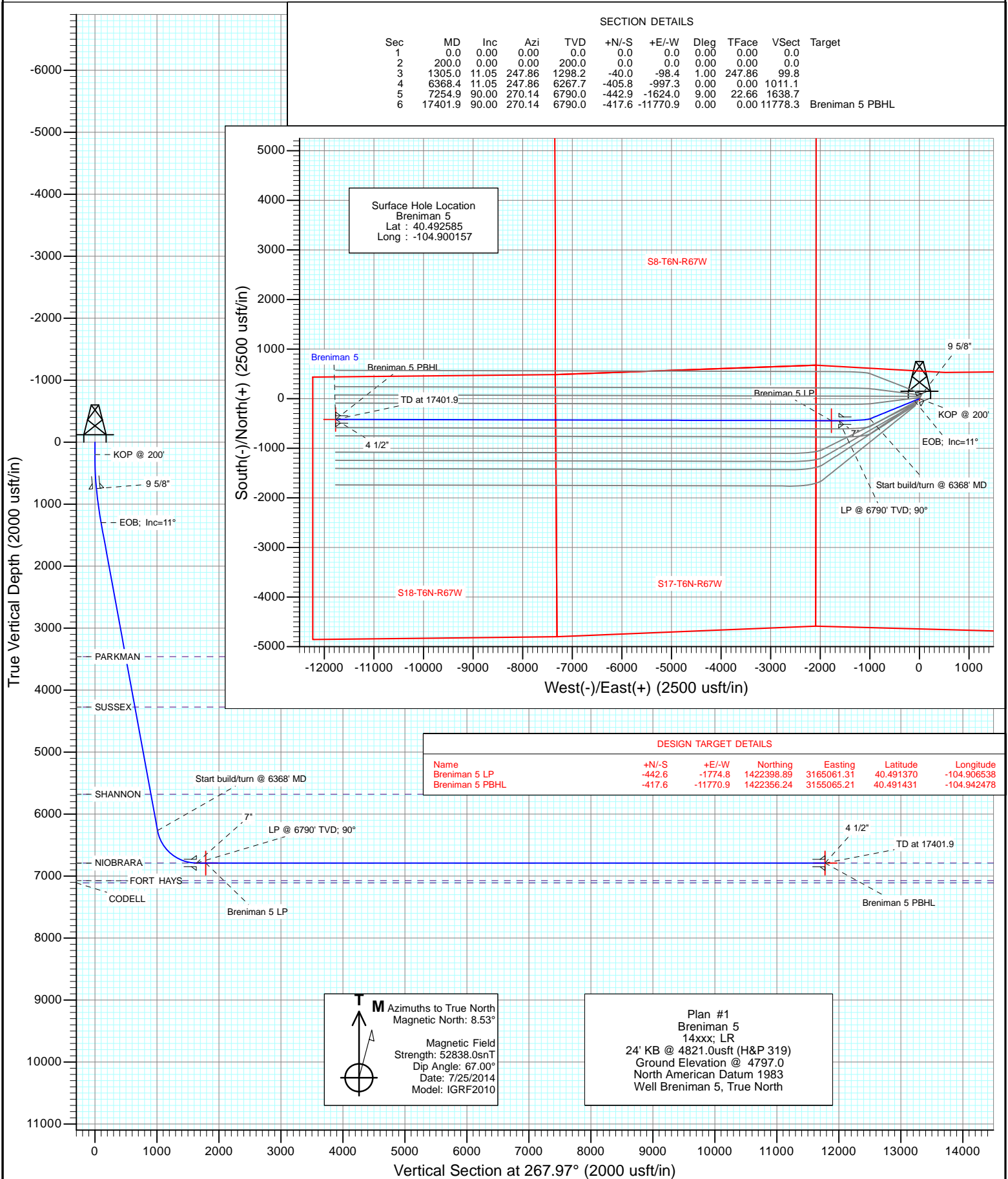




Project: WELD COUNTY, CO  
Site: S16-T6N-R67W  
Well: Breniman 5  
Wellbore: Hz  
Design: Plan #1



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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 5					
Well Position	+N/-S	0.0 usft	Northing:	1,422,853.44 usft	Latitude:	40.492585
	+E/-W	0.0 usft	Easting:	3,166,833.06 usft	Longitude:	-104.900157
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	4,797.0 usft

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

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	267.97

<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	
1,305.0	11.05	247.86	1,298.2	-40.0	-98.4	1.00	1.00	0.00	247.86	
6,368.4	11.05	247.86	6,267.7	-405.8	-997.3	0.00	0.00	0.00	0.00	
7,254.9	90.00	270.14	6,790.0	-442.9	-1,624.0	9.00	8.91	2.51	22.66	
17,401.9	90.00	270.14	6,790.0	-417.6	-11,770.9	0.00	0.00	0.00	0.00	Breniman 5 PBHL

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	247.86	300.0	-0.3	-0.8	0.8	1.00	1.00	
400.0	2.00	247.86	400.0	-1.3	-3.2	3.3	1.00	1.00	
500.0	3.00	247.86	499.9	-3.0	-7.3	7.4	1.00	1.00	
600.0	4.00	247.86	599.7	-5.3	-12.9	13.1	1.00	1.00	
700.0	5.00	247.86	699.4	-8.2	-20.2	20.5	1.00	1.00	
750.0	5.50	247.86	749.2	-9.9	-24.4	24.8	1.00	1.00	9 5/8"
800.0	6.00	247.86	798.9	-11.8	-29.1	29.5	1.00	1.00	
900.0	7.00	247.86	898.3	-16.1	-39.6	40.1	1.00	1.00	
1,000.0	8.00	247.86	997.4	-21.0	-51.6	52.4	1.00	1.00	
1,100.0	9.00	247.86	1,096.3	-26.6	-65.3	66.2	1.00	1.00	
1,200.0	10.00	247.86	1,194.9	-32.8	-80.6	81.7	1.00	1.00	
1,300.0	11.00	247.86	1,293.3	-39.7	-97.5	98.9	1.00	1.00	
1,305.0	11.05	247.86	1,298.2	-40.0	-98.4	99.8	1.00	1.00	EOB; Inc=11°
1,400.0	11.05	247.86	1,391.4	-46.9	-115.3	116.8	0.00	0.00	
1,500.0	11.05	247.86	1,489.5	-54.1	-133.0	134.8	0.00	0.00	
1,600.0	11.05	247.86	1,587.7	-61.3	-150.8	152.8	0.00	0.00	
1,700.0	11.05	247.86	1,685.8	-68.6	-168.5	170.8	0.00	0.00	
1,800.0	11.05	247.86	1,784.0	-75.8	-186.3	188.8	0.00	0.00	
1,900.0	11.05	247.86	1,882.1	-83.0	-204.0	206.8	0.00	0.00	
2,000.0	11.05	247.86	1,980.3	-90.2	-221.8	224.8	0.00	0.00	
2,100.0	11.05	247.86	2,078.4	-97.5	-239.5	242.8	0.00	0.00	
2,200.0	11.05	247.86	2,176.6	-104.7	-257.3	260.8	0.00	0.00	
2,300.0	11.05	247.86	2,274.7	-111.9	-275.0	278.8	0.00	0.00	
2,400.0	11.05	247.86	2,372.9	-119.1	-292.8	296.8	0.00	0.00	
2,500.0	11.05	247.86	2,471.0	-126.4	-310.5	314.8	0.00	0.00	
2,600.0	11.05	247.86	2,569.1	-133.6	-328.3	332.8	0.00	0.00	
2,700.0	11.05	247.86	2,667.3	-140.8	-346.1	350.8	0.00	0.00	
2,800.0	11.05	247.86	2,765.4	-148.0	-363.8	368.8	0.00	0.00	
2,900.0	11.05	247.86	2,863.6	-155.3	-381.6	386.8	0.00	0.00	
3,000.0	11.05	247.86	2,961.7	-162.5	-399.3	404.8	0.00	0.00	
3,100.0	11.05	247.86	3,059.9	-169.7	-417.1	422.8	0.00	0.00	
3,200.0	11.05	247.86	3,158.0	-176.9	-434.8	440.8	0.00	0.00	
3,300.0	11.05	247.86	3,256.2	-184.2	-452.6	458.8	0.00	0.00	
3,400.0	11.05	247.86	3,354.3	-191.4	-470.3	476.8	0.00	0.00	
3,500.0	11.05	247.86	3,452.5	-198.6	-488.1	494.8	0.00	0.00	
3,507.7	11.05	247.86	3,460.0	-199.2	-489.5	496.2	0.00	0.00	PARKMAN
3,600.0	11.05	247.86	3,550.6	-205.8	-505.8	512.8	0.00	0.00	
3,700.0	11.05	247.86	3,648.7	-213.1	-523.6	530.8	0.00	0.00	
3,800.0	11.05	247.86	3,746.9	-220.3	-541.3	548.8	0.00	0.00	
3,900.0	11.05	247.86	3,845.0	-227.5	-559.1	566.8	0.00	0.00	
4,000.0	11.05	247.86	3,943.2	-234.7	-576.9	584.8	0.00	0.00	
4,100.0	11.05	247.86	4,041.3	-241.9	-594.6	602.8	0.00	0.00	
4,200.0	11.05	247.86	4,139.5	-249.2	-612.4	620.8	0.00	0.00	
4,300.0	11.05	247.86	4,237.6	-256.4	-630.1	638.8	0.00	0.00	
4,338.1	11.05	247.86	4,275.0	-259.1	-636.9	645.7	0.00	0.00	SUSSEX
4,400.0	11.05	247.86	4,335.8	-263.6	-647.9	656.8	0.00	0.00	
4,500.0	11.05	247.86	4,433.9	-270.8	-665.6	674.8	0.00	0.00	
4,600.0	11.05	247.86	4,532.1	-278.1	-683.4	692.8	0.00	0.00	
4,700.0	11.05	247.86	4,630.2	-285.3	-701.1	710.8	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	11.05	247.86	4,728.4	-292.5	-718.9	728.8	0.00	0.00	
4,900.0	11.05	247.86	4,826.5	-299.7	-736.6	746.8	0.00	0.00	
5,000.0	11.05	247.86	4,924.6	-307.0	-754.4	764.8	0.00	0.00	
5,100.0	11.05	247.86	5,022.8	-314.2	-772.2	782.8	0.00	0.00	
5,200.0	11.05	247.86	5,120.9	-321.4	-789.9	800.8	0.00	0.00	
5,300.0	11.05	247.86	5,219.1	-328.6	-807.7	818.8	0.00	0.00	
5,400.0	11.05	247.86	5,317.2	-335.9	-825.4	836.8	0.00	0.00	
5,500.0	11.05	247.86	5,415.4	-343.1	-843.2	854.8	0.00	0.00	
5,600.0	11.05	247.86	5,513.5	-350.3	-860.9	872.8	0.00	0.00	
5,700.0	11.05	247.86	5,611.7	-357.5	-878.7	890.8	0.00	0.00	
5,769.6	11.05	247.86	5,680.0	-362.6	-891.0	903.3	0.00	0.00	SHANNON
5,800.0	11.05	247.86	5,709.8	-364.8	-896.4	908.8	0.00	0.00	
5,900.0	11.05	247.86	5,808.0	-372.0	-914.2	926.8	0.00	0.00	
6,000.0	11.05	247.86	5,906.1	-379.2	-931.9	944.8	0.00	0.00	
6,100.0	11.05	247.86	6,004.2	-386.4	-949.7	962.8	0.00	0.00	
6,200.0	11.05	247.86	6,102.4	-393.7	-967.4	980.8	0.00	0.00	
6,300.0	11.05	247.86	6,200.5	-400.9	-985.2	998.8	0.00	0.00	
6,368.4	11.05	247.86	6,267.7	-405.8	-997.3	1,011.1	0.00	0.00	Start build/turn @ 6368' MD
6,400.0	13.71	252.48	6,298.5	-408.1	-1,003.7	1,017.6	9.00	8.44	
6,500.0	22.44	259.81	6,393.5	-415.0	-1,033.9	1,047.9	9.00	8.72	
6,600.0	31.31	263.15	6,482.6	-421.5	-1,078.5	1,092.8	9.00	8.88	
6,700.0	40.24	265.12	6,563.7	-427.4	-1,136.6	1,151.1	9.00	8.93	
6,800.0	49.19	266.48	6,634.7	-432.5	-1,206.7	1,221.3	9.00	8.95	
6,900.0	58.15	267.51	6,693.9	-436.7	-1,287.1	1,301.8	9.00	8.96	
7,000.0	67.12	268.35	6,739.8	-439.8	-1,375.8	1,390.5	9.00	8.97	
7,100.0	76.09	269.09	6,771.3	-441.9	-1,470.5	1,485.3	9.00	8.97	
7,200.0	85.07	269.78	6,787.6	-442.9	-1,569.1	1,583.8	9.00	8.97	
7,254.9	90.00	270.14	6,790.0	-442.9	-1,623.9	1,638.6	9.00	8.98	LP @ 6790' TVD; 90° - NIOBRARA - 7"
7,300.0	90.00	270.14	6,790.0	-442.8	-1,669.0	1,683.7	0.01	0.01	
7,400.0	90.00	270.14	6,790.0	-442.6	-1,769.0	1,783.6	0.00	0.00	
7,500.0	90.00	270.14	6,790.0	-442.3	-1,869.0	1,883.5	0.00	0.00	
7,600.0	90.00	270.14	6,790.0	-442.1	-1,969.0	1,983.5	0.00	0.00	
7,700.0	90.00	270.14	6,790.0	-441.8	-2,069.0	2,083.4	0.00	0.00	
7,800.0	90.00	270.14	6,790.0	-441.6	-2,169.0	2,183.3	0.00	0.00	
7,900.0	90.00	270.14	6,790.0	-441.3	-2,269.0	2,283.2	0.00	0.00	
8,000.0	90.00	270.14	6,790.0	-441.1	-2,369.0	2,383.2	0.00	0.00	
8,100.0	90.00	270.14	6,790.0	-440.8	-2,469.0	2,483.1	0.00	0.00	
8,200.0	90.00	270.14	6,790.0	-440.6	-2,569.0	2,583.0	0.00	0.00	
8,300.0	90.00	270.14	6,790.0	-440.3	-2,669.0	2,683.0	0.00	0.00	
8,400.0	90.00	270.14	6,790.0	-440.1	-2,769.0	2,782.9	0.00	0.00	
8,500.0	90.00	270.14	6,790.0	-439.8	-2,869.0	2,882.8	0.00	0.00	
8,600.0	90.00	270.14	6,790.0	-439.6	-2,969.0	2,982.7	0.00	0.00	
8,700.0	90.00	270.14	6,790.0	-439.3	-3,069.0	3,082.7	0.00	0.00	
8,800.0	90.00	270.14	6,790.0	-439.1	-3,169.0	3,182.6	0.00	0.00	
8,900.0	90.00	270.14	6,790.0	-438.8	-3,269.0	3,282.5	0.00	0.00	
9,000.0	90.00	270.14	6,790.0	-438.6	-3,369.0	3,382.4	0.00	0.00	
9,100.0	90.00	270.14	6,790.0	-438.3	-3,469.0	3,482.4	0.00	0.00	
9,200.0	90.00	270.14	6,790.0	-438.1	-3,569.0	3,582.3	0.00	0.00	
9,300.0	90.00	270.14	6,790.0	-437.8	-3,669.0	3,682.2	0.00	0.00	
9,400.0	90.00	270.14	6,790.0	-437.6	-3,769.0	3,782.2	0.00	0.00	
9,500.0	90.00	270.14	6,790.0	-437.3	-3,869.0	3,882.1	0.00	0.00	
9,600.0	90.00	270.14	6,790.0	-437.1	-3,969.0	3,982.0	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
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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 5	<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
9,700.0	90.00	270.14	6,790.0	-436.8	-4,069.0	4,081.9	0.00	0.00	
9,800.0	90.00	270.14	6,790.0	-436.6	-4,169.0	4,181.9	0.00	0.00	
9,900.0	90.00	270.14	6,790.0	-436.3	-4,269.0	4,281.8	0.00	0.00	
10,000.0	90.00	270.14	6,790.0	-436.1	-4,369.0	4,381.7	0.00	0.00	
10,100.0	90.00	270.14	6,790.0	-435.8	-4,469.0	4,481.7	0.00	0.00	
10,200.0	90.00	270.14	6,790.0	-435.6	-4,569.0	4,581.6	0.00	0.00	
10,300.0	90.00	270.14	6,790.0	-435.3	-4,669.0	4,681.5	0.00	0.00	
10,400.0	90.00	270.14	6,790.0	-435.1	-4,769.0	4,781.4	0.00	0.00	
10,500.0	90.00	270.14	6,790.0	-434.8	-4,869.0	4,881.4	0.00	0.00	
10,600.0	90.00	270.14	6,790.0	-434.6	-4,969.0	4,981.3	0.00	0.00	
10,700.0	90.00	270.14	6,790.0	-434.3	-5,069.0	5,081.2	0.00	0.00	
10,800.0	90.00	270.14	6,790.0	-434.1	-5,169.0	5,181.1	0.00	0.00	
10,900.0	90.00	270.14	6,790.0	-433.8	-5,269.0	5,281.1	0.00	0.00	
11,000.0	90.00	270.14	6,790.0	-433.6	-5,369.0	5,381.0	0.00	0.00	
11,100.0	90.00	270.14	6,790.0	-433.3	-5,469.0	5,480.9	0.00	0.00	
11,200.0	90.00	270.14	6,790.0	-433.1	-5,569.0	5,580.9	0.00	0.00	
11,300.0	90.00	270.14	6,790.0	-432.8	-5,669.0	5,680.8	0.00	0.00	
11,400.0	90.00	270.14	6,790.0	-432.6	-5,769.0	5,780.7	0.00	0.00	
11,500.0	90.00	270.14	6,790.0	-432.3	-5,869.0	5,880.6	0.00	0.00	
11,600.0	90.00	270.14	6,790.0	-432.1	-5,969.0	5,980.6	0.00	0.00	
11,700.0	90.00	270.14	6,790.0	-431.8	-6,069.0	6,080.5	0.00	0.00	
11,800.0	90.00	270.14	6,790.0	-431.6	-6,169.0	6,180.4	0.00	0.00	
11,900.0	90.00	270.14	6,790.0	-431.3	-6,269.0	6,280.4	0.00	0.00	
12,000.0	90.00	270.14	6,790.0	-431.1	-6,369.0	6,380.3	0.00	0.00	
12,100.0	90.00	270.14	6,790.0	-430.8	-6,469.0	6,480.2	0.00	0.00	
12,200.0	90.00	270.14	6,790.0	-430.6	-6,569.0	6,580.1	0.00	0.00	
12,300.0	90.00	270.14	6,790.0	-430.3	-6,669.0	6,680.1	0.00	0.00	
12,400.0	90.00	270.14	6,790.0	-430.1	-6,769.0	6,780.0	0.00	0.00	
12,500.0	90.00	270.14	6,790.0	-429.8	-6,869.0	6,879.9	0.00	0.00	
12,600.0	90.00	270.14	6,790.0	-429.6	-6,969.0	6,979.8	0.00	0.00	
12,700.0	90.00	270.14	6,790.0	-429.3	-7,069.0	7,079.8	0.00	0.00	
12,800.0	90.00	270.14	6,790.0	-429.1	-7,169.0	7,179.7	0.00	0.00	
12,900.0	90.00	270.14	6,790.0	-428.8	-7,269.0	7,279.6	0.00	0.00	
13,000.0	90.00	270.14	6,790.0	-428.6	-7,369.0	7,379.6	0.00	0.00	
13,100.0	90.00	270.14	6,790.0	-428.3	-7,469.0	7,479.5	0.00	0.00	
13,200.0	90.00	270.14	6,790.0	-428.1	-7,569.0	7,579.4	0.00	0.00	
13,300.0	90.00	270.14	6,790.0	-427.8	-7,669.0	7,679.3	0.00	0.00	
13,400.0	90.00	270.14	6,790.0	-427.6	-7,769.0	7,779.3	0.00	0.00	
13,500.0	90.00	270.14	6,790.0	-427.3	-7,869.0	7,879.2	0.00	0.00	
13,600.0	90.00	270.14	6,790.0	-427.1	-7,969.0	7,979.1	0.00	0.00	
13,700.0	90.00	270.14	6,790.0	-426.8	-8,069.0	8,079.1	0.00	0.00	
13,800.0	90.00	270.14	6,790.0	-426.6	-8,169.0	8,179.0	0.00	0.00	
13,900.0	90.00	270.14	6,790.0	-426.3	-8,269.0	8,278.9	0.00	0.00	
14,000.0	90.00	270.14	6,790.0	-426.1	-8,369.0	8,378.8	0.00	0.00	
14,100.0	90.00	270.14	6,790.0	-425.8	-8,469.0	8,478.8	0.00	0.00	
14,200.0	90.00	270.14	6,790.0	-425.6	-8,569.0	8,578.7	0.00	0.00	
14,300.0	90.00	270.14	6,790.0	-425.3	-8,669.0	8,678.6	0.00	0.00	
14,400.0	90.00	270.14	6,790.0	-425.1	-8,769.0	8,778.5	0.00	0.00	
14,500.0	90.00	270.14	6,790.0	-424.8	-8,869.0	8,878.5	0.00	0.00	
14,600.0	90.00	270.14	6,790.0	-424.6	-8,969.0	8,978.4	0.00	0.00	
14,700.0	90.00	270.14	6,790.0	-424.3	-9,069.0	9,078.3	0.00	0.00	
14,800.0	90.00	270.14	6,790.0	-424.1	-9,169.0	9,178.3	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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
14,900.0	90.00	270.14	6,790.0	-423.8	-9,269.0	9,278.2	0.00	0.00	
15,000.0	90.00	270.14	6,790.0	-423.6	-9,369.0	9,378.1	0.00	0.00	
15,100.0	90.00	270.14	6,790.0	-423.3	-9,469.0	9,478.0	0.00	0.00	
15,200.0	90.00	270.14	6,790.0	-423.1	-9,569.0	9,578.0	0.00	0.00	
15,300.0	90.00	270.14	6,790.0	-422.8	-9,669.0	9,677.9	0.00	0.00	
15,400.0	90.00	270.14	6,790.0	-422.6	-9,769.0	9,777.8	0.00	0.00	
15,500.0	90.00	270.14	6,790.0	-422.3	-9,869.0	9,877.8	0.00	0.00	
15,600.0	90.00	270.14	6,790.0	-422.1	-9,969.0	9,977.7	0.00	0.00	
15,700.0	90.00	270.14	6,790.0	-421.8	-10,069.0	10,077.6	0.00	0.00	
15,800.0	90.00	270.14	6,790.0	-421.6	-10,169.0	10,177.5	0.00	0.00	
15,900.0	90.00	270.14	6,790.0	-421.3	-10,269.0	10,277.5	0.00	0.00	
16,000.0	90.00	270.14	6,790.0	-421.1	-10,369.0	10,377.4	0.00	0.00	
16,100.0	90.00	270.14	6,790.0	-420.8	-10,469.0	10,477.3	0.00	0.00	
16,200.0	90.00	270.14	6,790.0	-420.6	-10,569.0	10,577.2	0.00	0.00	
16,300.0	90.00	270.14	6,790.0	-420.3	-10,669.0	10,677.2	0.00	0.00	
16,400.0	90.00	270.14	6,790.0	-420.1	-10,769.0	10,777.1	0.00	0.00	
16,500.0	90.00	270.14	6,790.0	-419.8	-10,869.0	10,877.0	0.00	0.00	
16,600.0	90.00	270.14	6,790.0	-419.6	-10,969.0	10,977.0	0.00	0.00	
16,700.0	90.00	270.14	6,790.0	-419.3	-11,069.0	11,076.9	0.00	0.00	
16,800.0	90.00	270.14	6,790.0	-419.1	-11,169.0	11,176.8	0.00	0.00	
16,900.0	90.00	270.14	6,790.0	-418.8	-11,269.0	11,276.7	0.00	0.00	
17,000.0	90.00	270.14	6,790.0	-418.6	-11,369.0	11,376.7	0.00	0.00	
17,100.0	90.00	270.14	6,790.0	-418.3	-11,469.0	11,476.6	0.00	0.00	
17,200.0	90.00	270.14	6,790.0	-418.1	-11,569.0	11,576.5	0.00	0.00	
17,300.0	90.00	270.14	6,790.0	-417.8	-11,669.0	11,676.5	0.00	0.00	
17,400.0	90.00	270.14	6,790.0	-417.6	-11,769.0	11,776.4	0.00	0.00	
17,401.9	90.00	270.14	6,790.0	-417.6	-11,770.9	11,778.3	0.00	0.00	TD at 17401.9 - 4 1/2"

### 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 5 PBHL	0.00	0.00	6,790.0	-417.6	-11,770.9	1,422,356.24	3,155,065.21	40.491431	-104.942478
- plan hits target center									
- Point									
Breniman 5 LP	0.00	0.00	6,790.0	-442.6	-1,774.8	1,422,398.89	3,165,061.31	40.491370	-104.906538
- plan hits target center									
- Point									

### Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,254.9	6,790.0	7"	0	0
750.0	749.2	9 5/8"	0	0
17,401.9	6,790.0	4 1/2"	0	0

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,507.7	3,460.0	PARKMAN				
4,338.1	4,275.0	SUSSEX				
5,769.6	5,680.0	SHANNON				
7,254.9	6,790.0	NIOBRARA				

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'	
1,305.0	1,298.2	-40.0	-98.4	EOB; Inc=11°	
6,368.4	6,267.7	-405.8	-997.3	Start build/turn @ 6368' MD	
7,254.9	6,790.0	-442.9	-1,624.0	LP @ 6790' TVD; 90°	
17,401.9	6,790.0	-417.6	-11,770.9	TD at 17401.9	

# **Extraction Oil & Gas**

**WELD COUNTY, CO**

**S16-T6N-R67W**

**Breniman 5**

**Hz**

**Plan #1**

## **Anticollision Report**

**28 July, 2014**



# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	17,401.9	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S16-T6N-R67W						
Breniman 1 - Hz - Plan #1	200.0	200.0	111.8	111.2	181.945	CC, ES
Breniman 1 - Hz - Plan #1	17,401.9	17,410.6	990.2	426.6	1.757	SF
Breniman 10 - Hz - Plan #1	200.0	200.0	140.0	139.7	455.490	CC
Breniman 10 - Hz - Plan #1	300.0	297.9	140.1	139.6	290.472	ES
Breniman 10 - Hz - Plan #1	17,401.9	16,829.6	989.8	708.5	3.519	SF
Breniman 11 - Hz - Plan #1	200.0	200.0	168.1	167.8	546.774	CC
Breniman 11 - Hz - Plan #1	300.0	297.3	168.2	167.7	348.720	ES
Breniman 11 - Hz - Plan #1	2,100.0	2,042.3	252.0	246.9	49.901	SF
Breniman 2 - Hz - Plan #1	200.0	200.0	83.9	83.2	136.507	CC
Breniman 2 - Hz - Plan #1	300.0	300.6	84.2	83.2	87.209	ES
Breniman 2 - Hz - Plan #1	17,401.9	17,394.1	660.1	96.8	1.172	Level 2, SF
Breniman 3 - Hz - Plan #1	200.0	200.0	55.8	55.2	90.836	CC
Breniman 3 - Hz - Plan #1	300.0	300.5	56.1	55.1	58.067	ES
Breniman 3 - Hz - Plan #1	17,401.9	17,710.0	592.2	120.4	1.255	Level 3, SF
Breniman 4 - Hz - Plan #1	200.0	199.0	28.2	27.6	46.043	CC
Breniman 4 - Hz - Plan #1	17,401.9	17,389.4	330.1	-232.8	0.586	Level 1, ES, SF
Breniman 6 - Hz - Plan #1	200.0	200.0	27.9	27.6	90.821	CC
Breniman 6 - Hz - Plan #1	600.0	598.4	28.3	27.3	27.693	ES
Breniman 6 - Hz - Plan #1	17,401.9	17,606.0	364.5	234.3	2.800	SF
Breniman 7 - Hz - Plan #1	200.0	200.0	56.3	56.0	183.123	CC
Breniman 7 - Hz - Plan #1	17,401.9	17,301.1	330.1	48.8	1.173	Level 2, ES, SF
Breniman 8 - Hz - Plan #1	200.0	200.0	83.9	83.6	272.924	CC
Breniman 8 - Hz - Plan #1	500.0	496.4	84.2	83.3	100.405	ES
Breniman 8 - Hz - Plan #1	17,401.9	16,783.6	660.1	378.8	2.347	SF
Breniman 9 - Hz - Plan #1	200.0	200.0	112.3	112.0	365.225	CC
Breniman 9 - Hz - Plan #1	400.0	396.6	112.5	111.8	170.750	ES
Breniman 9 - Hz - Plan #1	17,401.9	17,104.5	886.5	624.6	3.384	SF

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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			
0.0	0.0	0.0	0.0	0.0	0.0	31.00	95.8	57.6	111.8					
100.0	100.0	100.0	100.0	0.1	0.1	31.00	95.8	57.6	111.8	111.5	0.27	421.347		
200.0	200.0	200.0	200.0	0.3	0.3	31.00	95.8	57.6	111.8	111.2	0.61	181.945 CC, ES		
300.0	300.0	300.3	300.3	0.5	0.5	142.97	96.1	56.8	112.3	111.4	0.97	116.376		
400.0	400.0	400.6	400.6	0.7	0.7	142.44	97.1	54.3	114.0	112.7	1.32	86.228		
500.0	499.9	500.9	500.7	0.9	0.9	141.61	98.7	50.2	116.8	115.1	1.69	69.103		
600.0	599.7	601.1	600.7	1.1	1.1	140.50	100.9	44.5	120.7	118.6	2.07	58.184		
700.0	699.4	701.1	700.5	1.3	1.3	139.19	103.8	37.2	125.8	123.3	2.48	50.696		
800.0	798.9	801.1	800.0	1.5	1.5	137.71	107.2	28.2	132.1	129.2	2.92	45.294		
900.0	898.3	900.9	899.1	1.8	1.8	136.14	111.4	17.7	139.7	136.3	3.39	41.251		
1,000.0	997.4	1,000.5	997.9	2.0	2.0	134.53	116.1	5.6	148.5	144.7	3.89	38.139		
1,100.0	1,096.3	1,099.9	1,096.2	2.3	2.3	132.91	121.4	-8.1	158.7	154.2	4.45	35.690		
1,200.0	1,194.9	1,199.1	1,194.1	2.7	2.7	131.33	127.4	-23.4	170.1	165.0	5.04	33.729		
1,300.0	1,293.3	1,298.1	1,291.4	3.0	3.0	129.81	133.9	-40.2	182.8	177.1	5.69	32.132		
1,400.0	1,391.4	1,396.9	1,388.3	3.4	3.4	128.31	141.0	-58.4	196.3	190.0	6.37	30.823		
1,500.0	1,489.5	1,495.9	1,485.1	3.7	3.7	126.89	148.3	-77.1	210.0	203.0	7.06	29.728		
1,600.0	1,587.7	1,594.8	1,582.0	4.1	4.1	125.65	155.5	-95.7	223.8	216.1	7.77	28.811		
1,700.0	1,685.8	1,693.7	1,678.9	4.5	4.5	124.55	162.8	-114.4	237.7	229.2	8.48	28.037		
1,800.0	1,784.0	1,792.7	1,775.8	4.8	4.9	123.57	170.1	-133.0	251.7	242.5	9.19	27.377		
1,900.0	1,882.1	1,891.6	1,872.7	5.2	5.3	122.70	177.3	-151.6	265.7	255.8	9.91	26.809		
2,000.0	1,980.3	1,990.5	1,969.6	5.6	5.7	121.91	184.6	-170.3	279.8	269.2	10.63	26.316		
2,100.0	2,078.4	2,089.5	2,066.5	6.0	6.0	121.20	191.8	-188.9	293.9	282.6	11.36	25.885		
2,200.0	2,176.6	2,188.4	2,163.4	6.3	6.4	120.55	199.1	-207.6	308.1	296.0	12.08	25.506		
2,300.0	2,274.7	2,287.3	2,260.3	6.7	6.8	119.96	206.4	-226.2	322.3	309.5	12.81	25.170		
2,400.0	2,372.9	2,386.3	2,357.1	7.1	7.2	119.43	213.6	-244.9	336.6	323.0	13.53	24.870		
2,500.0	2,471.0	2,485.2	2,454.0	7.5	7.6	118.93	220.9	-263.5	350.8	336.6	14.26	24.602		
2,600.0	2,569.2	2,584.1	2,550.9	7.9	8.0	118.47	228.2	-282.1	365.1	350.1	14.99	24.360		
2,700.0	2,667.3	2,683.1	2,647.8	8.2	8.4	118.05	235.4	-300.8	379.4	363.7	15.72	24.141		
2,800.0	2,765.4	2,782.0	2,744.7	8.6	8.8	117.66	242.7	-319.4	393.8	377.3	16.45	23.942		
2,900.0	2,863.6	2,880.9	2,841.6	9.0	9.2	117.29	249.9	-338.1	408.1	391.0	17.18	23.761		
3,000.0	2,961.7	2,979.9	2,938.5	9.4	9.6	116.96	257.2	-356.7	422.5	404.6	17.91	23.595		
3,100.0	3,059.9	3,078.8	3,035.4	9.7	10.0	116.64	264.5	-375.4	436.9	418.2	18.64	23.442		
3,200.0	3,158.0	3,177.7	3,132.3	10.1	10.3	116.34	271.7	-394.0	451.3	431.9	19.37	23.301		
3,300.0	3,256.2	3,276.7	3,229.1	10.5	10.7	116.06	279.0	-412.6	465.7	445.6	20.10	23.171		
3,400.0	3,354.3	3,375.6	3,326.0	10.9	11.1	115.80	286.3	-431.3	480.1	459.2	20.83	23.051		
3,500.0	3,452.5	3,474.5	3,422.9	11.3	11.5	115.55	293.5	-449.9	494.5	472.9	21.56	22.939		
3,600.0	3,550.6	3,573.4	3,519.8	11.6	11.9	115.32	300.8	-468.6	508.9	486.6	22.29	22.834		
3,700.0	3,648.8	3,672.4	3,616.7	12.0	12.3	115.10	308.1	-487.2	523.4	500.3	23.02	22.737		
3,800.0	3,746.9	3,771.3	3,713.6	12.4	12.7	114.89	315.3	-505.9	537.8	514.1	23.75	22.645		
3,900.0	3,845.0	3,870.2	3,810.5	12.8	13.1	114.70	322.6	-524.5	552.3	527.8	24.48	22.560		
4,000.0	3,943.2	3,969.2	3,907.4	13.2	13.5	114.51	329.8	-543.1	566.7	541.5	25.21	22.480		
4,100.0	4,041.3	4,068.1	4,004.3	13.5	13.9	114.33	337.1	-561.8	581.2	555.2	25.94	22.404		
4,200.0	4,139.5	4,167.0	4,101.1	13.9	14.3	114.16	344.4	-580.4	595.6	569.0	26.67	22.333		
4,300.0	4,237.6	4,266.0	4,198.0	14.3	14.7	114.00	351.6	-599.1	610.1	582.7	27.40	22.265		
4,400.0	4,335.8	4,364.9	4,294.9	14.7	15.1	113.85	358.9	-617.7	624.6	596.5	28.13	22.202		
4,500.0	4,433.9	4,463.8	4,391.8	15.1	15.5	113.70	366.2	-636.4	639.1	610.2	28.86	22.141		
4,600.0	4,532.1	4,562.8	4,488.7	15.5	15.9	113.56	373.4	-655.0	653.5	624.0	29.59	22.084		
4,700.0	4,630.2	4,661.7	4,585.6	15.8	16.2	113.43	380.7	-673.6	668.0	637.7	30.32	22.030		
4,800.0	4,728.4	4,760.6	4,682.5	16.2	16.6	113.30	387.9	-692.3	682.5	651.5	31.05	21.978		
4,900.0	4,826.5	4,859.6	4,779.4	16.6	17.0	113.18	395.2	-710.9	697.0	665.2	31.79	21.929		
5,000.0	4,924.7	4,958.5	4,876.2	17.0	17.4	113.06	402.5	-729.6	711.5	679.0	32.52	21.882		
5,100.0	5,022.8	5,057.4	4,973.1	17.4	17.8	112.94	409.7	-748.2	726.0	692.8	33.25	21.838		

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 5
<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 5	<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 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	5,120.9	5,156.4	5,070.0	17.7	18.2	112.84	417.0	-766.8	740.5	706.5	33.98	21.795		
5,300.0	5,219.1	5,255.3	5,166.9	18.1	18.6	112.73	424.3	-785.5	755.0	720.3	34.71	21.754		
5,400.0	5,317.2	5,354.2	5,263.8	18.5	19.0	112.63	431.5	-804.1	769.5	734.1	35.44	21.715		
5,500.0	5,415.4	5,453.2	5,360.7	18.9	19.4	112.53	438.8	-822.8	784.0	747.9	36.17	21.678		
5,600.0	5,513.5	5,552.1	5,457.6	19.3	19.8	112.44	446.1	-841.4	798.6	761.7	36.90	21.642		
5,700.0	5,611.7	5,651.0	5,554.5	19.6	20.2	112.35	453.3	-860.1	813.1	775.4	37.63	21.608		
5,800.0	5,709.8	5,750.0	5,651.4	20.0	20.6	112.26	460.6	-878.7	827.6	789.2	38.36	21.575		
5,900.0	5,808.0	5,848.9	5,748.2	20.4	21.0	112.18	467.8	-897.3	842.1	803.0	39.09	21.543		
6,000.0	5,906.1	5,947.8	5,845.1	20.8	21.4	112.10	475.1	-916.0	856.6	816.8	39.82	21.513		
6,100.0	6,004.3	6,046.8	5,942.0	21.2	21.8	112.02	482.4	-934.6	871.2	830.6	40.55	21.483		
6,200.0	6,102.4	6,145.7	6,038.9	21.6	22.2	111.94	489.6	-953.3	885.7	844.4	41.28	21.455		
6,300.0	6,200.5	6,244.6	6,135.8	21.9	22.6	111.87	496.9	-971.9	900.2	858.2	42.01	21.428		
6,400.0	6,298.5	6,343.6	6,232.7	22.3	23.0	106.92	504.2	-990.6	914.7	871.9	42.77	21.388		
6,500.0	6,393.5	6,443.7	6,330.2	23.0	23.4	99.21	511.5	-1,011.9	928.9	885.1	43.84	21.188		
6,600.0	6,482.6	6,546.4	6,425.9	23.8	24.2	95.66	518.7	-1,048.0	942.4	897.0	45.44	20.740		
6,700.0	6,563.7	6,651.1	6,516.3	24.9	25.1	93.56	525.6	-1,100.3	954.8	907.2	47.57	20.071		
6,800.0	6,634.7	6,757.8	6,598.4	26.2	26.4	92.18	531.8	-1,168.0	965.8	915.5	50.25	19.218		
6,900.0	6,693.9	6,866.5	6,669.1	27.8	28.0	91.23	537.3	-1,250.1	975.0	921.5	53.47	18.233		
7,000.0	6,739.8	6,976.9	6,725.7	29.5	29.9	90.59	541.8	-1,344.6	982.2	925.0	57.21	17.169		
7,100.0	6,771.3	7,088.6	6,765.5	31.4	32.0	90.20	545.0	-1,448.8	987.2	925.8	61.38	16.083		
7,200.0	6,787.6	7,201.2	6,786.7	33.5	34.3	90.02	546.8	-1,559.2	989.8	923.9	65.87	15.025		
7,300.0	6,790.0	7,308.6	6,790.0	35.6	36.6	90.00	547.4	-1,666.6	990.2	919.8	70.41	14.063		
7,400.0	6,790.0	7,408.6	6,790.0	37.7	38.7	90.00	547.6	-1,766.6	990.2	915.3	74.85	13.228		
7,500.0	6,790.0	7,508.6	6,790.0	39.9	40.9	90.00	547.9	-1,866.6	990.2	910.8	79.36	12.478		
7,600.0	6,790.0	7,608.6	6,790.0	42.2	43.2	90.00	548.1	-1,966.6	990.2	906.3	83.91	11.801		
7,700.0	6,790.0	7,708.6	6,790.0	44.4	45.4	90.00	548.4	-2,066.6	990.2	901.7	88.50	11.188		
7,800.0	6,790.0	7,808.6	6,790.0	46.7	47.7	90.00	548.6	-2,166.6	990.2	897.0	93.14	10.631		
7,900.0	6,790.0	7,908.6	6,790.0	49.0	50.0	90.00	548.9	-2,266.6	990.2	892.4	97.80	10.125		
8,000.0	6,790.0	8,008.6	6,790.0	51.3	52.3	90.00	549.1	-2,366.6	990.2	887.7	102.49	9.661		
8,100.0	6,790.0	8,108.6	6,790.0	53.6	54.6	90.00	549.4	-2,466.6	990.2	883.0	107.20	9.237		
8,200.0	6,790.0	8,208.6	6,790.0	56.0	57.0	90.00	549.6	-2,566.6	990.2	878.2	111.94	8.846		
8,300.0	6,790.0	8,308.6	6,790.0	58.3	59.3	90.00	549.9	-2,666.6	990.2	873.5	116.69	8.486		
8,400.0	6,790.0	8,408.6	6,790.0	60.7	61.7	90.00	550.1	-2,766.6	990.2	868.7	121.45	8.153		
8,500.0	6,790.0	8,508.6	6,790.0	63.1	64.1	90.00	550.4	-2,866.6	990.2	863.9	126.24	7.844		
8,600.0	6,790.0	8,608.6	6,790.0	65.4	66.4	90.00	550.6	-2,966.6	990.2	859.1	131.03	7.557		
8,700.0	6,790.0	8,708.6	6,790.0	67.8	68.8	90.00	550.9	-3,066.6	990.2	854.3	135.83	7.290		
8,800.0	6,790.0	8,808.6	6,790.0	70.2	71.2	90.00	551.1	-3,166.6	990.2	849.5	140.65	7.040		
8,900.0	6,790.0	8,908.6	6,790.0	72.6	73.6	90.00	551.4	-3,266.6	990.2	844.7	145.47	6.807		
9,000.0	6,790.0	9,008.6	6,790.0	75.0	76.0	90.00	551.6	-3,366.6	990.2	839.9	150.30	6.588		
9,100.0	6,790.0	9,108.6	6,790.0	77.4	78.4	90.00	551.8	-3,466.6	990.2	835.0	155.14	6.382		
9,200.0	6,790.0	9,208.6	6,790.0	79.8	80.8	90.00	552.1	-3,566.6	990.2	830.2	159.99	6.189		
9,300.0	6,790.0	9,308.6	6,790.0	82.3	83.2	90.00	552.3	-3,666.6	990.2	825.3	164.84	6.007		
9,400.0	6,790.0	9,408.6	6,790.0	84.7	85.7	90.00	552.6	-3,766.6	990.2	820.5	169.70	5.835		
9,500.0	6,790.0	9,508.6	6,790.0	87.1	88.1	90.00	552.8	-3,866.6	990.2	815.6	174.56	5.672		
9,600.0	6,790.0	9,608.6	6,790.0	89.5	90.5	90.00	553.1	-3,966.6	990.2	810.7	179.43	5.518		
9,700.0	6,790.0	9,708.6	6,790.0	91.9	92.9	90.00	553.3	-4,066.6	990.2	805.9	184.30	5.373		
9,800.0	6,790.0	9,808.6	6,790.0	94.4	95.4	90.00	553.6	-4,166.6	990.2	801.0	189.18	5.234		
9,900.0	6,790.0	9,908.6	6,790.0	96.8	97.8	90.00	553.8	-4,266.6	990.2	796.1	194.06	5.103		
10,000.0	6,790.0	10,008.6	6,790.0	99.2	100.2	90.00	554.1	-4,366.6	990.2	791.2	198.94	4.977		
10,100.0	6,790.0	10,108.6	6,790.0	101.7	102.7	90.00	554.3	-4,466.6	990.2	786.4	203.83	4.858		
10,200.0	6,790.0	10,208.6	6,790.0	104.1	105.1	90.00	554.6	-4,566.6	990.2	781.5	208.71	4.744		
10,300.0	6,790.0	10,308.6	6,790.0	106.6	107.5	90.00	554.8	-4,666.6	990.2	776.6	213.61	4.636		

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 5
<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 5	<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	6,790.0	10,408.6	6,790.0	109.0	110.0	90.00	555.1	-4,766.6	990.2	771.7	218.50	4.532		
10,500.0	6,790.0	10,508.6	6,790.0	111.4	112.4	90.00	555.3	-4,866.6	990.2	766.8	223.40	4.432		
10,600.0	6,790.0	10,608.6	6,790.0	113.9	114.9	90.00	555.6	-4,966.6	990.2	761.9	228.30	4.337		
10,700.0	6,790.0	10,708.6	6,790.0	116.3	117.3	90.00	555.8	-5,066.6	990.2	757.0	233.20	4.246		
10,800.0	6,790.0	10,808.6	6,790.0	118.8	119.8	90.00	556.1	-5,166.6	990.2	752.1	238.10	4.159		
10,900.0	6,790.0	10,908.6	6,790.0	121.2	122.2	90.00	556.3	-5,266.6	990.2	747.2	243.01	4.075		
11,000.0	6,790.0	11,008.6	6,790.0	123.7	124.6	90.00	556.6	-5,366.6	990.2	742.3	247.91	3.994		
11,100.0	6,790.0	11,108.6	6,790.0	126.1	127.1	90.00	556.8	-5,466.6	990.2	737.4	252.82	3.917		
11,200.0	6,790.0	11,208.6	6,790.0	128.6	129.5	90.00	557.1	-5,566.6	990.2	732.4	257.73	3.842		
11,300.0	6,790.0	11,308.6	6,790.0	131.0	132.0	90.00	557.3	-5,666.6	990.2	727.5	262.64	3.770		
11,400.0	6,790.0	11,408.6	6,790.0	133.5	134.5	90.00	557.6	-5,766.6	990.2	722.6	267.56	3.701		
11,500.0	6,790.0	11,508.6	6,790.0	135.9	136.9	90.00	557.8	-5,866.6	990.2	717.7	272.47	3.634		
11,600.0	6,790.0	11,608.6	6,790.0	138.4	139.4	90.00	558.1	-5,966.6	990.2	712.8	277.38	3.570		
11,700.0	6,790.0	11,708.6	6,790.0	140.8	141.8	90.00	558.3	-6,066.6	990.2	707.9	282.30	3.508		
11,800.0	6,790.0	11,808.6	6,790.0	143.3	144.3	90.00	558.6	-6,166.6	990.2	703.0	287.22	3.447		
11,900.0	6,790.0	11,908.6	6,790.0	145.8	146.7	90.00	558.8	-6,266.6	990.2	698.0	292.14	3.389		
12,000.0	6,790.0	12,008.6	6,790.0	148.2	149.2	90.00	559.1	-6,366.6	990.2	693.1	297.06	3.333		
12,100.0	6,790.0	12,108.6	6,790.0	150.7	151.6	90.00	559.3	-6,466.6	990.2	688.2	301.98	3.279		
12,200.0	6,790.0	12,208.6	6,790.0	153.1	154.1	90.00	559.6	-6,566.6	990.2	683.3	306.90	3.226		
12,300.0	6,790.0	12,308.6	6,790.0	155.6	156.6	90.00	559.8	-6,666.6	990.2	678.4	311.82	3.175		
12,400.0	6,790.0	12,408.6	6,790.0	158.0	159.0	90.00	560.1	-6,766.6	990.2	673.4	316.74	3.126		
12,500.0	6,790.0	12,508.6	6,790.0	160.5	161.5	90.00	560.3	-6,866.6	990.2	668.5	321.67	3.078		
12,600.0	6,790.0	12,608.6	6,790.0	163.0	163.9	90.00	560.6	-6,966.6	990.2	663.6	326.59	3.032		
12,700.0	6,790.0	12,708.6	6,790.0	165.4	166.4	90.00	560.8	-7,066.6	990.2	658.7	331.52	2.987		
12,800.0	6,790.0	12,808.6	6,790.0	167.9	168.9	90.00	561.1	-7,166.6	990.2	653.7	336.45	2.943		
12,900.0	6,790.0	12,908.6	6,790.0	170.3	171.3	90.00	561.3	-7,266.6	990.2	648.8	341.37	2.901		
13,000.0	6,790.0	13,008.6	6,790.0	172.8	173.8	90.00	561.6	-7,366.6	990.2	643.9	346.30	2.859		
13,100.0	6,790.0	13,108.6	6,790.0	175.3	176.2	90.00	561.8	-7,466.6	990.2	639.0	351.23	2.819		
13,200.0	6,790.0	13,208.6	6,790.0	177.7	178.7	90.00	562.1	-7,566.5	990.2	634.0	356.16	2.780		
13,300.0	6,790.0	13,308.6	6,790.0	180.2	181.2	90.00	562.3	-7,666.5	990.2	629.1	361.09	2.742		
13,400.0	6,790.0	13,408.6	6,790.0	182.7	183.6	90.00	562.6	-7,766.5	990.2	624.2	366.01	2.705		
13,500.0	6,790.0	13,508.6	6,790.0	185.1	186.1	90.00	562.8	-7,866.5	990.2	619.2	370.94	2.669		
13,600.0	6,790.0	13,608.6	6,790.0	187.6	188.6	90.00	563.1	-7,966.5	990.2	614.3	375.88	2.634		
13,700.0	6,790.0	13,708.6	6,790.0	190.1	191.0	90.00	563.3	-8,066.5	990.2	609.4	380.81	2.600		
13,800.0	6,790.0	13,808.6	6,790.0	192.5	193.5	90.00	563.6	-8,166.5	990.2	604.4	385.74	2.567		
13,900.0	6,790.0	13,908.6	6,790.0	195.0	195.9	90.00	563.8	-8,266.5	990.2	599.5	390.67	2.535		
14,000.0	6,790.0	14,008.6	6,790.0	197.4	198.4	90.00	564.1	-8,366.5	990.2	594.6	395.60	2.503		
14,100.0	6,790.0	14,108.6	6,790.0	199.9	200.9	90.00	564.3	-8,466.5	990.2	589.6	400.54	2.472		
14,200.0	6,790.0	14,208.6	6,790.0	202.4	203.3	90.00	564.6	-8,566.5	990.2	584.7	405.47	2.442		
14,300.0	6,790.0	14,308.6	6,790.0	204.8	205.8	90.00	564.8	-8,666.5	990.2	579.8	410.40	2.413		
14,400.0	6,790.0	14,408.6	6,790.0	207.3	208.3	90.00	565.1	-8,766.5	990.2	574.8	415.34	2.384		
14,500.0	6,790.0	14,508.6	6,790.0	209.8	210.7	90.00	565.3	-8,866.5	990.2	569.9	420.27	2.356		
14,600.0	6,790.0	14,608.6	6,790.0	212.2	213.2	90.00	565.6	-8,966.5	990.2	565.0	425.21	2.329		
14,700.0	6,790.0	14,708.6	6,790.0	214.7	215.7	90.00	565.8	-9,066.5	990.2	560.0	430.14	2.302		
14,800.0	6,790.0	14,808.6	6,790.0	217.2	218.1	90.00	566.1	-9,166.5	990.2	555.1	435.08	2.276		
14,900.0	6,790.0	14,908.6	6,790.0	219.6	220.6	90.00	566.3	-9,266.5	990.2	550.2	440.01	2.250		
15,000.0	6,790.0	15,008.6	6,790.0	222.1	223.1	90.00	566.6	-9,366.5	990.2	545.2	444.95	2.225		
15,100.0	6,790.0	15,108.6	6,790.0	224.6	225.5	90.00	566.8	-9,466.5	990.2	540.3	449.88	2.201		
15,200.0	6,790.0	15,208.6	6,790.0	227.0	228.0	90.00	567.1	-9,566.5	990.2	535.4	454.82	2.177		
15,300.0	6,790.0	15,308.6	6,790.0	229.5	230.5	90.00	567.3	-9,666.5	990.2	530.4	459.76	2.154		
15,400.0	6,790.0	15,408.6	6,790.0	232.0	232.9	90.00	567.6	-9,766.5	990.2	525.5	464.69	2.131		
15,500.0	6,790.0	15,508.6	6,790.0	234.4	235.4	90.00	567.8	-9,866.5	990.2	520.5	469.63	2.108		

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 5
<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 5	<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		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	6,790.0	15,608.6	6,790.0	236.9	237.9	90.00	568.1	-9,966.5	990.2	515.6	474.57	2.086		
15,700.0	6,790.0	15,708.6	6,790.0	239.4	240.3	90.00	568.3	-10,066.5	990.2	510.7	479.51	2.065		
15,800.0	6,790.0	15,808.6	6,790.0	241.8	242.8	90.00	568.6	-10,166.5	990.2	505.7	484.44	2.044		
15,900.0	6,790.0	15,908.6	6,790.0	244.3	245.3	90.00	568.8	-10,266.5	990.2	500.8	489.38	2.023		
16,000.0	6,790.0	16,008.6	6,790.0	246.8	247.7	90.00	569.1	-10,366.5	990.2	495.9	494.32	2.003		
16,100.0	6,790.0	16,108.6	6,790.0	249.2	250.2	90.00	569.3	-10,466.5	990.2	490.9	499.26	1.983		
16,200.0	6,790.0	16,208.6	6,790.0	251.7	252.7	90.00	569.6	-10,566.5	990.2	486.0	504.20	1.964		
16,300.0	6,790.0	16,308.6	6,790.0	254.2	255.1	90.00	569.8	-10,666.5	990.2	481.0	509.14	1.945		
16,400.0	6,790.0	16,408.6	6,790.0	256.7	257.6	90.00	570.1	-10,766.5	990.2	476.1	514.08	1.926		
16,500.0	6,790.0	16,508.6	6,790.0	259.1	260.1	90.00	570.3	-10,866.5	990.2	471.2	519.02	1.908		
16,600.0	6,790.0	16,608.6	6,790.0	261.6	262.5	90.00	570.6	-10,966.5	990.2	466.2	523.96	1.890		
16,700.0	6,790.0	16,708.6	6,790.0	264.1	265.0	90.00	570.8	-11,066.5	990.2	461.3	528.90	1.872		
16,800.0	6,790.0	16,808.6	6,790.0	266.5	267.5	90.00	571.1	-11,166.5	990.2	456.3	533.84	1.855		
16,900.0	6,790.0	16,908.6	6,790.0	269.0	270.0	90.00	571.3	-11,266.5	990.2	451.4	538.78	1.838		
17,000.0	6,790.0	17,008.6	6,790.0	271.5	272.4	90.00	571.6	-11,366.5	990.2	446.5	543.72	1.821		
17,100.0	6,790.0	17,108.6	6,790.0	273.9	274.9	90.00	571.8	-11,466.5	990.2	441.5	548.66	1.805		
17,200.0	6,790.0	17,208.6	6,790.0	276.4	277.4	90.00	572.1	-11,566.5	990.2	436.6	553.60	1.789		
17,300.0	6,790.0	17,308.6	6,790.0	278.9	279.8	90.00	572.3	-11,666.5	990.2	431.6	558.54	1.773		
17,400.0	6,790.0	17,408.6	6,790.0	281.3	282.3	90.00	572.6	-11,766.5	990.2	426.7	563.48	1.757		
17,401.9	6,790.0	17,410.6	6,790.0	281.4	282.3	90.00	572.6	-11,768.5	990.2	426.6	563.57	1.757 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-149.17	-120.2	-71.8	140.0					
100.0	100.0	100.0	100.0	0.1	0.0	-149.17	-120.2	-71.8	140.0	139.9	0.13	1,053.916		
200.0	200.0	200.0	200.0	0.3	0.0	-149.17	-120.2	-71.8	140.0	139.7	0.31	455.490 CC		
300.0	300.0	297.9	297.9	0.5	0.0	-37.08	-120.7	-72.5	140.1	139.6	0.48	290.472 ES		
400.0	400.0	395.7	395.7	0.7	0.0	-37.26	-122.0	-74.6	140.3	139.6	0.66	212.979		
500.0	499.9	493.6	493.4	0.9	0.0	-37.55	-124.3	-78.1	140.6	139.8	0.84	167.781		
600.0	599.7	591.4	591.1	1.1	0.0	-37.95	-127.5	-83.0	141.1	140.1	1.02	138.032		
700.0	699.4	689.3	688.7	1.3	0.0	-38.47	-131.5	-89.3	141.8	140.6	1.21	116.859		
800.0	798.9	787.1	786.1	1.5	0.0	-39.09	-136.5	-97.0	142.6	141.2	1.41	100.937		
900.0	898.3	884.9	883.3	1.8	0.0	-39.82	-142.4	-106.1	143.6	141.9	1.62	88.464		
1,000.0	997.4	982.8	980.3	2.0	0.0	-40.64	-149.2	-116.6	144.7	142.9	1.85	78.379		
1,100.0	1,096.3	1,080.6	1,077.1	2.3	0.0	-41.56	-156.9	-128.5	146.0	144.0	2.09	70.022		
1,200.0	1,194.9	1,178.4	1,173.7	2.7	0.0	-42.56	-165.4	-141.8	147.6	145.2	2.34	62.963		
1,300.0	1,293.3	1,276.2	1,269.9	3.0	0.0	-43.65	-174.9	-156.4	149.3	146.7	2.62	56.896		
1,400.0	1,391.4	1,374.0	1,365.8	3.4	0.0	-44.61	-185.3	-172.4	151.9	149.0	2.92	52.094		
1,500.0	1,489.5	1,471.8	1,461.3	3.7	0.0	-45.19	-196.5	-189.8	155.9	152.7	3.21	48.583		
1,600.0	1,587.7	1,569.4	1,556.4	4.1	0.0	-45.40	-208.6	-208.6	161.3	157.8	3.50	46.093		
1,700.0	1,685.8	1,666.9	1,650.9	4.5	0.0	-45.27	-221.6	-228.6	168.0	164.3	3.78	44.419		
1,800.0	1,784.0	1,764.1	1,744.8	4.8	0.0	-44.85	-235.4	-250.0	176.2	172.2	4.06	43.410		
1,900.0	1,882.1	1,861.1	1,837.9	5.2	0.0	-44.18	-250.0	-272.6	185.8	181.5	4.33	42.953		
2,000.0	1,980.3	1,957.7	1,930.3	5.6	0.0	-43.31	-265.4	-296.5	196.9	192.3	4.58	42.962		
2,100.0	2,078.4	2,054.0	2,021.8	6.0	0.0	-42.30	-281.6	-321.5	209.3	204.5	4.83	43.371		
2,200.0	2,176.6	2,149.8	2,112.4	6.3	0.0	-41.19	-298.5	-347.8	223.3	218.3	5.06	44.128		
2,300.0	2,274.7	2,245.2	2,202.0	6.7	0.0	-40.02	-316.2	-375.1	238.8	233.5	5.28	45.190		
2,400.0	2,372.9	2,340.0	2,290.6	7.1	0.0	-38.82	-334.6	-403.6	255.8	250.3	5.50	46.523		
2,500.0	2,471.0	2,434.2	2,378.0	7.5	0.0	-37.62	-353.6	-433.0	274.4	268.7	5.71	48.094		
2,600.0	2,569.2	2,527.8	2,464.3	7.9	0.0	-36.44	-373.3	-463.5	294.5	288.6	5.91	49.878		
2,700.0	2,667.3	2,620.8	2,549.4	8.2	0.0	-35.30	-393.6	-494.9	316.2	310.1	6.10	51.851		
2,800.0	2,765.4	2,717.6	2,637.7	8.6	0.0	-34.20	-415.2	-528.4	338.8	332.6	6.29	53.897		
2,900.0	2,863.6	2,814.8	2,726.3	9.0	0.0	-33.23	-436.9	-562.0	361.6	355.1	6.48	55.826		
3,000.0	2,961.7	2,912.1	2,814.9	9.4	0.0	-32.37	-458.6	-595.5	384.4	377.7	6.67	57.642		
3,100.0	3,059.9	3,009.3	2,903.5	9.7	0.0	-31.61	-480.3	-629.1	407.3	400.4	6.86	59.354		
3,200.0	3,158.0	3,106.5	2,992.1	10.1	0.0	-30.93	-502.0	-662.7	430.2	423.2	7.06	60.969		
3,300.0	3,256.2	3,203.7	3,080.8	10.5	0.0	-30.32	-523.7	-696.3	453.2	446.0	7.25	62.494		
3,400.0	3,354.3	3,300.9	3,169.4	10.9	0.0	-29.77	-545.4	-729.8	476.3	468.8	7.45	63.937		
3,500.0	3,452.5	3,398.1	3,258.0	11.3	0.0	-29.27	-567.1	-763.4	499.4	491.7	7.65	65.302		
3,600.0	3,550.6	3,495.3	3,346.6	11.6	0.0	-28.81	-588.8	-797.0	522.5	514.7	7.85	66.596		
3,700.0	3,648.8	3,592.5	3,435.2	12.0	0.0	-28.39	-610.5	-830.5	545.7	537.6	8.05	67.824		
3,800.0	3,746.9	3,689.7	3,523.8	12.4	0.0	-28.01	-632.1	-864.1	568.8	560.6	8.25	68.990		
3,900.0	3,845.0	3,786.9	3,612.4	12.8	0.0	-27.65	-653.8	-897.7	592.0	583.6	8.45	70.099		
4,000.0	3,943.2	3,884.1	3,701.0	13.2	0.0	-27.33	-675.5	-931.2	615.2	606.6	8.65	71.155		
4,100.0	4,041.3	3,981.4	3,789.7	13.5	0.0	-27.02	-697.2	-964.8	638.5	629.6	8.85	72.161		
4,200.0	4,139.5	4,078.6	3,878.3	13.9	0.0	-26.74	-718.9	-998.4	661.7	652.7	9.05	73.121		
4,300.0	4,237.6	4,175.8	3,966.9	14.3	0.0	-26.48	-740.6	-1,032.0	685.0	675.7	9.25	74.038		
4,400.0	4,335.8	4,273.0	4,055.5	14.7	0.0	-26.23	-762.3	-1,065.5	708.3	698.8	9.45	74.914		
4,500.0	4,433.9	4,370.2	4,144.1	15.1	0.0	-26.00	-784.0	-1,099.1	731.6	721.9	9.66	75.753		
4,600.0	4,532.1	4,467.4	4,232.7	15.5	0.0	-25.79	-805.7	-1,132.7	754.9	745.0	9.86	76.556		
4,700.0	4,630.2	4,564.6	4,321.3	15.8	0.0	-25.58	-827.3	-1,166.2	778.2	768.1	10.06	77.325		
4,800.0	4,728.4	4,661.8	4,409.9	16.2	0.0	-25.39	-849.0	-1,199.8	801.5	791.2	10.27	78.063		
4,900.0	4,826.5	4,759.0	4,498.6	16.6	0.0	-25.21	-870.7	-1,233.4	824.8	814.3	10.47	78.772		
5,000.0	4,924.7	4,856.2	4,587.2	17.0	0.0	-25.04	-892.4	-1,267.0	848.2	837.5	10.67	79.453		
5,100.0	5,022.8	4,953.5	4,675.8	17.4	0.0	-24.88	-914.1	-1,300.5	871.5	860.6	10.88	80.107		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
5,200.0	5,120.9	5,050.7	4,764.4	17.7	0.0	-24.73	-935.8	-1,334.1	894.8	883.8	11.08	80.737		
5,300.0	5,219.1	5,147.9	4,853.0	18.1	0.0	-24.58	-957.5	-1,367.7	918.2	906.9	11.29	81.344		
5,400.0	5,317.2	5,245.1	4,941.6	18.5	0.0	-24.44	-979.2	-1,401.2	941.6	930.1	11.49	81.928		
5,500.0	5,415.4	5,342.3	5,030.2	18.9	0.0	-24.31	-1,000.9	-1,434.8	964.9	953.2	11.70	82.492		
5,600.0	5,513.5	5,439.5	5,118.8	19.3	0.0	-24.19	-1,022.6	-1,468.4	988.3	976.4	11.90	83.035		
7,400.0	6,790.0	6,908.1	6,455.7	37.7	0.0	-69.78	-1,349.8	-1,980.2	989.6	954.8	34.84	28.403		
7,500.0	6,790.0	6,950.0	6,491.2	39.9	0.0	-71.94	-1,358.4	-2,000.6	972.5	935.1	37.40	26.002		
7,600.0	6,790.0	6,991.9	6,525.3	42.2	0.0	-74.03	-1,366.8	-2,023.5	963.4	923.4	39.98	24.096		
7,679.4	6,790.0	7,037.4	6,560.6	44.0	0.0	-76.20	-1,375.4	-2,050.8	961.3	919.1	42.13	22.818		
7,700.0	6,790.0	7,050.6	6,570.6	44.4	0.0	-76.80	-1,377.8	-2,059.3	961.4	918.7	42.69	22.521		
7,800.0	6,790.0	7,125.7	6,623.4	46.7	0.0	-80.04	-1,390.6	-2,111.0	965.3	919.9	45.43	21.247		
7,900.0	6,790.0	7,221.9	6,681.8	49.0	0.0	-83.59	-1,404.8	-2,186.0	973.1	925.0	48.13	20.218		
8,000.0	6,790.0	7,342.9	6,738.6	51.3	0.0	-86.99	-1,418.5	-2,291.7	981.8	931.1	50.69	19.370		
8,100.0	6,790.0	7,487.4	6,779.6	53.6	0.0	-89.40	-1,428.2	-2,429.6	988.2	935.1	53.10	18.610		
8,200.0	6,790.0	7,630.0	6,790.0	56.0	0.0	-90.00	-1,430.4	-2,571.5	989.8	934.4	55.47	17.844		
8,300.0	6,790.0	7,730.0	6,790.0	58.3	0.0	-90.00	-1,430.2	-2,671.5	989.8	932.0	57.85	17.111		
8,400.0	6,790.0	7,830.0	6,790.0	60.7	0.0	-90.00	-1,429.9	-2,771.5	989.8	929.6	60.23	16.434		
8,500.0	6,790.0	7,930.0	6,790.0	63.1	0.0	-90.00	-1,429.7	-2,871.5	989.8	927.2	62.62	15.806		
8,600.0	6,790.0	8,030.0	6,790.0	65.4	0.0	-90.00	-1,429.4	-2,971.5	989.8	924.8	65.02	15.224		
8,700.0	6,790.0	8,130.0	6,790.0	67.8	0.0	-90.00	-1,429.2	-3,071.5	989.8	922.4	67.42	14.681		
8,800.0	6,790.0	8,230.0	6,790.0	70.2	0.0	-90.00	-1,428.9	-3,171.5	989.8	920.0	69.83	14.175		
8,900.0	6,790.0	8,330.0	6,790.0	72.6	0.0	-90.00	-1,428.7	-3,271.5	989.8	917.6	72.24	13.702		
9,000.0	6,790.0	8,430.0	6,790.0	75.0	0.0	-90.00	-1,428.4	-3,371.5	989.8	915.2	74.66	13.258		
9,100.0	6,790.0	8,530.0	6,790.0	77.4	0.0	-90.00	-1,428.2	-3,471.5	989.8	912.8	77.08	12.842		
9,200.0	6,790.0	8,630.0	6,790.0	79.8	0.0	-90.00	-1,427.9	-3,571.5	989.8	910.3	79.50	12.450		
9,300.0	6,790.0	8,730.0	6,790.0	82.3	0.0	-90.00	-1,427.7	-3,671.5	989.8	907.9	81.93	12.082		
9,400.0	6,790.0	8,830.0	6,790.0	84.7	0.0	-90.00	-1,427.4	-3,771.5	989.8	905.5	84.36	11.734		
9,500.0	6,790.0	8,930.0	6,790.0	87.1	0.0	-90.00	-1,427.2	-3,871.5	989.8	903.1	86.79	11.405		
9,600.0	6,790.0	9,030.0	6,790.0	89.5	0.0	-90.00	-1,426.9	-3,971.5	989.8	900.6	89.22	11.094		
9,700.0	6,790.0	9,130.0	6,790.0	91.9	0.0	-90.00	-1,426.7	-4,071.5	989.8	898.2	91.66	10.799		
9,800.0	6,790.0	9,230.0	6,790.0	94.4	0.0	-90.00	-1,426.4	-4,171.5	989.8	895.7	94.10	10.519		
9,900.0	6,790.0	9,330.0	6,790.0	96.8	0.0	-90.00	-1,426.2	-4,271.5	989.8	893.3	96.54	10.253		
10,000.0	6,790.0	9,430.0	6,790.0	99.2	0.0	-90.00	-1,425.9	-4,371.5	989.8	890.9	98.98	10.000		
10,100.0	6,790.0	9,530.0	6,790.0	101.7	0.0	-90.00	-1,425.7	-4,471.5	989.8	888.4	101.42	9.759		
10,200.0	6,790.0	9,630.0	6,790.0	104.1	0.0	-90.00	-1,425.4	-4,571.5	989.8	886.0	103.87	9.530		
10,300.0	6,790.0	9,730.0	6,790.0	106.6	0.0	-90.00	-1,425.2	-4,671.5	989.8	883.5	106.32	9.310		
10,400.0	6,790.0	9,830.0	6,790.0	109.0	0.0	-90.00	-1,424.9	-4,771.5	989.8	881.1	108.76	9.101		
10,500.0	6,790.0	9,930.0	6,790.0	111.4	0.0	-90.00	-1,424.7	-4,871.5	989.8	878.6	111.21	8.901		
10,600.0	6,790.0	10,030.0	6,790.0	113.9	0.0	-90.00	-1,424.4	-4,971.5	989.8	876.2	113.66	8.709		
10,700.0	6,790.0	10,130.0	6,790.0	116.3	0.0	-90.00	-1,424.2	-5,071.5	989.8	873.7	116.11	8.525		
10,800.0	6,790.0	10,230.0	6,790.0	118.8	0.0	-90.00	-1,423.9	-5,171.5	989.8	871.3	118.56	8.349		
10,900.0	6,790.0	10,330.0	6,790.0	121.2	0.0	-90.00	-1,423.7	-5,271.5	989.8	868.8	121.02	8.179		
11,000.0	6,790.0	10,430.0	6,790.0	123.7	0.0	-90.00	-1,423.4	-5,371.5	989.8	866.4	123.47	8.017		
11,100.0	6,790.0	10,530.0	6,790.0	126.1	0.0	-90.00	-1,423.2	-5,471.5	989.8	863.9	125.92	7.861		
11,200.0	6,790.0	10,630.0	6,790.0	128.6	0.0	-90.00	-1,422.9	-5,571.5	989.8	861.5	128.38	7.710		
11,300.0	6,790.0	10,730.0	6,790.0	131.0	0.0	-90.00	-1,422.7	-5,671.5	989.8	859.0	130.84	7.565		
11,400.0	6,790.0	10,830.0	6,790.0	133.5	0.0	-90.00	-1,422.4	-5,771.5	989.8	856.5	133.29	7.426		
11,500.0	6,790.0	10,930.0	6,790.0	135.9	0.0	-90.00	-1,422.2	-5,871.5	989.8	854.1	135.75	7.292		
11,600.0	6,790.0	11,030.0	6,790.0	138.4	0.0	-90.00	-1,421.9	-5,971.5	989.8	851.6	138.21	7.162		
11,700.0	6,790.0	11,130.0	6,790.0	140.8	0.0	-90.00	-1,421.7	-6,071.5	989.8	849.2	140.67	7.037		
11,800.0	6,790.0	11,230.0	6,790.0	143.3	0.0	-90.00	-1,421.4	-6,171.5	989.8	846.7	143.13	6.916		
11,900.0	6,790.0	11,330.0	6,790.0	145.8	0.0	-90.00	-1,421.2	-6,271.5	989.8	844.2	145.58	6.799		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 10 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
12,000.0	6,790.0	11,430.0	6,790.0	148.2	0.0	-90.00	-1,420.9	-6,371.5	989.8	841.8	148.04	6.686	
12,100.0	6,790.0	11,530.0	6,790.0	150.7	0.0	-90.00	-1,420.7	-6,471.5	989.8	839.3	150.51	6.577	
12,200.0	6,790.0	11,630.0	6,790.0	153.1	0.0	-90.00	-1,420.4	-6,571.5	989.8	836.9	152.97	6.471	
12,300.0	6,790.0	11,730.0	6,790.0	155.6	0.0	-90.00	-1,420.2	-6,671.5	989.8	834.4	155.43	6.368	
12,400.0	6,790.0	11,830.0	6,790.0	158.0	0.0	-90.00	-1,419.9	-6,771.5	989.8	831.9	157.89	6.269	
12,500.0	6,790.0	11,930.0	6,790.0	160.5	0.0	-90.00	-1,419.7	-6,871.5	989.8	829.5	160.35	6.173	
12,600.0	6,790.0	12,030.0	6,790.0	163.0	0.0	-90.00	-1,419.4	-6,971.5	989.8	827.0	162.81	6.080	
12,700.0	6,790.0	12,130.0	6,790.0	165.4	0.0	-90.00	-1,419.2	-7,071.5	989.8	824.6	165.28	5.989	
12,800.0	6,790.0	12,230.0	6,790.0	167.9	0.0	-90.00	-1,418.9	-7,171.5	989.8	822.1	167.74	5.901	
12,900.0	6,790.0	12,330.0	6,790.0	170.3	0.0	-90.00	-1,418.7	-7,271.5	989.8	819.6	170.20	5.816	
13,000.0	6,790.0	12,430.0	6,790.0	172.8	0.0	-90.00	-1,418.4	-7,371.5	989.8	817.2	172.67	5.733	
13,100.0	6,790.0	12,530.0	6,790.0	175.3	0.0	-90.00	-1,418.2	-7,471.5	989.8	814.7	175.13	5.652	
13,200.0	6,790.0	12,630.0	6,790.0	177.7	0.0	-90.00	-1,417.9	-7,571.5	989.8	812.2	177.60	5.573	
13,300.0	6,790.0	12,730.0	6,790.0	180.2	0.0	-90.00	-1,417.7	-7,671.5	989.8	809.8	180.06	5.497	
13,400.0	6,790.0	12,830.0	6,790.0	182.7	0.0	-90.00	-1,417.4	-7,771.5	989.8	807.3	182.53	5.423	
13,500.0	6,790.0	12,930.0	6,790.0	185.1	0.0	-90.00	-1,417.2	-7,871.5	989.8	804.8	184.99	5.351	
13,600.0	6,790.0	13,030.0	6,790.0	187.6	0.0	-90.00	-1,416.9	-7,971.5	989.8	802.4	187.46	5.280	
13,700.0	6,790.0	13,130.0	6,790.0	190.1	0.0	-90.00	-1,416.7	-8,071.5	989.8	799.9	189.92	5.212	
13,800.0	6,790.0	13,230.0	6,790.0	192.5	0.0	-90.00	-1,416.4	-8,171.5	989.8	797.4	192.39	5.145	
13,900.0	6,790.0	13,330.0	6,790.0	195.0	0.0	-90.00	-1,416.2	-8,271.5	989.8	795.0	194.85	5.080	
14,000.0	6,790.0	13,430.0	6,790.0	197.4	0.0	-90.00	-1,415.9	-8,371.5	989.8	792.5	197.32	5.016	
14,100.0	6,790.0	13,530.0	6,790.0	199.9	0.0	-90.00	-1,415.7	-8,471.5	989.8	790.0	199.79	4.954	
14,200.0	6,790.0	13,630.0	6,790.0	202.4	0.0	-90.00	-1,415.4	-8,571.5	989.8	787.6	202.25	4.894	
14,300.0	6,790.0	13,730.0	6,790.0	204.8	0.0	-90.00	-1,415.2	-8,671.5	989.8	785.1	204.72	4.835	
14,400.0	6,790.0	13,830.0	6,790.0	207.3	0.0	-90.00	-1,414.9	-8,771.5	989.8	782.6	207.19	4.777	
14,500.0	6,790.0	13,930.0	6,790.0	209.8	0.0	-90.00	-1,414.7	-8,871.5	989.8	780.2	209.66	4.721	
14,600.0	6,790.0	14,030.0	6,790.0	212.2	0.0	-90.00	-1,414.4	-8,971.5	989.8	777.7	212.12	4.666	
14,700.0	6,790.0	14,130.0	6,790.0	214.7	0.0	-90.00	-1,414.2	-9,071.5	989.8	775.2	214.59	4.613	
14,800.0	6,790.0	14,230.0	6,790.0	217.2	0.0	-90.00	-1,413.9	-9,171.5	989.8	772.8	217.06	4.560	
14,900.0	6,790.0	14,330.0	6,790.0	219.6	0.0	-90.00	-1,413.7	-9,271.5	989.8	770.3	219.53	4.509	
15,000.0	6,790.0	14,430.0	6,790.0	222.1	0.0	-90.00	-1,413.4	-9,371.5	989.8	767.8	221.99	4.459	
15,100.0	6,790.0	14,530.0	6,790.0	224.6	0.0	-90.00	-1,413.2	-9,471.5	989.8	765.4	224.46	4.410	
15,200.0	6,790.0	14,630.0	6,790.0	227.0	0.0	-90.00	-1,412.9	-9,571.5	989.8	762.9	226.93	4.362	
15,300.0	6,790.0	14,730.0	6,790.0	229.5	0.0	-90.00	-1,412.7	-9,671.5	989.8	760.4	229.40	4.315	
15,400.0	6,790.0	14,830.0	6,790.0	232.0	0.0	-90.00	-1,412.4	-9,771.5	989.8	758.0	231.87	4.269	
15,500.0	6,790.0	14,930.0	6,790.0	234.4	0.0	-90.00	-1,412.2	-9,871.5	989.8	755.5	234.34	4.224	
15,600.0	6,790.0	15,030.0	6,790.0	236.9	0.0	-90.00	-1,411.9	-9,971.5	989.8	753.0	236.81	4.180	
15,700.0	6,790.0	15,130.0	6,790.0	239.4	0.0	-90.00	-1,411.7	-10,071.5	989.8	750.5	239.27	4.137	
15,800.0	6,790.0	15,230.0	6,790.0	241.8	0.0	-90.00	-1,411.4	-10,171.5	989.8	748.1	241.74	4.094	
15,900.0	6,790.0	15,330.0	6,790.0	244.3	0.0	-90.00	-1,411.2	-10,271.5	989.8	745.6	244.21	4.053	
16,000.0	6,790.0	15,430.0	6,790.0	246.8	0.0	-90.00	-1,410.9	-10,371.5	989.8	743.1	246.68	4.013	
16,100.0	6,790.0	15,530.0	6,790.0	249.2	0.0	-90.00	-1,410.7	-10,471.5	989.8	740.7	249.15	3.973	
16,200.0	6,790.0	15,630.0	6,790.0	251.7	0.0	-90.00	-1,410.4	-10,571.5	989.8	738.2	251.62	3.934	
16,300.0	6,790.0	15,730.0	6,790.0	254.2	0.0	-90.00	-1,410.2	-10,671.5	989.8	735.7	254.09	3.896	
16,400.0	6,790.0	15,830.0	6,790.0	256.7	0.0	-90.00	-1,409.9	-10,771.5	989.8	733.3	256.56	3.858	
16,500.0	6,790.0	15,930.0	6,790.0	259.1	0.0	-90.00	-1,409.7	-10,871.5	989.8	730.8	259.03	3.821	
16,600.0	6,790.0	16,030.0	6,790.0	261.6	0.0	-90.00	-1,409.4	-10,971.5	989.8	728.3	261.50	3.785	
16,700.0	6,790.0	16,130.0	6,790.0	264.1	0.0	-90.00	-1,409.2	-11,071.5	989.8	725.8	263.97	3.750	
16,800.0	6,790.0	16,230.0	6,790.0	266.5	0.0	-90.00	-1,408.9	-11,171.5	989.8	723.4	266.44	3.715	
16,900.0	6,790.0	16,330.0	6,790.0	269.0	0.0	-90.00	-1,408.7	-11,271.5	989.8	720.9	268.91	3.681	
17,000.0	6,790.0	16,430.0	6,790.0	271.5	0.0	-90.00	-1,408.4	-11,371.5	989.8	718.4	271.38	3.647	
17,100.0	6,790.0	16,530.0	6,790.0	273.9	0.0	-90.00	-1,408.2	-11,471.5	989.8	716.0	273.85	3.614	

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S16-T6N-R67W - Breniman 10 - Hz - Plan #1												<b>Offset Site Error:</b>	0.0 usft
Survey Program: 0-												<b>Offset Well Error:</b>	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
17,200.0	6,790.0	16,630.0	6,790.0	276.4	0.0	-90.00	-1,407.9	-11,571.5	989.8	713.5	276.32	3.582	
17,300.0	6,790.0	16,730.0	6,790.0	278.9	0.0	-90.00	-1,407.7	-11,671.5	989.8	711.0	278.79	3.550	
17,367.1	6,790.0	16,797.1	6,790.0	280.5	0.0	-90.00	-1,407.5	-11,738.6	989.8	709.4	280.45	3.529	
17,400.0	6,790.0	16,829.6	6,790.0	281.3	0.0	-90.00	-1,407.4	-11,771.1	989.8	708.6	281.26	3.519	
17,401.9	6,790.0	16,829.6	6,790.0	281.4	0.0	-90.00	-1,407.4	-11,771.1	989.8	708.5	281.31	3.519 SF	

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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-Reference														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	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	-149.14	-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	1,265.129			
200.0	200.0	200.0	200.0	0.3	0.0	-149.14	-144.3	-86.2	168.1	167.8	0.31	546.774	CC		
300.0	300.0	297.3	297.3	0.5	0.0	-37.07	-144.8	-86.9	168.2	167.7	0.48	348.720	ES		
400.0	400.0	394.6	394.6	0.7	0.0	-37.29	-146.3	-88.8	168.5	167.8	0.66	255.762			
500.0	499.9	492.0	491.8	0.9	0.0	-37.67	-148.9	-92.0	169.0	168.1	0.84	201.579			
600.0	599.7	589.3	589.0	1.1	0.0	-38.19	-152.5	-96.5	169.7	168.7	1.02	165.938			
700.0	699.4	686.6	686.0	1.3	0.0	-38.85	-157.2	-102.3	170.6	169.4	1.21	140.583			
800.0	798.9	783.8	782.8	1.5	0.0	-39.65	-162.9	-109.4	171.8	170.4	1.41	121.520			
900.0	898.3	881.1	879.5	1.8	0.0	-40.58	-169.6	-117.8	173.3	171.6	1.63	106.583			
1,000.0	997.4	978.3	976.0	2.0	0.0	-41.63	-177.3	-127.4	175.0	173.1	1.85	94.499			
1,100.0	1,096.3	1,075.6	1,072.2	2.3	0.0	-42.79	-186.1	-138.3	177.0	174.9	2.10	84.481			
1,200.0	1,194.9	1,172.8	1,168.1	2.7	0.0	-44.05	-195.8	-150.5	179.4	177.0	2.36	76.014			
1,300.0	1,293.3	1,269.9	1,263.7	3.0	0.0	-45.41	-206.6	-163.9	182.1	179.4	2.65	68.737			
1,400.0	1,391.4	1,367.1	1,359.0	3.4	0.0	-46.70	-218.4	-178.6	185.7	182.7	2.95	62.936			
1,500.0	1,489.5	1,464.2	1,453.9	3.7	0.0	-47.68	-231.2	-194.5	190.8	187.6	3.26	58.586			
1,600.0	1,587.7	1,561.1	1,548.3	4.1	0.0	-48.35	-245.0	-211.7	197.5	193.9	3.57	55.377			
1,700.0	1,685.8	1,657.9	1,642.2	4.5	0.0	-48.73	-259.8	-230.1	205.5	201.7	3.87	53.069			
1,800.0	1,784.0	1,754.5	1,735.5	4.8	0.0	-48.84	-275.5	-249.7	215.0	210.9	4.18	51.487			
1,900.0	1,882.1	1,850.7	1,828.0	5.2	0.0	-48.73	-292.1	-270.4	225.9	221.5	4.47	50.495			
2,000.0	1,980.3	1,946.7	1,919.8	5.6	0.0	-48.41	-309.6	-292.2	238.3	233.5	4.77	49.992			
2,100.0	2,078.4	2,042.3	2,010.7	6.0	0.0	-47.93	-328.1	-315.2	252.0	246.9	5.05	49.901	SF		
2,200.0	2,176.6	2,137.4	2,100.7	6.3	0.0	-47.32	-347.4	-339.2	267.1	261.8	5.33	50.161			
2,300.0	2,274.7	2,232.0	2,189.7	6.7	0.0	-46.61	-367.5	-364.3	283.7	278.1	5.59	50.724			
2,400.0	2,372.9	2,326.1	2,277.7	7.1	0.0	-45.84	-388.4	-390.3	301.8	295.9	5.85	51.552			
2,500.0	2,471.0	2,419.7	2,364.6	7.5	0.0	-45.01	-410.1	-417.3	321.3	315.2	6.11	52.613			
2,600.0	2,569.2	2,512.6	2,450.3	7.9	0.0	-44.17	-432.5	-445.2	342.3	335.9	6.35	53.880			
2,700.0	2,667.3	2,604.8	2,534.8	8.2	0.0	-43.31	-455.6	-474.0	364.7	358.1	6.59	55.329			
2,800.0	2,765.4	2,696.4	2,618.1	8.6	0.0	-42.45	-479.4	-503.6	388.6	381.8	6.82	56.942			
2,900.0	2,863.6	2,787.2	2,700.1	9.0	0.0	-41.60	-503.7	-534.0	414.0	407.0	7.05	58.699			
3,000.0	2,961.7	2,881.4	2,784.8	9.4	0.0	-40.75	-529.7	-566.4	440.6	433.3	7.28	60.555			
3,100.0	3,059.9	2,977.6	2,871.1	9.7	0.0	-39.98	-556.3	-599.5	467.3	459.8	7.50	62.323			
3,200.0	3,158.0	3,073.8	2,957.4	10.1	0.0	-39.30	-582.8	-632.5	494.1	486.3	7.72	63.990			
3,300.0	3,256.2	3,170.0	3,043.8	10.5	0.0	-38.68	-609.4	-665.6	520.9	512.9	7.95	65.561			
3,400.0	3,354.3	3,266.2	3,130.1	10.9	0.0	-38.12	-635.9	-698.7	547.8	539.6	8.17	67.045			
3,500.0	3,452.5	3,362.4	3,216.4	11.3	0.0	-37.62	-662.5	-731.8	574.7	566.3	8.40	68.448			
3,600.0	3,550.6	3,458.5	3,302.7	11.6	0.0	-37.16	-689.0	-764.9	601.7	593.1	8.62	69.776			
3,700.0	3,648.8	3,554.7	3,389.1	12.0	0.0	-36.74	-715.6	-797.9	628.7	619.8	8.85	71.035			
3,800.0	3,746.9	3,650.9	3,475.4	12.4	0.0	-36.36	-742.2	-831.0	655.7	646.6	9.08	72.229			
3,900.0	3,845.0	3,747.1	3,561.7	12.8	0.0	-36.00	-768.7	-864.1	682.8	673.5	9.31	73.364			
4,000.0	3,943.2	3,843.3	3,648.1	13.2	0.0	-35.67	-795.3	-897.2	709.9	700.3	9.54	74.443			
4,100.0	4,041.3	3,939.5	3,734.4	13.5	0.0	-35.37	-821.8	-930.2	737.0	727.2	9.76	75.470			
4,200.0	4,139.5	4,035.7	3,820.7	13.9	0.0	-35.09	-848.4	-963.3	764.1	754.1	9.99	76.449			
4,300.0	4,237.6	4,131.8	3,907.0	14.3	0.0	-34.82	-874.9	-996.4	791.2	781.0	10.22	77.384			
4,400.0	4,335.8	4,228.0	3,993.4	14.7	0.0	-34.58	-901.5	-1,029.5	818.4	807.9	10.45	78.276			
4,500.0	4,433.9	4,324.2	4,079.7	15.1	0.0	-34.35	-928.0	-1,062.6	845.5	834.8	10.69	79.129			
4,600.0	4,532.1	4,420.4	4,166.0	15.5	0.0	-34.13	-954.6	-1,095.6	872.7	861.8	10.92	79.945			
4,700.0	4,630.2	4,516.6	4,252.4	15.8	0.0	-33.93	-981.1	-1,128.7	899.9	888.7	11.15	80.726			
4,800.0	4,728.4	4,612.8	4,338.7	16.2	0.0	-33.74	-1,007.7	-1,161.8	927.1	915.7	11.38	81.475			
4,900.0	4,826.5	4,709.0	4,425.0	16.6	0.0	-33.56	-1,034.2	-1,194.9	954.3	942.7	11.61	82.194			
5,000.0	4,924.7	4,805.2	4,511.4	17.0	0.0	-33.39	-1,060.8	-1,227.9	981.5	969.6	11.84	82.884			

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 5
<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 5	<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		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			
0.0	0.0	0.0	0.0	0.0	0.0	31.16	71.8	43.4	83.9						
100.0	100.0	100.0	100.0	0.1	0.1	31.16	71.8	43.4	83.9	83.6	0.27	316.122			
200.0	200.0	200.0	200.0	0.3	0.3	31.16	71.8	43.4	83.9	83.2	0.61	136.507 CC			
300.0	300.0	300.6	300.6	0.5	0.5	143.10	71.9	42.5	84.2	83.2	0.97	87.209 ES			
400.0	400.0	401.2	401.1	0.7	0.7	142.53	72.2	39.9	85.2	83.9	1.32	64.474			
500.0	499.9	501.7	501.6	0.9	0.9	141.60	72.8	35.5	87.0	85.3	1.69	51.499			
600.0	599.7	602.3	601.9	1.1	1.1	140.37	73.5	29.4	89.5	87.4	2.07	43.173			
700.0	699.4	702.7	702.1	1.3	1.3	138.88	74.5	21.5	92.7	90.2	2.48	37.415			
800.0	798.9	803.2	802.0	1.5	1.5	137.20	75.7	11.9	96.7	93.8	2.91	33.217			
900.0	898.3	903.5	901.7	1.8	1.8	135.39	77.2	0.6	101.6	98.2	3.38	30.037			
1,000.0	997.4	1,003.8	1,001.1	2.0	2.0	133.50	78.8	-12.5	107.3	103.4	3.89	27.556			
1,100.0	1,096.3	1,103.9	1,100.2	2.3	2.3	131.59	80.7	-27.2	113.9	109.5	4.45	25.577			
1,200.0	1,194.9	1,204.0	1,198.9	2.7	2.7	129.70	82.8	-43.7	121.4	116.4	5.06	23.974			
1,300.0	1,293.3	1,303.8	1,297.0	3.0	3.0	127.90	85.1	-61.7	129.8	124.1	5.72	22.682			
1,400.0	1,391.4	1,403.4	1,394.8	3.4	3.4	126.51	87.4	-80.1	138.9	132.5	6.40	21.702			
1,500.0	1,489.5	1,502.9	1,492.6	3.7	3.7	125.31	89.7	-98.5	148.0	140.9	7.09	20.882			
1,600.0	1,587.7	1,602.4	1,590.4	4.1	4.1	124.24	92.0	-116.9	157.1	149.3	7.78	20.190			
1,700.0	1,685.8	1,702.0	1,688.2	4.5	4.4	123.29	94.4	-135.3	166.3	157.8	8.48	19.602			
1,800.0	1,784.0	1,801.5	1,786.0	4.8	4.8	122.44	96.7	-153.7	175.6	166.4	9.19	19.096			
1,900.0	1,882.1	1,901.1	1,883.8	5.2	5.2	121.68	99.0	-172.2	184.8	174.9	9.91	18.659			
2,000.0	1,980.3	2,000.6	1,981.6	5.6	5.5	120.98	101.4	-190.6	194.1	183.5	10.62	18.277			
2,100.0	2,078.4	2,100.1	2,079.4	6.0	5.9	120.36	103.7	-209.0	203.5	192.1	11.34	17.942			
2,200.0	2,176.6	2,199.7	2,177.2	6.3	6.3	119.78	106.0	-227.4	212.8	200.8	12.06	17.645			
2,300.0	2,274.7	2,299.2	2,275.0	6.7	6.6	119.26	108.4	-245.8	222.2	209.4	12.78	17.380			
2,400.0	2,372.9	2,398.8	2,372.8	7.1	7.0	118.78	110.7	-264.2	231.6	218.1	13.51	17.144			
2,500.0	2,471.0	2,498.3	2,470.6	7.5	7.4	118.33	113.0	-282.6	241.0	226.8	14.23	16.931			
2,600.0	2,569.2	2,597.8	2,568.4	7.9	7.7	117.92	115.3	-301.0	250.4	235.5	14.96	16.738			
2,700.0	2,667.3	2,697.4	2,666.2	8.2	8.1	117.54	117.7	-319.4	259.8	244.2	15.69	16.563			
2,800.0	2,765.4	2,796.9	2,764.0	8.6	8.5	117.18	120.0	-337.8	269.3	252.9	16.42	16.404			
2,900.0	2,863.6	2,896.5	2,861.7	9.0	8.9	116.85	122.3	-356.2	278.7	261.6	17.15	16.258			
3,000.0	2,961.7	2,996.0	2,959.5	9.4	9.2	116.54	124.7	-374.7	288.2	270.3	17.87	16.123			
3,100.0	3,059.9	3,095.5	3,057.3	9.7	9.6	116.26	127.0	-393.1	297.7	279.1	18.60	16.000			
3,200.0	3,158.0	3,195.1	3,155.1	10.1	10.0	115.98	129.3	-411.5	307.1	287.8	19.33	15.886			
3,300.0	3,256.2	3,294.6	3,252.9	10.5	10.3	115.73	131.6	-429.9	316.6	296.6	20.07	15.780			
3,400.0	3,354.3	3,394.2	3,350.7	10.9	10.7	115.49	134.0	-448.3	326.1	305.3	20.80	15.682			
3,500.0	3,452.5	3,493.7	3,448.5	11.3	11.1	115.26	136.3	-466.7	335.6	314.1	21.53	15.590			
3,600.0	3,550.6	3,593.2	3,546.3	11.6	11.4	115.05	138.6	-485.1	345.1	322.8	22.26	15.504			
3,700.0	3,648.8	3,692.8	3,644.1	12.0	11.8	114.84	141.0	-503.5	354.6	331.6	22.99	15.424			
3,800.0	3,746.9	3,792.3	3,741.9	12.4	12.2	114.65	143.3	-521.9	364.1	340.4	23.72	15.349			
3,900.0	3,845.0	3,891.9	3,839.7	12.8	12.6	114.47	145.6	-540.3	373.6	349.2	24.45	15.279			
4,000.0	3,943.2	3,991.4	3,937.5	13.2	12.9	114.30	147.9	-558.7	383.1	357.9	25.19	15.213			
4,100.0	4,041.3	4,090.9	4,035.3	13.5	13.3	114.13	150.3	-577.2	392.7	366.7	25.92	15.150			
4,200.0	4,139.5	4,190.5	4,133.1	13.9	13.7	113.97	152.6	-595.6	402.2	375.5	26.65	15.091			
4,300.0	4,237.6	4,290.0	4,230.9	14.3	14.0	113.82	154.9	-614.0	411.7	384.3	27.38	15.035			
4,400.0	4,335.8	4,389.6	4,328.7	14.7	14.4	113.68	157.3	-632.4	421.2	393.1	28.11	14.982			
4,500.0	4,433.9	4,489.1	4,426.5	15.1	14.8	113.54	159.6	-650.8	430.7	401.9	28.85	14.932			
4,600.0	4,532.1	4,588.6	4,524.3	15.5	15.2	113.41	161.9	-669.2	440.3	410.7	29.58	14.885			
4,700.0	4,630.2	4,688.2	4,622.1	15.8	15.5	113.29	164.2	-687.6	449.8	419.5	30.31	14.839			
4,800.0	4,728.4	4,787.7	4,719.9	16.2	15.9	113.17	166.6	-706.0	459.3	428.3	31.04	14.796			
4,900.0	4,826.5	4,887.3	4,817.6	16.6	16.3	113.05	168.9	-724.4	468.9	437.1	31.78	14.755			
5,000.0	4,924.7	4,986.8	4,915.4	17.0	16.6	112.94	171.2	-742.8	478.4	445.9	32.51	14.716			
5,100.0	5,022.8	5,086.3	5,013.2	17.4	17.0	112.84	173.6	-761.2	488.0	454.7	33.24	14.679			

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 5
<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 5	<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 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	5,120.9	5,185.9	5,111.0	17.7	17.4	112.73	175.9	-779.6	497.5	463.5	33.98	14.643		
5,300.0	5,219.1	5,285.4	5,208.8	18.1	17.8	112.63	178.2	-798.1	507.0	472.3	34.71	14.609		
5,400.0	5,317.2	5,385.0	5,306.6	18.5	18.1	112.54	180.5	-816.5	516.6	481.1	35.44	14.576		
5,500.0	5,415.4	5,484.5	5,404.4	18.9	18.5	112.45	182.9	-834.9	526.1	490.0	36.17	14.544		
5,600.0	5,513.5	5,584.0	5,502.2	19.3	18.9	112.36	185.2	-853.3	535.7	498.8	36.91	14.514		
5,700.0	5,611.7	5,683.6	5,600.0	19.6	19.2	112.28	187.5	-871.7	545.2	507.6	37.64	14.485		
5,800.0	5,709.8	5,783.1	5,697.8	20.0	19.6	112.19	189.9	-890.1	554.8	516.4	38.37	14.457		
5,900.0	5,808.0	5,882.7	5,795.6	20.4	20.0	112.11	192.2	-908.5	564.3	525.2	39.11	14.431		
6,000.0	5,906.1	5,982.2	5,893.4	20.8	20.4	112.04	194.5	-926.9	573.9	534.0	39.84	14.405		
6,100.0	6,004.3	6,081.7	5,991.2	21.2	20.7	111.96	196.8	-945.3	583.4	542.9	40.57	14.380		
6,200.0	6,102.4	6,181.3	6,089.0	21.6	21.1	111.89	199.2	-963.7	593.0	551.7	41.31	14.356		
6,300.0	6,200.5	6,280.8	6,186.8	21.9	21.5	111.82	201.5	-982.1	602.5	560.5	42.04	14.333		
6,400.0	6,298.5	6,380.4	6,284.6	22.3	21.9	107.03	203.8	-1,000.7	612.1	569.3	42.82	14.293		
6,500.0	6,393.5	6,480.3	6,380.3	23.0	22.4	99.40	206.1	-1,028.9	621.3	577.3	44.08	14.096		
6,600.0	6,482.6	6,580.7	6,470.9	23.8	23.3	95.83	208.4	-1,071.8	630.0	584.2	45.82	13.750		
6,700.0	6,563.7	6,681.5	6,553.9	24.9	24.4	93.70	210.4	-1,128.8	638.0	589.9	48.06	13.275		
6,800.0	6,634.7	6,782.7	6,627.2	26.2	25.7	92.29	212.3	-1,198.4	644.9	594.1	50.77	12.701		
6,900.0	6,693.9	6,884.2	6,688.7	27.8	27.3	91.31	214.0	-1,279.1	650.7	596.7	53.96	12.059		
7,000.0	6,739.8	6,986.2	6,736.8	29.5	29.1	90.64	215.3	-1,368.8	655.2	597.6	57.58	11.379		
7,100.0	6,771.3	7,088.4	6,770.0	31.4	31.2	90.22	216.3	-1,465.3	658.3	596.7	61.55	10.694		
7,200.0	6,787.6	7,190.7	6,787.4	33.5	33.3	90.02	217.0	-1,566.1	659.9	594.1	65.79	10.030		
7,300.0	6,790.0	7,292.1	6,790.0	35.6	35.5	90.00	217.3	-1,667.4	660.1	590.0	70.16	9.409		
7,400.0	6,790.0	7,392.1	6,790.0	37.7	37.8	90.00	217.5	-1,767.4	660.1	585.5	74.60	8.849		
7,500.0	6,790.0	7,492.1	6,790.0	39.9	40.0	90.00	217.8	-1,867.4	660.1	581.0	79.10	8.345		
7,600.0	6,790.0	7,592.1	6,790.0	42.2	42.3	90.00	218.0	-1,967.4	660.1	576.5	83.66	7.891		
7,700.0	6,790.0	7,692.1	6,790.0	44.4	44.6	90.00	218.3	-2,067.4	660.1	571.9	88.25	7.480		
7,800.0	6,790.0	7,792.1	6,790.0	46.7	46.9	90.00	218.5	-2,167.4	660.1	567.2	92.88	7.107		
7,900.0	6,790.0	7,892.1	6,790.0	49.0	49.2	90.00	218.8	-2,267.4	660.1	562.6	97.55	6.767		
8,000.0	6,790.0	7,992.1	6,790.0	51.3	51.5	90.00	219.0	-2,367.4	660.1	557.9	102.24	6.457		
8,100.0	6,790.0	8,092.1	6,790.0	53.6	53.9	90.00	219.3	-2,467.4	660.1	553.2	106.95	6.172		
8,200.0	6,790.0	8,192.1	6,790.0	56.0	56.3	90.00	219.5	-2,567.4	660.1	548.4	111.68	5.911		
8,300.0	6,790.0	8,292.1	6,790.0	58.3	58.6	90.00	219.8	-2,667.4	660.1	543.7	116.44	5.669		
8,400.0	6,790.0	8,392.1	6,790.0	60.7	61.0	90.00	220.0	-2,767.4	660.1	538.9	121.20	5.446		
8,500.0	6,790.0	8,492.1	6,790.0	63.1	63.4	90.00	220.3	-2,867.4	660.1	534.1	125.98	5.240		
8,600.0	6,790.0	8,592.1	6,790.0	65.4	65.8	90.00	220.5	-2,967.4	660.1	529.3	130.78	5.048		
8,700.0	6,790.0	8,692.1	6,790.0	67.8	68.2	90.00	220.8	-3,067.4	660.1	524.5	135.58	4.869		
8,800.0	6,790.0	8,792.1	6,790.0	70.2	70.6	90.00	221.0	-3,167.4	660.1	519.7	140.40	4.702		
8,900.0	6,790.0	8,892.1	6,790.0	72.6	73.0	90.00	221.3	-3,267.4	660.1	514.9	145.22	4.546		
9,000.0	6,790.0	8,992.1	6,790.0	75.0	75.4	90.00	221.5	-3,367.4	660.1	510.1	150.05	4.399		
9,100.0	6,790.0	9,092.1	6,790.0	77.4	77.8	90.00	221.8	-3,467.4	660.1	505.2	154.89	4.262		
9,200.0	6,790.0	9,192.1	6,790.0	79.8	80.3	90.00	222.0	-3,567.4	660.1	500.4	159.74	4.132		
9,300.0	6,790.0	9,292.1	6,790.0	82.3	82.7	90.00	222.3	-3,667.4	660.1	495.5	164.59	4.011		
9,400.0	6,790.0	9,392.1	6,790.0	84.7	85.1	90.00	222.5	-3,767.4	660.1	490.7	169.45	3.896		
9,500.0	6,790.0	9,492.1	6,790.0	87.1	87.6	90.00	222.8	-3,867.4	660.1	485.8	174.31	3.787		
9,600.0	6,790.0	9,592.1	6,790.0	89.5	90.0	90.00	223.0	-3,967.4	660.1	480.9	179.18	3.684		
9,700.0	6,790.0	9,692.1	6,790.0	91.9	92.4	90.00	223.3	-4,067.4	660.1	476.1	184.05	3.587		
9,800.0	6,790.0	9,792.1	6,790.0	94.4	94.9	90.00	223.5	-4,167.4	660.1	471.2	188.93	3.494		
9,900.0	6,790.0	9,892.1	6,790.0	96.8	97.3	90.00	223.8	-4,267.4	660.1	466.3	193.81	3.406		
10,000.0	6,790.0	9,992.1	6,790.0	99.2	99.7	90.00	224.0	-4,367.4	660.1	461.4	198.69	3.322		
10,100.0	6,790.0	10,092.1	6,790.0	101.7	102.2	90.00	224.3	-4,467.4	660.1	456.5	203.58	3.243		
10,200.0	6,790.0	10,192.1	6,790.0	104.1	104.6	90.00	224.5	-4,567.4	660.1	451.7	208.47	3.167		
10,300.0	6,790.0	10,292.1	6,790.0	106.6	107.1	90.00	224.8	-4,667.4	660.1	446.8	213.36	3.094		

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 5
<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 5	<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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,400.0	6,790.0	10,392.1	6,790.0	109.0	109.5	90.00	225.0	-4,767.4	660.1	441.9	218.25	3.025		
10,500.0	6,790.0	10,492.1	6,790.0	111.4	112.0	90.00	225.3	-4,867.4	660.1	437.0	223.15	2.958		
10,600.0	6,790.0	10,592.1	6,790.0	113.9	114.4	90.00	225.5	-4,967.4	660.1	432.1	228.05	2.895		
10,700.0	6,790.0	10,692.1	6,790.0	116.3	116.9	90.00	225.8	-5,067.4	660.1	427.2	232.95	2.834		
10,800.0	6,790.0	10,792.1	6,790.0	118.8	119.3	90.00	226.0	-5,167.4	660.1	422.3	237.86	2.775		
10,900.0	6,790.0	10,892.1	6,790.0	121.2	121.8	90.00	226.3	-5,267.4	660.1	417.4	242.76	2.719		
11,000.0	6,790.0	10,992.1	6,790.0	123.7	124.2	90.00	226.5	-5,367.4	660.1	412.5	247.67	2.665		
11,100.0	6,790.0	11,092.1	6,790.0	126.1	126.7	90.00	226.8	-5,467.4	660.1	407.5	252.58	2.614		
11,200.0	6,790.0	11,192.1	6,790.0	128.6	129.1	90.00	227.0	-5,567.4	660.1	402.6	257.49	2.564		
11,300.0	6,790.0	11,292.1	6,790.0	131.0	131.6	90.00	227.3	-5,667.4	660.1	397.7	262.40	2.516		
11,400.0	6,790.0	11,392.1	6,790.0	133.5	134.0	90.00	227.5	-5,767.4	660.1	392.8	267.31	2.469		
11,500.0	6,790.0	11,492.1	6,790.0	135.9	136.5	90.00	227.8	-5,867.4	660.1	387.9	272.22	2.425		
11,600.0	6,790.0	11,592.1	6,790.0	138.4	139.0	90.00	228.0	-5,967.4	660.1	383.0	277.14	2.382		
11,700.0	6,790.0	11,692.1	6,790.0	140.8	141.4	90.00	228.3	-6,067.4	660.1	378.1	282.06	2.340		
11,800.0	6,790.0	11,792.1	6,790.0	143.3	143.9	90.00	228.5	-6,167.4	660.1	373.1	286.97	2.300		
11,900.0	6,790.0	11,892.1	6,790.0	145.8	146.3	90.00	228.8	-6,267.4	660.1	368.2	291.89	2.262		
12,000.0	6,790.0	11,992.1	6,790.0	148.2	148.8	90.00	229.0	-6,367.4	660.1	363.3	296.81	2.224		
12,100.0	6,790.0	12,092.1	6,790.0	150.7	151.2	90.00	229.3	-6,467.4	660.1	358.4	301.73	2.188		
12,200.0	6,790.0	12,192.1	6,790.0	153.1	153.7	90.00	229.5	-6,567.4	660.1	353.5	306.65	2.153		
12,300.0	6,790.0	12,292.1	6,790.0	155.6	156.2	90.00	229.8	-6,667.4	660.1	348.5	311.58	2.119		
12,400.0	6,790.0	12,392.1	6,790.0	158.0	158.6	90.00	230.0	-6,767.4	660.1	343.6	316.50	2.086		
12,500.0	6,790.0	12,492.1	6,790.0	160.5	161.1	90.00	230.3	-6,867.4	660.1	338.7	321.42	2.054		
12,600.0	6,790.0	12,592.1	6,790.0	163.0	163.6	90.00	230.5	-6,967.4	660.1	333.8	326.35	2.023		
12,700.0	6,790.0	12,692.1	6,790.0	165.4	166.0	90.00	230.8	-7,067.4	660.1	328.8	331.28	1.993		
12,800.0	6,790.0	12,792.1	6,790.0	167.9	168.5	90.00	231.0	-7,167.4	660.1	323.9	336.20	1.963		
12,900.0	6,790.0	12,892.1	6,790.0	170.3	170.9	90.00	231.3	-7,267.4	660.1	319.0	341.13	1.935		
13,000.0	6,790.0	12,992.1	6,790.0	172.8	173.4	90.00	231.5	-7,367.4	660.1	314.1	346.06	1.908		
13,100.0	6,790.0	13,092.1	6,790.0	175.3	175.9	90.00	231.8	-7,467.4	660.1	309.1	350.98	1.881		
13,200.0	6,790.0	13,192.1	6,790.0	177.7	178.3	90.00	232.0	-7,567.4	660.1	304.2	355.91	1.855		
13,300.0	6,790.0	13,292.1	6,790.0	180.2	180.8	90.00	232.3	-7,667.4	660.1	299.3	360.84	1.829		
13,400.0	6,790.0	13,392.1	6,790.0	182.7	183.3	90.00	232.5	-7,767.4	660.1	294.3	365.77	1.805		
13,500.0	6,790.0	13,492.1	6,790.0	185.1	185.7	90.00	232.8	-7,867.4	660.1	289.4	370.70	1.781		
13,600.0	6,790.0	13,592.1	6,790.0	187.6	188.2	90.00	233.0	-7,967.4	660.1	284.5	375.63	1.757		
13,700.0	6,790.0	13,692.1	6,790.0	190.1	190.7	90.00	233.3	-8,067.4	660.1	279.6	380.56	1.735		
13,800.0	6,790.0	13,792.1	6,790.0	192.5	193.1	90.00	233.5	-8,167.4	660.1	274.6	385.50	1.712		
13,900.0	6,790.0	13,892.1	6,790.0	195.0	195.6	90.00	233.8	-8,267.4	660.1	269.7	390.43	1.691		
14,000.0	6,790.0	13,992.1	6,790.0	197.4	198.1	90.00	234.0	-8,367.4	660.1	264.8	395.36	1.670		
14,100.0	6,790.0	14,092.1	6,790.0	199.9	200.5	90.00	234.3	-8,467.4	660.1	259.8	400.29	1.649		
14,200.0	6,790.0	14,192.1	6,790.0	202.4	203.0	90.00	234.5	-8,567.4	660.1	254.9	405.23	1.629		
14,300.0	6,790.0	14,292.1	6,790.0	204.8	205.5	90.00	234.8	-8,667.4	660.1	250.0	410.16	1.609		
14,400.0	6,790.0	14,392.1	6,790.0	207.3	207.9	90.00	235.0	-8,767.4	660.1	245.0	415.09	1.590		
14,500.0	6,790.0	14,492.1	6,790.0	209.8	210.4	90.00	235.3	-8,867.4	660.1	240.1	420.03	1.572		
14,600.0	6,790.0	14,592.1	6,790.0	212.2	212.9	90.00	235.5	-8,967.4	660.1	235.2	424.96	1.553		
14,700.0	6,790.0	14,692.1	6,790.0	214.7	215.3	90.00	235.8	-9,067.4	660.1	230.2	429.90	1.536		
14,800.0	6,790.0	14,792.1	6,790.0	217.2	217.8	90.00	236.0	-9,167.4	660.1	225.3	434.83	1.518		
14,900.0	6,790.0	14,892.1	6,790.0	219.6	220.3	90.00	236.3	-9,267.4	660.1	220.3	439.77	1.501		
15,000.0	6,790.0	14,992.1	6,790.0	222.1	222.7	90.00	236.5	-9,367.4	660.1	215.4	444.71	1.484 Level 3		
15,100.0	6,790.0	15,092.1	6,790.0	224.6	225.2	90.00	236.8	-9,467.4	660.1	210.5	449.64	1.468 Level 3		
15,200.0	6,790.0	15,192.1	6,790.0	227.0	227.7	90.00	237.0	-9,567.4	660.1	205.5	454.58	1.452 Level 3		
15,300.0	6,790.0	15,292.1	6,790.0	229.5	230.1	90.00	237.3	-9,667.4	660.1	200.6	459.52	1.437 Level 3		
15,400.0	6,790.0	15,392.1	6,790.0	232.0	232.6	90.00	237.5	-9,767.4	660.1	195.7	464.45	1.421 Level 3		
15,500.0	6,790.0	15,492.1	6,790.0	234.4	235.1	90.00	237.8	-9,867.4	660.1	190.7	469.39	1.406 Level 3		

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

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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		
15,600.0	6,790.0	15,592.1	6,790.0	236.9	237.5	90.00	238.0	-9,967.4	660.1	185.8	474.33	1.392 Level 3		
15,700.0	6,790.0	15,692.1	6,790.0	239.4	240.0	90.00	238.3	-10,067.4	660.1	180.9	479.26	1.377 Level 3		
15,800.0	6,790.0	15,792.1	6,790.0	241.8	242.5	90.00	238.5	-10,167.4	660.1	175.9	484.20	1.363 Level 3		
15,900.0	6,790.0	15,892.1	6,790.0	244.3	244.9	90.00	238.8	-10,267.4	660.1	171.0	489.14	1.350 Level 3		
16,000.0	6,790.0	15,992.1	6,790.0	246.8	247.4	90.00	239.0	-10,367.4	660.1	166.0	494.08	1.336 Level 3		
16,100.0	6,790.0	16,092.1	6,790.0	249.2	249.9	90.00	239.3	-10,467.4	660.1	161.1	499.02	1.323 Level 3		
16,200.0	6,790.0	16,192.1	6,790.0	251.7	252.3	90.00	239.5	-10,567.4	660.1	156.2	503.96	1.310 Level 3		
16,300.0	6,790.0	16,292.1	6,790.0	254.2	254.8	90.00	239.8	-10,667.4	660.1	151.2	508.90	1.297 Level 3		
16,400.0	6,790.0	16,392.1	6,790.0	256.7	257.3	90.00	240.0	-10,767.4	660.1	146.3	513.84	1.285 Level 3		
16,500.0	6,790.0	16,492.1	6,790.0	259.1	259.8	90.00	240.3	-10,867.4	660.1	141.3	518.77	1.272 Level 3		
16,600.0	6,790.0	16,592.1	6,790.0	261.6	262.2	90.00	240.5	-10,967.4	660.1	136.4	523.71	1.260 Level 3		
16,700.0	6,790.0	16,692.1	6,790.0	264.1	264.7	90.00	240.8	-11,067.4	660.1	131.5	528.65	1.249 Level 2		
16,800.0	6,790.0	16,792.1	6,790.0	266.5	267.2	90.00	241.0	-11,167.4	660.1	126.5	533.59	1.237 Level 2		
16,900.0	6,790.0	16,892.1	6,790.0	269.0	269.6	90.00	241.3	-11,267.4	660.1	121.6	538.53	1.226 Level 2		
17,000.0	6,790.0	16,992.1	6,790.0	271.5	272.1	90.00	241.5	-11,367.4	660.1	116.6	543.47	1.215 Level 2		
17,100.0	6,790.0	17,092.1	6,790.0	273.9	274.6	90.00	241.8	-11,467.4	660.1	111.7	548.41	1.204 Level 2		
17,200.0	6,790.0	17,192.1	6,790.0	276.4	277.0	90.00	242.0	-11,567.4	660.1	106.8	553.36	1.193 Level 2		
17,300.0	6,790.0	17,292.1	6,790.0	278.9	279.5	90.00	242.3	-11,667.4	660.1	101.8	558.30	1.182 Level 2		
17,400.0	6,790.0	17,392.1	6,790.0	281.3	282.0	90.00	242.5	-11,767.3	660.1	96.9	563.24	1.172 Level 2		
17,401.9	6,790.0	17,394.1	6,790.0	281.4	282.0	90.00	242.5	-11,769.3	660.1	96.8	563.33	1.172 Level 2, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1														Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	31.22	47.7	28.9	55.8						
100.0	100.0	100.0	100.0	0.1	0.1	31.22	47.7	28.9	55.8	55.5	0.27	210.356			
200.0	200.0	200.0	200.0	0.3	0.3	31.22	47.7	28.9	55.8	55.2	0.61	90.836 CC			
300.0	300.0	300.5	300.5	0.5	0.5	143.12	47.7	28.0	56.1	55.1	0.97	58.067 ES			
400.0	400.0	401.0	401.0	0.7	0.7	142.42	47.7	25.4	56.8	55.5	1.32	42.993			
500.0	499.9	501.5	501.3	0.9	0.9	141.29	47.7	21.0	58.1	56.4	1.69	34.423			
600.0	599.7	601.9	601.6	1.1	1.1	139.79	47.8	14.8	59.9	57.8	2.07	28.950			
700.0	699.4	702.4	701.7	1.3	1.3	137.99	47.8	6.9	62.3	59.8	2.47	25.185			
800.0	798.9	802.8	801.7	1.5	1.5	135.97	47.8	-2.8	65.2	62.3	2.91	22.455			
900.0	898.3	903.1	901.4	1.8	1.8	133.82	47.8	-14.2	68.9	65.5	3.38	20.397			
1,000.0	997.4	1,003.4	1,000.8	2.0	2.0	131.60	47.9	-27.3	73.1	69.3	3.89	18.800			
1,100.0	1,096.3	1,103.7	1,100.0	2.3	2.3	129.38	47.9	-42.2	78.1	73.6	4.45	17.532			
1,200.0	1,194.9	1,203.8	1,198.7	2.7	2.7	127.23	48.0	-58.8	83.8	78.7	5.07	16.523			
1,300.0	1,293.3	1,303.6	1,297.0	3.0	3.0	125.87	48.0	-75.9	90.4	84.7	5.71	15.835			
1,400.0	1,391.4	1,403.3	1,395.2	3.4	3.3	125.20	48.1	-93.0	97.6	91.3	6.35	15.363			
1,500.0	1,489.5	1,503.0	1,493.5	3.7	3.7	124.64	48.1	-110.1	104.8	97.8	7.01	14.961			
1,600.0	1,587.7	1,602.8	1,591.7	4.1	4.0	124.14	48.2	-127.2	112.1	104.4	7.67	14.615			
1,700.0	1,685.8	1,702.5	1,690.0	4.5	4.3	123.70	48.2	-144.3	119.3	111.0	8.34	14.315			
1,800.0	1,784.0	1,802.2	1,788.3	4.8	4.7	123.32	48.3	-161.4	126.6	117.6	9.01	14.054			
1,900.0	1,882.1	1,902.0	1,886.5	5.2	5.0	122.97	48.3	-178.5	133.9	124.2	9.68	13.824			
2,000.0	1,980.3	2,001.7	1,984.8	5.6	5.4	122.67	48.3	-195.6	141.1	130.8	10.36	13.622			
2,100.0	2,078.4	2,101.4	2,083.0	6.0	5.7	122.39	48.4	-212.7	148.4	137.3	11.04	13.441			
2,200.0	2,176.6	2,201.2	2,181.3	6.3	6.1	122.14	48.4	-229.8	155.7	143.9	11.72	13.280			
2,300.0	2,274.7	2,300.9	2,279.5	6.7	6.4	121.91	48.5	-246.9	162.9	150.5	12.40	13.135			
2,400.0	2,372.9	2,400.6	2,377.8	7.1	6.7	121.70	48.5	-264.0	170.2	157.1	13.09	13.004			
2,500.0	2,471.0	2,500.4	2,476.1	7.5	7.1	121.50	48.6	-281.1	177.5	163.7	13.78	12.885			
2,600.0	2,569.2	2,600.1	2,574.3	7.9	7.4	121.33	48.6	-298.1	184.8	170.3	14.46	12.776			
2,700.0	2,667.3	2,699.8	2,672.6	8.2	7.8	121.16	48.7	-315.2	192.0	176.9	15.15	12.677			
2,800.0	2,765.4	2,799.6	2,770.8	8.6	8.1	121.01	48.7	-332.3	199.3	183.5	15.84	12.585			
2,900.0	2,863.6	2,899.3	2,869.1	9.0	8.5	120.87	48.8	-349.4	206.6	190.1	16.53	12.501			
3,000.0	2,961.7	2,999.0	2,967.3	9.4	8.8	120.74	48.8	-366.5	213.9	196.7	17.22	12.424			
3,100.0	3,059.9	3,098.8	3,065.6	9.7	9.2	120.61	48.9	-383.6	221.2	203.3	17.91	12.352			
3,200.0	3,158.0	3,198.5	3,163.8	10.1	9.5	120.50	48.9	-400.7	228.5	209.9	18.60	12.285			
3,300.0	3,256.2	3,298.2	3,262.1	10.5	9.9	120.39	49.0	-417.8	235.8	216.5	19.29	12.222			
3,400.0	3,354.3	3,398.0	3,360.4	10.9	10.2	120.29	49.0	-434.9	243.1	223.1	19.98	12.164			
3,500.0	3,452.5	3,497.7	3,458.6	11.3	10.6	120.19	49.1	-452.0	250.3	229.7	20.67	12.109			
3,600.0	3,550.6	3,597.4	3,556.9	11.6	10.9	120.10	49.1	-469.1	257.6	236.3	21.37	12.058			
3,700.0	3,648.8	3,697.2	3,655.1	12.0	11.3	120.02	49.2	-486.2	264.9	242.9	22.06	12.010			
3,800.0	3,746.9	3,796.9	3,753.4	12.4	11.6	119.94	49.2	-503.3	272.2	249.5	22.75	11.965			
3,900.0	3,845.0	3,896.6	3,851.6	12.8	12.0	119.86	49.2	-520.4	279.5	256.1	23.44	11.922			
4,000.0	3,943.2	3,996.4	3,949.9	13.2	12.3	119.79	49.3	-537.5	286.8	262.7	24.14	11.882			
4,100.0	4,041.3	4,096.1	4,048.2	13.5	12.7	119.72	49.3	-554.6	294.1	269.3	24.83	11.844			
4,200.0	4,139.5	4,195.8	4,146.4	13.9	13.0	119.65	49.4	-571.7	301.4	275.9	25.53	11.808			
4,300.0	4,237.6	4,295.6	4,244.7	14.3	13.4	119.59	49.4	-588.8	308.7	282.5	26.22	11.773			
4,400.0	4,335.8	4,395.3	4,342.9	14.7	13.7	119.53	49.5	-605.9	316.0	289.1	26.91	11.741			
4,500.0	4,433.9	4,495.0	4,441.2	15.1	14.0	119.47	49.5	-623.0	323.3	295.7	27.61	11.710			
4,600.0	4,532.1	4,594.8	4,539.4	15.5	14.4	119.42	49.6	-640.1	330.6	302.3	28.30	11.680			
4,700.0	4,630.2	4,694.5	4,637.7	15.8	14.7	119.37	49.6	-657.2	337.9	308.9	29.00	11.652			
4,800.0	4,728.4	4,794.2	4,736.0	16.2	15.1	119.32	49.7	-674.3	345.2	315.5	29.69	11.625			
4,900.0	4,826.5	4,894.0	4,834.2	16.6	15.4	119.27	49.7	-691.4	352.5	322.1	30.38	11.600			
5,000.0	4,924.7	4,993.7	4,932.5	17.0	15.8	119.22	49.8	-708.5	359.8	328.7	31.08	11.575			
5,100.0	5,022.8	5,093.4	5,030.7	17.4	16.1	119.18	49.8	-725.6	367.0	335.3	31.77	11.552			

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance			Total 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	5,120.9	5,193.2	5,129.0	17.7	16.5	119.13	49.9	-742.7	374.3	341.9	32.47	11.529		
5,300.0	5,219.1	5,292.9	5,227.2	18.1	16.8	119.09	49.9	-759.8	381.6	348.5	33.16	11.508		
5,400.0	5,317.2	5,392.6	5,325.5	18.5	17.2	119.05	50.0	-776.9	388.9	355.1	33.86	11.487		
5,500.0	5,415.4	5,492.4	5,423.7	18.9	17.5	119.02	50.0	-794.0	396.2	361.7	34.55	11.467		
5,600.0	5,513.5	5,592.1	5,522.0	19.3	17.9	118.98	50.1	-811.1	403.5	368.3	35.25	11.448		
5,700.0	5,611.7	5,691.8	5,620.3	19.6	18.2	118.95	50.1	-828.2	410.8	374.9	35.95	11.429		
5,800.0	5,709.8	5,791.6	5,718.5	20.0	18.6	118.91	50.1	-845.3	418.1	381.5	36.64	11.412		
5,900.0	5,808.0	5,891.3	5,816.8	20.4	18.9	118.88	50.2	-862.4	425.4	388.1	37.34	11.395		
6,000.0	5,906.1	5,991.0	5,915.0	20.8	19.3	118.85	50.2	-879.5	432.7	394.7	38.03	11.378		
6,100.0	6,004.3	6,090.8	6,013.3	21.2	19.6	118.82	50.3	-896.6	440.0	401.3	38.73	11.362		
6,200.0	6,102.4	6,190.5	6,111.5	21.6	20.0	118.79	50.3	-913.7	447.3	407.9	39.42	11.347		
6,300.0	6,200.5	6,290.2	6,209.8	21.9	20.3	118.76	50.4	-930.8	454.6	414.5	40.12	11.332		
6,400.0	6,298.5	6,389.9	6,308.0	22.3	20.7	114.10	50.4	-947.9	462.0	421.2	40.85	11.310		
6,500.0	6,393.5	6,488.7	6,405.3	23.0	21.0	107.83	50.5	-964.8	470.8	429.1	41.65	11.302		
6,600.0	6,482.6	6,584.1	6,499.4	23.8	21.4	106.96	50.5	-981.2	482.3	439.9	42.41	11.373		
6,700.0	6,563.7	6,674.0	6,587.9	24.9	21.7	108.26	50.6	-996.6	498.6	455.5	43.15	11.556		
6,800.0	6,634.7	6,791.6	6,701.2	26.2	22.3	111.62	50.6	-1,027.4	519.6	475.7	43.94	11.825		
6,900.0	6,693.9	6,925.4	6,820.7	27.8	23.5	115.14	50.8	-1,087.0	542.0	496.8	45.23	11.982		
7,000.0	6,739.8	7,079.2	6,939.2	29.5	25.3	118.51	51.1	-1,184.5	563.3	516.1	47.21	11.932		
7,100.0	6,771.3	7,255.1	7,041.5	31.4	28.1	121.32	51.4	-1,326.9	580.6	530.4	50.21	11.563		
7,200.0	6,787.6	7,450.2	7,104.9	33.5	31.9	123.01	51.9	-1,510.6	590.6	536.0	54.63	10.812		
7,300.0	6,790.0	7,608.0	7,115.0	35.6	35.3	123.28	52.3	-1,667.8	592.2	532.9	59.37	9.975		
7,400.0	6,790.0	7,708.0	7,115.0	37.7	37.5	123.28	52.5	-1,767.8	592.2	529.2	63.07	9.390		
7,500.0	6,790.0	7,808.0	7,115.0	39.9	39.8	123.28	52.8	-1,867.8	592.2	525.4	66.82	8.863		
7,600.0	6,790.0	7,908.0	7,115.0	42.2	42.0	123.28	53.0	-1,967.8	592.2	521.6	70.62	8.387		
7,700.0	6,790.0	8,008.0	7,115.0	44.4	44.3	123.28	53.3	-2,067.8	592.2	517.8	74.45	7.955		
7,800.0	6,790.0	8,108.0	7,115.0	46.7	46.6	123.28	53.5	-2,167.8	592.2	513.9	78.31	7.563		
7,900.0	6,790.0	8,208.0	7,115.0	49.0	49.0	123.28	53.8	-2,267.8	592.2	510.0	82.20	7.205		
8,000.0	6,790.0	8,308.0	7,115.0	51.3	51.3	123.28	54.0	-2,367.8	592.2	506.1	86.12	6.877		
8,100.0	6,790.0	8,408.0	7,115.0	53.6	53.7	123.28	54.3	-2,467.8	592.2	502.2	90.05	6.577		
8,200.0	6,790.0	8,508.0	7,115.0	56.0	56.0	123.28	54.5	-2,567.8	592.2	498.2	94.00	6.300		
8,300.0	6,790.0	8,608.0	7,115.0	58.3	58.4	123.28	54.8	-2,667.8	592.2	494.3	97.97	6.045		
8,400.0	6,790.0	8,708.0	7,115.0	60.7	60.8	123.28	55.0	-2,767.8	592.2	490.3	101.95	5.809		
8,500.0	6,790.0	8,808.0	7,115.0	63.1	63.1	123.28	55.3	-2,867.8	592.2	486.3	105.95	5.590		
8,600.0	6,790.0	8,908.0	7,115.0	65.4	65.5	123.28	55.5	-2,967.8	592.2	482.3	109.95	5.386		
8,700.0	6,790.0	9,008.0	7,115.0	67.8	67.9	123.28	55.8	-3,067.8	592.2	478.3	113.97	5.197		
8,800.0	6,790.0	9,108.0	7,115.0	70.2	70.3	123.28	56.0	-3,167.8	592.2	474.2	117.99	5.019		
8,900.0	6,790.0	9,208.0	7,115.0	72.6	72.7	123.28	56.3	-3,267.8	592.2	470.2	122.02	4.853		
9,000.0	6,790.0	9,308.0	7,115.0	75.0	75.2	123.28	56.5	-3,367.8	592.2	466.2	126.06	4.698		
9,100.0	6,790.0	9,408.0	7,115.0	77.4	77.6	123.28	56.8	-3,467.8	592.2	462.1	130.11	4.552		
9,200.0	6,790.0	9,508.0	7,115.0	79.8	80.0	123.28	57.0	-3,567.8	592.2	458.1	134.16	4.414		
9,300.0	6,790.0	9,608.0	7,115.0	82.3	82.4	123.28	57.3	-3,667.8	592.2	454.0	138.22	4.285		
9,400.0	6,790.0	9,708.0	7,115.0	84.7	84.8	123.28	57.5	-3,767.8	592.2	450.0	142.28	4.163		
9,500.0	6,790.0	9,808.0	7,115.0	87.1	87.3	123.28	57.8	-3,867.8	592.2	445.9	146.34	4.047		
9,600.0	6,790.0	9,908.0	7,115.0	89.5	89.7	123.28	58.0	-3,967.8	592.2	441.8	150.41	3.937		
9,700.0	6,790.0	10,008.0	7,115.0	91.9	92.1	123.28	58.3	-4,067.8	592.2	437.7	154.49	3.833		
9,800.0	6,790.0	10,108.0	7,115.0	94.4	94.6	123.28	58.5	-4,167.8	592.2	433.7	158.57	3.735		
9,900.0	6,790.0	10,208.0	7,115.0	96.8	97.0	123.28	58.8	-4,267.8	592.2	429.6	162.65	3.641		
10,000.0	6,790.0	10,308.0	7,115.0	99.2	99.5	123.28	59.0	-4,367.8	592.2	425.5	166.73	3.552		
10,100.0	6,790.0	10,408.0	7,115.0	101.7	101.9	123.28	59.3	-4,467.8	592.2	421.4	170.82	3.467		
10,200.0	6,790.0	10,508.0	7,115.0	104.1	104.3	123.28	59.5	-4,567.8	592.2	417.3	174.91	3.386		
10,300.0	6,790.0	10,608.0	7,115.0	106.6	106.8	123.28	59.8	-4,667.8	592.2	413.2	179.00	3.309		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							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	6,790.0	10,708.0	7,115.0	109.0	109.2	123.28	60.0	-4,767.8	592.2	409.1	183.10	3.235		
10,500.0	6,790.0	10,808.0	7,115.0	111.4	111.7	123.28	60.3	-4,867.8	592.2	405.0	187.19	3.164		
10,600.0	6,790.0	10,908.0	7,115.0	113.9	114.1	123.28	60.5	-4,967.8	592.2	400.9	191.29	3.096		
10,700.0	6,790.0	11,008.0	7,115.0	116.3	116.6	123.28	60.8	-5,067.8	592.2	396.8	195.39	3.031		
10,800.0	6,790.0	11,108.0	7,115.0	118.8	119.0	123.28	61.0	-5,167.8	592.2	392.7	199.49	2.969		
10,900.0	6,790.0	11,208.0	7,115.0	121.2	121.5	123.28	61.3	-5,267.8	592.2	388.6	203.60	2.909		
11,000.0	6,790.0	11,308.0	7,115.0	123.7	123.9	123.28	61.5	-5,367.8	592.2	384.5	207.70	2.851		
11,100.0	6,790.0	11,408.0	7,115.0	126.1	126.4	123.28	61.8	-5,467.8	592.2	380.4	211.81	2.796		
11,200.0	6,790.0	11,508.0	7,115.0	128.6	128.8	123.28	62.0	-5,567.8	592.2	376.3	215.92	2.743		
11,300.0	6,790.0	11,608.0	7,115.0	131.0	131.3	123.28	62.3	-5,667.8	592.2	372.2	220.03	2.692		
11,400.0	6,790.0	11,708.0	7,115.0	133.5	133.7	123.28	62.5	-5,767.8	592.2	368.1	224.14	2.642		
11,500.0	6,790.0	11,808.0	7,115.0	135.9	136.2	123.28	62.8	-5,867.8	592.2	364.0	228.25	2.595		
11,600.0	6,790.0	11,908.0	7,115.0	138.4	138.7	123.28	63.0	-5,967.8	592.2	359.9	232.36	2.549		
11,700.0	6,790.0	12,008.0	7,115.0	140.8	141.1	123.28	63.3	-6,067.8	592.2	355.8	236.48	2.504		
11,800.0	6,790.0	12,108.0	7,115.0	143.3	143.6	123.28	63.5	-6,167.8	592.2	351.6	240.59	2.462		
11,900.0	6,790.0	12,208.0	7,115.0	145.8	146.0	123.28	63.8	-6,267.8	592.2	347.5	244.71	2.420		
12,000.0	6,790.0	12,308.0	7,115.0	148.2	148.5	123.28	64.0	-6,367.8	592.2	343.4	248.82	2.380		
12,100.0	6,790.0	12,408.0	7,115.0	150.7	150.9	123.28	64.3	-6,467.8	592.2	339.3	252.94	2.341		
12,200.0	6,790.0	12,508.0	7,115.0	153.1	153.4	123.28	64.5	-6,567.8	592.2	335.2	257.06	2.304		
12,300.0	6,790.0	12,608.0	7,115.0	155.6	155.9	123.28	64.8	-6,667.8	592.2	331.1	261.18	2.268		
12,400.0	6,790.0	12,708.0	7,115.0	158.0	158.3	123.28	65.0	-6,767.8	592.2	326.9	265.30	2.232		
12,500.0	6,790.0	12,808.0	7,115.0	160.5	160.8	123.28	65.3	-6,867.8	592.2	322.8	269.42	2.198		
12,600.0	6,790.0	12,908.0	7,115.0	163.0	163.2	123.28	65.5	-6,967.8	592.2	318.7	273.54	2.165		
12,700.0	6,790.0	13,008.0	7,115.0	165.4	165.7	123.28	65.8	-7,067.8	592.2	314.6	277.66	2.133		
12,800.0	6,790.0	13,108.0	7,115.0	167.9	168.2	123.28	66.0	-7,167.8	592.2	310.4	281.78	2.102		
12,900.0	6,790.0	13,208.0	7,115.0	170.3	170.6	123.28	66.3	-7,267.8	592.2	306.3	285.91	2.071		
13,000.0	6,790.0	13,308.0	7,115.0	172.8	173.1	123.28	66.5	-7,367.8	592.2	302.2	290.03	2.042		
13,100.0	6,790.0	13,408.0	7,115.0	175.3	175.6	123.28	66.8	-7,467.8	592.2	298.1	294.15	2.013		
13,200.0	6,790.0	13,508.0	7,115.0	177.7	178.0	123.28	67.0	-7,567.8	592.2	294.0	298.28	1.985		
13,300.0	6,790.0	13,608.0	7,115.0	180.2	180.5	123.28	67.3	-7,667.8	592.2	289.8	302.40	1.958		
13,400.0	6,790.0	13,708.0	7,115.0	182.7	183.0	123.28	67.5	-7,767.8	592.2	285.7	306.53	1.932		
13,500.0	6,790.0	13,808.0	7,115.0	185.1	185.4	123.28	67.8	-7,867.8	592.2	281.6	310.66	1.906		
13,600.0	6,790.0	13,908.0	7,115.0	187.6	187.9	123.28	68.0	-7,967.8	592.2	277.4	314.78	1.881		
13,700.0	6,790.0	14,008.0	7,115.0	190.1	190.3	123.28	68.3	-8,067.8	592.2	273.3	318.91	1.857		
13,800.0	6,790.0	14,108.0	7,115.0	192.5	192.8	123.28	68.5	-8,167.8	592.2	269.2	323.04	1.833		
13,900.0	6,790.0	14,208.0	7,115.0	195.0	195.3	123.28	68.8	-8,267.8	592.2	265.1	327.16	1.810		
14,000.0	6,790.0	14,308.0	7,115.0	197.4	197.7	123.28	69.0	-8,367.8	592.2	260.9	331.29	1.788		
14,100.0	6,790.0	14,408.0	7,115.0	199.9	200.2	123.28	69.2	-8,467.8	592.2	256.8	335.42	1.766		
14,200.0	6,790.0	14,508.0	7,115.0	202.4	202.7	123.28	69.5	-8,567.8	592.2	252.7	339.55	1.744		
14,300.0	6,790.0	14,608.0	7,115.0	204.8	205.1	123.28	69.7	-8,667.8	592.2	248.6	343.68	1.723		
14,400.0	6,790.0	14,708.0	7,115.0	207.3	207.6	123.28	70.0	-8,767.8	592.2	244.4	347.81	1.703		
14,500.0	6,790.0	14,808.0	7,115.0	209.8	210.1	123.28	70.2	-8,867.8	592.2	240.3	351.94	1.683		
14,600.0	6,790.0	14,908.0	7,115.0	212.2	212.5	123.28	70.5	-8,967.8	592.2	236.2	356.07	1.663		
14,700.0	6,790.0	15,008.0	7,115.0	214.7	215.0	123.28	70.7	-9,067.8	592.2	232.0	360.20	1.644		
14,800.0	6,790.0	15,108.0	7,115.0	217.2	217.5	123.28	71.0	-9,167.8	592.2	227.9	364.33	1.626		
14,900.0	6,790.0	15,208.0	7,115.0	219.6	219.9	123.28	71.2	-9,267.8	592.2	223.8	368.46	1.607		
15,000.0	6,790.0	15,308.0	7,115.0	222.1	222.4	123.28	71.5	-9,367.8	592.2	219.6	372.59	1.589		
15,100.0	6,790.0	15,408.0	7,115.0	224.6	224.9	123.28	71.7	-9,467.8	592.2	215.5	376.72	1.572		
15,200.0	6,790.0	15,508.0	7,115.0	227.0	227.3	123.28	72.0	-9,567.8	592.2	211.4	380.85	1.555		
15,300.0	6,790.0	15,608.0	7,115.0	229.5	229.8	123.28	72.2	-9,667.8	592.2	207.2	384.99	1.538		
15,400.0	6,790.0	15,708.0	7,115.0	232.0	232.3	123.28	72.5	-9,767.8	592.2	203.1	389.12	1.522		
15,500.0	6,790.0	15,808.0	7,115.0	234.4	234.8	123.28	72.7	-9,867.8	592.2	199.0	393.25	1.506		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 3 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
15,600.0	6,790.0	15,908.0	7,115.0	236.9	237.2	123.28	73.0	-9,967.8	592.2	194.8	397.38	1.490 Level 3		
15,700.0	6,790.0	16,008.0	7,115.0	239.4	239.7	123.28	73.2	-10,067.8	592.2	190.7	401.52	1.475 Level 3		
15,800.0	6,790.0	16,108.0	7,115.0	241.8	242.2	123.28	73.5	-10,167.8	592.2	186.6	405.65	1.460 Level 3		
15,900.0	6,790.0	16,208.0	7,115.0	244.3	244.6	123.28	73.7	-10,267.8	592.2	182.4	409.78	1.445 Level 3		
16,000.0	6,790.0	16,308.0	7,115.0	246.8	247.1	123.28	74.0	-10,367.8	592.2	178.3	413.92	1.431 Level 3		
16,100.0	6,790.0	16,408.0	7,115.0	249.2	249.6	123.28	74.2	-10,467.8	592.2	174.2	418.05	1.417 Level 3		
16,200.0	6,790.0	16,508.0	7,115.0	251.7	252.0	123.28	74.5	-10,567.8	592.2	170.0	422.18	1.403 Level 3		
16,300.0	6,790.0	16,608.0	7,115.0	254.2	254.5	123.28	74.7	-10,667.8	592.2	165.9	426.32	1.389 Level 3		
16,400.0	6,790.0	16,708.0	7,115.0	256.7	257.0	123.28	75.0	-10,767.8	592.2	161.8	430.45	1.376 Level 3		
16,500.0	6,790.0	16,808.0	7,115.0	259.1	259.4	123.28	75.2	-10,867.8	592.2	157.6	434.59	1.363 Level 3		
16,600.0	6,790.0	16,908.0	7,115.0	261.6	261.9	123.28	75.5	-10,967.8	592.2	153.5	438.72	1.350 Level 3		
16,700.0	6,790.0	17,008.0	7,115.0	264.1	264.4	123.28	75.7	-11,067.8	592.2	149.4	442.85	1.337 Level 3		
16,800.0	6,790.0	17,108.0	7,115.0	266.5	266.9	123.28	76.0	-11,167.8	592.2	145.2	446.99	1.325 Level 3		
16,900.0	6,790.0	17,208.0	7,115.0	269.0	269.3	123.28	76.2	-11,267.8	592.2	141.1	451.12	1.313 Level 3		
17,000.0	6,790.0	17,308.0	7,115.0	271.5	271.8	123.28	76.5	-11,367.8	592.2	137.0	455.26	1.301 Level 3		
17,100.0	6,790.0	17,408.0	7,115.0	273.9	274.3	123.28	76.7	-11,467.8	592.2	132.8	459.39	1.289 Level 3		
17,200.0	6,790.0	17,508.0	7,115.0	276.4	276.7	123.28	77.0	-11,567.8	592.2	128.7	463.53	1.278 Level 3		
17,300.0	6,790.0	17,608.0	7,115.0	278.9	279.2	123.28	77.2	-11,667.8	592.2	124.6	467.66	1.266 Level 3		
17,400.0	6,790.0	17,708.0	7,115.0	281.3	281.7	123.28	77.5	-11,767.7	592.2	120.4	471.80	1.255 Level 3		
17,401.9	6,790.0	17,710.0	7,115.0	281.4	281.7	123.28	77.5	-11,769.7	592.2	120.4	471.88	1.255 Level 3, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	31.51	24.0	14.7	28.2					
100.0	100.0	99.0	99.0	0.1	0.1	31.51	24.0	14.7	28.2	27.9	0.26	106.857		
200.0	200.0	199.0	199.0	0.3	0.3	31.51	24.0	14.7	28.2	27.6	0.61	46.043 CC		
300.0	300.0	299.3	299.3	0.5	0.5	143.34	23.9	13.9	28.4	27.4	0.96	29.462		
400.0	400.0	399.6	399.6	0.7	0.7	142.37	23.6	11.3	28.9	27.5	1.32	21.898		
500.0	499.9	499.9	499.8	0.9	0.9	140.82	23.1	7.0	29.7	28.0	1.68	17.647		
600.0	599.7	600.2	599.9	1.1	1.1	138.77	22.3	0.9	30.9	28.8	2.06	14.972		
700.0	699.4	700.5	699.8	1.3	1.3	136.35	21.3	-6.9	32.4	30.0	2.46	13.163		
800.0	798.9	800.7	799.6	1.5	1.5	133.69	20.2	-16.5	34.4	31.5	2.90	11.877		
900.0	898.3	901.0	899.2	1.8	1.8	130.93	18.7	-27.8	36.8	33.5	3.37	10.929		
1,000.0	997.4	1,001.2	998.6	2.0	2.0	128.16	17.1	-40.8	39.7	35.8	3.89	10.209		
1,100.0	1,096.3	1,101.4	1,097.7	2.3	2.3	125.47	15.3	-55.5	43.1	38.6	4.46	9.652		
1,200.0	1,194.9	1,201.6	1,196.5	2.7	2.7	122.93	13.2	-71.9	46.9	41.8	5.09	9.214		
1,300.0	1,293.3	1,301.5	1,294.8	3.0	3.0	120.89	11.0	-89.7	51.3	45.6	5.76	8.907		
1,400.0	1,391.4	1,401.4	1,393.1	3.4	3.3	119.92	8.8	-107.6	56.3	49.8	6.44	8.736		
1,500.0	1,489.5	1,501.3	1,491.3	3.7	3.7	119.11	6.5	-125.6	61.2	54.0	7.12	8.587		
1,600.0	1,587.7	1,601.2	1,589.5	4.1	4.0	118.42	4.3	-143.5	66.1	58.3	7.82	8.457		
1,700.0	1,685.8	1,701.1	1,687.7	4.5	4.4	117.83	2.1	-161.4	71.0	62.5	8.51	8.343		
1,800.0	1,784.0	1,800.9	1,786.0	4.8	4.8	117.31	-0.2	-179.4	76.0	66.8	9.22	8.244		
1,900.0	1,882.1	1,900.8	1,884.2	5.2	5.1	116.86	-2.4	-197.3	80.9	71.0	9.92	8.156		
2,000.0	1,980.3	2,000.7	1,982.4	5.6	5.5	116.45	-4.7	-215.2	85.9	75.3	10.63	8.078		
2,100.0	2,078.4	2,100.6	2,080.6	6.0	5.8	116.10	-6.9	-233.2	90.9	79.5	11.34	8.009		
2,200.0	2,176.6	2,200.4	2,178.9	6.3	6.2	115.78	-9.1	-251.1	95.8	83.8	12.06	7.946		
2,300.0	2,274.7	2,300.3	2,277.1	6.7	6.6	115.49	-11.4	-269.0	100.8	88.0	12.77	7.890		
2,400.0	2,372.9	2,400.2	2,375.3	7.1	6.9	115.23	-13.6	-287.0	105.7	92.3	13.49	7.840		
2,500.0	2,471.0	2,500.1	2,473.6	7.5	7.3	114.99	-15.8	-304.9	110.7	96.5	14.21	7.793		
2,600.0	2,569.2	2,599.9	2,571.8	7.9	7.6	114.77	-18.1	-322.8	115.7	100.8	14.92	7.751		
2,700.0	2,667.3	2,699.8	2,670.0	8.2	8.0	114.57	-20.3	-340.7	120.7	105.0	15.64	7.713		
2,800.0	2,765.4	2,799.7	2,768.2	8.6	8.4	114.39	-22.6	-358.7	125.6	109.3	16.36	7.678		
2,900.0	2,863.6	2,899.6	2,866.5	9.0	8.7	114.22	-24.8	-376.6	130.6	113.5	17.08	7.645		
3,000.0	2,961.7	2,999.4	2,964.7	9.4	9.1	114.06	-27.0	-394.5	135.6	117.8	17.81	7.615		
3,100.0	3,059.9	3,099.3	3,062.9	9.7	9.4	113.91	-29.3	-412.5	140.6	122.0	18.53	7.587		
3,200.0	3,158.0	3,199.2	3,161.1	10.1	9.8	113.78	-31.5	-430.4	145.5	126.3	19.25	7.561		
3,300.0	3,256.2	3,299.1	3,259.4	10.5	10.2	113.65	-33.8	-448.3	150.5	130.5	19.97	7.537		
3,400.0	3,354.3	3,398.9	3,357.6	10.9	10.5	113.53	-36.0	-466.3	155.5	134.8	20.69	7.514		
3,500.0	3,452.5	3,498.8	3,455.8	11.3	10.9	113.42	-38.2	-484.2	160.5	139.1	21.42	7.493		
3,600.0	3,550.6	3,598.7	3,554.1	11.6	11.3	113.31	-40.5	-502.1	165.5	143.3	22.14	7.473		
3,700.0	3,648.8	3,698.6	3,652.3	12.0	11.6	113.21	-42.7	-520.1	170.4	147.6	22.86	7.454		
3,800.0	3,746.9	3,798.4	3,750.5	12.4	12.0	113.12	-44.9	-538.0	175.4	151.8	23.59	7.437		
3,900.0	3,845.0	3,898.3	3,848.7	12.8	12.4	113.03	-47.2	-555.9	180.4	156.1	24.31	7.420		
4,000.0	3,943.2	3,998.2	3,947.0	13.2	12.7	112.95	-49.4	-573.8	185.4	160.4	25.04	7.405		
4,100.0	4,041.3	4,098.1	4,045.2	13.5	13.1	112.87	-51.7	-591.8	190.4	164.6	25.76	7.390		
4,200.0	4,139.5	4,197.9	4,143.4	13.9	13.4	112.80	-53.9	-609.7	195.4	168.9	26.49	7.376		
4,300.0	4,237.6	4,297.8	4,241.6	14.3	13.8	112.72	-56.1	-627.6	200.3	173.1	27.21	7.363		
4,400.0	4,335.8	4,397.7	4,339.9	14.7	14.2	112.66	-58.4	-645.6	205.3	177.4	27.94	7.350		
4,500.0	4,433.9	4,497.6	4,438.1	15.1	14.5	112.59	-60.6	-663.5	210.3	181.6	28.66	7.338		
4,600.0	4,532.1	4,597.4	4,536.3	15.5	14.9	112.53	-62.8	-681.4	215.3	185.9	29.39	7.326		
4,700.0	4,630.2	4,697.3	4,634.6	15.8	15.3	112.47	-65.1	-699.4	220.3	190.2	30.11	7.316		
4,800.0	4,728.4	4,797.2	4,732.8	16.2	15.6	112.41	-67.3	-717.3	225.3	194.4	30.84	7.305		
4,900.0	4,826.5	4,897.1	4,831.0	16.6	16.0	112.36	-69.6	-735.2	230.2	198.7	31.56	7.295		
5,000.0	4,924.7	4,996.9	4,929.2	17.0	16.4	112.31	-71.8	-753.2	235.2	202.9	32.29	7.286		
5,100.0	5,022.8	5,096.8	5,027.5	17.4	16.7	112.26	-74.0	-771.1	240.2	207.2	33.01	7.277		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor	
5,200.0	5,120.9	5,196.7	5,125.7	17.7	17.1	112.21	-76.3	-789.0	245.2	211.5	33.74	7.268	
5,300.0	5,219.1	5,296.6	5,223.9	18.1	17.4	112.17	-78.5	-807.0	250.2	215.7	34.46	7.259	
5,400.0	5,317.2	5,396.4	5,322.1	18.5	17.8	112.12	-80.8	-824.9	255.2	220.0	35.19	7.251	
5,500.0	5,415.4	5,496.3	5,420.4	18.9	18.2	112.08	-83.0	-842.8	260.2	224.2	35.92	7.244	
5,600.0	5,513.5	5,596.2	5,518.6	19.3	18.5	112.04	-85.2	-860.7	265.1	228.5	36.64	7.236	
5,700.0	5,611.7	5,696.1	5,616.8	19.6	18.9	112.00	-87.5	-878.7	270.1	232.8	37.37	7.229	
5,800.0	5,709.8	5,795.9	5,715.1	20.0	19.3	111.96	-89.7	-896.6	275.1	237.0	38.09	7.222	
5,900.0	5,808.0	5,895.8	5,813.3	20.4	19.6	111.93	-91.9	-914.5	280.1	241.3	38.82	7.216	
6,000.0	5,906.1	5,995.7	5,911.5	20.8	20.0	111.89	-94.2	-932.5	285.1	245.5	39.55	7.209	
6,100.0	6,004.3	6,095.6	6,009.7	21.2	20.4	111.86	-96.4	-950.4	290.1	249.8	40.27	7.203	
6,200.0	6,102.4	6,195.4	6,108.0	21.6	20.7	111.83	-98.7	-968.3	295.1	254.1	41.00	7.197	
6,300.0	6,200.5	6,295.3	6,206.2	21.9	21.1	111.80	-100.9	-986.3	300.1	258.3	41.72	7.191	
6,400.0	6,298.5	6,395.1	6,304.1	22.3	21.5	107.05	-103.1	-1,005.2	305.0	262.5	42.54	7.171	
6,500.0	6,393.5	6,494.5	6,398.4	23.0	22.1	99.45	-105.2	-1,036.2	309.9	266.0	43.87	7.063	
6,600.0	6,482.6	6,593.8	6,486.7	23.8	23.0	95.90	-107.2	-1,081.4	314.4	268.7	45.68	6.883	
6,700.0	6,563.7	6,693.0	6,566.8	24.9	24.1	93.79	-108.9	-1,139.7	318.5	270.6	47.94	6.644	
6,800.0	6,634.7	6,792.1	6,636.9	26.2	25.5	92.40	-110.4	-1,209.6	322.2	271.5	50.67	6.358	
6,900.0	6,693.9	6,891.1	6,695.2	27.8	27.0	91.44	-111.5	-1,289.5	325.2	271.3	53.82	6.042	
7,000.0	6,739.8	6,990.1	6,740.4	29.5	28.8	90.79	-112.3	-1,377.5	327.5	270.1	57.37	5.708	
7,100.0	6,771.3	7,089.1	6,771.5	31.4	30.8	90.39	-112.8	-1,471.3	329.1	267.9	61.25	5.373	
7,200.0	6,787.6	7,188.0	6,787.6	33.5	32.9	90.19	-113.0	-1,568.9	329.9	264.6	65.37	5.047	
7,300.0	6,790.0	7,287.5	6,790.0	35.6	35.0	90.17	-112.8	-1,668.2	330.1	260.4	69.67	4.738	
7,400.0	6,790.0	7,387.5	6,790.0	37.7	37.3	90.17	-112.5	-1,768.2	330.1	256.0	74.11	4.454	
7,500.0	6,790.0	7,487.5	6,790.0	39.9	39.5	90.17	-112.3	-1,868.2	330.1	251.5	78.61	4.199	
7,600.0	6,790.0	7,587.5	6,790.0	42.2	41.8	90.17	-112.0	-1,968.2	330.1	246.9	83.16	3.969	
7,700.0	6,790.0	7,687.5	6,790.0	44.4	44.1	90.17	-111.8	-2,068.2	330.1	242.3	87.76	3.761	
7,800.0	6,790.0	7,787.5	6,790.0	46.7	46.4	90.17	-111.5	-2,168.2	330.1	237.7	92.39	3.573	
7,900.0	6,790.0	7,887.5	6,790.0	49.0	48.7	90.17	-111.3	-2,268.2	330.1	233.0	97.05	3.401	
8,000.0	6,790.0	7,987.5	6,790.0	51.3	51.0	90.17	-111.0	-2,368.2	330.1	228.3	101.74	3.244	
8,100.0	6,790.0	8,087.5	6,790.0	53.6	53.4	90.17	-110.8	-2,468.2	330.1	223.6	106.45	3.101	
8,200.0	6,790.0	8,187.5	6,790.0	56.0	55.8	90.17	-110.5	-2,568.2	330.1	218.9	111.19	2.968	
8,300.0	6,790.0	8,287.5	6,790.0	58.3	58.1	90.17	-110.3	-2,668.2	330.1	214.1	115.94	2.847	
8,400.0	6,790.0	8,387.5	6,790.0	60.7	60.5	90.17	-110.0	-2,768.2	330.1	209.4	120.71	2.734	
8,500.0	6,790.0	8,487.5	6,790.0	63.1	62.9	90.17	-109.8	-2,868.2	330.1	204.6	125.49	2.630	
8,600.0	6,790.0	8,587.5	6,790.0	65.4	65.3	90.17	-109.5	-2,968.2	330.1	199.8	130.28	2.533	
8,700.0	6,790.0	8,687.5	6,790.0	67.8	67.7	90.17	-109.3	-3,068.2	330.1	195.0	135.09	2.443	
8,800.0	6,790.0	8,787.5	6,790.0	70.2	70.1	90.17	-109.0	-3,168.2	330.1	190.2	139.90	2.359	
8,900.0	6,790.0	8,887.5	6,790.0	72.6	72.5	90.17	-108.8	-3,268.2	330.1	185.3	144.73	2.281	
9,000.0	6,790.0	8,987.5	6,790.0	75.0	74.9	90.17	-108.5	-3,368.2	330.1	180.5	149.56	2.207	
9,100.0	6,790.0	9,087.5	6,790.0	77.4	77.4	90.17	-108.3	-3,468.2	330.1	175.7	154.40	2.138	
9,200.0	6,790.0	9,187.5	6,790.0	79.8	79.8	90.17	-108.0	-3,568.2	330.1	170.8	159.25	2.073	
9,300.0	6,790.0	9,287.5	6,790.0	82.3	82.2	90.17	-107.8	-3,668.2	330.1	166.0	164.10	2.011	
9,400.0	6,790.0	9,387.5	6,790.0	84.7	84.6	90.17	-107.5	-3,768.2	330.1	161.1	168.96	1.954	
9,500.0	6,790.0	9,487.5	6,790.0	87.1	87.1	90.17	-107.3	-3,868.2	330.1	156.2	173.82	1.899	
9,600.0	6,790.0	9,587.5	6,790.0	89.5	89.5	90.17	-107.0	-3,968.2	330.1	151.4	178.69	1.847	
9,700.0	6,790.0	9,687.5	6,790.0	91.9	91.9	90.17	-106.8	-4,068.2	330.1	146.5	183.56	1.798	
9,800.0	6,790.0	9,787.5	6,790.0	94.4	94.4	90.17	-106.5	-4,168.2	330.1	141.6	188.44	1.752	
9,900.0	6,790.0	9,887.5	6,790.0	96.8	96.8	90.17	-106.3	-4,268.2	330.1	136.7	193.32	1.707	
10,000.0	6,790.0	9,987.5	6,790.0	99.2	99.2	90.17	-106.0	-4,368.2	330.1	131.9	198.20	1.665	
10,100.0	6,790.0	10,087.5	6,790.0	101.7	101.7	90.17	-105.8	-4,468.2	330.1	127.0	203.09	1.625	
10,200.0	6,790.0	10,187.5	6,790.0	104.1	104.1	90.17	-105.5	-4,568.2	330.1	122.1	207.98	1.587	
10,300.0	6,790.0	10,287.5	6,790.0	106.6	106.6	90.17	-105.3	-4,668.2	330.1	117.2	212.87	1.551	

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor		
10,400.0	6,790.0	10,387.5	6,790.0	109.0	109.0	90.17	-105.0	-4,768.2	330.1	112.3	217.76	1.516		
10,500.0	6,790.0	10,487.5	6,790.0	111.4	111.5	90.17	-104.8	-4,868.2	330.1	107.4	222.66	1.482 Level 3		
10,600.0	6,790.0	10,587.5	6,790.0	113.9	113.9	90.17	-104.5	-4,968.2	330.1	102.5	227.56	1.450 Level 3		
10,700.0	6,790.0	10,687.5	6,790.0	116.3	116.4	90.17	-104.3	-5,068.2	330.1	97.6	232.46	1.420 Level 3		
10,800.0	6,790.0	10,787.5	6,790.0	118.8	118.8	90.17	-104.0	-5,168.2	330.1	92.7	237.37	1.391 Level 3		
10,900.0	6,790.0	10,887.5	6,790.0	121.2	121.3	90.17	-103.8	-5,268.2	330.1	87.8	242.27	1.362 Level 3		
11,000.0	6,790.0	10,987.5	6,790.0	123.7	123.7	90.17	-103.5	-5,368.2	330.1	82.9	247.18	1.335 Level 3		
11,100.0	6,790.0	11,087.5	6,790.0	126.1	126.2	90.17	-103.3	-5,468.2	330.1	78.0	252.09	1.309 Level 3		
11,200.0	6,790.0	11,187.5	6,790.0	128.6	128.6	90.17	-103.0	-5,568.2	330.1	73.1	257.00	1.284 Level 3		
11,300.0	6,790.0	11,287.5	6,790.0	131.0	131.1	90.17	-102.8	-5,668.2	330.1	68.2	261.91	1.260 Level 3		
11,400.0	6,790.0	11,387.5	6,790.0	133.5	133.6	90.17	-102.5	-5,768.2	330.1	63.2	266.82	1.237 Level 2		
11,500.0	6,790.0	11,487.5	6,790.0	135.9	136.0	90.17	-102.3	-5,868.2	330.1	58.3	271.74	1.215 Level 2		
11,600.0	6,790.0	11,587.5	6,790.0	138.4	138.5	90.17	-102.0	-5,968.2	330.1	53.4	276.65	1.193 Level 2		
11,700.0	6,790.0	11,687.5	6,790.0	140.8	140.9	90.17	-101.8	-6,068.2	330.1	48.5	281.57	1.172 Level 2		
11,800.0	6,790.0	11,787.5	6,790.0	143.3	143.4	90.17	-101.5	-6,168.2	330.1	43.6	286.49	1.152 Level 2		
11,900.0	6,790.0	11,887.5	6,790.0	145.8	145.8	90.17	-101.3	-6,268.2	330.1	38.7	291.41	1.133 Level 2		
12,000.0	6,790.0	11,987.5	6,790.0	148.2	148.3	90.17	-101.0	-6,368.2	330.1	33.7	296.33	1.114 Level 2		
12,100.0	6,790.0	12,087.5	6,790.0	150.7	150.8	90.17	-100.8	-6,468.2	330.1	28.8	301.25	1.096 Level 2		
12,200.0	6,790.0	12,187.5	6,790.0	153.1	153.2	90.17	-100.5	-6,568.2	330.1	23.9	306.17	1.078 Level 2		
12,300.0	6,790.0	12,287.5	6,790.0	155.6	155.7	90.17	-100.3	-6,668.2	330.1	19.0	311.09	1.061 Level 2		
12,400.0	6,790.0	12,387.5	6,790.0	158.0	158.1	90.17	-100.0	-6,768.2	330.1	14.0	316.02	1.044 Level 2		
12,500.0	6,790.0	12,487.5	6,790.0	160.5	160.6	90.17	-99.8	-6,868.2	330.1	9.1	320.94	1.028 Level 2		
12,600.0	6,790.0	12,587.5	6,790.0	163.0	163.1	90.17	-99.5	-6,968.2	330.1	4.2	325.86	1.013 Level 2		
12,700.0	6,790.0	12,687.5	6,790.0	165.4	165.5	90.17	-99.3	-7,068.2	330.1	-0.7	330.79	0.998 Level 1		
12,800.0	6,790.0	12,787.5	6,790.0	167.9	168.0	90.17	-99.0	-7,168.2	330.1	-5.7	335.72	0.983 Level 1		
12,900.0	6,790.0	12,887.5	6,790.0	170.3	170.5	90.17	-98.8	-7,268.2	330.1	-10.6	340.64	0.969 Level 1		
13,000.0	6,790.0	12,987.5	6,790.0	172.8	172.9	90.17	-98.5	-7,368.2	330.1	-15.5	345.57	0.955 Level 1		
13,100.0	6,790.0	13,087.5	6,790.0	175.3	175.4	90.17	-98.3	-7,468.2	330.1	-20.4	350.50	0.942 Level 1		
13,200.0	6,790.0	13,187.5	6,790.0	177.7	177.8	90.17	-98.0	-7,568.2	330.1	-25.4	355.43	0.929 Level 1		
13,300.0	6,790.0	13,287.5	6,790.0	180.2	180.3	90.17	-97.8	-7,668.2	330.1	-30.3	360.36	0.916 Level 1		
13,400.0	6,790.0	13,387.5	6,790.0	182.7	182.8	90.17	-97.5	-7,768.2	330.1	-35.2	365.29	0.904 Level 1		
13,500.0	6,790.0	13,487.5	6,790.0	185.1	185.2	90.17	-97.3	-7,868.2	330.1	-40.2	370.22	0.892 Level 1		
13,600.0	6,790.0	13,587.5	6,790.0	187.6	187.7	90.17	-97.0	-7,968.2	330.1	-45.1	375.15	0.880 Level 1		
13,700.0	6,790.0	13,687.5	6,790.0	190.1	190.2	90.17	-96.8	-8,068.2	330.1	-50.0	380.08	0.868 Level 1		
13,800.0	6,790.0	13,787.5	6,790.0	192.5	192.6	90.17	-96.5	-8,168.2	330.1	-55.0	385.01	0.857 Level 1		
13,900.0	6,790.0	13,887.5	6,790.0	195.0	195.1	90.17	-96.3	-8,268.2	330.1	-59.9	389.94	0.846 Level 1		
14,000.0	6,790.0	13,987.5	6,790.0	197.4	197.6	90.17	-96.0	-8,368.2	330.1	-64.8	394.88	0.836 Level 1		
14,100.0	6,790.0	14,087.5	6,790.0	199.9	200.0	90.17	-95.8	-8,468.2	330.1	-69.7	399.81	0.826 Level 1		
14,200.0	6,790.0	14,187.5	6,790.0	202.4	202.5	90.17	-95.5	-8,568.2	330.1	-74.7	404.74	0.815 Level 1		
14,300.0	6,790.0	14,287.5	6,790.0	204.8	205.0	90.17	-95.3	-8,668.2	330.1	-79.6	409.68	0.806 Level 1		
14,400.0	6,790.0	14,387.5	6,790.0	207.3	207.4	90.17	-95.0	-8,768.2	330.1	-84.6	414.61	0.796 Level 1		
14,500.0	6,790.0	14,487.5	6,790.0	209.8	209.9	90.17	-94.8	-8,868.2	330.1	-89.5	419.55	0.787 Level 1		
14,600.0	6,790.0	14,587.5	6,790.0	212.2	212.4	90.17	-94.5	-8,968.2	330.1	-94.4	424.48	0.778 Level 1		
14,700.0	6,790.0	14,687.5	6,790.0	214.7	214.8	90.17	-94.3	-9,068.2	330.1	-99.4	429.42	0.769 Level 1		
14,800.0	6,790.0	14,787.5	6,790.0	217.2	217.3	90.17	-94.0	-9,168.2	330.1	-104.3	434.35	0.760 Level 1		
14,900.0	6,790.0	14,887.5	6,790.0	219.6	219.8	90.17	-93.8	-9,268.2	330.1	-109.2	439.29	0.751 Level 1		
15,000.0	6,790.0	14,987.5	6,790.0	222.1	222.2	90.17	-93.5	-9,368.2	330.1	-114.2	444.22	0.743 Level 1		
15,100.0	6,790.0	15,087.5	6,790.0	224.6	224.7	90.17	-93.3	-9,468.2	330.1	-119.1	449.16	0.735 Level 1		
15,200.0	6,790.0	15,187.5	6,790.0	227.0	227.2	90.17	-93.0	-9,568.2	330.1	-124.0	454.10	0.727 Level 1		
15,300.0	6,790.0	15,287.5	6,790.0	229.5	229.6	90.17	-92.8	-9,668.2	330.1	-129.0	459.03	0.719 Level 1		
15,400.0	6,790.0	15,387.5	6,790.0	232.0	232.1	90.17	-92.5	-9,768.2	330.1	-133.9	463.97	0.711 Level 1		
15,500.0	6,790.0	15,487.5	6,790.0	234.4	234.6	90.17	-92.3	-9,868.2	330.1	-138.8	468.91	0.704 Level 1		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 4 - Hz - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
15,600.0	6,790.0	15,587.5	6,790.0	236.9	237.1	90.17	-92.0	-9,968.2	330.1	-143.8	473.84	0.697	Level 1	
15,700.0	6,790.0	15,687.5	6,790.0	239.4	239.5	90.17	-91.8	-10,068.2	330.1	-148.7	478.78	0.689	Level 1	
15,800.0	6,790.0	15,787.5	6,790.0	241.8	242.0	90.17	-91.5	-10,168.2	330.1	-153.7	483.72	0.682	Level 1	
15,900.0	6,790.0	15,887.5	6,790.0	244.3	244.5	90.17	-91.3	-10,268.2	330.1	-158.6	488.66	0.675	Level 1	
16,000.0	6,790.0	15,987.5	6,790.0	246.8	246.9	90.17	-91.0	-10,368.2	330.1	-163.5	493.60	0.669	Level 1	
16,100.0	6,790.0	16,087.5	6,790.0	249.2	249.4	90.17	-90.8	-10,468.2	330.1	-168.5	498.54	0.662	Level 1	
16,200.0	6,790.0	16,187.5	6,790.0	251.7	251.9	90.17	-90.5	-10,568.2	330.1	-173.4	503.48	0.656	Level 1	
16,300.0	6,790.0	16,287.5	6,790.0	254.2	254.3	90.17	-90.3	-10,668.2	330.1	-178.4	508.41	0.649	Level 1	
16,400.0	6,790.0	16,387.5	6,790.0	256.7	256.8	90.17	-90.0	-10,768.2	330.1	-183.3	513.35	0.643	Level 1	
16,500.0	6,790.0	16,487.5	6,790.0	259.1	259.3	90.17	-89.8	-10,868.2	330.1	-188.2	518.29	0.637	Level 1	
16,600.0	6,790.0	16,587.5	6,790.0	261.6	261.7	90.17	-89.5	-10,968.2	330.1	-193.2	523.23	0.631	Level 1	
16,700.0	6,790.0	16,687.5	6,790.0	264.1	264.2	90.17	-89.3	-11,068.2	330.1	-198.1	528.17	0.625	Level 1	
16,800.0	6,790.0	16,787.5	6,790.0	266.5	266.7	90.17	-89.0	-11,168.2	330.1	-203.1	533.11	0.619	Level 1	
16,900.0	6,790.0	16,887.5	6,790.0	269.0	269.2	90.17	-88.8	-11,268.2	330.1	-208.0	538.05	0.613	Level 1	
17,000.0	6,790.0	16,987.5	6,790.0	271.5	271.6	90.17	-88.5	-11,368.2	330.1	-212.9	542.99	0.608	Level 1	
17,100.0	6,790.0	17,087.5	6,790.0	273.9	274.1	90.17	-88.3	-11,468.2	330.1	-217.9	547.93	0.602	Level 1	
17,200.0	6,790.0	17,187.5	6,790.0	276.4	276.6	90.17	-88.0	-11,568.2	330.1	-222.8	552.87	0.597	Level 1	
17,300.0	6,790.0	17,287.5	6,790.0	278.9	279.0	90.17	-87.8	-11,668.2	330.1	-227.8	557.81	0.592	Level 1	
17,400.0	6,790.0	17,387.4	6,790.0	281.3	281.5	90.17	-87.5	-11,768.2	330.1	-232.7	562.75	0.587	Level 1	
17,401.9	6,790.0	17,389.4	6,790.0	281.4	281.6	90.17	-87.5	-11,770.1	330.1	-232.8	562.85	0.586 Level 1, ES, SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	-149.46	-24.0	-14.2	27.9					
100.0	100.0	100.0	100.0	0.1	0.0	-149.46	-24.0	-14.2	27.9	27.8	0.13	210.142		
200.0	200.0	200.0	200.0	0.3	0.0	-149.46	-24.0	-14.2	27.9	27.6	0.31	90.821 CC		
300.0	300.0	299.6	299.6	0.5	0.0	-37.40	-24.4	-15.0	27.9	27.5	0.48	57.941		
400.0	400.0	399.2	399.2	0.7	0.0	-37.66	-25.5	-17.3	28.0	27.4	0.66	42.534		
500.0	499.9	498.8	498.7	0.9	0.0	-38.07	-27.4	-21.2	28.1	27.3	0.84	33.573		
600.0	599.7	598.4	598.1	1.1	0.0	-38.64	-30.0	-26.7	28.3	27.3	1.02	27.693 ES		
700.0	699.4	698.0	697.4	1.3	0.0	-39.37	-33.3	-33.7	28.6	27.4	1.21	23.521		
800.0	798.9	797.6	796.5	1.5	0.0	-40.24	-37.4	-42.3	28.9	27.4	1.42	20.392		
900.0	898.3	897.2	895.5	1.8	0.0	-41.25	-42.2	-52.5	29.2	27.6	1.63	17.947		
1,000.0	897.4	896.8	894.2	2.0	0.0	-42.38	-47.7	-64.2	29.7	27.8	1.86	15.974		
1,100.0	1,096.3	1,096.4	1,092.7	2.3	0.0	-43.62	-54.0	-77.4	30.1	28.0	2.10	14.341		
1,200.0	1,194.9	1,196.0	1,191.0	2.7	0.0	-44.96	-61.0	-92.2	30.7	28.3	2.37	12.964		
1,300.0	1,293.3	1,295.6	1,288.9	3.0	0.0	-46.38	-68.7	-108.6	31.4	28.7	2.66	11.782		
1,400.0	1,391.4	1,395.2	1,386.5	3.4	0.0	-46.85	-77.1	-126.5	32.6	29.7	2.95	11.049		
1,500.0	1,489.5	1,495.0	1,484.1	3.7	0.0	-45.78	-86.2	-145.5	34.8	31.6	3.22	10.821		
1,600.0	1,587.7	1,595.0	1,581.8	4.1	0.0	-44.77	-95.2	-164.7	37.1	33.6	3.48	10.657		
1,700.0	1,685.8	1,695.0	1,679.5	4.5	0.0	-43.87	-104.3	-183.9	39.4	35.7	3.75	10.524		
1,800.0	1,784.0	1,794.9	1,777.2	4.8	0.0	-43.07	-113.4	-203.1	41.7	37.7	4.01	10.414		
1,900.0	1,882.1	1,894.9	1,874.9	5.2	0.0	-42.36	-122.5	-222.2	44.0	39.8	4.27	10.324		
2,000.0	1,980.3	1,994.9	1,972.6	5.6	0.0	-41.71	-131.5	-241.4	46.4	41.8	4.52	10.248		
2,100.0	2,078.4	2,094.8	2,070.3	6.0	0.0	-41.13	-140.6	-260.6	48.7	43.9	4.78	10.183		
2,200.0	2,176.6	2,194.8	2,168.0	6.3	0.0	-40.60	-149.7	-279.8	51.0	46.0	5.04	10.129		
2,300.0	2,274.7	2,294.8	2,265.7	6.7	0.0	-40.12	-158.7	-298.9	53.3	48.0	5.29	10.082		
2,400.0	2,372.9	2,394.8	2,363.4	7.1	0.0	-39.68	-167.8	-318.1	55.7	50.1	5.54	10.042		
2,500.0	2,471.0	2,494.7	2,461.1	7.5	0.0	-39.27	-176.9	-337.3	58.0	52.2	5.80	10.008		
2,600.0	2,569.2	2,594.7	2,558.8	7.9	0.0	-38.89	-185.9	-356.5	60.3	54.3	6.05	9.977		
2,700.0	2,667.3	2,694.7	2,656.5	8.2	0.0	-38.55	-195.0	-375.6	62.7	56.4	6.30	9.951		
2,800.0	2,765.4	2,794.7	2,754.2	8.6	0.0	-38.22	-204.1	-394.8	65.0	58.5	6.55	9.928		
2,900.0	2,863.6	2,894.6	2,851.9	9.0	0.0	-37.92	-213.1	-414.0	67.4	60.6	6.80	9.907		
3,000.0	2,961.7	2,994.6	2,949.5	9.4	0.0	-37.64	-222.2	-433.2	69.7	62.7	7.05	9.889		
3,100.0	3,059.9	3,094.6	3,047.2	9.7	0.0	-37.38	-231.3	-452.3	72.1	64.8	7.30	9.873		
3,200.0	3,158.0	3,194.5	3,144.9	10.1	0.0	-37.14	-240.4	-471.5	74.4	66.9	7.55	9.859		
3,300.0	3,256.2	3,294.5	3,242.6	10.5	0.0	-36.91	-249.4	-490.7	76.8	69.0	7.80	9.846		
3,400.0	3,354.3	3,394.5	3,340.3	10.9	0.0	-36.69	-258.5	-509.9	79.1	71.1	8.05	9.835		
3,500.0	3,452.5	3,494.5	3,438.0	11.3	0.0	-36.49	-267.6	-529.0	81.5	73.2	8.29	9.825		
3,600.0	3,550.6	3,594.4	3,535.7	11.6	0.0	-36.29	-276.6	-548.2	83.8	75.3	8.54	9.815		
3,700.0	3,648.8	3,694.4	3,633.4	12.0	0.0	-36.11	-285.7	-567.4	86.2	77.4	8.79	9.807		
3,800.0	3,746.9	3,794.4	3,731.1	12.4	0.0	-35.94	-294.8	-586.6	88.6	79.5	9.04	9.800		
3,900.0	3,845.0	3,894.3	3,828.8	12.8	0.0	-35.78	-303.8	-605.7	90.9	81.6	9.28	9.793		
4,000.0	3,943.2	3,994.3	3,926.5	13.2	0.0	-35.62	-312.9	-624.9	93.3	83.7	9.53	9.787		
4,100.0	4,041.3	4,094.3	4,024.2	13.5	0.0	-35.48	-322.0	-644.1	95.6	85.9	9.78	9.781		
4,200.0	4,139.5	4,194.3	4,121.9	13.9	0.0	-35.34	-331.0	-663.3	98.0	88.0	10.02	9.776		
4,300.0	4,237.6	4,294.2	4,219.6	14.3	0.0	-35.20	-340.1	-682.4	100.3	90.1	10.27	9.772		
4,400.0	4,335.8	4,394.2	4,317.3	14.7	0.0	-35.07	-349.2	-701.6	102.7	92.2	10.52	9.767		
4,500.0	4,433.9	4,494.2	4,415.0	15.1	0.0	-34.95	-358.3	-720.8	105.1	94.3	10.76	9.763		
4,600.0	4,532.1	4,594.1	4,512.7	15.5	0.0	-34.84	-367.3	-739.9	107.4	96.4	11.01	9.760		
4,700.0	4,630.2	4,694.1	4,610.4	15.8	0.0	-34.72	-376.4	-759.1	109.8	98.5	11.25	9.757		
4,800.0	4,728.4	4,794.1	4,708.1	16.2	0.0	-34.62	-385.5	-778.3	112.2	100.7	11.50	9.754		
4,900.0	4,826.5	4,894.1	4,805.8	16.6	0.0	-34.52	-394.5	-797.5	114.5	102.8	11.74	9.751		
5,000.0	4,924.7	4,994.0	4,903.5	17.0	0.0	-34.42	-403.6	-816.6	116.9	104.9	11.99	9.749		
5,100.0	5,022.8	5,094.0	5,001.2	17.4	0.0	-34.32	-412.7	-835.8	119.2	107.0	12.23	9.747		

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 5
<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 5	<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-Reference													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis		Separation Factor	
5,200.0	5,120.9	5,194.0	5,098.9	17.7	0.0	-34.23	-421.7	-855.0	121.6	109.1	12.48	9.745		
5,300.0	5,219.1	5,293.9	5,196.6	18.1	0.0	-34.15	-430.8	-874.2	124.0	111.3	12.73	9.743		
5,400.0	5,317.2	5,393.9	5,294.2	18.5	0.0	-34.06	-439.9	-893.3	126.3	113.4	12.97	9.741		
5,500.0	5,415.4	5,493.9	5,391.9	18.9	0.0	-33.98	-448.9	-912.5	128.7	115.5	13.22	9.739		
5,600.0	5,513.5	5,593.9	5,489.6	19.3	0.0	-33.90	-458.0	-931.7	131.1	117.6	13.46	9.738		
5,700.0	5,611.7	5,693.8	5,587.3	19.6	0.0	-33.83	-467.1	-950.9	133.4	119.7	13.70	9.737		
5,800.0	5,709.8	5,793.8	5,685.0	20.0	0.0	-33.75	-476.2	-970.0	135.8	121.9	13.95	9.735		
5,900.0	5,808.0	5,893.8	5,782.7	20.4	0.0	-33.68	-485.2	-989.2	138.2	124.0	14.19	9.734		
6,000.0	5,906.1	5,993.8	5,880.4	20.8	0.0	-33.62	-494.3	-1,008.4	140.5	126.1	14.44	9.733		
6,100.0	6,004.3	6,093.7	5,978.1	21.2	0.0	-33.55	-503.4	-1,027.6	142.9	128.2	14.68	9.732		
6,200.0	6,102.4	6,193.7	6,075.8	21.6	0.0	-33.49	-512.4	-1,046.7	145.3	130.3	14.93	9.731		
6,300.0	6,200.5	6,293.7	6,173.5	21.9	0.0	-33.43	-521.5	-1,065.9	147.6	132.5	15.17	9.731		
6,400.0	6,298.5	6,393.6	6,271.2	22.3	0.0	-38.11	-530.6	-1,085.1	149.6	134.1	15.47	9.665		
6,500.0	6,393.5	6,492.9	6,368.2	23.0	0.0	-49.54	-539.6	-1,104.1	145.2	128.4	16.83	8.628		
6,600.0	6,482.6	6,589.1	6,462.2	23.8	0.0	-63.22	-548.3	-1,122.6	135.7	116.0	19.72	6.882		
6,698.2	6,562.3	6,678.4	6,549.5	24.9	0.0	-81.19	-556.4	-1,139.7	129.8	106.4	23.38	5.553		
6,700.0	6,563.7	6,680.0	6,551.0	24.9	0.0	-81.54	-556.5	-1,140.0	129.8	106.4	23.43	5.539		
6,800.0	6,634.7	6,766.0	6,634.9	26.2	0.0	-101.37	-564.3	-1,157.3	140.8	115.1	25.72	5.475		
6,900.0	6,693.9	6,859.3	6,723.1	27.8	0.0	-118.07	-572.5	-1,186.6	171.5	145.9	25.61	6.697		
7,000.0	6,739.8	6,963.4	6,815.2	29.5	0.0	-130.28	-581.0	-1,234.0	213.8	189.7	24.10	8.871		
7,100.0	6,771.3	7,082.6	6,909.6	31.4	0.0	-139.07	-589.6	-1,305.9	260.9	238.8	22.09	11.807		
7,200.0	6,787.6	7,222.9	7,001.4	33.5	0.0	-145.51	-597.9	-1,411.4	307.6	287.6	19.99	15.389		
7,300.0	6,790.0	7,393.0	7,078.5	35.6	0.0	-150.74	-604.7	-1,562.2	347.7	329.4	18.27	19.027		
7,400.0	6,790.0	7,598.0	7,114.9	37.7	0.0	-153.07	-607.6	-1,763.1	364.5	346.2	18.22	20.003		
7,500.0	6,790.0	7,704.4	7,115.0	39.9	0.0	-153.08	-607.4	-1,869.5	364.5	345.2	19.25	18.933		
7,600.0	6,790.0	7,804.4	7,115.0	42.2	0.0	-153.08	-607.1	-1,969.5	364.5	344.2	20.30	17.958		
7,700.0	6,790.0	7,904.4	7,115.0	44.4	0.0	-153.08	-606.9	-2,069.5	364.5	343.1	21.35	17.070		
7,800.0	6,790.0	8,004.4	7,115.0	46.7	0.0	-153.08	-606.6	-2,169.5	364.5	342.1	22.42	16.261		
7,900.0	6,790.0	8,104.4	7,115.0	49.0	0.0	-153.08	-606.4	-2,269.5	364.5	341.0	23.48	15.521		
8,000.0	6,790.0	8,204.4	7,115.0	51.3	0.0	-153.08	-606.1	-2,369.5	364.5	339.9	24.56	14.842		
8,100.0	6,790.0	8,304.4	7,115.0	53.6	0.0	-153.08	-605.9	-2,469.5	364.5	338.9	25.64	14.216		
8,200.0	6,790.0	8,404.4	7,115.0	56.0	0.0	-153.08	-605.6	-2,569.5	364.5	337.8	26.72	13.639		
8,300.0	6,790.0	8,504.4	7,115.0	58.3	0.0	-153.08	-605.4	-2,669.5	364.5	336.7	27.81	13.106		
8,400.0	6,790.0	8,604.4	7,115.0	60.7	0.0	-153.08	-605.1	-2,769.4	364.5	335.6	28.90	12.611		
8,500.0	6,790.0	8,704.4	7,115.0	63.1	0.0	-153.08	-604.9	-2,869.4	364.5	334.5	30.00	12.150		
8,600.0	6,790.0	8,804.4	7,115.0	65.4	0.0	-153.08	-604.6	-2,969.4	364.5	333.4	31.10	11.721		
8,700.0	6,790.0	8,904.4	7,115.0	67.8	0.0	-153.08	-604.4	-3,069.4	364.5	332.3	32.20	11.321		
8,800.0	6,790.0	9,004.4	7,115.0	70.2	0.0	-153.08	-604.1	-3,169.4	364.5	331.2	33.30	10.946		
8,900.0	6,790.0	9,104.4	7,115.0	72.6	0.0	-153.08	-603.9	-3,269.4	364.5	330.1	34.40	10.595		
9,000.0	6,790.0	9,204.4	7,115.0	75.0	0.0	-153.08	-603.6	-3,369.4	364.5	329.0	35.51	10.264		
9,100.0	6,790.0	9,304.4	7,115.0	77.4	0.0	-153.08	-603.4	-3,469.4	364.5	327.9	36.62	9.954		
9,200.0	6,790.0	9,404.4	7,115.0	79.8	0.0	-153.08	-603.1	-3,569.4	364.5	326.8	37.73	9.661		
9,300.0	6,790.0	9,504.4	7,115.0	82.3	0.0	-153.08	-602.9	-3,669.4	364.5	325.7	38.84	9.385		
9,400.0	6,790.0	9,604.4	7,115.0	84.7	0.0	-153.08	-602.6	-3,769.4	364.5	324.5	39.95	9.123		
9,500.0	6,790.0	9,704.4	7,115.0	87.1	0.0	-153.08	-602.4	-3,869.4	364.5	323.4	41.07	8.876		
9,600.0	6,790.0	9,804.4	7,115.0	89.5	0.0	-153.08	-602.1	-3,969.4	364.5	322.3	42.18	8.642		
9,700.0	6,790.0	9,904.4	7,115.0	91.9	0.0	-153.08	-601.9	-4,069.4	364.5	321.2	43.30	8.419		
9,800.0	6,790.0	10,004.4	7,115.0	94.4	0.0	-153.08	-601.6	-4,169.4	364.5	320.1	44.41	8.207		
9,900.0	6,790.0	10,104.4	7,115.0	96.8	0.0	-153.08	-601.4	-4,269.4	364.5	319.0	45.53	8.006		
10,000.0	6,790.0	10,204.4	7,115.0	99.2	0.0	-153.08	-601.1	-4,369.4	364.5	317.9	46.65	7.814		
10,100.0	6,790.0	10,304.4	7,115.0	101.7	0.0	-153.08	-600.9	-4,469.4	364.5	316.7	47.77	7.631		
10,200.0	6,790.0	10,404.4	7,115.0	104.1	0.0	-153.08	-600.6	-4,569.4	364.5	315.6	48.89	7.456		

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 5
<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 5	<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
10,300.0	6,790.0	10,504.4	7,115.0	106.6	0.0	-153.08	-600.4	-4,669.4	364.5	314.5	50.01	7.289	
10,400.0	6,790.0	10,604.4	7,115.0	109.0	0.0	-153.08	-600.1	-4,769.4	364.5	313.4	51.13	7.129	
10,500.0	6,790.0	10,704.4	7,115.0	111.4	0.0	-153.08	-599.9	-4,869.4	364.5	312.3	52.25	6.976	
10,600.0	6,790.0	10,804.4	7,115.0	113.9	0.0	-153.08	-599.6	-4,969.4	364.5	311.1	53.37	6.830	
10,700.0	6,790.0	10,904.4	7,115.0	116.3	0.0	-153.08	-599.4	-5,069.4	364.5	310.0	54.49	6.689	
10,800.0	6,790.0	11,004.4	7,115.0	118.8	0.0	-153.08	-599.1	-5,169.4	364.5	308.9	55.61	6.554	
10,900.0	6,790.0	11,104.4	7,115.0	121.2	0.0	-153.08	-598.9	-5,269.4	364.5	307.8	56.74	6.424	
11,000.0	6,790.0	11,204.4	7,115.0	123.7	0.0	-153.08	-598.6	-5,369.4	364.5	306.6	57.86	6.299	
11,100.0	6,790.0	11,304.4	7,115.0	126.1	0.0	-153.08	-598.4	-5,469.4	364.5	305.5	58.99	6.179	
11,200.0	6,790.0	11,404.4	7,115.0	128.6	0.0	-153.08	-598.1	-5,569.4	364.5	304.4	60.11	6.064	
11,300.0	6,790.0	11,504.4	7,115.0	131.0	0.0	-153.08	-597.9	-5,669.4	364.5	303.3	61.23	5.952	
11,400.0	6,790.0	11,604.4	7,115.0	133.5	0.0	-153.08	-597.6	-5,769.4	364.5	302.1	62.36	5.845	
11,500.0	6,790.0	11,704.4	7,115.0	135.9	0.0	-153.08	-597.4	-5,869.4	364.5	301.0	63.49	5.741	
11,600.0	6,790.0	11,804.4	7,115.0	138.4	0.0	-153.08	-597.1	-5,969.4	364.5	299.9	64.61	5.641	
11,700.0	6,790.0	11,904.4	7,115.0	140.8	0.0	-153.08	-596.9	-6,069.4	364.5	298.8	65.74	5.545	
11,800.0	6,790.0	12,004.4	7,115.0	143.3	0.0	-153.08	-596.6	-6,169.4	364.5	297.6	66.86	5.451	
11,900.0	6,790.0	12,104.4	7,115.0	145.8	0.0	-153.08	-596.4	-6,269.4	364.5	296.5	67.99	5.361	
12,000.0	6,790.0	12,204.4	7,115.0	148.2	0.0	-153.08	-596.1	-6,369.4	364.5	295.4	69.12	5.274	
12,100.0	6,790.0	12,304.4	7,115.0	150.7	0.0	-153.08	-595.9	-6,469.4	364.5	294.3	70.24	5.189	
12,200.0	6,790.0	12,404.4	7,115.0	153.1	0.0	-153.08	-595.6	-6,569.4	364.5	293.1	71.37	5.107	
12,300.0	6,790.0	12,504.4	7,115.0	155.6	0.0	-153.08	-595.4	-6,669.4	364.5	292.0	72.50	5.028	
12,400.0	6,790.0	12,604.4	7,115.0	158.0	0.0	-153.08	-595.1	-6,769.4	364.5	290.9	73.63	4.951	
12,500.0	6,790.0	12,704.4	7,115.0	160.5	0.0	-153.08	-594.9	-6,869.4	364.5	289.7	74.75	4.876	
12,600.0	6,790.0	12,804.4	7,115.0	163.0	0.0	-153.08	-594.6	-6,969.4	364.5	288.6	75.88	4.804	
12,700.0	6,790.0	12,904.4	7,115.0	165.4	0.0	-153.08	-594.4	-7,069.4	364.5	287.5	77.01	4.733	
12,800.0	6,790.0	13,004.4	7,115.0	167.9	0.0	-153.08	-594.1	-7,169.4	364.5	286.4	78.14	4.665	
12,900.0	6,790.0	13,104.4	7,115.0	170.3	0.0	-153.08	-593.9	-7,269.4	364.5	285.2	79.27	4.598	
13,000.0	6,790.0	13,204.4	7,115.0	172.8	0.0	-153.08	-593.6	-7,369.4	364.5	284.1	80.39	4.534	
13,100.0	6,790.0	13,304.4	7,115.0	175.3	0.0	-153.08	-593.4	-7,469.4	364.5	283.0	81.52	4.471	
13,200.0	6,790.0	13,404.4	7,115.0	177.7	0.0	-153.08	-593.1	-7,569.4	364.5	281.8	82.65	4.410	
13,300.0	6,790.0	13,504.4	7,115.0	180.2	0.0	-153.08	-592.9	-7,669.4	364.5	280.7	83.78	4.351	
13,400.0	6,790.0	13,604.4	7,115.0	182.7	0.0	-153.08	-592.6	-7,769.4	364.5	279.6	84.91	4.293	
13,500.0	6,790.0	13,704.4	7,115.0	185.1	0.0	-153.08	-592.4	-7,869.4	364.5	278.5	86.04	4.236	
13,600.0	6,790.0	13,804.4	7,115.0	187.6	0.0	-153.08	-592.1	-7,969.4	364.5	277.3	87.17	4.182	
13,700.0	6,790.0	13,904.4	7,115.0	190.1	0.0	-153.08	-591.9	-8,069.4	364.5	276.2	88.30	4.128	
13,800.0	6,790.0	14,004.4	7,115.0	192.5	0.0	-153.08	-591.6	-8,169.4	364.5	275.1	89.43	4.076	
13,900.0	6,790.0	14,104.4	7,115.0	195.0	0.0	-153.08	-591.4	-8,269.4	364.5	273.9	90.56	4.025	
14,000.0	6,790.0	14,204.4	7,115.0	197.4	0.0	-153.08	-591.1	-8,369.4	364.5	272.8	91.69	3.975	
14,100.0	6,790.0	14,304.4	7,115.0	199.9	0.0	-153.08	-590.9	-8,469.4	364.5	271.7	92.82	3.927	
14,200.0	6,790.0	14,404.4	7,115.0	202.4	0.0	-153.08	-590.6	-8,569.4	364.5	270.6	93.95	3.880	
14,300.0	6,790.0	14,504.4	7,115.0	204.8	0.0	-153.08	-590.4	-8,669.4	364.5	269.4	95.08	3.834	
14,400.0	6,790.0	14,604.4	7,115.0	207.3	0.0	-153.08	-590.1	-8,769.4	364.5	268.3	96.21	3.789	
14,500.0	6,790.0	14,704.4	7,115.0	209.8	0.0	-153.08	-589.9	-8,869.4	364.5	267.2	97.34	3.745	
14,600.0	6,790.0	14,804.4	7,115.0	212.2	0.0	-153.08	-589.6	-8,969.4	364.5	266.0	98.47	3.702	
14,700.0	6,790.0	14,904.4	7,115.0	214.7	0.0	-153.08	-589.4	-9,069.4	364.5	264.9	99.60	3.660	
14,800.0	6,790.0	15,004.4	7,115.0	217.2	0.0	-153.08	-589.1	-9,169.4	364.5	263.8	100.73	3.619	
14,900.0	6,790.0	15,104.4	7,115.0	219.6	0.0	-153.08	-588.9	-9,269.4	364.5	262.6	101.86	3.578	
15,000.0	6,790.0	15,204.4	7,115.0	222.1	0.0	-153.08	-588.6	-9,369.4	364.5	261.5	102.99	3.539	
15,100.0	6,790.0	15,304.4	7,115.0	224.6	0.0	-153.08	-588.4	-9,469.4	364.5	260.4	104.12	3.501	
15,200.0	6,790.0	15,404.4	7,115.0	227.0	0.0	-153.08	-588.1	-9,569.4	364.5	259.2	105.25	3.463	
15,300.0	6,790.0	15,504.4	7,115.0	229.5	0.0	-153.08	-587.9	-9,669.4	364.5	258.1	106.38	3.426	
15,400.0	6,790.0	15,604.4	7,115.0	232.0	0.0	-153.08	-587.6	-9,769.4	364.5	257.0	107.51	3.390	

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 5
<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 5	<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						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
15,500.0	6,790.0	15,704.4	7,115.0	234.4	0.0	-153.08	-587.4	-9,869.4	364.5	255.9	108.64	3.355		
15,600.0	6,790.0	15,804.4	7,115.0	236.9	0.0	-153.08	-587.1	-9,969.4	364.5	254.7	109.77	3.320		
15,700.0	6,790.0	15,904.4	7,115.0	239.4	0.0	-153.08	-586.9	-10,069.4	364.5	253.6	110.91	3.287		
15,800.0	6,790.0	16,004.4	7,115.0	241.8	0.0	-153.08	-586.6	-10,169.4	364.5	252.5	112.04	3.253		
15,900.0	6,790.0	16,104.4	7,115.0	244.3	0.0	-153.08	-586.4	-10,269.4	364.5	251.3	113.17	3.221		
16,000.0	6,790.0	16,204.4	7,115.0	246.8	0.0	-153.08	-586.1	-10,369.4	364.5	250.2	114.30	3.189		
16,100.0	6,790.0	16,304.4	7,115.0	249.2	0.0	-153.08	-585.9	-10,469.4	364.5	249.1	115.43	3.158		
16,200.0	6,790.0	16,404.4	7,115.0	251.7	0.0	-153.08	-585.6	-10,569.4	364.5	247.9	116.56	3.127		
16,300.0	6,790.0	16,504.4	7,115.0	254.2	0.0	-153.08	-585.4	-10,669.4	364.5	246.8	117.69	3.097		
16,400.0	6,790.0	16,604.4	7,115.0	256.7	0.0	-153.08	-585.1	-10,769.4	364.5	245.7	118.82	3.068		
16,500.0	6,790.0	16,704.4	7,115.0	259.1	0.0	-153.08	-584.9	-10,869.4	364.5	244.5	119.96	3.039		
16,600.0	6,790.0	16,804.4	7,115.0	261.6	0.0	-153.08	-584.6	-10,969.4	364.5	243.4	121.09	3.010		
16,700.0	6,790.0	16,904.4	7,115.0	264.1	0.0	-153.08	-584.4	-11,069.4	364.5	242.3	122.22	2.982		
16,800.0	6,790.0	17,004.4	7,115.0	266.5	0.0	-153.08	-584.1	-11,169.4	364.5	241.1	123.35	2.955		
16,900.0	6,790.0	17,104.4	7,115.0	269.0	0.0	-153.08	-583.9	-11,269.4	364.5	240.0	124.48	2.928		
17,000.0	6,790.0	17,204.4	7,115.0	271.5	0.0	-153.08	-583.6	-11,369.4	364.5	238.9	125.61	2.902		
17,100.0	6,790.0	17,304.4	7,115.0	273.9	0.0	-153.08	-583.4	-11,469.4	364.5	237.8	126.74	2.876		
17,200.0	6,790.0	17,404.4	7,115.0	276.4	0.0	-153.08	-583.1	-11,569.4	364.5	236.6	127.88	2.850		
17,300.0	6,790.0	17,504.4	7,115.0	278.9	0.0	-153.08	-582.9	-11,669.4	364.5	235.5	129.01	2.825		
17,400.0	6,790.0	17,604.4	7,115.0	281.3	0.0	-153.08	-582.6	-11,769.4	364.5	234.4	130.14	2.801		
17,401.6	6,790.0	17,606.0	7,115.0	281.4	0.0	-153.08	-582.6	-11,771.0	364.5	234.3	130.16	2.800		
17,401.9	6,790.0	17,606.0	7,115.0	281.4	0.0	-153.08	-582.6	-11,771.0	364.5	234.3	130.16	2.800 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	-149.41	-48.5	-28.6	56.3					
100.0	100.0	100.0	100.0	0.1	0.0	-149.41	-48.5	-28.6	56.3	56.2	0.13	423.710		
200.0	200.0	200.0	200.0	0.3	0.0	-149.41	-48.5	-28.6	56.3	56.0	0.31	183.123 CC		
300.0	300.0	299.1	299.1	0.5	0.0	-37.38	-48.9	-29.4	56.4	55.9	0.48	116.853		
400.0	400.0	398.3	398.3	0.7	0.0	-37.71	-50.2	-31.6	56.5	55.9	0.66	85.838		
500.0	499.9	497.4	497.3	0.9	0.0	-38.26	-52.4	-35.3	56.9	56.0	0.84	67.826		
600.0	599.7	596.6	596.3	1.1	0.0	-39.02	-55.4	-40.5	57.3	56.3	1.02	56.027		
700.0	699.4	695.7	695.1	1.3	0.0	-39.98	-59.4	-47.1	57.9	56.7	1.22	47.670		
800.0	798.9	794.9	793.8	1.5	0.0	-41.13	-64.1	-55.2	58.7	57.3	1.42	41.411		
900.0	898.3	894.0	892.3	1.8	0.0	-42.44	-69.8	-64.8	59.6	58.0	1.63	36.523		
1,000.0	997.4	993.1	990.6	2.0	0.0	-43.90	-76.3	-75.8	60.8	58.9	1.86	32.582		
1,100.0	1,096.3	1,092.2	1,088.6	2.3	0.0	-45.49	-83.7	-88.3	62.1	60.0	2.12	29.323		
1,200.0	1,194.9	1,191.3	1,186.4	2.7	0.0	-47.19	-92.0	-102.3	63.6	61.2	2.39	26.578		
1,300.0	1,293.3	1,290.5	1,283.9	3.0	0.0	-48.97	-101.1	-117.7	65.3	62.6	2.70	24.228		
1,400.0	1,391.4	1,389.5	1,381.0	3.4	0.0	-50.31	-111.1	-134.6	67.8	64.8	3.01	22.532		
1,500.0	1,489.5	1,488.6	1,477.8	3.7	0.0	-50.61	-121.9	-152.9	71.6	68.3	3.31	21.599		
1,600.0	1,587.7	1,587.8	1,574.3	4.1	0.0	-50.06	-133.5	-172.6	76.6	73.0	3.60	21.245		
1,700.0	1,685.8	1,687.7	1,671.4	4.5	0.0	-49.39	-145.4	-192.7	81.9	78.0	3.89	21.048		
1,800.0	1,784.0	1,787.5	1,768.4	4.8	0.0	-48.79	-157.3	-212.9	87.2	83.0	4.17	20.883		
1,900.0	1,882.1	1,887.4	1,865.5	5.2	0.0	-48.27	-169.3	-233.1	92.5	88.0	4.46	20.742		
2,000.0	1,980.3	1,987.2	1,962.6	5.6	0.0	-47.80	-181.2	-253.2	97.8	93.1	4.74	20.622		
2,100.0	2,078.4	2,087.1	2,059.6	6.0	0.0	-47.38	-193.1	-273.4	103.2	98.1	5.03	20.518		
2,200.0	2,176.6	2,186.9	2,156.7	6.3	0.0	-47.00	-205.0	-293.6	108.5	103.2	5.31	20.428		
2,300.0	2,274.7	2,286.8	2,253.8	6.7	0.0	-46.66	-216.9	-313.7	113.9	108.3	5.60	20.348		
2,400.0	2,372.9	2,386.7	2,350.8	7.1	0.0	-46.35	-228.9	-333.9	119.2	113.3	5.88	20.278		
2,500.0	2,471.0	2,486.5	2,447.9	7.5	0.0	-46.06	-240.8	-354.1	124.6	118.4	6.16	20.216		
2,600.0	2,569.2	2,586.4	2,545.0	7.9	0.0	-45.80	-252.7	-374.2	129.9	123.5	6.44	20.161		
2,700.0	2,667.3	2,686.2	2,642.1	8.2	0.0	-45.56	-264.6	-394.4	135.3	128.6	6.73	20.111		
2,800.0	2,765.4	2,786.1	2,739.1	8.6	0.0	-45.34	-276.5	-414.6	140.6	133.6	7.01	20.066		
2,900.0	2,863.6	2,885.9	2,836.2	9.0	0.0	-45.13	-288.4	-434.7	146.0	138.7	7.29	20.026		
3,000.0	2,961.7	2,985.8	2,933.3	9.4	0.0	-44.94	-300.4	-454.9	151.4	143.8	7.57	19.989		
3,100.0	3,059.9	3,085.6	3,030.3	9.7	0.0	-44.76	-312.3	-475.1	156.7	148.9	7.85	19.955		
3,200.0	3,158.0	3,185.5	3,127.4	10.1	0.0	-44.59	-324.2	-495.2	162.1	154.0	8.14	19.925		
3,300.0	3,256.2	3,285.3	3,224.5	10.5	0.0	-44.44	-336.1	-515.4	167.5	159.1	8.42	19.897		
3,400.0	3,354.3	3,385.2	3,321.5	10.9	0.0	-44.29	-348.0	-535.6	172.8	164.1	8.70	19.871		
3,500.0	3,452.5	3,485.1	3,418.6	11.3	0.0	-44.15	-360.0	-555.7	178.2	169.2	8.98	19.847		
3,600.0	3,550.6	3,584.9	3,515.7	11.6	0.0	-44.02	-371.9	-575.9	183.6	174.3	9.26	19.825		
3,700.0	3,648.8	3,684.8	3,612.7	12.0	0.0	-43.90	-383.8	-596.1	189.0	179.4	9.54	19.804		
3,800.0	3,746.9	3,784.6	3,709.8	12.4	0.0	-43.79	-395.7	-616.2	194.3	184.5	9.82	19.785		
3,900.0	3,845.0	3,884.5	3,806.9	12.8	0.0	-43.68	-407.6	-636.4	199.7	189.6	10.10	19.768		
4,000.0	3,943.2	3,984.3	3,903.9	13.2	0.0	-43.57	-419.6	-656.6	205.1	194.7	10.38	19.751		
4,100.0	4,041.3	4,084.2	4,001.0	13.5	0.0	-43.48	-431.5	-676.7	210.5	199.8	10.66	19.736		
4,200.0	4,139.5	4,184.0	4,098.1	13.9	0.0	-43.38	-443.4	-696.9	215.8	204.9	10.94	19.721		
4,300.0	4,237.6	4,283.9	4,195.1	14.3	0.0	-43.29	-455.3	-717.1	221.2	210.0	11.22	19.708		
4,400.0	4,335.8	4,383.7	4,292.2	14.7	0.0	-43.21	-467.2	-737.2	226.6	215.1	11.50	19.695		
4,500.0	4,433.9	4,483.6	4,389.3	15.1	0.0	-43.13	-479.1	-757.4	232.0	220.2	11.78	19.683		
4,600.0	4,532.1	4,583.5	4,486.3	15.5	0.0	-43.05	-491.1	-777.6	237.3	225.3	12.07	19.671		
4,700.0	4,630.2	4,683.3	4,583.4	15.8	0.0	-42.98	-503.0	-797.7	242.7	230.4	12.35	19.661		
4,800.0	4,728.4	4,783.2	4,680.5	16.2	0.0	-42.91	-514.9	-817.9	248.1	235.5	12.63	19.651		
4,900.0	4,826.5	4,883.0	4,777.6	16.6	0.0	-42.84	-526.8	-838.1	253.5	240.6	12.91	19.641		
5,000.0	4,924.7	4,982.9	4,874.6	17.0	0.0	-42.78	-538.7	-858.2	258.9	245.7	13.19	19.632		
5,100.0	5,022.8	5,082.7	4,971.7	17.4	0.0	-42.71	-550.7	-878.4	264.2	250.8	13.47	19.623		

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 5
<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 5	<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		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis		
5,200.0	5,120.9	5,182.6	5,068.8	17.7	0.0	-42.65	-562.6	-898.6	269.6	255.9	13.75	19.615	
5,300.0	5,219.1	5,282.4	5,165.8	18.1	0.0	-42.60	-574.5	-918.7	275.0	261.0	14.03	19.607	
5,400.0	5,317.2	5,382.3	5,262.9	18.5	0.0	-42.54	-586.4	-938.9	280.4	266.1	14.31	19.600	
5,500.0	5,415.4	5,482.2	5,360.0	18.9	0.0	-42.49	-598.3	-959.1	285.8	271.2	14.58	19.593	
5,600.0	5,513.5	5,582.0	5,457.0	19.3	0.0	-42.44	-610.2	-979.2	291.1	276.3	14.86	19.586	
5,700.0	5,611.7	5,681.9	5,554.1	19.6	0.0	-42.39	-622.2	-999.4	296.5	281.4	15.14	19.579	
5,800.0	5,709.8	5,781.7	5,651.2	20.0	0.0	-42.34	-634.1	-1,019.6	301.9	286.5	15.42	19.573	
5,900.0	5,808.0	5,881.6	5,748.2	20.4	0.0	-42.30	-646.0	-1,039.7	307.3	291.6	15.70	19.567	
6,000.0	5,906.1	5,981.4	5,845.3	20.8	0.0	-42.25	-657.9	-1,059.9	312.7	296.7	15.98	19.562	
6,100.0	6,004.3	6,081.3	5,942.4	21.2	0.0	-42.21	-669.8	-1,080.1	318.0	301.8	16.26	19.556	
6,200.0	6,102.4	6,181.1	6,039.4	21.6	0.0	-42.17	-681.8	-1,100.2	323.4	306.9	16.54	19.551	
6,300.0	6,200.5	6,281.0	6,136.5	21.9	0.0	-42.13	-693.7	-1,120.4	328.8	312.0	16.82	19.546	
6,400.0	6,298.5	6,380.9	6,233.6	22.3	0.0	-46.61	-705.6	-1,140.6	333.9	316.7	17.12	19.497	
6,500.0	6,393.5	6,472.4	6,322.3	23.0	0.0	-55.10	-716.5	-1,160.2	334.5	316.6	17.94	18.649	
6,600.0	6,482.6	6,555.3	6,400.1	23.8	0.0	-60.19	-726.0	-1,186.9	333.5	314.4	19.14	17.429	
6,700.0	6,563.7	6,639.5	6,475.0	24.9	0.0	-64.32	-735.2	-1,224.2	332.0	311.3	20.71	16.033	
6,800.0	6,634.7	6,725.4	6,545.7	26.2	0.0	-68.22	-743.8	-1,272.2	330.3	307.7	22.64	14.589	
6,900.0	6,693.9	6,813.3	6,610.7	27.8	0.0	-72.13	-751.6	-1,330.8	328.7	303.8	24.88	13.211	
7,000.0	6,739.8	6,903.7	6,668.5	29.5	0.0	-76.13	-758.6	-1,399.7	327.5	300.1	27.34	11.979	
7,098.4	6,770.9	6,995.3	6,716.7	31.4	0.0	-80.16	-764.3	-1,477.4	327.0	297.2	29.85	10.957	
7,100.0	6,771.3	6,996.9	6,717.4	31.4	0.0	-80.23	-764.4	-1,478.7	327.0	297.2	29.89	10.942	
7,200.0	6,787.6	7,093.3	6,755.4	33.5	0.0	-84.38	-768.9	-1,567.2	327.6	295.2	32.39	10.114	
7,300.0	6,790.0	7,193.9	6,780.4	35.6	0.0	-88.33	-771.7	-1,664.4	329.1	294.4	34.70	9.482	
7,400.0	6,790.0	7,299.5	6,790.0	37.7	0.0	-90.00	-772.6	-1,769.5	330.1	293.1	36.93	8.937	
7,500.0	6,790.0	7,399.9	6,790.0	39.9	0.0	-90.00	-772.4	-1,869.9	330.1	290.9	39.18	8.424	
7,600.0	6,790.0	7,499.9	6,790.0	42.2	0.0	-90.00	-772.1	-1,969.9	330.1	288.6	41.46	7.961	
7,700.0	6,790.0	7,599.9	6,790.0	44.4	0.0	-90.00	-771.9	-2,069.9	330.1	286.3	43.76	7.543	
7,800.0	6,790.0	7,699.9	6,790.0	46.7	0.0	-90.00	-771.6	-2,169.9	330.1	284.0	46.07	7.164	
7,900.0	6,790.0	7,799.9	6,790.0	49.0	0.0	-90.00	-771.4	-2,269.9	330.1	281.7	48.40	6.819	
8,000.0	6,790.0	7,899.9	6,790.0	51.3	0.0	-90.00	-771.1	-2,369.9	330.1	279.3	50.75	6.504	
8,100.0	6,790.0	7,999.9	6,790.0	53.6	0.0	-90.00	-770.9	-2,469.9	330.1	277.0	53.10	6.215	
8,200.0	6,790.0	8,099.9	6,790.0	56.0	0.0	-90.00	-770.6	-2,569.9	330.1	274.6	55.47	5.950	
8,300.0	6,790.0	8,199.9	6,790.0	58.3	0.0	-90.00	-770.4	-2,669.9	330.1	272.2	57.85	5.706	
8,400.0	6,790.0	8,299.9	6,790.0	60.7	0.0	-90.00	-770.1	-2,769.9	330.1	269.8	60.23	5.480	
8,500.0	6,790.0	8,399.9	6,790.0	63.1	0.0	-90.00	-769.9	-2,869.9	330.1	267.4	62.62	5.271	
8,600.0	6,790.0	8,499.9	6,790.0	65.4	0.0	-90.00	-769.6	-2,969.9	330.1	265.0	65.02	5.076	
8,700.0	6,790.0	8,599.9	6,790.0	67.8	0.0	-90.00	-769.4	-3,069.9	330.1	262.6	67.42	4.895	
8,800.0	6,790.0	8,699.9	6,790.0	70.2	0.0	-90.00	-769.1	-3,169.9	330.1	260.2	69.83	4.727	
8,900.0	6,790.0	8,799.9	6,790.0	72.6	0.0	-90.00	-768.9	-3,269.9	330.1	257.8	72.24	4.569	
9,000.0	6,790.0	8,899.9	6,790.0	75.0	0.0	-90.00	-768.6	-3,369.9	330.1	255.4	74.66	4.421	
9,100.0	6,790.0	8,999.9	6,790.0	77.4	0.0	-90.00	-768.4	-3,469.9	330.1	253.0	77.08	4.282	
9,200.0	6,790.0	9,099.9	6,790.0	79.8	0.0	-90.00	-768.1	-3,569.9	330.1	250.6	79.50	4.152	
9,300.0	6,790.0	9,199.9	6,790.0	82.3	0.0	-90.00	-767.9	-3,669.9	330.1	248.1	81.93	4.029	
9,400.0	6,790.0	9,299.9	6,790.0	84.7	0.0	-90.00	-767.6	-3,769.9	330.1	245.7	84.36	3.913	
9,500.0	6,790.0	9,399.9	6,790.0	87.1	0.0	-90.00	-767.4	-3,869.9	330.1	243.3	86.79	3.803	
9,600.0	6,790.0	9,499.9	6,790.0	89.5	0.0	-90.00	-767.1	-3,969.9	330.1	240.8	89.22	3.699	
9,700.0	6,790.0	9,599.9	6,790.0	91.9	0.0	-90.00	-766.9	-4,069.9	330.1	238.4	91.66	3.601	
9,800.0	6,790.0	9,699.9	6,790.0	94.4	0.0	-90.00	-766.6	-4,169.9	330.1	236.0	94.10	3.508	
9,900.0	6,790.0	9,799.9	6,790.0	96.8	0.0	-90.00	-766.4	-4,269.9	330.1	233.5	96.54	3.419	
10,000.0	6,790.0	9,899.9	6,790.0	99.2	0.0	-90.00	-766.1	-4,369.9	330.1	231.1	98.98	3.335	
10,100.0	6,790.0	9,999.9	6,790.0	101.7	0.0	-90.00	-765.9	-4,469.9	330.1	228.6	101.42	3.254	
10,200.0	6,790.0	10,099.9	6,790.0	104.1	0.0	-90.00	-765.6	-4,569.9	330.1	226.2	103.87	3.178	

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	6,790.0	10,199.9	6,790.0	106.6	0.0	-90.00	-765.4	-4,669.9	330.1	223.7	106.32	3.105	
10,400.0	6,790.0	10,299.9	6,790.0	109.0	0.0	-90.00	-765.1	-4,769.9	330.1	221.3	108.76	3.035	
10,500.0	6,790.0	10,399.9	6,790.0	111.4	0.0	-90.00	-764.9	-4,869.9	330.1	218.8	111.21	2.968	
10,600.0	6,790.0	10,499.9	6,790.0	113.9	0.0	-90.00	-764.6	-4,969.9	330.1	216.4	113.66	2.904	
10,700.0	6,790.0	10,599.9	6,790.0	116.3	0.0	-90.00	-764.4	-5,069.9	330.1	213.9	116.11	2.843	
10,800.0	6,790.0	10,699.9	6,790.0	118.8	0.0	-90.00	-764.1	-5,169.9	330.1	211.5	118.56	2.784	
10,900.0	6,790.0	10,799.9	6,790.0	121.2	0.0	-90.00	-763.9	-5,269.9	330.1	209.0	121.02	2.727	
11,000.0	6,790.0	10,899.9	6,790.0	123.7	0.0	-90.00	-763.6	-5,369.9	330.1	206.6	123.47	2.673	
11,100.0	6,790.0	10,999.9	6,790.0	126.1	0.0	-90.00	-763.4	-5,469.9	330.1	204.1	125.92	2.621	
11,200.0	6,790.0	11,099.9	6,790.0	128.6	0.0	-90.00	-763.1	-5,569.9	330.1	201.7	128.38	2.571	
11,300.0	6,790.0	11,199.9	6,790.0	131.0	0.0	-90.00	-762.9	-5,669.9	330.1	199.2	130.84	2.523	
11,400.0	6,790.0	11,299.9	6,790.0	133.5	0.0	-90.00	-762.6	-5,769.9	330.1	196.8	133.29	2.476	
11,500.0	6,790.0	11,399.9	6,790.0	135.9	0.0	-90.00	-762.4	-5,869.9	330.1	194.3	135.75	2.431	
11,600.0	6,790.0	11,499.9	6,790.0	138.4	0.0	-90.00	-762.1	-5,969.9	330.1	191.9	138.21	2.388	
11,700.0	6,790.0	11,599.9	6,790.0	140.8	0.0	-90.00	-761.9	-6,069.9	330.1	189.4	140.67	2.346	
11,800.0	6,790.0	11,699.9	6,790.0	143.3	0.0	-90.00	-761.6	-6,169.9	330.1	186.9	143.13	2.306	
11,900.0	6,790.0	11,799.9	6,790.0	145.8	0.0	-90.00	-761.4	-6,269.9	330.1	184.5	145.58	2.267	
12,000.0	6,790.0	11,899.9	6,790.0	148.2	0.0	-90.00	-761.1	-6,369.9	330.1	182.0	148.04	2.229	
12,100.0	6,790.0	11,999.9	6,790.0	150.7	0.0	-90.00	-760.9	-6,469.9	330.1	179.6	150.51	2.193	
12,200.0	6,790.0	12,099.9	6,790.0	153.1	0.0	-90.00	-760.6	-6,569.9	330.1	177.1	152.97	2.158	
12,300.0	6,790.0	12,199.9	6,790.0	155.6	0.0	-90.00	-760.4	-6,669.9	330.1	174.6	155.43	2.124	
12,400.0	6,790.0	12,299.9	6,790.0	158.0	0.0	-90.00	-760.1	-6,769.9	330.1	172.2	157.89	2.090	
12,500.0	6,790.0	12,399.9	6,790.0	160.5	0.0	-90.00	-759.9	-6,869.9	330.1	169.7	160.35	2.058	
12,600.0	6,790.0	12,499.9	6,790.0	163.0	0.0	-90.00	-759.6	-6,969.9	330.1	167.2	162.81	2.027	
12,700.0	6,790.0	12,599.9	6,790.0	165.4	0.0	-90.00	-759.4	-7,069.9	330.1	164.8	165.28	1.997	
12,800.0	6,790.0	12,699.9	6,790.0	167.9	0.0	-90.00	-759.1	-7,169.9	330.1	162.3	167.74	1.968	
12,900.0	6,790.0	12,799.9	6,790.0	170.3	0.0	-90.00	-758.9	-7,269.9	330.1	159.9	170.20	1.939	
13,000.0	6,790.0	12,899.9	6,790.0	172.8	0.0	-90.00	-758.6	-7,369.9	330.1	157.4	172.67	1.912	
13,100.0	6,790.0	12,999.9	6,790.0	175.3	0.0	-90.00	-758.4	-7,469.9	330.1	154.9	175.13	1.885	
13,200.0	6,790.0	13,099.9	6,790.0	177.7	0.0	-90.00	-758.1	-7,569.9	330.1	152.5	177.60	1.858	
13,300.0	6,790.0	13,199.9	6,790.0	180.2	0.0	-90.00	-757.9	-7,669.9	330.1	150.0	180.06	1.833	
13,400.0	6,790.0	13,299.9	6,790.0	182.7	0.0	-90.00	-757.6	-7,769.9	330.1	147.5	182.53	1.808	
13,500.0	6,790.0	13,399.9	6,790.0	185.1	0.0	-90.00	-757.4	-7,869.9	330.1	145.1	184.99	1.784	
13,600.0	6,790.0	13,499.9	6,790.0	187.6	0.0	-90.00	-757.1	-7,969.9	330.1	142.6	187.46	1.761	
13,700.0	6,790.0	13,599.9	6,790.0	190.1	0.0	-90.00	-756.9	-8,069.9	330.1	140.1	189.92	1.738	
13,800.0	6,790.0	13,699.9	6,790.0	192.5	0.0	-90.00	-756.6	-8,169.9	330.1	137.7	192.39	1.716	
13,900.0	6,790.0	13,799.9	6,790.0	195.0	0.0	-90.00	-756.4	-8,269.9	330.1	135.2	194.85	1.694	
14,000.0	6,790.0	13,899.9	6,790.0	197.4	0.0	-90.00	-756.1	-8,369.9	330.1	132.7	197.32	1.673	
14,100.0	6,790.0	13,999.9	6,790.0	199.9	0.0	-90.00	-755.9	-8,469.9	330.1	130.3	199.79	1.652	
14,200.0	6,790.0	14,099.9	6,790.0	202.4	0.0	-90.00	-755.6	-8,569.9	330.1	127.8	202.25	1.632	
14,300.0	6,790.0	14,199.9	6,790.0	204.8	0.0	-90.00	-755.4	-8,669.9	330.1	125.3	204.72	1.612	
14,400.0	6,790.0	14,299.9	6,790.0	207.3	0.0	-90.00	-755.1	-8,769.9	330.1	122.9	207.19	1.593	
14,500.0	6,790.0	14,399.9	6,790.0	209.8	0.0	-90.00	-754.9	-8,869.9	330.1	120.4	209.66	1.574	
14,600.0	6,790.0	14,499.9	6,790.0	212.2	0.0	-90.00	-754.6	-8,969.9	330.1	117.9	212.12	1.556	
14,700.0	6,790.0	14,599.9	6,790.0	214.7	0.0	-90.00	-754.4	-9,069.9	330.1	115.5	214.59	1.538	
14,800.0	6,790.0	14,699.9	6,790.0	217.2	0.0	-90.00	-754.1	-9,169.9	330.1	113.0	217.06	1.521	
14,900.0	6,790.0	14,799.9	6,790.0	219.6	0.0	-90.00	-753.9	-9,269.9	330.1	110.5	219.53	1.504	
15,000.0	6,790.0	14,899.9	6,790.0	222.1	0.0	-90.00	-753.6	-9,369.9	330.1	108.1	221.99	1.487 Level 3	
15,100.0	6,790.0	14,999.9	6,790.0	224.6	0.0	-90.00	-753.4	-9,469.9	330.1	105.6	224.46	1.470 Level 3	
15,200.0	6,790.0	15,099.9	6,790.0	227.0	0.0	-90.00	-753.1	-9,569.9	330.1	103.1	226.93	1.454 Level 3	
15,300.0	6,790.0	15,199.9	6,790.0	229.5	0.0	-90.00	-752.9	-9,669.9	330.1	100.7	229.40	1.439 Level 3	
15,400.0	6,790.0	15,299.9	6,790.0	232.0	0.0	-90.00	-752.6	-9,769.9	330.1	98.2	231.87	1.423 Level 3	

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

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 7 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
15,500.0	6,790.0	15,399.9	6,790.0	234.4	0.0	-90.00	-752.4	-9,869.8	330.1	95.7	234.34	1.408	Level 3	
15,600.0	6,790.0	15,499.9	6,790.0	236.9	0.0	-90.00	-752.1	-9,969.8	330.1	93.3	236.81	1.394	Level 3	
15,700.0	6,790.0	15,599.9	6,790.0	239.4	0.0	-90.00	-751.9	-10,069.8	330.1	90.8	239.27	1.379	Level 3	
15,800.0	6,790.0	15,699.9	6,790.0	241.8	0.0	-90.00	-751.7	-10,169.8	330.1	88.3	241.74	1.365	Level 3	
15,900.0	6,790.0	15,799.9	6,790.0	244.3	0.0	-90.00	-751.4	-10,269.8	330.1	85.8	244.21	1.352	Level 3	
16,000.0	6,790.0	15,899.9	6,790.0	246.8	0.0	-90.00	-751.2	-10,369.8	330.1	83.4	246.68	1.338	Level 3	
16,100.0	6,790.0	15,999.9	6,790.0	249.2	0.0	-90.00	-750.9	-10,469.8	330.1	80.9	249.15	1.325	Level 3	
16,200.0	6,790.0	16,099.9	6,790.0	251.7	0.0	-90.00	-750.7	-10,569.8	330.1	78.4	251.62	1.312	Level 3	
16,300.0	6,790.0	16,199.9	6,790.0	254.2	0.0	-90.00	-750.4	-10,669.8	330.1	76.0	254.09	1.299	Level 3	
16,400.0	6,790.0	16,299.9	6,790.0	256.7	0.0	-90.00	-750.2	-10,769.8	330.1	73.5	256.56	1.286	Level 3	
16,500.0	6,790.0	16,399.9	6,790.0	259.1	0.0	-90.00	-749.9	-10,869.8	330.1	71.0	259.03	1.274	Level 3	
16,600.0	6,790.0	16,499.9	6,790.0	261.6	0.0	-90.00	-749.7	-10,969.8	330.1	68.6	261.50	1.262	Level 3	
16,700.0	6,790.0	16,599.9	6,790.0	264.1	0.0	-90.00	-749.4	-11,069.8	330.1	66.1	263.97	1.250	Level 3	
16,800.0	6,790.0	16,699.9	6,790.0	266.5	0.0	-90.00	-749.2	-11,169.8	330.1	63.6	266.44	1.239	Level 2	
16,900.0	6,790.0	16,799.9	6,790.0	269.0	0.0	-90.00	-748.9	-11,269.8	330.1	61.1	268.91	1.227	Level 2	
17,000.0	6,790.0	16,899.9	6,790.0	271.5	0.0	-90.00	-748.7	-11,369.8	330.1	58.7	271.38	1.216	Level 2	
17,100.0	6,790.0	16,999.9	6,790.0	273.9	0.0	-90.00	-748.4	-11,469.8	330.1	56.2	273.85	1.205	Level 2	
17,200.0	6,790.0	17,099.9	6,790.0	276.4	0.0	-90.00	-748.2	-11,569.8	330.1	53.7	276.32	1.194	Level 2	
17,300.0	6,790.0	17,199.9	6,790.0	278.9	0.0	-90.00	-747.9	-11,669.8	330.1	51.3	278.79	1.184	Level 2	
17,400.0	6,790.0	17,299.8	6,790.0	281.3	0.0	-90.00	-747.7	-11,769.8	330.1	48.8	281.26	1.173	Level 2	
17,401.3	6,790.0	17,301.1	6,790.0	281.4	0.0	-90.00	-747.7	-11,771.1	330.1	48.8	281.29	1.173	Level 2	
17,401.9	6,790.0	17,301.1	6,790.0	281.4	0.0	-90.00	-747.7	-11,771.1	330.1	48.8	281.31	1.173	Level 2, ES, SF	

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-149.30	-72.1	-42.8	83.9					
100.0	100.0	100.0	100.0	0.1	0.0	-149.30	-72.1	-42.8	83.9	83.8	0.13	631.493		
200.0	200.0	200.0	200.0	0.3	0.0	-149.30	-72.1	-42.8	83.9	83.6	0.31	272.924 CC		
300.0	300.0	298.8	298.8	0.5	0.0	-37.20	-72.5	-43.6	83.9	83.4	0.48	174.022		
400.0	400.0	397.6	397.5	0.7	0.0	-37.32	-73.7	-45.9	84.0	83.4	0.66	127.541		
500.0	499.9	496.4	496.2	0.9	0.0	-37.52	-75.6	-49.7	84.2	83.3	0.84	100.405 ES		
600.0	599.7	595.1	594.8	1.1	0.0	-37.81	-78.2	-55.0	84.4	83.3	1.02	82.526		
700.0	699.4	693.9	693.3	1.3	0.0	-38.17	-81.6	-61.9	84.6	83.4	1.21	69.792		
800.0	798.9	792.7	791.6	1.5	0.0	-38.60	-85.8	-70.2	85.0	83.6	1.41	60.212		
900.0	898.3	891.5	889.8	1.8	0.0	-39.12	-90.8	-80.1	85.4	83.8	1.62	52.707		
1,000.0	997.4	990.3	987.8	2.0	0.0	-39.70	-96.4	-91.5	85.9	84.0	1.84	46.642		
1,100.0	1,096.3	1,089.1	1,085.5	2.3	0.0	-40.36	-102.9	-104.4	86.4	84.3	2.08	41.620		
1,200.0	1,194.9	1,187.9	1,183.0	2.7	0.0	-41.08	-110.1	-118.8	87.0	84.7	2.33	37.383		
1,300.0	1,293.3	1,286.6	1,280.1	3.0	0.0	-41.86	-118.0	-134.7	87.7	85.1	2.60	33.745		
1,400.0	1,391.4	1,385.4	1,377.0	3.4	0.0	-42.37	-126.7	-152.1	89.1	86.2	2.88	30.969		
1,500.0	1,489.5	1,484.2	1,473.4	3.7	0.0	-42.20	-136.2	-171.0	91.9	88.7	3.15	29.176		
1,600.0	1,587.7	1,582.8	1,569.4	4.1	0.0	-41.43	-146.3	-191.4	96.0	92.6	3.41	28.176		
1,700.0	1,685.8	1,681.2	1,664.8	4.5	0.0	-40.14	-157.2	-213.2	101.5	97.8	3.65	27.829		
1,800.0	1,784.0	1,779.5	1,759.6	4.8	0.0	-38.49	-168.8	-236.4	108.4	104.6	3.87	28.037		
1,900.0	1,882.1	1,877.4	1,853.6	5.2	0.0	-36.58	-181.1	-260.9	116.9	112.9	4.07	28.724		
2,000.0	1,980.3	1,975.1	1,946.8	5.6	0.0	-34.56	-194.0	-286.8	127.0	122.7	4.26	29.832		
2,100.0	2,078.4	2,072.3	2,039.1	6.0	0.0	-32.51	-207.6	-314.1	138.7	134.3	4.43	31.310		
2,200.0	2,176.6	2,169.1	2,130.5	6.3	0.0	-30.50	-221.9	-342.5	152.0	147.4	4.59	33.115		
2,300.0	2,274.7	2,265.4	2,220.9	6.7	0.0	-28.59	-236.7	-372.3	167.1	162.3	4.75	35.205		
2,400.0	2,372.9	2,361.1	2,310.2	7.1	0.0	-26.80	-252.1	-403.1	183.8	178.9	4.90	37.544		
2,500.0	2,471.0	2,456.2	2,398.4	7.5	0.0	-25.15	-268.1	-435.1	202.2	197.2	5.04	40.099		
2,600.0	2,569.2	2,552.6	2,487.1	7.9	0.0	-23.64	-284.9	-468.7	222.1	216.9	5.19	42.802		
2,700.0	2,667.3	2,650.4	2,577.1	8.2	0.0	-22.33	-301.9	-502.9	242.3	236.9	5.34	45.376		
2,800.0	2,765.4	2,748.2	2,667.2	8.6	0.0	-21.23	-319.0	-537.1	262.5	257.0	5.49	47.785		
2,900.0	2,863.6	2,846.0	2,757.2	9.0	0.0	-20.29	-336.1	-571.3	282.9	277.2	5.65	50.039		
3,000.0	2,961.7	2,943.8	2,847.2	9.4	0.0	-19.47	-353.2	-605.5	303.3	297.5	5.82	52.153		
3,100.0	3,059.9	3,041.6	2,937.2	9.7	0.0	-18.75	-370.3	-639.7	323.8	317.8	5.98	54.137		
3,200.0	3,158.0	3,139.4	3,027.3	10.1	0.0	-18.13	-387.4	-673.9	344.3	338.1	6.15	56.001		
3,300.0	3,256.2	3,237.2	3,117.3	10.5	0.0	-17.57	-404.5	-708.1	364.8	358.5	6.32	57.757		
3,400.0	3,354.3	3,335.0	3,207.3	10.9	0.0	-17.07	-421.6	-742.3	385.4	378.9	6.49	59.412		
3,500.0	3,452.5	3,432.8	3,297.3	11.3	0.0	-16.62	-438.6	-776.5	406.0	399.4	6.66	60.975		
3,600.0	3,550.6	3,530.6	3,387.4	11.6	0.0	-16.21	-455.7	-810.7	426.7	419.8	6.83	62.453		
3,700.0	3,648.8	3,628.4	3,477.4	12.0	0.0	-15.85	-472.8	-844.9	447.3	440.3	7.01	63.852		
3,800.0	3,746.9	3,726.3	3,567.4	12.4	0.0	-15.51	-489.9	-879.1	468.0	460.8	7.18	65.179		
3,900.0	3,845.0	3,824.1	3,657.4	12.8	0.0	-15.20	-507.0	-913.3	488.6	481.3	7.35	66.439		
4,000.0	3,943.2	3,921.9	3,747.5	13.2	0.0	-14.92	-524.1	-947.5	509.3	501.8	7.53	67.636		
4,100.0	4,041.3	4,019.7	3,837.5	13.5	0.0	-14.66	-541.2	-981.7	530.0	522.3	7.71	68.775		
4,200.0	4,139.5	4,117.5	3,927.5	13.9	0.0	-14.42	-558.2	-1,015.9	550.7	542.9	7.88	69.861		
4,300.0	4,237.6	4,215.3	4,017.5	14.3	0.0	-14.20	-575.3	-1,050.1	571.5	563.4	8.06	70.896		
4,400.0	4,335.8	4,313.1	4,107.6	14.7	0.0	-13.99	-592.4	-1,084.3	592.2	583.9	8.24	71.885		
4,500.0	4,433.9	4,410.9	4,197.6	15.1	0.0	-13.80	-609.5	-1,118.5	612.9	604.5	8.42	72.830		
4,600.0	4,532.1	4,508.7	4,287.6	15.5	0.0	-13.62	-626.6	-1,152.7	633.6	625.1	8.59	73.734		
4,700.0	4,630.2	4,606.5	4,377.6	15.8	0.0	-13.45	-643.7	-1,186.9	654.4	645.6	8.77	74.600		
4,800.0	4,728.4	4,704.3	4,467.7	16.2	0.0	-13.29	-660.8	-1,221.1	675.1	666.2	8.95	75.430		
4,900.0	4,826.5	4,802.1	4,557.7	16.6	0.0	-13.14	-677.8	-1,255.3	695.9	686.8	9.13	76.226		
5,000.0	4,924.7	4,899.9	4,647.7	17.0	0.0	-13.00	-694.9	-1,289.5	716.7	707.3	9.31	76.991		
5,100.0	5,022.8	4,997.7	4,737.7	17.4	0.0	-12.86	-712.0	-1,323.7	737.4	727.9	9.49	77.725		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
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	5,120.9	5,095.6	4,827.8	17.7	0.0	-12.74	-729.1	-1,357.9	758.2	748.5	9.67	78.431	
5,300.0	5,219.1	5,193.4	4,917.8	18.1	0.0	-12.62	-746.2	-1,392.1	778.9	769.1	9.85	79.111	
5,400.0	5,317.2	5,291.2	5,007.8	18.5	0.0	-12.51	-763.3	-1,426.3	799.7	789.7	10.03	79.765	
5,500.0	5,415.4	5,389.0	5,097.8	18.9	0.0	-12.40	-780.4	-1,460.6	820.5	810.3	10.21	80.396	
5,600.0	5,513.5	5,486.8	5,187.9	19.3	0.0	-12.30	-797.4	-1,494.8	841.3	830.9	10.39	81.004	
5,700.0	5,611.7	5,584.6	5,277.9	19.6	0.0	-12.20	-814.5	-1,529.0	862.0	851.5	10.57	81.591	
5,800.0	5,709.8	5,682.4	5,367.9	20.0	0.0	-12.11	-831.6	-1,563.2	882.8	872.1	10.75	82.158	
5,900.0	5,808.0	5,780.2	5,457.9	20.4	0.0	-12.02	-848.7	-1,597.4	903.6	892.7	10.93	82.706	
6,000.0	5,906.1	5,878.0	5,548.0	20.8	0.0	-11.94	-865.8	-1,631.6	924.4	913.3	11.11	83.235	
6,100.0	6,004.3	5,975.8	5,638.0	21.2	0.0	-11.86	-882.9	-1,665.8	945.2	933.9	11.29	83.747	
6,200.0	6,102.4	6,073.6	5,728.0	21.6	0.0	-11.78	-900.0	-1,700.0	966.0	954.5	11.47	84.242	
6,300.0	6,200.5	6,171.4	5,818.0	21.9	0.0	-11.71	-917.0	-1,734.2	986.8	975.1	11.65	84.722	
6,400.0	6,298.6	6,269.3	5,913.0	22.3	0.0	-11.63	-934.1	-1,768.4	1007.6	995.9	11.83	85.202	
6,500.0	6,396.7	6,367.4	6,008.0	22.7	0.0	-11.55	-951.2	-1,802.6	1028.4	1016.7	12.01	85.682	
6,600.0	6,494.8	6,465.5	6,103.0	23.1	0.0	-11.47	-968.3	-1,836.8	1049.2	1037.5	12.19	86.162	
6,700.0	6,592.9	6,563.6	6,198.0	23.5	0.0	-11.39	-985.4	-1,871.0	1070.0	1058.3	12.37	86.642	
6,800.0	6,691.0	6,661.7	6,293.0	23.9	0.0	-11.31	-1,002.5	-1,905.2	1090.8	1078.9	12.55	87.122	
6,900.0	6,789.1	6,759.8	6,388.0	24.3	0.0	-11.23	-1,019.6	-1,939.4	1111.6	1099.7	12.73	87.602	
7,000.0	6,887.2	6,857.9	6,483.0	24.7	0.0	-11.15	-1,036.7	-1,973.6	1132.4	1120.5	12.91	88.082	
7,100.0	6,985.3	6,956.0	6,578.0	25.1	0.0	-11.07	-1,053.8	-2,007.8	1153.2	1141.3	13.09	88.562	
7,200.0	7,083.4	7,054.1	6,673.0	25.5	0.0	-10.99	-1,070.9	-2,042.0	1174.0	1162.1	13.27	89.042	
7,300.0	7,181.5	7,152.2	6,768.0	25.9	0.0	-10.91	-1,088.0	-2,076.2	1194.8	1182.9	13.45	89.522	
7,400.0	7,279.6	7,250.3	6,863.0	26.3	0.0	-10.83	-1,105.1	-2,110.4	1215.6	1203.7	13.63	90.002	
7,500.0	7,377.7	7,348.4	6,958.0	26.7	0.0	-10.75	-1,122.2	-2,144.6	1236.4	1224.5	13.81	90.482	
7,600.0	7,475.8	7,446.5	7,053.0	27.1	0.0	-10.67	-1,139.3	-2,178.8	1257.2	1245.7	14.00	90.962	
7,700.0	7,573.9	7,544.6	7,148.0	27.5	0.0	-10.59	-1,156.4	-2,213.0	1278.0	1266.9	14.18	91.442	
7,800.0	7,672.0	7,642.7	7,243.0	27.9	0.0	-10.51	-1,173.5	-2,247.2	1298.8	1287.7	14.36	91.922	
7,900.0	7,770.1	7,740.8	7,338.0	28.3	0.0	-10.43	-1,190.6	-2,281.4	1319.6	1308.5	14.54	92.402	
8,000.0	7,868.2	7,838.9	7,433.0	28.7	0.0	-10.35	-1,207.7	-2,315.6	1340.4	1329.3	14.72	92.882	
8,100.0	7,966.3	7,937.0	7,528.0	29.1	0.0	-10.27	-1,224.8	-2,350.0	1361.2	1350.1	14.90	93.362	
8,200.0	8,064.4	8,035.1	7,623.0	29.5	0.0	-10.19	-1,241.9	-2,384.2	1382.0	1370.9	15.08	93.842	
8,300.0	8,162.5	8,133.2	7,718.0	29.9	0.0	-10.11	-1,259.0	-2,418.4	1402.8	1391.7	15.26	94.322	
8,400.0	8,260.6	8,231.3	7,813.0	30.3	0.0	-10.03	-1,276.1	-2,452.6	1423.6	1412.5	15.44	94.802	
8,500.0	8,358.7	8,329.4	7,908.0	30.7	0.0	-9.95	-1,293.2	-2,486.8	1444.4	1433.3	15.62	95.282	
8,600.0	8,456.8	8,427.5	8,003.0	31.1	0.0	-9.87	-1,310.3	-2,521.0	1465.2	1454.1	15.80	95.762	
8,700.0	8,554.9	8,525.6	8,098.0	31.5	0.0	-9.79	-1,327.4	-2,555.2	1486.0	1474.9	15.98	96.242	
8,800.0	8,653.0	8,623.7	8,193.0	31.9	0.0	-9.71	-1,344.5	-2,589.4	1506.8	1495.7	16.16	96.722	
8,900.0	8,751.1	8,721.8	8,288.0	32.3	0.0	-9.63	-1,361.6	-2,623.6	1527.6	1516.5	16.34	97.202	
9,000.0	8,849.2	8,819.9	8,383.0	32.7	0.0	-9.55	-1,378.7	-2,657.8	1548.4	1537.3	16.52	97.682	
9,100.0	8,947.3	8,918.0	8,478.0	33.1	0.0	-9.47	-1,395.8	-2,692.0	1569.2	1558.1	16.70	98.162	
9,200.0	9,045.4	9,016.1	8,573.0	33.5	0.0	-9.39	-1,412.9	-2,726.2	1590.0	1578.9	16.88	98.642	
9,300.0	9,143.5	9,114.2	8,668.0	33.9	0.0	-9.31	-1,430.0	-2,760.4	1610.8	1599.7	17.06	99.122	
9,400.0	9,241.6	9,212.3	8,763.0	34.3	0.0	-9.23	-1,447.1	-2,794.6	1631.6	1620.5	17.24	99.602	
9,500.0	9,339.7	9,310.4	8,858.0	34.7	0.0	-9.15	-1,464.2	-2,828.8	1652.4	1641.3	17.42	100.082	
9,600.0	9,437.8	9,408.5	8,953.0	35.1	0.0	-9.07	-1,481.3	-2,863.0	1673.2	1662.1	17.60	100.562	
9,700.0	9,535.9	9,506.6	9,048.0	35.5	0.0	-8.99	-1,498.4	-2,897.2	1694.0	1682.9	17.78	101.042	
9,800.0	9,634.0	9,604.7	9,143.0	35.9	0.0	-8.91	-1,515.5	-2,931.4	1714.8	1703.7	17.96	101.522	
9,900.0	9,732.1	9,702.8	9,238.0	36.3	0.0	-8.83	-1,532.6	-2,965.6	1735.6	1724.5	18.14	102.002	
10,000.0	9,830.2	9,800.9	9,333.0	36.7	0.0	-8.75	-1,549.7	-3,000.0	1756.4	1745.3	18.32	102.482	
10,100.0	9,928.3	9,899.0	9,428.0	37.1	0.0	-8.67	-1,566.8	-3,034.2	1777.2	1766.1	18.50	102.962	
10,200.0	10,026.4	10,000.0	9,523.0	37.5	0.0	-8.59	-1,583.9	-3,068.4	1798.0	1786.9	18.68	103.442	
10,300.0	10,124.5	10,098.1	9,618.0	37.9	0.0	-8.51	-1,601.0	-3,102.6	1818.8	1807.7	18.86	103.922	
10,400.0	10,222.6	10,196.2	9,713.0	38.3	0.0	-8.43	-1,618.1	-3,136.8	1839.6	1828.5	19.04	104.402	
10,500.0	10,320.7	10,294.3	9,808.0	38.7	0.0	-8.35	-1,635.2	-3,171.0	1860.4	1849.3	19.22	104.882	

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
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
10,600.0	6,790.0	9,983.3	6,790.0	113.9	0.0	-90.00	-1,094.5	-4,970.7	659.9	546.2	113.66	5.806	
10,700.0	6,790.0	10,083.3	6,790.0	116.3	0.0	-90.00	-1,094.2	-5,070.7	659.9	543.8	116.11	5.683	
10,800.0	6,790.0	10,183.3	6,790.0	118.8	0.0	-90.00	-1,094.0	-5,170.7	659.9	541.3	118.56	5.566	
10,900.0	6,790.0	10,283.3	6,790.0	121.2	0.0	-90.00	-1,093.7	-5,270.7	659.9	538.9	121.02	5.453	
11,000.0	6,790.0	10,383.3	6,790.0	123.7	0.0	-90.00	-1,093.5	-5,370.7	659.9	536.4	123.47	5.345	
11,100.0	6,790.0	10,483.3	6,790.0	126.1	0.0	-90.00	-1,093.2	-5,470.7	659.9	534.0	125.92	5.240	
11,200.0	6,790.0	10,583.3	6,790.0	128.6	0.0	-90.00	-1,093.0	-5,570.7	659.9	531.5	128.38	5.140	
11,300.0	6,790.0	10,683.3	6,790.0	131.0	0.0	-90.00	-1,092.7	-5,670.7	659.9	529.1	130.84	5.044	
11,400.0	6,790.0	10,783.3	6,790.0	133.5	0.0	-90.00	-1,092.5	-5,770.7	659.9	526.6	133.29	4.951	
11,500.0	6,790.0	10,883.3	6,790.0	135.9	0.0	-90.00	-1,092.2	-5,870.7	659.9	524.2	135.75	4.861	
11,600.0	6,790.0	10,983.3	6,790.0	138.4	0.0	-90.00	-1,092.0	-5,970.7	659.9	521.7	138.21	4.775	
11,700.0	6,790.0	11,083.3	6,790.0	140.8	0.0	-90.00	-1,091.7	-6,070.7	659.9	519.2	140.67	4.691	
11,800.0	6,790.0	11,183.3	6,790.0	143.3	0.0	-90.00	-1,091.5	-6,170.7	659.9	516.8	143.13	4.611	
11,900.0	6,790.0	11,283.3	6,790.0	145.8	0.0	-90.00	-1,091.3	-6,270.7	659.9	514.3	145.58	4.533	
12,000.0	6,790.0	11,383.3	6,790.0	148.2	0.0	-90.00	-1,091.0	-6,370.7	659.9	511.9	148.04	4.458	
12,100.0	6,790.0	11,483.3	6,790.0	150.7	0.0	-90.00	-1,090.8	-6,470.7	659.9	509.4	150.51	4.385	
12,200.0	6,790.0	11,583.3	6,790.0	153.1	0.0	-90.00	-1,090.5	-6,570.7	659.9	507.0	152.97	4.314	
12,300.0	6,790.0	11,683.3	6,790.0	155.6	0.0	-90.00	-1,090.3	-6,670.7	659.9	504.5	155.43	4.246	
12,400.0	6,790.0	11,783.3	6,790.0	158.0	0.0	-90.00	-1,090.0	-6,770.7	659.9	502.1	157.89	4.180	
12,500.0	6,790.0	11,883.3	6,790.0	160.5	0.0	-90.00	-1,089.8	-6,870.6	659.9	499.6	160.35	4.116	
12,600.0	6,790.0	11,983.3	6,790.0	163.0	0.0	-90.00	-1,089.5	-6,970.6	659.9	497.1	162.81	4.053	
12,700.0	6,790.0	12,083.3	6,790.0	165.4	0.0	-90.00	-1,089.3	-7,070.6	660.0	494.7	165.28	3.993	
12,800.0	6,790.0	12,183.3	6,790.0	167.9	0.0	-90.00	-1,089.0	-7,170.6	660.0	492.2	167.74	3.934	
12,900.0	6,790.0	12,283.3	6,790.0	170.3	0.0	-90.00	-1,088.8	-7,270.6	660.0	489.8	170.20	3.877	
13,000.0	6,790.0	12,383.3	6,790.0	172.8	0.0	-90.00	-1,088.5	-7,370.6	660.0	487.3	172.67	3.822	
13,100.0	6,790.0	12,483.3	6,790.0	175.3	0.0	-90.00	-1,088.3	-7,470.6	660.0	484.8	175.13	3.768	
13,200.0	6,790.0	12,583.3	6,790.0	177.7	0.0	-90.00	-1,088.1	-7,570.6	660.0	482.4	177.60	3.716	
13,300.0	6,790.0	12,683.3	6,790.0	180.2	0.0	-90.00	-1,087.8	-7,670.6	660.0	479.9	180.06	3.665	
13,400.0	6,790.0	12,783.3	6,790.0	182.7	0.0	-90.00	-1,087.6	-7,770.6	660.0	477.4	182.53	3.616	
13,500.0	6,790.0	12,883.3	6,790.0	185.1	0.0	-90.00	-1,087.3	-7,870.6	660.0	475.0	184.99	3.568	
13,600.0	6,790.0	12,983.3	6,790.0	187.6	0.0	-90.00	-1,087.1	-7,970.6	660.0	472.5	187.46	3.521	
13,700.0	6,790.0	13,083.3	6,790.0	190.1	0.0	-90.00	-1,086.8	-8,070.6	660.0	470.1	189.92	3.475	
13,800.0	6,790.0	13,183.3	6,790.0	192.5	0.0	-90.00	-1,086.6	-8,170.6	660.0	467.6	192.39	3.431	
13,900.0	6,790.0	13,283.3	6,790.0	195.0	0.0	-90.00	-1,086.3	-8,270.6	660.0	465.1	194.85	3.387	
14,000.0	6,790.0	13,383.3	6,790.0	197.4	0.0	-90.00	-1,086.1	-8,370.6	660.0	462.7	197.32	3.345	
14,100.0	6,790.0	13,483.3	6,790.0	199.9	0.0	-90.00	-1,085.8	-8,470.6	660.0	460.2	199.79	3.304	
14,200.0	6,790.0	13,583.3	6,790.0	202.4	0.0	-90.00	-1,085.6	-8,570.6	660.0	457.7	202.25	3.263	
14,300.0	6,790.0	13,683.3	6,790.0	204.8	0.0	-90.00	-1,085.3	-8,670.6	660.0	455.3	204.72	3.224	
14,400.0	6,790.0	13,783.3	6,790.0	207.3	0.0	-90.00	-1,085.1	-8,770.6	660.0	452.8	207.19	3.186	
14,500.0	6,790.0	13,883.3	6,790.0	209.8	0.0	-90.00	-1,084.9	-8,870.6	660.0	450.4	209.66	3.148	
14,600.0	6,790.0	13,983.3	6,790.0	212.2	0.0	-90.00	-1,084.6	-8,970.6	660.0	447.9	212.12	3.111	
14,700.0	6,790.0	14,083.3	6,790.0	214.7	0.0	-90.00	-1,084.4	-9,070.6	660.0	445.4	214.59	3.076	
14,800.0	6,790.0	14,183.3	6,790.0	217.2	0.0	-90.00	-1,084.1	-9,170.6	660.0	443.0	217.06	3.041	
14,900.0	6,790.0	14,283.3	6,790.0	219.6	0.0	-90.00	-1,083.9	-9,270.6	660.0	440.5	219.53	3.007	
15,000.0	6,790.0	14,383.3	6,790.0	222.1	0.0	-90.00	-1,083.6	-9,370.6	660.0	438.0	221.99	2.973	
15,100.0	6,790.0	14,483.3	6,790.0	224.6	0.0	-90.00	-1,083.4	-9,470.6	660.0	435.6	224.46	2.941	
15,200.0	6,790.0	14,583.3	6,790.0	227.0	0.0	-90.00	-1,083.1	-9,570.6	660.0	433.1	226.93	2.909	
15,300.0	6,790.0	14,683.3	6,790.0	229.5	0.0	-90.00	-1,082.9	-9,670.6	660.0	430.6	229.40	2.877	
15,400.0	6,790.0	14,783.3	6,790.0	232.0	0.0	-90.00	-1,082.6	-9,770.6	660.0	428.2	231.87	2.847	
15,500.0	6,790.0	14,883.3	6,790.0	234.4	0.0	-90.00	-1,082.4	-9,870.6	660.1	425.7	234.34	2.817	
15,600.0	6,790.0	14,983.3	6,790.0	236.9	0.0	-90.00	-1,082.1	-9,970.6	660.1	423.2	236.81	2.787	
15,700.0	6,790.0	15,083.3	6,790.0	239.4	0.0	-90.00	-1,081.9	-10,070.6	660.1	420.8	239.27	2.759	

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

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 8 - Hz - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
15,800.0	6,790.0	15,183.3	6,790.0	241.8	0.0	-90.00	-1,081.7	-10,170.6	660.1	418.3	241.74	2.730		
15,900.0	6,790.0	15,283.3	6,790.0	244.3	0.0	-90.00	-1,081.4	-10,270.6	660.1	415.9	244.21	2.703		
16,000.0	6,790.0	15,383.3	6,790.0	246.8	0.0	-90.00	-1,081.2	-10,370.6	660.1	413.4	246.68	2.676		
16,100.0	6,790.0	15,483.3	6,790.0	249.2	0.0	-90.00	-1,080.9	-10,470.6	660.1	410.9	249.15	2.649		
16,200.0	6,790.0	15,583.3	6,790.0	251.7	0.0	-90.00	-1,080.7	-10,570.6	660.1	408.5	251.62	2.623		
16,300.0	6,790.0	15,683.3	6,790.0	254.2	0.0	-90.00	-1,080.4	-10,670.6	660.1	406.0	254.09	2.598		
16,400.0	6,790.0	15,783.3	6,790.0	256.7	0.0	-90.00	-1,080.2	-10,770.6	660.1	403.5	256.56	2.573		
16,500.0	6,790.0	15,883.3	6,790.0	259.1	0.0	-90.00	-1,079.9	-10,870.6	660.1	401.1	259.03	2.548		
16,600.0	6,790.0	15,983.3	6,790.0	261.6	0.0	-90.00	-1,079.7	-10,970.6	660.1	398.6	261.50	2.524		
16,700.0	6,790.0	16,083.3	6,790.0	264.1	0.0	-90.00	-1,079.4	-11,070.6	660.1	396.1	263.97	2.501		
16,800.0	6,790.0	16,183.3	6,790.0	266.5	0.0	-90.00	-1,079.2	-11,170.6	660.1	393.7	266.44	2.477		
16,900.0	6,790.0	16,283.3	6,790.0	269.0	0.0	-90.00	-1,078.9	-11,270.6	660.1	391.2	268.91	2.455		
17,000.0	6,790.0	16,383.3	6,790.0	271.5	0.0	-90.00	-1,078.7	-11,370.6	660.1	388.7	271.38	2.432		
17,100.0	6,790.0	16,483.3	6,790.0	273.9	0.0	-90.00	-1,078.5	-11,470.6	660.1	386.3	273.85	2.410		
17,200.0	6,790.0	16,583.3	6,790.0	276.4	0.0	-90.00	-1,078.2	-11,570.6	660.1	383.8	276.32	2.389		
17,300.0	6,790.0	16,683.3	6,790.0	278.9	0.0	-90.00	-1,078.0	-11,670.6	660.1	381.3	278.79	2.368		
17,400.0	6,790.0	16,783.2	6,790.0	281.3	0.0	-90.00	-1,077.7	-11,770.6	660.1	378.9	281.26	2.347		
17,401.9	6,790.0	16,783.6	6,790.0	281.4	0.0	-90.00	-1,077.7	-11,771.0	660.1	378.8	281.31	2.347 SF		

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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	-149.31	-96.5	-57.3	112.3					
100.0	100.0	100.0	100.0	0.1	0.0	-149.31	-96.5	-57.3	112.3	112.1	0.13	845.061		
200.0	200.0	200.0	200.0	0.3	0.0	-149.31	-96.5	-57.3	112.3	112.0	0.31	365.225 CC		
300.0	300.0	298.3	298.3	0.5	0.0	-37.22	-97.0	-58.0	112.3	111.8	0.48	232.902		
400.0	400.0	396.6	396.6	0.7	0.0	-37.38	-98.2	-60.2	112.5	111.8	0.66	170.750 ES		
500.0	499.9	495.0	494.8	0.9	0.0	-37.64	-100.3	-63.9	112.7	111.9	0.84	134.493		
600.0	599.7	593.3	593.0	1.1	0.0	-38.01	-103.3	-69.0	113.1	112.1	1.02	110.623		
700.0	699.4	691.6	691.0	1.3	0.0	-38.48	-107.1	-75.6	113.6	112.4	1.21	93.632		
800.0	798.9	789.9	788.9	1.5	0.0	-39.04	-111.7	-83.6	114.2	112.8	1.41	80.854		
900.0	898.3	888.2	886.6	1.8	0.0	-39.70	-117.1	-93.1	114.9	113.3	1.62	70.845		
1,000.0	997.4	986.5	984.1	2.0	0.0	-40.45	-123.4	-104.0	115.8	113.9	1.85	62.754		
1,100.0	1,096.3	1,084.9	1,081.3	2.3	0.0	-41.28	-130.5	-116.4	116.8	114.7	2.08	56.053		
1,200.0	1,194.9	1,183.2	1,178.3	2.7	0.0	-42.20	-138.5	-130.2	117.9	115.6	2.34	50.394		
1,300.0	1,293.3	1,281.5	1,275.1	3.0	0.0	-43.19	-147.3	-145.5	119.2	116.6	2.62	45.533		
1,400.0	1,391.4	1,379.8	1,371.4	3.4	0.0	-44.00	-156.9	-162.2	121.3	118.3	2.91	41.735		
1,500.0	1,489.5	1,478.0	1,467.4	3.7	0.0	-44.32	-167.3	-180.3	124.7	121.5	3.19	39.072		
1,600.0	1,587.7	1,576.1	1,563.0	4.1	0.0	-44.17	-178.6	-199.9	129.5	126.0	3.47	37.311		
1,700.0	1,685.8	1,674.1	1,657.9	4.5	0.0	-43.61	-190.6	-220.8	135.6	131.9	3.74	36.276		
1,800.0	1,784.0	1,771.9	1,752.2	4.8	0.0	-42.71	-203.4	-243.0	143.2	139.2	4.00	35.843		
1,900.0	1,882.1	1,869.4	1,845.8	5.2	0.0	-41.55	-217.0	-266.6	152.2	148.0	4.24	35.917		
2,000.0	1,980.3	1,966.5	1,938.6	5.6	0.0	-40.20	-231.3	-291.5	162.7	158.3	4.47	36.428		
2,100.0	2,078.4	2,063.3	2,030.6	6.0	0.0	-38.73	-246.3	-317.6	174.7	170.1	4.68	37.319		
2,200.0	2,176.6	2,159.6	2,121.6	6.3	0.0	-37.21	-262.0	-344.9	188.3	183.4	4.89	38.546		
2,300.0	2,274.7	2,255.4	2,211.6	6.7	0.0	-35.68	-278.4	-373.4	203.5	198.4	5.08	40.069		
2,400.0	2,372.9	2,350.7	2,300.5	7.1	0.0	-34.18	-295.5	-403.1	220.2	214.9	5.26	41.855		
2,500.0	2,471.0	2,447.0	2,389.9	7.5	0.0	-32.72	-313.4	-434.2	238.4	233.0	5.44	43.848		
2,600.0	2,569.2	2,545.1	2,480.9	7.9	0.0	-31.42	-331.7	-466.1	257.0	251.4	5.61	45.781		
2,700.0	2,667.3	2,643.2	2,571.8	8.2	0.0	-30.29	-350.1	-498.0	275.7	269.9	5.79	47.596		
2,800.0	2,765.4	2,741.3	2,662.8	8.6	0.0	-29.31	-368.4	-529.9	294.4	288.5	5.97	49.301		
2,900.0	2,863.6	2,839.4	2,753.7	9.0	0.0	-28.44	-386.8	-561.8	313.3	307.1	6.15	50.903		
3,000.0	2,961.7	2,937.5	2,844.6	9.4	0.0	-27.68	-405.1	-593.6	332.2	325.8	6.34	52.411		
3,100.0	3,059.9	3,035.6	2,935.6	9.7	0.0	-26.99	-423.5	-625.5	351.1	344.6	6.52	53.831		
3,200.0	3,158.0	3,133.8	3,026.5	10.1	0.0	-26.38	-441.8	-657.4	370.1	363.4	6.71	55.170		
3,300.0	3,256.2	3,231.9	3,117.5	10.5	0.0	-25.83	-460.2	-689.3	389.2	382.3	6.90	56.434		
3,400.0	3,354.3	3,330.0	3,208.4	10.9	0.0	-25.32	-478.5	-721.2	408.2	401.2	7.08	57.630		
3,500.0	3,452.5	3,428.1	3,299.4	11.3	0.0	-24.87	-496.9	-753.1	427.3	420.1	7.27	58.761		
3,600.0	3,550.6	3,526.2	3,390.3	11.6	0.0	-24.45	-515.2	-785.0	446.5	439.0	7.46	59.833		
3,700.0	3,648.8	3,624.3	3,481.3	12.0	0.0	-24.06	-533.5	-816.9	465.6	457.9	7.65	60.850		
3,800.0	3,746.9	3,722.4	3,572.2	12.4	0.0	-23.71	-551.9	-848.8	484.8	476.9	7.84	61.817		
3,900.0	3,845.0	3,820.5	3,663.2	12.8	0.0	-23.38	-570.2	-880.6	503.9	495.9	8.03	62.736		
4,000.0	3,943.2	3,918.6	3,754.1	13.2	0.0	-23.08	-588.6	-912.5	523.1	514.9	8.22	63.611		
4,100.0	4,041.3	4,016.7	3,845.1	13.5	0.0	-22.80	-606.9	-944.4	542.3	533.9	8.42	64.445		
4,200.0	4,139.5	4,114.8	3,936.0	13.9	0.0	-22.54	-625.3	-976.3	561.5	552.9	8.61	65.240		
4,300.0	4,237.6	4,212.9	4,026.9	14.3	0.0	-22.29	-643.6	-1,008.2	580.8	572.0	8.80	66.000		
4,400.0	4,335.8	4,311.0	4,117.9	14.7	0.0	-22.06	-662.0	-1,040.1	600.0	591.0	8.99	66.727		
4,500.0	4,433.9	4,409.1	4,208.8	15.1	0.0	-21.85	-680.3	-1,072.0	619.2	610.1	9.18	67.422		
4,600.0	4,532.1	4,507.2	4,299.8	15.5	0.0	-21.65	-698.7	-1,103.9	638.5	629.1	9.38	68.088		
4,700.0	4,630.2	4,605.3	4,390.7	15.8	0.0	-21.46	-717.0	-1,135.8	657.7	648.2	9.57	68.726		
4,800.0	4,728.4	4,703.4	4,481.7	16.2	0.0	-21.28	-735.4	-1,167.6	677.0	667.2	9.76	69.338		
4,900.0	4,826.5	4,801.5	4,572.6	16.6	0.0	-21.11	-753.7	-1,199.5	696.3	686.3	9.96	69.926		
5,000.0	4,924.7	4,899.6	4,663.6	17.0	0.0	-20.95	-772.1	-1,231.4	715.6	705.4	10.15	70.491		
5,100.0	5,022.8	4,997.8	4,754.5	17.4	0.0	-20.79	-790.4	-1,263.3	734.8	724.5	10.34	71.034		

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis		
5,200.0	5,120.9	5,095.9	4,845.5	17.7	0.0	-20.65	-808.8	-1,295.2	754.1	743.6	10.54	71.557	
5,300.0	5,219.1	5,194.0	4,936.4	18.1	0.0	-20.51	-827.1	-1,327.1	773.4	762.7	10.73	72.060	
5,400.0	5,317.2	5,292.1	5,027.4	18.5	0.0	-20.38	-845.4	-1,359.0	792.7	781.8	10.93	72.545	
5,500.0	5,415.4	5,390.2	5,118.3	18.9	0.0	-20.26	-863.8	-1,390.9	812.0	800.9	11.12	73.013	
5,600.0	5,513.5	5,488.3	5,209.2	19.3	0.0	-20.14	-882.1	-1,422.8	831.3	820.0	11.32	73.464	
5,700.0	5,611.7	5,586.4	5,300.2	19.6	0.0	-20.03	-900.5	-1,454.6	850.6	839.1	11.51	73.900	
5,800.0	5,709.8	5,684.5	5,391.1	20.0	0.0	-19.92	-918.8	-1,486.5	869.9	858.2	11.71	74.321	
5,900.0	5,808.0	5,782.6	5,482.1	20.4	0.0	-19.82	-937.2	-1,518.4	889.2	877.3	11.90	74.728	
6,000.0	5,906.1	5,880.7	5,573.0	20.8	0.0	-19.72	-955.5	-1,550.3	908.6	896.5	12.09	75.122	
6,100.0	6,004.3	5,978.8	5,664.0	21.2	0.0	-19.62	-973.9	-1,582.2	927.9	915.6	12.29	75.502	
6,200.0	6,102.4	6,076.9	5,754.9	21.6	0.0	-19.53	-992.2	-1,614.1	947.2	934.7	12.48	75.871	
6,300.0	6,200.5	6,175.0	5,845.9	21.9	0.0	-19.44	-1,010.6	-1,646.0	966.5	953.8	12.68	76.228	
6,400.0	6,298.5	6,273.2	5,936.9	22.3	0.0	-23.57	-1,028.9	-1,677.9	985.3	972.4	12.83	76.800	
6,500.0	6,393.5	6,372.4	6,028.8	23.0	0.0	-30.38	-1,047.5	-1,710.1	995.1	982.1	13.07	76.112	
6,600.0	6,482.6	6,470.7	6,120.0	23.8	0.0	-34.46	-1,065.9	-1,742.1	993.5	979.8	13.67	72.694	
6,700.0	6,563.7	6,565.8	6,208.2	24.9	0.0	-38.42	-1,083.7	-1,773.0	980.8	966.1	14.78	66.368	
6,800.0	6,634.7	6,655.4	6,291.2	26.2	0.0	-43.02	-1,100.4	-1,802.1	958.4	941.8	16.62	57.664	
6,900.0	6,693.9	6,737.2	6,367.0	27.8	0.0	-48.53	-1,115.7	-1,828.7	928.0	908.7	19.31	48.071	
7,000.0	6,739.8	6,809.1	6,433.7	29.5	0.0	-54.89	-1,129.2	-1,852.1	892.0	869.3	22.73	39.251	
7,100.0	6,771.3	6,869.6	6,489.7	31.4	0.0	-61.72	-1,140.5	-1,871.7	853.3	826.8	26.53	32.160	
7,200.0	6,787.6	6,916.9	6,533.6	33.5	0.0	-68.30	-1,149.3	-1,887.1	815.3	785.0	30.26	26.938	
7,300.0	6,790.0	6,951.6	6,565.8	35.6	0.0	-72.55	-1,155.8	-1,898.4	781.8	748.5	33.26	23.504	
7,400.0	6,790.0	6,984.0	6,595.8	37.7	0.0	-74.90	-1,161.9	-1,908.9	758.1	722.3	35.77	21.192	
7,500.0	6,790.0	7,016.5	6,625.9	39.9	0.0	-77.26	-1,167.9	-1,919.5	745.6	707.3	38.30	19.466	
7,554.4	6,790.0	7,034.1	6,642.3	41.2	0.0	-78.55	-1,171.2	-1,925.2	743.9	704.2	39.69	18.743	
7,600.0	6,790.0	7,048.9	6,656.0	42.2	0.0	-79.63	-1,174.0	-1,930.0	745.1	704.3	40.84	18.244	
7,700.0	6,790.0	7,081.4	6,686.1	44.4	0.0	-81.99	-1,180.1	-1,940.6	756.5	713.1	43.37	17.444	
7,800.0	6,790.0	7,127.8	6,728.8	46.7	0.0	-85.31	-1,188.7	-1,956.8	779.1	733.1	45.94	16.960	
7,900.0	6,790.0	7,205.1	6,796.8	49.0	0.0	-90.51	-1,202.4	-1,990.5	810.5	762.1	48.40	16.745	
8,000.0	6,790.0	7,340.0	6,904.4	51.3	0.0	-98.32	-1,224.0	-2,068.6	846.3	796.1	50.22	16.854	
8,100.0	6,790.0	7,592.7	7,053.0	53.6	0.0	-107.94	-1,253.6	-2,268.8	877.4	826.8	50.58	17.345	
8,200.0	6,790.0	7,904.5	7,115.0	56.0	0.0	-111.51	-1,265.4	-2,571.1	886.5	834.8	51.71	17.144	
8,300.0	6,790.0	8,004.5	7,115.0	58.3	0.0	-111.51	-1,265.1	-2,671.1	886.5	832.6	53.92	16.441	
8,400.0	6,790.0	8,104.5	7,115.0	60.7	0.0	-111.51	-1,264.9	-2,771.1	886.5	830.4	56.14	15.790	
8,500.0	6,790.0	8,204.5	7,115.0	63.1	0.0	-111.51	-1,264.6	-2,871.1	886.5	828.2	58.37	15.188	
8,600.0	6,790.0	8,304.5	7,115.0	65.4	0.0	-111.51	-1,264.4	-2,971.1	886.5	825.9	60.60	14.629	
8,700.0	6,790.0	8,404.5	7,115.0	67.8	0.0	-111.51	-1,264.1	-3,071.1	886.5	823.7	62.84	14.108	
8,800.0	6,790.0	8,504.5	7,115.0	70.2	0.0	-111.51	-1,263.9	-3,171.1	886.5	821.5	65.08	13.622	
8,900.0	6,790.0	8,604.5	7,115.0	72.6	0.0	-111.51	-1,263.6	-3,271.1	886.5	819.2	67.33	13.167	
9,000.0	6,790.0	8,704.5	7,115.0	75.0	0.0	-111.51	-1,263.4	-3,371.1	886.5	817.0	69.58	12.742	
9,100.0	6,790.0	8,804.5	7,115.0	77.4	0.0	-111.51	-1,263.1	-3,471.1	886.5	814.7	71.83	12.342	
9,200.0	6,790.0	8,904.5	7,115.0	79.8	0.0	-111.51	-1,262.9	-3,571.1	886.5	812.4	74.09	11.966	
9,300.0	6,790.0	9,004.5	7,115.0	82.3	0.0	-111.51	-1,262.6	-3,671.1	886.5	810.2	76.35	11.612	
9,400.0	6,790.0	9,104.5	7,115.0	84.7	0.0	-111.51	-1,262.4	-3,771.1	886.5	807.9	78.61	11.278	
9,500.0	6,790.0	9,204.5	7,115.0	87.1	0.0	-111.51	-1,262.1	-3,871.1	886.5	805.7	80.87	10.962	
9,600.0	6,790.0	9,304.5	7,115.0	89.5	0.0	-111.51	-1,261.9	-3,971.1	886.5	803.4	83.14	10.663	
9,700.0	6,790.0	9,404.5	7,115.0	91.9	0.0	-111.51	-1,261.6	-4,071.1	886.5	801.1	85.41	10.380	
9,800.0	6,790.0	9,504.5	7,115.0	94.4	0.0	-111.51	-1,261.4	-4,171.1	886.5	798.9	87.68	10.111	
9,900.0	6,790.0	9,604.5	7,115.0	96.8	0.0	-111.51	-1,261.1	-4,271.1	886.5	796.6	89.95	9.856	
10,000.0	6,790.0	9,704.5	7,115.0	99.2	0.0	-111.51	-1,260.9	-4,371.1	886.5	794.3	92.22	9.613	
10,100.0	6,790.0	9,804.5	7,115.0	101.7	0.0	-111.51	-1,260.6	-4,471.1	886.5	792.0	94.50	9.382	
10,200.0	6,790.0	9,904.5	7,115.0	104.1	0.0	-111.51	-1,260.4	-4,571.1	886.5	789.8	96.77	9.161	

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 5
<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 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S16-T6N-R67W - Breniman 9 - Hz - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis		
10,300.0	6,790.0	10,004.5	7,115.0	106.6	0.0	-111.51	-1,260.1	-4,671.1	886.5	787.5	99.05	8.950	
10,400.0	6,790.0	10,104.5	7,115.0	109.0	0.0	-111.51	-1,259.9	-4,771.1	886.5	785.2	101.33	8.749	
10,500.0	6,790.0	10,204.5	7,115.0	111.4	0.0	-111.51	-1,259.6	-4,871.1	886.5	782.9	103.61	8.557	
10,600.0	6,790.0	10,304.5	7,115.0	113.9	0.0	-111.51	-1,259.4	-4,971.1	886.5	780.6	105.89	8.372	
10,700.0	6,790.0	10,404.5	7,115.0	116.3	0.0	-111.51	-1,259.1	-5,071.1	886.5	778.4	108.17	8.196	
10,800.0	6,790.0	10,504.5	7,115.0	118.8	0.0	-111.51	-1,258.9	-5,171.1	886.5	776.1	110.45	8.026	
10,900.0	6,790.0	10,604.5	7,115.0	121.2	0.0	-111.51	-1,258.6	-5,271.1	886.5	773.8	112.74	7.864	
11,000.0	6,790.0	10,704.5	7,115.0	123.7	0.0	-111.51	-1,258.4	-5,371.1	886.5	771.5	115.02	7.708	
11,100.0	6,790.0	10,804.5	7,115.0	126.1	0.0	-111.51	-1,258.1	-5,471.1	886.5	769.2	117.30	7.557	
11,200.0	6,790.0	10,904.5	7,115.0	128.6	0.0	-111.51	-1,257.9	-5,571.1	886.5	766.9	119.59	7.413	
11,300.0	6,790.0	11,004.5	7,115.0	131.0	0.0	-111.51	-1,257.6	-5,671.1	886.5	764.7	121.88	7.274	
11,400.0	6,790.0	11,104.5	7,115.0	133.5	0.0	-111.51	-1,257.4	-5,771.1	886.5	762.4	124.16	7.140	
11,500.0	6,790.0	11,204.5	7,115.0	135.9	0.0	-111.51	-1,257.1	-5,871.1	886.5	760.1	126.45	7.011	
11,600.0	6,790.0	11,304.5	7,115.0	138.4	0.0	-111.51	-1,256.9	-5,971.1	886.5	757.8	128.74	6.886	
11,700.0	6,790.0	11,404.5	7,115.0	140.8	0.0	-111.51	-1,256.6	-6,071.1	886.5	755.5	131.03	6.766	
11,800.0	6,790.0	11,504.5	7,115.0	143.3	0.0	-111.51	-1,256.4	-6,171.1	886.5	753.2	133.32	6.650	
11,900.0	6,790.0	11,604.5	7,115.0	145.8	0.0	-111.51	-1,256.1	-6,271.1	886.5	750.9	135.61	6.537	
12,000.0	6,790.0	11,704.5	7,115.0	148.2	0.0	-111.51	-1,255.9	-6,371.1	886.5	748.6	137.90	6.429	
12,100.0	6,790.0	11,804.5	7,115.0	150.7	0.0	-111.51	-1,255.6	-6,471.1	886.5	746.3	140.19	6.324	
12,200.0	6,790.0	11,904.5	7,115.0	153.1	0.0	-111.51	-1,255.4	-6,571.1	886.5	744.0	142.48	6.222	
12,300.0	6,790.0	12,004.5	7,115.0	155.6	0.0	-111.51	-1,255.1	-6,671.1	886.5	741.8	144.77	6.124	
12,400.0	6,790.0	12,104.5	7,115.0	158.0	0.0	-111.51	-1,254.9	-6,771.1	886.5	739.5	147.06	6.028	
12,500.0	6,790.0	12,204.5	7,115.0	160.5	0.0	-111.51	-1,254.6	-6,871.1	886.5	737.2	149.35	5.936	
12,600.0	6,790.0	12,304.5	7,115.0	163.0	0.0	-111.51	-1,254.4	-6,971.1	886.5	734.9	151.64	5.846	
12,700.0	6,790.0	12,404.5	7,115.0	165.4	0.0	-111.51	-1,254.1	-7,071.1	886.5	732.6	153.94	5.759	
12,800.0	6,790.0	12,504.5	7,115.0	167.9	0.0	-111.51	-1,253.9	-7,171.1	886.5	730.3	156.23	5.674	
12,900.0	6,790.0	12,604.5	7,115.0	170.3	0.0	-111.51	-1,253.6	-7,271.1	886.5	728.0	158.52	5.592	
13,000.0	6,790.0	12,704.5	7,115.0	172.8	0.0	-111.51	-1,253.4	-7,371.1	886.5	725.7	160.82	5.513	
13,100.0	6,790.0	12,804.5	7,115.0	175.3	0.0	-111.51	-1,253.1	-7,471.1	886.5	723.4	163.11	5.435	
13,200.0	6,790.0	12,904.5	7,115.0	177.7	0.0	-111.51	-1,252.9	-7,571.1	886.5	721.1	165.40	5.360	
13,300.0	6,790.0	13,004.5	7,115.0	180.2	0.0	-111.51	-1,252.6	-7,671.1	886.5	718.8	167.70	5.286	
13,400.0	6,790.0	13,104.5	7,115.0	182.7	0.0	-111.51	-1,252.4	-7,771.1	886.5	716.5	169.99	5.215	
13,500.0	6,790.0	13,204.5	7,115.0	185.1	0.0	-111.51	-1,252.1	-7,871.1	886.5	714.2	172.29	5.146	
13,600.0	6,790.0	13,304.5	7,115.0	187.6	0.0	-111.51	-1,251.9	-7,971.1	886.5	711.9	174.58	5.078	
13,700.0	6,790.0	13,404.5	7,115.0	190.1	0.0	-111.51	-1,251.6	-8,071.1	886.5	709.6	176.88	5.012	
13,800.0	6,790.0	13,504.5	7,115.0	192.5	0.0	-111.51	-1,251.4	-8,171.1	886.5	707.3	179.17	4.948	
13,900.0	6,790.0	13,604.5	7,115.0	195.0	0.0	-111.51	-1,251.1	-8,271.1	886.5	705.0	181.47	4.885	
14,000.0	6,790.0	13,704.5	7,115.0	197.4	0.0	-111.51	-1,250.9	-8,371.1	886.5	702.8	183.77	4.824	
14,100.0	6,790.0	13,804.5	7,115.0	199.9	0.0	-111.51	-1,250.6	-8,471.1	886.5	700.5	186.06	4.765	
14,200.0	6,790.0	13,904.5	7,115.0	202.4	0.0	-111.51	-1,250.4	-8,571.1	886.5	698.2	188.36	4.707	
14,300.0	6,790.0	14,004.5	7,115.0	204.8	0.0	-111.51	-1,250.1	-8,671.1	886.5	695.9	190.65	4.650	
14,400.0	6,790.0	14,104.5	7,115.0	207.3	0.0	-111.51	-1,249.9	-8,771.1	886.5	693.6	192.95	4.595	
14,500.0	6,790.0	14,204.5	7,115.0	209.8	0.0	-111.51	-1,249.6	-8,871.1	886.5	691.3	195.25	4.540	
14,600.0	6,790.0	14,304.5	7,115.0	212.2	0.0	-111.51	-1,249.4	-8,971.1	886.5	689.0	197.54	4.488	
14,700.0	6,790.0	14,404.5	7,115.0	214.7	0.0	-111.51	-1,249.1	-9,071.1	886.5	686.7	199.84	4.436	
14,800.0	6,790.0	14,504.5	7,115.0	217.2	0.0	-111.51	-1,248.9	-9,171.1	886.5	684.4	202.14	4.386	
14,900.0	6,790.0	14,604.5	7,115.0	219.6	0.0	-111.51	-1,248.6	-9,271.1	886.5	682.1	204.44	4.336	
15,000.0	6,790.0	14,704.5	7,115.0	222.1	0.0	-111.51	-1,248.4	-9,371.1	886.5	679.8	206.73	4.288	
15,100.0	6,790.0	14,804.5	7,115.0	224.6	0.0	-111.51	-1,248.1	-9,471.1	886.5	677.5	209.03	4.241	
15,200.0	6,790.0	14,904.5	7,115.0	227.0	0.0	-111.51	-1,247.9	-9,571.1	886.5	675.2	211.33	4.195	
15,300.0	6,790.0	15,004.5	7,115.0	229.5	0.0	-111.51	-1,247.6	-9,671.1	886.5	672.9	213.63	4.150	
15,400.0	6,790.0	15,104.5	7,115.0	232.0	0.0	-111.51	-1,247.4	-9,771.1	886.5	670.6	215.92	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 5
<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 5	<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)					
15,500.0	6,790.0	15,204.5	7,115.0	234.4	0.0	-111.51	-1,247.1	-9,871.1	886.5	668.3	218.22	4.062	
15,600.0	6,790.0	15,304.5	7,115.0	236.9	0.0	-111.51	-1,246.9	-9,971.1	886.5	666.0	220.52	4.020	
15,700.0	6,790.0	15,404.5	7,115.0	239.4	0.0	-111.51	-1,246.6	-10,071.1	886.5	663.7	222.82	3.979	
15,800.0	6,790.0	15,504.5	7,115.0	241.8	0.0	-111.51	-1,246.4	-10,171.1	886.5	661.4	225.12	3.938	
15,900.0	6,790.0	15,604.5	7,115.0	244.3	0.0	-111.51	-1,246.1	-10,271.1	886.5	659.1	227.41	3.898	
16,000.0	6,790.0	15,704.5	7,115.0	246.8	0.0	-111.51	-1,245.9	-10,371.1	886.5	656.8	229.71	3.859	
16,100.0	6,790.0	15,804.5	7,115.0	249.2	0.0	-111.51	-1,245.6	-10,471.1	886.5	654.5	232.01	3.821	
16,200.0	6,790.0	15,904.5	7,115.0	251.7	0.0	-111.51	-1,245.4	-10,571.1	886.5	652.2	234.31	3.783	
16,300.0	6,790.0	16,004.5	7,115.0	254.2	0.0	-111.51	-1,245.1	-10,671.1	886.5	649.9	236.61	3.747	
16,400.0	6,790.0	16,104.5	7,115.0	256.7	0.0	-111.51	-1,244.9	-10,771.1	886.5	647.6	238.91	3.711	
16,500.0	6,790.0	16,204.5	7,115.0	259.1	0.0	-111.51	-1,244.6	-10,871.1	886.5	645.3	241.21	3.675	
16,600.0	6,790.0	16,304.5	7,115.0	261.6	0.0	-111.51	-1,244.4	-10,971.1	886.5	643.0	243.51	3.641	
16,700.0	6,790.0	16,404.5	7,115.0	264.1	0.0	-111.51	-1,244.1	-11,071.1	886.5	640.7	245.81	3.607	
16,800.0	6,790.0	16,504.5	7,115.0	266.5	0.0	-111.51	-1,243.9	-11,171.1	886.5	638.4	248.10	3.573	
16,900.0	6,790.0	16,604.5	7,115.0	269.0	0.0	-111.51	-1,243.6	-11,271.1	886.5	636.1	250.40	3.540	
17,000.0	6,790.0	16,704.5	7,115.0	271.5	0.0	-111.51	-1,243.4	-11,371.1	886.5	633.8	252.70	3.508	
17,100.0	6,790.0	16,804.5	7,115.0	273.9	0.0	-111.51	-1,243.1	-11,471.1	886.5	631.5	255.00	3.476	
17,200.0	6,790.0	16,904.5	7,115.0	276.4	0.0	-111.51	-1,242.9	-11,571.1	886.5	629.2	257.30	3.445	
17,300.0	6,790.0	17,004.5	7,115.0	278.9	0.0	-111.51	-1,242.6	-11,671.1	886.5	626.9	259.60	3.415	
17,400.0	6,790.0	17,104.5	7,115.0	281.3	0.0	-111.51	-1,242.4	-11,771.1	886.5	624.6	261.90	3.385	
17,400.0	6,790.0	17,104.5	7,115.0	281.3	0.0	-111.51	-1,242.4	-11,771.1	886.5	624.6	261.90	3.385	
17,401.9	6,790.0	17,104.5	7,115.0	281.4	0.0	-111.51	-1,242.4	-11,771.1	886.5	624.6	261.95	3.384 SF	

# Anticollision Report

<b>Company:</b>	Extraction Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well Breniman 5
<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 5	<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 5

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°

