	63.70	50,272

<b>Design</b>	OH				
<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	128.59	

<b>Survey Program</b>	<b>Date</b>	1/15/2016			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
50.00	350.00	Survey #1 - Gyro Survey (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
448.00	3,472.00	Survey #2 - MWD Survey (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

<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	
50.00	0.43	139.57	50.00	-0.14	0.12	0.18	0.86	0.86	0.00	
<b>First Gyro Survey</b>										
100.00	0.55	118.00	100.00	-0.40	0.46	0.60	0.44	0.24	-43.14	
150.00	0.59	118.33	150.00	-0.63	0.89	1.09	0.08	0.08	0.66	
200.00	0.63	136.56	199.99	-0.95	1.31	1.62	0.39	0.08	36.46	
250.00	0.58	120.83	249.99	-1.28	1.72	2.14	0.35	-0.10	-31.46	
300.00	0.59	141.02	299.99	-1.61	2.09	2.64	0.41	0.02	40.38	



<b>Company:</b>	B.P.	<b>Local Co-ordinate Reference:</b>	Well Ford H3
<b>Project:</b>	La Plata County, CO NAD83	<b>TVD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
<b>Site:</b>	Ford Pad	<b>MD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
<b>Well:</b>	Ford H3	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

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)
350.00	0.45	125.60	349.99	-1.93	2.42	3.09	0.39	-0.28	-30.84
<b>Last Gyro Survey</b>									
448.00	1.04	86.48	447.98	-2.10	3.62	4.14	0.76	0.60	-39.92
<b>First SDI MWD Survey</b>									
478.00	0.68	81.28	477.97	-2.05	4.06	4.46	1.23	-1.20	-17.33
508.00	1.43	341.84	507.97	-1.67	4.12	4.27	5.60	2.50	-331.47
538.00	3.54	319.75	537.94	-0.61	3.41	3.04	7.60	7.03	-73.63
570.00	5.42	314.42	569.84	1.20	1.69	0.57	6.01	5.88	-16.66
600.00	7.14	310.30	599.66	3.40	-0.74	-2.70	5.92	5.73	-13.73
631.00	8.96	309.40	630.35	6.18	-4.08	-7.04	5.88	5.87	-2.90
661.00	10.60	308.77	659.92	9.39	-8.03	-12.14	5.48	5.47	-2.10
692.00	12.16	304.97	690.31	13.05	-12.93	-18.25	5.58	5.03	-12.26
722.00	13.35	301.60	719.57	16.67	-18.47	-24.84	4.68	3.97	-11.23
753.00	15.07	300.27	749.62	20.58	-25.00	-32.38	5.65	5.55	-4.29
783.00	16.49	301.85	778.49	24.79	-31.99	-40.47	4.94	4.73	5.27
814.00	17.86	303.63	808.10	29.75	-39.68	-49.57	4.73	4.42	5.74
844.00	18.85	303.41	836.58	34.96	-47.56	-58.98	3.31	3.30	-0.73
875.00	19.88	302.83	865.82	40.58	-56.17	-69.21	3.38	3.32	-1.87
906.00	20.78	301.74	894.89	46.33	-65.28	-79.92	3.15	2.90	-3.52
937.00	22.46	301.68	923.71	52.33	-74.99	-91.26	5.42	5.42	-0.19
967.00	24.10	303.43	951.27	58.72	-84.98	-103.05	5.93	5.47	5.83
999.00	25.63	304.88	980.30	66.28	-96.11	-116.46	5.15	4.78	4.53
1,030.00	27.26	305.13	1,008.05	74.20	-107.42	-130.24	5.27	5.26	0.81
1,061.00	27.96	302.73	1,035.52	82.21	-119.34	-144.56	4.24	2.26	-7.74
1,092.00	28.83	302.26	1,062.79	90.13	-131.77	-159.22	2.90	2.81	-1.52
1,123.00	30.17	302.60	1,089.78	98.32	-144.66	-174.39	4.36	4.32	1.10
1,154.00	31.90	301.82	1,116.34	106.83	-158.18	-190.27	5.73	5.58	-2.52
1,186.00	33.60	300.85	1,143.25	115.83	-172.97	-207.45	5.56	5.31	-3.03
1,217.00	35.83	299.96	1,168.73	124.76	-188.19	-224.92	7.38	7.19	-2.87
1,248.00	37.02	300.12	1,193.67	133.98	-204.13	-243.12	3.85	3.84	0.52
1,279.00	38.03	301.45	1,218.26	143.64	-220.35	-261.83	4.18	3.26	4.29
1,311.00	39.24	302.64	1,243.25	154.25	-237.28	-281.67	4.44	3.78	3.72
1,342.00	39.95	302.81	1,267.14	164.93	-253.90	-301.33	2.32	2.29	0.55
1,373.00	40.86	301.25	1,290.75	175.58	-270.94	-321.29	4.39	2.94	-5.03
1,404.00	41.34	300.61	1,314.11	186.05	-288.42	-341.49	2.06	1.55	-2.06
1,436.00	40.09	300.34	1,338.36	196.64	-306.41	-362.15	3.94	-3.91	-0.84
1,467.00	39.29	300.13	1,362.22	206.61	-323.51	-381.74	2.62	-2.58	-0.68
1,498.00	39.47	300.45	1,386.18	216.53	-340.49	-401.20	0.88	0.58	1.03
1,530.00	40.19	301.12	1,410.75	227.02	-358.10	-421.51	2.62	2.25	2.09
1,561.00	39.68	301.05	1,434.52	237.30	-375.14	-441.23	1.65	-1.65	-0.23
1,592.00	38.95	300.83	1,458.51	247.39	-391.99	-460.70	2.40	-2.35	-0.71
1,623.00	40.08	299.58	1,482.42	257.31	-409.04	-480.21	4.46	3.65	-4.03



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<b>Project:</b>	La Plata County, CO NAD83	<b>TVD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
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<b>Well:</b>	Ford H3	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

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)	
1,655.00	41.90	300.42	1,506.58	267.81	-427.21	-500.97	5.94	5.69	2.63	
1,687.00	41.65	300.74	1,530.44	278.66	-445.57	-522.08	1.03	-0.78	1.00	
1,718.00	40.86	300.50	1,553.75	289.07	-463.16	-542.32	2.60	-2.55	-0.77	
1,749.00	39.80	299.83	1,577.38	299.15	-480.50	-562.17	3.69	-3.42	-2.16	
1,780.00	39.99	300.53	1,601.16	309.15	-497.69	-581.84	1.57	0.61	2.26	
1,812.00	41.42	302.67	1,625.42	320.09	-515.46	-602.55	6.24	4.47	6.69	
1,843.00	40.75	302.66	1,648.79	331.08	-532.61	-622.81	2.16	-2.16	-0.03	
1,875.00	39.82	302.29	1,673.20	342.19	-550.06	-643.38	3.00	-2.91	-1.16	
1,938.00	40.21	303.19	1,721.45	364.10	-584.13	-683.68	1.11	0.62	1.43	
1,969.00	41.19	304.83	1,744.95	375.41	-600.89	-703.83	4.68	3.16	5.29	
2,001.00	41.16	303.92	1,769.04	387.30	-618.28	-724.84	1.87	-0.09	-2.84	
2,032.00	40.95	304.34	1,792.41	398.73	-635.13	-745.14	1.12	-0.68	1.35	
2,064.00	40.68	304.24	1,816.63	410.51	-652.41	-765.99	0.87	-0.84	-0.31	
2,095.00	39.92	303.82	1,840.27	421.73	-669.03	-785.98	2.60	-2.45	-1.35	
2,127.00	38.51	303.31	1,865.07	432.92	-685.88	-806.13	4.52	-4.41	-1.59	
2,158.00	37.86	303.40	1,889.43	443.45	-701.89	-825.22	2.10	-2.10	0.29	
2,190.00	37.27	303.39	1,914.80	454.19	-718.18	-844.65	1.84	-1.84	-0.03	
2,221.00	36.87	302.87	1,939.53	464.40	-733.83	-863.25	1.64	-1.29	-1.68	
2,252.00	35.91	302.30	1,964.49	474.31	-749.32	-881.54	3.28	-3.10	-1.84	
2,284.00	34.33	301.07	1,990.66	483.98	-764.98	-899.81	5.41	-4.94	-3.84	
2,315.00	33.53	301.97	2,016.38	493.03	-779.74	-916.99	3.05	-2.58	2.90	
2,347.00	31.58	301.28	2,043.35	502.06	-794.40	-934.08	6.20	-6.09	-2.16	
2,378.00	29.63	300.77	2,070.03	510.19	-807.92	-949.72	6.35	-6.29	-1.65	
2,409.00	27.84	300.96	2,097.22	517.84	-820.71	-964.49	5.78	-5.77	0.61	
2,441.00	27.35	300.93	2,125.58	525.46	-833.42	-979.18	1.53	-1.53	-0.09	
2,472.00	26.98	300.40	2,153.16	532.68	-845.60	-993.20	1.43	-1.19	-1.71	
2,504.00	25.92	300.32	2,181.81	539.88	-857.90	-1,007.30	3.31	-3.31	-0.25	
2,536.00	24.18	300.43	2,210.79	546.73	-869.59	-1,020.71	5.44	-5.44	0.34	
2,567.00	22.74	300.70	2,239.23	553.01	-880.21	-1,032.93	4.66	-4.65	0.87	
2,599.00	21.81	300.50	2,268.84	559.18	-890.65	-1,044.95	2.92	-2.91	-0.63	
2,630.00	21.27	299.87	2,297.68	564.91	-900.49	-1,056.21	1.89	-1.74	-2.03	
2,661.00	20.69	300.97	2,326.62	570.53	-910.06	-1,067.19	2.26	-1.87	3.55	
2,692.00	19.51	303.96	2,355.74	576.24	-919.05	-1,077.78	5.05	-3.81	9.65	
2,724.00	17.70	305.97	2,386.06	582.08	-927.42	-1,087.97	6.00	-5.66	6.28	
2,755.00	15.63	305.51	2,415.76	587.27	-934.64	-1,096.84	6.69	-6.68	-1.48	
2,786.00	13.82	304.06	2,445.74	591.77	-941.10	-1,104.71	5.96	-5.84	-4.68	
2,817.00	12.43	302.02	2,475.93	595.62	-947.00	-1,111.71	4.73	-4.48	-6.58	
2,849.00	11.27	299.15	2,507.25	598.96	-952.65	-1,118.22	4.06	-3.63	-8.97	
2,880.00	9.67	297.58	2,537.73	601.65	-957.60	-1,123.76	5.24	-5.16	-5.06	
2,912.00	8.30	298.18	2,569.34	603.98	-962.02	-1,128.67	4.29	-4.28	1.88	
2,943.00	6.82	297.69	2,600.07	605.89	-965.62	-1,132.68	4.78	-4.77	-1.58	
2,975.00	4.87	291.41	2,631.90	607.27	-968.57	-1,135.84	6.40	-6.09	-19.63	



<b>Company:</b>	B.P.	<b>Local Co-ordinate Reference:</b>	Well Ford H3
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<b>Site:</b>	Ford Pad	<b>MD Reference:</b>	GL 6701.27' & RKB 11' @ 6712.27usft (Aztec 507)
<b>Well:</b>	Ford H3	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

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)	
3,006.00	3.56	292.06	2,662.81	608.11	-970.69	-1,138.02	4.23	-4.23	2.10	
3,037.00	3.00	295.63	2,693.76	608.83	-972.31	-1,139.74	1.92	-1.81	11.52	
3,068.00	2.79	293.68	2,724.72	609.48	-973.73	-1,141.26	0.75	-0.68	-6.29	
3,099.00	2.55	291.79	2,755.69	610.04	-975.07	-1,142.65	0.82	-0.77	-6.10	
3,130.00	2.41	287.81	2,786.66	610.49	-976.33	-1,143.92	0.72	-0.45	-12.84	
3,161.00	2.13	282.98	2,817.64	610.82	-977.51	-1,145.05	1.09	-0.90	-15.58	
3,192.00	1.83	276.17	2,848.62	611.01	-978.56	-1,145.98	1.23	-0.97	-21.97	
3,223.00	1.73	267.14	2,879.60	611.04	-979.52	-1,146.75	0.96	-0.32	-29.13	
3,254.00	1.68	258.28	2,910.59	610.92	-980.43	-1,147.39	0.86	-0.16	-28.58	
3,285.00	1.68	254.93	2,941.58	610.71	-981.32	-1,147.95	0.32	0.00	-10.81	
3,317.00	1.72	252.92	2,973.56	610.45	-982.23	-1,148.50	0.22	0.13	-6.28	
3,348.00	1.55	251.95	3,004.55	610.18	-983.07	-1,148.99	0.56	-0.55	-3.13	
3,380.00	1.73	243.16	3,036.54	609.83	-983.92	-1,149.43	0.97	0.56	-27.47	
3,415.00	1.72	237.70	3,071.52	609.31	-984.83	-1,149.82	0.47	-0.03	-15.60	
Last SDI MWD Survey										
3,472.00	1.72	237.70	3,128.49	608.39	-986.28	-1,150.38	0.00	0.00	0.00	
Projection to TD										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
50.00	50.00	-0.14	0.12	First Gyro Survey	
350.00	349.99	-1.93	2.42	Last Gyro Survey	
448.00	447.98	-2.10	3.62	First SDI MWD Survey	
3,415.00	3,071.52	609.31	-984.83	Last SDI MWD Survey	
3,472.00	3,128.49	608.39	-986.28	Projection to TD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



<b>JOB NO.:</b>	330116DEF338327	<b>Report Time:</b>	2400	1 of 4
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09958	
<b>LOCATION:</b>	Ford Pad	<b>WORK ORDER#</b>	338327	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	33N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	RANGE: 10	8W
<b>WELL NAME:</b>	Ford H3			

From Saturday, January 09, 2016 at 0000 to Saturday, January 09, 2016 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.	24.00	Percent Slide:	NA	Chlorides	0	WL	0			Oil %	0

PERSONNEL						cASING			BHA	
Lead Directional :		Mark Houston				Size	Lb/ft	Set Depth	N/A	
Second Directional :		David Hensley				Signature:				
MWD Operator1		Jim Blosser								
MWD Operator2		Mike Willms								
Directional Company:		SDI								
Geologist:										
Company Man:		Mike Colbert								
Incl. In:	0	Azm. In:	0	Incl. Out:	0	Azm. Out:	0			

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
9-Jan-16	00:00	24:00	24.00	0	0	Other	Move rig & rig up





<b>JOB NO.:</b>	330116DEF338327	<b>Report Time:</b>	2400	2 of 4
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09958	
<b>LOCATION:</b>	Ford Pad	<b>WORK ORDER#</b>	338327	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	33N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	RANGE: 10	8W
<b>WELL NAME:</b>	Ford H3			

From Sunday, January 10, 2016 at 0000 to Sunday, January 10, 2016 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.	24.00	Percent Slide:	NA	Chlorides	0	WL	0			Oil %	0
PERSONNEL				cASING					BHA		
Lead Directional :	Mark Houston			Size	Lb/ft	Set Depth		N/A			
Second Directional :	David Hensley			Signature:							
MWD Operator1	Jim Blosser										
MWD Operator2	Mike Willms										
Directional Company:	SDI										
Geologist:											
Company Man:	Mike Colbert										
Incl. In:	0	Azm. In:	0	Incl. Out:	0	Azm. Out:	0				

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
10-Jan-16	00:00	24:00	24.00	0	0	Other	Rig Operations Drill surface,run csg,nipple up



<b>JOB NO.:</b>	330116DEF338327	<b>Report Time:</b>	2400	3 of 4
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09958	
<b>LOCATION:</b>	Ford Pad	<b>WORK ORDER#</b>	338327	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	33N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	10	8W
<b>WELL NAME:</b>	Ford H3			

From Monday, January 11, 2016 at 0000 to Monday, January 11, 2016 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	430.00	Rotary Hours	6.00	WOB	15	Pick UP	48	Slack Off	32	SPM	
End Depth	2372.00	Circulating Hours	1.85	RAB	40	SPP	1625	FlowRate	0 - 520	240	
Total Drilled:	1942.00	Avg. Total ROP:	196.49	Mud Data							
Total Rotary Drilled:	1299.00	Avg. Rotary ROP:	216.50	Type	wate baser			PV	11	SOLID	5
Total Drilled Sliding:	643.00	Avg. Slide ROP:	165.58	Weight	9.1	GAS	16	YP	10	BHT°	86
Slide Hours:	3.88	Percent Rotary:	66.89	Viscosity	43	SAND	0.2	PH	9.5	Flow T°	70
Below Rotary Hrs.	20.50	Percent Slide:	33.11	Chlorides	500	WL	4.8			Oil %	0
PERSONNEL				cASING					BHA		
Lead Directional :	Mark Houston			Size	Lb/ft	Set Depth		BHA # 1:SEC MM55 5X12, 6 1/2 3.3 7:8 1.50 FBH, HANG OFF, NMPC, NMDC, GAP SUB, NMDC,			
Second Directional :	David Hensley			Signature:							
MWD Operator1	Jim Blosser										
MWD Operator2	Mike Willms										
Directional Company:	SDI										
Geologist:											
Company Man:	Mike Colbert										
Incl. In:	0	Azm. In:	0	Incl. Out:	0	Azm. Out:	0				

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
11-Jan-16	00:00	03:30	3.50	0	0	Test BOPS	Test BOPS
11-Jan-16	03:30	05:00	1.50	0	0	Other	Install new shaker screens & load tools and heavy w on racks
11-Jan-16	05:00	06:30	1.50	430	430	Change BHA	Change BHA P/U BHA #1 (tested Motor Good)
11-Jan-16	06:30	08:15	1.75	430	430	TIH	TIH T/377'
11-Jan-16	08:15	09:40	1.42	430	430	Circulating	Circulating Drill out Float @377' and shoe @ 420'
11-Jan-16	09:40	09:59	0.32	430	489	Drilling	Drilling F/430' T/489'
11-Jan-16	09:59	10:02	0.05	489	489	Survey & Conn.	Survey & Conn. @448' Inc 1.04° Azm 86.48°
11-Jan-16	10:02	10:08	0.10	489	499	Sliding	Slide
11-Jan-16	10:08	10:11	0.05	499	505	Drilling	Drilling - (WOB:15;GPM :479;RPM:60)
11-Jan-16	10:11	10:14	0.05	505	505	Survey & Conn.	Survey & Conn. @448' Inc 1.04° Azm 86.48°
11-Jan-16	10:14	10:18	0.07	505	521	Sliding	Sliding - (WOB:15;GPM :479;TFO:0))
11-Jan-16	10:18	10:22	0.07	521	535	Drilling	Drilling - (WOB:15;GPM :479;RPM:60)
11-Jan-16	10:22	10:25	0.05	535	535	Survey & Conn.	Survey & Conn. @478' Inc 0.68° Azm 81.28°
11-Jan-16	10:25	10:29	0.07	535	551	Sliding	Sliding - (WOB:15;GPM :479;TFO:302M)
11-Jan-16	10:29	10:33	0.07	551	565	Drilling	Drilling - (WOB:15;GPM :479;RPM:60)
11-Jan-16	10:33	10:36	0.05	565	565	Survey & Conn.	Survey & Conn. @508' Inc 1.43° Azm 341.84°
11-Jan-16	10:36	10:41	0.08	565	580	Sliding	Sliding - (WOB:15;GPM :479;TFO:302M)
11-Jan-16	10:41	10:43	0.03	580	595	Drilling	Drilling - (WOB:15;GPM :479;RPM:60)
11-Jan-16	10:43	10:46	0.05	595	595	Survey & Conn.	Survey & Conn. @538' Inc 3.54° Azm 319.75°
11-Jan-16	10:46	10:51	0.08	595	608	Sliding	Sliding - (WOB:15;GPM :479;TFO:302M)
11-Jan-16	10:51	10:56	0.08	608	627	Drilling	Drilling - (WOB:15;GPM :479;RPM:60)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
11-Jan-16	10:56	10:59	0.05	627	627	Survey & Conn.	Survey & Conn.@570' Inc 5.42° Azm 314.42°
11-Jan-16	10:59	11:05	0.10	627	643	Sliding	Sliding - (WOB:15;GPM:479;TFO:302M))
11-Jan-16	11:05	11:08	0.05	643	657	Drilling	Drilling - (WOB:15;GPM:479;RPM:60)
11-Jan-16	11:08	11:11	0.05	657	657	Survey & Conn.	Survey & Conn.@600' Inc 7.14° Azm 310.3°
11-Jan-16	11:11	11:15	0.07	657	671	Sliding	Sliding - (WOB:15; :479;TFO:20L)
11-Jan-16	11:15	11:18	0.05	671	688	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	11:18	11:21	0.05	688	688	Survey & Conn.	Survey & Conn.@631' Inc 8.96° Azm 309.4°
11-Jan-16	11:21	11:25	0.07	688	702	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	11:25	11:29	0.07	702	718	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	11:43	11:47	0.07	749	762	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	11:47	11:49	0.03	762	779	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	11:49	11:52	0.05	779	779	Survey & Conn.	Survey & Conn.@722' Inc 13.35° Azm 301.6°
11-Jan-16	11:52	11:56	0.07	779	793	Sliding	Sliding - (WOB:15; :479;TFO:10L))
11-Jan-16	11:56	12:00	0.07	793	810	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	12:00	12:03	0.05	810	810	Survey & Conn.	Survey & Conn.@753' Inc 15.07° Azm 300.27°
11-Jan-16	12:03	12:08	0.08	810	825	Sliding	Sliding - (WOB:15; :479;TFO:5R))
11-Jan-16	12:08	12:11	0.05	825	840	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	12:11	12:18	0.12	840	840	Survey & Conn.	Survey & Conn.@783' Inc 16.49° Azm 301.85°
11-Jan-16	12:18	12:22	0.07	840	854	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	11:29	11:32	0.05	718	718	Survey & Conn.	Survey & Conn.@661' Inc 10.6° Azm 308.77°
11-Jan-16	11:32	11:36	0.07	718	736	Sliding	Sliding - (WOB:15; :479;TFO:20L))
11-Jan-16	11:36	11:40	0.07	736	749	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	11:40	11:43	0.05	749	749	Survey & Conn.	Survey & Conn.@692' Inc 12.16° Azm 304.97°
11-Jan-16	12:22	12:25	0.05	854	871	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	12:25	12:28	0.05	871	871	Survey & Conn.	Survey & Conn.@814' Inc 17.86° Azm 303.63°
11-Jan-16	12:28	12:32	0.07	871	885	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	12:32	12:35	0.05	885	901	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	12:35	12:38	0.05	901	901	Survey & Conn.	Survey & Conn.@844' Inc 18.85° Azm 303.41°
11-Jan-16	12:38	12:44	0.10	901	919	Sliding	Sliding - (WOB:15; :479;TFO:10L))
11-Jan-16	12:44	12:47	0.05	919	932	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	12:47	13:13	0.43	932	932	Rig Service-Inhole	Rig Service-Inhole
11-Jan-16	16:42	16:45	0.05	1493	1493	Survey & Conn.	Survey & Conn.@1436' Inc 40.09° Azm 300.34°
11-Jan-16	16:45	16:52	0.12	1493	1513	Sliding	Sliding - (WOB:15; :520;TFO:15L))
11-Jan-16	16:52	17:00	0.13	1513	1524	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:00	17:05	0.08	1524	1524	Survey & Conn.	Survey & Conn.@1467' Inc 39.29° Azm 300.13°
11-Jan-16	13:13	13:15	0.03	932	932	Survey & Conn.	Survey & Conn.@875' Inc 19.88° Azm 302.83°
11-Jan-16	13:15	13:19	0.07	932	950	Sliding	Sliding - (WOB:15; :479;TFO:15L)
11-Jan-16	13:19	13:21	0.03	950	963	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	13:21	13:24	0.05	963	963	Survey & Conn.	Survey & Conn.@906' Inc 20.78° Azm 301.74°
11-Jan-16	13:24	13:28	0.07	963	983	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	13:28	13:31	0.05	983	994	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	13:31	13:34	0.05	994	994	Survey & Conn.	Survey & Conn.@937' Inc 22.46° Azm 301.68°
11-Jan-16	13:34	13:37	0.05	994	1010	Sliding	Sliding - (WOB:15; :479;TFO:10R))
11-Jan-16	13:37	13:41	0.07	1010	1024	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	13:41	13:44	0.05	1024	1024	Survey & Conn.	Survey & Conn.@967' Inc 24.1° Azm 303.43°
11-Jan-16	13:44	13:48	0.07	1024	1024	Sliding	Sliding - (WOB:15; :479;TFO:360)
11-Jan-16	13:48	13:51	0.05	1024	1056	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	13:51	13:54	0.05	1056	1056	Survey & Conn.	Survey & Conn.@999' Inc 25.63° Azm 304.88°
11-Jan-16	13:54	14:00	0.10	1056	1074	Sliding	Sliding - (WOB:15; :479;TFO:15L))
11-Jan-16	14:00	14:03	0.05	1074	1087	Drilling	Drilling - (WOB:15; :479;RPM:60)
11-Jan-16	14:03	14:06	0.05	1087	1087	Survey & Conn.	Survey & Conn.@1030' Inc 27.26° Azm 305.13°

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
11-Jan-16	14:06	14:10	0.07	1087	1103	Sliding	Sliding - (WOB:15; :479;TFO:15L)
11-Jan-16	14:10	14:13	0.05	1103	1118	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	14:13	14:16	0.05	1118	1118	Survey & Conn.	Survey & Conn.@1061' Inc 27.96° Azm 302.73°
11-Jan-16	14:16	14:22	0.10	1118	1138	Sliding	Sliding - (WOB:15; :520;TFO:15L))
11-Jan-16	14:22	14:26	0.07	1138	1149	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	14:26	14:30	0.07	1149	1149	Survey & Conn.	Survey & Conn.@1092' Inc 28.83° Azm 302.26°
11-Jan-16	14:30	14:36	0.10	1149	1170	Sliding	Sliding - (WOB:15; :520;TFO:360)
11-Jan-16	14:36	14:39	0.05	1170	1180	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	14:39	14:42	0.05	1180	1180	Survey & Conn.	Survey & Conn.@1123' Inc 30.17° Azm 302.6°
11-Jan-16	14:42	14:49	0.12	1180	1200	Sliding	Sliding - (WOB:15; :520;TFO:360)
11-Jan-16	14:49	14:51	0.03	1200	1211	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	14:51	14:54	0.05	1211	1211	Survey & Conn.	Survey & Conn.@1154' Inc 31.9° Azm 301.82°
11-Jan-16	14:54	15:03	0.15	1211	1231	Sliding	Sliding - (WOB:15; :520;TFO:360)
11-Jan-16	15:03	15:07	0.07	1231	1243	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	15:07	15:10	0.05	1243	1243	Survey & Conn.	Survey & Conn.@1186' Inc 33.6° Azm 300.85°
11-Jan-16	15:10	15:16	0.10	1243	1263	Sliding	Sliding - (WOB:15; :520;TFO:360))
11-Jan-16	15:16	15:20	0.07	1263	1274	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	15:20	15:23	0.05	1274	1274	Survey & Conn.	Survey & Conn.@1217' Inc 35.83° Azm 299.96°
11-Jan-16	15:23	15:29	0.10	1274	1291	Sliding	Sliding - (WOB:15; :520;TFO:10R))
11-Jan-16	15:29	15:33	0.07	1291	1305	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	15:33	15:36	0.05	1305	1305	Survey & Conn.	Survey & Conn.@1248' Inc 37.02° Azm 300.12°
11-Jan-16	15:36	15:43	0.12	1305	1318	Sliding	Sliding - (WOB:15;GPM :520;TFO:30R)
11-Jan-16	15:43	15:47	0.07	1318	1336	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	15:47	15:50	0.05	1336	1336	Survey & Conn.	Survey & Conn.@1279' Inc 38.03° Azm 301.45°
11-Jan-16	15:50	15:55	0.08	1336	1368	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	15:55	15:58	0.05	1368	1368	Survey & Conn.	Survey & Conn.@1311' Inc 39.24° Azm 302.64°
11-Jan-16	15:58	16:05	0.12	1368	1388	Sliding	Sliding - (WOB:15; :520;TFO:30R))
11-Jan-16	16:05	16:14	0.15	1388	1399	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	16:14	16:17	0.05	1399	1399	Survey & Conn.	Survey & Conn.@1342' Inc 39.95° Azm 302.81°
11-Jan-16	16:17	16:24	0.12	1399	1430	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	16:24	16:27	0.05	1430	1430	Survey & Conn.	Survey & Conn.@1373' Inc 40.86° Azm 301.25°
11-Jan-16	16:27	16:34	0.12	1430	1461	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	16:34	16:37	0.05	1461	1461	Survey & Conn.	Survey & Conn.@1404' Inc 41.34° Azm 300.61°
11-Jan-16	16:37	16:42	0.08	1461	1493	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:05	17:10	0.08	1524	1534	Sliding	Sliding - (WOB:15; :520;TFO:15R)
11-Jan-16	17:10	17:15	0.08	1534	1555	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:15	17:20	0.08	1555	1555	Survey & Conn.	Survey & Conn.@1498' Inc 39.47° Azm 300.45°
11-Jan-16	17:20	17:25	0.08	1555	1587	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:25	17:30	0.08	1587	1587	Survey & Conn.	Survey & Conn.@1530' Inc 40.19° Azm 301.12°
11-Jan-16	17:30	17:33	0.05	1587	1597	Sliding	Sliding - (WOB:15; :520;TFO:360))
11-Jan-16	17:33	17:35	0.03	1597	1618	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:35	17:40	0.08	1618	1618	Survey & Conn.	Survey & Conn.@1561' Inc 39.68° Azm 301.05°
11-Jan-16	17:40	17:45	0.08	1618	1638	Sliding	Sliding - (WOB:15; :520;TFO:360)
11-Jan-16	17:45	17:50	0.08	1638	1649	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	17:50	17:55	0.08	1649	1649	Survey & Conn.	Survey & Conn.@1592' Inc 38.95° Azm 300.83°
11-Jan-16	17:55	18:00	0.08	1649	1664	Sliding	Sliding - (WOB:15; :520;TFO:360)
11-Jan-16	18:00	18:05	0.08	1664	1680	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	18:05	18:10	0.08	1680	1680	Survey & Conn.	Survey & Conn.@1623' Inc 40.08° Azm 299.58°
11-Jan-16	18:10	18:20	0.17	1680	1712	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	18:20	18:25	0.08	1712	1712	Survey & Conn.	Survey & Conn.@1655' Inc 41.9° Azm 300.42°
11-Jan-16	18:25	18:35	0.17	1712	1744	Drilling	Drilling - (WOB:15; :520;RPM:60)



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
11-Jan-16	18:35	18:40	0.08	1744	1744	Survey & Conn.	Survey & Conn.@1687' Inc 41.65° Azm 300.74°
11-Jan-16	18:40	18:50	0.17	1744	1775	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	18:50	18:55	0.08	1775	1775	Survey & Conn.	Survey & Conn.@1718' Inc 40.86° Azm 300.5°
11-Jan-16	18:55	19:00	0.08	1775	1795	Sliding	Sliding - (WOB:15; :520;TFO:360))
11-Jan-16	19:00	19:05	0.08	1795	1800	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	19:05	19:10	0.08	1800	1800	Survey & Conn.	Survey & Conn.@1749' Inc 39.8° Azm 299.83°
11-Jan-16	19:10	19:20	0.17	1800	1815	Sliding	Sliding - (WOB:15; :520;TFO:15R))
11-Jan-16	19:20	19:25	0.08	1815	1837	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	19:25	19:30	0.08	1837	1837	Survey & Conn.	Survey & Conn.@1780' Inc 39.99° Azm 300.53°
11-Jan-16	19:30	19:40	0.17	1837	1869	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	19:40	19:45	0.08	1869	1869	Survey & Conn.	Survey & Conn.@1812' Inc 41.42° Azm 302.67°
11-Jan-16	19:45	19:50	0.08	1869	1900	Drilling	Drilling - (WOB:15; :520;RPM:60)
11-Jan-16	19:50	19:55	0.08	1900	1900	Survey & Conn.	Survey & Conn.@1843' Inc 40.75° Azm 302.66°
11-Jan-16	19:55	20:05	0.17	1900	1932	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	20:05	20:10	0.08	1932	1932	Survey & Conn.	Survey & Conn.@1875' Inc 39.82° Azm 302.29°
11-Jan-16	20:10	20:20	0.17	1932	1952	Sliding	Sliding - (WOB:15;GPM :520;TFO:20 R))
11-Jan-16	20:20	20:25	0.08	1952	1963	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	20:25	20:30	0.08	1963	1963	Survey & Conn.	Survey & Conn.@1875' Inc 39.82° Azm 302.29°
11-Jan-16	20:30	20:35	0.08	1963	1973	Sliding	Sliding - (WOB:15;GPM :520;TFO:20 R)
11-Jan-16	20:35	20:40	0.08	1973	1995	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	20:40	20:45	0.08	1995	1995	Survey & Conn.	Survey & Conn.@1938' Inc 40.21° Azm 303.19°
11-Jan-16	20:45	20:55	0.17	1995	2026	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	20:55	21:00	0.08	2026	2026	Survey & Conn.	Survey & Conn.@1969' Inc 41.19° Azm 304.83°
11-Jan-16	21:00	21:10	0.17	2026	2058	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	21:10	21:15	0.08	2058	2058	Survey & Conn.	Survey & Conn.@2001' Inc 41.16° Azm 303.92°
11-Jan-16	21:15	21:25	0.17	2058	2089	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	21:25	21:30	0.08	2089	2089	Survey & Conn.	Survey & Conn.@2032' Inc 40.95° Azm 304.34°
11-Jan-16	21:30	21:35	0.08	2089	2095	Sliding	Sliding - (WOB:15;GPM :520;TFO:20 R))
11-Jan-16	21:35	21:40	0.08	2095	2121	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	21:40	21:45	0.08	2121	2121	Survey & Conn.	Survey & Conn.@2064' Inc 40.68° Azm 304.24°
11-Jan-16	21:45	21:50	0.08	2121	2129	Sliding	Sliding - (WOB:15;GPM :520;TFO:20 R))
11-Jan-16	21:50	21:55	0.08	2129	2152	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	21:55	22:00	0.08	2152	2152	Survey & Conn.	Survey & Conn.@2095' Inc 39.92° Azm 303.82°
11-Jan-16	22:00	22:20	0.33	2152	2184	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	22:20	22:25	0.08	2184	2184	Survey & Conn.	Survey & Conn.@2127' Inc 38.51° Azm 303.31°
11-Jan-16	22:25	22:35	0.17	2184	2215	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	22:35	22:40	0.08	2215	2215	Survey & Conn.	Survey & Conn.@2158' Inc 37.86° Azm 303.4°
11-Jan-16	22:40	22:50	0.17	2215	2247	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	22:50	22:55	0.08	2247	2247	Survey & Conn.	Survey & Conn.@2190' Inc 37.27° Azm 303.39°
11-Jan-16	22:55	23:00	0.08	2247	2254	Sliding	Sliding - (WOB:15;GPM :520;TFO:-165))
11-Jan-16	23:00	23:10	0.17	2254	2278	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	23:10	23:15	0.08	2278	2278	Survey & Conn.	Survey & Conn.@2221' Inc 36.87° Azm 302.87°
11-Jan-16	23:15	23:20	0.08	2278	2284	Sliding	Sliding - (WOB:15;GPM :520;TFO:-165))
11-Jan-16	23:20	23:30	0.17	2284	2309	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	23:30	23:35	0.08	2309	2309	Survey & Conn.	Survey & Conn.@2252' Inc 35.91° Azm 302.3°
11-Jan-16	23:35	23:40	0.08	2309	2319	Sliding	Sliding - (WOB:15;GPM :520;TFO:180)
11-Jan-16	23:40	23:45	0.08	2319	2341	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
11-Jan-16	23:45	23:50	0.08	2341	2341	Survey & Conn.	Survey & Conn.@2284' Inc 34.33° Azm 301.07°
11-Jan-16	23:50	23:55	0.08	2341	2348	Sliding	Sliding - (WOB:15;GPM :520;TFO:180))
11-Jan-16	23:55	24:00	0.08	2348	2372	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)



<b>JOB NO.:</b>	330116DEF338327	<b>Report Time:</b>	2400	4 of 4
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09958	
<b>LOCATION:</b>	Ford Pad	<b>WORK ORDER#</b>	338327	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	33N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	10	8W
<b>WELL NAME:</b>	Ford H3			

From Tuesday, January 12, 2016 at 0000 to Tuesday, January 12, 2016 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	2372.00	Rotary Hours	5.22	WOB	35	Pick UP	60	Slack Off	40	SPM	
End Depth	3472.00	Circulating Hours	0.90	RAB	50	SPP	1900	FlowRate	520 - 520	240	
Total Drilled:	1100.00	Avg. Total ROP:	157.89	Mud Data							
Total Rotary Drilled:	931.00	Avg. Rotary ROP:	178.47	Type	water baser			PV	11	SOLID	5
Total Drilled Sliding:	169.00	Avg. Slide ROP:	96.57	Weight	9.1	GAS	16	YP	10	BHT°	86
Slide Hours:	1.75	Percent Rotary:	84.64	Viscosity	43	SAND	0.2	PH	9.5	Flow T°	70
Below Rotary Hrs.	24.00	Percent Slide:	15.36	Chlorides	500	WL	4.8			Oil %	0

PERSONNEL						cASING			BHA	
Lead Directional :		Mark Houston				Signature:	Size	Lb/ft	Set Depth	BHA # 1:SEC MM55 5X12, 6 1/2 3.3 7:8 1.50 FBH, HANG OFF, NMPC, NMDC, GAP SUB, NMDC,
Second Directional :		David Hensley								
MWD Operator1		Jim Blosser								
MWD Operator2		Mike Willms								
Directional Company:		SDI								
Geologist:										
Company Man:		Mike Colbert								
Incl. In:	0	Azm. In:	0	Incl. Out:	0	Azm. Out:	0			

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
12-Jan-16	00:00	00:05	0.08	2372	2372	Survey & Conn.	Survey & Conn. @2315' Inc 33.53° Azm 301.97°
12-Jan-16	00:05	00:10	0.08	2372	2382	Sliding	Sliding - (WOB:15;GPM :520;TFO:180)
12-Jan-16	00:10	00:20	0.17	2382	2404	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	00:20	00:25	0.08	2404	2404	Survey & Conn.	Survey & Conn. @2347' Inc 31.58° Azm 301.28°
12-Jan-16	00:25	00:30	0.08	2404	2411	Sliding	Sliding - (WOB:15;GPM :520;TFO:180)
12-Jan-16	00:30	00:35	0.08	2411	2435	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	00:35	00:40	0.08	2435	2435	Survey & Conn.	Survey & Conn. @2378' Inc 29.63° Azm 300.77°
12-Jan-16	00:40	00:50	0.17	2435	2466	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	00:50	00:55	0.08	2466	2466	Survey & Conn.	Survey & Conn. @2409' Inc 27.84° Azm 300.96°
12-Jan-16	00:55	01:10	0.25	2466	2498	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	01:10	01:15	0.08	2498	2498	Survey & Conn.	Survey & Conn. @2441' Inc 27.35° Azm 300.93°
12-Jan-16	01:15	01:20	0.08	2498	2506	Sliding	Sliding - (WOB:15;GPM :520;TFO:180)
12-Jan-16	01:20	01:25	0.08	2506	2529	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	01:25	01:30	0.08	2529	2529	Survey & Conn.	Survey & Conn. @2472' Inc 26.98° Azm 300.4°
12-Jan-16	01:30	01:40	0.17	2529	2537	Sliding	Sliding - (WOB:15;GPM :520;TFO:180)
12-Jan-16	01:40	01:50	0.17	2537	2561	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	01:50	01:55	0.08	2561	2561	Survey & Conn.	Survey & Conn. @2504' Inc 25.92° Azm 300.32°
12-Jan-16	01:55	02:00	0.08	2561	2569	Sliding	Sliding - (WOB:15;GPM :520;TFO:150R))
12-Jan-16	02:00	02:10	0.17	2569	2593	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	02:10	02:15	0.08	2593	2593	Survey & Conn.	Survey & Conn. @2536' Inc 24.18° Azm 300.43°
12-Jan-16	02:15	02:25	0.17	2593	2624	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
12-Jan-16	02:25	02:30	0.08	2624	2624	Survey & Conn.	Survey & Conn.@2567' Inc 22.74° Azm 300.7°
12-Jan-16	02:30	02:40	0.17	2624	2656	Drilling	Drilling - (WOB:15;GPM :520;RPM:60)
12-Jan-16	02:40	02:45	0.08	2656	2656	Survey & Conn.	Survey & Conn.@2599' Inc 21.81° Azm 300.5°
12-Jan-16	02:45	02:50	0.08	2656	2664	Sliding	Sliding - (WOB:15;GPM :520;TFO:150R)
12-Jan-16	02:50	03:00	0.17	2664	2687	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	03:00	03:05	0.08	2687	2687	Survey & Conn.	Survey & Conn.@2630' Inc 21.27° Azm 299.87°
12-Jan-16	03:05	03:10	0.08	2687	2699	Sliding	Sliding - (WOB:35;GPM :520;TFO:150R))
12-Jan-16	03:10	03:15	0.08	2699	2718	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	03:15	03:20	0.08	2718	2718	Survey & Conn.	Survey & Conn.@2661' Inc 20.69° Azm 300.97°
12-Jan-16	03:20	03:25	0.08	2718	2732	Sliding	Sliding - (WOB:35;GPM :520;TFO:135R))
12-Jan-16	03:25	03:30	0.08	2732	2749	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	03:30	03:35	0.08	2749	2749	Survey & Conn.	Survey & Conn.@2692' Inc 19.51° Azm 303.96°
12-Jan-16	03:35	03:45	0.17	2749	2763	Sliding	Sliding - (WOB:35;GPM :520;TFO:135R))
12-Jan-16	04:35	04:40	0.08	2843	2851	Sliding	Sliding - (WOB:35;GPM :520;TFO:180))
12-Jan-16	04:40	04:50	0.17	2851	2874	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	04:50	04:55	0.08	2874	2874	Survey & Conn.	Survey & Conn.@2817' Inc 12.43° Azm 302.02°
12-Jan-16	04:55	05:03	0.13	2874	2886	Sliding	Sliding - (WOB:35;GPM :520;TFO:180)
12-Jan-16	05:03	05:11	0.13	2886	2906	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	05:11	05:14	0.05	2906	2906	Survey & Conn.	Survey & Conn.@2849' Inc 11.27° Azm 299.15°
12-Jan-16	05:14	05:21	0.12	2906	2916	Sliding	Sliding - (WOB:35;GPM :520;TFO:180)
12-Jan-16	05:21	05:29	0.13	2916	2937	Drilling	Drilling - (WOB:22; :520;RPM:60)
12-Jan-16	05:29	05:32	0.05	2937	2937	Survey & Conn.	Survey & Conn.@2880' Inc 9.67° Azm 297.58°
12-Jan-16	05:32	05:39	0.12	2937	2947	Sliding	Sliding - (WOB:35; :520;TFO:180)
12-Jan-16	05:39	05:45	0.10	2947	2969	Drilling	Drilling - (WOB:22; :520;RPM:60)
12-Jan-16	05:45	05:48	0.05	2969	2969	Survey & Conn.	Survey & Conn.@2912' Inc 8.3° Azm 298.18°
12-Jan-16	05:48	05:56	0.13	2969	2981	Sliding	Sliding - (WOB:35; :520;TFO:180)
12-Jan-16	05:56	06:04	0.13	2981	3000	Drilling	Drilling - (WOB:22; :520;RPM:60)
12-Jan-16	06:04	06:07	0.05	3000	3000	Survey & Conn.	Survey & Conn.@2943' Inc 6.82° Azm 297.69°
12-Jan-16	06:07	06:12	0.08	3000	3008	Sliding	Sliding - (WOB:35; :520;TFO:180)
12-Jan-16	06:12	06:22	0.17	3008	3032	Drilling	Drilling - (WOB:22; :520;RPM:60)
12-Jan-16	06:22	06:25	0.05	3032	3032	Survey & Conn.	Survey & Conn.@2975' Inc 4.87° Azm 291.41°
12-Jan-16	06:25	06:32	0.12	3032	3063	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	06:32	06:35	0.05	3063	3063	Survey & Conn.	Survey & Conn.@3006' Inc 3.56° Azm 292.06°
12-Jan-16	06:51	07:00	0.15	3094	3125	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	07:00	07:03	0.05	3125	3125	Survey & Conn.	Survey & Conn.@3068' Inc 2.79° Azm 293.68°
12-Jan-16	07:03	07:13	0.17	3125	3156	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	07:13	07:16	0.05	3156	3156	Survey & Conn.	Survey & Conn.@3099' Inc 2.55° Azm 291.79°
12-Jan-16	07:16	07:25	0.15	3156	3187	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	07:25	07:28	0.05	3187	3187	Survey & Conn.	Survey & Conn.@3130' Inc 2.41° Azm 287.81°
12-Jan-16	07:28	07:38	0.17	3187	3218	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	07:38	07:41	0.05	3218	3218	Survey & Conn.	Survey & Conn.@3161' Inc 2.13° Azm 282.98°
12-Jan-16	07:41	07:50	0.15	3218	3249	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	07:50	07:53	0.05	3249	3249	Survey & Conn.	Survey & Conn.@3192' Inc 1.83° Azm 276.17°
12-Jan-16	07:53	08:00	0.12	3249	3280	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	08:00	08:03	0.05	3280	3280	Survey & Conn.	Survey & Conn.@3223' Inc 1.73° Azm 267.14°
12-Jan-16	08:03	08:13	0.17	3280	3311	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	08:13	08:16	0.05	3311	3311	Survey & Conn.	Survey & Conn.@3254' Inc 1.68° Azm 258.28°
12-Jan-16	08:16	08:24	0.13	3311	3342	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	08:24	08:27	0.05	3342	3342	Survey & Conn.	Survey & Conn.@3285' Inc 1.68° Azm 254.93°
12-Jan-16	08:27	08:36	0.15	3342	3374	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	08:36	08:39	0.05	3374	3374	Survey & Conn.	Survey & Conn.@3317' Inc 1.72° Azm 252.92°

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
12-Jan-16	08:39	08:46	0.12	3374	3405	Drilling	Drilling - (WOB:35; :520;RPM:60)
12-Jan-16	08:46	08:49	0.05	3405	3405	Survey & Conn.	Survey & Conn.@3348' Inc 1.55° Azm 251.95°
12-Jan-16	08:49	09:03	0.23	3405	3437	Drilling	Drilling - (WOB:35; :520;RPM:60)
12-Jan-16	09:03	09:06	0.05	3437	3437	Survey & Conn.	Survey & Conn.@3380' Inc 1.73° Azm 243.16°
12-Jan-16	09:06	09:18	0.20	3437	3472	Drilling	Drilling - (WOB:35; :520;RPM:60)
12-Jan-16	09:18	09:21	0.05	3472	3472	Survey & Conn.	Survey & Conn.@3415' Inc 1.72° Azm 237.7°
12-Jan-16	09:21	10:15	0.90	3472	3472	Circulating	Circulating
12-Jan-16	10:15	10:45	0.50	3472	3472	Other	Check for flow
12-Jan-16	03:45	03:55	0.17	2763	2781	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	03:55	04:00	0.08	2781	2781	Survey & Conn.	Survey & Conn.@2724' Inc 17.7° Azm 305.97°
12-Jan-16	04:00	04:05	0.08	2781	2791	Sliding	Sliding - (WOB:35;GPM :520;TFO:180)
12-Jan-16	04:05	04:15	0.17	2791	2812	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	04:15	04:20	0.08	2812	2812	Survey & Conn.	Survey & Conn.@2755' Inc 15.63° Azm 305.51°
12-Jan-16	04:20	04:25	0.08	2812	2822	Sliding	Sliding - (WOB:35;GPM :520;TFO:180))
12-Jan-16	04:25	04:30	0.08	2822	2843	Drilling	Drilling - (WOB:22;GPM :520;RPM:60)
12-Jan-16	04:30	04:35	0.08	2843	2843	Survey & Conn.	Survey & Conn.@2786' Inc 13.82° Azm 304.06°
12-Jan-16	06:35	06:47	0.20	3063	3094	Drilling	Drilling - (WOB:35;GPM :520;RPM:60)
12-Jan-16	06:47	06:51	0.07	3094	3094	Survey & Conn.	Survey & Conn.@3037' Inc 3° Azm 295.63°
12-Jan-16	10:45	15:30	4.75	3472	3472	POOH	POOH
12-Jan-16	15:30	16:30	1.00	3472	3472	Change BHA	Change BHA L/D BHA #1
12-Jan-16	16:30	24:00	7.50	3472	3472	Other	CSG Operations



## BHA # 1

## SDI



JOB NO.: 330116DEF338327 Work Order: 338327  
 COMPANY: B.P.  
 LOCATION: Ford Pad  
 RIG NAME: Aztec 507  
 STATE: Colorado  
 COUNTY: La Plata  
 WELL NAME: Ford H3

FIELD: San Juan Basin  
 Township: 33N  
 SECT. RANGE: 10 8W  
 Lead DD: Mark Houston  
 Co. Man: Mike Colbert  
 BHA TYPE: Steerable Assembly  
 BHA WT: 7538 Wt @ Jars: N/A

Time and Depths		MOTOR DATA	Drilling Parameters	
Date In:	11-Jan-16 @ 05:00	6 1/2 3.3 7:8 FBH 1.50	SO/PU:	0 - 40 / 0-60
Date Out:	12-Jan-16 @ 16:30	MFG.: SDI	Rot Strg Wt:	0-50
Hrs In Hole:	35.50	Pad OD: .25	WOB:	15 - 35
Start Depth:	430.00	NB Stab: 0	TORQ:	0 - 8000
End Depth:	3472.00	Bit to Bend: 60	SPP:	0 - 1900
Total Drilled:	3042.00	Bent Hsg/Sub°: 1.5 /	Motor RPM:	67 - 73
Avg. Total ROP:	180.53	Lobe/Stage: 7:8 / 3.3	Rotary RPM:	60 - 60
Circ Hrs: Tot/Only	19.60 / 2.75	Rev/GAL: 0.14	Flow Rate:	479 - 520
Percent Slide:	26.69	Rotor Jet: 0	Avg Diff:	
Percent Hrs:	33.43	Prop BUR: 8.5	Stall Pres.:	
Slide Hours:	5.63	Act BUR:	Off Bot Pres.:	
Total Sliding:	812.00	Mud Data		Bit Record
Avg. Slide ROP:	144.14	Type	water baser OTHER / SEC MM55 5X12	
Percent Rotary:	73.31	WT: 9.1	GAS: 16	Run #: 1
Percent Hrs:	66.57	Vis: 43	PV: 11	Type Bit: PDC
Rotary Hours:	11.22	WL: 4.8	PH: 9.5	IADC#: TFA: 0.552
Total Rotary:	2230.00	SOL: 5	SAND: 0.2	JETS: 5-12
Avg. Rotary ROP:	198.81	Oil %: 0	T °: 86	Bit Drop: 744 PSI @ 520 GPM
Reason POOH:		Chlor: 500	YP: 10	Cond.:
MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 57	Last Casing
	GYRO: 0	DNSC: 0	Sonic: 0	Shoe @: Hanger @:

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

Motor # 6320 Going in with 0.0 HRS Ending HRS = 0.0

## BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
SEC MM55 5X12	12731543	2	7 7/8	0.75	0.75	4 1/2 REGP	
6 1/2 3.3 7:8 1.50 FBH	6320	2	6 1/2	29.12	29.87	4 1/2 XHB	SDI
HANG OFF	8-725	3 1/4	6 7/16	1.77	31.64	4 1/2 XHB	SDI
NMPC	125-485	3 1/4	6 1/2	10.02	41.66	4 1/2 XHB	SDI
NMDC	122-283	3 5/16	6 1/8	30.16	71.82	4 1/2 XHB	SDI
GAP SUB	69-925	3 1/8	6 7/16	5.00	76.82	4 1/2 XHB	SDI
NMDC	122-311	3 1/4	6 1/8	29.22	106.04	4 1/2 XHB	SDI

NMDC  
O.D.=6 1/8  
Length=29.22

GAP SUB  
O.D.=6 7/16  
Length=5

NMDC  
O.D.=6 1/8  
Length=30.16

NMPC  
O.D.=6 1/2  
Length=10.02

HANG OFF  
O.D.=6 7/16  
Length=1.77

6 1/2 3.3 7:8 1.50 FBH  
O.D.=6 1/2  
Length=29.12

SEC MM55 5X12  
O.D.=7 7/8  
Length=0.75



**JOB NO.:** 330116DEF338327  
**COMPANY:** B.P.  
**LOCATION:** Ford Pad  
**RIG NAME:** Aztec 507  
**STATE:** Colorado  
**COUNTY:** Country  
**WELL NAME:** Ford H3

**FIELD:** San Juan Basin  
**Township:** 33N  
**Range** 8W

MOTOR INFORMATION	
Desc: 6 1/2 3.3 7:8 FBH 1.50	
Bent Hsg/Sub: 1.5 / 0	Bit to Bend: 60
Pad OD: .25	NB Stab:

## Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	11-Jan	Drilling	09:40	09:59	0.32	430	489	59	15	186.3	60	0	479			0.62	138.00	5.60	
1	11-Jan	Sliding	10:02	10:08	0.10	489	499	10	15	100.0	60	0	479		302M	0.99	169.00	5.60	
1	11-Jan	Drilling	10:08	10:11	0.05	499	505	6	15	120.0	60	0	479			1.28	178.00	5.60	
1	11-Jan	Sliding	10:14	10:18	0.07	505	521	16	15	240.0	60	0	479		302M	2.31	356.00	7.60	
1	11-Jan	Drilling	10:18	10:22	0.07	521	535	14	15	210.0	60	0	479			3.32	3.00	7.60	
1	11-Jan	Sliding	10:25	10:29	0.07	535	551	16	15	240.0	60	0	479		302M	4.30	322.00	6.01	
1	11-Jan	Drilling	10:29	10:33	0.07	551	565	14	15	210.0	60	0	479			5.12	325.00	6.01	
1	11-Jan	Sliding	10:36	10:41	0.08	565	580	15	15	180.0	60	0	479		302M	5.99	316.00	5.92	
1	11-Jan	Drilling	10:41	10:43	0.03	580	595	15	15	450.0	60	0	479			6.85	318.00	5.92	
1	11-Jan	Sliding	10:46	10:51	0.08	595	608	13	15	156.0	60	0	479		302M	7.61	311.00	5.88	
1	11-Jan	Drilling	10:51	10:56	0.08	608	627	19	15	228.0	60	0	479			8.73	311.00	5.88	
1	11-Jan	Sliding	10:59	11:05	0.10	627	643	16	15	160.0	60	6600	479	1109	20L	9.62	310.00	5.48	
1	11-Jan	Drilling	11:05	11:08	0.05	643	657	14	15	280.0	60	6600	479	1109		10.38	310.00	5.48	
1	11-Jan	Sliding	11:11	11:15	0.07	657	671	14	15	210.0	60	6600	479	1109	15L	11.10	310.00	5.58	
1	11-Jan	Drilling	11:15	11:18	0.05	671	688	17	15	340.0	60	6600	479	1109		11.96	312.00	5.58	
1	11-Jan	Sliding	11:21	11:25	0.07	688	702	14	15	210.0	60	6600	479	1109	20L	12.55	306.00	4.68	
1	11-Jan	Drilling	11:25	11:29	0.07	702	718	16	15	240.0	60	6600	479	1109		13.19	308.00	4.68	
1	11-Jan	Sliding	11:32	11:36	0.07	718	736	18	15	270.0	60	6600	479	1109	15L	14.13	302.00	5.65	
1	11-Jan	Drilling	11:36	11:40	0.07	736	749	13	15	195.0	60	6600	479	1109		14.85	303.00	5.65	
1	11-Jan	Sliding	11:43	11:47	0.07	749	762	13	15	195.0	60	6600	479	1109	10L	15.49	301.00	4.94	
1	11-Jan	Drilling	11:47	11:49	0.03	762	779	17	15	510.0	60	6600	479	1109		16.30	302.00	4.94	
1	11-Jan	Sliding	11:52	11:56	0.07	779	793	14	15	210.0	60	6600	479	1109	5R	16.93	302.00	4.73	
1	11-Jan	Drilling	11:56	12:00	0.07	793	810	17	15	255.0	60	6600	479	1109		17.68	303.00	4.73	
1	11-Jan	Sliding	12:03	12:08	0.08	810	825	15	15	180.0	60	6600	479	1109	10R	18.22	304.00	3.31	
1	11-Jan	Drilling	12:08	12:11	0.05	825	840	15	15	300.0	60	6600	479	1109		18.72	304.00	3.31	

# Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	11-Jan	Sliding	12:18	12:22	0.07	840	854	14	15	210.0	60	6600	479	1320	15L	19.18	304.00	3.38	
1	11-Jan	Drilling	12:22	12:25	0.05	854	871	17	15	340.0	60	6600	479	1320		19.75	304.00	3.38	
1	11-Jan	Sliding	12:28	12:32	0.07	871	885	14	15	210.0	60	6600	479	1320	10L	20.17	303.00	3.15	
1	11-Jan	Drilling	12:32	12:35	0.05	885	901	16	15	320.0	60	6600	479	1320		20.63	304.00	3.15	
1	11-Jan	Sliding	12:38	12:44	0.10	901	919	18	15	180.0	60	6600	479	1320	15L	21.48	302.00	5.42	
1	11-Jan	Drilling	12:44	12:47	0.05	919	932	13	15	260.0	60	6600	479	1320		22.19	302.00	5.42	
1	11-Jan	Sliding	13:15	13:19	0.07	932	950	18	15	270.0	60	6600	479	1320	15L	23.17	302.00	5.93	
1	11-Jan	Drilling	13:19	13:21	0.03	950	963	13	15	390.0	60	6600	479	1320		23.88	303.00	5.93	
1	11-Jan	Sliding	13:24	13:28	0.07	963	983	20	15	300.0	60	6600	479	1320	10R	24.86	304.00	5.15	
1	11-Jan	Drilling	13:28	13:31	0.05	983	994	11	15	220.0	60	6600	479	1320		25.39	305.00	5.15	
1	11-Jan	Sliding	13:34	13:37	0.05	994	1010	16	15	320.0	60	6600	479	1320	360	26.21	305.00	5.27	
1	11-Jan	Drilling	13:37	13:41	0.07	1010	1024	14	15	210.0	60	6600	479	1320		26.94	305.00	5.27	
1	11-Jan	Sliding	13:44	13:48	0.07	1024	1024	0	15	0.0	60	6600	479	1320	15L	26.94	305.00	5.27	
1	11-Jan	Drilling	13:48	13:51	0.05	1024	1056	32	15	640.0	60	6600	479	1320		27.84	307.00	4.24	
1	11-Jan	Sliding	13:54	14:00	0.10	1056	1074	18	15	180.0	60	6600	479	1320	15L	28.32	303.00	2.90	
1	11-Jan	Drilling	14:00	14:03	0.05	1074	1087	13	15	260.0	60	6600	479	1320		28.69	303.00	2.90	
1	11-Jan	Sliding	14:06	14:10	0.07	1087	1103	16	15	240.0	60	6600	520	1625	15L	29.31	302.00	4.36	
1	11-Jan	Drilling	14:10	14:13	0.05	1103	1118	15	15	300.0	60	6600	520	1625		29.95	303.00	4.36	
1	11-Jan	Sliding	14:16	14:22	0.10	1118	1138	20	15	200.0	60	6600	520	1625	360	31.01	303.00	5.73	
1	11-Jan	Drilling	14:22	14:26	0.07	1138	1149	11	15	165.0	60	6600	520	1625		31.62	303.00	5.73	
1	11-Jan	Sliding	14:30	14:36	0.10	1149	1170	21	15	210.0	60	6600	520	1625	360	32.75	302.00	5.56	
1	11-Jan	Drilling	14:36	14:39	0.05	1170	1180	10	15	200.0	60	6600	520	1625		33.28	303.00	5.56	
1	11-Jan	Sliding	14:42	14:49	0.12	1180	1200	20	15	171.4	60	6600	520	1625	360	34.61	301.00	7.38	
1	11-Jan	Drilling	14:49	14:51	0.03	1200	1211	11	15	330.0	60	6600	520	1625		35.40	302.00	7.38	
1	11-Jan	Sliding	14:54	15:03	0.15	1211	1231	20	15	133.3	60	6600	520	1625	360	36.37	300.00	3.85	
1	11-Jan	Drilling	15:03	15:07	0.07	1231	1243	12	15	180.0	60	6600	520	1625		36.83	300.00	3.85	
1	11-Jan	Sliding	15:10	15:16	0.10	1243	1263	20	15	200.0	60	6600	520	1625	10R	37.51	301.00	4.18	
1	11-Jan	Drilling	15:16	15:20	0.07	1263	1274	11	15	165.0	60	6600	520	1625		37.87	301.00	4.18	
1	11-Jan	Sliding	15:23	15:29	0.10	1274	1291	17	15	170.0	60	6600	520	1625	30R	38.48	302.00	4.44	
1	11-Jan	Drilling	15:29	15:33	0.07	1291	1305	14	15	210.0	60	6600	520	1625		39.01	302.00	4.44	
1	11-Jan	Sliding	15:36	15:43	0.12	1305	1318	13	15	111.4	60	6600	520	1625	30R	39.40	303.00	2.32	
1	11-Jan	Drilling	15:43	15:47	0.07	1318	1336	18	15	270.0	60	6600	520	1625		39.81	303.00	2.32	
1	11-Jan	Drilling	15:50	15:55	0.08	1336	1368	32	15	384.0	60	6600	520	1625		40.71	304.00	4.39	

# Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	11-Jan	Sliding	15:58	16:05	0.12	1368	1388	20	15	171.4	60	6600	520	1625	15L	41.09	302.00	2.06	
1	11-Jan	Drilling	16:05	16:14	0.15	1388	1399	11	15	73.3	60	6600	520	1625		41.26	302.00	2.06	
1	11-Jan	Drilling	16:17	16:24	0.12	1399	1430	31	15	265.7	60	6600	520	1625		40.32	301.00	3.94	
1	11-Jan	Drilling	16:27	16:34	0.12	1430	1461	31	15	265.7	60	6600	520	1625		39.44	301.00	2.62	
1	11-Jan	Drilling	16:37	16:42	0.08	1461	1493	32	15	384.0	60	6600	520	1625		39.44	300.00	0.88	
1	11-Jan	Sliding	16:45	16:52	0.12	1493	1513	20	15	171.4	60	6600	520	1625	15R	39.81	301.00	2.62	
1	11-Jan	Drilling	16:52	17:00	0.13	1513	1524	11	15	82.5	60	6600	520	1625		40.05	301.00	2.62	
1	11-Jan	Sliding	17:05	17:10	0.08	1524	1534	10	15	120.0	60	6600	520	1625	15R	40.12	301.00	1.65	
1	11-Jan	Drilling	17:10	17:15	0.08	1534	1555	21	15	252.0	60	6600	520	1625		39.78	301.00	1.65	
1	11-Jan	Drilling	17:20	17:25	0.08	1555	1587	32	15	384.0	60	6600	520	1625		39.07	301.00	2.40	
1	11-Jan	Sliding	17:30	17:33	0.05	1587	1597	10	15	200.0	60	6600	520	1625	360	39.13	301.00	4.46	
1	11-Jan	Drilling	17:33	17:35	0.03	1597	1618	21	15	630.0	60	6600	520	1625		39.90	302.00	4.46	
1	11-Jan	Sliding	17:40	17:45	0.08	1618	1638	20	15	240.0	60	6600	520	1625	360	40.93	300.00	5.94	
1	11-Jan	Drilling	17:45	17:50	0.08	1638	1649	11	15	132.0	60	6600	520	1625		41.56	300.00	5.94	
1	11-Jan	Sliding	17:55	18:00	0.08	1649	1664	15	15	180.0	60	6600	520	1625	360	41.83	301.00	1.03	
1	11-Jan	Drilling	18:00	18:05	0.08	1664	1680	16	15	192.0	60	6600	520	1625		41.70	301.00	1.03	
1	11-Jan	Drilling	18:10	18:20	0.17	1680	1712	32	15	192.0	60	6600	520	1625		41.01	301.00	2.60	
1	11-Jan	Drilling	18:25	18:35	0.17	1712	1744	32	15	192.0	60	6600	520	1625		39.97	301.00	3.69	
1	11-Jan	Drilling	18:40	18:50	0.17	1744	1775	31	15	186.0	60	6600	520	1625		39.96	300.00	1.57	
1	11-Jan	Sliding	18:55	19:00	0.08	1775	1795	20	15	240.0	60	6600	520	1625	15R	40.66	302.00	6.24	
1	11-Jan	Drilling	19:00	19:05	0.08	1795	1800	5	15	60.0	60	6600	520	1625		40.88	302.00	6.24	
1	11-Jan	Sliding	19:10	19:20	0.17	1800	1815	15	15	90.0	60	6600	520	1625	20 R	41.36	303.00	2.16	
1	11-Jan	Drilling	19:20	19:25	0.08	1815	1837	22	15	264.0	60	6600	520	1625		40.88	303.00	2.16	
1	11-Jan	Drilling	19:30	19:40	0.17	1837	1869	32	15	192.0	60	6600	520	1625		39.99	303.00	3.00	
1	11-Jan	Drilling	19:45	19:50	0.08	1869	1900	31	15	372.0	60	6600	520	1625		39.97	303.00	1.11	
1	11-Jan	Drilling	19:55	20:05	0.17	1900	1932	32	15	192.0	60	6600	520	1625		40.17	303.00	1.11	
1	11-Jan	Sliding	20:10	20:20	0.17	1932	1952	20	15	120.0	60	8000	520	1625	20 R	40.65	304.00	4.68	
1	11-Jan	Drilling	20:20	20:25	0.08	1952	1963	11	15	132.0	60	8000	520	1625		41.00	305.00	4.68	
1	11-Jan	Sliding	20:30	20:35	0.08	1963	1973	10	15	120.0	60	8000	520	1625	20 R	41.19	305.00	1.87	
1	11-Jan	Drilling	20:35	20:40	0.08	1973	1995	22	15	264.0	60	8000	520	1625		41.17	306.00	1.87	
1	11-Jan	Drilling	20:45	20:55	0.17	1995	2026	31	15	186.0	60	8000	520	1625		40.99	304.00	1.12	
1	11-Jan	Drilling	21:00	21:10	0.17	2026	2058	32	15	192.0	60	8000	520	1625		40.73	304.00	0.87	
1	11-Jan	Drilling	21:15	21:25	0.17	2058	2089	31	15	186.0	60	8000	520	1625		40.07	305.00	2.60	

# Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	11-Jan	Sliding	21:30	21:35	0.08	2089	2095	6	15	72.0	60	8000	520	1625	180	39.92	305.00	2.60	
1	11-Jan	Drilling	21:35	21:40	0.08	2095	2121	26	15	312.0	60	8000	520	1625		38.77	304.00	4.52	
1	11-Jan	Sliding	21:45	21:50	0.08	2121	2129	8	15	96.0	60	8000	520	1625	-165	38.47	303.00	2.10	
1	11-Jan	Drilling	21:50	21:55	0.08	2129	2152	23	15	276.0	60	8000	520	1625		37.99	303.00	2.10	
1	11-Jan	Drilling	22:00	22:20	0.33	2152	2184	32	15	96.0	60	8000	520	1625		37.38	303.00	1.84	
1	11-Jan	Drilling	22:25	22:35	0.17	2184	2215	31	15	186.0	60	8000	520	1625		36.95	304.00	1.64	
1	11-Jan	Drilling	22:40	22:50	0.17	2215	2247	32	15	192.0	60	8000	520	1625		36.06	303.00	3.28	
1	11-Jan	Sliding	22:55	23:00	0.08	2247	2254	7	15	84.0	60	8000	520	1625	-165	35.81	302.00	5.41	
1	11-Jan	Drilling	23:00	23:10	0.17	2254	2278	24	15	144.0	60	8000	520	1625		34.63	303.00	5.41	
1	11-Jan	Sliding	23:15	23:20	0.08	2278	2284	6	15	72.0	60	8000	520	1625	180	34.33	304.00	5.41	
1	11-Jan	Drilling	23:20	23:30	0.17	2284	2309	25	15	150.0	60	8000	520	1625		33.68	302.00	3.05	
1	11-Jan	Sliding	23:35	23:40	0.08	2309	2319	10	15	120.0	60	8000	520	1625	180	33.29	302.00	6.20	
1	11-Jan	Drilling	23:40	23:45	0.08	2319	2341	22	15	264.0	60	8000	520	1625		31.95	303.00	6.20	
1	11-Jan	Sliding	23:50	23:55	0.08	2341	2348	7	15	84.0	60	8000	520	1625	180	31.52	301.00	6.35	
1	11-Jan	Drilling	23:55	24:00	0.08	2348	2372	24	15	288.0	60	8000	520	1625		30.01	302.00	6.35	
1	12-Jan	Sliding	00:05	00:10	0.08	2372	2382	10	15	120.0	60	8000	520	1625	180	29.40	301.00	5.78	
1	12-Jan	Drilling	00:10	00:20	0.17	2382	2404	22	15	132.0	60	8000	520	1625		28.13	301.00	5.78	
1	12-Jan	Sliding	00:25	00:30	0.08	2404	2411	7	15	84.0	60	8000	520	1625	180	27.81	301.00	1.53	
1	12-Jan	Drilling	00:30	00:35	0.08	2411	2435	24	15	288.0	60	8000	520	1625		27.44	301.00	1.53	
1	12-Jan	Drilling	00:40	00:50	0.17	2435	2466	31	15	186.0	60	8000	520	1625		27.05	301.00	1.43	
1	12-Jan	Drilling	00:55	01:10	0.25	2466	2498	32	15	128.0	60	8000	520	1625		26.12	300.00	3.31	
1	12-Jan	Sliding	01:15	01:20	0.08	2498	2506	8	15	96.0	60	8000	520	1625	180	25.81	300.00	5.44	
1	12-Jan	Drilling	01:20	01:25	0.08	2506	2529	23	15	276.0	60	8000	520	1625		24.56	300.00	5.44	
1	12-Jan	Sliding	01:30	01:40	0.17	2529	2537	8	15	48.0	60	8000	520	1625	180	24.13	300.00	4.66	
1	12-Jan	Drilling	01:40	01:50	0.17	2537	2561	24	15	144.0	60	8000	520	1625		23.02	301.00	4.66	
1	12-Jan	Sliding	01:55	02:00	0.08	2561	2569	8	35	96.0	60	8000	520	1625	150R	22.68	301.00	2.92	
1	12-Jan	Drilling	02:00	02:10	0.17	2569	2593	24	22	144.0	60	8000	520	1900		21.98	301.00	2.92	
1	12-Jan	Drilling	02:15	02:25	0.17	2593	2624	31	22	186.0	60	8000	520	1900		21.37	301.00	1.89	
1	12-Jan	Drilling	02:30	02:40	0.17	2624	2656	32	22	192.0	60	8000	520	1900		20.78	301.00	2.26	
1	12-Jan	Sliding	02:45	02:50	0.08	2656	2664	8	35	96.0	60	8000	520	1900	150R	20.57	301.00	5.05	
1	12-Jan	Drilling	02:50	03:00	0.17	2664	2687	23	22	138.0	60	8000	520	1900		19.70	303.00	5.05	
1	12-Jan	Sliding	03:05	03:10	0.08	2687	2699	12	35	144.0	60	8000	520	1900	135R	19.11	304.00	6.00	
1	12-Jan	Drilling	03:10	03:15	0.08	2699	2718	19	22	228.0	60	8000	520	1900		18.04	306.00	6.00	

# Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	12-Jan	Sliding	03:20	03:25	0.08	2718	2732	14	35	168.0	60	8000	520	1900	180	17.17	306.00	6.69	
1	12-Jan	Drilling	03:25	03:30	0.08	2732	2749	17	22	204.0	60	8000	520	1900		16.03	306.00	6.69	
1	12-Jan	Sliding	03:35	03:45	0.17	2749	2763	14	35	84.0	60	8000	520	1900	180	15.16	306.00	5.96	
1	12-Jan	Drilling	03:45	03:55	0.17	2763	2781	18	22	108.0	60	8000	520	1900		14.11	307.00	5.96	
1	12-Jan	Sliding	04:00	04:05	0.08	2781	2791	10	35	120.0	60	8000	520	1900	180	13.59	304.00	4.73	
1	12-Jan	Drilling	04:05	04:15	0.17	2791	2812	21	22	126.0	60	8000	520	1900		12.65	306.00	4.73	
1	12-Jan	Sliding	04:20	04:25	0.08	2812	2822	10	35	120.0	60	8000	520	1900	-165	12.25	302.00	4.06	
1	12-Jan	Drilling	04:25	04:30	0.08	2822	2843	21	22	252.0	60	8000	520	1900		11.49	304.00	4.06	
1	12-Jan	Sliding	04:35	04:40	0.08	2843	2851	8	35	96.0	60	8000	520	1900	180	11.17	299.00	5.24	
1	12-Jan	Drilling	04:40	04:50	0.17	2851	2874	23	22	138.0	60	8000	520	1900		9.98	300.00	5.24	
1	12-Jan	Sliding	04:55	05:03	0.13	2874	2886	12	35	90.0	60	8000	520	1900	180	9.41	298.00	4.29	
1	12-Jan	Drilling	05:03	05:11	0.13	2886	2906	20	22	150.0	60	8000	520	1900		8.56	298.00	4.29	
1	12-Jan	Sliding	05:14	05:21	0.12	2906	2916	10	35	85.7	60	8000	520	1900	180	8.11	298.00	4.78	
1	12-Jan	Drilling	05:21	05:29	0.13	2916	2937	21	22	157.5	60	8000	520	1900		7.11	299.00	4.78	
1	12-Jan	Sliding	05:32	05:39	0.12	2937	2947	10	35	85.7	60	8000	520	1900	180	6.57	298.00	6.40	
1	12-Jan	Drilling	05:39	05:45	0.10	2947	2969	22	22	220.0	60	8000	520	1900		5.23	302.00	6.40	
1	12-Jan	Sliding	05:48	05:56	0.13	2969	2981	12	35	90.0	60	8000	520	1900	180	4.62	292.00	4.23	
1	12-Jan	Drilling	05:56	06:04	0.13	2981	3000	19	22	142.5	60	8000	520	1900		3.81	292.00	4.23	
1	12-Jan	Sliding	06:07	06:12	0.08	3000	3008	8	35	96.0	60	8000	520	1900	180	3.52	292.00	1.92	
1	12-Jan	Drilling	06:12	06:22	0.17	3008	3032	24	35	144.0	60	8000	520	1900	180	3.09	295.00	1.92	
1	12-Jan	Drilling	06:25	06:32	0.12	3032	3063	31	35	265.7	60	8000	520	1900		2.82	297.00	0.75	
1	12-Jan	Drilling	06:35	06:47	0.20	3063	3094	31	35	155.0	60	8000	520	1900		2.59	295.00	0.82	
1	12-Jan	Drilling	06:51	07:00	0.15	3094	3125	31	35	206.7	60	8000	520	1900		2.43	295.00	0.72	
1	12-Jan	Drilling	07:03	07:13	0.17	3125	3156	31	35	186.0	60	8000	520	1900		2.17	292.00	1.09	
1	12-Jan	Drilling	07:16	07:25	0.15	3156	3187	31	35	206.7	60	8000	520	1900		1.88	289.00	1.23	
1	12-Jan	Drilling	07:28	07:38	0.17	3187	3218	31	35	186.0	60	8000	520	1900		1.74	284.00	0.96	
1	12-Jan	Drilling	07:41	07:50	0.15	3218	3249	31	35	206.7	60	8000	520	1900		1.69	275.00	0.86	
1	12-Jan	Drilling	07:53	08:00	0.12	3249	3280	31	35	265.7	60	8000	520	1900		1.68	261.00	0.32	
1	12-Jan	Drilling	08:03	08:13	0.17	3280	3311	31	35	186.0	60	8000	520	1900		1.71	257.00	0.22	
1	12-Jan	Drilling	08:16	08:24	0.13	3311	3342	31	35	232.5	60	8000	520	1900		1.58	254.00	0.56	
1	12-Jan	Drilling	08:27	08:36	0.15	3342	3374	32	35	213.3	60	8000	520	1900		1.69	259.00	0.97	
1	12-Jan	Drilling	08:39	08:46	0.12	3374	3405	31	35	265.7	60	8000	520	1900		1.72	247.00	0.47	
1	12-Jan	Drilling	08:49	09:03	0.23	3405	3437	32	35	137.1	60	8000	520	1900		1.72	238.00	0.00	

# Slide Report for BHA # 1

Note: Surveys listed are interpolated from the actual surveys

#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
1	12-Jan	Drilling	09:06	09:18	0.20	3437	3472	35	35	175.0	60	8000	520	1900		1.72	238.00	0.00	

Total Drilled: 3042 Avg. Total ROP: 180.53 DEPTH% - TIME %

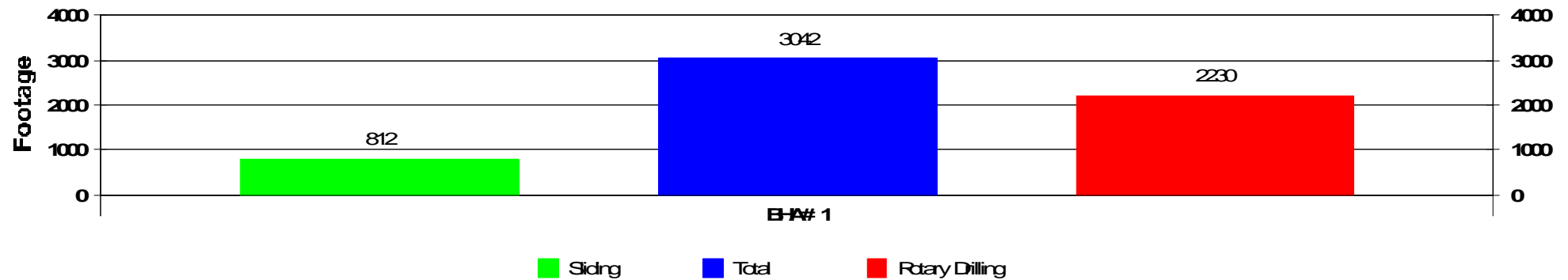
Total Rotary Drilled: 2230 Avg. Rotary ROP: 198.81 Percent Rotary: 73.31 - 66.57

Total Drilled Sliding: 812 Avg. Slide ROP: 144.14 Percent Slide: 26.69 - 33.43

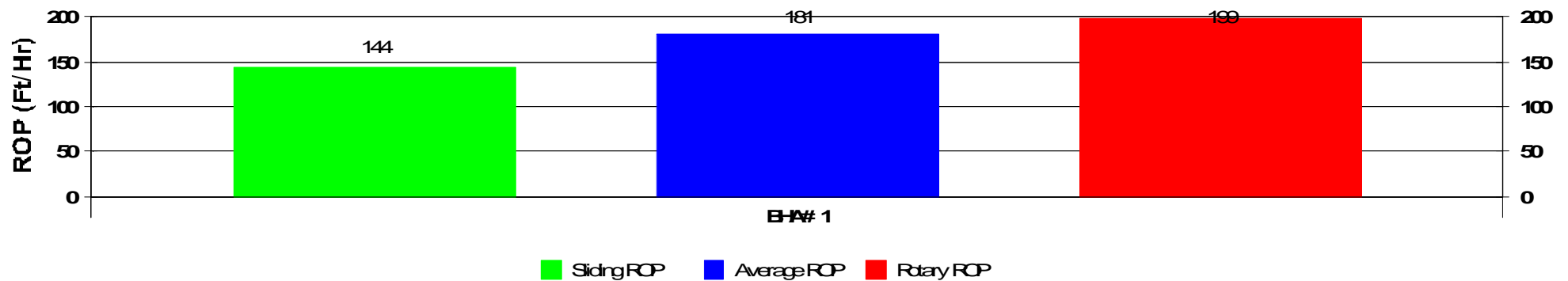


JOB NO.:	330116DEF338327	FIELD:	San Juan Basin	
COMPANY:	B.P.	Township:	33N	
LOCATION:	Ford Pad	SECT/RANGE:	10	8W
RIG NAME:	Aztec 507	COMMENT		
STATE:	Colorado			
COUNTY:	La Plata			
WELL NAME:	Ford H3			

### Footage Drilled with BHA

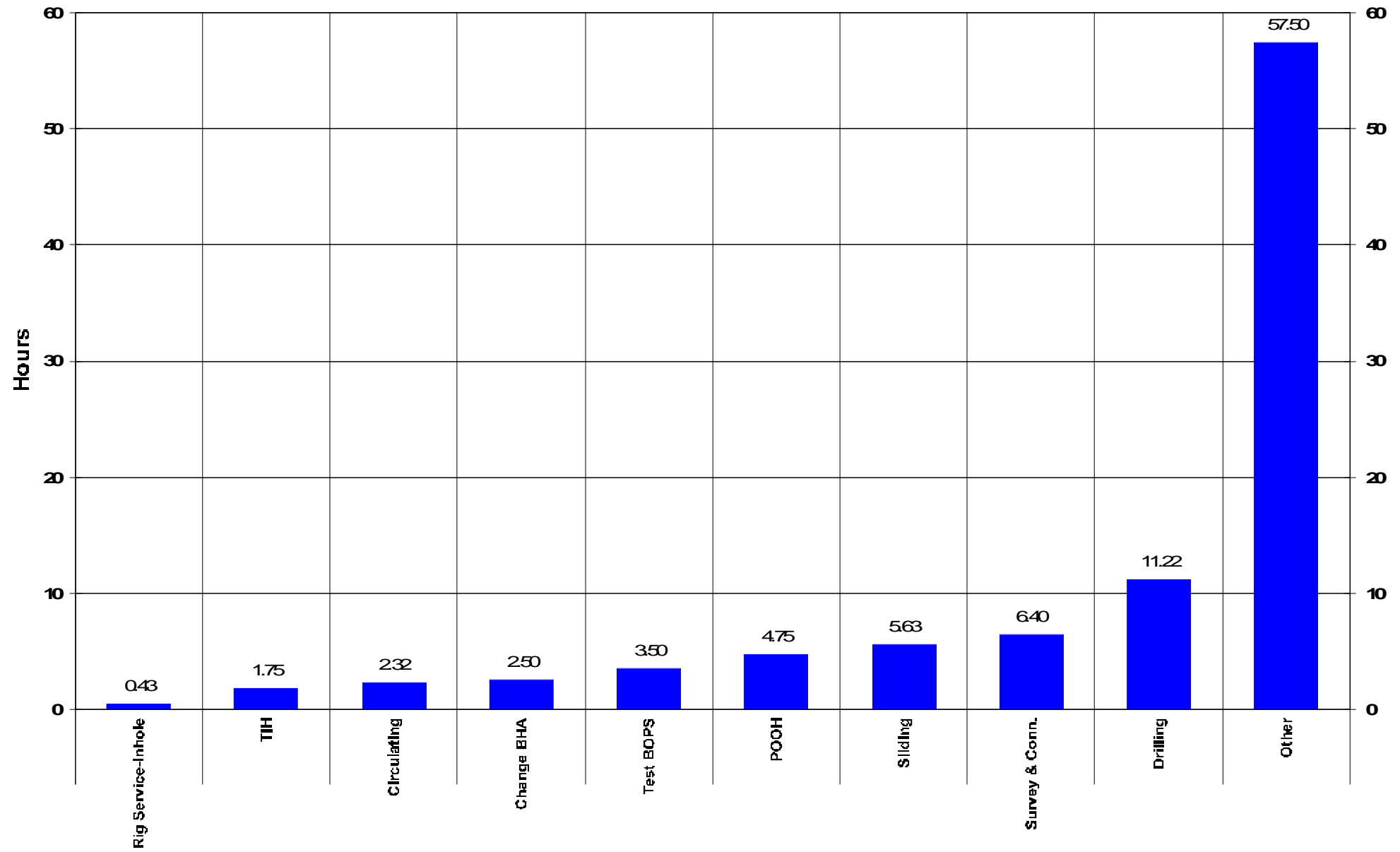


### ROP vs BHA

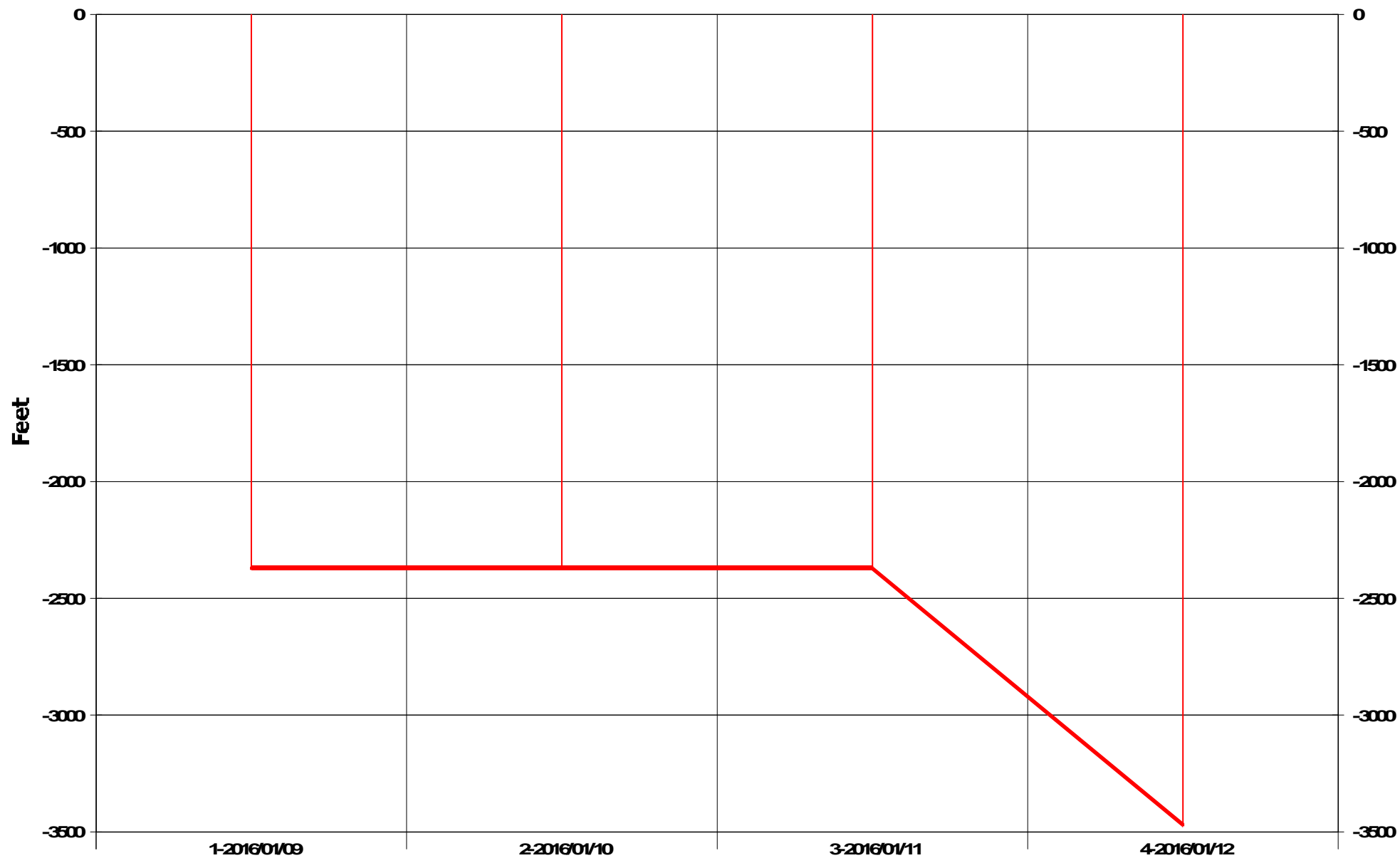




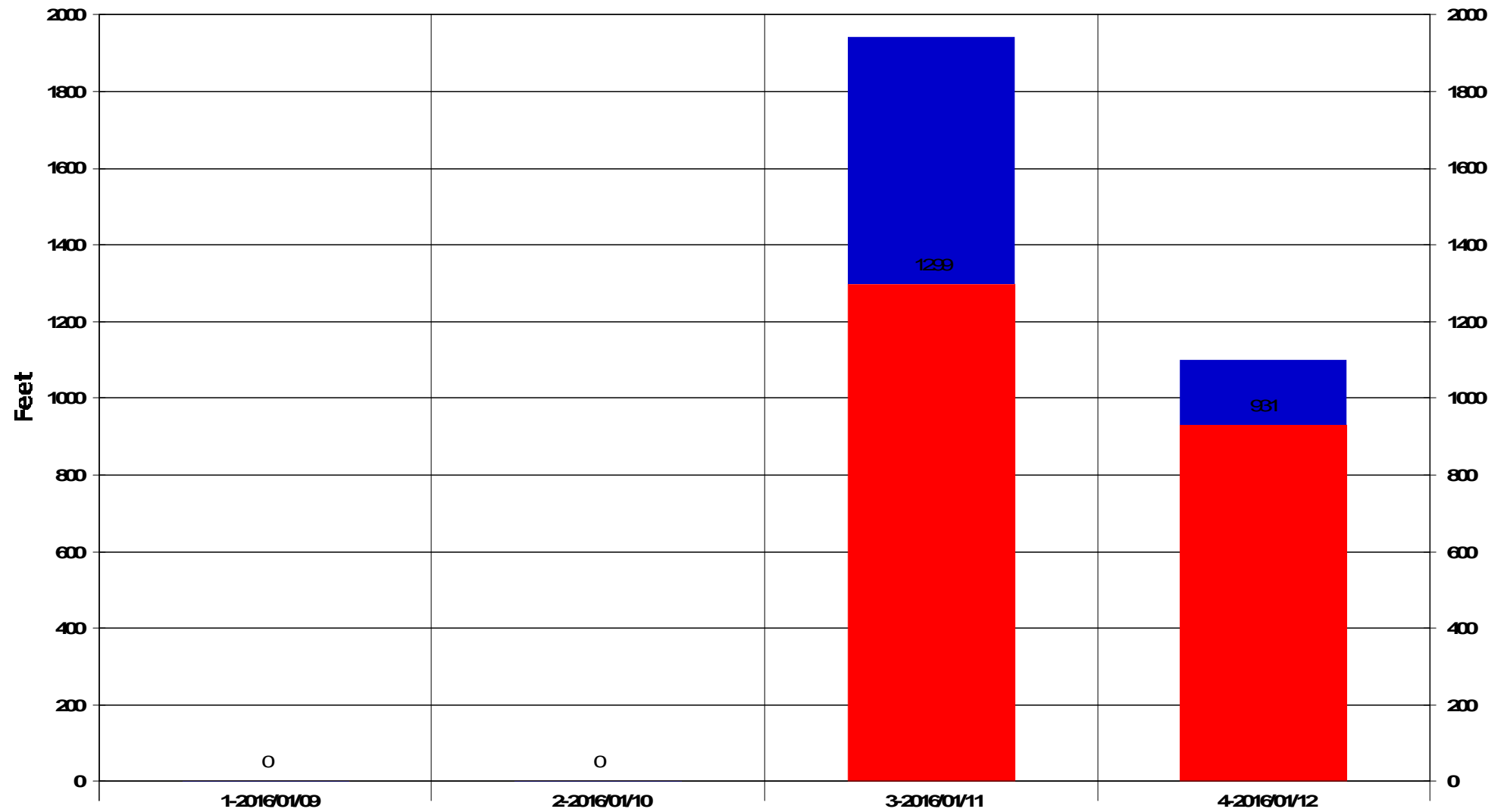
## Activity Histogram



# Measured Depth vs Days



## Daily Footage



Rotary Drilling Siding

# **SUPPORT STAFF**

**D'Arcy Quinn – Northern USA Region Director  
(307) 472-6621**

**[darcy.quinn@scientificdrilling.com](mailto:darcy.quinn@scientificdrilling.com)**

**Chad Bloor – Grand Junction, CO & Farmington, NM  
District Base Manager  
(970) 245-9447**

**[chad.bloor@scientificdrilling.com](mailto:chad.bloor@scientificdrilling.com)**

**Colorado District Well Planner:  
Janie Collins**

**Directional Drillers:  
D. Hensley, M. Houston**

**MWD Operators:  
J. Blosser, M. Willms**

2948 I-70 Bus. Loop  
Grand Junction, CO 81504  
(970) 245-9447



**Scientific Drilling**

**[www.scientificdrilling.com](http://www.scientificdrilling.com)**

