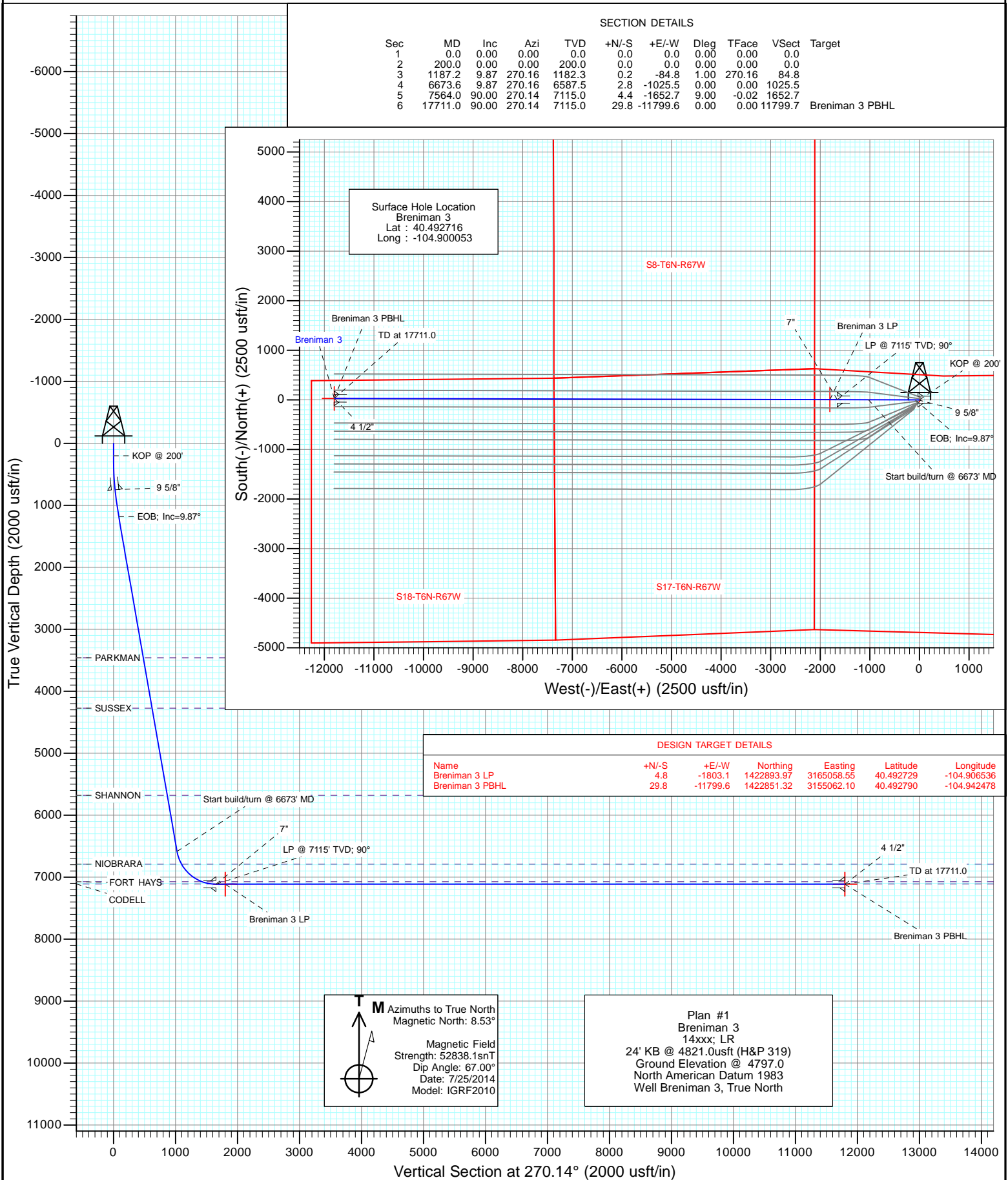




Project: WELD COUNTY, CO  
Site: S16-T6N-R67W  
Well: Breniman 3  
Wellbore: Hz  
Design: Plan #1



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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 3					
Well Position	+N/-S	0.0 usft	Northing:	1,422,901.36 usft	Latitude:	40.492716
	+E/-W	0.0 usft	Easting:	3,166,861.66 usft	Longitude:	-104.900053
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	270.14

<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	
1,187.2	9.87	270.16	1,182.3	0.2	-84.8	1.00	1.00	0.00	270.16	
6,673.6	9.87	270.16	6,587.5	2.8	-1,025.5	0.00	0.00	0.00	0.00	
7,564.0	90.00	270.14	7,115.0	4.4	-1,652.7	9.00	9.00	0.00	-0.02	
17,711.0	90.00	270.14	7,115.0	29.8	-11,799.6	0.00	0.00	0.00	0.00	Breniman 3 PBHL

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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	270.16	300.0	0.0	-0.9	0.9	1.00	1.00	
400.0	2.00	270.16	400.0	0.0	-3.5	3.5	1.00	1.00	
500.0	3.00	270.16	499.9	0.0	-7.9	7.9	1.00	1.00	
600.0	4.00	270.16	599.7	0.0	-14.0	14.0	1.00	1.00	
700.0	5.00	270.16	699.4	0.1	-21.8	21.8	1.00	1.00	
750.0	5.50	270.16	749.2	0.1	-26.4	26.4	1.00	1.00	9 5/8"
800.0	6.00	270.16	798.9	0.1	-31.4	31.4	1.00	1.00	
900.0	7.00	270.16	898.3	0.1	-42.7	42.7	1.00	1.00	
1,000.0	8.00	270.16	997.4	0.2	-55.8	55.8	1.00	1.00	
1,100.0	9.00	270.16	1,096.3	0.2	-70.5	70.5	1.00	1.00	
1,187.2	9.87	270.16	1,182.3	0.2	-84.8	84.8	1.00	1.00	EOB; Inc=9.87°
1,200.0	9.87	270.16	1,194.9	0.2	-87.0	87.0	0.00	0.00	
1,300.0	9.87	270.16	1,293.4	0.3	-104.2	104.2	0.00	0.00	
1,400.0	9.87	270.16	1,392.0	0.3	-121.3	121.3	0.00	0.00	
1,500.0	9.87	270.16	1,490.5	0.4	-138.5	138.5	0.00	0.00	
1,600.0	9.87	270.16	1,589.0	0.4	-155.6	155.6	0.00	0.00	
1,700.0	9.87	270.16	1,687.5	0.5	-172.8	172.8	0.00	0.00	
1,800.0	9.87	270.16	1,786.0	0.5	-189.9	189.9	0.00	0.00	
1,900.0	9.87	270.16	1,884.6	0.6	-207.0	207.0	0.00	0.00	
2,000.0	9.87	270.16	1,983.1	0.6	-224.2	224.2	0.00	0.00	
2,100.0	9.87	270.16	2,081.6	0.7	-241.3	241.3	0.00	0.00	
2,200.0	9.87	270.16	2,180.1	0.7	-258.5	258.5	0.00	0.00	
2,300.0	9.87	270.16	2,278.6	0.8	-275.6	275.6	0.00	0.00	
2,400.0	9.87	270.16	2,377.2	0.8	-292.8	292.8	0.00	0.00	
2,500.0	9.87	270.16	2,475.7	0.9	-309.9	309.9	0.00	0.00	
2,600.0	9.87	270.16	2,574.2	0.9	-327.1	327.1	0.00	0.00	
2,700.0	9.87	270.16	2,672.7	1.0	-344.2	344.2	0.00	0.00	
2,800.0	9.87	270.16	2,771.2	1.0	-361.3	361.3	0.00	0.00	
2,900.0	9.87	270.16	2,869.8	1.0	-378.5	378.5	0.00	0.00	
3,000.0	9.87	270.16	2,968.3	1.1	-395.6	395.6	0.00	0.00	
3,100.0	9.87	270.16	3,066.8	1.1	-412.8	412.8	0.00	0.00	
3,200.0	9.87	270.16	3,165.3	1.2	-429.9	429.9	0.00	0.00	
3,300.0	9.87	270.16	3,263.8	1.2	-447.1	447.1	0.00	0.00	
3,400.0	9.87	270.16	3,362.4	1.3	-464.2	464.2	0.00	0.00	
3,499.1	9.87	270.16	3,460.0	1.3	-481.2	481.2	0.00	0.00	PARKMAN
3,500.0	9.87	270.16	3,460.9	1.3	-481.4	481.4	0.00	0.00	
3,600.0	9.87	270.16	3,559.4	1.4	-498.5	498.5	0.00	0.00	
3,700.0	9.87	270.16	3,657.9	1.4	-515.6	515.6	0.00	0.00	
3,800.0	9.87	270.16	3,756.4	1.5	-532.8	532.8	0.00	0.00	
3,900.0	9.87	270.16	3,854.9	1.5	-549.9	549.9	0.00	0.00	
4,000.0	9.87	270.16	3,953.5	1.6	-567.1	567.1	0.00	0.00	
4,100.0	9.87	270.16	4,052.0	1.6	-584.2	584.2	0.00	0.00	
4,200.0	9.87	270.16	4,150.5	1.7	-601.4	601.4	0.00	0.00	
4,300.0	9.87	270.16	4,249.0	1.7	-618.5	618.5	0.00	0.00	
4,326.4	9.87	270.16	4,275.0	1.7	-623.0	623.0	0.00	0.00	SUSSEX
4,400.0	9.87	270.16	4,347.5	1.8	-635.7	635.7	0.00	0.00	
4,500.0	9.87	270.16	4,446.1	1.8	-652.8	652.8	0.00	0.00	
4,600.0	9.87	270.16	4,544.6	1.9	-669.9	670.0	0.00	0.00	
4,700.0	9.87	270.16	4,643.1	1.9	-687.1	687.1	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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	9.87	270.16	4,741.6	2.0	-704.2	704.2	0.00	0.00	
4,900.0	9.87	270.16	4,840.1	2.0	-721.4	721.4	0.00	0.00	
5,000.0	9.87	270.16	4,938.7	2.0	-738.5	738.5	0.00	0.00	
5,100.0	9.87	270.16	5,037.2	2.1	-755.7	755.7	0.00	0.00	
5,200.0	9.87	270.16	5,135.7	2.1	-772.8	772.8	0.00	0.00	
5,300.0	9.87	270.16	5,234.2	2.2	-790.0	790.0	0.00	0.00	
5,400.0	9.87	270.16	5,332.7	2.2	-807.1	807.1	0.00	0.00	
5,500.0	9.87	270.16	5,431.3	2.3	-824.3	824.3	0.00	0.00	
5,600.0	9.87	270.16	5,529.8	2.3	-841.4	841.4	0.00	0.00	
5,700.0	9.87	270.16	5,628.3	2.4	-858.5	858.5	0.00	0.00	
5,752.5	9.87	270.16	5,680.0	2.4	-867.5	867.5	0.00	0.00	SHANNON
5,800.0	9.87	270.16	5,726.8	2.4	-875.7	875.7	0.00	0.00	
5,900.0	9.87	270.16	5,825.3	2.5	-892.8	892.8	0.00	0.00	
6,000.0	9.87	270.16	5,923.8	2.5	-910.0	910.0	0.00	0.00	
6,100.0	9.87	270.16	6,022.4	2.6	-927.1	927.1	0.00	0.00	
6,200.0	9.87	270.16	6,120.9	2.6	-944.3	944.3	0.00	0.00	
6,300.0	9.87	270.16	6,219.4	2.7	-961.4	961.4	0.00	0.00	
6,400.0	9.87	270.16	6,317.9	2.7	-978.6	978.6	0.00	0.00	
6,500.0	9.87	270.16	6,416.4	2.8	-995.7	995.7	0.00	0.00	
6,600.0	9.87	270.16	6,515.0	2.8	-1,012.8	1,012.8	0.00	0.00	
6,673.6	9.87	270.16	6,587.5	2.8	-1,025.5	1,025.5	0.00	0.00	Start build/turn @ 6673' MD
6,700.0	12.24	270.16	6,613.4	2.9	-1,030.5	1,030.5	9.00	9.00	
6,800.0	21.24	270.15	6,709.0	2.9	-1,059.3	1,059.3	9.00	9.00	
6,889.6	29.31	270.15	6,790.0	3.0	-1,097.5	1,097.5	9.00	9.00	NIORARA
6,900.0	30.24	270.15	6,799.0	3.0	-1,102.7	1,102.7	9.00	9.00	
7,000.0	39.24	270.15	6,881.1	3.2	-1,159.6	1,159.6	9.00	9.00	
7,100.0	48.24	270.15	6,953.3	3.4	-1,228.7	1,228.7	9.00	9.00	
7,200.0	57.24	270.14	7,013.8	3.6	-1,308.2	1,308.2	9.00	9.00	
7,300.0	66.24	270.14	7,061.1	3.8	-1,396.2	1,396.2	9.00	9.00	
7,337.1	69.58	270.14	7,075.0	3.9	-1,430.6	1,430.6	9.00	9.00	FORT HAYS
7,400.0	75.24	270.14	7,094.0	4.0	-1,490.5	1,490.5	9.00	9.00	
7,484.1	82.81	270.14	7,110.0	4.2	-1,573.0	1,573.0	9.00	9.00	CODELL
7,500.0	84.24	270.14	7,111.8	4.3	-1,588.8	1,588.8	9.00	9.00	
7,564.0	90.00	270.14	7,115.0	4.4	-1,652.7	1,652.7	8.99	8.99	LP @ 7115' TVD; 90° - 7"
7,600.0	90.00	270.14	7,115.0	4.5	-1,688.7	1,688.7	0.00	0.00	
7,700.0	90.00	270.14	7,115.0	4.8	-1,788.7	1,788.7	0.00	0.00	
7,800.0	90.00	270.14	7,115.0	5.0	-1,888.7	1,888.7	0.00	0.00	
7,900.0	90.00	270.14	7,115.0	5.3	-1,988.7	1,988.7	0.00	0.00	
8,000.0	90.00	270.14	7,115.0	5.5	-2,088.7	2,088.7	0.00	0.00	
8,100.0	90.00	270.14	7,115.0	5.8	-2,188.7	2,188.7	0.00	0.00	
8,200.0	90.00	270.14	7,115.0	6.0	-2,288.7	2,288.7	0.00	0.00	
8,300.0	90.00	270.14	7,115.0	6.3	-2,388.7	2,388.7	0.00	0.00	
8,400.0	90.00	270.14	7,115.0	6.5	-2,488.7	2,488.7	0.00	0.00	
8,500.0	90.00	270.14	7,115.0	6.8	-2,588.7	2,588.7	0.00	0.00	
8,600.0	90.00	270.14	7,115.0	7.0	-2,688.7	2,688.7	0.00	0.00	
8,700.0	90.00	270.14	7,115.0	7.3	-2,788.7	2,788.7	0.00	0.00	
8,800.0	90.00	270.14	7,115.0	7.5	-2,888.7	2,888.7	0.00	0.00	
8,900.0	90.00	270.14	7,115.0	7.8	-2,988.7	2,988.7	0.00	0.00	
9,000.0	90.00	270.14	7,115.0	8.0	-3,088.7	3,088.7	0.00	0.00	
9,100.0	90.00	270.14	7,115.0	8.3	-3,188.7	3,188.7	0.00	0.00	
9,200.0	90.00	270.14	7,115.0	8.5	-3,288.7	3,288.7	0.00	0.00	
9,300.0	90.00	270.14	7,115.0	8.8	-3,388.7	3,388.7	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
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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 3	<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	9.0	-3,488.7	3,488.7	0.00	0.00	
9,500.0	90.00	270.14	7,115.0	9.3	-3,588.7	3,588.7	0.00	0.00	
9,600.0	90.00	270.14	7,115.0	9.5	-3,688.7	3,688.7	0.00	0.00	
9,700.0	90.00	270.14	7,115.0	9.8	-3,788.7	3,788.7	0.00	0.00	
9,800.0	90.00	270.14	7,115.0	10.0	-3,888.7	3,888.7	0.00	0.00	
9,900.0	90.00	270.14	7,115.0	10.3	-3,988.7	3,988.7	0.00	0.00	
10,000.0	90.00	270.14	7,115.0	10.5	-4,088.7	4,088.7	0.00	0.00	
10,100.0	90.00	270.14	7,115.0	10.8	-4,188.7	4,188.7	0.00	0.00	
10,200.0	90.00	270.14	7,115.0	11.0	-4,288.7	4,288.7	0.00	0.00	
10,300.0	90.00	270.14	7,115.0	11.3	-4,388.7	4,388.7	0.00	0.00	
10,400.0	90.00	270.14	7,115.0	11.5	-4,488.7	4,488.7	0.00	0.00	
10,500.0	90.00	270.14	7,115.0	11.8	-4,588.7	4,588.7	0.00	0.00	
10,600.0	90.00	270.14	7,115.0	12.0	-4,688.7	4,688.7	0.00	0.00	
10,700.0	90.00	270.14	7,115.0	12.3	-4,788.7	4,788.7	0.00	0.00	
10,800.0	90.00	270.14	7,115.0	12.5	-4,888.7	4,888.7	0.00	0.00	
10,900.0	90.00	270.14	7,115.0	12.8	-4,988.7	4,988.7	0.00	0.00	
11,000.0	90.00	270.14	7,115.0	13.0	-5,088.7	5,088.7	0.00	0.00	
11,100.0	90.00	270.14	7,115.0	13.3	-5,188.7	5,188.7	0.00	0.00	
11,200.0	90.00	270.14	7,115.0	13.5	-5,288.7	5,288.7	0.00	0.00	
11,300.0	90.00	270.14	7,115.0	13.8	-5,388.7	5,388.7	0.00	0.00	
11,400.0	90.00	270.14	7,115.0	14.0	-5,488.7	5,488.7	0.00	0.00	
11,500.0	90.00	270.14	7,115.0	14.3	-5,588.7	5,588.7	0.00	0.00	
11,600.0	90.00	270.14	7,115.0	14.5	-5,688.7	5,688.7	0.00	0.00	
11,700.0	90.00	270.14	7,115.0	14.8	-5,788.7	5,788.7	0.00	0.00	
11,800.0	90.00	270.14	7,115.0	15.0	-5,888.7	5,888.7	0.00	0.00	
11,900.0	90.00	270.14	7,115.0	15.3	-5,988.7	5,988.7	0.00	0.00	
12,000.0	90.00	270.14	7,115.0	15.5	-6,088.7	6,088.7	0.00	0.00	
12,100.0	90.00	270.14	7,115.0	15.8	-6,188.7	6,188.7	0.00	0.00	
12,200.0	90.00	270.14	7,115.0	16.0	-6,288.7	6,288.7	0.00	0.00	
12,300.0	90.00	270.14	7,115.0	16.3	-6,388.7	6,388.7	0.00	0.00	
12,400.0	90.00	270.14	7,115.0	16.5	-6,488.7	6,488.7	0.00	0.00	
12,500.0	90.00	270.14	7,115.0	16.8	-6,588.7	6,588.7	0.00	0.00	
12,600.0	90.00	270.14	7,115.0	17.0	-6,688.7	6,688.7	0.00	0.00	
12,700.0	90.00	270.14	7,115.0	17.3	-6,788.7	6,788.7	0.00	0.00	
12,800.0	90.00	270.14	7,115.0	17.5	-6,888.7	6,888.7	0.00	0.00	
12,900.0	90.00	270.14	7,115.0	17.8	-6,988.7	6,988.7	0.00	0.00	
13,000.0	90.00	270.14	7,115.0	18.0	-7,088.7	7,088.7	0.00	0.00	
13,100.0	90.00	270.14	7,115.0	18.3	-7,188.7	7,188.7	0.00	0.00	
13,200.0	90.00	270.14	7,115.0	18.5	-7,288.7	7,288.7	0.00	0.00	
13,300.0	90.00	270.14	7,115.0	18.8	-7,388.7	7,388.7	0.00	0.00	
13,400.0	90.00	270.14	7,115.0	19.0	-7,488.7	7,488.7	0.00	0.00	
13,500.0	90.00	270.14	7,115.0	19.3	-7,588.7	7,588.7	0.00	0.00	
13,600.0	90.00	270.14	7,115.0	19.5	-7,688.7	7,688.7	0.00	0.00	
13,700.0	90.00	270.14	7,115.0	19.8	-7,788.7	7,788.7	0.00	0.00	
13,800.0	90.00	270.14	7,115.0	20.0	-7,888.7	7,888.7	0.00	0.00	
13,900.0	90.00	270.14	7,115.0	20.3	-7,988.7	7,988.7	0.00	0.00	
14,000.0	90.00	270.14	7,115.0	20.5	-8,088.7	8,088.7	0.00	0.00	
14,100.0	90.00	270.14	7,115.0	20.8	-8,188.7	8,188.7	0.00	0.00	
14,200.0	90.00	270.14	7,115.0	21.0	-8,288.7	8,288.7	0.00	0.00	
14,300.0	90.00	270.14	7,115.0	21.3	-8,388.7	8,388.7	0.00	0.00	
14,400.0	90.00	270.14	7,115.0	21.5	-8,488.7	8,488.7	0.00	0.00	
14,500.0	90.00	270.14	7,115.0	21.8	-8,588.7	8,588.7	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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	22.0	-8,688.7	8,688.7	0.00	0.00	
14,700.0	90.00	270.14	7,115.0	22.3	-8,788.7	8,788.7	0.00	0.00	
14,800.0	90.00	270.14	7,115.0	22.5	-8,888.7	8,888.7	0.00	0.00	
14,900.0	90.00	270.14	7,115.0	22.8	-8,988.7	8,988.7	0.00	0.00	
15,000.0	90.00	270.14	7,115.0	23.0	-9,088.7	9,088.7	0.00	0.00	
15,100.0	90.00	270.14	7,115.0	23.3	-9,188.7	9,188.7	0.00	0.00	
15,200.0	90.00	270.14	7,115.0	23.5	-9,288.7	9,288.7	0.00	0.00	
15,300.0	90.00	270.14	7,115.0	23.8	-9,388.7	9,388.7	0.00	0.00	
15,400.0	90.00	270.14	7,115.0	24.0	-9,488.7	9,488.7	0.00	0.00	
15,500.0	90.00	270.14	7,115.0	24.3	-9,588.7	9,588.7	0.00	0.00	
15,600.0	90.00	270.14	7,115.0	24.5	-9,688.7	9,688.7	0.00	0.00	
15,700.0	90.00	270.14	7,115.0	24.8	-9,788.7	9,788.7	0.00	0.00	
15,800.0	90.00	270.14	7,115.0	25.0	-9,888.7	9,888.7	0.00	0.00	
15,900.0	90.00	270.14	7,115.0	25.3	-9,988.7	9,988.7	0.00	0.00	
16,000.0	90.00	270.14	7,115.0	25.5	-10,088.7	10,088.7	0.00	0.00	
16,100.0	90.00	270.14	7,115.0	25.8	-10,188.6	10,188.7	0.00	0.00	
16,200.0	90.00	270.14	7,115.0	26.0	-10,288.6	10,288.7	0.00	0.00	
16,300.0	90.00	270.14	7,115.0	26.3	-10,388.6	10,388.7	0.00	0.00	
16,400.0	90.00	270.14	7,115.0	26.5	-10,488.6	10,488.7	0.00	0.00	
16,500.0	90.00	270.14	7,115.0	26.8	-10,588.6	10,588.7	0.00	0.00	
16,600.0	90.00	270.14	7,115.0	27.0	-10,688.6	10,688.7	0.00	0.00	
16,700.0	90.00	270.14	7,115.0	27.3	-10,788.6	10,788.7	0.00	0.00	
16,800.0	90.00	270.14	7,115.0	27.5	-10,888.6	10,888.7	0.00	0.00	
16,900.0	90.00	270.14	7,115.0	27.8	-10,988.6	10,988.7	0.00	0.00	
17,000.0	90.00	270.14	7,115.0	28.0	-11,088.6	11,088.7	0.00	0.00	
17,100.0	90.00	270.14	7,115.0	28.3	-11,188.6	11,188.7	0.00	0.00	
17,200.0	90.00	270.14	7,115.0	28.5	-11,288.6	11,288.7	0.00	0.00	
17,300.0	90.00	270.14	7,115.0	28.8	-11,388.6	11,388.7	0.00	0.00	
17,400.0	90.00	270.14	7,115.0	29.0	-11,488.6	11,488.7	0.00	0.00	
17,500.0	90.00	270.14	7,115.0	29.3	-11,588.6	11,588.7	0.00	0.00	
17,600.0	90.00	270.14	7,115.0	29.5	-11,688.6	11,688.7	0.00	0.00	
17,700.0	90.00	270.14	7,115.0	29.8	-11,788.6	11,788.7	0.00	0.00	
17,711.0	90.00	270.14	7,115.0	29.8	-11,799.6	11,799.7	0.00	0.00	TD at 17711.0

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Breniman 3 LP	0.00	0.00	7,115.0	4.8	-1,803.1	1,422,893.97	3,165,058.55	40.492729	-104.906536
- plan hits target center									
- Point									
Breniman 3 PBHL	0.00	0.00	7,115.0	29.8	-11,799.6	1,422,851.32	3,155,062.10	40.492790	-104.942478
- plan hits target center									
- Point									

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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 (")	
750.0	749.2	9 5/8"	0	0	
7,564.0	7,115.0	7"	0	0	
17,711.0	7,115.0	4 1/2"	0	0	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,499.1	3,460.0	PARKMAN			
4,326.4	4,275.0	SUSSEX			
5,752.5	5,680.0	SHANNON			
6,889.6	6,790.0	NIOBRARA			
7,337.1	7,075.0	FORT HAYS			
7,484.1	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'	
1,187.2	1,182.3	0.2	-84.8	EOB; Inc=9.87°	
6,673.6	6,587.5	2.8	-1,025.5	Start build/turn @ 6673' MD	
7,564.0	7,115.0	4.4	-1,652.7	LP @ 7115' TVD; 90°	
17,711.0	7,115.0	29.8	-11,799.6	TD at 17711.0	

# **Extraction Oil & Gas**

**WELD COUNTY, CO**

**S16-T6N-R67W**

**Breniman 3**

**Hz**

**Plan #1**

## **Anticollision Report**

**28 July, 2014**

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	7/28/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,711.0	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
Offet Well - Wellbore - Design	Depth (usft)	Depth (usft)	Centres (usft)	Ellipses (usft)	Factor	
S16-T6N-R67W						
Breniman 1 - Hz - Plan #1	200.0	200.0	56.0	55.4	91.111	CC
Breniman 1 - Hz - Plan #1	300.0	300.2	56.3	55.3	58.295	ES
Breniman 1 - Hz - Plan #1	17,711.0	17,411.6	592.2	119.5	1.253	Level 3, SF
Breniman 10 - Hz - Plan #1	200.0	200.0	195.8	195.5	637.040	CC, ES
Breniman 10 - Hz - Plan #1	2,200.0	2,119.2	371.4	365.6	63.630	SF
Breniman 11 - Hz - Plan #1	200.0	200.0	223.9	223.6	728.324	CC, ES
Breniman 11 - Hz - Plan #1	2,300.0	2,195.5	439.7	433.5	70.625	SF
Breniman 2 - Hz - Plan #1	200.0	200.0	28.1	27.4	45.672	CC
Breniman 2 - Hz - Plan #1	400.0	400.4	28.4	27.1	21.492	ES
Breniman 2 - Hz - Plan #1	17,711.0	17,395.1	364.5	103.5	1.397	Level 3, SF
Breniman 4 - Hz - Plan #1	200.0	199.0	27.6	27.3	89.791	CC
Breniman 4 - Hz - Plan #1	300.0	298.7	27.7	27.2	57.329	ES
Breniman 4 - Hz - Plan #1	17,711.0	17,268.6	363.6	232.9	2.781	SF
Breniman 5 - Hz - Plan #1	200.0	200.0	55.8	55.5	181.553	CC, ES
Breniman 5 - Hz - Plan #1	17,711.0	17,280.0	592.2	356.1	2.508	SF
Breniman 6 - Hz - Plan #1	200.0	200.0	83.7	83.4	272.370	CC, ES
Breniman 6 - Hz - Plan #1	17,711.0	17,606.0	660.1	378.4	2.343	SF
Breniman 7 - Hz - Plan #1	200.0	200.0	112.1	111.8	364.670	CC, ES
Breniman 7 - Hz - Plan #1	17,711.0	17,301.1	886.8	624.5	3.380	SF
Breniman 8 - Hz - Plan #1	200.0	200.0	139.7	139.4	454.473	CC, ES
Breniman 8 - Hz - Plan #1	2,000.0	1,952.4	260.6	255.5	50.593	SF
Breniman 9 - Hz - Plan #1	200.0	200.0	168.1	167.8	546.773	CC, ES
Breniman 9 - Hz - Plan #1	2,100.0	2,036.6	315.9	310.4	57.480	SF

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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: 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	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	30.78	48.1	28.6	56.0					
100.0	100.0	100.0	100.0	0.1	0.1	30.78	48.1	28.6	56.0	55.7	0.27	210.993		
200.0	200.0	200.0	200.0	0.3	0.3	30.78	48.1	28.6	56.0	55.4	0.61	91.111 CC		
300.0	300.0	300.2	300.2	0.5	0.5	120.51	48.4	27.8	56.3	55.3	0.97	58.295 ES		
400.0	400.0	400.3	400.3	0.7	0.7	120.17	49.4	25.4	57.2	55.9	1.32	43.189		
500.0	499.9	500.5	500.3	0.9	0.9	119.62	50.9	21.3	58.7	57.0	1.70	34.587		
600.0	599.7	600.6	600.3	1.1	1.1	118.91	53.2	15.6	60.8	58.7	2.09	29.085		
700.0	699.4	700.7	700.0	1.3	1.3	118.05	56.0	8.3	63.5	61.0	2.51	25.295		
800.0	798.9	800.7	799.6	1.5	1.5	117.11	59.5	-0.7	66.9	63.9	2.97	22.548		
900.0	898.3	900.8	899.0	1.8	1.8	116.10	63.6	-11.2	70.9	67.4	3.46	20.481		
1,000.0	997.4	1,000.8	998.2	2.0	2.0	115.07	68.4	-23.4	75.5	71.5	4.00	18.881		
1,100.0	1,096.3	1,100.7	1,097.0	2.3	2.3	114.05	73.7	-37.2	80.8	76.2	4.58	17.615		
1,200.0	1,194.9	1,200.6	1,195.5	2.7	2.7	113.04	79.7	-52.6	86.6	81.4	5.22	16.602		
1,300.0	1,293.5	1,300.4	1,293.7	3.0	3.0	111.51	86.3	-69.5	92.8	86.9	5.89	15.739		
1,400.0	1,392.0	1,400.1	1,391.4	3.3	3.4	109.22	93.5	-88.0	99.0	92.4	6.60	14.990		
1,500.0	1,490.5	1,499.9	1,489.1	3.7	3.8	107.00	100.8	-106.7	105.4	98.0	7.32	14.391		
1,600.0	1,589.0	1,599.6	1,586.7	4.0	4.1	105.03	108.2	-125.5	111.9	103.8	8.04	13.911		
1,700.0	1,687.5	1,699.3	1,684.4	4.3	4.5	103.28	115.5	-144.3	118.5	109.7	8.76	13.522		
1,800.0	1,786.0	1,799.0	1,782.0	4.7	4.9	101.71	122.8	-163.1	125.2	115.7	9.49	13.202		
1,900.0	1,884.6	1,898.7	1,879.7	5.0	5.3	100.31	130.1	-181.9	132.1	121.8	10.21	12.936		
2,000.0	1,983.1	1,998.5	1,977.4	5.4	5.7	99.04	137.4	-200.7	138.9	128.0	10.93	12.714		
2,100.0	2,081.6	2,098.2	2,075.0	5.7	6.1	97.90	144.8	-219.5	145.9	134.2	11.65	12.526		
2,200.0	2,180.1	2,197.9	2,172.7	6.1	6.5	96.86	152.1	-238.3	152.9	140.5	12.36	12.366		
2,300.0	2,278.6	2,297.6	2,270.3	6.4	6.9	95.91	159.4	-257.1	159.9	146.9	13.08	12.229		
2,400.0	2,377.2	2,397.3	2,368.0	6.7	7.3	95.04	166.7	-275.9	167.0	153.2	13.79	12.110		
2,500.0	2,475.7	2,497.0	2,465.6	7.1	7.6	94.24	174.0	-294.7	174.1	159.6	14.50	12.007		
2,600.0	2,574.2	2,596.8	2,563.3	7.4	8.0	93.50	181.4	-313.4	181.3	166.1	15.21	11.917		
2,700.0	2,672.7	2,696.5	2,661.0	7.8	8.4	92.82	188.7	-332.2	188.5	172.6	15.92	11.837		
2,800.0	2,771.2	2,796.2	2,758.6	8.1	8.8	92.19	196.0	-351.0	195.7	179.1	16.63	11.767		
2,900.0	2,869.8	2,895.9	2,856.3	8.5	9.2	91.61	203.3	-369.8	202.9	185.6	17.34	11.705		
3,000.0	2,968.3	2,995.6	2,953.9	8.8	9.6	91.06	210.6	-388.6	210.2	192.1	18.04	11.649		
3,100.0	3,066.8	3,095.3	3,051.6	9.2	10.0	90.56	218.0	-407.4	217.4	198.7	18.74	11.599		
3,200.0	3,165.3	3,195.1	3,149.2	9.5	10.4	90.08	225.3	-426.2	224.7	205.3	19.45	11.555		
3,300.0	3,263.8	3,294.8	3,246.9	9.9	10.8	89.63	232.6	-445.0	232.0	211.9	20.15	11.514		
3,400.0	3,362.4	3,394.5	3,344.6	10.2	11.2	89.22	239.9	-463.8	239.3	218.5	20.85	11.478		
3,500.0	3,460.9	3,494.2	3,442.2	10.6	11.6	88.82	247.3	-482.6	246.6	225.1	21.55	11.445		
3,600.0	3,559.4	3,593.9	3,539.9	10.9	12.0	88.45	254.6	-501.4	254.0	231.7	22.25	11.414		
3,700.0	3,657.9	3,693.7	3,637.5	11.3	12.4	88.10	261.9	-520.1	261.3	238.4	22.95	11.387		
3,800.0	3,756.4	3,793.4	3,735.2	11.6	12.8	87.77	269.2	-538.9	268.6	245.0	23.64	11.362		
3,900.0	3,855.0	3,893.1	3,832.8	12.0	13.2	87.46	276.5	-557.7	276.0	251.7	24.34	11.339		
4,000.0	3,953.5	3,992.8	3,930.5	12.3	13.6	87.16	283.9	-576.5	283.4	258.3	25.04	11.317		
4,100.0	4,052.0	4,092.5	4,028.2	12.7	14.0	86.88	291.2	-595.3	290.7	265.0	25.73	11.298		
4,200.0	4,150.5	4,192.2	4,125.8	13.0	14.4	86.61	298.5	-614.1	298.1	271.7	26.43	11.280		
4,300.0	4,249.0	4,292.0	4,223.5	13.4	14.8	86.36	305.8	-632.9	305.5	278.4	27.12	11.263		
4,400.0	4,347.6	4,391.7	4,321.1	13.7	15.2	86.11	313.1	-651.7	312.9	285.1	27.82	11.248		
4,500.0	4,446.1	4,491.4	4,418.8	14.1	15.6	85.88	320.5	-670.5	320.3	291.8	28.51	11.233		
4,600.0	4,544.6	4,591.1	4,516.4	14.4	16.0	85.66	327.8	-689.3	327.7	298.5	29.21	11.220		
4,700.0	4,643.1	4,690.8	4,614.1	14.8	16.4	85.45	335.1	-708.0	335.1	305.2	29.90	11.208		
4,800.0	4,741.6	4,790.6	4,711.8	15.1	16.8	85.24	342.4	-726.8	342.5	311.9	30.59	11.196		
4,900.0	4,840.1	4,890.3	4,809.4	15.5	17.2	85.05	349.7	-745.6	349.9	318.7	31.29	11.185		
5,000.0	4,938.7	4,990.0	4,907.1	15.8	17.6	84.87	357.1	-764.4	357.4	325.4	31.98	11.175		
5,100.0	5,037.2	5,089.7	5,004.7	16.2	18.0	84.69	364.4	-783.2	364.8	332.1	32.67	11.166		

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 3
<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 3	<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	5,135.7	5,189.4	5,102.4	16.5	18.4	84.52	371.7	-802.0	372.2	338.8	33.36	11.157		
5,300.0	5,234.2	5,289.1	5,200.0	16.9	18.7	84.35	379.0	-820.8	379.6	345.6	34.05	11.148		
5,400.0	5,332.7	5,388.9	5,297.7	17.2	19.1	84.19	386.3	-839.6	387.1	352.3	34.74	11.141		
5,500.0	5,431.3	5,488.6	5,395.4	17.6	19.5	84.04	393.7	-858.4	394.5	359.1	35.43	11.133		
5,600.0	5,529.8	5,588.3	5,493.0	17.9	19.9	83.89	401.0	-877.2	401.9	365.8	36.13	11.126		
5,700.0	5,628.3	5,688.0	5,590.7	18.3	20.3	83.75	408.3	-896.0	409.4	372.6	36.82	11.120		
5,800.0	5,726.8	5,787.7	5,688.3	18.6	20.7	83.62	415.6	-914.7	416.8	379.3	37.51	11.113		
5,900.0	5,825.3	5,887.4	5,786.0	19.0	21.1	83.49	422.9	-933.5	424.3	386.1	38.20	11.108		
6,000.0	5,923.9	5,987.2	5,883.6	19.3	21.5	83.36	430.3	-952.3	431.7	392.8	38.89	11.102		
6,100.0	6,022.4	6,086.9	5,981.3	19.7	21.9	83.24	437.6	-971.1	439.2	399.6	39.58	11.097		
6,200.0	6,120.9	6,186.6	6,079.0	20.0	22.3	83.12	444.9	-989.9	446.6	406.3	40.26	11.092		
6,300.0	6,219.4	6,286.3	6,176.6	20.4	22.7	83.00	452.2	-1,008.7	454.1	413.1	40.95	11.087		
6,400.0	6,317.9	6,386.0	6,274.3	20.7	23.1	82.89	459.6	-1,027.5	461.5	419.9	41.64	11.083		
6,500.0	6,416.5	6,477.6	6,362.4	21.1	23.6	82.01	466.2	-1,051.0	469.8	427.5	42.32	11.102		
6,600.0	6,515.0	6,565.0	6,442.6	21.4	24.3	79.74	472.2	-1,085.2	480.4	437.6	42.87	11.208		
6,700.0	6,613.4	6,645.9	6,512.0	21.8	25.1	76.23	477.5	-1,126.2	494.7	451.5	43.19	11.455		
6,800.0	6,709.1	6,722.8	6,572.7	22.4	26.0	71.88	482.1	-1,173.2	511.1	467.6	43.52	11.744		
6,900.0	6,799.0	6,800.0	6,627.5	23.2	27.0	68.00	486.4	-1,227.4	527.8	483.6	44.16	11.952		
7,000.0	6,881.1	6,870.4	6,671.4	24.3	28.1	64.82	489.8	-1,282.2	543.8	498.7	45.14	12.048		
7,100.0	6,953.3	6,942.1	6,709.6	25.6	29.3	62.14	492.8	-1,342.7	558.5	512.0	46.50	12.010		
7,200.0	7,013.8	7,012.7	6,740.5	27.2	30.5	60.02	495.2	-1,406.2	571.0	522.7	48.28	11.827		
7,300.0	7,061.1	7,082.5	6,763.9	28.9	31.9	58.43	497.1	-1,471.9	580.9	530.4	50.50	11.502		
7,400.0	7,094.0	7,150.0	6,779.5	30.9	33.2	57.38	498.5	-1,537.5	587.9	534.7	53.16	11.058		
7,500.0	7,111.8	7,220.9	6,788.4	33.0	34.7	56.81	499.3	-1,607.8	591.6	535.2	56.34	10.500		
7,600.0	7,115.0	7,300.6	6,790.0	35.2	36.4	56.72	499.6	-1,687.5	592.2	532.3	59.89	9.889		
7,700.0	7,115.0	7,400.6	6,790.0	37.4	38.5	56.72	499.9	-1,787.5	592.2	528.6	63.59	9.314		
7,800.0	7,115.0	7,500.6	6,790.0	39.6	40.7	56.72	500.1	-1,887.5	592.2	524.9	67.34	8.795		
7,900.0	7,115.0	7,600.6	6,790.0	41.9	43.0	56.72	500.4	-1,987.5	592.2	521.1	71.13	8.326		
8,000.0	7,115.0	7,700.6	6,790.0	44.1	45.2	56.72	500.6	-2,087.5	592.2	517.3	74.96	7.901		
8,100.0	7,115.0	7,800.6	6,790.0	46.5	47.5	56.72	500.9	-2,187.5	592.2	513.4	78.82	7.514		
8,200.0	7,115.0	7,900.6	6,790.0	48.8	49.8	56.72	501.1	-2,287.5	592.2	509.5	82.71	7.160		
8,300.0	7,115.0	8,000.6	6,790.0	51.1	52.1	56.72	501.4	-2,387.5	592.2	505.6	86.62	6.837		
8,400.0	7,115.0	8,100.6	6,790.0	53.5	54.4	56.72	501.6	-2,487.5	592.2	501.7	90.56	6.540		
8,500.0	7,115.0	8,200.6	6,790.0	55.8	56.8	56.72	501.9	-2,587.5	592.2	497.7	94.51	6.266		
8,600.0	7,115.0	8,300.6	6,790.0	58.2	59.1	56.72	502.1	-2,687.5	592.2	493.8	98.47	6.014		
8,700.0	7,115.0	8,400.6	6,790.0	60.6	61.5	56.72	502.4	-2,787.5	592.2	489.8	102.46	5.780		
8,800.0	7,115.0	8,500.6	6,790.0	63.0	63.9	56.72	502.6	-2,887.5	592.2	485.8	106.45	5.564		
8,900.0	7,115.0	8,600.6	6,790.0	65.3	66.2	56.72	502.9	-2,987.5	592.2	481.8	110.45	5.362		
9,000.0	7,115.0	8,700.6	6,790.0	67.7	68.6	56.72	503.1	-3,087.5	592.2	477.8	114.47	5.174		
9,100.0	7,115.0	8,800.6	6,790.0	70.1	71.0	56.72	503.4	-3,187.5	592.2	473.7	118.49	4.998		
9,200.0	7,115.0	8,900.6	6,790.0	72.6	73.4	56.72	503.6	-3,287.5	592.2	469.7	122.52	4.834		
9,300.0	7,115.0	9,000.6	6,790.0	75.0	75.8	56.72	503.9	-3,387.5	592.2	465.7	126.56	4.680		
9,400.0	7,115.0	9,100.6	6,790.0	77.4	78.2	56.72	504.1	-3,487.5	592.2	461.6	130.60	4.535		
9,500.0	7,115.0	9,200.6	6,790.0	79.8	80.6	56.72	504.4	-3,587.5	592.2	457.6	134.65	4.398		
9,600.0	7,115.0	9,300.6	6,790.0	82.2	83.0	56.72	504.6	-3,687.5	592.2	453.5	138.71	4.270		
9,700.0	7,115.0	9,400.6	6,790.0	84.6	85.5	56.72	504.9	-3,787.5	592.2	449.5	142.77	4.148		
9,800.0	7,115.0	9,500.6	6,790.0	87.1	87.9	56.72	505.1	-3,887.5	592.2	445.4	146.84	4.033		
9,900.0	7,115.0	9,600.6	6,790.0	89.5	90.3	56.72	505.4	-3,987.5	592.2	441.3	150.90	3.925		
10,000.0	7,115.0	9,700.6	6,790.0	91.9	92.7	56.72	505.6	-4,087.5	592.2	437.3	154.98	3.821		
10,100.0	7,115.0	9,800.6	6,790.0	94.4	95.2	56.72	505.9	-4,187.5	592.2	433.2	159.06	3.723		
10,200.0	7,115.0	9,900.6	6,790.0	96.8	97.6	56.72	506.1	-4,287.5	592.2	429.1	163.14	3.630		
10,300.0	7,115.0	10,000.6	6,790.0	99.3	100.0	56.72	506.4	-4,387.5	592.2	425.0	167.22	3.542		

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 3
<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 3	<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		
10,400.0	7,115.0	10,100.6	6,790.0	101.7	102.5	56.72	506.6	-4,487.5	592.2	420.9	171.31	3.457		
10,500.0	7,115.0	10,200.6	6,790.0	104.1	104.9	56.72	506.9	-4,587.5	592.2	416.8	175.39	3.377		
10,600.0	7,115.0	10,300.6	6,790.0	106.6	107.3	56.72	507.1	-4,687.5	592.2	412.7	179.49	3.300		
10,700.0	7,115.0	10,400.6	6,790.0	109.0	109.8	56.72	507.4	-4,787.5	592.2	408.7	183.58	3.226		
10,800.0	7,115.0	10,500.6	6,790.0	111.5	112.2	56.72	507.6	-4,887.5	592.2	404.6	187.68	3.156		
10,900.0	7,115.0	10,600.6	6,790.0	113.9	114.7	56.72	507.9	-4,987.5	592.2	400.5	191.77	3.088		
11,000.0	7,115.0	10,700.6	6,790.0	116.4	117.1	56.72	508.1	-5,087.5	592.2	396.4	195.87	3.024		
11,100.0	7,115.0	10,800.6	6,790.0	118.8	119.6	56.72	508.4	-5,187.5	592.2	392.3	199.97	2.962		
11,200.0	7,115.0	10,900.6	6,790.0	121.3	122.0	56.72	508.6	-5,287.5	592.2	388.2	204.08	2.902		
11,300.0	7,115.0	11,000.6	6,790.0	123.7	124.5	56.72	508.9	-5,387.5	592.2	384.0	208.18	2.845		
11,400.0	7,115.0	11,100.6	6,790.0	126.2	126.9	56.72	509.1	-5,487.5	592.2	379.9	212.29	2.790		
11,500.0	7,115.0	11,200.6	6,790.0	128.6	129.4	56.72	509.4	-5,587.5	592.2	375.8	216.40	2.737		
11,600.0	7,115.0	11,300.6	6,790.0	131.1	131.8	56.72	509.6	-5,687.5	592.2	371.7	220.51	2.686		
11,700.0	7,115.0	11,400.6	6,790.0	133.5	134.3	56.72	509.9	-5,787.5	592.2	367.6	224.62	2.637		
11,800.0	7,115.0	11,500.6	6,790.0	136.0	136.7	56.72	510.1	-5,887.5	592.2	363.5	228.73	2.589		
11,900.0	7,115.0	11,600.6	6,790.0	138.5	139.2	56.72	510.4	-5,987.5	592.2	359.4	232.84	2.544		
12,000.0	7,115.0	11,700.6	6,790.0	140.9	141.6	56.72	510.6	-6,087.5	592.2	355.3	236.95	2.499		
12,100.0	7,115.0	11,800.6	6,790.0	143.4	144.1	56.72	510.9	-6,187.5	592.2	351.2	241.07	2.457		
12,200.0	7,115.0	11,900.6	6,790.0	145.8	146.5	56.72	511.1	-6,287.5	592.2	347.0	245.18	2.415		
12,300.0	7,115.0	12,000.6	6,790.0	148.3	149.0	56.72	511.4	-6,387.5	592.2	342.9	249.30	2.376		
12,400.0	7,115.0	12,100.6	6,790.0	150.7	151.4	56.72	511.6	-6,487.5	592.2	338.8	253.42	2.337		
12,500.0	7,115.0	12,200.6	6,790.0	153.2	153.9	56.72	511.9	-6,587.5	592.2	334.7	257.53	2.300		
12,600.0	7,115.0	12,300.6	6,790.0	155.7	156.4	56.72	512.1	-6,687.5	592.2	330.6	261.65	2.263		
12,700.0	7,115.0	12,400.6	6,790.0	158.1	158.8	56.72	512.4	-6,787.5	592.2	326.5	265.77	2.228		
12,800.0	7,115.0	12,500.6	6,790.0	160.6	161.3	56.72	512.6	-6,887.5	592.2	322.3	269.89	2.194		
12,900.0	7,115.0	12,600.6	6,790.0	163.1	163.7	56.72	512.9	-6,987.5	592.2	318.2	274.01	2.161		
13,000.0	7,115.0	12,700.6	6,790.0	165.5	166.2	56.72	513.1	-7,087.5	592.2	314.1	278.14	2.129		
13,100.0	7,115.0	12,800.6	6,790.0	168.0	168.7	56.72	513.4	-7,187.5	592.2	310.0	282.26	2.098		
13,200.0	7,115.0	12,900.6	6,790.0	170.4	171.1	56.72	513.6	-7,287.5	592.2	305.9	286.38	2.068		
13,300.0	7,115.0	13,000.6	6,790.0	172.9	173.6	56.72	513.9	-7,387.5	592.2	301.7	290.50	2.039		
13,400.0	7,115.0	13,100.6	6,790.0	175.4	176.0	56.72	514.1	-7,487.5	592.2	297.6	294.63	2.010		
13,500.0	7,115.0	13,200.6	6,790.0	177.8	178.5	56.72	514.4	-7,587.5	592.2	293.5	298.75	1.982		
13,600.0	7,115.0	13,300.6	6,790.0	180.3	181.0	56.72	514.6	-7,687.5	592.2	289.4	302.88	1.955		
13,700.0	7,115.0	13,400.6	6,790.0	182.8	183.4	56.72	514.9	-7,787.5	592.2	285.2	307.00	1.929		
13,800.0	7,115.0	13,500.6	6,790.0	185.2	185.9	56.72	515.1	-7,887.5	592.2	281.1	311.13	1.903		
13,900.0	7,115.0	13,600.6	6,790.0	187.7	188.4	56.72	515.4	-7,987.5	592.2	277.0	315.25	1.879		
14,000.0	7,115.0	13,700.6	6,790.0	190.2	190.8	56.72	515.6	-8,087.5	592.2	272.9	319.38	1.854		
14,100.0	7,115.0	13,800.6	6,790.0	192.6	193.3	56.72	515.9	-8,187.5	592.2	268.7	323.51	1.831		
14,200.0	7,115.0	13,900.6	6,790.0	195.1	195.7	56.72	516.1	-8,287.5	592.2	264.6	327.64	1.808		
14,300.0	7,115.0	14,000.6	6,790.0	197.5	198.2	56.72	516.4	-8,387.5	592.2	260.5	331.76	1.785		
14,400.0	7,115.0	14,100.6	6,790.0	200.0	200.7	56.72	516.6	-8,487.5	592.2	256.3	335.89	1.763		
14,500.0	7,115.0	14,200.6	6,790.0	202.5	203.1	56.72	516.9	-8,587.4	592.2	252.2	340.02	1.742		
14,600.0	7,115.0	14,300.6	6,790.0	204.9	205.6	56.72	517.1	-8,687.4	592.2	248.1	344.15	1.721		
14,700.0	7,115.0	14,400.6	6,790.0	207.4	208.1	56.72	517.4	-8,787.4	592.2	244.0	348.28	1.700		
14,800.0	7,115.0	14,500.6	6,790.0	209.9	210.5	56.72	517.6	-8,887.4	592.2	239.8	352.41	1.681		
14,900.0	7,115.0	14,600.6	6,790.0	212.3	213.0	56.72	517.9	-8,987.4	592.2	235.7	356.54	1.661		
15,000.0	7,115.0	14,700.6	6,790.0	214.8	215.5	56.72	518.1	-9,087.4	592.2	231.6	360.67	1.642		
15,100.0	7,115.0	14,800.6	6,790.0	217.3	217.9	56.72	518.4	-9,187.4	592.2	227.4	364.80	1.623		
15,200.0	7,115.0	14,900.6	6,790.0	219.7	220.4	56.72	518.6	-9,287.4	592.2	223.3	368.93	1.605		
15,300.0	7,115.0	15,000.6	6,790.0	222.2	222.9	56.72	518.9	-9,387.4	592.2	219.2	373.06	1.587		
15,400.0	7,115.0	15,100.6	6,790.0	224.7	225.3	56.72	519.1	-9,487.4	592.2	215.0	377.19	1.570		
15,500.0	7,115.0	15,200.6	6,790.0	227.2	227.8	56.72	519.4	-9,587.4	592.2	210.9	381.32	1.553		

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 3
<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 3	<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		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	Separation Factor		
15,600.0	7,115.0	15,300.6	6,790.0	229.6	230.3	56.72	519.6	-9,687.4	592.2	206.8	385.46	1.536		
15,700.0	7,115.0	15,400.6	6,790.0	232.1	232.7	56.72	519.9	-9,787.4	592.2	202.6	389.59	1.520		
15,800.0	7,115.0	15,500.6	6,790.0	234.6	235.2	56.72	520.1	-9,887.4	592.2	198.5	393.72	1.504		
15,900.0	7,115.0	15,600.6	6,790.0	237.0	237.7	56.72	520.4	-9,987.4	592.2	194.4	397.85	1.489 Level 3		
16,000.0	7,115.0	15,700.6	6,790.0	239.5	240.1	56.72	520.6	-10,087.4	592.2	190.2	401.98	1.473 Level 3		
16,100.0	7,115.0	15,800.6	6,790.0	242.0	242.6	56.72	520.9	-10,187.4	592.2	186.1	406.12	1.458 Level 3		
16,200.0	7,115.0	15,900.6	6,790.0	244.4	245.1	56.72	521.1	-10,287.4	592.2	182.0	410.25	1.444 Level 3		
16,300.0	7,115.0	16,000.6	6,790.0	246.9	247.5	56.72	521.4	-10,387.4	592.2	177.8	414.38	1.429 Level 3		
16,400.0	7,115.0	16,100.6	6,790.0	249.4	250.0	56.72	521.6	-10,487.4	592.2	173.7	418.52	1.415 Level 3		
16,500.0	7,115.0	16,200.6	6,790.0	251.8	252.5	56.72	521.9	-10,587.4	592.2	169.6	422.65	1.401 Level 3		
16,600.0	7,115.0	16,300.6	6,790.0	254.3	254.9	56.72	522.1	-10,687.4	592.2	165.4	426.78	1.388 Level 3		
16,700.0	7,115.0	16,400.6	6,790.0	256.8	257.4	56.72	522.4	-10,787.4	592.2	161.3	430.92	1.374 Level 3		
16,800.0	7,115.0	16,500.6	6,790.0	259.2	259.9	56.72	522.6	-10,887.4	592.2	157.2	435.05	1.361 Level 3		
16,900.0	7,115.0	16,600.6	6,790.0	261.7	262.4	56.72	522.9	-10,987.4	592.2	153.0	439.19	1.348 Level 3		
17,000.0	7,115.0	16,700.6	6,790.0	264.2	264.8	56.72	523.1	-11,087.4	592.2	148.9	443.32	1.336 Level 3		
17,100.0	7,115.0	16,800.6	6,790.0	266.7	267.3	56.72	523.3	-11,187.4	592.2	144.8	447.46	1.324 Level 3		
17,200.0	7,115.0	16,900.6	6,790.0	269.1	269.8	56.72	523.6	-11,287.4	592.2	140.6	451.59	1.311 Level 3		
17,300.0	7,115.0	17,000.6	6,790.0	271.6	272.2	56.72	523.8	-11,387.4	592.2	136.5	455.72	1.300 Level 3		
17,400.0	7,115.0	17,100.6	6,790.0	274.1	274.7	56.72	524.1	-11,487.4	592.2	132.4	459.86	1.288 Level 3		
17,500.0	7,115.0	17,200.6	6,790.0	276.5	277.2	56.72	524.3	-11,587.4	592.2	128.2	463.99	1.276 Level 3		
17,600.0	7,115.0	17,300.6	6,790.0	279.0	279.6	56.72	524.6	-11,687.4	592.2	124.1	468.13	1.265 Level 3		
17,700.0	7,115.0	17,400.6	6,790.0	281.5	282.1	56.72	524.8	-11,787.4	592.2	120.0	472.27	1.254 Level 3		
17,711.0	7,115.0	17,411.6	6,790.0	281.7	282.4	56.72	524.9	-11,798.4	592.2	119.5	472.72	1.253 Level 3, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.06	-167.9	-100.7	195.8					
100.0	100.0	100.0	100.0	0.1	0.0	-149.06	-167.9	-100.7	195.8	195.7	0.13	1,473.989		
200.0	200.0	200.0	200.0	0.3	0.0	-149.06	-167.9	-100.7	195.8	195.5	0.31	637.040 CC, ES		
300.0	300.0	297.0	297.0	0.5	0.0	-59.32	-168.4	-101.4	196.1	195.6	0.48	406.383		
400.0	400.0	394.0	394.0	0.7	0.0	-59.63	-169.7	-103.4	197.1	196.4	0.66	298.082		
500.0	499.9	491.0	490.9	0.9	0.0	-60.14	-172.0	-106.9	198.7	197.8	0.85	234.850		
600.0	599.7	588.0	587.7	1.1	0.0	-60.84	-175.1	-111.7	200.9	199.9	1.04	193.177		
700.0	699.4	684.9	684.3	1.3	0.0	-61.71	-179.1	-117.9	203.8	202.6	1.25	163.506		
800.0	798.9	781.7	780.7	1.5	0.0	-62.74	-184.0	-125.5	207.5	206.0	1.47	141.231		
900.0	898.3	878.4	876.8	1.8	0.0	-63.91	-189.7	-134.4	211.9	210.2	1.71	123.867		
1,000.0	997.4	975.1	972.7	2.0	0.0	-65.20	-196.4	-144.7	217.1	215.1	1.97	109.960		
1,100.0	1,096.3	1,071.6	1,068.3	2.3	0.0	-66.58	-203.9	-156.3	223.1	220.8	2.26	98.602		
1,200.0	1,194.9	1,168.1	1,163.5	2.7	0.0	-68.04	-212.2	-169.2	230.0	227.4	2.58	89.273		
1,300.0	1,293.5	1,264.4	1,258.3	3.0	0.0	-69.37	-221.4	-183.5	238.1	235.2	2.90	82.151		
1,400.0	1,392.0	1,360.6	1,352.7	3.3	0.0	-70.38	-231.5	-199.1	247.7	244.5	3.23	76.792		
1,500.0	1,490.5	1,456.7	1,446.6	3.7	0.0	-71.10	-242.4	-216.0	258.6	255.1	3.55	72.757		
1,600.0	1,589.0	1,552.4	1,539.9	4.0	0.0	-71.54	-254.2	-234.1	270.9	267.0	3.89	69.730		
1,700.0	1,687.5	1,647.9	1,632.6	4.3	0.0	-71.73	-266.7	-253.5	284.5	280.3	4.22	67.488		
1,800.0	1,786.0	1,743.1	1,724.5	4.7	0.0	-71.71	-280.0	-274.2	299.3	294.8	4.54	65.869		
1,900.0	1,884.6	1,837.8	1,815.6	5.0	0.0	-71.51	-294.1	-296.0	315.4	310.6	4.87	64.752		
2,000.0	1,983.1	1,932.1	1,905.9	5.4	0.0	-71.16	-309.0	-318.9	332.8	327.6	5.20	64.049		
2,100.0	2,081.6	2,026.0	1,995.2	5.7	0.0	-70.68	-324.5	-343.0	351.5	346.0	5.52	63.692		
2,200.0	2,180.1	2,119.2	2,083.6	6.1	0.0	-70.10	-340.8	-368.2	371.4	365.6	5.84	63.630 SF		
2,300.0	2,278.6	2,211.9	2,170.9	6.4	0.0	-69.45	-357.7	-394.4	392.7	386.5	6.15	63.820		
2,400.0	2,377.2	2,304.0	2,257.1	6.7	0.0	-68.74	-375.2	-421.5	415.2	408.8	6.46	64.231		
2,500.0	2,475.7	2,395.4	2,342.1	7.1	0.0	-67.99	-393.4	-449.7	439.1	432.4	6.77	64.834		
2,600.0	2,574.2	2,486.2	2,426.0	7.4	0.0	-67.21	-412.2	-478.7	464.4	457.3	7.08	65.607		
2,700.0	2,672.7	2,576.1	2,508.6	7.8	0.0	-66.42	-431.5	-508.6	490.9	483.5	7.38	66.531		
2,800.0	2,771.2	2,668.2	2,592.6	8.1	0.0	-65.60	-451.9	-540.2	518.7	511.0	7.68	67.581		
2,900.0	2,869.8	2,763.9	2,679.9	8.5	0.0	-64.83	-473.3	-573.3	546.8	538.8	7.97	68.610		
3,000.0	2,968.3	2,859.6	2,767.1	8.8	0.0	-64.12	-494.6	-606.4	575.0	566.7	8.26	69.578		
3,100.0	3,066.8	2,955.3	2,854.4	9.2	0.0	-63.49	-516.0	-639.4	603.3	594.7	8.56	70.491		
3,200.0	3,165.3	3,051.0	2,941.6	9.5	0.0	-62.91	-537.4	-672.5	631.6	622.7	8.85	71.352		
3,300.0	3,263.8	3,146.8	3,028.9	9.9	0.0	-62.38	-558.7	-705.6	660.0	650.8	9.15	72.166		
3,400.0	3,362.4	3,242.5	3,116.1	10.2	0.0	-61.89	-580.1	-738.6	688.4	679.0	9.44	72.935		
3,500.0	3,460.9	3,338.2	3,203.4	10.6	0.0	-61.44	-601.4	-771.6	716.9	707.1	9.73	73.663		
3,600.0	3,559.4	3,433.9	3,290.6	10.9	0.0	-61.03	-622.8	-804.7	745.4	735.3	10.02	74.352		
3,700.0	3,657.9	3,529.6	3,377.9	11.3	0.0	-60.65	-644.1	-837.7	773.9	763.6	10.32	75.007		
3,800.0	3,756.4	3,625.3	3,465.1	11.6	0.0	-60.29	-665.5	-870.8	802.5	791.9	10.61	75.629		
3,900.0	3,855.0	3,721.1	3,552.4	12.0	0.0	-59.96	-686.9	-903.9	831.1	820.2	10.90	76.220		
4,000.0	3,953.5	3,816.8	3,639.6	12.3	0.0	-59.65	-708.2	-936.9	859.7	848.5	11.20	76.782		
4,100.0	4,052.0	3,912.5	3,726.9	12.7	0.0	-59.36	-729.6	-970.0	888.3	876.8	11.49	77.318		
4,200.0	4,150.5	4,008.2	3,814.1	13.0	0.0	-59.09	-750.9	-1,003.0	917.0	905.2	11.78	77.829		
4,300.0	4,249.0	4,103.9	3,901.4	13.4	0.0	-58.83	-772.3	-1,036.1	945.7	933.6	12.07	78.317		
4,400.0	4,347.6	4,199.6	3,988.6	13.7	0.0	-58.59	-793.6	-1,069.1	974.4	962.0	12.37	78.784		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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)		Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.05	-192.0	-115.1	223.9					
100.0	100.0	100.0	100.0	0.1	0.0	-149.05	-192.0	-115.1	223.9	0.13	1,685.202			
200.0	200.0	200.0	200.0	0.3	0.0	-149.05	-192.0	-115.1	223.9	0.31	728.324 CC, ES			
300.0	300.0	296.5	296.5	0.5	0.0	-59.32	-192.5	-115.8	224.2	0.48	464.584			
400.0	400.0	392.9	392.9	0.7	0.0	-59.64	-194.0	-117.7	225.2	0.66	340.704			
500.0	499.9	489.3	489.2	0.9	0.0	-60.18	-196.6	-120.8	227.0	0.85	268.341			
600.0	599.7	585.7	585.4	1.1	0.0	-60.92	-200.1	-125.3	229.5	1.04	220.624			
700.0	699.4	682.0	681.4	1.3	0.0	-61.85	-204.7	-130.9	232.7	1.25	186.630			
800.0	798.9	778.1	777.2	1.5	0.0	-62.94	-210.2	-137.9	236.7	1.47	161.095			
900.0	898.3	874.2	872.7	1.8	0.0	-64.18	-216.8	-146.0	241.6	1.71	141.182			
1,000.0	997.4	970.2	967.9	2.0	0.0	-65.55	-224.3	-155.5	247.4	1.98	125.230			
1,100.0	1,096.3	1,066.0	1,062.7	2.3	0.0	-67.01	-232.9	-166.1	254.1	2.26	112.205			
1,200.0	1,194.9	1,161.7	1,157.2	2.7	0.0	-68.56	-242.4	-177.9	261.8	2.58	101.510			
1,300.0	1,293.5	1,257.2	1,251.2	3.0	0.0	-70.03	-252.9	-191.0	270.9	2.90	93.319			
1,400.0	1,392.0	1,352.6	1,344.8	3.3	0.0	-71.23	-264.3	-205.2	281.6	3.23	87.114			
1,500.0	1,490.5	1,447.8	1,437.9	3.7	0.0	-72.16	-276.7	-220.7	293.8	3.57	82.398			
1,600.0	1,589.0	1,542.7	1,530.4	4.0	0.0	-72.85	-290.0	-237.3	307.4	3.90	78.817			
1,700.0	1,687.5	1,637.2	1,622.2	4.3	0.0	-73.32	-304.2	-255.0	322.3	4.23	76.114			
1,800.0	1,786.0	1,731.5	1,713.3	4.7	0.0	-73.59	-319.4	-273.8	338.6	4.57	74.103			
1,900.0	1,884.6	1,825.3	1,803.6	5.0	0.0	-73.69	-335.3	-293.7	356.2	4.90	72.645			
2,000.0	1,983.1	1,918.6	1,893.0	5.4	0.0	-73.64	-352.1	-314.6	375.2	5.24	71.639			
2,100.0	2,081.6	2,011.5	1,981.4	5.7	0.0	-73.47	-369.8	-336.6	395.4	5.57	71.004			
2,200.0	2,180.1	2,103.8	2,068.9	6.1	0.0	-73.19	-388.2	-359.5	416.9	5.90	70.682			
2,300.0	2,278.6	2,195.5	2,155.4	6.4	0.0	-72.83	-407.3	-383.4	439.7	6.23	70.625 SF			
2,400.0	2,377.2	2,286.5	2,240.7	6.7	0.0	-72.40	-427.2	-408.2	463.8	6.55	70.794			
2,500.0	2,475.7	2,376.9	2,324.9	7.1	0.0	-71.91	-447.8	-433.8	489.2	6.88	71.160			
2,600.0	2,574.2	2,466.6	2,408.0	7.4	0.0	-71.38	-469.0	-460.2	515.9	7.20	71.698			
2,700.0	2,672.7	2,555.6	2,489.8	7.8	0.0	-70.83	-490.9	-487.5	543.9	7.51	72.387			
2,800.0	2,771.2	2,643.8	2,570.3	8.1	0.0	-70.25	-513.3	-515.4	573.3	7.83	73.209			
2,900.0	2,869.8	2,731.1	2,649.6	8.5	0.0	-69.66	-536.3	-544.1	603.9	8.14	74.149			
3,000.0	2,968.3	2,817.7	2,727.6	8.8	0.0	-69.06	-559.9	-573.4	635.8	8.46	75.195			
3,100.0	3,066.8	2,912.0	2,812.3	9.2	0.0	-68.43	-585.9	-605.9	668.4	8.76	76.270			
3,200.0	3,165.3	3,006.4	2,896.9	9.5	0.0	-67.87	-611.9	-638.3	701.0	9.07	77.282			
3,300.0	3,263.8	3,100.7	2,981.5	9.9	0.0	-67.35	-638.0	-670.7	733.7	9.38	78.235			
3,400.0	3,362.4	3,195.0	3,066.2	10.2	0.0	-66.88	-664.0	-703.1	766.4	9.69	79.133			
3,500.0	3,460.9	3,289.3	3,150.8	10.6	0.0	-66.44	-690.0	-735.6	799.2	9.99	79.981			
3,600.0	3,559.4	3,383.6	3,235.5	10.9	0.0	-66.04	-716.1	-768.0	832.1	10.30	80.782			
3,700.0	3,657.9	3,477.9	3,320.1	11.3	0.0	-65.68	-742.1	-800.4	864.9	10.61	81.541			
3,800.0	3,756.4	3,572.2	3,404.7	11.6	0.0	-65.33	-768.1	-832.9	897.8	10.91	82.260			
3,900.0	3,855.0	3,666.5	3,489.4	12.0	0.0	-65.02	-794.2	-865.3	930.7	11.22	82.942			
4,000.0	3,953.5	3,760.8	3,574.0	12.3	0.0	-64.72	-820.2	-897.7	963.7	11.53	83.591			
4,100.0	4,052.0	3,855.1	3,658.7	12.7	0.0	-64.44	-846.2	-930.2	996.6	11.84	84.207			

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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			
0.0	0.0	0.0	0.0	0.0	0.0	31.03	24.0	14.5	28.1					
100.0	100.0	100.0	100.0	0.1	0.1	31.03	24.0	14.5	28.1	27.8	0.27	105.766		
200.0	200.0	200.0	200.0	0.3	0.3	31.03	24.0	14.5	28.1	27.4	0.61	45.672 CC		
300.0	300.0	300.2	300.2	0.5	0.5	120.76	24.2	13.6	28.2	27.2	0.97	29.166		
400.0	400.0	400.4	400.4	0.7	0.7	120.45	24.5	11.0	28.4	27.1	1.32	21.492 ES		
500.0	499.9	500.6	500.5	0.9	0.9	119.95	25.0	6.6	28.9	27.2	1.69	17.064		
600.0	599.7	600.8	600.5	1.1	1.1	119.28	25.8	0.6	29.6	27.5	2.09	14.187		
700.0	699.4	701.0	700.3	1.3	1.3	118.45	26.8	-7.3	30.4	27.9	2.50	12.168		
800.0	798.9	801.2	800.1	1.5	1.5	117.51	28.0	-16.8	31.5	28.6	2.95	10.675		
900.0	898.3	901.3	899.6	1.8	1.8	116.47	29.4	-28.1	32.8	29.3	3.44	9.529		
1,000.0	997.4	1,001.5	998.9	2.0	2.0	115.36	31.1	-41.1	34.3	30.3	3.97	8.624		
1,100.0	1,096.3	1,101.7	1,098.0	2.3	2.3	114.23	32.9	-55.8	35.9	31.4	4.55	7.893		
1,200.0	1,194.9	1,201.9	1,196.8	2.7	2.7	113.06	35.0	-72.2	37.8	32.7	5.19	7.296		
1,300.0	1,293.5	1,302.0	1,295.2	3.0	3.0	110.55	37.3	-90.3	39.6	33.7	5.87	6.742		
1,400.0	1,392.0	1,401.9	1,393.4	3.3	3.4	107.64	39.6	-108.8	41.3	34.7	6.58	6.278		
1,500.0	1,490.5	1,501.9	1,491.6	3.7	3.7	104.96	42.0	-127.3	43.1	35.8	7.29	5.910		
1,600.0	1,589.0	1,601.8	1,589.8	4.0	4.1	102.51	44.3	-145.7	45.0	37.0	8.01	5.615		
1,700.0	1,687.5	1,701.8	1,688.0	4.3	4.4	100.26	46.6	-164.2	47.0	38.2	8.73	5.377		
1,800.0	1,786.0	1,801.8	1,786.2	4.7	4.8	98.19	49.0	-182.7	49.0	39.5	9.45	5.182		
1,900.0	1,884.6	1,901.7	1,884.5	5.0	5.2	96.29	51.3	-201.2	51.1	40.9	10.17	5.022		
2,000.0	1,983.1	2,001.7	1,982.7	5.4	5.5	94.54	53.7	-219.7	53.2	42.3	10.89	4.889		
2,100.0	2,081.6	2,101.7	2,080.9	5.7	5.9	92.93	56.0	-238.2	55.4	43.8	11.60	4.778		
2,200.0	2,180.1	2,201.6	2,179.1	6.1	6.3	91.44	58.3	-256.7	57.7	45.4	12.31	4.685		
2,300.0	2,278.6	2,301.6	2,277.3	6.4	6.6	90.07	60.7	-275.2	59.9	46.9	13.01	4.606		
2,400.0	2,377.2	2,401.6	2,375.5	6.7	7.0	88.79	63.0	-293.6	62.2	48.5	13.71	4.539		
2,500.0	2,475.7	2,501.5	2,473.7	7.1	7.4	87.61	65.4	-312.1	64.6	50.2	14.41	4.481		
2,600.0	2,574.2	2,601.5	2,571.9	7.4	7.8	86.51	67.7	-330.6	66.9	51.8	15.10	4.432		
2,700.0	2,672.7	2,701.5	2,670.2	7.8	8.1	85.48	70.0	-349.1	69.3	53.5	15.79	4.389		
2,800.0	2,771.2	2,801.4	2,768.4	8.1	8.5	84.52	72.4	-367.6	71.7	55.2	16.47	4.353		
2,900.0	2,869.8	2,901.4	2,866.6	8.5	8.9	83.63	74.7	-386.1	74.1	57.0	17.16	4.321		
3,000.0	2,968.3	3,001.3	2,964.8	8.8	9.2	82.79	77.1	-404.6	76.6	58.7	17.83	4.293		
3,100.0	3,066.8	3,101.3	3,063.0	9.2	9.6	82.01	79.4	-423.1	79.0	60.5	18.51	4.269		
3,200.0	3,165.3	3,201.3	3,161.2	9.5	10.0	81.27	81.7	-441.5	81.5	62.3	19.18	4.247		
3,300.0	3,263.8	3,301.2	3,259.4	9.9	10.4	80.57	84.1	-460.0	84.0	64.1	19.85	4.229		
3,400.0	3,362.4	3,401.2	3,357.6	10.2	10.7	79.92	86.4	-478.5	86.4	65.9	20.52	4.213		
3,500.0	3,460.9	3,501.2	3,455.9	10.6	11.1	79.30	88.7	-497.0	88.9	67.8	21.19	4.198		
3,600.0	3,559.4	3,601.1	3,554.1	10.9	11.5	78.71	91.1	-515.5	91.5	69.6	21.85	4.186		
3,700.0	3,657.9	3,701.1	3,652.3	11.3	11.8	78.16	93.4	-534.0	94.0	71.5	22.51	4.174		
3,800.0	3,756.4	3,801.1	3,750.5	11.6	12.2	77.63	95.8	-552.5	96.5	73.3	23.17	4.165		
3,900.0	3,855.0	3,901.0	3,848.7	12.0	12.6	77.14	98.1	-571.0	99.0	75.2	23.83	4.156		
4,000.0	3,953.5	4,001.0	3,946.9	12.3	13.0	76.66	100.4	-589.4	101.6	77.1	24.49	4.148		
4,100.0	4,052.0	4,101.0	4,045.1	12.7	13.3	76.21	102.8	-607.9	104.1	79.0	25.14	4.141		
4,200.0	4,150.5	4,200.9	4,143.3	13.0	13.7	75.79	105.1	-626.4	106.7	80.9	25.80	4.135		
4,300.0	4,249.0	4,300.9	4,241.5	13.4	14.1	75.38	107.5	-644.9	109.2	82.8	26.45	4.130		
4,400.0	4,347.6	4,400.8	4,339.8	13.7	14.5	74.99	109.8	-663.4	111.8	84.7	27.10	4.126		
4,500.0	4,446.1	4,500.8	4,438.0	14.1	14.8	74.62	112.1	-681.9	114.4	86.6	27.75	4.121		
4,600.0	4,544.6	4,600.8	4,536.2	14.4	15.2	74.26	114.5	-700.4	117.0	88.6	28.40	4.118		
4,700.0	4,643.1	4,700.7	4,634.4	14.8	15.6	73.92	116.8	-718.9	119.5	90.5	29.05	4.115		
4,800.0	4,741.6	4,800.7	4,732.6	15.1	15.9	73.60	119.2	-737.3	122.1	92.4	29.70	4.112		
4,900.0	4,840.1	4,900.7	4,830.8	15.5	16.3	73.28	121.5	-755.8	124.7	94.4	30.34	4.110		
5,000.0	4,938.7	5,000.6	4,929.0	15.8	16.7	72.98	123.8	-774.3	127.3	96.3	30.99	4.108		
5,100.0	5,037.2	5,100.6	5,027.2	16.2	17.1	72.70	126.2	-792.8	129.9	98.3	31.64	4.106		

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 3
<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 3	<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						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	5,135.7	5,200.6	5,125.5	16.5	17.4	72.42	128.5	-811.3	132.5	100.2	32.28	4.104		
5,300.0	5,234.2	5,300.5	5,223.7	16.9	17.8	72.15	130.8	-829.8	135.1	102.2	32.92	4.103		
5,400.0	5,332.7	5,400.5	5,321.9	17.2	18.2	71.90	133.2	-848.3	137.7	104.1	33.57	4.102		
5,500.0	5,431.3	5,500.5	5,420.1	17.6	18.6	71.65	135.5	-866.8	140.3	106.1	34.21	4.101		
5,600.0	5,529.8	5,600.4	5,518.3	17.9	18.9	71.41	137.9	-885.2	142.9	108.1	34.85	4.101		
5,700.0	5,628.3	5,700.4	5,616.5	18.3	19.3	71.19	140.2	-903.7	145.5	110.0	35.49	4.100		
5,800.0	5,726.8	5,800.3	5,714.7	18.6	19.7	70.97	142.5	-922.2	148.1	112.0	36.13	4.100		
5,900.0	5,825.3	5,900.3	5,812.9	19.0	20.1	70.75	144.9	-940.7	150.7	114.0	36.77	4.099		
6,000.0	5,923.9	6,000.3	5,911.2	19.3	20.4	70.55	147.2	-959.2	153.4	115.9	37.41	4.099		
6,100.0	6,022.4	6,100.2	6,009.4	19.7	20.8	70.35	149.6	-977.7	156.0	117.9	38.05	4.099		
6,200.0	6,120.9	6,200.2	6,107.6	20.0	21.2	70.16	151.9	-996.2	158.6	119.9	38.69	4.099		
6,300.0	6,219.4	6,300.2	6,205.8	20.4	21.5	69.97	154.2	-1,014.7	161.2	121.9	39.33	4.099		
6,400.0	6,317.9	6,397.4	6,301.2	20.7	21.9	69.55	156.5	-1,033.4	164.1	124.2	39.93	4.110		
6,500.0	6,416.5	6,487.6	6,387.1	21.1	22.5	66.03	158.6	-1,060.4	171.3	131.3	39.96	4.286		
6,600.0	6,515.0	6,572.9	6,464.1	21.4	23.2	59.71	160.5	-1,096.9	185.8	146.6	39.16	4.744		
6,700.0	6,613.4	6,650.0	6,528.9	21.8	24.0	52.07	162.1	-1,138.5	210.1	172.5	37.59	5.589		
6,800.0	6,709.1	6,725.1	6,586.9	22.4	24.9	44.51	163.6	-1,186.3	238.5	202.7	35.76	6.667		
6,900.0	6,799.0	6,800.0	6,638.6	23.2	26.0	38.90	164.9	-1,240.4	266.3	231.9	34.38	7.746		
7,000.0	6,881.1	6,867.5	6,679.5	24.3	27.0	35.00	166.0	-1,294.0	292.0	258.5	33.42	8.736		
7,100.0	6,953.3	6,936.6	6,715.2	25.6	28.2	32.05	167.0	-1,353.1	314.5	281.8	32.72	9.612		
7,200.0	7,013.8	7,000.0	6,742.2	27.2	29.4	30.00	167.7	-1,410.5	333.4	301.1	32.33	10.314		
7,300.0	7,061.1	7,072.1	6,765.8	28.9	30.8	28.44	168.5	-1,478.6	348.0	315.7	32.29	10.778		
7,400.0	7,094.0	7,139.0	6,780.6	30.9	32.2	27.49	169.0	-1,543.8	358.1	325.4	32.68	10.957		
7,500.0	7,111.8	7,200.0	6,788.2	33.0	33.5	27.02	169.3	-1,604.2	363.6	330.0	33.56	10.835		
7,600.0	7,115.0	7,284.1	6,790.0	35.2	35.4	26.92	169.6	-1,688.3	364.5	329.3	35.23	10.347		
7,700.0	7,115.0	7,384.1	6,790.0	37.4	37.6	26.92	169.8	-1,788.3	364.5	327.2	37.25	9.785		
7,800.0	7,115.0	7,484.1	6,790.0	39.6	39.8	26.92	170.1	-1,888.3	364.5	325.2	39.30	9.275		
7,900.0	7,115.0	7,584.1	6,790.0	41.9	42.1	26.92	170.3	-1,988.3	364.5	323.1	41.37	8.810		
8,000.0	7,115.0	7,684.1	6,790.0	44.1	44.4	26.92	170.6	-2,088.3	364.5	321.0	43.47	8.386		
8,100.0	7,115.0	7,784.1	6,790.0	46.5	46.7	26.92	170.8	-2,188.3	364.5	318.9	45.57	7.998		
8,200.0	7,115.0	7,884.1	6,790.0	48.8	49.0	26.92	171.1	-2,288.3	364.5	316.8	47.70	7.642		
8,300.0	7,115.0	7,984.1	6,790.0	51.1	51.4	26.92	171.3	-2,388.3	364.5	314.7	49.83	7.314		
8,400.0	7,115.0	8,084.1	6,790.0	53.5	53.7	26.92	171.6	-2,488.3	364.5	312.5	51.98	7.012		
8,500.0	7,115.0	8,184.1	6,790.0	55.8	56.1	26.92	171.8	-2,588.3	364.5	310.4	54.14	6.733		
8,600.0	7,115.0	8,284.1	6,790.0	58.2	58.4	26.92	172.1	-2,688.3	364.5	308.2	56.30	6.474		
8,700.0	7,115.0	8,384.1	6,790.0	60.6	60.8	26.92	172.3	-2,788.3	364.5	306.0	58.48	6.233		
8,800.0	7,115.0	8,484.1	6,790.0	63.0	63.2	26.92	172.6	-2,888.3	364.5	303.8	60.66	6.009		
8,900.0	7,115.0	8,584.1	6,790.0	65.3	65.6	26.92	172.8	-2,988.3	364.5	301.7	62.84	5.800		
9,000.0	7,115.0	8,684.1	6,790.0	67.7	68.0	26.92	173.1	-3,088.3	364.5	299.5	65.04	5.604		
9,100.0	7,115.0	8,784.1	6,790.0	70.1	70.4	26.92	173.3	-3,188.3	364.5	297.3	67.23	5.421		
9,200.0	7,115.0	8,884.1	6,790.0	72.6	72.8	26.92	173.6	-3,288.3	364.5	295.1	69.44	5.249		
9,300.0	7,115.0	8,984.1	6,790.0	75.0	75.2	26.92	173.8	-3,388.3	364.5	292.9	71.64	5.088		
9,400.0	7,115.0	9,084.1	6,790.0	77.4	77.7	26.92	174.1	-3,488.3	364.5	290.6	73.85	4.936		
9,500.0	7,115.0	9,184.1	6,790.0	79.8	80.1	26.92	174.3	-3,588.3	364.5	288.4	76.06	4.792		
9,600.0	7,115.0	9,284.1	6,790.0	82.2	82.5	26.92	174.6	-3,688.3	364.5	286.2	78.28	4.656		
9,700.0	7,115.0	9,384.1	6,790.0	84.6	84.9	26.92	174.8	-3,788.3	364.5	284.0	80.50	4.528		
9,800.0	7,115.0	9,484.1	6,790.0	87.1	87.4	26.92	175.1	-3,888.3	364.5	281.8	82.72	4.406		
9,900.0	7,115.0	9,584.1	6,790.0	89.5	89.8	26.92	175.3	-3,988.3	364.5	279.6	84.94	4.291		
10,000.0	7,115.0	9,684.1	6,790.0	91.9	92.2	26.92	175.6	-4,088.3	364.5	277.3	87.17	4.181		
10,100.0	7,115.0	9,784.1	6,790.0	94.4	94.7	26.92	175.8	-4,188.3	364.5	275.1	89.40	4.077		
10,200.0	7,115.0	9,884.1	6,790.0	96.8	97.1	26.92	176.1	-4,288.3	364.5	272.9	91.63	3.978		
10,300.0	7,115.0	9,984.1	6,790.0	99.3	99.5	26.92	176.3	-4,388.3	364.5	270.6	93.86	3.883		

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 3
<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 3	<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		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		
10,400.0	7,115.0	10,084.1	6,790.0	101.7	102.0	26.92	176.5	-4,488.3	364.5	268.4	96.09	3.793		
10,500.0	7,115.0	10,184.1	6,790.0	104.1	104.4	26.92	176.8	-4,588.3	364.5	266.2	98.33	3.707		
10,600.0	7,115.0	10,284.1	6,790.0	106.6	106.9	26.92	177.0	-4,688.3	364.5	263.9	100.57	3.624		
10,700.0	7,115.0	10,384.1	6,790.0	109.0	109.3	26.92	177.3	-4,788.3	364.5	261.7	102.80	3.546		
10,800.0	7,115.0	10,484.1	6,790.0	111.5	111.8	26.92	177.5	-4,888.3	364.5	259.5	105.04	3.470		
10,900.0	7,115.0	10,584.1	6,790.0	113.9	114.2	26.92	177.8	-4,988.3	364.5	257.2	107.28	3.398		
11,000.0	7,115.0	10,684.1	6,790.0	116.4	116.7	26.92	178.0	-5,088.3	364.5	255.0	109.53	3.328		
11,100.0	7,115.0	10,784.1	6,790.0	118.8	119.1	26.92	178.3	-5,188.3	364.5	252.7	111.77	3.261		
11,200.0	7,115.0	10,884.1	6,790.0	121.3	121.6	26.92	178.5	-5,288.3	364.5	250.5	114.01	3.197		
11,300.0	7,115.0	10,984.1	6,790.0	123.7	124.0	26.92	178.8	-5,388.3	364.5	248.2	116.26	3.135		
11,400.0	7,115.0	11,084.1	6,790.0	126.2	126.5	26.92	179.0	-5,488.3	364.5	246.0	118.50	3.076		
11,500.0	7,115.0	11,184.1	6,790.0	128.6	128.9	26.92	179.3	-5,588.3	364.5	243.8	120.75	3.019		
11,600.0	7,115.0	11,284.1	6,790.0	131.1	131.4	26.92	179.5	-5,688.3	364.5	241.5	122.99	2.964		
11,700.0	7,115.0	11,384.1	6,790.0	133.5	133.8	26.92	179.8	-5,788.3	364.5	239.3	125.24	2.910		
11,800.0	7,115.0	11,484.1	6,790.0	136.0	136.3	26.92	180.0	-5,888.3	364.5	237.0	127.49	2.859		
11,900.0	7,115.0	11,584.1	6,790.0	138.5	138.8	26.92	180.3	-5,988.3	364.5	234.8	129.74	2.809		
12,000.0	7,115.0	11,684.1	6,790.0	140.9	141.2	26.92	180.5	-6,088.3	364.5	232.5	131.99	2.762		
12,100.0	7,115.0	11,784.1	6,790.0	143.4	143.7	26.92	180.8	-6,188.3	364.5	230.3	134.24	2.715		
12,200.0	7,115.0	11,884.1	6,790.0	145.8	146.1	26.92	181.0	-6,288.3	364.5	228.0	136.49	2.671		
12,300.0	7,115.0	11,984.1	6,790.0	148.3	148.6	26.92	181.3	-6,388.3	364.5	225.8	138.74	2.627		
12,400.0	7,115.0	12,084.1	6,790.0	150.7	151.0	26.92	181.5	-6,488.3	364.5	223.5	140.99	2.585		
12,500.0	7,115.0	12,184.1	6,790.0	153.2	153.5	26.92	181.8	-6,588.3	364.5	221.3	143.25	2.545		
12,600.0	7,115.0	12,284.1	6,790.0	155.7	156.0	26.92	182.0	-6,688.3	364.5	219.0	145.50	2.505		
12,700.0	7,115.0	12,384.1	6,790.0	158.1	158.4	26.92	182.3	-6,788.3	364.5	216.7	147.75	2.467		
12,800.0	7,115.0	12,484.1	6,790.0	160.6	160.9	26.92	182.5	-6,888.3	364.5	214.5	150.01	2.430		
12,900.0	7,115.0	12,584.1	6,790.0	163.1	163.4	26.92	182.8	-6,988.3	364.5	212.2	152.26	2.394		
13,000.0	7,115.0	12,684.1	6,790.0	165.5	165.8	26.92	183.0	-7,088.3	364.5	210.0	154.52	2.359		
13,100.0	7,115.0	12,784.1	6,790.0	168.0	168.3	26.92	183.3	-7,188.3	364.5	207.7	156.77	2.325		
13,200.0	7,115.0	12,884.1	6,790.0	170.4	170.7	26.92	183.5	-7,288.3	364.5	205.5	159.03	2.292		
13,300.0	7,115.0	12,984.1	6,790.0	172.9	173.2	26.92	183.8	-7,388.3	364.5	203.2	161.28	2.260		
13,400.0	7,115.0	13,084.1	6,790.0	175.4	175.7	26.92	184.0	-7,488.3	364.5	201.0	163.54	2.229		
13,500.0	7,115.0	13,184.1	6,790.0	177.8	178.1	26.92	184.3	-7,588.3	364.5	198.7	165.79	2.199		
13,600.0	7,115.0	13,284.1	6,790.0	180.3	180.6	26.92	184.5	-7,688.3	364.5	196.4	168.05	2.169		
13,700.0	7,115.0	13,384.1	6,790.0	182.8	183.1	26.92	184.8	-7,788.3	364.5	194.2	170.31	2.140		
13,800.0	7,115.0	13,484.1	6,790.0	185.2	185.5	26.92	185.0	-7,888.3	364.5	191.9	172.56	2.112		
13,900.0	7,115.0	13,584.1	6,790.0	187.7	188.0	26.92	185.3	-7,988.3	364.5	189.7	174.82	2.085		
14,000.0	7,115.0	13,684.1	6,790.0	190.2	190.5	26.92	185.5	-8,088.3	364.5	187.4	177.08	2.058		
14,100.0	7,115.0	13,784.1	6,790.0	192.6	192.9	26.92	185.8	-8,188.3	364.5	185.2	179.34	2.032		
14,200.0	7,115.0	13,884.1	6,790.0	195.1	195.4	26.92	186.0	-8,288.3	364.5	182.9	181.60	2.007		
14,300.0	7,115.0	13,984.1	6,790.0	197.5	197.9	26.92	186.3	-8,388.3	364.5	180.6	183.85	1.983		
14,400.0	7,115.0	14,084.1	6,790.0	200.0	200.3	26.92	186.5	-8,488.3	364.5	178.4	186.11	1.958		
14,500.0	7,115.0	14,184.1	6,790.0	202.5	202.8	26.92	186.8	-8,588.3	364.5	176.1	188.37	1.935		
14,600.0	7,115.0	14,284.1	6,790.0	204.9	205.3	26.92	187.0	-8,688.3	364.5	173.9	190.63	1.912		
14,700.0	7,115.0	14,384.1	6,790.0	207.4	207.7	26.92	187.3	-8,788.3	364.5	171.6	192.89	1.890		
14,800.0	7,115.0	14,484.1	6,790.0	209.9	210.2	26.92	187.5	-8,888.3	364.5	169.4	195.15	1.868		
14,900.0	7,115.0	14,584.1	6,790.0	212.3	212.7	26.92	187.8	-8,988.3	364.5	167.1	197.41	1.846		
15,000.0	7,115.0	14,684.1	6,790.0	214.8	215.1	26.92	188.0	-9,088.3	364.5	164.8	199.67	1.826		
15,100.0	7,115.0	14,784.1	6,790.0	217.3	217.6	26.92	188.3	-9,188.3	364.5	162.6	201.93	1.805		
15,200.0	7,115.0	14,884.1	6,790.0	219.7	220.1	26.92	188.5	-9,288.3	364.5	160.3	204.19	1.785		
15,300.0	7,115.0	14,984.1	6,790.0	222.2	222.5	26.92	188.8	-9,388.3	364.5	158.1	206.45	1.766		
15,400.0	7,115.0	15,084.1	6,790.0	224.7	225.0	26.92	189.0	-9,488.3	364.5	155.8	208.71	1.746		
15,500.0	7,115.0	15,184.1	6,790.0	227.2	227.5	26.92	189.3	-9,588.3	364.5	153.5	210.97	1.728		

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 3
<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 3	<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		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	15,284.1	6,790.0	229.6	229.9	26.92	189.5	-9,688.3	364.5	151.3	213.23	1.709		
15,700.0	7,115.0	15,384.1	6,790.0	232.1	232.4	26.92	189.8	-9,788.3	364.5	149.0	215.49	1.691		
15,800.0	7,115.0	15,484.1	6,790.0	234.6	234.9	26.92	190.0	-9,888.3	364.5	146.7	217.75	1.674		
15,900.0	7,115.0	15,584.1	6,790.0	237.0	237.3	26.92	190.3	-9,988.3	364.5	144.5	220.01	1.657		
16,000.0	7,115.0	15,684.1	6,790.0	239.5	239.8	26.92	190.5	-10,088.3	364.5	142.2	222.27	1.640		
16,100.0	7,115.0	15,784.1	6,790.0	242.0	242.3	26.92	190.8	-10,188.3	364.5	140.0	224.54	1.623		
16,200.0	7,115.0	15,884.1	6,790.0	244.4	244.7	26.92	191.0	-10,288.3	364.5	137.7	226.80	1.607		
16,300.0	7,115.0	15,984.1	6,790.0	246.9	247.2	26.92	191.3	-10,388.3	364.5	135.4	229.06	1.591		
16,400.0	7,115.0	16,084.1	6,790.0	249.4	249.7	26.92	191.5	-10,488.3	364.5	133.2	231.32	1.576		
16,500.0	7,115.0	16,184.1	6,790.0	251.8	252.1	26.92	191.8	-10,588.3	364.5	130.9	233.58	1.560		
16,600.0	7,115.0	16,284.1	6,790.0	254.3	254.6	26.92	192.0	-10,688.3	364.5	128.7	235.85	1.546		
16,700.0	7,115.0	16,384.1	6,790.0	256.8	257.1	26.92	192.3	-10,788.3	364.5	126.4	238.11	1.531		
16,800.0	7,115.0	16,484.1	6,790.0	259.2	259.6	26.92	192.5	-10,888.3	364.5	124.1	240.37	1.516		
16,900.0	7,115.0	16,584.1	6,790.0	261.7	262.0	26.92	192.8	-10,988.3	364.5	121.9	242.63	1.502		
17,000.0	7,115.0	16,684.1	6,790.0	264.2	264.5	26.92	193.0	-11,088.3	364.5	119.6	244.89	1.488 Level 3		
17,100.0	7,115.0	16,784.1	6,790.0	266.7	267.0	26.92	193.3	-11,188.3	364.5	117.3	247.16	1.475 Level 3		
17,200.0	7,115.0	16,884.1	6,790.0	269.1	269.4	26.92	193.5	-11,288.3	364.5	115.1	249.42	1.461 Level 3		
17,300.0	7,115.0	16,984.1	6,790.0	271.6	271.9	26.92	193.8	-11,388.3	364.5	112.8	251.68	1.448 Level 3		
17,400.0	7,115.0	17,084.1	6,790.0	274.1	274.4	26.92	194.0	-11,488.3	364.5	110.6	253.94	1.435 Level 3		
17,500.0	7,115.0	17,184.1	6,790.0	276.5	276.8	26.92	194.3	-11,588.3	364.5	108.3	256.21	1.423 Level 3		
17,600.0	7,115.0	17,284.1	6,790.0	279.0	279.3	26.92	194.5	-11,688.3	364.5	106.0	258.47	1.410 Level 3		
17,700.0	7,115.0	17,384.1	6,790.0	281.5	281.8	26.92	194.8	-11,788.3	364.5	103.8	260.73	1.398 Level 3		
17,711.0	7,115.0	17,395.1	6,790.0	281.7	282.1	26.92	194.8	-11,799.2	364.5	103.5	260.98	1.397 Level 3, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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-													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	-23.7	-14.2	27.6					
100.0	100.0	99.0	99.0	0.1	0.0	-149.07	-23.7	-14.2	27.6	27.5	0.13	207.762		
200.0	200.0	199.0	199.0	0.3	0.0	-149.07	-23.7	-14.2	27.6	27.3	0.31	89.791 CC		
300.0	300.0	298.7	298.7	0.5	0.0	-59.38	-23.8	-15.0	27.7	27.2	0.48	57.329 ES		
400.0	400.0	398.4	398.4	0.7	0.0	-59.74	-24.0	-17.6	27.9	27.2	0.66	42.191		
500.0	499.9	498.1	498.0	0.9	0.0	-60.33	-24.5	-21.9	28.3	27.4	0.85	33.430		
600.0	599.7	597.8	597.5	1.1	0.0	-61.10	-25.2	-27.9	28.8	27.8	1.04	27.715		
700.0	699.4	697.5	696.9	1.3	0.0	-62.05	-26.0	-35.6	29.5	28.3	1.25	23.690		
800.0	798.9	797.3	796.2	1.5	0.0	-63.14	-27.0	-45.1	30.4	29.0	1.47	20.702		
900.0	898.3	897.0	895.2	1.8	0.0	-64.34	-28.2	-56.3	31.5	29.8	1.71	18.396		
1,000.0	997.4	996.7	994.1	2.0	0.0	-65.63	-29.6	-69.2	32.7	30.8	1.98	16.567		
1,100.0	1,096.3	1,096.4	1,092.7	2.3	0.0	-66.96	-31.2	-83.7	34.2	31.9	2.26	15.086		
1,200.0	1,194.9	1,196.0	1,191.0	2.7	0.0	-68.30	-33.0	-100.0	35.8	33.2	2.58	13.882		
1,300.0	1,293.5	1,295.7	1,289.1	3.0	0.0	-68.14	-34.9	-118.0	38.0	35.1	2.89	13.150		
1,400.0	1,392.0	1,395.3	1,386.7	3.3	0.0	-65.86	-37.0	-137.7	41.0	37.9	3.18	12.901		
1,500.0	1,490.5	1,495.2	1,484.3	3.7	0.0	-62.72	-39.3	-158.5	44.7	41.3	3.45	12.950		
1,600.0	1,589.0	1,595.1	1,582.0	4.0	0.0	-60.05	-41.5	-179.3	48.6	44.8	3.72	13.047		
1,700.0	1,687.5	1,695.0	1,679.7	4.3	0.0	-57.77	-43.8	-200.1	52.5	48.5	3.98	13.170		
1,800.0	1,786.0	1,794.9	1,777.4	4.7	0.0	-55.81	-46.0	-220.9	56.4	52.2	4.24	13.307		
1,900.0	1,884.6	1,894.8	1,875.1	5.0	0.0	-54.11	-48.3	-241.7	60.5	56.0	4.50	13.451		
2,000.0	1,983.1	1,994.7	1,972.8	5.4	0.0	-52.63	-50.5	-262.5	64.6	59.8	4.75	13.596		
2,100.0	2,081.6	2,094.6	2,070.5	5.7	0.0	-51.32	-52.8	-283.3	68.7	63.7	5.00	13.740		
2,200.0	2,180.1	2,194.5	2,168.1	6.1	0.0	-50.16	-55.0	-304.0	72.8	67.6	5.25	13.882		
2,300.0	2,278.6	2,294.4	2,265.8	6.4	0.0	-49.13	-57.3	-324.8	77.0	71.5	5.49	14.019		
2,400.0	2,377.2	2,394.3	2,363.5	6.7	0.0	-48.20	-59.5	-345.6	81.2	75.5	5.74	14.151		
2,500.0	2,475.7	2,494.2	2,461.2	7.1	0.0	-47.36	-61.8	-366.4	85.5	79.5	5.98	14.278		
2,600.0	2,574.2	2,594.1	2,558.9	7.4	0.0	-46.61	-64.0	-387.2	89.7	83.5	6.23	14.399		
2,700.0	2,672.7	2,694.0	2,656.6	7.8	0.0	-45.92	-66.3	-408.0	93.9	87.5	6.47	14.516		
2,800.0	2,771.2	2,793.9	2,754.3	8.1	0.0	-45.29	-68.5	-428.8	98.2	91.5	6.71	14.627		
2,900.0	2,869.8	2,893.8	2,852.0	8.5	0.0	-44.71	-70.8	-449.6	102.5	95.5	6.96	14.733		
3,000.0	2,968.3	2,993.7	2,949.7	8.8	0.0	-44.18	-73.0	-470.4	106.8	99.6	7.20	14.834		
3,100.0	3,066.8	3,093.6	3,047.3	9.2	0.0	-43.69	-75.3	-491.2	111.1	103.6	7.44	14.931		
3,200.0	3,165.3	3,193.5	3,145.0	9.5	0.0	-43.24	-77.5	-512.0	115.4	107.7	7.68	15.023		
3,300.0	3,263.8	3,293.4	3,242.7	9.9	0.0	-42.82	-79.8	-532.8	119.7	111.8	7.92	15.111		
3,400.0	3,362.4	3,393.3	3,340.4	10.2	0.0	-42.43	-82.0	-553.6	124.0	115.8	8.16	15.195		
3,500.0	3,460.9	3,493.2	3,438.1	10.6	0.0	-42.06	-84.3	-574.4	128.3	119.9	8.40	15.276		
3,600.0	3,559.4	3,593.2	3,535.8	10.9	0.0	-41.72	-86.5	-595.2	132.6	124.0	8.64	15.353		
3,700.0	3,657.9	3,693.1	3,633.5	11.3	0.0	-41.40	-88.8	-616.0	137.0	128.1	8.88	15.427		
3,800.0	3,756.4	3,793.0	3,731.2	11.6	0.0	-41.10	-91.0	-636.8	141.3	132.2	9.12	15.497		
3,900.0	3,855.0	3,892.9	3,828.9	12.0	0.0	-40.82	-93.3	-657.6	145.6	136.3	9.36	15.565		
4,000.0	3,953.5	3,992.8	3,926.5	12.3	0.0	-40.56	-95.5	-678.4	150.0	140.4	9.60	15.629		
4,100.0	4,052.0	4,092.7	4,024.2	12.7	0.0	-40.31	-97.8	-699.2	154.3	144.5	9.83	15.692		
4,200.0	4,150.5	4,192.6	4,121.9	13.0	0.0	-40.07	-100.0	-720.0	158.7	148.6	10.07	15.751		
4,300.0	4,249.0	4,292.5	4,219.6	13.4	0.0	-39.85	-102.3	-740.8	163.0	152.7	10.31	15.809		
4,400.0	4,347.6	4,392.4	4,317.3	13.7	0.0	-39.63	-104.5	-761.6	167.4	156.8	10.55	15.864		
4,500.0	4,446.1	4,492.3	4,415.0	14.1	0.0	-39.43	-106.8	-782.4	171.7	160.9	10.79	15.917		
4,600.0	4,544.6	4,592.2	4,512.7	14.4	0.0	-39.24	-109.0	-803.2	176.1	165.1	11.03	15.968		
4,700.0	4,643.1	4,692.1	4,610.4	14.8	0.0	-39.06	-111.3	-824.0	180.4	169.2	11.27	16.017		
4,800.0	4,741.6	4,792.0	4,708.1	15.1	0.0	-38.88	-113.5	-844.8	184.8	173.3	11.50	16.064		
4,900.0	4,840.1	4,891.9	4,805.7	15.5	0.0	-38.72	-115.8	-865.6	189.2	177.4	11.74	16.110		
5,000.0	4,938.7	4,991.8	4,903.4	15.8	0.0	-38.56	-118.0	-886.4	193.5	181.5	11.98	16.154		
5,100.0	5,037.2	5,091.7	5,001.1	16.2	0.0	-38.41	-120.3	-907.2	197.9	185.7	12.22	16.197		

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 3
<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 3	<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-															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	5,135.7	5,191.6	5,098.8	16.5	0.0	-38.26	-122.6	-928.0	202.2	189.8	12.46	16.238				
5,300.0	5,234.2	5,291.5	5,196.5	16.9	0.0	-38.12	-124.8	-948.7	206.6	193.9	12.69	16.277				
5,400.0	5,332.7	5,391.4	5,294.2	17.2	0.0	-37.99	-127.1	-969.5	211.0	198.0	12.93	16.316				
5,500.0	5,431.3	5,491.3	5,391.9	17.6	0.0	-37.86	-129.3	-990.3	215.3	202.2	13.17	16.353				
5,600.0	5,529.8	5,591.2	5,489.6	17.9	0.0	-37.74	-131.6	-1,011.1	219.7	206.3	13.41	16.389				
5,700.0	5,628.3	5,691.1	5,587.3	18.3	0.0	-37.62	-133.8	-1,031.9	224.1	210.4	13.64	16.424				
5,800.0	5,726.8	5,791.0	5,684.9	18.6	0.0	-37.51	-136.1	-1,052.7	228.5	214.6	13.88	16.458				
5,900.0	5,825.3	5,890.9	5,782.6	19.0	0.0	-37.40	-138.3	-1,073.5	232.8	218.7	14.12	16.490				
6,000.0	5,923.9	5,990.8	5,880.3	19.3	0.0	-37.29	-140.6	-1,094.3	237.2	222.8	14.36	16.522				
6,100.0	6,022.4	6,090.7	5,978.0	19.7	0.0	-37.19	-142.8	-1,115.1	241.6	227.0	14.59	16.553				
6,200.0	6,120.9	6,190.6	6,075.7	20.0	0.0	-37.09	-145.1	-1,135.9	246.0	231.1	14.83	16.583				
6,300.0	6,219.4	6,290.5	6,173.4	20.4	0.0	-37.00	-147.3	-1,156.7	250.3	235.3	15.07	16.612				
6,400.0	6,317.9	6,390.4	6,271.1	20.7	0.0	-36.91	-149.6	-1,177.5	254.7	239.4	15.31	16.640				
6,500.0	6,416.5	6,469.4	6,347.5	21.1	0.0	-36.42	-151.3	-1,197.0	262.5	247.0	15.48	16.960				
6,600.0	6,515.0	6,542.3	6,415.5	21.4	0.0	-34.93	-152.8	-1,223.2	279.6	264.1	15.47	18.072				
6,700.0	6,613.4	6,611.2	6,476.7	21.8	0.0	-32.48	-154.2	-1,254.9	305.7	290.4	15.29	19.994				
6,800.0	6,709.1	6,678.1	6,532.4	22.4	0.0	-29.59	-155.4	-1,291.8	331.7	316.7	15.01	22.101				
6,900.0	6,799.0	6,750.0	6,587.6	23.2	0.0	-27.43	-156.6	-1,337.8	353.6	338.8	14.79	23.915				
7,000.0	6,881.1	6,809.2	6,629.0	24.3	0.0	-26.08	-157.5	-1,380.1	370.8	356.2	14.65	25.310				
7,100.0	6,953.3	6,874.0	6,669.5	25.6	0.0	-25.17	-158.3	-1,430.6	383.3	368.7	14.57	26.303				
7,200.0	7,013.8	6,938.4	6,704.5	27.2	0.0	-24.69	-159.0	-1,484.7	390.6	376.0	14.61	26.732				
7,300.0	7,061.1	7,000.0	6,732.7	28.9	0.0	-24.62	-159.5	-1,539.4	392.9	378.0	14.85	26.456				
7,400.0	7,094.0	7,067.1	6,757.2	30.9	0.0	-24.96	-160.0	-1,601.7	389.9	374.5	15.37	25.366				
7,500.0	7,111.8	7,131.6	6,774.5	33.0	0.0	-25.71	-160.2	-1,663.9	381.8	365.5	16.25	23.491				
7,600.0	7,115.0	7,200.0	6,785.9	35.2	0.0	-26.69	-160.3	-1,731.3	369.6	352.1	17.52	21.103				
7,700.0	7,115.0	7,262.8	6,789.9	37.4	0.0	-26.99	-160.2	-1,793.9	363.7	345.0	18.67	19.485				
7,738.9	7,115.0	7,296.9	6,790.0	38.2	0.0	-26.99	-160.2	-1,828.0	363.6	344.5	19.07	19.071				
7,800.0	7,115.0	7,358.0	6,790.0	39.6	0.0	-26.99	-160.0	-1,889.1	363.6	343.9	19.69	18.464				
7,900.0	7,115.0	7,458.0	6,790.0	41.9	0.0	-26.99	-159.8	-1,989.1	363.6	342.9	20.73	17.541				
8,000.0	7,115.0	7,558.0	6,790.0	44.1	0.0	-26.99	-159.5	-2,089.1	363.6	341.8	21.78	16.698				
8,100.0	7,115.0	7,658.0	6,790.0	46.5	0.0	-26.99	-159.3	-2,189.1	363.6	340.8	22.83	15.927				
8,200.0	7,115.0	7,758.0	6,790.0	48.8	0.0	-26.99	-159.0	-2,289.1	363.6	339.7	23.89	15.218				
8,300.0	7,115.0	7,858.0	6,790.0	51.1	0.0	-26.99	-158.8	-2,389.1	363.6	338.6	24.96	14.567				
8,400.0	7,115.0	7,958.0	6,790.0	53.5	0.0	-26.99	-158.5	-2,489.1	363.6	337.6	26.04	13.965				
8,500.0	7,115.0	8,058.0	6,790.0	55.8	0.0	-26.99	-158.3	-2,589.1	363.6	336.5	27.12	13.409				
8,600.0	7,115.0	8,158.0	6,790.0	58.2	0.0	-26.99	-158.0	-2,689.1	363.6	335.4	28.20	12.894				
8,700.0	7,115.0	8,258.0	6,790.0	60.6	0.0	-26.99	-157.8	-2,789.1	363.6	334.3	29.29	12.415				
8,800.0	7,115.0	8,358.0	6,790.0	63.0	0.0	-26.99	-157.5	-2,889.1	363.6	333.2	30.38	11.969				
8,900.0	7,115.0	8,458.0	6,790.0	65.3	0.0	-26.99	-157.3	-2,989.1	363.6	332.1	31.47	11.552				
9,000.0	7,115.0	8,558.0	6,790.0	67.7	0.0	-26.99	-157.0	-3,089.1	363.6	331.0	32.57	11.163				
9,100.0	7,115.0	8,658.0	6,790.0	70.1	0.0	-26.99	-156.8	-3,189.1	363.6	329.9	33.67	10.798				
9,200.0	7,115.0	8,758.0	6,790.0	72.6	0.0	-26.99	-156.5	-3,289.1	363.6	328.8	34.78	10.456				
9,300.0	7,115.0	8,858.0	6,790.0	75.0	0.0	-26.99	-156.3	-3,389.1	363.6	327.7	35.88	10.134				
9,400.0	7,115.0	8,958.0	6,790.0	77.4	0.0	-26.99	-156.0	-3,489.1	363.6	326.6	36.99	9.831				
9,500.0	7,115.0	9,058.0	6,790.0	79.8	0.0	-26.99	-155.8	-3,589.1	363.6	325.5	38.09	9.545				
9,600.0	7,115.0	9,158.0	6,790.0	82.2	0.0	-26.99	-155.5	-3,689.1	363.6	324.4	39.20	9.275				
9,700.0	7,115.0	9,258.0	6,790.0	84.6	0.0	-26.99	-155.3	-3,789.1	363.6	323.3	40.32	9.019				
9,800.0	7,115.0	9,358.0	6,790.0	87.1	0.0	-26.99	-155.0	-3,889.1	363.6	322.2	41.43	8.777				
9,900.0	7,115.0	9,458.0	6,790.0	89.5	0.0	-26.99	-154.8	-3,989.1	363.6	321.1	42.54	8.547				
10,000.0	7,115.0	9,558.0	6,790.0	91.9	0.0	-26.99	-154.5	-4,089.1	363.6	319.9	43.66	8.328				
10,100.0	7,115.0	9,658.0	6,790.0	94.4	0.0	-26.99	-154.3	-4,189.1	363.6	318.8	44.77	8.121				
10,200.0	7,115.0	9,758.0	6,790.0	96.8	0.0	-26.99	-154.0	-4,289.1	363.6	317.7	45.89	7.923				

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 3
<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 3	<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-													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)				Between Centres (usft)	Between Ellipses (usft)	
10,300.0	7,115.0	9,858.0	6,790.0	99.3	0.0	-26.99	-153.8	-4,389.1	363.6	316.6	7.735			
10,400.0	7,115.0	9,958.0	6,790.0	101.7	0.0	-26.99	-153.5	-4,489.1	363.6	315.5	7.555			
10,500.0	7,115.0	10,058.0	6,790.0	104.1	0.0	-26.99	-153.3	-4,589.1	363.6	314.4	7.383			
10,600.0	7,115.0	10,158.0	6,790.0	106.6	0.0	-26.99	-153.0	-4,689.1	363.6	313.2	7.219			
10,700.0	7,115.0	10,258.0	6,790.0	109.0	0.0	-26.99	-152.8	-4,789.1	363.6	312.1	7.062			
10,800.0	7,115.0	10,358.0	6,790.0	111.5	0.0	-26.99	-152.5	-4,889.1	363.6	311.0	6.911			
10,900.0	7,115.0	10,458.0	6,790.0	113.9	0.0	-26.99	-152.3	-4,989.1	363.6	309.9	6.767			
11,000.0	7,115.0	10,558.0	6,790.0	116.4	0.0	-26.99	-152.0	-5,089.1	363.6	308.7	6.628			
11,100.0	7,115.0	10,658.0	6,790.0	118.8	0.0	-26.99	-151.8	-5,189.1	363.6	307.6	6.495			
11,200.0	7,115.0	10,758.0	6,790.0	121.3	0.0	-26.99	-151.5	-5,289.1	363.6	306.5	6.367			
11,300.0	7,115.0	10,858.0	6,790.0	123.7	0.0	-26.99	-151.3	-5,389.1	363.6	305.4	6.244			
11,400.0	7,115.0	10,958.0	6,790.0	126.2	0.0	-26.99	-151.0	-5,489.1	363.6	304.3	6.126			
11,500.0	7,115.0	11,058.0	6,790.0	128.6	0.0	-26.99	-150.8	-5,589.1	363.6	303.1	6.012			
11,600.0	7,115.0	11,158.0	6,790.0	131.1	0.0	-26.99	-150.5	-5,689.1	363.6	302.0	5.902			
11,700.0	7,115.0	11,258.0	6,790.0	133.5	0.0	-26.99	-150.3	-5,789.1	363.6	300.9	5.796			
11,800.0	7,115.0	11,358.0	6,790.0	136.0	0.0	-26.99	-150.0	-5,889.1	363.6	299.7	5.694			
11,900.0	7,115.0	11,458.0	6,790.0	138.5	0.0	-26.99	-149.8	-5,989.1	363.6	298.6	5.595			
12,000.0	7,115.0	11,558.0	6,790.0	140.9	0.0	-26.99	-149.5	-6,089.1	363.6	297.5	5.500			
12,100.0	7,115.0	11,658.0	6,790.0	143.4	0.0	-26.99	-149.3	-6,189.1	363.6	296.4	5.407			
12,200.0	7,115.0	11,758.0	6,790.0	145.8	0.0	-26.99	-149.0	-6,289.1	363.6	295.2	5.318			
12,300.0	7,115.0	11,858.0	6,790.0	148.3	0.0	-26.99	-148.8	-6,389.1	363.6	294.1	5.232			
12,400.0	7,115.0	11,958.0	6,790.0	150.7	0.0	-26.99	-148.5	-6,489.1	363.6	293.0	5.148			
12,500.0	7,115.0	12,058.0	6,790.0	153.2	0.0	-26.99	-148.3	-6,589.1	363.6	291.9	5.067			
12,600.0	7,115.0	12,158.0	6,790.0	155.7	0.0	-26.99	-148.0	-6,689.1	363.6	290.7	4.989			
12,700.0	7,115.0	12,258.0	6,790.0	158.1	0.0	-26.99	-147.8	-6,789.1	363.6	289.6	4.913			
12,800.0	7,115.0	12,358.0	6,790.0	160.6	0.0	-26.99	-147.5	-6,889.1	363.6	288.5	4.839			
12,900.0	7,115.0	12,458.0	6,790.0	163.1	0.0	-26.99	-147.3	-6,989.1	363.6	287.3	4.767			
13,000.0	7,115.0	12,558.0	6,790.0	165.5	0.0	-26.99	-147.0	-7,089.1	363.6	286.2	4.698			
13,100.0	7,115.0	12,658.0	6,790.0	168.0	0.0	-26.99	-146.8	-7,189.1	363.6	285.1	4.630			
13,200.0	7,115.0	12,758.0	6,790.0	170.4	0.0	-26.99	-146.5	-7,289.1	363.6	283.9	4.564			
13,300.0	7,115.0	12,858.0	6,790.0	172.9	0.0	-26.99	-146.3	-7,389.1	363.6	282.8	4.500			
13,400.0	7,115.0	12,958.0	6,790.0	175.4	0.0	-26.99	-146.0	-7,489.1	363.6	281.7	4.438			
13,500.0	7,115.0	13,058.0	6,790.0	177.8	0.0	-26.99	-145.8	-7,589.1	363.6	280.6	4.378			
13,600.0	7,115.0	13,158.0	6,790.0	180.3	0.0	-26.99	-145.5	-7,689.1	363.6	279.4	4.319			
13,700.0	7,115.0	13,258.0	6,790.0	182.8	0.0	-26.99	-145.3	-7,789.1	363.6	278.3	4.262			
13,800.0	7,115.0	13,358.0	6,790.0	185.2	0.0	-26.99	-145.0	-7,889.1	363.6	277.2	4.206			
13,900.0	7,115.0	13,458.0	6,790.0	187.7	0.0	-26.99	-144.8	-7,989.1	363.6	276.0	4.152			
14,000.0	7,115.0	13,558.0	6,790.0	190.2	0.0	-26.99	-144.5	-8,089.1	363.6	274.9	4.099			
14,100.0	7,115.0	13,658.0	6,790.0	192.6	0.0	-26.99	-144.3	-8,189.1	363.6	273.8	4.047			
14,200.0	7,115.0	13,758.0	6,790.0	195.1	0.0	-26.99	-144.0	-8,289.1	363.6	272.6	3.997			
14,300.0	7,115.0	13,858.0	6,790.0	197.5	0.0	-26.99	-143.8	-8,389.1	363.6	271.5	3.948			
14,400.0	7,115.0	13,958.0	6,790.0	200.0	0.0	-26.99	-143.5	-8,489.1	363.6	270.4	3.900			
14,500.0	7,115.0	14,058.0	6,790.0	202.5	0.0	-26.99	-143.3	-8,589.1	363.6	269.2	3.853			
14,600.0	7,115.0	14,158.0	6,790.0	204.9	0.0	-26.99	-143.0	-8,689.1	363.6	268.1	3.807			
14,700.0	7,115.0	14,258.0	6,790.0	207.4	0.0	-26.99	-142.8	-8,789.1	363.6	267.0	3.763			
14,800.0	7,115.0	14,358.0	6,790.0	209.9	0.0	-26.99	-142.5	-8,889.1	363.6	265.8	3.719			
14,900.0	7,115.0	14,458.0	6,790.0	212.3	0.0	-26.99	-142.3	-8,989.1	363.6	264.7	3.677			
15,000.0	7,115.0	14,558.0	6,790.0	214.8	0.0	-26.99	-142.0	-9,089.1	363.6	263.6	3.635			
15,100.0	7,115.0	14,658.0	6,790.0	217.3	0.0	-26.99	-141.8	-9,189.1	363.6	262.4	3.594			
15,200.0	7,115.0	14,758.0	6,790.0	219.7	0.0	-26.99	-141.5	-9,289.1	363.6	261.3	3.554			
15,300.0	7,115.0	14,858.0	6,790.0	222.2	0.0	-26.99	-141.3	-9,389.1	363.6	260.2	3.516			
15,400.0	7,115.0	14,958.0	6,790.0	224.7	0.0	-26.99	-141.0	-9,489.1	363.6	259.0	3.477			

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 3
<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 3	<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-													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	15,058.0	6,790.0	227.2	0.0	-26.99	-140.8	-9,589.1	363.6	257.9	105.69	3.440		
15,600.0	7,115.0	15,158.0	6,790.0	229.6	0.0	-26.99	-140.5	-9,689.1	363.6	256.8	106.83	3.404		
15,700.0	7,115.0	15,258.0	6,790.0	232.1	0.0	-26.99	-140.3	-9,789.1	363.6	255.6	107.96	3.368		
15,800.0	7,115.0	15,358.0	6,790.0	234.6	0.0	-26.99	-140.0	-9,889.1	363.6	254.5	109.09	3.333		
15,900.0	7,115.0	15,458.0	6,790.0	237.0	0.0	-26.99	-139.8	-9,989.1	363.6	253.4	110.23	3.299		
16,000.0	7,115.0	15,558.0	6,790.0	239.5	0.0	-26.99	-139.5	-10,089.1	363.6	252.2	111.36	3.265		
16,100.0	7,115.0	15,658.0	6,790.0	242.0	0.0	-26.99	-139.3	-10,189.1	363.6	251.1	112.49	3.232		
16,200.0	7,115.0	15,758.0	6,790.0	244.4	0.0	-26.99	-139.0	-10,289.1	363.6	250.0	113.63	3.200		
16,300.0	7,115.0	15,858.0	6,790.0	246.9	0.0	-26.99	-138.8	-10,389.1	363.6	248.8	114.76	3.168		
16,400.0	7,115.0	15,958.0	6,790.0	249.4	0.0	-26.99	-138.5	-10,489.1	363.6	247.7	115.89	3.137		
16,500.0	7,115.0	16,058.0	6,790.0	251.8	0.0	-26.99	-138.3	-10,589.1	363.6	246.6	117.03	3.107		
16,600.0	7,115.0	16,158.0	6,790.0	254.3	0.0	-26.99	-138.0	-10,689.1	363.6	245.4	118.16	3.077		
16,700.0	7,115.0	16,258.0	6,790.0	256.8	0.0	-26.99	-137.8	-10,789.1	363.6	244.3	119.29	3.048		
16,800.0	7,115.0	16,358.0	6,790.0	259.2	0.0	-26.99	-137.5	-10,889.1	363.6	243.2	120.43	3.019		
16,900.0	7,115.0	16,458.0	6,790.0	261.7	0.0	-26.99	-137.3	-10,989.1	363.6	242.0	121.56	2.991		
17,000.0	7,115.0	16,558.0	6,790.0	264.2	0.0	-26.99	-137.0	-11,089.1	363.6	240.9	122.70	2.964		
17,100.0	7,115.0	16,658.0	6,790.0	266.7	0.0	-26.99	-136.8	-11,189.1	363.6	239.8	123.83	2.936		
17,200.0	7,115.0	16,758.0	6,790.0	269.1	0.0	-26.99	-136.5	-11,289.1	363.6	238.6	124.96	2.910		
17,300.0	7,115.0	16,858.0	6,790.0	271.6	0.0	-26.99	-136.3	-11,389.1	363.6	237.5	126.10	2.884		
17,400.0	7,115.0	16,958.0	6,790.0	274.1	0.0	-26.99	-136.0	-11,489.1	363.6	236.4	127.23	2.858		
17,500.0	7,115.0	17,058.0	6,790.0	276.5	0.0	-26.99	-135.8	-11,589.1	363.6	235.2	128.37	2.833		
17,600.0	7,115.0	17,158.0	6,790.0	279.0	0.0	-26.99	-135.5	-11,689.1	363.6	234.1	129.50	2.808		
17,700.0	7,115.0	17,258.0	6,790.0	281.5	0.0	-26.99	-135.3	-11,789.1	363.6	233.0	130.63	2.783		
17,710.2	7,115.0	17,268.2	6,790.0	281.7	0.0	-26.99	-135.2	-11,799.3	363.6	232.9	130.75	2.781		
17,711.0	7,115.0	17,268.6	6,790.0	281.7	0.0	-26.99	-135.2	-11,799.7	363.6	232.9	130.76	2.781 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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-													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)		Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-148.78	-47.7	-28.9	55.8					
100.0	100.0	100.0	100.0	0.1	0.0	-148.78	-47.7	-28.9	55.8	55.7	0.13	420.079		
200.0	200.0	200.0	200.0	0.3	0.0	-148.78	-47.7	-28.9	55.8	55.5	0.31	181.553 CC, ES		
300.0	300.0	299.3	299.2	0.5	0.0	-59.14	-48.0	-29.7	56.0	55.5	0.48	116.088		
400.0	400.0	398.5	398.5	0.7	0.0	-59.73	-48.9	-32.2	56.7	56.0	0.66	85.745		
500.0	499.9	497.7	497.6	0.9	0.0	-60.68	-50.3	-36.2	57.8	57.0	0.85	68.327		
600.0	599.7	597.0	596.6	1.1	0.0	-61.95	-52.3	-41.9	59.4	58.4	1.04	57.074		
700.0	699.4	696.2	695.5	1.3	0.0	-63.48	-54.9	-49.2	61.5	60.2	1.25	49.235		
800.0	798.9	795.3	794.3	1.5	0.0	-65.21	-58.0	-58.1	64.1	62.6	1.47	43.483		
900.0	898.3	894.5	892.8	1.8	0.0	-67.08	-61.7	-68.6	67.2	65.5	1.72	39.101		
1,000.0	997.4	993.6	991.1	2.0	0.0	-69.03	-66.0	-80.7	71.0	69.0	1.99	35.674		
1,100.0	1,096.3	1,092.7	1,089.1	2.3	0.0	-71.00	-70.8	-94.4	75.2	73.0	2.28	32.940		
1,200.0	1,194.9	1,191.7	1,186.8	2.7	0.0	-72.93	-76.2	-109.7	80.1	77.5	2.61	30.759		
1,300.0	1,293.5	1,290.7	1,284.1	3.0	0.0	-74.17	-82.2	-126.5	85.9	83.0	2.93	29.307		
1,400.0	1,392.0	1,389.6	1,381.0	3.3	0.0	-74.37	-88.7	-145.0	92.7	89.5	3.26	28.464		
1,500.0	1,490.5	1,488.6	1,477.7	3.7	0.0	-73.76	-95.7	-164.9	100.5	96.9	3.58	28.068		
1,600.0	1,589.0	1,588.2	1,575.0	4.0	0.0	-73.04	-103.0	-185.5	108.5	104.6	3.90	27.815		
1,700.0	1,687.5	1,687.9	1,672.3	4.3	0.0	-72.42	-110.2	-206.0	116.6	112.4	4.22	27.600		
1,800.0	1,786.0	1,787.6	1,769.5	4.7	0.0	-71.88	-117.4	-226.6	124.6	120.1	4.55	27.415		
1,900.0	1,884.6	1,887.2	1,866.8	5.0	0.0	-71.40	-124.7	-247.1	132.7	127.9	4.87	27.254		
2,000.0	1,983.1	1,986.9	1,964.0	5.4	0.0	-70.98	-131.9	-267.7	140.8	135.6	5.19	27.113		
2,100.0	2,081.6	2,086.6	2,061.3	5.7	0.0	-70.60	-139.2	-288.2	148.9	143.4	5.52	26.989		
2,200.0	2,180.1	2,186.2	2,158.5	6.1	0.0	-70.27	-146.4	-308.8	157.0	151.2	5.84	26.879		
2,300.0	2,278.6	2,285.9	2,255.8	6.4	0.0	-69.96	-153.7	-329.3	165.1	158.9	6.16	26.781		
2,400.0	2,377.2	2,385.6	2,353.1	6.7	0.0	-69.69	-160.9	-349.8	173.2	166.7	6.49	26.693		
2,500.0	2,475.7	2,485.2	2,450.3	7.1	0.0	-69.44	-168.2	-370.4	181.3	174.5	6.81	26.614		
2,600.0	2,574.2	2,584.9	2,547.6	7.4	0.0	-69.21	-175.4	-390.9	189.4	182.3	7.14	26.542		
2,700.0	2,672.7	2,684.6	2,644.8	7.8	0.0	-69.00	-182.7	-411.5	197.5	190.1	7.46	26.476		
2,800.0	2,771.2	2,784.2	2,742.1	8.1	0.0	-68.80	-189.9	-432.0	205.7	197.9	7.79	26.417		
2,900.0	2,869.8	2,883.9	2,839.3	8.5	0.0	-68.63	-197.2	-452.6	213.8	205.7	8.11	26.362		
3,000.0	2,968.3	2,983.6	2,936.6	8.8	0.0	-68.46	-204.4	-473.1	221.9	213.5	8.43	26.311		
3,100.0	3,066.8	3,083.2	3,033.9	9.2	0.0	-68.31	-211.7	-493.7	230.0	221.3	8.76	26.265		
3,200.0	3,165.3	3,182.9	3,131.1	9.5	0.0	-68.16	-218.9	-514.2	238.2	229.1	9.08	26.222		
3,300.0	3,263.8	3,282.6	3,228.4	9.9	0.0	-68.03	-226.2	-534.8	246.3	236.9	9.41	26.182		
3,400.0	3,362.4	3,382.2	3,325.6	10.2	0.0	-67.90	-233.4	-555.3	254.4	244.7	9.73	26.145		
3,500.0	3,460.9	3,481.9	3,422.9	10.6	0.0	-67.78	-240.7	-575.8	262.5	252.5	10.06	26.110		
3,600.0	3,559.4	3,581.6	3,520.1	10.9	0.0	-67.67	-247.9	-596.4	270.7	260.3	10.38	26.078		
3,700.0	3,657.9	3,681.2	3,617.4	11.3	0.0	-67.57	-255.2	-616.9	278.8	268.1	10.70	26.047		
3,800.0	3,756.4	3,780.9	3,714.7	11.6	0.0	-67.47	-262.4	-637.5	286.9	275.9	11.03	26.019		
3,900.0	3,855.0	3,880.6	3,811.9	12.0	0.0	-67.38	-269.6	-658.0	295.1	283.7	11.35	25.992		
4,000.0	3,953.5	3,980.2	3,909.2	12.3	0.0	-67.29	-276.9	-678.6	303.2	291.5	11.68	25.967		
4,100.0	4,052.0	4,079.9	4,006.4	12.7	0.0	-67.21	-284.1	-699.1	311.3	299.3	12.00	25.943		
4,200.0	4,150.5	4,179.6	4,103.7	13.0	0.0	-67.13	-291.4	-719.7	319.5	307.2	12.33	25.920		
4,300.0	4,249.0	4,279.3	4,200.9	13.4	0.0	-67.05	-298.6	-740.2	327.6	315.0	12.65	25.899		
4,400.0	4,347.6	4,378.9	4,298.2	13.7	0.0	-66.98	-305.9	-760.7	335.7	322.8	12.97	25.879		
4,500.0	4,446.1	4,478.6	4,395.5	14.1	0.0	-66.91	-313.1	-781.3	343.9	330.6	13.30	25.860		
4,600.0	4,544.6	4,578.3	4,492.7	14.4	0.0	-66.85	-320.4	-801.8	352.0	338.4	13.62	25.841		
4,700.0	4,643.1	4,677.9	4,590.0	14.8	0.0	-66.79	-327.6	-822.4	360.2	346.2	13.95	25.824		
4,800.0	4,741.6	4,777.6	4,687.2	15.1	0.0	-66.73	-334.9	-842.9	368.3	354.0	14.27	25.807		
4,900.0	4,840.1	4,877.3	4,784.5	15.5	0.0	-66.67	-342.1	-863.5	376.4	361.8	14.60	25.792		
5,000.0	4,938.7	4,976.9	4,881.7	15.8	0.0	-66.62	-349.4	-884.0	384.6	369.7	14.92	25.777		
5,100.0	5,037.2	5,076.6	4,979.0	16.2	0.0	-66.56	-356.6	-904.6	392.7	377.5	15.24	25.762		

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 3
<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 3	<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-												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	5,135.7	5,176.3	5,076.3	16.5	0.0	-66.51	-363.9	-925.1	400.9	385.3	15.57	25.748	
5,300.0	5,234.2	5,275.9	5,173.5	16.9	0.0	-66.47	-371.1	-945.7	409.0	393.1	15.89	25.735	
5,400.0	5,332.7	5,375.6	5,270.8	17.2	0.0	-66.42	-378.4	-966.2	417.1	400.9	16.22	25.723	
5,500.0	5,431.3	5,475.3	5,368.0	17.6	0.0	-66.37	-385.6	-986.7	425.3	408.7	16.54	25.710	
5,600.0	5,529.8	5,574.9	5,465.3	17.9	0.0	-66.33	-392.9	-1,007.3	433.4	416.6	16.87	25.699	
5,700.0	5,628.3	5,674.6	5,562.5	18.3	0.0	-66.29	-400.1	-1,027.8	441.6	424.4	17.19	25.688	
5,800.0	5,726.8	5,774.3	5,659.8	18.6	0.0	-66.25	-407.3	-1,048.4	449.7	432.2	17.51	25.677	
5,900.0	5,825.3	5,873.9	5,757.1	19.0	0.0	-66.21	-414.6	-1,068.9	457.8	440.0	17.84	25.667	
6,000.0	5,923.9	5,973.6	5,854.3	19.3	0.0	-66.18	-421.8	-1,089.5	466.0	447.8	18.16	25.657	
6,100.0	6,022.4	6,073.3	5,951.6	19.7	0.0	-66.14	-429.1	-1,110.0	474.1	455.6	18.49	25.647	
6,200.0	6,120.9	6,172.9	6,048.8	20.0	0.0	-66.11	-436.3	-1,130.6	482.3	463.5	18.81	25.638	
6,300.0	6,219.4	6,272.6	6,146.1	20.4	0.0	-66.07	-443.6	-1,151.1	490.4	471.3	19.14	25.629	
6,400.0	6,317.9	6,372.3	6,243.3	20.7	0.0	-66.04	-450.8	-1,171.6	498.6	479.1	19.46	25.620	
6,500.0	6,416.5	6,458.5	6,327.2	21.1	0.0	-65.86	-457.1	-1,190.8	507.4	487.7	19.77	25.669	
6,600.0	6,515.0	6,532.6	6,397.0	21.4	0.0	-64.90	-462.3	-1,215.0	520.7	500.7	19.99	26.043	
6,700.0	6,613.4	6,600.0	6,457.6	21.8	0.0	-62.92	-466.7	-1,243.9	538.8	518.7	20.10	26.802	
6,800.0	6,709.1	6,671.8	6,518.6	22.4	0.0	-59.91	-471.2	-1,281.7	557.3	537.0	20.22	27.559	
6,900.0	6,799.0	6,739.5	6,571.8	23.2	0.0	-57.58	-475.1	-1,323.3	573.5	553.0	20.54	27.926	
7,000.0	6,881.1	6,800.0	6,615.3	24.3	0.0	-55.90	-478.3	-1,365.1	587.1	566.0	21.06	27.874	
7,100.0	6,953.3	6,873.1	6,662.4	25.6	0.0	-54.67	-481.7	-1,420.9	597.3	575.5	21.79	27.416	
7,200.0	7,013.8	6,939.4	6,699.3	27.2	0.0	-54.02	-484.3	-1,475.8	604.1	581.4	22.77	26.527	
7,300.0	7,061.1	7,000.0	6,727.9	28.9	0.0	-53.87	-486.3	-1,529.2	607.3	583.3	24.04	25.263	
7,400.0	7,094.0	7,072.0	6,755.2	30.9	0.0	-54.28	-488.2	-1,595.8	606.8	581.1	25.63	23.677	
7,500.0	7,111.8	7,138.6	6,773.6	33.0	0.0	-55.18	-489.4	-1,659.8	602.6	575.1	27.52	21.898	
7,600.0	7,115.0	7,200.0	6,784.5	35.2	0.0	-56.25	-490.1	-1,720.1	595.7	566.1	29.61	20.118	
7,700.0	7,115.0	7,274.3	6,789.9	37.4	0.0	-56.71	-490.3	-1,794.2	592.3	560.7	31.60	18.744	
7,738.7	7,115.0	7,308.7	6,790.0	38.2	0.0	-56.72	-490.2	-1,828.6	592.2	559.9	32.32	18.322	
7,800.0	7,115.0	7,370.1	6,790.0	39.6	0.0	-56.72	-490.1	-1,889.9	592.2	558.8	33.47	17.693	
7,900.0	7,115.0	7,470.1	6,790.0	41.9	0.0	-56.72	-489.8	-1,989.9	592.2	556.9	35.37	16.746	
8,000.0	7,115.0	7,570.1	6,790.0	44.1	0.0	-56.72	-489.6	-2,089.9	592.2	555.0	37.28	15.887	
8,100.0	7,115.0	7,670.1	6,790.0	46.5	0.0	-56.72	-489.3	-2,189.9	592.2	553.0	39.21	15.105	
8,200.0	7,115.0	7,770.1	6,790.0	48.8	0.0	-56.72	-489.1	-2,289.9	592.2	551.1	41.15	14.392	
8,300.0	7,115.0	7,870.1	6,790.0	51.1	0.0	-56.72	-488.8	-2,389.9	592.2	549.1	43.10	13.740	
8,400.0	7,115.0	7,970.1	6,790.0	53.5	0.0	-56.72	-488.6	-2,489.9	592.2	547.2	45.07	13.141	
8,500.0	7,115.0	8,070.1	6,790.0	55.8	0.0	-56.72	-488.3	-2,589.9	592.2	545.2	47.04	12.589	
8,600.0	7,115.0	8,170.1	6,790.0	58.2	0.0	-56.72	-488.1	-2,689.9	592.2	543.2	49.02	12.080	
8,700.0	7,115.0	8,270.1	6,790.0	60.6	0.0	-56.72	-487.8	-2,789.9	592.2	541.2	51.01	11.609	
8,800.0	7,115.0	8,370.1	6,790.0	63.0	0.0	-56.72	-487.6	-2,889.9	592.2	539.2	53.01	11.172	
8,900.0	7,115.0	8,470.1	6,790.0	65.3	0.0	-56.72	-487.3	-2,989.9	592.2	537.2	55.01	10.766	
9,000.0	7,115.0	8,570.1	6,790.0	67.7	0.0	-56.72	-487.1	-3,089.9	592.2	535.2	57.02	10.387	
9,100.0	7,115.0	8,670.1	6,790.0	70.1	0.0	-56.72	-486.8	-3,189.9	592.2	533.2	59.03	10.033	
9,200.0	7,115.0	8,770.1	6,790.0	72.6	0.0	-56.72	-486.6	-3,289.9	592.2	531.2	61.04	9.702	
9,300.0	7,115.0	8,870.1	6,790.0	75.0	0.0	-56.72	-486.3	-3,389.9	592.2	529.2	63.06	9.392	
9,400.0	7,115.0	8,970.1	6,790.0	77.4	0.0	-56.72	-486.1	-3,489.9	592.2	527.2	65.08	9.100	
9,500.0	7,115.0	9,070.1	6,790.0	79.8	0.0	-56.72	-485.8	-3,589.9	592.2	525.1	67.11	8.825	
9,600.0	7,115.0	9,170.1	6,790.0	82.2	0.0	-56.72	-485.6	-3,689.9	592.2	523.1	69.13	8.566	
9,700.0	7,115.0	9,270.1	6,790.0	84.6	0.0	-56.72	-485.3	-3,789.9	592.2	521.1	71.16	8.322	
9,800.0	7,115.0	9,370.1	6,790.0	87.1	0.0	-56.72	-485.1	-3,889.9	592.2	519.0	73.20	8.091	
9,900.0	7,115.0	9,470.1	6,790.0	89.5	0.0	-56.72	-484.8	-3,989.9	592.2	517.0	75.23	7.872	
10,000.0	7,115.0	9,570.1	6,790.0	91.9	0.0	-56.72	-484.6	-4,089.9	592.2	515.0	77.27	7.665	
10,100.0	7,115.0	9,670.1	6,790.0	94.4	0.0	-56.72	-484.3	-4,189.9	592.2	512.9	79.31	7.468	
10,200.0	7,115.0	9,770.1	6,790.0	96.8	0.0	-56.72	-484.1	-4,289.9	592.2	510.9	81.35	7.280	

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 3
<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 3	<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-													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		
10,300.0	7,115.0	9,870.1	6,790.0	99.3	0.0	-56.72	-483.8	-4,389.9	592.2	508.8	83.39	7.102		
10,400.0	7,115.0	9,970.1	6,790.0	101.7	0.0	-56.72	-483.6	-4,489.9	592.2	506.8	85.43	6.932		
10,500.0	7,115.0	10,070.1	6,790.0	104.1	0.0	-56.72	-483.3	-4,589.9	592.2	504.8	87.47	6.770		
10,600.0	7,115.0	10,170.1	6,790.0	106.6	0.0	-56.72	-483.1	-4,689.9	592.2	502.7	89.52	6.616		
10,700.0	7,115.0	10,270.1	6,790.0	109.0	0.0	-56.72	-482.8	-4,789.9	592.2	500.7	91.57	6.468		
10,800.0	7,115.0	10,370.1	6,790.0	111.5	0.0	-56.72	-482.6	-4,889.9	592.2	498.6	93.61	6.326		
10,900.0	7,115.0	10,470.1	6,790.0	113.9	0.0	-56.72	-482.3	-4,989.9	592.2	496.6	95.66	6.191		
11,000.0	7,115.0	10,570.1	6,790.0	116.4	0.0	-56.72	-482.1	-5,089.9	592.2	494.5	97.71	6.061		
11,100.0	7,115.0	10,670.1	6,790.0	118.8	0.0	-56.72	-481.8	-5,189.9	592.2	492.5	99.76	5.936		
11,200.0	7,115.0	10,770.1	6,790.0	121.3	0.0	-56.72	-481.6	-5,289.9	592.2	490.4	101.81	5.817		
11,300.0	7,115.0	10,870.1	6,790.0	123.7	0.0	-56.72	-481.3	-5,389.9	592.2	488.4	103.87	5.702		
11,400.0	7,115.0	10,970.1	6,790.0	126.2	0.0	-56.72	-481.1	-5,489.9	592.2	486.3	105.92	5.591		
11,500.0	7,115.0	11,070.1	6,790.0	128.6	0.0	-56.72	-480.8	-5,589.9	592.2	484.3	107.97	5.485		
11,600.0	7,115.0	11,170.1	6,790.0	131.1	0.0	-56.72	-480.6	-5,689.9	592.2	482.2	110.03	5.383		
11,700.0	7,115.0	11,270.1	6,790.0	133.5	0.0	-56.72	-480.3	-5,789.9	592.2	480.2	112.08	5.284		
11,800.0	7,115.0	11,370.1	6,790.0	136.0	0.0	-56.72	-480.1	-5,889.9	592.2	478.1	114.14	5.189		
11,900.0	7,115.0	11,470.1	6,790.0	138.5	0.0	-56.72	-479.8	-5,989.9	592.2	476.0	116.19	5.097		
12,000.0	7,115.0	11,570.1	6,790.0	140.9	0.0	-56.72	-479.6	-6,089.9	592.2	474.0	118.25	5.008		
12,100.0	7,115.0	11,670.1	6,790.0	143.4	0.0	-56.72	-479.3	-6,189.9	592.2	471.9	120.31	4.923		
12,200.0	7,115.0	11,770.1	6,790.0	145.8	0.0	-56.72	-479.1	-6,289.9	592.2	469.9	122.36	4.840		
12,300.0	7,115.0	11,870.1	6,790.0	148.3	0.0	-56.72	-478.8	-6,389.9	592.2	467.8	124.42	4.760		
12,400.0	7,115.0	11,970.1	6,790.0	150.7	0.0	-56.72	-478.6	-6,489.9	592.2	465.8	126.48	4.682		
12,500.0	7,115.0	12,070.1	6,790.0	153.2	0.0	-56.72	-478.3	-6,589.9	592.2	463.7	128.54	4.607		
12,600.0	7,115.0	12,170.1	6,790.0	155.7	0.0	-56.72	-478.1	-6,689.9	592.2	461.6	130.60	4.535		
12,700.0	7,115.0	12,270.1	6,790.0	158.1	0.0	-56.72	-477.8	-6,789.9	592.2	459.6	132.66	4.464		
12,800.0	7,115.0	12,370.1	6,790.0	160.6	0.0	-56.72	-477.6	-6,889.9	592.2	457.5	134.72	4.396		
12,900.0	7,115.0	12,470.1	6,790.0	163.1	0.0	-56.72	-477.3	-6,989.9	592.2	455.5	136.78	4.330		
13,000.0	7,115.0	12,570.1	6,790.0	165.5	0.0	-56.72	-477.1	-7,089.9	592.2	453.4	138.84	4.266		
13,100.0	7,115.0	12,670.1	6,790.0	168.0	0.0	-56.72	-476.8	-7,189.9	592.2	451.3	140.90	4.203		
13,200.0	7,115.0	12,770.1	6,790.0	170.4	0.0	-56.72	-476.6	-7,289.9	592.2	449.3	142.96	4.143		
13,300.0	7,115.0	12,870.1	6,790.0	172.9	0.0	-56.72	-476.3	-7,389.9	592.2	447.2	145.02	4.084		
13,400.0	7,115.0	12,970.1	6,790.0	175.4	0.0	-56.72	-476.1	-7,489.9	592.2	445.1	147.09	4.026		
13,500.0	7,115.0	13,070.1	6,790.0	177.8	0.0	-56.72	-475.8	-7,589.9	592.2	443.1	149.15	3.971		
13,600.0	7,115.0	13,170.1	6,790.0	180.3	0.0	-56.72	-475.6	-7,689.9	592.2	441.0	151.21	3.917		
13,700.0	7,115.0	13,270.1	6,790.0	182.8	0.0	-56.72	-475.3	-7,789.9	592.2	439.0	153.27	3.864		
13,800.0	7,115.0	13,370.1	6,790.0	185.2	0.0	-56.72	-475.1	-7,889.9	592.2	436.9	155.34	3.813		
13,900.0	7,115.0	13,470.1	6,790.0	187.7	0.0	-56.72	-474.8	-7,989.9	592.2	434.8	157.40	3.763		
14,000.0	7,115.0	13,570.1	6,790.0	190.2	0.0	-56.72	-474.6	-8,089.9	592.2	432.8	159.46	3.714		
14,100.0	7,115.0	13,670.1	6,790.0	192.6	0.0	-56.72	-474.3	-8,189.9	592.2	430.7	161.53	3.666		
14,200.0	7,115.0	13,770.1	6,790.0	195.1	0.0	-56.72	-474.1	-8,289.9	592.2	428.6	163.59	3.620		
14,300.0	7,115.0	13,870.1	6,790.0	197.5	0.0	-56.72	-473.8	-8,389.9	592.2	426.6	165.65	3.575		
14,400.0	7,115.0	13,970.1	6,790.0	200.0	0.0	-56.72	-473.6	-8,489.9	592.2	424.5	167.72	3.531		
14,500.0	7,115.0	14,070.1	6,790.0	202.5	0.0	-56.72	-473.3	-8,589.9	592.2	422.5	169.78	3.488		
14,600.0	7,115.0	14,170.1	6,790.0	204.9	0.0	-56.72	-473.1	-8,689.9	592.2	420.4	171.85	3.446		
14,700.0	7,115.0	14,270.1	6,790.0	207.4	0.0	-56.72	-472.8	-8,789.9	592.2	418.3	173.91	3.405		
14,800.0	7,115.0	14,370.1	6,790.0	209.9	0.0	-56.72	-472.6	-8,889.9	592.2	416.3	175.98	3.365		
14,900.0	7,115.0	14,470.1	6,790.0	212.3	0.0	-56.72	-472.3	-8,989.9	592.2	414.2	178.04	3.326		
15,000.0	7,115.0	14,570.1	6,790.0	214.8	0.0	-56.72	-472.1	-9,089.9	592.2	412.1	180.11	3.288		
15,100.0	7,115.0	14,670.1	6,790.0	217.3	0.0	-56.72	-471.8	-9,189.9	592.2	410.1	182.17	3.251		
15,200.0	7,115.0	14,770.1	6,790.0	219.7	0.0	-56.72	-471.6	-9,289.9	592.2	408.0	184.24	3.215		
15,300.0	7,115.0	14,870.1	6,790.0	222.2	0.0	-56.72	-471.3	-9,389.9	592.2	405.9	186.30	3.179		
15,400.0	7,115.0	14,970.1	6,790.0	224.7	0.0	-56.72	-471.1	-9,489.9	592.2	403.9	188.37	3.144		

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 3
<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 3	<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-													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			
15,500.0	7,115.0	15,070.1	6,790.0	227.2	0.0	-56.72	-470.8	-9,589.9	592.2	401.8	190.43	3.110		
15,600.0	7,115.0	15,170.1	6,790.0	229.6	0.0	-56.72	-470.6	-9,689.9	592.2	399.7	192.50	3.077		
15,700.0	7,115.0	15,270.1	6,790.0	232.1	0.0	-56.72	-470.3	-9,789.9	592.2	397.7	194.56	3.044		
15,800.0	7,115.0	15,370.1	6,790.0	234.6	0.0	-56.72	-470.1	-9,889.9	592.2	395.6	196.63	3.012		
15,900.0	7,115.0	15,470.1	6,790.0	237.0	0.0	-56.72	-469.8	-9,989.9	592.2	393.5	198.70	2.981		
16,000.0	7,115.0	15,570.1	6,790.0	239.5	0.0	-56.72	-469.6	-10,089.9	592.2	391.5	200.76	2.950		
16,100.0	7,115.0	15,670.1	6,790.0	242.0	0.0	-56.72	-469.3	-10,189.9	592.2	389.4	202.83	2.920		
16,200.0	7,115.0	15,770.1	6,790.0	244.4	0.0	-56.72	-469.1	-10,289.9	592.2	387.3	204.90	2.890		
16,300.0	7,115.0	15,870.1	6,790.0	246.9	0.0	-56.72	-468.8	-10,389.9	592.2	385.3	206.96	2.862		
16,400.0	7,115.0	15,970.1	6,790.0	249.4	0.0	-56.72	-468.6	-10,489.9	592.2	383.2	209.03	2.833		
16,500.0	7,115.0	16,070.1	6,790.0	251.8	0.0	-56.72	-468.3	-10,589.9	592.2	381.1	211.10	2.806		
16,600.0	7,115.0	16,170.1	6,790.0	254.3	0.0	-56.72	-468.1	-10,689.9	592.2	379.1	213.16	2.778		
16,700.0	7,115.0	16,270.1	6,790.0	256.8	0.0	-56.72	-467.8	-10,789.9	592.2	377.0	215.23	2.752		
16,800.0	7,115.0	16,370.1	6,790.0	259.2	0.0	-56.72	-467.6	-10,889.9	592.2	374.9	217.30	2.725		
16,900.0	7,115.0	16,470.1	6,790.0	261.7	0.0	-56.72	-467.3	-10,989.9	592.2	372.9	219.36	2.700		
17,000.0	7,115.0	16,570.1	6,790.0	264.2	0.0	-56.72	-467.1	-11,089.9	592.2	370.8	221.43	2.675		
17,100.0	7,115.0	16,670.1	6,790.0	266.7	0.0	-56.72	-466.8	-11,189.9	592.2	368.7	223.50	2.650		
17,200.0	7,115.0	16,770.1	6,790.0	269.1	0.0	-56.72	-466.6	-11,289.9	592.2	366.7	225.57	2.626		
17,300.0	7,115.0	16,870.1	6,790.0	271.6	0.0	-56.72	-466.3	-11,389.9	592.2	364.6	227.63	2.602		
17,400.0	7,115.0	16,970.1	6,790.0	274.1	0.0	-56.72	-466.1	-11,489.9	592.2	362.5	229.70	2.578		
17,500.0	7,115.0	17,070.1	6,790.0	276.5	0.0	-56.72	-465.8	-11,589.9	592.2	360.5	231.77	2.555		
17,600.0	7,115.0	17,170.1	6,790.0	279.0	0.0	-56.72	-465.6	-11,689.9	592.2	358.4	233.84	2.533		
17,700.0	7,115.0	17,270.1	6,790.0	281.5	0.0	-56.72	-465.3	-11,789.9	592.2	356.3	235.90	2.510		
17,709.9	7,115.0	17,280.0	6,790.0	281.7	0.0	-56.72	-465.3	-11,799.9	592.2	356.1	236.11	2.508		
17,711.0	7,115.0	17,280.0	6,790.0	281.7	0.0	-56.72	-465.3	-11,799.9	592.2	356.1	236.13	2.508 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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 6 - 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	-149.01	-71.8	-43.1	83.7					
100.0	100.0	100.0	100.0	0.1	0.0	-149.01	-71.8	-43.1	83.7	83.6	0.13	630.212		
200.0	200.0	200.0	200.0	0.3	0.0	-149.01	-71.8	-43.1	83.7	83.4	0.31	272.370 CC, ES		
300.0	300.0	298.8	298.8	0.5	0.0	-59.35	-72.1	-43.9	84.0	83.5	0.48	174.034		
400.0	400.0	397.6	397.5	0.7	0.0	-59.88	-73.2	-46.2	84.8	84.1	0.66	128.272		
500.0	499.9	496.4	496.2	0.9	0.0	-60.75	-75.0	-50.0	86.2	85.3	0.85	101.864		
600.0	599.7	595.1	594.8	1.1	0.0	-61.91	-77.6	-55.4	88.1	87.1	1.04	84.694		
700.0	699.4	693.8	693.2	1.3	0.0	-63.34	-80.9	-62.3	90.7	89.5	1.25	72.649		
800.0	798.9	792.5	791.4	1.5	0.0	-64.97	-84.9	-70.8	93.9	92.5	1.47	63.745		
900.0	898.3	891.1	889.4	1.8	0.0	-66.75	-89.6	-80.7	97.8	96.1	1.72	56.912		
1,000.0	997.4	989.7	987.2	2.0	0.0	-68.63	-95.0	-92.2	102.4	100.4	1.99	51.528		
1,100.0	1,096.3	1,088.2	1,084.6	2.3	0.0	-70.56	-101.1	-105.2	107.7	105.5	2.28	47.206		
1,200.0	1,194.9	1,186.6	1,181.7	2.7	0.0	-72.50	-108.0	-119.7	113.8	111.2	2.60	43.729		
1,300.0	1,293.5	1,285.0	1,278.5	3.0	0.0	-73.97	-115.6	-135.7	121.0	118.1	2.93	41.281		
1,400.0	1,392.0	1,383.2	1,374.8	3.3	0.0	-74.71	-123.8	-153.2	129.3	126.1	3.26	39.665		
1,500.0	1,490.5	1,482.2	1,471.6	3.7	0.0	-74.91	-132.7	-172.0	138.6	135.0	3.59	38.604		
1,600.0	1,589.0	1,581.7	1,568.8	4.0	0.0	-75.04	-141.8	-191.1	147.9	144.0	3.92	37.727		
1,700.0	1,687.5	1,681.3	1,666.1	4.3	0.0	-75.15	-150.8	-210.2	157.3	153.0	4.25	36.972		
1,800.0	1,786.0	1,780.8	1,763.4	4.7	0.0	-75.25	-159.8	-229.3	166.7	162.1	4.59	36.314		
1,900.0	1,884.6	1,880.4	1,860.7	5.0	0.0	-75.34	-168.9	-248.4	176.0	171.1	4.93	35.738		
2,000.0	1,983.1	1,980.0	1,958.0	5.4	0.0	-75.42	-177.9	-267.5	185.4	180.1	5.26	35.229		
2,100.0	2,081.6	2,079.5	2,055.3	5.7	0.0	-75.49	-186.9	-286.6	194.8	189.2	5.60	34.777		
2,200.0	2,180.1	2,179.1	2,152.6	6.1	0.0	-75.56	-196.0	-305.7	204.1	198.2	5.94	34.372		
2,300.0	2,278.6	2,278.6	2,249.9	6.4	0.0	-75.62	-205.0	-324.8	213.5	207.2	6.28	34.009		
2,400.0	2,377.2	2,378.2	2,347.2	6.7	0.0	-75.68	-214.0	-343.9	222.8	216.2	6.62	33.680		
2,500.0	2,475.7	2,477.8	2,444.5	7.1	0.0	-75.73	-223.1	-363.0	232.2	225.3	6.96	33.381		
2,600.0	2,574.2	2,577.3	2,541.8	7.4	0.0	-75.77	-232.1	-382.1	241.6	234.3	7.30	33.109		
2,700.0	2,672.7	2,676.9	2,639.1	7.8	0.0	-75.82	-241.1	-401.1	250.9	243.3	7.64	32.860		
2,800.0	2,771.2	2,776.4	2,736.4	8.1	0.0	-75.86	-250.1	-420.2	260.3	252.3	7.98	32.630		
2,900.0	2,869.8	2,876.0	2,833.7	8.5	0.0	-75.90	-259.2	-439.3	269.7	261.4	8.32	32.419		
3,000.0	2,968.3	2,975.6	2,931.0	8.8	0.0	-75.93	-268.2	-458.4	279.0	270.4	8.66	32.224		
3,100.0	3,066.8	3,075.1	3,028.2	9.2	0.0	-75.96	-277.2	-477.5	288.4	279.4	9.00	32.043		
3,200.0	3,165.3	3,174.7	3,125.5	9.5	0.0	-75.99	-286.3	-496.6	297.8	288.4	9.34	31.874		
3,300.0	3,263.8	3,274.2	3,222.8	9.9	0.0	-76.02	-295.3	-515.7	307.1	297.5	9.68	31.717		
3,400.0	3,362.4	3,373.8	3,320.1	10.2	0.0	-76.05	-304.3	-534.8	316.5	306.5	10.03	31.571		
3,500.0	3,460.9	3,473.4	3,417.4	10.6	0.0	-76.08	-313.4	-553.9	325.9	315.5	10.37	31.433		
3,600.0	3,559.4	3,572.9	3,514.7	10.9	0.0	-76.10	-322.4	-573.0	335.2	324.5	10.71	31.304		
3,700.0	3,657.9	3,672.5	3,612.0	11.3	0.0	-76.12	-331.4	-592.1	344.6	333.6	11.05	31.183		
3,800.0	3,756.4	3,772.1	3,709.3	11.6	0.0	-76.14	-340.5	-611.2	354.0	342.6	11.39	31.069		
3,900.0	3,855.0	3,871.6	3,806.6	12.0	0.0	-76.17	-349.5	-630.3	363.3	351.6	11.74	30.961		
4,000.0	3,953.5	3,971.2	3,903.9	12.3	0.0	-76.18	-358.5	-649.4	372.7	360.6	12.08	30.860		
4,100.0	4,052.0	4,070.7	4,001.2	12.7	0.0	-76.20	-367.6	-668.5	382.1	369.6	12.42	30.763		
4,200.0	4,150.5	4,170.3	4,098.5	13.0	0.0	-76.22	-376.6	-687.6	391.4	378.7	12.76	30.672		
4,300.0	4,249.0	4,269.9	4,195.8	13.4	0.0	-76.24	-385.6	-706.7	400.8	387.7	13.10	30.585		
4,400.0	4,347.6	4,369.4	4,293.1	13.7	0.0	-76.25	-394.7	-725.8	410.2	396.7	13.45	30.503		
4,500.0	4,446.1	4,469.0	4,390.4	14.1	0.0	-76.27	-403.7	-744.9	419.5	405.7	13.79	30.425		
4,600.0	4,544.6	4,568.5	4,487.7	14.4	0.0	-76.28	-412.7	-764.0	428.9	414.8	14.13	30.350		
4,700.0	4,643.1	4,668.1	4,584.9	14.8	0.0	-76.30	-421.8	-783.1	438.3	423.8	14.47	30.279		
4,800.0	4,741.6	4,767.7	4,682.2	15.1	0.0	-76.31	-430.8	-802.2	447.6	432.8	14.82	30.211		
4,900.0	4,840.1	4,867.2	4,779.5	15.5	0.0	-76.32	-439.8	-821.2	457.0	441.8	15.16	30.146		
5,000.0	4,938.7	4,966.8	4,876.8	15.8	0.0	-76.34	-448.8	-840.3	466.4	450.9	15.50	30.084		
5,100.0	5,037.2	5,066.3	4,974.1	16.2	0.0	-76.35	-457.9	-859.4	475.7	459.9	15.85	30.024		

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 3
<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 3	<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 6 - 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	
5,200.0	5,135.7	5,165.9	5,071.4	16.5	0.0	-76.36	-466.9	-878.5	485.1	468.9	16.19	29.967	
5,300.0	5,234.2	5,265.5	5,168.7	16.9	0.0	-76.37	-475.9	-897.6	494.5	477.9	16.53	29.912	
5,400.0	5,332.7	5,365.0	5,266.0	17.2	0.0	-76.38	-485.0	-916.7	503.8	487.0	16.87	29.860	
5,500.0	5,431.3	5,464.6	5,363.3	17.6	0.0	-76.39	-494.0	-935.8	513.2	496.0	17.22	29.809	
5,600.0	5,529.8	5,564.1	5,460.6	17.9	0.0	-76.40	-503.0	-954.9	522.6	505.0	17.56	29.761	
5,700.0	5,628.3	5,663.7	5,557.9	18.3	0.0	-76.41	-512.1	-974.0	531.9	514.0	17.90	29.714	
5,800.0	5,726.8	5,763.3	5,655.2	18.6	0.0	-76.42	-521.1	-993.1	541.3	523.1	18.24	29.669	
5,900.0	5,825.3	5,862.8	5,752.5	19.0	0.0	-76.43	-530.1	-1,012.2	550.7	532.1	18.59	29.625	
6,000.0	5,923.9	5,962.4	5,849.8	19.3	0.0	-76.44	-539.2	-1,031.3	560.0	541.1	18.93	29.583	
6,100.0	6,022.4	6,061.9	5,947.1	19.7	0.0	-76.45	-548.2	-1,050.4	569.4	550.1	19.27	29.543	
6,200.0	6,120.9	6,161.5	6,044.4	20.0	0.0	-76.45	-557.2	-1,069.5	578.8	559.1	19.62	29.504	
6,300.0	6,219.4	6,261.1	6,141.6	20.4	0.0	-76.46	-566.3	-1,088.6	588.1	568.2	19.96	29.466	
6,400.0	6,317.9	6,360.6	6,238.9	20.7	0.0	-76.47	-575.3	-1,107.7	597.5	577.2	20.30	29.430	
6,500.0	6,416.5	6,460.2	6,336.2	21.1	0.0	-76.48	-584.3	-1,126.8	606.9	586.2	20.65	29.395	
6,600.0	6,515.0	6,559.7	6,433.5	21.4	0.0	-76.48	-593.4	-1,145.9	616.2	595.2	20.99	29.360	
6,700.0	6,613.4	6,659.3	6,530.8	21.8	0.0	-76.33	-602.4	-1,165.0	625.5	604.1	21.34	29.314	
6,800.0	6,709.1	6,750.0	6,619.4	22.4	0.0	-76.63	-610.6	-1,182.6	632.2	610.3	21.93	28.829	
6,900.0	6,799.0	6,837.1	6,702.4	23.2	0.0	-77.51	-618.3	-1,207.3	637.5	614.7	22.79	27.969	
7,000.0	6,881.1	6,921.6	6,779.2	24.3	0.0	-78.57	-625.4	-1,242.1	642.1	618.2	23.91	26.860	
7,100.0	6,953.3	7,008.2	6,852.2	25.6	0.0	-79.86	-632.1	-1,287.8	646.1	620.9	25.28	25.563	
7,200.0	7,013.8	7,097.1	6,920.2	27.2	0.0	-81.35	-638.3	-1,344.8	649.7	622.8	26.90	24.154	
7,300.0	7,061.1	7,188.8	6,981.3	28.9	0.0	-83.04	-643.8	-1,412.8	652.7	624.0	28.75	22.705	
7,400.0	7,094.0	7,283.8	7,033.6	30.9	0.0	-84.89	-648.5	-1,491.9	655.3	624.5	30.78	21.286	
7,500.0	7,111.8	7,382.6	7,075.0	33.0	0.0	-86.89	-652.1	-1,581.4	657.5	624.5	32.94	19.957	
7,600.0	7,115.0	7,485.8	7,103.0	35.2	0.0	-88.96	-654.5	-1,680.6	659.2	624.0	35.15	18.753	
7,700.0	7,115.0	7,594.9	7,114.8	37.4	0.0	-89.98	-655.3	-1,788.9	660.1	622.7	37.36	17.668	
7,800.0	7,115.0	7,696.4	7,115.0	39.6	0.0	-90.00	-655.1	-1,890.4	660.1	620.5	39.60	16.670	
7,900.0	7,115.0	7,796.4	7,115.0	41.9	0.0	-90.00	-654.8	-1,990.4	660.1	618.3	41.86	15.769	
8,000.0	7,115.0	7,896.4	7,115.0	44.1	0.0	-90.00	-654.6	-2,090.4	660.1	616.0	44.15	14.952	
8,100.0	7,115.0	7,996.4	7,115.0	46.5	0.0	-90.00	-654.3	-2,190.4	660.1	613.7	46.45	14.210	
8,200.0	7,115.0	8,096.4	7,115.0	48.8	0.0	-90.00	-654.1	-2,290.4	660.1	611.3	48.78	13.534	
8,300.0	7,115.0	8,196.4	7,115.0	51.1	0.0	-90.00	-653.8	-2,390.4	660.1	609.0	51.11	12.915	
8,400.0	7,115.0	8,296.4	7,115.0	53.5	0.0	-90.00	-653.6	-2,490.4	660.1	606.7	53.46	12.348	
8,500.0	7,115.0	8,396.4	7,115.0	55.8	0.0	-90.00	-653.3	-2,590.4	660.1	604.3	55.82	11.826	
8,600.0	7,115.0	8,496.4	7,115.0	58.2	0.0	-90.00	-653.1	-2,690.4	660.1	601.9	58.19	11.344	
8,700.0	7,115.0	8,596.4	7,115.0	60.6	0.0	-90.00	-652.8	-2,790.4	660.1	599.6	60.57	10.899	
8,800.0	7,115.0	8,696.4	7,115.0	63.0	0.0	-90.00	-652.6	-2,890.4	660.1	597.2	62.95	10.486	
8,900.0	7,115.0	8,796.4	7,115.0	65.3	0.0	-90.00	-652.3	-2,990.4	660.1	594.8	65.34	10.102	
9,000.0	7,115.0	8,896.4	7,115.0	67.7	0.0	-90.00	-652.1	-3,090.4	660.1	592.4	67.74	9.745	
9,100.0	7,115.0	8,996.4	7,115.0	70.1	0.0	-90.00	-651.8	-3,190.4	660.1	590.0	70.15	9.411	
9,200.0	7,115.0	9,096.4	7,115.0	72.6	0.0	-90.00	-651.6	-3,290.4	660.1	587.6	72.55	9.098	
9,300.0	7,115.0	9,196.4	7,115.0	75.0	0.0	-90.00	-651.3	-3,390.4	660.1	585.2	74.97	8.806	
9,400.0	7,115.0	9,296.4	7,115.0	77.4	0.0	-90.00	-651.1	-3,490.4	660.1	582.7	77.38	8.531	
9,500.0	7,115.0	9,396.4	7,115.0	79.8	0.0	-90.00	-650.8	-3,590.4	660.1	580.3	79.80	8.272	
9,600.0	7,115.0	9,496.4	7,115.0	82.2	0.0	-90.00	-650.6	-3,690.4	660.1	577.9	82.22	8.028	
9,700.0	7,115.0	9,596.4	7,115.0	84.6	0.0	-90.00	-650.3	-3,790.4	660.1	575.5	84.65	7.798	
9,800.0	7,115.0	9,696.4	7,115.0	87.1	0.0	-90.00	-650.1	-3,890.4	660.1	573.0	87.08	7.581	
9,900.0	7,115.0	9,796.4	7,115.0	89.5	0.0	-90.00	-649.8	-3,990.4	660.1	570.6	89.51	7.375	
10,000.0	7,115.0	9,896.4	7,115.0	91.9	0.0	-90.00	-649.6	-4,090.4	660.1	568.2	91.94	7.180	
10,100.0	7,115.0	9,996.4	7,115.0	94.4	0.0	-90.00	-649.3	-4,190.4	660.1	565.7	94.38	6.994	
10,200.0	7,115.0	10,096.4	7,115.0	96.8	0.0	-90.00	-649.1	-4,290.3	660.1	563.3	96.82	6.818	
10,300.0	7,115.0	10,196.4	7,115.0	99.3	0.0	-90.00	-648.8	-4,390.3	660.1	560.9	99.26	6.651	

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 3
<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 3	<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 6 - 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
10,400.0	7,115.0	10,296.4	7,115.0	101.7	0.0	-90.00	-648.6	-4,490.3	660.1	558.4	101.70	6.491	
10,500.0	7,115.0	10,396.4	7,115.0	104.1	0.0	-90.00	-648.3	-4,590.3	660.1	556.0	104.14	6.339	
10,600.0	7,115.0	10,496.4	7,115.0	106.6	0.0	-90.00	-648.1	-4,690.3	660.1	553.5	106.58	6.193	
10,700.0	7,115.0	10,596.4	7,115.0	109.0	0.0	-90.00	-647.8	-4,790.3	660.1	551.1	109.03	6.055	
10,800.0	7,115.0	10,696.4	7,115.0	111.5	0.0	-90.00	-647.6	-4,890.3	660.1	548.6	111.48	5.922	
10,900.0	7,115.0	10,796.4	7,115.0	113.9	0.0	-90.00	-647.3	-4,990.3	660.1	546.2	113.92	5.794	
11,000.0	7,115.0	10,896.4	7,115.0	116.4	0.0	-90.00	-647.1	-5,090.3	660.1	543.7	116.37	5.672	
11,100.0	7,115.0	10,996.4	7,115.0	118.8	0.0	-90.00	-646.8	-5,190.3	660.1	541.3	118.82	5.555	
11,200.0	7,115.0	11,096.4	7,115.0	121.3	0.0	-90.00	-646.6	-5,290.3	660.1	538.8	121.27	5.443	
11,300.0	7,115.0	11,196.4	7,115.0	123.7	0.0	-90.00	-646.3	-5,390.3	660.1	536.4	123.73	5.335	
11,400.0	7,115.0	11,296.4	7,115.0	126.2	0.0	-90.00	-646.1	-5,490.3	660.1	533.9	126.18	5.232	
11,500.0	7,115.0	11,396.4	7,115.0	128.6	0.0	-90.00	-645.8	-5,590.3	660.1	531.5	128.63	5.132	
11,600.0	7,115.0	11,496.4	7,115.0	131.1	0.0	-90.00	-645.6	-5,690.3	660.1	529.0	131.09	5.036	
11,700.0	7,115.0	11,596.4	7,115.0	133.5	0.0	-90.00	-645.3	-5,790.3	660.1	526.6	133.54	4.943	
11,800.0	7,115.0	11,696.4	7,115.0	136.0	0.0	-90.00	-645.1	-5,890.3	660.1	524.1	136.00	4.854	
11,900.0	7,115.0	11,796.4	7,115.0	138.5	0.0	-90.00	-644.8	-5,990.3	660.1	521.7	138.46	4.768	
12,000.0	7,115.0	11,896.4	7,115.0	140.9	0.0	-90.00	-644.6	-6,090.3	660.1	519.2	140.91	4.685	
12,100.0	7,115.0	11,996.4	7,115.0	143.4	0.0	-90.00	-644.3	-6,190.3	660.1	516.7	143.37	4.604	
12,200.0	7,115.0	12,096.4	7,115.0	145.8	0.0	-90.00	-644.1	-6,290.3	660.1	514.3	145.83	4.527	
12,300.0	7,115.0	12,196.4	7,115.0	148.3	0.0	-90.00	-643.8	-6,390.3	660.1	511.8	148.29	4.452	
12,400.0	7,115.0	12,296.4	7,115.0	150.7	0.0	-90.00	-643.6	-6,490.3	660.1	509.4	150.75	4.379	
12,500.0	7,115.0	12,396.4	7,115.0	153.2	0.0	-90.00	-643.3	-6,590.3	660.1	506.9	153.21	4.309	
12,600.0	7,115.0	12,496.4	7,115.0	155.7	0.0	-90.00	-643.1	-6,690.3	660.1	504.5	155.67	4.241	
12,700.0	7,115.0	12,596.4	7,115.0	158.1	0.0	-90.00	-642.8	-6,790.3	660.1	502.0	158.13	4.175	
12,800.0	7,115.0	12,696.4	7,115.0	160.6	0.0	-90.00	-642.6	-6,890.3	660.1	499.5	160.59	4.111	
12,900.0	7,115.0	12,796.4	7,115.0	163.1	0.0	-90.00	-642.3	-6,990.3	660.1	497.1	163.05	4.049	
13,000.0	7,115.0	12,896.4	7,115.0	165.5	0.0	-90.00	-642.1	-7,090.3	660.1	494.6	165.51	3.988	
13,100.0	7,115.0	12,996.4	7,115.0	168.0	0.0	-90.00	-641.8	-7,190.3	660.1	492.1	167.98	3.930	
13,200.0	7,115.0	13,096.4	7,115.0	170.4	0.0	-90.00	-641.6	-7,290.3	660.1	489.7	170.44	3.873	
13,300.0	7,115.0	13,196.4	7,115.0	172.9	0.0	-90.00	-641.4	-7,390.3	660.1	487.2	172.90	3.818	
13,400.0	7,115.0	13,296.4	7,115.0	175.4	0.0	-90.00	-641.1	-7,490.3	660.1	484.8	175.36	3.764	
13,500.0	7,115.0	13,396.4	7,115.0	177.8	0.0	-90.00	-640.9	-7,590.3	660.1	482.3	177.83	3.712	
13,600.0	7,115.0	13,496.4	7,115.0	180.3	0.0	-90.00	-640.6	-7,690.3	660.1	479.8	180.29	3.661	
13,700.0	7,115.0	13,596.4	7,115.0	182.8	0.0	-90.00	-640.4	-7,790.3	660.1	477.4	182.76	3.612	
13,800.0	7,115.0	13,696.4	7,115.0	185.2	0.0	-90.00	-640.1	-7,890.3	660.1	474.9	185.22	3.564	
13,900.0	7,115.0	13,796.4	7,115.0	187.7	0.0	-90.00	-639.9	-7,990.3	660.1	472.4	187.69	3.517	
14,000.0	7,115.0	13,896.4	7,115.0	190.2	0.0	-90.00	-639.6	-8,090.3	660.1	470.0	190.15	3.472	
14,100.0	7,115.0	13,996.4	7,115.0	192.6	0.0	-90.00	-639.4	-8,190.3	660.1	467.5	192.62	3.427	
14,200.0	7,115.0	14,096.4	7,115.0	195.1	0.0	-90.00	-639.1	-8,290.3	660.1	465.0	195.08	3.384	
14,300.0	7,115.0	14,196.4	7,115.0	197.5	0.0	-90.00	-638.9	-8,390.3	660.1	462.6	197.55	3.342	
14,400.0	7,115.0	14,296.4	7,115.0	200.0	0.0	-90.00	-638.6	-8,490.3	660.1	460.1	200.01	3.300	
14,500.0	7,115.0	14,396.4	7,115.0	202.5	0.0	-90.00	-638.4	-8,590.3	660.1	457.6	202.48	3.260	
14,600.0	7,115.0	14,496.4	7,115.0	204.9	0.0	-90.00	-638.1	-8,690.3	660.1	455.2	204.95	3.221	
14,700.0	7,115.0	14,596.4	7,115.0	207.4	0.0	-90.00	-637.9	-8,790.3	660.1	452.7	207.41	3.183	
14,800.0	7,115.0	14,696.4	7,115.0	209.9	0.0	-90.00	-637.6	-8,890.3	660.1	450.2	209.88	3.145	
14,900.0	7,115.0	14,796.4	7,115.0	212.3	0.0	-90.00	-637.4	-8,990.3	660.1	447.8	212.35	3.109	
15,000.0	7,115.0	14,896.4	7,115.0	214.8	0.0	-90.00	-637.1	-9,090.3	660.1	445.3	214.81	3.073	
15,100.0	7,115.0	14,996.4	7,115.0	217.3	0.0	-90.00	-636.9	-9,190.3	660.1	442.8	217.28	3.038	
15,200.0	7,115.0	15,096.4	7,115.0	219.7	0.0	-90.00	-636.6	-9,290.3	660.1	440.4	219.75	3.004	
15,300.0	7,115.0	15,196.4	7,115.0	222.2	0.0	-90.00	-636.4	-9,390.3	660.1	437.9	222.22	2.971	
15,400.0	7,115.0	15,296.4	7,115.0	224.7	0.0	-90.00	-636.1	-9,490.3	660.1	435.4	224.68	2.938	
15,500.0	7,115.0	15,396.4	7,115.0	227.2	0.0	-90.00	-635.9	-9,590.3	660.1	433.0	227.15	2.906	

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 3
<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 3	<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 6 - 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)						
15,600.0	7,115.0	15,496.4	7,115.0	229.6	0.0	-90.00	-635.6	-9,690.3	660.1	430.5	229.62	2.875		
15,700.0	7,115.0	15,596.4	7,115.0	232.1	0.0	-90.00	-635.4	-9,790.3	660.1	428.0	232.09	2.844		
15,800.0	7,115.0	15,696.4	7,115.0	234.6	0.0	-90.00	-635.1	-9,890.3	660.1	425.6	234.56	2.814		
15,900.0	7,115.0	15,796.4	7,115.0	237.0	0.0	-90.00	-634.9	-9,990.3	660.1	423.1	237.02	2.785		
16,000.0	7,115.0	15,896.4	7,115.0	239.5	0.0	-90.00	-634.6	-10,090.3	660.1	420.6	239.49	2.756		
16,100.0	7,115.0	15,996.4	7,115.0	242.0	0.0	-90.00	-634.4	-10,190.3	660.1	418.2	241.96	2.728		
16,200.0	7,115.0	16,096.4	7,115.0	244.4	0.0	-90.00	-634.1	-10,290.3	660.1	415.7	244.43	2.701		
16,300.0	7,115.0	16,196.4	7,115.0	246.9	0.0	-90.00	-633.9	-10,390.3	660.1	413.2	246.90	2.674		
16,400.0	7,115.0	16,296.4	7,115.0	249.4	0.0	-90.00	-633.6	-10,490.3	660.1	410.8	249.37	2.647		
16,500.0	7,115.0	16,396.4	7,115.0	251.8	0.0	-90.00	-633.4	-10,590.3	660.1	408.3	251.84	2.621		
16,600.0	7,115.0	16,496.4	7,115.0	254.3	0.0	-90.00	-633.1	-10,690.3	660.1	405.8	254.31	2.596		
16,700.0	7,115.0	16,596.4	7,115.0	256.8	0.0	-90.00	-632.9	-10,790.3	660.1	403.3	256.78	2.571		
16,800.0	7,115.0	16,696.4	7,115.0	259.2	0.0	-90.00	-632.6	-10,890.3	660.1	400.9	259.24	2.546		
16,900.0	7,115.0	16,796.4	7,115.0	261.7	0.0	-90.00	-632.4	-10,990.3	660.1	398.4	261.71	2.522		
17,000.0	7,115.0	16,896.4	7,115.0	264.2	0.0	-90.00	-632.1	-11,090.3	660.1	395.9	264.18	2.499		
17,100.0	7,115.0	16,996.4	7,115.0	266.7	0.0	-90.00	-631.9	-11,190.3	660.1	393.5	266.65	2.476		
17,200.0	7,115.0	17,096.4	7,115.0	269.1	0.0	-90.00	-631.6	-11,290.3	660.1	391.0	269.12	2.453		
17,300.0	7,115.0	17,196.4	7,115.0	271.6	0.0	-90.00	-631.4	-11,390.3	660.1	388.5	271.59	2.431		
17,400.0	7,115.0	17,296.4	7,115.0	274.1	0.0	-90.00	-631.1	-11,490.3	660.1	386.1	274.06	2.409		
17,500.0	7,115.0	17,396.4	7,115.0	276.5	0.0	-90.00	-630.9	-11,590.3	660.1	383.6	276.53	2.387		
17,600.0	7,115.0	17,496.4	7,115.0	279.0	0.0	-90.00	-630.6	-11,690.3	660.1	381.1	279.00	2.366		
17,700.0	7,115.0	17,596.4	7,115.0	281.5	0.0	-90.00	-630.4	-11,790.3	660.1	378.6	281.47	2.345		
17,709.3	7,115.0	17,605.7	7,115.0	281.7	0.0	-90.00	-630.3	-11,799.6	660.1	378.4	281.70	2.343		
17,711.0	7,115.0	17,606.0	7,115.0	281.7	0.0	-90.00	-630.3	-11,799.9	660.1	378.4	281.74	2.343 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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	-149.09	-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	364.670 CC, ES		
300.0	300.0	298.3	298.3	0.5	0.0	-59.42	-96.6	-58.3	112.4	111.9	0.48	232.898		
400.0	400.0	396.6	396.6	0.7	0.0	-59.92	-97.9	-60.5	113.3	112.7	0.66	171.413		
500.0	499.9	494.9	494.7	0.9	0.0	-60.73	-100.0	-64.1	114.9	114.1	0.85	135.805		
600.0	599.7	593.1	592.8	1.1	0.0	-61.83	-103.0	-69.2	117.1	116.1	1.04	112.558		
700.0	699.4	691.3	690.7	1.3	0.0	-63.18	-106.9	-75.7	120.1	118.8	1.25	96.175		
800.0	798.9	789.4	788.4	1.5	0.0	-64.74	-111.6	-83.7	123.7	122.3	1.47	84.006		
900.0	898.3	887.5	885.8	1.8	0.0	-66.46	-117.1	-93.0	128.2	126.5	1.72	74.625		
1,000.0	997.4	985.5	983.0	2.0	0.0	-68.29	-123.5	-103.9	133.5	131.5	1.99	67.201		
1,100.0	1,096.3	1,083.4	1,079.9	2.3	0.0	-70.20	-130.8	-116.1	139.6	137.3	2.28	61.214		
1,200.0	1,194.9	1,181.1	1,176.3	2.7	0.0	-72.13	-138.8	-129.7	146.6	144.0	2.60	56.376		
1,300.0	1,293.5	1,278.8	1,272.4	3.0	0.0	-73.75	-147.7	-144.8	154.9	151.9	2.93	52.871		
1,400.0	1,392.0	1,376.4	1,368.1	3.3	0.0	-74.79	-157.4	-161.2	164.4	161.2	3.26	50.428		
1,500.0	1,490.5	1,473.7	1,463.3	3.7	0.0	-75.33	-167.9	-179.0	175.2	171.6	3.59	48.768		
1,600.0	1,589.0	1,571.2	1,558.1	4.0	0.0	-75.44	-179.2	-198.1	187.2	183.3	3.92	47.696		
1,700.0	1,687.5	1,670.4	1,654.6	4.3	0.0	-75.42	-191.1	-218.2	199.6	195.4	4.26	46.887		
1,800.0	1,786.0	1,769.6	1,751.0	4.7	0.0	-75.40	-202.9	-238.2	212.0	207.4	4.59	46.182		
1,900.0	1,884.6	1,868.8	1,847.5	5.0	0.0	-75.38	-214.8	-258.3	224.4	219.5	4.93	45.562		
2,000.0	1,983.1	1,968.1	1,943.9	5.4	0.0	-75.36	-226.6	-278.3	236.8	231.6	5.26	45.014		
2,100.0	2,081.6	2,067.3	2,040.4	5.7	0.0	-75.35	-238.5	-298.3	249.3	243.7	5.60	44.527		
2,200.0	2,180.1	2,166.5	2,136.9	6.1	0.0	-75.33	-250.3	-318.4	261.7	255.7	5.93	44.090		
2,300.0	2,278.6	2,265.7	2,233.3	6.4	0.0	-75.32	-262.1	-338.4	274.1	267.8	6.27	43.697		
2,400.0	2,377.2	2,365.0	2,329.8	6.7	0.0	-75.31	-274.0	-358.5	286.5	279.9	6.61	43.342		
2,500.0	2,475.7	2,464.2	2,426.2	7.1	0.0	-75.30	-285.8	-378.5	298.9	292.0	6.95	43.018		
2,600.0	2,574.2	2,563.4	2,522.7	7.4	0.0	-75.29	-297.7	-398.5	311.3	304.0	7.29	42.723		
2,700.0	2,672.7	2,662.7	2,619.2	7.8	0.0	-75.28	-309.5	-418.6	323.7	316.1	7.63	42.453		
2,800.0	2,771.2	2,761.9	2,715.6	8.1	0.0	-75.27	-321.4	-438.6	336.1	328.2	7.96	42.205		
2,900.0	2,869.8	2,861.1	2,812.1	8.5	0.0	-75.27	-333.2	-458.7	348.5	340.2	8.30	41.976		
3,000.0	2,968.3	2,960.3	2,908.5	8.8	0.0	-75.26	-345.1	-478.7	361.0	352.3	8.64	41.764		
3,100.0	3,066.8	3,059.6	3,005.0	9.2	0.0	-75.25	-356.9	-498.7	373.4	364.4	8.98	41.567		
3,200.0	3,165.3	3,158.8	3,101.4	9.5	0.0	-75.25	-368.7	-518.8	385.8	376.5	9.32	41.384		
3,300.0	3,263.8	3,258.0	3,197.9	9.9	0.0	-75.24	-380.6	-538.8	398.2	388.5	9.66	41.213		
3,400.0	3,362.4	3,357.2	3,294.4	10.2	0.0	-75.24	-392.4	-558.9	410.6	400.6	10.00	41.054		
3,500.0	3,460.9	3,456.5	3,390.8	10.6	0.0	-75.23	-404.3	-578.9	423.0	412.7	10.34	40.904		
3,600.0	3,559.4	3,555.7	3,487.3	10.9	0.0	-75.23	-416.1	-598.9	435.4	424.7	10.68	40.764		
3,700.0	3,657.9	3,654.9	3,583.7	11.3	0.0	-75.22	-428.0	-619.0	447.8	436.8	11.02	40.632		
3,800.0	3,756.4	3,754.2	3,680.2	11.6	0.0	-75.22	-439.8	-639.0	460.2	448.9	11.36	40.508		
3,900.0	3,855.0	3,853.4	3,776.6	12.0	0.0	-75.21	-451.6	-659.1	472.7	461.0	11.70	40.391		
4,000.0	3,953.5	3,952.6	3,873.1	12.3	0.0	-75.21	-463.5	-679.1	485.1	473.0	12.04	40.280		
4,100.0	4,052.0	4,051.8	3,969.6	12.7	0.0	-75.21	-475.3	-699.1	497.5	485.1	12.38	40.175		
4,200.0	4,150.5	4,151.1	4,066.0	13.0	0.0	-75.20	-487.2	-719.2	509.9	497.2	12.72	40.075		
4,300.0	4,249.0	4,250.3	4,162.5	13.4	0.0	-75.20	-499.0	-739.2	522.3	509.2	13.06	39.981		
4,400.0	4,347.6	4,349.5	4,258.9	13.7	0.0	-75.20	-510.9	-759.3	534.7	521.3	13.40	39.891		
4,500.0	4,446.1	4,448.7	4,355.4	14.1	0.0	-75.19	-522.7	-779.3	547.1	533.4	13.74	39.805		
4,600.0	4,544.6	4,548.0	4,451.8	14.4	0.0	-75.19	-534.5	-799.3	559.5	545.4	14.09	39.724		
4,700.0	4,643.1	4,647.2	4,548.3	14.8	0.0	-75.19	-546.4	-819.4	571.9	557.5	14.43	39.646		
4,800.0	4,741.6	4,746.4	4,644.8	15.1	0.0	-75.19	-558.2	-839.4	584.4	569.6	14.77	39.572		
4,900.0	4,840.1	4,845.6	4,741.2	15.5	0.0	-75.18	-570.1	-859.5	596.8	581.7	15.11	39.501		
5,000.0	4,938.7	4,944.9	4,837.7	15.8	0.0	-75.18	-581.9	-879.5	609.2	593.7	15.45	39.433		
5,100.0	5,037.2	5,044.1	4,934.1	16.2	0.0	-75.18	-593.8	-899.5	621.6	605.8	15.79	39.368		

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 3
<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 3	<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)				Between Centres (usft)	Between Ellipses (usft)	
5,200.0	5,135.7	5,143.3	5,030.6	16.5	0.0	-75.18	-605.6	-919.6	634.0	617.9	16.13	39.306		
5,300.0	5,234.2	5,242.6	5,127.1	16.9	0.0	-75.17	-617.5	-939.6	646.4	629.9	16.47	39.246		
5,400.0	5,332.7	5,341.8	5,223.5	17.2	0.0	-75.17	-629.3	-959.7	658.8	642.0	16.81	39.189		
5,500.0	5,431.3	5,441.0	5,320.0	17.6	0.0	-75.17	-641.1	-979.7	671.2	654.1	17.15	39.133		
5,600.0	5,529.8	5,540.2	5,416.4	17.9	0.0	-75.17	-653.0	-999.7	683.6	666.1	17.49	39.080		
5,700.0	5,628.3	5,639.5	5,512.9	18.3	0.0	-75.17	-664.8	-1,019.8	696.0	678.2	17.83	39.029		
5,800.0	5,726.8	5,738.7	5,609.3	18.6	0.0	-75.17	-676.7	-1,039.8	708.5	690.3	18.17	38.980		
5,900.0	5,825.3	5,837.9	5,705.8	19.0	0.0	-75.16	-688.5	-1,059.9	720.9	702.4	18.52	38.933		
6,000.0	5,923.9	5,937.1	5,802.3	19.3	0.0	-75.16	-700.4	-1,079.9	733.3	714.4	18.86	38.887		
6,100.0	6,022.4	6,036.4	5,898.7	19.7	0.0	-75.16	-712.2	-1,099.9	745.7	726.5	19.20	38.843		
6,200.0	6,120.9	6,135.6	5,995.2	20.0	0.0	-75.16	-724.0	-1,120.0	758.1	738.6	19.54	38.800		
6,300.0	6,219.4	6,234.8	6,091.6	20.4	0.0	-75.16	-735.9	-1,140.0	770.5	750.6	19.88	38.759		
6,400.0	6,317.9	6,334.1	6,188.1	20.7	0.0	-75.16	-747.7	-1,160.1	782.9	762.7	20.22	38.719		
6,500.0	6,416.5	6,433.3	6,284.5	21.1	0.0	-75.15	-759.6	-1,180.1	795.3	774.8	20.56	38.680		
6,600.0	6,515.0	6,509.7	6,357.7	21.4	0.0	-74.84	-768.5	-1,199.8	809.1	788.2	20.88	38.748		
6,700.0	6,613.4	6,583.3	6,425.6	21.8	0.0	-73.58	-776.8	-1,227.1	825.7	804.6	21.15	39.049		
6,800.0	6,709.1	6,650.0	6,484.0	22.4	0.0	-71.38	-784.0	-1,258.5	842.3	820.8	21.52	39.135		
6,900.0	6,799.0	6,726.3	6,546.4	23.2	0.0	-69.49	-791.6	-1,301.7	857.2	835.1	22.11	38.779		
7,000.0	6,881.1	6,800.0	6,601.4	24.3	0.0	-68.06	-798.2	-1,350.2	870.0	847.1	22.91	37.975		
7,100.0	6,953.3	6,867.2	6,646.4	25.6	0.0	-67.07	-803.6	-1,399.8	880.2	856.3	23.95	36.754		
7,200.0	7,013.8	6,937.4	6,687.5	27.2	0.0	-66.49	-808.6	-1,456.4	887.7	862.4	25.23	35.177		
7,300.0	7,061.1	7,007.8	6,722.3	28.9	0.0	-66.33	-812.7	-1,517.4	892.2	865.5	26.78	33.319		
7,400.0	7,094.0	7,078.4	6,750.4	30.9	0.0	-66.59	-816.0	-1,582.1	893.8	865.3	28.58	31.278		
7,500.0	7,111.8	7,150.0	6,771.3	33.0	0.0	-67.27	-818.4	-1,650.5	892.5	861.9	30.61	29.160		
7,600.0	7,115.0	7,221.6	6,784.6	35.2	0.0	-68.16	-819.9	-1,720.7	888.7	855.9	32.79	27.108		
7,700.0	7,115.0	7,300.0	6,790.0	37.4	0.0	-68.50	-820.4	-1,798.9	886.9	852.0	34.91	25.405		
7,736.7	7,115.0	7,328.6	6,790.0	38.2	0.0	-68.50	-820.3	-1,827.5	886.8	851.2	35.67	24.859		
7,800.0	7,115.0	7,391.8	6,790.0	39.6	0.0	-68.50	-820.1	-1,890.8	886.8	849.9	36.99	23.974		
7,900.0	7,115.0	7,491.8	6,790.0	41.9	0.0	-68.50	-819.9	-1,990.8	886.8	847.7	39.10	22.682		
8,000.0	7,115.0	7,591.8	6,790.0	44.1	0.0	-68.50	-819.6	-2,090.8	886.8	845.6	41.23	21.512		
8,100.0	7,115.0	7,691.8	6,790.0	46.5	0.0	-68.50	-819.4	-2,190.8	886.8	843.5	43.37	20.448		
8,200.0	7,115.0	7,791.8	6,790.0	48.8	0.0	-68.50	-819.1	-2,290.8	886.8	841.3	45.53	19.477		
8,300.0	7,115.0	7,891.8	6,790.0	51.1	0.0	-68.50	-818.9	-2,390.8	886.8	839.1	47.71	18.589		
8,400.0	7,115.0	7,991.8	6,790.0	53.5	0.0	-68.50	-818.6	-2,490.8	886.8	837.0	49.89	17.775		
8,500.0	7,115.0	8,091.8	6,790.0	55.8	0.0	-68.50	-818.4	-2,590.8	886.8	834.8	52.09	17.025		
8,600.0	7,115.0	8,191.8	6,790.0	58.2	0.0	-68.50	-818.1	-2,690.8	886.8	832.6	54.29	16.334		
8,700.0	7,115.0	8,291.8	6,790.0	60.6	0.0	-68.50	-817.9	-2,790.8	886.8	830.3	56.51	15.694		
8,800.0	7,115.0	8,391.8	6,790.0	63.0	0.0	-68.50	-817.6	-2,890.8	886.8	828.1	58.73	15.101		
8,900.0	7,115.0	8,491.8	6,790.0	65.3	0.0	-68.50	-817.4	-2,990.8	886.8	825.9	60.95	14.550		
9,000.0	7,115.0	8,591.8	6,790.0	67.7	0.0	-68.50	-817.1	-3,090.8	886.8	823.7	63.18	14.036		
9,100.0	7,115.0	8,691.8	6,790.0	70.1	0.0	-68.50	-816.9	-3,190.8	886.8	821.4	65.42	13.556		
9,200.0	7,115.0	8,791.8	6,790.0	72.6	0.0	-68.50	-816.6	-3,290.8	886.8	819.2	67.66	13.107		
9,300.0	7,115.0	8,891.8	6,790.0	75.0	0.0	-68.50	-816.4	-3,390.8	886.8	816.9	69.91	12.686		
9,400.0	7,115.0	8,991.8	6,790.0	77.4	0.0	-68.50	-816.1	-3,490.8	886.8	814.7	72.16	12.291		
9,500.0	7,115.0	9,091.8	6,790.0	79.8	0.0	-68.50	-815.9	-3,590.8	886.8	812.4	74.41	11.919		
9,600.0	7,115.0	9,191.8	6,790.0	82.2	0.0	-68.50	-815.6	-3,690.8	886.8	810.2	76.66	11.568		
9,700.0	7,115.0	9,291.8	6,790.0	84.6	0.0	-68.50	-815.4	-3,790.8	886.8	807.9	78.92	11.237		
9,800.0	7,115.0	9,391.8	6,790.0	87.1	0.0	-68.50	-815.1	-3,890.8	886.8	805.7	81.18	10.924		
9,900.0	7,115.0	9,491.8	6,790.0	89.5	0.0	-68.50	-814.9	-3,990.8	886.8	803.4	83.44	10.628		
10,000.0	7,115.0	9,591.8	6,790.0	91.9	0.0	-68.50	-814.6	-4,090.8	886.8	801.1	85.71	10.347		
10,100.0	7,115.0	9,691.8	6,790.0	94.4	0.0	-68.50	-814.4	-4,190.8	886.8	798.9	87.98	10.080		
10,200.0	7,115.0	9,791.8	6,790.0	96.8	0.0	-68.50	-814.1	-4,290.8	886.8	796.6	90.25	9.827		

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 3
<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 3	<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)						
10,300.0	7,115.0	9,891.8	6,790.0	99.3	0.0	-68.50	-813.9	-4,390.8	886.8	794.3	92.52	9.586		
10,400.0	7,115.0	9,991.8	6,790.0	101.7	0.0	-68.50	-813.6	-4,490.8	886.8	792.1	94.79	9.356		
10,500.0	7,115.0	10,091.8	6,790.0	104.1	0.0	-68.50	-813.4	-4,590.8	886.8	789.8	97.06	9.137		
10,600.0	7,115.0	10,191.8	6,790.0	106.6	0.0	-68.50	-813.1	-4,690.8	886.8	787.5	99.34	8.928		
10,700.0	7,115.0	10,291.8	6,790.0	109.0	0.0	-68.50	-812.9	-4,790.8	886.8	785.2	101.61	8.728		
10,800.0	7,115.0	10,391.8	6,790.0	111.5	0.0	-68.50	-812.6	-4,890.8	886.8	783.0	103.89	8.536		
10,900.0	7,115.0	10,491.8	6,790.0	113.9	0.0	-68.50	-812.4	-4,990.8	886.8	780.7	106.17	8.353		
11,000.0	7,115.0	10,591.8	6,790.0	116.4	0.0	-68.50	-812.1	-5,090.8	886.8	778.4	108.45	8.178		
11,100.0	7,115.0	10,691.8	6,790.0	118.8	0.0	-68.50	-811.9	-5,190.8	886.8	776.1	110.73	8.009		
11,200.0	7,115.0	10,791.8	6,790.0	121.3	0.0	-68.50	-811.6	-5,290.8	886.8	773.8	113.01	7.847		
11,300.0	7,115.0	10,891.8	6,790.0	123.7	0.0	-68.50	-811.4	-5,390.8	886.8	771.6	115.29	7.692		
11,400.0	7,115.0	10,991.8	6,790.0	126.2	0.0	-68.50	-811.1	-5,490.8	886.8	769.3	117.58	7.543		
11,500.0	7,115.0	11,091.8	6,790.0	128.6	0.0	-68.50	-810.9	-5,590.8	886.8	767.0	119.86	7.399		
11,600.0	7,115.0	11,191.8	6,790.0	131.1	0.0	-68.50	-810.6	-5,690.8	886.8	764.7	122.14	7.261		
11,700.0	7,115.0	11,291.8	6,790.0	133.5	0.0	-68.50	-810.4	-5,790.8	886.8	762.4	124.43	7.127		
11,800.0	7,115.0	11,391.8	6,790.0	136.0	0.0	-68.50	-810.1	-5,890.8	886.8	760.1	126.72	6.999		
11,900.0	7,115.0	11,491.8	6,790.0	138.5	0.0	-68.50	-809.9	-5,990.8	886.8	757.8	129.00	6.875		
12,000.0	7,115.0	11,591.8	6,790.0	140.9	0.0	-68.50	-809.6	-6,090.8	886.8	755.6	131.29	6.755		
12,100.0	7,115.0	11,691.8	6,790.0	143.4	0.0	-68.50	-809.4	-6,190.8	886.8	753.3	133.58	6.639		
12,200.0	7,115.0	11,791.8	6,790.0	145.8	0.0	-68.50	-809.1	-6,290.8	886.8	751.0	135.87	6.527		
12,300.0	7,115.0	11,891.8	6,790.0	148.3	0.0	-68.50	-808.9	-6,390.8	886.8	748.7	138.16	6.419		
12,400.0	7,115.0	11,991.8	6,790.0	150.7	0.0	-68.50	-808.6	-6,490.8	886.8	746.4	140.44	6.315		
12,500.0	7,115.0	12,091.8	6,790.0	153.2	0.0	-68.50	-808.4	-6,590.8	886.8	744.1	142.73	6.213		
12,600.0	7,115.0	12,191.8	6,790.0	155.7	0.0	-68.50	-808.1	-6,690.8	886.8	741.8	145.02	6.115		
12,700.0	7,115.0	12,291.8	6,790.0	158.1	0.0	-68.50	-807.9	-6,790.8	886.8	739.5	147.32	6.020		
12,800.0	7,115.0	12,391.8	6,790.0	160.6	0.0	-68.50	-807.6	-6,890.8	886.8	737.2	149.61	5.928		
12,900.0	7,115.0	12,491.8	6,790.0	163.1	0.0	-68.50	-807.4	-6,990.8	886.8	734.9	151.90	5.838		
13,000.0	7,115.0	12,591.8	6,790.0	165.5	0.0	-68.50	-807.1	-7,090.8	886.8	732.7	154.19	5.752		
13,100.0	7,115.0	12,691.8	6,790.0	168.0	0.0	-68.50	-806.9	-7,190.8	886.8	730.4	156.48	5.667		
13,200.0	7,115.0	12,791.8	6,790.0	170.4	0.0	-68.50	-806.6	-7,290.8	886.8	728.1	158.77	5.586		
13,300.0	7,115.0	12,891.8	6,790.0	172.9	0.0	-68.50	-806.4	-7,390.8	886.8	725.8	161.07	5.506		
13,400.0	7,115.0	12,991.8	6,790.0	175.4	0.0	-68.50	-806.1	-7,490.8	886.8	723.5	163.36	5.429		
13,500.0	7,115.0	13,091.8	6,790.0	177.8	0.0	-68.50	-805.9	-7,590.8	886.8	721.2	165.65	5.354		
13,600.0	7,115.0	13,191.8	6,790.0	180.3	0.0	-68.50	-805.6	-7,690.8	886.8	718.9	167.95	5.281		
13,700.0	7,115.0	13,291.8	6,790.0	182.8	0.0	-68.50	-805.4	-7,790.8	886.8	716.6	170.24	5.209		
13,800.0	7,115.0	13,391.8	6,790.0	185.2	0.0	-68.50	-805.1	-7,890.8	886.8	714.3	172.53	5.140		
13,900.0	7,115.0	13,491.8	6,790.0	187.7	0.0	-68.50	-804.9	-7,990.8	886.8	712.0	174.83	5.073		
14,000.0	7,115.0	13,591.8	6,790.0	190.2	0.0	-68.50	-804.6	-8,090.8	886.8	709.7	177.12	5.007		
14,100.0	7,115.0	13,691.8	6,790.0	192.6	0.0	-68.50	-804.4	-8,190.8	886.8	707.4	179.42	4.943		
14,200.0	7,115.0	13,791.8	6,790.0	195.1	0.0	-68.50	-804.1	-8,290.7	886.8	705.1	181.71	4.880		
14,300.0	7,115.0	13,891.8	6,790.0	197.5	0.0	-68.50	-803.9	-8,390.7	886.8	702.8	184.01	4.820		
14,400.0	7,115.0	13,991.8	6,790.0	200.0	0.0	-68.50	-803.6	-8,490.7	886.8	700.5	186.30	4.760		
14,500.0	7,115.0	14,091.8	6,790.0	202.5	0.0	-68.50	-803.4	-8,590.7	886.8	698.2	188.60	4.702		
14,600.0	7,115.0	14,191.8	6,790.0	204.9	0.0	-68.50	-803.1	-8,690.7	886.8	696.0	190.90	4.646		
14,700.0	7,115.0	14,291.8	6,790.0	207.4	0.0	-68.50	-802.9	-8,790.7	886.8	693.7	193.19	4.591		
14,800.0	7,115.0	14,391.8	6,790.0	209.9	0.0	-68.50	-802.6	-8,890.7	886.8	691.4	195.49	4.537		
14,900.0	7,115.0	14,491.8	6,790.0	212.3	0.0	-68.50	-802.4	-8,990.7	886.8	689.1	197.78	4.484		
15,000.0	7,115.0	14,591.8	6,790.0	214.8	0.0	-68.50	-802.1	-9,090.7	886.8	686.8	200.08	4.432		
15,100.0	7,115.0	14,691.8	6,790.0	217.3	0.0	-68.50	-801.9	-9,190.7	886.8	684.5	202.38	4.382		
15,200.0	7,115.0	14,791.8	6,790.0	219.7	0.0	-68.50	-801.6	-9,290.7	886.8	682.2	204.67	4.333		
15,300.0	7,115.0	14,891.8	6,790.0	222.2	0.0	-68.50	-801.4	-9,390.7	886.8	679.9	206.97	4.285		
15,400.0	7,115.0	14,991.8	6,790.0	224.7	0.0	-68.50	-801.1	-9,490.7	886.8	677.6	209.27	4.238		

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 3
<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 3	<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			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)	
15,500.0	7,115.0	15,091.8	6,790.0	227.2	0.0	-68.50	-800.9	-9,590.7	886.8	675.3	211.57	4.192		
15,600.0	7,115.0	15,191.8	6,790.0	229.6	0.0	-68.50	-800.6	-9,690.7	886.8	673.0	213.86	4.147		
15,700.0	7,115.0	15,291.8	6,790.0	232.1	0.0	-68.50	-800.4	-9,790.7	886.8	670.7	216.16	4.103		
15,800.0	7,115.0	15,391.8	6,790.0	234.6	0.0	-68.50	-800.1	-9,890.7	886.8	668.4	218.46	4.060		
15,900.0	7,115.0	15,491.8	6,790.0	237.0	0.0	-68.50	-799.9	-9,990.7	886.8	666.1	220.76	4.017		
16,000.0	7,115.0	15,591.8	6,790.0	239.5	0.0	-68.50	-799.6	-10,090.7	886.8	663.8	223.05	3.976		
16,100.0	7,115.0	15,691.8	6,790.0	242.0	0.0	-68.50	-799.4	-10,190.7	886.8	661.5	225.35	3.935		
16,200.0	7,115.0	15,791.8	6,790.0	244.4	0.0	-68.50	-799.1	-10,290.7	886.8	659.2	227.65	3.896		
16,300.0	7,115.0	15,891.8	6,790.0	246.9	0.0	-68.50	-798.9	-10,390.7	886.8	656.9	229.95	3.857		
16,400.0	7,115.0	15,991.8	6,790.0	249.4	0.0	-68.50	-798.6	-10,490.7	886.8	654.6	232.25	3.819		
16,500.0	7,115.0	16,091.8	6,790.0	251.8	0.0	-68.50	-798.4	-10,590.7	886.8	652.3	234.54	3.781		
16,600.0	7,115.0	16,191.8	6,790.0	254.3	0.0	-68.50	-798.1	-10,690.7	886.8	650.0	236.84	3.744		
16,700.0	7,115.0	16,291.8	6,790.0	256.8	0.0	-68.50	-797.9	-10,790.7	886.8	647.7	239.14	3.708		
16,800.0	7,115.0	16,391.8	6,790.0	259.2	0.0	-68.50	-797.6	-10,890.7	886.8	645.4	241.44	3.673		
16,900.0	7,115.0	16,491.8	6,790.0	261.7	0.0	-68.50	-797.4	-10,990.7	886.8	643.1	243.74	3.639		
17,000.0	7,115.0	16,591.8	6,790.0	264.2	0.0	-68.50	-797.1	-11,090.7	886.8	640.8	246.04	3.605		
17,100.0	7,115.0	16,691.8	6,790.0	266.7	0.0	-68.50	-796.9	-11,190.7	886.8	638.5	248.34	3.571		
17,200.0	7,115.0	16,791.8	6,790.0	269.1	0.0	-68.50	-796.6	-11,290.7	886.8	636.2	250.64	3.538		
17,300.0	7,115.0	16,891.8	6,790.0	271.6	0.0	-68.50	-796.4	-11,390.7	886.8	633.9	252.93	3.506		
17,400.0	7,115.0	16,991.8	6,790.0	274.1	0.0	-68.50	-796.1	-11,490.7	886.8	631.6	255.23	3.475		
17,500.0	7,115.0	17,091.8	6,790.0	276.5	0.0	-68.50	-795.9	-11,590.7	886.8	629.3	257.53	3.444		
17,600.0	7,115.0	17,191.8	6,790.0	279.0	0.0	-68.50	-795.6	-11,690.7	886.8	627.0	259.83	3.413		
17,700.0	7,115.0	17,291.8	6,790.0	281.5	0.0	-68.50	-795.4	-11,790.7	886.8	624.7	262.13	3.383		
17,709.2	7,115.0	17,301.0	6,790.0	281.7	0.0	-68.50	-795.4	-11,799.9	886.8	624.5	262.34	3.380		
17,711.0	7,115.0	17,301.1	6,790.0	281.7	0.0	-68.50	-795.4	-11,800.0	886.8	624.5	262.38	3.380 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 3
<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 3	<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
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	-149.09	-119.9	-71.8	139.7					
100.0	100.0	100.0	100.0	0.1	0.0	-149.09	-119.9	-71.8	139.7	139.6	0.13	1,051.562		
200.0	200.0	200.0	200.0	0.3	0.0	-149.09	-119.9	-71.8	139.7	139.4	0.31	454.473	CC, ES	
300.0	300.0	298.0	298.0	0.5	0.0	-59.36	-120.2	-72.5	140.0	139.5	0.48	290.024		
400.0	400.0	396.0	395.9	0.7	0.0	-59.70	-121.4	-74.8	140.8	140.1	0.66	212.964		
500.0	499.9	493.9	493.8	0.9	0.0	-60.26	-123.2	-78.5	142.2	141.3	0.85	168.086		
600.0	599.7	591.9	591.5	1.1	0.0	-61.02	-125.8	-83.7	144.2	143.1	1.04	138.596		
700.0	699.4	689.7	689.2	1.3	0.0	-61.96	-129.2	-90.5	146.7	145.5	1.25	117.664		
800.0	798.9	787.6	786.6	1.5	0.0	-63.07	-133.3	-98.7	149.9	148.5	1.47	101.998		
900.0	898.3	885.4	883.8	1.8	0.0	-64.32	-138.2	-108.4	153.8	152.1	1.71	89.822		
1,000.0	997.4	983.1	980.7	2.0	0.0	-65.68	-143.7	-119.6	158.3	156.3	1.98	80.098		
1,100.0	1,096.3	1,080.8	1,077.4	2.3	0.0	-67.13	-150.1	-132.2	163.5	161.2	2.27	72.176		
1,200.0	1,194.9	1,178.4	1,173.7	2.7	0.0	-68.63	-157.1	-146.3	169.5	166.9	2.58	65.691		
1,300.0	1,293.5	1,275.9	1,269.6	3.0	0.0	-69.91	-164.9	-161.9	176.6	173.7	2.90	60.830		
1,400.0	1,392.0	1,373.3	1,365.2	3.3	0.0	-70.72	-173.4	-178.9	184.9	181.7	3.23	57.284		
1,500.0	1,490.5	1,470.6	1,460.2	3.7	0.0	-71.12	-182.6	-197.3	194.5	191.0	3.55	54.721		
1,600.0	1,589.0	1,567.6	1,554.7	4.0	0.0	-71.15	-192.5	-217.1	205.3	201.5	3.88	52.911		
1,700.0	1,687.5	1,664.3	1,648.5	4.3	0.0	-70.87	-203.0	-238.2	217.3	213.1	4.20	51.693		
1,800.0	1,786.0	1,760.8	1,741.5	4.7	0.0	-70.33	-214.3	-260.8	230.5	226.0	4.52	50.951		
1,900.0	1,884.6	1,856.8	1,833.8	5.0	0.0	-69.59	-226.2	-284.6	244.9	240.1	4.84	50.605		
2,000.0	1,983.1	1,952.4	1,925.2	5.4	0.0	-68.69	-238.7	-309.6	260.6	255.5	5.15	50.593	SF	
2,100.0	2,081.6	2,047.5	2,015.6	5.7	0.0	-67.67	-251.8	-335.9	277.6	272.1	5.46	50.868		
2,200.0	2,180.1	2,142.1	2,105.1	6.1	0.0	-66.57	-265.5	-363.4	295.9	290.1	5.76	51.395		
2,300.0	2,278.6	2,236.1	2,193.5	6.4	0.0	-65.42	-279.8	-392.0	315.5	309.4	6.05	52.144		
2,400.0	2,377.2	2,329.4	2,280.7	6.7	0.0	-64.24	-294.7	-421.7	336.5	330.2	6.34	53.090		
2,500.0	2,475.7	2,422.1	2,366.8	7.1	0.0	-63.06	-310.0	-452.4	358.9	352.3	6.62	54.213		
2,600.0	2,574.2	2,514.8	2,452.4	7.4	0.0	-61.87	-326.0	-484.4	382.7	375.8	6.90	55.495		
2,700.0	2,672.7	2,611.5	2,541.4	7.8	0.0	-60.73	-342.9	-518.2	407.1	400.0	7.17	56.800		
2,800.0	2,771.2	2,708.2	2,630.3	8.1	0.0	-59.71	-359.8	-552.0	431.7	424.3	7.44	58.031		
2,900.0	2,869.8	2,804.8	2,719.3	8.5	0.0	-58.81	-376.7	-585.8	456.4	448.7	7.71	59.193		
3,000.0	2,968.3	2,901.5	2,808.3	8.8	0.0	-58.00	-393.5	-619.6	481.2	473.2	7.98	60.289		
3,100.0	3,066.8	2,998.2	2,897.3	9.2	0.0	-57.26	-410.4	-653.4	506.0	497.8	8.25	61.325		
3,200.0	3,165.3	3,094.8	2,986.2	9.5	0.0	-56.60	-427.3	-687.2	530.9	522.4	8.52	62.304		
3,300.0	3,263.8	3,191.5	3,075.2	9.9	0.0	-55.99	-444.2	-721.0	555.9	547.1	8.79	63.230		
3,400.0	3,362.4	3,288.2	3,164.2	10.2	0.0	-55.44	-461.1	-754.8	581.0	571.9	9.06	64.107		
3,500.0	3,460.9	3,384.8	3,253.2	10.6	0.0	-54.93	-478.0	-788.6	606.1	596.7	9.33	64.938		
3,600.0	3,559.4	3,481.5	3,342.1	10.9	0.0	-54.47	-494.9	-822.4	631.2	621.6	9.60	65.726		
3,700.0	3,657.9	3,578.2	3,431.1	11.3	0.0	-54.04	-511.7	-856.3	656.4	646.5	9.87	66.475		
3,800.0	3,756.4	3,674.8	3,520.1	11.6	0.0	-53.64	-528.6	-890.1	681.6	671.4	10.14	67.186		
3,900.0	3,855.0	3,771.5	3,609.1	12.0	0.0	-53.26	-545.5	-923.9	706.8	696.4	10.41	67.864		
4,000.0	3,953.5	3,868.2	3,698.0	12.3	0.0	-52.92	-562.4	-957.7	732.0	721.3	10.69	68.509		
4,100.0	4,052.0	3,964.8	3,787.0	12.7	0.0	-52.60	-579.3	-991.5	757.3	746.4	10.96	69.124		
4,200.0	4,150.5	4,061.5	3,876.0	13.0	0.0	-52.30	-596.2	-1,025.3	782.6	771.4	11.23	69.711		
4,300.0	4,249.0	4,158.2	3,965.0	13.4	0.0	-52.01	-613.1	-1,059.1	807.9	796.4	11.50	70.272		
4,400.0	4,347.6	4,254.9	4,053.9	13.7	0.0	-51.75	-630.0	-1,092.9	833.3	821.5	11.77	70.808		
4,500.0	4,446.1	4,351.5	4,142.9	14.1	0.0	-51.50	-646.8	-1,126.7	858.6	846.6	12.04	71.321		
4,600.0	4,544.6	4,448.2	4,231.9	14.4	0.0	-51.26	-663.7	-1,160.5	884.0	871.7	12.31	71.813		
4,700.0	4,643.1	4,544.9	4,320.9	14.8	0.0	-51.04	-680.6	-1,194.3	909.4	896.8	12.58	72.284		
4,800.0	4,741.6	4,641.5	4,409.9	15.1	0.0	-50.83	-697.5	-1,228.1	934.7	921.9	12.85	72.736		
4,900.0	4,840.1	4,738.2	4,498.8	15.5	0.0	-50.63	-714.4	-1,261.9	960.1	947.0	13.12	73.170		
5,000.0	4,938.7	4,834.9	4,587.8	15.8	0.0	-50.44	-731.3	-1,295.7	985.6	972.2	13.39	73.587		

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 3
<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 3	<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	-149.14	-144.3	-86.2	168.1					
100.0	100.0	100.0	100.0	0.1	0.0	-149.14	-144.3	-86.2	168.1	167.9	0.13	1,265.128		
200.0	200.0	200.0	200.0	0.3	0.0	-149.14	-144.3	-86.2	168.1	167.8	0.31	546.773 CC, ES		
300.0	300.0	297.5	297.5	0.5	0.0	-59.40	-144.7	-86.9	168.4	167.9	0.48	348.857		
400.0	400.0	395.0	395.0	0.7	0.0	-59.73	-145.9	-89.1	169.3	168.6	0.66	256.012		
500.0	499.9	492.5	492.3	0.9	0.0	-60.26	-148.0	-92.7	170.8	169.9	0.85	201.866		
600.0	599.7	589.9	589.6	1.1	0.0	-60.98	-150.9	-97.7	172.9	171.9	1.04	166.228		
700.0	699.4	687.3	686.7	1.3	0.0	-61.89	-154.6	-104.2	175.7	174.4	1.25	140.889		
800.0	798.9	784.6	783.6	1.5	0.0	-62.96	-159.1	-112.1	179.1	177.7	1.47	121.892		
900.0	898.3	881.9	880.3	1.8	0.0	-64.17	-164.5	-121.4	183.3	181.6	1.71	107.104		
1,000.0	997.4	979.1	976.7	2.0	0.0	-65.49	-170.6	-132.1	188.2	186.2	1.98	95.275		
1,100.0	1,096.3	1,076.2	1,072.8	2.3	0.0	-66.90	-177.6	-144.2	193.9	191.6	2.26	85.627		
1,200.0	1,194.9	1,173.2	1,168.6	2.7	0.0	-68.38	-185.4	-157.7	200.4	197.8	2.58	77.713		
1,300.0	1,293.5	1,270.2	1,263.9	3.0	0.0	-69.70	-194.0	-172.6	208.0	205.1	2.90	71.719		
1,400.0	1,392.0	1,367.0	1,358.9	3.3	0.0	-70.63	-203.3	-188.9	217.1	213.9	3.23	67.266		
1,500.0	1,490.5	1,463.6	1,453.4	3.7	0.0	-71.21	-213.5	-206.5	227.5	223.9	3.56	63.967		
1,600.0	1,589.0	1,560.0	1,547.2	4.0	0.0	-71.48	-224.4	-225.5	239.1	235.2	3.88	61.548		
1,700.0	1,687.5	1,656.1	1,640.5	4.3	0.0	-71.47	-236.0	-245.7	252.0	247.7	4.21	59.817		
1,800.0	1,786.0	1,751.9	1,733.0	4.7	0.0	-71.24	-248.4	-267.3	266.1	261.5	4.54	58.633		
1,900.0	1,884.6	1,847.2	1,824.6	5.0	0.0	-70.80	-261.5	-290.1	281.4	276.5	4.86	57.896		
2,000.0	1,983.1	1,942.2	1,915.5	5.4	0.0	-70.21	-275.3	-314.0	298.0	292.8	5.18	57.531		
2,100.0	2,081.6	2,036.6	2,005.3	5.7	0.0	-69.50	-289.8	-339.2	315.9	310.4	5.50	57.480 SF		
2,200.0	2,180.1	2,130.6	2,094.2	6.1	0.0	-68.70	-304.9	-365.5	335.0	329.2	5.81	57.700		
2,300.0	2,278.6	2,223.9	2,182.1	6.4	0.0	-67.82	-320.7	-392.9	355.5	349.4	6.11	58.155		
2,400.0	2,377.2	2,316.6	2,268.8	6.7	0.0	-66.90	-337.0	-421.3	377.3	370.9	6.42	58.817		
2,500.0	2,475.7	2,409.0	2,354.7	7.1	0.0	-65.95	-354.0	-450.8	400.5	393.8	6.71	59.662		
2,600.0	2,574.2	2,505.9	2,444.5	7.4	0.0	-65.00	-372.1	-482.3	424.3	417.3	7.01	60.563		
2,700.0	2,672.7	2,602.8	2,534.3	7.8	0.0	-64.16	-390.2	-513.8	448.3	441.0	7.30	61.410		
2,800.0	2,771.2	2,699.7	2,624.2	8.1	0.0	-63.40	-408.4	-545.3	472.3	464.7	7.59	62.208		
2,900.0	2,869.8	2,796.6	2,714.0	8.5	0.0	-62.71	-426.5	-576.8	496.3	488.5	7.88	62.959		
3,000.0	2,968.3	2,893.5	2,803.8	8.8	0.0	-62.08	-444.6	-608.3	520.5	512.3	8.18	63.667		
3,100.0	3,066.8	2,990.4	2,893.6	9.2	0.0	-61.52	-462.7	-639.7	544.7	536.2	8.47	64.334		
3,200.0	3,165.3	3,087.3	2,983.5	9.5	0.0	-61.00	-480.8	-671.2	568.9	560.2	8.76	64.964		
3,300.0	3,263.8	3,184.2	3,073.3	9.9	0.0	-60.52	-499.0	-702.7	593.2	584.2	9.05	65.559		
3,400.0	3,362.4	3,281.1	3,163.1	10.2	0.0	-60.08	-517.1	-734.2	617.5	608.2	9.34	66.123		
3,500.0	3,460.9	3,378.0	3,252.9	10.6	0.0	-59.67	-535.2	-765.7	641.9	632.2	9.63	66.657		
3,600.0	3,559.4	3,474.9	3,342.8	10.9	0.0	-59.29	-553.3	-797.2	666.2	656.3	9.92	67.163		
3,700.0	3,657.9	3,571.7	3,432.6	11.3	0.0	-58.94	-571.4	-828.7	690.6	680.4	10.21	67.644		
3,800.0	3,756.4	3,668.6	3,522.4	11.6	0.0	-58.62	-589.6	-860.2	715.1	704.6	10.50	68.101		
3,900.0	3,855.0	3,765.5	3,612.2	12.0	0.0	-58.31	-607.7	-891.7	739.5	728.7	10.79	68.535		
4,000.0	3,953.5	3,862.4	3,702.0	12.3	0.0	-58.03	-625.8	-923.2	764.0	752.9	11.08	68.949		
4,100.0	4,052.0	3,959.3	3,791.9	12.7	0.0	-57.76	-643.9	-954.7	788.4	777.1	11.37	69.344		
4,200.0	4,150.5	4,056.2	3,881.7	13.0	0.0	-57.51	-662.0	-986.2	812.9	801.3	11.66	69.721		
4,300.0	4,249.0	4,153.1	3,971.5	13.4	0.0	-57.27	-680.2	-1,017.7	837.5	825.5	11.95	70.081		
4,400.0	4,347.6	4,250.0	4,061.3	13.7	0.0	-57.05	-698.3	-1,049.2	862.0	849.7	12.24	70.425		
4,500.0	4,446.1	4,346.9	4,151.2	14.1	0.0	-56.83	-716.4	-1,080.7	886.5	874.0	12.53	70.754		
4,600.0	4,544.6	4,443.8	4,241.0	14.4	0.0	-56.64	-734.5	-1,112.2	911.0	898.2	12.82	71.070		
4,700.0	4,643.1	4,540.7	4,330.8	14.8	0.0	-56.45	-752.7	-1,143.7	935.6	922.5	13.11	71.372		
4,800.0	4,741.6	4,637.6	4,420.6	15.1	0.0	-56.27	-770.8	-1,175.2	960.2	946.8	13.40	71.663		
4,900.0	4,840.1	4,734.5	4,510.4	15.5	0.0	-56.10	-788.9	-1,206.7	984.7	971.0	13.69	71.941		

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 3
<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 3	<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 3

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°

