

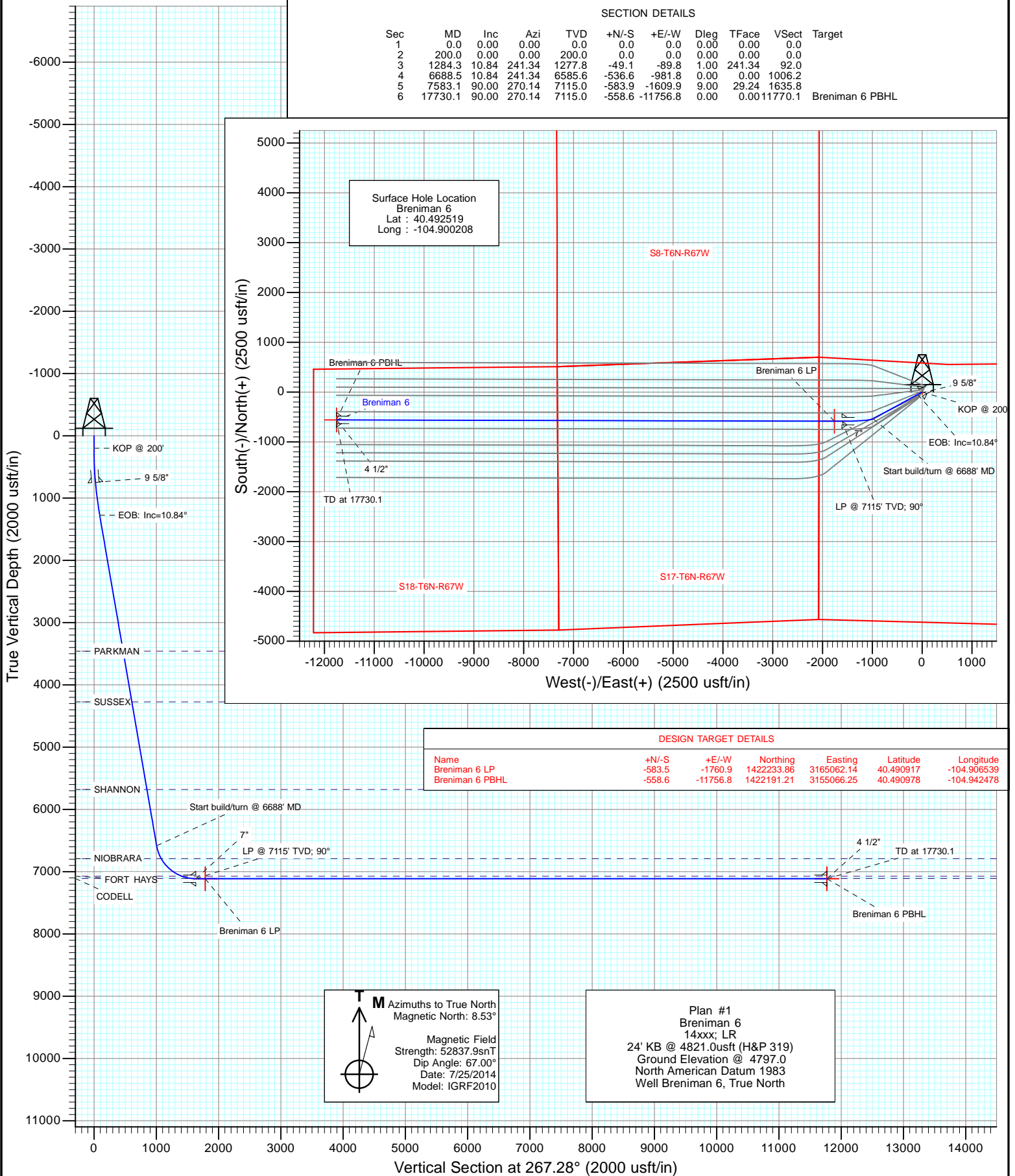


Project: WELD COUNTY, CO  
Site: S16-T6N-R67W  
Well: Breniman 6  
Wellbore: Hz  
Design: Plan #1



#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1284.3	10.84	241.34	1277.8	-49.1	-89.8	1.00	241.34	92.0	
4	6688.5	10.84	241.34	6585.6	-536.6	-981.8	0.00	0.00	1006.2	
5	7583.1	90.00	270.14	7115.0	-583.9	-1609.9	9.00	29.24	1635.8	
6	17730.1	90.00	270.14	7115.0	-558.6	-11756.8	0.00	0.00	11770.1	Breniman 6 PBHL



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, CO	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site:</b>	S16-T6N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

<b>Project</b>	WELD COUNTY, CO		
<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 Northern Zone		

Site		S16-T6N-R67W			
Site Position:		Northing:	1,422,877.59 usft	Latitude:	40.492651
From:	Lat/Long	Easting:	3,166,847.63 usft	Longitude:	-104.900104
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.39 °

Well	Breniman 6					
Well Position	+N/-S	0.0 usft	Northing:	1,422,829.30 usft	Latitude:	40.492519
	+E/-W	0.0 usft	Easting:	3,166,819.03 usft	Longitude:	-104.900208
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	4,797.0 usft

<b>Wellbore</b>	Hz				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	7/25/2014	8.53	67.00	52,838

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	267.28	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,284.3	10.84	241.34	1,277.8	-49.1	-89.8	1.00	1.00	0.00	241.34	
6,688.5	10.84	241.34	6,585.6	-536.6	-981.8	0.00	0.00	0.00	0.00	
7,583.1	90.00	270.14	7,115.0	-583.9	-1,609.9	9.00	8.85	3.22	29.24	
17,730.1	90.00	270.14	7,115.0	-558.6	-11,756.8	0.00	0.00	0.00	0.00	Breniman 6 PBHL

# Planning Report

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<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, CO	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site:</b>	S16-T6N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	1.00	241.34	300.0	-0.4	-0.8	0.8	1.00	1.00	
400.0	2.00	241.34	400.0	-1.7	-3.1	3.1	1.00	1.00	
500.0	3.00	241.34	499.9	-3.8	-6.9	7.1	1.00	1.00	
600.0	4.00	241.34	599.7	-6.7	-12.2	12.6	1.00	1.00	
700.0	5.00	241.34	699.4	-10.5	-19.1	19.6	1.00	1.00	
750.0	5.50	241.34	749.2	-12.7	-23.1	23.7	1.00	1.00	9 5/8"
800.0	6.00	241.34	798.9	-15.1	-27.5	28.2	1.00	1.00	
900.0	7.00	241.34	898.3	-20.5	-37.5	38.4	1.00	1.00	
1,000.0	8.00	241.34	997.4	-26.7	-48.9	50.1	1.00	1.00	
1,100.0	9.00	241.34	1,096.3	-33.8	-61.9	63.4	1.00	1.00	
1,200.0	10.00	241.34	1,194.9	-41.7	-76.4	78.3	1.00	1.00	
1,284.3	10.84	241.34	1,277.8	-49.1	-89.8	92.0	1.00	1.00	EOB: Inc=10.84°
1,300.0	10.84	241.34	1,293.3	-50.5	-92.4	94.6	0.00	0.00	
1,400.0	10.84	241.34	1,391.5	-59.5	-108.9	111.6	0.00	0.00	
1,500.0	10.84	241.34	1,489.7	-68.5	-125.4	128.5	0.00	0.00	
1,600.0	10.84	241.34	1,587.9	-77.5	-141.9	145.4	0.00	0.00	
1,700.0	10.84	241.34	1,686.1	-86.6	-158.4	162.3	0.00	0.00	
1,800.0	10.84	241.34	1,784.3	-95.6	-174.9	179.2	0.00	0.00	
1,900.0	10.84	241.34	1,882.5	-104.6	-191.4	196.1	0.00	0.00	
2,000.0	10.84	241.34	1,980.8	-113.6	-207.9	213.1	0.00	0.00	
2,100.0	10.84	241.34	2,079.0	-122.7	-224.4	230.0	0.00	0.00	
2,200.0	10.84	241.34	2,177.2	-131.7	-240.9	246.9	0.00	0.00	
2,300.0	10.84	241.34	2,275.4	-140.7	-257.4	263.8	0.00	0.00	
2,400.0	10.84	241.34	2,373.6	-149.7	-273.9	280.7	0.00	0.00	
2,500.0	10.84	241.34	2,471.8	-158.7	-290.4	297.6	0.00	0.00	
2,600.0	10.84	241.34	2,570.0	-167.8	-306.9	314.6	0.00	0.00	
2,700.0	10.84	241.34	2,668.3	-176.8	-323.4	331.5	0.00	0.00	
2,800.0	10.84	241.34	2,766.5	-185.8	-340.0	348.4	0.00	0.00	
2,900.0	10.84	241.34	2,864.7	-194.8	-356.5	365.3	0.00	0.00	
3,000.0	10.84	241.34	2,962.9	-203.9	-373.0	382.2	0.00	0.00	
3,100.0	10.84	241.34	3,061.1	-212.9	-389.5	399.1	0.00	0.00	
3,200.0	10.84	241.34	3,159.3	-221.9	-406.0	416.1	0.00	0.00	
3,300.0	10.84	241.34	3,257.5	-230.9	-422.5	433.0	0.00	0.00	
3,400.0	10.84	241.34	3,355.8	-239.9	-439.0	449.9	0.00	0.00	
3,500.0	10.84	241.34	3,454.0	-249.0	-455.5	466.8	0.00	0.00	
3,506.1	10.84	241.34	3,460.0	-249.5	-456.5	467.8	0.00	0.00	PARKMAN
3,600.0	10.84	241.34	3,552.2	-258.0	-472.0	483.7	0.00	0.00	
3,700.0	10.84	241.34	3,650.4	-267.0	-488.5	500.6	0.00	0.00	
3,800.0	10.84	241.34	3,748.6	-276.0	-505.0	517.6	0.00	0.00	
3,900.0	10.84	241.34	3,846.8	-285.1	-521.5	534.5	0.00	0.00	
4,000.0	10.84	241.34	3,945.0	-294.1	-538.0	551.4	0.00	0.00	
4,100.0	10.84	241.34	4,043.3	-303.1	-554.5	568.3	0.00	0.00	
4,200.0	10.84	241.34	4,141.5	-312.1	-571.1	585.2	0.00	0.00	
4,300.0	10.84	241.34	4,239.7	-321.1	-587.6	602.1	0.00	0.00	
4,335.9	10.84	241.34	4,275.0	-324.4	-593.5	608.2	0.00	0.00	SUSSEX
4,400.0	10.84	241.34	4,337.9	-330.2	-604.1	619.1	0.00	0.00	
4,500.0	10.84	241.34	4,436.1	-339.2	-620.6	636.0	0.00	0.00	
4,600.0	10.84	241.34	4,534.3	-348.2	-637.1	652.9	0.00	0.00	
4,700.0	10.84	241.34	4,632.5	-357.2	-653.6	669.8	0.00	0.00	

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<b>Project:</b>	WELD COUNTY, CO	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site:</b>	S16-T6N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,800.0	10.84	241.34	4,730.8	-366.2	-670.1	686.7	0.00	0.00	
4,900.0	10.84	241.34	4,829.0	-375.3	-686.6	703.6	0.00	0.00	
5,000.0	10.84	241.34	4,927.2	-384.3	-703.1	720.6	0.00	0.00	
5,100.0	10.84	241.34	5,025.4	-393.3	-719.6	737.5	0.00	0.00	
5,200.0	10.84	241.34	5,123.6	-402.3	-736.1	754.4	0.00	0.00	
5,300.0	10.84	241.34	5,221.8	-411.4	-752.6	771.3	0.00	0.00	
5,400.0	10.84	241.34	5,320.0	-420.4	-769.1	788.2	0.00	0.00	
5,500.0	10.84	241.34	5,418.3	-429.4	-785.6	805.1	0.00	0.00	
5,600.0	10.84	241.34	5,516.5	-438.4	-802.2	822.1	0.00	0.00	
5,700.0	10.84	241.34	5,614.7	-447.4	-818.7	839.0	0.00	0.00	
5,766.5	10.84	241.34	5,680.0	-453.4	-829.6	850.2	0.00	0.00	SHANNON
5,800.0	10.84	241.34	5,712.9	-456.5	-835.2	855.9	0.00	0.00	
5,900.0	10.84	241.34	5,811.1	-465.5	-851.7	872.8	0.00	0.00	
6,000.0	10.84	241.34	5,909.3	-474.5	-868.2	889.7	0.00	0.00	
6,100.0	10.84	241.34	6,007.6	-483.5	-884.7	906.6	0.00	0.00	
6,200.0	10.84	241.34	6,105.8	-492.6	-901.2	923.6	0.00	0.00	
6,300.0	10.84	241.34	6,204.0	-501.6	-917.7	940.5	0.00	0.00	
6,400.0	10.84	241.34	6,302.2	-510.6	-934.2	957.4	0.00	0.00	
6,500.0	10.84	241.34	6,400.4	-519.6	-950.7	974.3	0.00	0.00	
6,600.0	10.84	241.34	6,498.6	-528.6	-967.2	991.2	0.00	0.00	
6,688.5	10.84	241.34	6,585.6	-536.6	-981.8	1,006.2	0.00	0.00	Start build/turn @ 6688' MD
6,700.0	11.75	243.82	6,596.8	-537.7	-983.8	1,008.2	9.00	7.95	
6,800.0	20.19	255.61	6,692.9	-546.5	-1,009.7	1,034.5	9.00	8.44	
6,900.0	28.96	260.55	6,783.8	-554.8	-1,050.4	1,075.6	9.00	8.77	
6,907.1	29.60	260.79	6,790.0	-555.3	-1,053.9	1,079.0	9.00	8.84	NIOBRARA
7,000.0	37.84	263.32	6,867.2	-562.3	-1,104.9	1,130.3	9.00	8.87	
7,100.0	46.75	265.16	6,941.1	-569.0	-1,171.8	1,197.5	9.00	8.91	
7,200.0	55.69	266.53	7,003.6	-574.5	-1,249.4	1,275.3	9.00	8.94	
7,300.0	64.64	267.64	7,053.3	-578.9	-1,336.0	1,362.0	9.00	8.95	
7,355.7	69.63	268.18	7,075.0	-580.8	-1,387.3	1,413.3	9.00	8.96	FORT HAYS
7,400.0	73.59	268.59	7,089.0	-582.0	-1,429.3	1,455.3	9.00	8.96	
7,500.0	82.55	269.45	7,109.6	-583.6	-1,527.0	1,553.0	9.00	8.96	
7,503.1	82.83	269.48	7,110.0	-583.7	-1,530.1	1,556.0	9.00	8.96	CODELL
7,583.1	90.00	270.14	7,115.0	-583.9	-1,609.9	1,635.8	9.00	8.96	LP @ 7115' TVD; 90° - 7"
7,600.0	90.00	270.14	7,115.0	-583.9	-1,626.8	1,652.6	0.00	0.00	
7,700.0	90.00	270.14	7,115.0	-583.6	-1,726.8	1,752.5	0.00	0.00	
7,800.0	90.00	270.14	7,115.0	-583.4	-1,826.8	1,852.4	0.00	0.00	
7,900.0	90.00	270.14	7,115.0	-583.1	-1,926.8	1,952.3	0.00	0.00	
8,000.0	90.00	270.14	7,115.0	-582.9	-2,026.8	2,052.1	0.00	0.00	
8,100.0	90.00	270.14	7,115.0	-582.6	-2,126.8	2,152.0	0.00	0.00	
8,200.0	90.00	270.14	7,115.0	-582.4	-2,226.8	2,251.9	0.00	0.00	
8,300.0	90.00	270.14	7,115.0	-582.1	-2,326.8	2,351.8	0.00	0.00	
8,400.0	90.00	270.14	7,115.0	-581.9	-2,426.8	2,451.6	0.00	0.00	
8,500.0	90.00	270.14	7,115.0	-581.6	-2,526.8	2,551.5	0.00	0.00	
8,600.0	90.00	270.14	7,115.0	-581.4	-2,626.8	2,651.4	0.00	0.00	
8,700.0	90.00	270.14	7,115.0	-581.1	-2,726.8	2,751.3	0.00	0.00	
8,800.0	90.00	270.14	7,115.0	-580.9	-2,826.8	2,851.1	0.00	0.00	
8,900.0	90.00	270.14	7,115.0	-580.6	-2,926.8	2,951.0	0.00	0.00	
9,000.0	90.00	270.14	7,115.0	-580.4	-3,026.8	3,050.9	0.00	0.00	
9,100.0	90.00	270.14	7,115.0	-580.1	-3,126.7	3,150.8	0.00	0.00	
9,200.0	90.00	270.14	7,115.0	-579.9	-3,226.7	3,250.6	0.00	0.00	
9,300.0	90.00	270.14	7,115.0	-579.6	-3,326.7	3,350.5	0.00	0.00	

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<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
9,400.0	90.00	270.14	7,115.0	-579.4	-3,426.7	3,450.4	0.00	0.00	
9,500.0	90.00	270.14	7,115.0	-579.1	-3,526.7	3,550.3	0.00	0.00	
9,600.0	90.00	270.14	7,115.0	-578.9	-3,626.7	3,650.1	0.00	0.00	
9,700.0	90.00	270.14	7,115.0	-578.6	-3,726.7	3,750.0	0.00	0.00	
9,800.0	90.00	270.14	7,115.0	-578.4	-3,826.7	3,849.9	0.00	0.00	
9,900.0	90.00	270.14	7,115.0	-578.1	-3,926.7	3,949.8	0.00	0.00	
10,000.0	90.00	270.14	7,115.0	-577.9	-4,026.7	4,049.6	0.00	0.00	
10,100.0	90.00	270.14	7,115.0	-577.6	-4,126.7	4,149.5	0.00	0.00	
10,200.0	90.00	270.14	7,115.0	-577.4	-4,226.7	4,249.4	0.00	0.00	
10,300.0	90.00	270.14	7,115.0	-577.1	-4,326.7	4,349.3	0.00	0.00	
10,400.0	90.00	270.14	7,115.0	-576.9	-4,426.7	4,449.1	0.00	0.00	
10,500.0	90.00	270.14	7,115.0	-576.6	-4,526.7	4,549.0	0.00	0.00	
10,600.0	90.00	270.14	7,115.0	-576.4	-4,626.7	4,648.9	0.00	0.00	
10,700.0	90.00	270.14	7,115.0	-576.1	-4,726.7	4,748.8	0.00	0.00	
10,800.0	90.00	270.14	7,115.0	-575.9	-4,826.7	4,848.6	0.00	0.00	
10,900.0	90.00	270.14	7,115.0	-575.6	-4,926.7	4,948.5	0.00	0.00	
11,000.0	90.00	270.14	7,115.0	-575.4	-5,026.7	5,048.4	0.00	0.00	
11,100.0	90.00	270.14	7,115.0	-575.1	-5,126.7	5,148.3	0.00	0.00	
11,200.0	90.00	270.14	7,115.0	-574.9	-5,226.7	5,248.1	0.00	0.00	
11,300.0	90.00	270.14	7,115.0	-574.6	-5,326.7	5,348.0	0.00	0.00	
11,400.0	90.00	270.14	7,115.0	-574.4	-5,426.7	5,447.9	0.00	0.00	
11,500.0	90.00	270.14	7,115.0	-574.1	-5,526.7	5,547.8	0.00	0.00	
11,600.0	90.00	270.14	7,115.0	-573.9	-5,626.7	5,647.6	0.00	0.00	
11,700.0	90.00	270.14	7,115.0	-573.6	-5,726.7	5,747.5	0.00	0.00	
11,800.0	90.00	270.14	7,115.0	-573.4	-5,826.7	5,847.4	0.00	0.00	
11,900.0	90.00	270.14	7,115.0	-573.1	-5,926.7	5,947.3	0.00	0.00	
12,000.0	90.00	270.14	7,115.0	-572.9	-6,026.7	6,047.1	0.00	0.00	
12,100.0	90.00	270.14	7,115.0	-572.6	-6,126.7	6,147.0	0.00	0.00	
12,200.0	90.00	270.14	7,115.0	-572.4	-6,226.7	6,246.9	0.00	0.00	
12,300.0	90.00	270.14	7,115.0	-572.1	-6,326.7	6,346.8	0.00	0.00	
12,400.0	90.00	270.14	7,115.0	-571.9	-6,426.7	6,446.6	0.00	0.00	
12,500.0	90.00	270.14	7,115.0	-571.6	-6,526.7	6,546.5	0.00	0.00	
12,600.0	90.00	270.14	7,115.0	-571.4	-6,626.7	6,646.4	0.00	0.00	
12,700.0	90.00	270.14	7,115.0	-571.1	-6,726.7	6,746.3	0.00	0.00	
12,800.0	90.00	270.14	7,115.0	-570.9	-6,826.7	6,846.1	0.00	0.00	
12,900.0	90.00	270.14	7,115.0	-570.6	-6,926.7	6,946.0	0.00	0.00	
13,000.0	90.00	270.14	7,115.0	-570.4	-7,026.7	7,045.9	0.00	0.00	
13,100.0	90.00	270.14	7,115.0	-570.1	-7,126.7	7,145.8	0.00	0.00	
13,200.0	90.00	270.14	7,115.0	-569.9	-7,226.7	7,245.6	0.00	0.00	
13,300.0	90.00	270.14	7,115.0	-569.6	-7,326.7	7,345.5	0.00	0.00	
13,400.0	90.00	270.14	7,115.0	-569.4	-7,426.7	7,445.4	0.00	0.00	
13,500.0	90.00	270.14	7,115.0	-569.1	-7,526.7	7,545.3	0.00	0.00	
13,600.0	90.00	270.14	7,115.0	-568.9	-7,626.7	7,645.1	0.00	0.00	
13,700.0	90.00	270.14	7,115.0	-568.6	-7,726.7	7,745.0	0.00	0.00	
13,800.0	90.00	270.14	7,115.0	-568.4	-7,826.7	7,844.9	0.00	0.00	
13,900.0	90.00	270.14	7,115.0	-568.1	-7,926.7	7,944.8	0.00	0.00	
14,000.0	90.00	270.14	7,115.0	-567.9	-8,026.7	8,044.6	0.00	0.00	
14,100.0	90.00	270.14	7,115.0	-567.6	-8,126.7	8,144.5	0.00	0.00	
14,200.0	90.00	270.14	7,115.0	-567.4	-8,226.7	8,244.4	0.00	0.00	
14,300.0	90.00	270.14	7,115.0	-567.1	-8,326.7	8,344.3	0.00	0.00	
14,400.0	90.00	270.14	7,115.0	-566.9	-8,426.7	8,444.1	0.00	0.00	
14,500.0	90.00	270.14	7,115.0	-566.6	-8,526.7	8,544.0	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, CO	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site:</b>	S16-T6N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
14,600.0	90.00	270.14	7,115.0	-566.4	-8,626.7	8,643.9	0.00	0.00	
14,700.0	90.00	270.14	7,115.0	-566.2	-8,726.7	8,743.8	0.00	0.00	
14,800.0	90.00	270.14	7,115.0	-565.9	-8,826.7	8,843.6	0.00	0.00	
14,900.0	90.00	270.14	7,115.0	-565.7	-8,926.7	8,943.5	0.00	0.00	
15,000.0	90.00	270.14	7,115.0	-565.4	-9,026.7	9,043.4	0.00	0.00	
15,100.0	90.00	270.14	7,115.0	-565.2	-9,126.7	9,143.3	0.00	0.00	
15,200.0	90.00	270.14	7,115.0	-564.9	-9,226.7	9,243.1	0.00	0.00	
15,300.0	90.00	270.14	7,115.0	-564.7	-9,326.7	9,343.0	0.00	0.00	
15,400.0	90.00	270.14	7,115.0	-564.4	-9,426.7	9,442.9	0.00	0.00	
15,500.0	90.00	270.14	7,115.0	-564.2	-9,526.7	9,542.8	0.00	0.00	
15,600.0	90.00	270.14	7,115.0	-563.9	-9,626.7	9,642.6	0.00	0.00	
15,700.0	90.00	270.14	7,115.0	-563.7	-9,726.7	9,742.5	0.00	0.00	
15,800.0	90.00	270.14	7,115.0	-563.4	-9,826.7	9,842.4	0.00	0.00	
15,900.0	90.00	270.14	7,115.0	-563.2	-9,926.7	9,942.3	0.00	0.00	
16,000.0	90.00	270.14	7,115.0	-562.9	-10,026.7	10,042.1	0.00	0.00	
16,100.0	90.00	270.14	7,115.0	-562.7	-10,126.7	10,142.0	0.00	0.00	
16,200.0	90.00	270.14	7,115.0	-562.4	-10,226.7	10,241.9	0.00	0.00	
16,300.0	90.00	270.14	7,115.0	-562.2	-10,326.7	10,341.8	0.00	0.00	
16,400.0	90.00	270.14	7,115.0	-561.9	-10,426.7	10,441.6	0.00	0.00	
16,500.0	90.00	270.14	7,115.0	-561.7	-10,526.7	10,541.5	0.00	0.00	
16,600.0	90.00	270.14	7,115.0	-561.4	-10,626.7	10,641.4	0.00	0.00	
16,700.0	90.00	270.14	7,115.0	-561.2	-10,726.7	10,741.3	0.00	0.00	
16,800.0	90.00	270.14	7,115.0	-560.9	-10,826.7	10,841.1	0.00	0.00	
16,900.0	90.00	270.14	7,115.0	-560.7	-10,926.7	10,941.0	0.00	0.00	
17,000.0	90.00	270.14	7,115.0	-560.4	-11,026.7	11,040.9	0.00	0.00	
17,100.0	90.00	270.14	7,115.0	-560.2	-11,126.7	11,140.8	0.00	0.00	
17,200.0	90.00	270.14	7,115.0	-559.9	-11,226.7	11,240.6	0.00	0.00	
17,300.0	90.00	270.14	7,115.0	-559.7	-11,326.7	11,340.5	0.00	0.00	
17,400.0	90.00	270.14	7,115.0	-559.4	-11,426.7	11,440.4	0.00	0.00	
17,500.0	90.00	270.14	7,115.0	-559.2	-11,526.7	11,540.3	0.00	0.00	
17,600.0	90.00	270.14	7,115.0	-558.9	-11,626.7	11,640.1	0.00	0.00	
17,700.0	90.00	270.14	7,115.0	-558.7	-11,726.7	11,740.0	0.00	0.00	
17,730.1	90.00	270.14	7,115.0	-558.6	-11,756.8	11,770.1	0.00	0.00	TD at 17730.1

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
Breniman 6 LP - plan hits target center - Point	0.00	0.00	7,115.0	-583.5	-1,760.9	1,422,233.86	3,165,062.14	40.490917	-104.906539
Breniman 6 PBHL - plan hits target center - Point	0.00	0.00	7,115.0	-558.6	-11,756.8	1,422,191.21	3,155,066.25	40.490978	-104.942478

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Company:</b>	Extraction Oil & Gas	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, CO	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site:</b>	S16-T6N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
7,583.1	7,115.0	7"	0	0	
750.0	749.2	9 5/8"	0	0	
17,730.1	7,115.0	4 1/2"	0	0	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,506.1	3,460.0	PARKMAN			
4,335.9	4,275.0	SUSSEX			
5,766.5	5,680.0	SHANNON			
6,907.1	6,790.0	NIOBRARA			
7,355.7	7,075.0	FORT HAYS			
7,503.1	7,110.0	CODELL			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
1,284.3	1,277.8	-49.1	-89.8	EOB: Inc=10.84°	
6,688.5	6,585.6	-536.6	-981.8	Start build/turn @ 6688' MD	
7,583.1	7,115.0	-583.9	-1,609.9	LP @ 7115' TVD; 90°	
17,730.1	7,115.0	-558.6	-11,756.8	TD at 17730.1	

# **Extraction Oil & Gas**

**WELD COUNTY, CO**

**S16-T6N-R67W**

**Breniman 6**

**Hz**

**Plan #1**

## **Anticollision Report**

**28 July, 2014**



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,215.7usft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	7/28/2014		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	17,730.1	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S16-T6N-R67W						
Breniman 1 - Hz - Plan #1	200.0	200.0	139.7	139.1	227.384	CC, ES
Breniman 1 - Hz - Plan #1	17,730.1	17,410.2	1,200.1	657.6	2.212	SF
Breniman 10 - Hz - Plan #1	200.0	200.0	112.1	111.8	364.671	CC
Breniman 10 - Hz - Plan #1	700.0	691.4	112.5	111.3	93.550	ES
Breniman 10 - Hz - Plan #1	17,730.1	16,829.6	886.5	624.8	3.387	SF
Breniman 11 - Hz - Plan #1	200.0	200.0	140.2	139.8	455.955	CC
Breniman 11 - Hz - Plan #1	400.0	395.5	140.3	139.7	213.290	ES
Breniman 11 - Hz - Plan #1	17,730.1	16,900.9	1,199.7	929.1	4.433	SF
Breniman 2 - Hz - Plan #1	100.0	100.0	111.8	111.5	421.347	CC
Breniman 2 - Hz - Plan #1	200.0	200.0	111.8	111.2	181.945	ES
Breniman 2 - Hz - Plan #1	17,730.1	17,393.7	886.8	362.5	1.691	SF
Breniman 3 - Hz - Plan #1	200.0	200.0	83.7	83.1	136.274	CC
Breniman 3 - Hz - Plan #1	300.0	300.8	84.0	83.1	87.011	ES
Breniman 3 - Hz - Plan #1	17,730.1	17,709.6	660.1	97.4	1.173	Level 2, SF
Breniman 4 - Hz - Plan #1	200.0	199.0	56.1	55.5	91.609	CC
Breniman 4 - Hz - Plan #1	300.0	299.6	56.3	55.4	58.477	ES
Breniman 4 - Hz - Plan #1	17,730.1	17,389.1	591.7	119.8	1.254	Level 3, SF
Breniman 5 - Hz - Plan #1	200.0	200.0	27.9	27.3	45.440	CC
Breniman 5 - Hz - Plan #1	500.0	501.2	28.4	26.7	16.938	ES
Breniman 5 - Hz - Plan #1	17,730.1	17,401.6	364.5	104.2	1.401	Level 3, SF
Breniman 7 - Hz - Plan #1	200.0	200.0	28.4	28.1	92.302	CC
Breniman 7 - Hz - Plan #1	1,100.0	1,096.1	29.4	27.3	14.436	ES
Breniman 7 - Hz - Plan #1	17,730.1	17,301.1	364.5	234.3	2.800	SF
Breniman 8 - Hz - Plan #1	1,315.1	1,306.1	53.3	50.9	21.832	CC, ES
Breniman 8 - Hz - Plan #1	17,730.1	16,783.6	592.2	356.7	2.514	SF
Breniman 9 - Hz - Plan #1	608.8	603.6	84.3	83.3	81.613	CC
Breniman 9 - Hz - Plan #1	1,300.0	1,286.1	84.4	81.9	34.169	ES
Breniman 9 - Hz - Plan #1	17,730.1	17,104.5	659.8	378.7	2.348	SF

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 1 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
							+N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	30.91	119.9	71.8	139.7					
100.0	100.0	100.0	100.0	0.1	0.1	30.91	119.9	71.8	139.7	139.4	0.27	526.573		
200.0	200.0	200.0	200.0	0.3	0.3	30.91	119.9	71.8	139.7	139.1	0.61	227.384	CC, ES	
300.0	300.0	300.4	300.4	0.5	0.5	149.39	120.2	70.9	140.3	139.3	0.97	145.350		
400.0	400.0	400.8	400.7	0.7	0.7	148.87	121.1	68.5	142.1	140.8	1.32	107.549		
500.0	499.9	501.1	500.9	0.9	0.9	148.04	122.7	64.4	145.2	143.5	1.69	86.016		
600.0	599.7	601.3	601.0	1.1	1.1	146.92	125.0	58.7	149.5	147.5	2.07	72.243		
700.0	699.4	701.4	700.7	1.3	1.3	145.59	127.8	51.3	155.2	152.7	2.47	62.764		
800.0	798.9	801.3	800.2	1.5	1.5	144.08	131.3	42.4	162.2	159.3	2.90	55.904		
900.0	898.3	901.0	899.2	1.8	1.8	142.45	135.4	31.9	170.6	167.2	3.36	50.753		
1,000.0	997.4	1,000.5	997.9	2.0	2.0	140.77	140.1	19.7	180.4	176.6	3.86	46.775		
1,100.0	1,096.3	1,099.7	1,096.0	2.3	2.3	139.06	145.4	6.1	191.7	187.3	4.39	43.636		
1,200.0	1,194.9	1,198.7	1,193.6	2.7	2.6	137.38	151.4	-9.1	204.5	199.5	4.97	41.115		
1,300.0	1,293.3	1,297.3	1,290.6	3.0	3.0	135.75	157.9	-25.9	218.7	213.1	5.60	39.068		
1,400.0	1,391.5	1,395.8	1,387.1	3.4	3.4	134.11	165.0	-44.0	233.7	227.4	6.26	37.336		
1,500.0	1,489.7	1,494.4	1,483.7	3.7	3.7	132.56	172.2	-62.6	248.8	241.9	6.93	35.889		
1,600.0	1,587.9	1,593.0	1,580.3	4.1	4.1	131.20	179.4	-81.2	264.2	256.5	7.62	34.680		
1,700.0	1,686.1	1,691.7	1,676.9	4.4	4.5	129.98	186.7	-99.8	279.6	271.3	8.31	33.659		
1,800.0	1,784.3	1,790.3	1,773.5	4.8	4.9	128.89	193.9	-118.4	295.2	286.2	9.00	32.789		
1,900.0	1,882.5	1,888.9	1,870.1	5.2	5.3	127.91	201.2	-137.0	310.8	301.1	9.70	32.042		
2,000.0	1,980.8	1,987.6	1,966.7	5.5	5.6	127.02	208.4	-155.5	326.6	316.2	10.40	31.394		
2,100.0	2,079.0	2,086.2	2,063.3	5.9	6.0	126.22	215.7	-174.1	342.4	331.3	11.11	30.828		
2,200.0	2,177.2	2,184.8	2,159.9	6.3	6.4	125.48	222.9	-192.7	358.2	346.4	11.81	30.331		
2,300.0	2,275.4	2,283.5	2,256.5	6.7	6.8	124.81	230.1	-211.3	374.2	361.6	12.52	29.891		
2,400.0	2,373.6	2,382.1	2,353.1	7.0	7.2	124.19	237.4	-229.9	390.1	376.9	13.23	29.499		
2,500.0	2,471.8	2,480.7	2,449.7	7.4	7.6	123.62	244.6	-248.5	406.1	392.2	13.93	29.149		
2,600.0	2,570.0	2,579.4	2,546.3	7.8	8.0	123.10	251.9	-267.1	422.2	407.5	14.64	28.833		
2,700.0	2,668.3	2,678.0	2,642.9	8.1	8.4	122.61	259.1	-285.6	438.3	422.9	15.35	28.548		
2,800.0	2,766.5	2,776.6	2,739.5	8.5	8.8	122.16	266.3	-304.2	454.4	438.3	16.06	28.290		
2,900.0	2,864.7	2,875.3	2,836.1	8.9	9.1	121.74	273.6	-322.8	470.5	453.7	16.77	28.054		
3,000.0	2,962.9	2,973.9	2,932.7	9.3	9.5	121.34	280.8	-341.4	486.6	469.2	17.48	27.839		
3,100.0	3,061.1	3,072.5	3,029.2	9.6	9.9	120.98	288.1	-360.0	502.8	484.6	18.19	27.641		
3,200.0	3,159.3	3,171.2	3,125.8	10.0	10.3	120.63	295.3	-378.6	519.0	500.1	18.90	27.459		
3,300.0	3,257.6	3,269.8	3,222.4	10.4	10.7	120.31	302.5	-397.2	535.2	515.6	19.61	27.291		
3,400.0	3,355.8	3,368.4	3,319.0	10.8	11.1	120.00	309.8	-415.7	551.4	531.1	20.32	27.136		
3,500.0	3,454.0	3,467.1	3,415.6	11.1	11.5	119.71	317.0	-434.3	567.7	546.6	21.03	26.991		
3,600.0	3,552.2	3,565.7	3,512.2	11.5	11.9	119.44	324.3	-452.9	583.9	562.2	21.74	26.857		
3,700.0	3,650.4	3,664.3	3,608.8	11.9	12.3	119.18	331.5	-471.5	600.2	577.7	22.45	26.731		
3,800.0	3,748.6	3,763.0	3,705.4	12.3	12.7	118.94	338.7	-490.1	616.5	593.3	23.16	26.614		
3,900.0	3,846.8	3,861.6	3,802.0	12.6	13.1	118.71	346.0	-508.7	632.8	608.9	23.87	26.505		
4,000.0	3,945.1	3,960.2	3,898.6	13.0	13.5	118.49	353.2	-527.3	649.1	624.5	24.58	26.402		
4,100.0	4,043.3	4,058.9	3,995.2	13.4	13.8	118.28	360.5	-545.9	665.4	640.1	25.29	26.305		
4,200.0	4,141.5	4,157.5	4,091.8	13.8	14.2	118.08	367.7	-564.4	681.7	655.7	26.00	26.214		
4,300.0	4,239.7	4,256.1	4,188.4	14.1	14.6	117.89	375.0	-583.0	698.0	671.3	26.71	26.128		
4,400.0	4,337.9	4,354.8	4,285.0	14.5	15.0	117.71	382.2	-601.6	714.3	686.9	27.43	26.046		
4,500.0	4,436.1	4,453.4	4,381.6	14.9	15.4	117.54	389.4	-620.2	730.7	702.5	28.14	25.970		
4,600.0	4,534.3	4,552.0	4,478.2	15.3	15.8	117.37	396.7	-638.8	747.0	718.2	28.85	25.897		
4,700.0	4,632.6	4,650.7	4,574.8	15.6	16.2	117.21	403.9	-657.4	763.3	733.8	29.56	25.828		
4,800.0	4,730.8	4,749.3	4,671.4	16.0	16.6	117.06	411.2	-676.0	779.7	749.4	30.27	25.762		
4,900.0	4,829.0	4,847.9	4,768.0	16.4	17.0	116.92	418.4	-694.5	796.1	765.1	30.98	25.700		
5,000.0	4,927.2	4,946.6	4,864.6	16.8	17.4	116.78	425.6	-713.1	812.4	780.7	31.69	25.640		
5,100.0	5,025.4	5,045.2	4,961.2	17.1	17.8	116.64	432.9	-731.7	828.8	796.4	32.40	25.584		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 1 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference  (usft)	Offset  (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,200.0	5,123.6	5,143.8	5,057.7	17.5	18.2	116.52	440.1	-750.3	845.2	812.0	33.10	25.530		
5,300.0	5,221.8	5,242.5	5,154.3	17.9	18.6	116.39	447.4	-768.9	861.5	827.7	33.81	25.478		
5,400.0	5,320.1	5,341.1	5,250.9	18.3	19.0	116.27	454.6	-787.5	877.9	843.4	34.52	25.429		
5,500.0	5,418.3	5,439.7	5,347.5	18.6	19.4	116.16	461.8	-806.1	894.3	859.1	35.23	25.381		
5,600.0	5,516.5	5,538.4	5,444.1	19.0	19.7	116.05	469.1	-824.6	910.7	874.7	35.94	25.336		
5,700.0	5,614.7	5,637.0	5,540.7	19.4	20.1	115.94	476.3	-843.2	927.1	890.4	36.65	25.293		
5,800.0	5,712.9	5,735.6	5,637.3	19.8	20.5	115.84	483.6	-861.8	943.5	906.1	37.36	25.251		
5,900.0	5,811.1	5,834.3	5,733.9	20.1	20.9	115.74	490.8	-880.4	959.8	921.8	38.07	25.211		
6,000.0	5,909.3	5,932.9	5,830.5	20.5	21.3	115.64	498.1	-899.0	976.2	937.5	38.78	25.173		
6,100.0	6,007.6	6,031.5	5,927.1	20.9	21.7	115.55	505.3	-917.6	992.6	953.2	39.49	25.136		
6,200.0	6,105.8	6,130.2	6,023.7	21.3	22.1	115.46	512.5	-936.2	1,009.0	968.8	40.20	25.100		
6,300.0	6,204.0	6,228.8	6,120.3	21.6	22.5	115.37	519.8	-954.8	1,025.4	984.5	40.91	25.066		
6,400.0	6,302.2	6,327.4	6,216.9	22.0	22.9	115.29	527.0	-973.3	1,041.9	1,000.2	41.62	25.033		
6,500.0	6,400.4	6,423.5	6,310.7	22.4	23.3	115.15	534.1	-992.5	1,058.3	1,016.0	42.36	24.984		
6,600.0	6,498.6	6,513.5	6,396.0	22.8	23.9	114.45	540.5	-1,020.6	1,075.4	1,032.1	43.27	24.855		
6,700.0	6,596.8	6,600.0	6,473.3	23.1	24.6	110.56	546.3	-1,058.7	1,093.6	1,049.3	44.32	24.675		
6,800.0	6,692.9	6,678.8	6,538.7	23.7	25.5	96.23	551.3	-1,102.3	1,112.4	1,066.8	45.66	24.363		
6,900.0	6,783.8	6,757.2	6,597.9	24.5	26.4	89.01	555.8	-1,153.4	1,130.7	1,083.4	47.32	23.896		
7,000.0	6,867.2	6,833.9	6,649.4	25.5	27.5	84.27	559.8	-1,210.0	1,147.9	1,098.6	49.28	23.295		
7,100.0	6,941.1	6,909.3	6,693.0	26.7	28.7	80.84	563.2	-1,271.4	1,163.3	1,111.8	51.51	22.584		
7,200.0	7,003.6	6,983.7	6,728.7	28.1	30.0	78.28	566.0	-1,336.6	1,176.5	1,122.5	54.02	21.777		
7,300.0	7,053.3	7,057.4	6,756.3	29.7	31.4	76.42	568.3	-1,404.8	1,187.0	1,130.2	56.80	20.899		
7,400.0	7,089.0	7,130.6	6,775.7	31.5	32.8	75.16	569.9	-1,475.3	1,194.6	1,134.8	59.83	19.967		
7,500.0	7,109.6	7,200.0	6,786.6	33.5	34.3	74.46	570.9	-1,543.9	1,199.0	1,135.9	63.01	19.028		
7,600.0	7,115.0	7,280.2	6,790.0	35.5	35.9	74.29	571.3	-1,623.9	1,200.1	1,133.4	66.62	18.013		
7,700.0	7,115.0	7,380.2	6,790.0	37.6	38.1	74.29	571.6	-1,723.9	1,200.1	1,129.2	70.87	16.934		
7,800.0	7,115.0	7,480.2	6,790.0	39.8	40.3	74.29	571.8	-1,823.9	1,200.1	1,124.9	75.18	15.963		
7,900.0	7,115.0	7,580.2	6,790.0	41.9	42.5	74.29	572.1	-1,923.9	1,200.1	1,120.5	79.53	15.088		
8,000.0	7,115.0	7,680.2	6,790.0	44.1	44.8	74.29	572.3	-2,023.9	1,200.1	1,116.1	83.94	14.297		
8,100.0	7,115.0	7,780.2	6,790.0	46.4	47.0	74.29	572.6	-2,123.9	1,200.1	1,111.7	88.38	13.578		
8,200.0	7,115.0	7,880.2	6,790.0	48.6	49.3	74.29	572.8	-2,223.9	1,200.1	1,107.2	92.85	12.924		
8,300.0	7,115.0	7,980.2	6,790.0	50.9	51.6	74.29	573.1	-2,323.9	1,200.1	1,102.7	97.35	12.327		
8,400.0	7,115.0	8,080.2	6,790.0	53.2	54.0	74.29	573.3	-2,423.9	1,200.1	1,098.2	101.88	11.779		
8,500.0	7,115.0	8,180.2	6,790.0	55.5	56.3	74.29	573.6	-2,523.9	1,200.1	1,093.6	106.43	11.276		
8,600.0	7,115.0	8,280.2	6,790.0	57.8	58.7	74.29	573.8	-2,623.9	1,200.1	1,089.1	110.99	10.812		
8,700.0	7,115.0	8,380.2	6,790.0	60.2	61.0	74.29	574.1	-2,723.9	1,200.1	1,084.5	115.57	10.384		
8,800.0	7,115.0	8,480.2	6,790.0	62.5	63.4	74.29	574.3	-2,823.9	1,200.1	1,079.9	120.17	9.987		
8,900.0	7,115.0	8,580.2	6,790.0	64.9	65.8	74.29	574.6	-2,923.9	1,200.1	1,075.3	124.77	9.618		
9,000.0	7,115.0	8,680.2	6,790.0	67.2	68.1	74.29	574.8	-3,023.9	1,200.1	1,070.7	129.39	9.274		
9,100.0	7,115.0	8,780.2	6,790.0	69.6	70.5	74.29	575.1	-3,123.9	1,200.1	1,066.0	134.02	8.954		
9,200.0	7,115.0	8,880.2	6,790.0	72.0	72.9	74.29	575.3	-3,223.9	1,200.1	1,061.4	138.66	8.655		
9,300.0	7,115.0	8,980.2	6,790.0	74.4	75.3	74.29	575.6	-3,323.9	1,200.1	1,056.7	143.31	8.374		
9,400.0	7,115.0	9,080.2	6,790.0	76.8	77.7	74.29	575.8	-3,423.9	1,200.1	1,052.1	147.96	8.111		
9,500.0	7,115.0	9,180.2	6,790.0	79.2	80.1	74.29	576.1	-3,523.9	1,200.1	1,047.4	152.62	7.863		
9,600.0	7,115.0	9,280.2	6,790.0	81.6	82.5	74.29	576.3	-3,623.9	1,200.1	1,042.8	157.29	7.629		
9,700.0	7,115.0	9,380.2	6,790.0	84.0	85.0	74.29	576.6	-3,723.9	1,200.1	1,038.1	161.97	7.409		
9,800.0	7,115.0	9,480.2	6,790.0	86.4	87.4	74.29	576.8	-3,823.9	1,200.1	1,033.4	166.64	7.201		
9,900.0	7,115.0	9,580.2	6,790.0	88.8	89.8	74.29	577.1	-3,923.9	1,200.1	1,028.7	171.33	7.004		
10,000.0	7,115.0	9,680.2	6,790.0	91.2	92.2	74.29	577.3	-4,023.9	1,200.1	1,024.0	176.01	6.818		
10,100.0	7,115.0	9,780.2	6,790.0	93.6	94.7	74.29	577.6	-4,123.9	1,200.1	1,019.3	180.71	6.641		
10,200.0	7,115.0	9,880.2	6,790.0	96.1	97.1	74.29	577.8	-4,223.9	1,200.1	1,014.7	185.40	6.473		
10,300.0	7,115.0	9,980.2	6,790.0	98.5	99.5	74.29	578.1	-4,323.9	1,200.1	1,010.0	190.10	6.313		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 1 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference  (usft)	Offset  (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,400.0	7,115.0	10,080.2	6,790.0	100.9	102.0	74.29	578.3	-4,423.9	1,200.1	1,005.3	194.80	6.160		
10,500.0	7,115.0	10,180.2	6,790.0	103.4	104.4	74.29	578.6	-4,523.9	1,200.1	1,000.5	199.51	6.015		
10,600.0	7,115.0	10,280.2	6,790.0	105.8	106.8	74.29	578.8	-4,623.9	1,200.1	995.8	204.22	5.876		
10,700.0	7,115.0	10,380.2	6,790.0	108.2	109.3	74.29	579.1	-4,723.9	1,200.1	991.1	208.93	5.744		
10,800.0	7,115.0	10,480.2	6,790.0	110.7	111.7	74.29	579.3	-4,823.9	1,200.1	986.4	213.64	5.617		
10,900.0	7,115.0	10,580.2	6,790.0	113.1	114.2	74.29	579.6	-4,923.9	1,200.1	981.7	218.35	5.496		
11,000.0	7,115.0	10,680.2	6,790.0	115.5	116.6	74.29	579.8	-5,023.9	1,200.1	977.0	223.07	5.380		
11,100.0	7,115.0	10,780.2	6,790.0	118.0	119.1	74.29	580.1	-5,123.9	1,200.1	972.3	227.79	5.268		
11,200.0	7,115.0	10,880.2	6,790.0	120.4	121.5	74.29	580.3	-5,223.9	1,200.1	967.5	232.51	5.161		
11,300.0	7,115.0	10,980.2	6,790.0	122.9	124.0	74.29	580.6	-5,323.9	1,200.1	962.8	237.23	5.059		
11,400.0	7,115.0	11,080.2	6,790.0	125.3	126.4	74.29	580.8	-5,423.9	1,200.1	958.1	241.96	4.960		
11,500.0	7,115.0	11,180.2	6,790.0	127.8	128.9	74.29	581.1	-5,523.9	1,200.1	953.4	246.68	4.865		
11,600.0	7,115.0	11,280.2	6,790.0	130.2	131.3	74.29	581.3	-5,623.9	1,200.1	948.6	251.41	4.773		
11,700.0	7,115.0	11,380.2	6,790.0	132.7	133.8	74.29	581.6	-5,723.9	1,200.1	943.9	256.14	4.685		
11,800.0	7,115.0	11,480.2	6,790.0	135.1	136.2	74.29	581.8	-5,823.9	1,200.1	939.2	260.87	4.600		
11,900.0	7,115.0	11,580.2	6,790.0	137.6	138.7	74.29	582.1	-5,923.9	1,200.1	934.5	265.60	4.518		
12,000.0	7,115.0	11,680.2	6,790.0	140.0	141.1	74.29	582.3	-6,023.9	1,200.1	929.7	270.34	4.439		
12,100.0	7,115.0	11,780.2	6,790.0	142.5	143.6	74.29	582.6	-6,123.9	1,200.1	925.0	275.07	4.363		
12,200.0	7,115.0	11,880.2	6,790.0	144.9	146.0	74.29	582.8	-6,223.9	1,200.1	920.3	279.80	4.289		
12,300.0	7,115.0	11,980.2	6,790.0	147.4	148.5	74.29	583.1	-6,323.9	1,200.1	915.5	284.54	4.218		
12,400.0	7,115.0	12,080.2	6,790.0	149.8	150.9	74.29	583.3	-6,423.9	1,200.1	910.8	289.28	4.148		
12,500.0	7,115.0	12,180.2	6,790.0	152.3	153.4	74.29	583.6	-6,523.9	1,200.1	906.0	294.02	4.082		
12,600.0	7,115.0	12,280.2	6,790.0	154.7	155.9	74.29	583.8	-6,623.9	1,200.1	901.3	298.75	4.017		
12,700.0	7,115.0	12,380.2	6,790.0	157.2	158.3	74.29	584.1	-6,723.9	1,200.1	896.6	303.49	3.954		
12,800.0	7,115.0	12,480.2	6,790.0	159.6	160.8	74.29	584.3	-6,823.9	1,200.1	891.8	308.23	3.893		
12,900.0	7,115.0	12,580.2	6,790.0	162.1	163.2	74.29	584.6	-6,923.9	1,200.1	887.1	312.97	3.834		
13,000.0	7,115.0	12,680.2	6,790.0	164.6	165.7	74.29	584.8	-7,023.9	1,200.1	882.3	317.72	3.777		
13,100.0	7,115.0	12,780.2	6,790.0	167.0	168.2	74.29	585.1	-7,123.9	1,200.1	877.6	322.46	3.722		
13,200.0	7,115.0	12,880.2	6,790.0	169.5	170.6	74.29	585.3	-7,223.9	1,200.1	872.9	327.20	3.668		
13,300.0	7,115.0	12,980.2	6,790.0	171.9	173.1	74.29	585.6	-7,323.9	1,200.1	868.1	331.95	3.615		
13,400.0	7,115.0	13,080.2	6,790.0	174.4	175.5	74.29	585.8	-7,423.9	1,200.1	863.4	336.69	3.564		
13,500.0	7,115.0	13,180.2	6,790.0	176.9	178.0	74.29	586.1	-7,523.9	1,200.1	858.6	341.43	3.515		
13,600.0	7,115.0	13,280.2	6,790.0	179.3	180.5	74.29	586.3	-7,623.9	1,200.1	853.9	346.18	3.467		
13,700.0	7,115.0	13,380.2	6,790.0	181.8	182.9	74.29	586.6	-7,723.9	1,200.1	849.1	350.93	3.420		
13,800.0	7,115.0	13,480.2	6,790.0	184.2	185.4	74.29	586.8	-7,823.9	1,200.1	844.4	355.67	3.374		
13,900.0	7,115.0	13,580.2	6,790.0	186.7	187.8	74.29	587.1	-7,923.9	1,200.1	839.6	360.42	3.330		
14,000.0	7,115.0	13,680.2	6,790.0	189.2	190.3	74.29	587.3	-8,023.9	1,200.1	834.9	365.17	3.286		
14,100.0	7,115.0	13,780.2	6,790.0	191.6	192.8	74.29	587.6	-8,123.9	1,200.1	830.1	369.91	3.244		
14,200.0	7,115.0	13,880.2	6,790.0	194.1	195.2	74.29	587.8	-8,223.9	1,200.1	825.4	374.66	3.203		
14,300.0	7,115.0	13,980.2	6,790.0	196.6	197.7	74.29	588.1	-8,323.9	1,200.1	820.6	379.41	3.163		
14,400.0	7,115.0	14,080.2	6,790.0	199.0	200.2	74.29	588.3	-8,423.9	1,200.1	815.9	384.16	3.124		
14,500.0	7,115.0	14,180.2	6,790.0	201.5	202.6	74.29	588.6	-8,523.9	1,200.1	811.1	388.91	3.086		
14,600.0	7,115.0	14,280.2	6,790.0	203.9	205.1	74.29	588.8	-8,623.9	1,200.1	806.4	393.66	3.048		
14,700.0	7,115.0	14,380.2	6,790.0	206.4	207.6	74.29	589.1	-8,723.9	1,200.1	801.6	398.41	3.012		
14,800.0	7,115.0	14,480.2	6,790.0	208.9	210.0	74.29	589.3	-8,823.9	1,200.1	796.9	403.16	2.977		
14,900.0	7,115.0	14,580.2	6,790.0	211.3	212.5	74.29	589.6	-8,923.9	1,200.1	792.1	407.91	2.942		
15,000.0	7,115.0	14,680.2	6,790.0	213.8	215.0	74.29	589.8	-9,023.9	1,200.1	787.4	412.66	2.908		
15,100.0	7,115.0	14,780.2	6,790.0	216.3	217.4	74.29	590.1	-9,123.9	1,200.1	782.6	417.42	2.875		
15,200.0	7,115.0	14,880.2	6,790.0	218.7	219.9	74.29	590.3	-9,223.9	1,200.1	777.9	422.17	2.843		
15,300.0	7,115.0	14,980.2	6,790.0	221.2	222.4	74.29	590.6	-9,323.9	1,200.1	773.1	426.92	2.811		
15,400.0	7,115.0	15,080.2	6,790.0	223.7	224.8	74.29	590.8	-9,423.9	1,200.1	768.4	431.67	2.780		
15,500.0	7,115.0	15,180.2	6,790.0	226.1	227.3	74.29	591.1	-9,523.9	1,200.1	763.6	436.42	2.750		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 1 - Hz - Plan #1													Offset Site Error: 0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
15,600.0	7,115.0	15,280.2	6,790.0	228.6	229.8	74.29	591.3	-9,623.9	1,200.1	758.9	441.18	2.720	
15,700.0	7,115.0	15,380.2	6,790.0	231.1	232.2	74.29	591.6	-9,723.9	1,200.1	754.1	445.93	2.691	
15,800.0	7,115.0	15,480.2	6,790.0	233.5	234.7	74.29	591.8	-9,823.9	1,200.1	749.4	450.68	2.663	
15,900.0	7,115.0	15,580.2	6,790.0	236.0	237.2	74.29	592.1	-9,923.9	1,200.1	744.6	455.44	2.635	
16,000.0	7,115.0	15,680.2	6,790.0	238.5	239.6	74.29	592.3	-10,023.9	1,200.1	739.9	460.19	2.608	
16,100.0	7,115.0	15,780.2	6,790.0	240.9	242.1	74.29	592.6	-10,123.9	1,200.1	735.1	464.95	2.581	
16,200.0	7,115.0	15,880.2	6,790.0	243.4	244.6	74.29	592.8	-10,223.9	1,200.1	730.4	469.70	2.555	
16,300.0	7,115.0	15,980.2	6,790.0	245.9	247.0	74.29	593.0	-10,323.9	1,200.1	725.6	474.46	2.529	
16,400.0	7,115.0	16,080.2	6,790.0	248.3	249.5	74.29	593.3	-10,423.9	1,200.1	720.8	479.21	2.504	
16,500.0	7,115.0	16,180.2	6,790.0	250.8	252.0	74.29	593.5	-10,523.9	1,200.1	716.1	483.97	2.480	
16,600.0	7,115.0	16,280.2	6,790.0	253.3	254.4	74.29	593.8	-10,623.9	1,200.1	711.3	488.72	2.456	
16,700.0	7,115.0	16,380.2	6,790.0	255.7	256.9	74.29	594.0	-10,723.9	1,200.1	706.6	493.48	2.432	
16,800.0	7,115.0	16,480.2	6,790.0	258.2	259.4	74.29	594.3	-10,823.9	1,200.1	701.8	498.23	2.409	
16,900.0	7,115.0	16,580.2	6,790.0	260.7	261.8	74.29	594.5	-10,923.9	1,200.1	697.1	502.99	2.386	
17,000.0	7,115.0	16,680.2	6,790.0	263.1	264.3	74.29	594.8	-11,023.9	1,200.1	692.3	507.74	2.364	
17,100.0	7,115.0	16,780.2	6,790.0	265.6	266.8	74.29	595.0	-11,123.9	1,200.1	687.6	512.50	2.342	
17,200.0	7,115.0	16,880.2	6,790.0	268.1	269.3	74.29	595.3	-11,223.9	1,200.1	682.8	517.26	2.320	
17,300.0	7,115.0	16,980.2	6,790.0	270.5	271.7	74.29	595.5	-11,323.9	1,200.1	678.0	522.01	2.299	
17,400.0	7,115.0	17,080.2	6,790.0	273.0	274.2	74.29	595.8	-11,423.9	1,200.1	673.3	526.77	2.278	
17,500.0	7,115.0	17,180.2	6,790.0	275.5	276.7	74.29	596.0	-11,523.9	1,200.1	668.5	531.53	2.258	
17,600.0	7,115.0	17,280.2	6,790.0	277.9	279.1	74.29	596.3	-11,623.9	1,200.1	663.8	536.28	2.238	
17,700.0	7,115.0	17,380.2	6,790.0	280.4	281.6	74.29	596.5	-11,723.9	1,200.1	659.0	541.04	2.218	
17,730.1	7,115.0	17,410.2	6,790.0	281.2	282.3	74.29	596.6	-11,753.9	1,200.1	657.6	542.47	2.212 SF	

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-149.09	-96.2	-57.6	112.1					
100.0	100.0	100.0	100.0	0.1	0.0	-149.09	-96.2	-57.6	112.1	112.0	0.13	843.777		
200.0	200.0	200.0	200.0	0.3	0.0	-149.09	-96.2	-57.6	112.1	111.8	0.31	364.671 CC		
300.0	300.0	298.3	298.3	0.5	0.0	-30.47	-96.6	-58.3	112.1	111.6	0.48	232.527		
400.0	400.0	396.6	396.5	0.7	0.0	-30.56	-98.0	-60.4	112.2	111.5	0.66	170.462		
500.0	499.9	494.8	494.7	0.9	0.0	-30.72	-100.3	-63.9	112.2	111.4	0.84	134.273		
600.0	599.7	593.1	592.8	1.1	0.0	-30.94	-103.5	-68.9	112.4	111.3	1.02	110.471		
700.0	699.4	691.4	690.8	1.3	0.0	-31.22	-107.6	-75.3	112.5	111.3	1.20	93.550 ES		
800.0	798.9	789.7	788.6	1.5	0.0	-31.56	-112.6	-83.0	112.7	111.3	1.39	80.847		
900.0	898.3	887.9	886.3	1.8	0.0	-31.97	-118.6	-92.2	113.0	111.4	1.59	70.913		
1,000.0	997.4	986.2	983.8	2.0	0.0	-32.43	-125.4	-102.8	113.2	111.4	1.80	62.896		
1,100.0	1,096.3	1,084.5	1,081.0	2.3	0.0	-32.95	-133.2	-114.8	113.6	111.6	2.02	56.262		
1,200.0	1,194.9	1,182.8	1,178.0	2.7	0.0	-33.53	-141.8	-128.2	113.9	111.7	2.25	50.661		
1,300.0	1,293.3	1,281.1	1,274.7	3.0	0.0	-34.16	-151.4	-143.0	114.4	111.9	2.49	45.878		
1,400.0	1,391.5	1,379.4	1,371.1	3.4	0.0	-34.54	-161.8	-159.2	115.8	113.1	2.74	42.243		
1,500.0	1,489.7	1,477.6	1,467.0	3.7	0.0	-34.49	-173.2	-176.7	118.7	115.8	2.99	39.755		
1,600.0	1,587.9	1,575.7	1,562.5	4.1	0.0	-34.04	-185.4	-195.6	123.1	119.9	3.22	38.191		
1,700.0	1,686.1	1,673.6	1,657.4	4.4	0.0	-33.26	-198.5	-215.9	129.0	125.6	3.45	37.385		
1,800.0	1,784.3	1,771.3	1,751.7	4.8	0.0	-32.21	-212.4	-237.4	136.4	132.8	3.67	37.210		
1,900.0	1,882.5	1,868.8	1,845.3	5.2	0.0	-30.98	-227.1	-260.3	145.4	141.5	3.87	37.571		
2,000.0	1,980.8	1,965.9	1,938.0	5.5	0.0	-29.62	-242.7	-284.3	156.0	151.9	4.06	38.390		
2,100.0	2,079.0	2,062.5	2,029.9	5.9	0.0	-28.21	-259.0	-309.6	168.1	163.9	4.24	39.604		
2,200.0	2,177.2	2,158.8	2,120.9	6.3	0.0	-26.79	-276.1	-336.1	181.9	177.5	4.42	41.162		
2,300.0	2,275.4	2,254.5	2,210.8	6.7	0.0	-25.40	-293.9	-363.7	197.4	192.8	4.59	43.017		
2,400.0	2,373.6	2,349.7	2,299.7	7.0	0.0	-24.06	-312.5	-392.4	214.4	209.7	4.75	45.131		
2,500.0	2,471.8	2,444.3	2,387.4	7.4	0.0	-22.80	-331.7	-422.1	233.2	228.3	4.91	47.468		
2,600.0	2,570.0	2,538.3	2,473.9	7.8	0.0	-21.62	-351.5	-452.8	253.6	248.5	5.07	49.999		
2,700.0	2,668.3	2,631.8	2,559.4	8.1	0.0	-20.52	-372.0	-484.6	275.6	270.3	5.23	52.696		
2,800.0	2,766.5	2,729.0	2,648.1	8.5	0.0	-19.51	-393.7	-518.1	298.3	293.0	5.39	55.386		
2,900.0	2,864.7	2,826.3	2,736.7	8.9	0.0	-18.64	-415.4	-551.7	321.2	315.7	5.55	57.900		
3,000.0	2,962.9	2,923.5	2,825.4	9.3	0.0	-17.89	-437.1	-585.3	344.1	338.4	5.71	60.254		
3,100.0	3,061.1	3,020.8	2,914.0	9.6	0.0	-17.23	-458.8	-618.9	367.1	361.2	5.88	62.462		
3,200.0	3,159.3	3,118.0	3,002.6	10.0	0.0	-16.64	-480.5	-652.5	390.1	384.1	6.05	64.536		
3,300.0	3,257.6	3,215.2	3,091.3	10.4	0.0	-16.13	-502.2	-686.1	413.2	407.0	6.21	66.487		
3,400.0	3,355.8	3,312.5	3,179.9	10.8	0.0	-15.66	-523.9	-719.6	436.3	429.9	6.39	68.325		
3,500.0	3,454.0	3,409.7	3,268.6	11.1	0.0	-15.25	-545.6	-753.2	459.4	452.8	6.56	70.060		
3,600.0	3,552.2	3,507.0	3,357.2	11.5	0.0	-14.87	-567.3	-786.8	482.5	475.8	6.73	71.700		
3,700.0	3,650.4	3,604.2	3,445.9	11.9	0.0	-14.53	-589.0	-820.4	505.6	498.7	6.90	73.253		
3,800.0	3,748.6	3,701.5	3,534.5	12.3	0.0	-14.22	-610.7	-854.0	528.8	521.7	7.08	74.725		
3,900.0	3,846.8	3,798.7	3,623.2	12.6	0.0	-13.93	-632.4	-887.6	552.0	544.7	7.25	76.121		
4,000.0	3,945.1	3,895.9	3,711.8	13.0	0.0	-13.67	-654.1	-921.1	575.2	567.7	7.43	77.449		
4,100.0	4,043.3	3,993.2	3,800.4	13.4	0.0	-13.42	-675.8	-954.7	598.3	590.7	7.60	78.712		
4,200.0	4,141.5	4,090.4	3,889.1	13.8	0.0	-13.20	-697.5	-988.3	621.5	613.8	7.78	79.915		
4,300.0	4,239.7	4,187.7	3,977.7	14.1	0.0	-12.99	-719.2	-1,021.9	644.8	636.8	7.95	81.062		
4,400.0	4,337.9	4,284.9	4,066.4	14.5	0.0	-12.80	-740.9	-1,055.5	668.0	659.9	8.13	82.157		
4,500.0	4,436.1	4,382.2	4,155.0	14.9	0.0	-12.62	-762.6	-1,089.1	691.2	682.9	8.31	83.204		
4,600.0	4,534.3	4,479.4	4,243.7	15.3	0.0	-12.45	-784.3	-1,122.6	714.4	706.0	8.48	84.206		
4,700.0	4,632.6	4,576.6	4,332.3	15.6	0.0	-12.29	-806.0	-1,156.2	737.7	729.0	8.66	85.165		
4,800.0	4,730.8	4,673.9	4,420.9	16.0	0.0	-12.14	-827.7	-1,189.8	760.9	752.1	8.84	86.084		
4,900.0	4,829.0	4,771.1	4,509.6	16.4	0.0	-12.00	-849.4	-1,223.4	784.2	775.2	9.02	86.965		
5,000.0	4,927.2	4,868.4	4,598.2	16.8	0.0	-11.87	-871.1	-1,257.0	807.4	798.2	9.19	87.811		
5,100.0	5,025.4	4,965.6	4,686.9	17.1	0.0	-11.74	-892.8	-1,290.5	830.7	821.3	9.37	88.625		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
5,200.0	5,123.6	5,062.9	4,775.5	17.5	0.0	-11.63	-914.5	-1,324.1	853.9	844.4	9.55	89.406		
5,300.0	5,221.8	5,160.1	4,864.2	17.9	0.0	-11.52	-936.2	-1,357.7	877.2	867.5	9.73	90.159		
5,400.0	5,320.1	5,257.3	4,952.8	18.3	0.0	-11.41	-957.9	-1,391.3	900.5	890.6	9.91	90.883		
5,500.0	5,418.3	5,354.6	5,041.4	18.6	0.0	-11.31	-979.6	-1,424.9	923.7	913.7	10.09	91.581		
5,600.0	5,516.5	5,451.8	5,130.1	19.0	0.0	-11.21	-1,001.3	-1,458.5	947.0	936.7	10.27	92.255		
5,700.0	5,614.7	5,549.1	5,218.7	19.4	0.0	-11.12	-1,023.0	-1,492.0	970.3	959.8	10.44	92.904		
5,800.0	5,712.9	5,646.3	5,307.4	19.8	0.0	-11.04	-1,044.7	-1,525.6	993.6	982.9	10.62	93.531		
5,900.0	5,811.1	5,743.6	5,396.0	20.1	0.0	-10.95	-1,066.4	-1,559.2	1,016.8	1,006.0	10.80	94.137		
6,000.0	5,909.3	5,840.8	5,484.7	20.5	0.0	-10.87	-1,088.0	-1,592.8	1,040.1	1,029.1	10.98	94.723		
6,100.0	6,007.6	5,938.0	5,573.3	20.9	0.0	-10.80	-1,109.7	-1,626.4	1,063.4	1,052.2	11.16	95.289		
6,200.0	6,105.8	6,035.3	5,661.9	21.3	0.0	-10.73	-1,131.4	-1,660.0	1,086.7	1,075.3	11.34	95.837		
6,300.0	6,204.0	6,132.5	5,750.6	21.6	0.0	-10.66	-1,153.1	-1,693.5	1,110.0	1,098.4	11.52	96.368		
6,400.0	6,302.2	6,229.8	5,839.2	22.0	0.0	-10.59	-1,174.8	-1,727.1	1,133.3	1,121.6	11.70	96.882		
6,500.0	6,400.4	6,327.0	5,927.9	22.4	0.0	-10.53	-1,196.5	-1,760.7	1,156.5	1,144.7	11.88	97.381		
6,600.0	6,498.6	6,424.3	6,016.5	22.8	0.0	-10.47	-1,218.2	-1,794.3	1,179.8	1,167.8	12.06	97.864		
6,700.0	6,596.8	6,521.5	6,105.2	23.1	0.0	-12.69	-1,239.9	-1,827.9	1,203.0	1,190.8	12.22	98.462		
7,000.0	6,867.2	6,815.3	6,372.9	25.5	0.0	-32.24	-1,305.5	-1,929.3	1,215.0	1,201.8	13.16	92.290		
7,100.0	6,941.1	6,850.0	6,404.5	26.7	0.0	-35.19	-1,313.2	-1,941.7	1,197.7	1,183.6	14.09	84.981		
7,200.0	7,003.6	6,900.0	6,448.7	28.1	0.0	-38.54	-1,324.0	-1,962.3	1,173.8	1,158.1	15.72	74.670		
7,300.0	7,053.3	6,950.0	6,491.2	29.7	0.0	-42.31	-1,334.4	-1,986.5	1,144.5	1,126.4	18.12	63.146		
7,400.0	7,089.0	6,977.0	6,513.4	31.5	0.0	-45.97	-1,339.8	-2,000.9	1,110.1	1,089.1	21.06	52.708		
7,500.0	7,109.6	7,013.2	6,542.1	33.5	0.0	-50.38	-1,346.8	-2,021.8	1,072.0	1,047.4	24.67	43.462		
7,600.0	7,115.0	7,050.0	6,570.1	35.5	0.0	-54.74	-1,353.6	-2,044.7	1,031.5	1,003.2	28.34	36.400		
7,700.0	7,115.0	7,084.9	6,595.4	37.6	0.0	-56.23	-1,359.8	-2,067.9	994.4	963.8	30.61	32.481		
7,800.0	7,115.0	7,127.2	6,624.4	39.8	0.0	-57.97	-1,366.8	-2,097.9	963.3	930.3	33.04	29.153		
7,900.0	7,115.0	7,175.5	6,655.0	41.9	0.0	-59.84	-1,374.3	-2,134.5	938.4	902.8	35.59	26.367		
8,000.0	7,115.0	7,230.4	6,686.4	44.1	0.0	-61.80	-1,381.9	-2,178.9	919.4	881.1	38.23	24.048		
8,100.0	7,115.0	7,292.4	6,717.3	46.4	0.0	-63.76	-1,389.3	-2,232.1	905.6	864.6	40.92	22.131		
8,200.0	7,115.0	7,361.6	6,745.6	48.6	0.0	-65.59	-1,396.1	-2,294.8	896.2	852.6	43.61	20.553		
8,300.0	7,115.0	7,437.3	6,768.8	50.9	0.0	-67.10	-1,401.7	-2,366.6	890.5	844.3	46.23	19.264		
8,400.0	7,115.0	7,518.2	6,784.3	53.2	0.0	-68.12	-1,405.3	-2,445.8	887.5	838.8	48.72	18.215		
8,500.0	7,115.0	7,604.3	6,790.0	55.5	0.0	-68.49	-1,406.4	-2,531.7	886.5	835.5	51.03	17.372		
8,534.4	7,115.0	7,635.8	6,790.0	56.3	0.0	-68.49	-1,406.4	-2,563.2	886.5	834.7	51.79	17.118		
8,600.0	7,115.0	7,701.5	6,790.0	57.8	0.0	-68.49	-1,406.2	-2,628.8	886.5	833.3	53.23	16.654		
8,700.0	7,115.0	7,801.5	6,790.0	60.2	0.0	-68.49	-1,405.9	-2,728.8	886.5	831.1	55.44	15.990		
8,800.0	7,115.0	7,901.5	6,790.0	62.5	0.0	-68.49	-1,405.7	-2,828.8	886.5	828.9	57.66	15.375		
8,900.0	7,115.0	8,001.5	6,790.0	64.9	0.0	-68.49	-1,405.4	-2,928.8	886.5	826.7	59.88	14.804		
9,000.0	7,115.0	8,101.5	6,790.0	67.2	0.0	-68.49	-1,405.2	-3,028.8	886.5	824.4	62.11	14.273		
9,100.0	7,115.0	8,201.5	6,790.0	69.6	0.0	-68.49	-1,404.9	-3,128.8	886.5	822.2	64.35	13.778		
9,200.0	7,115.0	8,301.5	6,790.0	72.0	0.0	-68.49	-1,404.7	-3,228.8	886.5	820.0	66.59	13.314		
9,300.0	7,115.0	8,401.5	6,790.0	74.4	0.0	-68.49	-1,404.4	-3,328.8	886.5	817.7	68.83	12.880		
9,400.0	7,115.0	8,501.5	6,790.0	76.8	0.0	-68.49	-1,404.2	-3,428.8	886.5	815.5	71.08	12.473		
9,500.0	7,115.0	8,601.5	6,790.0	79.2	0.0	-68.49	-1,403.9	-3,528.8	886.5	813.2	73.33	12.090		
9,600.0	7,115.0	8,701.5	6,790.0	81.6	0.0	-68.49	-1,403.7	-3,628.8	886.5	811.0	75.58	11.730		
9,700.0	7,115.0	8,801.5	6,790.0	84.0	0.0	-68.49	-1,403.4	-3,728.8	886.5	808.7	77.84	11.390		
9,800.0	7,115.0	8,901.5	6,790.0	86.4	0.0	-68.49	-1,403.2	-3,828.8	886.5	806.4	80.10	11.068		
9,900.0	7,115.0	9,001.5	6,790.0	88.8	0.0	-68.49	-1,402.9	-3,928.8	886.5	804.2	82.36	10.764		
10,000.0	7,115.0	9,101.5	6,790.0	91.2	0.0	-68.49	-1,402.7	-4,028.8	886.5	801.9	84.62	10.476		
10,100.0	7,115.0	9,201.5	6,790.0	93.6	0.0	-68.49	-1,402.4	-4,128.8	886.5	799.6	86.89	10.203		
10,200.0	7,115.0	9,301.5	6,790.0	96.1	0.0	-68.49	-1,402.2	-4,228.8	886.5	797.4	89.16	9.944		
10,300.0	7,115.0	9,401.5	6,790.0	98.5	0.0	-68.49	-1,401.9	-4,328.8	886.5	795.1	91.43	9.697		
10,400.0	7,115.0	9,501.5	6,790.0	100.9	0.0	-68.49	-1,401.7	-4,428.8	886.5	792.8	93.70	9.462		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
10,500.0	7,115.0	9,601.5	6,790.0	103.4	0.0	-68.49	-1,401.4	-4,528.8	886.5	790.6	95.97	9.238		
10,600.0	7,115.0	9,701.5	6,790.0	105.8	0.0	-68.49	-1,401.2	-4,628.8	886.5	788.3	98.24	9.024		
10,700.0	7,115.0	9,801.5	6,790.0	108.2	0.0	-68.49	-1,400.9	-4,728.8	886.5	786.0	100.52	8.819		
10,800.0	7,115.0	9,901.5	6,790.0	110.7	0.0	-68.49	-1,400.7	-4,828.8	886.5	783.7	102.80	8.624		
10,900.0	7,115.0	10,001.5	6,790.0	113.1	0.0	-68.49	-1,400.4	-4,928.8	886.5	781.5	105.07	8.437		
11,000.0	7,115.0	10,101.5	6,790.0	115.5	0.0	-68.49	-1,400.2	-5,028.8	886.5	779.2	107.35	8.258		
11,100.0	7,115.0	10,201.5	6,790.0	118.0	0.0	-68.49	-1,399.9	-5,128.8	886.5	776.9	109.63	8.086		
11,200.0	7,115.0	10,301.5	6,790.0	120.4	0.0	-68.49	-1,399.7	-5,228.8	886.5	774.6	111.91	7.921		
11,300.0	7,115.0	10,401.5	6,790.0	122.9	0.0	-68.49	-1,399.4	-5,328.8	886.5	772.3	114.20	7.763		
11,400.0	7,115.0	10,501.5	6,790.0	125.3	0.0	-68.49	-1,399.2	-5,428.8	886.5	770.0	116.48	7.611		
11,500.0	7,115.0	10,601.5	6,790.0	127.8	0.0	-68.49	-1,398.9	-5,528.8	886.5	767.8	118.76	7.465		
11,600.0	7,115.0	10,701.5	6,790.0	130.2	0.0	-68.49	-1,398.7	-5,628.8	886.5	765.5	121.05	7.324		
11,700.0	7,115.0	10,801.5	6,790.0	132.7	0.0	-68.49	-1,398.4	-5,728.8	886.5	763.2	123.33	7.188		
11,800.0	7,115.0	10,901.5	6,790.0	135.1	0.0	-68.49	-1,398.2	-5,828.8	886.5	760.9	125.62	7.057		
11,900.0	7,115.0	11,001.5	6,790.0	137.6	0.0	-68.49	-1,397.9	-5,928.8	886.5	758.6	127.90	6.931		
12,000.0	7,115.0	11,101.5	6,790.0	140.0	0.0	-68.49	-1,397.7	-6,028.8	886.5	756.3	130.19	6.809		
12,100.0	7,115.0	11,201.5	6,790.0	142.5	0.0	-68.49	-1,397.4	-6,128.8	886.5	754.0	132.48	6.692		
12,200.0	7,115.0	11,301.5	6,790.0	144.9	0.0	-68.49	-1,397.2	-6,228.8	886.5	751.8	134.77	6.578		
12,300.0	7,115.0	11,401.5	6,790.0	147.4	0.0	-68.49	-1,396.9	-6,328.8	886.5	749.5	137.05	6.468		
12,400.0	7,115.0	11,501.5	6,790.0	149.8	0.0	-68.49	-1,396.7	-6,428.8	886.5	747.2	139.34	6.362		
12,500.0	7,115.0	11,601.5	6,790.0	152.3	0.0	-68.49	-1,396.4	-6,528.8	886.5	744.9	141.63	6.259		
12,600.0	7,115.0	11,701.5	6,790.0	154.7	0.0	-68.49	-1,396.2	-6,628.8	886.5	742.6	143.92	6.160		
12,700.0	7,115.0	11,801.5	6,790.0	157.2	0.0	-68.49	-1,395.9	-6,728.8	886.5	740.3	146.21	6.063		
12,800.0	7,115.0	11,901.5	6,790.0	159.6	0.0	-68.49	-1,395.7	-6,828.8	886.5	738.0	148.50	5.970		
12,900.0	7,115.0	12,001.5	6,790.0	162.1	0.0	-68.49	-1,395.4	-6,928.8	886.5	735.7	150.80	5.879		
13,000.0	7,115.0	12,101.5	6,790.0	164.6	0.0	-68.49	-1,395.2	-7,028.8	886.5	733.4	153.09	5.791		
13,100.0	7,115.0	12,201.5	6,790.0	167.0	0.0	-68.49	-1,394.9	-7,128.8	886.5	731.1	155.38	5.706		
13,200.0	7,115.0	12,301.5	6,790.0	169.5	0.0	-68.49	-1,394.7	-7,228.8	886.5	728.9	157.67	5.623		
13,300.0	7,115.0	12,401.5	6,790.0	171.9	0.0	-68.49	-1,394.4	-7,328.8	886.5	726.6	159.96	5.542		
13,400.0	7,115.0	12,501.5	6,790.0	174.4	0.0	-68.49	-1,394.2	-7,428.8	886.5	724.3	162.26	5.464		
13,500.0	7,115.0	12,601.5	6,790.0	176.9	0.0	-68.49	-1,393.9	-7,528.8	886.5	722.0	164.55	5.388		
13,600.0	7,115.0	12,701.5	6,790.0	179.3	0.0	-68.49	-1,393.7	-7,628.8	886.5	719.7	166.84	5.314		
13,700.0	7,115.0	12,801.5	6,790.0	181.8	0.0	-68.49	-1,393.4	-7,728.8	886.5	717.4	169.14	5.241		
13,800.0	7,115.0	12,901.5	6,790.0	184.2	0.0	-68.49	-1,393.2	-7,828.8	886.5	715.1	171.43	5.171		
13,900.0	7,115.0	13,001.5	6,790.0	186.7	0.0	-68.49	-1,392.9	-7,928.8	886.5	712.8	173.72	5.103		
14,000.0	7,115.0	13,101.5	6,790.0	189.2	0.0	-68.49	-1,392.7	-8,028.8	886.5	710.5	176.02	5.037		
14,100.0	7,115.0	13,201.5	6,790.0	191.6	0.0	-68.49	-1,392.4	-8,128.8	886.5	708.2	178.31	4.972		
14,200.0	7,115.0	13,301.5	6,790.0	194.1	0.0	-68.49	-1,392.2	-8,228.8	886.5	705.9	180.61	4.909		
14,300.0	7,115.0	13,401.5	6,790.0	196.6	0.0	-68.49	-1,391.9	-8,328.8	886.5	703.6	182.90	4.847		
14,400.0	7,115.0	13,501.5	6,790.0	199.0	0.0	-68.49	-1,391.7	-8,428.8	886.5	701.3	185.20	4.787		
14,500.0	7,115.0	13,601.5	6,790.0	201.5	0.0	-68.49	-1,391.4	-8,528.8	886.5	699.0	187.49	4.728		
14,600.0	7,115.0	13,701.5	6,790.0	203.9	0.0	-68.49	-1,391.2	-8,628.8	886.5	696.7	189.79	4.671		
14,700.0	7,115.0	13,801.5	6,790.0	206.4	0.0	-68.49	-1,390.9	-8,728.8	886.5	694.4	192.08	4.615		
14,800.0	7,115.0	13,901.5	6,790.0	208.9	0.0	-68.49	-1,390.7	-8,828.8	886.5	692.1	194.38	4.561		
14,900.0	7,115.0	14,001.5	6,790.0	211.3	0.0	-68.49	-1,390.4	-8,928.8	886.5	689.8	196.68	4.507		
15,000.0	7,115.0	14,101.5	6,790.0	213.8	0.0	-68.49	-1,390.2	-9,028.8	886.5	687.5	198.97	4.455		
15,100.0	7,115.0	14,201.5	6,790.0	216.3	0.0	-68.49	-1,389.9	-9,128.8	886.5	685.2	201.27	4.405		
15,200.0	7,115.0	14,301.5	6,790.0	218.7	0.0	-68.49	-1,389.7	-9,228.8	886.5	682.9	203.57	4.355		
15,300.0	7,115.0	14,401.5	6,790.0	221.2	0.0	-68.49	-1,389.4	-9,328.8	886.5	680.7	205.86	4.306		
15,400.0	7,115.0	14,501.5	6,790.0	223.7	0.0	-68.49	-1,389.2	-9,428.8	886.5	678.4	208.16	4.259		
15,500.0	7,115.0	14,601.5	6,790.0	226.1	0.0	-68.49	-1,388.9	-9,528.8	886.5	676.1	210.46	4.212		
15,600.0	7,115.0	14,701.5	6,790.0	228.6	0.0	-68.49	-1,388.7	-9,628.8	886.5	673.8	212.75	4.167		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,700.0	7,115.0	14,801.5	6,790.0	231.1	0.0	-68.49	-1,388.4	-9,728.8	886.5	671.5	215.05	4.122		
15,800.0	7,115.0	14,901.5	6,790.0	233.5	0.0	-68.49	-1,388.2	-9,828.8	886.5	669.2	217.35	4.079		
15,900.0	7,115.0	15,001.5	6,790.0	236.0	0.0	-68.49	-1,387.9	-9,928.8	886.5	666.9	219.65	4.036		
16,000.0	7,115.0	15,101.5	6,790.0	238.5	0.0	-68.49	-1,387.7	-10,028.8	886.5	664.6	221.94	3.994		
16,100.0	7,115.0	15,201.5	6,790.0	240.9	0.0	-68.49	-1,387.4	-10,128.8	886.5	662.3	224.24	3.953		
16,200.0	7,115.0	15,301.5	6,790.0	243.4	0.0	-68.49	-1,387.2	-10,228.8	886.5	660.0	226.54	3.913		
16,300.0	7,115.0	15,401.5	6,790.0	245.9	0.0	-68.49	-1,386.9	-10,328.8	886.5	657.7	228.84	3.874		
16,400.0	7,115.0	15,501.5	6,790.0	248.3	0.0	-68.49	-1,386.7	-10,428.8	886.5	655.4	231.14	3.835		
16,500.0	7,115.0	15,601.5	6,790.0	250.8	0.0	-68.49	-1,386.4	-10,528.8	886.5	653.1	233.43	3.798		
16,600.0	7,115.0	15,701.5	6,790.0	253.3	0.0	-68.49	-1,386.2	-10,628.8	886.5	650.8	235.73	3.761		
16,700.0	7,115.0	15,801.5	6,790.0	255.7	0.0	-68.49	-1,385.9	-10,728.8	886.5	648.5	238.03	3.724		
16,800.0	7,115.0	15,901.5	6,790.0	258.2	0.0	-68.49	-1,385.7	-10,828.8	886.5	646.2	240.33	3.689		
16,900.0	7,115.0	16,001.5	6,790.0	260.7	0.0	-68.49	-1,385.4	-10,928.8	886.5	643.9	242.63	3.654		
17,000.0	7,115.0	16,101.5	6,790.0	263.1	0.0	-68.49	-1,385.2	-11,028.8	886.5	641.6	244.93	3.619		
17,100.0	7,115.0	16,201.5	6,790.0	265.6	0.0	-68.49	-1,384.9	-11,128.8	886.5	639.3	247.23	3.586		
17,200.0	7,115.0	16,301.5	6,790.0	268.1	0.0	-68.49	-1,384.7	-11,228.8	886.5	637.0	249.52	3.553		
17,300.0	7,115.0	16,401.5	6,790.0	270.5	0.0	-68.49	-1,384.4	-11,328.8	886.5	634.7	251.82	3.520		
17,400.0	7,115.0	16,501.5	6,790.0	273.0	0.0	-68.49	-1,384.2	-11,428.8	886.5	632.4	254.12	3.489		
17,500.0	7,115.0	16,601.5	6,790.0	275.5	0.0	-68.49	-1,383.9	-11,528.8	886.5	630.1	256.42	3.457		
17,600.0	7,115.0	16,701.5	6,790.0	277.9	0.0	-68.49	-1,383.7	-11,628.8	886.5	627.8	258.72	3.427		
17,700.0	7,115.0	16,801.5	6,790.0	280.4	0.0	-68.49	-1,383.4	-11,728.8	886.5	625.5	261.02	3.396		
17,724.4	7,115.0	16,825.9	6,790.0	281.0	0.0	-68.49	-1,383.4	-11,753.2	886.5	624.9	261.58	3.389		
17,730.1	7,115.0	16,829.6	6,790.0	281.2	0.0	-68.49	-1,383.4	-11,756.9	886.5	624.8	261.71	3.387 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 11 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.07	-120.2	-72.0	140.2					
100.0	100.0	100.0	100.0	0.1	0.0	-149.07	-120.2	-72.0	140.2	140.0	0.13	1,054.991		
200.0	200.0	200.0	200.0	0.3	0.0	-149.07	-120.2	-72.0	140.2	139.8	0.31	455.955 CC		
300.0	300.0	297.8	297.8	0.5	0.0	-30.47	-120.7	-72.7	140.2	139.7	0.48	290.788		
400.0	400.0	395.5	395.5	0.7	0.0	-30.64	-122.3	-74.6	140.3	139.7	0.66	213.290 ES		
500.0	499.9	493.3	493.1	0.9	0.0	-30.93	-124.9	-77.9	140.6	139.7	0.84	168.159		
600.0	599.7	591.0	590.7	1.1	0.0	-31.33	-128.6	-82.4	140.9	139.9	1.02	138.512		
700.0	699.4	688.8	688.2	1.3	0.0	-31.85	-133.3	-88.3	141.4	140.2	1.20	117.457		
800.0	798.9	786.5	785.5	1.5	0.0	-32.47	-139.0	-95.4	142.0	140.6	1.40	101.657		
900.0	898.3	884.3	882.6	1.8	0.0	-33.20	-145.8	-103.9	142.6	141.0	1.60	89.297		
1,000.0	997.4	982.0	979.6	2.0	0.0	-34.03	-153.6	-113.6	143.5	141.7	1.81	79.309		
1,100.0	1,096.3	1,079.7	1,076.3	2.3	0.0	-34.96	-162.4	-124.6	144.5	142.4	2.03	71.027		
1,200.0	1,194.9	1,177.5	1,172.7	2.7	0.0	-35.98	-172.3	-136.9	145.6	143.3	2.27	64.013		
1,300.0	1,293.3	1,275.2	1,268.9	3.0	0.0	-37.08	-183.2	-150.5	146.9	144.4	2.53	58.009		
1,400.0	1,391.5	1,372.9	1,364.7	3.4	0.0	-38.02	-195.1	-165.3	149.3	146.5	2.80	53.333		
1,500.0	1,489.7	1,470.5	1,460.1	3.7	0.0	-38.62	-208.0	-181.4	153.2	150.2	3.07	49.939		
1,600.0	1,587.9	1,568.1	1,555.1	4.1	0.0	-38.89	-222.0	-198.8	158.7	155.3	3.34	47.566		
1,700.0	1,686.1	1,665.4	1,649.5	4.4	0.0	-38.87	-236.9	-217.4	165.6	162.0	3.60	46.014		
1,800.0	1,784.3	1,762.5	1,743.2	4.8	0.0	-38.59	-252.8	-237.2	174.0	170.1	3.85	45.136		
1,900.0	1,882.5	1,859.4	1,836.3	5.2	0.0	-38.08	-269.6	-258.1	183.9	179.8	4.10	44.818		
2,000.0	1,980.8	1,955.9	1,928.5	5.5	0.0	-37.41	-287.3	-280.2	195.3	190.9	4.34	44.973		
2,100.0	2,079.0	2,052.0	2,019.9	5.9	0.0	-36.60	-306.0	-303.4	208.2	203.6	4.57	45.531		
2,200.0	2,177.2	2,147.6	2,110.4	6.3	0.0	-35.71	-325.5	-327.7	222.6	217.8	4.79	46.438		
2,300.0	2,275.4	2,242.8	2,199.8	6.7	0.0	-34.76	-345.8	-353.0	238.6	233.6	5.01	47.649		
2,400.0	2,373.6	2,337.5	2,288.2	7.0	0.0	-33.79	-366.9	-379.4	256.1	250.9	5.21	49.126		
2,500.0	2,471.8	2,431.5	2,375.5	7.4	0.0	-32.82	-388.8	-406.6	275.2	269.8	5.41	50.837		
2,600.0	2,570.0	2,524.9	2,461.7	7.8	0.0	-31.86	-411.5	-434.9	295.8	290.2	5.61	52.754		
2,700.0	2,668.3	2,617.7	2,546.6	8.1	0.0	-30.92	-434.8	-463.9	318.0	312.2	5.80	54.852		
2,800.0	2,766.5	2,709.7	2,630.2	8.5	0.0	-30.02	-458.8	-493.9	341.8	335.8	5.98	57.111		
2,900.0	2,864.7	2,801.0	2,712.6	8.9	0.0	-29.16	-483.5	-524.6	367.0	360.9	6.17	59.510		
3,000.0	2,962.9	2,896.3	2,798.2	9.3	0.0	-28.33	-509.8	-557.3	393.4	387.0	6.35	61.965		
3,100.0	3,061.1	2,992.7	2,884.6	9.6	0.0	-27.59	-536.4	-590.5	419.8	413.3	6.53	64.282		
3,200.0	3,159.3	3,089.0	2,971.1	10.0	0.0	-26.94	-563.0	-623.6	446.3	439.5	6.71	66.461		
3,300.0	3,257.6	3,185.3	3,057.5	10.4	0.0	-26.36	-589.6	-656.7	472.8	465.9	6.90	68.513		
3,400.0	3,355.8	3,281.6	3,143.9	10.8	0.0	-25.84	-616.2	-689.8	499.3	492.2	7.09	70.449		
3,500.0	3,454.0	3,377.9	3,230.4	11.1	0.0	-25.38	-642.7	-723.0	525.9	518.6	7.28	72.278		
3,600.0	3,552.2	3,474.2	3,316.8	11.5	0.0	-24.96	-669.3	-756.1	552.5	545.1	7.47	74.007		
3,700.0	3,650.4	3,570.6	3,403.3	11.9	0.0	-24.58	-695.9	-789.2	579.2	571.5	7.66	75.645		
3,800.0	3,748.6	3,666.9	3,489.7	12.3	0.0	-24.23	-722.5	-822.3	605.8	598.0	7.85	77.199		
3,900.0	3,846.8	3,763.2	3,576.2	12.6	0.0	-23.91	-749.1	-855.4	632.5	624.5	8.04	78.674		
4,000.0	3,945.1	3,859.5	3,662.6	13.0	0.0	-23.62	-775.7	-888.6	659.2	651.0	8.23	80.076		
4,100.0	4,043.3	3,955.8	3,749.1	13.4	0.0	-23.35	-802.3	-921.7	686.0	677.5	8.43	81.410		
4,200.0	4,141.5	4,052.1	3,835.5	13.8	0.0	-23.10	-828.9	-954.8	712.7	704.1	8.62	82.682		
4,300.0	4,239.7	4,148.5	3,922.0	14.1	0.0	-22.87	-855.5	-987.9	739.4	730.6	8.81	83.895		
4,400.0	4,337.9	4,244.8	4,008.4	14.5	0.0	-22.65	-882.0	-1,021.0	766.2	757.2	9.01	85.053		
4,500.0	4,436.1	4,341.1	4,094.8	14.9	0.0	-22.45	-908.6	-1,054.2	792.9	783.7	9.20	86.159		
4,600.0	4,534.3	4,437.4	4,181.3	15.3	0.0	-22.26	-935.2	-1,087.3	819.7	810.3	9.40	87.218		
4,700.0	4,632.6	4,533.7	4,267.7	15.6	0.0	-22.08	-961.8	-1,120.4	846.5	836.9	9.59	88.232		
4,800.0	4,730.8	4,630.0	4,354.2	16.0	0.0	-21.92	-988.4	-1,153.5	873.3	863.5	9.79	89.204		
4,900.0	4,829.0	4,726.4	4,440.6	16.4	0.0	-21.76	-1,015.0	-1,186.7	900.1	890.1	9.99	90.136		
5,000.0	4,927.2	4,822.7	4,527.1	16.8	0.0	-21.62	-1,041.6	-1,219.8	926.9	916.7	10.18	91.031		
5,100.0	5,025.4	4,919.0	4,613.5	17.1	0.0	-21.48	-1,068.2	-1,252.9	953.7	943.3	10.38	91.891		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 11 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,123.6	5,015.3	4,700.0	17.5	0.0	-21.35	-1,094.8	-1,286.0	980.5	969.9	10.57	92.718		
5,300.0	5,221.8	5,111.6	4,786.4	17.9	0.0	-21.22	-1,121.3	-1,319.1	1,007.3	996.5	10.77	93.514		
5,400.0	5,320.1	5,207.9	4,872.9	18.3	0.0	-21.11	-1,147.9	-1,352.3	1,034.1	1,023.1	10.97	94.280		
5,500.0	5,418.3	5,304.3	4,959.3	18.6	0.0	-21.00	-1,174.5	-1,385.4	1,060.9	1,049.8	11.17	95.018		
5,600.0	5,516.5	5,400.6	5,045.7	19.0	0.0	-20.89	-1,201.1	-1,418.5	1,087.7	1,076.4	11.36	95.730		
5,700.0	5,614.7	5,496.9	5,132.2	19.4	0.0	-20.79	-1,227.7	-1,451.6	1,114.6	1,103.0	11.56	96.417		
5,800.0	5,712.9	5,593.2	5,218.6	19.8	0.0	-20.69	-1,254.3	-1,484.8	1,141.4	1,129.6	11.76	97.080		
5,900.0	5,811.1	5,689.5	5,305.1	20.1	0.0	-20.60	-1,280.9	-1,517.9	1,168.2	1,156.3	11.95	97.721		
6,000.0	5,909.3	5,785.8	5,391.5	20.5	0.0	-20.51	-1,307.5	-1,551.0	1,195.1	1,182.9	12.15	98.340		
8,000.0	7,115.0	7,235.5	6,650.2	44.1	0.0	-67.31	-1,694.4	-2,125.9	1,208.8	1,169.0	39.89	30.306		
8,100.0	7,115.0	7,300.0	6,687.1	46.4	0.0	-69.14	-1,705.6	-2,177.6	1,202.8	1,160.3	42.51	28.295		
8,200.0	7,115.0	7,381.5	6,726.1	48.6	0.0	-71.09	-1,717.5	-2,248.0	1,200.1	1,154.9	45.19	26.554		
8,300.0	7,115.0	7,470.9	6,758.8	50.9	0.0	-72.72	-1,727.4	-2,330.6	1,199.4	1,151.6	47.81	25.084		
8,309.5	7,115.0	7,479.9	6,761.4	51.1	0.0	-72.85	-1,728.2	-2,339.1	1,199.4	1,151.3	48.06	24.956		
8,400.0	7,115.0	7,569.4	6,781.5	53.2	0.0	-73.86	-1,734.2	-2,426.1	1,199.6	1,149.2	50.34	23.831		
8,500.0	7,115.0	7,673.3	6,790.0	55.5	0.0	-74.28	-1,736.5	-2,529.5	1,199.7	1,147.0	52.70	22.764		
8,600.0	7,115.0	7,773.5	6,790.0	57.8	0.0	-74.28	-1,736.3	-2,629.7	1,199.7	1,144.8	54.98	21.821		
8,700.0	7,115.0	7,873.5	6,790.0	60.2	0.0	-74.28	-1,736.0	-2,729.7	1,199.7	1,142.5	57.27	20.950		
8,800.0	7,115.0	7,973.5	6,790.0	62.5	0.0	-74.28	-1,735.8	-2,829.7	1,199.7	1,140.2	59.56	20.143		
8,900.0	7,115.0	8,073.5	6,790.0	64.9	0.0	-74.28	-1,735.5	-2,929.7	1,199.7	1,137.9	61.86	19.394		
9,000.0	7,115.0	8,173.5	6,790.0	67.2	0.0	-74.28	-1,735.3	-3,029.7	1,199.7	1,135.6	64.17	18.697		
9,100.0	7,115.0	8,273.5	6,790.0	69.6	0.0	-74.28	-1,735.0	-3,129.7	1,199.7	1,133.3	66.48	18.046		
9,200.0	7,115.0	8,373.5	6,790.0	72.0	0.0	-74.28	-1,734.8	-3,229.7	1,199.7	1,130.9	68.80	17.439		
9,300.0	7,115.0	8,473.5	6,790.0	74.4	0.0	-74.28	-1,734.5	-3,329.7	1,199.7	1,128.6	71.12	16.870		
9,400.0	7,115.0	8,573.5	6,790.0	76.8	0.0	-74.28	-1,734.3	-3,429.7	1,199.7	1,126.3	73.44	16.336		
9,500.0	7,115.0	8,673.5	6,790.0	79.2	0.0	-74.28	-1,734.0	-3,529.7	1,199.7	1,124.0	75.77	15.834		
9,600.0	7,115.0	8,773.5	6,790.0	81.6	0.0	-74.28	-1,733.8	-3,629.7	1,199.7	1,121.6	78.10	15.361		
9,700.0	7,115.0	8,873.5	6,790.0	84.0	0.0	-74.28	-1,733.5	-3,729.7	1,199.7	1,119.3	80.44	14.915		
9,800.0	7,115.0	8,973.5	6,790.0	86.4	0.0	-74.28	-1,733.3	-3,829.7	1,199.7	1,117.0	82.78	14.494		
9,900.0	7,115.0	9,073.5	6,790.0	88.8	0.0	-74.28	-1,733.0	-3,929.7	1,199.7	1,114.6	85.12	14.095		
10,000.0	7,115.0	9,173.5	6,790.0	91.2	0.0	-74.28	-1,732.8	-4,029.7	1,199.7	1,112.3	87.46	13.718		
10,100.0	7,115.0	9,273.5	6,790.0	93.6	0.0	-74.28	-1,732.5	-4,129.7	1,199.7	1,109.9	89.80	13.360		
10,200.0	7,115.0	9,373.5	6,790.0	96.1	0.0	-74.28	-1,732.3	-4,229.7	1,199.7	1,107.6	92.15	13.020		
10,300.0	7,115.0	9,473.5	6,790.0	98.5	0.0	-74.28	-1,732.0	-4,329.7	1,199.7	1,105.2	94.50	12.696		
10,400.0	7,115.0	9,573.5	6,790.0	100.9	0.0	-74.28	-1,731.8	-4,429.7	1,199.7	1,102.9	96.85	12.388		
10,500.0	7,115.0	9,673.5	6,790.0	103.4	0.0	-74.28	-1,731.5	-4,529.7	1,199.7	1,100.5	99.20	12.094		
10,600.0	7,115.0	9,773.5	6,790.0	105.8	0.0	-74.28	-1,731.3	-4,629.7	1,199.7	1,098.2	101.55	11.814		
10,700.0	7,115.0	9,873.5	6,790.0	108.2	0.0	-74.28	-1,731.0	-4,729.7	1,199.7	1,095.8	103.90	11.546		
10,800.0	7,115.0	9,973.5	6,790.0	110.7	0.0	-74.28	-1,730.8	-4,829.7	1,199.7	1,093.5	106.26	11.290		
10,900.0	7,115.0	10,073.5	6,790.0	113.1	0.0	-74.28	-1,730.5	-4,929.7	1,199.7	1,091.1	108.62	11.046		
11,000.0	7,115.0	10,173.5	6,790.0	115.5	0.0	-74.28	-1,730.3	-5,029.7	1,199.7	1,088.8	110.97	10.811		
11,100.0	7,115.0	10,273.5	6,790.0	118.0	0.0	-74.28	-1,730.0	-5,129.7	1,199.7	1,086.4	113.33	10.586		
11,200.0	7,115.0	10,373.5	6,790.0	120.4	0.0	-74.28	-1,729.8	-5,229.6	1,199.7	1,084.0	115.69	10.370		
11,300.0	7,115.0	10,473.5	6,790.0	122.9	0.0	-74.28	-1,729.5	-5,329.6	1,199.7	1,081.7	118.05	10.163		
11,400.0	7,115.0	10,573.5	6,790.0	125.3	0.0	-74.28	-1,729.3	-5,429.6	1,199.7	1,079.3	120.42	9.963		
11,500.0	7,115.0	10,673.5	6,790.0	127.8	0.0	-74.28	-1,729.0	-5,529.6	1,199.7	1,076.9	122.78	9.772		
11,600.0	7,115.0	10,773.5	6,790.0	130.2	0.0	-74.28	-1,728.8	-5,629.6	1,199.7	1,074.6	125.14	9.587		
11,700.0	7,115.0	10,873.5	6,790.0	132.7	0.0	-74.28	-1,728.5	-5,729.6	1,199.7	1,072.2	127.50	9.409		
11,800.0	7,115.0	10,973.5	6,790.0	135.1	0.0	-74.28	-1,728.3	-5,829.6	1,199.7	1,069.9	129.87	9.238		
11,900.0	7,115.0	11,073.5	6,790.0	137.6	0.0	-74.28	-1,728.0	-5,929.6	1,199.7	1,067.5	132.23	9.073		
12,000.0	7,115.0	11,173.5	6,790.0	140.0	0.0	-74.28	-1,727.8	-6,029.6	1,199.7	1,065.1	134.60	8.913		
12,100.0	7,115.0	11,273.5	6,790.0	142.5	0.0	-74.28	-1,727.5	-6,129.6	1,199.7	1,062.8	136.97	8.759		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 11 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
12,200.0	7,115.0	11,373.5	6,790.0	144.9	0.0	-74.28	-1,727.3	-6,229.6	1,199.7	1,060.4	139.33	8.610	
12,300.0	7,115.0	11,473.5	6,790.0	147.4	0.0	-74.28	-1,727.0	-6,329.6	1,199.7	1,058.0	141.70	8.467	
12,400.0	7,115.0	11,573.5	6,790.0	149.8	0.0	-74.28	-1,726.8	-6,429.6	1,199.7	1,055.7	144.07	8.327	
12,500.0	7,115.0	11,673.5	6,790.0	152.3	0.0	-74.28	-1,726.5	-6,529.6	1,199.7	1,053.3	146.44	8.193	
12,600.0	7,115.0	11,773.5	6,790.0	154.7	0.0	-74.28	-1,726.3	-6,629.6	1,199.7	1,050.9	148.81	8.062	
12,700.0	7,115.0	11,873.5	6,790.0	157.2	0.0	-74.28	-1,726.0	-6,729.6	1,199.7	1,048.5	151.17	7.936	
12,800.0	7,115.0	11,973.5	6,790.0	159.6	0.0	-74.28	-1,725.8	-6,829.6	1,199.7	1,046.2	153.54	7.814	
12,900.0	7,115.0	12,073.5	6,790.0	162.1	0.0	-74.28	-1,725.5	-6,929.6	1,199.7	1,043.8	155.91	7.695	
13,000.0	7,115.0	12,173.5	6,790.0	164.6	0.0	-74.28	-1,725.3	-7,029.6	1,199.7	1,041.4	158.28	7.579	
13,100.0	7,115.0	12,273.5	6,790.0	167.0	0.0	-74.28	-1,725.0	-7,129.6	1,199.7	1,039.1	160.66	7.468	
13,200.0	7,115.0	12,373.5	6,790.0	169.5	0.0	-74.28	-1,724.8	-7,229.6	1,199.7	1,036.7	163.03	7.359	
13,300.0	7,115.0	12,473.5	6,790.0	171.9	0.0	-74.28	-1,724.5	-7,329.6	1,199.7	1,034.3	165.40	7.254	
13,400.0	7,115.0	12,573.5	6,790.0	174.4	0.0	-74.28	-1,724.3	-7,429.6	1,199.7	1,031.9	167.77	7.151	
13,500.0	7,115.0	12,673.5	6,790.0	176.9	0.0	-74.28	-1,724.0	-7,529.6	1,199.7	1,029.6	170.14	7.051	
13,600.0	7,115.0	12,773.5	6,790.0	179.3	0.0	-74.28	-1,723.8	-7,629.6	1,199.7	1,027.2	172.51	6.954	
13,700.0	7,115.0	12,873.5	6,790.0	181.8	0.0	-74.28	-1,723.5	-7,729.6	1,199.7	1,024.8	174.89	6.860	
13,800.0	7,115.0	12,973.5	6,790.0	184.2	0.0	-74.28	-1,723.3	-7,829.6	1,199.7	1,022.5	177.26	6.768	
13,900.0	7,115.0	13,073.5	6,790.0	186.7	0.0	-74.28	-1,723.0	-7,929.6	1,199.7	1,020.1	179.63	6.679	
14,000.0	7,115.0	13,173.5	6,790.0	189.2	0.0	-74.28	-1,722.8	-8,029.6	1,199.7	1,017.7	182.01	6.592	
14,100.0	7,115.0	13,273.5	6,790.0	191.6	0.0	-74.28	-1,722.5	-8,129.6	1,199.7	1,015.3	184.38	6.507	
14,200.0	7,115.0	13,373.5	6,790.0	194.1	0.0	-74.28	-1,722.3	-8,229.6	1,199.7	1,013.0	186.75	6.424	
14,300.0	7,115.0	13,473.5	6,790.0	196.6	0.0	-74.28	-1,722.0	-8,329.6	1,199.7	1,010.6	189.13	6.343	
14,400.0	7,115.0	13,573.5	6,790.0	199.0	0.0	-74.28	-1,721.8	-8,429.6	1,199.7	1,008.2	191.50	6.265	
14,500.0	7,115.0	13,673.5	6,790.0	201.5	0.0	-74.28	-1,721.5	-8,529.6	1,199.7	1,005.8	193.88	6.188	
14,600.0	7,115.0	13,773.5	6,790.0	203.9	0.0	-74.28	-1,721.3	-8,629.6	1,199.7	1,003.5	196.25	6.113	
14,700.0	7,115.0	13,873.5	6,790.0	206.4	0.0	-74.28	-1,721.0	-8,729.6	1,199.7	1,001.1	198.63	6.040	
14,800.0	7,115.0	13,973.5	6,790.0	208.9	0.0	-74.28	-1,720.8	-8,829.6	1,199.7	998.7	201.00	5.969	
14,900.0	7,115.0	14,073.5	6,790.0	211.3	0.0	-74.28	-1,720.5	-8,929.6	1,199.7	996.3	203.38	5.899	
15,000.0	7,115.0	14,173.5	6,790.0	213.8	0.0	-74.28	-1,720.3	-9,029.6	1,199.7	994.0	205.75	5.831	
15,100.0	7,115.0	14,273.5	6,790.0	216.3	0.0	-74.28	-1,720.0	-9,129.6	1,199.7	991.6	208.13	5.764	
15,200.0	7,115.0	14,373.5	6,790.0	218.7	0.0	-74.28	-1,719.7	-9,229.6	1,199.7	989.2	210.50	5.699	
15,300.0	7,115.0	14,473.5	6,790.0	221.2	0.0	-74.28	-1,719.5	-9,329.6	1,199.7	986.8	212.88	5.636	
15,400.0	7,115.0	14,573.5	6,790.0	223.7	0.0	-74.28	-1,719.2	-9,429.6	1,199.7	984.5	215.26	5.573	
15,500.0	7,115.0	14,673.5	6,790.0	226.1	0.0	-74.28	-1,719.0	-9,529.6	1,199.7	982.1	217.63	5.513	
15,600.0	7,115.0	14,773.5	6,790.0	228.6	0.0	-74.28	-1,718.7	-9,629.6	1,199.7	979.7	220.01	5.453	
15,700.0	7,115.0	14,873.5	6,790.0	231.1	0.0	-74.28	-1,718.5	-9,729.6	1,199.7	977.3	222.38	5.395	
15,800.0	7,115.0	14,973.5	6,790.0	233.5	0.0	-74.28	-1,718.2	-9,829.6	1,199.7	974.9	224.76	5.338	
15,900.0	7,115.0	15,073.5	6,790.0	236.0	0.0	-74.28	-1,718.0	-9,929.6	1,199.7	972.6	227.14	5.282	
16,000.0	7,115.0	15,173.5	6,790.0	238.5	0.0	-74.28	-1,717.7	-10,029.6	1,199.7	970.2	229.51	5.227	
16,100.0	7,115.0	15,273.5	6,790.0	240.9	0.0	-74.28	-1,717.5	-10,129.6	1,199.7	967.8	231.89	5.174	
16,200.0	7,115.0	15,373.5	6,790.0	243.4	0.0	-74.28	-1,717.2	-10,229.6	1,199.7	965.4	234.27	5.121	
16,300.0	7,115.0	15,473.5	6,790.0	245.9	0.0	-74.28	-1,717.0	-10,329.6	1,199.7	963.1	236.64	5.070	
16,400.0	7,115.0	15,573.5	6,790.0	248.3	0.0	-74.28	-1,716.7	-10,429.6	1,199.7	960.7	239.02	5.019	
16,500.0	7,115.0	15,673.5	6,790.0	250.8	0.0	-74.28	-1,716.5	-10,529.6	1,199.7	958.3	241.40	4.970	
16,600.0	7,115.0	15,773.5	6,790.0	253.3	0.0	-74.28	-1,716.2	-10,629.6	1,199.7	955.9	243.78	4.921	
16,700.0	7,115.0	15,873.5	6,790.0	255.7	0.0	-74.28	-1,716.0	-10,729.6	1,199.7	953.6	246.15	4.874	
16,800.0	7,115.0	15,973.5	6,790.0	258.2	0.0	-74.28	-1,715.7	-10,829.6	1,199.7	951.2	248.53	4.827	
16,900.0	7,115.0	16,073.5	6,790.0	260.7	0.0	-74.28	-1,715.5	-10,929.6	1,199.7	948.8	250.91	4.781	
17,000.0	7,115.0	16,173.5	6,790.0	263.1	0.0	-74.28	-1,715.2	-11,029.6	1,199.7	946.4	253.29	4.737	
17,100.0	7,115.0	16,273.5	6,790.0	265.6	0.0	-74.28	-1,715.0	-11,129.6	1,199.7	944.0	255.67	4.692	
17,200.0	7,115.0	16,373.5	6,790.0	268.1	0.0	-74.28	-1,714.7	-11,229.6	1,199.7	941.7	258.04	4.649	
17,300.0	7,115.0	16,473.5	6,790.0	270.5	0.0	-74.28	-1,714.5	-11,329.6	1,199.7	939.3	260.42	4.607	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		S16-T6N-R67W - Breniman 11 - Hz - Plan #1										Offset Site Error:		0.0 usft	
Survey Program: 0-												Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor			
17,400.0	7,115.0	16,573.5	6,790.0	273.0	0.0	-74.28	-1,714.2	-11,429.6	1,199.7	936.9	262.80	4.565			
17,500.0	7,115.0	16,673.5	6,790.0	275.5	0.0	-74.28	-1,714.0	-11,529.6	1,199.7	934.5	265.18	4.524			
17,600.0	7,115.0	16,773.5	6,790.0	277.9	0.0	-74.28	-1,713.7	-11,629.6	1,199.7	932.1	267.56	4.484			
17,700.0	7,115.0	16,873.5	6,790.0	280.4	0.0	-74.28	-1,713.5	-11,729.6	1,199.7	929.8	269.93	4.444			
17,724.2	7,115.0	16,897.7	6,790.0	281.0	0.0	-74.28	-1,713.4	-11,753.8	1,199.7	929.2	270.51	4.435			
17,730.1	7,115.0	16,900.9	6,790.0	281.2	0.0	-74.28	-1,713.4	-11,757.1	1,199.7	929.1	270.65	4.433 SF			

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 2 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	31.00	95.8	57.6	111.8					
100.0	100.0	100.0	100.0	0.1	0.1	31.00	95.8	57.6	111.8	111.5	0.27	421.347 CC		
200.0	200.0	200.0	200.0	0.3	0.3	31.00	95.8	57.6	111.8	111.2	0.61	181.945 ES		
300.0	300.0	300.8	300.8	0.5	0.5	149.47	95.9	56.7	112.2	111.2	0.97	116.147		
400.0	400.0	401.6	401.5	0.7	0.7	148.91	96.3	54.1	113.4	112.1	1.32	85.754		
500.0	499.9	502.3	502.2	0.9	0.9	148.00	96.8	49.7	115.4	113.7	1.69	68.368		
600.0	599.7	603.0	602.7	1.1	1.1	146.79	97.6	43.5	118.3	116.2	2.07	57.180		
700.0	699.4	703.6	702.9	1.3	1.3	145.31	98.6	35.6	122.1	119.6	2.47	49.420		
800.0	798.9	804.1	803.0	1.5	1.5	143.62	99.8	26.0	126.8	123.9	2.90	43.746		
900.0	898.3	904.5	902.8	1.8	1.8	141.78	101.2	14.7	132.5	129.1	3.36	39.434		
1,000.0	997.4	1,004.8	1,002.2	2.0	2.0	139.85	102.9	1.6	139.2	135.4	3.86	36.059		
1,100.0	1,096.3	1,105.0	1,101.2	2.3	2.3	137.87	104.8	-13.2	147.0	142.6	4.41	33.359		
1,200.0	1,194.9	1,205.0	1,199.8	2.7	2.7	135.90	106.8	-29.6	155.8	150.8	5.00	31.162		
1,300.0	1,293.3	1,304.7	1,297.9	3.0	3.0	134.00	109.1	-47.7	165.8	160.2	5.64	29.394		
1,400.0	1,391.5	1,404.0	1,395.5	3.4	3.4	132.39	111.5	-66.0	176.3	170.0	6.30	27.985		
1,500.0	1,489.7	1,503.4	1,493.1	3.7	3.7	130.96	113.8	-84.4	186.9	179.9	6.97	26.811		
1,600.0	1,587.9	1,602.7	1,590.6	4.1	4.1	129.68	116.1	-102.8	197.6	189.9	7.65	25.823		
1,700.0	1,686.1	1,702.0	1,688.2	4.4	4.4	128.53	118.4	-121.2	208.4	200.0	8.34	24.984		
1,800.0	1,784.3	1,801.4	1,785.8	4.8	4.8	127.50	120.7	-139.5	219.2	210.2	9.03	24.265		
1,900.0	1,882.5	1,900.7	1,883.4	5.2	5.2	126.57	123.1	-157.9	230.1	220.4	9.73	23.644		
2,000.0	1,980.8	2,000.0	1,981.0	5.5	5.5	125.72	125.4	-176.3	241.1	230.7	10.44	23.104		
2,100.0	2,079.0	2,099.4	2,078.6	5.9	5.9	124.94	127.7	-194.6	252.1	241.0	11.14	22.631		
2,200.0	2,177.2	2,198.7	2,176.2	6.3	6.3	124.23	130.0	-213.0	263.2	251.4	11.85	22.212		
2,300.0	2,275.4	2,298.0	2,273.8	6.7	6.6	123.58	132.4	-231.4	274.3	261.7	12.56	21.841		
2,400.0	2,373.6	2,397.4	2,371.4	7.0	7.0	122.97	134.7	-249.8	285.4	272.2	13.27	21.510		
2,500.0	2,471.8	2,496.7	2,469.0	7.4	7.4	122.42	137.0	-268.1	296.6	282.6	13.98	21.212		
2,600.0	2,570.0	2,596.0	2,566.6	7.8	7.7	121.90	139.3	-286.5	307.8	293.1	14.70	20.943		
2,700.0	2,668.3	2,695.4	2,664.2	8.1	8.1	121.42	141.7	-304.9	319.0	303.6	15.41	20.700		
2,800.0	2,766.5	2,794.7	2,761.8	8.5	8.5	120.97	144.0	-323.2	330.3	314.1	16.13	20.479		
2,900.0	2,864.7	2,894.0	2,859.4	8.9	8.8	120.55	146.3	-341.6	341.5	324.7	16.84	20.277		
3,000.0	2,962.9	2,993.4	2,957.0	9.3	9.2	120.16	148.6	-360.0	352.8	335.2	17.56	20.091		
3,100.0	3,061.1	3,092.7	3,054.6	9.6	9.6	119.79	151.0	-378.4	364.1	345.8	18.28	19.921		
3,200.0	3,159.3	3,192.0	3,152.1	10.0	9.9	119.45	153.3	-396.7	375.4	356.4	18.99	19.764		
3,300.0	3,257.6	3,291.4	3,249.7	10.4	10.3	119.12	155.6	-415.1	386.7	367.0	19.71	19.619		
3,400.0	3,355.8	3,390.7	3,347.3	10.8	10.7	118.82	157.9	-433.5	398.0	377.6	20.43	19.484		
3,500.0	3,454.0	3,490.1	3,444.9	11.1	11.1	118.53	160.3	-451.8	409.3	388.2	21.14	19.359		
3,600.0	3,552.2	3,589.4	3,542.5	11.5	11.4	118.25	162.6	-470.2	420.7	398.8	21.86	19.242		
3,700.0	3,650.4	3,688.7	3,640.1	11.9	11.8	117.99	164.9	-488.6	432.0	409.5	22.58	19.133		
3,800.0	3,748.6	3,788.1	3,737.7	12.3	12.2	117.75	167.2	-506.9	443.4	420.1	23.30	19.031		
3,900.0	3,846.8	3,887.4	3,835.3	12.6	12.5	117.51	169.6	-525.3	454.8	430.7	24.02	18.935		
4,000.0	3,945.1	3,986.7	3,932.9	13.0	12.9	117.29	171.9	-543.7	466.1	441.4	24.74	18.845		
4,100.0	4,043.3	4,086.1	4,030.5	13.4	13.3	117.08	174.2	-562.1	477.5	452.1	25.45	18.760		
4,200.0	4,141.5	4,185.4	4,128.1	13.8	13.7	116.87	176.5	-580.4	488.9	462.7	26.17	18.681		
4,300.0	4,239.7	4,284.7	4,225.7	14.1	14.0	116.68	178.8	-598.8	500.3	473.4	26.89	18.605		
4,400.0	4,337.9	4,384.1	4,323.3	14.5	14.4	116.50	181.2	-617.2	511.7	484.1	27.61	18.534		
4,500.0	4,436.1	4,483.4	4,420.9	14.9	14.8	116.32	183.5	-635.5	523.1	494.8	28.33	18.466		
4,600.0	4,534.3	4,582.7	4,518.5	15.3	15.1	116.15	185.8	-653.9	534.5	505.5	29.05	18.402		
4,700.0	4,632.6	4,682.1	4,616.1	15.6	15.5	115.99	188.1	-672.3	545.9	516.2	29.77	18.342		
4,800.0	4,730.8	4,781.4	4,713.6	16.0	15.9	115.83	190.5	-690.7	557.4	526.9	30.48	18.284		
4,900.0	4,829.0	4,880.7	4,811.2	16.4	16.2	115.69	192.8	-709.0	568.8	537.6	31.20	18.229		
5,000.0	4,927.2	4,980.1	4,908.8	16.8	16.6	115.54	195.1	-727.4	580.2	548.3	31.92	18.176		
5,100.0	5,025.4	5,079.4	5,006.4	17.1	17.0	115.40	197.4	-745.8	591.6	559.0	32.64	18.126		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 2 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,123.6	5,178.7	5,104.0	17.5	17.4	115.27	199.8	-764.1	603.1	569.7	33.36	18.079	
5,300.0	5,221.8	5,278.1	5,201.6	17.9	17.7	115.15	202.1	-782.5	614.5	580.4	34.08	18.033	
5,400.0	5,320.1	5,377.4	5,299.2	18.3	18.1	115.02	204.4	-800.9	625.9	591.2	34.80	17.989	
5,500.0	5,418.3	5,476.7	5,396.8	18.6	18.5	114.90	206.7	-819.3	637.4	601.9	35.51	17.947	
5,600.0	5,516.5	5,576.1	5,494.4	19.0	18.8	114.79	209.1	-837.6	648.8	612.6	36.23	17.907	
5,700.0	5,614.7	5,675.4	5,592.0	19.4	19.2	114.68	211.4	-856.0	660.3	623.3	36.95	17.869	
5,800.0	5,712.9	5,774.8	5,689.6	19.8	19.6	114.57	213.7	-874.4	671.7	634.1	37.67	17.832	
5,900.0	5,811.1	5,874.1	5,787.2	20.1	20.0	114.47	216.0	-892.7	683.2	644.8	38.39	17.796	
6,000.0	5,909.3	5,973.4	5,884.8	20.5	20.3	114.37	218.4	-911.1	694.6	655.5	39.11	17.762	
6,100.0	6,007.6	6,072.8	5,982.4	20.9	20.7	114.27	220.7	-929.5	706.1	666.3	39.83	17.729	
6,200.0	6,105.8	6,172.1	6,080.0	21.3	21.1	114.18	223.0	-947.9	717.5	677.0	40.54	17.698	
6,300.0	6,204.0	6,271.4	6,177.5	21.6	21.4	114.09	225.3	-966.2	729.0	687.7	41.26	17.667	
6,400.0	6,302.2	6,370.5	6,274.8	22.0	21.8	114.00	227.6	-984.6	740.5	698.5	41.98	17.637	
6,500.0	6,400.4	6,461.2	6,362.3	22.4	22.3	113.39	229.7	-1,008.1	752.5	709.7	42.86	17.558	
6,600.0	6,498.6	6,550.0	6,443.9	22.8	23.0	111.88	231.7	-1,043.0	766.1	722.2	43.96	17.429	
6,700.0	6,596.8	6,627.6	6,510.6	23.1	23.8	107.28	233.4	-1,082.5	782.1	737.0	45.14	17.327	
6,800.0	6,692.9	6,700.0	6,568.1	23.7	24.6	92.41	234.8	-1,126.4	799.8	753.2	46.57	17.172	
6,900.0	6,783.8	6,776.0	6,622.6	24.5	25.6	84.62	236.2	-1,179.2	817.5	769.2	48.27	16.936	
7,000.0	6,867.2	6,850.0	6,669.4	25.5	26.7	79.43	237.5	-1,236.6	834.3	784.3	50.09	16.657	
7,100.0	6,941.1	6,917.6	6,706.0	26.7	27.9	75.71	238.5	-1,293.4	849.7	797.7	51.99	16.344	
7,200.0	7,003.6	6,986.9	6,737.0	28.1	29.2	72.89	239.4	-1,355.2	863.0	808.9	54.05	15.965	
7,300.0	7,053.3	7,050.0	6,759.3	29.7	30.4	70.89	240.0	-1,414.3	873.6	817.5	56.18	15.551	
7,400.0	7,089.0	7,123.4	6,777.8	31.5	31.9	69.46	240.6	-1,485.3	881.3	822.6	58.67	15.021	
7,500.0	7,109.6	7,191.1	6,787.4	33.5	33.3	68.69	241.0	-1,552.3	885.7	824.5	61.26	14.458	
7,600.0	7,115.0	7,263.6	6,790.0	35.5	34.9	68.50	241.3	-1,624.7	886.8	822.6	64.25	13.804	
7,700.0	7,115.0	7,363.6	6,790.0	37.6	37.1	68.50	241.5	-1,724.7	886.8	818.5	68.35	12.974	
7,800.0	7,115.0	7,463.6	6,790.0	39.8	39.4	68.50	241.8	-1,824.7	886.8	814.3	72.52	12.229	
7,900.0	7,115.0	7,563.6	6,790.0	41.9	41.6	68.50	242.0	-1,924.7	886.8	810.1	76.74	11.557	
8,000.0	7,115.0	7,663.6	6,790.0	44.1	43.9	68.50	242.3	-2,024.7	886.8	805.9	81.00	10.949	
8,100.0	7,115.0	7,763.6	6,790.0	46.4	46.2	68.50	242.5	-2,124.7	886.8	801.6	85.29	10.398	
8,200.0	7,115.0	7,863.6	6,790.0	48.6	48.5	68.50	242.8	-2,224.7	886.8	797.2	89.62	9.896	
8,300.0	7,115.0	7,963.6	6,790.0	50.9	50.9	68.50	243.0	-2,324.7	886.8	792.9	93.97	9.438	
8,400.0	7,115.0	8,063.6	6,790.0	53.2	53.2	68.50	243.3	-2,424.7	886.8	788.5	98.35	9.018	
8,500.0	7,115.0	8,163.6	6,790.0	55.5	55.6	68.50	243.5	-2,524.7	886.8	784.1	102.74	8.632	
8,600.0	7,115.0	8,263.6	6,790.0	57.8	58.0	68.50	243.8	-2,624.7	886.8	779.7	107.16	8.276	
8,700.0	7,115.0	8,363.6	6,790.0	60.2	60.3	68.50	244.0	-2,724.7	886.8	775.3	111.59	7.948	
8,800.0	7,115.0	8,463.6	6,790.0	62.5	62.7	68.50	244.3	-2,824.7	886.8	770.8	116.03	7.643	
8,900.0	7,115.0	8,563.6	6,790.0	64.9	65.1	68.50	244.5	-2,924.7	886.8	766.4	120.48	7.361	
9,000.0	7,115.0	8,663.6	6,790.0	67.2	67.5	68.50	244.8	-3,024.7	886.8	761.9	124.95	7.098	
9,100.0	7,115.0	8,763.6	6,790.0	69.6	69.9	68.50	245.0	-3,124.7	886.8	757.4	129.43	6.852	
9,200.0	7,115.0	8,863.6	6,790.0	72.0	72.3	68.50	245.3	-3,224.7	886.8	752.9	133.91	6.623	
9,300.0	7,115.0	8,963.6	6,790.0	74.4	74.7	68.50	245.5	-3,324.7	886.8	748.4	138.41	6.408	
9,400.0	7,115.0	9,063.6	6,790.0	76.8	77.2	68.50	245.8	-3,424.7	886.8	743.9	142.91	6.206	
9,500.0	7,115.0	9,163.6	6,790.0	79.2	79.6	68.50	246.0	-3,524.7	886.8	739.4	147.41	6.016	
9,600.0	7,115.0	9,263.6	6,790.0	81.6	82.0	68.50	246.3	-3,624.7	886.8	734.9	151.93	5.837	
9,700.0	7,115.0	9,363.6	6,790.0	84.0	84.4	68.50	246.5	-3,724.7	886.8	730.4	156.45	5.669	
9,800.0	7,115.0	9,463.6	6,790.0	86.4	86.9	68.50	246.8	-3,824.7	886.8	725.9	160.97	5.509	
9,900.0	7,115.0	9,563.6	6,790.0	88.8	89.3	68.50	247.0	-3,924.7	886.8	721.3	165.50	5.359	
10,000.0	7,115.0	9,663.6	6,790.0	91.2	91.7	68.50	247.3	-4,024.7	886.8	716.8	170.03	5.216	
10,100.0	7,115.0	9,763.6	6,790.0	93.6	94.2	68.50	247.5	-4,124.7	886.8	712.3	174.57	5.080	
10,200.0	7,115.0	9,863.6	6,790.0	96.1	96.6	68.50	247.8	-4,224.7	886.8	707.7	179.11	4.952	
10,300.0	7,115.0	9,963.6	6,790.0	98.5	99.0	68.50	248.0	-4,324.7	886.8	703.2	183.65	4.829	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 2 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
10,400.0	7,115.0	10,063.6	6,790.0	100.9	101.5	68.50	248.3	-4,424.7	886.8	698.7	188.19	4.712		
10,500.0	7,115.0	10,163.6	6,790.0	103.4	103.9	68.50	248.5	-4,524.7	886.8	694.1	192.74	4.601		
10,600.0	7,115.0	10,263.6	6,790.0	105.8	106.4	68.50	248.8	-4,624.7	886.8	689.6	197.30	4.495		
10,700.0	7,115.0	10,363.6	6,790.0	108.2	108.8	68.50	249.0	-4,724.7	886.8	685.0	201.85	4.394		
10,800.0	7,115.0	10,463.6	6,790.0	110.7	111.3	68.50	249.3	-4,824.7	886.8	680.4	206.41	4.297		
10,900.0	7,115.0	10,563.6	6,790.0	113.1	113.7	68.50	249.5	-4,924.7	886.8	675.9	210.97	4.204		
11,000.0	7,115.0	10,663.6	6,790.0	115.5	116.2	68.50	249.8	-5,024.7	886.8	671.3	215.53	4.115		
11,100.0	7,115.0	10,763.6	6,790.0	118.0	118.6	68.50	250.0	-5,124.7	886.8	666.8	220.09	4.029		
11,200.0	7,115.0	10,863.6	6,790.0	120.4	121.1	68.50	250.3	-5,224.7	886.8	662.2	224.65	3.948		
11,300.0	7,115.0	10,963.6	6,790.0	122.9	123.5	68.50	250.5	-5,324.7	886.8	657.6	229.22	3.869		
11,400.0	7,115.0	11,063.6	6,790.0	125.3	126.0	68.50	250.8	-5,424.7	886.8	653.1	233.79	3.793		
11,500.0	7,115.0	11,163.6	6,790.0	127.8	128.4	68.50	251.0	-5,524.7	886.8	648.5	238.36	3.721		
11,600.0	7,115.0	11,263.6	6,790.0	130.2	130.9	68.50	251.3	-5,624.7	886.8	643.9	242.93	3.651		
11,700.0	7,115.0	11,363.6	6,790.0	132.7	133.3	68.50	251.5	-5,724.7	886.8	639.3	247.50	3.583		
11,800.0	7,115.0	11,463.6	6,790.0	135.1	135.8	68.50	251.8	-5,824.7	886.8	634.8	252.07	3.518		
11,900.0	7,115.0	11,563.6	6,790.0	137.6	138.2	68.50	252.0	-5,924.7	886.8	630.2	256.65	3.455		
12,000.0	7,115.0	11,663.6	6,790.0	140.0	140.7	68.50	252.3	-6,024.7	886.8	625.6	261.22	3.395		
12,100.0	7,115.0	11,763.6	6,790.0	142.5	143.2	68.50	252.5	-6,124.7	886.8	621.0	265.80	3.337		
12,200.0	7,115.0	11,863.6	6,790.0	144.9	145.6	68.50	252.8	-6,224.7	886.8	616.5	270.38	3.280		
12,300.0	7,115.0	11,963.6	6,790.0	147.4	148.1	68.50	253.0	-6,324.7	886.8	611.9	274.96	3.225		
12,400.0	7,115.0	12,063.6	6,790.0	149.8	150.5	68.50	253.3	-6,424.7	886.8	607.3	279.54	3.173		
12,500.0	7,115.0	12,163.6	6,790.0	152.3	153.0	68.50	253.5	-6,524.7	886.8	602.7	284.12	3.121		
12,600.0	7,115.0	12,263.6	6,790.0	154.7	155.5	68.50	253.8	-6,624.7	886.8	598.1	288.70	3.072		
12,700.0	7,115.0	12,363.6	6,790.0	157.2	157.9	68.50	254.0	-6,724.7	886.8	593.6	293.28	3.024		
12,800.0	7,115.0	12,463.6	6,790.0	159.6	160.4	68.50	254.3	-6,824.7	886.8	589.0	297.86	2.977		
12,900.0	7,115.0	12,563.6	6,790.0	162.1	162.8	68.50	254.5	-6,924.7	886.8	584.4	302.45	2.932		
13,000.0	7,115.0	12,663.6	6,790.0	164.6	165.3	68.50	254.8	-7,024.7	886.8	579.8	307.03	2.888		
13,100.0	7,115.0	12,763.6	6,790.0	167.0	167.8	68.50	255.0	-7,124.7	886.8	575.2	311.62	2.846		
13,200.0	7,115.0	12,863.6	6,790.0	169.5	170.2	68.50	255.3	-7,224.7	886.8	570.6	316.20	2.805		
13,300.0	7,115.0	12,963.6	6,790.0	171.9	172.7	68.50	255.5	-7,324.7	886.8	566.1	320.79	2.765		
13,400.0	7,115.0	13,063.6	6,790.0	174.4	175.2	68.50	255.8	-7,424.7	886.8	561.5	325.38	2.726		
13,500.0	7,115.0	13,163.6	6,790.0	176.9	177.6	68.50	256.0	-7,524.7	886.8	556.9	329.96	2.688		
13,600.0	7,115.0	13,263.6	6,790.0	179.3	180.1	68.50	256.2	-7,624.7	886.8	552.3	334.55	2.651		
13,700.0	7,115.0	13,363.6	6,790.0	181.8	182.6	68.50	256.5	-7,724.7	886.8	547.7	339.14	2.615		
13,800.0	7,115.0	13,463.6	6,790.0	184.2	185.0	68.50	256.7	-7,824.7	886.8	543.1	343.73	2.580		
13,900.0	7,115.0	13,563.6	6,790.0	186.7	187.5	68.50	257.0	-7,924.7	886.8	538.5	348.32	2.546		
14,000.0	7,115.0	13,663.6	6,790.0	189.2	190.0	68.50	257.2	-8,024.7	886.8	533.9	352.91	2.513		
14,100.0	7,115.0	13,763.6	6,790.0	191.6	192.4	68.50	257.5	-8,124.7	886.8	529.3	357.50	2.481		
14,200.0	7,115.0	13,863.6	6,790.0	194.1	194.9	68.50	257.7	-8,224.7	886.8	524.8	362.09	2.449		
14,300.0	7,115.0	13,963.6	6,790.0	196.6	197.3	68.50	258.0	-8,324.7	886.8	520.2	366.68	2.419		
14,400.0	7,115.0	14,063.6	6,790.0	199.0	199.8	68.50	258.2	-8,424.7	886.8	515.6	371.27	2.389		
14,500.0	7,115.0	14,163.6	6,790.0	201.5	202.3	68.50	258.5	-8,524.7	886.8	511.0	375.86	2.359		
14,600.0	7,115.0	14,263.6	6,790.0	203.9	204.7	68.50	258.7	-8,624.7	886.8	506.4	380.46	2.331		
14,700.0	7,115.0	14,363.6	6,790.0	206.4	207.2	68.50	259.0	-8,724.7	886.8	501.8	385.05	2.303		
14,800.0	7,115.0	14,463.6	6,790.0	208.9	209.7	68.50	259.2	-8,824.7	886.8	497.2	389.64	2.276		
14,900.0	7,115.0	14,563.6	6,790.0	211.3	212.1	68.50	259.5	-8,924.7	886.8	492.6	394.23	2.250		
15,000.0	7,115.0	14,663.6	6,790.0	213.8	214.6	68.50	259.7	-9,024.7	886.8	488.0	398.83	2.224		
15,100.0	7,115.0	14,763.6	6,790.0	216.3	217.1	68.50	260.0	-9,124.7	886.8	483.4	403.42	2.198		
15,200.0	7,115.0	14,863.6	6,790.0	218.7	219.6	68.50	260.2	-9,224.7	886.8	478.8	408.02	2.174		
15,300.0	7,115.0	14,963.6	6,790.0	221.2	222.0	68.50	260.5	-9,324.7	886.8	474.2	412.61	2.149		
15,400.0	7,115.0	15,063.6	6,790.0	223.7	224.5	68.50	260.7	-9,424.7	886.8	469.6	417.20	2.126		
15,500.0	7,115.0	15,163.6	6,790.0	226.1	227.0	68.50	261.0	-9,524.7	886.8	465.0	421.80	2.103		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 2 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,600.0	7,115.0	15,263.6	6,790.0	228.6	229.4	68.50	261.2	-9,624.7	886.8	460.5	426.39	2.080		
15,700.0	7,115.0	15,363.6	6,790.0	231.1	231.9	68.50	261.5	-9,724.7	886.8	455.9	430.99	2.058		
15,800.0	7,115.0	15,463.6	6,790.0	233.5	234.4	68.50	261.7	-9,824.7	886.8	451.3	435.59	2.036		
15,900.0	7,115.0	15,563.6	6,790.0	236.0	236.8	68.50	262.0	-9,924.7	886.8	446.7	440.18	2.015		
16,000.0	7,115.0	15,663.6	6,790.0	238.5	239.3	68.50	262.2	-10,024.7	886.8	442.1	444.78	1.994		
16,100.0	7,115.0	15,763.6	6,790.0	240.9	241.8	68.50	262.5	-10,124.7	886.8	437.5	449.37	1.974		
16,200.0	7,115.0	15,863.6	6,790.0	243.4	244.2	68.50	262.7	-10,224.7	886.8	432.9	453.97	1.954		
16,300.0	7,115.0	15,963.6	6,790.0	245.9	246.7	68.50	263.0	-10,324.7	886.8	428.3	458.57	1.934		
16,400.0	7,115.0	16,063.6	6,790.0	248.3	249.2	68.50	263.2	-10,424.7	886.8	423.7	463.16	1.915		
16,500.0	7,115.0	16,163.6	6,790.0	250.8	251.6	68.50	263.5	-10,524.7	886.8	419.1	467.76	1.896		
16,600.0	7,115.0	16,263.6	6,790.0	253.3	254.1	68.50	263.7	-10,624.7	886.8	414.5	472.36	1.877		
16,700.0	7,115.0	16,363.6	6,790.0	255.7	256.6	68.50	264.0	-10,724.7	886.8	409.9	476.96	1.859		
16,800.0	7,115.0	16,463.6	6,790.0	258.2	259.1	68.50	264.2	-10,824.7	886.8	405.3	481.55	1.842		
16,900.0	7,115.0	16,563.6	6,790.0	260.7	261.5	68.50	264.5	-10,924.7	886.8	400.7	486.15	1.824		
17,000.0	7,115.0	16,663.6	6,790.0	263.1	264.0	68.50	264.7	-11,024.7	886.8	396.1	490.75	1.807		
17,100.0	7,115.0	16,763.6	6,790.0	265.6	266.5	68.50	265.0	-11,124.7	886.8	391.5	495.35	1.790		
17,200.0	7,115.0	16,863.6	6,790.0	268.1	268.9	68.50	265.2	-11,224.7	886.8	386.9	499.95	1.774		
17,300.0	7,115.0	16,963.6	6,790.0	270.5	271.4	68.50	265.5	-11,324.7	886.8	382.3	504.55	1.758		
17,400.0	7,115.0	17,063.6	6,790.0	273.0	273.9	68.50	265.7	-11,424.7	886.8	377.7	509.14	1.742		
17,500.0	7,115.0	17,163.6	6,790.0	275.5	276.3	68.50	266.0	-11,524.7	886.8	373.1	513.74	1.726		
17,600.0	7,115.0	17,263.6	6,790.0	277.9	278.8	68.50	266.2	-11,624.7	886.8	368.5	518.34	1.711		
17,700.0	7,115.0	17,363.6	6,790.0	280.4	281.3	68.50	266.5	-11,724.7	886.8	363.9	522.94	1.696		
17,730.1	7,115.0	17,393.7	6,790.0	281.2	282.0	68.50	266.6	-11,754.8	886.8	362.5	524.33	1.691 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	30.99	71.8	43.1	83.7					
100.0	100.0	100.0	100.0	0.1	0.1	30.99	71.8	43.1	83.7	83.5	0.27	315.581		
200.0	200.0	200.0	200.0	0.3	0.3	30.99	71.8	43.1	83.7	83.1	0.61	136.274 CC		
300.0	300.0	300.8	300.7	0.5	0.5	149.43	71.8	42.2	84.0	83.1	0.97	87.011 ES		
400.0	400.0	401.5	401.5	0.7	0.7	148.79	71.8	39.6	84.9	83.6	1.32	64.277		
500.0	499.9	502.2	502.1	0.9	0.9	147.75	71.8	35.1	86.5	84.8	1.69	51.293		
600.0	599.7	602.9	602.6	1.1	1.1	146.36	71.8	29.0	88.7	86.6	2.07	42.952		
700.0	699.4	703.5	702.9	1.3	1.3	144.67	71.8	21.0	91.6	89.2	2.46	37.176		
800.0	798.9	804.1	803.0	1.5	1.5	142.74	71.9	11.3	95.3	92.4	2.89	32.958		
900.0	898.3	904.6	902.8	1.8	1.8	140.65	71.9	-0.2	99.7	96.4	3.35	29.755		
1,000.0	997.4	1,005.0	1,002.4	2.0	2.0	138.46	71.9	-13.4	105.0	101.1	3.85	27.248		
1,100.0	1,096.3	1,105.4	1,101.6	2.3	2.3	136.23	72.0	-28.3	111.1	106.7	4.40	25.242		
1,200.0	1,194.9	1,205.5	1,200.4	2.7	2.7	134.04	72.0	-44.9	118.2	113.2	5.00	23.630		
1,300.0	1,293.3	1,305.1	1,298.5	3.0	3.0	132.42	72.1	-61.9	126.4	120.7	5.62	22.476		
1,400.0	1,391.5	1,404.7	1,396.6	3.4	3.3	131.24	72.1	-79.0	135.0	128.8	6.26	21.585		
1,500.0	1,489.7	1,504.3	1,494.7	3.7	3.7	130.20	72.2	-96.1	143.8	136.9	6.90	20.831		
1,600.0	1,587.9	1,603.9	1,592.8	4.1	4.0	129.28	72.2	-113.2	152.6	145.0	7.56	20.190		
1,700.0	1,686.1	1,703.5	1,690.9	4.4	4.3	128.46	72.2	-130.2	161.4	153.1	8.22	19.638		
1,800.0	1,784.3	1,803.0	1,789.1	4.8	4.7	127.73	72.3	-147.3	170.2	161.3	8.88	19.161		
1,900.0	1,882.5	1,902.6	1,887.2	5.2	5.0	127.06	72.3	-164.4	179.1	169.5	9.55	18.744		
2,000.0	1,980.8	2,002.2	1,985.3	5.5	5.4	126.47	72.4	-181.5	187.9	177.7	10.23	18.378		
2,100.0	2,079.0	2,101.8	2,083.4	5.9	5.7	125.92	72.4	-198.5	196.8	185.9	10.90	18.054		
2,200.0	2,177.2	2,201.4	2,181.5	6.3	6.1	125.42	72.5	-215.6	205.8	194.2	11.58	17.765		
2,300.0	2,275.4	2,301.0	2,279.6	6.7	6.4	124.97	72.5	-232.7	214.7	202.4	12.26	17.507		
2,400.0	2,373.6	2,400.6	2,377.7	7.0	6.7	124.55	72.6	-249.8	223.6	210.7	12.95	17.275		
2,500.0	2,471.8	2,500.1	2,475.8	7.4	7.1	124.16	72.6	-266.8	232.6	219.0	13.63	17.065		
2,600.0	2,570.0	2,599.7	2,573.9	7.8	7.4	123.80	72.7	-283.9	241.6	227.3	14.32	16.874		
2,700.0	2,668.3	2,699.3	2,672.1	8.1	7.8	123.47	72.7	-301.0	250.5	235.5	15.00	16.700		
2,800.0	2,766.5	2,798.9	2,770.2	8.5	8.1	123.16	72.8	-318.0	259.5	243.8	15.69	16.541		
2,900.0	2,864.7	2,898.5	2,868.3	8.9	8.5	122.87	72.8	-335.1	268.5	252.1	16.38	16.395		
3,000.0	2,962.9	2,998.1	2,966.4	9.3	8.8	122.60	72.9	-352.2	277.5	260.4	17.07	16.260		
3,100.0	3,061.1	3,097.7	3,064.5	9.6	9.2	122.34	72.9	-369.3	286.5	268.8	17.76	16.135		
3,200.0	3,159.3	3,197.3	3,162.6	10.0	9.5	122.11	73.0	-386.3	295.5	277.1	18.45	16.020		
3,300.0	3,257.6	3,296.8	3,260.7	10.4	9.9	121.88	73.0	-403.4	304.5	285.4	19.14	15.913		
3,400.0	3,355.8	3,396.4	3,358.8	10.8	10.2	121.67	73.1	-420.5	313.6	293.7	19.83	15.813		
3,500.0	3,454.0	3,496.0	3,456.9	11.1	10.6	121.47	73.1	-437.6	322.6	302.1	20.52	15.720		
3,600.0	3,552.2	3,595.6	3,555.1	11.5	10.9	121.28	73.1	-454.6	331.6	310.4	21.21	15.632		
3,700.0	3,650.4	3,695.2	3,653.2	11.9	11.3	121.11	73.2	-471.7	340.6	318.7	21.90	15.551		
3,800.0	3,748.6	3,794.8	3,751.3	12.3	11.6	120.94	73.2	-488.8	349.7	327.1	22.60	15.474		
3,900.0	3,846.8	3,894.4	3,849.4	12.6	11.9	120.78	73.3	-505.9	358.7	335.4	23.29	15.401		
4,000.0	3,945.1	3,993.9	3,947.5	13.0	12.3	120.62	73.3	-522.9	367.7	343.7	23.98	15.333		
4,100.0	4,043.3	4,093.5	4,045.6	13.4	12.6	120.48	73.4	-540.0	376.8	352.1	24.68	15.269		
4,200.0	4,141.5	4,193.1	4,143.7	13.8	13.0	120.34	73.4	-557.1	385.8	360.4	25.37	15.208		
4,300.0	4,239.7	4,292.7	4,241.8	14.1	13.3	120.21	73.5	-574.2	394.9	368.8	26.06	15.150		
4,400.0	4,337.9	4,392.3	4,340.0	14.5	13.7	120.08	73.5	-591.2	403.9	377.1	26.76	15.096		
4,500.0	4,436.1	4,491.9	4,438.1	14.9	14.0	119.96	73.6	-608.3	412.9	385.5	27.45	15.044		
4,600.0	4,534.3	4,591.5	4,536.2	15.3	14.4	119.84	73.6	-625.4	422.0	393.8	28.14	14.994		
4,700.0	4,632.6	4,691.0	4,634.3	15.6	14.7	119.73	73.7	-642.4	431.0	402.2	28.84	14.947		
4,800.0	4,730.8	4,790.6	4,732.4	16.0	15.1	119.63	73.7	-659.5	440.1	410.6	29.53	14.902		
4,900.0	4,829.0	4,890.2	4,830.5	16.4	15.4	119.52	73.8	-676.6	449.1	418.9	30.23	14.860		
5,000.0	4,927.2	4,989.8	4,928.6	16.8	15.8	119.43	73.8	-693.7	458.2	427.3	30.92	14.819		
5,100.0	5,025.4	5,089.4	5,026.7	17.1	16.1	119.33	73.9	-710.7	467.3	435.6	31.62	14.780		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,123.6	5,189.0	5,124.8	17.5	16.5	119.24	73.9	-727.8	476.3	444.0	32.31	14.742	
5,300.0	5,221.8	5,288.6	5,223.0	17.9	16.8	119.15	74.0	-744.9	485.4	452.4	33.00	14.706	
5,400.0	5,320.1	5,388.2	5,321.1	18.3	17.2	119.07	74.0	-762.0	494.4	460.7	33.70	14.672	
5,500.0	5,418.3	5,487.7	5,419.2	18.6	17.5	118.99	74.0	-779.0	503.5	469.1	34.39	14.639	
5,600.0	5,516.5	5,587.3	5,517.3	19.0	17.9	118.91	74.1	-796.1	512.6	477.5	35.09	14.607	
5,700.0	5,614.7	5,686.9	5,615.4	19.4	18.2	118.84	74.1	-813.2	521.6	485.8	35.78	14.577	
5,800.0	5,712.9	5,786.5	5,713.5	19.8	18.6	118.76	74.2	-830.3	530.7	494.2	36.48	14.548	
5,900.0	5,811.1	5,886.1	5,811.6	20.1	18.9	118.69	74.2	-847.3	539.7	502.6	37.17	14.520	
6,000.0	5,909.3	5,985.7	5,909.7	20.5	19.3	118.62	74.3	-864.4	548.8	510.9	37.87	14.492	
6,100.0	6,007.6	6,085.3	6,007.9	20.9	19.6	118.56	74.3	-881.5	557.9	519.3	38.56	14.466	
6,200.0	6,105.8	6,184.8	6,106.0	21.3	20.0	118.49	74.4	-898.6	566.9	527.7	39.26	14.441	
6,300.0	6,204.0	6,284.4	6,204.1	21.6	20.3	118.43	74.4	-915.6	576.0	536.1	39.95	14.417	
6,400.0	6,302.2	6,384.0	6,302.2	22.0	20.7	118.37	74.5	-932.7	585.1	544.4	40.65	14.393	
6,500.0	6,400.4	6,483.6	6,400.3	22.4	21.0	118.31	74.5	-949.8	594.1	552.8	41.34	14.370	
6,600.0	6,498.6	6,583.2	6,498.4	22.8	21.3	118.26	74.6	-966.9	603.2	561.2	42.04	14.348	
6,700.0	6,596.8	6,682.7	6,596.5	23.1	21.7	115.68	74.6	-984.0	612.3	569.5	42.76	14.320	
6,800.0	6,692.9	6,782.1	6,692.3	23.7	22.3	103.50	74.7	-1,009.9	621.2	577.2	43.96	14.129	
6,900.0	6,783.8	6,881.4	6,782.9	24.5	23.0	98.25	74.8	-1,050.5	629.5	583.9	45.63	13.797	
7,000.0	6,867.2	6,980.9	6,866.1	25.5	24.1	95.25	74.9	-1,104.6	637.2	589.5	47.75	13.345	
7,100.0	6,941.1	7,080.4	6,940.0	26.7	25.3	93.29	75.1	-1,171.2	644.1	593.7	50.32	12.798	
7,200.0	7,003.6	7,180.0	7,002.7	28.1	26.8	91.94	75.3	-1,248.5	649.8	596.5	53.33	12.186	
7,300.0	7,053.3	7,279.8	7,052.6	29.7	28.6	91.00	75.5	-1,334.7	654.4	597.7	56.73	11.535	
7,400.0	7,089.0	7,379.6	7,088.5	31.5	30.5	90.40	75.7	-1,427.8	657.7	597.2	60.49	10.873	
7,500.0	7,109.6	7,479.5	7,109.4	33.5	32.6	90.07	76.0	-1,525.4	659.6	595.1	64.51	10.225	
7,600.0	7,115.0	7,579.5	7,115.0	35.5	34.7	90.00	76.2	-1,625.1	660.1	591.4	68.71	9.607	
7,700.0	7,115.0	7,679.5	7,115.0	37.6	36.9	90.00	76.5	-1,725.1	660.1	587.0	73.10	9.030	
7,800.0	7,115.0	7,779.5	7,115.0	39.8	39.1	90.00	76.7	-1,825.1	660.1	582.6	77.56	8.511	
7,900.0	7,115.0	7,879.5	7,115.0	41.9	41.4	90.00	77.0	-1,925.1	660.1	578.0	82.08	8.043	
8,000.0	7,115.0	7,979.5	7,115.0	44.1	43.7	90.00	77.2	-2,025.1	660.1	573.5	86.64	7.619	
8,100.0	7,115.0	8,079.5	7,115.0	46.4	46.0	90.00	77.5	-2,125.1	660.1	568.9	91.24	7.235	
8,200.0	7,115.0	8,179.5	7,115.0	48.6	48.3	90.00	77.7	-2,225.1	660.1	564.2	95.88	6.885	
8,300.0	7,115.0	8,279.5	7,115.0	50.9	50.6	90.00	78.0	-2,325.1	660.1	559.6	100.55	6.565	
8,400.0	7,115.0	8,379.5	7,115.0	53.2	53.0	90.00	78.2	-2,425.1	660.1	554.9	105.24	6.273	
8,500.0	7,115.0	8,479.5	7,115.0	55.5	55.3	90.00	78.5	-2,525.1	660.1	550.2	109.96	6.004	
8,600.0	7,115.0	8,579.5	7,115.0	57.8	57.7	90.00	78.7	-2,625.1	660.1	545.4	114.69	5.756	
8,700.0	7,115.0	8,679.5	7,115.0	60.2	60.1	90.00	79.0	-2,725.1	660.1	540.7	119.44	5.527	
8,800.0	7,115.0	8,779.5	7,115.0	62.5	62.5	90.00	79.2	-2,825.1	660.1	535.9	124.21	5.315	
8,900.0	7,115.0	8,879.5	7,115.0	64.9	64.9	90.00	79.5	-2,925.1	660.1	531.1	128.99	5.118	
9,000.0	7,115.0	8,979.5	7,115.0	67.2	67.3	90.00	79.7	-3,025.1	660.1	526.3	133.79	4.934	
9,100.0	7,115.0	9,079.5	7,115.0	69.6	69.7	90.00	80.0	-3,125.1	660.1	521.5	138.59	4.763	
9,200.0	7,115.0	9,179.5	7,115.0	72.0	72.1	90.00	80.2	-3,225.1	660.1	516.7	143.40	4.603	
9,300.0	7,115.0	9,279.5	7,115.0	74.4	74.5	90.00	80.5	-3,325.1	660.1	511.9	148.23	4.453	
9,400.0	7,115.0	9,379.5	7,115.0	76.8	76.9	90.00	80.7	-3,425.1	660.1	507.1	153.06	4.313	
9,500.0	7,115.0	9,479.5	7,115.0	79.2	79.3	90.00	81.0	-3,525.1	660.1	502.2	157.90	4.181	
9,600.0	7,115.0	9,579.5	7,115.0	81.6	81.7	90.00	81.2	-3,625.1	660.1	497.4	162.74	4.056	
9,700.0	7,115.0	9,679.5	7,115.0	84.0	84.2	90.00	81.5	-3,725.1	660.1	492.5	167.59	3.939	
9,800.0	7,115.0	9,779.5	7,115.0	86.4	86.6	90.00	81.7	-3,825.1	660.1	487.7	172.45	3.828	
9,900.0	7,115.0	9,879.5	7,115.0	88.8	89.0	90.00	82.0	-3,925.1	660.1	482.8	177.31	3.723	
10,000.0	7,115.0	9,979.5	7,115.0	91.2	91.4	90.00	82.2	-4,025.1	660.1	477.9	182.18	3.623	
10,100.0	7,115.0	10,079.5	7,115.0	93.6	93.9	90.00	82.5	-4,125.1	660.1	473.1	187.05	3.529	
10,200.0	7,115.0	10,179.5	7,115.0	96.1	96.3	90.00	82.7	-4,225.1	660.1	468.2	191.92	3.439	
10,300.0	7,115.0	10,279.5	7,115.0	98.5	98.8	90.00	83.0	-4,325.1	660.1	463.3	196.80	3.354	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,115.0	10,379.5	7,115.0	100.9	101.2	90.00	83.2	-4,425.1	660.1	458.4	201.68	3.273	
10,500.0	7,115.0	10,479.5	7,115.0	103.4	103.6	90.00	83.5	-4,525.1	660.1	453.6	206.57	3.196	
10,600.0	7,115.0	10,579.5	7,115.0	105.8	106.1	90.00	83.7	-4,625.1	660.1	448.7	211.46	3.122	
10,700.0	7,115.0	10,679.5	7,115.0	108.2	108.5	90.00	84.0	-4,725.1	660.1	443.8	216.35	3.051	
10,800.0	7,115.0	10,779.5	7,115.0	110.7	111.0	90.00	84.2	-4,825.1	660.1	438.9	221.24	2.984	
10,900.0	7,115.0	10,879.5	7,115.0	113.1	113.4	90.00	84.5	-4,925.1	660.1	434.0	226.14	2.919	
11,000.0	7,115.0	10,979.5	7,115.0	115.5	115.9	90.00	84.7	-5,025.1	660.1	429.1	231.04	2.857	
11,100.0	7,115.0	11,079.5	7,115.0	118.0	118.3	90.00	85.0	-5,125.1	660.1	424.2	235.94	2.798	
11,200.0	7,115.0	11,179.5	7,115.0	120.4	120.8	90.00	85.2	-5,225.1	660.1	419.3	240.84	2.741	
11,300.0	7,115.0	11,279.5	7,115.0	122.9	123.2	90.00	85.5	-5,325.1	660.1	414.4	245.74	2.686	
11,400.0	7,115.0	11,379.5	7,115.0	125.3	125.7	90.00	85.7	-5,425.1	660.1	409.5	250.65	2.634	
11,500.0	7,115.0	11,479.5	7,115.0	127.8	128.1	90.00	86.0	-5,525.1	660.1	404.6	255.56	2.583	
11,600.0	7,115.0	11,579.5	7,115.0	130.2	130.6	90.00	86.2	-5,625.1	660.1	399.7	260.46	2.534	
11,700.0	7,115.0	11,679.5	7,115.0	132.7	133.0	90.00	86.5	-5,725.1	660.1	394.7	265.38	2.487	
11,800.0	7,115.0	11,779.5	7,115.0	135.1	135.5	90.00	86.7	-5,825.1	660.1	389.8	270.29	2.442	
11,900.0	7,115.0	11,879.5	7,115.0	137.6	138.0	90.00	87.0	-5,925.1	660.1	384.9	275.20	2.399	
12,000.0	7,115.0	11,979.5	7,115.0	140.0	140.4	90.00	87.2	-6,025.1	660.1	380.0	280.12	2.357	
12,100.0	7,115.0	12,079.5	7,115.0	142.5	142.9	90.00	87.5	-6,125.1	660.1	375.1	285.03	2.316	
12,200.0	7,115.0	12,179.5	7,115.0	144.9	145.3	90.00	87.7	-6,225.1	660.1	370.2	289.95	2.277	
12,300.0	7,115.0	12,279.5	7,115.0	147.4	147.8	90.00	88.0	-6,325.1	660.1	365.3	294.87	2.239	
12,400.0	7,115.0	12,379.5	7,115.0	149.8	150.2	90.00	88.2	-6,425.1	660.1	360.3	299.78	2.202	
12,500.0	7,115.0	12,479.5	7,115.0	152.3	152.7	90.00	88.5	-6,525.1	660.1	355.4	304.70	2.166	
12,600.0	7,115.0	12,579.5	7,115.0	154.7	155.2	90.00	88.7	-6,625.1	660.1	350.5	309.63	2.132	
12,700.0	7,115.0	12,679.5	7,115.0	157.2	157.6	90.00	89.0	-6,725.1	660.1	345.6	314.55	2.099	
12,800.0	7,115.0	12,779.5	7,115.0	159.6	160.1	90.00	89.2	-6,825.1	660.1	340.6	319.47	2.066	
12,900.0	7,115.0	12,879.5	7,115.0	162.1	162.5	90.00	89.5	-6,925.1	660.1	335.7	324.39	2.035	
13,000.0	7,115.0	12,979.5	7,115.0	164.6	165.0	90.00	89.7	-7,025.1	660.1	330.8	329.32	2.005	
13,100.0	7,115.0	13,079.5	7,115.0	167.0	167.5	90.00	90.0	-7,125.1	660.1	325.9	334.24	1.975	
13,200.0	7,115.0	13,179.5	7,115.0	169.5	169.9	90.00	90.2	-7,225.1	660.1	321.0	339.17	1.946	
13,300.0	7,115.0	13,279.5	7,115.0	171.9	172.4	90.00	90.5	-7,325.1	660.1	316.0	344.09	1.918	
13,400.0	7,115.0	13,379.5	7,115.0	174.4	174.9	90.00	90.7	-7,425.1	660.1	311.1	349.02	1.891	
13,500.0	7,115.0	13,479.5	7,115.0	176.9	177.3	90.00	91.0	-7,525.1	660.1	306.2	353.95	1.865	
13,600.0	7,115.0	13,579.5	7,115.0	179.3	179.8	90.00	91.2	-7,625.1	660.1	301.2	358.88	1.839	
13,700.0	7,115.0	13,679.5	7,115.0	181.8	182.3	90.00	91.5	-7,725.1	660.1	296.3	363.80	1.814	
13,800.0	7,115.0	13,779.5	7,115.0	184.2	184.7	90.00	91.7	-7,825.1	660.1	291.4	368.73	1.790	
13,900.0	7,115.0	13,879.5	7,115.0	186.7	187.2	90.00	92.0	-7,925.1	660.1	286.5	373.66	1.767	
14,000.0	7,115.0	13,979.5	7,115.0	189.2	189.6	90.00	92.2	-8,025.1	660.1	281.5	378.59	1.744	
14,100.0	7,115.0	14,079.5	7,115.0	191.6	192.1	90.00	92.5	-8,125.1	660.1	276.6	383.52	1.721	
14,200.0	7,115.0	14,179.5	7,115.0	194.1	194.6	90.00	92.7	-8,225.1	660.1	271.7	388.46	1.699	
14,300.0	7,115.0	14,279.5	7,115.0	196.6	197.0	90.00	93.0	-8,325.1	660.1	266.7	393.39	1.678	
14,400.0	7,115.0	14,379.5	7,115.0	199.0	199.5	90.00	93.2	-8,425.1	660.1	261.8	398.32	1.657	
14,500.0	7,115.0	14,479.5	7,115.0	201.5	202.0	90.00	93.5	-8,525.1	660.1	256.9	403.25	1.637	
14,600.0	7,115.0	14,579.5	7,115.0	203.9	204.4	90.00	93.7	-8,625.1	660.1	251.9	408.18	1.617	
14,700.0	7,115.0	14,679.5	7,115.0	206.4	206.9	90.00	94.0	-8,725.1	660.1	247.0	413.12	1.598	
14,800.0	7,115.0	14,779.5	7,115.0	208.9	209.4	90.00	94.2	-8,825.1	660.1	242.1	418.05	1.579	
14,900.0	7,115.0	14,879.5	7,115.0	211.3	211.8	90.00	94.5	-8,925.1	660.1	237.1	422.98	1.561	
15,000.0	7,115.0	14,979.5	7,115.0	213.8	214.3	90.00	94.7	-9,025.1	660.1	232.2	427.92	1.543	
15,100.0	7,115.0	15,079.5	7,115.0	216.3	216.8	90.00	95.0	-9,125.1	660.1	227.3	432.85	1.525	
15,200.0	7,115.0	15,179.5	7,115.0	218.7	219.2	90.00	95.2	-9,225.1	660.1	222.3	437.79	1.508	
15,300.0	7,115.0	15,279.5	7,115.0	221.2	221.7	90.00	95.5	-9,325.1	660.1	217.4	442.72	1.491 Level 3	
15,400.0	7,115.0	15,379.5	7,115.0	223.7	224.2	90.00	95.7	-9,425.1	660.1	212.5	447.66	1.475 Level 3	
15,500.0	7,115.0	15,479.5	7,115.0	226.1	226.6	90.00	96.0	-9,525.1	660.1	207.5	452.60	1.459 Level 3	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
15,600.0	7,115.0	15,579.5	7,115.0	228.6	229.1	90.00	96.2	-9,625.1	660.1	202.6	457.53	1.443 Level 3		
15,700.0	7,115.0	15,679.5	7,115.0	231.1	231.6	90.00	96.5	-9,725.1	660.1	197.7	462.47	1.427 Level 3		
15,800.0	7,115.0	15,779.5	7,115.0	233.5	234.0	90.00	96.7	-9,825.1	660.1	192.7	467.40	1.412 Level 3		
15,900.0	7,115.0	15,879.5	7,115.0	236.0	236.5	90.00	97.0	-9,925.1	660.1	187.8	472.34	1.398 Level 3		
16,000.0	7,115.0	15,979.5	7,115.0	238.5	239.0	90.00	97.2	-10,025.1	660.1	182.8	477.28	1.383 Level 3		
16,100.0	7,115.0	16,079.5	7,115.0	240.9	241.5	90.00	97.5	-10,125.1	660.1	177.9	482.22	1.369 Level 3		
16,200.0	7,115.0	16,179.5	7,115.0	243.4	243.9	90.00	97.7	-10,225.1	660.1	173.0	487.15	1.355 Level 3		
16,300.0	7,115.0	16,279.5	7,115.0	245.9	246.4	90.00	98.0	-10,325.1	660.1	168.0	492.09	1.341 Level 3		
16,400.0	7,115.0	16,379.5	7,115.0	248.3	248.9	90.00	98.2	-10,425.1	660.1	163.1	497.03	1.328 Level 3		
16,500.0	7,115.0	16,479.5	7,115.0	250.8	251.3	90.00	98.5	-10,525.1	660.1	158.2	501.97	1.315 Level 3		
16,600.0	7,115.0	16,579.5	7,115.0	253.3	253.8	90.00	98.7	-10,625.1	660.1	153.2	506.91	1.302 Level 3		
16,700.0	7,115.0	16,679.5	7,115.0	255.7	256.3	90.00	99.0	-10,725.1	660.1	148.3	511.84	1.290 Level 3		
16,800.0	7,115.0	16,779.5	7,115.0	258.2	258.7	90.00	99.2	-10,825.1	660.1	143.3	516.78	1.277 Level 3		
16,900.0	7,115.0	16,879.5	7,115.0	260.7	261.2	90.00	99.5	-10,925.1	660.1	138.4	521.72	1.265 Level 3		
17,000.0	7,115.0	16,979.5	7,115.0	263.1	263.7	90.00	99.7	-11,025.1	660.1	133.5	526.66	1.253 Level 3		
17,100.0	7,115.0	17,079.5	7,115.0	265.6	266.1	90.00	100.0	-11,125.1	660.1	128.5	531.60	1.242 Level 2		
17,200.0	7,115.0	17,179.5	7,115.0	268.1	268.6	90.00	100.2	-11,225.1	660.1	123.6	536.54	1.230 Level 2		
17,300.0	7,115.0	17,279.5	7,115.0	270.5	271.1	90.00	100.5	-11,325.1	660.1	118.6	541.48	1.219 Level 2		
17,400.0	7,115.0	17,379.5	7,115.0	273.0	273.6	90.00	100.7	-11,425.1	660.1	113.7	546.42	1.208 Level 2		
17,500.0	7,115.0	17,479.5	7,115.0	275.5	276.0	90.00	101.0	-11,525.1	660.1	108.8	551.36	1.197 Level 2		
17,600.0	7,115.0	17,579.5	7,115.0	277.9	278.5	90.00	101.2	-11,625.1	660.1	103.8	556.30	1.187 Level 2		
17,700.0	7,115.0	17,679.5	7,115.0	280.4	281.0	90.00	101.5	-11,725.1	660.1	98.9	561.24	1.176 Level 2		
17,730.1	7,115.0	17,709.6	7,115.0	281.2	281.7	90.00	101.5	-11,755.2	660.1	97.4	562.73	1.173 Level 2, SF		

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<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	31.03	48.1	28.9	56.1					
100.0	100.0	99.0	99.0	0.1	0.1	31.03	48.1	28.9	56.1	55.9	0.26	212.608		
200.0	200.0	199.0	199.0	0.3	0.3	31.03	48.1	28.9	56.1	55.5	0.61	91.609 CC		
300.0	300.0	299.6	299.6	0.5	0.5	149.44	48.0	28.1	56.3	55.4	0.96	58.477 ES		
400.0	400.0	400.2	400.2	0.7	0.7	148.70	47.7	25.5	57.0	55.7	1.32	43.232		
500.0	499.9	500.8	500.7	0.9	0.9	147.48	47.1	21.1	58.1	56.4	1.68	34.553		
600.0	599.7	601.4	601.0	1.1	1.1	145.86	46.4	15.0	59.7	57.6	2.06	28.999		
700.0	699.4	701.9	701.3	1.3	1.3	143.88	45.4	7.1	61.8	59.3	2.45	25.168		
800.0	798.9	802.4	801.3	1.5	1.5	141.65	44.2	-2.5	64.4	61.5	2.88	22.381		
900.0	898.3	902.9	901.1	1.8	1.8	139.23	42.8	-13.8	67.6	64.3	3.34	20.271		
1,000.0	997.4	1,003.3	1,000.7	2.0	2.0	136.72	41.1	-26.9	71.5	67.7	3.84	18.625		
1,100.0	1,096.3	1,103.7	1,099.9	2.3	2.3	134.18	39.3	-41.6	76.0	71.6	4.39	17.310		
1,200.0	1,194.9	1,204.0	1,198.9	2.7	2.7	131.69	37.2	-58.1	81.2	76.2	5.00	16.246		
1,300.0	1,293.3	1,304.0	1,297.2	3.0	3.0	129.49	35.0	-76.0	87.2	81.5	5.65	15.438		
1,400.0	1,391.5	1,403.7	1,395.3	3.4	3.4	127.83	32.8	-93.9	93.6	87.3	6.31	14.833		
1,500.0	1,489.7	1,503.5	1,493.4	3.7	3.7	126.39	30.5	-111.8	100.1	93.1	6.99	14.326		
1,600.0	1,587.9	1,603.2	1,591.5	4.1	4.1	125.13	28.3	-129.7	106.6	99.0	7.67	13.897		
1,700.0	1,686.1	1,703.0	1,689.7	4.4	4.4	124.01	26.1	-147.6	113.2	104.9	8.37	13.532		
1,800.0	1,784.3	1,802.8	1,787.8	4.8	4.8	123.02	23.8	-165.5	119.9	110.8	9.07	13.219		
1,900.0	1,882.5	1,902.5	1,885.9	5.2	5.1	122.13	21.6	-183.4	126.5	116.8	9.77	12.947		
2,000.0	1,980.8	2,002.3	1,984.0	5.5	5.5	121.32	19.4	-201.3	133.2	122.7	10.48	12.711		
2,100.0	2,079.0	2,102.0	2,082.1	5.9	5.8	120.60	17.1	-219.2	139.9	128.7	11.19	12.503		
2,200.0	2,177.2	2,201.8	2,180.2	6.3	6.2	119.94	14.9	-237.2	146.7	134.8	11.90	12.319		
2,300.0	2,275.4	2,301.6	2,278.3	6.7	6.6	119.34	12.6	-255.1	153.4	140.8	12.62	12.156		
2,400.0	2,373.6	2,401.3	2,376.4	7.0	6.9	118.79	10.4	-273.0	160.2	146.8	13.34	12.010		
2,500.0	2,471.8	2,501.1	2,474.6	7.4	7.3	118.29	8.2	-290.9	167.0	152.9	14.06	11.878		
2,600.0	2,570.0	2,600.8	2,572.7	7.8	7.6	117.82	5.9	-308.8	173.7	159.0	14.78	11.760		
2,700.0	2,668.3	2,700.6	2,670.8	8.1	8.0	117.39	3.7	-326.7	180.6	165.1	15.50	11.652		
2,800.0	2,766.5	2,800.3	2,768.9	8.5	8.4	116.99	1.5	-344.6	187.4	171.1	16.22	11.554		
2,900.0	2,864.7	2,900.1	2,867.0	8.9	8.7	116.62	-0.8	-362.5	194.2	177.2	16.94	11.464		
3,000.0	2,962.9	2,999.9	2,965.1	9.3	9.1	116.28	-3.0	-380.4	201.0	183.4	17.66	11.382		
3,100.0	3,061.1	3,099.6	3,063.2	9.6	9.4	115.95	-5.2	-398.3	207.8	189.5	18.38	11.306		
3,200.0	3,159.3	3,199.4	3,161.3	10.0	9.8	115.65	-7.5	-416.3	214.7	195.6	19.11	11.236		
3,300.0	3,257.6	3,299.1	3,259.5	10.4	10.2	115.37	-9.7	-434.2	221.5	201.7	19.83	11.172		
3,400.0	3,355.8	3,398.9	3,357.6	10.8	10.5	115.10	-11.9	-452.1	228.4	207.8	20.55	11.112		
3,500.0	3,454.0	3,498.7	3,455.7	11.1	10.9	114.85	-14.2	-470.0	235.2	214.0	21.28	11.056		
3,600.0	3,552.2	3,598.4	3,553.8	11.5	11.3	114.61	-16.4	-487.9	242.1	220.1	22.00	11.004		
3,700.0	3,650.4	3,698.2	3,651.9	11.9	11.6	114.39	-18.7	-505.8	249.0	226.2	22.73	10.955		
3,800.0	3,748.6	3,797.9	3,750.0	12.3	12.0	114.18	-20.9	-523.7	255.8	232.4	23.45	10.909		
3,900.0	3,846.8	3,897.7	3,848.1	12.6	12.4	113.98	-23.1	-541.6	262.7	238.5	24.18	10.866		
4,000.0	3,945.1	3,997.5	3,946.3	13.0	12.7	113.78	-25.4	-559.5	269.6	244.7	24.90	10.826		
4,100.0	4,043.3	4,097.2	4,044.4	13.4	13.1	113.60	-27.6	-577.4	276.5	250.8	25.63	10.788		
4,200.0	4,141.5	4,197.0	4,142.5	13.8	13.4	113.43	-29.8	-595.4	283.3	257.0	26.35	10.752		
4,300.0	4,239.7	4,296.7	4,240.6	14.1	13.8	113.27	-32.1	-613.3	290.2	263.1	27.08	10.718		
4,400.0	4,337.9	4,396.5	4,338.7	14.5	14.2	113.11	-34.3	-631.2	297.1	269.3	27.80	10.686		
4,500.0	4,436.1	4,496.3	4,436.8	14.9	14.5	112.96	-36.5	-649.1	304.0	275.5	28.53	10.656		
4,600.0	4,534.3	4,596.0	4,534.9	15.3	14.9	112.82	-38.8	-667.0	310.9	281.6	29.25	10.627		
4,700.0	4,632.6	4,695.8	4,633.0	15.6	15.3	112.68	-41.0	-684.9	317.8	287.8	29.98	10.600		
4,800.0	4,730.8	4,795.5	4,731.2	16.0	15.6	112.55	-43.2	-702.8	324.7	294.0	30.70	10.574		
4,900.0	4,829.0	4,895.3	4,829.3	16.4	16.0	112.43	-45.5	-720.7	331.6	300.1	31.43	10.549		
5,000.0	4,927.2	4,995.1	4,927.4	16.8	16.3	112.31	-47.7	-738.6	338.5	306.3	32.16	10.525		
5,100.0	5,025.4	5,094.8	5,025.5	17.1	16.7	112.19	-50.0	-756.5	345.3	312.5	32.88	10.503		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis		Separation Factor	
5,200.0	5,123.6	5,194.6	5,123.6	17.5	17.1	112.08	-52.2	-774.5	352.2	318.6	33.61	10.481		
5,300.0	5,221.8	5,294.3	5,221.7	17.9	17.4	111.97	-54.4	-792.4	359.1	324.8	34.33	10.460		
5,400.0	5,320.1	5,394.1	5,319.8	18.3	17.8	111.87	-56.7	-810.3	366.0	331.0	35.06	10.441		
5,500.0	5,418.3	5,493.9	5,418.0	18.6	18.2	111.77	-58.9	-828.2	372.9	337.2	35.79	10.422		
5,600.0	5,516.5	5,593.6	5,516.1	19.0	18.5	111.68	-61.1	-846.1	379.8	343.3	36.51	10.403		
5,700.0	5,614.7	5,693.4	5,614.2	19.4	18.9	111.58	-63.4	-864.0	386.8	349.5	37.24	10.386		
5,800.0	5,712.9	5,793.1	5,712.3	19.8	19.3	111.49	-65.6	-881.9	393.7	355.7	37.96	10.369		
5,900.0	5,811.1	5,892.9	5,810.4	20.1	19.6	111.41	-67.8	-899.8	400.6	361.9	38.69	10.353		
6,000.0	5,909.3	5,992.7	5,908.5	20.5	20.0	111.33	-70.1	-917.7	407.5	368.1	39.42	10.338		
6,100.0	6,007.6	6,092.4	6,006.6	20.9	20.3	111.25	-72.3	-935.6	414.4	374.2	40.14	10.323		
6,200.0	6,105.8	6,192.2	6,104.7	21.3	20.7	111.17	-74.5	-953.6	421.3	380.4	40.87	10.308		
6,300.0	6,204.0	6,291.9	6,202.9	21.6	21.1	111.09	-76.8	-971.5	428.2	386.6	41.59	10.294		
6,400.0	6,302.2	6,388.9	6,298.1	22.0	21.5	110.93	-78.9	-989.6	435.2	392.9	42.35	10.276		
6,500.0	6,400.4	6,478.7	6,383.8	22.4	22.0	109.49	-80.9	-1,016.1	443.9	400.5	43.39	10.230		
6,600.0	6,498.6	6,563.6	6,460.7	22.8	22.7	106.76	-82.6	-1,052.0	455.6	410.9	44.64	10.205		
6,700.0	6,596.8	6,641.3	6,526.3	23.1	23.5	100.61	-84.0	-1,093.6	471.9	426.0	45.94	10.272		
6,800.0	6,692.9	6,714.4	6,582.9	23.7	24.4	84.26	-85.2	-1,139.6	491.5	444.1	47.34	10.381		
6,900.0	6,783.8	6,785.3	6,632.5	24.5	25.4	75.42	-86.2	-1,190.3	511.6	462.9	48.65	10.516		
7,000.0	6,867.2	6,850.0	6,672.5	25.5	26.4	69.55	-87.0	-1,241.1	531.0	481.2	49.79	10.666		
7,100.0	6,941.1	6,922.8	6,711.1	26.7	27.6	65.04	-87.8	-1,302.7	548.7	497.8	50.94	10.772		
7,200.0	7,003.6	6,989.9	6,740.3	28.1	28.8	61.79	-88.3	-1,363.1	564.1	512.1	52.00	10.847		
7,300.0	7,053.3	7,050.0	6,761.0	29.7	30.0	59.52	-88.6	-1,419.5	576.4	523.4	53.01	10.874		
7,400.0	7,089.0	7,122.3	6,778.6	31.5	31.5	57.88	-88.9	-1,489.6	585.2	530.9	54.31	10.776		
7,500.0	7,109.6	7,188.0	6,787.6	33.5	32.9	57.02	-88.9	-1,554.6	590.4	534.7	55.72	10.595		
7,600.0	7,115.0	7,259.0	6,790.0	35.5	34.4	56.80	-88.8	-1,625.5	591.7	534.0	57.72	10.251		
7,700.0	7,115.0	7,359.0	6,790.0	37.6	36.6	56.80	-88.5	-1,725.5	591.7	530.3	61.42	9.634		
7,800.0	7,115.0	7,459.0	6,790.0	39.8	38.9	56.80	-88.3	-1,825.5	591.7	526.5	65.17	9.079		
7,900.0	7,115.0	7,559.0	6,790.0	41.9	41.1	56.80	-88.0	-1,925.5	591.7	522.7	68.97	8.579		
8,000.0	7,115.0	7,659.0	6,790.0	44.1	43.4	56.80	-87.8	-2,025.5	591.7	518.9	72.80	8.127		
8,100.0	7,115.0	7,759.0	6,790.0	46.4	45.7	56.80	-87.5	-2,125.5	591.7	515.0	76.67	7.717		
8,200.0	7,115.0	7,859.0	6,790.0	48.6	48.0	56.80	-87.3	-2,225.5	591.7	511.1	80.57	7.344		
8,300.0	7,115.0	7,959.0	6,790.0	50.9	50.4	56.80	-87.0	-2,325.5	591.7	507.2	84.49	7.003		
8,400.0	7,115.0	8,059.0	6,790.0	53.2	52.7	56.80	-86.8	-2,425.5	591.7	503.3	88.43	6.691		
8,500.0	7,115.0	8,159.0	6,790.0	55.5	55.1	56.80	-86.5	-2,525.5	591.7	499.3	92.38	6.405		
8,600.0	7,115.0	8,259.0	6,790.0	57.8	57.5	56.80	-86.3	-2,625.5	591.7	495.3	96.36	6.140		
8,700.0	7,115.0	8,359.0	6,790.0	60.2	59.8	56.80	-86.0	-2,725.5	591.7	491.3	100.35	5.896		
8,800.0	7,115.0	8,459.0	6,790.0	62.5	62.2	56.80	-85.8	-2,825.5	591.7	487.3	104.35	5.670		
8,900.0	7,115.0	8,559.0	6,790.0	64.9	64.6	56.80	-85.5	-2,925.5	591.7	483.3	108.36	5.460		
9,000.0	7,115.0	8,659.0	6,790.0	67.2	67.0	56.80	-85.3	-3,025.5	591.7	479.3	112.38	5.265		
9,100.0	7,115.0	8,759.0	6,790.0	69.6	69.4	56.80	-85.0	-3,125.5	591.7	475.3	116.41	5.083		
9,200.0	7,115.0	8,859.0	6,790.0	72.0	71.8	56.80	-84.8	-3,225.5	591.7	471.2	120.45	4.912		
9,300.0	7,115.0	8,959.0	6,790.0	74.4	74.2	56.80	-84.5	-3,325.5	591.7	467.2	124.49	4.753		
9,400.0	7,115.0	9,059.0	6,790.0	76.8	76.7	56.80	-84.3	-3,425.5	591.7	463.1	128.54	4.603		
9,500.0	7,115.0	9,159.0	6,790.0	79.2	79.1	56.80	-84.0	-3,525.5	591.7	459.1	132.60	4.462		
9,600.0	7,115.0	9,259.0	6,790.0	81.6	81.5	56.80	-83.8	-3,625.5	591.7	455.0	136.66	4.330		
9,700.0	7,115.0	9,359.0	6,790.0	84.0	83.9	56.80	-83.5	-3,725.5	591.7	451.0	140.73	4.204		
9,800.0	7,115.0	9,459.0	6,790.0	86.4	86.4	56.80	-83.3	-3,825.5	591.7	446.9	144.80	4.086		
9,900.0	7,115.0	9,559.0	6,790.0	88.8	88.8	56.80	-83.0	-3,925.5	591.7	442.8	148.88	3.974		
10,000.0	7,115.0	9,659.0	6,790.0	91.2	91.2	56.80	-82.8	-4,025.5	591.7	438.7	152.96	3.868		
10,100.0	7,115.0	9,759.0	6,790.0	93.6	93.7	56.80	-82.5	-4,125.5	591.7	434.6	157.04	3.768		
10,200.0	7,115.0	9,859.0	6,790.0	96.1	96.1	56.80	-82.3	-4,225.5	591.7	430.6	161.13	3.672		
10,300.0	7,115.0	9,959.0	6,790.0	98.5	98.6	56.80	-82.0	-4,325.5	591.7	426.5	165.22	3.581		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)				Between Ellipses (usft)	
10,400.0	7,115.0	10,059.0	6,790.0	100.9	101.0	56.80	-81.8	-4,425.5	591.7	422.4	169.31	3.495		
10,500.0	7,115.0	10,159.0	6,790.0	103.4	103.4	56.80	-81.6	-4,525.5	591.7	418.3	173.41	3.412		
10,600.0	7,115.0	10,259.0	6,790.0	105.8	105.9	56.80	-81.3	-4,625.5	591.7	414.2	177.50	3.333		
10,700.0	7,115.0	10,359.0	6,790.0	108.2	108.3	56.80	-81.1	-4,725.5	591.7	410.1	181.60	3.258		
10,800.0	7,115.0	10,459.0	6,790.0	110.7	110.8	56.80	-80.8	-4,825.5	591.7	406.0	185.70	3.186		
10,900.0	7,115.0	10,559.0	6,790.0	113.1	113.2	56.80	-80.6	-4,925.5	591.7	401.9	189.81	3.117		
11,000.0	7,115.0	10,659.0	6,790.0	115.5	115.7	56.80	-80.3	-5,025.5	591.7	397.8	193.91	3.051		
11,100.0	7,115.0	10,759.0	6,790.0	118.0	118.1	56.80	-80.1	-5,125.5	591.7	393.7	198.02	2.988		
11,200.0	7,115.0	10,859.0	6,790.0	120.4	120.6	56.80	-79.8	-5,225.5	591.7	389.6	202.13	2.927		
11,300.0	7,115.0	10,959.0	6,790.0	122.9	123.0	56.80	-79.6	-5,325.5	591.7	385.4	206.24	2.869		
11,400.0	7,115.0	11,059.0	6,790.0	125.3	125.5	56.80	-79.3	-5,425.5	591.7	381.3	210.35	2.813		
11,500.0	7,115.0	11,159.0	6,790.0	127.8	127.9	56.80	-79.1	-5,525.5	591.7	377.2	214.46	2.759		
11,600.0	7,115.0	11,259.0	6,790.0	130.2	130.4	56.80	-78.8	-5,625.5	591.7	373.1	218.58	2.707		
11,700.0	7,115.0	11,359.0	6,790.0	132.7	132.9	56.80	-78.6	-5,725.5	591.7	369.0	222.69	2.657		
11,800.0	7,115.0	11,459.0	6,790.0	135.1	135.3	56.80	-78.3	-5,825.5	591.7	364.9	226.81	2.609		
11,900.0	7,115.0	11,559.0	6,790.0	137.6	137.8	56.80	-78.1	-5,925.5	591.7	360.8	230.93	2.562		
12,000.0	7,115.0	11,659.0	6,790.0	140.0	140.2	56.80	-77.8	-6,025.5	591.7	356.6	235.05	2.517		
12,100.0	7,115.0	11,759.0	6,790.0	142.5	142.7	56.80	-77.6	-6,125.5	591.7	352.5	239.17	2.474		
12,200.0	7,115.0	11,859.0	6,790.0	144.9	145.1	56.80	-77.3	-6,225.5	591.7	348.4	243.29	2.432		
12,300.0	7,115.0	11,959.0	6,790.0	147.4	147.6	56.80	-77.1	-6,325.5	591.7	344.3	247.41	2.392		
12,400.0	7,115.0	12,059.0	6,790.0	149.8	150.1	56.80	-76.8	-6,425.5	591.7	340.2	251.53	2.352		
12,500.0	7,115.0	12,159.0	6,790.0	152.3	152.5	56.80	-76.6	-6,525.5	591.7	336.0	255.65	2.314		
12,600.0	7,115.0	12,259.0	6,790.0	154.7	155.0	56.80	-76.3	-6,625.5	591.7	331.9	259.78	2.278		
12,700.0	7,115.0	12,359.0	6,790.0	157.2	157.4	56.80	-76.1	-6,725.5	591.7	327.8	263.90	2.242		
12,800.0	7,115.0	12,459.0	6,790.0	159.6	159.9	56.80	-75.8	-6,825.5	591.7	323.7	268.03	2.208		
12,900.0	7,115.0	12,559.0	6,790.0	162.1	162.4	56.80	-75.6	-6,925.5	591.7	319.5	272.15	2.174		
13,000.0	7,115.0	12,659.0	6,790.0	164.6	164.8	56.80	-75.3	-7,025.5	591.7	315.4	276.28	2.142		
13,100.0	7,115.0	12,759.0	6,790.0	167.0	167.3	56.80	-75.1	-7,125.5	591.7	311.3	280.41	2.110		
13,200.0	7,115.0	12,859.0	6,790.0	169.5	169.8	56.80	-74.8	-7,225.5	591.7	307.1	284.53	2.079		
13,300.0	7,115.0	12,959.0	6,790.0	171.9	172.2	56.80	-74.6	-7,325.5	591.7	303.0	288.66	2.050		
13,400.0	7,115.0	13,059.0	6,790.0	174.4	174.7	56.80	-74.3	-7,425.5	591.7	298.9	292.79	2.021		
13,500.0	7,115.0	13,159.0	6,790.0	176.9	177.1	56.80	-74.1	-7,525.5	591.7	294.8	296.92	1.993		
13,600.0	7,115.0	13,259.0	6,790.0	179.3	179.6	56.80	-73.8	-7,625.5	591.7	290.6	301.05	1.965		
13,700.0	7,115.0	13,359.0	6,790.0	181.8	182.1	56.80	-73.6	-7,725.5	591.7	286.5	305.18	1.939		
13,800.0	7,115.0	13,459.0	6,790.0	184.2	184.5	56.80	-73.3	-7,825.5	591.7	282.4	309.31	1.913		
13,900.0	7,115.0	13,559.0	6,790.0	186.7	187.0	56.80	-73.1	-7,925.5	591.7	278.2	313.44	1.888		
14,000.0	7,115.0	13,659.0	6,790.0	189.2	189.5	56.80	-72.8	-8,025.5	591.7	274.1	317.57	1.863		
14,100.0	7,115.0	13,759.0	6,790.0	191.6	191.9	56.80	-72.6	-8,125.5	591.7	270.0	321.70	1.839		
14,200.0	7,115.0	13,859.0	6,790.0	194.1	194.4	56.80	-72.3	-8,225.5	591.7	265.8	325.84	1.816		
14,300.0	7,115.0	13,959.0	6,790.0	196.6	196.9	56.80	-72.1	-8,325.5	591.7	261.7	329.97	1.793		
14,400.0	7,115.0	14,059.0	6,790.0	199.0	199.3	56.80	-71.8	-8,425.5	591.7	257.6	334.10	1.771		
14,500.0	7,115.0	14,159.0	6,790.0	201.5	201.8	56.80	-71.6	-8,525.5	591.7	253.4	338.23	1.749		
14,600.0	7,115.0	14,259.0	6,790.0	203.9	204.3	56.80	-71.3	-8,625.5	591.7	249.3	342.37	1.728		
14,700.0	7,115.0	14,359.0	6,790.0	206.4	206.7	56.80	-71.1	-8,725.5	591.7	245.2	346.50	1.708		
14,800.0	7,115.0	14,459.0	6,790.0	208.9	209.2	56.80	-70.8	-8,825.5	591.7	241.0	350.64	1.687		
14,900.0	7,115.0	14,559.0	6,790.0	211.3	211.7	56.80	-70.6	-8,925.5	591.7	236.9	354.77	1.668		
15,000.0	7,115.0	14,659.0	6,790.0	213.8	214.1	56.80	-70.3	-9,025.5	591.7	232.8	358.90	1.649		
15,100.0	7,115.0	14,759.0	6,790.0	216.3	216.6	56.80	-70.1	-9,125.5	591.7	228.6	363.04	1.630		
15,200.0	7,115.0	14,859.0	6,790.0	218.7	219.1	56.80	-69.8	-9,225.5	591.7	224.5	367.17	1.611		
15,300.0	7,115.0	14,959.0	6,790.0	221.2	221.5	56.80	-69.6	-9,325.5	591.7	220.4	371.31	1.594		
15,400.0	7,115.0	15,059.0	6,790.0	223.7	224.0	56.80	-69.3	-9,425.5	591.7	216.2	375.45	1.576		
15,500.0	7,115.0	15,159.0	6,790.0	226.1	226.5	56.80	-69.1	-9,525.5	591.7	212.1	379.58	1.559		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
15,600.0	7,115.0	15,259.0	6,790.0	228.6	228.9	56.80	-68.8	-9,625.5	591.7	208.0	383.72	1.542		
15,700.0	7,115.0	15,359.0	6,790.0	231.1	231.4	56.80	-68.6	-9,725.5	591.7	203.8	387.85	1.526		
15,800.0	7,115.0	15,459.0	6,790.0	233.5	233.9	56.80	-68.3	-9,825.5	591.7	199.7	391.99	1.509		
15,900.0	7,115.0	15,559.0	6,790.0	236.0	236.3	56.80	-68.1	-9,925.5	591.7	195.6	396.13	1.494 Level 3		
16,000.0	7,115.0	15,659.0	6,790.0	238.5	238.8	56.80	-67.8	-10,025.5	591.7	191.4	400.26	1.478 Level 3		
16,100.0	7,115.0	15,759.0	6,790.0	240.9	241.3	56.80	-67.6	-10,125.5	591.7	187.3	404.40	1.463 Level 3		
16,200.0	7,115.0	15,859.0	6,790.0	243.4	243.8	56.80	-67.3	-10,225.5	591.7	183.1	408.54	1.448 Level 3		
16,300.0	7,115.0	15,959.0	6,790.0	245.9	246.2	56.80	-67.1	-10,325.5	591.7	179.0	412.68	1.434 Level 3		
16,400.0	7,115.0	16,059.0	6,790.0	248.3	248.7	56.80	-66.8	-10,425.5	591.7	174.9	416.81	1.420 Level 3		
16,500.0	7,115.0	16,159.0	6,790.0	250.8	251.2	56.80	-66.6	-10,525.5	591.7	170.7	420.95	1.406 Level 3		
16,600.0	7,115.0	16,259.0	6,790.0	253.3	253.6	56.80	-66.3	-10,625.5	591.7	166.6	425.09	1.392 Level 3		
16,700.0	7,115.0	16,359.0	6,790.0	255.7	256.1	56.80	-66.1	-10,725.5	591.7	162.5	429.23	1.378 Level 3		
16,800.0	7,115.0	16,459.0	6,790.0	258.2	258.6	56.80	-65.8	-10,825.5	591.7	158.3	433.37	1.365 Level 3		
16,900.0	7,115.0	16,559.0	6,790.0	260.7	261.0	56.80	-65.6	-10,925.5	591.7	154.2	437.51	1.352 Level 3		
17,000.0	7,115.0	16,659.0	6,790.0	263.1	263.5	56.80	-65.3	-11,025.5	591.7	150.0	441.64	1.340 Level 3		
17,100.0	7,115.0	16,759.0	6,790.0	265.6	266.0	56.80	-65.1	-11,125.5	591.7	145.9	445.78	1.327 Level 3		
17,200.0	7,115.0	16,859.0	6,790.0	268.1	268.5	56.80	-64.8	-11,225.5	591.7	141.8	449.92	1.315 Level 3		
17,300.0	7,115.0	16,959.0	6,790.0	270.5	270.9	56.80	-64.6	-11,325.5	591.7	137.6	454.06	1.303 Level 3		
17,400.0	7,115.0	17,059.0	6,790.0	273.0	273.4	56.80	-64.3	-11,425.5	591.7	133.5	458.20	1.291 Level 3		
17,500.0	7,115.0	17,159.0	6,790.0	275.5	275.9	56.80	-64.1	-11,525.5	591.7	129.3	462.34	1.280 Level 3		
17,600.0	7,115.0	17,259.0	6,790.0	277.9	278.3	56.80	-63.8	-11,625.5	591.7	125.2	466.48	1.268 Level 3		
17,700.0	7,115.0	17,359.0	6,790.0	280.4	280.8	56.80	-63.6	-11,725.5	591.7	121.1	470.62	1.257 Level 3		
17,730.1	7,115.0	17,389.1	6,790.0	281.2	281.5	56.80	-63.5	-11,755.6	591.7	119.8	471.86	1.254 Level 3, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 5 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference  (usft)	Offset  (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	30.54	24.0	14.2	27.9					
100.0	100.0	100.0	100.0	0.1	0.1	30.54	24.0	14.2	27.9	27.7	0.27	105.229		
200.0	200.0	200.0	200.0	0.3	0.3	30.54	24.0	14.2	27.9	27.3	0.61	45.440 CC		
300.0	300.0	300.4	300.4	0.5	0.5	149.02	23.7	13.4	28.0	27.0	0.96	28.994		
400.0	400.0	400.8	400.7	0.7	0.7	148.51	22.7	10.9	28.1	26.8	1.32	21.346		
500.0	499.9	501.2	501.0	0.9	0.9	147.66	21.1	6.9	28.4	26.7	1.68	16.938 ES		
600.0	599.7	601.5	601.2	1.1	1.1	146.50	18.7	1.2	28.8	26.7	2.05	14.076		
700.0	699.4	701.9	701.3	1.3	1.3	145.06	15.8	-6.2	29.3	26.9	2.43	12.068		
800.0	798.9	802.3	801.2	1.5	1.5	143.36	12.1	-15.1	30.0	27.1	2.83	10.578		
900.0	898.3	902.7	900.9	1.8	1.8	141.46	7.8	-25.7	30.8	27.5	3.27	9.425		
1,000.0	997.4	1,003.1	1,000.4	2.0	2.0	139.38	2.9	-37.9	31.8	28.0	3.74	8.502		
1,100.0	1,096.3	1,103.4	1,099.7	2.3	2.3	137.18	-2.7	-51.6	32.9	28.7	4.25	7.744		
1,200.0	1,194.9	1,203.8	1,198.6	2.7	2.7	134.91	-9.0	-67.0	34.2	29.4	4.82	7.110		
1,300.0	1,293.3	1,304.1	1,297.3	3.0	3.0	132.57	-15.9	-84.1	35.8	30.3	5.44	6.571		
1,400.0	1,391.5	1,404.1	1,395.4	3.4	3.4	130.03	-23.2	-101.8	37.2	31.1	6.11	6.095		
1,500.0	1,489.7	1,504.1	1,493.5	3.7	3.7	127.69	-30.4	-119.6	38.8	32.0	6.80	5.701		
1,600.0	1,587.9	1,604.1	1,591.7	4.1	4.1	125.53	-37.6	-137.3	40.4	32.9	7.52	5.373		
1,700.0	1,686.1	1,704.0	1,689.8	4.4	4.5	123.54	-44.8	-155.0	42.0	33.8	8.25	5.099		
1,800.0	1,784.3	1,804.0	1,787.9	4.8	4.9	121.71	-52.0	-172.8	43.7	34.8	8.99	4.868		
1,900.0	1,882.5	1,904.0	1,886.0	5.2	5.2	120.01	-59.3	-190.5	45.5	35.8	9.74	4.671		
2,000.0	1,980.8	2,004.0	1,984.2	5.5	5.6	118.44	-66.5	-208.3	47.3	36.8	10.50	4.504		
2,100.0	2,079.0	2,103.9	2,082.3	5.9	6.0	116.98	-73.7	-226.0	49.1	37.8	11.26	4.359		
2,200.0	2,177.2	2,203.9	2,180.4	6.3	6.4	115.63	-80.9	-243.8	50.9	38.9	12.03	4.234		
2,300.0	2,275.4	2,303.9	2,278.5	6.7	6.7	114.37	-88.2	-261.5	52.8	40.0	12.80	4.126		
2,400.0	2,373.6	2,403.9	2,376.6	7.0	7.1	113.20	-95.4	-279.3	54.7	41.1	13.57	4.030		
2,500.0	2,471.8	2,503.8	2,474.8	7.4	7.5	112.11	-102.6	-297.0	56.6	42.3	14.34	3.946		
2,600.0	2,570.0	2,603.8	2,572.9	7.8	7.9	111.09	-109.8	-314.8	58.5	43.4	15.12	3.872		
2,700.0	2,668.3	2,703.8	2,671.0	8.1	8.2	110.14	-117.0	-332.5	60.5	44.6	15.90	3.806		
2,800.0	2,766.5	2,803.8	2,769.1	8.5	8.6	109.24	-124.3	-350.3	62.5	45.8	16.67	3.747		
2,900.0	2,864.7	2,903.7	2,867.3	8.9	9.0	108.40	-131.5	-368.0	64.4	47.0	17.45	3.694		
3,000.0	2,962.9	3,003.7	2,965.4	9.3	9.4	107.61	-138.7	-385.8	66.4	48.2	18.22	3.646		
3,100.0	3,061.1	3,103.7	3,063.5	9.6	9.8	106.87	-145.9	-403.5	68.4	49.5	19.00	3.603		
3,200.0	3,159.3	3,203.7	3,161.6	10.0	10.1	106.17	-153.2	-421.3	70.5	50.7	19.77	3.564		
3,300.0	3,257.6	3,303.6	3,259.8	10.4	10.5	105.51	-160.4	-439.0	72.5	51.9	20.55	3.528		
3,400.0	3,355.8	3,403.6	3,357.9	10.8	10.9	104.88	-167.6	-456.8	74.5	53.2	21.32	3.496		
3,500.0	3,454.0	3,503.6	3,456.0	11.1	11.3	104.29	-174.8	-474.5	76.6	54.5	22.09	3.466		
3,600.0	3,552.2	3,603.6	3,554.1	11.5	11.7	103.73	-182.0	-492.3	78.6	55.8	22.86	3.439		
3,700.0	3,650.4	3,703.5	3,652.2	11.9	12.0	103.20	-189.3	-510.0	80.7	57.1	23.64	3.414		
3,800.0	3,748.6	3,803.5	3,750.4	12.3	12.4	102.69	-196.5	-527.8	82.8	58.3	24.41	3.391		
3,900.0	3,846.8	3,903.5	3,848.5	12.6	12.8	102.21	-203.7	-545.5	84.8	59.7	25.18	3.369		
4,000.0	3,945.1	4,003.5	3,946.6	13.0	13.2	101.75	-210.9	-563.3	86.9	61.0	25.95	3.349		
4,100.0	4,043.3	4,103.5	4,044.7	13.4	13.6	101.31	-218.2	-581.0	89.0	62.3	26.71	3.331		
4,200.0	4,141.5	4,203.4	4,142.9	13.8	13.9	100.90	-225.4	-598.8	91.1	63.6	27.48	3.314		
4,300.0	4,239.7	4,303.4	4,241.0	14.1	14.3	100.50	-232.6	-616.5	93.2	64.9	28.25	3.298		
4,400.0	4,337.9	4,403.4	4,339.1	14.5	14.7	100.12	-239.8	-634.3	95.3	66.3	29.02	3.283		
4,500.0	4,436.1	4,503.4	4,437.2	14.9	15.1	99.75	-247.0	-652.0	97.4	67.6	29.78	3.269		
4,600.0	4,534.3	4,603.3	4,535.3	15.3	15.5	99.40	-254.3	-669.8	99.5	68.9	30.55	3.256		
4,700.0	4,632.6	4,703.3	4,633.5	15.6	15.8	99.07	-261.5	-687.5	101.6	70.3	31.32	3.244		
4,800.0	4,730.8	4,803.3	4,731.6	16.0	16.2	98.75	-268.7	-705.3	103.7	71.6	32.08	3.232		
4,900.0	4,829.0	4,903.3	4,829.7	16.4	16.6	98.44	-275.9	-723.0	105.8	73.0	32.84	3.222		
5,000.0	4,927.2	5,003.2	4,927.8	16.8	17.0	98.15	-283.2	-740.8	107.9	74.3	33.61	3.211		
5,100.0	5,025.4	5,103.2	5,026.0	17.1	17.4	97.86	-290.4	-758.5	110.1	75.7	34.37	3.202		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 5 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference  (usft)	Offset  (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,200.0	5,123.6	5,203.2	5,124.1	17.5	17.8	97.59	-297.6	-776.3	112.2	77.0	35.14	3.193		
5,300.0	5,221.8	5,303.2	5,222.2	17.9	18.1	97.32	-304.8	-794.0	114.3	78.4	35.90	3.184		
5,400.0	5,320.1	5,403.1	5,320.3	18.3	18.5	97.07	-312.0	-811.8	116.4	79.8	36.66	3.176		
5,500.0	5,418.3	5,503.1	5,418.4	18.6	18.9	96.82	-319.3	-829.5	118.6	81.1	37.42	3.168		
5,600.0	5,516.5	5,603.1	5,516.6	19.0	19.3	96.59	-326.5	-847.3	120.7	82.5	38.18	3.161		
5,700.0	5,614.7	5,703.1	5,614.7	19.4	19.7	96.36	-333.7	-865.0	122.8	83.9	38.94	3.154		
5,800.0	5,712.9	5,803.0	5,712.8	19.8	20.0	96.14	-340.9	-882.8	125.0	85.3	39.70	3.147		
5,900.0	5,811.1	5,903.0	5,810.9	20.1	20.4	95.93	-348.2	-900.5	127.1	86.6	40.46	3.141		
6,000.0	5,909.3	6,003.0	5,909.1	20.5	20.8	95.72	-355.4	-918.3	129.2	88.0	41.22	3.135		
6,100.0	6,007.6	6,103.0	6,007.2	20.9	21.2	95.52	-362.6	-936.0	131.4	89.4	41.98	3.129		
6,200.0	6,105.8	6,203.0	6,105.3	21.3	21.6	95.33	-369.8	-953.8	133.5	90.8	42.74	3.124		
6,300.0	6,204.0	6,302.9	6,203.4	21.6	21.9	95.14	-377.0	-971.5	135.7	92.2	43.50	3.119		
6,400.0	6,302.2	6,400.0	6,298.5	22.0	22.3	94.67	-384.0	-989.5	138.2	93.9	44.28	3.121		
6,500.0	6,400.4	6,490.2	6,384.5	22.4	22.9	90.62	-390.3	-1,016.1	145.7	100.6	45.17	3.226		
6,600.0	6,498.6	6,575.4	6,461.4	22.8	23.6	83.60	-395.9	-1,052.1	161.9	116.1	45.73	3.539		
6,700.0	6,596.8	6,650.0	6,524.3	23.1	24.3	73.55	-400.5	-1,091.8	189.0	143.4	45.62	4.143		
6,800.0	6,692.9	6,726.6	6,583.6	23.7	25.2	54.03	-404.8	-1,140.0	221.3	176.6	44.70	4.951		
6,900.0	6,783.8	6,800.0	6,634.7	24.5	26.2	43.97	-408.4	-1,192.6	252.7	209.1	43.54	5.804		
7,000.0	6,867.2	6,867.1	6,675.8	25.5	27.2	37.88	-411.3	-1,245.5	281.4	239.2	42.22	6.664		
7,100.0	6,941.1	6,935.2	6,711.6	26.7	28.4	33.74	-413.9	-1,303.3	306.6	265.9	40.73	7.528		
7,200.0	7,003.6	7,000.0	6,739.8	28.1	29.5	30.94	-415.8	-1,361.6	327.7	288.6	39.11	8.379		
7,300.0	7,053.3	7,068.8	6,763.1	29.7	30.8	28.99	-417.4	-1,426.3	344.3	306.8	37.46	9.191		
7,400.0	7,089.0	7,134.7	6,778.7	31.5	32.1	27.75	-418.4	-1,490.3	356.0	320.2	35.85	9.931		
7,500.0	7,109.6	7,200.0	6,787.6	33.5	33.5	27.09	-418.9	-1,554.9	362.8	328.3	34.43	10.536		
7,600.0	7,115.0	7,271.5	6,790.0	35.5	35.0	26.92	-418.9	-1,626.4	364.5	330.7	33.85	10.769		
7,700.0	7,115.0	7,371.5	6,790.0	37.6	37.1	26.92	-418.6	-1,726.4	364.5	328.6	35.88	10.159		
7,800.0	7,115.0	7,471.5	6,790.0	39.8	39.3	26.92	-418.4	-1,826.4	364.5	326.6	37.94	9.608		
7,900.0	7,115.0	7,571.5	6,790.0	41.9	41.5	26.92	-418.1	-1,926.4	364.5	324.5	40.02	9.108		
8,000.0	7,115.0	7,671.5	6,790.0	44.1	43.8	26.92	-417.9	-2,026.4	364.5	322.4	42.12	8.654		
8,100.0	7,115.0	7,771.5	6,790.0	46.4	46.1	26.92	-417.6	-2,126.4	364.5	320.3	44.24	8.240		
8,200.0	7,115.0	7,871.5	6,790.0	48.6	48.3	26.92	-417.4	-2,226.4	364.5	318.1	46.37	7.861		
8,300.0	7,115.0	7,971.5	6,790.0	50.9	50.7	26.92	-417.1	-2,326.4	364.5	316.0	48.51	7.514		
8,400.0	7,115.0	8,071.5	6,790.0	53.2	53.0	26.92	-416.9	-2,426.4	364.5	313.8	50.66	7.195		
8,500.0	7,115.0	8,171.5	6,790.0	55.5	55.3	26.92	-416.6	-2,526.4	364.5	311.7	52.83	6.900		
8,600.0	7,115.0	8,271.5	6,790.0	57.8	57.7	26.92	-416.4	-2,626.4	364.5	309.5	55.00	6.627		
8,700.0	7,115.0	8,371.5	6,790.0	60.2	60.0	26.92	-416.1	-2,726.4	364.5	307.3	57.18	6.375		
8,800.0	7,115.0	8,471.5	6,790.0	62.5	62.4	26.92	-415.9	-2,826.4	364.5	305.1	59.36	6.140		
8,900.0	7,115.0	8,571.5	6,790.0	64.9	64.8	26.92	-415.6	-2,926.4	364.5	302.9	61.56	5.921		
9,000.0	7,115.0	8,671.5	6,790.0	67.2	67.1	26.92	-415.4	-3,026.4	364.5	300.7	63.75	5.717		
9,100.0	7,115.0	8,771.5	6,790.0	69.6	69.5	26.92	-415.1	-3,126.4	364.5	298.5	65.95	5.527		
9,200.0	7,115.0	8,871.5	6,790.0	72.0	71.9	26.92	-414.9	-3,226.4	364.5	296.3	68.16	5.348		
9,300.0	7,115.0	8,971.5	6,790.0	74.4	74.3	26.92	-414.6	-3,326.4	364.5	294.1	70.37	5.180		
9,400.0	7,115.0	9,071.5	6,790.0	76.8	76.7	26.92	-414.4	-3,426.4	364.5	291.9	72.58	5.022		
9,500.0	7,115.0	9,171.5	6,790.0	79.2	79.2	26.92	-414.1	-3,526.4	364.5	289.7	74.80	4.873		
9,600.0	7,115.0	9,271.5	6,790.0	81.6	81.6	26.92	-413.9	-3,626.4	364.5	287.5	77.02	4.732		
9,700.0	7,115.0	9,371.5	6,790.0	84.0	84.0	26.92	-413.6	-3,726.4	364.5	285.3	79.24	4.600		
9,800.0	7,115.0	9,471.5	6,790.0	86.4	86.4	26.92	-413.4	-3,826.4	364.5	283.0	81.47	4.474		
9,900.0	7,115.0	9,571.5	6,790.0	88.8	88.8	26.92	-413.1	-3,926.4	364.5	280.8	83.70	4.355		
10,000.0	7,115.0	9,671.5	6,790.0	91.2	91.3	26.92	-412.9	-4,026.4	364.5	278.6	85.93	4.242		
10,100.0	7,115.0	9,771.5	6,790.0	93.6	93.7	26.92	-412.6	-4,126.4	364.5	276.3	88.16	4.135		
10,200.0	7,115.0	9,871.5	6,790.0	96.1	96.1	26.92	-412.4	-4,226.4	364.5	274.1	90.39	4.033		
10,300.0	7,115.0	9,971.5	6,790.0	98.5	98.5	26.92	-412.1	-4,326.4	364.5	271.9	92.62	3.935		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 5 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
10,400.0	7,115.0	10,071.5	6,790.0	100.9	101.0	26.92	-411.9	-4,426.4	364.5	269.6	94.86	3.842		
10,500.0	7,115.0	10,171.5	6,790.0	103.4	103.4	26.92	-411.6	-4,526.4	364.5	267.4	97.10	3.754		
10,600.0	7,115.0	10,271.5	6,790.0	105.8	105.9	26.92	-411.4	-4,626.4	364.5	265.2	99.34	3.669		
10,700.0	7,115.0	10,371.5	6,790.0	108.2	108.3	26.92	-411.1	-4,726.4	364.5	262.9	101.58	3.588		
10,800.0	7,115.0	10,471.5	6,790.0	110.7	110.7	26.92	-410.9	-4,826.4	364.5	260.7	103.82	3.511		
10,900.0	7,115.0	10,571.5	6,790.0	113.1	113.2	26.92	-410.6	-4,926.4	364.5	258.4	106.06	3.437		
11,000.0	7,115.0	10,671.5	6,790.0	115.5	115.6	26.92	-410.4	-5,026.4	364.5	256.2	108.31	3.365		
11,100.0	7,115.0	10,771.5	6,790.0	118.0	118.1	26.92	-410.1	-5,126.3	364.5	253.9	110.55	3.297		
11,200.0	7,115.0	10,871.5	6,790.0	120.4	120.5	26.92	-409.9	-5,226.3	364.5	251.7	112.80	3.231		
11,300.0	7,115.0	10,971.5	6,790.0	122.9	123.0	26.92	-409.6	-5,326.3	364.5	249.5	115.04	3.168		
11,400.0	7,115.0	11,071.5	6,790.0	125.3	125.4	26.92	-409.4	-5,426.3	364.5	247.2	117.29	3.108		
11,500.0	7,115.0	11,171.5	6,790.0	127.8	127.9	26.92	-409.1	-5,526.3	364.5	245.0	119.54	3.049		
11,600.0	7,115.0	11,271.5	6,790.0	130.2	130.3	26.92	-408.9	-5,626.3	364.5	242.7	121.79	2.993		
11,700.0	7,115.0	11,371.5	6,790.0	132.7	132.8	26.92	-408.6	-5,726.3	364.5	240.5	124.04	2.939		
11,800.0	7,115.0	11,471.5	6,790.0	135.1	135.2	26.92	-408.4	-5,826.3	364.5	238.2	126.29	2.886		
11,900.0	7,115.0	11,571.5	6,790.0	137.6	137.7	26.92	-408.1	-5,926.3	364.5	236.0	128.54	2.836		
12,000.0	7,115.0	11,671.5	6,790.0	140.0	140.1	26.92	-407.9	-6,026.3	364.5	233.7	130.79	2.787		
12,100.0	7,115.0	11,771.5	6,790.0	142.5	142.6	26.92	-407.6	-6,126.3	364.5	231.5	133.04	2.740		
12,200.0	7,115.0	11,871.5	6,790.0	144.9	145.1	26.92	-407.4	-6,226.3	364.5	229.2	135.29	2.694		
12,300.0	7,115.0	11,971.5	6,790.0	147.4	147.5	26.92	-407.1	-6,326.3	364.5	227.0	137.55	2.650		
12,400.0	7,115.0	12,071.5	6,790.0	149.8	150.0	26.92	-406.9	-6,426.3	364.5	224.7	139.80	2.607		
12,500.0	7,115.0	12,171.5	6,790.0	152.3	152.4	26.92	-406.6	-6,526.3	364.5	222.4	142.05	2.566		
12,600.0	7,115.0	12,271.5	6,790.0	154.7	154.9	26.92	-406.4	-6,626.3	364.5	220.2	144.31	2.526		
12,700.0	7,115.0	12,371.5	6,790.0	157.2	157.3	26.92	-406.1	-6,726.3	364.5	217.9	146.56	2.487		
12,800.0	7,115.0	12,471.5	6,790.0	159.6	159.8	26.92	-405.9	-6,826.3	364.5	215.7	148.82	2.449		
12,900.0	7,115.0	12,571.5	6,790.0	162.1	162.3	26.92	-405.6	-6,926.3	364.5	213.4	151.07	2.413		
13,000.0	7,115.0	12,671.5	6,790.0	164.6	164.7	26.92	-405.4	-7,026.3	364.5	211.2	153.33	2.377		
13,100.0	7,115.0	12,771.5	6,790.0	167.0	167.2	26.92	-405.1	-7,126.3	364.5	208.9	155.58	2.343		
13,200.0	7,115.0	12,871.5	6,790.0	169.5	169.6	26.92	-404.9	-7,226.3	364.5	206.7	157.84	2.309		
13,300.0	7,115.0	12,971.5	6,790.0	171.9	172.1	26.92	-404.6	-7,326.3	364.5	204.4	160.10	2.277		
13,400.0	7,115.0	13,071.5	6,790.0	174.4	174.6	26.92	-404.4	-7,426.3	364.5	202.1	162.35	2.245		
13,500.0	7,115.0	13,171.5	6,790.0	176.9	177.0	26.92	-404.1	-7,526.3	364.5	199.9	164.61	2.214		
13,600.0	7,115.0	13,271.5	6,790.0	179.3	179.5	26.92	-403.9	-7,626.3	364.5	197.6	166.87	2.184		
13,700.0	7,115.0	13,371.5	6,790.0	181.8	182.0	26.92	-403.6	-7,726.3	364.5	195.4	169.13	2.155		
13,800.0	7,115.0	13,471.5	6,790.0	184.2	184.4	26.92	-403.4	-7,826.3	364.5	193.1	171.38	2.127		
13,900.0	7,115.0	13,571.5	6,790.0	186.7	186.9	26.92	-403.1	-7,926.3	364.5	190.9	173.64	2.099		
14,000.0	7,115.0	13,671.5	6,790.0	189.2	189.3	26.92	-402.9	-8,026.3	364.5	188.6	175.90	2.072		
14,100.0	7,115.0	13,771.5	6,790.0	191.6	191.8	26.92	-402.6	-8,126.3	364.5	186.3	178.16	2.046		
14,200.0	7,115.0	13,871.5	6,790.0	194.1	194.3	26.92	-402.4	-8,226.3	364.5	184.1	180.42	2.020		
14,300.0	7,115.0	13,971.5	6,790.0	196.6	196.7	26.92	-402.1	-8,326.3	364.5	181.8	182.68	1.995		
14,400.0	7,115.0	14,071.5	6,790.0	199.0	199.2	26.92	-401.9	-8,426.3	364.5	179.6	184.94	1.971		
14,500.0	7,115.0	14,171.5	6,790.0	201.5	201.7	26.92	-401.6	-8,526.3	364.5	177.3	187.20	1.947		
14,600.0	7,115.0	14,271.5	6,790.0	203.9	204.1	26.92	-401.4	-8,626.3	364.5	175.0	189.46	1.924		
14,700.0	7,115.0	14,371.5	6,790.0	206.4	206.6	26.92	-401.1	-8,726.3	364.5	172.8	191.72	1.901		
14,800.0	7,115.0	14,471.5	6,790.0	208.9	209.1	26.92	-400.9	-8,826.3	364.5	170.5	193.98	1.879		
14,900.0	7,115.0	14,571.5	6,790.0	211.3	211.5	26.92	-400.6	-8,926.3	364.5	168.3	196.24	1.857		
15,000.0	7,115.0	14,671.5	6,790.0	213.8	214.0	26.92	-400.4	-9,026.3	364.5	166.0	198.50	1.836		
15,100.0	7,115.0	14,771.5	6,790.0	216.3	216.5	26.92	-400.1	-9,126.3	364.5	163.7	200.76	1.816		
15,200.0	7,115.0	14,871.5	6,790.0	218.7	218.9	26.92	-399.9	-9,226.3	364.5	161.5	203.02	1.795		
15,300.0	7,115.0	14,971.5	6,790.0	221.2	221.4	26.92	-399.6	-9,326.3	364.5	159.2	205.28	1.776		
15,400.0	7,115.0	15,071.5	6,790.0	223.7	223.9	26.92	-399.4	-9,426.3	364.5	157.0	207.54	1.756		
15,500.0	7,115.0	15,171.5	6,790.0	226.1	226.3	26.92	-399.1	-9,526.3	364.5	154.7	209.80	1.737		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 5 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
15,600.0	7,115.0	15,271.5	6,790.0	228.6	228.8	26.92	-398.9	-9,626.3	364.5	152.4	212.06	1.719		
15,700.0	7,115.0	15,371.5	6,790.0	231.1	231.3	26.92	-398.6	-9,726.3	364.5	150.2	214.33	1.701		
15,800.0	7,115.0	15,471.5	6,790.0	233.5	233.7	26.92	-398.4	-9,826.3	364.5	147.9	216.59	1.683		
15,900.0	7,115.0	15,571.5	6,790.0	236.0	236.2	26.92	-398.1	-9,926.3	364.5	145.7	218.85	1.666		
16,000.0	7,115.0	15,671.5	6,790.0	238.5	238.7	26.92	-397.9	-10,026.3	364.5	143.4	221.11	1.648		
16,100.0	7,115.0	15,771.5	6,790.0	240.9	241.1	26.92	-397.6	-10,126.3	364.5	141.1	223.37	1.632		
16,200.0	7,115.0	15,871.5	6,790.0	243.4	243.6	26.92	-397.4	-10,226.3	364.5	138.9	225.64	1.615		
16,300.0	7,115.0	15,971.5	6,790.0	245.9	246.1	26.92	-397.1	-10,326.3	364.5	136.6	227.90	1.599		
16,400.0	7,115.0	16,071.5	6,790.0	248.3	248.5	26.92	-396.9	-10,426.3	364.5	134.3	230.16	1.584		
16,500.0	7,115.0	16,171.5	6,790.0	250.8	251.0	26.92	-396.6	-10,526.3	364.5	132.1	232.42	1.568		
16,600.0	7,115.0	16,271.5	6,790.0	253.3	253.5	26.92	-396.4	-10,626.3	364.5	129.8	234.68	1.553		
16,700.0	7,115.0	16,371.5	6,790.0	255.7	255.9	26.92	-396.1	-10,726.3	364.5	127.6	236.95	1.538		
16,800.0	7,115.0	16,471.5	6,790.0	258.2	258.4	26.92	-395.9	-10,826.3	364.5	125.3	239.21	1.524		
16,900.0	7,115.0	16,571.5	6,790.0	260.7	260.9	26.92	-395.6	-10,926.3	364.5	123.0	241.47	1.509		
17,000.0	7,115.0	16,671.5	6,790.0	263.1	263.4	26.92	-395.4	-11,026.3	364.5	120.8	243.74	1.495 Level 3		
17,100.0	7,115.0	16,771.5	6,790.0	265.6	265.8	26.92	-395.1	-11,126.3	364.5	118.5	246.00	1.482 Level 3		
17,200.0	7,115.0	16,871.5	6,790.0	268.1	268.3	26.92	-394.9	-11,226.3	364.5	116.2	248.26	1.468 Level 3		
17,300.0	7,115.0	16,971.5	6,790.0	270.5	270.8	26.92	-394.6	-11,326.3	364.5	114.0	250.52	1.455 Level 3		
17,400.0	7,115.0	17,071.5	6,790.0	273.0	273.2	26.92	-394.4	-11,426.3	364.5	111.7	252.79	1.442 Level 3		
17,500.0	7,115.0	17,171.5	6,790.0	275.5	275.7	26.92	-394.1	-11,526.3	364.5	109.4	255.05	1.429 Level 3		
17,600.0	7,115.0	17,271.5	6,790.0	277.9	278.2	26.92	-393.9	-11,626.3	364.5	107.2	257.31	1.417 Level 3		
17,700.0	7,115.0	17,371.5	6,790.0	280.4	280.6	26.92	-393.6	-11,726.3	364.5	104.9	259.58	1.404 Level 3		
17,730.1	7,115.0	17,401.6	6,790.0	281.2	281.4	26.92	-393.6	-11,756.4	364.5	104.2	260.26	1.401 Level 3, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.35	-24.4	-14.5	28.4					
100.0	100.0	100.0	100.0	0.1	0.0	-149.35	-24.4	-14.5	28.4	28.2	0.13	213.568		
200.0	200.0	200.0	200.0	0.3	0.0	-149.35	-24.4	-14.5	28.4	28.1	0.31	92.302 CC		
300.0	300.0	299.6	299.6	0.5	0.0	-30.75	-24.8	-15.2	28.4	27.9	0.48	58.869		
400.0	400.0	399.1	399.1	0.7	0.0	-30.91	-26.2	-17.4	28.4	27.8	0.66	43.186		
500.0	499.9	498.7	498.6	0.9	0.0	-31.18	-28.4	-21.2	28.5	27.6	0.84	34.055		
600.0	599.7	598.3	598.0	1.1	0.0	-31.56	-31.4	-26.4	28.6	27.5	1.02	28.060		
700.0	699.4	697.8	697.2	1.3	0.0	-32.05	-35.4	-33.1	28.7	27.5	1.20	23.805		
800.0	798.9	797.4	796.3	1.5	0.0	-32.63	-40.2	-41.3	28.8	27.4	1.40	20.613		
900.0	898.3	897.0	895.3	1.8	0.0	-33.32	-46.0	-50.9	29.0	27.4	1.60	18.119		
1,000.0	897.4	896.5	894.0	2.0	0.0	-34.10	-52.5	-62.1	29.1	27.3	1.81	16.104		
1,100.0	1,096.3	1,096.1	1,092.5	2.3	0.0	-34.97	-60.0	-74.7	29.4	27.3	2.03	14.436 ES		
1,200.0	1,194.9	1,195.7	1,190.7	2.7	0.0	-35.93	-68.3	-88.8	29.6	27.3	2.27	13.024		
1,300.0	1,293.3	1,295.3	1,288.6	3.0	0.0	-36.94	-77.5	-104.3	29.9	27.4	2.53	11.824		
1,400.0	1,391.5	1,394.8	1,386.2	3.4	0.0	-36.76	-87.6	-121.3	31.2	28.4	2.78	11.214		
1,500.0	1,489.7	1,494.3	1,483.3	3.7	0.0	-34.93	-98.5	-139.8	33.8	30.8	3.00	11.298		
1,600.0	1,587.9	1,593.9	1,580.2	4.1	0.0	-32.10	-110.2	-159.6	37.9	34.8	3.18	11.931		
1,700.0	1,686.1	1,693.8	1,677.3	4.4	0.0	-29.59	-122.1	-179.8	42.4	39.1	3.36	12.633		
1,800.0	1,784.3	1,793.7	1,774.4	4.8	0.0	-27.57	-134.0	-200.0	47.0	43.4	3.54	13.283		
1,900.0	1,882.5	1,893.5	1,871.5	5.2	0.0	-25.91	-146.0	-220.1	51.5	47.8	3.71	13.882		
2,000.0	1,980.8	1,993.4	1,968.6	5.5	0.0	-24.52	-157.9	-240.3	56.2	52.3	3.89	14.434		
2,100.0	2,079.0	2,093.3	2,065.7	5.9	0.0	-23.34	-169.8	-260.5	60.8	56.8	4.07	14.943		
2,200.0	2,177.2	2,193.2	2,162.8	6.3	0.0	-22.33	-181.7	-280.6	65.5	61.3	4.25	15.413		
2,300.0	2,275.4	2,293.1	2,259.9	6.7	0.0	-21.45	-193.6	-300.8	70.2	65.8	4.43	15.848		
2,400.0	2,373.6	2,393.0	2,357.0	7.0	0.0	-20.69	-205.6	-321.0	74.9	70.3	4.61	16.250		
2,500.0	2,471.8	2,492.9	2,454.1	7.4	0.0	-20.01	-217.5	-341.2	79.6	74.8	4.79	16.624		
2,600.0	2,570.0	2,592.7	2,551.2	7.8	0.0	-19.41	-229.4	-361.3	84.4	79.4	4.97	16.971		
2,700.0	2,668.3	2,692.6	2,648.3	8.1	0.0	-18.88	-241.3	-381.5	89.1	83.9	5.15	17.295		
2,800.0	2,766.5	2,792.5	2,745.4	8.5	0.0	-18.39	-253.3	-401.7	93.8	88.5	5.33	17.598		
2,900.0	2,864.7	2,892.4	2,842.5	8.9	0.0	-17.96	-265.2	-421.9	98.6	93.1	5.51	17.881		
3,000.0	2,962.9	2,992.3	2,939.6	9.3	0.0	-17.56	-277.1	-442.0	103.3	97.6	5.69	18.147		
3,100.0	3,061.1	3,092.2	3,036.7	9.6	0.0	-17.20	-289.0	-462.2	108.1	102.2	5.88	18.396		
3,200.0	3,159.3	3,192.0	3,133.8	10.0	0.0	-16.87	-300.9	-482.4	112.9	106.8	6.06	18.631		
3,300.0	3,257.6	3,291.9	3,230.9	10.4	0.0	-16.57	-312.9	-502.6	117.6	111.4	6.24	18.852		
3,400.0	3,355.8	3,391.8	3,328.0	10.8	0.0	-16.29	-324.8	-522.7	122.4	116.0	6.42	19.060		
3,500.0	3,454.0	3,491.7	3,425.1	11.1	0.0	-16.03	-336.7	-542.9	127.2	120.6	6.60	19.258		
3,600.0	3,552.2	3,591.6	3,522.1	11.5	0.0	-15.79	-348.6	-563.1	131.9	125.2	6.79	19.445		
3,700.0	3,650.4	3,691.5	3,619.2	11.9	0.0	-15.57	-360.6	-583.2	136.7	129.8	6.97	19.622		
3,800.0	3,748.6	3,791.3	3,716.3	12.3	0.0	-15.36	-372.5	-603.4	141.5	134.4	7.15	19.790		
3,900.0	3,846.8	3,891.2	3,813.4	12.6	0.0	-15.17	-384.4	-623.6	146.3	139.0	7.33	19.950		
4,000.0	3,945.1	3,991.1	3,910.5	13.0	0.0	-14.98	-396.3	-643.8	151.1	143.6	7.52	20.102		
4,100.0	4,043.3	4,091.0	4,007.6	13.4	0.0	-14.81	-408.2	-663.9	155.9	148.2	7.70	20.247		
4,200.0	4,141.5	4,190.9	4,104.7	13.8	0.0	-14.65	-420.2	-684.1	160.6	152.8	7.88	20.385		
4,300.0	4,239.7	4,290.8	4,201.8	14.1	0.0	-14.50	-432.1	-704.3	165.4	157.4	8.06	20.517		
4,400.0	4,337.9	4,390.7	4,298.9	14.5	0.0	-14.36	-444.0	-724.5	170.2	162.0	8.25	20.643		
4,500.0	4,436.1	4,490.5	4,396.0	14.9	0.0	-14.22	-455.9	-744.6	175.0	166.6	8.43	20.764		
4,600.0	4,534.3	4,590.4	4,493.1	15.3	0.0	-14.09	-467.8	-764.8	179.8	171.2	8.61	20.879		
4,700.0	4,632.6	4,690.3	4,590.2	15.6	0.0	-13.97	-479.8	-785.0	184.6	175.8	8.79	20.990		
4,800.0	4,730.8	4,790.2	4,687.3	16.0	0.0	-13.86	-491.7	-805.1	189.4	180.4	8.98	21.096		
4,900.0	4,829.0	4,890.1	4,784.4	16.4	0.0	-13.75	-503.6	-825.3	194.2	185.0	9.16	21.199		
5,000.0	4,927.2	4,990.0	4,881.5	16.8	0.0	-13.64	-515.5	-845.5	199.0	189.6	9.34	21.297		
5,100.0	5,025.4	5,089.8	4,978.6	17.1	0.0	-13.54	-527.5	-865.7	203.8	194.2	9.53	21.391		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,123.6	5,189.7	5,075.7	17.5	0.0	-13.45	-539.4	-885.8	208.5	198.8	9.71	21.482		
5,300.0	5,221.8	5,289.6	5,172.8	17.9	0.0	-13.36	-551.3	-906.0	213.3	203.4	9.89	21.569		
5,400.0	5,320.1	5,389.5	5,269.9	18.3	0.0	-13.27	-563.2	-926.2	218.1	208.1	10.07	21.653		
5,500.0	5,418.3	5,489.4	5,367.0	18.6	0.0	-13.19	-575.1	-946.4	222.9	212.7	10.26	21.734		
5,600.0	5,516.5	5,589.3	5,464.1	19.0	0.0	-13.11	-587.1	-966.5	227.7	217.3	10.44	21.813		
5,700.0	5,614.7	5,689.2	5,561.2	19.4	0.0	-13.03	-599.0	-986.7	232.5	221.9	10.62	21.888		
5,800.0	5,712.9	5,789.0	5,658.3	19.8	0.0	-12.96	-610.9	-1,006.9	237.3	226.5	10.81	21.961		
5,900.0	5,811.1	5,888.9	5,755.4	20.1	0.0	-12.89	-622.8	-1,027.0	242.1	231.1	10.99	22.032		
6,000.0	5,909.3	5,988.8	5,852.5	20.5	0.0	-12.82	-634.8	-1,047.2	246.9	235.7	11.17	22.100		
6,100.0	6,007.6	6,088.7	5,949.6	20.9	0.0	-12.76	-646.7	-1,067.4	251.7	240.4	11.36	22.166		
6,200.0	6,105.8	6,188.6	6,046.7	21.3	0.0	-12.70	-658.6	-1,087.6	256.5	245.0	11.54	22.230		
6,300.0	6,204.0	6,288.5	6,143.8	21.6	0.0	-12.64	-670.5	-1,107.7	261.3	249.6	11.72	22.292		
6,400.0	6,302.2	6,388.3	6,240.9	22.0	0.0	-12.58	-682.4	-1,127.9	266.1	254.2	11.91	22.352		
6,500.0	6,400.4	6,475.2	6,325.0	22.4	0.0	-12.54	-692.8	-1,146.7	272.2	260.1	12.07	22.555		
6,600.0	6,498.6	6,550.0	6,395.3	22.8	0.0	-11.06	-701.4	-1,170.7	286.2	274.1	12.12	23.621		
6,700.0	6,596.8	6,620.0	6,458.1	23.1	0.0	-11.25	-709.1	-1,200.5	309.1	297.0	12.08	25.582		
6,800.0	6,692.9	6,688.1	6,515.8	23.7	0.0	-19.43	-716.1	-1,236.0	333.6	321.7	11.98	27.856		
6,900.0	6,783.8	6,750.0	6,564.7	24.5	0.0	-21.69	-722.0	-1,273.5	354.6	342.7	11.88	29.835		
7,000.0	6,867.2	6,821.5	6,616.3	25.5	0.0	-22.32	-728.3	-1,322.4	371.2	359.5	11.75	31.586		
7,100.0	6,941.1	6,887.3	6,658.8	26.7	0.0	-22.64	-733.4	-1,372.4	383.4	371.7	11.67	32.861		
7,200.0	7,003.6	6,950.0	6,694.2	28.1	0.0	-22.96	-737.6	-1,423.9	390.8	379.1	11.77	33.206		
7,300.0	7,053.3	7,018.1	6,726.9	29.7	0.0	-23.42	-741.5	-1,483.6	393.4	381.2	12.25	32.114		
7,400.0	7,089.0	7,083.5	6,752.1	31.5	0.0	-24.11	-744.4	-1,543.8	391.1	377.8	13.29	29.439		
7,500.0	7,109.6	7,150.0	6,771.3	33.5	0.0	-25.12	-746.7	-1,607.3	384.0	369.0	14.98	25.634		
7,600.0	7,115.0	7,215.0	6,783.7	35.5	0.0	-26.37	-748.0	-1,671.1	372.4	355.3	17.12	21.758		
7,700.0	7,115.0	7,282.2	6,789.6	37.6	0.0	-26.88	-748.6	-1,738.1	365.0	346.7	18.33	19.908		
7,744.7	7,115.0	7,316.1	6,790.0	38.6	0.0	-26.92	-748.5	-1,771.9	364.5	345.7	18.80	19.387		
7,800.0	7,115.0	7,371.4	6,790.0	39.8	0.0	-26.92	-748.4	-1,827.2	364.5	345.1	19.36	18.829		
7,900.0	7,115.0	7,471.4	6,790.0	41.9	0.0	-26.92	-748.2	-1,927.2	364.5	344.1	20.38	17.886		
8,000.0	7,115.0	7,571.4	6,790.0	44.1	0.0	-26.92	-747.9	-2,027.2	364.5	343.1	21.41	17.025		
8,100.0	7,115.0	7,671.4	6,790.0	46.4	0.0	-26.92	-747.7	-2,127.2	364.5	342.0	22.45	16.235		
8,200.0	7,115.0	7,771.4	6,790.0	48.6	0.0	-26.92	-747.4	-2,227.2	364.5	341.0	23.50	15.509		
8,300.0	7,115.0	7,871.4	6,790.0	50.9	0.0	-26.92	-747.2	-2,327.2	364.5	339.9	24.56	14.842		
8,400.0	7,115.0	7,971.4	6,790.0	53.2	0.0	-26.92	-746.9	-2,427.2	364.5	338.9	25.62	14.225		
8,500.0	7,115.0	8,071.4	6,790.0	55.5	0.0	-26.92	-746.7	-2,527.2	364.5	337.8	26.69	13.655		
8,600.0	7,115.0	8,171.4	6,790.0	57.8	0.0	-26.92	-746.4	-2,627.2	364.5	336.7	27.77	13.127		
8,700.0	7,115.0	8,271.4	6,790.0	60.2	0.0	-26.92	-746.2	-2,727.2	364.5	335.7	28.85	12.635		
8,800.0	7,115.0	8,371.4	6,790.0	62.5	0.0	-26.92	-745.9	-2,827.2	364.5	334.6	29.93	12.178		
8,900.0	7,115.0	8,471.4	6,790.0	64.9	0.0	-26.92	-745.7	-2,927.2	364.5	333.5	31.02	11.751		
9,000.0	7,115.0	8,571.4	6,790.0	67.2	0.0	-26.92	-745.4	-3,027.2	364.5	332.4	32.11	11.352		
9,100.0	7,115.0	8,671.4	6,790.0	69.6	0.0	-26.92	-745.2	-3,127.2	364.5	331.3	33.20	10.979		
9,200.0	7,115.0	8,771.4	6,790.0	72.0	0.0	-26.92	-744.9	-3,227.2	364.5	330.2	34.30	10.628		
9,300.0	7,115.0	8,871.4	6,790.0	74.4	0.0	-26.92	-744.7	-3,327.2	364.5	329.1	35.39	10.298		
9,400.0	7,115.0	8,971.4	6,790.0	76.8	0.0	-26.92	-744.4	-3,427.2	364.5	328.0	36.50	9.988		
9,500.0	7,115.0	9,071.4	6,790.0	79.2	0.0	-26.92	-744.2	-3,527.2	364.5	326.9	37.60	9.695		
9,600.0	7,115.0	9,171.4	6,790.0	81.6	0.0	-26.92	-743.9	-3,627.2	364.5	325.8	38.70	9.418		
9,700.0	7,115.0	9,271.4	6,790.0	84.0	0.0	-26.92	-743.7	-3,727.2	364.5	324.7	39.81	9.157		
9,800.0	7,115.0	9,371.4	6,790.0	86.4	0.0	-26.92	-743.4	-3,827.2	364.5	323.6	40.91	8.909		
9,900.0	7,115.0	9,471.4	6,790.0	88.8	0.0	-26.92	-743.2	-3,927.2	364.5	322.5	42.02	8.674		
10,000.0	7,115.0	9,571.4	6,790.0	91.2	0.0	-26.92	-742.9	-4,027.2	364.5	321.4	43.13	8.450		
10,100.0	7,115.0	9,671.4	6,790.0	93.6	0.0	-26.92	-742.7	-4,127.2	364.5	320.3	44.24	8.238		
10,200.0	7,115.0	9,771.4	6,790.0	96.1	0.0	-26.92	-742.4	-4,227.2	364.5	319.1	45.36	8.036		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,115.0	9,871.4	6,790.0	98.5	0.0	-26.92	-742.2	-4,327.2	364.5	318.0	46.47	7.844	
10,400.0	7,115.0	9,971.4	6,790.0	100.9	0.0	-26.92	-741.9	-4,427.2	364.5	316.9	47.59	7.660	
10,500.0	7,115.0	10,071.4	6,790.0	103.4	0.0	-26.92	-741.7	-4,527.2	364.5	315.8	48.70	7.485	
10,600.0	7,115.0	10,171.4	6,790.0	105.8	0.0	-26.92	-741.4	-4,627.2	364.5	314.7	49.82	7.317	
10,700.0	7,115.0	10,271.4	6,790.0	108.2	0.0	-26.92	-741.2	-4,727.2	364.5	313.6	50.93	7.156	
10,800.0	7,115.0	10,371.4	6,790.0	110.7	0.0	-26.92	-740.9	-4,827.2	364.5	312.4	52.05	7.003	
10,900.0	7,115.0	10,471.4	6,790.0	113.1	0.0	-26.92	-740.7	-4,927.2	364.5	311.3	53.17	6.855	
11,000.0	7,115.0	10,571.4	6,790.0	115.5	0.0	-26.92	-740.4	-5,027.2	364.5	310.2	54.29	6.714	
11,100.0	7,115.0	10,671.4	6,790.0	118.0	0.0	-26.92	-740.2	-5,127.2	364.5	309.1	55.41	6.579	
11,200.0	7,115.0	10,771.4	6,790.0	120.4	0.0	-26.92	-739.9	-5,227.2	364.5	308.0	56.53	6.448	
11,300.0	7,115.0	10,871.4	6,790.0	122.9	0.0	-26.92	-739.7	-5,327.2	364.5	306.9	57.65	6.323	
11,400.0	7,115.0	10,971.4	6,790.0	125.3	0.0	-26.92	-739.4	-5,427.2	364.5	305.7	58.77	6.202	
11,500.0	7,115.0	11,071.4	6,790.0	127.8	0.0	-26.92	-739.2	-5,527.2	364.5	304.6	59.89	6.086	
11,600.0	7,115.0	11,171.4	6,790.0	130.2	0.0	-26.92	-738.9	-5,627.2	364.5	303.5	61.01	5.974	
11,700.0	7,115.0	11,271.4	6,790.0	132.7	0.0	-26.92	-738.7	-5,727.2	364.5	302.4	62.14	5.866	
11,800.0	7,115.0	11,371.4	6,790.0	135.1	0.0	-26.92	-738.4	-5,827.2	364.5	301.2	63.26	5.762	
11,900.0	7,115.0	11,471.4	6,790.0	137.6	0.0	-26.92	-738.2	-5,927.2	364.5	300.1	64.38	5.662	
12,000.0	7,115.0	11,571.4	6,790.0	140.0	0.0	-26.92	-737.9	-6,027.2	364.5	299.0	65.51	5.564	
12,100.0	7,115.0	11,671.4	6,790.0	142.5	0.0	-26.92	-737.7	-6,127.2	364.5	297.9	66.63	5.471	
12,200.0	7,115.0	11,771.4	6,790.0	144.9	0.0	-26.92	-737.4	-6,227.2	364.5	296.7	67.75	5.380	
12,300.0	7,115.0	11,871.4	6,790.0	147.4	0.0	-26.92	-737.2	-6,327.2	364.5	295.6	68.88	5.292	
12,400.0	7,115.0	11,971.4	6,790.0	149.8	0.0	-26.92	-736.9	-6,427.2	364.5	294.5	70.00	5.207	
12,500.0	7,115.0	12,071.4	6,790.0	152.3	0.0	-26.92	-736.7	-6,527.2	364.5	293.4	71.13	5.125	
12,600.0	7,115.0	12,171.4	6,790.0	154.7	0.0	-26.92	-736.4	-6,627.2	364.5	292.2	72.25	5.045	
12,700.0	7,115.0	12,271.4	6,790.0	157.2	0.0	-26.92	-736.2	-6,727.2	364.5	291.1	73.38	4.967	
12,800.0	7,115.0	12,371.4	6,790.0	159.6	0.0	-26.92	-735.9	-6,827.2	364.5	290.0	74.51	4.892	
12,900.0	7,115.0	12,471.4	6,790.0	162.1	0.0	-26.92	-735.7	-6,927.2	364.5	288.9	75.63	4.819	
13,000.0	7,115.0	12,571.4	6,790.0	164.6	0.0	-26.92	-735.4	-7,027.2	364.5	287.7	76.76	4.749	
13,100.0	7,115.0	12,671.4	6,790.0	167.0	0.0	-26.92	-735.2	-7,127.2	364.5	286.6	77.88	4.680	
13,200.0	7,115.0	12,771.4	6,790.0	169.5	0.0	-26.92	-734.9	-7,227.2	364.5	285.5	79.01	4.613	
13,300.0	7,115.0	12,871.4	6,790.0	171.9	0.0	-26.92	-734.7	-7,327.2	364.5	284.4	80.14	4.548	
13,400.0	7,115.0	12,971.4	6,790.0	174.4	0.0	-26.92	-734.4	-7,427.2	364.5	283.2	81.27	4.485	
13,500.0	7,115.0	13,071.4	6,790.0	176.9	0.0	-26.92	-734.2	-7,527.2	364.5	282.1	82.39	4.424	
13,600.0	7,115.0	13,171.4	6,790.0	179.3	0.0	-26.92	-733.9	-7,627.2	364.5	281.0	83.52	4.364	
13,700.0	7,115.0	13,271.4	6,790.0	181.8	0.0	-26.92	-733.7	-7,727.2	364.5	279.9	84.65	4.306	
13,800.0	7,115.0	13,371.4	6,790.0	184.2	0.0	-26.92	-733.4	-7,827.2	364.5	278.7	85.78	4.249	
13,900.0	7,115.0	13,471.4	6,790.0	186.7	0.0	-26.92	-733.2	-7,927.2	364.5	277.6	86.90	4.194	
14,000.0	7,115.0	13,571.4	6,790.0	189.2	0.0	-26.92	-732.9	-8,027.2	364.5	276.5	88.03	4.141	
14,100.0	7,115.0	13,671.4	6,790.0	191.6	0.0	-26.92	-732.7	-8,127.2	364.5	275.3	89.16	4.088	
14,200.0	7,115.0	13,771.4	6,790.0	194.1	0.0	-26.92	-732.4	-8,227.2	364.5	274.2	90.29	4.037	
14,300.0	7,115.0	13,871.4	6,790.0	196.6	0.0	-26.92	-732.2	-8,327.2	364.5	273.1	91.42	3.987	
14,400.0	7,115.0	13,971.4	6,790.0	199.0	0.0	-26.92	-731.9	-8,427.2	364.5	272.0	92.55	3.939	
14,500.0	7,115.0	14,071.4	6,790.0	201.5	0.0	-26.92	-731.7	-8,527.2	364.5	270.8	93.68	3.891	
14,600.0	7,115.0	14,171.4	6,790.0	203.9	0.0	-26.92	-731.4	-8,627.2	364.5	269.7	94.80	3.845	
14,700.0	7,115.0	14,271.4	6,790.0	206.4	0.0	-26.92	-731.2	-8,727.2	364.5	268.6	95.93	3.800	
14,800.0	7,115.0	14,371.4	6,790.0	208.9	0.0	-26.92	-730.9	-8,827.2	364.5	267.4	97.06	3.755	
14,900.0	7,115.0	14,471.4	6,790.0	211.3	0.0	-26.92	-730.7	-8,927.2	364.5	266.3	98.19	3.712	
15,000.0	7,115.0	14,571.4	6,790.0	213.8	0.0	-26.92	-730.4	-9,027.2	364.5	265.2	99.32	3.670	
15,100.0	7,115.0	14,671.4	6,790.0	216.3	0.0	-26.92	-730.2	-9,127.2	364.5	264.0	100.45	3.629	
15,200.0	7,115.0	14,771.4	6,790.0	218.7	0.0	-26.92	-729.9	-9,227.2	364.5	262.9	101.58	3.588	
15,300.0	7,115.0	14,871.4	6,790.0	221.2	0.0	-26.92	-729.7	-9,327.2	364.5	261.8	102.71	3.549	
15,400.0	7,115.0	14,971.4	6,790.0	223.7	0.0	-26.92	-729.4	-9,427.2	364.5	260.7	103.84	3.510	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,500.0	7,115.0	15,071.4	6,790.0	226.1	0.0	-26.92	-729.2	-9,527.2	364.5	259.5	104.97	3.472		
15,600.0	7,115.0	15,171.4	6,790.0	228.6	0.0	-26.92	-728.9	-9,627.2	364.5	258.4	106.10	3.435		
15,700.0	7,115.0	15,271.4	6,790.0	231.1	0.0	-26.92	-728.7	-9,727.2	364.5	257.3	107.23	3.399		
15,800.0	7,115.0	15,371.4	6,790.0	233.5	0.0	-26.92	-728.4	-9,827.2	364.5	256.1	108.36	3.364		
15,900.0	7,115.0	15,471.4	6,790.0	236.0	0.0	-26.92	-728.2	-9,927.2	364.5	255.0	109.49	3.329		
16,000.0	7,115.0	15,571.4	6,790.0	238.5	0.0	-26.92	-727.9	-10,027.2	364.5	253.9	110.62	3.295		
16,100.0	7,115.0	15,671.4	6,790.0	240.9	0.0	-26.92	-727.7	-10,127.2	364.5	252.7	111.75	3.262		
16,200.0	7,115.0	15,771.4	6,790.0	243.4	0.0	-26.92	-727.4	-10,227.2	364.5	251.6	112.88	3.229		
16,300.0	7,115.0	15,871.4	6,790.0	245.9	0.0	-26.92	-727.2	-10,327.2	364.5	250.5	114.01	3.197		
16,400.0	7,115.0	15,971.4	6,790.0	248.3	0.0	-26.92	-726.9	-10,427.2	364.5	249.4	115.14	3.166		
16,500.0	7,115.0	16,071.4	6,790.0	250.8	0.0	-26.92	-726.7	-10,527.2	364.5	248.2	116.27	3.135		
16,600.0	7,115.0	16,171.4	6,790.0	253.3	0.0	-26.92	-726.4	-10,627.2	364.5	247.1	117.40	3.105		
16,700.0	7,115.0	16,271.4	6,790.0	255.7	0.0	-26.92	-726.2	-10,727.2	364.5	246.0	118.53	3.075		
16,800.0	7,115.0	16,371.4	6,790.0	258.2	0.0	-26.92	-725.9	-10,827.2	364.5	244.8	119.66	3.046		
16,900.0	7,115.0	16,471.4	6,790.0	260.7	0.0	-26.92	-725.7	-10,927.2	364.5	243.7	120.79	3.018		
17,000.0	7,115.0	16,571.4	6,790.0	263.1	0.0	-26.92	-725.4	-11,027.2	364.5	242.6	121.93	2.990		
17,100.0	7,115.0	16,671.4	6,790.0	265.6	0.0	-26.92	-725.2	-11,127.2	364.5	241.4	123.06	2.962		
17,200.0	7,115.0	16,771.4	6,790.0	268.1	0.0	-26.92	-724.9	-11,227.2	364.5	240.3	124.19	2.935		
17,300.0	7,115.0	16,871.4	6,790.0	270.5	0.0	-26.92	-724.7	-11,327.2	364.5	239.2	125.32	2.909		
17,400.0	7,115.0	16,971.4	6,790.0	273.0	0.0	-26.92	-724.4	-11,427.2	364.5	238.1	126.45	2.883		
17,500.0	7,115.0	17,071.4	6,790.0	275.5	0.0	-26.92	-724.2	-11,527.2	364.5	236.9	127.58	2.857		
17,600.0	7,115.0	17,171.4	6,790.0	277.9	0.0	-26.92	-723.9	-11,627.2	364.5	235.8	128.71	2.832		
17,700.0	7,115.0	17,271.4	6,790.0	280.4	0.0	-26.92	-723.7	-11,727.2	364.5	234.7	129.84	2.807		
17,714.4	7,115.0	17,285.8	6,790.0	280.8	0.0	-26.92	-723.7	-11,741.5	364.5	234.5	130.01	2.804		
17,730.1	7,115.0	17,301.1	6,790.0	281.2	0.0	-26.92	-723.6	-11,756.9	364.5	234.3	130.18	2.800 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.22	-48.1	-28.6	56.0					
100.0	100.0	100.0	100.0	0.1	0.0	-149.22	-48.1	-28.6	56.0	55.8	0.13	421.352		
200.0	200.0	200.0	200.0	0.3	0.0	-149.22	-48.1	-28.6	56.0	55.7	0.31	182.103		
300.0	300.0	299.2	299.2	0.5	0.0	-30.53	-48.5	-29.4	56.0	55.5	0.48	116.051		
400.0	400.0	398.4	398.3	0.7	0.0	-30.46	-49.6	-31.7	55.9	55.2	0.66	84.933		
500.0	499.9	497.6	497.4	0.9	0.0	-30.34	-51.5	-35.6	55.8	54.9	0.84	66.723		
600.0	599.7	596.7	596.4	1.1	0.0	-30.17	-54.2	-40.9	55.6	54.6	1.02	54.701		
700.0	699.4	695.9	695.3	1.3	0.0	-29.96	-57.7	-47.8	55.4	54.2	1.20	46.129		
800.0	798.9	795.1	794.0	1.5	0.0	-29.69	-61.9	-56.3	55.2	53.8	1.39	39.683		
900.0	898.3	894.3	892.6	1.8	0.0	-29.37	-66.9	-66.2	54.9	53.3	1.58	34.645		
1,000.0	897.4	893.5	891.0	2.0	0.0	-28.99	-72.6	-77.7	54.5	52.8	1.78	30.593		
1,100.0	1,096.3	1,092.7	1,089.1	2.3	0.0	-28.57	-79.1	-90.7	54.2	52.2	1.99	27.262		
1,200.0	1,194.9	1,191.9	1,186.9	2.7	0.0	-28.08	-86.4	-105.3	53.7	51.5	2.20	24.477		
1,300.0	1,293.3	1,291.1	1,284.5	3.0	0.0	-27.52	-94.4	-121.3	53.3	50.9	2.41	22.131		
1,315.1	1,308.1	1,306.1	1,299.2	3.1	0.0	-27.41	-95.6	-123.9	53.3	50.9	2.44	21.832 CC, ES		
1,400.0	1,391.5	1,390.3	1,381.7	3.4	0.0	-26.37	-103.1	-138.8	53.8	51.2	2.61	20.600		
1,500.0	1,489.7	1,489.4	1,478.5	3.7	0.0	-24.43	-112.6	-157.9	55.9	53.1	2.80	19.973		
1,600.0	1,587.9	1,588.4	1,574.8	4.1	0.0	-21.95	-122.9	-178.4	59.7	56.7	2.97	20.097		
1,700.0	1,686.1	1,687.2	1,670.5	4.4	0.0	-19.20	-133.9	-200.3	65.1	62.0	3.12	20.848		
1,800.0	1,784.3	1,785.8	1,765.6	4.8	0.0	-16.45	-145.5	-223.7	72.3	69.0	3.27	22.121		
1,900.0	1,882.5	1,884.0	1,859.9	5.2	0.0	-13.87	-157.9	-248.5	81.3	77.9	3.41	23.823		
2,000.0	1,980.8	1,982.0	1,953.4	5.5	0.0	-11.55	-170.9	-274.5	92.1	88.5	3.56	25.877		
2,100.0	2,079.0	2,079.5	2,045.9	5.9	0.0	-9.54	-184.6	-301.9	104.6	100.9	3.71	28.218		
2,200.0	2,177.2	2,176.5	2,137.6	6.3	0.0	-7.82	-198.9	-330.6	118.9	115.1	3.86	30.797		
2,300.0	2,275.4	2,273.1	2,228.1	6.7	0.0	-6.37	-213.9	-360.5	135.0	130.9	4.02	33.572		
2,400.0	2,373.6	2,369.0	2,317.6	7.0	0.0	-5.16	-229.4	-391.6	152.7	148.5	4.18	36.511		
2,500.0	2,471.8	2,464.4	2,405.9	7.4	0.0	-4.14	-245.5	-423.8	172.2	167.8	4.35	39.589		
2,600.0	2,570.0	2,561.1	2,494.9	7.8	0.0	-3.27	-262.3	-457.5	193.0	188.5	4.52	42.719		
2,700.0	2,668.3	2,658.8	2,584.9	8.1	0.0	-2.56	-279.4	-491.6	213.9	209.2	4.69	45.637		
2,800.0	2,766.5	2,756.6	2,674.9	8.5	0.0	-1.98	-296.5	-525.8	234.9	230.0	4.86	48.340		
2,900.0	2,864.7	2,854.3	2,764.8	8.9	0.0	-1.50	-313.5	-560.0	255.9	250.9	5.03	50.851		
3,000.0	2,962.9	2,952.1	2,854.8	9.3	0.0	-1.09	-330.6	-594.2	276.9	271.7	5.21	53.191		
3,100.0	3,061.1	3,049.8	2,944.8	9.6	0.0	-0.73	-347.7	-628.4	298.0	292.6	5.38	55.376		
3,200.0	3,159.3	3,147.5	3,034.7	10.0	0.0	-0.42	-364.8	-662.6	319.0	313.4	5.56	57.421		
3,300.0	3,257.6	3,245.3	3,124.7	10.4	0.0	-0.15	-381.8	-696.7	340.0	334.3	5.73	59.339		
3,400.0	3,355.8	3,343.0	3,214.7	10.8	0.0	0.08	-398.9	-730.9	361.1	355.2	5.91	61.142		
3,500.0	3,454.0	3,440.8	3,304.7	11.1	0.0	0.29	-416.0	-765.1	382.2	376.1	6.08	62.840		
3,600.0	3,552.2	3,538.5	3,394.6	11.5	0.0	0.48	-433.1	-799.3	403.2	397.0	6.26	64.441		
3,700.0	3,650.4	3,636.3	3,484.6	11.9	0.0	0.66	-450.1	-833.5	424.3	417.8	6.43	65.955		
3,800.0	3,748.6	3,734.0	3,574.6	12.3	0.0	0.81	-467.2	-867.6	445.3	438.7	6.61	67.387		
3,900.0	3,846.8	3,831.8	3,664.5	12.6	0.0	0.95	-484.3	-901.8	466.4	459.6	6.78	68.744		
4,000.0	3,945.1	3,929.5	3,754.5	13.0	0.0	1.08	-501.4	-936.0	487.5	480.5	6.96	70.032		
4,100.0	4,043.3	4,027.3	3,844.5	13.4	0.0	1.20	-518.4	-970.2	508.6	501.4	7.14	71.256		
4,200.0	4,141.5	4,125.0	3,934.5	13.8	0.0	1.31	-535.5	-1,004.4	529.7	522.3	7.31	72.421		
4,300.0	4,239.7	4,222.8	4,024.4	14.1	0.0	1.41	-552.6	-1,038.6	550.7	543.2	7.49	73.531		
4,400.0	4,337.9	4,320.5	4,114.4	14.5	0.0	1.50	-569.7	-1,072.7	571.8	564.1	7.67	74.590		
4,500.0	4,436.1	4,418.3	4,204.4	14.9	0.0	1.58	-586.7	-1,106.9	592.9	585.1	7.84	75.600		
4,600.0	4,534.3	4,516.0	4,294.3	15.3	0.0	1.66	-603.8	-1,141.1	614.0	606.0	8.02	76.566		
4,700.0	4,632.6	4,613.8	4,384.3	15.6	0.0	1.74	-620.9	-1,175.3	635.1	626.9	8.20	77.491		
4,800.0	4,730.8	4,711.5	4,474.3	16.0	0.0	1.81	-638.0	-1,209.5	656.2	647.8	8.37	78.376		
4,900.0	4,829.0	4,809.3	4,564.3	16.4	0.0	1.88	-655.0	-1,243.6	677.2	668.7	8.55	79.225		
5,000.0	4,927.2	4,907.0	4,654.2	16.8	0.0	1.94	-672.1	-1,277.8	698.3	689.6	8.72	80.039		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
5,100.0	5,025.4	5,004.8	4,744.2	17.1	0.0	2.00	-689.2	-1,312.0	719.4	710.5	8.90	80.821		
5,200.0	5,123.6	5,102.5	4,834.2	17.5	0.0	2.05	-706.3	-1,346.2	740.5	731.4	9.08	81.572		
5,300.0	5,221.8	5,200.3	4,924.1	17.9	0.0	2.10	-723.3	-1,380.4	761.6	752.3	9.25	82.295		
5,400.0	5,320.1	5,298.0	5,014.1	18.3	0.0	2.15	-740.4	-1,414.6	782.7	773.3	9.43	82.991		
5,500.0	5,418.3	5,395.8	5,104.1	18.6	0.0	2.20	-757.5	-1,448.7	803.8	794.2	9.61	83.661		
5,600.0	5,516.5	5,493.5	5,194.1	19.0	0.0	2.24	-774.6	-1,482.9	824.9	815.1	9.78	84.306		
5,700.0	5,614.7	5,591.3	5,284.0	19.4	0.0	2.28	-791.6	-1,517.1	846.0	836.0	9.96	84.929		
5,800.0	5,712.9	5,689.0	5,374.0	19.8	0.0	2.32	-808.7	-1,551.3	867.1	856.9	10.14	85.530		
5,900.0	5,811.1	5,786.8	5,464.0	20.1	0.0	2.36	-825.8	-1,585.5	888.1	877.8	10.31	86.110		
6,000.0	5,909.3	5,884.5	5,553.9	20.5	0.0	2.40	-842.9	-1,619.7	909.2	898.7	10.49	86.671		
6,100.0	6,007.6	5,982.3	5,643.9	20.9	0.0	2.43	-860.0	-1,653.8	930.3	919.7	10.67	87.214		
6,200.0	6,105.8	6,080.0	5,733.9	21.3	0.0	2.46	-877.0	-1,688.0	951.4	940.6	10.84	87.738		
6,300.0	6,204.0	6,177.8	5,823.8	21.6	0.0	2.50	-894.1	-1,722.2	972.5	961.5	11.02	88.246		
6,400.0	6,302.2	6,275.5	5,913.8	22.0	0.0	2.53	-911.2	-1,756.4	993.6	982.4	11.20	88.737		
6,500.0	6,400.4	6,373.2	6,003.8	22.4	0.0	2.56	-928.3	-1,790.6	1,014.7	1,003.3	11.37	89.214		
6,600.0	6,498.6	6,471.0	6,093.8	22.8	0.0	2.58	-945.3	-1,824.7	1,035.8	1,024.3	11.55	89.676		
6,700.0	6,596.8	6,568.8	6,183.8	23.1	0.0	0.27	-962.4	-1,858.9	1,056.8	1,045.1	11.73	90.126		
6,800.0	6,692.9	6,667.8	6,274.9	23.7	0.0	-10.80	-979.7	-1,893.6	1,069.4	1,057.6	11.78	90.816		
6,900.0	6,783.8	6,767.1	6,366.3	24.5	0.0	-15.93	-997.1	-1,928.3	1,068.0	1,056.3	11.66	91.582		
7,000.0	6,867.2	6,817.7	6,412.6	25.5	0.0	-19.27	-1,005.8	-1,946.7	1,054.6	1,043.0	11.53	91.484		
7,100.0	6,941.1	6,850.0	6,441.4	26.7	0.0	-21.97	-1,011.3	-1,960.3	1,033.0	1,021.4	11.58	89.215		
7,200.0	7,003.6	6,900.0	6,484.5	28.1	0.0	-24.99	-1,019.5	-1,984.2	1,003.6	991.5	12.19	82.347		
7,300.0	7,053.3	6,934.5	6,513.2	29.7	0.0	-28.15	-1,024.9	-2,002.7	967.0	953.4	13.60	71.093		
7,400.0	7,089.0	6,972.1	6,543.2	31.5	0.0	-31.98	-1,030.6	-2,024.5	923.8	907.7	16.08	57.456		
7,500.0	7,109.6	7,000.0	6,564.6	33.5	0.0	-36.28	-1,034.6	-2,041.9	874.9	855.4	19.48	44.916		
7,600.0	7,115.0	7,050.0	6,601.1	35.5	0.0	-41.75	-1,041.5	-2,075.4	821.4	797.7	23.70	34.664		
7,700.0	7,115.0	7,081.0	6,622.4	37.6	0.0	-43.21	-1,045.5	-2,097.6	770.4	744.6	25.77	29.899		
7,800.0	7,115.0	7,122.9	6,649.4	39.8	0.0	-45.15	-1,050.6	-2,129.2	725.6	697.4	28.13	25.791		
7,900.0	7,115.0	7,169.8	6,677.2	41.9	0.0	-47.23	-1,055.8	-2,166.6	687.4	656.8	30.67	22.415		
8,000.0	7,115.0	7,222.1	6,704.9	44.1	0.0	-49.40	-1,060.9	-2,210.6	656.2	622.8	33.34	19.680		
8,100.0	7,115.0	7,279.9	6,731.2	46.4	0.0	-51.56	-1,065.8	-2,261.8	631.7	595.6	36.10	17.500		
8,200.0	7,115.0	7,350.0	6,756.9	48.6	0.0	-53.75	-1,070.6	-2,326.9	613.7	574.7	38.94	15.758		
8,300.0	7,115.0	7,410.9	6,773.3	50.9	0.0	-55.20	-1,073.6	-2,385.4	601.4	559.9	41.51	14.487		
8,400.0	7,115.0	7,482.3	6,785.6	53.2	0.0	-56.30	-1,075.7	-2,455.7	594.3	550.4	43.97	13.517		
8,500.0	7,115.0	7,555.7	6,790.0	55.5	0.0	-56.70	-1,076.4	-2,528.9	592.0	545.8	46.13	12.833		
8,527.9	7,115.0	7,582.7	6,790.0	56.1	0.0	-56.70	-1,076.3	-2,555.9	592.0	545.3	46.68	12.681		
8,600.0	7,115.0	7,654.8	6,790.0	57.8	0.0	-56.70	-1,076.1	-2,628.0	592.0	543.9	48.11	12.305		
8,700.0	7,115.0	7,754.8	6,790.0	60.2	0.0	-56.70	-1,075.9	-2,728.0	592.0	541.9	50.09	11.818		
8,800.0	7,115.0	7,854.8	6,790.0	62.5	0.0	-56.70	-1,075.7	-2,828.0	592.0	539.9	52.08	11.366		
8,900.0	7,115.0	7,954.8	6,790.0	64.9	0.0	-56.70	-1,075.4	-2,928.0	592.0	537.9	54.08	10.946		
9,000.0	7,115.0	8,054.8	6,790.0	67.2	0.0	-56.70	-1,075.2	-3,028.0	592.0	535.9	56.08	10.556		
9,100.0	7,115.0	8,154.8	6,790.0	69.6	0.0	-56.70	-1,074.9	-3,128.0	592.0	533.9	58.09	10.191		
9,200.0	7,115.0	8,254.8	6,790.0	72.0	0.0	-56.70	-1,074.7	-3,228.0	592.0	531.9	60.10	9.850		
9,300.0	7,115.0	8,354.8	6,790.0	74.4	0.0	-56.70	-1,074.4	-3,328.0	592.0	529.9	62.12	9.530		
9,400.0	7,115.0	8,454.8	6,790.0	76.8	0.0	-56.70	-1,074.2	-3,428.0	592.0	527.8	64.14	9.230		
9,500.0	7,115.0	8,554.8	6,790.0	79.2	0.0	-56.70	-1,073.9	-3,528.0	592.0	525.8	66.16	8.948		
9,600.0	7,115.0	8,654.8	6,790.0	81.6	0.0	-56.70	-1,073.7	-3,628.0	592.0	523.8	68.18	8.682		
9,700.0	7,115.0	8,754.8	6,790.0	84.0	0.0	-56.70	-1,073.4	-3,728.0	592.0	521.8	70.21	8.432		
9,800.0	7,115.0	8,854.8	6,790.0	86.4	0.0	-56.70	-1,073.2	-3,828.0	592.0	519.8	72.24	8.195		
9,900.0	7,115.0	8,954.8	6,790.0	88.8	0.0	-56.70	-1,072.9	-3,928.0	592.0	517.7	74.27	7.970		
10,000.0	7,115.0	9,054.8	6,790.0	91.2	0.0	-56.70	-1,072.7	-4,028.0	592.0	515.7	76.31	7.758		
10,100.0	7,115.0	9,154.8	6,790.0	93.6	0.0	-56.70	-1,072.5	-4,128.0	592.0	513.7	78.35	7.556		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Reference													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis		Separation Factor	
10,200.0	7,115.0	9,254.8	6,790.0	96.1	0.0	-56.70	-1,072.2	-4,228.0	592.0	511.6	80.38	7.365		
10,300.0	7,115.0	9,354.8	6,790.0	98.5	0.0	-56.70	-1,072.0	-4,328.0	592.0	509.6	82.42	7.182		
10,400.0	7,115.0	9,454.8	6,790.0	100.9	0.0	-56.70	-1,071.7	-4,428.0	592.0	507.5	84.47	7.009		
10,500.0	7,115.0	9,554.8	6,790.0	103.4	0.0	-56.70	-1,071.5	-4,528.0	592.0	505.5	86.51	6.843		
10,600.0	7,115.0	9,654.8	6,790.0	105.8	0.0	-56.70	-1,071.2	-4,628.0	592.0	503.5	88.55	6.685		
10,700.0	7,115.0	9,754.8	6,790.0	108.2	0.0	-56.70	-1,071.0	-4,728.0	592.0	501.4	90.60	6.535		
10,800.0	7,115.0	9,854.8	6,790.0	110.7	0.0	-56.70	-1,070.7	-4,828.0	592.0	499.4	92.65	6.390		
10,900.0	7,115.0	9,954.8	6,790.0	113.1	0.0	-56.70	-1,070.5	-4,928.0	592.0	497.3	94.69	6.252		
11,000.0	7,115.0	10,054.8	6,790.0	115.5	0.0	-56.70	-1,070.2	-5,028.0	592.0	495.3	96.74	6.120		
11,100.0	7,115.0	10,154.8	6,790.0	118.0	0.0	-56.70	-1,070.0	-5,128.0	592.0	493.2	98.79	5.993		
11,200.0	7,115.0	10,254.8	6,790.0	120.4	0.0	-56.70	-1,069.7	-5,228.0	592.0	491.2	100.84	5.871		
11,300.0	7,115.0	10,354.8	6,790.0	122.9	0.0	-56.70	-1,069.5	-5,328.0	592.0	489.1	102.89	5.754		
11,400.0	7,115.0	10,454.8	6,790.0	125.3	0.0	-56.71	-1,069.3	-5,428.0	592.0	487.1	104.95	5.641		
11,500.0	7,115.0	10,554.8	6,790.0	127.8	0.0	-56.71	-1,069.0	-5,528.0	592.0	485.0	107.00	5.533		
11,600.0	7,115.0	10,654.8	6,790.0	130.2	0.0	-56.71	-1,068.8	-5,628.0	592.0	483.0	109.05	5.429		
11,700.0	7,115.0	10,754.8	6,790.0	132.7	0.0	-56.71	-1,068.5	-5,728.0	592.1	480.9	111.11	5.329		
11,800.0	7,115.0	10,854.8	6,790.0	135.1	0.0	-56.71	-1,068.3	-5,828.0	592.1	478.9	113.16	5.232		
11,900.0	7,115.0	10,954.8	6,790.0	137.6	0.0	-56.71	-1,068.0	-5,928.0	592.1	476.8	115.22	5.139		
12,000.0	7,115.0	11,054.8	6,790.0	140.0	0.0	-56.71	-1,067.8	-6,028.0	592.1	474.8	117.27	5.049		
12,100.0	7,115.0	11,154.8	6,790.0	142.5	0.0	-56.71	-1,067.5	-6,128.0	592.1	472.7	119.33	4.962		
12,200.0	7,115.0	11,254.8	6,790.0	144.9	0.0	-56.71	-1,067.3	-6,228.0	592.1	470.7	121.39	4.877		
12,300.0	7,115.0	11,354.8	6,790.0	147.4	0.0	-56.71	-1,067.0	-6,328.0	592.1	468.6	123.45	4.796		
12,400.0	7,115.0	11,454.8	6,790.0	149.8	0.0	-56.71	-1,066.8	-6,428.0	592.1	466.6	125.50	4.718		
12,500.0	7,115.0	11,554.8	6,790.0	152.3	0.0	-56.71	-1,066.5	-6,528.0	592.1	464.5	127.56	4.641		
12,600.0	7,115.0	11,654.8	6,790.0	154.7	0.0	-56.71	-1,066.3	-6,628.0	592.1	462.5	129.62	4.568		
12,700.0	7,115.0	11,754.8	6,790.0	157.2	0.0	-56.71	-1,066.1	-6,728.0	592.1	460.4	131.68	4.496		
12,800.0	7,115.0	11,854.8	6,790.0	159.6	0.0	-56.71	-1,065.8	-6,828.0	592.1	458.3	133.74	4.427		
12,900.0	7,115.0	11,954.8	6,790.0	162.1	0.0	-56.71	-1,065.6	-6,928.0	592.1	456.3	135.80	4.360		
13,000.0	7,115.0	12,054.8	6,790.0	164.6	0.0	-56.71	-1,065.3	-7,028.0	592.1	454.2	137.86	4.295		
13,100.0	7,115.0	12,154.8	6,790.0	167.0	0.0	-56.71	-1,065.1	-7,128.0	592.1	452.2	139.92	4.232		
13,200.0	7,115.0	12,254.8	6,790.0	169.5	0.0	-56.71	-1,064.8	-7,228.0	592.1	450.1	141.98	4.170		
13,300.0	7,115.0	12,354.8	6,790.0	171.9	0.0	-56.71	-1,064.6	-7,328.0	592.1	448.1	144.04	4.111		
13,400.0	7,115.0	12,454.8	6,790.0	174.4	0.0	-56.71	-1,064.3	-7,428.0	592.1	446.0	146.11	4.053		
13,500.0	7,115.0	12,554.8	6,790.0	176.9	0.0	-56.71	-1,064.1	-7,528.0	592.1	443.9	148.17	3.996		
13,600.0	7,115.0	12,654.8	6,790.0	179.3	0.0	-56.71	-1,063.8	-7,628.0	592.1	441.9	150.23	3.941		
13,700.0	7,115.0	12,754.8	6,790.0	181.8	0.0	-56.71	-1,063.6	-7,728.0	592.1	439.8	152.29	3.888		
13,800.0	7,115.0	12,854.8	6,790.0	184.2	0.0	-56.71	-1,063.3	-7,828.0	592.1	437.8	154.36	3.836		
13,900.0	7,115.0	12,954.8	6,790.0	186.7	0.0	-56.71	-1,063.1	-7,928.0	592.1	435.7	156.42	3.785		
14,000.0	7,115.0	13,054.8	6,790.0	189.2	0.0	-56.71	-1,062.9	-8,028.0	592.1	433.6	158.48	3.736		
14,100.0	7,115.0	13,154.8	6,790.0	191.6	0.0	-56.71	-1,062.6	-8,128.0	592.1	431.6	160.54	3.688		
14,200.0	7,115.0	13,254.8	6,790.0	194.1	0.0	-56.71	-1,062.4	-8,228.0	592.1	429.5	162.61	3.641		
14,300.0	7,115.0	13,354.8	6,790.0	196.6	0.0	-56.71	-1,062.1	-8,328.0	592.1	427.5	164.67	3.596		
14,400.0	7,115.0	13,454.8	6,790.0	199.0	0.0	-56.71	-1,061.9	-8,428.0	592.1	425.4	166.74	3.551		
14,500.0	7,115.0	13,554.8	6,790.0	201.5	0.0	-56.71	-1,061.6	-8,528.0	592.1	423.3	168.80	3.508		
14,600.0	7,115.0	13,654.8	6,790.0	203.9	0.0	-56.71	-1,061.4	-8,628.0	592.1	421.3	170.87	3.466		
14,700.0	7,115.0	13,754.8	6,790.0	206.4	0.0	-56.71	-1,061.1	-8,728.0	592.1	419.2	172.93	3.424		
14,800.0	7,115.0	13,854.8	6,790.0	208.9	0.0	-56.71	-1,060.9	-8,828.0	592.1	417.1	174.99	3.384		
14,900.0	7,115.0	13,954.8	6,790.0	211.3	0.0	-56.71	-1,060.6	-8,928.0	592.1	415.1	177.06	3.344		
15,000.0	7,115.0	14,054.8	6,790.0	213.8	0.0	-56.71	-1,060.4	-9,028.0	592.1	413.0	179.12	3.306		
15,100.0	7,115.0	14,154.8	6,790.0	216.3	0.0	-56.71	-1,060.1	-9,128.0	592.2	411.0	181.19	3.268		
15,200.0	7,115.0	14,254.8	6,790.0	218.7	0.0	-56.71	-1,059.9	-9,228.0	592.2	408.9	183.26	3.231		
15,300.0	7,115.0	14,354.8	6,790.0	221.2	0.0	-56.71	-1,059.7	-9,328.0	592.2	406.8	185.32	3.195		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,400.0	7,115.0	14,454.8	6,790.0	223.7	0.0	-56.71	-1,059.4	-9,428.0	592.2	404.8	187.39	3.160		
15,500.0	7,115.0	14,554.8	6,790.0	226.1	0.0	-56.71	-1,059.2	-9,528.0	592.2	402.7	189.45	3.126		
15,600.0	7,115.0	14,654.8	6,790.0	228.6	0.0	-56.71	-1,058.9	-9,628.0	592.2	400.6	191.52	3.092		
15,700.0	7,115.0	14,754.8	6,790.0	231.1	0.0	-56.71	-1,058.7	-9,728.0	592.2	398.6	193.58	3.059		
15,800.0	7,115.0	14,854.8	6,790.0	233.5	0.0	-56.71	-1,058.4	-9,828.0	592.2	396.5	195.65	3.027		
15,900.0	7,115.0	14,954.8	6,790.0	236.0	0.0	-56.71	-1,058.2	-9,928.0	592.2	394.5	197.72	2.995		
16,000.0	7,115.0	15,054.8	6,790.0	238.5	0.0	-56.71	-1,057.9	-10,028.0	592.2	392.4	199.78	2.964		
16,100.0	7,115.0	15,154.8	6,790.0	240.9	0.0	-56.71	-1,057.7	-10,128.0	592.2	390.3	201.85	2.934		
16,200.0	7,115.0	15,254.8	6,790.0	243.4	0.0	-56.71	-1,057.4	-10,228.0	592.2	388.3	203.92	2.904		
16,300.0	7,115.0	15,354.8	6,790.0	245.9	0.0	-56.71	-1,057.2	-10,328.0	592.2	386.2	205.98	2.875		
16,400.0	7,115.0	15,454.8	6,790.0	248.3	0.0	-56.71	-1,056.9	-10,428.0	592.2	384.1	208.05	2.846		
16,500.0	7,115.0	15,554.8	6,790.0	250.8	0.0	-56.71	-1,056.7	-10,528.0	592.2	382.1	210.12	2.818		
16,600.0	7,115.0	15,654.8	6,790.0	253.3	0.0	-56.72	-1,056.5	-10,628.0	592.2	380.0	212.18	2.791		
16,700.0	7,115.0	15,754.8	6,790.0	255.7	0.0	-56.72	-1,056.2	-10,728.0	592.2	377.9	214.25	2.764		
16,800.0	7,115.0	15,854.8	6,790.0	258.2	0.0	-56.72	-1,056.0	-10,828.0	592.2	375.9	216.32	2.738		
16,900.0	7,115.0	15,954.8	6,790.0	260.7	0.0	-56.72	-1,055.7	-10,928.0	592.2	373.8	218.39	2.712		
17,000.0	7,115.0	16,054.8	6,790.0	263.1	0.0	-56.72	-1,055.5	-11,028.0	592.2	371.8	220.45	2.686		
17,100.0	7,115.0	16,154.8	6,790.0	265.6	0.0	-56.72	-1,055.2	-11,128.0	592.2	369.7	222.52	2.661		
17,200.0	7,115.0	16,254.8	6,790.0	268.1	0.0	-56.72	-1,055.0	-11,228.0	592.2	367.6	224.59	2.637		
17,300.0	7,115.0	16,354.8	6,790.0	270.5	0.0	-56.72	-1,054.7	-11,328.0	592.2	365.6	226.66	2.613		
17,400.0	7,115.0	16,454.8	6,790.0	273.0	0.0	-56.72	-1,054.5	-11,428.0	592.2	363.5	228.73	2.589		
17,500.0	7,115.0	16,554.8	6,790.0	275.5	0.0	-56.72	-1,054.2	-11,528.0	592.2	361.4	230.79	2.566		
17,600.0	7,115.0	16,654.8	6,790.0	277.9	0.0	-56.72	-1,054.0	-11,628.0	592.2	359.4	232.86	2.543		
17,700.0	7,115.0	16,754.8	6,790.0	280.4	0.0	-56.72	-1,053.7	-11,728.0	592.2	357.3	234.93	2.521		
17,713.8	7,115.0	16,768.6	6,790.0	280.8	0.0	-56.72	-1,053.7	-11,741.8	592.2	357.0	235.22	2.518		
17,730.1	7,115.0	16,783.6	6,790.0	281.2	0.0	-56.72	-1,053.7	-11,756.8	592.2	356.7	235.55	2.514 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.26	-72.5	-43.1	84.3					
100.0	100.0	100.0	100.0	0.1	0.0	-149.26	-72.5	-43.1	84.3	84.2	0.13	634.920		
200.0	200.0	200.0	200.0	0.3	0.0	-149.26	-72.5	-43.1	84.3	84.0	0.31	274.405		
300.0	300.0	298.7	298.7	0.5	0.0	-30.62	-72.9	-43.8	84.3	83.9	0.48	174.943		
400.0	400.0	397.5	397.4	0.7	0.0	-30.66	-74.2	-46.1	84.3	83.7	0.66	128.188		
500.0	499.9	496.2	496.1	0.9	0.0	-30.74	-76.3	-49.7	84.3	83.5	0.84	100.897		
600.0	599.7	594.9	594.6	1.1	0.0	-30.84	-79.3	-54.9	84.3	83.3	1.02	82.928		
608.8	608.4	603.6	603.3	1.1	0.0	-30.85	-79.6	-55.4	84.3	83.3	1.03	81.613 CC		
700.0	699.4	693.7	693.1	1.3	0.0	-30.97	-83.1	-61.5	84.3	83.1	1.20	70.143		
800.0	798.9	792.4	791.4	1.5	0.0	-31.13	-87.8	-69.6	84.3	83.0	1.39	60.539		
900.0	898.3	891.2	889.5	1.8	0.0	-31.32	-93.3	-79.2	84.3	82.8	1.59	53.029		
1,000.0	997.4	989.9	987.4	2.0	0.0	-31.54	-99.6	-90.2	84.4	82.6	1.80	46.973		
1,100.0	1,096.3	1,088.6	1,085.1	2.3	0.0	-31.79	-106.8	-102.7	84.4	82.3	2.01	41.971		
1,200.0	1,194.9	1,187.4	1,182.5	2.7	0.0	-32.07	-114.8	-116.7	84.4	82.1	2.23	37.756		
1,257.1	1,251.1	1,243.8	1,238.0	2.9	0.0	-32.23	-119.8	-125.3	84.4	82.0	2.37	35.634		
1,300.0	1,293.3	1,286.1	1,279.6	3.0	0.0	-32.37	-123.7	-132.1	84.4	81.9	2.47	34.169 ES		
1,400.0	1,391.5	1,384.9	1,376.5	3.4	0.0	-32.30	-133.4	-148.9	85.4	82.7	2.71	31.557		
1,500.0	1,489.7	1,483.6	1,472.9	3.7	0.0	-31.65	-143.9	-167.2	87.8	84.9	2.93	29.961		
1,600.0	1,587.9	1,582.1	1,568.8	4.1	0.0	-30.52	-155.2	-186.9	91.8	88.7	3.14	29.193		
1,700.0	1,686.1	1,680.5	1,664.1	4.4	0.0	-29.01	-167.4	-208.0	97.3	94.0	3.34	29.115		
1,800.0	1,784.3	1,778.7	1,758.8	4.8	0.0	-27.25	-180.3	-230.4	104.4	100.9	3.53	29.619		
1,900.0	1,882.5	1,876.5	1,852.7	5.2	0.0	-25.36	-193.9	-254.2	113.2	109.5	3.70	30.621		
2,000.0	1,980.8	1,974.1	1,945.9	5.5	0.0	-23.46	-208.4	-279.3	123.7	119.8	3.86	32.049		
2,100.0	2,079.0	2,071.2	2,038.1	5.9	0.0	-21.60	-223.5	-305.6	135.8	131.8	4.01	33.840		
2,200.0	2,177.2	2,167.9	2,129.4	6.3	0.0	-19.85	-239.4	-333.2	149.6	145.5	4.16	35.941		
2,300.0	2,275.4	2,264.0	2,219.7	6.7	0.0	-18.23	-255.9	-361.9	165.2	160.9	4.31	38.306		
2,400.0	2,373.6	2,359.6	2,308.8	7.0	0.0	-16.76	-273.1	-391.7	182.5	178.0	4.46	40.893		
2,500.0	2,471.8	2,456.4	2,398.6	7.4	0.0	-15.42	-291.1	-423.1	201.2	196.6	4.61	43.619		
2,600.0	2,570.0	2,554.5	2,489.6	7.8	0.0	-14.29	-309.4	-455.0	220.1	215.4	4.77	46.187		
2,700.0	2,668.3	2,652.6	2,580.5	8.1	0.0	-13.33	-327.8	-486.8	239.2	234.2	4.92	48.571		
2,800.0	2,766.5	2,750.7	2,671.5	8.5	0.0	-12.52	-346.1	-518.7	258.3	253.2	5.08	50.789		
2,900.0	2,864.7	2,848.8	2,762.4	8.9	0.0	-11.82	-364.5	-550.6	277.4	272.1	5.25	52.855		
3,000.0	2,962.9	2,946.9	2,853.3	9.3	0.0	-11.21	-382.8	-582.5	296.6	291.1	5.41	54.785		
3,100.0	3,061.1	3,045.0	2,944.3	9.6	0.0	-10.67	-401.2	-614.4	315.7	310.2	5.58	56.591		
3,200.0	3,159.3	3,143.1	3,035.2	10.0	0.0	-10.19	-419.5	-646.3	335.0	329.2	5.75	58.285		
3,300.0	3,257.6	3,241.2	3,126.2	10.4	0.0	-9.77	-437.9	-678.2	354.2	348.3	5.92	59.876		
3,400.0	3,355.8	3,339.3	3,217.1	10.8	0.0	-9.39	-456.2	-710.1	373.5	367.4	6.09	61.373		
3,500.0	3,454.0	3,437.4	3,308.0	11.1	0.0	-9.04	-474.6	-741.9	392.7	386.5	6.26	62.784		
3,600.0	3,552.2	3,535.5	3,399.0	11.5	0.0	-8.73	-492.9	-773.8	412.0	405.6	6.43	64.117		
3,700.0	3,650.4	3,633.6	3,489.9	11.9	0.0	-8.45	-511.3	-805.7	431.3	424.7	6.60	65.377		
3,800.0	3,748.6	3,731.7	3,580.9	12.3	0.0	-8.19	-529.6	-837.6	450.6	443.8	6.77	66.570		
3,900.0	3,846.8	3,829.8	3,671.8	12.6	0.0	-7.95	-547.9	-869.5	469.9	463.0	6.94	67.702		
4,000.0	3,945.1	3,927.9	3,762.7	13.0	0.0	-7.74	-566.3	-901.4	489.2	482.1	7.11	68.778		
4,100.0	4,043.3	4,026.0	3,853.7	13.4	0.0	-7.53	-584.6	-933.3	508.6	501.3	7.29	69.800		
4,200.0	4,141.5	4,124.1	3,944.6	13.8	0.0	-7.35	-603.0	-965.2	527.9	520.4	7.46	70.773		
4,300.0	4,239.7	4,222.2	4,035.6	14.1	0.0	-7.17	-621.3	-997.0	547.2	539.6	7.63	71.701		
4,400.0	4,337.9	4,320.3	4,126.5	14.5	0.0	-7.01	-639.7	-1,028.9	566.6	558.8	7.81	72.586		
4,500.0	4,436.1	4,418.4	4,217.4	14.9	0.0	-6.86	-658.0	-1,060.8	585.9	577.9	7.98	73.432		
4,600.0	4,534.3	4,516.5	4,308.4	15.3	0.0	-6.72	-676.4	-1,092.7	605.2	597.1	8.15	74.241		
4,700.0	4,632.6	4,614.6	4,399.3	15.6	0.0	-6.58	-694.7	-1,124.6	624.6	616.3	8.33	75.015		
4,800.0	4,730.8	4,712.7	4,490.3	16.0	0.0	-6.46	-713.1	-1,156.5	644.0	635.5	8.50	75.756		
4,900.0	4,829.0	4,810.8	4,581.2	16.4	0.0	-6.34	-731.4	-1,188.4	663.3	654.6	8.67	76.467		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor	
5,000.0	4,927.2	4,908.9	4,672.2	16.8	0.0	-6.23	-749.7	-1,220.2	682.7	673.8	8.85	77.150	
5,100.0	5,025.4	5,007.0	4,763.1	17.1	0.0	-6.12	-768.1	-1,252.1	702.0	693.0	9.02	77.805	
5,200.0	5,123.6	5,105.1	4,854.0	17.5	0.0	-6.02	-786.4	-1,284.0	721.4	712.2	9.20	78.435	
5,300.0	5,221.8	5,203.2	4,945.0	17.9	0.0	-5.93	-804.8	-1,315.9	740.8	731.4	9.37	79.041	
5,400.0	5,320.1	5,301.3	5,035.9	18.3	0.0	-5.84	-823.1	-1,347.8	760.1	750.6	9.55	79.625	
5,500.0	5,418.3	5,399.4	5,126.9	18.6	0.0	-5.76	-841.5	-1,379.7	779.5	769.8	9.72	80.187	
5,600.0	5,516.5	5,497.5	5,217.8	19.0	0.0	-5.67	-859.8	-1,411.6	798.9	789.0	9.90	80.729	
5,700.0	5,614.7	5,595.6	5,308.7	19.4	0.0	-5.60	-878.2	-1,443.5	818.2	808.2	10.07	81.252	
5,800.0	5,712.9	5,693.7	5,399.7	19.8	0.0	-5.52	-896.5	-1,475.3	837.6	827.4	10.25	81.757	
5,900.0	5,811.1	5,791.8	5,490.6	20.1	0.0	-5.45	-914.9	-1,507.2	857.0	846.6	10.42	82.244	
6,000.0	5,909.3	5,889.9	5,581.6	20.5	0.0	-5.39	-933.2	-1,539.1	876.4	865.8	10.59	82.715	
6,100.0	6,007.6	5,988.0	5,672.5	20.9	0.0	-5.32	-951.6	-1,571.0	895.7	885.0	10.77	83.171	
6,200.0	6,105.8	6,086.1	5,763.4	21.3	0.0	-5.26	-969.9	-1,602.9	915.1	904.2	10.94	83.612	
6,300.0	6,204.0	6,184.2	5,854.4	21.6	0.0	-5.20	-988.2	-1,634.8	934.5	923.4	11.12	84.039	
6,400.0	6,302.2	6,282.3	5,945.3	22.0	0.0	-5.15	-1,006.6	-1,666.7	953.9	942.6	11.29	84.452	
6,500.0	6,400.4	6,380.4	6,036.3	22.4	0.0	-5.09	-1,024.9	-1,698.6	973.2	961.8	11.47	84.852	
6,600.0	6,498.6	6,478.5	6,127.2	22.8	0.0	-5.04	-1,043.3	-1,730.4	992.6	981.0	11.64	85.241	
6,700.0	6,596.8	6,576.6	6,218.2	23.1	0.0	-7.31	-1,061.6	-1,762.3	1,011.9	1,000.1	11.81	85.669	
6,800.0	6,692.9	6,675.8	6,310.1	23.7	0.0	-18.36	-1,080.2	-1,794.6	1,023.4	1,011.5	11.91	85.928	
6,900.0	6,783.8	6,774.8	6,401.8	24.5	0.0	-23.67	-1,098.7	-1,826.7	1,021.9	1,009.9	12.05	84.838	
7,000.0	6,867.2	6,871.2	6,491.2	25.5	0.0	-27.96	-1,116.7	-1,858.1	1,008.0	995.5	12.44	81.004	
7,100.0	6,941.1	6,962.7	6,576.1	26.7	0.0	-32.54	-1,133.8	-1,887.8	982.4	968.9	13.48	72.854	
7,200.0	7,003.6	7,047.0	6,654.2	28.1	0.0	-38.01	-1,149.6	-1,915.2	946.6	931.0	15.57	60.801	
7,300.0	7,053.3	7,100.0	6,703.3	29.7	0.0	-43.67	-1,159.5	-1,932.5	903.0	884.5	18.56	48.655	
7,400.0	7,089.0	7,150.0	6,748.7	31.5	0.0	-50.20	-1,168.6	-1,951.4	855.9	833.5	22.45	38.119	
7,500.0	7,109.6	7,173.6	6,769.6	33.5	0.0	-56.03	-1,172.9	-1,961.5	807.2	780.8	26.44	30.528	
7,600.0	7,115.0	7,200.0	6,792.5	35.5	0.0	-61.52	-1,177.5	-1,973.8	759.5	729.2	30.28	25.081	
7,700.0	7,115.0	7,236.8	6,823.5	37.6	0.0	-64.12	-1,183.7	-1,992.5	718.1	685.2	32.89	21.831	
7,800.0	7,115.0	7,276.0	6,855.4	39.8	0.0	-66.85	-1,190.1	-2,014.4	686.1	650.5	35.60	19.274	
7,900.0	7,115.0	7,323.2	6,892.0	41.9	0.0	-70.05	-1,197.4	-2,043.5	663.9	625.4	38.45	17.268	
8,000.0	7,115.0	7,380.7	6,933.4	44.1	0.0	-73.75	-1,205.7	-2,082.3	651.2	609.8	41.39	15.733	
8,100.0	7,115.0	7,450.6	6,979.0	46.4	0.0	-77.86	-1,214.8	-2,134.5	646.7	602.4	44.34	14.586	
8,116.1	7,115.0	7,463.2	6,986.6	46.7	0.0	-78.55	-1,216.4	-2,144.5	646.7	601.8	44.81	14.431	
8,200.0	7,115.0	7,535.3	7,026.3	48.6	0.0	-82.13	-1,224.3	-2,204.1	648.4	601.2	47.18	13.743	
8,300.0	7,115.0	7,636.0	7,070.1	50.9	0.0	-86.05	-1,232.9	-2,294.2	653.1	603.3	49.81	13.112	
8,400.0	7,115.0	7,751.1	7,102.4	53.2	0.0	-88.91	-1,239.2	-2,404.3	657.8	605.6	52.25	12.589	
8,500.0	7,115.0	7,875.3	7,115.0	55.5	0.0	-90.00	-1,241.4	-2,527.7	659.8	605.2	54.62	12.080	
8,600.0	7,115.0	7,976.0	7,115.0	57.8	0.0	-90.00	-1,241.2	-2,628.4	659.8	602.8	56.99	11.578	
8,700.0	7,115.0	8,076.0	7,115.0	60.2	0.0	-90.00	-1,240.9	-2,728.4	659.8	600.4	59.36	11.115	
8,800.0	7,115.0	8,176.0	7,115.0	62.5	0.0	-90.00	-1,240.7	-2,828.4	659.8	598.0	61.75	10.685	
8,900.0	7,115.0	8,276.0	7,115.0	64.9	0.0	-90.00	-1,240.4	-2,928.4	659.8	595.7	64.14	10.287	
9,000.0	7,115.0	8,376.0	7,115.0	67.2	0.0	-90.00	-1,240.2	-3,028.4	659.8	593.3	66.53	9.916	
9,100.0	7,115.0	8,476.0	7,115.0	69.6	0.0	-90.00	-1,239.9	-3,128.4	659.8	590.8	68.94	9.571	
9,200.0	7,115.0	8,576.0	7,115.0	72.0	0.0	-90.00	-1,239.7	-3,228.4	659.8	588.4	71.34	9.248	
9,300.0	7,115.0	8,676.0	7,115.0	74.4	0.0	-90.00	-1,239.4	-3,328.4	659.8	586.0	73.76	8.945	
9,400.0	7,115.0	8,776.0	7,115.0	76.8	0.0	-90.00	-1,239.2	-3,428.4	659.8	583.6	76.17	8.662	
9,500.0	7,115.0	8,876.0	7,115.0	79.2	0.0	-90.00	-1,238.9	-3,528.4	659.8	581.2	78.59	8.395	
9,600.0	7,115.0	8,976.0	7,115.0	81.6	0.0	-90.00	-1,238.7	-3,628.4	659.8	578.8	81.01	8.144	
9,700.0	7,115.0	9,076.0	7,115.0	84.0	0.0	-90.00	-1,238.4	-3,728.4	659.8	576.3	83.44	7.907	
9,800.0	7,115.0	9,176.0	7,115.0	86.4	0.0	-90.00	-1,238.2	-3,828.4	659.8	573.9	85.87	7.684	
9,900.0	7,115.0	9,276.0	7,115.0	88.8	0.0	-90.00	-1,237.9	-3,928.4	659.8	571.5	88.30	7.472	
10,000.0	7,115.0	9,376.0	7,115.0	91.2	0.0	-90.00	-1,237.7	-4,028.4	659.8	569.0	90.73	7.272	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis		
10,100.0	7,115.0	9,476.0	7,115.0	93.6	0.0	-90.00	-1,237.4	-4,128.4	659.8	566.6	93.17	7.082	
10,200.0	7,115.0	9,576.0	7,115.0	96.1	0.0	-90.00	-1,237.2	-4,228.4	659.8	564.2	95.61	6.901	
10,300.0	7,115.0	9,676.0	7,115.0	98.5	0.0	-90.00	-1,236.9	-4,328.4	659.8	561.7	98.05	6.729	
10,400.0	7,115.0	9,776.0	7,115.0	100.9	0.0	-90.00	-1,236.7	-4,428.4	659.8	559.3	100.49	6.566	
10,500.0	7,115.0	9,876.0	7,115.0	103.4	0.0	-90.00	-1,236.4	-4,528.4	659.8	556.9	102.93	6.410	
10,600.0	7,115.0	9,976.0	7,115.0	105.8	0.0	-90.00	-1,236.2	-4,628.4	659.8	554.4	105.37	6.261	
10,700.0	7,115.0	10,076.0	7,115.0	108.2	0.0	-90.00	-1,235.9	-4,728.4	659.8	552.0	107.82	6.119	
10,800.0	7,115.0	10,176.0	7,115.0	110.7	0.0	-90.00	-1,235.7	-4,828.4	659.8	549.5	110.27	5.983	
10,900.0	7,115.0	10,276.0	7,115.0	113.1	0.0	-90.00	-1,235.4	-4,928.4	659.8	547.1	112.72	5.853	
11,000.0	7,115.0	10,376.0	7,115.0	115.5	0.0	-90.00	-1,235.2	-5,028.4	659.8	544.6	115.16	5.729	
11,100.0	7,115.0	10,476.0	7,115.0	118.0	0.0	-90.00	-1,234.9	-5,128.4	659.8	542.2	117.62	5.610	
11,200.0	7,115.0	10,576.0	7,115.0	120.4	0.0	-90.00	-1,234.7	-5,228.4	659.8	539.7	120.07	5.495	
11,300.0	7,115.0	10,676.0	7,115.0	122.9	0.0	-90.00	-1,234.4	-5,328.4	659.8	537.3	122.52	5.385	
11,400.0	7,115.0	10,776.0	7,115.0	125.3	0.0	-90.00	-1,234.2	-5,428.4	659.8	534.8	124.97	5.279	
11,500.0	7,115.0	10,876.0	7,115.0	127.8	0.0	-90.00	-1,233.9	-5,528.4	659.8	532.4	127.43	5.178	
11,600.0	7,115.0	10,976.0	7,115.0	130.2	0.0	-90.00	-1,233.7	-5,628.4	659.8	529.9	129.88	5.080	
11,700.0	7,115.0	11,076.0	7,115.0	132.7	0.0	-90.00	-1,233.4	-5,728.4	659.8	527.4	132.34	4.986	
11,800.0	7,115.0	11,176.0	7,115.0	135.1	0.0	-90.00	-1,233.2	-5,828.4	659.8	525.0	134.79	4.895	
11,900.0	7,115.0	11,276.0	7,115.0	137.6	0.0	-90.00	-1,232.9	-5,928.4	659.8	522.5	137.25	4.807	
12,000.0	7,115.0	11,376.0	7,115.0	140.0	0.0	-90.00	-1,232.7	-6,028.4	659.8	520.1	139.71	4.723	
12,100.0	7,115.0	11,476.0	7,115.0	142.5	0.0	-90.00	-1,232.4	-6,128.4	659.8	517.6	142.16	4.641	
12,200.0	7,115.0	11,576.0	7,115.0	144.9	0.0	-90.00	-1,232.2	-6,228.4	659.8	515.2	144.62	4.562	
12,300.0	7,115.0	11,676.0	7,115.0	147.4	0.0	-90.00	-1,231.9	-6,328.4	659.8	512.7	147.08	4.486	
12,400.0	7,115.0	11,776.0	7,115.0	149.8	0.0	-90.00	-1,231.7	-6,428.4	659.8	510.2	149.54	4.412	
12,500.0	7,115.0	11,876.0	7,115.0	152.3	0.0	-90.00	-1,231.4	-6,528.4	659.8	507.8	152.00	4.341	
12,600.0	7,115.0	11,976.0	7,115.0	154.7	0.0	-90.00	-1,231.2	-6,628.4	659.8	505.3	154.46	4.271	
12,700.0	7,115.0	12,076.0	7,115.0	157.2	0.0	-90.00	-1,230.9	-6,728.4	659.8	502.8	156.92	4.204	
12,800.0	7,115.0	12,176.0	7,115.0	159.6	0.0	-90.00	-1,230.7	-6,828.4	659.8	500.4	159.38	4.139	
12,900.0	7,115.0	12,276.0	7,115.0	162.1	0.0	-90.00	-1,230.4	-6,928.4	659.8	497.9	161.85	4.077	
13,000.0	7,115.0	12,376.0	7,115.0	164.6	0.0	-90.00	-1,230.2	-7,028.4	659.8	495.5	164.31	4.015	
13,100.0	7,115.0	12,476.0	7,115.0	167.0	0.0	-90.00	-1,229.9	-7,128.4	659.8	493.0	166.77	3.956	
13,200.0	7,115.0	12,576.0	7,115.0	169.5	0.0	-90.00	-1,229.7	-7,228.4	659.8	490.5	169.23	3.899	
13,300.0	7,115.0	12,676.0	7,115.0	171.9	0.0	-90.00	-1,229.4	-7,328.4	659.8	488.1	171.70	3.843	
13,400.0	7,115.0	12,776.0	7,115.0	174.4	0.0	-90.00	-1,229.2	-7,428.4	659.8	485.6	174.16	3.788	
13,500.0	7,115.0	12,876.0	7,115.0	176.9	0.0	-90.00	-1,228.9	-7,528.4	659.8	483.1	176.62	3.735	
13,600.0	7,115.0	12,976.0	7,115.0	179.3	0.0	-90.00	-1,228.7	-7,628.4	659.8	480.7	179.09	3.684	
13,700.0	7,115.0	13,076.0	7,115.0	181.8	0.0	-90.00	-1,228.4	-7,728.4	659.8	478.2	181.55	3.634	
13,800.0	7,115.0	13,176.0	7,115.0	184.2	0.0	-90.00	-1,228.2	-7,828.4	659.8	475.8	184.02	3.585	
13,900.0	7,115.0	13,276.0	7,115.0	186.7	0.0	-90.00	-1,227.9	-7,928.4	659.8	473.3	186.48	3.538	
14,000.0	7,115.0	13,376.0	7,115.0	189.2	0.0	-90.00	-1,227.7	-8,028.4	659.8	470.8	188.95	3.492	
14,100.0	7,115.0	13,476.0	7,115.0	191.6	0.0	-90.00	-1,227.4	-8,128.4	659.8	468.4	191.41	3.447	
14,200.0	7,115.0	13,576.0	7,115.0	194.1	0.0	-90.00	-1,227.2	-8,228.4	659.8	465.9	193.88	3.403	
14,300.0	7,115.0	13,676.0	7,115.0	196.6	0.0	-90.00	-1,226.9	-8,328.4	659.8	463.4	196.34	3.360	
14,400.0	7,115.0	13,776.0	7,115.0	199.0	0.0	-90.00	-1,226.7	-8,428.4	659.8	461.0	198.81	3.319	
14,500.0	7,115.0	13,876.0	7,115.0	201.5	0.0	-90.00	-1,226.4	-8,528.4	659.8	458.5	201.28	3.278	
14,600.0	7,115.0	13,976.0	7,115.0	203.9	0.0	-90.00	-1,226.2	-8,628.4	659.8	456.0	203.74	3.238	
14,700.0	7,115.0	14,076.0	7,115.0	206.4	0.0	-90.00	-1,225.9	-8,728.4	659.8	453.6	206.21	3.199	
14,800.0	7,115.0	14,176.0	7,115.0	208.9	0.0	-90.00	-1,225.7	-8,828.4	659.8	451.1	208.68	3.162	
14,900.0	7,115.0	14,276.0	7,115.0	211.3	0.0	-90.00	-1,225.4	-8,928.4	659.8	448.6	211.14	3.125	
15,000.0	7,115.0	14,376.0	7,115.0	213.8	0.0	-90.00	-1,225.2	-9,028.4	659.8	446.2	213.61	3.089	
15,100.0	7,115.0	14,476.0	7,115.0	216.3	0.0	-90.00	-1,224.9	-9,128.4	659.8	443.7	216.08	3.053	
15,200.0	7,115.0	14,576.0	7,115.0	218.7	0.0	-90.00	-1,224.7	-9,228.4	659.8	441.2	218.55	3.019	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,300.0	7,115.0	14,676.0	7,115.0	221.2	0.0	-90.00	-1,224.4	-9,328.4	659.8	438.7	221.01	2.985		
15,400.0	7,115.0	14,776.0	7,115.0	223.7	0.0	-90.00	-1,224.2	-9,428.4	659.8	436.3	223.48	2.952		
15,500.0	7,115.0	14,876.0	7,115.0	226.1	0.0	-90.00	-1,223.9	-9,528.4	659.8	433.8	225.95	2.920		
15,600.0	7,115.0	14,976.0	7,115.0	228.6	0.0	-90.00	-1,223.7	-9,628.4	659.8	431.3	228.42	2.888		
15,700.0	7,115.0	15,076.0	7,115.0	231.1	0.0	-90.00	-1,223.4	-9,728.4	659.8	428.9	230.89	2.858		
15,800.0	7,115.0	15,176.0	7,115.0	233.5	0.0	-90.00	-1,223.2	-9,828.4	659.8	426.4	233.35	2.827		
15,900.0	7,115.0	15,276.0	7,115.0	236.0	0.0	-90.00	-1,222.9	-9,928.4	659.8	423.9	235.82	2.798		
16,000.0	7,115.0	15,376.0	7,115.0	238.5	0.0	-90.00	-1,222.7	-10,028.4	659.8	421.5	238.29	2.769		
16,100.0	7,115.0	15,476.0	7,115.0	240.9	0.0	-90.00	-1,222.4	-10,128.4	659.8	419.0	240.76	2.740		
16,200.0	7,115.0	15,576.0	7,115.0	243.4	0.0	-90.00	-1,222.2	-10,228.4	659.8	416.5	243.23	2.712		
16,300.0	7,115.0	15,676.0	7,115.0	245.9	0.0	-90.00	-1,221.9	-10,328.4	659.8	414.1	245.70	2.685		
16,400.0	7,115.0	15,776.0	7,115.0	248.3	0.0	-90.00	-1,221.7	-10,428.4	659.8	411.6	248.17	2.659		
16,500.0	7,115.0	15,876.0	7,115.0	250.8	0.0	-90.00	-1,221.4	-10,528.4	659.8	409.1	250.64	2.632		
16,600.0	7,115.0	15,976.0	7,115.0	253.3	0.0	-90.00	-1,221.2	-10,628.4	659.8	406.7	253.11	2.607		
16,700.0	7,115.0	16,076.0	7,115.0	255.7	0.0	-90.00	-1,220.9	-10,728.4	659.8	404.2	255.58	2.581		
16,800.0	7,115.0	16,176.0	7,115.0	258.2	0.0	-90.00	-1,220.7	-10,828.4	659.8	401.7	258.05	2.557		
16,900.0	7,115.0	16,276.0	7,115.0	260.7	0.0	-90.00	-1,220.4	-10,928.4	659.8	399.2	260.51	2.533		
17,000.0	7,115.0	16,376.0	7,115.0	263.1	0.0	-90.00	-1,220.2	-11,028.4	659.8	396.8	262.98	2.509		
17,100.0	7,115.0	16,476.0	7,115.0	265.6	0.0	-90.00	-1,219.9	-11,128.4	659.8	394.3	265.45	2.485		
17,200.0	7,115.0	16,576.0	7,115.0	268.1	0.0	-90.00	-1,219.7	-11,228.4	659.8	391.8	267.92	2.462		
17,300.0	7,115.0	16,676.0	7,115.0	270.5	0.0	-90.00	-1,219.4	-11,328.4	659.8	389.4	270.39	2.440		
17,400.0	7,115.0	16,776.0	7,115.0	273.0	0.0	-90.00	-1,219.2	-11,428.4	659.8	386.9	272.86	2.418		
17,500.0	7,115.0	16,876.0	7,115.0	275.5	0.0	-90.00	-1,218.9	-11,528.4	659.8	384.4	275.33	2.396		
17,600.0	7,115.0	16,976.0	7,115.0	277.9	0.0	-90.00	-1,218.7	-11,628.4	659.8	381.9	277.80	2.375		
17,700.0	7,115.0	17,076.0	7,115.0	280.4	0.0	-90.00	-1,218.4	-11,728.4	659.8	379.5	280.27	2.354		
17,724.6	7,115.0	17,100.6	7,115.0	281.0	0.0	-90.00	-1,218.3	-11,753.0	659.8	378.9	280.88	2.349		
17,730.1	7,115.0	17,104.5	7,115.0	281.2	0.0	-90.00	-1,218.3	-11,756.9	659.8	378.7	281.02	2.348 SF		

## Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 6
<b>Project:</b>	WELD COUNTY, CO	<b>TVD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Reference Site:</b>	S16-T6N-R67W	<b>MD Reference:</b>	24' KB @ 4821.0usft (H&P 319)
<b>Site Error:</b>	0.0usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Breniman 6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 24' KB @ 4821.0usft (H&P 319)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Breniman 6

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°

