



# **Chevron**

**Garfield County, CO (NAD83)  
Skinner Ridge Field  
SKR-598-08-BV-04**

**OH**

**Design: OH**

## **Standard Survey Report**

**14 October, 2013**



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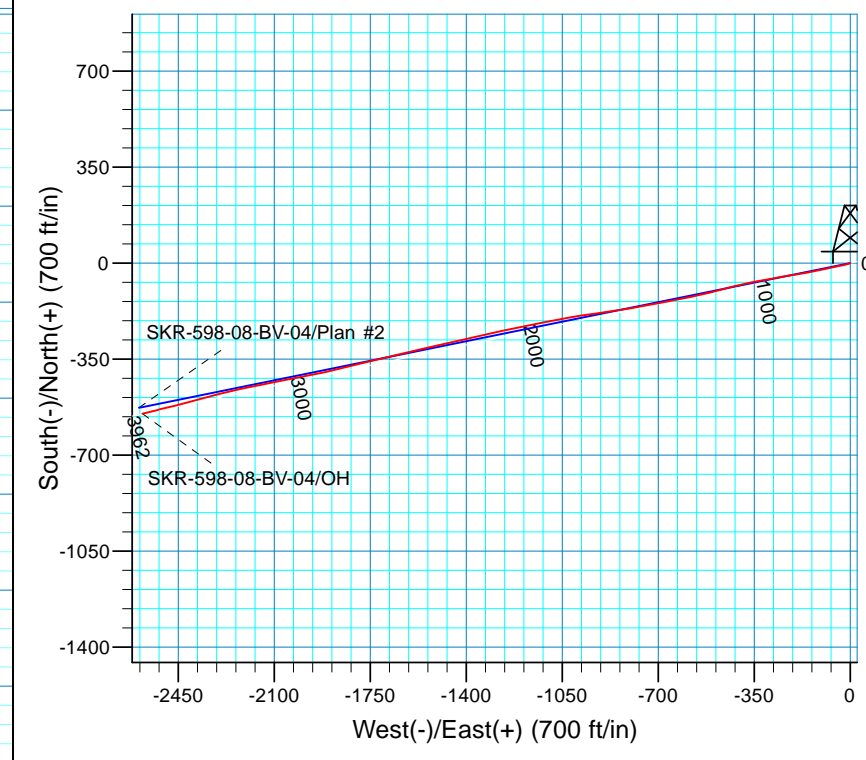
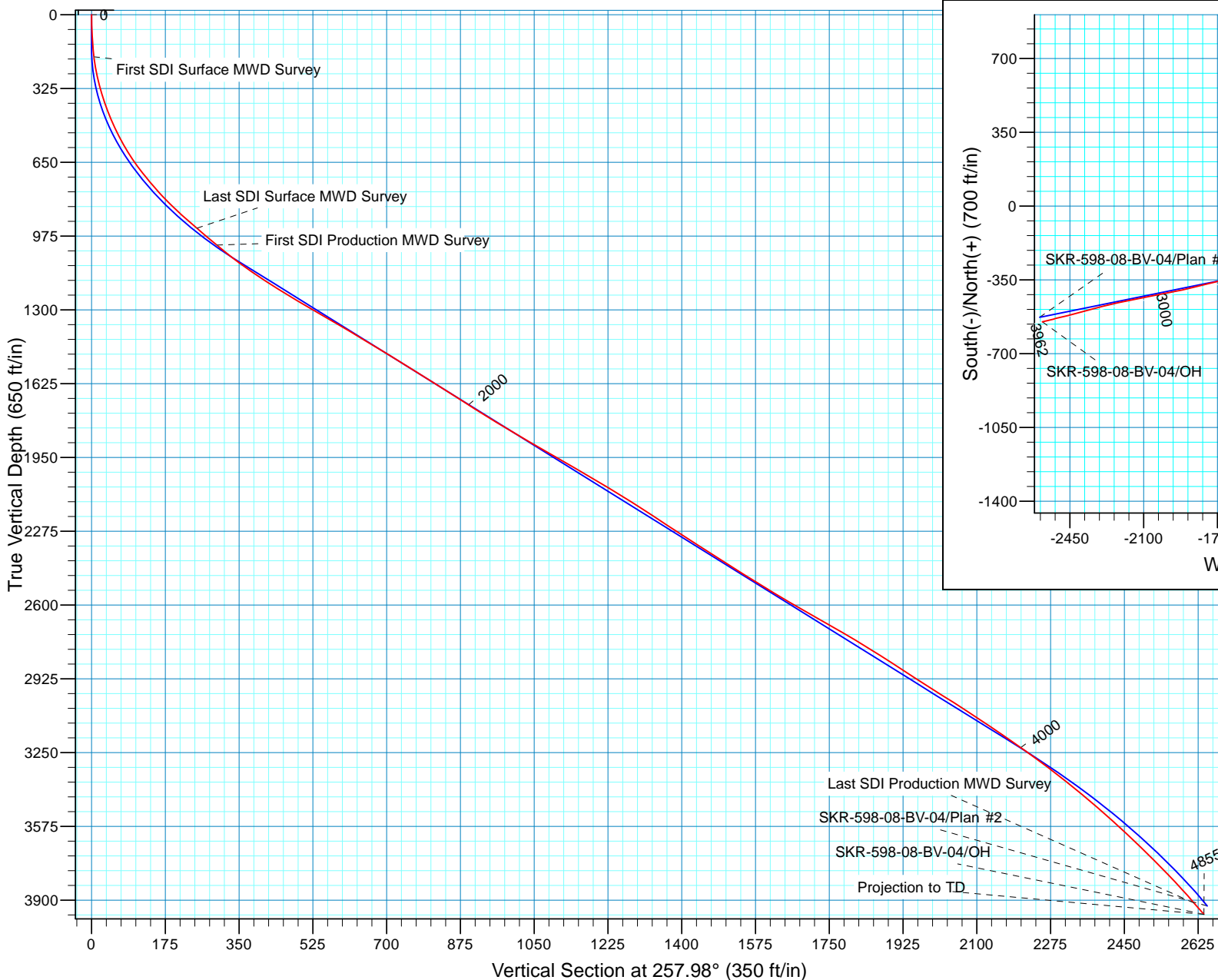
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WELL DETAILS: SKR-598-08-BV-04

GL 6549.60 & RKB 12.5' @ 6562.10ft						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1664477.65	2179231.23	39° 37' 17.918 N	108° 24' 50.980 W	



Design: OH (SKR-598-08-BV-04/OH)

Created By: Janie Collins Date: 12:09, October 14 2013

PROJECT DETAILS: Garfield County, CO (NAD83)

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

System Datum: Mean Sea Level  
 Local North: True



<b>Company:</b>	Chevron	<b>Local Co-ordinate Reference:</b>	Well SKR-598-08-BV-04
<b>Project:</b>	Garfield County, CO (NAD83)	<b>TVD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Site:</b>	Skinner Ridge Field	<b>MD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Well:</b>	SKR-598-08-BV-04	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

<b>Project</b>	Garfield 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 Central Zone		

<b>Site</b>	Skinner Ridge Field				
<b>Site Position:</b>		<b>Northing:</b>	1,664,493.63 usft	<b>Latitude:</b>	39° 37' 18.075 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,179,228.12 usft	<b>Longitude:</b>	108° 24' 51.026 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	-1.84 °

<b>Well</b>	SKR-598-08-BV-04					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	1,664,477.65 usft	<b>Latitude:</b>	39° 37' 17.918 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,179,231.23 usft	<b>Longitude:</b>	108° 24' 50.980 W
<b>Position Uncertainty</b>	0.00 ft		<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	6,549.60 ft

<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>
	IGRF200510	5/2/2013	10.28	65.73	52,111

<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	257.98	

<b>Survey Program</b>	<b>Date</b>	10/14/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
185.00	988.00	Survey #1 - Surface MWD (OH)	MWD-SDI		
1,076.00	4,855.00	Survey #2 0 Production MWD Survey (OH)	MWD-SDI		

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</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	
185.00	3.34	248.88	184.90	-1.94	-5.03	5.32	1.81	1.81	0.00	
<b>First SDI Surface MWD Survey</b>										
276.00	7.30	255.73	275.49	-4.32	-13.11	13.72	4.40	4.35	7.53	
367.00	9.72	256.35	365.48	-7.56	-26.18	27.18	2.66	2.66	0.68	
457.00	12.69	259.87	453.75	-11.09	-43.30	44.66	3.38	3.30	3.91	
548.00	15.56	257.31	541.99	-15.53	-65.05	66.86	3.23	3.15	-2.81	
639.00	19.74	257.51	628.69	-21.54	-91.97	94.44	4.59	4.59	0.22	
730.00	23.54	258.24	713.26	-28.57	-124.78	127.99	4.19	4.18	0.80	
806.00	26.14	260.23	782.23	-34.51	-156.14	159.90	3.59	3.42	2.62	



<b>Company:</b>	Chevron	<b>Local Co-ordinate Reference:</b>	Well SKR-598-08-BV-04
<b>Project:</b>	Garfield County, CO (NAD83)	<b>TVD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Site:</b>	Skinner Ridge Field	<b>MD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Well:</b>	SKR-598-08-BV-04	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
896.00	29.65	260.84	861.76	-41.42	-197.67	201.96	3.91	3.90	0.68	
988.00	32.71	260.04	940.46	-49.34	-244.63	249.54	3.36	3.33	-0.87	
<b>Last SDI Surface MWD Survey</b>										
1,076.00	32.48	259.18	1,014.60	-57.89	-291.26	296.93	0.59	-0.26	-0.98	
<b>First SDI Production MWD Survey</b>										
1,167.00	35.96	260.13	1,089.83	-67.06	-341.59	348.07	3.87	3.82	1.04	
1,257.00	39.27	257.40	1,161.12	-77.81	-395.45	402.98	4.12	3.68	-3.03	
1,348.00	41.41	255.25	1,230.48	-91.75	-452.67	461.85	2.80	2.35	-2.36	
1,438.00	43.34	255.36	1,296.96	-107.14	-511.34	522.44	2.15	2.14	0.12	
1,529.00	42.74	258.88	1,363.48	-120.99	-571.86	584.52	2.72	-0.66	3.87	
1,619.00	41.42	257.93	1,430.28	-133.11	-630.94	644.83	1.63	-1.47	-1.06	
1,710.00	41.61	260.40	1,498.43	-144.44	-690.17	705.12	1.81	0.21	2.71	
1,801.00	40.71	258.75	1,566.94	-155.27	-749.08	764.99	1.55	-0.99	-1.81	
1,891.00	40.42	260.92	1,635.31	-165.60	-806.68	823.48	1.60	-0.32	2.41	
1,982.00	40.54	261.36	1,704.53	-174.70	-865.05	882.46	0.34	0.13	0.48	
2,072.00	41.24	262.06	1,772.57	-183.19	-923.35	941.25	0.93	0.78	0.78	
2,163.00	41.71	261.91	1,840.75	-191.59	-983.03	1,001.37	0.53	0.52	-0.16	
2,253.00	43.57	259.73	1,906.96	-201.34	-1,043.20	1,062.25	2.64	2.07	-2.42	
2,344.00	43.17	259.05	1,973.11	-212.84	-1,104.62	1,124.72	0.68	-0.44	-0.75	
2,434.00	42.24	258.37	2,039.24	-224.79	-1,164.48	1,185.76	1.15	-1.03	-0.76	
2,525.00	41.22	257.42	2,107.16	-237.49	-1,223.70	1,246.33	1.32	-1.12	-1.04	
2,615.00	40.36	257.49	2,175.29	-250.26	-1,281.09	1,305.12	0.96	-0.96	0.08	
2,706.00	38.71	256.93	2,245.47	-263.08	-1,337.58	1,363.04	1.86	-1.81	-0.62	
2,795.00	39.93	258.49	2,314.33	-275.07	-1,392.68	1,419.43	1.76	1.37	1.75	
2,886.00	41.05	257.58	2,383.53	-287.32	-1,450.48	1,478.51	1.39	1.23	-1.00	
2,976.00	39.54	257.34	2,452.18	-299.96	-1,507.29	1,536.71	1.69	-1.68	-0.27	
3,067.00	41.41	255.45	2,521.40	-313.87	-1,564.69	1,595.75	2.46	2.05	-2.08	
3,158.00	42.90	256.35	2,588.86	-328.74	-1,623.93	1,656.78	1.77	1.64	0.99	
3,248.00	43.77	257.20	2,654.32	-342.87	-1,684.05	1,718.53	1.16	0.97	0.94	
3,339.00	42.77	257.21	2,720.58	-356.68	-1,744.88	1,780.90	1.10	-1.10	0.01	
3,429.00	40.98	256.59	2,787.59	-370.29	-1,803.39	1,840.96	2.04	-1.99	-0.69	
3,520.00	39.65	255.87	2,856.98	-384.30	-1,860.57	1,899.81	1.55	-1.46	-0.79	
3,610.00	39.81	257.11	2,926.20	-397.74	-1,916.50	1,957.31	0.90	0.18	1.38	
3,701.00	40.74	259.51	2,995.63	-409.64	-1,974.10	2,016.13	1.99	1.02	2.64	
3,792.00	39.71	259.09	3,065.11	-420.55	-2,031.85	2,074.88	1.17	-1.13	-0.46	
3,882.00	38.74	258.98	3,134.83	-431.38	-2,087.72	2,131.78	1.08	-1.08	-0.12	
3,973.00	37.46	258.63	3,206.44	-442.27	-2,142.80	2,187.92	1.43	-1.41	-0.38	
4,063.00	36.33	258.31	3,278.41	-453.07	-2,195.74	2,241.95	1.27	-1.26	-0.36	
4,154.00	34.73	256.52	3,352.47	-464.58	-2,247.35	2,294.83	2.10	-1.76	-1.97	
4,245.00	33.13	256.38	3,427.97	-476.48	-2,296.73	2,345.60	1.76	-1.76	-0.15	
4,336.00	31.51	255.40	3,504.87	-488.33	-2,343.91	2,394.22	1.87	-1.78	-1.08	
4,426.00	30.20	253.88	3,582.13	-500.54	-2,388.42	2,440.29	1.69	-1.46	-1.69	
4,516.00	29.31	256.15	3,660.27	-512.10	-2,431.56	2,484.89	1.60	-0.99	2.52	



<b>Company:</b>	Chevron	<b>Local Co-ordinate Reference:</b>	Well SKR-598-08-BV-04
<b>Project:</b>	Garfield County, CO (NAD83)	<b>TVD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Site:</b>	Skinner Ridge Field	<b>MD Reference:</b>	GL 6549.60 & RKB 12.5' @ 6562.10ft
<b>Well:</b>	SKR-598-08-BV-04	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,607.00	28.14	255.91	3,740.07	-522.66	-2,474.00	2,528.60	1.29	-1.29	-0.26	
4,697.00	27.09	256.44	3,819.81	-532.63	-2,514.51	2,570.30	1.20	-1.17	0.59	
4,799.00	24.90	255.34	3,911.49	-543.51	-2,557.86	2,614.97	2.20	-2.15	-1.08	
<b>Last SDI Production MWD Survey</b>										
4,855.00	24.90	255.34	3,962.28	-549.48	-2,580.67	2,638.52	0.00	0.00	0.00	
<b>Projection to TD</b>										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
185.00	184.90	-1.94	-5.03	First SDI Surface MWD Survey	
988.00	940.46	-49.34	-244.63	Last SDI Surface MWD Survey	
1,076.00	1,014.60	-57.89	-291.26	First SDI Production MWD Survey	
4,799.00	3,911.49	-543.51	-2,557.86	Last SDI Production MWD Survey	
4,855.00	3,962.28	-549.48	-2,580.67	Projection to TD	

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



<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	1 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

From Wednesday, October 02, 2013 at 0000 to Wednesday, October 02, 2013 at 2400

DRILLING SUMMARY				Drilling Parameters									
Start Depth	90.00	Rotary Hours	8.00	WOB	12	Pick UP	60	Slack Off	45	SPM			
End Depth	787.00	Circulating Hours	0.00	RAB	50	SPP	1477	FlowRate	0 - 530	190			
Total Drilled:	697.00	Avg. Total ROP:	63.36	<b>Mud Data</b>									
Total Rotary Drilled:	454.00	Avg. Rotary ROP:	56.75	Type	LSND	PV	28	SOLID	3.2				
Total Drilled Sliding:	243.00	Avg. Slide ROP:	81.00	Weight	8.8	GAS	0	YP	28	BHT°	120		
Slide Hours:	3.00	Percent Rotary:	65.14	Viscosity	89	SAND	0.5	PH	9	Flow T°	120		
Below Rotary Hrs.	24.00	Percent Slide:	34.86	Chlorides	900	WL	6.8	Oil %	0				
PERSONNEL				cASING			BHA						
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 1:12.25 / PDC / 9X13s, 8' MOTOR, 8' PONY, 8' MONEL, 8' HOS, 8' GAP, 8' PONY, 8' MONEL, XOVER, 6' DC, 4 1/2 Spiral,						
Second Directional :	Jonathen Franklin			Signature:									
MWD Operator1	Luke Kristy												
MWD Operator2													
Directional Company:	SDI												
Geologist:													
Company Man:	GREG/JOEL												
Incl. In:	0	Azm. In:	0	Incl. Out:	23.54	Azm. Out:	258.24						

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
2-Oct-13	00:00	10:30	10.50	90	90	Other	Finish skid Rgging UP
2-Oct-13	10:30	12:00	1.50	90	90	Change BHA	Make up dir tools and scribe motor
2-Oct-13	12:00	14:20	2.33	90	161	Drilling	Change BHA
2-Oct-13	14:20	14:30	0.17	161	161	Survey & Conn.	Survey & Conn.
2-Oct-13	14:30	15:25	0.92	161	206	Sliding	Survey & Conn.
2-Oct-13	15:25	16:15	0.83	206	242	Drilling	Drilling - (WOB:0;GPM :0;RPM:0)
2-Oct-13	16:15	16:25	0.17	242	242	Survey & Conn.	Survey & Conn.
2-Oct-13	16:25	16:55	0.50	242	280	Sliding	Sliding - (WOB:10;GPM :415;TFO:0)
2-Oct-13	16:55	17:50	0.92	280	333	Drilling	Drilling - (WOB:10;GPM :415;RPM:40)
2-Oct-13	17:50	17:55	0.08	333	333	Survey & Conn.	Survey & Conn.
2-Oct-13	17:55	18:05	0.17	333	363	Sliding	Sliding - (WOB:10;GPM :0;TFO:30)
2-Oct-13	18:05	18:50	0.75	363	424	Drilling	Drilling - (WOB:10;GPM :0;RPM:40)
2-Oct-13	18:50	18:55	0.08	424	424	Survey & Conn.	Survey & Conn.
2-Oct-13	18:55	19:10	0.25	424	454	Sliding	Sliding - (WOB:10;GPM :475;TFO:30)
2-Oct-13	19:10	20:05	0.92	454	514	Drilling	Drilling - (WOB:10;GPM :475;RPM:40)
2-Oct-13	20:05	20:15	0.17	514	514	Survey & Conn.	Survey & Conn.
2-Oct-13	20:15	20:40	0.42	514	544	Sliding	Sliding - (WOB:10;GPM :415;TFO:30)
2-Oct-13	20:40	21:45	1.08	544	605	Drilling	Drilling - (WOB:10;GPM :415;RPM:40)
2-Oct-13	21:45	21:55	0.17	605	605	Survey & Conn.	Survey & Conn.
2-Oct-13	21:55	22:25	0.50	605	645	Sliding	Sliding - (WOB:10;GPM :480;TFO:30)
2-Oct-13	22:25	22:55	0.50	645	696	Drilling	Drilling - (WOB:10;GPM :415;RPM:40)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
2-Oct-13	22:55	23:00	0.08	696	696	Survey & Conn.	Survey & Conn.
2-Oct-13	23:00	23:15	0.25	696	726	Sliding	Sliding - (WOB:10;GPM :480;TFO:30)
2-Oct-13	23:15	23:55	0.67	726	787	Drilling	Drilling - (WOB:12;GPM :415;RPM:40)
2-Oct-13	23:55	24:00	0.08	787	787	Survey & Conn.	Survey & Conn.





<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	2 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

**From Thursday, October 03, 2013 at 0000 to Thursday, October 03, 2013 at 2400**

DRILLING SUMMARY				Drilling Parameters							
Start Depth	787.00	Rotary Hours	2.25	WOB	12	Pick UP	60	Slack Off	45	SPM	
End Depth	1045.00	Circulating Hours	1.50	RAB	50	SPP	1477	FlowRate	480 - 530	190	
Total Drilled:	258.00	Avg. Total ROP:	79.38	Mud Data							
Total Rotary Drilled:	163.00	Avg. Rotary ROP:	72.44	Type	LSND	PV	28	SOLID	3.2		
Total Drilled Sliding:	95.00	Avg. Slide ROP:	95.00	Weight	8.8	GAS	0	YP	28	BHT°	120
Slide Hours:	1.00	Percent Rotary:	63.18	Viscosity	89	SAND	0.5	PH	9	Flow T°	120
Below Rotary Hrs.	24.00	Percent Slide:	36.82	Chlorides	900	WL	6.8	Oil %	0		

PERSONNEL				cASING			BHA
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 1:12.25 / PDC / 9X13s, 8' MOTOR, 8' PONY, 8' MONEL, 8' HOS, 8' GAP, 8' PONY, 8' MONEL, XOVER, 6' DC, 4 1/2 Spiral,
Second Directional :	Jonathen Franklin			Signature:			
MWD Operator1	Luke Kristy						
MWD Operator2							
Directional Company:	SDI						
Geologist:							
Company Man:	GREG/JOEL						
Incl. In:	23.54	Azm. In:	258.24	Incl. Out:	0	Azm. Out:	0

**GENERAL COMMENT**

NEW SDI-840 going in with 20.83 D&C hrs.  
 MAX DIFF - 470psi  
 Optimum Diff 100-350psi  
 Max Operating Torque -7800t ft/lbs  
 Max GPM - 900  
 MOTOR YIELD 9.9  
 TOTAL D&C HRS. 15.25

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
3-Oct-13	00:00	00:20	0.33	787	817	Sliding	Sliding - (WOB:10;GPM :480;TFO:30)
3-Oct-13	00:20	00:50	0.50	817	817	Rig Service-Inhole	Rig Service-Inhole
3-Oct-13	00:50	01:05	0.25	817	863	Drilling	Drilling - (WOB:12;GPM :530;RPM:40)
3-Oct-13	01:05	01:10	0.08	863	863	Survey & Conn.	Survey & Conn.
3-Oct-13	01:10	01:30	0.33	863	893	Sliding	Sliding - (WOB:10;GPM :480;TFO:30)
3-Oct-13	01:30	02:25	0.92	893	953	Drilling	Drilling - (WOB:12;GPM :530;RPM:40)
3-Oct-13	02:25	02:30	0.08	953	953	Survey & Conn.	Survey & Conn.
3-Oct-13	02:30	02:50	0.33	953	988	Sliding	Sliding - (WOB:10;GPM :480;TFO:30)
3-Oct-13	02:50	03:55	1.08	988	1045	Drilling	Drilling - (WOB:12;GPM :530;RPM:40)
3-Oct-13	03:55	04:00	0.08	1045	1045	Survey & Conn.	Survey & Conn.
3-Oct-13	04:00	05:00	1.00	1045	1045	Circulating	Circulating
3-Oct-13	05:00	07:00	2.00	1045	1045	POOH	POOH
3-Oct-13	07:00	08:00	1.00	1045	1045	Change BHA	Change BHA
3-Oct-13	08:00	24:00	16.00	1045	1045	Other	CASING OPERATIONS



<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	3 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

**From Friday, October 04, 2013 at 0000 to Friday, October 04, 2013 at 2400**

DRILLING SUMMARY				Drilling Parameters								
Start Depth	1045.00	Rotary Hours	0.42	WOB	12	Pick UP	60	Slack Off	45	SPM		
End Depth	1045.00	Circulating Hours	1.00	RAB	50	SPP	1477	FlowRate	530 - 530	190		
Total Drilled:	0.00	Avg. Total ROP:	.00	<b>Mud Data</b>								
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	.00	Type	LSND	PV	28	SOLID	3.2			
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	8.8	GAS	0	YP	28	BHT°	120	
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	89	SAND	0.5	PH	9	Flow T°	120	
Below Rotary Hrs.	23.67	Percent Slide:	NA	Chlorides	900	WL	6.8			Oil %	0	

PERSONNEL				cASING			BHA
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 2:7 7/8 - FX55 - PDC-5X15, 6.5 MOTOR 1.75 BEND, 6.5 PONY, 6.5 HOS, 6.5 MONEL, 6.5 GAP, 6.5 PONY, 6.5 MONEL, 4 1/2 Spiral,
Second Directional :	Jonathen Franklin			Signature:			
MWD Operator1	Luke Kristy						
MWD Operator2							
Directional Company:	SDI						
Geologist:							
Company Man:	GREG/JOEL						
Incl. In:	0	Azm. In:	0	Incl. Out:	32.71	Azm. Out:	260.04

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
4-Oct-13	00:00	13:30	13.50	1045	1045	Other	Casing ops.
4-Oct-13	13:30	14:00	0.50	1045	1045	TIH	pick up motor
4-Oct-13	14:00	14:30	0.50	1045	1045	Rig repair	Rig repair
4-Oct-13	14:30	15:15	0.75	1045	1045	TIH	Make up dir. tools & scribe MWD
4-Oct-13	15:15	16:30	1.25	1045	1045	TIH	TIH
4-Oct-13	16:30	17:30	1.00	1045	1045	Reaming	Clean out cmt float & sho
4-Oct-13	17:30	18:30	1.00	1045	1045	POOH	POOH
4-Oct-13	18:30	18:50	0.33	1045	1045	L/D DP	L/D 3 DC
4-Oct-13	18:50	19:40	0.83	1045	1045	TIH	TIH
4-Oct-13	19:40	23:35	3.92	1045	1045	Rig repair	Rig repair HPU
4-Oct-13	23:35	24:00	0.42	1045	1045	Drilling Cement	Drilling - (WOB:12;GPM :530;RPM:40)



<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	4 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

From Saturday, October 05, 2013 at 0000 to Saturday, October 05, 2013 at 2400

DRILLING SUMMARY				Drilling Parameters									
Start Depth	1045.00	Rotary Hours	6.00	WOB	12	Pick UP	60	Slack Off	45	SPM			
End Depth	1784.00	Circulating Hours	0.00	RAB	50	SPP	1330	FlowRate	377 - 505	184			
Total Drilled:	739.00	Avg. Total ROP:	100.77	<b>Mud Data</b>									
Total Rotary Drilled:	579.00	Avg. Rotary ROP:	96.50	Type	LSND	PV	28	SOLID	3.2				
Total Drilled Sliding:	160.00	Avg. Slide ROP:	120.00	Weight	8.8	GAS	0	YP	28	BHT°	120		
Slide Hours:	1.33	Percent Rotary:	78.35	Viscosity	89	SAND	0.5	PH	9	Flow T°	120		
Below Rotary Hrs.	24.00	Percent Slide:	21.65	Chlorides	900	WL	6.8	Oil %	0				

PERSONNEL				cASING			BHA				
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 2:7 7/8 - FX55 - PDC-5X15, 6.5 MOTOR 1.75 BEND, 6.5 PONY, 6.5 HOS, 6.5 MONEL, 6.5 GAP, 6.5 PONY, 6.5 MONEL, 4 1/2 Spiral,				
Second Directional :	Jonathen Franklin			Signature:							
MWD Operator1	Luke Kristy										
MWD Operator2											
Directional Company:	SDI										
Geologist:											
Company Man:	GREG/JOEL			Incl. In:	32.71	Azm. In:	260.04	Incl. Out:	41.61	Azm. Out:	260.4

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Oct-13	00:00	01:05	1.08	1045	1045	Drilling Cement	Drilling - (WOB:12;GPM :377;RPM:20)
5-Oct-13	01:05	01:40	0.58	1045	1132	Drilling	Drilling - (WOB:12;GPM :505;RPM:40)
5-Oct-13	01:40	01:50	0.17	1132	1132	Survey & Conn.	Survey & Conn.@1076' Inc 32.48° Azm 259.18°
5-Oct-13	01:50	02:15	0.42	1132	1172	Sliding	Sliding - (WOB:10;GPM :505;TFO:0)
5-Oct-13	02:15	02:40	0.42	1172	1223	Drilling	Drilling - (WOB:12;GPM :505;RPM:40)
5-Oct-13	02:40	02:50	0.17	1223	1223	Survey & Conn.	Survey & Conn.@1167' Inc 35.96° Azm 260.13°
5-Oct-13	02:50	03:05	0.25	1223	1263	Sliding	Sliding - (WOB:10;GPM :505;TFO:0)
5-Oct-13	03:05	03:30	0.42	1263	1313	Drilling	Drilling - (WOB:12;GPM :505;RPM:40)
5-Oct-13	03:30	03:40	0.17	1313	1313	Survey & Conn.	Survey & Conn.@1257' Inc 39.27° Azm 257.4°
5-Oct-13	03:40	03:55	0.25	1313	1343	Sliding	Sliding - (WOB:10;GPM :505;TFO:0)
5-Oct-13	03:55	04:30	0.58	1343	1404	Drilling	Drilling - (WOB:12;GPM :505;RPM:40)
5-Oct-13	04:30	04:40	0.17	1404	1404	Survey & Conn.	Survey & Conn.@1348' Inc 41.41° Azm 255.25°
5-Oct-13	04:40	04:50	0.17	1404	1424	Sliding	Sliding - (WOB:15; :505;TFO:30)
5-Oct-13	04:50	05:30	0.67	1424	1494	Drilling	Drilling - (WOB:12; :505;RPM:40)
5-Oct-13	05:30	05:40	0.17	1494	1494	Survey & Conn.	Survey & Conn.@1438' Inc 43.34° Azm 255.36°
5-Oct-13	05:40	05:45	0.08	1494	1509	Sliding	Sliding - (WOB:15; :505;TFO:85)
5-Oct-13	05:45	06:20	0.58	1509	1585	Drilling	Drilling - (WOB:12; :505;RPM:40)
5-Oct-13	06:20	06:30	0.17	1585	1585	Survey & Conn.	Survey & Conn.@1529' Inc 42.74° Azm 258.88°
5-Oct-13	06:30	07:10	0.67	1585	1675	Drilling	Drilling - (WOB:12; :505;RPM:40)
5-Oct-13	07:10	07:20	0.17	1675	1675	Survey & Conn.	Survey & Conn.@1619' Inc 41.42° Azm 257.93°
5-Oct-13	07:20	07:30	0.17	1675	1690	Sliding	Sliding - (WOB:15; :505;TFO:85)

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
5-Oct-13	07:30	08:20	0.83	1690	1766	Drilling	Drilling - (WOB:12; :505;RPM:40)
5-Oct-13	08:20	08:30	0.17	1766	1766	Survey & Conn.	Survey & Conn. @ 1710' Inc 41.61° Azm 260.4°
5-Oct-13	08:30	08:40	0.17	1766	1784	Drilling	Drilling - (WOB:12;GPM :505;RPM:40)
5-Oct-13	08:40	09:45	1.08	1784	1784	POOH	POOH pump line washout
5-Oct-13	09:45	22:55	13.17	1784	1784	Rig repair	Rig repair fix pump line washout
5-Oct-13	22:55	23:20	0.42	1784	1784	TIH	TIH
5-Oct-13	23:20	24:00	0.67	1784	1784	Rig repair	Rig repair fix roughneck ram



<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	5 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

From Sunday, October 06, 2013 at 0000 to Sunday, October 06, 2013 at 2400

DRILLING SUMMARY				Drilling Parameters								
Start Depth	1784.00	Rotary Hours	8.33	WOB	15	Pick UP	63	Slack Off	35	SPM		
End Depth	3215.00	Circulating Hours	3.50	RAB	48	SPP	1800	FlowRate	505 - 560	206		
Total Drilled:	1431.00	Avg. Total ROP:	137.38	<b>Mud Data</b>								
Total Rotary Drilled:	1224.00	Avg. Rotary ROP:	146.88	Type	LSND	PV	28	SOLID	3.2			
Total Drilled Sliding:	207.00	Avg. Slide ROP:	99.36	Weight	8.8	GAS	0	YP	28	BHT°	120	
Slide Hours:	2.08	Percent Rotary:	85.53	Viscosity	89	SAND	0.5	PH	9	Flow T°	120	
Below Rotary Hrs.	24.00	Percent Slide:	14.47	Chlorides	900	WL	6.8			Oil %	0	
PERSONNEL				cASING			BHA					
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 2:7 7/8 - FX55 - PDC-5X15, 6.5 MOTOR 1.75 BEND, 6.5 PONY, 6.5 HOS, 6.5 MONEL, 6.5 GAP, 6.5 PONY, 6.5 MONEL, 4 1/2 Spiral,					
Second Directional :	Jonathen Franklin			Signature:								
MWD Operator1	Luke Kristy											
MWD Operator2												
Directional Company:	SDI											
Geologist:												
Company Man:	GREG/JOEL			Incl. In:	41.61	Azm. In:	260.4	Incl. Out:	41.68	Azm. Out:	255.47	

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Oct-13	00:00	00:45	0.75	1784	1784	TIH	TIH
6-Oct-13	00:45	01:05	0.33	1784	1784	Circulating	Circulating B/U CLEAN HOLE
6-Oct-13	01:05	01:40	0.58	1784	1857	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	01:40	01:50	0.17	1857	1857	Survey & Conn.	Survey & Conn. @1801' Inc 40.71° Azm 258.75°
6-Oct-13	01:50	02:00	0.17	1857	1872	Sliding	Sliding - (WOB:15;GPM :560;TFO:70)
6-Oct-13	02:00	02:30	0.50	1872	1947	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	02:30	02:40	0.17	1947	1947	Survey & Conn.	Survey & Conn. @1891' Inc 40.42° Azm 260.92°
6-Oct-13	02:40	02:50	0.17	1947	1962	Sliding	Sliding - (WOB:15;GPM :560;TFO:70)
6-Oct-13	02:50	03:20	0.50	1962	2038	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	03:20	03:30	0.17	2038	2038	Survey & Conn.	Survey & Conn. @1982' Inc 40.54° Azm 261.36°
6-Oct-13	03:30	03:45	0.25	2038	2060	Sliding	Sliding - (WOB:15;GPM :560;TFO:10)
6-Oct-13	03:45	04:00	0.25	2060	2083	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	04:00	04:10	0.17	2083	2098	Sliding	Sliding - (WOB:15;GPM :560;TFO:10)
6-Oct-13	04:10	04:20	0.17	2098	2128	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	04:20	04:30	0.17	2128	2128	Survey & Conn.	Survey & Conn. @2072' Inc 41.24° Azm 262.06°
6-Oct-13	04:30	05:00	0.50	2128	2219	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	05:00	05:10	0.17	2219	2219	Survey & Conn.	Survey & Conn. @2163' Inc 41.71° Azm 261.91°
6-Oct-13	05:10	05:20	0.17	2219	2239	Sliding	Sliding - (WOB:15;GPM :560;TFO:10)
6-Oct-13	05:20	08:00	2.67	2239	2239	Circulating	work on mud pump
6-Oct-13	08:00	08:30	0.50	2239	2309	Drilling	Drilling - (WOB:15;GPM :560;RPM:40) to shoe
6-Oct-13	08:30	08:35	0.08	2309	2309	Survey & Conn.	Survey & Conn. @2253' Inc 43.57° Azm 259.73°

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
6-Oct-13	08:35	09:20	0.75	2309	2400	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	09:20	09:25	0.08	2400	2400	Survey & Conn.	Survey & Conn.@2344' Inc 43.17° Azm 259.05°
6-Oct-13	09:25	10:00	0.58	2400	2490	Drilling	Drilling - (WOB:15;GPM :560;RPM:40)
6-Oct-13	10:00	11:30	1.50	2490	2490	POOH	POOH to casing shoe
6-Oct-13	11:30	15:45	4.25	2490	2490	Rig repair	Rig repair
6-Oct-13	15:45	17:00	1.25	2490	2490	TIH	TIH
6-Oct-13	17:00	17:30	0.50	2490	2490	Circulating	Circulating
6-Oct-13	17:30	18:00	0.50	2490	2581	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	18:00	18:10	0.17	2581	2581	Survey & Conn.	Survey & Conn.@2525' Inc 41.22° Azm 257.42°
6-Oct-13	18:10	18:40	0.50	2581	2671	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	18:40	18:50	0.17	2671	2671	Survey & Conn.	Survey & Conn.@2615' Inc 40.36° Azm 257.49°
6-Oct-13	18:50	19:20	0.50	2671	2762	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	19:20	19:30	0.17	2762	2762	Survey & Conn.	Survey & Conn.@2706' Inc 38.71° Azm 256.93°
6-Oct-13	19:30	19:45	0.25	2762	2784	Sliding	Sliding - (WOB:15; :560;TFO:10)
6-Oct-13	19:45	20:10	0.42	2784	2852	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	20:10	20:20	0.17	2852	2852	Survey & Conn.	Survey & Conn.@2795' Inc 39.93° Azm 258.49°
6-Oct-13	20:20	20:30	0.17	2852	2883	Sliding	Sliding - (WOB:15; :560;TFO:10)
6-Oct-13	20:30	21:00	0.50	2883	2943	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	21:00	21:10	0.17	2943	2943	Survey & Conn.	Survey & Conn.@2886' Inc 41.05° Azm 257.58°
6-Oct-13	21:10	21:50	0.67	2943	3033	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	21:50	22:00	0.17	3033	3033	Survey & Conn.	Survey & Conn.@2976' Inc 39.54° Azm 257.34°
6-Oct-13	22:00	22:15	0.25	3033	3060	Sliding	Sliding - (WOB:15; :560;TFO:10)
6-Oct-13	22:15	22:45	0.50	3060	3124	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	22:45	22:55	0.17	3124	3124	Survey & Conn.	Survey & Conn.@3067' Inc 41.41° Azm 255.45°
6-Oct-13	22:55	23:05	0.17	3124	3144	Sliding	Sliding - (WOB:15; :560;TFO:10)
6-Oct-13	23:05	23:20	0.25	3144	3169	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	23:20	23:40	0.33	3169	3189	Sliding	Sliding - (WOB:15; :560;TFO:10)
6-Oct-13	23:40	23:50	0.17	3189	3215	Drilling	Drilling - (WOB:15; :560;RPM:40)
6-Oct-13	23:50	24:00	0.17	3215	3215	Survey & Conn.	Survey & Conn.@3158' Inc 42.9° Azm 256.35°



<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	6 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

**From Monday, October 07, 2013 at 0000 to Monday, October 07, 2013 at 2400**

DRILLING SUMMARY				Drilling Parameters									
Start Depth	3215.00	Rotary Hours	14.50	WOB	20	Pick UP	80	Slack Off	45	SPM			
End Depth	4855.00	Circulating Hours	2.58	RAB	65	SPP	2050	FlowRate	560 - 560	206			
Total Drilled:	1640.00	Avg. Total ROP:	98.89	<b>Mud Data</b>									
Total Rotary Drilled:	1589.00	Avg. Rotary ROP:	109.59	Type	LSND	PV	28	SOLID	3.2				
Total Drilled Sliding:	51.00	Avg. Slide ROP:	24.48	Weight	8.8	GAS	0	YP	28	BHT°	120		
Slide Hours:	2.08	Percent Rotary:	96.89	Viscosity	89	SAND	0.5	PH	9	Flow T°	120		
Below Rotary Hrs.	24.00	Percent Slide:	3.11	Chlorides	900	WL	6.8	Oil %	0				
PERSONNEL				cASING			BHA						
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 2:7 7/8 - FX55 - PDC-5X15, 6.5 MOTOR 1.75 BEND, 6.5 PONY, 6.5 HOS, 6.5 MONEL, 6.5 GAP, 6.5 PONY, 6.5 MONEL, 4 1/2 Spiral,						
Second Directional :	Jonathen Franklin			Signature:									
MWD Operator1	Luke Kristy												
MWD Operator2													
Directional Company:	SDI												
Geologist:													
Company Man:	GREG/JOEL			Incl. In:	41.68	Azm. In:	255.47	Incl. Out:	24.9	Azm. Out:	255.34		

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
7-Oct-13	00:00	00:20	0.33	3215	3260	Drilling	Drilling - (WOB:20; :560;RPM:40)
7-Oct-13	00:20	01:00	0.67	3260	3260	Rig Service-Inhole	Rig Service-Inhole
7-Oct-13	01:00	01:15	0.25	3260	3305	Drilling	Drilling - (WOB:20; :560;RPM:60)
7-Oct-13	01:15	01:25	0.17	3305	3305	Survey & Conn.	Survey & Conn.@3248' Inc 43.77° Azm 257.2°
7-Oct-13	01:25	01:55	0.50	3305	3396	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	01:55	02:05	0.17	3396	3396	Survey & Conn.	Survey & Conn.@3339' Inc 42.77° Azm 257.21°
7-Oct-13	02:05	02:40	0.58	3396	3486	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	02:40	02:50	0.17	3486	3486	Survey & Conn.	Survey & Conn.@3429' Inc 40.98° Azm 256.59°
7-Oct-13	02:50	03:50	1.00	3486	3577	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	03:50	04:00	0.17	3577	3577	Survey & Conn.	Survey & Conn.@3520' Inc 39.65° Azm 255.87°
7-Oct-13	04:00	04:20	0.33	3577	3597	Sliding	Sliding - (WOB:15; :560;TFO:40)
7-Oct-13	04:20	04:45	0.42	3597	3622	Drilling	Drilling - (WOB:20; :560;RPM:60)
7-Oct-13	04:45	05:00	0.25	3622	3642	Sliding	Sliding - (WOB:15; :560;TFO:40)
7-Oct-13	05:00	05:10	0.17	3642	3667	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	05:10	05:20	0.17	3667	3667	Survey & Conn.	Survey & Conn.@3610' Inc 39.81° Azm 257.11°
7-Oct-13	05:20	05:30	0.17	3667	3687	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	05:30	06:00	0.50	3687	3687	Circulating	Circulating
7-Oct-13	06:00	06:35	0.58	3687	3758	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	06:35	06:40	0.08	3758	3758	Survey & Conn.	Survey & Conn.@3701' Inc 40.74° Azm 259.51°
7-Oct-13	06:40	07:25	0.75	3758	3849	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	07:25	07:35	0.17	3849	3849	Survey & Conn.	Survey & Conn.@3792' Inc 39.71° Azm 259.09°

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
7-Oct-13	07:35	08:20	0.75	3849	3939	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	08:20	08:25	0.08	3939	3939	Survey & Conn.	Survey & Conn.@3882' Inc 38.74° Azm 258.98°
7-Oct-13	08:25	09:15	0.83	3939	4030	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	09:15	09:20	0.08	4030	4030	Survey & Conn.	Survey & Conn.@3973' Inc 37.46° Azm 258.63°
7-Oct-13	09:20	10:15	0.92	4030	4120	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	10:15	10:20	0.08	4120	4120	Survey & Conn.	Survey & Conn.@4063' Inc 36.33° Azm 258.31°
7-Oct-13	10:20	11:20	1.00	4120	4211	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	11:20	11:25	0.08	4211	4211	Survey & Conn.	Survey & Conn.@4154' Inc 34.73° Azm 256.52°
7-Oct-13	11:25	12:20	0.92	4211	4302	Drilling	00Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	12:20	12:45	0.42	4302	4302	Rig Service-Inhole	Rig Service-Inhole
7-Oct-13	12:45	13:40	0.92	4302	4392	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	13:40	13:45	0.08	4392	4392	Survey & Conn.	Survey & Conn.@4336' Inc 31.51° Azm 255.4°
7-Oct-13	13:45	14:40	0.92	4392	4483	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	14:40	14:45	0.08	4483	4483	Survey & Conn.	Survey & Conn.@4426' Inc 30.2° Azm 253.88°
7-Oct-13	14:45	14:55	0.17	4483	4496	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	14:55	16:25	1.50	4496	4507	Sliding	Sliding - (WOB:15;GPM :560;TFO:40)
7-Oct-13	16:25	17:00	0.58	4507	4573	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	17:00	17:05	0.08	4573	4573	Survey & Conn.	Survey & Conn.@4516' Inc 29.31° Azm 256.15°
7-Oct-13	17:05	17:55	0.83	4573	4664	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	17:55	18:00	0.08	4664	4664	Survey & Conn.	Survey & Conn.@4607' Inc 28.14° Azm 255.91°
7-Oct-13	18:00	18:30	0.50	4664	4731	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	18:30	19:40	1.17	4731	4731	Rig repair	Rig repair PUMP DOWN
7-Oct-13	19:40	19:55	0.25	4731	4754	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	19:55	20:05	0.17	4754	4754	Survey & Conn.	Survey & Conn.@4697' Inc 27.09° Azm 256.44°
7-Oct-13	20:05	21:15	1.17	4754	4855	Drilling	Drilling - (WOB:20;GPM :560;RPM:60)
7-Oct-13	21:15	22:15	1.00	4855	4855	Circulating	Circulating
7-Oct-13	22:15	24:00	1.75	4855	4855	POOH	POOH





<b>JOB NO.:</b>	420913DEF63156	<b>Report Time:</b>	2400	7 of 7
<b>COMPANY:</b>	Chevron	<b>API JOB #</b>		
<b>LOCATION:</b>	Skinner Ridge Field	<b>WORK ORDER#</b>	165907	
<b>RIG NAME:</b>	Ensign 122	<b>FIELD:</b>	Skinner Ridge	
<b>STATE:</b>	Colorado	<b>Township:</b>	5S	
<b>COUNTY:</b>	Garfield	<b>SECT\</b>	8	98W
<b>WELL NAME:</b>	SKR 598-08-BV-04			

**From Tuesday, October 08, 2013 at 0000 to Tuesday, October 08, 2013 at 2400**

DRILLING SUMMARY				Drilling Parameters							
Start Depth	0.00	Rotary Hours	0.00	WOB	20	Pick UP	80	Slack Off	45	SPM	
End Depth	0.00	Circulating Hours	0.00	RAB	65	SPP	2050	FlowRate	560 - 560	206	
Total Drilled:	0.00	Avg. Total ROP:	NA	<b>Mud Data</b>							
Total Rotary Drilled:	0.00	Avg. Rotary ROP:	NA	Type	LSND	PV	28	SOLID	3.2		
Total Drilled Sliding:	0.00	Avg. Slide ROP:	NA	Weight	8.8	GAS	0	YP	28	BHT°	120
Slide Hours:	0.00	Percent Rotary:	NA	Viscosity	89	SAND	0.5	PH	9	Flow T°	120
Below Rotary Hrs.	24.00	Percent Slide:	NA	Chlorides	900	WL	6.8			Oil %	0

PERSONNEL				cASING			BHA
Lead Directional :	Ed Mackey			Size	Lb/ft	Set Depth	BHA # 2:7 7/8 - FX55 - PDC-5X15, 6.5 MOTOR 1.75 BEND, 6.5 PONY, 6.5 HOS, 6.5 MONEL, 6.5 GAP, 6.5 PONY, 6.5 MONEL, 4 1/2 Spiral,
Second Directional :	Jonathen Franklin			Signature:			
MWD Operator1	Luke Kristy						
MWD Operator2							
Directional Company:	SDI						
Geologist:							
Company Man:	GREG/JOEL						
Incl. In:	24.9	Azm. In:	255.34	Incl. Out:	0	Azm. Out:	0

**GENERAL COMMENT**

Date	Start Time	End Time	Hours	Start Depth	End Depth	Activity Code	COMMENT
8-Oct-13	00:00	06:00	6.00	4855	4855	POOH	POOH L/D TOOLS
8-Oct-13	06:00	24:00	18.00	4855	4855	Other	CASING OPPS DeMob

**BHA # 1**

**SDI**



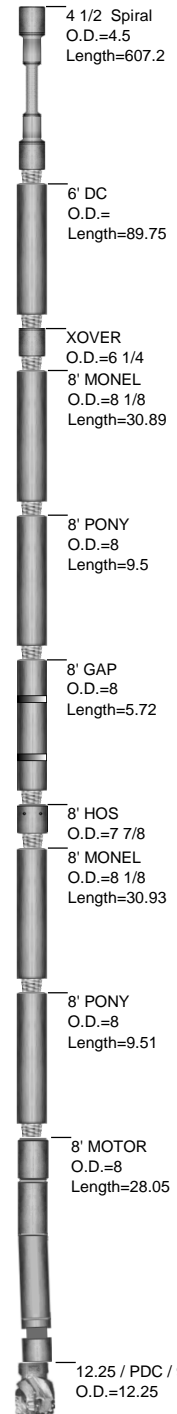
**JOB NO.:** 420913DEF63156 **Work Order:** 165907  
**COMPANY:** Chevron  
**LOCATION:** Skinner Ridge Field  
**RIG NAME:** Ensign 122  
**STATE:** Colorado  
**COUNTY:** Garfield  
**WELL NAME:** SKR 598-08-BV-04

**FIELD:** Skinner Ridge  
**Township:** 5S  
**SECT. RANGE:** 8 98W  
**Lead DD:** Ed Mackey  
**Co. Man:** GREG/JOEL  
**BHA TYPE:** Steerable Assembly  
**BHA WT:** 32136 **Wt @ Jars:** N/A

Time and Depths		MOTOR DATA		Drilling Parameters	
<b>Date In:</b>	02-Oct-13 @ 10:30	Titan II 8 FBH 7:8 lobe 4.0 stage		<b>SO/PU:</b>	0 - 45 / 0-60
<b>Date Out:</b>	03-Oct-13 @ 08:00	<b>MFG.:</b> SDI		<b>Rot Strg Wt:</b>	0-50
<b>Hrs In Hole:</b>	21.50	<b>Pad OD:</b> 8.5		<b>WOB:</b>	0 - 12
<b>Start Depth:</b>	90.00	<b>NB Stab:</b> 0		<b>TORQ:</b>	0 - 2000
<b>End Depth:</b>	1045.00	<b>Bit to Bend:</b> 4.56		<b>SPP:</b>	0 - 1477
<b>Total Drilled:</b>	955.00	<b>Bent Hsg/Sub°:</b> 2.75 /		<b>Motor RPM:</b>	- 77
<b>Avg. Total ROP:</b>	67.02	<b>Lobe/Stage:</b> 7:8 / 4		<b>Rotary RPM:</b>	0 - 40
<b>Circ Hrs: Tot/Only</b>	15.75 / 1.50	<b>Rev/GAL:</b> 0.16		<b>Flow Rate:</b>	0 - 530
<b>Percent Slide:</b>	35.39	<b>Rotor Jet:</b> 0		<b>Avg Diff:</b>	
<b>Percent Hrs:</b>	28.07	<b>Prop BUR:</b>		<b>Stall Pres.:</b>	
<b>Slide Hours:</b>	4.00	<b>Act BUR:</b>		<b>Off Bot Pres.:</b>	
<b>Total Sliding:</b>	338.00	Mud Data		Bit Record	
<b>Avg. Slide ROP:</b>	84.50	<b>Type</b> LSND		BAKER / 12.25 / PDC / 9X13s	
<b>Percent Rotary:</b>	64.61	<b>WT:</b> 8.8	<b>GAS:</b> 0	<b>Run #:</b>	1
<b>Percent Hrs:</b>	71.93	<b>Vis:</b> 89	<b>PV:</b> 28	<b>Type Bit:</b>	PDC
<b>Rotary Hours:</b>	10.25	<b>WL:</b> 6.8	<b>PH:</b> 9	<b>IADC#:</b>	TFA: 1.166
<b>Total Rotary:</b>	617.00	<b>SOL:</b> 3.2	<b>SAND:</b> 0.5	<b>JETS:</b>	9-13
<b>Avg. Rotary ROP:</b>	60.20	<b>Oil %:</b> 0	<b>T °:</b> 120	<b>Bit Drop:</b>	167 PSI @ 530 GPM
<b>Reason POOH:</b>	TD	<b>Chlor:</b> 900	<b>YP:</b> 28	<b>Cond.:</b>	GOOD
<b>MWD Spacing</b>	<b>Gamma:</b> 0	<b>Restiv:</b> 0	<b>Sensor:</b> 57	<b>Last Casing</b>	n n .
	<b>GYRO:</b> 0	<b>DNCS:</b> 90	<b>Sonic:</b> 0	<b>Shoe @:</b>	<b>Hanger @:</b>

**INC IN:** .0 **INC OUT:** 32.7 **AZM IN:** .00 **AZM OUT:** 260.04  
 NEW SDI-840 going in with 20.83 D&C hrs.  
 MAX DIFF - 470psi  
 Optimum Diff 100-350psi  
 Max Operating Torque -7800t ft/lbs  
 Max GPM - 900  
 MOTOR YIELD 9.9  
 TOTAL D&C HRS. 15.25

BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
12.25 / PDC / 9X13s	7016120		12.25	1.50	1.50	6 5/8 REGP	
8' MOTOR	SDI-840		8	28.05	29.55	6 5/8 REGB	
8' PONY	SDI --126-068	3.75	8	9.51	39.06	6 5/8 REGB	
8' MONEL	SDI 84-375	3.75	8 1/8	30.93	69.99	6 5/8 REGB	
8' HOS	SDI-89-025	3 3/4	7 7/8	2.63	72.62	6 5/8 REGB	
8' GAP	SDI-69-605	3 1/4	8	5.72	78.34	6 5/8 REGB	
8' PONY	SDI-052	3.75	8	9.50	87.84	6 5/8 REGB	
8' MONEL	NSN	3.75	8 1/8	30.89	118.73	6 5/8 REGB	
XOVER	SDI-1-481	2 3/4	6 1/4	2.51	121.24	6 5/8 REGB	
6' DC	RIG 1			89.75	210.99	4 1/2 XHB	
4 1/2 Spiral	HWDP - Pin	2.75	4.5	607.20	818.19	4 1/2 XHB	





**JOB NO.:** 420913DEF63156  
**COMPANY:** Chevron  
**LOCATION:** Skinner Ridge Field  
**RIG NAME:** Ensign 122  
**STATE:** Colorado  
**COUNTY:** Country  
**WELL NAME:** SKR 598-08-BV-04

**FIELD:** Skinner Ridge  
**Township:** 5S  
**Range** 98W

MOTOR INFORMATION	
Desc: Titan II 8 FBH 7:8 lobe 4.0 stage @2.75	
Bent Hsg/Sub: 2.75 / 0	Bit to Bend: 4.56
Pad OD: 8.5	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	2-Oct	Drilling	12:00	14:20	2.33	90	161	71		30.4	0	0				2.91	263.40	1.81	
1	2-Oct	Sliding	14:30	15:25	0.92	161	206	45		49.1	0	0				4.25	250.50	4.40	
1	2-Oct	Drilling	15:25	16:15	0.83	206	242	36	10	43.2	40	2000				5.82	253.26	4.40	
1	2-Oct	Sliding	16:25	16:55	0.50	242	280	38	10	76.0	40	0			258	7.41	255.73	2.66	
1	2-Oct	Drilling	16:55	17:50	0.92	280	333	53	10	57.8	40	0				8.82	255.73	2.66	
1	2-Oct	Sliding	17:55	18:05	0.17	333	363	30	10	180.0	40	2	475	777	30	9.61	255.73	2.66	
1	2-Oct	Drilling	18:05	18:50	0.75	363	424	61	10	81.3	40	2	475	777		11.60	258.88	3.38	
1	2-Oct	Sliding	18:55	19:10	0.25	424	454	30	10	120.0	40	2	475	777	30	12.59	260.22	3.38	
1	2-Oct	Drilling	19:10	20:05	0.92	454	514	60	10	65.5	40	2	475	777		14.49	257.99	3.23	
1	2-Oct	Sliding	20:15	20:40	0.42	514	544	30	10	72.0	40	2	415	777	30	15.43	257.00	3.23	
1	2-Oct	Drilling	20:40	21:45	1.08	544	605	61	10	56.3	40	2	415	777		18.18	257.94	4.59	
1	2-Oct	Sliding	21:55	22:25	0.50	605	645	40	10	80.0	40	2	480	1022	30	19.99	257.51	4.19	
1	2-Oct	Drilling	22:25	22:55	0.50	645	696	51	10	102.0	40	2	415	1022		22.12	257.51	4.19	
1	2-Oct	Sliding	23:00	23:15	0.25	696	726	30	10	120.0	40	2	480	1022	30	23.37	257.51	4.19	
1	2-Oct	Drilling	23:15	23:55	0.67	726	787	61	12	91.5	40	6	530	1477		25.49	259.74	3.59	
1	3-Oct	Sliding	00:00	00:20	0.33	787	817	30	10	90.0	40	6	480	1477	30	26.57	260.35	3.91	
1	3-Oct	Drilling	00:50	01:05	0.25	817	863	46	12	184.0	40	6	530	1477		28.36	260.86	3.91	
1	3-Oct	Sliding	01:10	01:30	0.33	863	893	30	10	90.0	40	6	480	1477	30	29.53	261.20	3.91	
1	3-Oct	Drilling	01:30	02:25	0.92	893	953	60	12	65.5	40	6	530	1477		31.55	260.22	3.36	
1	3-Oct	Sliding	02:30	02:50	0.33	953	988	35	10	105.0	40	6	480	1477	30	32.71	259.84	3.36	
1	3-Oct	Drilling	02:50	03:55	1.08	988	1045	57	12	52.6	40	6	530	1477		32.71	260.04	0.00	

<b>Total Drilled:</b>	955	<b>Avg. Total ROP:</b>	67.02	<b>DEPTH% - TIME %</b>
<b>Total Rotary Drilled:</b>	617	<b>Avg. Rotary ROP:</b>	60.20	<b>Percent Rotary:</b> 64.61 - 71.93
<b>Total Drilled Sliding:</b>	338	<b>Avg. Slide ROP:</b>	84.50	<b>Percent Slide:</b> 35.39 - 28.07

**BHA # 2**

**SDI**



**JOB NO.:** 420913DEF63156 **Work Order:** 165907  
**COMPANY:** Chevron  
**LOCATION:** Skinner Ridge Field  
**RIG NAME:** Ensign 122  
**STATE:** Colorado  
**COUNTY:** Garfield  
**WELL NAME:** SKR 598-08-BV-04

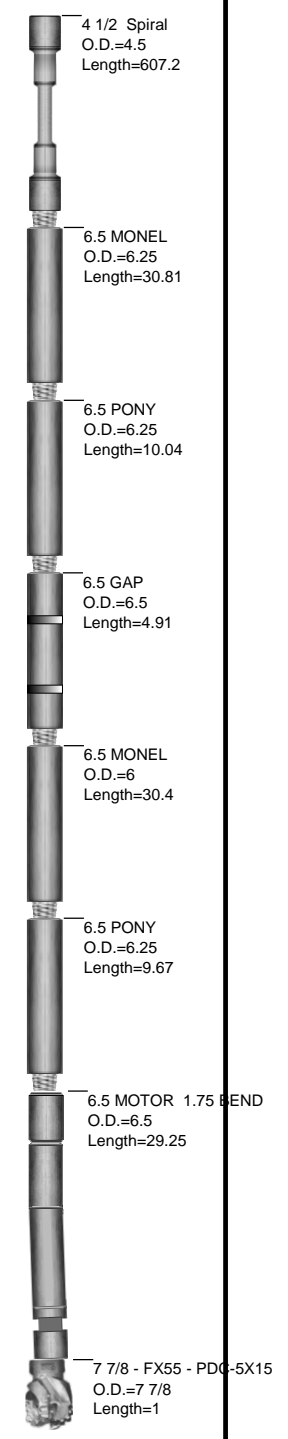
**FIELD:** Skinner Ridge  
**Township:** 5S  
**SECT. RANGE:** 8 98W  
**Lead DD:** Ed Mackey  
**Co. Man:** GREG/JOEL  
**BHA TYPE:** Steerable Assembly  
**BHA WT:** 25646 **Wt @ Jars:** N/A

Time and Depths		MOTOR DATA		Drilling Parameters	
<b>Date In:</b>	04-Oct-13 @ 13:30	6.5 in 7:8 lobe 3.3 stg .14 rpg		<b>SO/PU:</b>	35 - 45 / 60-80
<b>Date Out:</b>	08-Oct-13 @ 06:00	<b>MFG.:</b>	SDI	<b>Rot Strg Wt:</b>	48-65
<b>Hrs In Hole:</b>	88.17	<b>Pad OD:</b>	6.85	<b>WOB:</b>	10 - 20
<b>Start Depth:</b>	1045.00	<b>NB Stab:</b>	0	<b>TORQ:</b>	6 - 12
<b>End Depth:</b>	4855.00	<b>Bit to Bend:</b>	6.8	<b>SPP:</b>	830 - 2050
<b>Total Drilled:</b>	3810.00	<b>Bent Hsg/Sub°:</b>	1.75 /	<b>Motor RPM:</b>	71 - 78
<b>Avg. Total ROP:</b>	109.64	<b>Lobe/Stage:</b>	7:8 / 3.3	<b>Rotary RPM:</b>	40 - 60
<b>Circ Hrs: Tot/Only</b>	41.83 / 7.08	<b>Rev/GAL:</b>	0.14	<b>Flow Rate:</b>	377 - 560
<b>Percent Slide:</b>	10.97	<b>Rotor Jet:</b>	0	<b>Avg Diff:</b>	
<b>Percent Hrs:</b>	15.83	<b>Prop BUR:</b>		<b>Stall Pres.:</b>	
<b>Slide Hours:</b>	5.50	<b>Act BUR:</b>		<b>Off Bot Pres.:</b>	
<b>Total Sliding:</b>	418.00	<b>Mud Data</b>		<b>Bit Record</b>	
<b>Avg. Slide ROP:</b>	76.00	<b>Type</b>	LSND	HALLIBURTON / 7 7/8 - FX55 - PDC-5X15	
<b>Percent Rotary:</b>	89.03	<b>WT:</b>	8.8	<b>GAS:</b>	0
<b>Percent Hrs:</b>	84.17	<b>Vis:</b>	89	<b>PV:</b>	28
<b>Rotary Hours:</b>	29.25	<b>WL:</b>	6.8	<b>PH:</b>	9
<b>Total Rotary:</b>	3392.00	<b>SOL:</b>	3.2	<b>SAND:</b>	0.5
<b>Avg. Rotary ROP:</b>	115.97	<b>Oil %:</b>	0	<b>T °:</b>	120
<b>Reason POOH:</b>		<b>Chlor:</b>	900	<b>YP:</b>	28
<b>MWD Spacing</b>	<b>Gamma:</b> 0	<b>Restiv:</b> 0	<b>Sensor:</b> 57	<b>Last Casing</b> n n .	
	<b>GYRO:</b> 0	<b>DNCS:</b> 1045	<b>Sonic:</b> 0	<b>Shoe @:</b> <b>Hanger @:</b>	

**INC IN:** 32.6 **INC OUT:** 24.9 **AZM IN:** 259.39 **AZM OUT:** 255.34

**BHA Detail**

Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	MFG.
7 7/8 - FX55 - PDC-5X15	11868397		7 7/8	1.00	1.00	4 1/2 REGP	
6.5 MOTOR 1.75 BEND	SDI-6534		6.5	29.25	30.25	4 1/2 XHB	
6.5 PONY	SDI-125-083	3.25	6.25	9.67	39.92	4 1/2 XHB	
6.5 HOS	SDI-8-245	3.25	6 1/8	1.97	41.89	4 1/2 XHB	
6.5 MONEL	SDI-122-354	3 3/8	6	30.40	72.29	4 1/2 XHB	
6.5 GAP	SDI-69-734	2.875	6.5	4.91	77.20	4 1/2 XHB	
6.5 PONY	SDI-125-179	3.25	6.25	10.04	87.24	4 1/2 XHB	
6.5 MONEL	SDI-122-522	3.25	6.25	30.81	118.05	4 1/2 XHB	
4 1/2 Spiral	HWDP - Pin	2.75	4.5	607.20	725.25	4 1/2 XH	





**JOB NO.:** 420913DEF63156  
**COMPANY:** Chevron  
**LOCATION:** Skinner Ridge Field  
**RIG NAME:** Ensign 122  
**STATE:** Colorado  
**COUNTY:** Country  
**WELL NAME:** SKR 598-08-BV-04

**FIELD:** Skinner Ridge  
**Township:** 5S  
**Range** 98W

MOTOR INFORMATION	
Desc:	0.5 in 7.6 lobe 3.5 stg 1.14 tpg 1.75 deg fixed
Bent Hsg/Sub:	1.75 / 0 Bit to Bend: 6.8
Pad OD:	6.85 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	5-Oct	Drilling	01:05	01:40	0.58	1045	1132	87	12	149.1	40	6	505	1330		34.62	260.00	3.87	
2	5-Oct	Sliding	01:50	02:15	0.42	1132	1172	40	10	96.0	40	6	505	1330		36.14	260.00	4.12	
2	5-Oct	Drilling	02:15	02:40	0.42	1172	1223	51	12	122.4	40	6	505	1330		38.01	262.00	4.12	
2	5-Oct	Sliding	02:50	03:05	0.25	1223	1263	40	10	160.0	40	6	505	1330		39.41	258.00	2.80	
2	5-Oct	Drilling	03:05	03:30	0.42	1263	1313	50	12	120.0	40	6	505	1330		40.58	259.00	2.80	
2	5-Oct	Sliding	03:40	03:55	0.25	1313	1343	30	10	120.0	40	6	505	1330		41.29	259.00	2.80	
2	5-Oct	Drilling	03:55	04:30	0.58	1343	1404	61	12	104.6	40	6	505	1330		42.61	255.00	2.15	
2	5-Oct	Sliding	04:40	04:50	0.17	1404	1424	20	15	120.0	40	6	505	1330	30	43.04	255.00	2.15	
2	5-Oct	Drilling	04:50	05:30	0.67	1424	1494	70	12	105.0	40	6	505	1330		42.96	258.00	2.72	
2	5-Oct	Sliding	05:40	05:45	0.08	1494	1509	15	15	180.0	40	6	505	1330	85	42.86	258.00	2.72	
2	5-Oct	Drilling	05:45	06:20	0.58	1509	1585	76	12	130.3	40	6	505	1330		41.92	259.00	1.63	
2	5-Oct	Drilling	06:30	07:10	0.67	1585	1675	90	12	135.0	40	6	505	1330		41.53	259.00	1.81	
2	5-Oct	Sliding	07:20	07:30	0.17	1675	1690	15	15	90.0	40	6	505	1330	85	41.56	260.00	1.81	
2	5-Oct	Drilling	07:30	08:20	0.83	1690	1766	76	12	91.2	40	6	505	1330		41.05	261.00	1.55	
2	5-Oct	Drilling	08:30	08:40	0.17	1766	1784	18	12	108.0	40	6	505	1330		40.88	262.00	1.55	
2	6-Oct	Drilling	01:05	01:40	0.58	1784	1857	73	15	125.1	40	9	560	1800		40.52	260.00	1.60	
2	6-Oct	Sliding	01:50	02:00	0.17	1857	1872	15	15	90.0	40	9	560	1800	70	40.48	260.00	1.60	
2	6-Oct	Drilling	02:00	02:30	0.50	1872	1947	75	15	150.0	40	9	560	1800	70	40.49	261.00	0.34	
2	6-Oct	Sliding	02:40	02:50	0.17	1947	1962	15	15	90.0	40	9	560	1800	70	40.51	261.00	0.34	
2	6-Oct	Drilling	02:50	03:20	0.50	1962	2038	76	15	152.0	40	9	560	1800		40.98	262.00	0.93	
2	6-Oct	Sliding	03:30	03:45	0.25	2038	2060	22	15	88.0	40	9	560	1800	10	41.15	262.00	0.93	
2	6-Oct	Drilling	03:45	04:00	0.25	2060	2083	23	15	92.0	40	9	560	1800		41.30	262.00	0.53	
2	6-Oct	Sliding	04:00	04:10	0.17	2083	2098	15	15	90.0	40	9	560	1800	10	41.37	262.00	0.53	
2	6-Oct	Drilling	04:10	04:20	0.17	2098	2128	30	15	180.0	40	9	560	1800		41.53	262.00	0.53	
2	6-Oct	Drilling	04:30	05:00	0.50	2128	2219	91	15	182.0	40	9	560	1800		42.86	263.00	2.64	

# 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	6-Oct	Sliding	05:10	05:20	0.17	2219	2239	20	15	120.0	40	9	560	1800	10	43.28	264.00	2.64	
2	6-Oct	Drilling	08:00	08:30	0.50	2239	2309	70	15	140.0	40	9	560	1800		43.32	260.00	0.68	
2	6-Oct	Drilling	08:35	09:20	0.75	2309	2400	91	15	121.3	40	9	560	1800		42.59	259.00	1.15	
2	6-Oct	Drilling	09:25	10:00	0.58	2400	2490	90	15	154.3	40	9	560	1800		41.61	259.00	1.32	
2	6-Oct	Drilling	17:30	18:00	0.50	2490	2581	91	15	182.0	40	9	560	1800		40.68	257.00	0.96	
2	6-Oct	Drilling	18:10	18:40	0.50	2581	2671	90	15	180.0	40	9	560	1800		39.34	258.00	1.86	
2	6-Oct	Drilling	18:50	19:20	0.50	2671	2762	91	15	182.0	40	9	560	1800		39.48	258.00	1.76	
2	6-Oct	Sliding	19:30	19:45	0.25	2762	2784	22	15	88.0	40	9	560	1800	10	39.78	258.00	1.76	
2	6-Oct	Drilling	19:45	20:10	0.42	2784	2852	68	15	163.2	40	9	560	1800		40.63	259.00	1.39	
2	6-Oct	Sliding	20:20	20:30	0.17	2852	2883	31	15	186.0	40	9	560	1800	10	41.01	259.00	1.39	
2	6-Oct	Drilling	20:30	21:00	0.50	2883	2943	60	15	120.0	40	9	560	1800		40.09	258.00	1.69	
2	6-Oct	Drilling	21:10	21:50	0.67	2943	3033	90	15	135.0	40	9	560	1800		40.71	259.00	2.46	
2	6-Oct	Sliding	22:00	22:15	0.25	3033	3060	27	15	108.0	40	9	560	1800	10	41.27	259.00	2.46	
2	6-Oct	Drilling	22:15	22:45	0.50	3060	3124	64	15	128.0	40	9	560	1800		42.34	256.00	1.77	
2	6-Oct	Sliding	22:55	23:05	0.17	3124	3144	20	15	120.0	40	9	560	1800	10	42.67	256.00	1.77	
2	6-Oct	Drilling	23:05	23:20	0.25	3144	3169	25	15	100.0	40	9	560	1800		43.01	256.00	1.16	
2	6-Oct	Sliding	23:20	23:40	0.33	3169	3189	20	15	60.0	40	9	560	1800	10	43.20	257.00	1.16	
2	6-Oct	Drilling	23:40	23:50	0.17	3189	3215	26	15	156.0	40	9	560	1800		43.45	257.00	1.16	
2	7-Oct	Drilling	00:00	00:20	0.33	3215	3260	45	20	135.0	60	12	560	2050		43.64	257.00	1.10	
2	7-Oct	Drilling	01:00	01:15	0.25	3260	3305	45	20	180.0	60	12	560	2050		43.14	257.00	1.10	
2	7-Oct	Drilling	01:25	01:55	0.50	3305	3396	91	20	182.0	60	12	560	2050		41.64	258.00	2.04	
2	7-Oct	Drilling	02:05	02:40	0.58	3396	3486	90	20	154.3	60	12	560	2050		40.15	257.00	1.55	
2	7-Oct	Drilling	02:50	03:50	1.00	3486	3577	91	20	91.0	60	12	560	2050		39.75	257.00	0.90	
2	7-Oct	Sliding	04:00	04:20	0.33	3577	3597	20	15	60.0	60	12	560	2050	40	39.79	257.00	0.90	
2	7-Oct	Drilling	04:20	04:45	0.42	3597	3622	25	20	60.0	60	12	560	2050		39.93	257.00	1.99	
2	7-Oct	Sliding	04:45	05:00	0.25	3622	3642	20	15	80.0	60	12	560	2050	40	40.13	258.00	1.99	
2	7-Oct	Drilling	05:00	05:10	0.17	3642	3667	25	20	150.0	60	12	560	2050		40.39	259.00	1.99	
2	7-Oct	Drilling	05:20	05:30	0.17	3667	3687	20	20	120.0	60	12	560	2050		40.59	259.00	1.99	
2	7-Oct	Drilling	06:00	06:35	0.58	3687	3758	71	20	121.7	60	12	560	2050		40.09	260.00	1.17	
2	7-Oct	Drilling	06:40	07:25	0.75	3758	3849	91	20	121.3	60	12	560	2050		39.10	259.00	1.08	
2	7-Oct	Drilling	07:35	08:20	0.75	3849	3939	90	20	120.0	60	12	560	2050		37.94	259.00	1.43	
2	7-Oct	Drilling	08:25	09:15	0.83	3939	4030	91	20	109.2	60	12	560	2050		36.74	259.00	1.27	
2	7-Oct	Drilling	09:20	10:15	0.92	4030	4120	90	20	98.2	60	12	560	2050		35.32	259.00	2.10	

# Slide Report for BHA # 2

Note: Surveys listed are interpolated from the actual surveys

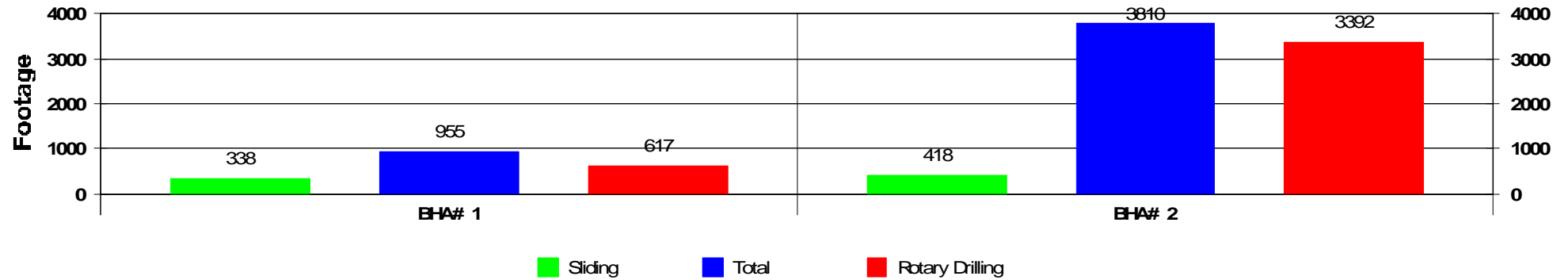
#	Date	Drill Mode	Start Time	End Time	Hours	Start MD	End MD	Depth Drilled	WOB	ROP	RPM	Surf. Torque	Flow Rate	SPP	TFO	INC	AZM	DLS	Note
2	7-Oct	Drilling	10:20	11:20	1.00	4120	4211	91	20	91.0	60	12	560	2050		33.73	257.00	1.76	
2	7-Oct	Drilling	11:25	12:20	0.92	4211	4302	91	20	99.3	60	12	560	2050		32.11	257.00	1.87	
2	7-Oct	Drilling	12:45	13:40	0.92	4302	4392	90	20	98.2	60	12	560	2050		30.69	256.00	1.69	
2	7-Oct	Drilling	13:45	14:40	0.92	4392	4483	91	20	99.3	60	12	560	2050		29.63	255.00	1.60	
2	7-Oct	Drilling	14:45	14:55	0.17	4483	4496	13	20	78.0	60	12	560	2050		29.50	256.00	1.60	
2	7-Oct	Sliding	14:55	16:25	1.50	4496	4507	11	15	7.3	60	12	560	2050	40	29.40	256.00	1.60	
2	7-Oct	Drilling	16:25	17:00	0.58	4507	4573	66	20	113.1	60	12	560	2050		28.58	256.00	1.29	
2	7-Oct	Drilling	17:05	17:55	0.83	4573	4664	91	20	109.2	60	12	560	2050		27.47	256.00	1.20	
2	7-Oct	Drilling	18:00	18:30	0.50	4664	4731	67	20	134.0	60	12	560	2050		26.36	257.00	2.20	
2	7-Oct	Drilling	19:40	19:55	0.25	4731	4754	23	20	92.0	60	12	560	2050		25.87	257.00	2.20	
2	7-Oct	Drilling	20:05	21:15	1.17	4754	4855	101	20	86.6	60	12	560	2050		24.90	255.00	0.00	

<b>Total Drilled:</b>						3810	<b>Avg. Total ROP:</b>				109.64	<b>DEPTH% - TIME %</b>								
<b>Total Rotary Drilled:</b>						3392	<b>Avg. Rotary ROP:</b>				115.97	<b>Percent Rotary:</b>			89.03 - 84.17					
<b>Total Drilled Sliding:</b>						418	<b>Avg. Slide ROP:</b>				76.00	<b>Percent Slide:</b>			10.97 - 15.83					

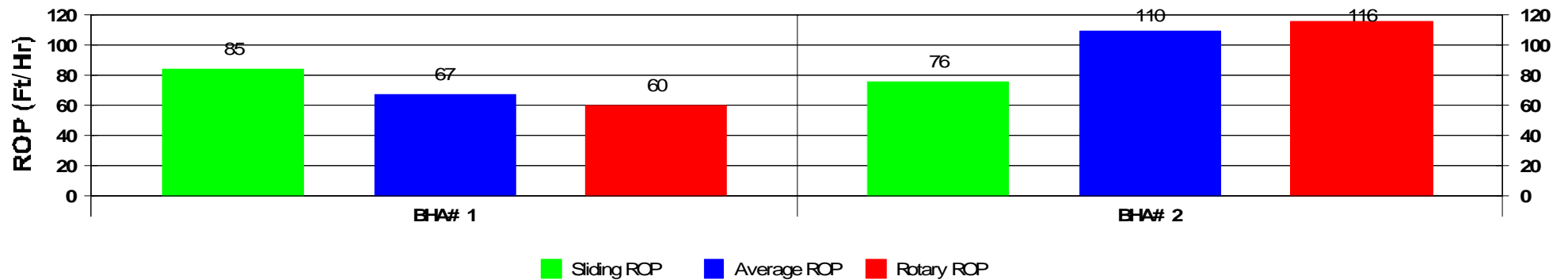


JOB NO.:	420913DEF63156	FIELD:	Skinner Ridge	
COMPANY:	Chevron	Township:	5S	
LOCATION:	Skinner Ridge Field	SECT/RANGE:	8	98W
RIG NAME:	Ensign 122	<b>COMMENT</b>		
STATE:	Colorado			
COUNTY:	Garfield			
WELL NAME:	SKR 598-08-BV-04			

### Footage Drilled with BHA

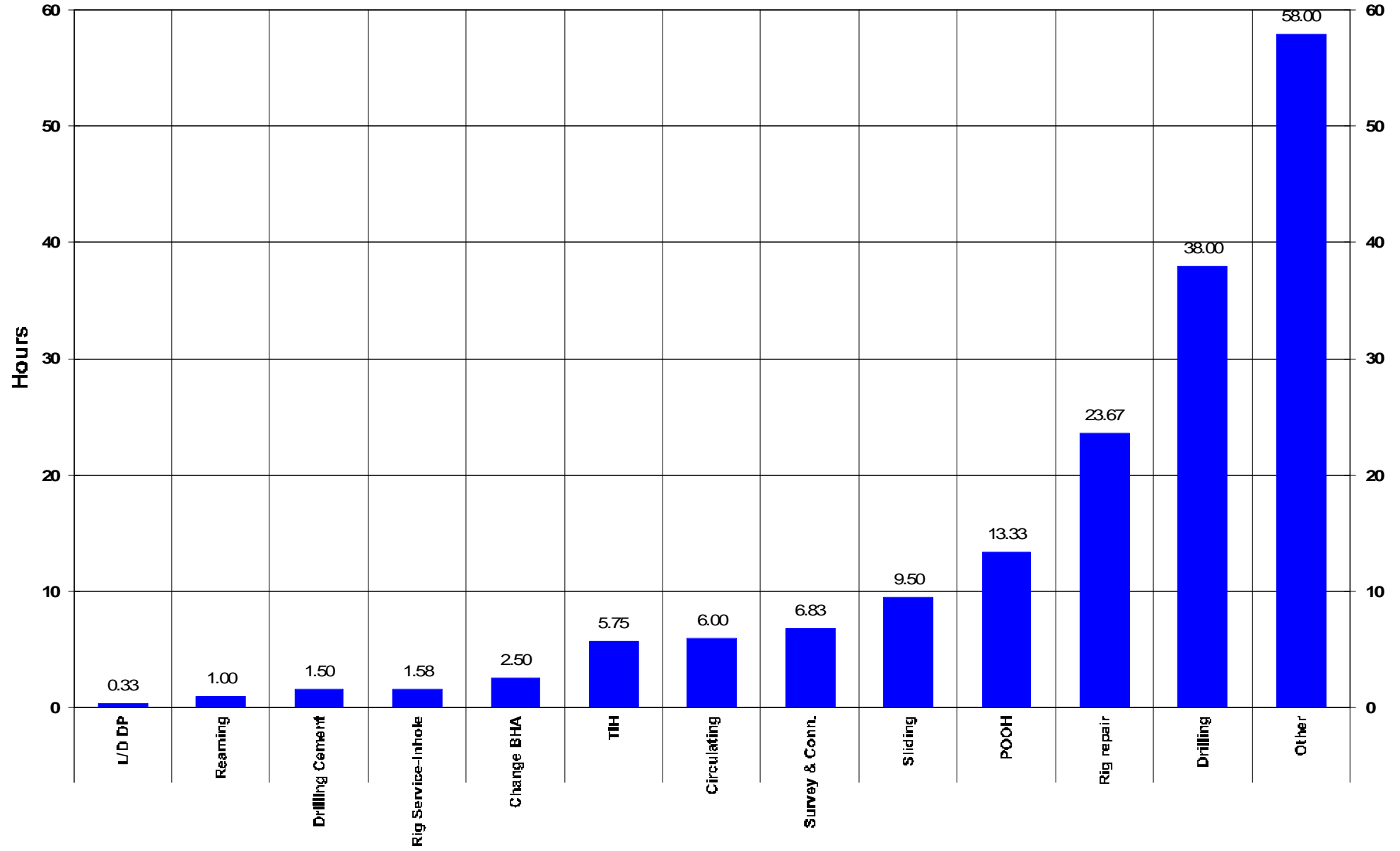


### ROP vs BHA

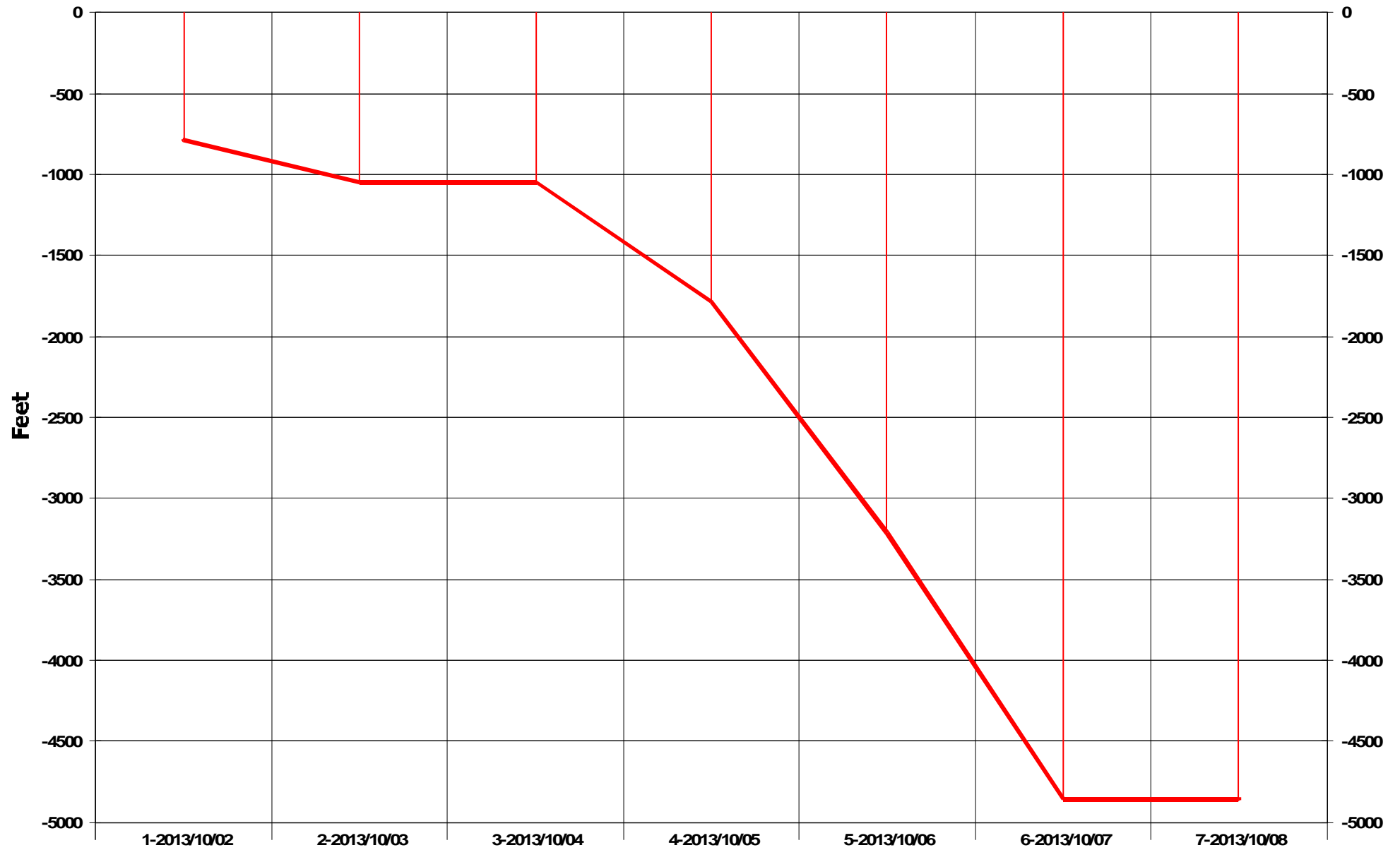




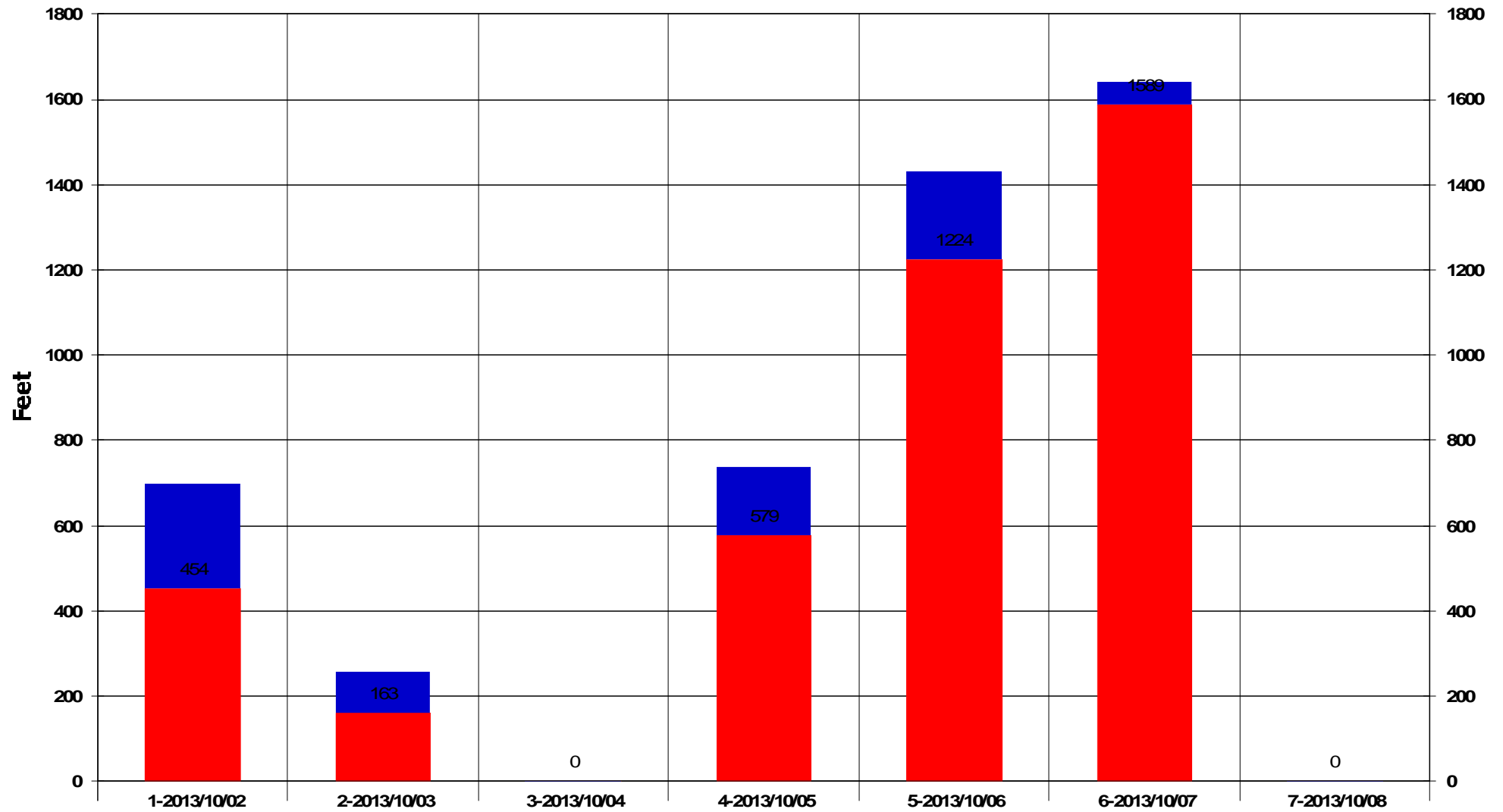
# Activity Histogram



### Measured Depth vs Days



# Daily Footage



Rotary Drilling Sliding

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