



**B.P.**

**La Plata County, CO NAD83  
SEC 9-T32N-R6W  
Tubbs 32-6-9 B 4**

**OH**

**Design: OH**

## **Standard Survey Report**

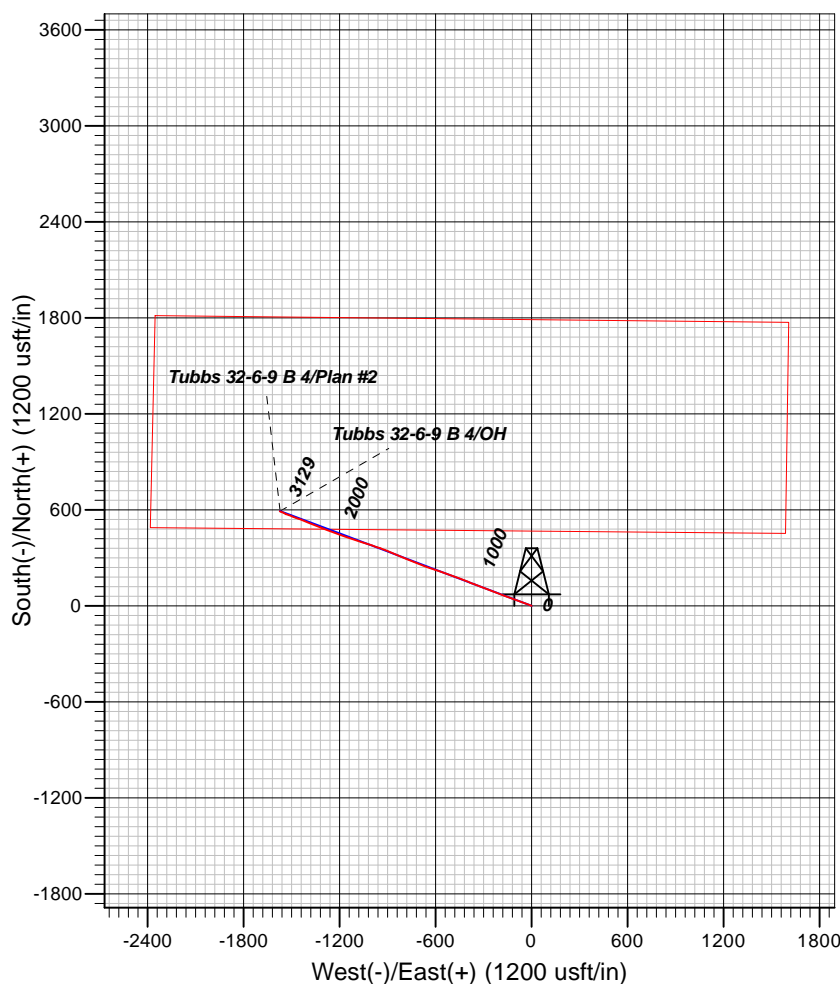
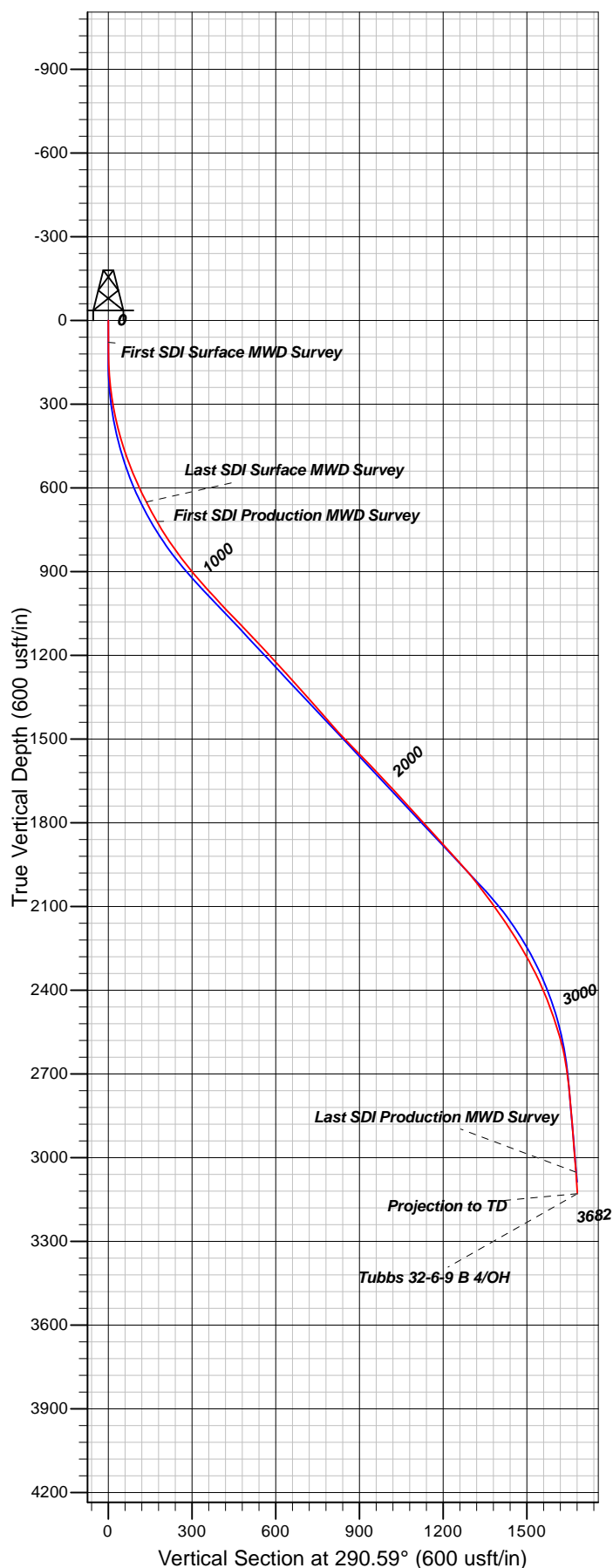
**09 June, 2015**



# TABLE OF CONTENTS

- 1. Directional Plot and Surveys**
- 2. Daily Drilling Reports**
- 3. BHA Summary Reports and Slide Sheets**
- 4. Graphical Job History**
- 5. Support Staff**





## Well Details: Tubbs 32-6-9 B 4

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1139438.90	2414944.81	37.0323715	-107.5043094	

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Tubbs 32-6-9 B 4, Grid North  
 Vertical (TVD) Reference: GL 6347.92' & RKB 11' @ 6358.91usft (Aztec 507)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: GL 6347.92' & RKB 11' @ 6358.91usft (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

13:44, June 09 2015  
 Created By: Janie Collins



## Survey Report



<b>Company:</b>	B.P.	<b>Local Co-ordinate Reference:</b>	Well Tubbs 32-6-9 B 4
<b>Project:</b>	La Plata County, CO NAD83	<b>TVD Reference:</b>	GL 6347.92' & RKB 11' @ 6358.91usft (Aztec 507)
<b>Site:</b>	SEC 9-T32N-R6W	<b>MD Reference:</b>	GL 6347.92' & RKB 11' @ 6358.91usft (Aztec 507)
<b>Well:</b>	Tubbs 32-6-9 B 4	<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		

<b>Site</b>	SEC 9-T32N-R6W			
<b>Site Position:</b>		<b>Northing:</b>	1,139,408.81 usft	<b>Latitude:</b> 37.0322889
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,414,944.98 usft	<b>Longitude:</b> -107.5043067
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b> -1.23 °

<b>Well</b>	Tubbs 32-6-9 B 4			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,139,438.90 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,414,944.82 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	6,347.91 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	5/4/2015	9.33	63.63	50,324

<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		290.59

<b>Survey Program</b>	<b>Date</b>	6/9/2015			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
79.00	673.00	Survey #1 - Surface MWD Survey (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
753.00	3,682.00	Survey #2 - Production 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	
79.00	0.48	318.71	79.00	0.25	-0.22	0.29	0.61	0.61	0.00	
<b>First SDI Surface MWD Survey</b>										
108.00	0.79	324.76	108.00	0.50	-0.41	0.56	1.09	1.07	20.86	
138.00	1.49	308.14	137.99	0.91	-0.84	1.11	2.56	2.33	-55.40	
168.00	2.74	297.85	167.97	1.49	-1.78	2.19	4.34	4.17	-34.30	
197.00	4.12	288.44	196.92	2.14	-3.38	3.92	5.12	4.76	-32.45	
227.00	5.66	288.36	226.81	2.95	-5.81	6.47	5.13	5.13	-0.27	



<b>Company:</b>	B.P.	<b>Local Co-ordinate Reference:</b>	Well Tubbs 32-6-9 B 4
<b>Project:</b>	La Plata County, CO NAD83	<b>TVD Reference:</b>	GL 6347.92' & RKB 11' @ 6358.91usft (Aztec 507)
<b>Site:</b>	SEC 9-T32N-R6W	<b>MD Reference:</b>	GL 6347.92' & RKB 11' @ 6358.91usft (Aztec 507)
<b>Well:</b>	Tubbs 32-6-9 B 4	<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)	
256.00	7.38	289.71	255.62	4.03	-8.92	9.77	5.95	5.93	4.66	
285.00	8.92	289.35	284.33	5.40	-12.79	13.88	5.31	5.31	-1.24	
316.00	10.40	289.17	314.88	7.12	-17.71	19.08	4.78	4.77	-0.58	
346.00	11.88	289.23	344.32	9.02	-23.18	24.87	4.93	4.93	0.20	
377.00	13.40	289.61	374.57	11.28	-29.58	31.65	4.91	4.90	1.23	
407.00	15.09	290.14	403.64	13.79	-36.52	39.03	5.65	5.63	1.77	
438.00	16.79	290.70	433.45	16.76	-44.49	47.55	5.51	5.48	1.81	
469.00	18.20	290.27	463.02	20.02	-53.22	56.87	4.57	4.55	-1.39	
500.00	19.71	289.80	492.33	23.47	-62.69	66.94	4.90	4.87	-1.52	
531.00	20.99	289.82	521.40	27.12	-72.83	77.71	4.13	4.13	0.06	
561.00	22.46	289.83	549.27	30.89	-83.27	88.82	4.90	4.90	0.03	
591.00	24.04	290.17	576.83	34.94	-94.40	100.66	5.29	5.27	1.13	
622.00	25.39	290.07	604.99	39.40	-106.57	113.62	4.36	4.35	-0.32	
653.00	26.78	290.74	632.83	44.15	-119.35	127.25	4.58	4.48	2.16	
673.00	27.68	291.28	650.61	47.44	-127.89	136.40	4.67	4.50	2.70	
Last SDI Surface MWD Survey										
753.00	29.55	291.28	720.84	61.34	-163.59	174.71	2.34	2.34	0.00	
First SDI Production MWD Survey										
784.00	31.12	290.90	747.59	66.97	-178.20	190.37	5.10	5.06	-1.23	
814.00	33.00	290.46	773.02	72.59	-193.09	206.29	6.31	6.27	-1.47	
844.00	34.52	290.54	797.96	78.43	-208.71	222.96	5.07	5.07	0.27	
875.00	35.67	289.87	823.32	84.59	-225.43	240.78	3.91	3.71	-2.16	
906.00	37.08	289.82	848.28	90.83	-242.73	259.16	4.55	4.55	-0.16	
937.00	37.86	289.58	872.89	97.18	-260.48	278.02	2.56	2.52	-0.77	
968.00	39.04	290.80	897.16	103.84	-278.57	297.30	4.53	3.81	3.94	
1,000.00	40.42	291.39	921.77	111.20	-297.65	317.75	4.47	4.31	1.84	
1,032.00	41.91	291.95	945.86	118.98	-317.23	338.81	4.80	4.66	1.75	
1,064.00	42.79	291.96	969.51	127.04	-337.22	360.36	2.75	2.75	0.03	
1,095.00	42.72	291.17	992.27	134.78	-356.79	381.40	1.74	-0.23	-2.55	
1,127.00	42.45	290.85	1,015.83	142.54	-377.01	403.05	1.08	-0.84	-1.00	
1,158.00	42.94	291.41	1,038.62	150.12	-396.61	424.07	2.00	1.58	1.81	
1,189.00	44.03	291.45	1,061.11	157.91	-416.47	445.40	3.52	3.52	0.13	
1,220.00	44.06	291.27	1,083.39	165.76	-436.54	466.95	0.42	0.10	-0.58	
1,251.00	44.08	290.53	1,105.67	173.45	-456.69	488.51	1.66	0.06	-2.39	
1,283.00	43.71	289.97	1,128.73	181.13	-477.50	510.70	1.68	-1.16	-1.75	
1,315.00	43.39	289.70	1,151.92	188.61	-498.24	532.75	1.16	-1.00	-0.84	
1,346.00	43.15	289.68	1,174.49	195.77	-518.25	553.99	0.78	-0.77	-0.06	
1,378.00	42.81	289.56	1,197.90	203.10	-538.80	575.80	1.09	-1.06	-0.38	
1,409.00	42.48	288.85	1,220.70	210.01	-558.63	596.80	1.88	-1.06	-2.29	
1,440.00	42.22	288.61	1,243.61	216.71	-578.41	617.67	0.99	-0.84	-0.77	
1,472.00	42.02	288.18	1,267.35	223.49	-598.77	639.12	1.10	-0.63	-1.34	
1,504.00	41.62	289.02	1,291.20	230.29	-618.99	660.44	2.15	-1.25	2.63	



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<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)	
1,535.00	42.13	290.43	1,314.28	237.28	-638.47	681.13	3.45	1.65	4.55	
1,566.00	41.90	290.46	1,337.31	244.52	-657.91	701.88	0.74	-0.74	0.10	
1,597.00	41.52	290.06	1,360.46	251.67	-677.26	722.50	1.50	-1.23	-1.29	
1,629.00	41.24	290.58	1,384.47	259.01	-697.10	743.66	1.39	-0.88	1.63	
1,660.00	41.20	291.66	1,407.78	266.37	-716.15	764.08	2.30	-0.13	3.48	
1,691.00	41.13	291.69	1,431.12	273.91	-735.12	784.49	0.23	-0.23	0.10	
1,723.00	41.83	292.24	1,455.10	281.84	-754.77	805.67	2.47	2.19	1.72	
1,753.00	42.69	292.50	1,477.30	289.52	-773.43	825.84	2.93	2.87	0.87	
1,785.00	43.53	292.44	1,500.66	297.87	-793.64	847.70	2.63	2.63	-0.19	
1,816.00	44.17	292.66	1,523.02	306.11	-813.47	869.16	2.12	2.06	0.71	
1,848.00	44.20	292.45	1,545.96	314.66	-834.07	891.45	0.47	0.09	-0.66	
1,880.00	44.06	292.81	1,568.93	323.24	-854.63	913.72	0.90	-0.44	1.13	
1,911.00	43.86	292.52	1,591.25	331.53	-874.49	935.22	0.92	-0.65	-0.94	
1,942.00	43.72	292.55	1,613.62	339.75	-894.31	956.66	0.46	-0.45	0.10	
1,974.00	43.47	292.43	1,636.80	348.19	-914.69	978.71	0.82	-0.78	-0.38	
2,006.00	43.26	291.22	1,660.06	356.36	-935.09	1,000.68	2.68	-0.66	-3.78	
2,037.00	43.13	288.75	1,682.67	363.61	-955.03	1,021.90	5.47	-0.42	-7.97	
2,069.00	42.95	288.02	1,706.05	370.50	-975.75	1,043.72	1.66	-0.56	-2.28	
2,101.00	42.75	287.47	1,729.51	377.13	-996.48	1,065.46	1.33	-0.63	-1.72	
2,132.00	42.09	287.55	1,752.40	383.43	-1,016.42	1,086.34	2.14	-2.13	0.26	
2,193.00	42.02	289.07	1,797.69	396.26	-1,055.21	1,127.16	1.67	-0.11	2.49	
2,225.00	41.90	287.75	1,821.49	403.02	-1,075.51	1,148.54	2.78	-0.38	-4.13	
2,257.00	41.88	287.65	1,845.31	409.51	-1,095.87	1,169.88	0.22	-0.06	-0.31	
2,288.00	42.14	287.49	1,868.34	415.78	-1,115.65	1,190.60	0.91	0.84	-0.52	
2,320.00	42.64	288.12	1,891.98	422.37	-1,136.19	1,212.15	2.05	1.56	1.97	
2,351.00	42.59	288.80	1,914.79	429.02	-1,156.09	1,233.12	1.49	-0.16	2.19	
2,382.00	41.83	289.46	1,937.75	435.85	-1,175.77	1,253.94	2.84	-2.45	2.13	
2,414.00	41.02	290.61	1,961.75	443.10	-1,195.66	1,275.11	3.47	-2.53	3.59	
2,444.00	40.56	291.11	1,984.46	450.08	-1,213.98	1,294.71	1.88	-1.53	1.67	
2,476.00	38.83	290.44	2,009.08	457.33	-1,233.08	1,315.15	5.57	-5.41	-2.09	
2,508.00	36.78	290.07	2,034.36	464.12	-1,251.48	1,334.76	6.45	-6.41	-1.16	
2,570.00	35.51	289.85	2,084.43	476.60	-1,285.86	1,371.33	2.06	-2.05	-0.35	
2,601.00	35.49	289.97	2,109.67	482.73	-1,302.78	1,389.33	0.23	-0.06	0.39	
2,633.00	35.08	290.59	2,135.79	489.14	-1,320.12	1,407.81	1.70	-1.28	1.94	
2,664.00	34.43	291.98	2,161.26	495.55	-1,336.59	1,425.48	3.31	-2.10	4.48	
2,695.00	33.63	292.98	2,186.95	502.18	-1,352.62	1,442.82	3.15	-2.58	3.23	
2,727.00	32.21	293.21	2,213.81	509.00	-1,368.61	1,460.19	4.45	-4.44	0.72	
2,758.00	30.69	293.90	2,240.26	515.47	-1,383.44	1,476.35	5.04	-4.90	2.23	
2,790.00	29.45	293.46	2,267.95	521.91	-1,398.12	1,492.36	3.94	-3.88	-1.38	
2,822.00	28.56	292.78	2,295.94	528.00	-1,412.39	1,507.86	2.97	-2.78	-2.13	
2,853.00	27.55	291.37	2,323.29	533.48	-1,425.90	1,522.43	3.90	-3.26	-4.55	
2,884.00	25.87	290.04	2,350.98	538.41	-1,438.93	1,536.36	5.75	-5.42	-4.29	



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<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)	
2,915.00	24.17	288.57	2,379.07	542.75	-1,451.30	1,549.47	5.84	-5.48	-4.74	
2,947.00	22.52	287.44	2,408.45	546.67	-1,463.36	1,562.14	5.34	-5.16	-3.53	
2,979.00	20.96	288.37	2,438.18	550.32	-1,474.64	1,573.98	4.99	-4.88	2.91	
3,010.00	19.86	291.43	2,467.23	553.99	-1,484.80	1,584.78	4.94	-3.55	9.87	
3,041.00	19.00	292.76	2,496.47	557.86	-1,494.36	1,595.09	3.12	-2.77	4.29	
3,072.00	18.33	293.79	2,525.84	561.78	-1,503.47	1,605.00	2.41	-2.16	3.32	
3,104.00	16.60	290.79	2,556.36	565.43	-1,512.35	1,614.60	6.09	-5.41	-9.38	
3,136.00	14.67	288.45	2,587.17	568.34	-1,520.47	1,623.22	6.34	-6.03	-7.31	
3,168.00	12.58	288.06	2,618.27	570.70	-1,527.63	1,630.75	6.54	-6.53	-1.22	
3,199.00	10.27	289.85	2,648.66	572.69	-1,533.44	1,636.88	7.54	-7.45	5.77	
3,229.00	8.42	296.37	2,678.26	574.57	-1,537.92	1,641.74	7.10	-6.17	21.73	
3,261.00	6.96	299.24	2,709.97	576.56	-1,541.71	1,645.99	4.72	-4.56	8.97	
3,293.00	6.75	300.66	2,741.74	578.47	-1,545.02	1,649.76	0.84	-0.66	4.44	
3,324.00	6.14	297.25	2,772.54	580.15	-1,548.06	1,653.20	2.32	-1.97	-11.00	
3,355.00	4.88	295.86	2,803.40	581.49	-1,550.72	1,656.16	4.09	-4.06	-4.48	
3,387.00	4.52	293.28	2,835.29	582.58	-1,553.11	1,658.78	1.30	-1.13	-8.06	
3,417.00	4.58	293.18	2,865.20	583.52	-1,555.29	1,661.15	0.20	0.20	-0.33	
3,448.00	4.47	292.95	2,896.10	584.48	-1,557.54	1,663.60	0.36	-0.35	-0.74	
3,480.00	4.52	289.87	2,928.00	585.39	-1,559.88	1,666.10	0.77	0.16	-9.63	
3,512.00	4.32	290.39	2,959.91	586.24	-1,562.19	1,668.57	0.64	-0.63	1.63	
3,543.00	4.20	291.43	2,990.82	587.06	-1,564.34	1,670.87	0.46	-0.39	3.35	
3,574.00	4.35	290.99	3,021.74	587.90	-1,566.50	1,673.18	0.50	0.48	-1.42	
3,605.00	4.22	294.61	3,052.65	588.79	-1,568.63	1,675.50	0.97	-0.42	11.68	
Last SDI Production MWD Survey										
3,682.00	4.22	294.61	3,129.44	591.15	-1,573.78	1,681.15	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	
79.00	79.00	0.25	-0.22	First SDI Surface MWD Survey	
673.00	650.61	47.44	-127.89	Last SDI Surface MWD Survey	
753.00	720.84	61.34	-163.59	First SDI Production MWD Survey	
3,605.00	3,052.65	588.79	-1,568.63	Last SDI Production MWD Survey	
3,682.00	3,129.44	591.15	-1,573.78	Projection to TD	

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





<b>JOB NO.:</b>	330615DEF284893	<b>Report Time:</b>	2400	1 of 5
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09927	
<b>LOCATION:</b>	Sec 9 T32N R06W	<b>WORK ORDER#</b>	284893	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	32N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	9	6W
<b>WELL NAME:</b>	Tubbs 32-6-9 B4			

From Wednesday, June 03, 2015 at 0000 to Wednesday, June 03, 2015 at 2400

DRILLING SUMMARY				Drilling Parameters							
Start Depth	105.00	Rotary Hours	7.75	WOB	32	Pick UP	62	Slack Off	50	SPM	
End Depth	730.00	Circulating Hours	1.17	RAB	52	SPP	1100	FlowRate	0 - 558	200	
Total Drilled:	625.00	Avg. Total ROP:	39.68	Mud Data							
Total Rotary Drilled:	297.00	Avg. Rotary ROP:	38.32	Type	SPUD			PV	8	SOLID	3.5
Total Drilled Sliding:	328.00	Avg. Slide ROP:	41.00	Weight	8.8	GAS	0	YP	5	BHT°	95
Slide Hours:	8.00	Percent Rotary:	47.52	Viscosity	38	SAND	0.05	PH	8.7	Flow T°	90
Below Rotary Hrs.	24.00	Percent Slide:	52.48	Chlorides	800	WL	14			Oil %	0
PERSONNEL				cASING					BHA		
Lead Directional :	David Hensley			Size	Lb/ft	Set Depth		BHA # 2:12 1/4 JZ, B-S, 6 1/2 FBH 1.5 7:8 3.0 W/12" STB, 12" Stabilizer, 6 1/2 NMPC, 6 1/2 HOS, 6 1/2 NMDC, 6 1/2 GAP SUB, 6 1/2 NMDC,			
Second Directional :	Doug Tanner			Signature:							
MWD Operator1	Mike Wilms										
MWD Operator2	Kyle Temple										
Directional Company:	Scientific										
Geologist:											
Company Man:	Mike Starns										
Incl. In:	0	Azm. In:	0	Incl. Out:	30.31	Azm. Out:	291.5				

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
3-Jun-15	00:00	00:50	0.83	0	0	Other	Finish rigging up
3-Jun-15	00:50	02:30	1.67	105	105	Drilling	Drilling
3-Jun-15	02:30	03:00	0.50	105	105	POOH	POOH
3-Jun-15	03:00	03:45	0.75	105	105	Change BHA	M/U BHA #2
3-Jun-15	03:45	03:50	0.08	105	105	Connection	Connection
3-Jun-15	03:50	04:00	0.17	105	105	Circulating	Circulating
3-Jun-15	04:00	04:15	0.25	105	136	Drilling	Drilling - (WOB:15; :306;RPM:50)
3-Jun-15	04:15	04:20	0.08	136	136	Other	Charge pump will not diengage
3-Jun-15	04:20	04:25	0.08	136	136	Survey & Conn.	Survey & Conn.@79' Inc 0.48° Azm 318.71°
3-Jun-15	04:25	04:30	0.08	136	136	Other	Top Drive brake not hooked up
3-Jun-15	04:30	04:40	0.17	136	154	Sliding	Sliding - (WOB:15; :558;TFO:290))
3-Jun-15	04:40	04:45	0.08	154	164	Drilling	Drilling - (WOB:15; :558;RPM:50)
3-Jun-15	04:45	04:50	0.08	164	164	Survey & Conn.	Survey & Conn.@108' Inc 0.79° Azm 324.76°
3-Jun-15	04:50	05:05	0.25	164	181	Sliding	Sliding - (WOB:15; :558;TFO:290))
3-Jun-15	05:05	05:15	0.17	181	195	Drilling	Drilling - (WOB:15; :558;RPM:50)
3-Jun-15	05:15	05:20	0.08	195	195	Survey & Conn.	Survey & Conn.@138' Inc 1.49° Azm 308.14°
3-Jun-15	05:20	05:30	0.17	195	212	Sliding	Sliding - (WOB:20; :558;TFO:290))
3-Jun-15	05:30	05:40	0.17	212	225	Drilling	Drilling - (WOB:15; :558;RPM:50)
3-Jun-15	06:45	06:50	0.08	254	254	Survey & Conn.	Survey & Conn.@197' Inc 4.12° Azm 288.44°
3-Jun-15	06:50	07:15	0.42	254	270	Sliding	Sliding - (WOB:20; :558;TFO:290))
3-Jun-15	07:15	07:45	0.50	270	284	Drilling	Drilling - (WOB:15; :558;RPM:50)



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
3-Jun-15	07:45	07:55	0.17	284	284	Survey & Conn.	Survey & Conn.@227' Inc 5.66° Azm 288.36°
3-Jun-15	07:55	08:25	0.50	284	300	Sliding	Sliding - (WOB:20; :558;TFO:360))
3-Jun-15	08:25	08:55	0.50	300	313	Drilling	Drilling - (WOB:15; :306;RPM:50)
3-Jun-15	08:55	09:00	0.08	313	313	Survey & Conn.	Survey & Conn.@256' Inc 7.38° Azm 289.71°
3-Jun-15	09:00	09:20	0.33	313	328	Sliding	Sliding - (WOB:20; :502;TFO:360))
3-Jun-15	09:20	09:35	0.25	328	342	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
3-Jun-15	09:35	09:40	0.08	342	342	Survey & Conn.	Survey & Conn.@285' Inc 8.92° Azm 289.35°
3-Jun-15	09:40	09:55	0.25	342	358	Sliding	Sliding - (WOB:24;GPM :502;TFO:360))
3-Jun-15	09:55	10:10	0.25	358	373	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
3-Jun-15	12:10	12:25	0.25	442	464	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
3-Jun-15	12:25	12:30	0.08	464	464	Survey & Conn.	Survey & Conn.@407' Inc 15.09° Azm 290.14°
3-Jun-15	12:30	12:55	0.42	464	479	Sliding	Sliding - (WOB:24;GPM :502;TFO:360))
3-Jun-15	12:55	13:10	0.25	479	495	Drilling	Drilling - (WOB:22;GPM :502;RPM:50)
3-Jun-15	13:10	13:15	0.08	495	495	Survey & Conn.	Survey & Conn.@438' Inc 16.79° Azm 290.7°
3-Jun-15	13:15	13:40	0.42	495	510	Sliding	Sliding - (WOB:27;GPM :502;TFO:360))
3-Jun-15	13:40	14:00	0.33	510	526	Drilling	Drilling - (WOB:22; :502;RPM:50)
3-Jun-15	14:00	14:05	0.08	526	526	Survey & Conn.	Survey & Conn.@469' Inc 18.2° Azm 290.27°
3-Jun-15	14:05	14:30	0.42	526	526	Rig repair	Rig repair pump
3-Jun-15	14:30	15:10	0.67	526	544	Sliding	Sliding - (WOB:27; :306;TFO:360))
3-Jun-15	15:10	15:45	0.58	544	557	Drilling	Drilling - (WOB:22;GPM :502;RPM:50)
3-Jun-15	15:45	15:50	0.08	557	557	Survey & Conn.	Survey & Conn.@500' Inc 19.71° Azm 289.8°
3-Jun-15	15:50	16:35	0.75	557	575	Sliding	Sliding - (WOB:27;GPM :306;TFO:360))
3-Jun-15	16:35	16:55	0.33	575	585	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
3-Jun-15	16:55	17:00	0.08	585	585	Other	Line up both pumps on the hole
3-Jun-15	17:00	17:05	0.08	585	588	Drilling	Drilling - (WOB:32;GPM :306;RPM:50)
3-Jun-15	17:05	17:10	0.08	588	588	Survey & Conn.	Survey & Conn.@531' Inc 20.99° Azm 289.82°
3-Jun-15	17:10	17:25	0.25	588	606	Sliding	Sliding - (WOB:38;GPM :306;TFO:360))
3-Jun-15	17:25	17:40	0.25	606	618	Drilling	Drilling - (WOB:32;GPM :306;RPM:50)
3-Jun-15	17:40	17:45	0.08	618	618	Survey & Conn.	Survey & Conn.@561' Inc 22.46° Azm 289.83°
3-Jun-15	17:45	18:00	0.25	618	636	Sliding	Sliding - (WOB:38;GPM :558;TFO:360))
3-Jun-15	18:00	18:20	0.33	636	648	Drilling	Drilling - (WOB:32;GPM :558;RPM:50)
3-Jun-15	18:20	18:25	0.08	648	648	Survey & Conn.	Survey & Conn.@591' Inc 24.04° Azm 290.17°
3-Jun-15	18:25	18:50	0.42	648	665	Sliding	Sliding - (WOB:38;GPM :558;TFO:360))
3-Jun-15	18:50	19:10	0.33	665	679	Drilling	Drilling - (WOB:32;GPM :558;RPM:50)
3-Jun-15	19:10	19:15	0.08	679	679	Survey & Conn.	Survey & Conn.@622' Inc 25.39° Azm 290.07°
3-Jun-15	19:15	19:50	0.58	679	697	Sliding	Sliding - (WOB:38;GPM :558;TFO:360))
3-Jun-15	19:50	20:05	0.25	697	710	Drilling	Drilling - (WOB:32;GPM :558;RPM:50)
3-Jun-15	20:05	20:10	0.08	710	710	Survey & Conn.	Survey & Conn.@653' Inc 26.78° Azm 290.74°
3-Jun-15	20:10	20:35	0.42	710	728	Sliding	Sliding - (WOB:38;GPM :558;TFO:360))
3-Jun-15	20:35	20:40	0.08	728	730	Drilling	Drilling - (WOB:32;GPM :558;RPM:50)
3-Jun-15	20:40	21:40	1.00	730	730	Circulating	Circulating
3-Jun-15	05:40	05:45	0.08	225	225	Survey & Conn.	Survey & Conn.@168' Inc 2.74° Azm 297.85°
3-Jun-15	05:45	06:20	0.58	225	241	Sliding	Sliding - (WOB:20; :558;TFO:290))
3-Jun-15	06:20	06:35	0.25	241	254	Drilling	Drilling - (WOB:15; :558;RPM:50)
3-Jun-15	06:35	06:45	0.17	254	254	Rig repair	Rig repair pump
3-Jun-15	10:10	10:15	0.08	373	373	Survey & Conn.	Survey & Conn.@316' Inc 10.4° Azm 289.17°
3-Jun-15	10:15	10:35	0.33	373	390	Sliding	Sliding - (WOB:24;GPM :502;TFO:360))
3-Jun-15	10:35	10:55	0.33	390	403	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
3-Jun-15	10:55	11:00	0.08	403	403	Survey & Conn.	Survey & Conn.@346' Inc 11.88° Azm 289.23°
3-Jun-15	11:00	11:35	0.58	403	420	Sliding	Sliding - (WOB:24;GPM :502;TFO:360))
3-Jun-15	11:35	11:50	0.25	420	434	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
3-Jun-15	11:50	11:55	0.08	434	434	Survey & Conn.	Survey & Conn.@377' Inc 13.4° Azm 289.61°
3-Jun-15	11:55	12:10	0.25	434	442	Sliding	Sliding - (WOB:24;GPM :502;TFO:360))
3-Jun-15	21:40	22:45	1.08	730	730	POOH	POOH
3-Jun-15	22:45	23:30	0.75	730	730	Other	L/D BHA #2
3-Jun-15	23:30	24:00	0.50	730	730	Other	Casing operations



<b>JOB NO.:</b>	330615DEF284893	<b>Report Time:</b>	2400	2 of 5
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09927	
<b>LOCATION:</b>	Sec 9 T32N R06W	<b>WORK ORDER#</b>	284893	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	32N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	9	6W
<b>WELL NAME:</b>	Tubbs 32-6-9 B4			

From Thursday, June 04, 2015 at 0000 to Thursday, June 04, 2015 at 2400

DRILLING SUMMARY					Drilling Parameters							
Start Depth	730.00	Rotary Hours	1.98	WOB	8	Pick UP	58	Slack Off	46	SPM		
End Depth	1349.00	Circulating Hours	0.98	RAB	52	SPP	1900	FlowRate	295 - 558	200		
Total Drilled:	619.00	Avg. Total ROP:	236.56	Mud Data								
Total Rotary Drilled:	490.00	Avg. Rotary ROP:	247.06	Type	LSND			PV	14	SOLID	3.5	
Total Drilled Sliding:	129.00	Avg. Slide ROP:	203.68	Weight	8.9	GAS	0	YP	12	BHT°	106	
Slide Hours:	0.63	Percent Rotary:	79.16	Viscosity	55	SAND	0.05	PH	8.5	Flow T°	96	
Below Rotary Hrs.	15.75	Percent Slide:	20.84	Chlorides	900	WL	12			Oil %	0	
PERSONNEL				cASING				BHA				
Lead Directional :	David Hensley			Size	Lb/ft	Set Depth		BHA # 3:7 7/8 MDSI 516 PDC w/ 3x13's 2x12's, 6 1/2 FHA 1.75 4:5 7.0, 6 1/2 NMPC, 6 1/2 NMPC, 6 1/2 HOS, 6 1/2 NMDC, 6 1/2 GAP SUB, 6 1/2 NMDC,				
Second Directional :	Doug Tanner			Signature:								
MWD Operator1	Mike Wilms											
MWD Operator2	Kyle Temple											
Directional Company:	Scientific											
Geologist:												
Company Man:	Mike Starns											
Incl. In:	30.31	Azm. In:	291.5	Incl. Out:	43.71	Azm. Out:	289.96					

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
4-Jun-15	00:00	08:00	8.00	730	730	Other	Casing operations
4-Jun-15	08:00	16:15	8.25	730	730	N/U BOPS	N/U BOPS & TEST
4-Jun-15	16:15	16:30	0.25	730	730	Change BHA	P/U M/U motor
4-Jun-15	16:30	16:45	0.25	730	730	Circulating	Test Motor
4-Jun-15	16:45	17:40	0.92	730	730	Other	M/U BHA #3
4-Jun-15	17:40	18:40	1.00	730	730	TIH	TIH & Tag FC @ 676'
4-Jun-15	18:40	18:45	0.08	730	730	Circulating	Circulating
4-Jun-15	18:45	19:05	0.33	730	730	Circulating	Drill Float & Cement
4-Jun-15	19:05	19:10	0.08	730	730	Connection	Connection
4-Jun-15	19:10	19:20	0.17	730	730	Circulating	Drill Cement & Shoe to 727'
4-Jun-15	19:20	19:30	0.17	730	730	Other	Repair auto driller cable
4-Jun-15	19:30	19:35	0.08	730	758	Drilling	Drilling - (WOB:15;GPM :334;RPM:50)
4-Jun-15	19:35	19:40	0.08	758	758	Connection	Connection
4-Jun-15	19:40	19:45	0.08	758	770	Sliding	Sliding - (WOB:15;GPM :334;TFO:360))
4-Jun-15	19:45	19:50	0.08	770	788	Drilling	Drilling - (WOB:15;GPM :334;RPM:50)
4-Jun-15	19:50	19:55	0.08	788	788	Survey & Conn.	Survey & Conn.@753' Inc 29.55° Azm 291.28°
4-Jun-15	19:55	20:00	0.08	788	788	Other	Sync MWD
4-Jun-15	20:00	20:05	0.08	788	800	Sliding	Sliding - (WOB:15;GPM :334;TFO:360))
4-Jun-15	20:05	20:10	0.08	800	819	Drilling	Drilling - (WOB:15;GPM :334;RPM:50)
4-Jun-15	20:10	20:15	0.08	819	819	Survey & Conn.	Survey & Conn.@753' Inc 29.55° Azm 291.28°
4-Jun-15	20:15	20:20	0.08	819	831	Sliding	Sliding - (WOB:15;GPM :334;TFO:360))

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
4-Jun-15	20:20	20:25	0.08	831	850	Drilling	Drilling - (WOB:15;GPM :334;RPM:50)
4-Jun-15	20:25	20:30	0.08	850	850	Survey & Conn.	Survey & Conn.@784' Inc 31.12° Azm 290.9°
4-Jun-15	20:30	20:32	0.03	850	861	Sliding	Sliding - (WOB:15;GPM :558;TFO:360))
4-Jun-15	20:32	20:36	0.07	861	880	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	20:36	20:45	0.15	880	880	Circulating	Hole Dirty
4-Jun-15	20:45	20:47	0.03	880	880	Survey & Conn.	Survey & Conn.@814' Inc 33° Azm 290.46°
4-Jun-15	20:47	20:50	0.05	880	889	Sliding	Sliding - (WOB:15;GPM :558;TFO:10R))
4-Jun-15	20:50	20:55	0.08	889	910	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	20:55	21:00	0.08	910	910	Survey & Conn.	Survey & Conn.@844' Inc 34.52° Azm 290.54°
4-Jun-15	21:00	21:04	0.07	910	921	Sliding	Sliding - (WOB:15;GPM :558;TFO:360))
4-Jun-15	21:04	21:08	0.07	921	941	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	21:08	21:13	0.08	941	941	Survey & Conn.	Survey & Conn.@875' Inc 35.67° Azm 289.87°
4-Jun-15	21:13	21:15	0.03	941	953	Sliding	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	21:15	21:20	0.08	953	972	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	21:20	21:25	0.08	972	972	Survey & Conn.	Survey & Conn.@906' Inc 37.08° Azm 289.82°
4-Jun-15	21:53	21:56	0.05	1034	1046	Sliding	Sliding - (WOB:15;GPM :558;TFO:10R))
4-Jun-15	21:56	22:00	0.07	1046	1066	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	22:00	22:05	0.08	1066	1066	Survey & Conn.	Survey & Conn.@1000' Inc 40.42° Azm 291.39°
4-Jun-15	22:05	22:13	0.13	1066	1098	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	22:13	22:18	0.08	1098	1098	Survey & Conn.	Survey & Conn.@1032' Inc 41.91° Azm 291.95°
4-Jun-15	22:18	22:25	0.12	1098	1130	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	22:25	22:30	0.08	1130	1130	Survey & Conn.	Survey & Conn.@1064' Inc 42.79° Azm 291.96°
4-Jun-15	22:30	22:37	0.12	1130	1161	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	22:37	22:43	0.10	1161	1161	Survey & Conn.	Survey & Conn.@1095' Inc 42.72° Azm 291.17°
4-Jun-15	22:43	22:46	0.05	1161	1174	Sliding	Sliding - (WOB:15;GPM :558;TFO:10R))
4-Jun-15	22:46	22:53	0.12	1174	1193	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	22:53	22:58	0.08	1193	1193	Survey & Conn.	Survey & Conn.@1127' Inc 42.45° Azm 290.85°
4-Jun-15	22:58	23:06	0.13	1193	1224	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	23:06	23:11	0.08	1224	1224	Survey & Conn.	Survey & Conn.@1158' Inc 42.94° Azm 291.41°
4-Jun-15	23:11	23:19	0.13	1224	1255	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	23:19	23:24	0.08	1255	1255	Survey & Conn.	Survey & Conn.@1189' Inc 44.03° Azm 291.45°
4-Jun-15	23:24	23:30	0.10	1255	1286	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	23:30	23:37	0.12	1286	1286	Survey & Conn.	Survey & Conn.@1220' Inc 44.06° Azm 291.27°
4-Jun-15	23:37	23:43	0.10	1286	1317	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	23:43	23:48	0.08	1317	1317	Survey & Conn.	Survey & Conn.@1251' Inc 44.08° Azm 290.53°
4-Jun-15	23:48	23:56	0.13	1317	1349	Drilling	Drilling - (WOB:8;GPM :558;RPM:50)
4-Jun-15	23:56	24:00	0.07	1349	1349	Survey & Conn.	Survey & Conn.@1283' Inc 43.71° Azm 289.97°
4-Jun-15	21:25	21:28	0.05	972	982	Sliding	Sliding - (WOB:15;GPM :558;TFO:10R))
4-Jun-15	21:28	21:35	0.12	982	1003	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	21:35	21:40	0.08	1003	1003	Survey & Conn.	Survey & Conn.@937' Inc 37.86° Azm 289.58°
4-Jun-15	21:40	21:43	0.05	1003	1018	Sliding	Sliding - (WOB:15;GPM :558;TFO:10R))
4-Jun-15	21:43	21:48	0.08	1018	1034	Drilling	Drilling - (WOB:15;GPM :558;RPM:50)
4-Jun-15	21:48	21:53	0.08	1034	1034	Survey & Conn.	Survey & Conn.@968' Inc 39.04° Azm 290.8°



<b>JOB NO.:</b>	330615DEF284893	<b>Report Time:</b>	2400	3 of 5
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09927	
<b>LOCATION:</b>	Sec 9 T32N R06W	<b>WORK ORDER#</b>	284893	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	32N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	9	6W
<b>WELL NAME:</b>	Tubbs 32-6-9 B4			

From Friday, June 05, 2015 at 0000 to Friday, June 05, 2015 at 2400

DRILLING SUMMARY					Drilling Parameters							
Start Depth	1349.00	Rotary Hours	10.98	WOB	22	Pick UP	104	Slack Off	56	SPM		
End Depth	3359.00	Circulating Hours	1.82	RAB	74	SPP	1850	FlowRate	306 - 558	170		
Total Drilled:	2010.00	Avg. Total ROP:	145.83	Mud Data								
Total Rotary Drilled:	1751.00	Avg. Rotary ROP:	159.42	Type	LSND			PV	15	SOLID	3.7	
Total Drilled Sliding:	259.00	Avg. Slide ROP:	92.50	Weight	8085	GAS	0	YP	6	BHT°	118	
Slide Hours:	2.80	Percent Rotary:	87.11	Viscosity	35	SAND	0.05	PH	8.5	Flow T°	110	
Below Rotary Hrs.	24.00	Percent Slide:	12.89	Chlorides	1100	WL	8			Oil %	0	
PERSONNEL				cASING					BHA			
Lead Directional :	David Hensley			Size	Lb/ft	Set Depth		BHA # 3:7 7/8 MDSI 516 PDC w/ 3x13's 2x12's, 6 1/2 FHA 1.75 4:5 7.0, 6 1/2 NMPC, 6 1/2 NMPC, 6 1/2 HOS, 6 1/2 NMDC, 6 1/2 GAP SUB, 6 1/2 NMDC,				
Second Directional :	Doug Tanner			Signature:								
MWD Operator1	Mike Wilms											
MWD Operator2	Kyle Temple											
Directional Company:	Scientific											
Geologist:												
Company Man:	Mike Starns											
Incl. In:	43.71	Azm. In:	289.96	Incl. Out:	4.88	Azm. Out:	295.86					

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Jun-15	00:00	00:08	0.13	1349	1381	Drilling	Drilling - (WOB:12;GPM :558;RPM:50)
5-Jun-15	00:08	00:16	0.13	1381	1381	Survey & Conn.	Survey & Conn.@1315' Inc 43.39° Azm 289.7°
5-Jun-15	00:16	00:23	0.12	1381	1412	Drilling	Drilling - (WOB:12;GPM :558;RPM:50)
5-Jun-15	00:23	00:28	0.08	1412	1412	Survey & Conn.	Survey & Conn.@1346' Inc 43.15° Azm 289.68°
5-Jun-15	00:28	00:35	0.12	1412	1444	Drilling	Drilling - (WOB:12;GPM :558;RPM:50)
5-Jun-15	00:35	00:42	0.12	1444	1444	Survey & Conn.	Survey & Conn.@1378' Inc 42.81° Azm 289.56°
5-Jun-15	00:42	00:50	0.13	1444	1475	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	00:50	00:55	0.08	1475	1475	Survey & Conn.	Survey & Conn.@1409' Inc 42.48° Azm 288.85°
5-Jun-15	00:55	01:03	0.13	1475	1506	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	01:03	01:12	0.15	1506	1506	Survey & Conn.	Survey & Conn.@1440' Inc 42.22° Azm 288.61°
5-Jun-15	01:12	01:15	0.05	1506	1519	Sliding	Sliding - (WOB:15;GPM :558;TFO:15R))
5-Jun-15	01:15	01:22	0.12	1519	1538	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	01:22	01:33	0.18	1538	1538	Circulating	Circulating - sweep
5-Jun-15	01:33	01:37	0.07	1538	1538	Survey & Conn.	Survey & Conn.@1472' Inc 42.02° Azm 288.18°
5-Jun-15	01:37	01:42	0.08	1538	1570	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	01:42	01:50	0.13	1570	1570	Survey & Conn.	Survey & Conn.@1504' Inc 41.62° Azm 289.02°
5-Jun-15	01:50	01:56	0.10	1570	1601	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	01:56	02:04	0.13	1601	1601	Survey & Conn.	Survey & Conn.@1535' Inc 42.13° Azm 290.43°
5-Jun-15	02:04	02:11	0.12	1601	1632	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	02:11	02:18	0.12	1632	1632	Survey & Conn.	Survey & Conn.@1566' Inc 41.9° Azm 290.46°
5-Jun-15	02:18	02:20	0.03	1632	1644	Sliding	Sliding - (WOB:15; :558;TFO:80R))



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Jun-15	02:20	02:27	0.12	1644	1663	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	02:27	02:33	0.10	1663	1663	Survey & Conn.	Survey & Conn.@1597' Inc 41.52° Azm 290.06°
5-Jun-15	02:33	02:35	0.03	1663	1675	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	02:35	03:30	0.92	1675	1675	Rig repair	Replace washed out hammer union on vibrator hose
5-Jun-15	03:30	03:35	0.08	1675	1695	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	05:30	05:35	0.08	1914	1946	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	05:35	05:50	0.25	1946	1946	Circulating	Circulating hole clean
5-Jun-15	05:50	05:55	0.08	1946	1946	Survey & Conn.	Survey & Conn.@1880' Inc 44.06° Azm 292.81°
5-Jun-15	05:55	06:00	0.08	1946	1977	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	06:00	06:05	0.08	1977	1977	Survey & Conn.	Survey & Conn.@1911' Inc 43.86° Azm 292.52°
5-Jun-15	06:05	06:15	0.17	1977	2008	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	06:15	06:20	0.08	2008	2008	Survey & Conn.	Survey & Conn.@1942' Inc 43.72° Azm 292.55°
5-Jun-15	06:20	06:25	0.08	2008	2018	Sliding	Sliding - (WOB:15;GPM :558;TFO:90L))
5-Jun-15	06:25	06:40	0.25	2018	2040	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	06:40	06:45	0.08	2040	2040	Survey & Conn.	Survey & Conn.@1974' Inc 43.47° Azm 292.43°
5-Jun-15	06:45	06:50	0.08	2040	2040	Other	XO T/ 1 PUMP
5-Jun-15	06:50	07:00	0.17	2040	2072	Drilling	Drilling - (WOB:18;GPM :558;RPM:50)
5-Jun-15	07:00	07:05	0.08	2072	2072	Survey & Conn.	Survey & Conn.@2006' Inc 43.26° Azm 291.22°
5-Jun-15	07:05	07:15	0.17	2072	2103	Drilling	Drilling - (WOB:18;GPM :306;RPM:50)
5-Jun-15	07:15	07:20	0.08	2103	2103	Survey & Conn.	Survey & Conn.@2037' Inc 43.13° Azm 288.75°
5-Jun-15	07:20	07:35	0.25	2103	2135	Drilling	Drilling - (WOB:18;GPM :306;RPM:50)
5-Jun-15	07:35	07:40	0.08	2135	2135	Survey & Conn.	Survey & Conn.@2069' Inc 42.95° Azm 288.02°
5-Jun-15	07:40	07:45	0.08	2135	2143	Sliding	Sliding - (WOB:15;GPM :558;TFO:45))
5-Jun-15	07:45	08:00	0.25	2143	2167	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
5-Jun-15	08:00	08:10	0.17	2167	2167	Survey & Conn.	Survey & Conn.@2101' Inc 42.75° Azm 287.47°
5-Jun-15	08:10	08:15	0.08	2167	2173	Sliding	Sliding - (WOB:15;GPM :558;TFO:10))
5-Jun-15	08:15	08:20	0.08	2173	2198	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
5-Jun-15	08:20	08:25	0.08	2198	2198	Survey & Conn.	Survey & Conn.@2132' Inc 42.09° Azm 287.55°
5-Jun-15	08:25	08:35	0.17	2198	2198	Circulating	Circulating work on pumps
5-Jun-15	08:35	08:40	0.08	2198	2228	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
5-Jun-15	08:40	08:45	0.08	2228	2228	Connection	Connection
5-Jun-15	08:45	08:55	0.17	2228	2259	Drilling	Drilling - (WOB:22;GPM :306;RPM:50)
5-Jun-15	08:55	09:00	0.08	2259	2259	Survey & Conn.	Survey & Conn.@2193' Inc 42.02° Azm 289.07°
5-Jun-15	09:00	09:05	0.08	2259	2265	Sliding	Sliding - (WOB:15;GPM :558;TFO:-60))
5-Jun-15	09:05	09:15	0.17	2265	2291	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	09:15	09:20	0.08	2291	2291	Survey & Conn.	Survey & Conn.@2225' Inc 41.9° Azm 287.75°
5-Jun-15	09:20	09:25	0.08	2291	2299	Sliding	Sliding - (WOB:15;GPM :516;TFO:-60))
5-Jun-15	09:25	09:30	0.08	2299	2323	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	09:30	09:35	0.08	2323	2323	Survey & Conn.	Survey & Conn.@2257' Inc 41.88° Azm 287.65°
5-Jun-15	09:35	09:50	0.25	2323	2354	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	09:50	09:55	0.08	2354	2354	Survey & Conn.	Survey & Conn.@2288' Inc 42.14° Azm 287.49°
5-Jun-15	09:55	10:10	0.25	2354	2386	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	10:10	10:15	0.08	2386	2386	Survey & Conn.	Survey & Conn.@2320' Inc 42.64° Azm 288.12°
5-Jun-15	10:15	10:20	0.08	2386	2394	Sliding	Sliding - (WOB:15;GPM :516;TFO:120))
5-Jun-15	10:20	10:25	0.08	2394	2417	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	10:25	10:30	0.08	2417	2417	Survey & Conn.	Survey & Conn.@2351' Inc 42.59° Azm 288.8°
5-Jun-15	10:30	10:40	0.17	2417	2448	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	10:40	10:45	0.08	2448	2448	Survey & Conn.	Survey & Conn.@2382' Inc 41.83° Azm 289.46°
5-Jun-15	10:45	10:50	0.08	2448	2454	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	14:10	14:15	0.08	2699	2699	Survey & Conn.	Survey & Conn.@2633' Inc 35.08° Azm 290.59°
5-Jun-15	14:15	14:20	0.08	2699	2704	Sliding	Sliding - (WOB:25;GPM :516;TFO:135))

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Jun-15	14:20	14:30	0.17	2704	2730	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	14:30	14:45	0.25	2730	2730	Circulating	Continues pump shut down Pump 1during drilling
5-Jun-15	14:45	14:50	0.08	2730	2730	Survey & Conn.	Survey & Conn.@2664' Inc 34.43° Azm 291.98°
5-Jun-15	14:50	14:55	0.08	2730	2736	Sliding	Sliding - (WOB:25;GPM :516;TFO:135))
5-Jun-15	14:55	15:05	0.17	2736	2761	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	15:05	15:10	0.08	2761	2761	Survey & Conn.	Survey & Conn.@2695' Inc 33.63° Azm 292.98°
5-Jun-15	15:10	15:15	0.08	2761	2767	Sliding	Sliding - (WOB:25;GPM :516;TFO:135))
5-Jun-15	15:15	15:25	0.17	2767	2793	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	15:25	15:30	0.08	2793	2793	Survey & Conn.	Survey & Conn.@2727' Inc 32.21° Azm 293.21°
5-Jun-15	15:30	15:35	0.08	2793	2799	Sliding	Sliding - (WOB:25;GPM :516;TFO:135))
5-Jun-15	15:35	15:45	0.17	2799	2824	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	15:45	15:50	0.08	2824	2824	Survey & Conn.	Survey & Conn.@2758' Inc 30.69° Azm 293.9°
5-Jun-15	15:50	15:55	0.08	2824	2828	Sliding	Sliding - (WOB:25;GPM :516;TFO:-135))
5-Jun-15	15:55	16:10	0.25	2828	2856	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	16:10	16:15	0.08	2856	2856	Survey & Conn.	Survey & Conn.@2790' Inc 29.45° Azm 293.46°
5-Jun-15	16:15	16:20	0.08	2856	2862	Sliding	Sliding - (WOB:25;GPM :516;TFO:-135)
5-Jun-15	16:20	16:30	0.17	2862	2888	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	16:30	16:35	0.08	2888	2888	Survey & Conn.	Survey & Conn.@2822' Inc 28.56° Azm 292.78°
5-Jun-15	16:35	16:40	0.08	2888	2894	Sliding	Sliding - (WOB:25;GPM :516;TFO:-135)
5-Jun-15	16:40	16:50	0.17	2894	2919	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	16:50	17:00	0.17	2919	2919	Survey & Conn.	Survey & Conn.@2853' Inc 27.55° Azm 291.37°
5-Jun-15	17:00	17:04	0.07	2919	2925	Sliding	Sliding - (WOB:25;GPM :516;TFO:-135))
5-Jun-15	18:48	18:52	0.07	3062	3076	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	18:52	19:02	0.17	3076	3076	Survey & Conn.	Survey & Conn.@3010' Inc 19.86° Azm 291.43°
5-Jun-15	19:02	19:04	0.03	3076	3078	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	19:04	19:07	0.05	3078	3078	Other	Pump died
5-Jun-15	19:07	19:09	0.03	3078	3083	Sliding	Sliding - (WOB:25;GPM :516;TFO:150R))
5-Jun-15	19:09	19:21	0.20	3083	3107	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	19:21	19:32	0.18	3107	3107	Survey & Conn.	Survey & Conn.@3041' Inc 19° Azm 292.76°
5-Jun-15	19:32	19:34	0.03	3107	3112	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	19:34	19:36	0.03	3112	3112	Other	Pump died
5-Jun-15	19:36	19:38	0.03	3112	3115	Sliding	Sliding - (WOB:25;GPM :516;TFO:170R)
5-Jun-15	19:38	19:45	0.12	3115	3129	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	19:45	19:49	0.07	3129	3129	Other	Pump died
5-Jun-15	19:49	19:51	0.03	3129	3134	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	19:51	19:55	0.07	3134	3134	Other	Pump died
5-Jun-15	19:55	19:57	0.03	3134	3138	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	19:57	20:08	0.18	3138	3138	Survey & Conn.	Survey & Conn.@3072' Inc 18.33° Azm 293.79°
5-Jun-15	20:08	20:10	0.03	3138	3139	Sliding	Sliding - (WOB:25;GPM :516;TFO:170R))
5-Jun-15	20:10	20:17	0.12	3139	3139	Other	Pump died
5-Jun-15	20:17	20:19	0.03	3139	3143	Sliding	Sliding - (WOB:25;GPM :516;TFO:170R))
5-Jun-15	20:19	20:25	0.10	3143	3143	Other	Blew pop off try 1 pump @ 130 stks
5-Jun-15	20:25	20:27	0.03	3143	3143	Other	Stalled 2x
5-Jun-15	20:27	20:35	0.13	3143	3143	Circulating	Circulating back on both pumps lower parameters and strokes
5-Jun-15	20:35	20:40	0.08	3143	3149	Sliding	Sliding - (WOB:25;GPM :516;TFO:160R))
5-Jun-15	20:40	20:53	0.22	3149	3170	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	23:52	24:00	0.13	3359	3359	Survey & Conn.	Survey & Conn.@3293' Inc 6.75° Azm 300.66°
5-Jun-15	03:35	03:40	0.08	1695	1695	Survey & Conn.	Survey & Conn.@1629' Inc 41.24° Azm 290.58°
5-Jun-15	03:40	03:50	0.17	1695	1726	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	03:50	03:55	0.08	1726	1726	Survey & Conn.	Survey & Conn.@1660' Inc 41.2° Azm 291.66°
5-Jun-15	03:55	03:58	0.05	1726	1738	Sliding	Sliding - (WOB:15; :558;TFO:65R))



Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Jun-15	03:58	04:05	0.12	1738	1757	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	04:05	04:10	0.08	1757	1757	Circulating	Circulating - work stand
5-Jun-15	04:10	04:15	0.08	1757	1757	Survey & Conn.	Survey & Conn.@1691' Inc 41.13° Azm 291.69°
5-Jun-15	04:15	04:25	0.17	1757	1789	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	04:25	04:35	0.17	1789	1801	Sliding	Sliding - (WOB:15; :558;TFO:15R))
5-Jun-15	04:35	04:40	0.08	1801	1819	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	04:40	04:45	0.08	1819	1819	Survey & Conn.	Survey & Conn.@1753' Inc 42.69° Azm 292.5°
5-Jun-15	04:45	04:52	0.12	1819	1851	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	04:52	04:57	0.08	1851	1851	Survey & Conn.	Survey & Conn.@1785' Inc 43.53° Azm 292.44°
5-Jun-15	04:57	05:15	0.30	1851	1882	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	05:15	05:25	0.17	1882	1914	Drilling	Drilling - (WOB:18; :558;RPM:50)
5-Jun-15	05:25	05:30	0.08	1914	1914	Survey & Conn.	Survey & Conn.@1848' Inc 44.2° Azm 292.45°
5-Jun-15	10:50	10:55	0.08	2454	2480	Drilling	Drilling - (WOB:22;GPM :558;RPM:50)
5-Jun-15	10:55	11:00	0.08	2480	2480	Survey & Conn.	Survey & Conn.@2414' Inc 41.02° Azm 290.61°
5-Jun-15	11:00	11:05	0.08	2480	2487	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	11:05	11:15	0.17	2487	2510	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	11:15	11:20	0.08	2510	2510	Survey & Conn.	Survey & Conn.@2444' Inc 40.56° Azm 291.11°
5-Jun-15	11:20	11:25	0.08	2510	2517	Sliding	Sliding - (WOB:25;GPM :516;TFO:180)
5-Jun-15	11:25	11:30	0.08	2517	2542	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	11:30	11:45	0.25	2542	2542	Circulating	Continues pump shut down during drilling
5-Jun-15	11:45	11:50	0.08	2542	2542	Survey & Conn.	Survey & Conn.@2476' Inc 38.83° Azm 290.44°
5-Jun-15	11:50	12:00	0.17	2542	2574	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	12:00	12:05	0.08	2574	2574	Survey & Conn.	Survey & Conn.@2508' Inc 36.78° Azm 290.07°
5-Jun-15	12:05	12:20	0.25	2574	2605	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	12:20	12:50	0.50	2605	2605	Circulating	Rig Service
5-Jun-15	12:50	13:10	0.33	2605	2636	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	13:10	13:15	0.08	2636	2636	Survey & Conn.	Survey & Conn.@2570' Inc 35.51° Azm 289.85°
5-Jun-15	13:15	13:20	0.08	2636	2641	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	13:20	13:35	0.25	2641	2667	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	13:35	13:40	0.08	2667	2667	Survey & Conn.	Survey & Conn.@2601' Inc 35.49° Azm 289.97°
5-Jun-15	13:40	13:45	0.08	2667	2672	Sliding	Sliding - (WOB:25;GPM :516;TFO:135))
5-Jun-15	13:45	14:10	0.42	2672	2699	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	17:04	17:12	0.13	2925	2950	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	17:12	17:20	0.13	2950	2950	Survey & Conn.	Survey & Conn.@2884' Inc 25.87° Azm 290.04°
5-Jun-15	17:20	17:22	0.03	2950	2956	Sliding	Sliding - (WOB:25;GPM :516;TFO:150L))
5-Jun-15	17:22	17:31	0.15	2956	2981	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	17:31	17:39	0.13	2981	2981	Survey & Conn.	Survey & Conn.@2915' Inc 24.17° Azm 288.57°
5-Jun-15	17:39	17:41	0.03	2981	2987	Sliding	Sliding - (WOB:25;GPM :516;TFO:180))
5-Jun-15	17:41	17:45	0.07	2987	2994	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	17:45	17:50	0.08	2994	2994	Other	Pump died
5-Jun-15	17:50	17:54	0.07	2994	3013	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	17:54	18:00	0.10	3013	3013	Survey & Conn.	Survey & Conn.@2947' Inc 22.52° Azm 287.44°
5-Jun-15	18:00	18:05	0.08	3013	3021	Sliding	Sliding - (WOB:25;GPM :516;TFO:140R))
5-Jun-15	18:05	18:06	0.02	3021	3023	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	18:06	18:17	0.18	3023	3023	Other	Pump died
5-Jun-15	18:17	18:24	0.12	3023	3045	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	18:24	18:34	0.17	3045	3045	Survey & Conn.	Survey & Conn.@2979' Inc 20.96° Azm 288.37°
5-Jun-15	18:34	18:39	0.08	3045	3051	Sliding	Sliding - (WOB:25;GPM :516;TFO:140R))
5-Jun-15	18:39	18:44	0.08	3051	3062	Drilling	Drilling - (WOB:22;GPM :516;RPM:50)
5-Jun-15	18:44	18:48	0.07	3062	3062	Other	Pump died
5-Jun-15	20:53	21:03	0.17	3170	3170	Survey & Conn.	Survey & Conn.@3104' Inc 16.6° Azm 290.79°

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Jun-15	21:03	21:10	0.12	3170	3179	Sliding	Sliding - (WOB:25;GPM :475;TFO:160R))
5-Jun-15	21:10	21:22	0.20	3179	3202	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
5-Jun-15	21:22	21:35	0.22	3202	3202	Survey & Conn.	Survey & Conn.@3136' Inc 14.67° Azm 288.45°
5-Jun-15	21:35	21:41	0.10	3202	3211	Sliding	Sliding - (WOB:25;GPM :475;TFO:170R))
5-Jun-15	21:41	22:00	0.32	3211	3234	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
5-Jun-15	22:00	22:10	0.17	3234	3234	Survey & Conn.	Survey & Conn.@3168' Inc 12.58° Azm 288.06°
5-Jun-15	22:10	22:17	0.12	3234	3244	Sliding	Sliding - (WOB:25;GPM :475;TFO:155R))
5-Jun-15	22:17	22:30	0.22	3244	3265	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
5-Jun-15	22:30	22:40	0.17	3265	3265	Survey & Conn.	Survey & Conn.@3199' Inc 10.27° Azm 289.85°
5-Jun-15	22:40	22:57	0.28	3265	3295	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
5-Jun-15	22:57	23:04	0.12	3295	3295	Survey & Conn.	Survey & Conn.@3229' Inc 8.42° Azm 296.37°
5-Jun-15	23:04	23:20	0.27	3295	3327	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
5-Jun-15	23:20	23:27	0.12	3327	3327	Survey & Conn.	Survey & Conn.@3261' Inc 6.96° Azm 299.24°
5-Jun-15	23:27	23:28	0.02	3327	3329	Sliding	Sliding - (WOB:25;GPM :475;TFO:180)
5-Jun-15	23:28	23:33	0.08	3329	3329	Other	Blew pop off
5-Jun-15	23:33	23:37	0.07	3329	3336	Sliding	Sliding - (WOB:25;GPM :475;TFO:180))
5-Jun-15	23:37	23:52	0.25	3336	3359	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)



<b>JOB NO.:</b>	330615DEF284893	<b>Report Time:</b>	2400	4 of 5
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09927	
<b>LOCATION:</b>	Sec 9 T32N R06W	<b>WORK ORDER#</b>	284893	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	32N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	9	6W
<b>WELL NAME:</b>	Tubbs 32-6-9 B4			

From Saturday, June 06, 2015 at 0000 to Saturday, June 06, 2015 at 2400

DRILLING SUMMARY						Drilling Parameters							
Start Depth	3359.00	Rotary Hours	2.97	WOB	22	Pick UP	130	Slack Off	70	SPM			
End Depth	3682.00	Circulating Hours	3.00	RAB	88	SPP	1850	FlowRate	475 - 475	170			
Total Drilled:	323.00	Avg. Total ROP:	108.88	Mud Data									
Total Rotary Drilled:	323.00	Avg. Rotary ROP:	108.88	Type	LSND				PV	15	SOLID	3.7	
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	8085	GAS	0	YP	6	BHT°	118		
Slide Hours:	0.00	Percent Rotary:	100.00	Viscosity	35	SAND	0.05	PH	8.5	Flow T°	110		
Below Rotary Hrs.	24.00	Percent Slide:	.00	Chlorides	1100	WL	8			Oil %	0		
PERSONNEL						cASING				BHA			
Lead Directional :	David Hensley			Size	Lb/ft	Set Depth		BHA # 3:7 7/8 MDSI 516 PDC w/ 3x13's 2x12's, 6 1/2 FHA 1.75 4:5 7.0, 6 1/2 NMPC, 6 1/2 NMPC, 6 1/2 HOS, 6 1/2 NMDC, 6 1/2 GAP SUB, 6 1/2 NMDC,					
Second Directional :	Doug Tanner			Signature:									
MWD Operator1	Mike Wilms												
MWD Operator2	Kyle Temple												
Directional Company:	Scientific												
Geologist:													
Company Man:	Mike Starns												
Incl. In:	4.88	Azm. In:	295.86	Incl. Out:	0	Azm. Out:	0						

#### GENERAL COMMENT

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Jun-15	00:00	00:15	0.25	3359	3390	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	00:15	00:25	0.17	3390	3390	Survey & Conn.	Survey & Conn.@3324' Inc 6.14° Azm 297.25°
6-Jun-15	00:25	00:38	0.22	3390	3421	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	00:38	00:45	0.12	3421	3421	Survey & Conn.	Survey & Conn.@3355' Inc 4.88° Azm 295.86°
6-Jun-15	00:45	01:00	0.25	3421	3453	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	01:00	01:05	0.08	3453	3453	Survey & Conn.	Survey & Conn.@3387' Inc 4.52° Azm 293.28°
6-Jun-15	01:05	01:20	0.25	3453	3483	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	01:20	01:27	0.12	3483	3483	Survey & Conn.	Survey & Conn.@3417' Inc 4.58° Azm 293.18°
6-Jun-15	01:27	01:45	0.30	3483	3514	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	01:45	01:51	0.10	3514	3514	Survey & Conn.	Survey & Conn.@3448' Inc 4.47° Azm 292.95°
6-Jun-15	01:51	02:12	0.35	3514	3546	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	02:12	02:18	0.10	3546	3546	Survey & Conn.	Survey & Conn.@3480' Inc 4.52° Azm 289.87°
6-Jun-15	02:18	02:42	0.40	3546	3578	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	02:42	02:49	0.12	3578	3578	Survey & Conn.	Survey & Conn.@3512' Inc 4.32° Azm 290.39°
6-Jun-15	02:49	03:07	0.30	3578	3609	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	03:07	03:13	0.10	3609	3609	Survey & Conn.	Survey & Conn.@3543' Inc 4.2° Azm 291.43°
6-Jun-15	03:13	03:31	0.30	3609	3640	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	03:31	03:37	0.10	3640	3640	Survey & Conn.	Survey & Conn.@3574' Inc 4.35° Azm 290.99°
6-Jun-15	03:37	03:53	0.27	3640	3671	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)
6-Jun-15	03:53	04:00	0.12	3671	3671	Survey & Conn.	Survey & Conn.@3605' Inc 4.22° Azm 294.61°
6-Jun-15	04:00	04:05	0.08	3671	3682	Drilling	Drilling - (WOB:22;GPM :475;RPM:50)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Jun-15	04:05	07:05	3.00	3682	3682	Circulating	Circulating
6-Jun-15	07:05	12:00	4.92	3682	3682	POOH	POOH Down directional tools
6-Jun-15	12:00	24:00	12.00	3682	3682	Other	Perform 5 1/2 CSG Operations



<b>JOB NO.:</b>	330615DEF284893	<b>Report Time:</b>	2400	5 of 5
<b>COMPANY:</b>	B.P.	<b>API JOB #</b>	05-067-09927	
<b>LOCATION:</b>	Sec 9 T32N R06W	<b>WORK ORDER#</b>	284893	
<b>RIG NAME:</b>	Aztec 507	<b>FIELD:</b>	San Juan Basin	
<b>STATE:</b>	Colorado	<b>Township:</b>	32N	
<b>COUNTY:</b>	La Plata	<b>SECT\</b>	RANGE: 9	6W
<b>WELL NAME:</b>	Tubbs 32-6-9 B4			

From Sunday, June 07, 2015 at 0000 to Sunday, June 07, 2015 at 2400

DRILLING SUMMARY				Drilling Parameters								
Start Depth	0.00	Rotary Hours	0.00	WOB	22	Pick UP	130	Slack Off	70	SPM		
End Depth	0.00	Circulating Hours	0.00	RAB	88	SPP	1850	FlowRate	475 - 475	170		
Total Drilled:	0.00	Avg. Total ROP:	NA	Mud Data								
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type	LSND			PV	15	SOLID	3.7	
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	8085	GAS	0	YP	6	BHT°	118	
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	35	SAND	0.05	PH	8.5	Flow T°	110	
Below Rotary Hrs.	24.00	Percent Slide:	NA	Chlorides	1100	WL	8			Oil %	0	
PERSONNEL				cASING					BHA			
Lead Directional :	David Hensley			Size	Lb/ft	Set Depth		N/A				
Second Directional :	Doug Tanner			Signature:								
MWD Operator1	Mike Wilms											
MWD Operator2	Kyle Temple											
Directional Company:	Scientific											
Geologist:												
Company Man:	Mike Starns											
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
7-Jun-15	00:00	24:00	24.00	3682	3682	Other	Move rig & rig up

<b>BHA #</b>		<b>SDI</b>		Scientific Drilling	
JOB NO.:                      Work Order:		FIELD:			
COMPANY:		Township:			
LOCATION:		SECT. RANGE:			
RIG NAME:		Lead DD:			
STATE:		Co. Man:			
COUNTY:		BHA TYPE:			
WELL NAME:		BHA WT:		Wt @ Jars:	

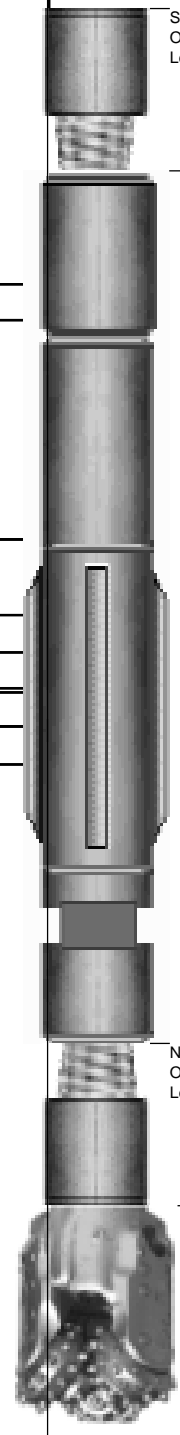
Time and Depths	MOTOR DATA	Drilling Parameters					
Date In:	MFG.:	SO/PU: /					
Date Out:	Pad OD:	Rot Strg Wt:					
Hrs In Hole:	NB Stab:	WOB:					
Start Depth:	Bit to Bend:	TORQ:					
End Depth:	Bent Hsg/Sub°: /	SPP:					
Total Drilled:	Lobe/Stage: /	Motor RPM:					
Avg. Total ROP:	Rev/GAL:	Rotary RPM:					
Circ Hrs: Tot/Only	Rotor Jet:	Flow Rate:					
Percent Slide:	Prop BUR:	Avg Diff:					
Percent Hrs:	Act BUR:	Stall Pres.:					
Slide Hours:		Off Bot Pres.:					
Total Sliding:	<b>Mud Data</b>	<b>Bit Record</b>					
Avg. Slide ROP:	Type Type	/					
Percent Rotary:	WT: GAS:	Run #:					
Percent Hrs:	Vis: PV:	Type Bit:					
Rotary Hours:	WL: PH:	IADC#: TFA:					
Total Rotary:	SOL: SAND:	JETS:					
Avg. Rotary ROP:	Oil %: T °:	Bit Drop: Type					
Reason POOH:	Chlor: YP:	Cond.:					
<b>MWD Spacing</b>	Gamma: Restiv: Sensor:	Last Casing n n .					
	GYRO: DNSC: Sonic:	Shoe @: Hanger @:					
INC IN: INC OUT:</ AZM IN:</ AZM OUT:</td <td></td> <td></td> <td></td>							
<b>BHA Detail</b>							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.

Shock Sub  
O.D.=6 3/8  
Length=11.56

NOV top ho e motor 7:8 2.  
O.D.=6 3/4  
Length=29.45

NOV Bit Sub  
O.D.=7 11/16  
Length=1.11

GHIGC 12 1/14" 3x16 1x  
O.D.=12 1/4  
Length=1



WinSURV II BHA Report - License: NP2320



JOB NO.:  
COMPANY:  
LOCATION:  
RIG NAME:  
STATE:  
COUNTY:           Country  
WELL NAME:

FIELD:  
Township:  
Range

MOTOR INFORMATION		
Desc: Nov Top Hole Motor		
Bent Hsg/Sub: 0	/ 0	Bit to Bend: 0
Pad OD:		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
Total Drilled:						0	Avg. Total ROP:			NA		DEPTH% - TIME %							
Total Rotary Drilled:						0	Avg. Rotary ROP:			NA		Percent Rotary:		NA					
Total Drilled Sliding:						0	Avg. Slide ROP:			NA		Percent Slide:		NA					



## BHA # 2

## SDI



JOB NO.: 330615DEF284893 Work Order: 284893  
 COMPANY: B.P.  
 LOCATION: Sec 9 T32N R06W  
 RIG NAME: Aztec 507  
 STATE: Colorado  
 COUNTY: La Plata  
 WELL NAME: Tubbs 32-6-9 B4

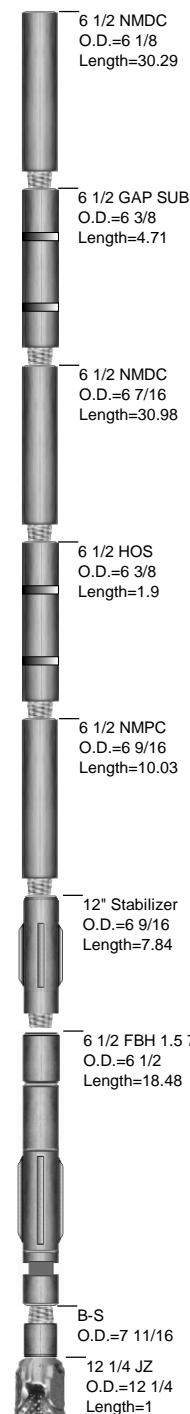
FIELD: San Juan Basin  
 Township: 32N  
 SECT. RANGE: 9 6W  
 Lead DD: David Hensley  
 Co. Man: Mike Starns  
 BHA TYPE: Steerable Assembly  
 BHA WT: 8033 Wt @ Jars: N/A

Time and Depths		MOTOR DATA		Drilling Parameters	
Date In:	03-Jun-15 @ 03:00	6 1/2 Motor 7/8 3.0 FBH 1.5		SO/PU:	30 - 50 / 30-62
Date Out:	03-Jun-15 @ 23:30	MFG.: SDI		Rot Strg Wt:	30-52
Hrs In Hole:	20.50	Pad OD: 6 7/8		WOB:	10 - 38
Start Depth:	105.00	NB Stab: 12		TORQ:	2000 - 2000
End Depth:	730.00	Bit to Bend: 4.44		SPP:	385 - 1100
Total Drilled:	625.00	Bent Hsg/Sub°: 1.5 /		Motor RPM:	89 - 162
Avg. Total ROP:	44.38	Lobe/Stage: 7/8 / 3		Rotary RPM:	50 - 50
Circ Hrs: Tot/Only	15.25 / 1.17	Rev/GAL: 0.29		Flow Rate:	279 - 558
Percent Slide:	52.48	Rotor Jet: 0		Avg Diff:	250
Percent Hrs:	56.80	Prop BUR: 8.5		Stall Pres.:	1350
Slide Hours:	8.00	Act BUR: 9		Off Bot Pres.:	1100
Total Sliding:	328.00	Mud Data		Bit Record	
Avg. Slide ROP:	41.00	Type SPUD		OTHER / 12 1/4 JZ	
Percent Rotary:	47.52	WT: 8.8	GAS: 0	Run #:	2
Percent Hrs:	43.20	Vis: 38	PV: 8	Type Bit:	INSERT BIT
Rotary Hours:	6.08	WL: 14	PH: 8.7	IADC#:	TFA: 0.739
Total Rotary:	297.00	SOL: 3.5	SAND: 0.05	JETS:	14,3-16
Avg. Rotary ROP:	48.82	Oil %: 0	T °: 95	Bit Drop:	462 PSI @ 558 GPM
Reason POOH:	TD	Chlor: 800	YP: 5	Cond.:	
MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 55	Last Casing	h n .
	GYRO: 0	DNCS: 105	Sonic: 0	Shoe @:	Hanger @:

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

## BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
12 1/4 JZ	F32281	3	12 1/4	1.00	1.00	4 1/2 REGP	OTHER
B-S	12-100	2 3/8	7 11/16	1.03	2.03	4 1/2 REGP	SDI
6 1/2 FBH 1.5 7:8 3.0 W/12" STB	65280	2	6 1/2	18.48	20.51	4 1/2 XHB	SDI
12" Stabilizer	604124	2 7/8	6 9/16	7.84	28.35	4 1/2 XHB	SDI
6 1/2 NMPC	125-485	3 1/4	6 9/16	10.03	38.38	4 1/2 XHB	SDI
6 1/2 HOS	8-728	3 1/4	6 3/8	1.90	40.28	4 1/2 XHB	SDI
6 1/2 NMDC	122-691	3 1/4	6 7/16	30.98	71.26	4 1/2 XHB	SDI
6 1/2 GAP SUB	69-858	2 7/8	6 3/8	4.71	75.97	4 1/2 XHB	SDI
6 1/2 NMDC	122-283	3 5/16	6 1/8	30.29	106.26	4 1/2 XHB	SDI





**JOB NO.:** 330615DEF284893  
**COMPANY:** B.P.  
**LOCATION:** Sec 9 T32N R06W  
**RIG NAME:** Aztec 507  
**STATE:** Colorado  
**COUNTY:** Country  
**WELL NAME:** Tubbs 32-6-9 B4

**FIELD:** San Juan Basin  
**Township:** 32N  
**Range** 6W

MOTOR INFORMATION	
Desc: 6 1/2 Motor 7/8 3.0 FBH 1.5	
Bent Hsg/Sub: 1.5 / 0	Bit to Bend: 4.44
Pad OD: 6 7/8	NB Stab:

## Slide Report for BHA # 2

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
2	3-Jun	Drilling	04:00	04:15	0.25	105	136	31	15	124.0	50	2000	306	550		1.44	341.00	0.77	
2	3-Jun	Sliding	04:30	04:40	0.17	136	154	18	15	108.0	50	2000	306	550	290	2.15	315.00	1.30	
2	3-Jun	Drilling	04:40	04:45	0.08	154	164	10	15	120.0	50	2000	306	550		2.57	318.00	1.30	
2	3-Jun	Sliding	04:50	05:05	0.25	164	181	17	15	68.0	50	2000	306	550	290	3.35	303.00	1.54	
2	3-Jun	Drilling	05:05	05:15	0.17	181	195	14	15	84.0	50	2000	306	550		4.02	307.00	1.54	
2	3-Jun	Sliding	05:20	05:30	0.17	195	212	17	20	102.0	50	2000	306	550	290	4.89	288.00	1.54	
2	3-Jun	Drilling	05:30	05:40	0.17	212	225	13	15	78.0	50	2000	306	550		5.56	289.00	1.54	
2	3-Jun	Sliding	05:45	06:20	0.58	225	241	16	20	27.4	50	2000	306	550	290	6.49	289.00	1.79	
2	3-Jun	Drilling	06:20	06:35	0.25	241	254	13	15	52.0	50	2000	306	550		7.26	290.00	1.79	
2	3-Jun	Sliding	06:50	07:15	0.42	254	270	16	20	38.4	50	2000	306	550	290	8.12	290.00	1.59	
2	3-Jun	Drilling	07:15	07:45	0.50	270	284	14	15	28.0	50	2000	306	550		8.87	290.00	1.59	
2	3-Jun	Sliding	07:55	08:25	0.50	284	300	16	20	32.0	50	2000	306	550	360	9.64	289.00	1.43	
2	3-Jun	Drilling	08:25	08:55	0.50	300	313	13	15	26.0	50	2000	306	550		10.26	290.00	1.43	
2	3-Jun	Sliding	09:00	09:20	0.33	313	328	15	20	45.0	50	2000	502	930	360	10.99	289.00	1.48	
2	3-Jun	Drilling	09:20	09:35	0.25	328	342	14	22	56.0	50	2000	502	930		11.68	289.00	1.48	
2	3-Jun	Sliding	09:40	09:55	0.25	342	358	16	24	64.0	50	2000	502	930	360	12.47	289.00	1.47	
2	3-Jun	Drilling	09:55	10:10	0.25	358	373	15	22	60.0	50	2000	502	930		13.20	290.00	1.47	
2	3-Jun	Sliding	10:15	10:35	0.33	373	390	17	24	51.0	50	2000	502	930	360	14.13	290.00	1.70	
2	3-Jun	Drilling	10:35	10:55	0.33	390	403	13	22	39.0	50	2000	502	930		14.86	290.00	1.70	
2	3-Jun	Sliding	11:00	11:35	0.58	403	420	17	24	29.1	50	2000	502	930	360	15.80	290.00	1.65	
2	3-Jun	Drilling	11:35	11:50	0.25	420	434	14	22	56.0	50	2000	502	930		16.57	291.00	1.65	
2	3-Jun	Sliding	11:55	12:10	0.25	434	442	8	24	32.0	50	2000	502	930	360	16.97	291.00	1.37	
2	3-Jun	Drilling	12:10	12:25	0.25	442	464	22	22	88.0	50	2000	502	930		17.97	291.00	1.37	
2	3-Jun	Sliding	12:30	12:55	0.42	464	479	15	27	36.0	50	2000	502	930	360	18.69	290.00	1.47	
2	3-Jun	Drilling	12:55	13:10	0.25	479	495	16	22	64.0	50	2000	502	930		19.47	291.00	1.47	

# Slide Report for BHA # 2

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
2	3-Jun	Sliding	13:15	13:40	0.42	495	510	15	27	36.0	50	2000	502	930	360	20.12	290.00	1.24	
2	3-Jun	Drilling	13:40	14:00	0.33	510	526	16	22	48.0	50	2000	502	930		20.78	290.00	1.24	
2	3-Jun	Sliding	14:30	15:10	0.67	526	544	18	27	27.0	50	2000	306	540	360	21.63	290.00	1.47	
2	3-Jun	Drilling	15:10	15:45	0.58	544	557	13	22	22.3	50	2000	306	540		22.26	290.00	1.47	
2	3-Jun	Sliding	15:50	16:35	0.75	557	575	18	27	24.0	50	2000	306	540	360	23.20	290.00	1.59	
2	3-Jun	Drilling	16:35	16:55	0.33	575	585	10	22	30.0	50	2000	306	540		23.72	290.00	1.59	
2	3-Jun	Drilling	17:00	17:05	0.08	585	588	3	32	36.0	50	2000	558	1100		23.88	290.00	1.59	
2	3-Jun	Sliding	17:10	17:25	0.25	588	606	18	38	72.0	50	2000	558	1100	360	24.69	290.00	1.31	
2	3-Jun	Drilling	17:25	17:40	0.25	606	618	12	32	48.0	50	2000	558	1100		25.22	290.00	1.31	
2	3-Jun	Sliding	17:45	18:00	0.25	618	636	18	38	72.0	50	2000	558	1100	10R	26.02	290.00	1.38	
2	3-Jun	Drilling	18:00	18:20	0.33	636	648	12	32	36.0	50	2000	558	1100		26.56	291.00	1.38	
2	3-Jun	Sliding	18:25	18:50	0.42	648	665	17	38	40.8	50	2000	558	1100	360	27.32	291.00	1.40	
2	3-Jun	Drilling	18:50	19:10	0.33	665	679	14	32	42.0	50	2000	558	1100		27.82	291.00	0.70	
2	3-Jun	Sliding	19:15	19:50	0.58	679	697	18	38	30.9	50	2000	558	1100	10R	28.24	291.00	0.70	
2	3-Jun	Drilling	19:50	20:05	0.25	697	710	13	32	52.0	50	2000	558	1100		28.54	291.00	0.70	
2	3-Jun	Sliding	20:10	20:35	0.42	710	728	18	38	43.2	50	2000	558	1100	360	28.97	291.00	0.70	
2	3-Jun	Drilling	20:35	20:40	0.08	728	730	2	32	24.0	50	2000	558	1100		29.01	291.00	0.70	

Total Drilled:

625

Avg. Total ROP:

44.38

DEPTH% - TIME %

Total Rotary Drilled:

297

Avg. Rotary ROP:

48.82

Percent Rotary: 47.52 - 43.20

Total Drilled Sliding:

328

Avg. Slide ROP:

41.00

Percent Slide: 52.48 - 56.80

## BHA # 3

## SDI



JOB NO.: 330615DEF284893 Work Order: 284893  
 COMPANY: B.P.  
 LOCATION: Sec 9 T32N R06W  
 RIG NAME: Aztec 507  
 STATE: Colorado  
 COUNTY: La Plata  
 WELL NAME: Tubbs 32-6-9 B4

FIELD: San Juan Basin  
 Township: 32N  
 SECT. RANGE: 9 6W  
 Lead DD: David Hensley  
 Co. Man: Mike Starns  
 BHA TYPE: Steerable Assembly  
 BHA WT: -1203511 Wt @ Jars: N/A

Time and Depths		MOTOR DATA	Drilling Parameters	
Date In:	04-Jun-15 @ 16:15	6 1/2 Motor 4:5 7.0 FBH 1.75	SO/PU:	46 - 70 / 58-130
Date Out:	06-Jun-15 @ 12:00	MFG.: SDI	Rot Strg Wt:	52-88
Hrs In Hole:	43.75	Pad OD: 6 7/8	WOB:	8 - 32
Start Depth:	730.00	NB Stab: 0	TORQ:	2000 - 7000
End Depth:	3682.00	Bit to Bend: 5.23	SPP:	650 - 2100
Total Drilled:	2952.00	Bent Hsg/Sub°: 1.75 /	Motor RPM:	167 - 279
Avg. Total ROP:	152.43	Lobe/Stage: 4/5 / 7	Rotary RPM:	50 - 50
Circ Hrs: Tot/Only	25.17 / 5.80	Rev/GAL:	Flow Rate:	295 - 558
Percent Slide:	13.14	Rotor Jet:	Avg Diff:	250
Percent Hrs:	17.73	Prop BUR:	Stall Pres.:	510
Slide Hours:	3.43	Act BUR:	Off Bot Pres.:	1700
Total Sliding:	388.00	Mud Data		Bit Record
Avg. Slide ROP:	113.01	Type	LSND SMITH / 7 7/8 MDSI 516 PDC w/ 3x13's	
Percent Rotary:	86.86	WT:	8085	GAS: 0
Percent Hrs:	82.27	Vis:	35	PV: 15
Rotary Hours:	15.93	WL:	8	PH: 8.5
Total Rotary:	2564.00	SOL:	3.7	SAND: 0.05
Avg. Rotary ROP:	160.92	Oil %:	0	T °: 118
Reason POOH:	TD	Chlor:	1100	YP: 6
MWD Spacing	Gamma: 0	Restiv: 0	Sensor: 66	Last Casing
	GYRO: 0	DNSSC: 0	Sonic: 0	Shoe @: Hanger @:

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

Bit to eye=64'

Motor # 65353 going in W/ 0.0 HRS Ending HRS 25.17

Rev/Gal 0.50

## BHA Detail

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
7 7/8 MDSI 516 PDC w/ 3x13's 2x12's	JJ5061	.61	7 7/8	0.75	0.75	4 1/2 REGP	SMITH
6 1/2 FHA 1.75 4:5 7.0	65353	2	6 1/2	26.47	27.22	4 1/2 XHB	SDI
6 1/2 NMPC	125-464	3 1/4	6 9/16	9.93	37.15	4 1/2 XHB	SDI
6 1/2 NMPC	125-485	3 1/4	6 9/16	10.03	47.18	4 1/2 XHB	SDI
6 1/2 HOS	8-728	3 1/4	6 3/8	1.90	49.08	4 1/2 XHB	SDI
6 1/2 NMDC	122-691	3 1/4	6 7/16	30.98	80.06	4 1/2 XHB	SDI
6 1/2 GAP SUB	69-858	2 7/8	6 3/8	4.71	84.77	4 1/2 XHB	SDI
6 1/2 NMDC	122-283	3 5/16	6 1/8	30.29	115.06	4 1/2 XHB	SDI

6 1/2 NMDC  
O.D.=6 1/8  
Length=30.29

6 1/2 GAP SUB  
O.D.=6 3/8  
Length=4.71

6 1/2 NMDC  
O.D.=6 7/16  
Length=30.98

6 1/2 HOS  
O.D.=6 3/8  
Length=1.9

6 1/2 NMPC  
O.D.=6 9/16  
Length=10.03

6 1/2 NMPC  
O.D.=6 9/16  
Length=9.93

6 1/2 FHA 1.75 4:5 7.0  
O.D.=6 1/2  
Length=26.47

7 7/8 MDSI 516 PDC w/ 3x13's 2  
O.D.=7 7/8  
Length=0.75



**JOB NO.:** 330615DEF284893  
**COMPANY:** B.P.  
**LOCATION:** Sec 9 T32N R06W  
**RIG NAME:** Aztec 507  
**STATE:** Colorado  
**COUNTY:** Country  
**WELL NAME:** Tubbs 32-6-9 B4

**FIELD:** San Juan Basin  
**Township:** 32N  
**Range** 6W

MOTOR INFORMATION	
Desc: 6 1/2 Motor 4:5 7.0 FBH 1.75	
Bent Hsg/Sub: 1.75/ 0	Bit to Bend: 5.23
Pad OD: 6 7/8	NB Stab:

## Slide Report for BHA # 3

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
3	4-Jun	Drilling	19:30	19:35	0.08	730	758	28	8	336.0	50	2000	334	1000		29.80	291.00	5.10	
3	4-Jun	Sliding	19:40	19:45	0.08	758	770	12	15	144.0	50	2000	334	1000	360	30.41	291.00	5.10	
3	4-Jun	Drilling	19:45	19:50	0.08	770	788	18	8	216.0	50	2000	334	1000		31.37	291.00	6.31	
3	4-Jun	Sliding	20:00	20:05	0.08	788	800	12	15	144.0	50	2000	334	1000	360	32.12	291.00	6.31	
3	4-Jun	Drilling	20:05	20:10	0.08	800	819	19	8	228.0	50	2000	334	1000		33.25	290.00	5.07	
3	4-Jun	Sliding	20:15	20:20	0.08	819	831	12	15	144.0	50	2000	334	1000	360	33.86	291.00	5.07	
3	4-Jun	Drilling	20:20	20:25	0.08	831	850	19	8	228.0	50	2000	334	1000		34.74	291.00	3.91	
3	4-Jun	Sliding	20:30	20:32	0.03	850	861	11	15	330.0	50	2000	558	1900	360	35.15	291.00	3.91	
3	4-Jun	Drilling	20:32	20:36	0.07	861	880	19	8	285.0	50	2000	558	1900		35.90	290.00	4.55	
3	4-Jun	Sliding	20:47	20:50	0.05	880	889	9	15	180.0	50	2000	558	1900	10R	36.31	290.00	4.55	
3	4-Jun	Drilling	20:50	20:55	0.08	889	910	21	8	252.0	50	4500	558	1900		37.18	290.00	2.56	
3	4-Jun	Sliding	21:00	21:04	0.07	910	921	11	15	165.0	50	4500	558	1900	360	37.46	290.00	2.56	
3	4-Jun	Drilling	21:04	21:08	0.07	921	941	20	8	300.0	50	4500	558	1900		38.01	290.00	4.53	
3	4-Jun	Sliding	21:13	21:15	0.03	941	953	12	15	360.0	50	4500	558	1900	20R	38.47	290.00	4.53	
3	4-Jun	Drilling	21:15	21:20	0.08	953	972	19	8	228.0	50	4500	558	1900		39.21	291.00	4.47	
3	4-Jun	Sliding	21:25	21:28	0.05	972	982	10	15	200.0	50	4500	558	1900	10R	39.64	291.00	4.47	
3	4-Jun	Drilling	21:28	21:35	0.12	982	1003	21	8	180.0	50	4500	558	1900		40.56	291.00	4.80	
3	4-Jun	Sliding	21:40	21:43	0.05	1003	1018	15	15	300.0	50	4500	558	1900	10R	41.26	292.00	4.80	
3	4-Jun	Drilling	21:43	21:48	0.08	1018	1034	16	8	192.0	50	4500	558	1900		41.97	292.00	2.75	
3	4-Jun	Sliding	21:53	21:56	0.05	1034	1046	12	15	240.0	50	4500	558	1900	10R	42.30	292.00	2.75	
3	4-Jun	Drilling	21:56	22:00	0.07	1046	1066	20	8	300.0	50	4500	558	1900		42.79	292.00	1.74	
3	4-Jun	Drilling	22:05	22:13	0.13	1066	1098	32	8	240.0	50	4500	558	1900		42.69	291.00	1.08	
3	4-Jun	Drilling	22:18	22:25	0.12	1098	1130	32	8	274.3	50	4500	558	1900		42.50	291.00	2.00	
3	4-Jun	Drilling	22:30	22:37	0.12	1130	1161	31	8	265.7	50	4500	558	1900		43.05	291.00	3.52	
3	4-Jun	Sliding	22:43	22:46	0.05	1161	1174	13	15	260.0	50	4500	558	1900	15R	43.50	291.00	3.52	

# Slide Report for BHA # 3

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
3	4-Jun	Drilling	22:46	22:53	0.12	1174	1193	19	8	162.9	50	4500	558	1900		44.03	291.00	0.42	
3	4-Jun	Drilling	22:58	23:06	0.13	1193	1224	31	8	232.5	50	4500	558	1900		44.06	291.00	1.66	
3	4-Jun	Drilling	23:11	23:19	0.13	1224	1255	31	8	232.5	50	4500	558	1900		44.03	291.00	1.68	
3	4-Jun	Drilling	23:24	23:30	0.10	1255	1286	31	8	310.0	50	4500	558	1900		43.68	290.00	1.16	
3	4-Jun	Drilling	23:37	23:43	0.10	1286	1317	31	8	310.0	50	4500	558	1900		43.37	290.00	0.78	
3	4-Jun	Drilling	23:48	23:56	0.13	1317	1349	32	8	240.0	50	4500	558	1900		43.12	290.00	1.09	
3	5-Jun	Drilling	00:00	00:08	0.13	1349	1381	32	12	240.0	50	4500	558	1900		42.78	290.00	1.88	
3	5-Jun	Drilling	00:16	00:23	0.12	1381	1412	31	12	265.7	50	4500	558	1900		42.45	289.00	0.99	
3	5-Jun	Drilling	00:28	00:35	0.12	1412	1444	32	12	274.3	50	4500	558	1900		42.19	289.00	1.10	
3	5-Jun	Drilling	00:42	00:50	0.13	1444	1475	31	18	232.5	50	4500	558	1900		41.98	288.00	2.15	
3	5-Jun	Drilling	00:55	01:03	0.13	1475	1506	31	18	232.5	50	4500	558	1900		41.65	289.00	3.45	
3	5-Jun	Sliding	01:12	01:15	0.05	1506	1519	13	15	260.0	50	4500	558	1900	80R	41.86	290.00	3.45	
3	5-Jun	Drilling	01:15	01:22	0.12	1519	1538	19	18	162.9	50	4500	558	1900		42.11	290.00	0.74	
3	5-Jun	Drilling	01:37	01:42	0.08	1538	1570	32	18	384.0	50	5800	558	2050		41.85	291.00	1.50	
3	5-Jun	Drilling	01:50	01:56	0.10	1570	1601	31	18	310.0	50	5800	558	2050		41.48	290.00	1.39	
3	5-Jun	Drilling	02:04	02:11	0.12	1601	1632	31	18	265.7	50	5800	558	2050		41.24	291.00	2.30	
3	5-Jun	Sliding	02:18	02:20	0.03	1632	1644	12	15	360.0	50	5800	558	2050	65R	41.22	291.00	2.30	
3	5-Jun	Drilling	02:20	02:27	0.12	1644	1663	19	18	162.9	50	5800	558	2050		41.19	292.00	0.23	
3	5-Jun	Drilling	02:33	02:35	0.03	1663	1675	12	18	360.0	50	5800	558	2050		41.17	292.00	0.23	
3	5-Jun	Drilling	03:30	03:35	0.08	1675	1695	20	18	240.0	50	5800	558	2050		41.22	292.00	2.47	
3	5-Jun	Drilling	03:40	03:50	0.17	1695	1726	31	18	186.0	50	5800	558	2050		41.92	292.00	2.93	
3	5-Jun	Sliding	03:55	03:58	0.05	1726	1738	12	15	240.0	50	5800	558	2050	30R	42.26	292.00	2.93	
3	5-Jun	Drilling	03:58	04:05	0.12	1738	1757	19	18	162.9	50	5800	558	2050		42.80	293.00	2.63	
3	5-Jun	Drilling	04:15	04:25	0.17	1757	1789	32	18	192.0	50	5800	558	2050		43.61	292.00	2.12	
3	5-Jun	Sliding	04:25	04:35	0.17	1789	1801	12	15	72.0	50	5800	558	2050	15R	43.86	293.00	2.12	
3	5-Jun	Drilling	04:35	04:40	0.08	1801	1819	18	18	216.0	50	5800	558	2050		44.17	293.00	0.47	
3	5-Jun	Drilling	04:45	04:52	0.12	1819	1851	32	18	274.3	50	5800	558	2050		44.19	292.00	0.90	
3	5-Jun	Drilling	04:57	05:15	0.30	1851	1882	31	18	103.3	50	5800	558	2050		44.05	293.00	0.92	
3	5-Jun	Drilling	05:15	05:25	0.17	1882	1914	32	18	192.0	50	5800	558	2050		43.85	293.00	0.46	
3	5-Jun	Drilling	05:30	05:35	0.08	1914	1946	32	18	384.0	50	5800	558	2050		43.69	293.00	0.82	
3	5-Jun	Drilling	05:55	06:00	0.08	1946	1977	31	18	372.0	50	5800	558	2050		43.45	293.00	2.68	
3	5-Jun	Drilling	06:05	06:15	0.17	1977	2008	31	18	186.0	50	5800	558	2050		43.25	291.00	5.47	
3	5-Jun	Sliding	06:20	06:25	0.08	2008	2018	10	15	120.0	50	5800	558	2050	90L	43.20	292.00	5.47	

# Slide Report for BHA # 3

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
3	5-Jun	Drilling	06:25	06:40	0.25	2018	2040	22	18	88.0	50	5800	558	2050		43.11	289.00	1.66	
3	5-Jun	Drilling	06:50	07:00	0.17	2040	2072	32	18	192.0	50	5800	306	1370		42.93	288.00	1.33	
3	5-Jun	Drilling	07:05	07:15	0.17	2072	2103	31	18	186.0	50	5800	306	1370		42.71	287.00	2.14	
3	5-Jun	Drilling	07:20	07:35	0.25	2103	2135	32	18	128.0	50	5800	306	1370		42.09	288.00	1.67	
3	5-Jun	Sliding	07:40	07:45	0.08	2135	2143	8	15	96.0	50	5800	558	1910	45	42.08	288.00	1.67	
3	5-Jun	Drilling	07:45	08:00	0.25	2143	2167	24	22	96.0	50	5800	558	1910		42.05	288.00	1.67	
3	5-Jun	Sliding	08:10	08:15	0.08	2167	2173	6	15	72.0	50	5800	558	1910	10	42.04	289.00	1.67	
3	5-Jun	Drilling	08:15	08:20	0.08	2173	2198	25	22	300.0	50	5800	558	1910		42.00	289.00	2.78	
3	5-Jun	Drilling	08:35	08:40	0.08	2198	2228	30	22	360.0	50	5800	558	1910		41.90	288.00	0.22	
3	5-Jun	Drilling	08:45	08:55	0.17	2228	2259	31	22	186.0	50	5800	558	1910		41.90	288.00	0.91	
3	5-Jun	Sliding	09:00	09:05	0.08	2259	2265	6	15	72.0	45	7000	516	1910	-60	41.95	288.00	0.91	
3	5-Jun	Drilling	09:05	09:15	0.17	2265	2291	26	22	156.0	50	7000	516	1910		42.19	288.00	2.05	
3	5-Jun	Sliding	09:20	09:25	0.08	2291	2299	8	15	96.0	50	7000	516	1910	-60	42.31	288.00	2.05	
3	5-Jun	Drilling	09:25	09:30	0.08	2299	2323	24	22	288.0	50	7000	516	1910		42.63	288.00	1.49	
3	5-Jun	Drilling	09:35	09:50	0.25	2323	2354	31	22	124.0	50	7000	516	1910		42.52	289.00	2.84	
3	5-Jun	Drilling	09:55	10:10	0.25	2354	2386	32	22	128.0	50	7000	516	1910		41.73	290.00	3.47	
3	5-Jun	Sliding	10:15	10:20	0.08	2386	2394	8	15	96.0	50	7000	516	1910	120	41.52	290.00	3.47	
3	5-Jun	Drilling	10:20	10:25	0.08	2394	2417	23	22	276.0	50	7000	516	1910		40.97	291.00	1.88	
3	5-Jun	Drilling	10:30	10:40	0.17	2417	2448	31	22	186.0	50	7000	516	1910		40.34	291.00	5.57	
3	5-Jun	Sliding	10:45	10:50	0.08	2448	2454	6	25	72.0	50	7000	516	1910	180	40.02	291.00	5.57	
3	5-Jun	Drilling	10:50	10:55	0.08	2454	2480	26	22	312.0	50	7000	516	1910		38.57	290.00	6.45	
3	5-Jun	Sliding	11:00	11:05	0.08	2480	2487	7	25	84.0	50	7000	516	1910	180	38.13	291.00	6.45	
3	5-Jun	Drilling	11:05	11:15	0.17	2487	2510	23	22	138.0	50	7000	516	1910		36.74	290.00	2.06	
3	5-Jun	Sliding	11:20	11:25	0.08	2510	2517	7	25	84.0	50	7000	516	1910	180	36.60	290.00	2.06	
3	5-Jun	Drilling	11:25	11:30	0.08	2517	2542	25	22	300.0	50	7000	516	1910		36.08	290.00	2.06	
3	5-Jun	Drilling	11:50	12:00	0.17	2542	2574	32	22	192.0	50	7000	516	1910		35.51	290.00	0.23	
3	5-Jun	Drilling	12:05	12:20	0.25	2574	2605	31	22	124.0	50	7000	516	1910		35.44	290.00	1.70	
3	5-Jun	Drilling	12:50	13:10	0.33	2605	2636	31	22	93.0	50	7000	516	1910		35.02	291.00	3.31	
3	5-Jun	Sliding	13:15	13:20	0.08	2636	2641	5	25	60.0	50	7000	516	1910	120	34.91	291.00	3.31	
3	5-Jun	Drilling	13:20	13:35	0.25	2641	2667	26	22	104.0	50	7000	516	1910		34.35	292.00	3.15	
3	5-Jun	Sliding	13:40	13:45	0.08	2667	2672	5	25	60.0	50	7000	516	1910	135	34.22	292.00	3.15	
3	5-Jun	Drilling	13:45	14:10	0.42	2672	2699	27	22	64.8	50	7000	516	1910		33.45	293.00	4.45	
3	5-Jun	Sliding	14:15	14:20	0.08	2699	2704	5	25	60.0	50	7000	516	1910	180	33.23	293.00	4.45	



# Slide Report for BHA # 3

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
3	5-Jun	Drilling	14:20	14:30	0.17	2704	2730	26	22	156.0	50	7000	516	1910		32.06	293.00	5.04	
3	5-Jun	Sliding	14:50	14:55	0.08	2730	2736	6	25	72.0	50	7000	516	1910	180	31.77	293.00	5.04	
3	5-Jun	Drilling	14:55	15:05	0.17	2736	2761	25	22	150.0	50	7000	516	1910		30.57	294.00	3.94	
3	5-Jun	Sliding	15:10	15:15	0.08	2761	2767	6	25	72.0	50	7000	516	1910	-165	30.34	294.00	3.94	
3	5-Jun	Drilling	15:15	15:25	0.17	2767	2793	26	22	156.0	50	7000	516	2100		29.37	294.00	2.97	
3	5-Jun	Sliding	15:30	15:35	0.08	2793	2799	6	25	72.0	50	7000	516	2100	-165	29.20	294.00	2.97	
3	5-Jun	Drilling	15:35	15:45	0.17	2799	2824	25	22	150.0	50	7000	516	2100		28.49	293.00	3.90	
3	5-Jun	Sliding	15:50	15:55	0.08	2824	2828	4	25	48.0	50	7000	516	2100	-135	28.36	293.00	3.90	
3	5-Jun	Drilling	15:55	16:10	0.25	2828	2856	28	22	112.0	50	7000	516	2100		27.39	291.00	5.75	
3	5-Jun	Sliding	16:15	16:20	0.08	2856	2862	6	25	72.0	50	7000	516	2100	-135	27.06	292.00	5.75	
3	5-Jun	Drilling	16:20	16:30	0.17	2862	2888	26	22	156.0	50	7000	516	2100		25.65	290.00	5.84	
3	5-Jun	Sliding	16:35	16:40	0.08	2888	2894	6	25	72.0	50	7000	516	2100	-135	25.32	290.00	5.84	
3	5-Jun	Drilling	16:40	16:50	0.17	2894	2919	25	22	150.0	50	7000	516	2100		23.96	289.00	5.34	
3	5-Jun	Sliding	17:00	17:04	0.07	2919	2925	6	25	90.0	50	7000	516	2100	150L	23.65	289.00	5.34	
3	5-Jun	Drilling	17:04	17:12	0.13	2925	2950	25	22	187.5	50	7000	516	2100		22.37	288.00	4.99	
3	5-Jun	Sliding	17:20	17:22	0.03	2950	2956	6	25	180.0	50	7000	516	2100	180	22.08	288.00	4.99	
3	5-Jun	Drilling	17:22	17:31	0.15	2956	2981	25	22	166.7	50	7000	516	2100		20.89	289.00	4.94	
3	5-Jun	Sliding	17:39	17:41	0.03	2981	2987	6	25	180.0	50	7000	516	2100	140R	20.67	289.00	4.94	
3	5-Jun	Drilling	17:41	17:45	0.07	2987	2994	7	22	105.0	50	7000	516	2100		20.42	290.00	4.94	
3	5-Jun	Drilling	17:50	17:54	0.07	2994	3013	19	22	285.0	50	7000	516	2100		19.78	292.00	3.12	
3	5-Jun	Sliding	18:00	18:05	0.08	3013	3021	8	25	96.0	50	7000	516	2100	140R	19.55	292.00	3.12	
3	5-Jun	Drilling	18:05	18:06	0.02	3021	3023	2	22	120.0	50	7000	516	2100		19.50	292.00	3.12	
3	5-Jun	Drilling	18:17	18:24	0.12	3023	3045	22	22	188.6	50	7000	516	2100		18.91	293.00	2.41	
3	5-Jun	Sliding	18:34	18:39	0.08	3045	3051	6	25	72.0	50	7000	516	2100	150R	18.78	293.00	2.41	
3	5-Jun	Drilling	18:39	18:44	0.08	3051	3062	11	22	132.0	50	7000	516	2100		18.55	293.00	2.41	
3	5-Jun	Drilling	18:48	18:52	0.07	3062	3076	14	22	210.0	50	7000	516	2100		18.11	294.00	6.09	
3	5-Jun	Sliding	19:02	19:04	0.03	3076	3078	2	25	60.0	50	7000	516	2100	180	18.00	294.00	6.09	
3	5-Jun	Sliding	19:07	19:09	0.03	3078	3083	5	25	150.0	50	7000	516	2100	180	17.73	295.00	6.09	
3	5-Jun	Drilling	19:09	19:21	0.20	3083	3107	24	22	120.0	50	7000	516	2100		16.42	291.00	6.34	
3	5-Jun	Sliding	19:32	19:34	0.03	3107	3112	5	25	150.0	50	7000	516	2100	170R	16.12	291.00	6.34	
3	5-Jun	Sliding	19:36	19:38	0.03	3112	3115	3	25	90.0	50	7000	516	2100	170R	15.93	292.00	6.34	
3	5-Jun	Drilling	19:38	19:45	0.12	3115	3129	14	22	120.0	50	7000	516	2100		15.09	293.00	6.34	
3	5-Jun	Drilling	19:49	19:51	0.03	3129	3134	5	22	150.0	50	7000	516	2100		14.79	293.00	6.34	

Slide Report for BHA # 3

Note: Surveys listed are interpolated from the actual surveys

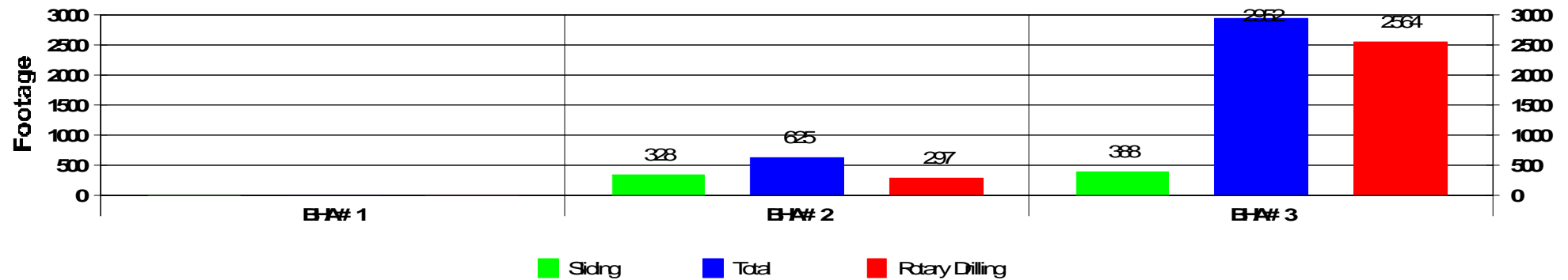
#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
3	5-Jun	Drilling	19:55	19:57	0.03	3134	3138	4	22	120.0	50	7000	516	2100		14.54	288.00	6.54	
3	5-Jun	Sliding	20:08	20:10	0.03	3138	3139	1	25	30.0	50	7000	516	2100	160R	14.47	288.00	6.54	
3	5-Jun	Sliding	20:17	20:19	0.03	3139	3143	4	25	120.0	50	7000	516	2100	160R	14.21	289.00	6.54	
3	5-Jun	Sliding	20:35	20:40	0.08	3143	3149	6	25	72.0	50	7000	475	1850	160R	13.82	289.00	6.54	
3	5-Jun	Drilling	20:40	20:53	0.22	3149	3170	21	22	96.9	50	7000	475	1850		12.43	288.00	7.54	
3	5-Jun	Sliding	21:03	21:10	0.12	3170	3179	9	25	77.1	50	7000	475	1850	170R	11.76	289.00	7.54	
3	5-Jun	Drilling	21:10	21:22	0.20	3179	3202	23	22	115.0	50	7000	475	1850		10.08	290.00	7.10	
3	5-Jun	Sliding	21:35	21:41	0.10	3202	3211	9	25	90.0	50	7000	475	1850	155R	9.52	292.00	7.10	
3	5-Jun	Drilling	21:41	22:00	0.32	3211	3234	23	22	72.6	50	7000	475	1850		8.19	297.00	4.72	
3	5-Jun	Sliding	22:10	22:17	0.12	3234	3244	10	25	85.7	50	7000	475	1850	180	7.73	298.00	4.72	
3	5-Jun	Drilling	22:17	22:30	0.22	3244	3265	21	22	96.9	50	7000	475	1850		6.93	299.00	0.84	
3	5-Jun	Drilling	22:40	22:57	0.28	3265	3295	30	22	105.9	50	7000	475	1850		6.71	301.00	2.32	
3	5-Jun	Drilling	23:04	23:20	0.27	3295	3327	32	22	120.0	50	7000	475	1850		6.02	297.00	4.09	
3	5-Jun	Sliding	23:27	23:28	0.02	3327	3329	2	25	120.0	50	7000	475	1850	180	5.94	297.00	4.09	
3	5-Jun	Sliding	23:33	23:37	0.07	3329	3336	7	25	105.0	50	7000	475	1850	180	5.65	298.00	4.09	
3	5-Jun	Drilling	23:37	23:52	0.25	3336	3359	23	22	92.0	50	7000	475	1850		4.83	296.00	1.30	
3	6-Jun	Drilling	00:00	00:15	0.25	3359	3390	31	22	124.0	50	7000	475	1850		4.53	293.00	0.20	
3	6-Jun	Drilling	00:25	00:38	0.22	3390	3421	31	22	143.1	50	7000	475	1850		4.57	293.00	0.36	
3	6-Jun	Drilling	00:45	01:00	0.25	3421	3453	32	22	128.0	50	7000	475	1850		4.48	293.00	0.77	
3	6-Jun	Drilling	01:05	01:20	0.25	3453	3483	30	22	120.0	50	7000	475	1850		4.50	290.00	0.64	
3	6-Jun	Drilling	01:27	01:45	0.30	3483	3514	31	22	103.3	50	7000	475	1850		4.31	290.00	0.46	
3	6-Jun	Drilling	01:51	02:12	0.35	3514	3546	32	22	91.4	50	7000	475	1850		4.21	291.00	0.50	
3	6-Jun	Drilling	02:18	02:42	0.40	3546	3578	32	22	80.0	50	7000	475	1850		4.33	291.00	0.97	
3	6-Jun	Drilling	02:49	03:07	0.30	3578	3609	31	22	103.3	50	7000	475	1850		4.22	295.00	0.00	
3	6-Jun	Drilling	03:13	03:31	0.30	3609	3640	31	22	103.3	50	7000	475	1850		4.22	295.00	0.00	
3	6-Jun	Drilling	03:37	03:53	0.27	3640	3671	31	22	116.3	50	7000	475	1850		4.22	295.00	0.00	
3	6-Jun	Drilling	04:00	04:05	0.08	3671	3682	11	22	132.0	50	7000	475	1850		4.22	295.00	0.00	

Total Drilled:	2952	Avg. Total ROP:	152.43	DEPTH% - TIME %
Total Rotary Drilled:	2564	Avg. Rotary ROP:	160.92	Percent Rotary: 86.86 - 82.27
Total Drilled Sliding:	388	Avg. Slide ROP:	113.01	Percent Slide: 13.14 - 17.73

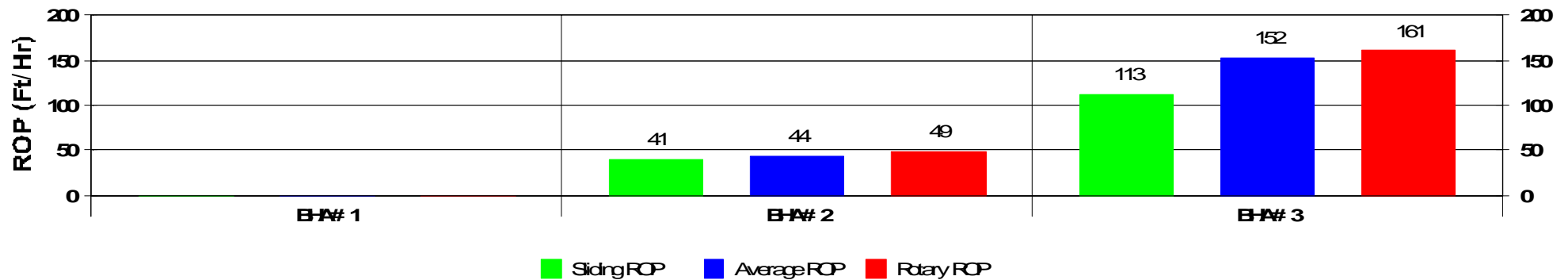


JOB NO.:	330615DEF284893	FIELD:	San Juan Basin	
COMPANY:	B.P.	Township:	32N	
LOCATION:	Sec 9 T32N R06W	SECT/RANGE:	9	6W
RIG NAME:	Aztec 507	COMMENT		
STATE:	Colorado			
COUNTY:	La Plata			
WELL NAME:	Tubbs 32-6-9 B4			

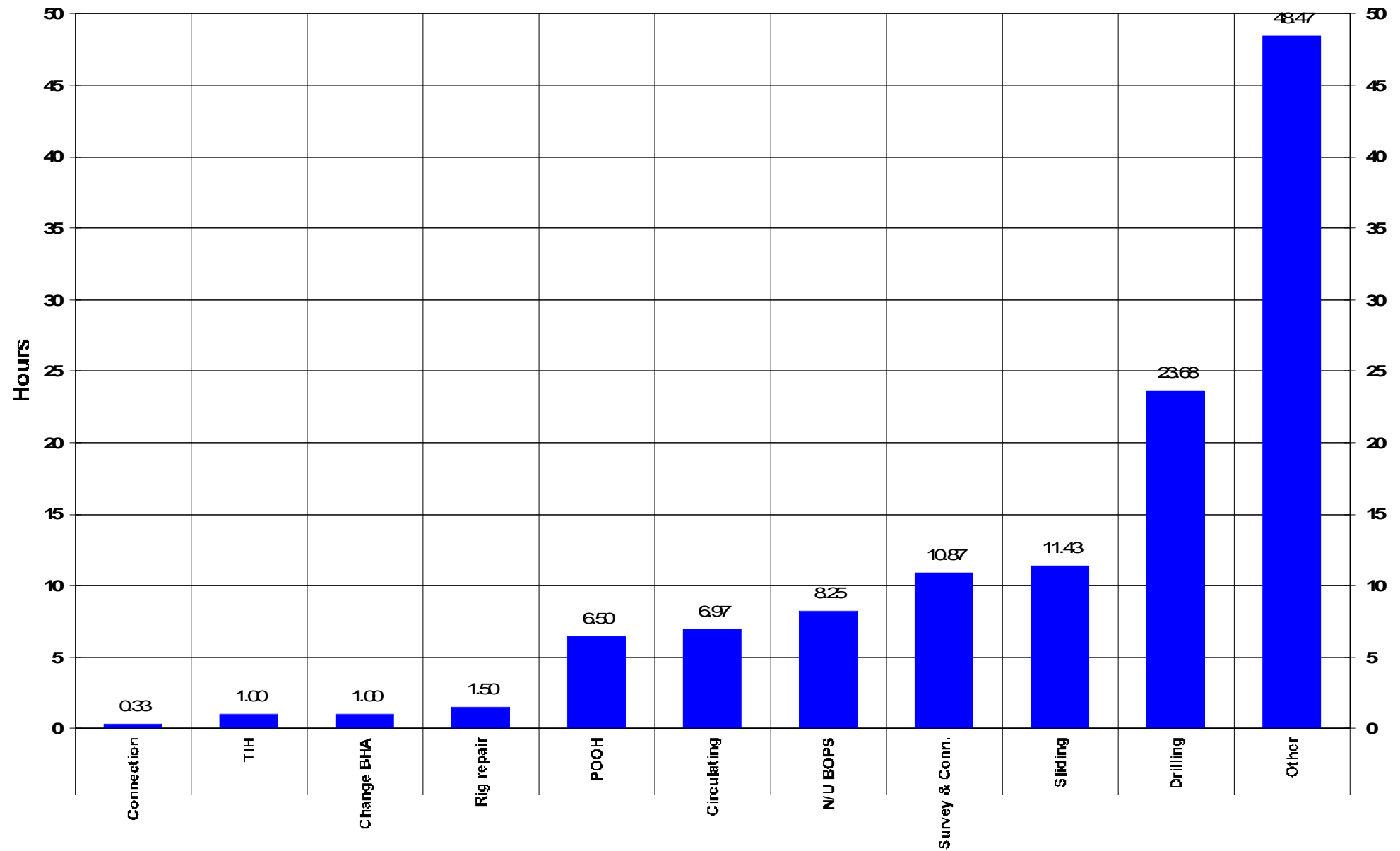
### Footage Drilled with BHA



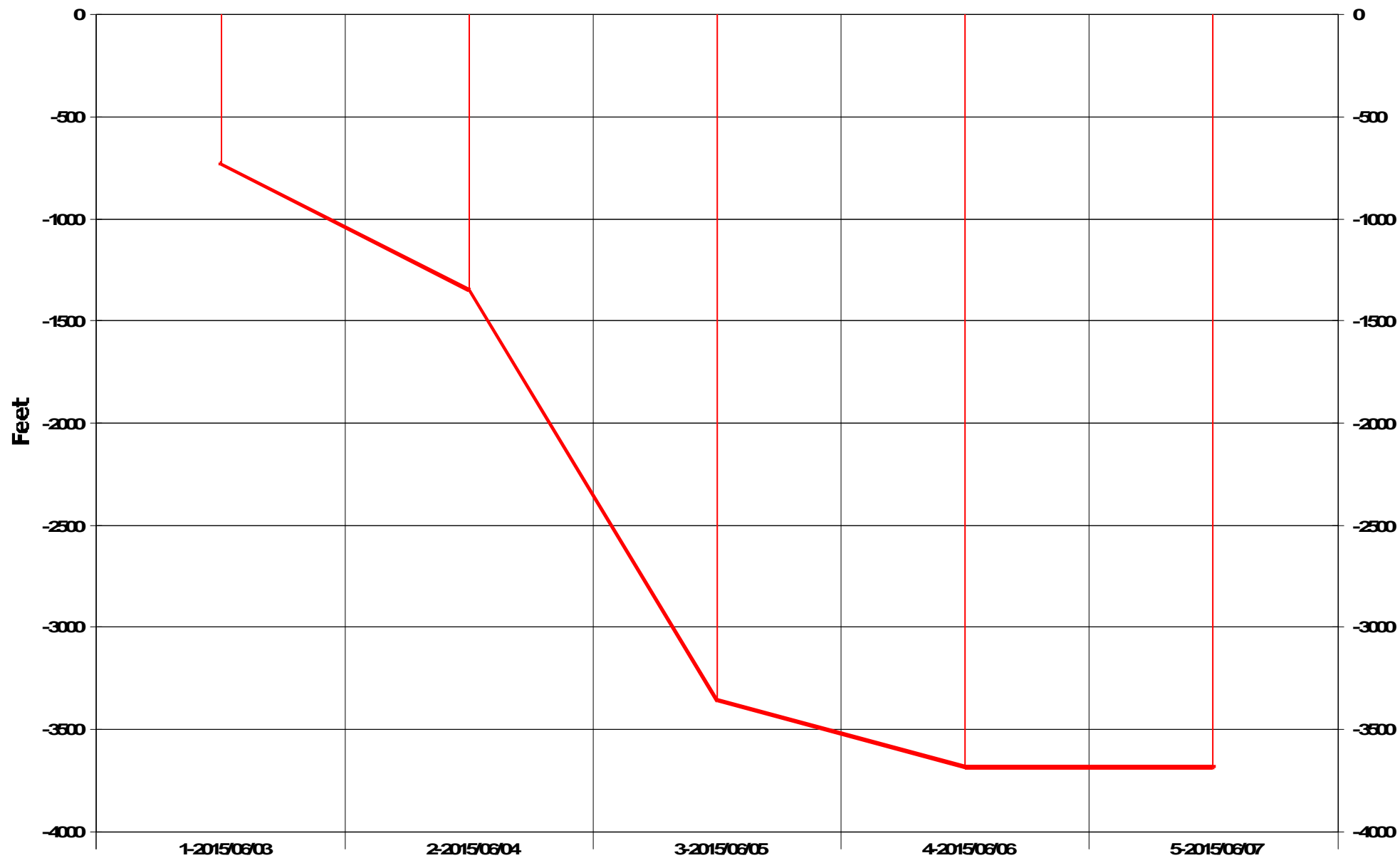
### ROP vs BHA



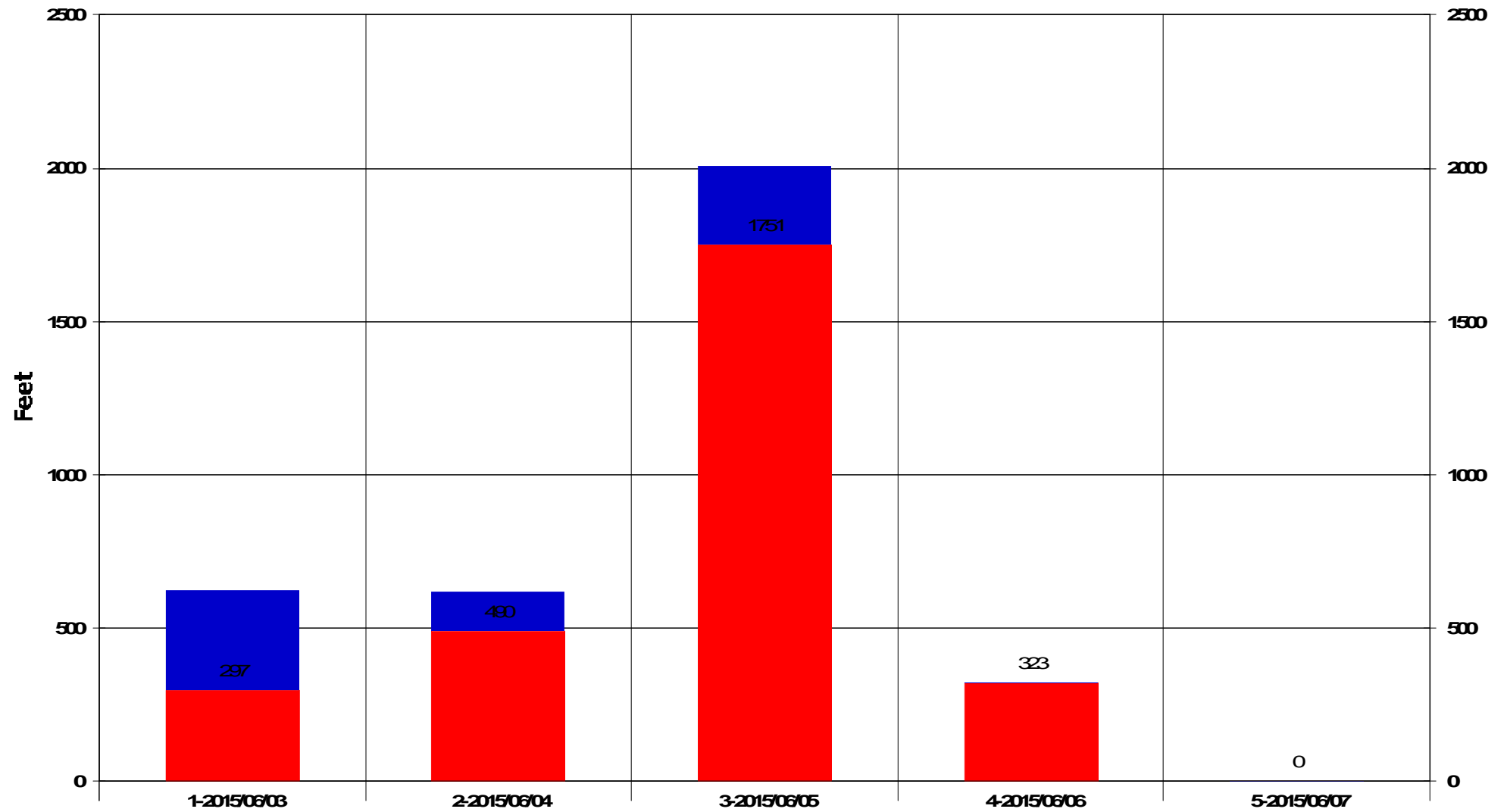
## Activity Histogram



Measured Depth vs Days



## Daily Footage



Rotary Drilling Siding

# SUPPORT STAFF

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**Janie Collins**

**Directional Drillers:**  
**D. Hensley, D. Tanner**

**MWD Operators:**  
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