

# EOG Resources, Inc.

Weld County, CO  
Sec. 21-T11N-R63W  
Crittter Creek 17-21H

Plan #2 - Sidetrack #1

Plan: Plan #2 - Sidetrack #1 Proposal

## Sperry Drilling Services Proposal Report

11 September, 2010

Well Coordinates: 573,241.63 N, 2,295,878.89 E (40° 54' 07.36" N, 104° 25' 46.97" W)

Ground Level: 5,229.00 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

Centered on Well Crittler Creek 17-21H

RKB 22' @ 5251.00ft (True 35)

N

True

API - US Survey Feet - Custom

**HALLIBURTON**

**Plan Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
6,500.00	0.25	282.99	6,499.74	-2.05	22.98	-17.74	0.00	0.00	0.00	0.00
<b>Kickoff Cement at 6500.00ft</b>										
6,530.00	3.36	182.13	6,529.72	-2.92	22.89	-18.28	11.39	10.37	-336.20	-104.95
<b>Build Rate = 11.39°/100ft</b>										
6,562.00	7.00	180.00	6,561.59	-5.81	22.85	-20.29	11.39	11.37	-6.67	-4.09
<b>End Build at 6562.00ft</b>										
6,600.00	7.00	180.00	6,599.30	-10.44	22.85	-23.56	0.00	0.00	0.00	0.00
6,610.00	7.00	180.00	6,609.23	-11.66	22.85	-24.42	0.00	0.00	0.00	0.00
<b>7.00 Inclination 180 Deg Azi</b>										
6,662.00	7.00	180.00	6,660.84	-17.99	22.85	-28.89	0.00	0.00	0.00	0.00
<b>Begin Drop at 6662.00ft</b>										
6,700.00	5.59	180.00	6,698.61	-22.16	22.85	-31.83	3.70	-3.70	0.00	180.00
6,760.00	3.37	180.00	6,758.42	-26.85	22.85	-35.14	3.70	-3.70	0.00	-180.00
<b>Drop Rate = 3.70°/100ft</b>										
6,800.00	1.89	180.00	6,798.38	-28.69	22.85	-36.44	3.70	-3.70	0.00	-180.00
6,851.16	0.00	180.00	6,849.53	-29.53	22.85	-37.03	3.70	-3.70	0.00	-180.00
<b>End Drop / Kickoff at 6851.16ft</b>										
6,900.00	5.86	300.00	6,898.29	-28.29	20.69	-34.62	12.00	12.00	245.70	120.00
7,000.00	17.86	300.00	6,995.97	-18.03	2.93	-14.79	12.00	12.00	0.00	0.00
7,100.00	29.86	300.00	7,087.26	2.16	-32.04	24.23	12.00	12.00	0.00	0.00
7,152.18	36.12	300.00	7,131.00	16.36	-56.63	51.68	12.00	12.00	0.00	0.00
<b>MKR9</b>										
7,200.00	41.86	300.00	7,168.15	31.40	-82.68	80.75	12.00	12.00	0.00	0.00
7,218.93	44.13	300.00	7,182.00	37.85	-93.86	93.22	12.00	12.00	0.00	0.00
<b>Sharon Springs</b>										
7,225.00	44.86	300.00	7,186.33	39.98	-97.55	97.34	12.00	12.00	0.00	0.00
<b>Build Rate = 12.00°/100ft</b>										
7,300.00	53.86	300.00	7,235.13	68.41	-146.78	152.28	12.00	12.00	0.00	0.00
7,315.39	55.71	300.00	7,244.00	74.69	-157.67	164.43	12.00	12.00	0.00	0.00
<b>Niobrara</b>										
7,400.00	65.86	300.00	7,285.25	111.57	-221.54	235.71	12.00	12.00	0.00	0.00
7,442.87	71.01	300.00	7,301.00	131.50	-256.06	274.24	12.00	12.00	0.00	0.00
<b>Niobrara 'B' Chalk</b>										
7,500.00	77.86	300.00	7,316.32	158.99	-303.69	327.39	12.00	12.00	0.00	0.00
7,600.00	89.86	300.00	7,327.00	208.62	-389.64	423.31	12.00	12.00	0.00	0.00
7,601.16	90.00	300.00	7,327.00	209.20	-390.64	424.43	12.00	12.00	0.00	0.00
<b>End Build at 7601.16ft - Niobrara "B" Chalk Target - 7" Casing Pt.</b>										
7,700.00	90.00	300.00	7,327.00	258.62	-476.24	519.96	0.00	0.00	0.00	0.00
7,701.16	90.00	300.00	7,327.00	259.20	-477.24	521.09	0.00	0.00	0.00	0.00
<b>Begin Turn at 7701.16ft</b>										
7,800.00	90.00	301.98	7,327.00	310.08	-561.97	617.03	2.00	0.00	2.00	90.00
7,900.00	90.00	303.98	7,327.00	364.51	-645.86	714.88	2.00	0.00	2.00	90.00
<b>Turn Rate = 2.00°/100ft</b>										
8,000.00	90.00	305.98	7,327.00	421.83	-727.79	813.39	2.00	0.00	2.00	90.00
8,091.29	90.00	307.80	7,327.00	476.63	-800.80	903.79	2.00	0.00	2.00	90.00
<b>End Turn at 8091.29ft</b>										
8,100.00	90.00	307.80	7,327.00	481.97	-807.68	912.43	0.00	0.00	0.00	90.00
8,200.00	90.00	307.80	7,327.00	543.26	-886.70	1,011.67	0.00	0.00	0.00	0.00
8,300.00	90.00	307.80	7,327.00	604.56	-965.71	1,110.91	0.00	0.00	0.00	0.00
8,400.00	90.00	307.80	7,327.00	665.85	-1,044.72	1,210.15	0.00	0.00	0.00	0.00
8,500.00	90.00	307.80	7,327.00	727.14	-1,123.73	1,309.39	0.00	0.00	0.00	0.00
8,600.00	90.00	307.80	7,327.00	788.44	-1,202.75	1,408.63	0.00	0.00	0.00	0.00
8,700.00	90.00	307.80	7,327.00	849.73	-1,281.76	1,507.87	0.00	0.00	0.00	0.00
8,800.00	90.00	307.80	7,327.00	911.03	-1,360.77	1,607.11	0.00	0.00	0.00	0.00
8,900.00	90.00	307.80	7,327.00	972.32	-1,439.78	1,706.35	0.00	0.00	0.00	0.00
9,000.00	90.00	307.80	7,327.00	1,033.62	-1,518.80	1,805.59	0.00	0.00	0.00	0.00

**Plan Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
9,100.00	90.00	307.80	7,327.00	1,094.91	-1,597.81	1,904.83	0.00	0.00	0.00	0.00
9,200.00	90.00	307.80	7,327.00	1,156.20	-1,676.82	2,004.07	0.00	0.00	0.00	0.00
9,300.00	90.00	307.80	7,327.00	1,217.50	-1,755.84	2,103.31	0.00	0.00	0.00	0.00
9,400.00	90.00	307.80	7,327.00	1,278.79	-1,834.85	2,202.55	0.00	0.00	0.00	0.00
9,500.00	90.00	307.80	7,327.00	1,340.09	-1,913.86	2,301.79	0.00	0.00	0.00	0.00
9,600.00	90.00	307.80	7,327.00	1,401.38	-1,992.87	2,401.03	0.00	0.00	0.00	0.00
9,700.00	90.00	307.80	7,327.00	1,462.68	-2,071.89	2,500.27	0.00	0.00	0.00	0.00
9,760.89	90.00	307.80	7,327.00	1,500.00	-2,120.00	2,560.70	0.00	0.00	0.00	0.00
<b>Begin Turn at 9760.89ft - Critter Creek 17-21H Plan #2 Waypoint #1 Tgt</b>										
9,800.00	90.00	308.58	7,327.00	1,524.18	-2,150.73	2,599.54	2.00	0.00	2.00	90.00
9,900.00	90.00	310.58	7,327.00	1,587.90	-2,227.80	2,699.11	2.00	0.00	2.00	90.00
10,000.00	90.00	312.58	7,327.00	1,654.27	-2,302.59	2,798.94	2.00	0.00	2.00	90.00
10,100.00	90.00	314.58	7,327.00	1,723.21	-2,375.02	2,898.91	2.00	0.00	2.00	90.00
10,200.00	90.00	316.58	7,327.00	1,794.63	-2,445.01	2,998.90	2.00	0.00	2.00	90.00
<b>Turn Rate = 2.00°/100ft</b>										
10,300.00	90.00	318.58	7,327.00	1,868.46	-2,512.45	3,098.78	2.00	0.00	2.00	90.00
10,400.00	90.00	320.58	7,327.00	1,944.59	-2,577.28	3,198.44	2.00	0.00	2.00	90.00
10,500.00	90.00	322.58	7,327.00	2,022.94	-2,639.41	3,297.75	2.00	0.00	2.00	90.00
10,585.03	90.00	324.29	7,327.00	2,091.23	-2,690.07	3,381.83	2.00	0.00	2.00	90.00
<b>End Turn at 10585.03ft</b>										
10,600.00	90.00	324.29	7,327.00	2,103.38	-2,698.81	3,396.59	0.00	0.00	0.00	0.00
10,700.00	90.00	324.29	7,327.00	2,184.58	-2,757.18	3,495.25	0.00	0.00	0.00	0.00
10,800.00	90.00	324.29	7,327.00	2,265.77	-2,815.56	3,593.90	0.00	0.00	0.00	0.00
10,900.00	90.00	324.29	7,327.00	2,346.96	-2,873.93	3,692.55	0.00	0.00	0.00	0.00
11,000.00	90.00	324.29	7,327.00	2,428.16	-2,932.31	3,791.21	0.00	0.00	0.00	0.00
11,100.00	90.00	324.29	7,327.00	2,509.35	-2,990.68	3,889.86	0.00	0.00	0.00	0.00
11,200.00	90.00	324.29	7,327.00	2,590.54	-3,049.06	3,988.51	0.00	0.00	0.00	0.00
11,300.00	90.00	324.29	7,327.00	2,671.74	-3,107.43	4,087.17	0.00	0.00	0.00	0.00
11,400.00	90.00	324.29	7,327.00	2,752.93	-3,165.81	4,185.82	0.00	0.00	0.00	0.00
11,500.00	90.00	324.29	7,327.00	2,834.12	-3,224.18	4,284.48	0.00	0.00	0.00	0.00
11,600.00	90.00	324.29	7,327.00	2,915.32	-3,282.56	4,383.13	0.00	0.00	0.00	0.00
11,700.00	90.00	324.29	7,327.00	2,996.51	-3,340.93	4,481.78	0.00	0.00	0.00	0.00
11,800.00	90.00	324.29	7,327.00	3,077.70	-3,399.31	4,580.44	0.00	0.00	0.00	0.00
11,900.00	90.00	324.29	7,327.00	3,158.90	-3,457.68	4,679.09	0.00	0.00	0.00	0.00
12,000.00	90.00	324.29	7,327.00	3,240.09	-3,516.06	4,777.74	0.00	0.00	0.00	0.00
<b>Hold Angle at 90.00</b>										
12,100.00	90.00	324.29	7,327.00	3,321.28	-3,574.43	4,876.40	0.00	0.00	0.00	0.00
12,200.00	90.00	324.29	7,327.00	3,402.48	-3,632.81	4,975.05	0.00	0.00	0.00	0.00
12,300.00	90.00	324.29	7,327.00	3,483.67	-3,691.18	5,073.70	0.00	0.00	0.00	0.00
12,400.00	90.00	324.29	7,327.00	3,564.86	-3,749.56	5,172.36	0.00	0.00	0.00	0.00
12,500.00	90.00	324.29	7,327.00	3,646.06	-3,807.93	5,271.01	0.00	0.00	0.00	0.00
12,600.00	90.00	324.29	7,327.00	3,727.25	-3,866.31	5,369.66	0.00	0.00	0.00	0.00
12,700.00	90.00	324.29	7,327.00	3,808.44	-3,924.68	5,468.32	0.00	0.00	0.00	0.00
12,800.00	90.00	324.29	7,327.00	3,889.64	-3,983.06	5,566.97	0.00	0.00	0.00	0.00
12,900.00	90.00	324.29	7,327.00	3,970.83	-4,041.43	5,665.62	0.00	0.00	0.00	0.00
13,000.00	90.00	324.29	7,327.00	4,052.02	-4,099.81	5,764.28	0.00	0.00	0.00	0.00
13,100.00	90.00	324.29	7,327.00	4,133.22	-4,158.18	5,862.93	0.00	0.00	0.00	0.00
13,127.85	90.00	324.29	7,327.00	4,155.83	-4,174.44	5,890.41	0.00	0.00	0.00	0.00
<b>Critter Creek 17-21H Plan #2 BH Tgt</b>										

**Plan Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal****Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,500.00	6,499.74	-2.05	22.98	Kickoff Cement at 6500.00ft
6,530.00	6,529.72	-2.92	22.89	Build Rate = 11.39°/100ft
6,562.00	6,561.59	-5.81	22.85	End Build at 6562.00ft
6,610.00	6,609.23	-11.66	22.85	7.00 Inclination 180 Deg Azi
6,662.00	6,660.84	-17.99	22.85	Begin Drop at 6662.00ft
6,760.00	6,758.42	-26.85	22.85	Drop Rate = 3.70°/100ft
6,851.16	6,849.53	-29.53	22.85	End Drop / Kickoff at 6851.16ft
7,225.00	7,186.33	39.98	-97.55	Build Rate = 12.00°/100ft
7,601.16	7,327.00	209.20	-390.64	End Build at 7601.16ft
7,701.16	7,327.00	259.20	-477.24	Begin Turn at 7701.16ft
7,900.00	7,327.00	364.51	-645.86	Turn Rate = 2.00°/100ft
8,091.29	7,327.00	476.63	-800.80	End Turn at 8091.29ft
9,760.89	7,327.00	1,500.00	-2,120.00	Begin Turn at 9760.89ft
10,200.00	7,327.00	1,794.63	-2,445.01	Turn Rate = 2.00°/100ft
10,585.03	7,327.00	2,091.23	-2,690.07	End Turn at 10585.03ft
12,000.00	7,327.00	3,240.09	-3,516.06	Hold Angle at 90.00
13,127.85	7,327.00	4,155.83	-4,174.44	Total Depth = 13127.85ft

**Vertical Section Information**

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/_S (ft)	+E/-W (ft)	
Target	Critter Creek 17-21H Plan #2 BH Tgt	314.87	Slot	0.00	0.00	0.00

**Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
1,370.00	6,500.00	Sperry MWD Survey (Vertical Wellbore and Build)	MWD
6,500.00	13,127.35	Plan #2 - Sidetrack #1 Proposal	MWD

**Casing Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,601.16	7,327.00	7" Casing Pt.	7	8-3/4

**Plan Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal****Formation Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	7,349.00	Niobrara "B" Marl		0.00	
0.00	0.00	White River		0.00	
764.00	764.00	Fox Hills		0.00	
1,049.00	1,049.00	Pierre Shale		0.00	
3,509.19	3,509.00	Terry Sandstone		0.00	
4,144.21	4,144.00	Hygiene		0.00	
4,814.24	4,814.00	MKR4		0.00	
6,035.26	6,035.00	MKR5		0.00	
6,311.26	6,311.00	MKR6		0.00	
7,152.18	7,131.00	MKR9		0.00	
7,218.93	7,182.00	Sharon Springs		0.00	
7,315.39	7,244.00	Niobrara		0.00	
7,442.87	7,301.00	Niobrara 'B' Chalk		0.00	
7,601.16	7,327.00	Niobrara "B" Chalk Target		0.00	

***Targets associated with this wellbore***

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
Critter Creek 17-21H S. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H S. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H E. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H E. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H Plan #1 BH Tgt	7,327.00	4,155.83	-4,174.44	Point
Critter Creek 17-21H N. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H W. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H N. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H W. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H Plan #1 Waypoint #1 Tgt	7,327.00	1,500.00	-2,120.00	Point
Critter Creek 17-21H S. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H S. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H E. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H Plan #2 BH Tgt	7,327.00	4,155.83	-4,174.44	Point
Critter Creek 17-21H E. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H N. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H W. Section Line	0.00	0.00	0.00	Polygon
Critter Creek 17-21H N. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H W. 600' Setback	0.00	0.00	0.00	Polygon
Critter Creek 17-21H Plan #2 Waypoint #1 Tgt	7,327.00	1,500.00	-2,120.00	Point

## North Reference Sheet for Sec. 21-T11N-R63W - Critter Creek 17-21H - Plan #2 - Sidetrack #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 22' @ 5251.00ft (True 35). Northing and Easting are relative to Critter Creek 17-21H

Coordinate System is US State Plane 1927 (Exact solution), Colorado North 501 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.50°, Longitude Origin: 0° 0' 0.000 E°, Latitude Origin: 40° 47' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 1.00002142

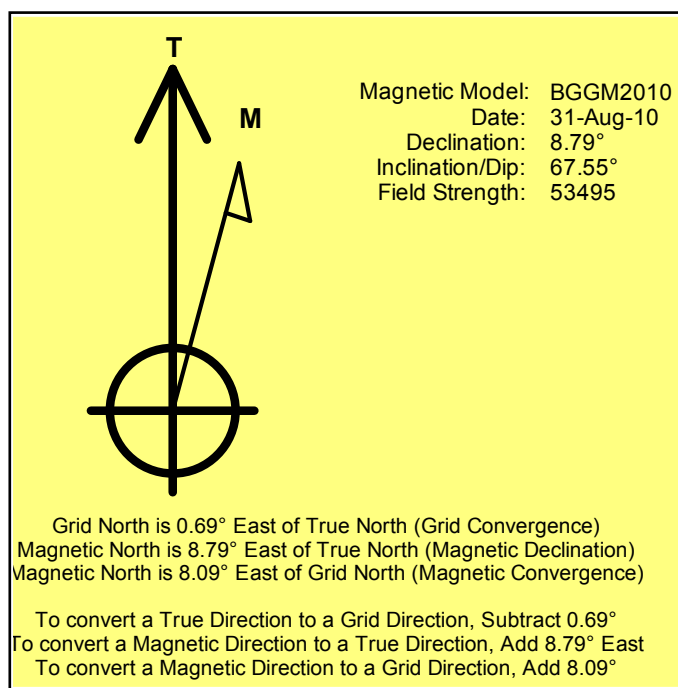
Grid Coordinates of Well: 573,241.63 ft N, 2,295,878.89 ft E

Geographical Coordinates of Well: 40° 54' 07.36" N, 104° 25' 46.97" W

Grid Convergence at Surface is: 0.69°

Based upon Minimum Curvature type calculations, at a Measured Depth of 13,127.85ft the Bottom Hole Displacement is 5,890.41ft in the Direction of 314.87° (True).

Magnetic Convergence at surface is: -8.09° (31 August 2010, , BGGM2010)



Project: Weld County, CO  
Site: Sec. 21-T11N-R63W  
Well: Critter Creek 17-21H  
Wellbore: Plan #2 - Sidetrack #1  
Design: Plan #2 - Sidetrack #1 Proposal

# EOG Resources, Inc.

**HALLIBURTON**  
Sperry Drilling

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	6500.00	0.25	282.99	6499.74	-2.05	22.98	0.00	0.00	-17.74	
2	6562.00	7.00	180.00	6561.59	-5.81	22.85	11.39	-104.95	-20.29	
3	6662.00	7.00	180.00	6660.84	-17.99	22.85	0.00	0.00	-28.89	
4	6851.16	0.00	0.00	6849.53	-29.53	22.85	3.70	180.00	-37.03	
5	7601.16	90.00	300.00	7327.00	209.20	-390.64	12.00	300.00	424.44	
6	7701.16	90.00	300.00	7327.00	259.20	-477.25	0.00	0.00	521.09	
7	8091.29	90.00	307.80	7327.00	476.63	-800.80	2.00	90.00	903.79	
8	9760.89	90.00	307.80	7327.00	1500.00	-2120.00	0.00	0.00	2560.70	Critter Creek 17-21H Plan #2 Waypoint #1 Tgt
9	10585.03	90.00	324.29	7327.00	2091.23	-2690.07	2.00	90.00	3381.82	
10	13127.85	90.00	324.29	7327.00	4155.83	-4174.44	0.00	0.00	5890.41	Critter Creek 17-21H Plan #2 BH Tgt

West(-)/East(+) (1500 ft/in)

-5250 -4500 -3750 -3000 -2250 -1500 -750 0 750

Section Line

600' Setback

Sec. 21

Critter Creek 17-21H Plan #2 Waypoint #1 Tgt

Critter Creek 17-21H/Sperry MWD Survey

710' FSL,  
892' FEL  
7" Casing Pt.

600' Setback

Section Line

600' Setback

Critter Creek 17-21H  
501 FSL, 501' FEL

South(-)/North(+) (1500 ft/in)

4500

3750

3000

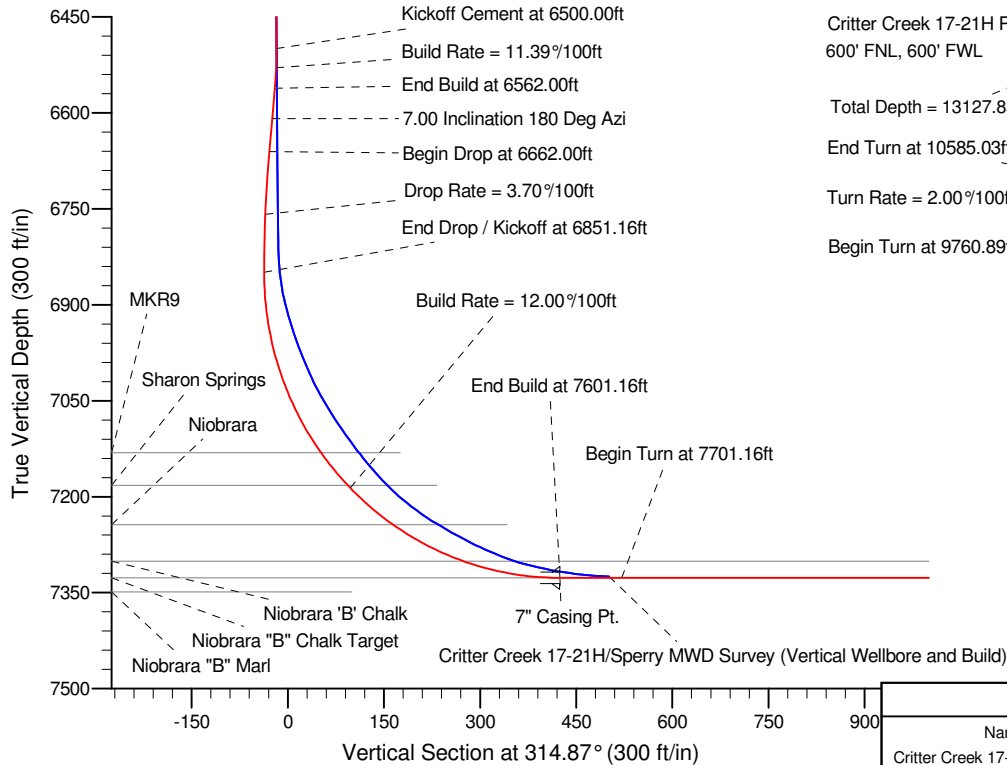
2250

1500

750

0

-750



Critter Creek 17-21H Plan #2 BH Tgt  
600' FNL, 600' FWL

Total Depth = 13127.85ft

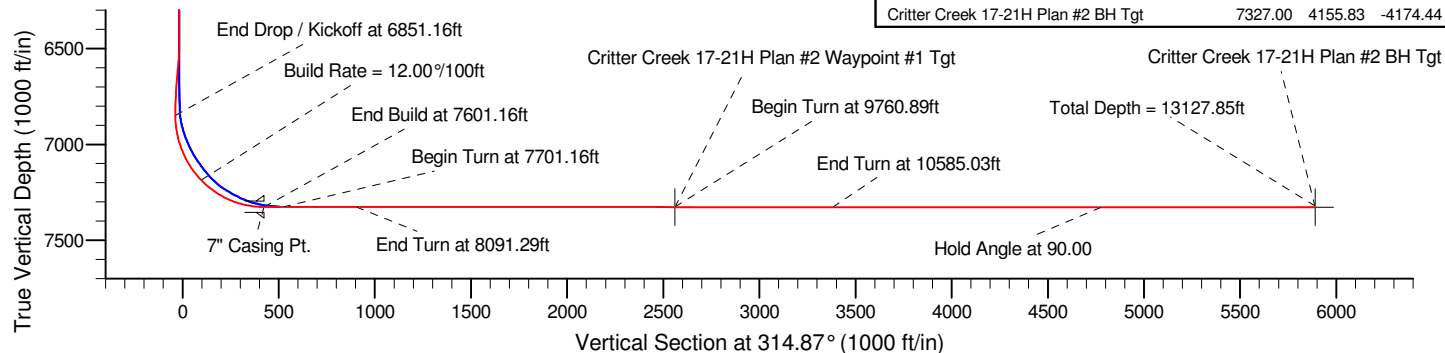
End Turn at 10585.03ft

Turn Rate = 2.00%/100ft

Begin Turn at 9760.89ft

## WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Critter Creek 17-21H Plan #2 Waypoint #1 Tgt	7327.00	1500.00	-2120.00	574715.96	2293740.90	40° 54' 22.180 N	104° 26' 14.579 W	Point
Critter Creek 17-21H Plan #2 BH Tgt	7327.00	4155.83	-4174.44	577346.86	2291654.51	40° 54' 48.420 N	104° 26' 41.340 W	Point



## WELL DETAILS: Critter Creek 17-21H

Ground Level:	5229.00
Northing	573241.63
Easting	2295878.89
Latitude	40° 54' 7.360 N
Longitude	104° 25' 46.970 W

(Critter Creek 17-21H/Plan #2 - Sidetrack #1)

Created By: Paul A. Bitzan Date: 09/11/2010

Checked: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_

Approved: \_\_\_\_\_ Date: \_\_\_\_\_

# **EOG Resources, Inc.**

Weld County, CO

Sec. 21-T11N-R63W

Critter Creek 17-21H

Plan #2 - Sidetrack #1

Plan #2 - Sidetrack #1 Proposal

## **Sperry Drilling Services**

### **Ellipse Separation Anticollision Report**

11 September, 2010

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Reference Design: Sec. 21-T11N-R63W - Critter Creek 17-21H - Plan #2 - Sidetrack #1 - Plan #2 - Sidetrack #1 Proposal

Well Coordinates: 573,241.63 N, 2,295,878.89 E (40° 54' 07.36" N, 104° 25' 46.97" W)

Datum Height: RKB 22' @ 5251.00ft (True 35)

Scan Range: 0.00 to 13,127.85 ft. Measured Depth.

Scan Radius is 9,999.98 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Geodetic Scale Factor Applied

Version: 2003.16 Build: 43I

**HALLIBURTON**



**Anticollision Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal**

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Sec. 21-T11N-R63W - Critter Creek 17-21H - Plan #2 - Sidetrack #1 - Sperry MWD Survey (Vertical Wellbore and Build)

Scan Range: 0.00 to 13,127.85 ft. Measured Depth.

Scan Radius is 9,999.98 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	+E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	+E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids ft	Relative Highside Bearing	Clearance Factor
1,370.00	1,370.00	0.00	0.00	1.51	1,370.00	1,370.00	0.00	0.00	1.51	0.00	< 0	0.00	N/A
1,380.00	1,380.00	0.00	0.07	1.54	1,380.00	1,380.00	0.00	0.07	1.54	0.00	< 0	0.00	N/A
1,661.00	1,660.97	-0.99	3.86	2.07	1,661.00	1,660.97	-0.99	3.86	2.07	0.00	< 0	0.00	N/A
1,946.00	1,945.94	-2.15	8.10	2.66	1,946.00	1,945.94	-2.15	8.10	2.66	0.00	< 0	0.00	N/A
2,229.00	2,228.90	-2.43	12.48	3.27	2,229.00	2,228.90	-2.43	12.48	3.27	0.00	< 0	0.00	N/A
2,515.00	2,514.88	-2.34	16.39	3.89	2,515.00	2,514.88	-2.34	16.39	3.89	0.00	< 0	0.00	N/A
2,797.00	2,796.85	-2.88	19.99	4.47	2,797.00	2,796.85	-2.88	19.99	4.47	0.00	< 0	0.00	N/A
3,081.00	3,080.83	-3.99	23.68	5.06	3,081.00	3,080.83	-3.99	23.68	5.06	0.00	< 0	0.00	N/A
3,365.00	3,364.82	-3.18	24.97	5.67	3,365.00	3,364.82	-3.18	24.97	5.67	0.00	< 0	0.00	N/A
3,646.00	3,645.80	-1.12	23.25	6.25	3,646.00	3,645.80	-1.12	23.25	6.25	0.00	< 0	0.00	N/A
3,931.00	3,930.79	0.28	20.80	6.83	3,931.00	3,930.79	0.28	20.80	6.83	0.00	< 0	0.00	N/A
4,216.00	4,215.78	-0.40	20.75	7.41	4,216.00	4,215.78	-0.40	20.75	7.41	0.00	< 0	0.00	N/A
4,501.00	4,500.77	-1.73	23.06	8.01	4,501.00	4,500.77	-1.73	23.06	8.01	0.00	< 0	0.00	N/A
4,784.00	4,783.76	-2.06	25.38	8.60	4,784.00	4,783.76	-2.06	25.38	8.60	0.00	< 0	0.00	N/A
5,069.00	5,068.75	-3.07	26.86	9.19	5,069.00	5,068.75	-3.07	26.86	9.19	0.00	< 0	0.00	N/A
5,350.00	5,349.75	-2.55	26.34	9.78	5,350.00	5,349.75	-2.55	26.34	9.78	0.00	< 0	0.00	N/A
5,635.00	5,634.74	-1.17	25.25	10.38	5,635.00	5,634.74	-1.17	25.25	10.38	0.00	< 0	0.00	N/A
5,920.00	5,919.74	-1.08	24.50	10.96	5,920.00	5,919.74	-1.08	24.50	10.96	0.00	< 0	0.00	N/A
6,204.00	6,203.74	-1.38	23.83	11.55	6,204.00	6,203.74	-1.38	23.83	11.55	0.00	< 0	0.00	N/A
6,298.00	6,297.74	-1.61	23.62	11.75	6,298.00	6,297.74	-1.61	23.62	11.75	0.00	< 0	0.00	N/A
6,393.00	6,392.74	-1.92	23.36	11.95	6,393.00	6,392.74	-1.92	23.36	11.95	0.00	< 0	0.00	N/A
6,500.00	6,499.74	-2.05	22.98	12.18	6,500.00	6,499.74	-2.05	22.98	12.18	0.00	< 0	0.00	N/A
6,527.66	6,527.38	-2.79	22.89	12.21	6,527.64	6,527.38	-2.01	22.86	12.23	0.78	< 0	175.24	0.032
6,550.00	6,549.66	-4.49	22.86	12.24	6,549.91	6,549.65	-1.95	22.76	12.28	2.54	< 0	177.24	0.104
6,562.00	6,561.59	-5.81	22.85	12.24	6,561.83	6,561.57	-1.91	22.70	12.31	3.90	< 0	177.71	0.160
6,600.00	6,599.30	-10.44	22.85	12.24	6,599.52	6,599.26	-1.75	22.50	12.39	8.70	< 0	177.66	0.355
6,662.00	6,660.84	-17.99	22.85	12.25	6,660.97	6,660.71	-1.35	22.14	12.51	16.66	< 0	177.53	0.677
6,700.00	6,698.61	-22.16	22.85	12.25	6,698.68	6,698.41	-1.03	21.89	12.59	21.15	< 0	177.38	0.855
6,800.00	6,798.38	-28.69	22.85	12.26	6,798.20	6,797.92	0.12	21.15	12.80	28.86	3.82	176.61	1.152
6,851.16	6,849.53	-29.53	22.85	12.26	6,847.98	6,847.64	1.52	19.40	12.91	31.30	6.14	-6.35	1.244
6,875.00	6,873.36	-29.24	22.34	12.27	6,870.35	6,869.82	3.04	16.96	12.95	32.91	7.70	50.34	1.305
6,900.00	6,898.29	-28.29	20.69	12.27	6,893.45	6,892.47	5.47	13.20	13.01	35.07	9.83	46.91	1.390
6,925.00	6,923.08	-26.68	17.92	12.27	6,916.69	6,914.96	8.79	8.34	13.06	37.63	12.40	43.87	1.492
6,950.00	6,947.67	-24.44	14.03	12.27	6,940.16	6,937.37	12.86	2.68	13.11	40.32	15.13	41.61	1.601
6,975.00	6,971.99	-21.55	9.02	12.28	6,963.92	6,959.80	17.49	-3.63	13.16	42.81	17.69	40.15	1.704
7,000.00	6,995.97	-18.03	2.93	12.29	6,987.87	6,982.16	22.51	-10.57	13.21	44.90	19.87	39.29	1.794
7,025.00	7,019.56	-13.88	-4.25	12.30	7,011.32	7,003.74	27.75	-18.10	13.26	46.64	21.73	38.75	1.873
7,050.00	7,042.67	-9.13	-12.49	12.31	7,034.54	7,024.65	33.36	-26.49	13.31	48.23	23.46	38.24	1.948
7,075.00	7,065.26	-3.78	-21.76	12.33	7,057.64	7,044.94	39.43	-35.71	13.37	49.74	25.14	37.81	2.022
7,100.00	7,087.26	2.16	-32.04	12.35	7,080.87	7,064.87	46.05	-45.65	13.43	51.11	26.69	37.68	2.093
7,125.00	7,108.60	8.66	-43.31	12.37	7,104.11	7,084.36	53.21	-56.07	13.51	52.30	28.04	38.04	2.156
7,150.00	7,129.24	15.72	-55.53	12.40	7,127.65	7,103.70	61.03	-67.00	13.59	53.26	29.13	39.00	2.208
7,175.00	7,149.11	23.30	-68.66	12.44	7,151.61	7,122.97	69.21	-78.64	13.68	53.76	29.73	40.29	2.237
7,200.00	7,168.15	31.40	-82.68	12.51	7,175.55	7,141.72	77.48	-91.00	13.78	53.77	29.79	41.67	2.242
7,225.00	7,186.33	39.98	-97.55	12.59	7,199.02	7,159.54	85.73	-103.85	13.89	53.39	29.42	43.10	2.227
7,250.00	7,203.58	49.02	-113.21	12.69	7,222.12	7,176.43	94.23	-117.11	14.01	52.88	28.84	44.72	2.200
7,275.00	7,219.86	58.51	-129.64	12.81	7,244.97	7,192.29	103.10	-130.97	14.14	52.44	28.29	46.36	2.171
7,300.00	7,235.13	68.41	-146.78	12.96	7,267.97	7,207.26	112.43	-145.72	14.29	52.11	27.78	47.89	2.142
7,325.00	7,249.34	78.69	-164.59	13.13	7,290.83	7,221.10	122.10	-161.13	14.45	51.90	27.34	49.26	2.113
7,337.72	7,256.15	84.06	-173.90	13.23	7,302.44	7,227.72	127.19	-169.19	14.54	51.87	27.17	49.95	2.100

**Anticollision Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal**

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Sec. 21-T11N-R63W - Critter Creek 17-21H - Plan #2 - Sidetrack #1 - Sperry MWD Survey (Vertical Wellbore and Build)

Scan Range: 0.00 to 13,127.85 ft. Measured Depth.

Scan Radius is 9,999.98 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids ft	Relative Highside Bearing	Clearance Factor
7,350.00	7,262.45	89.33	-183.02	13.33	7,313.85	7,233.98	132.31	-177.24	14.63	51.88	27.02	50.65	2.087
7,375.00	7,274.43	100.30	-202.02	13.56	7,337.19	7,246.16	143.08	-193.99	14.84	51.90	26.63	52.30	2.053
7,400.00	7,285.25	111.57	-221.54	13.82	7,360.57	7,257.66	154.29	-210.98	15.06	51.94	26.08	54.49	2.008
7,425.00	7,294.87	123.10	-241.52	14.10	7,384.33	7,268.72	166.08	-228.39	15.31	51.99	25.34	57.37	1.951
7,450.00	7,303.27	134.87	-261.91	14.41	7,408.38	7,279.27	178.20	-246.29	15.57	51.93	24.33	60.79	1.881
7,475.00	7,310.43	146.85	-282.65	14.75	7,432.69	7,288.95	190.44	-264.93	15.86	51.72	23.07	64.31	1.805
7,500.00	7,316.32	158.99	-303.69	15.12	7,456.74	7,297.39	202.54	-283.91	16.18	51.44	21.71	67.75	1.730
7,523.97	7,320.77	170.77	-324.08	15.49	7,479.41	7,304.21	214.08	-302.19	16.49	51.28	20.51	70.89	1.666
7,525.00	7,320.94	171.28	-324.96	15.51	7,480.39	7,304.47	214.58	-302.98	16.51	51.28	20.46	71.02	1.664
7,550.00	7,324.26	183.67	-346.42	15.92	7,504.00	7,310.16	226.90	-322.30	16.85	51.47	19.59	74.11	1.614
7,575.00	7,326.28	196.12	-368.00	16.35	7,527.00	7,314.80	239.23	-341.16	17.20	52.06	19.10	77.37	1.579
7,601.16	7,327.00	209.20	-390.64	16.81	7,552.37	7,318.90	253.22	-361.92	17.60	53.18	19.06	81.23	1.559
7,701.16	7,327.00	259.20	-477.25	18.73	7,620.00	7,325.05	291.43	-417.35	18.74	68.05	30.60	88.07	1.817
7,800.00	7,327.00	310.08	-561.97	20.78	7,620.00	7,325.05	291.43	-417.35	18.74	145.83	106.33	88.16	3.692
7,900.00	7,327.00	364.51	-645.86	22.96	7,620.00	7,325.05	291.43	-417.35	18.74	239.92	198.27	88.34	5.760
8,000.00	7,327.00	421.83	-727.79	25.20	7,620.00	7,325.05	291.43	-417.35	18.74	336.72	292.87	88.55	7.679
8,091.29	7,327.00	476.63	-800.80	27.30	7,620.00	7,325.05	291.43	-417.35	18.74	425.84	379.96	88.74	9.283
8,100.00	7,327.00	481.97	-807.68	27.50	7,620.00	7,325.05	291.43	-417.35	18.74	434.36	388.28	88.74	9.427
8,200.00	7,327.00	543.26	-886.70	29.87	7,620.00	7,325.05	291.43	-417.35	18.74	532.64	484.19	88.74	10.993
8,300.00	7,327.00	604.56	-965.71	32.27	7,620.00	7,325.05	291.43	-417.35	18.74	631.47	580.60	88.74	12.413
8,400.00	7,327.00	665.85	-1,044.72	34.72	7,620.00	7,325.05	291.43	-417.35	18.74	730.61	677.29	88.74	13.702
8,500.00	7,327.00	727.14	-1,123.73	37.19	7,620.00	7,325.05	291.43	-417.35	18.74	829.96	774.16	88.74	14.874
8,600.00	7,327.00	788.44	-1,202.75	39.68	7,620.00	7,325.05	291.43	-417.35	18.74	929.45	871.15	88.74	15.942
8,700.00	7,327.00	849.73	-1,281.76	42.20	7,620.00	7,325.05	291.43	-417.35	18.74	1,029.03	968.21	88.74	16.920
8,800.00	7,327.00	911.03	-1,360.77	44.72	7,620.00	7,325.05	291.43	-417.35	18.74	1,128.69	1,065.34	88.74	17.816
8,900.00	7,327.00	972.32	-1,439.78	47.27	7,620.00	7,325.05	291.43	-417.35	18.74	1,228.41	1,162.51	88.74	18.641
9,000.00	7,327.00	1,033.62	-1,518.80	49.82	7,620.00	7,325.05	291.43	-417.35	18.74	1,328.17	1,259.71	88.74	19.402
9,100.00	7,327.00	1,094.91	-1,597.81	52.38	7,620.00	7,325.05	291.43	-417.35	18.74	1,427.96	1,356.94	88.74	20.106
9,200.00	7,327.00	1,156.20	-1,676.82	54.95	7,620.00	7,325.05	291.43	-417.35	18.74	1,527.78	1,454.19	88.74	20.760
9,300.00	7,327.00	1,217.50	-1,755.84	57.53	7,620.00	7,325.05	291.43	-417.35	18.74	1,627.62	1,551.45	88.74	21.367
9,400.00	7,327.00	1,278.79	-1,834.85	60.11	7,620.00	7,325.05	291.43	-417.35	18.74	1,727.48	1,648.72	88.74	21.933
9,500.00	7,327.00	1,340.09	-1,913.86	62.70	7,620.00	7,325.05	291.43	-417.35	18.74	1,827.36	1,746.01	88.74	22.463
9,600.00	7,327.00	1,401.38	-1,992.87	65.30	7,620.00	7,325.05	291.43	-417.35	18.74	1,927.24	1,843.30	88.74	22.958
9,700.00	7,327.00	1,462.68	-2,071.89	67.89	7,620.00	7,325.05	291.43	-417.35	18.74	2,027.14	1,940.60	88.74	23.422
9,760.89	7,327.00	1,500.00	-2,120.00	69.48	7,620.00	7,325.05	291.43	-417.35	18.74	2,087.98	1,999.85	88.74	23.691
9,800.00	7,327.00	1,524.18	-2,150.73	70.49	7,620.00	7,325.05	291.43	-417.35	18.74	2,127.04	2,037.94	89.05	23.874
9,900.00	7,327.00	1,587.90	-2,227.80	73.02	7,620.00	7,325.05	291.43	-417.35	18.74	2,226.78	2,135.34	89.42	24.351
10,000.00	7,327.00	1,654.27	-2,302.59	75.53	7,620.00	7,325.05	291.43	-417.35	18.74	2,326.26	2,232.58	89.59	24.834
10,100.00	7,327.00	1,723.21	-2,375.02	78.00	7,620.00	7,325.05	291.43	-417.35	18.74	2,425.38	2,329.61	89.69	25.324
10,200.00	7,327.00	1,794.63	-2,445.01	80.44	7,620.00	7,325.05	291.43	-417.35	18.74	2,524.09	2,426.34	89.75	25.822
10,300.00	7,327.00	1,868.46	-2,512.45	82.83	7,620.00	7,325.05	291.43	-417.35	18.74	2,622.30	2,522.71	89.79	26.331
10,400.00	7,327.00	1,944.59	-2,577.28	85.18	7,620.00	7,325.05	291.43	-417.35	18.74	2,719.97	2,618.68	89.82	26.852
10,500.00	7,327.00	2,022.94	-2,639.41	87.48	7,620.00	7,325.05	291.43	-417.35	18.74	2,817.04	2,714.18	89.84	27.387
10,585.03	7,327.00	2,091.23	-2,690.07	89.40	7,620.00	7,325.05	291.43	-417.35	18.74	2,899.05	2,794.98	89.86	27.855
10,600.00	7,327.00	2,103.38	-2,698.81	89.74	7,620.00	7,325.05	291.43	-417.35	18.74	2,913.46	2,809.03	89.86	27.899
10,700.00	7,327.00	2,184.58	-2,757.18	92.01	7,620.00	7,325.05	291.43	-417.35	18.74	3,009.79	2,903.00	89.86	28.186
10,800.00	7,327.00	2,265.77	-2,815.56	94.28	7,620.00	7,325.05	291.43	-417.35	18.74	3,106.35	2,997.21	89.86	28.461
10,900.00	7,327.00	2,346.96	-2,873.93	96.56	7,620.00	7,325.05	291.43	-417.35	18.74	3,203.13	3,091.62	89.86	28.726
11,000.00	7,327.00	2,428.16	-2,932.31	98.85	7,620.00	7,325.05	291.43	-417.35	18.74	3,300.09	3,186.22	89.86	28.981
11,100.00	7,327.00	2,509.35	-2,990.68	101.14	7,620.00	7,325.05	291.43	-417.35	18.74	3,397.24	3,281.00	89.86	29.227
11,200.00	7,327.00	2,590.54	-3,049.06	103.43	7,620.00	7,325.05	291.43	-417.35	18.74	3,494.54	3,375.93	89.86	29.463
11,300.00	7,327.00	2,671.74	-3,107.43	105.74	7,620.00	7,325.05	291.43	-417.35	18.74	3,591.99	3,471.01	89.86	29.691

**Anticollision Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal**

Closest Approach 3D Proximity Scan on Current Survey Data (Highside Reference)

Offset Design: Sec. 21-T11N-R63W - Critter Creek 17-21H - Plan #2 - Sidetrack #1 - Sperry MWD Survey (Vertical Wellbore and Build)

Scan Range: 0.00 to 13,127.85 ft. Measured Depth.

Scan Radius is 9,999.98 ft. Clearance Factor cutoff is Unlimited. Max Ellipse Separation is Unlimited

Uncertainty Data for Reference Well					Uncertainty Data for Comparison Well					Separation (Ref. > Comp.)			
Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Measured Depth (ft)	Vertical Depth (ft)	Ellipse Centre +N/-S (ft)	Ellipse Centre +E/-W (ft)	Ellipse Major Axis/2	Between Centres (ft)	Between Ellipsoids ft	Relative Highside Bearing	Clearance Factor
11,400.00	7,327.00	2,752.93	-3,165.81	108.04	7,620.00	7,325.05	291.43	-417.35	18.74	3,689.58	3,566.23	89.86	29.911
11,500.00	7,327.00	2,834.12	-3,224.18	110.36	7,620.00	7,325.05	291.43	-417.35	18.74	3,787.29	3,661.57	89.86	30.123
11,600.00	7,327.00	2,915.32	-3,282.56	112.67	7,620.00	7,325.05	291.43	-417.35	18.74	3,885.13	3,757.02	89.86	30.328
11,700.00	7,327.00	2,996.51	-3,340.93	114.99	7,620.00	7,325.05	291.43	-417.35	18.74	3,983.06	3,852.58	89.86	30.526
11,800.00	7,327.00	3,077.70	-3,399.31	117.32	7,620.00	7,325.05	291.43	-417.35	18.74	4,081.10	3,948.24	89.86	30.717
11,900.00	7,327.00	3,158.90	-3,457.68	119.64	7,620.00	7,325.05	291.43	-417.35	18.74	4,179.23	4,043.99	89.86	30.902
12,000.00	7,327.00	3,240.09	-3,516.06	121.97	7,620.00	7,325.05	291.43	-417.35	18.74	4,277.45	4,139.82	89.86	31.080
12,100.00	7,327.00	3,321.28	-3,574.43	124.31	7,620.00	7,325.05	291.43	-417.35	18.74	4,375.75	4,235.74	89.86	31.253
12,200.00	7,327.00	3,402.48	-3,632.81	126.65	7,620.00	7,325.05	291.43	-417.35	18.74	4,474.12	4,331.73	89.86	31.420
12,300.00	7,327.00	3,483.67	-3,691.18	128.99	7,620.00	7,325.05	291.43	-417.35	18.74	4,572.57	4,427.79	89.86	31.582
12,400.00	7,327.00	3,564.86	-3,749.56	131.33	7,620.00	7,325.05	291.43	-417.35	18.74	4,671.08	4,523.91	89.86	31.740
12,500.00	7,327.00	3,646.06	-3,807.93	133.67	7,620.00	7,325.05	291.43	-417.35	18.74	4,769.65	4,620.09	89.86	31.892
12,600.00	7,327.00	3,727.25	-3,866.31	136.02	7,620.00	7,325.05	291.43	-417.35	18.74	4,868.28	4,716.34	89.86	32.039
12,700.00	7,327.00	3,808.44	-3,924.68	138.37	7,620.00	7,325.05	291.43	-417.35	18.74	4,966.97	4,812.63	89.86	32.183
12,800.00	7,327.00	3,889.64	-3,983.06	140.72	7,620.00	7,325.05	291.43	-417.35	18.74	5,065.70	4,908.98	89.86	32.322
12,900.00	7,327.00	3,970.83	-4,041.43	143.08	7,620.00	7,325.05	291.43	-417.35	18.74	5,164.49	5,005.37	89.86	32.457
13,000.00	7,327.00	4,052.02	-4,099.81	145.43	7,620.00	7,325.05	291.43	-417.35	18.74	5,263.32	5,101.81	89.86	32.588
13,100.00	7,327.00	4,133.22	-4,158.18	147.79	7,620.00	7,325.05	291.43	-417.35	18.74	5,362.20	5,198.29	89.86	32.715
13,127.85	7,327.00	4,155.83	-4,174.44	148.29	7,620.00	7,325.05	291.43	-417.35	18.74	5,389.74	5,225.37	89.86	32.791

**Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
1,370.00	6,500.00		MWD
6,500.00	13,127.35	Plan #2 - Sidetrack #1 Proposal	MWD

Ellipse error terms are correlated across survey tool tie-on points.

Calculated ellipses incorporate surface errors.

Separation is the actual distance between ellipsoids.

Distance Between centres is the straight line distance between wellbore centres.

Clearance Factor = Distance Between Profiles / (Distance Between Profiles - Ellipse Separation).

All station coordinates were calculated using the Minimum Curvature method.



Anticollision Report for Critter Creek 17-21H - Plan #2 - Sidetrack #1 Proposal

Direction and Coordinates are relative to True North Reference.  
Vertical Depths are relative to RKB 22' @ 5251.00ft (True 35). Northing and Easting are relative to Critter Creek 17-21H  
Coordinate System is US State Plane 1927 (Exact solution), Colorado North 501  
Central Meridian is -105.00°, Grid Convergence at Surface is: 0.69°

