

BONANZA CREEK ENERGY

WELD COUNTY

SEC 4-T5N-R61W

PH TITAN T4 03N-20-05

OWB

PROPOSAL 1

Anticollision Report

12 August, 2024

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Unknown AC limit!	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	8/12/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,138.90	PROPOSAL 1 (OWB)	MWD OWSG	OWSG MWD - Standard

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Summary						
SEC 10-T5N-R61W						
EXIST HZ PRONGHORN F-J-10HNB - OWB - FINAL SU	6,400.00	5,843.16	946.98	896.18	18.640	SF
EXIST HZ PRONGHORN F-J-10HNB - OWB - FINAL SU	6,643.60	5,853.00	910.20	862.60	19.124	CC, ES
PH HYPERION P10 03N-20-01 - OWB - PROPOSAL 1	11,989.27	12,311.45	883.82	682.49	4.390	CC
PH HYPERION P10 03N-20-01 - OWB - PROPOSAL 1	17,138.90	17,457.34	904.70	524.61	2.380	ES, SF
SEC 4-T5N-R61W						
ABND VERT PRONGHORN 14-4 - OWB - Design #1	900.00	849.00	3,337.93	3,317.23	161.253	CC
ABND VERT PRONGHORN 14-4 - OWB - Design #1	1,000.00	948.98	3,339.58	3,316.52	144.826	ES
ABND VERT PRONGHORN 14-4 - OWB - Design #1	8,900.00	5,997.00	5,374.21	5,210.75	32.877	SF
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - Desi	11,261.32	6,047.00	2,487.56	2,280.37	12.006	CC
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - Desi	11,300.00	6,047.00	2,487.86	2,280.29	11.986	ES
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - Desi	11,500.00	6,047.00	2,498.99	2,289.78	11.945	SF
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - GYR	11,283.97	5,801.42	2,501.73	2,397.27	23.949	CC
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - GYR	11,300.00	5,801.42	2,501.79	2,397.17	23.913	ES
ABND VERT PRONGHORN 31-4 (GYRO) - OWB - GYR	11,600.00	5,801.42	2,521.62	2,414.62	23.566	SF
ABND VERT SANBORN DRAW 1-33 (NO CSG) - OWB	16,509.56	6,057.00	2,517.83	2,320.18	12.739	CC, ES
ABND VERT SANBORN DRAW 1-33 (NO CSG) - OWB	16,700.00	6,057.00	2,525.02	2,326.01	12.688	SF
EXIST HZ ESTERLING 44-33H - OWB - FINAL SURVEY	12,600.00	5,900.00	665.21	546.14	5.587	SF
EXIST HZ ESTERLING 44-33H - OWB - FINAL SURVEY	12,620.40	5,900.00	664.89	546.08	5.596	CC, ES
EXIST HZ ESTERLING 44-33H - STK 1 - STK 1	12,600.00	5,900.00	665.21	546.14	5.587	SF
EXIST HZ ESTERLING 44-33H - STK 1 - STK 1	12,620.40	5,900.00	664.89	546.08	5.596	CC, ES
EXIST HZ PRONGHORN 14-11-4HNB - OWB - FINAL S	544.45	505.22	2,565.11	2,561.50	710.153	CC
EXIST HZ PRONGHORN 14-11-4HNB - OWB - FINAL S	600.00	552.07	2,565.21	2,561.23	644.794	ES
EXIST HZ PRONGHORN 14-11-4HNB - OWB - FINAL S	12,700.00	10,762.00	5,470.03	5,283.01	29.248	SF
EXIST HZ PRONGHORN T-P-4HNB - OWB - FINAL SU	1,648.24	1,629.75	133.38	122.64	12.428	CC, ES
EXIST HZ PRONGHORN T-P-4HNB - OWB - FINAL SU	11,600.00	10,733.00	1,828.31	1,654.25	10.503	SF
PH TITAN T4 04N-20-01 - OWB - PROPOSAL 1	497.19	498.47	75.23	71.79	21.878	CC
PH TITAN T4 04N-20-01 - OWB - PROPOSAL 1	500.00	501.26	75.23	71.77	21.743	ES
PH TITAN T4 04N-20-01 - OWB - PROPOSAL 1	17,138.90	17,428.42	4,486.41	4,114.21	12.054	SF
PH TITAN T4 04N-20-04 - OWB - PROPOSAL 1	1,012.63	1,012.98	12.43	5.41	1.771	CC, ES, SF
PH TITAN T4 04U-30-02 - OWB - PROPOSAL 1	495.70	496.97	51.41	47.99	15.011	CC
PH TITAN T4 04U-30-02 - OWB - PROPOSAL 1	500.00	501.23	51.42	47.96	14.869	ES
PH TITAN T4 04U-30-02 - OWB - PROPOSAL 1	16,400.00	18,750.00	1,790.20	1,440.31	5.116	SF
PH TITAN T4 04U-30-03 - OWB - PROPOSAL 1	504.80	506.16	27.93	24.44	7.999	CC, ES
PH TITAN T4 04U-30-03 - OWB - PROPOSAL 1	600.00	600.00	31.70	27.49	7.531	SF
PH TITAN T4 09U-20-06 - OWB - PROPOSAL 1	100.00	100.00	21.85	21.32	40.644	CC
PH TITAN T4 09U-20-06 - OWB - PROPOSAL 1	200.00	199.73	22.45	21.20	18.001	ES

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
SEC 4-T5N-R61W						
PH TITAN T4 09U-20-06 - OWB - PROPOSAL 1	6,100.00	6,012.42	135.07	69.79	2.069	SF
PH TITAN T4 09U-20-07 - OWB - PROPOSAL 1	300.00	300.00	40.17	38.20	20.373	CC, ES
PH TITAN T4 09U-20-07 - OWB - PROPOSAL 1	5,800.00	5,734.75	403.22	333.39	5.775	SF
SEC 9-T5N-R61W						
ABND VERT PRONGHORN 41-9 (GYRO) - GYRO SUR	3,993.29	3,793.88	594.07	557.60	16.289	CC
ABND VERT PRONGHORN 41-9 (GYRO) - GYRO SUR	4,000.00	3,800.06	594.08	557.53	16.255	ES
ABND VERT PRONGHORN 41-9 (GYRO) - GYRO SUR	4,500.00	4,257.14	625.20	583.79	15.097	SF
ABND VERT PRONGHORN 41-9 (GYRO) - OWB - Desi	4,014.00	3,814.14	569.68	468.91	5.653	CC
ABND VERT PRONGHORN 41-9 (GYRO) - OWB - Desi	4,100.00	3,893.04	570.70	467.64	5.538	ES
ABND VERT PRONGHORN 41-9 (GYRO) - OWB - Desi	4,500.00	4,259.99	601.55	488.64	5.328	SF
EXIST HZ PRONGHORN 41-11-9HZ - OWB - FINAL SU	5,366.21	5,085.48	130.71	78.55	2.506	CC, ES, SF

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 85-MWD OWSG												Offset Well Error:	0.00 usft	
SEC 10-T5N-R61W - EXIST HZ PRONGHORN F-J-10HNB - OWB - FINAL SURVEY														
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Reference (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	30.90	30.90	0.00	0.05	103.56		-626.40	2,597.77	2,672.22				
100.00	100.00	133.11	133.11	0.27	0.30	103.53		-625.15	2,597.90	2,672.07	2,671.50	0.57	4,710.770	
200.00	200.00	232.19	232.16	0.63	0.65	103.49		-623.26	2,598.24	2,671.95	2,670.67	1.28	2,085.208	
300.00	300.00	330.52	330.47	0.99	1.01	103.44		-621.02	2,598.62	2,671.80	2,669.81	1.99	1,340.556	
312.79	312.79	341.85	341.79	1.03	1.05	103.44		-620.79	2,598.68	2,671.80	2,669.72	2.08	1,284.819	
400.00	400.00	419.25	419.18	1.34	1.33	103.41		-619.54	2,599.12	2,671.96	2,669.29	2.67	1,000.826	
500.00	500.00	522.08	522.00	1.70	1.69	103.37		-618.06	2,599.82	2,672.29	2,668.90	3.39	788.191	
600.00	600.00	625.65	625.57	2.06	2.04	103.37		-618.17	2,599.98	2,672.46	2,668.36	4.10	651.567	
700.00	700.00	723.46	723.37	2.42	2.37	103.39		-619.12	2,599.93	2,672.63	2,667.85	4.79	558.329	
800.00	800.00	822.56	822.47	2.78	2.71	103.41		-620.03	2,599.94	2,672.86	2,667.38	5.48	487.423	
900.00	900.00	918.25	918.16	3.14	3.04	103.43		-620.82	2,600.05	2,673.17	2,666.99	6.17	433.079	
1,000.00	999.98	1,012.10	1,012.00	3.48	3.36	-11.92		-621.97	2,600.28	2,671.98	2,665.13	6.85	390.347	
1,100.00	1,099.84	1,106.22	1,106.12	3.82	3.69	-11.95		-622.61	2,600.86	2,667.61	2,660.10	7.51	355.059	
1,200.00	1,199.45	1,219.00	1,218.89	4.17	4.09	-12.02		-623.36	2,601.38	2,669.69	2,651.43	8.25	322.275	
1,300.00	1,298.70	1,330.25	1,330.13	4.53	4.48	-12.11		-624.33	2,601.30	2,647.90	2,638.91	8.99	294.545	
1,400.00	1,397.47	1,459.29	1,459.16	4.91	4.93	-12.24		-625.16	2,599.68	2,631.42	2,621.63	9.79	268.789	
1,500.00	1,495.62	1,556.41	1,556.25	5.31	5.27	-12.39		-625.95	2,597.81	2,611.11	2,600.62	10.48	249.087	
1,600.00	1,593.06	1,634.96	1,634.79	5.74	5.54	-12.56		-626.71	2,597.01	2,588.35	2,577.23	11.12	232.869	
1,700.00	1,689.64	1,720.86	1,720.69	6.21	5.84	-12.80		-626.10	2,596.90	2,562.78	2,551.01	11.78	217.613	
1,800.00	1,785.27	1,833.92	1,833.75	6.71	6.24	-13.12		-625.53	2,596.54	2,533.83	2,521.29	12.54	202.124	
1,900.00	1,879.82	1,910.50	1,910.32	7.27	6.50	-13.41		-625.69	2,596.12	2,501.60	2,488.42	13.18	189.831	
2,000.00	1,973.17	1,999.94	1,999.74	7.88	6.81	-13.81		-623.95	2,596.79	2,466.91	2,453.04	13.87	177.855	
2,100.00	2,065.27	2,158.38	2,157.61	8.54	7.37	-14.67		-610.94	2,597.73	2,427.96	2,413.16	14.80	164.076	
2,200.00	2,157.01	2,258.18	2,256.78	9.24	7.72	-15.22		-599.82	2,596.78	2,386.30	2,370.76	15.54	153.591	
2,300.00	2,248.74	2,336.00	2,334.12	9.96	8.00	-15.66		-591.17	2,596.66	2,345.50	2,329.28	16.22	144.604	
2,400.00	2,340.48	2,378.59	2,376.46	10.70	8.16	-15.90		-586.59	2,597.10	2,305.86	2,289.06	16.81	137.200	
2,500.00	2,432.22	2,431.03	2,428.60	11.45	8.35	-16.21		-581.18	2,598.41	2,267.91	2,250.47	17.44	130.075	
2,600.00	2,523.96	2,538.12	2,535.11	12.21	8.74	-16.84		-570.67	2,602.10	2,231.14	2,212.89	18.25	122.231	
2,700.00	2,615.70	2,656.25	2,652.61	12.99	9.17	-17.57		-558.60	2,604.09	2,192.78	2,173.66	19.12	114.698	
2,800.00	2,707.44	2,750.42	2,746.11	13.77	9.52	-18.21		-547.47	2,605.40	2,154.19	2,134.27	19.92	108.135	
2,900.00	2,799.17	2,840.66	2,835.69	14.55	9.86	-18.85		-536.65	2,606.63	2,115.79	2,095.06	20.73	102.080	

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 85-MWD OWSG													Offset Well Error:	0.00 usft
SEC 10-T5N-R61W - EXIST HZ PRONGHORN F-J-10HNB - OWB - FINAL SURVEY														
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)	Minimum Separation (usft)	Separation Factor		
3,000.00	2,890.91	2,954.76	2,948.95	15.35	10.29	-19.70	-522.89	2,607.47	2,077.07	2,055.46	21.62	96.083		
3,100.00	2,982.65	3,038.57	3,032.19	16.14	10.61	-20.33	-513.12	2,607.62	2,038.17	2,015.74	22.43	90.873		
3,200.00	3,074.39	3,113.71	3,106.91	16.95	10.89	-20.90	-505.16	2,607.97	1,999.89	1,976.66	23.23	86.101		
3,300.00	3,166.13	3,177.65	3,170.44	17.75	11.13	-21.40	-498.02	2,609.03	1,962.89	1,938.88	24.01	81.760		
3,400.00	3,257.87	3,251.22	3,243.43	18.56	11.42	-22.02	-489.11	2,611.25	1,927.29	1,902.45	24.83	77.607		
3,500.00	3,349.61	3,339.75	3,331.25	19.37	11.76	-22.80	-478.35	2,614.18	1,892.30	1,866.58	25.72	73.562		
3,600.00	3,441.34	3,447.29	3,437.93	20.18	12.17	-23.78	-465.18	2,617.30	1,857.31	1,830.62	26.69	69.586		
3,700.00	3,533.08	3,554.86	3,544.66	21.00	12.59	-24.80	-451.88	2,619.38	1,821.81	1,794.14	27.67	65.833		
3,800.00	3,624.82	3,666.33	3,655.34	21.81	13.03	-25.89	-438.63	2,620.34	1,785.76	1,757.08	28.68	62.269		
3,900.00	3,716.56	3,769.09	3,757.44	22.63	13.42	-26.91	-427.01	2,620.00	1,749.04	1,719.37	29.67	58.948		
4,000.00	3,808.30	3,861.57	3,849.39	23.45	13.78	-27.85	-417.26	2,619.38	1,712.46	1,681.80	30.65	55.870		
4,100.00	3,900.04	3,961.16	3,948.62	24.27	14.15	-28.84	-408.82	2,618.34	1,675.90	1,644.26	31.65	52.953		
4,200.00	3,991.78	4,029.61	4,016.92	25.09	14.41	-29.49	-404.20	2,617.73	1,639.88	1,607.28	32.59	50.317		
4,300.00	4,083.51	4,106.00	4,093.08	25.92	14.69	-30.27	-398.48	2,618.52	1,605.85	1,572.28	33.57	47.835		
4,400.00	4,175.25	4,181.45	4,168.26	26.74	14.98	-31.08	-392.27	2,619.95	1,573.05	1,538.48	34.58	45.496		
4,500.00	4,266.99	4,273.04	4,259.48	27.57	15.32	-32.13	-384.17	2,621.37	1,540.55	1,504.90	35.65	43.215		
4,600.00	4,358.73	4,360.00	4,346.06	28.39	15.65	-33.17	-376.24	2,622.90	1,508.77	1,472.03	36.74	41.069		
4,700.00	4,450.47	4,447.20	4,432.84	29.22	15.99	-34.26	-367.78	2,624.57	1,477.73	1,439.88	37.86	39.032		
4,800.00	4,542.21	4,564.40	4,549.29	30.05	16.45	-35.88	-354.66	2,625.93	1,446.93	1,407.82	39.11	36.995		
4,900.00	4,633.95	4,659.84	4,643.85	30.88	16.83	-37.35	-341.81	2,624.77	1,414.97	1,374.61	40.36	35.058		
5,000.00	4,725.68	4,741.00	4,724.25	31.70	17.15	-38.66	-330.73	2,624.48	1,384.67	1,343.07	41.61	33.281		
5,100.00	4,817.42	4,810.15	4,792.77	32.53	17.43	-39.79	-321.40	2,624.93	1,356.11	1,313.27	42.84	31.657		
5,200.00	4,909.16	4,895.06	4,876.91	33.36	17.77	-41.22	-310.08	2,626.10	1,329.17	1,285.02	44.15	30.106		
5,300.00	5,000.90	4,995.76	4,976.73	34.19	18.18	-42.97	-296.84	2,627.05	1,302.84	1,257.29	45.55	28.601		
5,400.00	5,092.64	5,094.83	5,075.15	35.02	18.57	-44.69	-285.56	2,627.67	1,276.85	1,229.90	46.96	27.193		
5,500.00	5,184.38	5,194.33	5,174.28	35.85	18.95	-46.36	-277.02	2,628.39	1,251.16	1,202.81	48.35	25.875		
5,600.00	5,276.11	5,294.27	5,273.98	36.69	19.32	-48.04	-270.18	2,628.93	1,225.76	1,176.00	49.76	24.635		
5,700.00	5,367.85	5,398.31	5,377.93	37.52	19.69	-49.73	-266.20	2,629.77	1,200.49	1,149.34	51.15	23.471		
5,800.00	5,459.76	5,512.30	5,491.91	38.34	20.08	-42.18	-264.23	2,629.75	1,174.08	1,121.57	52.51	22.358		
5,900.00	5,552.68	5,615.08	5,594.65	39.06	20.42	-15.00	-265.01	2,629.38	1,140.90	1,087.38	53.52	21.318		
6,000.00	5,644.46	5,662.00	5,641.44	39.64	20.56	10.49	-268.16	2,630.99	1,102.07	1,048.04	54.03	20.396		
6,100.00	5,732.30	5,725.00	5,703.77	40.06	20.74	30.21	-274.99	2,636.87	1,060.92	1,006.92	54.00	19.646		
6,200.00	5,813.53	5,765.69	5,743.22	40.35	20.85	44.96	-282.48	2,643.29	1,019.38	965.95	53.42	19.082		
6,300.00	5,885.68	5,814.07	5,788.75	40.51	20.96	57.11	-295.43	2,653.19	980.24	927.96	52.28	18.749		
6,400.00	5,946.56	5,843.16	5,815.35	40.57	21.02	65.90	-305.16	2,659.82	946.98	896.18	50.80	18.640 SF		
6,500.00	5,994.33	5,858.00	5,828.66	40.54	21.05	71.55	-310.68	2,663.38	923.29	874.04	49.25	18.747		
6,600.00	6,027.53	5,853.00	5,824.19	40.44	21.04	73.81	-308.78	2,662.18	911.42	863.45	47.97	18.999		
6,643.60	6,037.17	5,853.00	5,824.19	40.37	21.04	74.30	-308.78	2,662.18	910.20	862.60	47.59	19.124 CC, ES		
6,700.00	6,045.15	5,842.74	5,814.98	40.29	21.02	73.77	-305.01	2,659.72	912.13	864.87	47.27	19.298		
6,800.00	6,048.00	5,821.00	5,795.15	40.12	20.97	71.96	-297.62	2,654.72	924.85	877.59	47.26	19.569		
6,900.00	6,048.00	5,811.31	5,786.20	39.97	20.95	71.38	-294.58	2,652.59	947.62	899.63	47.99	19.747		
7,000.00	6,048.00	5,789.00	5,765.36	39.85	20.91	70.05	-288.19	2,647.85	979.78	930.67	49.12	19.949		
7,100.00	6,048.00	5,789.00	5,765.36	39.76	20.91	70.05	-288.19	2,647.85	1,020.26	969.56	50.70	20.123		
7,200.00	6,048.00	5,789.00	5,765.36	39.72	20.91	70.05	-288.19	2,647.85	1,068.59	1,016.20	52.40	20.394		
7,300.00	6,048.00	5,771.07	5,748.37	39.71	20.86	68.97	-283.70	2,644.30	1,123.28	1,069.36	53.92	20.833		
7,400.00	6,048.00	5,757.00	5,734.88	39.75	20.83	68.13	-280.63	2,641.73	1,184.01	1,128.63	55.38	21.380		
7,500.00	6,048.00	5,757.00	5,734.88	39.85	20.83	68.13	-280.63	2,641.73	1,249.54	1,192.71	56.83	21.988		
7,600.00	6,048.00	5,757.00	5,734.88	40.01	20.83	68.13	-280.63	2,641.73	1,319.39	1,261.27	58.12	22.699		
7,700.00	6,048.00	5,757.00	5,734.88	40.24	20.83	68.13	-280.63	2,641.73	1,392.93	1,333.66	59.27	23.499		
7,800.00	6,048.00	5,757.00	5,734.88	40.57	20.83	68.13	-280.63	2,641.73	1,469.60	1,409.31	60.29	24.376		
7,900.00	6,048.00	5,740.98	5,719.37	40.99	20.79	67.17	-277.58	2,639.11	1,548.54	1,487.47	61.07	25.355		
8,000.00	6,048.00	5,725.00	5,703.77	41.53	20.74	66.23	-274.99	2,636.87	1,630.18	1,568.42	61.76	26.396		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 85-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
8,100.00	6,048.00	5,725.00	5,703.77	42.19	20.74	66.23	-274.99	2,636.87	1,713.43	1,650.97	62.46	27.434		
8,200.00	6,048.00	5,725.00	5,703.77	42.97	20.74	66.23	-274.99	2,636.87	1,798.38	1,735.31	63.07	28.513		
8,300.00	6,048.00	5,725.00	5,703.77	43.85	20.74	66.23	-274.99	2,636.87	1,884.81	1,821.19	63.62	29.627		
8,400.00	6,048.00	5,725.00	5,703.77	44.83	20.74	66.23	-274.99	2,636.87	1,972.52	1,908.42	64.10	30.772		
8,500.00	6,048.00	5,725.00	5,703.77	45.90	20.74	66.23	-274.99	2,636.87	2,061.35	1,996.82	64.53	31.944		
8,600.00	6,048.00	5,725.00	5,703.77	47.05	20.74	66.23	-274.99	2,636.87	2,151.17	2,086.25	64.91	33.139		
8,700.00	6,048.00	5,725.00	5,703.77	48.25	20.74	66.23	-274.99	2,636.87	2,241.84	2,176.58	65.26	34.354		
8,800.00	6,048.00	5,725.00	5,703.77	49.51	20.74	66.23	-274.99	2,636.87	2,333.28	2,267.71	65.57	35.586		
8,900.00	6,048.00	5,710.55	5,689.56	50.81	20.70	65.38	-272.99	2,635.14	2,425.17	2,359.39	65.78	36.868		
9,000.00	6,048.00	5,708.09	5,687.14	52.15	20.70	65.24	-272.68	2,634.87	2,517.81	2,451.79	66.02	38.134		
9,100.00	6,048.00	5,694.00	5,673.21	53.53	20.66	64.43	-271.04	2,633.45	2,611.12	2,544.93	66.20	39.446		
9,200.00	6,048.00	5,694.00	5,673.21	54.94	20.66	64.43	-271.04	2,633.45	2,704.72	2,638.31	66.41	40.728		
9,300.00	6,048.00	5,694.00	5,673.21	56.37	20.66	64.43	-271.04	2,633.45	2,798.76	2,732.15	66.61	42.020		
9,400.00	6,048.00	5,694.00	5,673.21	57.82	20.66	64.43	-271.04	2,633.45	2,893.20	2,826.42	66.79	43.320		
9,500.00	6,048.00	5,694.00	5,673.21	59.30	20.66	64.43	-271.04	2,633.45	2,988.00	2,921.05	66.95	44.629		
9,600.00	6,048.00	5,694.00	5,673.21	60.79	20.66	64.43	-271.04	2,633.45	3,083.13	3,016.03	67.11	45.944		
9,700.00	6,048.00	5,694.00	5,673.21	62.30	20.66	64.43	-271.04	2,633.45	3,178.56	3,111.31	67.25	47.265		
9,800.00	6,048.00	5,694.00	5,673.21	63.82	20.66	64.43	-271.04	2,633.45	3,274.27	3,206.88	67.38	48.592		
9,900.00	6,048.00	5,694.00	5,673.21	65.36	20.66	64.43	-271.04	2,633.45	3,370.22	3,302.71	67.51	49.924		
10,000.00	6,048.00	5,694.00	5,673.21	66.91	20.66	64.43	-271.04	2,633.45	3,466.40	3,398.78	67.62	51.261		
10,100.00	6,048.00	5,694.00	5,673.21	68.48	20.66	64.43	-271.04	2,633.45	3,562.79	3,495.06	67.73	52.601		
10,200.00	6,048.00	5,694.00	5,673.21	70.05	20.66	64.43	-271.04	2,633.45	3,659.37	3,591.54	67.84	53.945		
10,300.00	6,048.00	5,694.00	5,673.21	71.63	20.66	64.43	-271.04	2,633.45	3,756.14	3,688.21	67.93	55.292		
10,400.00	6,048.00	5,694.00	5,673.21	73.23	20.66	64.43	-271.04	2,633.45	3,853.07	3,785.04	68.02	56.642		
10,500.00	6,048.00	5,679.40	5,658.74	74.83	20.61	63.60	-269.59	2,632.21	3,949.99	3,881.93	68.06	58.034		
10,600.00	6,048.00	5,677.88	5,657.23	76.43	20.61	63.52	-269.46	2,632.09	4,047.18	3,979.04	68.14	59.394		
10,700.00	6,048.00	5,676.41	5,655.77	78.05	20.61	63.44	-269.33	2,631.98	4,144.50	4,076.29	68.22	60.755		
10,800.00	6,048.00	5,662.00	5,641.44	79.67	20.56	62.63	-268.16	2,630.99	4,242.07	4,173.82	68.25	62.157		
10,900.00	6,048.00	5,662.00	5,641.44	81.30	20.56	62.63	-268.16	2,630.99	4,339.60	4,271.28	68.32	63.517		
11,000.00	6,048.00	5,662.00	5,641.44	82.94	20.56	62.63	-268.16	2,630.99	4,437.24	4,368.85	68.39	64.879		
11,100.00	6,048.00	5,662.00	5,641.44	84.58	20.56	62.63	-268.16	2,630.99	4,534.98	4,466.52	68.46	66.242		
11,200.00	6,048.00	5,662.00	5,641.44	86.22	20.56	62.63	-268.16	2,630.99	4,632.82	4,564.30	68.53	67.607		
11,300.00	6,048.00	5,662.00	5,641.44	87.87	20.56	62.63	-268.16	2,630.99	4,730.75	4,662.16	68.59	68.972		
11,400.00	6,048.00	5,662.00	5,641.44	89.53	20.56	62.63	-268.16	2,630.99	4,828.77	4,760.12	68.65	70.337		
11,500.00	6,048.00	5,662.00	5,641.44	91.19	20.56	62.63	-268.16	2,630.99	4,926.86	4,858.15	68.71	71.704		
11,600.00	6,048.00	5,662.00	5,641.44	92.85	20.56	62.63	-268.16	2,630.99	5,025.04	4,956.27	68.77	73.071		
11,700.00	6,048.00	5,662.00	5,641.44	94.52	20.56	62.63	-268.16	2,630.99	5,123.28	5,054.45	68.83	74.438		
11,800.00	6,048.00	5,662.00	5,641.44	96.19	20.56	62.63	-268.16	2,630.99	5,221.58	5,152.70	68.88	75.806		
11,900.00	6,048.00	5,662.00	5,641.44	97.86	20.56	62.63	-268.16	2,630.99	5,319.95	5,251.02	68.93	77.174		
12,000.00	6,048.00	5,662.00	5,641.44	99.54	20.56	62.63	-268.16	2,630.99	5,418.38	5,349.40	68.99	78.541		
12,100.00	6,048.00	5,662.00	5,641.44	101.22	20.56	62.63	-268.16	2,630.99	5,516.87	5,447.83	69.04	79.909		
12,200.00	6,048.00	5,662.00	5,641.44	102.91	20.56	62.63	-268.16	2,630.99	5,615.41	5,546.32	69.09	81.277		
12,300.00	6,048.00	5,662.00	5,641.44	104.59	20.56	62.63	-268.16	2,630.99	5,714.00	5,644.86	69.14	82.644		
12,400.00	6,048.00	5,649.93	5,629.42	106.28	20.53	61.97	-267.29	2,630.33	5,812.60	5,743.45	69.16	84.051		
12,500.00	6,048.00	5,647.57	5,627.07	107.97	20.52	61.84	-267.12	2,630.23	5,911.27	5,842.08	69.20	85.426		
12,600.00	6,048.00	5,645.24	5,624.75	109.67	20.51	61.72	-266.96	2,630.13	6,009.99	5,940.75	69.24	86.800		
12,700.00	6,048.00	5,642.93	5,622.45	111.37	20.51	61.59	-266.80	2,630.03	6,108.74	6,039.45	69.28	88.174		
12,800.00	6,048.00	5,630.00	5,609.55	113.07	20.47	60.91	-265.91	2,629.63	6,207.55	6,138.25	69.30	89.581		
12,900.00	6,048.00	5,630.00	5,609.55	114.77	20.47	60.91	-265.91	2,629.63	6,306.36	6,237.02	69.34	90.946		
13,000.00	6,048.00	5,630.00	5,609.55	116.47	20.47	60.91	-265.91	2,629.63	6,405.21	6,335.82	69.39	92.310		
13,100.00	6,048.00	5,630.00	5,609.55	118.18	20.47	60.91	-265.91	2,629.63	6,504.10	6,434.66	69.43	93.674		
13,200.00	6,048.00	5,630.00	5,609.55	119.88	20.47	60.91	-265.91	2,629.63	6,603.01	6,533.54	69.48	95.037		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 85-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
13,300.00	6,048.00	5,630.00	5,609.55	121.59	20.47	60.91	-265.91	2,629.63	6,701.97	6,632.44	69.52	96.399		
13,400.00	6,048.00	5,630.00	5,609.55	123.30	20.47	60.91	-265.91	2,629.63	6,800.95	6,731.38	69.57	97.761		
13,500.00	6,048.00	5,630.00	5,609.55	125.02	20.47	60.91	-265.91	2,629.63	6,899.96	6,830.34	69.61	99.121		
13,600.00	6,048.00	5,630.00	5,609.55	126.73	20.47	60.91	-265.91	2,629.63	6,998.99	6,929.34	69.66	100.480		
13,700.00	6,048.00	5,630.00	5,609.55	128.45	20.47	60.91	-265.91	2,629.63	7,098.06	7,028.36	69.70	101.838		
13,800.00	6,048.00	5,630.00	5,609.55	130.16	20.47	60.91	-265.91	2,629.63	7,197.15	7,127.41	69.74	103.195		
13,900.00	6,048.00	5,630.00	5,609.55	131.88	20.47	60.91	-265.91	2,629.63	7,296.27	7,226.48	69.79	104.551		
14,000.00	6,048.00	5,630.00	5,609.55	133.60	20.47	60.91	-265.91	2,629.63	7,395.41	7,325.58	69.83	105.906		
14,100.00	6,048.00	5,630.00	5,609.55	135.32	20.47	60.91	-265.91	2,629.63	7,494.57	7,424.70	69.87	107.260		
14,200.00	6,048.00	5,630.00	5,609.55	137.05	20.47	60.91	-265.91	2,629.63	7,593.75	7,523.84	69.92	108.612		
14,300.00	6,048.00	5,630.00	5,609.55	138.77	20.47	60.91	-265.91	2,629.63	7,692.96	7,623.00	69.96	109.963		
14,400.00	6,048.00	5,630.00	5,609.55	140.50	20.47	60.91	-265.91	2,629.63	7,792.19	7,722.18	70.00	111.313		
14,500.00	6,048.00	5,630.00	5,609.55	142.22	20.47	60.91	-265.91	2,629.63	7,891.43	7,821.39	70.05	112.661		
14,600.00	6,048.00	5,630.00	5,609.55	143.95	20.47	60.91	-265.91	2,629.63	7,990.70	7,920.61	70.09	114.008		
14,700.00	6,048.00	5,630.00	5,609.55	145.68	20.47	60.91	-265.91	2,629.63	8,089.98	8,019.85	70.13	115.353		
14,800.00	6,048.00	5,630.00	5,609.55	147.41	20.47	60.91	-265.91	2,629.63	8,189.28	8,119.10	70.18	116.697		
14,900.00	6,048.00	5,630.00	5,609.55	149.14	20.47	60.91	-265.91	2,629.63	8,288.60	8,218.38	70.22	118.039		
15,000.00	6,048.00	5,630.00	5,609.55	150.87	20.47	60.91	-265.91	2,629.63	8,387.93	8,317.67	70.26	119.380		
15,100.00	6,048.00	5,630.00	5,609.55	152.60	20.47	60.91	-265.91	2,629.63	8,487.28	8,416.97	70.31	120.719		
15,200.00	6,048.00	5,630.00	5,609.55	154.33	20.47	60.91	-265.91	2,629.63	8,586.64	8,516.29	70.35	122.057		
15,300.00	6,048.00	5,630.00	5,609.55	156.07	20.47	60.91	-265.91	2,629.63	8,686.02	8,615.63	70.39	123.392		
15,400.00	6,048.00	5,630.00	5,609.55	157.80	20.47	60.91	-265.91	2,629.63	8,785.41	8,714.98	70.44	124.727		
15,500.00	6,048.00	5,615.71	5,595.28	159.54	20.42	60.16	-265.04	2,629.38	8,884.70	8,814.25	70.45	126.112		
15,600.00	6,048.00	5,615.20	5,594.78	161.27	20.42	60.14	-265.02	2,629.38	8,984.11	8,913.62	70.49	127.446		
15,700.00	6,048.00	5,614.71	5,594.29	163.01	20.42	60.11	-264.99	2,629.37	9,083.53	9,013.00	70.54	128.777		
15,800.00	6,048.00	5,614.22	5,593.80	164.75	20.42	60.09	-264.96	2,629.37	9,182.97	9,112.39	70.58	130.106		
15,900.00	6,048.00	5,613.75	5,593.33	166.49	20.42	60.06	-264.94	2,629.36	9,282.42	9,211.79	70.62	131.434		
16,000.00	6,048.00	5,613.28	5,592.86	168.23	20.42	60.04	-264.92	2,629.36	9,381.88	9,311.21	70.67	132.760		
16,100.00	6,048.00	5,599.00	5,578.60	169.97	20.37	59.31	-264.29	2,629.29	9,481.46	9,410.77	70.68	134.138		
16,200.00	6,048.00	5,599.00	5,578.60	171.71	20.37	59.31	-264.29	2,629.29	9,580.93	9,510.20	70.73	135.458		
16,300.00	6,048.00	5,599.00	5,578.60	173.45	20.37	59.31	-264.29	2,629.29	9,680.42	9,609.64	70.78	136.777		
16,400.00	6,048.00	5,599.00	5,578.60	175.19	20.37	59.31	-264.29	2,629.29	9,779.91	9,709.09	70.82	138.094		
16,500.00	6,048.00	5,599.00	5,578.60	176.93	20.37	59.31	-264.29	2,629.29	9,879.42	9,808.55	70.87	139.409		
16,600.00	6,048.00	5,599.00	5,578.60	178.67	20.37	59.31	-264.29	2,629.29	9,978.93	9,908.02	70.91	140.722		

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	2,728.01	2,524.97	0.00	20.24	97.82	-633.06	4,611.50	5,269.96					
100.00	100.00	2,815.96	2,602.32	0.27	21.12	97.92	-635.54	4,569.72	5,223.08	5,209.76	13.32	392.113		
200.00	200.00	2,903.90	2,679.67	0.63	22.01	98.02	-638.02	4,527.93	5,176.21	5,162.32	13.89	372.688		
300.00	300.00	2,991.85	2,757.02	0.99	22.90	98.13	-640.50	4,486.15	5,129.35	5,114.83	14.53	353.126		
400.00	400.00	3,079.80	2,834.36	1.34	23.79	98.23	-642.97	4,444.36	5,082.51	5,067.30	15.21	334.187		
500.00	500.00	3,167.74	2,911.71	1.70	24.68	98.34	-645.45	4,402.58	5,035.68	5,019.76	15.92	316.274		
600.00	600.00	3,255.69	2,989.06	2.06	25.56	98.45	-647.93	4,360.79	4,988.87	4,972.21	16.66	299.533		
700.00	700.00	3,343.64	3,066.41	2.42	26.45	98.56	-650.40	4,319.01	4,942.07	4,924.67	17.40	283.977		
800.00	800.00	3,431.59	3,143.75	2.78	27.34	98.68	-652.88	4,277.22	4,895.29	4,877.13	18.16	269.554		
900.00	900.00	3,519.53	3,221.10	3.14	28.23	98.80	-655.36	4,235.44	4,848.52	4,829.60	18.93	256.182		
1,000.00	999.98	3,606.74	3,297.79	3.48	29.12	-16.77	-657.82	4,194.01	4,800.30	4,780.61	19.69	243.778		
1,100.00	1,099.84	3,692.37	3,373.11	3.82	29.98	-17.01	-660.23	4,153.32	4,749.19	4,728.75	20.45	232.255		
1,200.00	1,199.45	3,776.35	3,446.96	4.17	30.84	-17.30	-662.59	4,113.42	4,695.26	4,674.06	21.19	221.537		
1,300.00	1,298.70	3,858.55	3,519.25	4.53	31.67	-17.64	-664.91	4,074.37	4,638.55	4,616.62	21.93	211.541		
1,400.00	1,397.47	3,938.88	3,589.91	4.91	32.48	-18.03	-667.17	4,036.20	4,579.14	4,556.49	22.65	202.190		
1,500.00	1,495.62	4,017.25	3,658.83	5.31	33.28	-18.48	-669.38	3,998.97	4,517.09	4,493.74	23.35	193.416		
1,600.00	1,593.06	4,093.55	3,725.93	5.74	34.05	-19.00	-671.53	3,962.72	4,452.49	4,428.44	24.05	185.161		
1,700.00	1,689.64	4,167.70	3,791.14	6.21	34.80	-19.58	-673.62	3,927.49	4,385.40	4,360.68	24.72	177.372		
1,800.00	1,785.27	4,239.60	3,854.38	6.71	35.53	-20.25	-675.64	3,893.33	4,315.91	4,290.52	25.39	170.003		
1,900.00	1,879.82	4,309.17	3,915.56	7.27	36.24	-21.01	-677.60	3,860.27	4,244.10	4,218.07	26.04	163.014		
2,000.00	1,973.17	4,376.32	3,974.62	7.88	36.92	-21.88	-679.49	3,828.37	4,170.07	4,143.40	26.67	156.370		
2,100.00	2,065.27	4,441.06	4,031.56	8.54	37.58	-22.61	-681.32	3,797.61	4,093.98	4,066.69	27.29	150.021		
2,200.00	2,157.01	4,505.14	4,087.91	9.24	38.23	-22.71	-683.12	3,767.17	4,017.34	3,989.44	27.90	144.013		
2,300.00	2,248.74	4,569.21	4,144.26	9.96	38.88	-22.81	-684.93	3,736.72	3,940.70	3,912.20	28.51	138.228		
2,400.00	2,340.48	4,633.28	4,200.61	10.70	39.53	-22.92	-686.73	3,706.28	3,864.08	3,834.95	29.13	132.660		
2,500.00	2,432.22	4,697.36	4,256.97	11.45	40.18	-23.03	-688.53	3,675.84	3,787.45	3,757.70	29.75	127.300		
2,600.00	2,523.96	4,761.43	4,313.32	12.21	40.83	-23.15	-690.34	3,645.40	3,710.84	3,680.46	30.38	122.142		
2,700.00	2,615.70	4,825.51	4,369.67	12.99	41.48	-23.27	-692.14	3,614.95	3,634.23	3,603.21	31.01	117.177		
2,800.00	2,707.44	4,889.58	4,426.02	13.77	42.13	-23.40	-693.95	3,584.51	3,557.62	3,525.97	31.65	112.396		
2,900.00	2,799.17	4,953.66	4,482.37	14.55	42.78	-23.53	-695.75	3,554.07	3,481.03	3,448.74	32.29	107.793		
3,000.00	2,890.91	5,017.73	4,538.73	15.35	43.44	-23.67	-697.56	3,523.62	3,404.44	3,371.50	32.94	103.359		
3,100.00	2,982.65	5,081.81	4,595.08	16.14	44.09	-23.82	-699.36	3,493.18	3,327.86	3,294.28	33.59	99.086		
3,200.00	3,074.39	5,145.88	4,651.43	16.95	44.74	-23.97	-701.17	3,462.74	3,251.30	3,217.06	34.24	94.967		
3,300.00	3,166.13	5,209.96	4,707.78	17.75	45.39	-24.13	-702.97	3,432.30	3,174.74	3,139.85	34.89	90.995		
3,400.00	3,257.87	5,274.03	4,764.13	18.56	46.04	-24.29	-704.78	3,401.85	3,098.19	3,062.64	35.54	87.163		
3,500.00	3,349.61	5,338.11	4,820.49	19.37	46.69	-24.47	-706.58	3,371.41	3,021.65	2,985.45	36.20	83.464		
3,600.00	3,441.34	5,402.18	4,876.84	20.18	47.34	-24.65	-708.39	3,340.97	2,945.13	2,908.26	36.86	79.893		
3,700.00	3,533.08	5,466.26	4,933.19	21.00	47.99	-24.85	-710.19	3,310.53	2,868.62	2,831.09	37.53	76.443		
3,800.00	3,624.82	5,530.33	4,989.54	21.81	48.64	-25.05	-712.00	3,280.08	2,792.12	2,753.93	38.19	73.109		
3,900.00	3,716.56	5,594.40	5,045.89	22.63	49.30	-25.27	-713.80	3,249.64	2,715.64	2,676.78	38.86	69.885		
4,000.00	3,808.30	5,658.48	5,102.25	23.45	49.95	-25.50	-715.61	3,219.20	2,639.18	2,599.65	39.53	66.767		
4,100.00	3,900.04	5,722.55	5,158.60	24.27	50.60	-25.74	-717.41	3,188.75	2,562.73	2,522.53	40.20	63.749		
4,200.00	3,991.78	5,786.63	5,214.95	25.09	51.25	-25.99	-719.22	3,158.31	2,486.31	2,445.43	40.87	60.827		
4,300.00	4,083.51	5,850.70	5,271.30	25.92	51.90	-26.27	-721.02	3,127.87	2,409.90	2,368.35	41.55	57.997		
4,400.00	4,175.25	5,914.78	5,327.65	26.74	52.55	-26.56	-722.83	3,097.43	2,333.53	2,291.30	42.23	55.255		
4,500.00	4,266.99	5,978.85	5,384.01	27.57	53.20	-26.86	-724.63	3,066.98	2,257.18	2,214.26	42.92	52.596		
4,600.00	4,358.73	6,042.93	5,440.36	28.39	53.86	-27.20	-726.44	3,036.54	2,180.86	2,137.25	43.60	50.017		
4,700.00	4,450.47	6,107.00	5,496.71	29.22	54.51	-27.55	-728.24	3,006.10	2,104.57	2,060.27	44.29	47.515		
4,800.00	4,542.21	6,171.08	5,553.06	30.05	55.16	-27.93	-730.04	2,975.66	2,028.32	1,983.33	44.99	45.086		
4,900.00	4,633.95	6,235.21	5,609.41	30.88	55.81	-28.35	-731.84	2,945.22	1,951.87	1,906.24	45.64	42.769		
5,000.00	4,725.68	6,300.00	5,665.76	31.70	56.46	-28.80	-733.64	2,914.78	1,879.98	1,828.72	46.27	40.524		
5,100.00	4,817.42	6,366.47	5,722.11	32.53	57.11	-29.27	-735.44	2,884.34	1,808.69	1,751.06	46.87	38.377		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,200.00	4,909.16	6,454.47	5,795.06	33.36	57.86	-33.14	-674.19	2,845.19	1,721.47	1,673.66	47.81	36.005		
5,300.00	5,000.90	6,503.97	5,833.50	34.19	58.26	-34.88	-650.88	2,824.52	1,645.79	1,596.97	48.82	33.709		
5,400.00	5,092.64	6,546.12	5,864.74	35.02	58.58	-36.55	-628.12	2,807.74	1,571.48	1,521.46	50.02	31.414		
5,500.00	5,184.38	6,582.06	5,890.17	35.85	58.83	-38.12	-606.70	2,794.10	1,499.05	1,447.63	51.42	29.152		
5,600.00	5,276.11	6,612.86	5,910.98	36.69	59.04	-39.54	-586.93	2,782.94	1,429.02	1,376.02	53.01	26.960		
5,700.00	5,367.85	6,639.39	5,928.14	37.52	59.21	-40.84	-568.91	2,773.75	1,361.97	1,307.20	54.77	24.869		
5,800.00	5,459.76	6,663.03	5,942.80	38.34	59.36	-30.76	-552.10	2,765.90	1,298.22	1,241.54	56.68	22.904		
5,900.00	5,552.68	6,690.67	5,959.14	39.06	59.52	0.67	-531.61	2,757.16	1,235.54	1,177.23	58.31	21.190		
6,000.00	5,644.46	6,723.43	5,977.37	39.64	59.69	28.36	-506.19	2,747.42	1,174.40	1,114.88	59.52	19.731		
6,100.00	5,732.30	6,760.78	5,996.55	40.06	59.88	48.35	-475.83	2,737.19	1,116.19	1,055.97	60.22	18.535		
6,200.00	5,813.53	6,800.00	6,014.78	40.35	60.07	62.28	-442.49	2,727.49	1,062.34	1,002.09	60.25	17.633		
6,300.00	5,885.68	6,850.00	6,035.04	40.51	60.27	71.91	-398.08	2,716.73	1,014.26	954.27	59.99	16.908		
6,400.00	5,946.56	6,900.00	6,051.81	40.57	60.45	78.81	-351.84	2,707.86	973.32	914.19	59.13	16.459		
6,500.00	5,994.33	6,950.00	6,064.99	40.54	60.60	83.66	-304.12	2,700.95	940.76	882.90	57.87	16.257		
6,600.00	6,027.53	7,000.00	6,074.45	40.44	60.72	86.79	-255.29	2,696.04	917.68	861.20	56.48	16.248		
6,700.00	6,045.15	7,050.00	6,080.14	40.29	60.82	88.42	-205.71	2,693.17	904.92	849.61	55.31	16.361		
6,800.00	6,048.00	7,125.22	6,082.00	40.12	60.93	88.73	-130.55	2,692.48	902.12	846.91	55.21	16.340		
6,900.00	6,048.00	7,225.22	6,082.00	39.97	61.09	88.73	-30.55	2,692.90	901.77	845.82	55.95	16.117		
7,000.00	6,048.00	7,325.22	6,082.00	39.85	61.29	88.73	69.45	2,693.32	901.42	844.51	56.90	15.841		
7,100.00	6,048.00	7,425.22	6,082.00	39.76	61.51	88.73	169.45	2,693.73	901.06	843.01	58.06	15.520		
7,200.00	6,048.00	7,525.22	6,082.00	39.72	61.78	88.73	269.44	2,694.15	900.71	841.31	59.40	15.164		
7,300.00	6,048.00	7,625.22	6,082.00	39.71	62.08	88.73	369.44	2,694.57	900.36	839.44	60.92	14.780		
7,400.00	6,048.00	7,725.22	6,082.00	39.75	62.42	88.73	469.44	2,694.98	900.00	837.40	62.60	14.376		
7,500.00	6,048.00	7,825.22	6,082.00	39.85	62.79	88.73	569.44	2,695.40	899.65	835.21	64.44	13.961		
7,600.00	6,048.00	7,925.21	6,082.00	40.01	63.21	88.73	669.44	2,695.82	899.30	832.88	66.42	13.541		
7,700.00	6,048.00	8,025.21	6,082.00	40.24	63.66	88.73	769.44	2,696.24	898.94	830.42	68.52	13.120		
7,800.00	6,048.00	8,125.21	6,082.00	40.57	64.15	88.72	869.43	2,696.65	898.59	827.85	70.74	12.703		
7,900.00	6,048.00	8,225.21	6,082.00	40.99	64.69	88.72	969.43	2,697.07	898.24	825.17	73.06	12.294		
8,000.00	6,048.00	8,325.21	6,082.00	41.53	65.26	88.72	1,069.43	2,697.49	897.88	822.40	75.48	11.895		
8,100.00	6,048.00	8,425.21	6,082.00	42.19	65.87	88.72	1,169.43	2,697.90	897.53	819.54	77.99	11.508		
8,200.00	6,048.00	8,525.21	6,082.00	42.97	66.53	88.72	1,269.43	2,698.32	897.18	816.60	80.58	11.134		
8,300.00	6,048.00	8,625.21	6,082.00	43.85	67.23	88.72	1,369.43	2,698.74	896.82	813.59	83.24	10.774		
8,400.00	6,048.00	8,725.21	6,082.00	44.83	67.96	88.72	1,469.43	2,699.16	896.47	810.51	85.96	10.429		
8,500.00	6,048.00	8,825.21	6,082.00	45.90	68.74	88.72	1,569.42	2,699.57	896.12	807.38	88.74	10.098		
8,600.00	6,048.00	8,925.21	6,082.00	47.05	69.56	88.72	1,669.42	2,699.99	895.77	804.19	91.57	9.782		
8,700.00	6,048.00	9,025.21	6,082.00	48.25	70.42	88.72	1,769.42	2,700.41	895.41	800.96	94.46	9.480		
8,800.00	6,048.00	9,125.21	6,082.00	49.51	71.31	88.72	1,869.42	2,700.82	895.06	797.68	97.38	9.191		
8,900.00	6,048.00	9,225.21	6,082.00	50.81	72.25	88.72	1,969.42	2,701.24	894.71	794.36	100.35	8.916		
9,000.00	6,048.00	9,325.21	6,082.00	52.15	73.22	88.72	2,069.42	2,701.66	894.35	791.00	103.35	8.653		
9,100.00	6,048.00	9,425.21	6,082.00	53.53	74.22	88.72	2,169.42	2,702.08	894.00	787.61	106.39	8.403		
9,200.00	6,048.00	9,525.20	6,082.00	54.94	75.26	88.72	2,269.41	2,702.49	893.65	784.19	109.46	8.164		
9,300.00	6,048.00	9,625.20	6,082.00	56.37	76.33	88.72	2,369.41	2,702.91	893.29	780.74	112.55	7.937		
9,400.00	6,048.00	9,725.20	6,082.00	57.82	77.44	88.72	2,469.41	2,703.33	892.94	777.26	115.68	7.719		
9,500.00	6,048.00	9,825.20	6,082.00	59.30	78.57	88.72	2,569.41	2,703.74	892.59	773.77	118.82	7.512		
9,600.00	6,048.00	9,925.20	6,082.00	60.79	79.73	88.72	2,669.41	2,704.16	892.23	770.24	121.99	7.314		
9,700.00	6,048.00	10,025.20	6,082.00	62.30	80.92	88.72	2,769.41	2,704.58	891.88	766.70	125.18	7.125		
9,800.00	6,048.00	10,125.20	6,082.00	63.82	82.14	88.71	2,869.41	2,705.00	891.53	763.14	128.39	6.944		
9,900.00	6,048.00	10,225.20	6,082.00	65.36	83.38	88.71	2,969.40	2,705.41	891.18	759.57	131.61	6.771		
10,000.00	6,048.00	10,325.20	6,082.00	66.91	84.65	88.71	3,069.40	2,705.83	890.82	755.97	134.85	6.606		
10,100.00	6,048.00	10,425.20	6,082.00	68.48	85.93	88.71	3,169.40	2,706.25	890.47	752.36	138.11	6.448		
10,200.00	6,048.00	10,525.20	6,082.00	70.05	87.24	88.71	3,269.40	2,706.66	890.12	748.74	141.38	6.296		
10,300.00	6,048.00	10,625.20	6,082.00	71.63	88.57	88.71	3,369.40	2,707.08	889.76	745.11	144.66	6.151		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,400.00	6,048.00	10,725.20	6,082.00	73.23	89.92	88.71	3,469.40	2,707.50	889.41	741.46	147.95	6.011		
10,500.00	6,048.00	10,825.20	6,082.00	74.83	91.28	88.71	3,569.39	2,707.92	889.06	737.80	151.26	5.878		
10,600.00	6,048.00	10,925.20	6,082.00	76.43	92.66	88.71	3,669.39	2,708.33	888.70	734.13	154.58	5.749		
10,700.00	6,048.00	11,025.20	6,082.00	78.05	94.06	88.71	3,769.39	2,708.75	888.35	730.45	157.90	5.626		
10,800.00	6,048.00	11,125.19	6,082.00	79.67	95.48	88.71	3,869.39	2,709.17	888.00	726.76	161.24	5.507		
10,900.00	6,048.00	11,225.19	6,082.00	81.30	96.90	88.71	3,969.39	2,709.58	887.64	723.06	164.58	5.393		
11,000.00	6,048.00	11,325.19	6,082.00	82.94	98.35	88.71	4,069.39	2,710.00	887.29	719.36	167.94	5.284		
11,100.00	6,048.00	11,425.19	6,082.00	84.58	99.80	88.71	4,169.39	2,710.42	886.94	715.64	171.30	5.178		
11,200.00	6,048.00	11,525.19	6,082.00	86.22	101.27	88.71	4,269.38	2,710.84	886.59	711.92	174.66	5.076		
11,300.00	6,048.00	11,625.19	6,082.00	87.87	102.75	88.71	4,369.38	2,711.25	886.23	708.19	178.04	4.978		
11,400.00	6,048.00	11,725.19	6,082.00	89.53	104.24	88.71	4,469.38	2,711.67	885.88	704.46	181.42	4.883		
11,500.00	6,048.00	11,825.19	6,082.00	91.19	105.74	88.71	4,569.38	2,712.09	885.53	700.72	184.81	4.792		
11,600.00	6,048.00	11,925.19	6,082.00	92.85	107.24	88.71	4,669.38	2,712.50	885.17	696.97	188.20	4.703		
11,700.00	6,048.00	12,025.19	6,082.00	94.52	108.76	88.70	4,769.38	2,712.92	884.82	693.22	191.60	4.618		
11,800.00	6,048.00	12,125.19	6,082.00	96.19	110.29	88.70	4,869.38	2,713.34	884.47	689.46	195.00	4.536		
11,900.00	6,048.00	12,225.19	6,082.00	97.86	111.83	88.70	4,969.37	2,713.76	884.11	685.70	198.41	4.456		
11,989.27	6,048.00	12,311.45	6,082.00	99.36	113.16	88.70	5,055.64	2,714.13	883.82	682.49	201.33	4.390	CC	
12,000.00	6,048.00	12,319.66	6,082.00	99.54	113.29	88.70	5,063.84	2,714.21	883.83	682.24	201.59	4.384		
12,100.00	6,048.00	12,418.48	6,082.00	101.22	114.81	88.70	5,162.65	2,715.37	884.24	679.28	204.95	4.314		
12,200.00	6,048.00	12,518.48	6,082.00	102.91	116.36	88.70	5,262.65	2,716.54	884.64	676.27	208.37	4.245		
12,300.00	6,048.00	12,618.47	6,082.00	104.59	117.92	88.71	5,362.64	2,717.72	885.05	673.25	211.80	4.179		
12,400.00	6,048.00	12,718.47	6,082.00	106.28	119.49	88.71	5,462.63	2,718.90	885.46	670.23	215.23	4.114		
12,500.00	6,048.00	12,818.47	6,082.00	107.97	121.06	88.71	5,562.62	2,720.07	885.86	667.20	218.66	4.051		
12,600.00	6,048.00	12,918.47	6,082.00	109.67	122.63	88.71	5,662.62	2,721.25	886.27	664.17	222.09	3.991		
12,700.00	6,048.00	13,018.47	6,082.00	111.37	124.22	88.71	5,762.61	2,722.43	886.67	661.14	225.53	3.931		
12,800.00	6,048.00	13,118.47	6,082.00	113.07	125.81	88.71	5,862.60	2,723.60	887.08	658.11	228.97	3.874		
12,900.00	6,048.00	13,218.47	6,082.00	114.77	127.40	88.71	5,962.59	2,724.78	887.49	655.07	232.42	3.819		
13,000.00	6,048.00	13,318.47	6,082.00	116.47	129.00	88.71	6,062.58	2,725.96	887.89	652.03	235.86	3.764		
13,100.00	6,048.00	13,418.47	6,082.00	118.18	130.61	88.71	6,162.58	2,727.13	888.30	648.98	239.31	3.712		
13,200.00	6,048.00	13,518.47	6,082.00	119.88	132.22	88.71	6,262.57	2,728.31	888.70	645.94	242.77	3.661		
13,300.00	6,048.00	13,618.47	6,082.00	121.59	133.83	88.71	6,362.56	2,729.48	889.11	642.89	246.22	3.611		
13,400.00	6,048.00	13,718.47	6,082.00	123.30	135.45	88.71	6,462.55	2,730.66	889.52	639.84	249.68	3.563		
13,500.00	6,048.00	13,818.46	6,082.00	125.02	137.07	88.71	6,562.55	2,731.84	889.92	636.78	253.14	3.516		
13,600.00	6,048.00	13,918.46	6,082.00	126.73	138.70	88.71	6,662.54	2,733.01	890.33	633.72	256.60	3.470		
13,700.00	6,048.00	14,018.46	6,082.00	128.45	140.33	88.71	6,762.53	2,734.19	890.74	630.67	260.07	3.425		
13,800.00	6,048.00	14,118.46	6,082.00	130.16	141.97	88.71	6,862.52	2,735.37	891.14	627.61	263.54	3.381		
13,900.00	6,048.00	14,218.46	6,082.00	131.88	143.60	88.71	6,962.51	2,736.54	891.55	624.54	267.00	3.339		
14,000.00	6,048.00	14,318.46	6,082.00	133.60	145.25	88.72	7,062.51	2,737.72	891.95	621.48	270.48	3.298		
14,100.00	6,048.00	14,418.46	6,082.00	135.32	146.89	88.72	7,162.50	2,738.90	892.36	618.41	273.95	3.257		
14,200.00	6,048.00	14,518.46	6,082.00	137.05	148.54	88.72	7,262.49	2,740.07	892.77	615.34	277.42	3.218		
14,300.00	6,048.00	14,618.46	6,082.00	138.77	150.19	88.72	7,362.48	2,741.25	893.17	612.27	280.90	3.180		
14,400.00	6,048.00	14,718.46	6,082.00	140.50	151.85	88.72	7,462.48	2,742.43	893.58	609.20	284.38	3.142		
14,500.00	6,048.00	14,818.46	6,082.00	142.22	153.50	88.72	7,562.47	2,743.60	893.98	606.13	287.86	3.106		
14,600.00	6,048.00	14,918.46	6,082.00	143.95	155.16	88.72	7,662.46	2,744.78	894.39	603.05	291.34	3.070		
14,700.00	6,048.00	15,018.45	6,082.00	145.68	156.83	88.72	7,762.45	2,745.96	894.80	599.98	294.82	3.035		
14,800.00	6,048.00	15,118.45	6,082.00	147.41	158.49	88.72	7,862.44	2,747.13	895.20	596.90	298.30	3.001		
14,900.00	6,048.00	15,218.45	6,082.00	149.14	160.16	88.72	7,962.44	2,748.31	895.61	593.82	301.79	2.968		
15,000.00	6,048.00	15,318.45	6,082.00	150.87	161.83	88.72	8,062.43	2,749.49	896.02	590.74	305.27	2.935		
15,100.00	6,048.00	15,418.45	6,082.00	152.60	163.50	88.72	8,162.42	2,750.66	896.42	587.66	308.76	2.903		
15,200.00	6,048.00	15,518.45	6,082.00	154.33	165.18	88.72	8,262.41	2,751.84	896.83	584.58	312.25	2.872		
15,300.00	6,048.00	15,618.45	6,082.00	156.07	166.85	88.72	8,362.41	2,753.02	897.23	581.49	315.74	2.842		
15,400.00	6,048.00	15,718.45	6,082.00	157.80	168.53	88.72	8,462.40	2,754.19	897.64	578.41	319.23	2.812		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
15,500.00	6,048.00	15,818.45	6,082.00	159.54	170.21	88.72	8,562.39	2,755.37	898.05	575.32	322.72	2.783		
15,600.00	6,048.00	15,918.45	6,082.00	161.27	171.89	88.72	8,662.38	2,756.55	898.45	572.23	326.22	2.754		
15,700.00	6,048.00	16,018.45	6,082.00	163.01	173.58	88.73	8,762.38	2,757.72	898.86	569.15	329.71	2.726		
15,800.00	6,048.00	16,118.45	6,082.00	164.75	175.27	88.73	8,862.37	2,758.90	899.26	566.06	333.21	2.699		
15,900.00	6,048.00	16,218.44	6,082.00	166.49	176.95	88.73	8,962.36	2,760.08	899.67	562.97	336.70	2.672		
16,000.00	6,048.00	16,318.44	6,082.00	168.23	178.64	88.73	9,062.35	2,761.25	900.08	559.88	340.20	2.646		
16,100.00	6,048.00	16,418.44	6,082.00	169.97	180.34	88.73	9,162.34	2,762.43	900.48	556.78	343.70	2.620		
16,200.00	6,048.00	16,518.44	6,082.00	171.71	182.03	88.73	9,262.34	2,763.60	900.89	553.69	347.20	2.595		
16,300.00	6,048.00	16,618.44	6,082.00	173.45	183.72	88.73	9,362.33	2,764.78	901.30	550.60	350.70	2.570		
16,400.00	6,048.00	16,718.44	6,082.00	175.19	185.42	88.73	9,462.32	2,765.96	901.70	547.50	354.20	2.546		
16,500.00	6,048.00	16,818.44	6,082.00	176.93	187.12	88.73	9,562.31	2,767.13	902.11	544.40	357.70	2.522		
16,600.00	6,048.00	16,918.44	6,082.00	178.67	188.82	88.73	9,662.31	2,768.31	902.51	541.31	361.21	2.499		
16,700.00	6,048.00	17,018.44	6,082.00	180.42	190.52	88.73	9,762.30	2,769.49	902.92	538.21	364.71	2.476		
16,800.00	6,048.00	17,118.44	6,082.00	182.16	192.22	88.73	9,862.29	2,770.66	903.33	535.11	368.21	2.453		
16,900.00	6,048.00	17,218.44	6,082.00	183.91	193.92	88.73	9,962.28	2,771.84	903.73	532.01	371.72	2.431		
17,000.00	6,048.00	17,318.44	6,082.00	185.65	195.63	88.73	10,062.27	2,773.02	904.14	528.91	375.22	2.410		
17,100.00	6,048.00	17,418.44	6,082.00	187.40	197.33	88.73	10,162.27	2,774.19	904.54	525.81	378.73	2.388		
17,138.90	6,048.00	17,457.34	6,082.00	188.08	198.00	88.73	10,201.17	2,774.65	904.70	524.61	380.09	2.380	ES, SF	

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft		
Survey Program: 0-INC													SEC 4-T5N-R61W - ABND VERT PRONGHORN 14-4 - OWB - Design #1		Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor				
100.00	100.00	49.00	49.00	0.27	1.15	-83.86	357.26	-3,318.76	3,337.93	3,336.52	1.42	2,355.607				
200.00	200.00	149.00	149.00	0.63	3.37	-83.86	357.26	-3,318.76	3,337.93	3,333.94	4.00	835.093				
300.00	300.00	249.00	249.00	0.99	5.44	-83.86	357.26	-3,318.76	3,337.93	3,331.51	6.42	519.557				
400.00	400.00	349.00	349.00	1.34	7.47	-83.86	357.26	-3,318.76	3,337.93	3,329.12	8.82	378.546				
500.00	500.00	449.00	449.00	1.70	9.50	-83.86	357.26	-3,318.76	3,337.93	3,326.73	11.20	298.020				
600.00	600.00	549.00	549.00	2.06	11.52	-83.86	357.26	-3,318.76	3,337.93	3,324.36	13.58	245.830				
700.00	700.00	649.00	649.00	2.42	13.53	-83.86	357.26	-3,318.76	3,337.93	3,321.98	15.95	209.229				
800.00	800.00	749.00	749.00	2.78	15.55	-83.86	357.26	-3,318.76	3,337.93	3,319.61	18.33	182.129				
900.00	900.00	849.00	849.00	3.14	17.56	-83.86	357.26	-3,318.76	3,337.93	3,317.23	20.70	161.253 CC				
1,000.00	999.98	948.98	948.98	3.48	19.58	160.78	357.26	-3,318.76	3,339.58	3,316.52	23.06	144.826 ES				
1,100.00	1,099.84	1,048.84	1,048.84	3.82	21.59	160.78	357.26	-3,318.76	3,344.53	3,319.12	25.41	131.634				
1,200.00	1,199.45	1,148.45	1,148.45	4.17	23.59	160.77	357.26	-3,318.76	3,352.76	3,325.00	27.76	120.795				
1,300.00	1,298.70	1,247.70	1,247.70	4.53	25.59	160.77	357.26	-3,318.76	3,364.27	3,334.17	30.10	111.768				
1,400.00	1,397.47	1,346.47	1,346.47	4.91	27.58	160.75	357.26	-3,318.76	3,379.06	3,346.62	32.44	104.164				
1,500.00	1,495.62	1,444.62	1,444.62	5.31	29.55	160.74	357.26	-3,318.76	3,397.11	3,362.34	34.77	97.698				
1,600.00	1,593.06	1,542.06	1,542.06	5.74	31.51	160.72	357.26	-3,318.76	3,418.40	3,381.31	37.09	92.155				
1,700.00	1,689.64	1,638.64	1,638.64	6.21	33.45	160.70	357.26	-3,318.76	3,442.92	3,403.52	39.41	87.371				
1,800.00	1,785.27	1,734.27	1,734.27	6.71	35.38	160.66	357.26	-3,318.76	3,470.64	3,428.94	41.71	83.219				
1,900.00	1,879.82	1,828.82	1,828.82	7.27	37.28	160.62	357.26	-3,318.76	3,501.54	3,457.55	43.99	79.599				
2,000.00	1,973.17	1,922.17	1,922.17	7.88	39.16	160.58	357.26	-3,318.76	3,535.58	3,489.32	46.26	76.431				
2,100.00	2,065.27	2,014.27	2,014.27	8.54	41.01	160.59	357.26	-3,318.76	3,572.62	3,524.11	48.51	73.644				
2,200.00	2,157.01	2,106.01	2,106.01	9.24	42.86	160.80	357.26	-3,318.76	3,610.52	3,559.76	50.76	71.134				
2,300.00	2,248.74	2,197.74	2,197.74	9.96	44.70	161.00	357.26	-3,318.76	3,648.45	3,595.44	53.01	68.829				
2,400.00	2,340.48	2,289.48	2,289.48	10.70	46.55	161.20	357.26	-3,318.76	3,686.42	3,631.16	55.26	66.705				
2,500.00	2,432.22	2,381.22	2,381.22	11.45	48.39	161.40	357.26	-3,318.76	3,724.43	3,666.91	57.53	64.743				
2,600.00	2,523.96	2,472.96	2,472.96	12.21	50.24	161.59	357.26	-3,318.76	3,762.48	3,702.69	59.79	62.927				
2,700.00	2,615.70	2,564.70	2,564.70	12.99	52.08	161.78	357.26	-3,318.76	3,800.56	3,738.50	62.06	61.240				
2,800.00	2,707.44	2,656.44	2,656.44	13.77	53.93	161.96	357.26	-3,318.76	3,838.68	3,774.35	64.33	59.671				
2,900.00	2,799.17	2,748.17	2,748.17	14.55	55.77	162.14	357.26	-3,318.76	3,876.83	3,810.23	66.60	58.207				
3,000.00	2,890.91	2,839.91	2,839.91	15.35	57.62	162.32	357.26	-3,318.76	3,915.02	3,846.14	68.88	56.839				
3,100.00	2,982.65	2,931.65	2,931.65	16.14	59.46	162.50	357.26	-3,318.76	3,953.23	3,882.08	71.15	55.558				
3,200.00	3,074.39	3,023.39	3,023.39	16.95	61.31	162.67	357.26	-3,318.76	3,991.48	3,918.05	73.43	54.356				
3,300.00	3,166.13	3,115.13	3,115.13	17.75	63.15	162.83	357.26	-3,318.76	4,029.76	3,954.05	75.71	53.226				
3,400.00	3,257.87	3,206.87	3,206.87	18.56	65.00	163.00	357.26	-3,318.76	4,068.06	3,990.08	77.99	52.162				
3,500.00	3,349.61	3,298.61	3,298.61	19.37	66.84	163.16	357.26	-3,318.76	4,106.40	4,026.13	80.27	51.158				
3,600.00	3,441.34	3,390.34	3,390.34	20.18	68.69	163.32	357.26	-3,318.76	4,144.76	4,062.21	82.55	50.210				
3,700.00	3,533.08	3,482.08	3,482.08	21.00	70.53	163.47	357.26	-3,318.76	4,183.15	4,098.32	84.83	49.313				
3,800.00	3,624.82	3,573.82	3,573.82	21.81	72.38	163.63	357.26	-3,318.76	4,221.57	4,134.46	87.11	48.463				
3,900.00	3,716.56	3,665.56	3,665.56	22.63	74.22	163.78	357.26	-3,318.76	4,260.01	4,170.62	89.39	47.656				
4,000.00	3,808.30	3,757.30	3,757.30	23.45	76.07	163.92	357.26	-3,318.76	4,298.47	4,206.80	91.67	46.890				
4,100.00	3,900.04	3,849.04	3,849.04	24.27	77.91	164.07	357.26	-3,318.76	4,336.96	4,243.01	93.95	46.162				
4,200.00	3,991.78	3,940.78	3,940.78	25.09	79.76	164.21	357.26	-3,318.76	4,375.48	4,279.25	96.23	45.468				
4,300.00	4,083.51	4,032.51	4,032.51	25.92	81.60	164.35	357.26	-3,318.76	4,414.01	4,315.50	98.51	44.806				
4,400.00	4,175.25	4,124.25	4,124.25	26.74	83.45	164.49	357.26	-3,318.76	4,452.57	4,351.78	100.79	44.175				
4,500.00	4,266.99	4,215.99	4,215.99	27.57	85.29	164.62	357.26	-3,318.76	4,491.15	4,388.08	103.07	43.572				
4,600.00	4,358.73	4,307.73	4,307.73	28.39	87.14	164.76	357.26	-3,318.76	4,529.75	4,424.40	105.35	42.995				
4,700.00	4,450.47	4,399.47	4,399.47	29.22	88.98	164.89	357.26	-3,318.76	4,568.38	4,460.74	107.64	42.443				
4,800.00	4,542.21	4,491.21	4,491.21	30.05	90.83	165.01	357.26	-3,318.76	4,607.02	4,497.10	109.92	41.914				
4,900.00	4,633.95	4,582.95	4,582.95	30.88	92.67	165.14	357.26	-3,318.76	4,645.68	4,533.48	112.20	41.407				
5,000.00	4,725.68	4,674.68	4,674.68	31.70	94.52	165.26	357.26	-3,318.76	4,684.36	4,569.88	114.48	40.920				
5,100.00	4,817.42	4,766.42	4,766.42	32.53	96.36	165.39	357.26	-3,318.76	4,723.06	4,606.30	116.75	40.453				
5,200.00	4,909.16	4,858.16	4,858.16	33.36	98.21	165.51	357.26	-3,318.76	4,761.78	4,642.74	119.03	40.003				

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft		
Survey Program: 0-INC													SEC 4-T5N-R61W - ABND VERT PRONGHORN 14-4 - OWB - Design #1		Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor				
5,300.00	5,000.90	4,949.90	4,949.90	34.19	100.05	165.63	357.26	-3,318.76	4,800.51	4,679.20	121.31	39.571				
5,400.00	5,092.64	5,041.64	5,041.64	35.02	101.90	165.74	357.26	-3,318.76	4,839.26	4,715.67	123.59	39.155				
5,500.00	5,184.38	5,133.38	5,133.38	35.85	103.74	165.86	357.26	-3,318.76	4,878.03	4,752.16	125.87	38.754				
5,600.00	5,276.11	5,225.11	5,225.11	36.69	105.59	165.97	357.26	-3,318.76	4,916.82	4,788.67	128.15	38.367				
5,700.00	5,367.85	5,316.85	5,316.85	37.52	107.43	166.08	357.26	-3,318.76	4,955.62	4,825.19	130.43	37.995				
5,800.00	5,459.76	5,408.76	5,408.76	38.34	109.28	176.07	357.26	-3,318.76	4,994.25	4,861.54	132.71	37.634				
5,900.00	5,552.68	5,501.68	5,501.68	39.06	111.15	-155.29	357.26	-3,318.76	5,030.33	4,895.39	134.94	37.279				
6,000.00	5,644.46	5,593.46	5,593.46	39.64	112.99	-130.82	357.26	-3,318.76	5,062.38	4,925.31	137.07	36.933				
6,100.00	5,732.30	5,681.30	5,681.30	40.06	114.76	-114.23	357.26	-3,318.76	5,089.63	4,950.58	139.06	36.601				
6,200.00	5,813.53	5,762.53	5,762.53	40.35	116.39	-103.74	357.26	-3,318.76	5,111.63	4,970.76	140.86	36.288				
6,300.00	5,885.68	5,834.68	5,834.68	40.51	117.84	-97.16	357.26	-3,318.76	5,128.13	4,985.67	142.46	35.996				
6,400.00	5,946.56	5,895.56	5,895.56	40.57	119.07	-93.10	357.26	-3,318.76	5,139.12	4,995.29	143.83	35.731				
6,500.00	5,994.33	5,943.33	5,943.33	40.54	120.03	-90.76	357.26	-3,318.76	5,144.72	4,999.77	144.95	35.494				
6,600.00	6,027.53	5,976.53	5,976.53	40.44	120.70	-89.69	357.26	-3,318.76	5,145.16	4,999.36	145.80	35.288				
6,700.00	6,045.15	5,994.15	5,994.15	40.29	121.05	-89.62	357.26	-3,318.76	5,140.73	4,994.33	146.40	35.115				
6,800.00	6,048.00	5,997.00	5,997.00	40.12	121.11	-90.00	357.26	-3,318.76	5,132.23	4,985.48	146.75	34.974				
6,900.00	6,048.00	5,997.00	5,997.00	39.97	121.11	-90.00	357.26	-3,318.76	5,124.53	4,977.42	147.11	34.834				
7,000.00	6,048.00	5,997.00	5,997.00	39.85	121.11	-90.00	357.26	-3,318.76	5,118.78	4,971.22	147.56	34.691				
7,100.00	6,048.00	5,997.00	5,997.00	39.76	121.11	-90.00	357.26	-3,318.76	5,114.97	4,966.91	148.07	34.545				
7,200.00	6,048.00	5,997.00	5,997.00	39.72	121.11	-90.00	357.26	-3,318.76	5,113.12	4,964.48	148.64	34.399				
7,244.95	6,048.00	5,997.00	5,997.00	39.70	121.11	-90.00	357.26	-3,318.76	5,112.93	4,963.99	148.94	34.330				
7,300.00	6,048.00	5,997.00	5,997.00	39.71	121.11	-90.00	357.26	-3,318.76	5,113.23	4,963.95	149.28	34.253				
7,400.00	6,048.00	5,997.00	5,997.00	39.75	121.11	-90.00	357.26	-3,318.76	5,115.29	4,965.32	149.97	34.110				
7,500.00	6,048.00	5,997.00	5,997.00	39.85	121.11	-90.00	357.26	-3,318.76	5,119.30	4,968.60	150.70	33.969				
7,600.00	6,048.00	5,997.00	5,997.00	40.01	121.11	-90.00	357.26	-3,318.76	5,125.26	4,973.78	151.48	33.834				
7,700.00	6,048.00	5,997.00	5,997.00	40.24	121.11	-90.00	357.26	-3,318.76	5,133.16	4,980.86	152.30	33.704				
7,800.00	6,048.00	5,997.00	5,997.00	40.57	121.11	-90.00	357.26	-3,318.76	5,143.00	4,989.84	153.15	33.580				
7,900.00	6,048.00	5,997.00	5,997.00	40.99	121.11	-90.00	357.26	-3,318.76	5,154.75	5,000.72	154.03	33.465				
8,000.00	6,048.00	5,997.00	5,997.00	41.53	121.11	-90.00	357.26	-3,318.76	5,168.42	5,013.48	154.94	33.358				
8,100.00	6,048.00	5,997.00	5,997.00	42.19	121.11	-90.00	357.26	-3,318.76	5,183.98	5,028.12	155.86	33.261				
8,200.00	6,048.00	5,997.00	5,997.00	42.97	121.11	-90.00	357.26	-3,318.76	5,201.41	5,044.62	156.79	33.174				
8,300.00	6,048.00	5,997.00	5,997.00	43.85	121.11	-90.00	357.26	-3,318.76	5,220.70	5,062.96	157.74	33.097				
8,400.00	6,048.00	5,997.00	5,997.00	44.83	121.11	-90.00	357.26	-3,318.76	5,241.83	5,083.14	158.69	33.031				
8,500.00	6,048.00	5,997.00	5,997.00	45.90	121.11	-90.00	357.26	-3,318.76	5,264.78	5,105.13	159.65	32.977				
8,600.00	6,048.00	5,997.00	5,997.00	47.05	121.11	-90.00	357.26	-3,318.76	5,289.51	5,128.90	160.61	32.934				
8,700.00	6,048.00	5,997.00	5,997.00	48.25	121.11	-90.00	357.26	-3,318.76	5,316.01	5,154.45	161.56	32.903				
8,800.00	6,048.00	5,997.00	5,997.00	49.51	121.11	-90.00	357.26	-3,318.76	5,344.26	5,181.74	162.52	32.884				
8,900.00	6,048.00	5,997.00	5,997.00	50.81	121.11	-90.00	357.26	-3,318.76	5,374.21	5,210.75	163.46	32.877 SF				
9,000.00	6,048.00	5,997.00	5,997.00	52.15	121.11	-90.00	357.26	-3,318.76	5,405.85	5,241.45	164.40	32.882				
9,100.00	6,048.00	5,997.00	5,997.00	53.53	121.11	-90.00	357.26	-3,318.76	5,439.14	5,273.81	165.33	32.898				
9,200.00	6,048.00	5,997.00	5,997.00	54.94	121.11	-90.00	357.26	-3,318.76	5,474.06	5,307.81	166.25	32.927				
9,300.00	6,048.00	5,997.00	5,997.00	56.37	121.11	-90.00	357.26	-3,318.76	5,510.57	5,343.42	167.15	32.967				
9,400.00	6,048.00	5,997.00	5,997.00	57.82	121.11	-90.00	357.26	-3,318.76	5,548.65	5,380.60	168.05	33.019				
9,500.00	6,048.00	5,997.00	5,997.00	59.30	121.11	-90.00	357.26	-3,318.76	5,588.25	5,419.33	168.92	33.082				
9,600.00	6,048.00	5,997.00	5,997.00	60.79	121.11	-90.00	357.26	-3,318.76	5,629.35	5,459.57	169.78	33.156				
9,700.00	6,048.00	5,997.00	5,997.00	62.30	121.11	-90.00	357.26	-3,318.76	5,671.92	5,501.29	170.63	33.242				
9,800.00	6,048.00	5,997.00	5,997.00	63.82	121.11	-90.00	357.26	-3,318.76	5,715.92	5,544.47	171.45	33.338				
9,900.00	6,048.00	5,997.00	5,997.00	65.36	121.11	-90.00	357.26	-3,318.76	5,761.32	5,589.06	172.26	33.445				
10,000.00	6,048.00	5,997.00	5,997.00	66.91	121.11	-90.00	357.26	-3,318.76	5,808.09	5,635.03	173.05	33.562				
10,100.00	6,048.00	5,997.00	5,997.00	68.48	121.11	-90.00	357.26	-3,318.76	5,856.19	5,682.36	173.83	33.689				
10,200.00	6,048.00	5,997.00	5,997.00	70.05	121.11	-90.00	357.26	-3,318.76	5,905.59	5,731.01	174.58	33.827				
10,300.00	6,048.00	5,997.00	5,997.00	71.63	121.11	-90.00	357.26	-3,318.76	5,956.26	5,780.94	175.32	33.973				

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
10,400.00	6,048.00	5,997.00	5,997.00	73.23	121.11	-90.00	357.26	-3,318.76	6,008.17	5,832.13	176.04	34.129			
10,500.00	6,048.00	5,997.00	5,997.00	74.83	121.11	-90.00	357.26	-3,318.76	6,061.29	5,884.54	176.74	34.295			
10,600.00	6,048.00	5,997.00	5,997.00	76.43	121.11	-90.00	357.26	-3,318.76	6,115.57	5,938.15	177.42	34.469			
10,700.00	6,048.00	5,997.00	5,997.00	78.05	121.11	-90.00	357.26	-3,318.76	6,171.01	5,992.92	178.09	34.652			
10,800.00	6,048.00	5,997.00	5,997.00	79.67	121.11	-90.00	357.26	-3,318.76	6,227.55	6,048.82	178.73	34.843			
10,900.00	6,048.00	5,997.00	5,997.00	81.30	121.11	-90.00	357.26	-3,318.76	6,285.18	6,105.81	179.36	35.042			
11,000.00	6,048.00	5,997.00	5,997.00	82.94	121.11	-90.00	357.26	-3,318.76	6,343.86	6,163.88	179.97	35.249			
11,100.00	6,048.00	5,997.00	5,997.00	84.58	121.11	-90.00	357.26	-3,318.76	6,403.56	6,222.99	180.57	35.464			
11,200.00	6,048.00	5,997.00	5,997.00	86.22	121.11	-90.00	357.26	-3,318.76	6,464.26	6,283.12	181.14	35.686			
11,300.00	6,048.00	5,997.00	5,997.00	87.87	121.11	-90.00	357.26	-3,318.76	6,525.93	6,344.22	181.70	35.915			
11,400.00	6,048.00	5,997.00	5,997.00	89.53	121.11	-90.00	357.26	-3,318.76	6,588.53	6,406.29	182.25	36.152			
11,500.00	6,048.00	5,997.00	5,997.00	91.19	121.11	-90.00	357.26	-3,318.76	6,652.06	6,469.28	182.78	36.395			
11,600.00	6,048.00	5,997.00	5,997.00	92.85	121.11	-90.00	357.26	-3,318.76	6,716.47	6,533.18	183.29	36.644			
11,700.00	6,048.00	5,997.00	5,997.00	94.52	121.11	-90.00	357.26	-3,318.76	6,781.74	6,597.95	183.78	36.900			
11,800.00	6,048.00	5,997.00	5,997.00	96.19	121.11	-90.00	357.26	-3,318.76	6,847.85	6,663.58	184.27	37.163			
11,900.00	6,048.00	5,997.00	5,997.00	97.86	121.11	-90.00	357.26	-3,318.76	6,914.77	6,730.04	184.74	37.431			
12,000.00	6,048.00	5,997.00	5,997.00	99.54	121.11	-90.00	357.26	-3,318.76	6,982.49	6,797.30	185.19	37.705			
12,100.00	6,048.00	5,997.00	5,997.00	101.22	121.11	-90.00	357.26	-3,318.76	7,050.97	6,865.34	185.63	37.984			
12,200.00	6,048.00	5,997.00	5,997.00	102.91	121.11	-90.00	357.26	-3,318.76	7,120.20	6,934.15	186.06	38.269			
12,300.00	6,048.00	5,997.00	5,997.00	104.59	121.11	-90.00	357.26	-3,318.76	7,190.16	7,003.69	186.47	38.559			
12,400.00	6,048.00	5,997.00	5,997.00	106.28	121.11	-90.00	357.26	-3,318.76	7,260.81	7,073.94	186.87	38.854			
12,500.00	6,048.00	5,997.00	5,997.00	107.97	121.11	-90.00	357.26	-3,318.76	7,332.15	7,144.89	187.26	39.154			
12,600.00	6,048.00	5,997.00	5,997.00	109.67	121.11	-90.00	357.26	-3,318.76	7,404.16	7,216.52	187.64	39.459			
12,700.00	6,048.00	5,997.00	5,997.00	111.37	121.11	-90.00	357.26	-3,318.76	7,476.81	7,288.80	188.01	39.768			
12,800.00	6,048.00	5,997.00	5,997.00	113.07	121.11	-90.00	357.26	-3,318.76	7,550.08	7,361.71	188.36	40.082			
12,900.00	6,048.00	5,997.00	5,997.00	114.77	121.11	-90.00	357.26	-3,318.76	7,623.96	7,435.25	188.71	40.400			
13,000.00	6,048.00	5,997.00	5,997.00	116.47	121.11	-90.00	357.26	-3,318.76	7,698.43	7,509.38	189.05	40.723			
13,100.00	6,048.00	5,997.00	5,997.00	118.18	121.11	-90.00	357.26	-3,318.76	7,773.47	7,584.10	189.37	41.049			
13,200.00	6,048.00	5,997.00	5,997.00	119.88	121.11	-90.00	357.26	-3,318.76	7,849.07	7,659.39	189.69	41.379			
13,300.00	6,048.00	5,997.00	5,997.00	121.59	121.11	-90.00	357.26	-3,318.76	7,925.21	7,735.22	189.99	41.713			
13,400.00	6,048.00	5,997.00	5,997.00	123.30	121.11	-90.00	357.26	-3,318.76	8,001.88	7,811.59	190.29	42.051			
13,500.00	6,048.00	5,997.00	5,997.00	125.02	121.11	-90.00	357.26	-3,318.76	8,079.06	7,888.48	190.58	42.392			
13,600.00	6,048.00	5,997.00	5,997.00	126.73	121.11	-90.00	357.26	-3,318.76	8,156.73	7,965.87	190.86	42.737			
13,700.00	6,048.00	5,997.00	5,997.00	128.45	121.11	-90.00	357.26	-3,318.76	8,234.88	8,043.75	191.13	43.085			
13,800.00	6,048.00	5,997.00	5,997.00	130.16	121.11	-90.00	357.26	-3,318.76	8,313.50	8,122.11	191.39	43.437			
13,900.00	6,048.00	5,997.00	5,997.00	131.88	121.11	-90.00	357.26	-3,318.76	8,392.58	8,200.93	191.65	43.791			
14,000.00	6,048.00	5,997.00	5,997.00	133.60	121.11	-90.00	357.26	-3,318.76	8,472.10	8,280.20	191.90	44.149			
14,100.00	6,048.00	5,997.00	5,997.00	135.32	121.11	-90.00	357.26	-3,318.76	8,552.05	8,359.91	192.14	44.509			
14,200.00	6,048.00	5,997.00	5,997.00	137.05	121.11	-90.00	357.26	-3,318.76	8,632.42	8,440.04	192.38	44.872			
14,300.00	6,048.00	5,997.00	5,997.00	138.77	121.11	-90.00	357.26	-3,318.76	8,713.19	8,520.58	192.61	45.238			
14,400.00	6,048.00	5,997.00	5,997.00	140.50	121.11	-90.00	357.26	-3,318.76	8,794.36	8,601.53	192.83	45.607			
14,500.00	6,048.00	5,997.00	5,997.00	142.22	121.11	-90.00	357.26	-3,318.76	8,875.91	8,682.86	193.05	45.978			
14,600.00	6,048.00	5,997.00	5,997.00	143.95	121.11	-90.00	357.26	-3,318.76	8,957.84	8,764.58	193.26	46.352			
14,700.00	6,048.00	5,997.00	5,997.00	145.68	121.11	-90.00	357.26	-3,318.76	9,040.13	8,846.67	193.46	46.728			
14,800.00	6,048.00	5,997.00	5,997.00	147.41	121.11	-90.00	357.26	-3,318.76	9,122.77	8,929.11	193.66	47.107			
14,900.00	6,048.00	5,997.00	5,997.00	149.14	121.11	-90.00	357.26	-3,318.76	9,205.76	9,011.91	193.86	47.487			
15,000.00	6,048.00	5,997.00	5,997.00	150.87	121.11	-90.00	357.26	-3,318.76	9,289.09	9,095.04	194.05	47.870			
15,100.00	6,048.00	5,997.00	5,997.00	152.60	121.11	-90.00	357.26	-3,318.76	9,372.74	9,178.51	194.23	48.256			
15,200.00	6,048.00	5,997.00	5,997.00	154.33	121.11	-90.00	357.26	-3,318.76	9,456.70	9,262.29	194.41	48.643			
15,300.00	6,048.00	5,997.00	5,997.00	156.07	121.11	-90.00	357.26	-3,318.76	9,540.98	9,346.40	194.59	49.032			
15,400.00	6,048.00	5,997.00	5,997.00	157.80	121.11	-90.00	357.26	-3,318.76	9,625.56	9,430.80	194.76	49.424			
15,500.00	6,048.00	5,997.00	5,997.00	159.54	121.11	-90.00	357.26	-3,318.76	9,710.43	9,515.51	194.92	49.817			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
15,600.00	6,048.00	5,997.00	5,997.00	161.27	121.11	-90.00	357.26	-3,318.76	9,795.59	9,600.50	195.09	50.212			
15,700.00	6,048.00	5,997.00	5,997.00	163.01	121.11	-90.00	357.26	-3,318.76	9,881.02	9,685.78	195.24	50.609			
15,800.00	6,048.00	5,997.00	5,997.00	164.75	121.11	-90.00	357.26	-3,318.76	9,966.73	9,771.33	195.40	51.007			
15,900.00	6,048.00	5,997.00	5,997.00	166.49	121.11	-90.00	357.26	-3,318.76	10,052.70	9,857.15	195.55	51.407			
16,000.00	6,048.00	5,997.00	5,997.00	168.23	121.11	-90.00	357.26	-3,318.76	10,138.92	9,943.23	195.70	51.809			

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
100.00	100.00	99.00	99.00	0.27	2.32	-8.65	4,353.56	-662.53	4,403.68	4,401.09	2.59	1,701.175			
200.00	200.00	199.00	199.00	0.63	4.42	-8.65	4,353.56	-662.53	4,403.68	4,398.64	5.04	872.951			
300.00	300.00	299.00	299.00	0.99	6.46	-8.65	4,353.56	-662.53	4,403.68	4,396.24	7.45	591.451			
400.00	400.00	399.00	399.00	1.34	8.49	-8.65	4,353.56	-662.53	4,403.68	4,393.85	9.83	447.921			
500.00	500.00	499.00	499.00	1.70	10.51	-8.65	4,353.56	-662.53	4,403.68	4,391.47	12.21	360.636			
600.00	600.00	599.00	599.00	2.06	12.53	-8.65	4,353.56	-662.53	4,403.68	4,389.09	14.59	301.889			
700.00	700.00	699.00	699.00	2.42	14.54	-8.65	4,353.56	-662.53	4,403.68	4,386.72	16.96	259.629			
800.00	800.00	799.00	799.00	2.78	16.56	-8.65	4,353.56	-662.53	4,403.68	4,384.35	19.33	227.762			
900.00	900.00	899.00	899.00	3.14	18.57	-8.65	4,353.56	-662.53	4,403.68	4,381.97	21.71	202.870			
1,000.00	999.98	998.98	998.98	3.48	20.58	-124.02	4,353.56	-662.53	4,404.66	4,380.59	24.07	183.021			
1,100.00	1,099.84	1,098.84	1,098.84	3.82	22.59	-124.02	4,353.56	-662.53	4,407.59	4,381.17	26.42	166.853			
1,200.00	1,199.45	1,198.45	1,198.45	4.17	24.60	-124.04	4,353.56	-662.53	4,412.48	4,383.71	28.77	153.381			
1,300.00	1,298.70	1,297.70	1,297.70	4.53	26.60	-124.05	4,353.56	-662.53	4,419.34	4,388.22	31.12	142.001			
1,400.00	1,397.47	1,396.47	1,396.47	4.91	28.58	-124.07	4,353.56	-662.53	4,428.18	4,394.70	33.48	132.271			
1,500.00	1,495.62	1,494.62	1,494.62	5.31	30.56	-124.09	4,353.56	-662.53	4,439.01	4,403.17	35.84	123.863			
1,600.00	1,593.06	1,592.06	1,592.06	5.74	32.52	-124.12	4,353.56	-662.53	4,451.84	4,413.64	38.20	116.533			
1,700.00	1,689.64	1,688.64	1,688.64	6.21	34.46	-124.14	4,353.56	-662.53	4,466.71	4,426.14	40.57	110.089			
1,800.00	1,785.27	1,784.27	1,784.27	6.71	36.38	-124.15	4,353.56	-662.53	4,483.62	4,440.67	42.95	104.385			
1,900.00	1,879.82	1,878.82	1,878.82	7.27	38.29	-124.16	4,353.56	-662.53	4,502.61	4,457.27	45.34	99.305			
2,000.00	1,973.17	1,972.17	1,972.17	7.88	40.16	-124.17	4,353.56	-662.53	4,523.68	4,475.94	47.74	94.757			
2,100.00	2,065.27	2,064.27	2,064.27	8.54	42.02	-124.27	4,353.56	-662.53	4,546.80	4,496.65	50.15	90.665			
2,200.00	2,157.01	2,156.01	2,156.01	9.24	43.86	-124.66	4,353.56	-662.53	4,570.64	4,518.07	52.57	86.941			
2,300.00	2,248.74	2,247.74	2,247.74	9.96	45.71	-125.04	4,353.56	-662.53	4,594.70	4,539.70	55.01	83.529			
2,400.00	2,340.48	2,339.48	2,339.48	10.70	47.55	-125.43	4,353.56	-662.53	4,618.98	4,561.53	57.45	80.397			
2,500.00	2,432.22	2,431.22	2,431.22	11.45	49.40	-125.80	4,353.56	-662.53	4,643.48	4,583.57	59.90	77.514			
2,600.00	2,523.96	2,522.96	2,522.96	12.21	51.24	-126.18	4,353.56	-662.53	4,668.18	4,605.82	62.36	74.855			
2,700.00	2,615.70	2,614.70	2,614.70	12.99	53.09	-126.55	4,353.56	-662.53	4,693.10	4,628.27	64.82	72.397			
2,800.00	2,707.44	2,706.44	2,706.44	13.77	54.93	-126.92	4,353.56	-662.53	4,718.21	4,650.93	67.29	70.120			
2,900.00	2,799.17	2,798.17	2,798.17	14.55	56.78	-127.28	4,353.56	-662.53	4,743.53	4,673.78	69.75	68.005			
3,000.00	2,890.91	2,889.91	2,889.91	15.35	58.62	-127.65	4,353.56	-662.53	4,769.05	4,696.83	72.22	66.036			
3,100.00	2,982.65	2,981.65	2,981.65	16.14	60.47	-128.00	4,353.56	-662.53	4,794.76	4,720.08	74.68	64.201			
3,200.00	3,074.39	3,073.39	3,073.39	16.95	62.31	-128.36	4,353.56	-662.53	4,820.66	4,743.51	77.15	62.486			
3,300.00	3,166.13	3,165.13	3,165.13	17.75	64.16	-128.71	4,353.56	-662.53	4,846.75	4,767.14	79.61	60.880			
3,400.00	3,257.87	3,256.87	3,256.87	18.56	66.00	-129.05	4,353.56	-662.53	4,873.03	4,790.95	82.07	59.374			
3,500.00	3,349.61	3,348.61	3,348.61	19.37	67.85	-129.40	4,353.56	-662.53	4,899.49	4,814.95	84.53	57.959			
3,600.00	3,441.34	3,440.34	3,440.34	20.18	69.69	-129.74	4,353.56	-662.53	4,926.12	4,839.13	86.99	56.628			
3,700.00	3,533.08	3,532.08	3,532.08	21.00	71.54	-130.08	4,353.56	-662.53	4,952.94	4,863.49	89.45	55.373			
3,800.00	3,624.82	3,623.82	3,623.82	21.81	73.38	-130.41	4,353.56	-662.53	4,979.93	4,888.03	91.90	54.189			
3,900.00	3,716.56	3,715.56	3,715.56	22.63	75.23	-130.74	4,353.56	-662.53	5,007.09	4,912.74	94.35	53.069			
4,000.00	3,808.30	3,807.30	3,807.30	23.45	77.07	-131.07	4,353.56	-662.53	5,034.41	4,937.61	96.80	52.009			
4,100.00	3,900.04	3,899.04	3,899.04	24.27	78.92	-131.39	4,353.56	-662.53	5,061.91	4,962.66	99.24	51.005			
4,200.00	3,991.78	3,990.78	3,990.78	25.09	80.76	-131.71	4,353.56	-662.53	5,089.56	4,987.87	101.69	50.052			
4,300.00	4,083.51	4,082.51	4,082.51	25.92	82.61	-132.03	4,353.56	-662.53	5,117.38	5,013.25	104.12	49.147			
4,400.00	4,175.25	4,174.25	4,174.25	26.74	84.45	-132.35	4,353.56	-662.53	5,145.35	5,038.79	106.56	48.285			
4,500.00	4,266.99	4,265.99	4,265.99	27.57	86.30	-132.66	4,353.56	-662.53	5,173.48	5,064.48	108.99	47.465			
4,600.00	4,358.73	4,357.73	4,357.73	28.39	88.14	-132.97	4,353.56	-662.53	5,201.76	5,090.33	111.42	46.684			
4,700.00	4,450.47	4,449.47	4,449.47	29.22	89.99	-133.27	4,353.56	-662.53	5,230.19	5,116.33	113.85	45.938			
4,800.00	4,542.21	4,541.21	4,541.21	30.05	91.83	-133.57	4,353.56	-662.53	5,258.76	5,142.49	116.28	45.226			
4,900.00	4,633.95	4,632.95	4,632.95	30.88	93.68	-133.87	4,353.56	-662.53	5,287.49	5,168.79	118.70	44.546			
5,000.00	4,725.68	4,724.68	4,724.68	31.70	95.52	-134.17	4,353.56	-662.53	5,316.35	5,195.24	121.12	43.895			
5,100.00	4,817.42	4,816.42	4,816.42	32.53	97.37	-134.46	4,353.56	-662.53	5,345.36	5,221.83	123.53	43.271			
5,200.00	4,909.16	4,908.16	4,908.16	33.36	99.21	-134.75	4,353.56	-662.53	5,374.50	5,248.56	125.94	42.674			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-INC													Offset Well Error:	0.00 usft
SEC 4-T5N-R61W - ABND VERT PRONGHORN 31-4 (GYRO) - OWB - Design #1														
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)	Minimum Separation (usft)	Separation Factor		
5,300.00	5,000.90	4,999.90	4,999.90	34.19	101.06	-135.04	4,353.56	-662.53	5,403.78	5,275.43	128.35	42.101		
5,400.00	5,092.64	5,091.64	5,091.64	35.02	102.90	-135.33	4,353.56	-662.53	5,433.20	5,302.44	130.76	41.551		
5,500.00	5,184.38	5,183.38	5,183.38	35.85	104.75	-135.61	4,353.56	-662.53	5,462.74	5,329.58	133.16	41.022		
5,600.00	5,276.11	5,275.11	5,275.11	36.69	106.59	-135.89	4,353.56	-662.53	5,492.42	5,356.85	135.57	40.515		
5,700.00	5,367.85	5,366.85	5,366.85	37.52	108.44	-136.16	4,353.56	-662.53	5,522.22	5,384.26	137.96	40.027		
5,800.00	5,459.76	5,458.76	5,458.76	38.34	110.28	-127.65	4,353.56	-662.53	5,551.08	5,410.71	140.36	39.547		
5,900.00	5,552.68	5,551.68	5,551.68	39.06	112.15	-102.39	4,353.56	-662.53	5,567.51	5,424.70	142.82	38.984		
6,000.00	5,644.46	5,643.46	5,643.46	39.64	114.00	-81.25	4,353.56	-662.53	5,568.17	5,422.92	145.25	38.335		
6,100.00	5,732.30	5,731.30	5,731.30	40.06	115.76	-67.96	4,353.56	-662.53	5,553.17	5,405.58	147.59	37.626		
6,200.00	5,813.53	5,812.53	5,812.53	40.35	117.40	-60.87	4,353.56	-662.53	5,523.08	5,373.32	149.76	36.879		
6,300.00	5,885.68	5,884.68	5,884.68	40.51	118.85	-58.03	4,353.56	-662.53	5,478.92	5,327.21	151.71	36.113		
6,400.00	5,946.56	5,945.56	5,945.56	40.57	120.07	-58.49	4,353.56	-662.53	5,422.13	5,268.72	153.40	35.346		
6,500.00	5,994.33	5,993.33	5,993.33	40.54	121.03	-62.08	4,353.56	-662.53	5,354.45	5,199.66	154.79	34.593		
6,600.00	6,027.53	6,026.53	6,026.53	40.44	121.70	-69.25	4,353.56	-662.53	5,277.95	5,122.11	155.84	33.867		
6,700.00	6,045.15	6,044.15	6,044.15	40.29	122.06	-80.83	4,353.56	-662.53	5,194.90	5,038.34	156.56	33.181		
6,800.00	6,048.00	6,047.00	6,047.00	40.12	122.11	-90.00	4,353.56	-662.53	5,107.96	4,951.00	156.97	32.541		
6,900.00	6,048.00	6,047.00	6,047.00	39.97	122.11	-90.00	4,353.56	-662.53	5,020.86	4,863.53	157.33	31.913		
7,000.00	6,048.00	6,047.00	6,047.00	39.85	122.11	-90.00	4,353.56	-662.53	4,934.24	4,776.52	157.72	31.285		
7,100.00	6,048.00	6,047.00	6,047.00	39.76	122.11	-90.00	4,353.56	-662.53	4,848.14	4,690.01	158.14	30.658		
7,200.00	6,048.00	6,047.00	6,047.00	39.72	122.11	-90.00	4,353.56	-662.53	4,762.59	4,604.00	158.59	30.031		
7,300.00	6,048.00	6,047.00	6,047.00	39.71	122.11	-90.00	4,353.56	-662.53	4,677.60	4,518.54	159.07	29.407		
7,400.00	6,048.00	6,047.00	6,047.00	39.75	122.11	-90.00	4,353.56	-662.53	4,593.23	4,433.65	159.58	28.783		
7,500.00	6,048.00	6,047.00	6,047.00	39.85	122.11	-90.00	4,353.56	-662.53	4,509.49	4,349.36	160.13	28.162		
7,600.00	6,048.00	6,047.00	6,047.00	40.01	122.11	-90.00	4,353.56	-662.53	4,426.42	4,265.71	160.71	27.543		
7,700.00	6,048.00	6,047.00	6,047.00	40.24	122.11	-90.00	4,353.56	-662.53	4,344.07	4,182.73	161.33	26.926		
7,800.00	6,048.00	6,047.00	6,047.00	40.57	122.11	-90.00	4,353.56	-662.53	4,262.47	4,100.48	162.00	26.312		
7,900.00	6,048.00	6,047.00	6,047.00	40.99	122.11	-90.00	4,353.56	-662.53	4,181.67	4,018.98	162.70	25.702		
8,000.00	6,048.00	6,047.00	6,047.00	41.53	122.11	-90.00	4,353.56	-662.53	4,101.72	3,938.28	163.45	25.095		
8,100.00	6,048.00	6,047.00	6,047.00	42.19	122.11	-90.00	4,353.56	-662.53	4,022.67	3,858.43	164.24	24.493		
8,200.00	6,048.00	6,047.00	6,047.00	42.97	122.11	-90.00	4,353.56	-662.53	3,944.57	3,779.49	165.07	23.896		
8,300.00	6,048.00	6,047.00	6,047.00	43.85	122.11	-90.00	4,353.56	-662.53	3,867.47	3,701.52	165.96	23.304		
8,400.00	6,048.00	6,047.00	6,047.00	44.83	122.11	-90.00	4,353.56	-662.53	3,791.45	3,624.56	166.89	22.718		
8,500.00	6,048.00	6,047.00	6,047.00	45.90	122.11	-90.00	4,353.56	-662.53	3,716.56	3,548.69	167.88	22.139		
8,600.00	6,048.00	6,047.00	6,047.00	47.05	122.11	-90.00	4,353.56	-662.53	3,642.88	3,473.97	168.91	21.567		
8,700.00	6,048.00	6,047.00	6,047.00	48.25	122.11	-90.00	4,353.56	-662.53	3,570.48	3,400.48	170.00	21.003		
8,800.00	6,048.00	6,047.00	6,047.00	49.51	122.11	-90.00	4,353.56	-662.53	3,499.43	3,328.30	171.14	20.448		
8,900.00	6,048.00	6,047.00	6,047.00	50.81	122.11	-90.00	4,353.56	-662.53	3,429.84	3,257.50	172.33	19.903		
9,000.00	6,048.00	6,047.00	6,047.00	52.15	122.11	-90.00	4,353.56	-662.53	3,361.77	3,188.19	173.58	19.368		
9,100.00	6,048.00	6,047.00	6,047.00	53.53	122.11	-90.00	4,353.56	-662.53	3,295.34	3,120.46	174.88	18.844		
9,200.00	6,048.00	6,047.00	6,047.00	54.94	122.11	-90.00	4,353.56	-662.53	3,230.63	3,054.40	176.23	18.332		
9,300.00	6,048.00	6,047.00	6,047.00	56.37	122.11	-90.00	4,353.56	-662.53	3,167.76	2,990.13	177.63	17.833		
9,400.00	6,048.00	6,047.00	6,047.00	57.82	122.11	-90.00	4,353.56	-662.53	3,106.84	2,927.75	179.09	17.348		
9,500.00	6,048.00	6,047.00	6,047.00	59.30	122.11	-90.00	4,353.56	-662.53	3,047.98	2,867.40	180.58	16.878		
9,600.00	6,048.00	6,047.00	6,047.00	60.79	122.11	-90.00	4,353.56	-662.53	2,991.31	2,809.18	182.13	16.424		
9,700.00	6,048.00	6,047.00	6,047.00	62.30	122.11	-90.00	4,353.56	-662.53	2,936.95	2,753.24	183.71	15.987		
9,800.00	6,048.00	6,047.00	6,047.00	63.82	122.11	-90.00	4,353.56	-662.53	2,885.03	2,699.71	185.32	15.568		
9,900.00	6,048.00	6,047.00	6,047.00	65.36	122.11	-90.00	4,353.56	-662.53	2,835.69	2,648.73	186.96	15.167		
10,000.00	6,048.00	6,047.00	6,047.00	66.91	122.11	-90.00	4,353.56	-662.53	2,789.06	2,600.44	188.63	14.786		
10,100.00	6,048.00	6,047.00	6,047.00	68.48	122.11	-90.00	4,353.56	-662.53	2,745.29	2,554.99	190.30	14.426		
10,200.00	6,048.00	6,047.00	6,047.00	70.05	122.11	-90.00	4,353.56	-662.53	2,704.51	2,512.52	191.98	14.087		
10,300.00	6,048.00	6,047.00	6,047.00	71.63	122.11	-90.00	4,353.56	-662.53	2,666.85	2,473.20	193.65	13.771		
10,400.00	6,048.00	6,047.00	6,047.00	73.23	122.11	-90.00	4,353.56	-662.53	2,632.46	2,437.15	195.31	13.478		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 usft
SEC 4-T5N-R61W - ABND VERT PRONGHORN 31-4 (GYRO) - OWB - Design #1															
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)	Minimum Separation (usft)	Separation Factor			
10,500.00	6,048.00	6,047.00	6,047.00	74.83	122.11	-90.00	4,353.56	-662.53	2,601.45	2,404.51	196.94	13.209			
10,600.00	6,048.00	6,047.00	6,047.00	76.43	122.11	-90.00	4,353.56	-662.53	2,573.97	2,375.44	198.53	12.965			
10,700.00	6,048.00	6,047.00	6,047.00	78.05	122.11	-90.00	4,353.56	-662.53	2,550.11	2,350.04	200.07	12.746			
10,800.00	6,048.00	6,047.00	6,047.00	79.67	122.11	-90.00	4,353.56	-662.53	2,529.97	2,328.44	201.54	12.553			
10,900.00	6,048.00	6,047.00	6,047.00	81.30	122.11	-90.00	4,353.56	-662.53	2,513.66	2,310.73	202.94	12.386			
11,000.00	6,048.00	6,047.00	6,047.00	82.94	122.11	-90.00	4,353.56	-662.53	2,501.25	2,297.00	204.25	12.246			
11,100.00	6,048.00	6,047.00	6,047.00	84.58	122.11	-90.00	4,353.56	-662.53	2,492.79	2,287.32	205.46	12.133			
11,200.00	6,048.00	6,047.00	6,047.00	86.22	122.11	-90.00	4,353.56	-662.53	2,488.32	2,281.75	206.57	12.046			
11,261.32	6,048.00	6,047.00	6,047.00	87.23	122.11	-90.00	4,353.56	-662.53	2,487.56	2,280.37	207.20	12.006	CC		
11,300.00	6,048.00	6,047.00	6,047.00	87.87	122.11	-90.00	4,353.56	-662.53	2,487.86	2,280.29	207.57	11.986	ES		
11,400.00	6,048.00	6,047.00	6,047.00	89.53	122.11	-90.00	4,353.56	-662.53	2,491.42	2,282.98	208.45	11.952			
11,500.00	6,048.00	6,047.00	6,047.00	91.19	122.11	-90.00	4,353.56	-662.53	2,498.99	2,289.78	209.20	11.945	SF		
11,600.00	6,048.00	6,047.00	6,047.00	92.85	122.11	-90.00	4,353.56	-662.53	2,510.51	2,300.68	209.83	11.964			
11,700.00	6,048.00	6,047.00	6,047.00	94.52	122.11	-90.00	4,353.56	-662.53	2,525.95	2,315.60	210.34	12.009			
11,800.00	6,048.00	6,047.00	6,047.00	96.19	122.11	-90.00	4,353.56	-662.53	2,545.22	2,334.49	210.73	12.078			
11,900.00	6,048.00	6,047.00	6,047.00	97.86	122.11	-90.00	4,353.56	-662.53	2,568.24	2,357.25	211.00	12.172			
12,000.00	6,048.00	6,047.00	6,047.00	99.54	122.11	-90.00	4,353.56	-662.53	2,594.92	2,383.77	211.15	12.289			
12,100.00	6,048.00	6,047.00	6,047.00	101.22	122.11	-90.00	4,353.56	-662.53	2,625.14	2,413.94	211.20	12.430			
12,200.00	6,048.00	6,047.00	6,047.00	102.91	122.11	-90.00	4,353.56	-662.53	2,658.78	2,447.63	211.14	12.592			
12,300.00	6,048.00	6,047.00	6,047.00	104.59	122.11	-90.00	4,353.56	-662.53	2,695.71	2,484.71	211.00	12.776			
12,400.00	6,048.00	6,047.00	6,047.00	106.28	122.11	-90.00	4,353.56	-662.53	2,735.79	2,525.02	210.77	12.980			
12,500.00	6,048.00	6,047.00	6,047.00	107.97	122.11	-90.00	4,353.56	-662.53	2,778.90	2,568.44	210.46	13.204			
12,600.00	6,048.00	6,047.00	6,047.00	109.67	122.11	-90.00	4,353.56	-662.53	2,824.90	2,614.81	210.09	13.446			
12,700.00	6,048.00	6,047.00	6,047.00	111.37	122.11	-90.00	4,353.56	-662.53	2,873.63	2,663.98	209.65	13.707			
12,800.00	6,048.00	6,047.00	6,047.00	113.07	122.11	-90.00	4,353.56	-662.53	2,924.98	2,715.81	209.17	13.984			
12,900.00	6,048.00	6,047.00	6,047.00	114.77	122.11	-90.00	4,353.56	-662.53	2,978.80	2,770.16	208.64	14.277			
13,000.00	6,048.00	6,047.00	6,047.00	116.47	122.11	-90.00	4,353.56	-662.53	3,034.96	2,826.88	208.08	14.586			
13,100.00	6,048.00	6,047.00	6,047.00	118.18	122.11	-90.00	4,353.56	-662.53	3,093.33	2,885.85	207.48	14.909			
13,200.00	6,048.00	6,047.00	6,047.00	119.88	122.11	-90.00	4,353.56	-662.53	3,153.80	2,946.94	206.86	15.246			
13,300.00	6,048.00	6,047.00	6,047.00	121.59	122.11	-90.00	4,353.56	-662.53	3,216.24	3,010.02	206.22	15.596			
13,400.00	6,048.00	6,047.00	6,047.00	123.30	122.11	-90.00	4,353.56	-662.53	3,280.54	3,074.97	205.57	15.958			
13,500.00	6,048.00	6,047.00	6,047.00	125.02	122.11	-90.00	4,353.56	-662.53	3,346.59	3,141.68	204.91	16.332			
13,600.00	6,048.00	6,047.00	6,047.00	126.73	122.11	-90.00	4,353.56	-662.53	3,414.29	3,210.05	204.24	16.717			
13,700.00	6,048.00	6,047.00	6,047.00	128.45	122.11	-90.00	4,353.56	-662.53	3,483.55	3,279.98	203.57	17.112			
13,800.00	6,048.00	6,047.00	6,047.00	130.16	122.11	-90.00	4,353.56	-662.53	3,554.28	3,351.37	202.90	17.517			
13,900.00	6,048.00	6,047.00	6,047.00	131.88	122.11	-90.00	4,353.56	-662.53	3,626.38	3,424.14	202.24	17.931			
14,000.00	6,048.00	6,047.00	6,047.00	133.60	122.11	-90.00	4,353.56	-662.53	3,699.78	3,498.20	201.58	18.354			
14,100.00	6,048.00	6,047.00	6,047.00	135.32	122.11	-90.00	4,353.56	-662.53	3,774.40	3,573.48	200.92	18.785			
14,200.00	6,048.00	6,047.00	6,047.00	137.05	122.11	-90.00	4,353.56	-662.53	3,850.17	3,649.89	200.28	19.224			
14,300.00	6,048.00	6,047.00	6,047.00	138.77	122.11	-90.00	4,353.56	-662.53	3,927.03	3,727.39	199.64	19.670			
14,400.00	6,048.00	6,047.00	6,047.00	140.50	122.11	-90.00	4,353.56	-662.53	4,004.91	3,805.89	199.02	20.123			
14,500.00	6,048.00	6,047.00	6,047.00	142.22	122.11	-90.00	4,353.56	-662.53	4,083.75	3,885.35	198.41	20.583			
14,600.00	6,048.00	6,047.00	6,047.00	143.95	122.11	-90.00	4,353.56	-662.53	4,163.50	3,965.70	197.80	21.049			
14,700.00	6,048.00	6,047.00	6,047.00	145.68	122.11	-90.00	4,353.56	-662.53	4,244.11	4,046.90	197.22	21.520			
14,800.00	6,048.00	6,047.00	6,047.00	147.41	122.11	-90.00	4,353.56	-662.53	4,325.53	4,128.89	196.64	21.997			
14,900.00	6,048.00	6,047.00	6,047.00	149.14	122.11	-90.00	4,353.56	-662.53	4,407.72	4,211.64	196.08	22.479			
15,000.00	6,048.00	6,047.00	6,047.00	150.87	122.11	-90.00	4,353.56	-662.53	4,490.63	4,295.09	195.54	22.966			
15,100.00	6,048.00	6,047.00	6,047.00	152.60	122.11	-90.00	4,353.56	-662.53	4,574.22	4,379.21	195.00	23.457			
15,200.00	6,048.00	6,047.00	6,047.00	154.33	122.11	-90.00	4,353.56	-662.53	4,658.45	4,463.97	194.48	23.953			
15,300.00	6,048.00	6,047.00	6,047.00	156.07	122.11	-90.00	4,353.56	-662.53	4,743.30	4,549.33	193.98	24.453			
15,400.00	6,048.00	6,047.00	6,047.00	157.80	122.11	-90.00	4,353.56	-662.53	4,828.73	4,635.25	193.49	24.957			
15,500.00	6,048.00	6,047.00	6,047.00	159.54	122.11	-90.00	4,353.56	-662.53	4,914.71	4,721.71	193.01	25.464			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-INC												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,600.00	6,048.00	6,047.00	6,047.00	161.27	122.11	-90.00	4,353.56	-662.53	5,001.21	4,808.67	192.54	25.975		
15,700.00	6,048.00	6,047.00	6,047.00	163.01	122.11	-90.00	4,353.56	-662.53	5,088.21	4,896.12	192.09	26.489		
15,800.00	6,048.00	6,047.00	6,047.00	164.75	122.11	-90.00	4,353.56	-662.53	5,175.68	4,984.03	191.65	27.006		
15,900.00	6,048.00	6,047.00	6,047.00	166.49	122.11	-90.00	4,353.56	-662.53	5,263.59	5,072.36	191.22	27.526		
16,000.00	6,048.00	6,047.00	6,047.00	168.23	122.11	-90.00	4,353.56	-662.53	5,351.92	5,161.12	190.81	28.049		
16,100.00	6,048.00	6,047.00	6,047.00	169.97	122.11	-90.00	4,353.56	-662.53	5,440.66	5,250.26	190.41	28.574		
16,200.00	6,048.00	6,047.00	6,047.00	171.71	122.11	-90.00	4,353.56	-662.53	5,529.79	5,339.77	190.02	29.102		
16,300.00	6,048.00	6,047.00	6,047.00	173.45	122.11	-90.00	4,353.56	-662.53	5,619.28	5,429.64	189.64	29.632		
16,400.00	6,048.00	6,047.00	6,047.00	175.19	122.11	-90.00	4,353.56	-662.53	5,709.12	5,519.85	189.27	30.164		
16,500.00	6,048.00	6,047.00	6,047.00	176.93	122.11	-90.00	4,353.56	-662.53	5,799.29	5,610.38	188.91	30.698		
16,600.00	6,048.00	6,047.00	6,047.00	178.67	122.11	-90.00	4,353.56	-662.53	5,889.78	5,701.22	188.56	31.235		
16,700.00	6,048.00	6,047.00	6,047.00	180.42	122.11	-90.00	4,353.56	-662.53	5,980.57	5,792.34	188.23	31.773		
16,800.00	6,048.00	6,047.00	6,047.00	182.16	122.11	-90.00	4,353.56	-662.53	6,071.65	5,883.75	187.90	32.313		
16,900.00	6,048.00	6,047.00	6,047.00	183.91	122.11	-90.00	4,353.56	-662.53	6,163.01	5,975.43	187.59	32.854		
17,000.00	6,048.00	6,047.00	6,047.00	185.65	122.11	-90.00	4,353.56	-662.53	6,254.64	6,067.35	187.28	33.397		
17,100.00	6,048.00	6,047.00	6,047.00	187.40	122.11	-90.00	4,353.56	-662.53	6,346.51	6,159.53	186.98	33.942		
17,138.90	6,048.00	6,047.00	6,047.00	188.08	122.11	-90.00	4,353.56	-662.53	6,382.32	6,195.45	186.87	34.154		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 50-GYRO-MWD													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
100.00	100.00	50.00	50.00	0.27	0.07	-8.65	4,353.84	-662.72	4,404.26	4,403.92	0.34	N/A		
200.00	200.00	161.69	161.69	0.63	0.47	-8.66	4,354.85	-663.44	4,405.26	4,404.17	1.09	4,050.572		
300.00	300.00	258.32	258.31	0.99	0.80	-8.67	4,355.59	-664.09	4,406.12	4,404.33	1.78	2,469.030		
400.00	400.00	360.44	360.42	1.34	1.16	-8.68	4,356.40	-664.77	4,407.00	4,404.50	2.50	1,762.309		
500.00	500.00	455.83	455.81	1.70	1.49	-8.68	4,357.26	-665.46	4,408.00	4,404.80	3.19	1,380.340		
600.00	600.00	554.71	554.68	2.06	1.84	-8.69	4,358.19	-666.07	4,409.01	4,405.11	3.90	1,131.026		
700.00	700.00	656.17	656.13	2.42	2.19	-8.69	4,359.20	-666.39	4,410.05	4,405.44	4.61	956.193		
800.00	800.00	760.75	760.71	2.78	2.56	-8.70	4,360.06	-666.89	4,410.93	4,405.60	5.34	826.493		
900.00	900.00	861.63	861.58	3.14	2.91	-8.70	4,360.95	-667.12	4,411.84	4,405.79	6.05	729.364		
1,000.00	999.98	964.85	964.80	3.48	3.27	-124.05	4,361.65	-667.25	4,413.51	4,406.75	6.76	653.151		
1,100.00	1,099.84	1,066.73	1,066.68	3.82	3.63	-124.04	4,362.48	-667.30	4,417.25	4,409.80	7.45	592.589		
1,200.00	1,199.45	1,170.95	1,170.90	4.17	4.00	-124.05	4,363.15	-667.32	4,422.78	4,414.62	8.17	541.566		
1,300.00	1,298.70	1,265.28	1,265.22	4.53	4.33	-124.05	4,363.78	-667.47	4,430.32	4,421.47	8.85	500.381		
1,400.00	1,397.47	1,366.29	1,366.23	4.91	4.68	-124.06	4,364.48	-667.62	4,439.87	4,430.29	9.58	463.600		
1,500.00	1,495.62	1,463.95	1,463.89	5.31	5.02	-124.07	4,365.09	-667.75	4,451.34	4,441.03	10.30	432.000		
1,600.00	1,593.06	1,605.27	1,605.21	5.74	5.52	-124.19	4,365.67	-667.40	4,464.61	4,453.41	11.20	398.568		
1,700.00	1,689.64	1,696.71	1,696.64	6.21	5.83	-124.19	4,365.57	-666.90	4,479.30	4,467.35	11.95	374.935		
1,800.00	1,785.27	1,792.21	1,792.14	6.71	6.17	-124.20	4,365.52	-666.19	4,496.05	4,483.32	12.73	353.068		
1,900.00	1,879.82	1,871.61	1,871.54	7.27	6.44	-124.15	4,365.60	-665.66	4,515.02	4,501.52	13.50	334.523		
2,000.00	1,973.17	1,957.11	1,957.04	7.88	6.74	-124.11	4,365.95	-665.14	4,536.37	4,522.05	14.32	316.877		
2,100.00	2,065.27	2,054.20	2,054.12	8.54	7.08	-124.22	4,366.35	-664.45	4,559.73	4,544.52	15.21	299.741		
2,200.00	2,157.01	2,137.71	2,137.63	9.24	7.37	-124.56	4,366.71	-663.87	4,583.83	4,567.75	16.08	285.061		
2,300.00	2,248.74	2,237.69	2,237.60	9.96	7.72	-124.97	4,367.20	-663.11	4,608.18	4,591.16	17.02	270.743		
2,400.00	2,340.48	2,340.32	2,340.24	10.70	8.08	-125.39	4,367.47	-662.22	4,632.51	4,614.53	17.98	257.645		
2,500.00	2,432.22	2,438.84	2,438.75	11.45	8.43	-125.78	4,367.49	-661.38	4,656.81	4,637.88	18.93	245.974		
2,600.00	2,523.96	2,527.09	2,526.99	12.21	8.73	-126.14	4,367.56	-660.59	4,681.38	4,661.52	19.85	235.805		
2,700.00	2,615.70	2,613.54	2,613.44	12.99	9.04	-126.48	4,367.69	-659.93	4,706.23	4,685.46	20.77	226.583		
2,800.00	2,707.44	2,704.56	2,704.46	13.77	9.35	-126.83	4,367.85	-659.41	4,731.34	4,709.63	21.71	217.962		
2,900.00	2,799.17	2,800.00	2,799.90	14.55	9.69	-127.21	4,367.96	-658.89	4,756.59	4,733.93	22.66	209.898		
3,000.00	2,890.91	2,875.41	2,875.31	15.35	9.95	-127.50	4,368.04	-658.71	4,782.12	4,758.58	23.54	203.129		
3,100.00	2,982.65	2,945.89	2,945.79	16.14	10.20	-127.78	4,368.39	-659.01	4,808.31	4,783.91	24.40	197.029		
3,200.00	3,074.39	3,041.55	3,041.44	16.95	10.53	-128.15	4,368.99	-659.40	4,834.82	4,809.46	25.36	190.653		
3,300.00	3,166.13	3,130.80	3,130.69	17.75	10.84	-128.50	4,369.52	-660.00	4,861.55	4,835.26	26.29	184.928		
3,400.00	3,257.87	3,224.11	3,223.99	18.56	11.17	-128.86	4,370.00	-660.61	4,888.40	4,861.17	27.23	179.509		
3,500.00	3,349.61	3,327.12	3,327.00	19.37	11.53	-129.25	4,370.34	-661.45	4,915.32	4,887.11	28.21	174.242		
3,600.00	3,441.34	3,424.03	3,423.90	20.18	11.87	-129.62	4,370.48	-662.45	4,942.33	4,913.17	29.16	169.480		
3,700.00	3,533.08	3,500.00	3,499.88	21.00	12.13	-129.91	4,370.55	-663.20	4,969.47	4,939.44	30.03	165.475		
3,800.00	3,624.82	3,613.07	3,612.94	21.81	12.52	-130.33	4,370.52	-664.32	4,996.65	4,965.61	31.04	160.973		
3,900.00	3,716.56	3,711.15	3,711.01	22.63	12.87	-130.70	4,370.39	-665.39	5,023.99	4,992.00	31.99	157.054		
4,000.00	3,808.30	3,857.76	3,857.61	23.45	13.38	-131.23	4,369.33	-666.64	5,050.93	5,017.81	33.12	152.513		
4,100.00	3,900.04	3,941.63	3,941.48	24.27	13.67	-131.54	4,368.34	-666.94	5,077.50	5,043.49	34.01	149.307		
4,200.00	3,991.78	4,034.70	4,034.54	25.09	13.99	-131.87	4,367.35	-667.35	5,104.36	5,069.43	34.93	146.140		
4,300.00	4,083.51	4,100.00	4,099.84	25.92	14.22	-132.10	4,366.84	-667.79	5,131.68	5,095.94	35.74	143.585		
4,400.00	4,175.25	4,150.00	4,149.84	26.74	14.39	-132.27	4,366.81	-668.15	5,159.78	5,123.29	36.49	141.412		
4,500.00	4,266.99	4,217.96	4,217.79	27.57	14.63	-132.51	4,367.10	-668.75	5,188.55	5,151.25	37.30	139.099		
4,600.00	4,358.73	4,300.00	4,299.83	28.39	14.92	-132.79	4,367.74	-669.46	5,217.78	5,179.61	38.17	136.709		
4,700.00	4,450.47	4,395.25	4,395.07	29.22	15.25	-133.12	4,368.48	-670.54	5,247.24	5,208.16	39.08	134.261		
4,800.00	4,542.21	4,470.45	4,470.26	30.05	15.51	-133.37	4,369.05	-671.51	5,276.91	5,236.99	39.91	132.209		
4,900.00	4,633.95	4,553.08	4,552.88	30.88	15.80	-133.65	4,369.94	-672.60	5,306.99	5,266.22	40.77	130.166		
5,000.00	4,725.68	4,641.68	4,641.46	31.70	16.11	-133.94	4,371.04	-673.34	5,337.21	5,295.56	41.65	128.141		
5,100.00	4,817.42	4,785.65	4,785.42	32.53	16.62	-134.40	4,372.82	-673.99	5,367.58	5,324.82	42.76	125.541		
5,200.00	4,909.16	4,909.27	4,909.04	33.36	17.05	-134.79	4,373.45	-673.57	5,397.08	5,353.31	43.77	123.295		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 50-GYRO-MWD													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,300.00	5,000.90	5,005.01	5,004.78	34.19	17.38	-135.08	4,373.73	-672.85	5,426.36	5,381.69	44.68	121.458		
5,400.00	5,092.64	5,114.09	5,113.85	35.02	17.76	-135.40	4,373.99	-671.88	5,455.70	5,410.07	45.63	119.561		
5,500.00	5,184.38	5,213.10	5,212.85	35.85	18.11	-135.69	4,374.03	-670.11	5,484.63	5,438.09	46.54	117.838		
5,600.00	5,276.11	5,291.67	5,291.41	36.69	18.38	-135.91	4,374.19	-668.90	5,513.92	5,466.55	47.37	116.400		
5,700.00	5,367.85	5,367.78	5,367.51	37.52	18.65	-136.13	4,374.43	-668.09	5,543.59	5,495.41	48.18	115.053		
5,800.00	5,459.76	5,450.00	5,449.73	38.34	18.94	-127.58	4,374.73	-667.32	5,572.41	5,523.39	49.02	113.678		
5,900.00	5,552.68	5,561.25	5,560.97	39.06	19.32	-102.38	4,375.36	-666.50	5,589.07	5,539.06	50.00	111.772		
6,000.00	5,644.46	5,644.56	5,644.28	39.64	19.62	-81.20	4,375.61	-665.82	5,589.63	5,538.75	50.88	109.855		
6,100.00	5,732.30	5,731.45	5,731.17	40.06	19.92	-67.90	4,375.94	-665.03	5,574.55	5,522.79	51.76	107.703		
6,200.00	5,813.53	5,801.42	5,801.13	40.35	20.16	-60.72	4,376.22	-664.42	5,544.40	5,491.86	52.54	105.533		
6,300.00	5,885.68	5,801.42	5,801.13	40.51	20.16	-57.32	4,376.22	-664.42	5,500.79	5,447.80	52.99	103.815		
6,400.00	5,946.56	5,801.42	5,801.13	40.57	20.16	-57.04	4,376.22	-664.42	5,445.19	5,391.79	53.40	101.978		
6,500.00	5,994.33	5,801.42	5,801.13	40.54	20.16	-59.66	4,376.22	-664.42	5,378.95	5,325.18	53.77	100.036		
6,600.00	6,027.53	5,801.42	5,801.13	40.44	20.16	-65.58	4,376.22	-664.42	5,303.71	5,249.59	54.12	98.002		
6,700.00	6,045.15	5,801.42	5,801.13	40.29	20.16	-75.80	4,376.22	-664.42	5,221.44	5,166.99	54.45	95.892		
6,800.00	6,048.00	5,801.42	5,801.13	40.12	20.16	-84.36	4,376.22	-664.42	5,134.65	5,079.87	54.78	93.732		
6,900.00	6,048.00	5,801.42	5,801.13	39.97	20.16	-84.36	4,376.22	-664.42	5,047.56	4,992.43	55.13	91.566		
7,000.00	6,048.00	5,801.42	5,801.13	39.85	20.16	-84.36	4,376.22	-664.42	4,960.95	4,905.45	55.50	89.392		
7,100.00	6,048.00	5,801.42	5,801.13	39.76	20.16	-84.36	4,376.22	-664.42	4,874.86	4,818.96	55.90	87.212		
7,200.00	6,048.00	5,801.42	5,801.13	39.72	20.16	-84.36	4,376.22	-664.42	4,789.31	4,732.98	56.33	85.209		
7,300.00	6,048.00	5,801.42	5,801.13	39.71	20.16	-84.36	4,376.22	-664.42	4,704.32	4,647.54	56.79	82.843		
7,400.00	6,048.00	5,801.42	5,801.13	39.75	20.16	-84.36	4,376.22	-664.42	4,619.94	4,562.66	57.28	80.657		
7,500.00	6,048.00	5,801.42	5,801.13	39.85	20.16	-84.36	4,376.22	-664.42	4,536.20	4,478.39	57.81	78.473		
7,600.00	6,048.00	5,801.42	5,801.13	40.01	20.16	-84.36	4,376.22	-664.42	4,453.12	4,394.75	58.37	76.293		
7,700.00	6,048.00	5,801.42	5,801.13	40.24	20.16	-84.36	4,376.22	-664.42	4,370.75	4,311.78	58.97	74.120		
7,800.00	6,048.00	5,801.42	5,801.13	40.57	20.16	-84.36	4,376.22	-664.42	4,289.14	4,229.53	59.61	71.956		
7,900.00	6,048.00	5,801.42	5,801.13	40.99	20.16	-84.36	4,376.22	-664.42	4,208.31	4,148.03	60.29	69.804		
8,000.00	6,048.00	5,801.42	5,801.13	41.53	20.16	-84.36	4,376.22	-664.42	4,128.33	4,067.32	61.01	67.666		
8,100.00	6,048.00	5,801.42	5,801.13	42.19	20.16	-84.36	4,376.22	-664.42	4,049.24	3,987.46	61.78	65.547		
8,200.00	6,048.00	5,801.42	5,801.13	42.97	20.16	-84.36	4,376.22	-664.42	3,971.09	3,908.50	62.59	63.449		
8,300.00	6,048.00	5,801.42	5,801.13	43.85	20.16	-84.36	4,376.22	-664.42	3,893.93	3,830.49	63.45	61.374		
8,400.00	6,048.00	5,801.42	5,801.13	44.83	20.16	-84.36	4,376.22	-664.42	3,817.84	3,753.49	64.35	59.327		
8,500.00	6,048.00	5,801.42	5,801.13	45.90	20.16	-84.36	4,376.22	-664.42	3,742.88	3,677.57	65.31	57.310		
8,600.00	6,048.00	5,801.42	5,801.13	47.05	20.16	-84.36	4,376.22	-664.42	3,669.11	3,602.79	66.32	55.327		
8,700.00	6,048.00	5,801.42	5,801.13	48.25	20.16	-84.36	4,376.22	-664.42	3,596.60	3,529.23	67.38	53.381		
8,800.00	6,048.00	5,801.42	5,801.13	49.51	20.16	-84.36	4,376.22	-664.42	3,525.44	3,456.96	68.49	51.476		
8,900.00	6,048.00	5,801.42	5,801.13	50.81	20.16	-84.36	4,376.22	-664.42	3,455.72	3,386.06	69.65	49.614		
9,000.00	6,048.00	5,801.42	5,801.13	52.15	20.16	-84.36	4,376.22	-664.42	3,387.50	3,316.63	70.87	47.799		
9,100.00	6,048.00	5,801.42	5,801.13	53.53	20.16	-84.36	4,376.22	-664.42	3,320.90	3,248.76	72.14	46.034		
9,200.00	6,048.00	5,801.42	5,801.13	54.94	20.16	-84.36	4,376.22	-664.42	3,256.01	3,182.55	73.46	44.322		
9,300.00	6,048.00	5,801.42	5,801.13	56.37	20.16	-84.36	4,376.22	-664.42	3,192.93	3,118.09	74.84	42.666		
9,400.00	6,048.00	5,801.42	5,801.13	57.82	20.16	-84.36	4,376.22	-664.42	3,131.77	3,055.51	76.26	41.068		
9,500.00	6,048.00	5,801.42	5,801.13	59.30	20.16	-84.36	4,376.22	-664.42	3,072.65	2,994.93	77.73	39.531		
9,600.00	6,048.00	5,801.42	5,801.13	60.79	20.16	-84.36	4,376.22	-664.42	3,015.69	2,936.45	79.24	38.057		
9,700.00	6,048.00	5,801.42	5,801.13	62.30	20.16	-84.36	4,376.22	-664.42	2,961.02	2,880.22	80.79	36.649		
9,800.00	6,048.00	5,801.42	5,801.13	63.82	20.16	-84.36	4,376.22	-664.42	2,908.75	2,826.37	82.38	35.308		
9,900.00	6,048.00	5,801.42	5,801.13	65.36	20.16	-84.36	4,376.22	-664.42	2,859.03	2,775.03	84.00	34.036		
10,000.00	6,048.00	5,801.42	5,801.13	66.91	20.16	-84.36	4,376.22	-664.42	2,811.98	2,726.34	85.64	32.835		
10,100.00	6,048.00	5,801.42	5,801.13	68.48	20.16	-84.36	4,376.22	-664.42	2,767.75	2,680.46	87.30	31.706		
10,200.00	6,048.00	5,801.42	5,801.13	70.05	20.16	-84.36	4,376.22	-664.42	2,726.47	2,637.52	88.96	30.649		
10,300.00	6,048.00	5,801.42	5,801.13	71.63	20.16	-84.36	4,376.22	-664.42	2,688.28	2,597.67	90.62	29.667		
10,400.00	6,048.00	5,801.42	5,801.13	73.23	20.16	-84.36	4,376.22	-664.42	2,653.31	2,561.05	92.26	28.759		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 50-GYRO-MWD													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,500.00	6,048.00	5,801.42	5,801.13	74.83	20.16	-84.36	4,376.22	-664.42	2,621.69	2,527.81	93.88	27.925		
10,600.00	6,048.00	5,801.42	5,801.13	76.43	20.16	-84.36	4,376.22	-664.42	2,593.55	2,498.08	95.47	27.167		
10,700.00	6,048.00	5,801.42	5,801.13	78.05	20.16	-84.36	4,376.22	-664.42	2,568.99	2,471.98	97.01	26.483		
10,800.00	6,048.00	5,801.42	5,801.13	79.67	20.16	-84.36	4,376.22	-664.42	2,548.12	2,449.63	98.49	25.873		
10,900.00	6,048.00	5,801.42	5,801.13	81.30	20.16	-84.36	4,376.22	-664.42	2,531.03	2,431.13	99.89	25.337		
11,000.00	6,048.00	5,801.42	5,801.13	82.94	20.16	-84.36	4,376.22	-664.42	2,517.80	2,416.58	101.22	24.874		
11,100.00	6,048.00	5,801.42	5,801.13	84.58	20.16	-84.36	4,376.22	-664.42	2,508.49	2,406.03	102.46	24.483		
11,200.00	6,048.00	5,801.42	5,801.13	86.22	20.16	-84.36	4,376.22	-664.42	2,503.14	2,399.55	103.59	24.163		
11,283.97	6,048.00	5,801.42	5,801.13	87.61	20.16	-84.36	4,376.22	-664.42	2,501.73	2,397.27	104.46	23.949 CC		
11,300.00	6,048.00	5,801.42	5,801.13	87.87	20.16	-84.36	4,376.22	-664.42	2,501.79	2,397.17	104.62	23.913 ES		
11,400.00	6,048.00	5,801.42	5,801.13	89.53	20.16	-84.36	4,376.22	-664.42	2,504.42	2,398.89	105.53	23.731		
11,500.00	6,048.00	5,801.42	5,801.13	91.19	20.16	-84.36	4,376.22	-664.42	2,511.05	2,404.72	106.33	23.616		
11,600.00	6,048.00	5,801.42	5,801.13	92.85	20.16	-84.36	4,376.22	-664.42	2,521.62	2,414.62	107.00	23.566 SF		
11,700.00	6,048.00	5,801.42	5,801.13	94.52	20.16	-84.36	4,376.22	-664.42	2,536.09	2,428.54	107.55	23.580		
11,800.00	6,048.00	5,801.42	5,801.13	96.19	20.16	-84.36	4,376.22	-664.42	2,554.40	2,446.42	107.99	23.655		
11,900.00	6,048.00	5,801.42	5,801.13	97.86	20.16	-84.36	4,376.22	-664.42	2,576.47	2,468.16	108.30	23.790		
12,000.00	6,048.00	5,801.42	5,801.13	99.54	20.16	-84.36	4,376.22	-664.42	2,602.19	2,493.68	108.50	23.982		
12,100.00	6,048.00	5,801.42	5,801.13	101.22	20.16	-84.36	4,376.22	-664.42	2,631.46	2,522.86	108.60	24.231		
12,200.00	6,048.00	5,801.42	5,801.13	102.91	20.16	-84.36	4,376.22	-664.42	2,664.17	2,555.57	108.60	24.533		
12,300.00	6,048.00	5,801.42	5,801.13	104.59	20.16	-84.36	4,376.22	-664.42	2,700.19	2,591.69	108.50	24.887		
12,400.00	6,048.00	5,801.42	5,801.13	106.28	20.16	-84.36	4,376.22	-664.42	2,739.38	2,631.07	108.31	25.291		
12,500.00	6,048.00	5,801.42	5,801.13	107.97	20.16	-84.36	4,376.22	-664.42	2,781.62	2,673.57	108.05	25.743		
12,600.00	6,048.00	5,801.42	5,801.13	109.67	20.16	-84.36	4,376.22	-664.42	2,826.77	2,719.05	107.72	26.241		
12,700.00	6,048.00	5,801.42	5,801.13	111.37	20.16	-84.36	4,376.22	-664.42	2,874.69	2,767.36	107.33	26.783		
12,800.00	6,048.00	5,801.42	5,801.13	113.07	20.16	-84.36	4,376.22	-664.42	2,925.24	2,818.35	106.89	27.367		
12,900.00	6,048.00	5,801.42	5,801.13	114.77	20.16	-84.36	4,376.22	-664.42	2,978.30	2,871.90	106.40	27.992		
13,000.00	6,048.00	5,801.42	5,801.13	116.47	20.16	-84.36	4,376.22	-664.42	3,033.72	2,927.85	105.87	28.656		
13,100.00	6,048.00	5,801.42	5,801.13	118.18	20.16	-84.36	4,376.22	-664.42	3,091.38	2,986.08	105.31	29.356		
13,200.00	6,048.00	5,801.42	5,801.13	119.88	20.16	-84.36	4,376.22	-664.42	3,151.17	3,046.45	104.72	30.092		
13,300.00	6,048.00	5,801.42	5,801.13	121.59	20.16	-84.36	4,376.22	-664.42	3,212.95	3,108.84	104.11	30.861		
13,400.00	6,048.00	5,801.42	5,801.13	123.30	20.16	-84.36	4,376.22	-664.42	3,276.63	3,173.14	103.49	31.663		
13,500.00	6,048.00	5,801.42	5,801.13	125.02	20.16	-84.36	4,376.22	-664.42	3,342.08	3,239.23	102.85	32.495		
13,600.00	6,048.00	5,801.42	5,801.13	126.73	20.16	-84.36	4,376.22	-664.42	3,409.21	3,307.00	102.21	33.356		
13,700.00	6,048.00	5,801.42	5,801.13	128.45	20.16	-84.36	4,376.22	-664.42	3,477.92	3,376.36	101.56	34.245		
13,800.00	6,048.00	5,801.42	5,801.13	130.16	20.16	-84.36	4,376.22	-664.42	3,548.11	3,447.20	100.91	35.161		
13,900.00	6,048.00	5,801.42	5,801.13	131.88	20.16	-84.36	4,376.22	-664.42	3,619.71	3,519.45	100.26	36.102		
14,000.00	6,048.00	5,801.42	5,801.13	133.60	20.16	-84.36	4,376.22	-664.42	3,692.63	3,593.01	99.62	37.066		
14,100.00	6,048.00	5,801.42	5,801.13	135.32	20.16	-84.36	4,376.22	-664.42	3,766.79	3,667.81	98.98	38.054		
14,200.00	6,048.00	5,801.42	5,801.13	137.05	20.16	-84.36	4,376.22	-664.42	3,842.13	3,743.77	98.36	39.064		
14,300.00	6,048.00	5,801.42	5,801.13	138.77	20.16	-84.36	4,376.22	-664.42	3,918.56	3,820.83	97.73	40.094		
14,400.00	6,048.00	5,801.42	5,801.13	140.50	20.16	-84.36	4,376.22	-664.42	3,996.04	3,898.92	97.12	41.144		
14,500.00	6,048.00	5,801.42	5,801.13	142.22	20.16	-84.36	4,376.22	-664.42	4,074.50	3,977.98	96.52	42.213		
14,600.00	6,048.00	5,801.42	5,801.13	143.95	20.16	-84.36	4,376.22	-664.42	4,153.89	4,057.95	95.93	43.299		
14,700.00	6,048.00	5,801.42	5,801.13	145.68	20.16	-84.36	4,376.22	-664.42	4,234.14	4,138.79	95.36	44.403		
14,800.00	6,048.00	5,801.42	5,801.13	147.41	20.16	-84.36	4,376.22	-664.42	4,315.23	4,220.43	94.79	45.523		
14,900.00	6,048.00	5,801.42	5,801.13	149.14	20.16	-84.36	4,376.22	-664.42	4,397.09	4,302.85	94.24	46.658		
15,000.00	6,048.00	5,801.42	5,801.13	150.87	20.16	-84.36	4,376.22	-664.42	4,479.69	4,385.98	93.70	47.807		
15,100.00	6,048.00	5,801.42	5,801.13	152.60	20.16	-84.36	4,376.22	-664.42	4,562.98	4,469.80	93.18	48.971		
15,200.00	6,048.00	5,801.42	5,801.13	154.33	20.16	-84.36	4,376.22	-664.42	4,646.94	4,554.27	92.67	50.147		
15,300.00	6,048.00	5,801.42	5,801.13	156.07	20.16	-84.36	4,376.22	-664.42	4,731.51	4,639.35	92.17	51.336		
15,400.00	6,048.00	5,801.42	5,801.13	157.80	20.16	-84.36	4,376.22	-664.42	4,816.68	4,725.00	91.68	52.537		
15,500.00	6,048.00	5,801.42	5,801.13	159.54	20.16	-84.36	4,376.22	-664.42	4,902.41	4,811.20	91.21	53.749		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 50-GYRO-MWD												Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor	
15,600.00	6,048.00	5,801.42	5,801.13	161.27	20.16	-84.36	4,376.22	-664.42	4,988.67	4,897.92	90.75	54.972	
15,700.00	6,048.00	5,801.42	5,801.13	163.01	20.16	-84.36	4,376.22	-664.42	5,075.44	4,985.13	90.30	56.204	
15,800.00	6,048.00	5,801.42	5,801.13	164.75	20.16	-84.36	4,376.22	-664.42	5,162.68	5,072.81	89.87	57.447	
15,900.00	6,048.00	5,801.42	5,801.13	166.49	20.16	-84.36	4,376.22	-664.42	5,250.38	5,160.93	89.45	58.698	
16,000.00	6,048.00	5,801.42	5,801.13	168.23	20.16	-84.36	4,376.22	-664.42	5,338.51	5,249.47	89.04	59.959	
16,100.00	6,048.00	5,801.42	5,801.13	169.97	20.16	-84.36	4,376.22	-664.42	5,427.05	5,338.41	88.64	61.227	
16,200.00	6,048.00	5,801.42	5,801.13	171.71	20.16	-84.36	4,376.22	-664.42	5,515.98	5,427.73	88.25	62.503	
16,300.00	6,048.00	5,801.42	5,801.13	173.45	20.16	-84.36	4,376.22	-664.42	5,605.29	5,517.41	87.88	63.786	
16,400.00	6,048.00	5,801.42	5,801.13	175.19	20.16	-84.36	4,376.22	-664.42	5,694.95	5,607.44	87.51	65.076	
16,500.00	6,048.00	5,801.42	5,801.13	176.93	20.16	-84.36	4,376.22	-664.42	5,784.95	5,697.80	87.16	66.373	
16,600.00	6,048.00	5,801.42	5,801.13	178.67	20.16	-84.36	4,376.22	-664.42	5,875.28	5,788.46	86.81	67.676	
16,700.00	6,048.00	5,801.42	5,801.13	180.42	20.16	-84.36	4,376.22	-664.42	5,965.91	5,879.43	86.48	68.985	
16,800.00	6,048.00	5,801.42	5,801.13	182.16	20.16	-84.36	4,376.22	-664.42	6,056.84	5,970.68	86.16	70.299	
16,900.00	6,048.00	5,801.42	5,801.13	183.91	20.16	-84.36	4,376.22	-664.42	6,148.05	6,062.21	85.84	71.619	
17,000.00	6,048.00	5,801.42	5,801.13	185.65	20.16	-84.36	4,376.22	-664.42	6,239.53	6,153.99	85.54	72.943	
17,100.00	6,048.00	5,801.42	5,801.13	187.40	20.16	-84.36	4,376.22	-664.42	6,331.27	6,246.02	85.24	74.271	
17,138.90	6,048.00	5,801.42	5,801.13	188.08	20.16	-84.36	4,376.22	-664.42	6,367.02	6,281.89	85.13	74.790	

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	9.00	9.00	0.00	0.03	-3.89	9,601.88	-652.37	9,624.01					
100.00	100.00	109.00	109.00	0.27	0.37	-3.89	9,601.88	-652.37	9,624.01	9,623.38	0.63	N/A		
200.00	200.00	209.00	209.00	0.63	0.72	-3.89	9,601.88	-652.37	9,624.01	9,622.66	1.35	7,121.310		
300.00	300.00	309.00	309.00	0.99	1.08	-3.89	9,601.88	-652.37	9,624.01	9,621.94	2.07	4,652.919		
400.00	400.00	409.00	409.00	1.34	1.44	-3.89	9,601.88	-652.37	9,624.01	9,621.23	2.79	3,455.257		
500.00	500.00	509.00	509.00	1.70	1.80	-3.89	9,601.88	-652.37	9,624.01	9,620.51	3.50	2,747.937		
600.00	600.00	609.00	609.00	2.06	2.16	-3.89	9,601.88	-652.37	9,624.01	9,619.79	4.22	2,280.998		
700.00	700.00	709.00	709.00	2.42	2.52	-3.89	9,601.88	-652.37	9,624.01	9,619.08	4.94	1,949.699		
800.00	800.00	809.00	809.00	2.78	2.87	-3.89	9,601.88	-652.37	9,624.01	9,618.36	5.65	1,702.432		
900.00	900.00	909.00	909.00	3.14	3.23	-3.89	9,601.88	-652.37	9,624.01	9,617.64	6.37	1,510.825		
1,000.00	999.98	1,008.98	1,008.98	3.48	3.59	-119.24	9,601.88	-652.37	9,624.87	9,617.79	7.08	1,360.403		
1,100.00	1,099.84	1,108.84	1,108.84	3.82	3.95	-119.23	9,601.88	-652.37	9,627.42	9,619.65	7.77	1,238.622		
1,200.00	1,199.45	1,208.45	1,208.45	4.17	4.31	-119.20	9,601.88	-652.37	9,631.69	9,623.21	8.48	1,136.168		
1,300.00	1,298.70	1,307.70	1,307.70	4.53	4.66	-119.15	9,601.88	-652.37	9,637.67	9,628.47	9.19	1,048.608		
1,400.00	1,397.47	1,406.47	1,406.47	4.91	5.02	-119.10	9,601.88	-652.37	9,645.35	9,635.44	9.92	972.675		
1,500.00	1,495.62	1,504.62	1,504.62	5.31	5.37	-119.03	9,601.88	-652.37	9,654.75	9,644.10	10.66	905.941		
1,600.00	1,593.06	1,602.06	1,602.06	5.74	5.72	-118.95	9,601.88	-652.37	9,665.88	9,654.46	11.42	846.590		
1,700.00	1,689.64	1,698.64	1,698.64	6.21	6.06	-118.85	9,601.88	-652.37	9,678.72	9,666.52	12.20	793.251		
1,800.00	1,785.27	1,794.27	1,794.27	6.71	6.41	-118.74	9,601.88	-652.37	9,693.29	9,680.28	13.01	744.885		
1,900.00	1,879.82	1,888.82	1,888.82	7.27	6.75	-118.61	9,601.88	-652.37	9,709.60	9,695.74	13.86	700.701		
2,000.00	1,973.17	1,982.17	1,982.17	7.88	7.08	-118.47	9,601.88	-652.37	9,727.64	9,712.90	14.74	660.094		
2,100.00	2,065.27	2,074.27	2,074.27	8.54	7.41	-118.40	9,601.88	-652.37	9,747.36	9,731.71	15.65	622.646		
2,200.00	2,157.01	2,166.01	2,166.01	9.24	7.74	-118.60	9,601.88	-652.37	9,767.63	9,751.03	16.60	588.511		
2,300.00	2,248.74	2,257.74	2,257.74	9.96	8.07	-118.79	9,601.88	-652.37	9,788.02	9,770.47	17.56	557.512		
2,400.00	2,340.48	2,349.48	2,349.48	10.70	8.40	-118.98	9,601.88	-652.37	9,808.53	9,790.00	18.53	529.353		
2,500.00	2,432.22	2,441.22	2,441.22	11.45	8.73	-119.17	9,601.88	-652.37	9,829.16	9,809.65	19.51	503.739		
2,600.00	2,523.96	2,532.96	2,532.96	12.21	9.05	-119.36	9,601.88	-652.37	9,849.91	9,829.40	20.50	480.394		
2,700.00	2,615.70	2,624.70	2,624.70	12.99	9.38	-119.55	9,601.88	-652.37	9,870.77	9,849.27	21.50	459.070		
2,800.00	2,707.44	2,716.44	2,716.44	13.77	9.71	-119.74	9,601.88	-652.37	9,891.75	9,869.24	22.50	439.543		
2,900.00	2,799.17	2,808.17	2,808.17	14.55	10.04	-119.92	9,601.88	-652.37	9,912.84	9,889.33	23.51	421.615		
3,000.00	2,890.91	2,899.91	2,899.91	15.35	10.37	-120.11	9,601.88	-652.37	9,934.05	9,909.53	24.52	405.115		
3,100.00	2,982.65	2,991.65	2,991.65	16.14	10.70	-120.30	9,601.88	-652.37	9,955.37	9,929.84	25.53	389.888		
3,200.00	3,074.39	3,083.39	3,083.39	16.95	11.03	-120.48	9,601.88	-652.37	9,976.81	9,950.26	26.55	375.803		
3,300.00	3,166.13	3,175.13	3,175.13	17.75	11.36	-120.67	9,601.88	-652.37	9,998.36	9,970.80	27.56	362.743		
3,400.00	3,257.87	3,266.87	3,266.87	18.56	11.69	-120.85	9,601.88	-652.37	10,020.02	9,991.44	28.58	350.605		
6,800.00	6,048.00	6,057.00	6,057.00	40.12	21.69	-90.00	9,601.88	-652.37	10,030.70	9,971.14	59.57	168.399		
6,900.00	6,048.00	6,057.00	6,057.00	39.97	21.69	-90.00	9,601.88	-652.37	9,933.93	9,874.14	59.79	166.147		
7,000.00	6,048.00	6,057.00	6,057.00	39.85	21.69	-90.00	9,601.88	-652.37	9,837.23	9,777.21	60.02	163.890		
7,100.00	6,048.00	6,057.00	6,057.00	39.76	21.69	-90.00	9,601.88	-652.37	9,740.60	9,680.33	60.27	161.628		
7,200.00	6,048.00	6,057.00	6,057.00	39.72	21.69	-90.00	9,601.88	-652.37	9,644.03	9,583.51	60.52	159.360		
7,300.00	6,048.00	6,057.00	6,057.00	39.71	21.69	-90.00	9,601.88	-652.37	9,547.53	9,486.76	60.78	157.088		
7,400.00	6,048.00	6,057.00	6,057.00	39.75	21.69	-90.00	9,601.88	-652.37	9,451.11	9,390.06	61.05	154.812		
7,500.00	6,048.00	6,057.00	6,057.00	39.85	21.69	-90.00	9,601.88	-652.37	9,354.76	9,293.43	61.33	152.532		
7,600.00	6,048.00	6,057.00	6,057.00	40.01	21.69	-90.00	9,601.88	-652.37	9,258.49	9,196.87	61.62	150.249		
7,700.00	6,048.00	6,057.00	6,057.00	40.24	21.69	-90.00	9,601.88	-652.37	9,162.30	9,100.38	61.92	147.962		
7,800.00	6,048.00	6,057.00	6,057.00	40.57	21.69	-90.00	9,601.88	-652.37	9,066.19	9,003.96	62.24	145.674		
7,900.00	6,048.00	6,057.00	6,057.00	40.99	21.69	-90.00	9,601.88	-652.37	8,970.17	8,907.61	62.56	143.383		
8,000.00	6,048.00	6,057.00	6,057.00	41.53	21.69	-90.00	9,601.88	-652.37	8,874.23	8,811.34	62.90	141.091		
8,100.00	6,048.00	6,057.00	6,057.00	42.19	21.69	-90.00	9,601.88	-652.37	8,778.39	8,715.14	63.25	138.799		
8,200.00	6,048.00	6,057.00	6,057.00	42.97	21.69	-90.00	9,601.88	-652.37	8,682.64	8,619.03	63.61	136.506		
8,300.00	6,048.00	6,057.00	6,057.00	43.85	21.69	-90.00	9,601.88	-652.37	8,586.98	8,523.00	63.98	134.213		
8,400.00	6,048.00	6,057.00	6,057.00	44.83	21.69	-90.00	9,601.88	-652.37	8,491.43	8,427.06	64.37	131.921		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
8,500.00	6,048.00	6,057.00	6,057.00	45.90	21.69	-90.00	9,601.88	-652.37	8,395.98	8,331.21	64.77	129.630		
8,600.00	6,048.00	6,057.00	6,057.00	47.05	21.69	-90.00	9,601.88	-652.37	8,300.64	8,235.45	65.18	127.342		
8,700.00	6,048.00	6,057.00	6,057.00	48.25	21.69	-90.00	9,601.88	-652.37	8,205.40	8,139.79	65.61	125.056		
8,800.00	6,048.00	6,057.00	6,057.00	49.51	21.69	-90.00	9,601.88	-652.37	8,110.29	8,044.23	66.06	122.774		
8,900.00	6,048.00	6,057.00	6,057.00	50.81	21.69	-90.00	9,601.88	-652.37	8,015.29	7,948.77	66.52	120.495		
9,000.00	6,048.00	6,057.00	6,057.00	52.15	21.69	-90.00	9,601.88	-652.37	7,920.41	7,853.41	67.00	118.221		
9,100.00	6,048.00	6,057.00	6,057.00	53.53	21.69	-90.00	9,601.88	-652.37	7,825.66	7,758.17	67.49	115.953		
9,200.00	6,048.00	6,057.00	6,057.00	54.94	21.69	-90.00	9,601.88	-652.37	7,731.05	7,663.05	68.00	113.690		
9,300.00	6,048.00	6,057.00	6,057.00	56.37	21.69	-90.00	9,601.88	-652.37	7,636.57	7,568.04	68.53	111.434		
9,400.00	6,048.00	6,057.00	6,057.00	57.82	21.69	-90.00	9,601.88	-652.37	7,542.23	7,473.15	69.08	109.185		
9,500.00	6,048.00	6,057.00	6,057.00	59.30	21.69	-90.00	9,601.88	-652.37	7,448.04	7,378.40	69.64	106.945		
9,600.00	6,048.00	6,057.00	6,057.00	60.79	21.69	-90.00	9,601.88	-652.37	7,354.01	7,283.78	70.23	104.713		
9,700.00	6,048.00	6,057.00	6,057.00	62.30	21.69	-90.00	9,601.88	-652.37	7,260.13	7,189.30	70.84	102.491		
9,800.00	6,048.00	6,057.00	6,057.00	63.82	21.69	-90.00	9,601.88	-652.37	7,166.42	7,094.96	71.46	100.280		
9,900.00	6,048.00	6,057.00	6,057.00	65.36	21.69	-90.00	9,601.88	-652.37	7,072.89	7,000.77	72.11	98.079		
10,000.00	6,048.00	6,057.00	6,057.00	66.91	21.69	-90.00	9,601.88	-652.37	6,979.53	6,906.74	72.79	95.891		
10,100.00	6,048.00	6,057.00	6,057.00	68.48	21.69	-90.00	9,601.88	-652.37	6,886.35	6,812.87	73.48	93.715		
10,200.00	6,048.00	6,057.00	6,057.00	70.05	21.69	-90.00	9,601.88	-652.37	6,793.38	6,719.18	74.20	91.553		
10,300.00	6,048.00	6,057.00	6,057.00	71.63	21.69	-90.00	9,601.88	-652.37	6,700.60	6,625.65	74.95	89.405		
10,400.00	6,048.00	6,057.00	6,057.00	73.23	21.69	-90.00	9,601.88	-652.37	6,608.04	6,532.32	75.72	87.272		
10,500.00	6,048.00	6,057.00	6,057.00	74.83	21.69	-90.00	9,601.88	-652.37	6,515.69	6,439.18	76.52	85.154		
10,600.00	6,048.00	6,057.00	6,057.00	76.43	21.69	-90.00	9,601.88	-652.37	6,423.58	6,346.23	77.34	83.054		
10,700.00	6,048.00	6,057.00	6,057.00	78.05	21.69	-90.00	9,601.88	-652.37	6,331.70	6,253.50	78.20	80.971		
10,800.00	6,048.00	6,057.00	6,057.00	79.67	21.69	-90.00	9,601.88	-652.37	6,240.07	6,160.99	79.08	78.906		
10,900.00	6,048.00	6,057.00	6,057.00	81.30	21.69	-90.00	9,601.88	-652.37	6,148.71	6,068.71	80.00	76.860		
11,000.00	6,048.00	6,057.00	6,057.00	82.94	21.69	-90.00	9,601.88	-652.37	6,057.61	5,976.67	80.95	74.834		
11,100.00	6,048.00	6,057.00	6,057.00	84.58	21.69	-90.00	9,601.88	-652.37	5,966.81	5,884.88	81.93	72.829		
11,200.00	6,048.00	6,057.00	6,057.00	86.22	21.69	-90.00	9,601.88	-652.37	5,876.30	5,793.35	82.95	70.846		
11,300.00	6,048.00	6,057.00	6,057.00	87.87	21.69	-90.00	9,601.88	-652.37	5,786.10	5,702.10	84.00	68.884		
11,400.00	6,048.00	6,057.00	6,057.00	89.53	21.69	-90.00	9,601.88	-652.37	5,696.23	5,611.14	85.09	66.946		
11,500.00	6,048.00	6,057.00	6,057.00	91.19	21.69	-90.00	9,601.88	-652.37	5,606.70	5,520.49	86.22	65.031		
11,600.00	6,048.00	6,057.00	6,057.00	92.85	21.69	-90.00	9,601.88	-652.37	5,517.54	5,430.15	87.38	63.141		
11,700.00	6,048.00	6,057.00	6,057.00	94.52	21.69	-90.00	9,601.88	-652.37	5,428.75	5,340.15	88.59	61.277		
11,800.00	6,048.00	6,057.00	6,057.00	96.19	21.69	-90.00	9,601.88	-652.37	5,340.36	5,250.51	89.85	59.438		
11,900.00	6,048.00	6,057.00	6,057.00	97.86	21.69	-90.00	9,601.88	-652.37	5,252.38	5,161.23	91.14	57.627		
12,000.00	6,048.00	6,057.00	6,057.00	99.54	21.69	-90.00	9,601.88	-652.37	5,164.84	5,072.35	92.49	55.843		
12,100.00	6,048.00	6,057.00	6,057.00	101.22	21.69	-90.00	9,601.88	-652.37	5,077.76	4,983.88	93.88	54.087		
12,200.00	6,048.00	6,057.00	6,057.00	102.91	21.69	-90.00	9,601.88	-652.37	4,991.17	4,895.84	95.32	52.361		
12,300.00	6,048.00	6,057.00	6,057.00	104.59	21.69	-90.00	9,601.88	-652.37	4,905.08	4,808.27	96.82	50.664		
12,400.00	6,048.00	6,057.00	6,057.00	106.28	21.69	-90.00	9,601.88	-652.37	4,819.54	4,721.17	98.36	48.998		
12,500.00	6,048.00	6,057.00	6,057.00	107.97	21.69	-90.00	9,601.88	-652.37	4,734.56	4,634.59	99.96	47.363		
12,600.00	6,048.00	6,057.00	6,057.00	109.67	21.69	-90.00	9,601.88	-652.37	4,650.17	4,548.55	101.62	45.760		
12,700.00	6,048.00	6,057.00	6,057.00	111.37	21.69	-90.00	9,601.88	-652.37	4,566.42	4,463.08	103.34	44.189		
12,800.00	6,048.00	6,057.00	6,057.00	113.07	21.69	-90.00	9,601.88	-652.37	4,483.33	4,378.22	105.11	42.652		
12,900.00	6,048.00	6,057.00	6,057.00	114.77	21.69	-90.00	9,601.88	-652.37	4,400.95	4,294.00	106.95	41.148		
13,000.00	6,048.00	6,057.00	6,057.00	116.47	21.69	-90.00	9,601.88	-652.37	4,319.31	4,210.45	108.86	39.678		
13,100.00	6,048.00	6,057.00	6,057.00	118.18	21.69	-90.00	9,601.88	-652.37	4,238.46	4,127.63	110.83	38.244		
13,200.00	6,048.00	6,057.00	6,057.00	119.88	21.69	-90.00	9,601.88	-652.37	4,158.44	4,045.58	112.86	36.844		
13,300.00	6,048.00	6,057.00	6,057.00	121.59	21.69	-90.00	9,601.88	-652.37	4,079.30	3,964.33	114.97	35.481		
13,400.00	6,048.00	6,057.00	6,057.00	123.30	21.69	-90.00	9,601.88	-652.37	4,001.10	3,883.95	117.15	34.154		
13,500.00	6,048.00	6,057.00	6,057.00	125.02	21.69	-90.00	9,601.88	-652.37	3,923.89	3,804.49	119.40	32.864		
13,600.00	6,048.00	6,057.00	6,057.00	126.73	21.69	-90.00	9,601.88	-652.37	3,847.73	3,726.01	121.72	31.612		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
13,700.00	6,048.00	6,057.00	6,057.00	128.45	21.69	-90.00	9,601.88	-652.37	3,772.68	3,648.56	124.11	30.398		
13,800.00	6,048.00	6,057.00	6,057.00	130.16	21.69	-90.00	9,601.88	-652.37	3,698.81	3,572.23	126.58	29.221		
13,900.00	6,048.00	6,057.00	6,057.00	131.88	21.69	-90.00	9,601.88	-652.37	3,626.19	3,497.07	129.12	28.084		
14,000.00	6,048.00	6,057.00	6,057.00	133.60	21.69	-90.00	9,601.88	-652.37	3,554.90	3,423.17	131.73	26.986		
14,100.00	6,048.00	6,057.00	6,057.00	135.32	21.69	-90.00	9,601.88	-652.37	3,485.03	3,350.61	134.42	25.927		
14,200.00	6,048.00	6,057.00	6,057.00	137.05	21.69	-90.00	9,601.88	-652.37	3,416.65	3,279.48	137.17	24.908		
14,300.00	6,048.00	6,057.00	6,057.00	138.77	21.69	-90.00	9,601.88	-652.37	3,349.87	3,209.87	139.99	23.929		
14,400.00	6,048.00	6,057.00	6,057.00	140.50	21.69	-90.00	9,601.88	-652.37	3,284.77	3,141.89	142.88	22.990		
14,500.00	6,048.00	6,057.00	6,057.00	142.22	21.69	-90.00	9,601.88	-652.37	3,221.46	3,075.64	145.82	22.092		
14,600.00	6,048.00	6,057.00	6,057.00	143.95	21.69	-90.00	9,601.88	-652.37	3,160.04	3,011.23	148.82	21.235		
14,700.00	6,048.00	6,057.00	6,057.00	145.68	21.69	-90.00	9,601.88	-652.37	3,100.64	2,948.78	151.86	20.418		
14,800.00	6,048.00	6,057.00	6,057.00	147.41	21.69	-90.00	9,601.88	-652.37	3,043.36	2,888.43	154.93	19.643		
14,900.00	6,048.00	6,057.00	6,057.00	149.14	21.69	-90.00	9,601.88	-652.37	2,988.33	2,830.30	158.04	18.909		
15,000.00	6,048.00	6,057.00	6,057.00	150.87	21.69	-90.00	9,601.88	-652.37	2,935.68	2,774.53	161.15	18.217		
15,100.00	6,048.00	6,057.00	6,057.00	152.60	21.69	-90.00	9,601.88	-652.37	2,885.54	2,721.26	164.27	17.566		
15,200.00	6,048.00	6,057.00	6,057.00	154.33	21.69	-90.00	9,601.88	-652.37	2,838.03	2,670.65	167.38	16.956		
15,300.00	6,048.00	6,057.00	6,057.00	156.07	21.69	-90.00	9,601.88	-652.37	2,793.29	2,622.84	170.45	16.388		
15,400.00	6,048.00	6,057.00	6,057.00	157.80	21.69	-90.00	9,601.88	-652.37	2,751.47	2,577.99	173.48	15.861		
15,500.00	6,048.00	6,057.00	6,057.00	159.54	21.69	-90.00	9,601.88	-652.37	2,712.69	2,536.25	176.43	15.375		
15,600.00	6,048.00	6,057.00	6,057.00	161.27	21.69	-90.00	9,601.88	-652.37	2,677.08	2,497.78	179.30	14.931		
15,700.00	6,048.00	6,057.00	6,057.00	163.01	21.69	-90.00	9,601.88	-652.37	2,644.78	2,462.72	182.06	14.527		
15,800.00	6,048.00	6,057.00	6,057.00	164.75	21.69	-90.00	9,601.88	-652.37	2,615.90	2,431.22	184.68	14.165		
15,900.00	6,048.00	6,057.00	6,057.00	166.49	21.69	-90.00	9,601.88	-652.37	2,590.57	2,403.42	187.14	13.843		
16,000.00	6,048.00	6,057.00	6,057.00	168.23	21.69	-90.00	9,601.88	-652.37	2,568.87	2,379.44	189.43	13.561		
16,100.00	6,048.00	6,057.00	6,057.00	169.97	21.69	-90.00	9,601.88	-652.37	2,550.92	2,359.40	191.52	13.319		
16,200.00	6,048.00	6,057.00	6,057.00	171.71	21.69	-90.00	9,601.88	-652.37	2,536.79	2,343.40	193.39	13.117		
16,300.00	6,048.00	6,057.00	6,057.00	173.45	21.69	-90.00	9,601.88	-652.37	2,526.54	2,331.51	195.03	12.955		
16,400.00	6,048.00	6,057.00	6,057.00	175.19	21.69	-90.00	9,601.88	-652.37	2,520.21	2,323.79	196.42	12.831		
16,500.00	6,048.00	6,057.00	6,057.00	176.93	21.69	-90.00	9,601.88	-652.37	2,517.85	2,320.30	197.55	12.745		
16,509.56	6,048.00	6,057.00	6,057.00	177.10	21.69	-90.00	9,601.88	-652.37	2,517.83	2,320.18	197.65	12.739	CC, ES	
16,600.00	6,048.00	6,057.00	6,057.00	178.67	21.69	-90.00	9,601.88	-652.37	2,519.45	2,321.04	198.42	12.698		
16,700.00	6,048.00	6,057.00	6,057.00	180.42	21.69	-90.00	9,601.88	-652.37	2,525.02	2,326.01	199.02	12.688	SF	
16,800.00	6,048.00	6,057.00	6,057.00	182.16	21.69	-90.00	9,601.88	-652.37	2,534.53	2,335.18	199.35	12.714		
16,900.00	6,048.00	6,057.00	6,057.00	183.91	21.69	-90.00	9,601.88	-652.37	2,547.92	2,348.51	199.41	12.777		
17,000.00	6,048.00	6,057.00	6,057.00	185.65	21.69	-90.00	9,601.88	-652.37	2,565.15	2,365.93	199.23	12.876		
17,100.00	6,048.00	6,057.00	6,057.00	187.40	21.69	-90.00	9,601.88	-652.37	2,586.13	2,387.34	198.79	13.009		
17,138.90	6,048.00	6,057.00	6,057.00	188.08	21.69	-90.00	9,601.88	-652.37	2,595.29	2,396.73	198.56	13.071		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 146-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	44.94	44.94	0.00	0.07	7.87	5,337.15	737.67	5,387.91					
100.00	100.00	174.78	174.77	0.27	0.33	7.87	5,336.34	737.78	5,387.27	5,386.67	0.60	8,944.549		
200.00	200.00	269.78	269.78	0.63	0.67	7.87	5,335.59	737.84	5,386.51	5,385.21	1.30	4,140.902		
300.00	300.00	384.24	384.23	0.99	1.08	7.87	5,334.67	737.79	5,385.71	5,383.64	2.07	2,602.561		
400.00	400.00	488.05	488.04	1.34	1.46	7.87	5,333.51	737.70	5,384.59	5,381.79	2.80	1,923.919		
500.00	500.00	565.83	565.81	1.70	1.73	7.88	5,332.74	738.32	5,383.71	5,380.28	3.43	1,568.398		
600.00	600.00	636.90	636.87	2.06	1.98	7.90	5,332.29	739.58	5,383.34	5,379.30	4.04	1,332.465		
613.50	613.50	646.50	646.46	2.11	2.02	7.90	5,332.25	739.80	5,383.33	5,379.21	4.12	1,305.951		
700.00	700.00	707.87	707.80	2.42	2.23	7.92	5,332.13	741.58	5,383.50	5,378.85	4.65	1,158.556		
800.00	800.00	755.00	754.90	2.78	2.40	7.94	5,332.15	743.49	5,384.27	5,379.10	5.17	1,041.550		
900.00	900.00	818.36	818.17	3.14	2.62	7.97	5,332.63	746.69	5,385.83	5,380.08	5.75	936.625		
1,000.00	999.98	877.00	876.69	3.48	2.82	-107.31	5,333.72	750.24	5,388.96	5,382.66	6.30	855.094		
1,100.00	1,099.84	978.86	978.20	3.82	3.19	-107.19	5,335.71	758.45	5,393.58	5,386.58	7.01	769.762		
1,200.00	1,199.45	1,016.69	1,015.82	4.17	3.33	-107.07	5,336.53	762.29	5,399.64	5,392.15	7.49	720.565		
1,300.00	1,298.70	1,061.00	1,059.83	4.53	3.49	-106.92	5,337.82	767.35	5,407.73	5,399.72	8.01	674.780		
1,400.00	1,397.47	1,061.00	1,059.83	4.91	3.49	-106.72	5,337.82	767.35	5,418.27	5,409.88	8.38	646.319		
1,500.00	1,495.62	1,127.93	1,126.15	5.31	3.74	-106.52	5,340.82	775.77	5,430.39	5,421.36	9.03	601.454		
1,600.00	1,593.06	1,183.00	1,180.60	5.74	3.95	-106.29	5,344.44	783.21	5,445.14	5,435.48	9.65	564.093		
1,700.00	1,689.64	1,183.00	1,180.60	6.21	3.95	-105.97	5,344.44	783.21	5,461.82	5,451.73	10.09	541.234		
1,800.00	1,785.27	1,230.57	1,227.56	6.71	4.14	-105.68	5,348.39	789.74	5,480.65	5,469.90	10.75	509.690		
1,900.00	1,879.82	1,273.00	1,269.40	7.27	4.31	-105.36	5,352.54	795.41	5,501.59	5,490.15	11.43	481.225		
2,000.00	1,973.17	1,306.16	1,302.05	7.88	4.44	-104.99	5,356.12	799.92	5,524.48	5,512.36	12.12	455.778		
2,100.00	2,065.27	1,365.00	1,359.85	8.54	4.68	-104.79	5,363.00	808.51	5,549.29	5,536.33	12.96	428.110		
2,200.00	2,157.01	1,414.83	1,408.69	9.24	4.89	-104.93	5,369.12	816.27	5,575.07	5,561.27	13.80	403.960		
2,300.00	2,248.74	1,487.00	1,479.35	9.96	5.20	-105.12	5,378.05	827.92	5,601.27	5,586.52	14.75	379.619		
2,400.00	2,340.48	1,513.99	1,505.74	10.70	5.32	-105.19	5,381.61	832.35	5,628.36	5,612.84	15.52	362.590		
2,500.00	2,432.22	1,551.00	1,541.80	11.45	5.49	-105.28	5,386.98	838.71	5,656.68	5,640.33	16.34	346.088		
2,600.00	2,523.96	1,659.55	1,647.27	12.21	6.00	-105.54	5,402.98	858.75	5,685.66	5,668.14	17.52	324.521		
2,700.00	2,615.70	1,741.00	1,726.49	12.99	6.38	-105.73	5,414.36	873.89	5,714.02	5,695.44	18.58	307.505		
2,800.00	2,707.44	1,803.44	1,787.13	13.77	6.69	-105.87	5,423.28	885.80	5,742.88	5,723.32	19.56	293.592		
2,900.00	2,799.17	1,867.82	1,849.39	14.55	7.01	-106.00	5,433.12	898.93	5,772.68	5,752.13	20.56	280.840		
3,000.00	2,890.91	2,014.94	1,991.92	15.35	7.76	-106.32	5,455.10	927.98	5,802.23	5,780.24	21.99	263.833		
3,100.00	2,982.65	2,120.64	2,094.20	16.14	8.31	-106.53	5,470.14	950.01	5,831.28	5,808.05	23.23	251.027		
3,200.00	3,074.39	2,251.24	2,221.17	16.95	8.98	-106.82	5,487.87	974.95	5,859.45	5,834.86	24.60	238.218		
3,300.00	3,166.13	2,311.00	2,279.08	17.75	9.29	-106.94	5,496.34	986.99	5,888.42	5,862.83	25.59	230.093		
3,400.00	3,257.87	2,466.20	2,429.42	18.56	10.11	-107.25	5,518.14	1,018.73	5,917.70	5,890.59	27.12	218.207		
3,500.00	3,349.61	2,613.84	2,573.25	19.37	10.86	-107.56	5,536.90	1,046.24	5,945.32	5,916.73	28.59	207.944		
3,600.00	3,441.34	2,751.89	2,708.20	20.18	11.55	-107.87	5,553.34	1,070.28	5,972.14	5,942.14	30.00	199.083		
3,700.00	3,533.08	2,906.48	2,859.67	21.00	12.30	-108.22	5,570.77	1,095.75	5,998.46	5,966.98	31.48	190.540		
3,800.00	3,624.82	2,977.00	2,928.94	21.81	12.63	-108.39	5,578.61	1,106.41	6,024.62	5,992.10	32.52	185.235		
3,900.00	3,716.56	3,024.14	2,975.22	22.63	12.86	-108.50	5,584.13	1,113.45	6,051.40	6,017.96	33.45	180.931		
4,000.00	3,808.30	3,076.24	3,026.25	23.45	13.11	-108.62	5,590.55	1,121.80	6,078.94	6,044.55	34.39	176.763		
4,100.00	3,900.04	3,168.00	3,116.07	24.27	13.56	-108.83	5,602.05	1,136.62	6,106.76	6,071.21	35.55	171.793		
4,200.00	3,991.78	3,211.77	3,158.90	25.09	13.78	-108.93	5,607.72	1,143.61	6,135.11	6,098.66	36.45	168.337		
4,300.00	4,083.51	3,263.00	3,208.92	25.92	14.03	-109.04	5,614.93	1,152.00	6,164.43	6,127.05	37.38	164.914		
4,400.00	4,175.25	3,295.49	3,240.58	26.74	14.20	-109.11	5,619.76	1,157.54	6,194.55	6,156.34	38.21	162.112		
4,500.00	4,266.99	4,312.49	4,243.87	27.57	18.42	-111.72	5,693.25	1,269.67	6,211.35	6,167.80	43.56	142.605		
4,600.00	4,358.73	4,404.00	4,335.37	28.39	18.69	-112.04	5,694.03	1,270.12	6,228.23	6,183.66	44.58	139.714		
4,700.00	4,450.47	4,404.00	4,335.37	29.22	18.69	-112.04	5,694.03	1,270.12	6,246.00	6,200.70	45.31	137.855		
4,800.00	4,542.21	4,456.78	4,388.14	30.05	18.85	-112.22	5,695.03	1,270.25	6,264.54	6,218.34	46.20	135.606		
4,900.00	4,633.95	4,499.00	4,430.32	30.88	18.97	-112.37	5,696.64	1,269.85	6,284.51	6,237.47	47.04	133.587		
5,000.00	4,725.68	5,071.00	5,001.81	31.70	20.57	-114.34	5,696.51	1,265.21	6,301.69	6,252.26	49.43	127.480		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 146-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	5,102.49	5,033.28	32.53	20.66	-114.44	5,695.48	1,265.57	6,315.76	6,265.49	50.27	125.638		
5,200.00	4,909.16	5,166.00	5,096.77	33.36	20.84	-114.64	5,694.06	1,265.96	6,330.92	6,279.73	51.19	123.675		
5,300.00	5,000.90	5,166.00	5,096.77	34.19	20.84	-114.64	5,694.06	1,265.96	6,346.88	6,294.96	51.92	122.245		
5,400.00	5,092.64	5,166.00	5,096.77	35.02	20.84	-114.64	5,694.06	1,265.96	6,364.36	6,311.73	52.63	120.918		
5,500.00	5,184.38	5,223.11	5,153.88	35.85	21.01	-114.83	5,693.90	1,266.28	6,382.39	6,328.87	53.52	119.247		
5,600.00	5,276.11	5,261.00	5,191.76	36.69	21.13	-114.95	5,694.59	1,266.69	6,401.97	6,347.63	54.34	117.808		
5,700.00	5,367.85	5,333.58	5,264.31	37.52	21.36	-115.18	5,696.35	1,267.73	6,422.40	6,367.11	55.28	116.169		
5,800.00	5,459.76	5,451.00	5,381.70	38.34	21.74	-107.15	5,698.43	1,269.65	6,441.25	6,384.86	56.39	114.237		
5,900.00	5,552.68	5,518.24	5,448.93	39.06	21.96	-82.39	5,699.62	1,270.53	6,446.49	6,389.20	57.29	112.519		
6,000.00	5,644.46	5,741.00	5,671.44	39.64	22.61	-61.77	5,701.39	1,265.51	6,433.60	6,374.97	58.63	109.739		
6,100.00	5,732.30	5,931.00	5,852.08	40.06	22.92	-48.84	5,696.89	1,208.99	6,403.22	6,343.75	59.47	107.678		
6,200.00	5,813.53	5,931.00	5,852.08	40.35	22.92	-40.42	5,696.89	1,208.99	6,356.84	6,296.86	59.97	105.992		
6,300.00	5,885.68	5,931.00	5,852.08	40.51	22.92	-35.58	5,696.89	1,208.99	6,296.91	6,236.51	60.40	104.253		
6,400.00	5,946.56	5,947.40	5,866.90	40.57	22.94	-33.40	5,696.36	1,201.99	6,224.71	6,163.94	60.76	102.442		
6,500.00	5,994.33	5,963.00	5,880.91	40.54	22.96	-33.54	5,696.17	1,195.14	6,142.43	6,081.38	61.05	100.610		
6,600.00	6,027.53	5,963.00	5,880.91	40.44	22.96	-36.69	5,696.17	1,195.14	6,051.89	5,990.64	61.25	98.800		
6,700.00	6,045.15	5,963.00	5,880.91	40.29	22.96	-48.63	5,696.17	1,195.14	5,955.71	5,894.31	61.40	97.004		
6,800.00	6,048.00	5,963.00	5,880.91	40.12	22.96	-72.81	5,696.17	1,195.14	5,856.68	5,795.18	61.49	95.239		
6,900.00	6,048.00	5,963.00	5,880.91	39.97	22.96	-72.81	5,696.17	1,195.14	5,757.34	5,695.76	61.59	93.484		
7,000.00	6,048.00	5,963.00	5,880.91	39.85	22.96	-72.81	5,696.17	1,195.14	5,658.04	5,596.35	61.68	91.728		
7,100.00	6,048.00	5,963.00	5,880.91	39.76	22.96	-72.81	5,696.17	1,195.14	5,558.75	5,496.97	61.78	89.972		
7,200.00	6,048.00	5,963.00	5,880.91	39.72	22.96	-72.81	5,696.17	1,195.14	5,459.50	5,397.61	61.89	88.214		
7,300.00	6,048.00	5,963.00	5,880.91	39.71	22.96	-72.81	5,696.17	1,195.14	5,360.27	5,298.27	62.00	86.456		
7,400.00	6,048.00	5,963.00	5,880.91	39.75	22.96	-72.81	5,696.17	1,195.14	5,261.07	5,198.95	62.12	84.697		
7,500.00	6,048.00	5,963.00	5,880.91	39.85	22.96	-72.81	5,696.17	1,195.14	5,161.90	5,099.66	62.24	82.938		
7,600.00	6,048.00	5,963.00	5,880.91	40.01	22.96	-72.81	5,696.17	1,195.14	5,062.76	5,000.39	62.37	81.177		
7,700.00	6,048.00	5,963.00	5,880.91	40.24	22.96	-72.81	5,696.17	1,195.14	4,963.66	4,901.16	62.50	79.417		
7,800.00	6,048.00	5,963.00	5,880.91	40.57	22.96	-72.81	5,696.17	1,195.14	4,864.59	4,801.95	62.64	77.655		
7,900.00	6,048.00	5,963.00	5,880.91	40.99	22.96	-72.81	5,696.17	1,195.14	4,765.57	4,702.77	62.79	75.894		
8,000.00	6,048.00	5,963.00	5,880.91	41.53	22.96	-72.81	5,696.17	1,195.14	4,666.58	4,603.63	62.95	74.132		
8,100.00	6,048.00	5,963.00	5,880.91	42.19	22.96	-72.81	5,696.17	1,195.14	4,567.64	4,504.52	63.12	72.370		
8,200.00	6,048.00	5,963.00	5,880.91	42.97	22.96	-72.81	5,696.17	1,195.14	4,468.75	4,405.46	63.29	70.607		
8,300.00	6,048.00	5,963.00	5,880.91	43.85	22.96	-72.81	5,696.17	1,195.14	4,369.90	4,306.43	63.47	68.845		
8,400.00	6,048.00	5,963.00	5,880.91	44.83	22.96	-72.81	5,696.17	1,195.14	4,271.11	4,207.44	63.67	67.083		
8,500.00	6,048.00	5,963.00	5,880.91	45.90	22.96	-72.81	5,696.17	1,195.14	4,172.38	4,108.51	63.87	65.321		
8,600.00	6,048.00	5,963.00	5,880.91	47.05	22.96	-72.81	5,696.17	1,195.14	4,073.71	4,009.62	64.09	63.560		
8,700.00	6,048.00	5,963.00	5,880.91	48.25	22.96	-72.81	5,696.17	1,195.14	3,975.11	3,910.79	64.32	61.799		
8,800.00	6,048.00	5,963.00	5,880.91	49.51	22.96	-72.81	5,696.17	1,195.14	3,876.58	3,812.01	64.57	60.039		
8,900.00	6,048.00	5,949.22	5,868.54	50.81	22.95	-71.64	5,696.32	1,201.20	3,777.97	3,713.21	64.76	58.337		
9,000.00	6,048.00	5,948.84	5,868.19	52.15	22.95	-71.61	5,696.33	1,201.37	3,679.59	3,614.55	65.03	56.582		
9,100.00	6,048.00	5,948.45	5,867.84	53.53	22.95	-71.58	5,696.34	1,201.54	3,581.29	3,515.98	65.32	54.828		
9,200.00	6,048.00	5,948.03	5,867.47	54.94	22.95	-71.54	5,696.35	1,201.71	3,483.10	3,417.47	65.63	53.075		
9,300.00	6,048.00	5,947.60	5,867.08	56.37	22.94	-71.50	5,696.36	1,201.90	3,385.01	3,319.06	65.95	51.325		
9,400.00	6,048.00	5,947.16	5,866.68	57.82	22.94	-71.47	5,696.37	1,202.09	3,287.04	3,220.73	66.30	49.576		
9,500.00	6,048.00	5,946.69	5,866.26	59.30	22.94	-71.43	5,696.38	1,202.30	3,189.19	3,122.51	66.68	47.830		
9,600.00	6,048.00	5,946.20	5,865.81	60.79	22.94	-71.38	5,696.39	1,202.51	3,091.48	3,024.40	67.08	46.087		
9,700.00	6,048.00	5,945.68	5,865.35	62.30	22.94	-71.34	5,696.40	1,202.73	2,993.92	2,926.41	67.51	44.348		
9,800.00	6,048.00	5,945.14	5,864.86	63.82	22.94	-71.29	5,696.41	1,202.97	2,896.52	2,828.55	67.97	42.612		
9,900.00	6,048.00	5,944.57	5,864.35	65.36	22.94	-71.25	5,696.43	1,203.21	2,799.31	2,730.83	68.48	40.881		
10,000.00	6,048.00	5,943.98	5,863.81	66.91	22.94	-71.20	5,696.44	1,203.47	2,702.30	2,633.28	69.02	39.154		
10,100.00	6,048.00	5,931.00	5,852.08	68.48	22.92	-70.09	5,696.89	1,208.99	2,605.65	2,536.17	69.48	37.502		
10,200.00	6,048.00	5,931.00	5,852.08	70.05	22.92	-70.09	5,696.89	1,208.99	2,509.11	2,438.99	70.12	35.785		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 146-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	5,931.00	5,852.08	71.63	22.92	-70.09	5,696.89	1,208.99	2,412.84	2,342.04	70.81	34.076		
10,400.00	6,048.00	5,931.00	5,852.08	73.23	22.92	-70.09	5,696.89	1,208.99	2,316.90	2,245.33	71.56	32.375		
10,500.00	6,048.00	5,931.00	5,852.08	74.83	22.92	-70.09	5,696.89	1,208.99	2,221.31	2,148.91	72.39	30.684		
10,600.00	6,048.00	5,931.00	5,852.08	76.43	22.92	-70.09	5,696.89	1,208.99	2,126.12	2,052.82	73.30	29.005		
10,700.00	6,048.00	5,931.00	5,852.08	78.05	22.92	-70.09	5,696.89	1,208.99	2,031.40	1,957.10	74.31	27.338		
10,800.00	6,048.00	5,931.00	5,852.08	79.67	22.92	-70.09	5,696.89	1,208.99	1,937.21	1,861.80	75.41	25.688		
10,900.00	6,048.00	5,931.00	5,852.08	81.30	22.92	-70.09	5,696.89	1,208.99	1,843.63	1,766.99	76.64	24.055		
11,000.00	6,048.00	5,931.00	5,852.08	82.94	22.92	-70.09	5,696.89	1,208.99	1,750.77	1,672.76	78.01	22.444		
11,100.00	6,048.00	5,931.00	5,852.08	84.58	22.92	-70.09	5,696.89	1,208.99	1,658.73	1,579.20	79.53	20.858		
11,200.00	6,048.00	5,931.00	5,852.08	86.22	22.92	-70.09	5,696.89	1,208.99	1,567.66	1,486.44	81.22	19.300		
11,300.00	6,048.00	5,931.00	5,852.08	87.87	22.92	-70.09	5,696.89	1,208.99	1,477.76	1,394.63	83.13	17.777		
11,400.00	6,048.00	5,931.00	5,852.08	89.53	22.92	-70.09	5,696.89	1,208.99	1,389.23	1,303.97	85.26	16.293		
11,500.00	6,048.00	5,931.00	5,852.08	91.19	22.92	-70.09	5,696.89	1,208.99	1,302.36	1,214.70	87.66	14.857		
11,600.00	6,048.00	5,931.00	5,852.08	92.85	22.92	-70.09	5,696.89	1,208.99	1,217.52	1,127.16	90.35	13.475		
11,700.00	6,048.00	5,922.42	5,844.29	94.52	22.91	-69.35	5,697.26	1,212.55	1,135.08	1,042.01	93.07	12.196		
11,800.00	6,048.00	5,919.85	5,841.94	96.19	22.91	-69.13	5,697.37	1,213.61	1,055.71	959.41	96.30	10.963		
11,900.00	6,048.00	5,917.28	5,839.59	97.86	22.91	-68.91	5,697.48	1,214.66	980.10	880.25	99.84	9.816		
12,000.00	6,048.00	5,914.71	5,837.24	99.54	22.90	-68.69	5,697.59	1,215.69	909.20	805.54	103.66	8.771		
12,100.00	6,048.00	5,912.14	5,834.90	101.22	22.90	-68.47	5,697.70	1,216.73	844.21	736.56	107.65	7.842		
12,200.00	6,048.00	5,909.57	5,832.55	102.91	22.90	-68.25	5,697.81	1,217.75	786.57	674.98	111.59	7.049		
12,300.00	6,048.00	5,907.01	5,830.20	104.59	22.89	-68.03	5,697.92	1,218.76	738.02	622.87	115.16	6.409		
12,400.00	6,048.00	5,900.00	5,823.75	106.28	22.88	-67.42	5,698.22	1,221.50	700.48	582.87	117.62	5.956		
12,500.00	6,048.00	5,900.00	5,823.75	107.97	22.88	-67.42	5,698.22	1,221.50	675.71	556.52	119.19	5.669		
12,600.00	6,048.00	5,900.00	5,823.75	109.67	22.88	-67.42	5,698.22	1,221.50	665.21	546.14	119.07	5.587 SF		
12,620.40	6,048.00	5,900.00	5,823.75	110.02	22.88	-67.42	5,698.22	1,221.50	664.89	546.08	118.81	5.596 CC, ES		
12,700.00	6,048.00	5,900.00	5,823.75	111.37	22.88	-67.42	5,698.22	1,221.50	669.63	552.52	117.12	5.718		
12,800.00	6,048.00	5,900.00	5,823.75	113.07	22.88	-67.42	5,698.22	1,221.50	688.71	575.12	113.59	6.063		
12,900.00	6,048.00	5,892.25	5,816.59	114.77	22.87	-66.76	5,698.55	1,224.46	721.19	612.68	108.51	6.646		
13,000.00	6,048.00	5,889.88	5,814.40	116.47	22.87	-66.55	5,698.65	1,225.35	765.47	662.19	103.28	7.412		
13,100.00	6,048.00	5,887.53	5,812.22	118.18	22.87	-66.35	5,698.75	1,226.23	819.60	721.58	98.02	8.361		
13,200.00	6,048.00	5,885.19	5,810.04	119.88	22.86	-66.15	5,698.85	1,227.09	881.78	788.73	93.05	9.477		
13,300.00	6,048.00	5,882.85	5,807.87	121.59	22.86	-65.95	5,698.95	1,227.95	950.42	861.90	88.52	10.736		
13,400.00	6,048.00	5,880.52	5,805.71	123.30	22.86	-65.75	5,699.04	1,228.79	1,024.23	939.72	84.51	12.120		
13,500.00	6,048.00	5,878.20	5,803.54	125.02	22.85	-65.55	5,699.14	1,229.63	1,102.17	1,021.16	81.00	13.606		
13,600.00	6,048.00	5,875.89	5,801.39	126.73	22.85	-65.35	5,699.24	1,230.46	1,183.42	1,105.44	77.97	15.177		
13,700.00	6,048.00	5,868.00	5,794.01	128.45	22.84	-64.67	5,699.57	1,233.23	1,267.37	1,192.13	75.24	16.845		
13,800.00	6,048.00	5,868.00	5,794.01	130.16	22.84	-64.67	5,699.57	1,233.23	1,353.45	1,280.38	73.07	18.523		
13,900.00	6,048.00	5,868.00	5,794.01	131.88	22.84	-64.67	5,699.57	1,233.23	1,441.34	1,370.13	71.21	20.241		
14,000.00	6,048.00	5,868.00	5,794.01	133.60	22.84	-64.67	5,699.57	1,233.23	1,530.71	1,461.10	69.62	21.988		
14,100.00	6,048.00	5,868.00	5,794.01	135.32	22.84	-64.67	5,699.57	1,233.23	1,621.33	1,553.08	68.25	23.757		
14,200.00	6,048.00	5,868.00	5,794.01	137.05	22.84	-64.67	5,699.57	1,233.23	1,712.99	1,645.91	67.07	25.539		
14,300.00	6,048.00	5,868.00	5,794.01	138.77	22.84	-64.67	5,699.57	1,233.23	1,805.53	1,739.47	66.06	27.331		
14,400.00	6,048.00	5,868.00	5,794.01	140.50	22.84	-64.67	5,699.57	1,233.23	1,898.83	1,833.64	65.19	29.126		
14,500.00	6,048.00	5,868.00	5,794.01	142.22	22.84	-64.67	5,699.57	1,233.23	1,992.78	1,928.34	64.44	30.923		
14,600.00	6,048.00	5,868.00	5,794.01	143.95	22.84	-64.67	5,699.57	1,233.23	2,087.30	2,023.50	63.80	32.718		
14,700.00	6,048.00	5,868.00	5,794.01	145.68	22.84	-64.67	5,699.57	1,233.23	2,182.30	2,119.06	63.24	34.509		
14,800.00	6,048.00	5,868.00	5,794.01	147.41	22.84	-64.67	5,699.57	1,233.23	2,277.73	2,214.97	62.75	36.296		
14,900.00	6,048.00	5,856.23	5,782.94	149.14	22.82	-63.67	5,700.01	1,237.21	2,373.43	2,311.16	62.27	38.114		
15,000.00	6,048.00	5,855.26	5,782.03	150.87	22.82	-63.59	5,700.05	1,237.53	2,469.55	2,407.64	61.91	39.888		
15,100.00	6,048.00	5,854.33	5,781.15	152.60	22.82	-63.51	5,700.08	1,237.84	2,565.97	2,504.37	61.60	41.653		
15,200.00	6,048.00	5,853.43	5,780.30	154.33	22.82	-63.43	5,700.10	1,238.13	2,662.65	2,601.32	61.34	43.411		
15,300.00	6,048.00	5,852.57	5,779.48	156.07	22.82	-63.36	5,700.13	1,238.41	2,759.57	2,698.46	61.11	45.161		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft		
Survey Program: 146-MWD OWSG													SEC 4-T5N-R61W - EXIST HZ ESTERLING 44-33H - OWB - FINAL SURVEY		Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor				
15,400.00	6,048.00	5,851.74	5,778.70	157.80	22.81	-63.29	5,700.16	1,238.68	2,856.70	2,795.79	60.91	46.902				
15,500.00	6,048.00	5,850.94	5,777.94	159.54	22.81	-63.22	5,700.18	1,238.94	2,954.02	2,893.28	60.74	48.635				
15,600.00	6,048.00	5,850.16	5,777.21	161.27	22.81	-63.15	5,700.20	1,239.19	3,051.51	2,990.92	60.59	50.360				
15,700.00	6,048.00	5,849.42	5,776.50	163.01	22.81	-63.09	5,700.22	1,239.43	3,149.16	3,088.69	60.47	52.077				
15,800.00	6,048.00	5,848.70	5,775.82	164.75	22.81	-63.03	5,700.24	1,239.66	3,246.95	3,186.58	60.37	53.786				
15,900.00	6,048.00	5,836.00	5,763.76	166.49	22.79	-61.96	5,700.54	1,243.62	3,344.96	3,284.69	60.27	55.498				
16,000.00	6,048.00	5,836.00	5,763.76	168.23	22.79	-61.96	5,700.54	1,243.62	3,442.99	3,382.79	60.20	57.190				
16,100.00	6,048.00	5,836.00	5,763.76	169.97	22.79	-61.96	5,700.54	1,243.62	3,541.13	3,480.98	60.15	58.874				
16,200.00	6,048.00	5,836.00	5,763.76	171.71	22.79	-61.96	5,700.54	1,243.62	3,639.37	3,579.27	60.10	60.551				
16,300.00	6,048.00	5,836.00	5,763.76	173.45	22.79	-61.96	5,700.54	1,243.62	3,737.70	3,677.63	60.07	62.222				
16,400.00	6,048.00	5,836.00	5,763.76	175.19	22.79	-61.96	5,700.54	1,243.62	3,836.12	3,776.08	60.05	63.886				
16,500.00	6,048.00	5,836.00	5,763.76	176.93	22.79	-61.96	5,700.54	1,243.62	3,934.62	3,874.59	60.03	65.544				
16,600.00	6,048.00	5,836.00	5,763.76	178.67	22.79	-61.96	5,700.54	1,243.62	4,033.19	3,973.17	60.02	67.195				
16,700.00	6,048.00	5,836.00	5,763.76	180.42	22.79	-61.96	5,700.54	1,243.62	4,131.84	4,071.82	60.02	68.841				
16,800.00	6,048.00	5,836.00	5,763.76	182.16	22.79	-61.96	5,700.54	1,243.62	4,230.54	4,170.52	60.02	70.480				
16,900.00	6,048.00	5,836.00	5,763.76	183.91	22.79	-61.96	5,700.54	1,243.62	4,329.31	4,269.27	60.03	72.114				
17,000.00	6,048.00	5,836.00	5,763.76	185.65	22.79	-61.96	5,700.54	1,243.62	4,428.13	4,368.08	60.05	73.741				
17,100.00	6,048.00	5,836.00	5,763.76	187.40	22.79	-61.96	5,700.54	1,243.62	4,527.00	4,466.93	60.07	75.363				
17,138.90	6,048.00	5,836.00	5,763.76	188.08	22.79	-61.96	5,700.54	1,243.62	4,565.48	4,505.40	60.08	75.993				

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													SEC 4-T5N-R61W - EXIST HZ ESTERLING 44-33H - STK 1 - STK 1	Offset Site Error:	0.00 usft
Survey Program:													146-MWD OWSG	Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	44.94	44.94	0.00	0.07	7.87	5,337.15	737.67	5,387.91						
100.00	100.00	174.78	174.77	0.27	0.33	7.87	5,336.34	737.78	5,387.27	5,386.67	0.60	8,944.549			
200.00	200.00	269.78	269.78	0.63	0.67	7.87	5,335.59	737.84	5,386.51	5,385.21	1.30	4,140.902			
300.00	300.00	384.24	384.23	0.99	1.08	7.87	5,334.67	737.79	5,385.71	5,383.64	2.07	2,602.561			
400.00	400.00	488.05	488.04	1.34	1.46	7.87	5,333.51	737.70	5,384.59	5,381.79	2.80	1,923.919			
500.00	500.00	565.83	565.81	1.70	1.73	7.88	5,332.74	738.32	5,383.71	5,380.28	3.43	1,568.398			
600.00	600.00	636.90	636.87	2.06	1.98	7.90	5,332.29	739.58	5,383.34	5,379.30	4.04	1,332.465			
613.50	613.50	646.50	646.46	2.11	2.02	7.90	5,332.25	739.80	5,383.33	5,379.21	4.12	1,305.951			
700.00	700.00	707.87	707.80	2.42	2.23	7.92	5,332.13	741.58	5,383.50	5,378.85	4.65	1,158.556			
800.00	800.00	755.00	754.90	2.78	2.40	7.94	5,332.15	743.49	5,384.27	5,379.10	5.17	1,041.550			
900.00	900.00	818.36	818.17	3.14	2.62	7.97	5,332.63	746.69	5,385.83	5,380.08	5.75	936.625			
1,000.00	999.98	877.00	876.69	3.48	2.82	-107.31	5,333.72	750.24	5,388.96	5,382.66	6.30	855.094			
1,100.00	1,099.84	978.86	978.20	3.82	3.19	-107.19	5,335.71	758.45	5,393.58	5,386.58	7.01	769.762			
1,200.00	1,199.45	1,016.69	1,015.82	4.17	3.33	-107.07	5,336.53	762.29	5,399.64	5,392.15	7.49	720.565			
1,300.00	1,298.70	1,061.00	1,059.83	4.53	3.49	-106.92	5,337.82	767.35	5,407.73	5,399.72	8.01	674.780			
1,400.00	1,397.47	1,061.00	1,059.83	4.91	3.49	-106.72	5,337.82	767.35	5,418.27	5,409.88	8.38	646.319			
1,500.00	1,495.62	1,127.93	1,126.15	5.31	3.74	-106.52	5,340.82	775.77	5,430.39	5,421.36	9.03	601.454			
1,600.00	1,593.06	1,183.00	1,180.60	5.74	3.95	-106.29	5,344.44	783.21	5,445.14	5,435.48	9.65	564.093			
1,700.00	1,689.64	1,183.00	1,180.60	6.21	3.95	-105.97	5,344.44	783.21	5,461.82	5,451.73	10.09	541.234			
1,800.00	1,785.27	1,230.57	1,227.56	6.71	4.14	-105.68	5,348.39	789.74	5,480.65	5,469.90	10.75	509.690			
1,900.00	1,879.82	1,273.00	1,269.40	7.27	4.31	-105.36	5,352.54	795.41	5,501.59	5,490.15	11.43	481.225			
2,000.00	1,973.17	1,306.16	1,302.05	7.88	4.44	-104.99	5,356.12	799.92	5,524.48	5,512.36	12.12	455.778			
2,100.00	2,065.27	1,365.00	1,359.85	8.54	4.68	-104.79	5,363.00	808.51	5,549.29	5,536.33	12.96	428.110			
2,200.00	2,157.01	1,414.83	1,408.69	9.24	4.89	-104.93	5,369.12	816.27	5,575.07	5,561.27	13.80	403.960			
2,300.00	2,248.74	1,487.00	1,479.35	9.96	5.20	-105.12	5,378.05	827.92	5,601.27	5,586.52	14.75	379.619			
2,400.00	2,340.48	1,513.99	1,505.74	10.70	5.32	-105.19	5,381.61	832.35	5,628.36	5,612.84	15.52	362.590			
2,500.00	2,432.22	1,551.00	1,541.80	11.45	5.49	-105.28	5,386.98	838.71	5,656.68	5,640.33	16.34	346.088			
2,600.00	2,523.96	1,659.55	1,647.27	12.21	6.00	-105.54	5,402.98	858.75	5,685.66	5,668.14	17.52	324.521			
2,700.00	2,615.70	1,741.00	1,726.49	12.99	6.38	-105.73	5,414.36	873.89	5,714.02	5,695.44	18.58	307.505			
2,800.00	2,707.44	1,803.44	1,787.13	13.77	6.69	-105.87	5,423.28	885.80	5,742.88	5,723.32	19.56	293.592			
2,900.00	2,799.17	1,867.82	1,849.39	14.55	7.01	-106.00	5,433.12	898.93	5,772.68	5,752.13	20.56	280.840			
3,000.00	2,890.91	2,014.94	1,991.92	15.35	7.76	-106.32	5,455.10	927.98	5,802.23	5,780.24	21.99	263.833			
3,100.00	2,982.65	2,120.64	2,094.20	16.14	8.31	-106.53	5,470.14	950.01	5,831.28	5,808.05	23.23	251.027			
3,200.00	3,074.39	2,251.24	2,221.17	16.95	8.98	-106.82	5,487.87	974.95	5,859.45	5,834.86	24.60	238.218			
3,300.00	3,166.13	2,311.00	2,279.08	17.75	9.29	-106.94	5,496.34	986.99	5,888.42	5,862.83	25.59	230.093			
3,400.00	3,257.87	2,466.20	2,429.42	18.56	10.11	-107.25	5,518.14	1,018.73	5,917.70	5,890.59	27.12	218.207			
3,500.00	3,349.61	2,613.84	2,573.25	19.37	10.86	-107.56	5,536.90	1,046.24	5,945.32	5,916.73	28.59	207.944			
3,600.00	3,441.34	2,751.89	2,708.20	20.18	11.55	-107.87	5,553.34	1,070.28	5,972.14	5,942.14	30.00	199.083			
3,700.00	3,533.08	2,906.48	2,859.67	21.00	12.30	-108.22	5,570.77	1,095.75	5,998.46	5,966.98	31.48	190.540			
3,800.00	3,624.82	2,977.00	2,928.94	21.81	12.63	-108.39	5,578.61	1,106.41	6,024.62	5,992.10	32.52	185.235			
3,900.00	3,716.56	3,024.14	2,975.22	22.63	12.86	-108.50	5,584.13	1,113.45	6,051.40	6,017.96	33.45	180.931			
4,000.00	3,808.30	3,076.24	3,026.25	23.45	13.11	-108.62	5,590.55	1,121.80	6,078.94	6,044.55	34.39	176.763			
4,100.00	3,900.04	3,168.00	3,116.07	24.27	13.56	-108.83	5,602.05	1,136.62	6,106.76	6,071.21	35.55	171.793			
4,200.00	3,991.78	3,211.77	3,158.90	25.09	13.78	-108.93	5,607.72	1,143.61	6,135.11	6,098.66	36.45	168.337			
4,300.00	4,083.51	3,263.00	3,208.92	25.92	14.03	-109.04	5,614.93	1,152.00	6,164.43	6,127.05	37.38	164.914			
4,400.00	4,175.25	3,295.49	3,240.58	26.74	14.20	-109.11	5,619.76	1,157.54	6,194.55	6,156.34	38.21	162.112			
4,500.00	4,266.99	4,312.49	4,243.87	27.57	18.42	-111.72	5,693.25	1,269.67	6,211.35	6,167.80	43.56	142.605			
4,600.00	4,358.73	4,404.00	4,335.37	28.39	18.69	-112.04	5,694.03	1,270.12	6,228.23	6,183.66	44.58	139.714			
4,700.00	4,450.47	4,404.00	4,335.37	29.22	18.69	-112.04	5,694.03	1,270.12	6,246.00	6,200.70	45.31	137.855			
4,800.00	4,542.21	4,456.78	4,388.14	30.05	18.85	-112.22	5,695.03	1,270.25	6,264.54	6,218.34	46.20	135.606			
4,900.00	4,633.95	4,499.00	4,430.32	30.88	18.97	-112.37	5,696.64	1,269.85	6,284.51	6,237.47	47.04	133.587			
5,000.00	4,725.68	5,071.00	5,001.81	31.70	20.57	-114.34	5,696.51	1,265.21	6,301.69	6,252.26	49.43	127.480			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 146-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	5,102.49	5,033.28	32.53	20.66	-114.44	5,695.48	1,265.57	6,315.76	6,265.49	50.27	125.638		
5,200.00	4,909.16	5,166.00	5,096.77	33.36	20.84	-114.64	5,694.06	1,265.96	6,330.92	6,279.73	51.19	123.675		
5,300.00	5,000.90	5,166.00	5,096.77	34.19	20.84	-114.64	5,694.06	1,265.96	6,346.88	6,294.96	51.92	122.245		
5,400.00	5,092.64	5,166.00	5,096.77	35.02	20.84	-114.64	5,694.06	1,265.96	6,364.36	6,311.73	52.63	120.918		
5,500.00	5,184.38	5,223.11	5,153.88	35.85	21.01	-114.83	5,693.90	1,266.28	6,382.39	6,328.87	53.52	119.247		
5,600.00	5,276.11	5,261.00	5,191.76	36.69	21.13	-114.95	5,694.59	1,266.69	6,401.97	6,347.63	54.34	117.808		
5,700.00	5,367.85	5,333.58	5,264.31	37.52	21.36	-115.18	5,696.35	1,267.73	6,422.40	6,367.11	55.28	116.169		
5,800.00	5,459.76	5,451.00	5,381.70	38.34	21.74	-107.15	5,698.43	1,269.65	6,441.25	6,384.86	56.39	114.237		
5,900.00	5,552.68	5,518.24	5,448.93	39.06	21.96	-82.39	5,699.62	1,270.53	6,446.49	6,389.20	57.29	112.519		
6,000.00	5,644.46	5,741.00	5,671.44	39.64	22.61	-61.77	5,701.39	1,265.51	6,433.60	6,374.97	58.63	109.739		
6,100.00	5,732.30	5,931.00	5,852.08	40.06	22.92	-48.84	5,696.89	1,208.99	6,403.22	6,343.75	59.47	107.678		
6,200.00	5,813.53	5,931.00	5,852.08	40.35	22.92	-40.42	5,696.89	1,208.99	6,356.84	6,296.86	59.97	105.992		
6,300.00	5,885.68	5,931.00	5,852.08	40.51	22.92	-35.58	5,696.89	1,208.99	6,296.91	6,236.51	60.40	104.253		
6,400.00	5,946.56	5,947.40	5,866.90	40.57	22.94	-33.40	5,696.36	1,201.99	6,224.71	6,163.94	60.76	102.442		
6,500.00	5,994.33	5,963.00	5,880.91	40.54	22.96	-33.54	5,696.17	1,195.14	6,142.43	6,081.38	61.05	100.610		
6,600.00	6,027.53	5,963.00	5,880.91	40.44	22.96	-36.69	5,696.17	1,195.14	6,051.89	5,990.64	61.25	98.800		
6,700.00	6,045.15	5,963.00	5,880.91	40.29	22.96	-48.63	5,696.17	1,195.14	5,955.71	5,894.31	61.40	97.004		
6,800.00	6,048.00	5,963.00	5,880.91	40.12	22.96	-72.81	5,696.17	1,195.14	5,856.68	5,795.18	61.49	95.239		
6,900.00	6,048.00	5,963.00	5,880.91	39.97	22.96	-72.81	5,696.17	1,195.14	5,757.34	5,695.76	61.59	93.484		
7,000.00	6,048.00	5,963.00	5,880.91	39.85	22.96	-72.81	5,696.17	1,195.14	5,658.04	5,596.35	61.68	91.728		
7,100.00	6,048.00	5,963.00	5,880.91	39.76	22.96	-72.81	5,696.17	1,195.14	5,558.75	5,496.97	61.78	89.972		
7,200.00	6,048.00	5,963.00	5,880.91	39.72	22.96	-72.81	5,696.17	1,195.14	5,459.50	5,397.61	61.89	88.214		
7,300.00	6,048.00	5,963.00	5,880.91	39.71	22.96	-72.81	5,696.17	1,195.14	5,360.27	5,298.27	62.00	86.456		
7,400.00	6,048.00	5,963.00	5,880.91	39.75	22.96	-72.81	5,696.17	1,195.14	5,261.07	5,198.95	62.12	84.697		
7,500.00	6,048.00	5,963.00	5,880.91	39.85	22.96	-72.81	5,696.17	1,195.14	5,161.90	5,099.66	62.24	82.938		
7,600.00	6,048.00	5,963.00	5,880.91	40.01	22.96	-72.81	5,696.17	1,195.14	5,062.76	5,000.39	62.37	81.177		
7,700.00	6,048.00	5,963.00	5,880.91	40.24	22.96	-72.81	5,696.17	1,195.14	4,963.66	4,901.16	62.50	79.417		
7,800.00	6,048.00	5,963.00	5,880.91	40.57	22.96	-72.81	5,696.17	1,195.14	4,864.59	4,801.95	62.64	77.655		
7,900.00	6,048.00	5,963.00	5,880.91	40.99	22.96	-72.81	5,696.17	1,195.14	4,765.57	4,702.77	62.79	75.894		
8,000.00	6,048.00	5,963.00	5,880.91	41.53	22.96	-72.81	5,696.17	1,195.14	4,666.58	4,603.63	62.95	74.132		
8,100.00	6,048.00	5,963.00	5,880.91	42.19	22.96	-72.81	5,696.17	1,195.14	4,567.64	4,504.52	63.12	72.370		
8,200.00	6,048.00	5,963.00	5,880.91	42.97	22.96	-72.81	5,696.17	1,195.14	4,468.75	4,405.46	63.29	70.607		
8,300.00	6,048.00	5,963.00	5,880.91	43.85	22.96	-72.81	5,696.17	1,195.14	4,369.90	4,306.43	63.47	68.845		
8,400.00	6,048.00	5,963.00	5,880.91	44.83	22.96	-72.81	5,696.17	1,195.14	4,271.11	4,207.44	63.67	67.083		
8,500.00	6,048.00	5,963.00	5,880.91	45.90	22.96	-72.81	5,696.17	1,195.14	4,172.38	4,108.51	63.87	65.321		
8,600.00	6,048.00	5,963.00	5,880.91	47.05	22.96	-72.81	5,696.17	1,195.14	4,073.71	4,009.62	64.09	63.560		
8,700.00	6,048.00	5,963.00	5,880.91	48.25	22.96	-72.81	5,696.17	1,195.14	3,975.11	3,910.79	64.32	61.799		
8,800.00	6,048.00	5,963.00	5,880.91	49.51	22.96	-72.81	5,696.17	1,195.14	3,876.58	3,812.01	64.57	60.039		
8,900.00	6,048.00	5,949.22	5,868.54	50.81	22.95	-71.64	5,696.32	1,201.20	3,777.97	3,713.21	64.76	58.337		
9,000.00	6,048.00	5,948.84	5,868.19	52.15	22.95	-71.61	5,696.33	1,201.37	3,679.59	3,614.55	65.03	56.582		
9,100.00	6,048.00	5,948.45	5,867.84	53.53	22.95	-71.58	5,696.34	1,201.54	3,581.29	3,515.98	65.32	54.828		
9,200.00	6,048.00	5,948.03	5,867.47	54.94	22.95	-71.54	5,696.35	1,201.71	3,483.10	3,417.47	65.63	53.075		
9,300.00	6,048.00	5,947.60	5,867.08	56.37	22.94	-71.50	5,696.36	1,201.90	3,385.01	3,319.06	65.95	51.325		
9,400.00	6,048.00	5,947.16	5,866.68	57.82	22.94	-71.47	5,696.37	1,202.09	3,287.04	3,220.73	66.30	49.576		
9,500.00	6,048.00	5,946.69	5,866.26	59.30	22.94	-71.43	5,696.38	1,202.30	3,189.19	3,122.51	66.68	47.830		
9,600.00	6,048.00	5,946.20	5,865.81	60.79	22.94	-71.38	5,696.39	1,202.51	3,091.48	3,024.40	67.08	46.087		
9,700.00	6,048.00	5,945.68	5,865.35	62.30	22.94	-71.34	5,696.40	1,202.73	2,993.92	2,926.41	67.51	44.348		
9,800.00	6,048.00	5,945.14	5,864.86	63.82	22.94	-71.29	5,696.41	1,202.97	2,896.52	2,828.55	67.97	42.612		
9,900.00	6,048.00	5,944.57	5,864.35	65.36	22.94	-71.25	5,696.43	1,203.21	2,799.31	2,730.83	68.48	40.881		
10,000.00	6,048.00	5,943.98	5,863.81	66.91	22.94	-71.20	5,696.44	1,203.47	2,702.30	2,633.28	69.02	39.154		
10,100.00	6,048.00	5,931.00	5,852.08	68.48	22.92	-70.09	5,696.89	1,208.99	2,605.65	2,536.17	69.48	37.502		
10,200.00	6,048.00	5,931.00	5,852.08	70.05	22.92	-70.09	5,696.89	1,208.99	2,509.11	2,438.99	70.12	35.785		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 146-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	5,931.00	5,852.08	71.63	22.92	-70.09	5,696.89	1,208.99	2,412.84	2,342.04	70.81	34.076		
10,400.00	6,048.00	5,931.00	5,852.08	73.23	22.92	-70.09	5,696.89	1,208.99	2,316.90	2,245.33	71.56	32.375		
10,500.00	6,048.00	5,931.00	5,852.08	74.83	22.92	-70.09	5,696.89	1,208.99	2,221.31	2,148.91	72.39	30.684		
10,600.00	6,048.00	5,931.00	5,852.08	76.43	22.92	-70.09	5,696.89	1,208.99	2,126.12	2,052.82	73.30	29.005		
10,700.00	6,048.00	5,931.00	5,852.08	78.05	22.92	-70.09	5,696.89	1,208.99	2,031.40	1,957.10	74.31	27.338		
10,800.00	6,048.00	5,931.00	5,852.08	79.67	22.92	-70.09	5,696.89	1,208.99	1,937.21	1,861.80	75.41	25.688		
10,900.00	6,048.00	5,931.00	5,852.08	81.30	22.92	-70.09	5,696.89	1,208.99	1,843.63	1,766.99	76.64	24.055		
11,000.00	6,048.00	5,931.00	5,852.08	82.94	22.92	-70.09	5,696.89	1,208.99	1,750.77	1,672.76	78.01	22.444		
11,100.00	6,048.00	5,931.00	5,852.08	84.58	22.92	-70.09	5,696.89	1,208.99	1,658.73	1,579.20	79.53	20.858		
11,200.00	6,048.00	5,931.00	5,852.08	86.22	22.92	-70.09	5,696.89	1,208.99	1,567.66	1,486.44	81.22	19.300		
11,300.00	6,048.00	5,931.00	5,852.08	87.87	22.92	-70.09	5,696.89	1,208.99	1,477.76	1,394.63	83.13	17.777		
11,400.00	6,048.00	5,931.00	5,852.08	89.53	22.92	-70.09	5,696.89	1,208.99	1,389.23	1,303.97	85.26	16.293		
11,500.00	6,048.00	5,931.00	5,852.08	91.19	22.92	-70.09	5,696.89	1,208.99	1,302.36	1,214.70	87.66	14.857		
11,600.00	6,048.00	5,931.00	5,852.08	92.85	22.92	-70.09	5,696.89	1,208.99	1,217.52	1,127.16	90.35	13.475		
11,700.00	6,048.00	5,922.42	5,844.29	94.52	22.91	-69.35	5,697.26	1,212.55	1,135.08	1,042.01	93.07	12.196		
11,800.00	6,048.00	5,919.85	5,841.94	96.19	22.91	-69.13	5,697.37	1,213.61	1,055.71	959.41	96.30	10.963		
11,900.00	6,048.00	5,917.28	5,839.59	97.86	22.91	-68.91	5,697.48	1,214.66	980.10	880.25	99.84	9.816		
12,000.00	6,048.00	5,914.71	5,837.24	99.54	22.90	-68.69	5,697.59	1,215.69	909.20	805.54	103.66	8.771		
12,100.00	6,048.00	5,912.14	5,834.90	101.22	22.90	-68.47	5,697.70	1,216.73	844.21	736.56	107.65	7.842		
12,200.00	6,048.00	5,909.57	5,832.55	102.91	22.90	-68.25	5,697.81	1,217.75	786.57	674.98	111.59	7.049		
12,300.00	6,048.00	5,907.01	5,830.20	104.59	22.89	-68.03	5,697.92	1,218.76	738.02	622.87	115.16	6.409		
12,400.00	6,048.00	5,900.00	5,823.75	106.28	22.88	-67.42	5,698.22	1,221.50	700.48	582.87	117.62	5.956		
12,500.00	6,048.00	5,900.00	5,823.75	107.97	22.88	-67.42	5,698.22	1,221.50	675.71	556.52	119.19	5.669		
12,600.00	6,048.00	5,900.00	5,823.75	109.67	22.88	-67.42	5,698.22	1,221.50	665.21	546.14	119.07	5.587 SF		
12,620.40	6,048.00	5,900.00	5,823.75	110.02	22.88	-67.42	5,698.22	1,221.50	664.89	546.08	118.81	5.596 CC, ES		
12,700.00	6,048.00	5,900.00	5,823.75	111.37	22.88	-67.42	5,698.22	1,221.50	669.63	552.52	117.12	5.718		
12,800.00	6,048.00	5,900.00	5,823.75	113.07	22.88	-67.42	5,698.22	1,221.50	688.71	575.12	113.59	6.063		
12,900.00	6,048.00	5,892.25	5,816.59	114.77	22.87	-66.76	5,698.55	1,224.46	721.19	612.68	108.51	6.646		
13,000.00	6,048.00	5,889.88	5,814.40	116.47	22.87	-66.55	5,698.65	1,225.35	765.47	662.19	103.28	7.412		
13,100.00	6,048.00	5,887.53	5,812.22	118.18	22.87	-66.35	5,698.75	1,226.23	819.60	721.58	98.02	8.361		
13,200.00	6,048.00	5,885.19	5,810.04	119.88	22.86	-66.15	5,698.85	1,227.09	881.78	788.73	93.05	9.477		
13,300.00	6,048.00	5,882.85	5,807.87	121.59	22.86	-65.95	5,698.95	1,227.95	950.42	861.90	88.52	10.736		
13,400.00	6,048.00	5,880.52	5,805.71	123.30	22.86	-65.75	5,699.04	1,228.79	1,024.23	939.72	84.51	12.120		
13,500.00	6,048.00	5,878.20	5,803.54	125.02	22.85	-65.55	5,699.14	1,229.63	1,102.17	1,021.16	81.00	13.606		
13,600.00	6,048.00	5,875.89	5,801.39	126.73	22.85	-65.35	5,699.24	1,230.46	1,183.42	1,105.44	77.97	15.177		
13,700.00	6,048.00	5,868.00	5,794.01	128.45	22.84	-64.67	5,699.57	1,233.23	1,267.37	1,192.13	75.24	16.845		
13,800.00	6,048.00	5,868.00	5,794.01	130.16	22.84	-64.67	5,699.57	1,233.23	1,353.45	1,280.38	73.07	18.523		
13,900.00	6,048.00	5,868.00	5,794.01	131.88	22.84	-64.67	5,699.57	1,233.23	1,441.34	1,370.13	71.21	20.241		
14,000.00	6,048.00	5,868.00	5,794.01	133.60	22.84	-64.67	5,699.57	1,233.23	1,530.71	1,461.10	69.62	21.988		
14,100.00	6,048.00	5,868.00	5,794.01	135.32	22.84	-64.67	5,699.57	1,233.23	1,621.33	1,553.08	68.25	23.757		
14,200.00	6,048.00	5,868.00	5,794.01	137.05	22.84	-64.67	5,699.57	1,233.23	1,712.99	1,645.91	67.07	25.539		
14,300.00	6,048.00	5,868.00	5,794.01	138.77	22.84	-64.67	5,699.57	1,233.23	1,805.53	1,739.47	66.06	27.331		
14,400.00	6,048.00	5,868.00	5,794.01	140.50	22.84	-64.67	5,699.57	1,233.23	1,898.83	1,833.64	65.19	29.126		
14,500.00	6,048.00	5,868.00	5,794.01	142.22	22.84	-64.67	5,699.57	1,233.23	1,992.78	1,928.34	64.44	30.923		
14,600.00	6,048.00	5,868.00	5,794.01	143.95	22.84	-64.67	5,699.57	1,233.23	2,087.30	2,023.50	63.80	32.718		
14,700.00	6,048.00	5,868.00	5,794.01	145.68	22.84	-64.67	5,699.57	1,233.23	2,182.30	2,119.06	63.24	34.509		
14,800.00	6,048.00	5,868.00	5,794.01	147.41	22.84	-64.67	5,699.57	1,233.23	2,277.73	2,214.97	62.75	36.296		
14,900.00	6,048.00	5,856.23	5,782.94	149.14	22.82	-63.67	5,700.01	1,237.21	2,373.43	2,311.16	62.27	38.114		
15,000.00	6,048.00	5,855.26	5,782.03	150.87	22.82	-63.59	5,700.05	1,237.53	2,469.55	2,407.64	61.91	39.888		
15,100.00	6,048.00	5,854.33	5,781.15	152.60	22.82	-63.51	5,700.08	1,237.84	2,565.97	2,504.37	61.60	41.653		
15,200.00	6,048.00	5,853.43	5,780.30	154.33	22.82	-63.43	5,700.10	1,238.13	2,662.65	2,601.32	61.34	43.411		
15,300.00	6,048.00	5,852.57	5,779.48	156.07	22.82	-63.36	5,700.13	1,238.41	2,759.57	2,698.46	61.11	45.161		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 146-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
15,400.00	6,048.00	5,851.74	5,778.70	157.80	22.81	-63.29	5,700.16	1,238.68	2,856.70	2,795.79	60.91	46.902			
15,500.00	6,048.00	5,850.94	5,777.94	159.54	22.81	-63.22	5,700.18	1,238.94	2,954.02	2,893.28	60.74	48.635			
15,600.00	6,048.00	5,850.16	5,777.21	161.27	22.81	-63.15	5,700.20	1,239.19	3,051.51	2,990.92	60.59	50.360			
15,700.00	6,048.00	5,849.42	5,776.50	163.01	22.81	-63.09	5,700.22	1,239.43	3,149.16	3,088.69	60.47	52.077			
15,800.00	6,048.00	5,848.70	5,775.82	164.75	22.81	-63.03	5,700.24	1,239.66	3,246.95	3,186.58	60.37	53.786			
15,900.00	6,048.00	5,836.00	5,763.76	166.49	22.79	-61.96	5,700.54	1,243.62	3,344.96	3,284.69	60.27	55.498			
16,000.00	6,048.00	5,836.00	5,763.76	168.23	22.79	-61.96	5,700.54	1,243.62	3,442.99	3,382.79	60.20	57.190			
16,100.00	6,048.00	5,836.00	5,763.76	169.97	22.79	-61.96	5,700.54	1,243.62	3,541.13	3,480.98	60.15	58.874			
16,200.00	6,048.00	5,836.00	5,763.76	171.71	22.79	-61.96	5,700.54	1,243.62	3,639.37	3,579.27	60.10	60.551			
16,300.00	6,048.00	5,836.00	5,763.76	173.45	22.79	-61.96	5,700.54	1,243.62	3,737.70	3,677.63	60.07	62.222			
16,400.00	6,048.00	5,836.00	5,763.76	175.19	22.79	-61.96	5,700.54	1,243.62	3,836.12	3,776.08	60.05	63.886			
16,500.00	6,048.00	5,836.00	5,763.76	176.93	22.79	-61.96	5,700.54	1,243.62	3,934.62	3,874.59	60.03	65.544			
16,600.00	6,048.00	5,836.00	5,763.76	178.67	22.79	-61.96	5,700.54	1,243.62	4,033.19	3,973.17	60.02	67.195			
16,700.00	6,048.00	5,836.00	5,763.76	180.42	22.79	-61.96	5,700.54	1,243.62	4,131.84	4,071.82	60.02	68.841			
16,800.00	6,048.00	5,836.00	5,763.76	182.16	22.79	-61.96	5,700.54	1,243.62	4,230.54	4,170.52	60.02	70.480			
16,900.00	6,048.00	5,836.00	5,763.76	183.91	22.79	-61.96	5,700.54	1,243.62	4,329.31	4,269.27	60.03	72.114			
17,000.00	6,048.00	5,836.00	5,763.76	185.65	22.79	-61.96	5,700.54	1,243.62	4,428.13	4,368.08	60.05	73.741			
17,100.00	6,048.00	5,836.00	5,763.76	187.40	22.79	-61.96	5,700.54	1,243.62	4,527.00	4,466.93	60.07	75.363			
17,138.90	6,048.00	5,836.00	5,763.76	188.08	22.79	-61.96	5,700.54	1,243.62	4,565.48	4,505.40	60.08	75.993			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 478-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
100.00	100.00	61.00	61.00	0.27	0.21	-88.53	65.72	-2,564.27	2,565.12	2,564.64	0.48	5,346.835		
200.00	200.00	161.00	161.00	0.63	0.56	-88.53	65.72	-2,564.27	2,565.12	2,563.93	1.18	2,166.595		
300.00	300.00	261.00	261.00	0.99	0.90	-88.53	65.72	-2,564.27	2,565.12	2,563.23	1.89	1,358.546		
400.00	400.00	361.00	361.00	1.34	1.25	-88.53	65.72	-2,564.27	2,565.12	2,562.52	2.59	989.503		
500.00	500.00	461.00	461.00	1.70	1.59	-88.53	65.72	-2,564.27	2,565.12	2,561.82	3.30	778.128		
544.45	544.45	505.22	505.22	1.86	1.75	-88.53	65.81	-2,564.27	2,565.11	2,561.50	3.61	710.153	CC	
600.00	600.00	552.07	552.07	2.06	1.92	-88.52	66.07	-2,564.34	2,565.21	2,561.23	3.98	644.794	ES	
700.00	700.00	613.01	613.00	2.42	2.13	-88.52	66.37	-2,564.97	2,566.28	2,561.73	4.55	563.945		
800.00	800.00	653.00	652.98	2.78	2.27	-88.52	66.51	-2,565.94	2,569.07	2,564.02	5.05	508.950		
900.00	900.00	720.20	720.12	3.14	2.51	-88.52	66.47	-2,568.77	2,573.49	2,567.86	5.64	456.580		
1,000.00	999.98	771.09	770.90	3.48	2.69	156.06	66.19	-2,572.05	2,581.50	2,575.35	6.16	419.365		
1,100.00	1,099.84	836.00	835.57	3.82	2.92	155.97	66.00	-2,577.61	2,594.64	2,587.92	6.72	386.266		
1,200.00	1,199.45	871.55	870.92	4.17	3.05	155.85	65.84	-2,581.32	2,612.61	2,605.43	7.18	364.093		
1,300.00	1,298.70	928.00	926.95	4.53	3.26	155.70	65.04	-2,588.20	2,635.61	2,627.90	7.71	341.830		
1,400.00	1,397.47	995.83	994.10	4.91	3.52	155.50	62.48	-2,597.38	2,663.00	2,654.71	8.29	321.225		
1,500.00	1,495.62	1,064.58	1,061.98	5.31	3.79	155.24	57.71	-2,607.19	2,694.16	2,685.28	8.88	303.445		
1,600.00	1,593.06	1,113.00	1,109.66	5.74	3.98	154.93	53.68	-2,614.60	2,729.42	2,720.03	9.39	290.677		
1,700.00	1,689.64	1,178.03	1,173.51	6.21	4.25	154.58	47.68	-2,625.40	2,768.77	2,758.79	9.98	277.488		
1,800.00	1,785.27	1,206.00	1,200.89	6.71	4.37	154.17	44.93	-2,630.40	2,812.48	2,802.07	10.41	270.155		
1,900.00	1,879.82	1,273.29	1,266.53	7.27	4.67	153.74	37.86	-2,643.40	2,860.00	2,848.98	11.02	259.471		
2,000.00	1,973.17	1,327.89	1,319.53	7.88	4.93	153.26	31.62	-2,654.90	2,911.59	2,900.00	11.59	251.246		
2,100.00	2,065.27	1,393.74	1,383.28	8.54	5.25	152.90	23.46	-2,669.25	2,966.37	2,954.15	12.22	242.723		
2,200.00	2,157.01	1,641.15	1,623.51	9.24	6.46	153.15	-9.07	-2,718.36	3,020.95	3,007.20	13.76	219.611		
2,300.00	2,248.74	1,730.50	1,711.10	9.96	6.89	153.27	-19.34	-2,732.71	3,071.49	3,056.96	14.53	211.412		
2,400.00	2,340.48	1,807.11	1,786.26	10.70	7.25	153.41	-26.39	-2,745.73	3,122.89	3,107.65	15.24	204.898		
2,500.00	2,432.22	1,920.63	1,898.08	11.45	7.77	153.69	-32.87	-2,764.15	3,173.76	3,157.63	16.12	196.840		
2,600.00	2,523.96	1,984.37	1,961.00	12.21	8.05	153.89	-34.03	-2,774.24	3,224.50	3,207.74	16.76	192.351		
2,700.00	2,615.70	2,037.00	2,012.87	12.99	8.28	154.06	-34.57	-2,783.11	3,276.15	3,258.80	17.35	188.841		
2,800.00	2,707.44	2,146.98	2,121.26	13.77	8.77	154.41	-35.68	-2,801.72	3,327.95	3,309.74	18.21	182.787		
2,900.00	2,799.17	2,222.00	2,195.26	14.55	9.11	154.63	-37.10	-2,813.99	3,379.29	3,360.39	18.90	178.762		
3,000.00	2,890.91	2,279.87	2,252.28	15.35	9.37	154.79	-38.34	-2,823.77	3,431.19	3,411.67	19.52	175.788		
3,100.00	2,982.65	2,314.00	2,285.84	16.14	9.53	154.89	-38.94	-2,829.93	3,484.19	3,464.18	20.01	174.110		
3,200.00	3,074.39	2,369.90	2,340.69	16.95	9.79	155.04	-40.08	-2,840.65	3,538.10	3,517.49	20.61	171.642		
3,300.00	3,166.13	2,436.46	2,405.83	17.75	10.12	155.20	-42.01	-2,854.24	3,592.92	3,571.65	21.27	168.906		
3,400.00	3,257.87	2,499.00	2,467.06	18.56	10.42	155.34	-44.27	-2,866.72	3,647.54	3,625.63	21.91	166.477		
3,500.00	3,349.61	2,546.02	2,513.03	19.37	10.66	155.44	-46.04	-2,876.46	3,702.92	3,680.46	22.46	164.845		
3,600.00	3,441.34	2,592.00	2,557.75	20.18	10.89	155.54	-47.60	-2,887.04	3,759.79	3,736.78	23.01	163.426		
3,700.00	3,533.08	2,628.62	2,593.27	21.00	11.09	155.62	-48.78	-2,895.84	3,817.48	3,793.99	23.49	162.501		
3,800.00	3,624.82	2,767.25	2,727.98	21.81	11.81	155.91	-53.40	-2,928.24	3,875.02	3,850.45	24.57	157.723		
3,900.00	3,716.56	3,103.07	3,057.55	22.63	13.44	156.52	-67.83	-2,990.46	3,926.16	3,899.43	26.74	146.854		
4,000.00	3,808.30	3,159.00	3,112.65	23.45	13.70	156.62	-69.98	-2,999.81	3,977.95	3,950.60	27.35	145.462		
4,100.00	3,900.04	3,159.00	3,112.65	24.27	13.70	156.62	-69.98	-2,999.81	4,030.86	4,003.22	27.65	145.808		
4,200.00	3,991.78	3,159.00	3,112.65	25.09	13.70	156.62	-69.98	-2,999.81	4,085.54	4,057.61	27.93	146.293		
4,300.00	4,083.51	3,207.84	3,160.51	25.92	13.95	156.71	-71.72	-3,009.34	4,140.49	4,112.01	28.49	145.357		
4,400.00	4,175.25	3,255.00	3,206.24	26.74	14.19	156.79	-73.65	-3,020.67	4,197.92	4,168.89	29.03	144.607		
4,500.00	4,266.99	3,255.00	3,206.24	27.57	14.19	156.79	-73.65	-3,020.67	4,255.65	4,226.36	29.28	145.335		
4,600.00	4,358.73	3,255.00	3,206.24	28.39	14.19	156.79	-73.65	-3,020.67	4,314.91	4,285.39	29.52	146.170		
4,700.00	4,450.47	3,293.65	3,243.41	29.22	14.42	156.84	-75.81	-3,031.05	4,375.28	4,345.27	30.01	145.814		
4,800.00	4,542.21	3,351.00	3,298.16	30.05	14.76	156.88	-80.79	-3,047.37	4,436.59	4,405.97	30.62	144.900		
4,900.00	4,633.95	3,351.00	3,298.16	30.88	14.76	156.88	-80.79	-3,047.37	4,498.45	4,467.62	30.83	145.902		
5,000.00	4,725.68	3,386.29	3,331.59	31.70	14.99	156.89	-84.60	-3,058.02	4,561.27	4,529.97	31.29	145.753		
5,100.00	4,817.42	3,412.04	3,355.86	32.53	15.16	156.90	-87.51	-3,066.12	4,624.98	4,593.30	31.68	145.977		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
SEC 4-T5N-R61W - EXIST HZ PRONGHORN 14-11-4HNB - OWB - FINAL SURVEY													Offset Well Error:	0.00 usft
Survey Program: 478-MWD OWSG														
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)	Minimum Separation (usft)	Separation Factor	Warning	
5,200.00	4,909.16	4,000.72	3,915.20	33.36	18.80	156.76	-174.18	-3,225.93	4,686.01	4,649.80	36.21	129.423		
5,300.00	5,000.90	4,298.89	4,205.31	34.19	20.37	156.83	-211.45	-3,283.65	4,739.72	4,701.29	38.43	123.331		
5,400.00	5,092.64	4,550.14	4,451.84	35.02	21.59	156.96	-238.47	-3,323.58	4,791.54	4,751.29	40.26	119.029		
5,500.00	5,184.38	4,627.84	4,528.37	35.85	21.94	157.00	-246.67	-3,334.20	4,840.28	4,799.25	41.03	117.979		
5,600.00	5,276.11	5,019.01	4,916.08	36.69	23.54	157.40	-274.06	-3,376.00	4,887.87	4,844.42	43.44	112.511		
5,700.00	5,367.85	5,325.16	5,221.85	37.52	24.52	157.95	-275.87	-3,389.85	4,929.45	4,884.32	45.13	109.229		
5,800.00	5,459.76	5,509.50	5,406.18	38.34	25.04	168.17	-275.34	-3,391.76	4,967.59	4,921.37	46.23	107.454		
5,900.00	5,552.68	5,612.00	5,508.67	39.06	25.31	-162.97	-274.78	-3,391.70	5,004.14	4,957.24	46.90	106.704		
6,000.00	5,644.46	5,644.00	5,540.66	39.64	25.39	-137.82	-274.09	-3,391.86	5,039.45	4,992.26	47.18	106.805		
6,100.00	5,732.30	5,644.00	5,540.66	40.06	25.39	-120.00	-274.09	-3,391.86	5,073.25	5,026.00	47.24	107.387		
6,200.00	5,813.53	5,675.00	5,571.57	40.35	25.48	-108.10	-272.02	-3,392.72	5,104.51	5,057.18	47.33	107.841		
6,300.00	5,885.68	5,675.00	5,571.57	40.51	25.48	-99.75	-272.02	-3,392.72	5,132.52	5,085.26	47.26	108.612		
6,400.00	5,946.56	5,707.00	5,603.22	40.57	25.56	-94.12	-267.65	-3,394.37	5,156.53	5,109.26	47.27	109.077		
6,500.00	5,994.33	5,707.00	5,603.22	40.54	25.56	-90.03	-267.65	-3,394.37	5,175.77	5,128.59	47.19	109.686		
6,600.00	6,027.53	5,707.00	5,603.22	40.44	25.56	-87.34	-267.65	-3,394.37	5,190.01	5,142.87	47.14	110.099		
6,700.00	6,045.15	5,725.41	5,621.23	40.29	25.61	-86.06	-264.05	-3,395.60	5,198.70	5,151.47	47.23	110.078		
6,800.00	6,048.00	5,738.00	5,633.44	40.12	25.64	-85.86	-261.13	-3,396.59	5,202.49	5,155.11	47.38	109.812		
6,900.00	6,048.00	5,738.00	5,633.44	39.97	25.64	-85.86	-261.13	-3,396.59	5,206.80	5,159.23	47.56	109.472		
7,000.00	6,048.00	5,738.00	5,633.44	39.85	25.64	-85.86	-261.13	-3,396.59	5,213.02	5,165.20	47.83	108.999		
7,100.00	6,048.00	5,752.75	5,647.61	39.76	25.68	-86.01	-257.24	-3,397.86	5,221.10	5,172.88	48.22	108.277		
7,200.00	6,048.00	5,770.00	5,663.99	39.72	25.72	-86.20	-252.06	-3,399.48	5,231.03	5,182.34	48.69	107.428		
7,300.00	6,048.00	5,770.00	5,663.99	39.71	25.72	-86.20	-252.06	-3,399.48	5,242.78	5,193.62	49.16	106.637		
7,400.00	6,048.00	5,788.58	5,681.34	39.75	25.76	-86.39	-245.72	-3,401.39	5,256.31	5,206.55	49.77	105.621		
7,500.00	6,048.00	5,802.00	5,693.67	39.85	25.79	-86.52	-240.63	-3,402.90	5,271.63	5,221.23	50.40	104.590		
7,600.00	6,048.00	5,802.00	5,693.67	40.01	25.79	-86.52	-240.63	-3,402.90	5,288.75	5,237.71	51.04	103.628		
7,700.00	6,048.00	5,833.00	5,721.28	40.24	25.86	-86.83	-227.16	-3,406.96	5,307.55	5,255.72	51.83	102.396		
7,800.00	6,048.00	6,501.00	6,100.03	40.57	26.71	-90.99	294.46	-3,488.07	5,318.73	5,263.03	55.70	95.495		
7,900.00	6,048.00	7,939.00	6,117.24	40.99	39.81	-91.17	1,704.26	-3,476.20	5,326.78	5,255.08	71.70	74.293		
8,000.00	6,048.00	7,970.00	6,116.21	41.53	40.21	-91.16	1,734.97	-3,472.08	5,314.37	5,240.98	73.39	72.414		
8,100.00	6,048.00	8,024.45	6,114.78	42.19	40.91	-91.15	1,789.00	-3,465.46	5,303.01	5,227.57	75.43	70.300		
8,200.00	6,048.00	8,061.00	6,114.23	42.97	41.39	-91.14	1,825.31	-3,461.37	5,292.68	5,215.41	77.27	68.498		
8,300.00	6,048.00	8,116.30	6,113.71	43.85	42.13	-91.14	1,880.32	-3,455.73	5,283.32	5,203.92	79.40	66.539		
8,400.00	6,048.00	8,155.00	6,113.41	44.83	42.65	-91.14	1,918.86	-3,452.19	5,275.01	5,193.68	81.33	64.862		
8,500.00	6,048.00	8,201.62	6,113.40	45.90	43.30	-91.14	1,965.32	-3,448.42	5,267.76	5,184.36	83.40	63.164		
8,600.00	6,048.00	8,251.00	6,114.08	47.05	43.99	-91.15	2,014.58	-3,445.07	5,261.66	5,176.13	85.53	61.518		
8,700.00	6,048.00	8,303.73	6,115.11	48.25	44.74	-91.16	2,067.21	-3,441.97	5,256.50	5,168.76	87.74	59.907		
8,800.00	6,048.00	8,368.38	6,116.19	49.51	45.67	-91.17	2,131.76	-3,438.53	5,251.99	5,161.83	90.16	58.253		
8,900.00	6,048.00	8,442.00	6,117.58	50.81	46.75	-91.19	2,205.29	-3,435.23	5,248.25	5,155.51	92.74	56.592		
9,000.00	6,048.00	8,481.38	6,118.35	52.15	47.34	-91.19	2,244.64	-3,433.78	5,245.26	5,150.46	94.81	55.326		
9,100.00	6,048.00	8,538.00	6,119.25	53.53	48.18	-91.21	2,301.23	-3,432.20	5,243.23	5,146.08	97.16	53.967		
9,200.00	6,048.00	8,595.45	6,119.94	54.94	49.05	-91.21	2,358.66	-3,431.07	5,242.02	5,142.48	99.54	52.663		
9,300.00	6,048.00	8,728.49	6,120.84	56.37	51.08	-91.22	2,491.68	-3,428.86	5,241.24	5,138.06	103.18	50.796		
9,400.00	6,048.00	8,824.00	6,120.92	57.82	52.56	-91.22	2,587.17	-3,426.68	5,239.74	5,133.50	106.24	49.321		
9,500.00	6,048.00	8,906.45	6,120.45	59.30	53.84	-91.22	2,669.60	-3,424.99	5,238.45	5,129.35	109.10	48.016		
9,600.00	6,048.00	8,972.95	6,119.66	60.79	54.89	-91.21	2,736.09	-3,423.98	5,237.68	5,125.98	111.71	46.888		
9,664.66	6,048.00	9,015.00	6,118.83	61.77	55.55	-91.20	2,778.13	-3,423.58	5,237.55	5,124.16	113.38	46.193		
9,700.00	6,048.00	9,015.00	6,118.83	62.30	55.55	-91.20	2,778.13	-3,423.58	5,237.67	5,123.76	113.90	45.984		
9,800.00	6,048.00	9,057.52	6,118.27	63.82	56.23	-91.20	2,820.64	-3,423.65	5,238.75	5,122.64	116.11	45.119		
9,900.00	6,048.00	9,110.00	6,118.67	65.36	57.07	-91.20	2,873.11	-3,424.73	5,241.30	5,122.82	118.49	44.234		
10,000.00	6,048.00	9,110.00	6,118.67	66.91	57.07	-91.20	2,873.11	-3,424.73	5,244.94	5,125.02	119.92	43.738		
10,100.00	6,048.00	9,174.62	6,120.06	68.48	58.12	-91.21	2,937.66	-3,427.18	5,249.65	5,127.13	122.51	42.849		
10,200.00	6,048.00	9,239.70	6,121.57	70.05	59.18	-91.23	3,002.64	-3,430.38	5,255.33	5,130.21	125.13	42.000		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 478-MWD OWSSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	9,321.56	6,122.09	71.63	60.53	-91.23	3,084.39	-3,434.65	5,261.34	5,133.28	128.06	41.085		
10,400.00	6,048.00	9,396.00	6,122.25	73.23	61.76	-91.23	3,158.70	-3,439.09	5,268.02	5,137.16	130.86	40.256		
10,500.00	6,048.00	9,431.89	6,122.41	74.83	62.35	-91.24	3,194.51	-3,441.53	5,275.45	5,142.52	132.92	39.687		
10,600.00	6,048.00	9,529.02	6,122.83	76.43	63.97	-91.24	3,291.36	-3,448.87	5,283.77	5,147.58	136.18	38.799		
10,700.00	6,048.00	9,727.37	6,121.46	78.05	67.29	-91.22	3,489.32	-3,460.97	5,290.41	5,148.99	141.43	37.408		
10,800.00	6,048.00	9,818.55	6,119.88	79.67	68.82	-91.20	3,580.35	-3,465.92	5,296.58	5,151.98	144.60	36.630		
10,900.00	6,048.00	9,916.98	6,120.69	81.30	70.48	-91.21	3,678.62	-3,471.47	5,303.00	5,155.08	147.92	35.851		
11,000.00	6,048.00	10,228.79	6,123.29	82.94	75.73	-91.23	3,990.18	-3,481.97	5,306.80	5,151.47	155.33	34.165		
11,100.00	6,048.00	10,314.26	6,123.15	84.58	77.17	-91.23	4,075.65	-3,483.24	5,309.08	5,150.65	158.43	33.511		
11,200.00	6,048.00	10,520.57	6,123.65	86.22	80.64	-91.24	4,281.94	-3,484.85	5,310.58	5,146.81	163.77	32.426		
11,300.00	6,048.00	10,583.30	6,124.21	87.87	81.70	-91.24	4,344.66	-3,484.88	5,311.46	5,144.99	166.48	31.905		
11,400.00	6,048.00	10,636.00	6,124.73	89.53	82.59	-91.25	4,397.36	-3,485.38	5,313.21	5,144.22	168.99	31.442		
11,500.00	6,048.00	10,694.95	6,125.31	91.19	83.59	-91.25	4,456.30	-3,486.43	5,315.78	5,144.17	171.61	30.976		
11,600.00	6,048.00	10,762.00	6,125.90	92.85	84.73	-91.26	4,523.33	-3,488.04	5,319.00	5,144.62	174.38	30.502		
11,700.00	6,048.00	10,762.00	6,125.90	94.52	84.73	-91.26	4,523.33	-3,488.04	5,323.52	5,147.69	175.83	30.276		
11,800.00	6,048.00	10,762.00	6,125.90	96.19	84.73	-91.26	4,523.33	-3,488.04	5,329.92	5,152.70	177.22	30.075		
11,900.00	6,048.00	10,762.00	6,125.90	97.86	84.73	-91.26	4,523.33	-3,488.04	5,338.18	5,159.62	178.55	29.897		
12,000.00	6,048.00	10,762.00	6,125.90	99.54	84.73	-91.26	4,523.33	-3,488.04	5,348.30	5,168.47	179.83	29.741		
12,100.00	6,048.00	10,762.00	6,125.90	101.22	84.73	-91.26	4,523.33	-3,488.04	5,360.26	5,179.22	181.04	29.608		
12,200.00	6,048.00	10,762.00	6,125.90	102.91	84.73	-91.26	4,523.33	-3,488.04	5,374.06	5,191.87	182.19	29.497		
12,300.00	6,048.00	10,762.00	6,125.90	104.59	84.73	-91.26	4,523.33	-3,488.04	5,389.69	5,206.40	183.28	29.407		
12,400.00	6,048.00	10,762.00	6,125.90	106.28	84.73	-91.26	4,523.33	-3,488.04	5,407.11	5,222.80	184.31	29.337		
12,500.00	6,048.00	10,762.00	6,125.90	107.97	84.73	-91.26	4,523.33	-3,488.04	5,426.32	5,241.05	185.28	29.288		
12,600.00	6,048.00	10,762.00	6,125.90	109.67	84.73	-91.26	4,523.33	-3,488.04	5,447.30	5,261.12	186.18	29.258		
12,700.00	6,048.00	10,762.00	6,125.90	111.37	84.73	-91.26	4,523.33	-3,488.04	5,470.03	5,283.01	187.02	29.248 SF		
12,800.00	6,048.00	10,762.00	6,125.90	113.07	84.73	-91.26	4,523.33	-3,488.04	5,494.49	5,306.68	187.81	29.256		
12,900.00	6,048.00	10,762.00	6,125.90	114.77	84.73	-91.26	4,523.33	-3,488.04	5,520.65	5,332.11	188.53	29.282		
13,000.00	6,048.00	10,762.00	6,125.90	116.47	84.73	-91.26	4,523.33	-3,488.04	5,548.48	5,359.29	189.20	29.326		
13,100.00	6,048.00	10,762.00	6,125.90	118.18	84.73	-91.26	4,523.33	-3,488.04	5,577.98	5,388.17	189.80	29.388		
13,200.00	6,048.00	10,762.00	6,125.90	119.88	84.73	-91.26	4,523.33	-3,488.04	5,609.09	5,418.74	190.35	29.467		
13,300.00	6,048.00	10,762.00	6,125.90	121.59	84.73	-91.26	4,523.33	-3,488.04	5,641.82	5,450.97	190.85	29.562		
13,400.00	6,048.00	10,762.00	6,125.90	123.30	84.73	-91.26	4,523.33	-3,488.04	5,676.11	5,484.82	191.29	29.673		
13,500.00	6,048.00	10,762.00	6,125.90	125.02	84.73	-91.26	4,523.33	-3,488.04	5,711.95	5,520.27	191.68	29.800		
13,600.00	6,048.00	10,762.00	6,125.90	126.73	84.73	-91.26	4,523.33	-3,488.04	5,749.30	5,557.29	192.02	29.942		
13,700.00	6,048.00	10,762.00	6,125.90	128.45	84.73	-91.26	4,523.33	-3,488.04	5,788.15	5,595.84	192.30	30.099		
13,800.00	6,048.00	10,762.00	6,125.90	130.16	84.73	-91.26	4,523.33	-3,488.04	5,828.44	5,635.90	192.55	30.270		
13,900.00	6,048.00	10,762.00	6,125.90	131.88	84.73	-91.26	4,523.33	-3,488.04	5,870.17	5,677.43	192.74	30.456		
14,000.00	6,048.00	10,762.00	6,125.90	133.60	84.73	-91.26	4,523.33	-3,488.04	5,913.29	5,720.40	192.89	30.656		
14,100.00	6,048.00	10,762.00	6,125.90	135.32	84.73	-91.26	4,523.33	-3,488.04	5,957.78	5,764.78	193.00	30.870		
14,200.00	6,048.00	10,762.00	6,125.90	137.05	84.73	-91.26	4,523.33	-3,488.04	6,003.61	5,810.54	193.07	31.096		
14,300.00	6,048.00	10,762.00	6,125.90	138.77	84.73	-91.26	4,523.33	-3,488.04	6,050.74	5,857.65	193.09	31.336		
14,400.00	6,048.00	10,762.00	6,125.90	140.50	84.73	-91.26	4,523.33	-3,488.04	6,099.15	5,906.06	193.09	31.588		
14,500.00	6,048.00	10,762.00	6,125.90	142.22	84.73	-91.26	4,523.33	-3,488.04	6,148.80	5,955.76	193.04	31.852		
14,600.00	6,048.00	10,762.00	6,125.90	143.95	84.73	-91.26	4,523.33	-3,488.04	6,199.67	6,006.70	192.96	32.128		
14,700.00	6,048.00	10,762.00	6,125.90	145.68	84.73	-91.26	4,523.33	-3,488.04	6,251.72	6,058.86	192.86	32.417		
14,800.00	6,048.00	10,762.00	6,125.90	147.41	84.73	-91.26	4,523.33	-3,488.04	6,304.93	6,112.21	192.72	32.716		
14,900.00	6,048.00	10,762.00	6,125.90	149.14	84.73	-91.26	4,523.33	-3,488.04	6,359.27	6,166.72	192.55	33.027		
15,000.00	6,048.00	10,762.00	6,125.90	150.87	84.73	-91.26	4,523.33	-3,488.04	6,414.70	6,222.35	192.35	33.348		
15,100.00	6,048.00	10,762.00	6,125.90	152.60	84.73	-91.26	4,523.33	-3,488.04	6,471.21	6,279.07	192.14	33.681		
15,200.00	6,048.00	10,762.00	6,125.90	154.33	84.73	-91.26	4,523.33	-3,488.04	6,528.76	6,336.87	191.89	34.023		
15,300.00	6,048.00	10,762.00	6,125.90	156.07	84.73	-91.26	4,523.33	-3,488.04	6,587.32	6,395.70	191.63	34.376		
15,400.00	6,048.00	10,762.00	6,125.90	157.80	84.73	-91.26	4,523.33	-3,488.04	6,646.88	6,455.54	191.34	34.738		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 478-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
15,500.00	6,048.00	10,762.00	6,125.90	159.54	84.73	-91.26	4,523.33	-3,488.04	6,707.39	6,516.36	191.03	35.111			
15,600.00	6,048.00	10,762.00	6,125.90	161.27	84.73	-91.26	4,523.33	-3,488.04	6,768.84	6,578.13	190.71	35.493			
15,700.00	6,048.00	10,762.00	6,125.90	163.01	84.73	-91.26	4,523.33	-3,488.04	6,831.21	6,640.83	190.37	35.884			
15,800.00	6,048.00	10,762.00	6,125.90	164.75	84.73	-91.26	4,523.33	-3,488.04	6,894.46	6,704.44	190.02	36.284			
15,900.00	6,048.00	10,762.00	6,125.90	166.49	84.73	-91.26	4,523.33	-3,488.04	6,958.57	6,768.92	189.65	36.692			
16,000.00	6,048.00	10,762.00	6,125.90	168.23	84.73	-91.26	4,523.33	-3,488.04	7,023.52	6,834.25	189.26	37.110			
16,100.00	6,048.00	10,762.00	6,125.90	169.97	84.73	-91.26	4,523.33	-3,488.04	7,089.28	6,900.41	188.87	37.536			
16,200.00	6,048.00	10,762.00	6,125.90	171.71	84.73	-91.26	4,523.33	-3,488.04	7,155.84	6,967.38	188.46	37.970			
16,300.00	6,048.00	10,762.00	6,125.90	173.45	84.73	-91.26	4,523.33	-3,488.04	7,223.17	7,035.12	188.05	38.412			
16,400.00	6,048.00	10,762.00	6,125.90	175.19	84.73	-91.26	4,523.33	-3,488.04	7,291.25	7,103.63	187.62	38.861			
16,500.00	6,048.00	10,762.00	6,125.90	176.93	84.73	-91.26	4,523.33	-3,488.04	7,360.06	7,172.87	187.19	39.319			
16,600.00	6,048.00	10,762.00	6,125.90	178.67	84.73	-91.26	4,523.33	-3,488.04	7,429.58	7,242.83	186.75	39.784			
16,700.00	6,048.00	10,762.00	6,125.90	180.42	84.73	-91.26	4,523.33	-3,488.04	7,499.78	7,313.48	186.30	40.256			
16,800.00	6,048.00	10,762.00	6,125.90	182.16	84.73	-91.26	4,523.33	-3,488.04	7,570.66	7,384.81	185.85	40.736			
16,900.00	6,048.00	10,762.00	6,125.90	183.91	84.73	-91.26	4,523.33	-3,488.04	7,642.19	7,456.80	185.39	41.222			
17,000.00	6,048.00	10,762.00	6,125.90	185.65	84.73	-91.26	4,523.33	-3,488.04	7,714.35	7,529.42	184.93	41.715			
17,100.00	6,048.00	10,762.00	6,125.90	187.40	84.73	-91.26	4,523.33	-3,488.04	7,787.12	7,602.66	184.46	42.215			
17,138.90	6,048.00	10,762.00	6,125.90	188.08	84.73	-91.26	4,523.33	-3,488.04	7,815.60	7,631.32	184.28	42.411			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 526-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	58.95	83.80	139.21	162.80					
100.00	100.00	90.19	90.19	0.27	0.16	58.90	83.89	139.10	162.44	162.01	0.43	381.039		
200.00	200.00	190.39	190.39	0.63	0.33	58.73	84.21	138.69	162.26	161.30	0.96	169.075		
300.00	300.00	290.59	290.58	0.99	0.51	58.44	84.76	138.01	161.96	160.47	1.49	108.474		
400.00	400.00	390.78	390.77	1.34	0.68	58.03	85.54	137.03	161.54	159.52	2.03	79.717		
500.00	500.00	490.96	490.93	1.70	0.86	57.49	86.54	135.77	161.01	158.45	2.56	62.901		
600.00	600.00	591.48	591.43	2.06	1.15	56.94	87.44	134.36	160.31	157.10	3.21	49.935		
700.00	700.00	691.46	691.41	2.42	1.50	56.83	87.12	133.31	159.26	155.34	3.92	40.645		
771.56	771.56	761.61	761.56	2.68	1.74	56.99	86.58	133.29	158.94	154.53	4.41	36.012		
800.00	800.00	789.61	789.56	2.78	1.83	57.11	86.35	133.50	158.99	154.38	4.61	34.483		
900.00	900.00	889.53	889.47	3.14	2.17	57.59	85.38	134.48	159.29	153.98	5.31	30.013		
1,000.00	999.98	989.51	989.43	3.48	2.52	-57.73	84.20	135.63	158.70	152.71	6.00	26.460		
1,100.00	1,099.84	1,089.25	1,089.16	3.82	2.86	-58.71	82.83	136.94	156.31	149.62	6.68	23.387		
1,200.00	1,199.45	1,188.56	1,188.44	4.17	3.21	-60.82	81.50	138.49	152.43	145.05	7.38	20.660		
1,300.00	1,298.70	1,287.27	1,287.12	4.53	3.56	-64.13	80.20	140.54	147.64	139.56	8.08	18.264		
1,400.00	1,397.47	1,386.23	1,386.05	4.91	3.91	-68.93	79.13	142.83	142.39	133.58	8.81	16.163		
1,500.00	1,495.62	1,484.96	1,484.76	5.31	4.26	-75.72	78.59	144.62	137.35	127.79	9.56	14.366		
1,600.00	1,593.06	1,582.84	1,582.64	5.74	4.60	-84.71	78.58	145.38	133.87	123.53	10.34	12.945		
1,648.24	1,639.76	1,629.75	1,629.55	5.97	4.77	-89.64	78.56	145.65	133.38	122.64	10.73	12.428	CC, ES	
1,700.00	1,689.64	1,679.88	1,679.68	6.21	4.94	-95.23	78.47	145.96	134.03	122.88	11.15	12.023		
1,800.00	1,785.27	1,777.31	1,777.10	6.71	5.29	-106.56	77.64	146.61	139.14	127.18	11.96	11.631		
1,900.00	1,879.82	1,872.10	1,871.88	7.27	5.63	-117.46	76.15	147.38	150.42	137.67	12.75	11.801		
2,000.00	1,973.17	1,965.60	1,965.36	7.88	5.96	-127.15	75.18	148.51	169.34	155.85	13.49	12.553		
2,100.00	2,065.27	2,059.09	2,058.84	8.54	6.29	-135.55	74.01	149.67	194.70	180.50	14.20	13.711		
2,200.00	2,157.01	2,149.19	2,148.93	9.24	6.62	-142.19	73.09	150.59	224.46	209.59	14.87	15.096		
2,300.00	2,248.74	2,240.82	2,240.56	9.96	6.94	-147.42	72.75	151.10	257.31	241.77	15.54	16.563		
2,400.00	2,340.48	2,334.26	2,333.99	10.70	7.27	-151.84	71.41	150.71	291.51	275.31	16.20	17.990		
2,500.00	2,432.22	2,429.59	2,429.24	11.45	7.60	-155.81	67.97	149.19	326.18	309.30	16.88	19.329		
2,600.00	2,523.96	2,522.33	2,521.78	12.21	7.93	-159.32	62.54	146.50	361.30	343.78	17.53	20.613		
2,700.00	2,615.70	2,613.23	2,612.33	12.99	8.25	-162.47	55.67	142.54	397.38	379.21	18.17	21.869		
2,800.00	2,707.44	2,702.74	2,701.28	13.77	8.57	-165.39	47.39	136.99	434.70	415.90	18.81	23.114		
2,900.00	2,799.17	2,799.37	2,797.06	14.55	8.93	-168.30	36.56	130.23	472.43	452.92	19.50	24.224		
3,000.00	2,890.91	2,891.51	2,888.23	15.35	9.27	-170.79	24.86	123.89	510.13	489.94	20.19	25.269		
3,100.00	2,982.65	2,979.83	2,975.67	16.14	9.60	-172.82	13.91	117.99	548.55	527.69	20.86	26.291		
3,200.00	3,074.39	3,063.48	3,058.64	16.95	9.92	-174.40	4.86	112.28	588.35	566.83	21.52	27.343		
3,300.00	3,166.13	3,151.88	3,146.41	17.75	10.25	-175.79	-3.66	106.05	629.25	607.03	22.22	28.323		
3,400.00	3,257.87	3,249.98	3,243.74	18.56	10.63	-177.19	-13.63	99.03	670.32	647.32	23.01	29.136		
3,500.00	3,349.61	3,354.27	3,346.80	19.37	11.04	-178.76	-27.99	92.09	709.73	685.87	23.86	29.745		
3,600.00	3,441.34	3,452.93	3,443.51	20.18	11.45	-179.56	-46.07	84.84	748.28	723.58	24.70	30.298		
3,700.00	3,533.08	3,552.32	3,540.18	21.00	11.88	-177.78	-67.82	77.07	786.36	760.79	25.57	30.756		
3,800.00	3,624.82	3,650.96	3,636.00	21.81	12.31	-176.14	-90.22	70.38	823.79	797.34	26.46	31.137		
3,900.00	3,716.56	3,741.39	3,724.35	22.63	12.71	-174.94	-108.80	65.34	861.37	834.08	27.29	31.566		
4,000.00	3,808.30	3,819.29	3,801.01	23.45	13.04	-174.17	-122.12	61.47	899.84	871.84	28.00	32.138		
4,100.00	3,900.04	3,899.54	3,880.46	24.27	13.37	-173.64	-132.52	57.20	940.00	911.28	28.72	32.732		
4,200.00	3,991.78	4,006.09	3,986.22	25.09	13.80	-173.11	-144.66	52.63	979.83	950.18	29.65	33.047		
4,300.00	4,083.51	4,087.44	4,066.94	25.92	14.14	-172.73	-154.16	49.34	1,019.43	989.06	30.37	33.563		
4,400.00	4,175.25	4,169.45	4,148.17	26.74	14.47	-172.31	-164.52	44.84	1,060.04	1,028.94	31.11	34.077		
4,500.00	4,266.99	4,254.57	4,232.49	27.57	14.82	-171.90	-174.96	39.71	1,101.28	1,069.41	31.87	34.554		
4,600.00	4,358.73	4,347.29	4,324.37	28.39	15.21	-171.51	-186.06	34.01	1,142.76	1,110.06	32.71	34.941		
4,700.00	4,450.47	4,437.30	4,413.52	29.22	15.58	-171.14	-197.15	28.53	1,184.13	1,150.61	33.52	35.326		
4,800.00	4,542.21	4,523.88	4,499.13	30.05	15.95	-170.76	-208.70	22.74	1,225.79	1,191.48	34.31	35.724		
4,900.00	4,633.95	4,610.29	4,584.44	30.88	16.32	-170.36	-220.90	16.46	1,267.79	1,232.68	35.11	36.105		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 526-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,725.68	4,718.12	4,690.90	31.70	16.78	169.89	-236.25	8.86	1,309.69	1,273.57	36.12	36.262		
5,100.00	4,817.42	4,823.98	4,795.80	32.53	17.22	169.57	-249.55	3.82	1,349.96	1,312.88	37.08	36.409		
5,200.00	4,909.16	4,916.33	4,887.73	33.36	17.58	169.48	-257.70	0.73	1,389.96	1,352.07	37.89	36.686		
5,300.00	5,000.90	5,006.23	4,977.46	34.19	17.92	169.53	-262.78	-1.52	1,430.00	1,391.36	38.65	37.003		
5,400.00	5,092.64	5,099.69	5,070.84	35.02	18.25	169.67	-265.79	-3.25	1,470.08	1,430.67	39.41	37.305		
5,500.00	5,184.38	5,191.45	5,162.59	35.85	18.57	169.87	-267.29	-4.39	1,510.02	1,469.89	40.14	37.623		
5,600.00	5,276.11	5,279.00	5,250.13	36.69	18.86	170.10	-267.40	-5.22	1,550.13	1,509.31	40.82	37.977		
5,700.00	5,367.85	5,358.36	5,329.48	37.52	19.11	170.32	-266.95	-6.24	1,590.71	1,549.29	41.43	38.397		
5,800.00	5,459.76	5,437.02	5,408.13	38.34	19.36	-179.53	-266.55	-7.90	1,631.77	1,589.74	42.03	38.822		
5,900.00	5,552.68	5,510.52	5,481.59	39.06	19.60	-150.86	-265.96	-9.97	1,670.08	1,627.50	42.58	39.225		
6,000.00	5,644.46	5,592.15	5,563.14	39.64	19.86	-126.69	-263.58	-12.29	1,703.90	1,660.76	43.15	39.489		
6,100.00	5,732.30	5,676.75	5,647.13	40.06	20.09	-110.54	-254.04	-14.06	1,733.41	1,689.73	43.68	39.686		
6,200.00	5,813.53	5,764.00	5,731.83	40.35	20.30	-100.52	-233.44	-12.07	1,755.98	1,711.83	44.15	39.772		
6,300.00	5,885.68	5,821.86	5,785.70	40.51	20.41	-94.03	-212.53	-10.16	1,773.93	1,729.51	44.42	39.937		
6,400.00	5,946.56	5,859.00	5,818.58	40.57	20.47	-89.74	-195.34	-8.74	1,787.22	1,742.62	44.59	40.077		
6,500.00	5,994.33	5,891.00	5,845.89	40.54	20.52	-87.12	-178.69	-8.10	1,796.71	1,751.90	44.81	40.098		
6,600.00	6,027.53	6,050.00	5,966.40	40.44	20.76	-88.04	-76.09	-1.83	1,800.82	1,755.25	45.57	39.522		
6,700.00	6,045.15	6,081.00	5,986.20	40.29	20.81	-88.16	-52.33	0.26	1,797.58	1,751.63	45.96	39.114		
6,800.00	6,048.00	6,113.00	6,005.52	40.12	20.87	-88.96	-26.87	1.68	1,792.00	1,745.53	46.47	38.565		
6,900.00	6,048.00	6,177.00	6,039.84	39.97	21.00	-90.06	27.07	3.64	1,788.53	1,741.39	47.13	37.946		
6,940.09	6,048.00	6,177.00	6,039.84	39.91	21.00	-90.06	27.07	3.64	1,788.08	1,740.72	47.36	37.757		
7,000.00	6,048.00	6,208.00	6,054.28	39.85	21.08	-90.52	54.50	3.54	1,788.76	1,741.01	47.76	37.455		
7,100.00	6,048.00	6,240.00	6,067.55	39.76	21.16	-90.95	83.59	2.37	1,793.02	1,744.59	48.43	37.025		
7,200.00	6,048.00	6,304.00	6,090.51	39.72	21.36	-91.68	143.23	-0.94	1,800.08	1,750.83	49.25	36.551		
7,300.00	6,048.00	6,630.49	6,157.03	39.71	23.12	-93.78	459.96	-5.24	1,805.70	1,753.87	51.83	34.841		
7,400.00	6,048.00	6,689.00	6,157.27	39.75	23.55	-93.79	518.42	-2.81	1,802.54	1,749.56	52.98	34.023		
7,500.00	6,048.00	6,758.13	6,159.19	39.85	24.10	-93.86	587.51	-1.68	1,801.80	1,747.47	54.33	33.165		
7,600.00	6,048.00	6,905.66	6,163.02	40.01	25.44	-93.98	734.92	2.43	1,799.73	1,743.05	56.68	31.753		
7,700.00	6,048.00	6,987.79	6,162.33	40.24	26.27	-93.97	816.99	5.23	1,797.13	1,738.69	58.45	30.749		
7,768.07	6,048.00	7,025.87	6,161.56	40.45	26.67	-93.94	855.06	5.76	1,796.60	1,737.13	59.47	30.211		
7,800.00	6,048.00	7,049.15	6,161.39	40.57	26.93	-93.94	878.34	5.85	1,796.69	1,736.67	60.02	29.934		
7,900.00	6,048.00	7,109.68	6,161.96	40.99	27.60	-93.95	938.86	5.53	1,798.14	1,736.50	61.64	29.171		
8,000.00	6,048.00	7,163.00	6,163.06	41.53	28.22	-93.99	992.14	3.97	1,802.03	1,738.85	63.19	28.518		
8,100.00	6,048.00	7,250.84	6,165.30	42.19	29.28	-94.04	1,079.83	-0.64	1,808.15	1,742.80	65.35	27.668		
8,200.00	6,048.00	7,438.19	6,164.85	42.97	31.67	-94.01	1,267.04	-7.15	1,812.98	1,743.61	69.37	26.135		
8,300.00	6,048.00	7,536.86	6,166.35	43.85	32.99	-94.06	1,365.70	-7.66	1,814.37	1,742.40	71.96	25.213		
8,400.00	6,048.00	7,638.00	6,168.69	44.83	34.38	-94.13	1,466.81	-7.56	1,815.20	1,740.52	74.68	24.307		
8,500.00	6,048.00	7,720.39	6,169.93	45.90	35.54	-94.17	1,549.18	-8.22	1,816.86	1,739.77	77.09	23.569		
8,600.00	6,048.00	7,871.53	6,169.89	47.05	37.73	-94.16	1,700.31	-8.83	1,818.28	1,737.34	80.94	22.464		
8,644.45	6,048.00	7,902.76	6,169.41	47.57	38.19	-94.14	1,731.53	-8.43	1,818.04	1,736.09	81.95	22.185		
8,700.00	6,048.00	7,924.00	6,169.28	48.25	38.50	-94.14	1,752.77	-8.45	1,818.53	1,735.70	82.83	21.955		
8,800.00	6,048.00	7,987.00	6,169.80	49.51	39.44	-94.15	1,815.75	-9.93	1,821.61	1,736.67	84.94	21.446		
8,900.00	6,048.00	8,106.85	6,170.17	50.81	41.26	-94.15	1,935.55	-13.10	1,825.05	1,736.71	88.34	20.660		
9,000.00	6,048.00	8,322.67	6,168.97	52.15	44.58	-94.11	2,151.28	-12.75	1,826.66	1,732.80	93.87	19.460		
9,100.00	6,048.00	8,434.52	6,164.27	53.53	46.32	-93.98	2,262.91	-7.73	1,822.63	1,725.46	97.17	18.757		
9,200.00	6,048.00	8,534.31	6,163.94	54.94	47.88	-93.97	2,362.58	-2.95	1,818.60	1,718.34	100.26	18.139		
9,300.00	6,048.00	8,598.65	6,164.23	56.37	48.90	-93.99	2,426.86	-0.27	1,815.31	1,712.71	102.60	17.693		
9,400.00	6,048.00	8,686.00	6,164.04	57.82	50.29	-93.99	2,514.18	1.89	1,813.58	1,708.12	105.46	17.197		
9,500.00	6,048.00	8,806.68	6,163.91	59.30	52.23	-93.98	2,634.84	3.97	1,812.84	1,703.75	109.09	16.618		
9,600.00	6,048.00	8,883.41	6,162.23	60.79	53.47	-93.93	2,711.52	6.18	1,810.65	1,698.90	111.75	16.203		
9,700.00	6,048.00	8,972.00	6,161.88	62.30	54.91	-93.93	2,800.08	8.13	1,809.24	1,694.56	114.68	15.776		
9,744.00	6,048.00	9,003.00	6,162.20	62.97	55.42	-93.94	2,831.08	8.51	1,809.08	1,693.29	115.79	15.624		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 526-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
9,800.00	6,048.00	9,035.00	6,162.82	63.82	55.94	-93.96	2,863.07	8.59	1,809.44	1,692.43	117.01	15.464		
9,900.00	6,048.00	9,121.80	6,165.13	65.36	57.37	-94.03	2,949.84	7.55	1,811.54	1,691.61	119.92	15.106		
10,000.00	6,048.00	9,208.68	6,166.27	66.91	58.81	-94.06	3,036.69	6.27	1,813.88	1,691.04	122.84	14.766		
10,100.00	6,048.00	9,306.56	6,166.76	68.48	60.44	-94.07	3,134.55	3.93	1,817.05	1,691.00	126.06	14.415		
10,200.00	6,048.00	9,394.45	6,167.81	70.05	61.91	-94.09	3,222.40	1.68	1,820.45	1,691.43	129.02	14.110		
10,300.00	6,048.00	9,504.94	6,168.55	71.63	63.76	-94.11	3,332.85	-1.27	1,823.94	1,691.34	132.60	13.755		
10,365.09	6,048.00	9,627.74	6,167.05	72.67	65.82	-94.06	3,455.63	-0.99	1,823.70	1,687.45	136.24	13.386		
10,400.00	6,048.00	9,644.94	6,166.85	73.23	66.11	-94.05	3,472.83	-0.93	1,823.81	1,686.86	136.95	13.317		
10,500.00	6,048.00	9,725.07	6,166.05	74.83	67.46	-94.02	3,552.94	-1.87	1,825.57	1,685.80	139.76	13.062		
10,600.00	6,048.00	9,874.47	6,162.72	76.43	69.98	-93.92	3,702.29	-0.64	1,825.00	1,680.65	144.35	12.643		
10,647.86	6,048.00	9,907.17	6,162.39	77.21	70.53	-93.91	3,734.98	-0.28	1,824.81	1,679.24	145.57	12.535		
10,700.00	6,048.00	9,951.71	6,162.19	78.05	71.28	-93.90	3,779.53	-0.10	1,824.97	1,677.85	147.12	12.404		
10,800.00	6,048.00	10,060.98	6,163.13	79.67	73.14	-93.93	3,888.79	0.24	1,825.52	1,674.81	150.71	12.113		
10,900.00	6,048.00	10,202.54	6,161.15	81.30	75.53	-93.87	4,030.26	3.80	1,823.43	1,668.34	155.09	11.757		
11,000.00	6,048.00	10,317.25	6,160.76	82.94	77.47	-93.87	4,144.89	7.80	1,820.71	1,661.91	158.80	11.466		
11,100.00	6,048.00	10,400.00	6,161.02	84.58	78.87	-93.88	4,227.58	10.92	1,817.78	1,656.02	161.76	11.237		
11,200.00	6,048.00	10,463.00	6,162.17	86.22	79.95	-93.92	4,290.55	12.09	1,816.73	1,652.51	164.22	11.063		
11,204.45	6,048.00	10,463.00	6,162.17	86.29	79.95	-93.92	4,290.55	12.09	1,816.73	1,652.47	164.26	11.060		
11,300.00	6,048.00	10,527.00	6,163.54	87.87	81.04	-93.96	4,354.54	12.17	1,817.52	1,650.87	166.65	10.906		
11,400.00	6,048.00	10,599.41	6,163.78	89.53	82.29	-93.96	4,426.93	10.84	1,820.13	1,650.85	169.27	10.753		
11,500.00	6,048.00	10,685.03	6,163.85	91.19	83.76	-93.96	4,512.53	8.66	1,823.49	1,651.23	172.26	10.586		
11,600.00	6,048.00	10,733.00	6,163.93	92.85	84.59	-93.96	4,560.47	7.07	1,828.31	1,654.25	174.07	10.503 SF		
11,700.00	6,048.00	10,733.00	6,163.93	94.52	84.59	-93.96	4,560.47	7.07	1,837.95	1,663.90	174.05	10.560		
11,800.00	6,048.00	10,733.00	6,163.93	96.19	84.59	-93.96	4,560.47	7.07	1,852.94	1,679.36	173.58	10.675		
11,900.00	6,048.00	10,733.00	6,163.93	97.86	84.59	-93.96	4,560.47	7.07	1,873.15	1,700.47	172.68	10.848		
12,000.00	6,048.00	10,733.00	6,163.93	99.54	84.59	-93.96	4,560.47	7.07	1,898.43	1,727.03	171.39	11.076		
12,100.00	6,048.00	10,733.00	6,163.93	101.22	84.59	-93.96	4,560.47	7.07	1,928.56	1,758.80	169.76	11.361		
12,200.00	6,048.00	10,733.00	6,163.93	102.91	84.59	-93.96	4,560.47	7.07	1,963.33	1,795.51	167.82	11.699		
12,300.00	6,048.00	10,733.00	6,163.93	104.59	84.59	-93.96	4,560.47	7.07	2,002.50	1,836.86	165.64	12.090		
12,400.00	6,048.00	10,733.00	6,163.93	106.28	84.59	-93.96	4,560.47	7.07	2,045.81	1,882.56	163.24	12.532		
12,500.00	6,048.00	10,733.00	6,163.93	107.97	84.59	-93.96	4,560.47	7.07	2,093.00	1,932.31	160.69	13.025		
12,600.00	6,048.00	10,733.00	6,163.93	109.67	84.59	-93.96	4,560.47	7.07	2,143.82	1,985.80	158.02	13.567		
12,700.00	6,048.00	10,733.00	6,163.93	111.37	84.59	-93.96	4,560.47	7.07	2,198.02	2,042.74	155.28	14.156		
12,800.00	6,048.00	10,733.00	6,163.93	113.07	84.59	-93.96	4,560.47	7.07	2,255.35	2,102.87	152.49	14.791		
12,900.00	6,048.00	10,733.00	6,163.93	114.77	84.59	-93.96	4,560.47	7.07	2,315.59	2,165.91	149.68	15.470		
13,000.00	6,048.00	10,733.00	6,163.93	116.47	84.59	-93.96	4,560.47	7.07	2,378.50	2,231.62	146.88	16.193		
13,100.00	6,048.00	10,733.00	6,163.93	118.18	84.59	-93.96	4,560.47	7.07	2,443.89	2,299.78	144.11	16.958		
13,200.00	6,048.00	10,733.00	6,163.93	119.88	84.59	-93.96	4,560.47	7.07	2,511.56	2,370.17	141.39	17.763		
13,300.00	6,048.00	10,733.00	6,163.93	121.59	84.59	-93.96	4,560.47	7.07	2,581.32	2,442.60	138.72	18.608		
13,400.00	6,048.00	10,733.00	6,163.93	123.30	84.59	-93.96	4,560.47	7.07	2,653.03	2,516.90	136.13	19.489		
13,500.00	6,048.00	10,733.00	6,163.93	125.02	84.59	-93.96	4,560.47	7.07	2,726.52	2,592.91	133.60	20.407		
13,600.00	6,048.00	10,733.00	6,163.93	126.73	84.59	-93.96	4,560.47	7.07	2,801.64	2,670.48	131.16	21.360		
13,700.00	6,048.00	10,733.00	6,163.93	128.45	84.59	-93.96	4,560.47	7.07	2,878.29	2,749.48	128.80	22.346		
13,800.00	6,048.00	10,733.00	6,163.93	130.16	84.59	-93.96	4,560.47	7.07	2,956.33	2,829.80	126.53	23.365		
13,900.00	6,048.00	10,733.00	6,163.93	131.88	84.59	-93.96	4,560.47	7.07	3,035.65	2,911.31	124.34	24.414		
14,000.00	6,048.00	10,733.00	6,163.93	133.60	84.59	-93.96	4,560.47	7.07	3,116.17	2,993.93	122.23	25.493		
14,100.00	6,048.00	10,733.00	6,163.93	135.32	84.59	-93.96	4,560.47	7.07	3,197.79	3,077.57	120.21	26.601		
14,200.00	6,048.00	10,733.00	6,163.93	137.05	84.59	-93.96	4,560.47	7.07	3,280.42	3,162.14	118.28	27.735		
14,300.00	6,048.00	10,733.00	6,163.93	138.77	84.59	-93.96	4,560.47	7.07	3,364.00	3,247.58	116.42	28.895		
14,400.00	6,048.00	10,733.00	6,163.93	140.50	84.59	-93.96	4,560.47	7.07	3,448.45	3,333.81	114.64	30.081		
14,500.00	6,048.00	10,733.00	6,163.93	142.22	84.59	-93.96	4,560.47	7.07	3,533.71	3,420.78	112.94	31.290		
14,600.00	6,048.00	10,733.00	6,163.93	143.95	84.59	-93.96	4,560.47	7.07	3,619.73	3,508.43	111.30	32.521		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 526-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
14,700.00	6,048.00	10,733.00	6,163.93	145.68	84.59	-93.96	4,560.47	7.07	3,706.45	3,596.71	109.74	33.774			
14,800.00	6,048.00	10,733.00	6,163.93	147.41	84.59	-93.96	4,560.47	7.07	3,793.82	3,685.58	108.25	35.048			
14,900.00	6,048.00	10,733.00	6,163.93	149.14	84.59	-93.96	4,560.47	7.07	3,881.81	3,774.99	106.82	36.341			
15,000.00	6,048.00	10,733.00	6,163.93	150.87	84.59	-93.96	4,560.47	7.07	3,970.36	3,864.91	105.45	37.652			
15,100.00	6,048.00	10,733.00	6,163.93	152.60	84.59	-93.96	4,560.47	7.07	4,059.44	3,955.30	104.14	38.981			
15,200.00	6,048.00	10,733.00	6,163.93	154.33	84.59	-93.96	4,560.47	7.07	4,149.02	4,046.14	102.88	40.327			
15,300.00	6,048.00	10,733.00	6,163.93	156.07	84.59	-93.96	4,560.47	7.07	4,239.07	4,137.39	101.68	41.689			
15,400.00	6,048.00	10,733.00	6,163.93	157.80	84.59	-93.96	4,560.47	7.07	4,329.55	4,229.02	100.53	43.066			
15,500.00	6,048.00	10,733.00	6,163.93	159.54	84.59	-93.96	4,560.47	7.07	4,420.45	4,321.02	99.43	44.457			
15,600.00	6,048.00	10,733.00	6,163.93	161.27	84.59	-93.96	4,560.47	7.07	4,511.73	4,413.35	98.38	45.861			
15,700.00	6,048.00	10,733.00	6,163.93	163.01	84.59	-93.96	4,560.47	7.07	4,603.37	4,506.00	97.37	47.278			
15,800.00	6,048.00	10,733.00	6,163.93	164.75	84.59	-93.96	4,560.47	7.07	4,695.35	4,598.95	96.40	48.707			
15,900.00	6,048.00	10,733.00	6,163.93	166.49	84.59	-93.96	4,560.47	7.07	4,787.66	4,692.19	95.47	50.147			
16,000.00	6,048.00	10,733.00	6,163.93	168.23	84.59	-93.96	4,560.47	7.07	4,880.27	4,785.68	94.58	51.598			
16,100.00	6,048.00	10,733.00	6,163.93	169.97	84.59	-93.96	4,560.47	7.07	4,973.16	4,879.43	93.73	53.059			
16,200.00	6,048.00	10,733.00	6,163.93	171.71	84.59	-93.96	4,560.47	7.07	5,066.32	4,973.41	92.91	54.529			
16,300.00	6,048.00	10,733.00	6,163.93	173.45	84.59	-93.96	4,560.47	7.07	5,159.74	5,067.62	92.13	56.008			
16,400.00	6,048.00	10,733.00	6,163.93	175.19	84.59	-93.96	4,560.47	7.07	5,253.41	5,162.04	91.37	57.495			
16,500.00	6,048.00	10,733.00	6,163.93	176.93	84.59	-93.96	4,560.47	7.07	5,347.30	5,256.65	90.65	58.990			
16,600.00	6,048.00	10,733.00	6,163.93	178.67	84.59	-93.96	4,560.47	7.07	5,441.41	5,351.46	89.95	60.492			
16,700.00	6,048.00	10,733.00	6,163.93	180.42	84.59	-93.96	4,560.47	7.07	5,535.73	5,446.44	89.29	62.000			
16,800.00	6,048.00	10,733.00	6,163.93	182.16	84.59	-93.96	4,560.47	7.07	5,630.24	5,541.59	88.64	63.515			
16,900.00	6,048.00	10,733.00	6,163.93	183.91	84.59	-93.96	4,560.47	7.07	5,724.94	5,636.91	88.03	65.035			
17,000.00	6,048.00	10,733.00	6,163.93	185.65	84.59	-93.96	4,560.47	7.07	5,819.81	5,732.38	87.44	66.560			
17,100.00	6,048.00	10,733.00	6,163.93	187.40	84.59	-93.96	4,560.47	7.07	5,914.86	5,827.99	86.87	68.091			
17,138.90	6,048.00	10,733.00	6,163.93	188.08	84.59	-93.96	4,560.47	7.07	5,951.88	5,865.23	86.65	68.687			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.15	0.00	80.15					
100.00	100.00	100.00	100.00	0.27	0.27	0.00	80.15	0.00	80.15	79.62	0.54	149.064		
200.00	200.00	200.93	200.91	0.63	0.62	-1.20	79.54	-1.67	79.56	78.31	1.25	63.604		
300.00	300.00	301.62	301.45	0.99	0.99	-4.90	77.70	-6.66	78.00	76.03	1.97	39.597		
400.00	400.00	401.80	401.25	1.34	1.36	-11.29	74.67	-14.91	76.15	73.45	2.70	28.157		
497.19	497.19	498.47	497.19	1.69	1.75	-20.19	70.60	-25.97	75.23	71.79	3.44	21.878	CC	
500.00	500.00	501.26	499.95	1.70	1.76	-20.49	70.47	-26.33	75.23	71.77	3.46	21.743	ES	
600.00	600.00	600.00	597.47	2.06	2.18	-32.09	65.13	-40.85	76.92	72.68	4.24	18.160		
700.00	700.00	697.05	692.74	2.42	2.62	-44.72	58.75	-58.18	83.00	77.99	5.01	16.565		
800.00	800.00	792.99	786.25	2.78	3.10	-56.73	51.36	-78.28	94.63	88.87	5.76	16.425		
900.00	900.00	887.36	877.48	3.14	3.61	-66.90	43.04	-100.91	111.99	105.52	6.47	17.299		
1,000.00	999.98	979.64	965.88	3.48	4.14	169.76	33.90	-125.75	136.29	129.15	7.14	19.082		
1,100.00	1,099.84	1,069.11	1,050.73	3.82	4.71	163.95	24.11	-152.38	168.31	160.51	7.80	21.591		
1,200.00	1,199.45	1,155.40	1,131.69	4.17	5.29	159.84	13.80	-180.40	207.07	198.63	8.43	24.552		
1,300.00	1,298.70	1,238.19	1,208.48	4.53	5.89	156.91	3.12	-209.43	251.82	242.76	9.06	27.790		
1,400.00	1,397.47	1,317.24	1,280.94	4.91	6.50	154.76	-7.78	-239.07	302.00	292.32	9.68	31.206		
1,500.00	1,495.62	1,392.35	1,348.96	5.31	7.11	153.11	-18.78	-268.97	357.15	346.86	10.28	34.737		
1,600.00	1,593.06	1,463.40	1,412.51	5.74	7.73	151.78	-29.74	-298.79	416.87	405.99	10.88	38.332		
1,700.00	1,689.64	1,534.69	1,475.55	6.21	8.38	150.63	-41.23	-330.03	480.67	469.17	11.50	41.786		
1,800.00	1,785.27	1,609.45	1,541.52	6.71	9.07	149.67	-53.37	-363.03	547.08	534.87	12.20	44.827		
1,900.00	1,879.82	1,682.16	1,605.69	7.27	9.75	148.88	-65.18	-395.13	615.71	602.80	12.91	47.690		
2,000.00	1,973.17	1,752.74	1,667.98	7.88	10.41	148.18	-76.64	-426.29	686.49	672.87	13.62	50.401		
2,100.00	2,065.27	1,821.19	1,728.38	8.54	11.06	147.83	-87.75	-456.50	759.27	744.94	14.34	52.966		
2,200.00	2,157.01	1,889.04	1,788.26	9.24	11.70	148.27	-98.76	-486.45	832.62	817.58	15.04	55.350		
2,300.00	2,248.74	1,956.89	1,848.13	9.96	12.35	148.64	-109.78	-516.40	905.98	890.22	15.76	57.487		
2,400.00	2,340.48	2,024.74	1,908.01	10.70	13.00	148.95	-120.80	-546.36	979.36	962.88	16.48	59.413		
2,500.00	2,432.22	2,092.59	1,967.88	11.45	13.65	149.22	-131.81	-576.31	1,052.75	1,035.53	17.22	61.153		
2,600.00	2,523.96	2,160.44	2,027.76	12.21	14.30	149.45	-142.83	-606.26	1,126.15	1,108.20	17.95	62.730		
2,700.00	2,615.70	2,228.28	2,087.63	12.99	14.96	149.65	-153.85	-636.21	1,199.55	1,180.86	18.69	64.165		
2,800.00	2,707.44	2,296.13	2,147.51	13.77	15.61	149.84	-164.86	-666.16	1,272.97	1,253.53	19.44	65.475		
2,900.00	2,799.17	2,363.98	2,207.39	14.55	16.27	150.00	-175.88	-696.11	1,346.38	1,326.19	20.19	66.674		
3,000.00	2,890.91	2,431.83	2,267.26	15.35	16.93	150.14	-186.89	-726.06	1,419.81	1,398.86	20.95	67.774		
3,100.00	2,982.65	2,499.68	2,327.14	16.14	17.58	150.27	-197.91	-756.01	1,493.23	1,471.53	21.71	68.788		
3,200.00	3,074.39	2,567.53	2,387.01	16.95	18.24	150.39	-208.93	-785.97	1,566.66	1,544.19	22.47	69.723		
3,300.00	3,166.13	2,635.38	2,446.89	17.75	18.90	150.50	-219.94	-815.92	1,640.09	1,616.86	23.23	70.588		
3,400.00	3,257.87	2,703.23	2,506.76	18.56	19.56	150.60	-230.96	-845.87	1,713.53	1,689.53	24.00	71.390		
3,500.00	3,349.61	2,771.08	2,566.64	19.37	20.22	150.69	-241.97	-875.82	1,786.97	1,762.19	24.77	72.135		
3,600.00	3,441.34	2,838.93	2,626.52	20.18	20.88	150.77	-252.99	-905.77	1,860.40	1,834.86	25.54	72.829		
3,700.00	3,533.08	2,906.78	2,686.39	21.00	21.54	150.85	-264.01	-935.72	1,933.84	1,907.53	26.32	73.477		
3,800.00	3,624.82	2,974.63	2,746.27	21.81	22.21	150.92	-275.02	-965.67	2,007.29	1,980.19	27.10	74.082		
3,900.00	3,716.56	3,042.48	2,806.14	22.63	22.87	150.99	-286.04	-995.62	2,080.73	2,052.86	27.87	74.649		
4,000.00	3,808.30	3,110.33	2,866.02	23.45	23.53	151.05	-297.05	-1,025.58	2,154.17	2,125.52	28.65	75.181		
4,100.00	3,900.04	3,178.18	2,925.90	24.27	24.19	151.11	-308.07	-1,055.53	2,227.62	2,198.18	29.43	75.680		
4,200.00	3,991.78	3,246.03	2,985.77	25.09	24.86	151.16	-319.09	-1,085.48	2,301.07	2,270.85	30.22	76.150		
4,300.00	4,083.51	3,313.87	3,045.65	25.92	25.52	151.21	-330.10	-1,115.43	2,374.51	2,343.51	31.00	76.592		
4,400.00	4,175.25	3,381.72	3,105.52	26.74	26.18	151.26	-341.12	-1,145.38	2,447.96	2,416.17	31.79	77.010		
4,500.00	4,266.99	3,449.57	3,165.40	27.57	26.85	151.30	-352.13	-1,175.33	2,521.41	2,488.83	32.57	77.404		
4,600.00	4,358.73	3,517.42	3,225.27	28.39	27.51	151.35	-363.15	-1,205.28	2,594.86	2,561.50	33.36	77.777		
4,700.00	4,450.47	3,585.27	3,285.15	29.22	28.17	151.39	-374.17	-1,235.23	2,668.31	2,634.16	34.15	78.130		
4,800.00	4,542.21	3,653.12	3,345.03	30.05	28.84	151.42	-385.18	-1,265.19	2,741.76	2,706.82	34.94	78.464		
4,900.00	4,633.95	3,720.97	3,404.90	30.88	29.50	151.46	-396.20	-1,295.14	2,815.21	2,779.48	35.73	78.781		
5,000.00	4,725.68	3,788.82	3,464.78	31.70	30.17	151.49	-407.21	-1,325.09	2,888.66	2,852.13	36.53	79.083		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	3,856.67	3,524.65	32.53	30.83	151.53	-418.23	-1,355.04	2,962.11	2,924.79	37.32	79.369		
5,200.00	4,909.16	3,924.52	3,584.53	33.36	31.50	151.56	-429.25	-1,384.99	3,035.57	2,997.45	38.12	79.641		
5,300.00	5,000.90	3,992.37	3,644.40	34.19	32.16	151.59	-440.26	-1,414.94	3,109.02	3,070.11	38.91	79.900		
5,400.00	5,092.64	4,060.22	3,704.28	35.02	32.83	151.61	-451.28	-1,444.89	3,182.47	3,142.76	39.71	80.147		
5,500.00	5,184.38	4,128.07	3,764.16	35.85	33.49	151.64	-462.30	-1,474.84	3,255.93	3,215.42	40.51	80.382		
5,600.00	5,276.11	4,195.92	3,824.03	36.69	34.16	151.67	-473.31	-1,504.80	3,329.38	3,288.08	41.30	80.607		
5,700.00	5,367.85	4,263.77	3,883.91	37.52	34.82	151.69	-484.33	-1,534.75	3,402.83	3,360.73	42.10	80.821		
5,800.00	5,459.76	4,331.53	3,943.71	38.34	35.49	164.10	-495.33	-1,564.66	3,476.34	3,433.45	42.89	81.049		
5,900.00	5,552.68	4,397.71	4,002.11	39.06	36.13	-160.49	-506.08	-1,593.88	3,549.82	3,506.28	43.54	81.529		
6,000.00	5,644.46	4,460.20	4,057.26	39.64	36.75	-129.65	-516.22	-1,621.46	3,621.54	3,577.54	44.00	82.305		
6,100.00	5,732.30	4,517.09	4,107.46	40.06	37.31	-107.49	-525.46	-1,646.57	3,689.71	3,645.43	44.28	83.331		
6,200.00	5,813.53	4,566.66	4,151.21	40.35	37.79	-92.29	-533.51	-1,668.46	3,752.80	3,708.42	44.38	84.551		
6,300.00	5,885.68	4,607.41	4,187.17	40.51	38.19	-81.73	-540.12	-1,686.44	3,809.51	3,765.17	44.34	85.908		
6,400.00	5,946.56	4,638.09	4,214.24	40.57	38.49	-74.29	-545.10	-1,699.99	3,858.73	3,814.54	44.18	87.331		
6,500.00	5,994.33	4,657.77	4,231.61	40.54	38.69	-69.05	-548.30	-1,708.67	3,899.50	3,855.56	43.94	88.738		
6,600.00	6,027.53	4,665.85	4,238.74	40.44	38.76	-65.47	-549.61	-1,712.24	3,931.05	3,887.39	43.66	90.037		
6,700.00	6,045.15	4,662.09	4,235.42	40.29	38.73	-63.24	-549.00	-1,710.58	3,952.72	3,909.35	43.37	91.137		
6,800.00	6,048.00	4,647.56	4,222.60	40.12	38.58	-62.40	-546.64	-1,704.17	3,965.06	3,921.95	43.11	91.971		
6,900.00	6,048.00	4,630.98	4,207.97	39.97	38.42	-62.16	-543.95	-1,696.85	3,977.53	3,934.58	42.95	92.603		
7,000.00	6,048.00	4,614.41	4,193.34	39.85	38.26	-61.92	-541.26	-1,689.53	3,992.41	3,949.51	42.89	93.074		
7,100.00	6,048.00	4,597.83	4,178.71	39.76	38.10	-61.69	-538.57	-1,682.22	4,009.65	3,966.71	42.93	93.371		
7,200.00	6,048.00	4,581.26	4,164.09	39.72	37.93	-61.45	-535.88	-1,674.90	4,029.23	3,986.17	43.06	93.562		
7,300.00	6,048.00	4,564.68	4,149.46	39.71	37.77	-61.21	-533.18	-1,667.58	4,051.12	4,007.84	43.28	93.603		
7,400.00	6,048.00	4,548.11	4,134.83	39.75	37.61	-60.97	-530.49	-1,660.26	4,075.28	4,031.71	43.57	93.529		
7,500.00	6,048.00	4,531.53	4,120.20	39.85	37.45	-60.74	-527.80	-1,652.95	4,101.67	4,057.73	43.94	93.357		
7,600.00	6,048.00	4,514.95	4,105.58	40.01	37.28	-60.50	-525.11	-1,645.63	4,130.25	4,085.88	44.36	93.106		
7,700.00	6,048.00	4,498.38	4,090.95	40.24	37.12	-60.26	-522.42	-1,638.31	4,160.96	4,116.12	44.84	92.794		
7,800.00	6,048.00	4,481.80	4,076.32	40.57	36.96	-60.02	-519.73	-1,631.00	4,193.77	4,148.40	45.37	92.436		
7,900.00	6,048.00	4,465.23	4,061.69	40.99	36.80	-59.79	-517.04	-1,623.68	4,228.63	4,182.69	45.94	92.049		
8,000.00	6,048.00	4,448.65	4,047.07	41.53	36.63	-59.55	-514.35	-1,616.36	4,265.48	4,218.94	46.54	91.646		
8,100.00	6,048.00	4,432.08	4,032.44	42.19	36.47	-59.31	-511.65	-1,609.04	4,304.28	4,257.11	47.18	91.239		
8,200.00	6,048.00	4,415.50	4,017.81	42.97	36.31	-59.08	-508.96	-1,601.73	4,344.97	4,297.14	47.83	90.840		
8,300.00	6,048.00	4,398.92	4,003.18	43.85	36.15	-58.84	-506.27	-1,594.41	4,387.50	4,339.00	48.50	90.456		
8,400.00	6,048.00	8,715.69	6,048.00	44.83	57.83	-90.00	1,473.63	-2,617.03	4,419.94	4,339.49	80.45	54.942		
8,500.00	6,048.00	8,815.69	6,048.00	45.90	58.40	-90.00	1,573.63	-2,617.01	4,420.70	4,337.64	83.06	53.221		
8,600.00	6,048.00	8,915.68	6,048.00	47.05	59.03	-90.00	1,673.63	-2,617.00	4,421.46	4,335.71	85.74	51.565		
8,700.00	6,048.00	9,015.68	6,048.00	48.25	59.72	-90.00	1,773.62	-2,616.99	4,422.22	4,333.73	88.49	49.975		
8,800.00	6,048.00	9,115.68	6,048.00	49.51	60.46	-90.00	1,873.62	-2,616.98	4,422.98	4,331.69	91.29	48.452		
8,900.00	6,048.00	9,215.67	6,048.00	50.81	61.27	-90.00	1,973.62	-2,616.97	4,423.74	4,329.60	94.14	46.993		
9,000.00	6,048.00	9,315.67	6,048.00	52.15	62.14	-90.00	2,073.62	-2,616.96	4,424.50	4,327.47	97.03	45.599		
9,100.00	6,048.00	9,415.67	6,048.00	53.53	63.06	-90.00	2,173.61	-2,616.95	4,425.26	4,325.29	99.97	44.267		
9,200.00	6,048.00	9,515.66	6,048.00	54.94	64.04	-90.00	2,273.61	-2,616.94	4,426.02	4,323.08	102.94	42.995		
9,300.00	6,048.00	9,615.66	6,048.00	56.37	65.06	-90.00	2,373.61	-2,616.93	4,426.78	4,320.83	105.95	41.781		
9,400.00	6,048.00	9,715.66	6,048.00	57.82	66.13	-90.00	2,473.60	-2,616.92	4,427.54	4,318.54	108.99	40.622		
9,500.00	6,048.00	9,815.66	6,048.00	59.30	67.24	-90.00	2,573.60	-2,616.91	4,428.30	4,316.23	112.07	39.515		
9,600.00	6,048.00	9,915.65	6,048.00	60.79	68.40	-90.00	2,673.60	-2,616.90	4,429.06	4,313.89	115.17	38.458		
9,700.00	6,048.00	10,015.65	6,048.00	62.30	69.59	-90.00	2,773.60	-2,616.89	4,429.82	4,311.53	118.29	37.448		
9,800.00	6,048.00	10,115.65	6,048.00	63.82	70.82	-90.00	2,873.59	-2,616.88	4,430.58	4,309.14	121.44	36.484		
9,900.00	6,048.00	10,215.64	6,048.00	65.36	72.07	-90.00	2,973.59	-2,616.87	4,431.34	4,306.73	124.61	35.562		
10,000.00	6,048.00	10,315.64	6,048.00	66.91	73.36	-90.00	3,073.59	-2,616.86	4,432.10	4,304.30	127.80	34.681		
10,100.00	6,048.00	10,415.64	6,048.00	68.48	74.68	-90.00	3,173.58	-2,616.85	4,432.86	4,301.85	131.01	33.837		
10,200.00	6,048.00	10,515.64	6,048.00	70.05	76.02	-90.00	3,273.58	-2,616.83	4,433.62	4,299.39	134.23	33.030		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	10,615.63	6,048.00	71.63	77.38	-90.00	3,373.58	-2,616.82	4,434.37	4,296.90	137.47	32.257		
10,400.00	6,048.00	10,715.63	6,048.00	73.23	78.77	-90.00	3,473.58	-2,616.81	4,435.13	4,294.41	140.73	31.516		
10,500.00	6,048.00	10,815.63	6,048.00	74.83	80.18	-90.00	3,573.57	-2,616.80	4,435.89	4,291.90	143.99	30.806		
10,600.00	6,048.00	10,915.62	6,048.00	76.43	81.60	-90.00	3,673.57	-2,616.79	4,436.65	4,289.38	147.28	30.125		
10,700.00	6,048.00	11,015.62	6,048.00	78.05	83.04	-90.00	3,773.57	-2,616.78	4,437.41	4,286.84	150.57	29.471		
10,800.00	6,048.00	11,115.62	6,048.00	79.67	84.50	-90.00	3,873.56	-2,616.77	4,438.17	4,284.30	153.88	28.843		
10,900.00	6,048.00	11,215.62	6,048.00	81.30	85.97	-90.00	3,973.56	-2,616.76	4,438.93	4,281.74	157.19	28.239		
11,000.00	6,048.00	11,315.61	6,048.00	82.94	87.45	-90.00	4,073.56	-2,616.75	4,439.69	4,279.18	160.52	27.659		
11,100.00	6,048.00	11,415.61	6,048.00	84.58	88.95	-90.00	4,173.56	-2,616.74	4,440.45	4,276.60	163.85	27.100		
11,200.00	6,048.00	11,515.61	6,048.00	86.22	90.46	-90.00	4,273.55	-2,616.73	4,441.21	4,274.02	167.20	26.563		
11,300.00	6,048.00	11,615.60	6,048.00	87.87	91.98	-90.00	4,373.55	-2,616.72	4,441.97	4,271.42	170.55	26.045		
11,400.00	6,048.00	11,715.60	6,048.00	89.53	93.52	-90.00	4,473.55	-2,616.71	4,442.73	4,268.82	173.91	25.547		
11,500.00	6,048.00	11,815.60	6,048.00	91.19	95.06	-90.00	4,573.54	-2,616.70	4,443.49	4,266.22	177.27	25.066		
11,600.00	6,048.00	11,915.60	6,048.00	92.85	96.61	-90.00	4,673.54	-2,616.69	4,444.25	4,263.60	180.65	24.602		
11,700.00	6,048.00	12,015.59	6,048.00	94.52	98.17	-90.00	4,773.54	-2,616.68	4,445.01	4,260.98	184.03	24.154		
11,800.00	6,048.00	12,115.59	6,048.00	96.19	99.74	-90.00	4,873.54	-2,616.67	4,445.77	4,258.36	187.42	23.721		
11,900.00	6,048.00	12,215.59	6,048.00	97.86	101.31	-90.00	4,973.53	-2,616.65	4,446.53	4,255.72	190.81	23.304		
12,000.00	6,048.00	12,315.58	6,048.00	99.54	102.90	-90.00	5,073.53	-2,616.64	4,447.29	4,253.08	194.21	22.900		
12,100.00	6,048.00	12,415.58	6,048.00	101.22	104.48	-90.00	5,173.53	-2,616.63	4,448.05	4,250.44	197.61	22.509		
12,200.00	6,048.00	12,515.58	6,048.00	102.91	106.08	-90.00	5,273.52	-2,616.62	4,448.81	4,247.79	201.02	22.132		
12,300.00	6,048.00	12,615.58	6,048.00	104.59	107.68	-90.00	5,373.52	-2,616.61	4,449.57	4,245.14	204.43	21.766		
12,400.00	6,048.00	12,715.57	6,048.00	106.28	109.29	-90.00	5,473.52	-2,616.60	4,450.33	4,242.48	207.85	21.412		
12,500.00	6,048.00	12,815.57	6,048.00	107.97	110.90	-90.00	5,573.51	-2,616.59	4,451.09	4,239.82	211.27	21.068		
12,600.00	6,048.00	12,915.57	6,048.00	109.67	112.52	-90.00	5,673.51	-2,616.58	4,451.85	4,237.15	214.69	20.736		
12,700.00	6,048.00	13,015.56	6,048.00	111.37	114.15	-90.00	5,773.51	-2,616.57	4,452.61	4,234.48	218.12	20.413		
12,800.00	6,048.00	13,115.56	6,048.00	113.07	115.78	-90.00	5,873.51	-2,616.56	4,453.37	4,231.81	221.56	20.100		
12,900.00	6,048.00	13,215.56	6,048.00	114.77	117.41	-90.00	5,973.50	-2,616.55	4,454.13	4,229.13	224.99	19.797		
13,000.00	6,048.00	13,315.56	6,048.00	116.47	119.05	-90.00	6,073.50	-2,616.54	4,454.89	4,226.45	228.43	19.502		
13,100.00	6,048.00	13,415.55	6,048.00	118.18	120.69	-90.00	6,173.50	-2,616.53	4,455.65	4,223.77	231.88	19.216		
13,200.00	6,048.00	13,515.55	6,048.00	119.88	122.33	-90.00	6,273.49	-2,616.52	4,456.41	4,221.08	235.32	18.937		
13,300.00	6,048.00	13,615.55	6,048.00	121.59	123.98	-90.00	6,373.49	-2,616.51	4,457.17	4,218.39	238.77	18.667		
13,400.00	6,048.00	13,715.54	6,048.00	123.30	125.64	-90.00	6,473.49	-2,616.50	4,457.93	4,215.70	242.23	18.404		
13,500.00	6,048.00	13,815.54	6,048.00	125.02	127.29	-90.00	6,573.49	-2,616.48	4,458.69	4,213.01	245.68	18.148		
13,600.00	6,048.00	13,915.54	6,048.00	126.73	128.95	-90.00	6,673.48	-2,616.47	4,459.45	4,210.31	249.14	17.899		
13,700.00	6,048.00	14,015.54	6,048.00	128.45	130.61	-90.00	6,773.48	-2,616.46	4,460.21	4,207.61	252.60	17.657		
13,800.00	6,048.00	14,115.53	6,048.00	130.16	132.28	-90.00	6,873.48	-2,616.45	4,460.97	4,204.90	256.06	17.421		
13,900.00	6,048.00	14,215.53	6,048.00	131.88	133.95	-90.00	6,973.47	-2,616.44	4,461.72	4,202.20	259.53	17.192		
14,000.00	6,048.00	14,315.53	6,048.00	133.60	135.62	-90.00	7,073.47	-2,616.43	4,462.48	4,199.49	262.99	16.968		
14,100.00	6,048.00	14,415.52	6,048.00	135.32	137.29	-90.00	7,173.47	-2,616.42	4,463.24	4,196.78	266.46	16.750		
14,200.00	6,048.00	14,515.52	6,048.00	137.05	138.97	-90.00	7,273.47	-2,616.41	4,464.00	4,194.07	269.93	16.537		
14,300.00	6,048.00	14,615.52	6,048.00	138.77	140.65	-90.00	7,373.46	-2,616.40	4,464.76	4,191.36	273.41	16.330		
14,400.00	6,048.00	14,715.51	6,048.00	140.50	142.33	-90.00	7,473.46	-2,616.39	4,465.52	4,188.64	276.88	16.128		
14,500.00	6,048.00	14,815.51	6,048.00	142.22	144.02	-90.00	7,573.46	-2,616.38	4,466.28	4,185.93	280.36	15.931		
14,600.00	6,048.00	14,915.51	6,048.00	143.95	145.70	-90.00	7,673.45	-2,616.37	4,467.04	4,183.21	283.84	15.738		
14,700.00	6,048.00	15,015.51	6,048.00	145.68	147.39	-90.00	7,773.45	-2,616.36	4,467.80	4,180.49	287.32	15.550		
14,800.00	6,048.00	15,115.50	6,048.00	147.41	149.08	-90.00	7,873.45	-2,616.35	4,468.56	4,177.77	290.80	15.367		
14,900.00	6,048.00	15,215.50	6,048.00	149.14	150.77	-90.00	7,973.45	-2,616.34	4,469.32	4,175.04	294.28	15.187		
15,000.00	6,048.00	15,315.50	6,048.00	150.87	152.47	-90.00	8,073.44	-2,616.33	4,470.08	4,172.32	297.77	15.012		
15,100.00	6,048.00	15,415.49	6,048.00	152.60	154.16	-90.00	8,173.44	-2,616.32	4,470.84	4,169.59	301.25	14.841		
15,200.00	6,048.00	15,515.49	6,048.00	154.33	155.86	-90.00	8,273.44	-2,616.30	4,471.60	4,166.86	304.74	14.674		
15,300.00	6,048.00	15,615.49	6,048.00	156.07	157.56	-90.00	8,373.43	-2,616.29	4,472.36	4,164.13	308.23	14.510		
15,400.00	6,048.00	15,715.49	6,048.00	157.80	159.26	-90.00	8,473.43	-2,616.28	4,473.12	4,161.40	311.72	14.350		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
15,500.00	6,048.00	15,815.48	6,048.00	159.54	160.96	-90.00	8,573.43	-2,616.27	4,473.88	4,158.67	315.21	14.193			
15,600.00	6,048.00	15,915.48	6,048.00	161.27	162.67	-90.00	8,673.43	-2,616.26	4,474.64	4,155.94	318.70	14.040			
15,700.00	6,048.00	16,015.48	6,048.00	163.01	164.37	-90.00	8,773.42	-2,616.25	4,475.40	4,153.20	322.20	13.890			
15,800.00	6,048.00	16,115.47	6,048.00	164.75	166.08	-90.00	8,873.42	-2,616.24	4,476.16	4,150.47	325.69	13.744			
15,900.00	6,048.00	16,215.47	6,048.00	166.49	167.79	-90.00	8,973.42	-2,616.23	4,476.92	4,147.73	329.19	13.600			
16,000.00	6,048.00	16,315.47	6,048.00	168.23	169.50	-90.00	9,073.41	-2,616.22	4,477.68	4,144.99	332.69	13.459			
16,100.00	6,048.00	16,415.47	6,048.00	169.97	171.21	-90.00	9,173.41	-2,616.21	4,478.44	4,142.25	336.18	13.321			
16,200.00	6,048.00	16,515.46	6,048.00	171.71	172.92	-90.00	9,273.41	-2,616.20	4,479.20	4,139.51	339.68	13.186			
16,300.00	6,048.00	16,615.46	6,048.00	173.45	174.64	-90.00	9,373.41	-2,616.19	4,479.96	4,136.77	343.18	13.054			
16,400.00	6,048.00	16,715.46	6,048.00	175.19	176.35	-90.00	9,473.40	-2,616.18	4,480.72	4,134.03	346.69	12.924			
16,500.00	6,048.00	16,815.45	6,048.00	176.93	178.07	-90.00	9,573.40	-2,616.17	4,481.48	4,131.29	350.19	12.797			
16,600.00	6,048.00	16,915.45	6,048.00	178.67	179.79	-90.00	9,673.40	-2,616.16	4,482.24	4,128.55	353.69	12.673			
16,700.00	6,048.00	17,015.45	6,048.00	180.42	181.50	-90.00	9,773.39	-2,616.15	4,483.00	4,125.80	357.19	12.551			
16,800.00	6,048.00	17,115.45	6,048.00	182.16	183.22	-90.00	9,873.39	-2,616.14	4,483.76	4,123.06	360.70	12.431			
16,900.00	6,048.00	17,215.44	6,048.00	183.91	184.94	-90.00	9,973.39	-2,616.12	4,484.52	4,120.31	364.21	12.313			
17,000.00	6,048.00	17,315.44	6,048.00	185.65	186.67	-90.00	10,073.39	-2,616.11	4,485.28	4,117.56	367.71	12.198			
17,100.00	6,048.00	17,415.44	6,048.00	187.40	188.39	-90.00	10,173.38	-2,616.10	4,486.04	4,114.82	371.22	12.085			
17,138.90	6,048.00	17,428.42	6,048.00	188.08	188.61	-90.00	10,186.37	-2,616.10	4,486.41	4,114.21	372.20	12.054 SF			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.22	0.00	18.22					
100.00	100.00	100.00	100.00	0.27	0.27	0.00	18.22	0.00	18.22	17.68	0.54	33.884		
200.00	200.00	200.00	200.00	0.63	0.63	0.00	18.22	0.00	18.22	16.97	1.25	14.522		
300.00	300.00	300.00	300.00	0.99	0.99	0.00	18.22	0.00	18.22	16.25	1.97	9.241		
400.00	400.00	400.00	400.00	1.34	1.34	0.00	18.22	0.00	18.22	15.53	2.69	6.777		
500.00	500.00	500.00	500.00	1.70	1.70	0.00	18.22	0.00	18.22	14.81	3.41	5.350		
600.00	600.00	600.00	600.00	2.06	2.06	0.00	18.22	0.00	18.22	14.10	4.12	4.420		
700.00	700.00	700.00	700.00	2.42	2.42	0.00	18.22	0.00	18.22	13.38	4.84	3.765		
800.00	800.00	800.41	800.39	2.78	2.77	4.22	16.98	1.25	17.03	11.49	5.54	3.073		
900.00	900.00	900.57	900.41	3.14	3.10	20.60	13.29	4.99	14.20	7.96	6.24	2.277		
1,000.00	999.98	1,000.39	999.84	3.48	3.45	-64.79	7.16	11.20	12.46	5.53	6.93	1.797		
1,012.63	1,012.60	1,012.98	1,012.36	3.53	3.49	-60.56	6.22	12.15	12.43	5.41	7.02	1.771	CC, ES, SF	
1,100.00	1,099.84	1,100.00	1,098.70	3.82	3.81	-32.08	-1.37	19.84	13.68	6.08	7.60	1.800		
1,200.00	1,199.45	1,199.20	1,196.68	4.17	4.19	-6.93	-12.26	30.87	17.80	9.57	8.23	2.163		
1,300.00	1,298.70	1,298.14	1,293.81	4.53	4.59	9.83	-25.49	44.27	23.91	15.05	8.86	2.698		
1,400.00	1,397.47	1,397.29	1,390.42	4.91	5.03	21.36	-41.11	60.09	31.39	21.85	9.54	3.290		
1,500.00	1,495.62	1,496.36	1,486.58	5.31	5.49	30.29	-57.88	77.08	38.31	28.05	10.26	3.733		
1,600.00	1,593.06	1,596.04	1,583.32	5.74	5.97	39.15	-74.76	94.17	43.14	32.06	11.08	3.892		
1,700.00	1,689.64	1,695.67	1,680.01	6.21	6.46	49.19	-91.63	111.26	46.45	34.43	12.02	3.865		
1,800.00	1,785.27	1,795.13	1,776.54	6.71	6.96	61.06	-108.47	128.32	49.22	36.10	13.12	3.751		
1,900.00	1,879.82	1,894.29	1,872.78	7.27	7.46	74.77	-125.26	145.32	52.86	38.46	14.39	3.673		
2,000.00	1,973.17	1,993.05	1,968.62	7.88	7.97	89.39	-141.99	162.26	58.99	43.26	15.73	3.751		
2,100.00	2,065.27	2,091.29	2,063.97	8.54	8.48	103.33	-158.62	179.11	68.96	52.01	16.94	4.070		
2,200.00	2,157.01	2,189.38	2,159.17	9.24	9.00	114.04	-175.23	195.93	82.38	64.39	17.99	4.579		
2,300.00	2,248.74	2,287.47	2,254.37	9.96	9.52	121.62	-191.84	212.75	97.84	78.90	18.94	5.166		
2,400.00	2,340.48	2,385.56	2,349.56	10.70	10.04	127.08	-208.45	229.57	114.54	94.68	19.86	5.767		
2,500.00	2,432.22	2,483.65	2,444.76	11.45	10.56	131.14	-225.06	246.40	131.99	111.22	20.77	6.354		
2,600.00	2,523.96	2,581.74	2,539.96	12.21	11.09	134.24	-241.67	263.22	149.93	128.25	21.69	6.914		
2,700.00	2,615.70	2,679.82	2,635.16	12.99	11.62	136.68	-258.28	280.04	168.21	145.61	22.61	7.440		
2,800.00	2,707.44	2,777.91	2,730.35	13.77	12.15	138.64	-274.88	296.86	186.73	163.20	23.54	7.933		
2,900.00	2,799.17	2,876.00	2,825.55	14.55	12.68	140.24	-291.49	313.68	205.43	180.95	24.48	8.393		
3,000.00	2,890.91	2,974.09	2,920.75	15.35	13.21	141.58	-308.10	330.51	224.25	198.83	25.42	8.822		
3,100.00	2,982.65	3,072.18	3,015.95	16.14	13.75	142.71	-324.71	347.33	243.17	216.81	26.37	9.223		
3,200.00	3,074.39	3,170.27	3,111.14	16.95	14.28	143.68	-341.32	364.15	262.18	234.85	27.32	9.596		
3,300.00	3,166.13	3,268.36	3,206.34	17.75	14.82	144.52	-357.93	380.97	281.24	252.96	28.28	9.945		
3,400.00	3,257.87	3,366.45	3,301.54	18.56	15.35	145.25	-374.54	397.79	300.35	271.11	29.24	10.271		
3,500.00	3,349.61	3,464.54	3,396.74	19.37	15.89	145.89	-391.15	414.61	319.51	289.30	30.21	10.577		
3,600.00	3,441.34	3,562.62	3,491.93	20.18	16.42	146.46	-407.76	431.44	338.70	307.52	31.18	10.864		
3,700.00	3,533.08	3,660.71	3,587.13	21.00	16.96	146.97	-424.36	448.26	357.92	325.77	32.15	11.133		
3,800.00	3,624.82	3,758.80	3,682.33	21.81	17.50	147.42	-440.97	465.08	377.16	344.04	33.12	11.387		
3,900.00	3,716.56	3,856.89	3,777.53	22.63	18.04	147.84	-457.58	481.90	396.43	362.33	34.10	11.625		
4,000.00	3,808.30	3,954.98	3,872.73	23.45	18.58	148.21	-474.19	498.72	415.71	380.63	35.08	11.851		
4,100.00	3,900.04	4,053.07	3,967.92	24.27	19.12	148.55	-490.80	515.55	435.01	398.95	36.06	12.064		
4,200.00	3,991.78	4,151.16	4,063.12	25.09	19.66	148.87	-507.41	532.37	454.32	417.28	37.04	12.265		
4,300.00	4,083.51	4,249.25	4,158.32	25.92	20.20	149.15	-524.02	549.19	473.64	435.62	38.02	12.456		
4,400.00	4,175.25	4,347.33	4,253.52	26.74	20.74	149.42	-540.63	566.01	492.97	453.97	39.01	12.638		
4,500.00	4,266.99	4,445.42	4,348.71	27.57	21.28	149.66	-557.24	582.83	512.32	472.32	39.99	12.810		
4,600.00	4,358.73	4,543.51	4,443.91	28.39	21.82	149.89	-573.85	599.66	531.67	490.69	40.98	12.973		
4,700.00	4,450.47	4,641.60	4,539.11	29.22	22.36	150.10	-590.45	616.48	551.03	509.06	41.97	13.129		
4,800.00	4,542.21	4,739.69	4,634.31	30.05	22.90	150.30	-607.06	633.30	570.39	527.43	42.96	13.278		
4,900.00	4,633.95	4,837.78	4,729.50	30.88	23.45	150.48	-623.67	650.12	589.76	545.82	43.95	13.419		
5,000.00	4,725.68	4,935.87	4,824.70	31.70	23.99	150.65	-640.28	666.94	609.14	564.20	44.94	13.555		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	5,033.96	4,919.90	32.53	24.53	150.81	-656.89	683.77	628.52	582.59	45.93	13.684		
5,200.00	4,909.16	5,132.04	5,015.10	33.36	25.07	150.96	-673.50	700.59	647.91	600.99	46.92	13.808		
5,300.00	5,000.90	5,230.13	5,110.29	34.19	25.62	151.11	-690.11	717.41	667.30	619.39	47.92	13.927		
5,400.00	5,092.64	5,328.22	5,205.49	35.02	26.16	151.24	-706.72	734.23	686.70	637.79	48.91	14.040		
5,500.00	5,184.38	5,426.31	5,300.69	35.85	26.70	151.37	-723.33	751.05	706.09	656.19	49.90	14.149		
5,600.00	5,276.11	5,524.97	5,396.45	36.69	27.24	151.49	-739.98	767.97	725.49	674.59	50.90	14.253		
5,700.00	5,367.85	5,629.54	5,499.04	37.52	27.72	152.47	-746.84	786.19	744.38	692.83	51.54	14.442		
5,800.00	5,459.76	5,727.42	5,594.69	38.34	28.01	163.64	-736.02	803.29	763.18	711.61	51.57	14.799		
5,900.00	5,552.68	5,819.89	5,682.13	39.06	28.17	-167.36	-710.75	819.05	783.18	731.82	51.36	15.248		
6,000.00	5,644.46	5,908.72	5,761.29	39.64	28.23	-142.04	-673.34	833.42	803.84	752.76	51.08	15.738		
6,100.00	5,732.30	5,994.68	5,831.59	40.06	28.21	-124.21	-625.72	846.29	824.25	773.48	50.77	16.235		
6,200.00	5,813.53	6,078.42	5,892.58	40.35	28.13	-112.21	-569.56	857.56	843.59	793.11	50.49	16.709		
6,300.00	5,885.68	6,160.45	5,943.88	40.51	28.00	-103.95	-506.36	867.17	861.09	810.84	50.25	17.135		
6,400.00	5,946.56	6,241.19	5,985.18	40.57	27.83	-98.17	-437.51	875.03	876.08	825.98	50.10	17.487		
6,500.00	5,994.33	6,320.98	6,016.24	40.54	27.64	-94.19	-364.34	881.11	888.01	837.96	50.05	17.742		
6,600.00	6,027.53	6,400.00	6,036.84	40.44	27.44	-91.62	-288.23	885.34	896.46	846.33	50.13	17.883		
6,700.00	6,045.15	6,478.71	6,046.92	40.29	27.22	-90.26	-210.27	887.72	901.13	850.77	50.36	17.893		
6,800.00	6,048.00	6,568.95	6,048.00	40.12	26.98	-90.00	-120.05	888.59	902.03	851.38	50.65	17.809		
6,900.00	6,048.00	6,668.95	6,048.00	39.97	26.75	-90.00	-20.05	889.33	902.05	850.97	51.08	17.659		
7,000.00	6,048.00	6,768.95	6,048.00	39.85	26.54	-90.00	79.94	890.08	902.07	850.32	51.75	17.431		
7,100.00	6,048.00	6,868.95	6,048.00	39.76	26.36	-90.00	179.94	890.83	902.10	849.45	52.65	17.134		
7,200.00	6,048.00	6,968.95	6,048.00	39.72	26.23	-90.00	279.94	891.57	902.12	848.35	53.77	16.778		
7,300.00	6,048.00	7,068.95	6,048.00	39.71	26.98	-90.00	379.94	892.32	902.14	847.05	55.09	16.376		
7,400.00	6,048.00	7,168.95	6,048.00	39.75	27.90	-90.00	479.93	893.07	902.17	845.56	56.61	15.938		
7,500.00	6,048.00	7,268.95	6,048.00	39.85	28.87	-90.00	579.93	893.82	902.19	843.89	58.30	15.476		
7,600.00	6,048.00	7,368.95	6,048.00	40.01	29.91	-90.00	679.93	894.56	902.22	842.06	60.15	14.999		
7,700.00	6,048.00	7,468.95	6,048.00	40.24	31.01	-90.00	779.92	895.31	902.24	840.09	62.15	14.517		
7,800.00	6,048.00	7,568.95	6,048.00	40.57	32.16	-90.00	879.92	896.06	902.26	837.98	64.28	14.035		
7,900.00	6,048.00	7,668.95	6,048.00	40.99	33.35	-90.00	979.92	896.80	902.29	835.75	66.54	13.560		
8,000.00	6,048.00	7,768.95	6,048.00	41.53	34.59	-90.00	1,079.92	897.55	902.31	833.41	68.90	13.096		
8,100.00	6,048.00	7,868.95	6,048.00	42.19	35.88	-90.00	1,179.91	898.30	902.33	830.97	71.36	12.645		
8,200.00	6,048.00	7,968.95	6,048.00	42.97	37.19	-90.00	1,279.91	899.04	902.36	828.45	73.91	12.209		
8,300.00	6,048.00	8,068.95	6,048.00	43.85	38.55	-90.00	1,379.91	899.79	902.38	825.84	76.54	11.790		
8,400.00	6,048.00	8,168.95	6,048.00	44.83	39.93	-90.00	1,479.90	900.54	902.40	823.17	79.24	11.389		
8,500.00	6,048.00	8,268.95	6,048.00	45.90	41.34	-90.00	1,579.90	901.28	902.43	820.43	82.00	11.005		
8,600.00	6,048.00	8,368.95	6,048.00	47.05	42.77	-90.00	1,679.90	902.03	902.45	817.63	84.82	10.639		
8,700.00	6,048.00	8,468.95	6,048.00	48.25	44.23	-90.00	1,779.90	902.78	902.47	814.78	87.70	10.291		
8,800.00	6,048.00	8,568.95	6,048.00	49.51	45.71	-90.00	1,879.89	903.52	902.50	811.88	90.62	9.959		
8,900.00	6,048.00	8,668.95	6,048.00	50.81	47.20	-90.00	1,979.89	904.27	902.52	808.94	93.58	9.644		
9,000.00	6,048.00	8,768.95	6,048.00	52.15	48.72	-90.00	2,079.89	905.02	902.54	805.96	96.59	9.344		
9,100.00	6,048.00	8,868.95	6,048.00	53.53	50.25	-90.00	2,179.89	905.77	902.57	802.94	99.63	9.059		
9,200.00	6,048.00	8,968.95	6,048.00	54.94	51.79	-90.00	2,279.88	906.51	902.59	799.89	102.70	8.789		
9,300.00	6,048.00	9,068.95	6,048.00	56.37	53.35	-90.00	2,379.88	907.26	902.61	796.81	105.80	8.531		
9,400.00	6,048.00	9,168.95	6,048.00	57.82	54.92	-90.00	2,479.88	908.01	902.64	793.71	108.93	8.286		
9,500.00	6,048.00	9,268.95	6,048.00	59.30	56.50	-90.00	2,579.87	908.75	902.66	790.58	112.08	8.054		
9,600.00	6,048.00	9,368.95	6,048.00	60.79	58.09	-90.00	2,679.87	909.50	902.68	787.43	115.26	7.832		
9,700.00	6,048.00	9,468.95	6,048.00	62.30	59.70	-90.00	2,779.87	910.25	902.71	784.25	118.46	7.621		
9,800.00	6,048.00	9,568.95	6,048.00	63.82	61.31	-90.00	2,879.87	910.99	902.73	781.06	121.67	7.419		
9,900.00	6,048.00	9,668.95	6,048.00	65.36	62.93	-90.00	2,979.86	911.74	902.75	777.85	124.91	7.227		
10,000.00	6,048.00	9,768.95	6,048.00	66.91	64.55	-90.00	3,079.86	912.49	902.78	774.62	128.16	7.044		
10,100.00	6,048.00	9,868.95	6,048.00	68.48	66.19	-90.00	3,179.86	913.23	902.80	771.38	131.42	6.869		
10,200.00	6,048.00	9,968.95	6,048.00	70.05	67.83	-90.00	3,279.85	913.98	902.82	768.12	134.70	6.702		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	10,068.95	6,048.00	71.63	69.47	-90.00	3,379.85	914.73	902.85	764.85	137.99	6.543		
10,400.00	6,048.00	10,168.95	6,048.00	73.23	71.13	-90.00	3,479.85	915.48	902.87	761.57	141.30	6.390		
10,500.00	6,048.00	10,268.95	6,048.00	74.83	72.79	-90.00	3,579.85	916.22	902.89	758.28	144.62	6.243		
10,600.00	6,048.00	10,368.95	6,048.00	76.43	74.45	-90.00	3,679.84	916.97	902.92	754.97	147.94	6.103		
10,700.00	6,048.00	10,468.95	6,048.00	78.05	76.12	-90.00	3,779.84	917.72	902.94	751.66	151.28	5.969		
10,800.00	6,048.00	10,568.95	6,048.00	79.67	77.79	-90.00	3,879.84	918.46	902.96	748.34	154.63	5.840		
10,900.00	6,048.00	10,668.95	6,048.00	81.30	79.47	-90.00	3,979.83	919.21	902.99	745.01	157.98	5.716		
11,000.00	6,048.00	10,768.95	6,048.00	82.94	81.15	-90.00	4,079.83	919.96	903.01	741.67	161.34	5.597		
11,100.00	6,048.00	10,868.95	6,048.00	84.58	82.83	-90.00	4,179.83	920.70	903.03	738.32	164.72	5.482		
11,200.00	6,048.00	10,968.95	6,048.00	86.22	84.52	-90.00	4,279.83	921.45	903.06	734.97	168.09	5.372		
11,300.00	6,048.00	11,068.95	6,048.00	87.87	86.21	-90.00	4,379.82	922.20	903.08	731.60	171.48	5.266		
11,400.00	6,048.00	11,168.95	6,048.00	89.53	87.90	-90.00	4,479.82	922.94	903.11	728.24	174.87	5.164		
11,500.00	6,048.00	11,268.95	6,048.00	91.19	89.60	-90.00	4,579.82	923.69	903.13	724.86	178.27	5.066		
11,600.00	6,048.00	11,368.95	6,048.00	92.85	91.30	-90.00	4,679.82	924.44	903.15	721.48	181.67	4.971		
11,700.00	6,048.00	11,468.95	6,048.00	94.52	93.00	-90.00	4,779.81	925.19	903.18	718.10	185.08	4.880		
11,800.00	6,048.00	11,568.95	6,048.00	96.19	94.71	-90.00	4,879.81	925.93	903.20	714.71	188.49	4.792		
11,900.00	6,048.00	11,668.95	6,048.00	97.86	96.41	-90.00	4,979.81	926.68	903.22	711.32	191.91	4.707		
12,000.00	6,048.00	11,768.95	6,048.00	99.54	98.12	-90.00	5,079.80	927.43	903.25	707.92	195.33	4.624		
12,100.00	6,048.00	11,868.95	6,048.00	101.22	99.84	-90.00	5,179.80	928.17	903.27	704.51	198.75	4.545		
12,200.00	6,048.00	11,968.95	6,048.00	102.91	101.55	-90.00	5,279.80	928.92	903.29	701.11	202.19	4.468		
12,300.00	6,048.00	12,068.95	6,048.00	104.59	103.27	-90.00	5,379.80	929.67	903.32	697.70	205.62	4.393		
12,400.00	6,048.00	12,168.95	6,048.00	106.28	104.98	-90.00	5,479.79	930.41	903.34	694.28	209.06	4.321		
12,500.00	6,048.00	12,268.95	6,048.00	107.97	106.70	-90.00	5,579.79	931.16	903.36	690.86	212.50	4.251		
12,600.00	6,048.00	12,368.95	6,048.00	109.67	108.42	-90.00	5,679.79	931.91	903.39	687.44	215.95	4.183		
12,700.00	6,048.00	12,468.95	6,048.00	111.37	110.15	-90.00	5,779.78	932.65	903.41	684.02	219.39	4.118		
12,800.00	6,048.00	12,568.95	6,048.00	113.07	111.87	-90.00	5,879.78	933.40	903.43	680.59	222.84	4.054		
12,900.00	6,048.00	12,668.95	6,048.00	114.77	113.59	-90.00	5,979.78	934.15	903.46	677.16	226.30	3.992		
13,000.00	6,048.00	12,768.95	6,048.00	116.47	115.32	-90.00	6,079.78	934.89	903.48	673.72	229.76	3.932		
13,100.00	6,048.00	12,868.95	6,048.00	118.18	117.05	-90.00	6,179.77	935.64	903.50	670.29	233.22	3.874		
13,200.00	6,048.00	12,968.95	6,048.00	119.88	118.78	-90.00	6,279.77	936.39	903.53	666.85	236.68	3.818		
13,300.00	6,048.00	13,068.95	6,048.00	121.59	120.51	-90.00	6,379.77	937.14	903.55	663.41	240.14	3.763		
13,400.00	6,048.00	13,168.95	6,048.00	123.30	122.24	-90.00	6,479.77	937.88	903.57	659.97	243.61	3.709		
13,500.00	6,048.00	13,268.95	6,048.00	125.02	123.97	-90.00	6,579.76	938.63	903.60	656.52	247.08	3.657		
13,600.00	6,048.00	13,368.95	6,048.00	126.73	125.71	-90.00	6,679.76	939.38	903.62	653.07	250.55	3.607		
13,700.00	6,048.00	13,468.95	6,048.00	128.45	127.44	-90.00	6,779.76	940.12	903.64	649.62	254.02	3.557		
13,800.00	6,048.00	13,568.95	6,048.00	130.16	129.18	-90.00	6,879.75	940.87	903.67	646.17	257.50	3.509		
13,900.00	6,048.00	13,668.95	6,048.00	131.88	130.92	-90.00	6,979.75	941.62	903.69	642.72	260.97	3.463		
14,000.00	6,048.00	13,768.95	6,048.00	133.60	132.66	-90.00	7,079.75	942.36	903.71	639.26	264.45	3.417		
14,100.00	6,048.00	13,868.95	6,048.00	135.32	134.39	-90.00	7,179.75	943.11	903.74	635.80	267.93	3.373		
14,200.00	6,048.00	13,968.95	6,048.00	137.05	136.13	-90.00	7,279.74	943.86	903.76	632.35	271.42	3.330		
14,300.00	6,048.00	14,068.95	6,048.00	138.77	137.87	-90.00	7,379.74	944.60	903.78	628.89	274.90	3.288		
14,400.00	6,048.00	14,168.95	6,048.00	140.50	139.62	-90.00	7,479.74	945.35	903.81	625.42	278.38	3.247		
14,500.00	6,048.00	14,268.95	6,048.00	142.22	141.36	-90.00	7,579.73	946.10	903.83	621.96	281.87	3.207		
14,600.00	6,048.00	14,368.95	6,048.00	143.95	143.10	-90.00	7,679.73	946.85	903.85	618.50	285.36	3.167		
14,700.00	6,048.00	14,468.95	6,048.00	145.68	144.84	-90.00	7,779.73	947.59	903.88	615.03	288.85	3.129		
14,800.00	6,048.00	14,568.95	6,048.00	147.41	146.59	-90.00	7,879.73	948.34	903.90	611.56	292.34	3.092		
14,900.00	6,048.00	14,668.95	6,048.00	149.14	148.33	-90.00	7,979.72	949.09	903.93	608.09	295.83	3.056		
15,000.00	6,048.00	14,768.95	6,048.00	150.87	150.08	-90.00	8,079.72	949.83	903.95	604.62	299.33	3.020		
15,100.00	6,048.00	14,868.95	6,048.00	152.60	151.82	-90.00	8,179.72	950.58	903.97	601.15	302.82	2.985		
15,200.00	6,048.00	14,968.95	6,048.00	154.33	153.57	-90.00	8,279.72	951.33	904.00	597.68	306.32	2.951		
15,300.00	6,048.00	15,068.95	6,048.00	156.07	155.32	-90.00	8,379.71	952.07	904.02	594.21	309.81	2.918		
15,400.00	6,048.00	15,168.95	6,048.00	157.80	157.07	-90.00	8,479.71	952.82	904.04	590.73	313.31	2.885		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error:		0.00 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)	Minimum Separation (usft)		Separation Factor	
15,500.00	6,048.00	15,268.95	6,048.00	159.54	158.81	-90.00	8,579.71	953.57	904.07	587.26	316.81	2.854		
15,600.00	6,048.00	15,368.95	6,048.00	161.27	160.56	-90.00	8,679.70	954.31	904.09	583.78	320.31	2.823		
15,700.00	6,048.00	15,468.95	6,048.00	163.01	162.31	-90.00	8,779.70	955.06	904.11	580.30	323.81	2.792		
15,800.00	6,048.00	15,568.95	6,048.00	164.75	164.06	-90.00	8,879.70	955.81	904.14	576.82	327.31	2.762		
15,900.00	6,048.00	15,668.95	6,048.00	166.49	165.81	-90.00	8,979.70	956.55	904.16	573.34	330.82	2.733		
16,000.00	6,048.00	15,768.95	6,048.00	168.23	167.56	-90.00	9,079.69	957.30	904.18	569.86	334.32	2.705		
16,100.00	6,048.00	15,868.95	6,048.00	169.97	169.31	-90.00	9,179.69	958.05	904.21	566.38	337.82	2.677		
16,200.00	6,048.00	15,968.95	6,048.00	171.71	171.07	-90.00	9,279.69	958.80	904.23	562.90	341.33	2.649		
16,300.00	6,048.00	16,068.95	6,048.00	173.45	172.82	-90.00	9,379.68	959.54	904.25	559.42	344.84	2.622		
16,400.00	6,048.00	16,168.95	6,048.00	175.19	174.57	-90.00	9,479.68	960.29	904.28	555.93	348.34	2.596		
16,500.00	6,048.00	16,268.95	6,048.00	176.93	176.32	-90.00	9,579.68	961.04	904.30	552.45	351.85	2.570		
16,600.00	6,048.00	16,368.95	6,048.00	178.67	178.08	-90.00	9,679.68	961.78	904.32	548.96	355.36	2.545		
16,700.00	6,048.00	16,468.95	6,048.00	180.42	179.83	-90.00	9,779.67	962.53	904.35	545.48	358.87	2.520		
16,800.00	6,048.00	16,568.95	6,048.00	182.16	181.58	-90.00	9,879.67	963.28	904.37	541.99	362.38	2.496		
16,900.00	6,048.00	16,668.95	6,048.00	183.91	183.34	-90.00	9,979.67	964.02	904.39	538.50	365.89	2.472		
17,000.00	6,048.00	16,768.95	6,048.00	185.65	185.09	-90.00	10,079.66	964.77	904.42	535.02	369.40	2.448		
17,100.00	6,048.00	16,868.95	6,048.00	187.40	186.85	-90.00	10,179.66	965.52	904.44	531.53	372.91	2.425		
17,100.19	6,048.00	16,869.15	6,048.00	187.40	186.85	-90.00	10,179.86	965.52	904.44	531.52	372.92	2.425		
17,138.90	6,048.00	16,897.41	6,048.00	188.08	187.35	-90.00	10,208.11	965.73	904.51	530.78	373.73	2.420		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.29	0.00	58.29					
100.00	100.00	100.00	100.00	0.27	0.27	0.00	58.29	0.00	58.29	57.75	0.54	108.405		
200.00	200.00	200.93	200.91	0.63	0.62	-1.56	57.45	-1.57	57.48	56.23	1.25	45.964		
300.00	300.00	301.60	301.44	0.99	0.98	-6.49	54.95	-6.25	55.32	53.35	1.97	28.102		
400.00	400.00	401.78	401.22	1.34	1.36	-15.41	50.81	-14.01	52.72	50.01	2.70	19.508		
495.70	495.70	496.97	495.71	1.69	1.74	-28.11	45.35	-24.22	51.41	47.99	3.43	15.011	CC	
500.00	500.00	501.23	499.92	1.70	1.76	-28.76	45.07	-24.74	51.42	47.96	3.46	14.869	ES	
600.00	600.00	599.71	597.18	2.06	2.17	-45.40	37.81	-38.34	53.92	49.69	4.23	12.754		
700.00	700.00	697.01	692.70	2.42	2.62	-61.99	29.08	-54.67	62.35	57.38	4.98	12.523		
800.00	800.00	792.94	786.20	2.78	3.10	-75.52	18.99	-73.56	77.21	71.52	5.69	13.566		
900.00	900.00	887.31	877.43	3.14	3.60	-85.40	7.63	-94.82	97.77	91.40	6.37	15.338		
1,000.00	999.98	979.63	965.87	3.48	4.14	152.40	-4.84	-118.18	124.59	117.56	7.03	17.725		
1,100.00	1,099.84	1,069.28	1,050.89	3.82	4.70	148.07	-18.24	-143.26	158.10	150.42	7.68	20.581		
1,200.00	1,199.45	1,159.59	1,135.82	4.17	5.30	145.31	-32.71	-170.35	196.92	188.55	8.37	23.534		
1,300.00	1,298.70	1,250.39	1,221.15	4.53	5.91	143.72	-47.33	-197.72	238.65	229.57	9.08	26.270		
1,400.00	1,397.47	1,340.02	1,305.39	4.91	6.52	142.86	-61.76	-224.73	282.96	273.15	9.81	28.835		
1,500.00	1,495.62	1,428.39	1,388.44	5.31	7.14	142.44	-75.99	-251.37	329.75	319.19	10.55	31.248		
1,600.00	1,593.06	1,515.38	1,470.19	5.74	7.74	142.27	-90.00	-277.59	378.97	367.67	11.30	33.529		
1,700.00	1,689.64	1,600.89	1,550.55	6.21	8.34	142.27	-103.77	-303.36	430.62	418.56	12.06	35.696		
1,800.00	1,785.27	1,684.81	1,629.42	6.71	8.93	142.35	-117.28	-328.66	484.68	471.84	12.83	37.762		
1,900.00	1,879.82	1,767.05	1,706.71	7.27	9.50	142.48	-130.52	-353.44	541.12	527.51	13.62	39.742		
2,000.00	1,973.17	1,847.49	1,782.31	7.88	10.07	142.62	-143.47	-377.69	599.94	585.53	14.41	41.647		
2,100.00	2,065.27	1,926.12	1,856.21	8.54	10.63	142.99	-156.14	-401.39	661.02	645.82	15.20	43.477		
2,200.00	2,157.01	2,004.24	1,929.62	9.24	11.18	143.92	-168.71	-424.94	722.81	706.81	16.00	45.182		
2,300.00	2,248.74	2,082.36	2,003.04	9.96	11.73	144.71	-181.29	-448.48	784.70	767.91	16.80	46.713		
2,400.00	2,340.48	2,160.49	2,076.46	10.70	12.29	145.38	-193.87	-472.03	846.67	829.07	17.60	48.095		
2,500.00	2,432.22	2,238.61	2,149.88	11.45	12.84	145.96	-206.45	-495.58	908.71	890.29	18.41	49.347		
2,600.00	2,523.96	2,316.73	2,223.30	12.21	13.40	146.47	-219.03	-519.12	970.79	951.56	19.23	50.485		
2,700.00	2,615.70	2,394.85	2,296.71	12.99	13.96	146.92	-231.61	-542.67	1,032.92	1,012.87	20.05	51.523		
2,800.00	2,707.44	2,472.97	2,370.13	13.77	14.51	147.31	-244.19	-566.22	1,095.07	1,074.21	20.87	52.473		
2,900.00	2,799.17	2,551.09	2,443.55	14.55	15.07	147.67	-256.76	-589.76	1,157.26	1,135.57	21.69	53.346		
3,000.00	2,890.91	2,629.21	2,516.97	15.35	15.63	147.99	-269.34	-613.31	1,219.48	1,196.95	22.52	54.149		
3,100.00	2,982.65	2,707.33	2,590.39	16.14	16.18	148.27	-281.92	-636.86	1,281.71	1,258.36	23.35	54.892		
3,200.00	3,074.39	2,785.45	2,663.80	16.95	16.74	148.53	-294.50	-660.40	1,343.96	1,319.78	24.18	55.579		
3,300.00	3,166.13	2,863.57	2,737.22	17.75	17.30	148.77	-307.08	-683.95	1,406.23	1,381.21	25.01	56.217		
3,400.00	3,257.87	2,941.69	2,810.64	18.56	17.86	148.99	-319.66	-707.49	1,468.51	1,442.66	25.85	56.811		
3,500.00	3,349.61	3,019.81	2,884.06	19.37	18.42	149.19	-332.24	-731.04	1,530.80	1,504.11	26.69	57.364		
3,600.00	3,441.34	3,097.93	2,957.47	20.18	18.97	149.37	-344.82	-754.59	1,593.10	1,565.58	27.52	57.882		
3,700.00	3,533.08	3,176.06	3,030.89	21.00	19.53	149.54	-357.39	-778.13	1,655.42	1,627.05	28.36	58.366		
3,800.00	3,624.82	3,254.18	3,104.31	21.81	20.09	149.70	-369.97	-801.68	1,717.74	1,688.53	29.20	58.820		
3,900.00	3,716.56	3,332.30	3,177.73	22.63	20.65	149.85	-382.55	-825.23	1,780.06	1,750.02	30.04	59.247		
4,000.00	3,808.30	3,410.42	3,251.15	23.45	21.21	149.99	-395.13	-848.77	1,842.40	1,811.51	30.89	59.648		
4,100.00	3,900.04	3,488.54	3,324.56	24.27	21.77	150.11	-407.71	-872.32	1,904.74	1,873.01	31.73	60.027		
4,200.00	3,991.78	3,566.66	3,397.98	25.09	22.33	150.23	-420.29	-895.87	1,967.09	1,934.51	32.58	60.384		
4,300.00	4,083.51	3,644.78	3,471.40	25.92	22.89	150.35	-432.87	-919.41	2,029.44	1,996.02	33.42	60.722		
4,400.00	4,175.25	3,722.90	3,544.82	26.74	23.45	150.45	-445.45	-942.96	2,091.79	2,057.52	34.27	61.042		
4,500.00	4,266.99	3,801.02	3,618.24	27.57	24.01	150.55	-458.02	-966.51	2,154.15	2,119.04	35.12	61.345		
4,600.00	4,358.73	3,879.14	3,691.65	28.39	24.57	150.65	-470.60	-990.05	2,216.52	2,180.55	35.96	61.632		
4,700.00	4,450.47	3,957.26	3,765.07	29.22	25.13	150.74	-483.18	-1,013.60	2,278.88	2,242.07	36.81	61.905		
4,800.00	4,542.21	4,035.38	3,838.49	30.05	25.68	150.82	-495.76	-1,037.15	2,341.25	2,303.59	37.66	62.164		
4,900.00	4,633.95	4,113.50	3,911.91	30.88	26.24	150.90	-508.34	-1,060.69	2,403.63	2,365.12	38.51	62.411		
5,000.00	4,725.68	4,191.62	3,985.33	31.70	26.80	150.98	-520.92	-1,084.24	2,466.00	2,426.64	39.36	62.647		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	4,269.75	4,058.74	32.53	27.36	151.05	-533.50	-1,107.79	2,528.38	2,488.17	40.22	62.871		
5,200.00	4,909.16	4,347.87	4,132.16	33.36	27.92	151.12	-546.07	-1,131.33	2,590.76	2,549.70	41.07	63.085		
5,300.00	5,000.90	4,425.99	4,205.58	34.19	28.48	151.18	-558.65	-1,154.88	2,653.15	2,611.23	41.92	63.290		
5,400.00	5,092.64	4,504.11	4,279.00	35.02	29.04	151.25	-571.23	-1,178.43	2,715.53	2,672.76	42.77	63.486		
5,500.00	5,184.38	4,582.23	4,352.42	35.85	29.60	151.31	-583.81	-1,201.97	2,777.92	2,734.29	43.63	63.673		
5,600.00	5,276.11	4,660.35	4,425.83	36.69	30.16	151.36	-596.39	-1,225.52	2,840.31	2,795.82	44.48	63.852		
5,700.00	5,367.85	4,738.47	4,499.25	37.52	30.73	151.42	-608.97	-1,249.06	2,902.70	2,857.36	45.34	64.024		
5,800.00	5,459.76	4,816.53	4,572.61	38.34	31.28	162.80	-621.54	-1,272.59	2,965.16	2,918.98	46.18	64.204		
5,900.00	5,552.68	4,893.15	4,644.62	39.06	31.83	-164.52	-633.87	-1,295.69	3,027.91	2,981.02	46.90	64.566		
6,000.00	5,644.46	4,965.99	4,713.08	39.64	32.36	-135.95	-645.60	-1,317.64	3,089.59	3,042.16	47.43	65.138		
6,100.00	5,732.30	5,032.84	4,775.90	40.06	32.84	-115.40	-656.37	-1,337.79	3,148.77	3,100.98	47.79	65.883		
6,200.00	5,813.53	5,091.66	4,831.18	40.35	33.26	-101.19	-665.84	-1,355.52	3,204.28	3,156.29	47.99	66.765		
6,300.00	5,885.68	5,140.67	4,877.24	40.51	33.61	-91.12	-673.73	-1,370.29	3,255.14	3,207.09	48.05	67.745		
6,400.00	5,946.56	5,178.37	4,912.67	40.57	33.88	-83.81	-679.80	-1,381.66	3,300.52	3,252.53	47.99	68.780		
6,500.00	5,994.33	5,203.63	4,936.41	40.54	34.06	-78.43	-683.87	-1,389.27	3,339.68	3,291.84	47.83	69.817		
6,600.00	6,027.53	5,215.67	4,947.72	40.44	34.15	-74.53	-685.80	-1,392.90	3,371.96	3,324.33	47.63	70.800		
6,700.00	6,045.15	5,214.13	4,946.28	40.29	34.14	-71.84	-685.56	-1,392.43	3,396.72	3,349.33	47.39	71.671		
6,800.00	6,048.00	5,200.16	4,933.15	40.12	34.04	-70.65	-683.31	-1,388.22	3,414.30	3,367.14	47.17	72.387		
6,900.00	6,048.00	5,183.83	4,917.80	39.97	33.92	-70.37	-680.68	-1,383.30	3,432.69	3,385.67	47.02	73.004		
7,000.00	6,048.00	5,167.49	4,902.45	39.85	33.80	-70.10	-678.05	-1,378.38	3,453.81	3,406.85	46.96	73.554		
7,100.00	6,048.00	5,151.16	4,887.10	39.76	33.69	-69.83	-675.42	-1,373.45	3,477.59	3,430.62	46.97	74.040		
7,200.00	6,048.00	5,134.83	4,871.75	39.72	33.57	-69.55	-672.79	-1,368.53	3,504.00	3,456.94	47.05	74.466		
7,300.00	6,048.00	5,118.49	4,856.40	39.71	33.45	-69.28	-670.16	-1,363.61	3,532.96	3,485.75	47.21	74.840		
7,400.00	6,048.00	5,102.16	4,841.05	39.70	33.33	-69.00	-667.53	-1,358.68	3,562.00	3,515.16	47.36	75.160		
7,500.00	6,048.00	5,085.83	4,825.70	39.69	33.21	-68.72	-664.45	-1,353.75	3,591.12	3,544.10	47.50	75.420		
7,600.00	6,048.00	5,069.50	4,810.35	39.68	33.09	-68.44	-661.27	-1,348.82	3,620.24	3,572.64	47.63	75.630		
7,700.00	6,048.00	5,053.17	4,795.00	39.67	32.97	-68.16	-658.10	-1,343.89	3,649.36	3,600.78	47.75	75.790		
7,800.00	6,048.00	5,036.84	4,779.65	39.66	32.85	-67.88	-654.92	-1,338.96	3,678.48	3,628.92	47.86	75.900		
7,900.00	6,048.00	5,020.51	4,764.30	39.65	32.73	-67.60	-651.74	-1,334.03	3,707.60	3,657.06	47.96	76.000		
8,000.00	6,048.00	5,004.18	4,748.95	39.64	32.61	-67.32	-648.56	-1,329.10	3,736.72	3,685.20	48.05	76.080		
8,100.00	6,048.00	4,987.85	4,733.60	39.63	32.49	-67.04	-645.38	-1,324.17	3,765.84	3,713.34	48.13	76.150		
8,200.00	6,048.00	4,971.52	4,718.25	39.62	32.37	-66.76	-642.20	-1,319.24	3,794.96	3,741.48	48.20	76.210		
8,300.00	6,048.00	4,955.19	4,702.90	39.61	32.25	-66.48	-639.02	-1,314.31	3,824.08	3,769.62	48.26	76.260		
8,400.00	6,048.00	4,938.86	4,687.55	39.60	32.13	-66.20	-635.84	-1,309.38	3,853.20	3,797.76	48.31	76.300		
8,500.00	6,048.00	4,922.53	4,672.20	39.59	32.01	-65.92	-632.66	-1,304.45	3,882.32	3,825.90	48.35	76.340		
8,600.00	6,048.00	4,906.20	4,656.85	39.58	31.89	-65.64	-629.48	-1,300.00	3,911.44	3,854.04	48.38	76.370		
8,700.00	6,048.00	4,889.87	4,641.50	39.57	31.77	-65.36	-626.30	-1,295.55	3,940.56	3,882.18	48.40	76.390		
8,800.00	6,048.00	4,873.54	4,626.15	39.56	31.65	-65.08	-623.12	-1,291.10	3,969.68	3,910.32	48.41	76.400		
8,900.00	6,048.00	4,857.21	4,610.80	39.55	31.53	-64.80	-619.94	-1,286.65	3,998.80	3,938.46	48.41	76.410		
9,000.00	6,048.00	4,840.88	4,595.45	39.54	31.41	-64.52	-616.76	-1,282.20	4,027.92	3,966.60	48.40	76.410		
9,100.00	6,048.00	4,824.55	4,580.10	39.53	31.29	-64.24	-613.58	-1,277.75	4,057.04	3,994.74	48.38	76.400		
9,200.00	6,048.00	4,808.22	4,564.75	39.52	31.17	-63.96	-610.40	-1,273.30	4,086.16	4,022.88	48.35	76.380		
9,300.00	6,048.00	4,791.89	4,549.40	39.51	31.05	-63.68	-607.22	-1,268.85	4,115.28	4,051.02	48.31	76.350		
9,400.00	6,048.00	4,775.56	4,534.05	39.50	30.93	-63.40	-604.04	-1,264.40	4,144.40	4,079.16	48.26	76.310		
9,500.00	6,048.00	4,759.23	4,518.70	39.49	30.81	-63.12	-600.86	-1,259.95	4,173.52	4,107.30	48.20	76.260		
9,600.00	6,048.00	4,742.90	4,503.35	39.48	30.69	-62.84	-597.68	-1,255.50	4,202.64	4,135.44	48.13	76.200		
9,700.00	6,048.00	4,726.57	4,488.00	39.47	30.57	-62.56	-594.50	-1,251.05	4,231.76	4,163.58	48.05	76.130		
9,800.00	6,048.00	4,710.24	4,472.65	39.46	30.45	-62.28	-591.32	-1,246.60	4,260.88	4,191.72	47.96	76.050		
9,900.00	6,048.00	4,693.91	4,457.30	39.45	30.33	-62.00	-588.14	-1,242.15	4,290.00	4,219.86	47.86	75.960		
10,000.00	6,048.00	4,677.58	4,441.95	39.44	30.21	-61.72	-584.96	-1,237.70	4,319.12	4,248.00	47.75	75.860		
10,100.00	6,048.00	4,661.25	4,426.60	39.43	30.09	-61.44	-581.78	-1,233.25	4,348.24	4,276.14	47.63	75.750		
10,200.00	6,048.00	4,644.92	4,411.25	39.42	29.97	-61.16	-578.60	-1,228.80	4,377.36	4,304.28	47.50	75.630		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	23,463.53	6,048.00	71.63	155.69	-90.00	4,728.80	25.05	2,247.43	2,053.31	194.12	11.578		
10,400.00	6,048.00	23,463.53	6,048.00	73.23	155.69	-90.00	4,728.80	25.05	2,189.20	1,990.10	199.10	10.996		
10,500.00	6,048.00	23,463.53	6,048.00	74.83	155.69	-90.00	4,728.80	25.05	2,134.06	1,929.93	204.13	10.454		
10,600.00	6,048.00	23,463.53	6,048.00	76.43	155.69	-90.00	4,728.80	25.05	2,082.27	1,873.09	209.18	9.954		
10,700.00	6,048.00	23,463.53	6,048.00	78.05	155.69	-90.00	4,728.80	25.05	2,034.08	1,819.88	214.20	9.496		
10,800.00	6,048.00	23,463.53	6,048.00	79.67	155.69	-90.00	4,728.80	25.05	1,989.75	1,770.63	219.12	9.081		
10,900.00	6,048.00	23,463.53	6,048.00	81.30	155.69	-90.00	4,728.80	25.05	1,949.55	1,725.67	223.88	8.708		
11,000.00	6,048.00	23,463.53	6,048.00	82.94	155.69	-90.00	4,728.80	25.05	1,913.73	1,685.32	228.42	8.378		
11,100.00	6,048.00	23,463.53	6,048.00	84.58	155.69	-90.00	4,728.80	25.05	1,882.55	1,649.91	232.64	8.092		
11,200.00	6,048.00	23,463.53	6,048.00	86.22	155.69	-90.00	4,728.80	25.05	1,856.24	1,619.76	236.48	7.849		
11,300.00	6,048.00	23,463.53	6,048.00	87.87	155.69	-90.00	4,728.80	25.05	1,835.01	1,595.15	239.86	7.650		
11,400.00	6,048.00	23,463.53	6,048.00	89.53	155.69	-90.00	4,728.80	25.05	1,819.04	1,576.33	242.71	7.495		
11,500.00	6,048.00	23,463.53	6,048.00	91.19	155.69	-90.00	4,728.80	25.05	1,808.46	1,563.48	244.97	7.382		
11,600.00	6,048.00	23,463.53	6,048.00	92.85	155.69	-90.00	4,728.80	25.05	1,803.37	1,556.77	246.61	7.313		
11,700.00	6,048.00	23,399.98	6,048.00	94.52	155.69	-90.00	4,792.36	25.73	1,802.71	1,554.59	248.12	7.265		
11,800.00	6,048.00	23,299.98	6,048.00	96.19	155.70	-90.00	4,892.35	26.80	1,802.41	1,552.57	249.84	7.214		
11,900.00	6,048.00	23,199.98	6,048.00	97.86	155.74	-90.00	4,992.34	27.87	1,802.11	1,550.52	251.58	7.163		
12,000.00	6,048.00	23,099.98	6,048.00	99.54	155.80	-90.00	5,092.34	28.94	1,801.81	1,548.46	253.35	7.112		
12,100.00	6,048.00	22,999.98	6,048.00	101.22	155.87	-90.00	5,192.33	30.01	1,801.51	1,546.37	255.14	7.061		
12,200.00	6,048.00	22,899.98	6,048.00	102.91	155.97	-90.00	5,292.32	31.08	1,801.21	1,544.26	256.95	7.010		
12,300.00	6,048.00	22,799.98	6,048.00	104.59	156.09	-90.00	5,392.32	32.15	1,800.91	1,542.13	258.78	6.959		
12,400.00	6,048.00	22,699.98	6,048.00	106.28	156.22	-90.00	5,492.31	33.22	1,800.61	1,539.97	260.64	6.909		
12,500.00	6,048.00	22,599.98	6,048.00	107.97	156.38	-90.00	5,592.31	34.29	1,800.31	1,537.80	262.51	6.858		
12,600.00	6,048.00	22,499.98	6,048.00	109.67	156.56	-90.00	5,692.30	35.36	1,800.01	1,535.60	264.41	6.808		
12,700.00	6,048.00	22,399.98	6,048.00	111.37	156.75	-90.00	5,792.29	36.43	1,799.71	1,533.38	266.33	6.757		
12,800.00	6,048.00	22,299.98	6,048.00	113.07	156.97	-90.00	5,892.29	37.50	1,799.41	1,531.14	268.27	6.707		
12,900.00	6,048.00	22,199.98	6,048.00	114.77	157.21	-90.00	5,992.28	38.57	1,799.11	1,528.88	270.23	6.658		
13,000.00	6,048.00	22,099.98	6,048.00	116.47	157.46	-90.00	6,092.27	39.64	1,798.81	1,526.59	272.22	6.608		
13,100.00	6,048.00	21,999.98	6,048.00	118.18	157.74	-90.00	6,192.27	40.71	1,798.51	1,524.29	274.22	6.559		
13,200.00	6,048.00	21,899.98	6,048.00	119.88	158.03	-90.00	6,292.26	41.78	1,798.21	1,521.96	276.25	6.509		
13,300.00	6,048.00	21,799.98	6,048.00	121.59	158.35	-90.00	6,392.26	42.85	1,797.91	1,519.62	278.29	6.461		
13,400.00	6,048.00	21,699.99	6,048.00	123.30	158.68	-90.00	6,492.25	43.92	1,797.61	1,517.25	280.36	6.412		
13,500.00	6,048.00	21,599.99	6,048.00	125.02	159.03	-90.00	6,592.24	44.99	1,797.31	1,514.87	282.44	6.363		
13,600.00	6,048.00	21,499.99	6,048.00	126.73	159.40	-90.00	6,692.24	46.06	1,797.01	1,512.46	284.55	6.315		
13,700.00	6,048.00	21,399.99	6,048.00	128.45	159.79	-90.00	6,792.23	47.13	1,796.71	1,510.04	286.68	6.267		
13,800.00	6,048.00	21,299.99	6,048.00	130.16	160.20	-90.00	6,892.23	48.20	1,796.41	1,507.59	288.82	6.220		
13,900.00	6,048.00	21,199.99	6,048.00	131.88	160.63	-90.00	6,992.22	49.27	1,796.11	1,505.13	290.99	6.172		
14,000.00	6,048.00	21,099.99	6,048.00	133.60	161.07	-90.00	7,092.21	50.34	1,795.81	1,502.64	293.17	6.125		
14,100.00	6,048.00	20,999.99	6,048.00	135.32	161.53	-90.00	7,192.21	51.41	1,795.51	1,500.14	295.37	6.079		
14,200.00	6,048.00	20,899.99	6,048.00	137.05	162.02	-90.00	7,292.20	52.48	1,795.21	1,497.62	297.60	6.032		
14,300.00	6,048.00	20,799.99	6,048.00	138.77	162.51	-90.00	7,392.19	53.55	1,794.91	1,495.08	299.84	5.986		
14,400.00	6,048.00	20,699.99	6,048.00	140.50	163.03	-90.00	7,492.19	54.62	1,794.61	1,492.52	302.10	5.941		
14,500.00	6,048.00	20,599.99	6,048.00	142.22	163.57	-90.00	7,592.18	55.69	1,794.32	1,489.94	304.38	5.895		
14,600.00	6,048.00	20,499.99	6,048.00	143.95	164.12	-90.00	7,692.18	56.76	1,794.02	1,487.34	306.67	5.850		
14,700.00	6,048.00	20,399.99	6,048.00	145.68	164.69	-90.00	7,792.17	57.83	1,793.72	1,484.73	308.99	5.805		
14,800.00	6,048.00	20,299.99	6,048.00	147.41	165.27	-90.00	7,892.16	58.90	1,793.42	1,482.10	311.32	5.761		
14,900.00	6,048.00	20,199.99	6,048.00	149.14	165.88	-90.00	7,992.16	59.97	1,793.12	1,479.45	313.67	5.717		
15,000.00	6,048.00	20,099.99	6,048.00	150.87	166.50	-90.00	8,092.15	61.04	1,792.82	1,476.78	316.03	5.673		
15,100.00	6,048.00	19,999.99	6,048.00	152.60	167.13	-90.00	8,192.15	62.11	1,792.52	1,474.10	318.42	5.629		
15,200.00	6,048.00	19,899.99	6,048.00	154.33	167.78	-90.00	8,292.14	63.18	1,792.22	1,471.40	320.82	5.586		
15,300.00	6,048.00	19,799.99	6,048.00	156.07	168.45	-90.00	8,392.13	64.25	1,791.92	1,468.68	323.24	5.544		
15,400.00	6,048.00	19,699.99	6,048.00	157.80	169.14	-90.00	8,492.13	65.32	1,791.62	1,465.95	325.67	5.501		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error:		0.00 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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,500.00	6,048.00	19,599.99	6,048.00	159.54	169.84	-90.00	8,592.12	66.39	1,791.32	1,463.20	328.12	5.459		
15,600.00	6,048.00	19,499.99	6,048.00	161.27	170.55	-90.00	8,692.11	67.46	1,791.02	1,460.43	330.59	5.418		
15,700.00	6,048.00	19,400.00	6,048.00	163.01	171.29	-90.00	8,792.11	68.53	1,790.72	1,457.65	333.07	5.376		
15,800.00	6,048.00	19,300.00	6,048.00	164.75	172.03	-90.00	8,892.10	69.60	1,790.42	1,454.85	335.57	5.336		
15,900.00	6,048.00	19,200.00	6,048.00	166.49	172.79	-90.00	8,992.10	70.67	1,790.12	1,452.04	338.08	5.295		
16,000.00	6,048.00	19,100.00	6,048.00	168.23	173.57	-90.00	9,092.09	71.74	1,789.82	1,449.21	340.61	5.255		
16,100.00	6,048.00	19,000.00	6,048.00	169.97	174.36	-90.00	9,192.08	72.81	1,789.52	1,446.37	343.15	5.215		
16,200.00	6,048.00	18,900.00	6,048.00	171.71	175.17	-90.00	9,292.08	73.88	1,789.22	1,443.51	345.71	5.176		
16,300.00	6,048.00	18,800.00	6,048.00	173.45	175.98	-90.00	9,392.07	74.95	1,788.92	1,440.64	348.28	5.136		
16,323.95	6,048.00	18,781.82	6,048.00	173.86	176.13	-90.00	9,410.25	75.15	1,788.86	1,440.06	348.80	5.129		
16,400.00	6,048.00	18,750.00	6,048.00	175.19	176.40	-90.00	9,442.06	74.60	1,790.20	1,440.31	349.89	5.116 SF		
16,500.00	6,048.00	18,750.00	6,048.00	176.93	176.40	-90.00	9,442.06	74.60	1,795.48	1,445.70	349.78	5.133		
16,600.00	6,048.00	18,700.00	6,048.00	178.67	176.80	-90.00	9,491.85	70.19	1,805.00	1,454.38	350.62	5.148		
16,700.00	6,048.00	18,700.00	6,048.00	180.42	176.80	-90.00	9,491.85	70.19	1,818.52	1,469.49	349.03	5.210		
16,800.00	6,048.00	18,650.00	6,048.00	182.16	177.20	-90.00	9,541.06	61.45	1,836.41	1,487.24	349.17	5.259		
16,900.00	6,048.00	18,650.00	6,048.00	183.91	177.20	-90.00	9,541.06	61.45	1,857.83	1,511.58	346.25	5.366		
17,000.00	6,048.00	18,620.67	6,048.00	185.65	177.42	-90.00	9,569.52	54.33	1,883.35	1,538.87	344.48	5.467		
17,100.00	6,048.00	18,600.00	6,048.00	187.40	177.58	-90.00	9,589.33	48.45	1,912.68	1,570.91	341.77	5.596		
17,138.90	6,048.00	18,600.00	6,048.00	188.08	177.58	-90.00	9,589.33	48.45	1,925.19	1,585.17	340.03	5.662		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.08	0.00	40.08					
100.00	100.00	100.00	100.00	0.27	0.27	0.00	40.08	0.00	40.08	39.54	0.54	74.536		
200.00	200.00	200.97	200.95	0.63	0.62	-1.83	38.80	-1.24	38.83	37.58	1.25	31.048		
300.00	300.00	301.69	301.53	0.99	0.98	-8.05	34.99	-4.95	35.37	33.40	1.97	17.978		
400.00	400.00	401.92	401.36	1.34	1.36	-21.12	28.68	-11.08	30.77	28.08	2.70	11.407		
500.00	500.00	501.41	500.09	1.70	1.75	-44.45	19.94	-19.57	27.94	24.48	3.45	8.088		
504.80	504.80	506.16	504.80	1.72	1.77	-45.82	19.46	-20.03	27.93	24.44	3.49	7.999	CC, ES	
600.00	600.00	600.00	597.47	2.06	2.17	-73.71	8.86	-30.33	31.70	27.49	4.21	7.531	SF	
700.00	700.00	697.27	692.96	2.42	2.62	-95.83	-4.41	-43.23	44.02	39.11	4.91	8.958		
800.00	800.00	794.82	788.29	2.78	3.09	-108.45	-19.23	-57.62	61.86	56.26	5.61	11.029		
900.00	900.00	892.55	883.79	3.14	3.57	-115.32	-34.09	-72.07	81.36	75.04	6.31	12.887		
1,000.00	999.98	990.13	979.16	3.48	4.06	125.60	-48.94	-86.49	102.53	95.51	7.02	14.611		
1,100.00	1,099.84	1,087.36	1,074.17	3.82	4.55	124.34	-63.73	-100.86	125.83	118.10	7.73	16.281		
1,200.00	1,199.45	1,184.11	1,168.72	4.17	5.03	124.45	-78.45	-115.16	151.06	142.60	8.45	17.867		
1,300.00	1,298.70	1,280.27	1,262.69	4.53	5.52	125.33	-93.07	-129.38	178.24	169.05	9.20	19.383		
1,400.00	1,397.47	1,375.71	1,355.97	4.91	6.01	126.63	-107.59	-143.48	207.50	197.54	9.95	20.845		
1,500.00	1,495.62	1,470.33	1,448.43	5.31	6.49	128.14	-121.99	-157.47	238.95	228.22	10.73	22.269		
1,600.00	1,593.06	1,564.01	1,539.98	5.74	6.97	129.73	-136.24	-171.32	272.73	261.21	11.53	23.664		
1,700.00	1,689.64	1,656.63	1,630.49	6.21	7.44	131.33	-150.33	-185.01	308.96	296.62	12.34	25.042		
1,800.00	1,785.27	1,748.08	1,719.86	6.71	7.91	132.89	-164.24	-198.52	347.71	334.54	13.17	26.408		
1,900.00	1,879.82	1,838.25	1,807.98	7.27	8.37	134.37	-177.95	-211.85	389.06	375.05	14.01	27.769		
2,000.00	1,973.17	1,927.03	1,894.74	7.88	8.82	135.75	-191.46	-224.97	433.06	418.19	14.87	29.128		
2,100.00	2,065.27	2,014.36	1,980.09	8.54	9.27	137.21	-204.74	-237.88	479.64	463.91	15.73	30.482		
2,200.00	2,157.01	2,101.29	2,065.04	9.24	9.72	138.93	-217.97	-250.73	527.22	510.62	16.60	31.764		
2,300.00	2,248.74	2,188.22	2,149.99	9.96	10.16	140.36	-231.19	-263.58	575.11	557.65	17.46	32.933		
2,400.00	2,340.48	2,275.15	2,234.94	10.70	10.61	141.58	-244.42	-276.43	623.25	604.92	18.33	34.003		
2,500.00	2,432.22	2,362.08	2,319.89	11.45	11.06	142.63	-257.64	-289.28	671.57	652.37	19.20	34.984		
2,600.00	2,523.96	2,449.01	2,404.84	12.21	11.50	143.53	-270.86	-302.13	720.04	699.98	20.07	35.885		
2,700.00	2,615.70	2,535.94	2,489.79	12.99	11.95	144.33	-284.09	-314.98	768.64	747.70	20.93	36.716		
2,800.00	2,707.44	2,622.86	2,574.74	13.77	12.40	145.03	-297.31	-327.83	817.33	795.53	21.81	37.483		
2,900.00	2,799.17	2,709.79	2,659.69	14.55	12.84	145.65	-310.53	-340.67	866.11	843.43	22.68	38.194		
3,000.00	2,890.91	2,796.72	2,744.64	15.35	13.29	146.21	-323.76	-353.52	914.96	891.41	23.55	38.853		
3,100.00	2,982.65	2,883.65	2,829.59	16.14	13.74	146.71	-336.98	-366.37	963.86	939.44	24.42	39.467		
3,200.00	3,074.39	2,970.58	2,914.54	16.95	14.18	147.16	-350.21	-379.22	1,012.82	987.53	25.30	40.039		
3,300.00	3,166.13	3,057.51	2,999.50	17.75	14.63	147.57	-363.43	-392.07	1,061.83	1,035.65	26.17	40.573		
3,400.00	3,257.87	3,144.44	3,084.45	18.56	15.08	147.94	-376.65	-404.92	1,110.87	1,083.82	27.05	41.073		
3,500.00	3,349.61	3,231.36	3,169.40	19.37	15.53	148.29	-389.88	-417.77	1,159.94	1,132.02	27.92	41.542		
3,600.00	3,441.34	3,318.29	3,254.35	20.18	15.97	148.60	-403.10	-430.62	1,209.04	1,180.24	28.80	41.982		
3,700.00	3,533.08	3,405.22	3,339.30	21.00	16.42	148.89	-416.32	-443.47	1,258.17	1,228.49	29.68	42.397		
3,800.00	3,624.82	3,492.15	3,424.25	21.81	16.87	149.16	-429.55	-456.31	1,307.32	1,276.77	30.55	42.788		
3,900.00	3,716.56	3,579.08	3,509.20	22.63	17.32	149.41	-442.77	-469.16	1,356.49	1,325.06	31.43	43.156		
4,000.00	3,808.30	3,666.01	3,594.15	23.45	17.76	149.64	-456.00	-482.01	1,405.68	1,373.37	32.31	43.505		
4,100.00	3,900.04	3,752.94	3,679.10	24.27	18.21	149.86	-469.22	-494.86	1,454.89	1,421.70	33.19	43.835		
4,200.00	3,991.78	3,839.86	3,764.05	25.09	18.66	150.06	-482.44	-507.71	1,504.11	1,470.04	34.07	44.148		
4,300.00	4,083.51	3,926.79	3,849.00	25.92	19.11	150.25	-495.67	-520.56	1,553.34	1,518.39	34.95	44.445		
4,400.00	4,175.25	4,013.72	3,933.95	26.74	19.55	150.43	-508.89	-533.41	1,602.59	1,566.76	35.83	44.727		
4,500.00	4,266.99	4,100.65	4,018.90	27.57	20.00	150.60	-522.11	-546.26	1,651.85	1,615.13	36.71	44.995		
4,600.00	4,358.73	4,187.58	4,103.85	28.39	20.45	150.75	-535.34	-559.11	1,701.11	1,663.52	37.59	45.251		
4,700.00	4,450.47	4,274.51	4,188.80	29.22	20.90	150.90	-548.56	-571.95	1,750.39	1,711.92	38.47	45.495		
4,800.00	4,542.21	4,361.44	4,273.76	30.05	21.35	151.04	-561.79	-584.80	1,799.68	1,760.32	39.36	45.727		
4,900.00	4,633.95	4,448.36	4,358.71	30.88	21.79	151.18	-575.01	-597.65	1,848.97	1,808.73	40.24	45.949		
5,000.00	4,725.68	4,535.29	4,443.66	31.70	22.24	151.30	-588.23	-610.50	1,898.27	1,857.15	41.12	46.162		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
5,100.00	4,817.42	4,622.22	4,528.61	32.53	22.69	151.42	-601.46	-623.35	1,947.57	1,905.57	42.01	46.365			
5,200.00	4,909.16	4,709.15	4,613.56	33.36	23.14	151.54	-614.68	-636.20	1,996.89	1,954.00	42.89	46.560			
5,300.00	5,000.90	4,796.08	4,698.51	34.19	23.58	151.64	-627.90	-649.05	2,046.21	2,002.43	43.77	46.746			
5,400.00	5,092.64	4,883.01	4,783.46	35.02	24.03	151.75	-641.13	-661.90	2,095.53	2,050.87	44.66	46.925			
5,500.00	5,184.38	4,969.94	4,868.41	35.85	24.48	151.85	-654.35	-674.75	2,144.86	2,099.32	45.54	47.097			
5,600.00	5,276.11	5,056.87	4,953.36	36.69	24.93	151.94	-667.58	-687.59	2,194.19	2,147.77	46.43	47.262			
5,700.00	5,367.85	5,143.79	5,038.31	37.52	25.38	152.03	-680.80	-700.44	2,243.53	2,196.22	47.31	47.421			
5,800.00	5,459.76	5,230.69	5,123.23	38.34	25.82	162.58	-694.02	-713.29	2,292.95	2,244.76	48.19	47.582			
5,900.00	5,552.68	5,316.39	5,206.98	39.06	26.27	-167.07	-707.05	-725.95	2,342.80	2,293.83	48.97	47.845			
6,000.00	5,644.46	5,398.37	5,287.09	39.64	26.69	-140.69	-719.53	-738.07	2,392.14	2,342.54	49.61	48.222			
6,100.00	5,732.30	5,474.14	5,361.14	40.06	27.08	-122.02	-731.05	-749.27	2,440.06	2,389.95	50.11	48.694			
6,200.00	5,813.53	5,541.40	5,426.87	40.35	27.42	-109.27	-741.28	-759.21	2,485.87	2,435.39	50.48	49.243			
6,300.00	5,885.68	5,598.10	5,482.28	40.51	27.72	-100.23	-749.91	-767.59	2,529.09	2,478.37	50.73	49.855			
6,400.00	5,946.56	5,642.52	5,525.69	40.57	27.95	-93.49	-756.67	-774.16	2,569.33	2,518.46	50.87	50.511			
6,500.00	5,994.33	5,689.84	5,572.01	40.54	28.18	-88.64	-763.28	-781.16	2,606.14	2,555.09	51.05	51.046			
6,600.00	6,027.53	5,794.49	5,675.35	40.44	28.59	-86.46	-764.98	-796.69	2,638.64	2,587.01	51.63	51.102			
6,700.00	6,045.15	6,350.00	6,123.08	40.29	28.50	-92.47	-481.36	-861.94	2,663.99	2,611.98	52.01	51.224			
6,800.00	6,048.00	6,736.92	6,200.00	40.12	27.43	-93.27	-108.17	-870.88	2,665.87	2,614.18	51.69	51.579			
6,900.00	6,048.00	6,836.92	6,200.00	39.97	27.19	-93.27	-8.17	-870.18	2,665.94	2,613.82	52.12	51.153			
7,000.00	6,048.00	6,936.92	6,200.00	39.85	26.98	-93.27	91.83	-869.48	2,666.01	2,613.23	52.78	50.508			
7,100.00	6,048.00	7,036.92	6,200.00	39.76	26.83	-93.27	191.82	-868.78	2,666.08	2,612.41	53.68	49.670			
7,200.00	6,048.00	7,136.92	6,200.00	39.72	27.02	-93.27	291.82	-868.08	2,666.15	2,611.37	54.78	48.668			
7,300.00	6,048.00	7,236.92	6,200.00	39.71	27.75	-93.27	391.82	-867.38	2,666.22	2,610.13	56.09	47.532			
7,400.00	6,048.00	7,336.92	6,200.00	39.75	28.63	-93.27	491.82	-866.68	2,666.29	2,608.70	57.59	46.298			
7,500.00	6,048.00	7,436.92	6,200.00	39.85	29.58	-93.27	591.81	-865.98	2,666.36	2,607.10	59.26	44.994			
7,600.00	6,048.00	7,536.92	6,200.00	40.01	30.60	-93.27	691.81	-865.28	2,666.44	2,605.34	61.09	43.646			
7,700.00	6,048.00	7,636.92	6,200.00	40.24	31.67	-93.27	791.81	-864.58	2,666.51	2,603.44	63.07	42.280			
7,800.00	6,048.00	7,736.92	6,200.00	40.57	32.80	-93.27	891.81	-863.88	2,666.58	2,601.40	65.18	40.913			
7,900.00	6,048.00	7,836.92	6,200.00	40.99	33.98	-93.27	991.80	-863.18	2,666.65	2,599.24	67.41	39.561			
8,000.00	6,048.00	7,936.92	6,200.00	41.53	35.20	-93.27	1,091.80	-862.48	2,666.72	2,596.97	69.74	38.236			
8,100.00	6,048.00	8,036.92	6,200.00	42.19	36.46	-93.27	1,191.80	-861.78	2,666.79	2,594.61	72.18	36.946			
8,200.00	6,048.00	8,136.92	6,200.00	42.97	37.77	-93.27	1,291.80	-861.08	2,666.86	2,592.15	74.70	35.699			
8,300.00	6,048.00	8,236.92	6,200.00	43.85	39.10	-93.27	1,391.79	-860.38	2,666.93	2,589.62	77.31	34.497			
8,400.00	6,048.00	8,336.92	6,200.00	44.83	40.47	-93.27	1,491.79	-859.69	2,667.00	2,587.02	79.98	33.344			
8,500.00	6,048.00	8,436.92	6,200.00	45.90	41.86	-93.27	1,591.79	-858.99	2,667.07	2,584.35	82.72	32.240			
8,600.00	6,048.00	8,536.92	6,200.00	47.05	43.28	-93.27	1,691.79	-858.29	2,667.14	2,581.62	85.52	31.186			
8,700.00	6,048.00	8,636.92	6,200.00	48.25	44.72	-93.27	1,791.79	-857.59	2,667.21	2,578.83	88.38	30.180			
8,800.00	6,048.00	8,736.92	6,200.00	49.51	46.19	-93.27	1,891.78	-856.89	2,667.28	2,576.00	91.28	29.221			
8,900.00	6,048.00	8,836.92	6,200.00	50.81	47.67	-93.27	1,991.78	-856.19	2,667.35	2,573.13	94.22	28.309			
9,000.00	6,048.00	8,936.92	6,200.00	52.15	49.17	-93.27	2,091.78	-855.49	2,667.42	2,570.22	97.21	27.441			
9,100.00	6,048.00	9,036.92	6,200.00	53.53	50.69	-93.27	2,191.78	-854.79	2,667.49	2,567.27	100.23	26.614			
9,200.00	6,048.00	9,136.92	6,200.00	54.94	52.22	-93.27	2,291.77	-854.09	2,667.56	2,564.28	103.28	25.828			
9,300.00	6,048.00	9,236.92	6,200.00	56.37	53.77	-93.27	2,391.77	-853.39	2,667.64	2,561.27	106.37	25.080			
9,400.00	6,048.00	9,336.92	6,200.00	57.82	55.33	-93.27	2,491.77	-852.69	2,667.71	2,558.23	109.48	24.368			
9,500.00	6,048.00	9,436.92	6,200.00	59.30	56.90	-93.27	2,591.77	-851.99	2,667.78	2,555.16	112.61	23.690			
9,600.00	6,048.00	9,536.92	6,200.00	60.79	58.49	-93.27	2,691.76	-851.29	2,667.85	2,552.07	115.77	23.044			
9,700.00	6,048.00	9,636.92	6,200.00	62.30	60.08	-93.27	2,791.76	-850.59	2,667.92	2,548.96	118.96	22.428			
9,800.00	6,048.00	9,736.92	6,200.00	63.82	61.68	-93.27	2,891.76	-849.89	2,667.99	2,545.83	122.16	21.841			
9,900.00	6,048.00	9,836.92	6,200.00	65.36	63.29	-93.27	2,991.76	-849.19	2,668.06	2,542.68	125.38	21.280			
10,000.00	6,048.00	9,936.92	6,200.00	66.91	64.91	-93.27	3,091.75	-848.49	2,668.13	2,539.52	128.61	20.746			
10,100.00	6,048.00	10,036.92	6,200.00	68.48	66.54	-93.27	3,191.75	-847.79	2,668.20	2,536.34	131.86	20.234			
10,200.00	6,048.00	10,136.92	6,200.00	70.05	68.17	-93.27	3,291.75	-847.09	2,668.27	2,533.14	135.13	19.746			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,300.00	6,048.00	10,236.92	6,200.00	71.63	69.81	-93.27	3,391.75	-846.39	2,668.34	2,529.93	138.41	19.278		
10,400.00	6,048.00	10,336.92	6,200.00	73.23	71.46	-93.27	3,491.74	-845.69	2,668.41	2,526.71	141.70	18.831		
10,500.00	6,048.00	10,436.92	6,200.00	74.83	73.11	-93.27	3,591.74	-844.99	2,668.48	2,523.48	145.01	18.402		
10,600.00	6,048.00	10,536.92	6,200.00	76.43	74.77	-93.27	3,691.74	-844.29	2,668.55	2,520.23	148.32	17.992		
10,700.00	6,048.00	10,636.92	6,200.00	78.05	76.43	-93.27	3,791.74	-843.59	2,668.62	2,516.98	151.65	17.598		
10,800.00	6,048.00	10,736.92	6,200.00	79.67	78.10	-93.27	3,891.73	-842.89	2,668.69	2,513.71	154.98	17.219		
10,900.00	6,048.00	10,836.92	6,200.00	81.30	79.77	-93.27	3,991.73	-842.20	2,668.77	2,510.44	158.33	16.856		
11,000.00	6,048.00	10,936.92	6,200.00	82.94	81.44	-93.26	4,091.73	-841.50	2,668.84	2,507.16	161.68	16.507		
11,100.00	6,048.00	11,036.92	6,200.00	84.58	83.12	-93.26	4,191.73	-840.80	2,668.91	2,503.87	165.04	16.171		
11,200.00	6,048.00	11,136.92	6,200.00	86.22	84.80	-93.26	4,291.72	-840.10	2,668.98	2,500.57	168.41	15.848		
11,300.00	6,048.00	11,236.92	6,200.00	87.87	86.49	-93.26	4,391.72	-839.40	2,669.05	2,497.27	171.78	15.538		
11,400.00	6,048.00	11,336.92	6,200.00	89.53	88.18	-93.26	4,491.72	-838.70	2,669.12	2,493.96	175.16	15.238		
11,500.00	6,048.00	11,436.92	6,200.00	91.19	89.87	-93.26	4,591.72	-838.00	2,669.19	2,490.64	178.55	14.949		
11,600.00	6,048.00	11,536.92	6,200.00	92.85	91.57	-93.26	4,691.71	-837.30	2,669.26	2,487.32	181.94	14.671		
11,700.00	6,048.00	11,636.92	6,200.00	94.52	93.27	-93.26	4,791.71	-836.60	2,669.33	2,483.99	185.34	14.402		
11,800.00	6,048.00	11,736.92	6,200.00	96.19	94.97	-93.26	4,891.71	-835.90	2,669.40	2,480.66	188.74	14.143		
11,900.00	6,048.00	11,836.92	6,200.00	97.86	96.67	-93.26	4,991.71	-835.20	2,669.47	2,477.32	192.15	13.893		
12,000.00	6,048.00	11,936.92	6,200.00	99.54	98.38	-93.26	5,091.70	-834.50	2,669.54	2,473.98	195.56	13.650		
12,100.00	6,048.00	12,036.92	6,200.00	101.22	100.09	-93.26	5,191.70	-833.80	2,669.61	2,470.63	198.98	13.416		
12,200.00	6,048.00	12,136.92	6,200.00	102.91	101.80	-93.26	5,291.70	-833.10	2,669.68	2,467.28	202.40	13.190		
12,300.00	6,048.00	12,236.92	6,200.00	104.59	103.51	-93.26	5,391.70	-832.40	2,669.75	2,463.92	205.83	12.971		
12,400.00	6,048.00	12,336.92	6,200.00	106.28	105.22	-93.26	5,491.69	-831.70	2,669.82	2,460.56	209.26	12.758		
12,500.00	6,048.00	12,436.92	6,200.00	107.97	106.94	-93.26	5,591.69	-831.00	2,669.90	2,457.20	212.69	12.553		
12,600.00	6,048.00	12,536.92	6,200.00	109.67	108.66	-93.26	5,691.69	-830.30	2,669.97	2,453.84	216.13	12.353		
12,700.00	6,048.00	12,636.92	6,200.00	111.37	110.38	-93.26	5,791.69	-829.60	2,670.04	2,450.47	219.57	12.160		
12,800.00	6,048.00	12,736.92	6,200.00	113.07	112.10	-93.26	5,891.68	-828.90	2,670.11	2,447.09	223.01	11.973		
12,900.00	6,048.00	12,836.92	6,200.00	114.77	113.82	-93.26	5,991.68	-828.20	2,670.18	2,443.72	226.46	11.791		
13,000.00	6,048.00	12,936.92	6,200.00	116.47	115.55	-93.26	6,091.68	-827.50	2,670.25	2,440.34	229.91	11.614		
13,100.00	6,048.00	13,036.92	6,200.00	118.18	117.27	-93.26	6,191.68	-826.80	2,670.32	2,436.96	233.36	11.443		
13,200.00	6,048.00	13,136.92	6,200.00	119.88	119.00	-93.26	6,291.67	-826.10	2,670.39	2,433.57	236.82	11.276		
13,300.00	6,048.00	13,236.92	6,200.00	121.59	120.73	-93.26	6,391.67	-825.41	2,670.46	2,430.19	240.27	11.114		
13,400.00	6,048.00	13,336.92	6,200.00	123.30	122.46	-93.26	6,491.67	-824.71	2,670.53	2,426.80	243.73	10.957		
13,500.00	6,048.00	13,436.92	6,200.00	125.02	124.19	-93.26	6,591.67	-824.01	2,670.60	2,423.41	247.19	10.804		
13,600.00	6,048.00	13,536.92	6,200.00	126.73	125.92	-93.26	6,691.66	-823.31	2,670.67	2,420.01	250.66	10.655		
13,700.00	6,048.00	13,636.92	6,200.00	128.45	127.65	-93.26	6,791.66	-822.61	2,670.74	2,416.62	254.12	10.510		
13,800.00	6,048.00	13,736.92	6,200.00	130.16	129.39	-93.26	6,891.66	-821.91	2,670.81	2,413.22	257.59	10.368		
13,900.00	6,048.00	13,836.92	6,200.00	131.88	131.12	-93.26	6,991.66	-821.21	2,670.88	2,409.82	261.06	10.231		
14,000.00	6,048.00	13,936.92	6,200.00	133.60	132.86	-93.26	7,091.65	-820.51	2,670.95	2,406.42	264.53	10.097		
14,100.00	6,048.00	14,036.92	6,200.00	135.32	134.59	-93.26	7,191.65	-819.81	2,671.03	2,403.02	268.01	9.966		
14,200.00	6,048.00	14,136.92	6,200.00	137.05	136.33	-93.26	7,291.65	-819.11	2,671.10	2,399.61	271.48	9.839		
14,300.00	6,048.00	14,236.92	6,200.00	138.77	138.07	-93.26	7,391.65	-818.41	2,671.17	2,396.21	274.96	9.715		
14,400.00	6,048.00	14,336.92	6,200.00	140.50	139.81	-93.26	7,491.64	-817.71	2,671.24	2,392.80	278.44	9.594		
14,500.00	6,048.00	14,436.92	6,200.00	142.22	141.55	-93.26	7,591.64	-817.01	2,671.31	2,389.39	281.92	9.475		
14,600.00	6,048.00	14,536.92	6,200.00	143.95	143.29	-93.26	7,691.64	-816.31	2,671.38	2,385.98	285.40	9.360		
14,700.00	6,048.00	14,636.92	6,200.00	145.68	145.03	-93.26	7,791.64	-815.61	2,671.45	2,382.57	288.88	9.247		
14,800.00	6,048.00	14,736.92	6,200.00	147.41	146.78	-93.26	7,891.63	-814.91	2,671.52	2,379.15	292.37	9.138		
14,900.00	6,048.00	14,836.92	6,200.00	149.14	148.52	-93.26	7,991.63	-814.21	2,671.59	2,375.74	295.85	9.030		
15,000.00	6,048.00	14,936.92	6,200.00	150.87	150.26	-93.26	8,091.63	-813.51	2,671.66	2,372.32	299.34	8.925		
15,100.00	6,048.00	15,036.92	6,200.00	152.60	152.01	-93.26	8,191.63	-812.81	2,671.73	2,368.90	302.83	8.823		
15,200.00	6,048.00	15,136.92	6,200.00	154.33	153.75	-93.26	8,291.62	-812.11	2,671.80	2,365.48	306.32	8.722		
15,300.00	6,048.00	15,236.92	6,200.00	156.07	155.50	-93.26	8,391.62	-811.41	2,671.87	2,362.06	309.81	8.624		
15,400.00	6,048.00	15,336.92	6,200.00	157.80	157.25	-93.26	8,491.62	-810.71	2,671.94	2,358.64	313.30	8.528		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,500.00	6,048.00	15,436.92	6,200.00	159.54	158.99	-93.26	8,591.62	-810.01	2,672.01	2,355.22	316.79	8.435		
15,600.00	6,048.00	15,536.92	6,200.00	161.27	160.74	-93.26	8,691.61	-809.31	2,672.08	2,351.80	320.29	8.343		
15,700.00	6,048.00	15,636.92	6,200.00	163.01	162.49	-93.26	8,791.61	-808.61	2,672.16	2,348.37	323.78	8.253		
15,800.00	6,048.00	15,736.92	6,200.00	164.75	164.24	-93.26	8,891.61	-807.92	2,672.23	2,344.95	327.28	8.165		
15,900.00	6,048.00	15,836.92	6,200.00	166.49	165.99	-93.26	8,991.61	-807.22	2,672.30	2,341.52	330.78	8.079		
16,000.00	6,048.00	15,936.92	6,200.00	168.23	167.74	-93.26	9,091.60	-806.52	2,672.37	2,338.09	334.27	7.995		
16,100.00	6,048.00	16,036.92	6,200.00	169.97	169.49	-93.26	9,191.60	-805.82	2,672.44	2,334.67	337.77	7.912		
16,200.00	6,048.00	16,136.92	6,200.00	171.71	171.24	-93.26	9,291.60	-805.12	2,672.51	2,331.24	341.27	7.831		
16,300.00	6,048.00	16,236.92	6,200.00	173.45	172.99	-93.26	9,391.60	-804.42	2,672.58	2,327.81	344.77	7.752		
16,400.00	6,048.00	16,250.00	6,200.00	175.19	173.22	-93.26	9,404.68	-804.33	2,674.06	2,327.83	346.23	7.723		
16,500.00	6,048.00	16,300.00	6,199.93	176.93	174.10	-93.26	9,454.63	-806.31	2,678.55	2,330.14	348.40	7.688		
16,600.00	6,048.00	16,300.00	6,199.93	178.67	174.10	-93.26	9,454.63	-806.31	2,685.59	2,336.71	348.88	7.698		
16,700.00	6,048.00	16,300.00	6,199.93	180.42	174.10	-93.26	9,454.63	-806.31	2,696.32	2,347.43	348.90	7.728		
16,800.00	6,048.00	16,350.00	6,199.71	182.16	174.99	-93.24	9,504.21	-812.63	2,709.74	2,359.24	350.51	7.731		
16,900.00	6,048.00	16,350.00	6,199.71	183.91	174.99	-93.24	9,504.21	-812.63	2,725.91	2,376.06	349.85	7.792		
17,000.00	6,048.00	16,350.00	6,199.71	185.65	174.99	-93.24	9,504.21	-812.63	2,745.62	2,396.86	348.76	7.872		
17,100.00	6,048.00	16,400.00	6,199.37	187.40	175.88	-93.22	9,553.05	-823.25	2,767.73	2,417.86	349.87	7.911		
17,138.90	6,048.00	16,400.00	6,199.37	188.08	175.88	-93.22	9,553.05	-823.25	2,777.00	2,427.73	349.26	7.951		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-21.85	0.00	21.85						
100.00	100.00	100.00	100.00	0.27	0.27	180.00	-21.85	0.00	21.85	21.32	0.54	40.644	CC		
200.00	200.00	199.73	199.71	0.63	0.62	175.78	-22.39	1.65	22.45	21.20	1.25	18.001	ES		
300.00	300.00	299.21	299.05	0.99	0.98	164.63	-23.97	6.59	24.88	22.92	1.96	12.677			
400.00	400.00	398.22	397.68	1.34	1.35	150.97	-26.60	14.76	30.51	27.82	2.69	11.361			
500.00	500.00	496.52	495.25	1.70	1.74	139.22	-30.23	26.08	40.21	36.81	3.40	11.812			
600.00	600.00	593.88	591.44	2.06	2.15	130.76	-34.84	40.43	54.06	49.94	4.11	13.138			
700.00	700.00	690.11	685.95	2.42	2.59	125.00	-40.38	57.66	71.78	66.97	4.82	14.907			
800.00	800.00	785.01	778.50	2.78	3.06	121.09	-46.79	77.60	93.13	87.62	5.51	16.911			
900.00	900.00	878.40	868.86	3.14	3.55	118.35	-54.00	100.06	117.89	111.70	6.19	19.046			
1,000.00	999.98	970.60	957.26	3.48	4.09	1.03	-62.01	124.98	144.24	137.40	6.84	21.092			
1,100.00	1,099.84	1,062.91	1,044.89	3.82	4.66	-0.46	-70.88	152.59	170.37	162.88	7.49	22.749			
1,200.00	1,199.45	1,159.93	1,136.66	4.17	5.29	-1.65	-80.51	182.58	194.29	186.09	8.20	23.701			
1,300.00	1,298.70	1,257.73	1,229.15	4.53	5.94	-2.61	-90.23	212.81	214.87	205.94	8.92	24.081			
1,400.00	1,397.47	1,356.17	1,322.27	4.91	6.60	-3.46	-100.00	243.25	232.07	222.41	9.66	24.021			
1,500.00	1,495.62	1,455.15	1,415.88	5.31	7.26	-4.24	-109.84	273.85	245.89	235.48	10.41	23.613			
1,600.00	1,593.06	1,554.55	1,509.89	5.74	7.94	-5.01	-119.71	304.58	256.29	245.12	11.18	22.930			
1,700.00	1,689.64	1,654.23	1,604.18	6.21	8.62	-5.79	-129.61	335.39	263.28	251.33	11.95	22.025			
1,800.00	1,785.27	1,754.09	1,698.62	6.71	9.30	-6.63	-139.53	366.26	266.86	254.12	12.74	20.942			
1,900.00	1,879.82	1,853.99	1,793.11	7.27	9.99	-7.55	-149.45	397.15	267.03	253.49	13.55	19.713			
2,000.00	1,973.17	1,953.82	1,887.53	7.88	10.68	-8.58	-159.36	428.01	263.82	249.46	14.37	18.365			
2,100.00	2,065.27	2,053.47	1,987.78	8.54	11.36	-9.77	-169.26	458.82	257.39	242.19	15.20	16.928			
2,200.00	2,157.01	2,153.05	2,075.96	9.24	12.05	-11.05	-179.15	489.60	250.17	234.10	16.07	15.572			
2,300.00	2,248.74	2,252.62	2,170.14	9.96	12.74	-12.40	-189.04	520.39	243.08	226.13	16.95	14.340			
2,400.00	2,340.48	2,352.20	2,264.33	10.70	13.43	-13.83	-198.93	551.17	236.13	218.27	17.87	13.217			
2,500.00	2,432.22	2,451.78	2,358.51	11.45	14.12	-15.35	-208.82	581.96	229.34	210.53	18.82	12.189			
2,600.00	2,523.96	2,551.36	2,452.69	12.21	14.81	-16.96	-218.71	612.74	222.72	202.92	19.80	11.247			
2,700.00	2,615.70	2,650.94	2,546.87	12.99	15.50	-18.66	-228.60	643.52	216.29	195.45	20.84	10.380			
2,800.00	2,707.44	2,750.52	2,641.06	13.77	16.19	-20.47	-238.49	674.31	210.06	188.13	21.93	9.581			
2,900.00	2,799.17	2,850.10	2,735.24	14.55	16.88	-22.38	-248.38	705.09	204.05	180.98	23.07	8.843			
3,000.00	2,890.91	2,949.68	2,829.42	15.35	17.57	-24.41	-258.27	735.88	198.28	173.99	24.29	8.163			
3,100.00	2,982.65	3,049.26	2,923.61	16.14	18.26	-26.56	-268.16	766.66	192.78	167.19	25.58	7.535			
3,200.00	3,074.39	3,148.84	3,017.79	16.95	18.96	-28.82	-278.05	797.45	187.56	160.60	26.96	6.956			
3,300.00	3,166.13	3,248.41	3,111.97	17.75	19.65	-31.22	-287.94	828.23	182.66	154.22	28.44	6.423			
3,400.00	3,257.87	3,347.99	3,206.16	18.56	20.34	-33.74	-297.84	859.02	178.09	148.08	30.01	5.935			
3,500.00	3,349.61	3,447.57	3,300.34	19.37	21.03	-36.38	-307.73	889.80	173.88	142.20	31.68	5.489			
3,600.00	3,441.34	3,547.15	3,394.52	20.18	21.73	-39.15	-317.62	920.59	170.07	136.61	33.45	5.084			
3,700.00	3,533.08	3,646.73	3,488.71	21.00	22.42	-42.04	-327.51	951.37	166.67	131.34	35.33	4.717			
3,800.00	3,624.82	3,746.31	3,582.89	21.81	23.11	-45.04	-337.40	982.16	163.72	126.41	37.30	4.389			
3,900.00	3,716.56	3,845.89	3,677.07	22.63	23.81	-48.14	-347.29	1,012.94	161.23	121.87	39.36	4.096			
4,000.00	3,808.30	3,945.47	3,771.25	23.45	24.50	-51.33	-357.18	1,043.73	159.23	117.74	41.50	3.837			
4,100.00	3,900.04	4,045.05	3,865.44	24.27	25.19	-54.59	-367.07	1,074.51	157.75	114.06	43.68	3.611			
4,200.00	3,991.78	4,144.62	3,959.62	25.09	25.89	-57.90	-376.96	1,105.30	156.78	110.87	45.91	3.415			
4,300.00	4,083.51	4,244.20	4,053.80	25.92	26.58	-61.23	-386.85	1,136.08	156.35	108.20	48.15	3.247			
4,330.71	4,111.69	4,274.78	4,082.73	26.17	26.79	-62.26	-389.89	1,145.53	156.32	107.49	48.84	3.201			
4,400.00	4,175.25	4,343.78	4,147.99	26.74	27.28	-64.58	-396.74	1,166.86	156.45	106.07	50.38	3.105			
4,500.00	4,266.99	4,443.36	4,242.17	27.57	27.97	-67.91	-406.63	1,197.65	157.09	104.51	52.58	2.987			
4,600.00	4,358.73	4,542.94	4,336.35	28.39	28.66	-71.20	-416.52	1,228.43	158.26	103.52	54.74	2.891			
4,700.00	4,450.47	4,642.52	4,430.54	29.22	29.36	-74.43	-426.41	1,259.22	159.95	103.11	56.83	2.814			
4,800.00	4,542.21	4,742.10	4,524.72	30.05	30.05	-77.58	-436.30	1,290.00	162.13	103.28	58.85	2.755			
4,900.00	4,633.95	4,841.68	4,618.90	30.88	30.75	-80.65	-446.19	1,320.79	164.80	104.02	60.78	2.711			
5,000.00	4,725.68	4,941.26	4,713.09	31.70	31.44	-83.61	-456.08	1,351.57	167.93	105.31	62.62	2.682			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,817.42	5,040.84	4,807.27	32.53	32.13	-86.45	-465.97	1,382.36	171.49	107.12	64.38	2.664		
5,200.00	4,909.16	5,140.41	4,901.45	33.36	32.83	-89.17	-475.86	1,413.14	175.46	109.42	66.04	2.657		
5,300.00	5,000.90	5,239.99	4,995.63	34.19	33.52	-91.77	-485.75	1,443.93	179.81	112.19	67.62	2.659		
5,400.00	5,092.64	5,339.57	5,089.82	35.02	34.22	-94.24	-495.64	1,474.71	184.51	115.40	69.11	2.670		
5,500.00	5,184.38	5,439.15	5,184.00	35.85	34.91	-96.58	-505.53	1,505.50	189.54	119.00	70.54	2.687		
5,600.00	5,276.11	5,538.73	5,278.18	36.69	35.61	-98.80	-515.42	1,536.28	194.87	122.98	71.89	2.710		
5,700.00	5,367.85	5,638.31	5,372.37	37.52	36.30	-100.90	-525.31	1,567.07	200.48	127.29	73.19	2.739		
5,800.00	5,459.76	5,739.08	5,467.72	38.34	37.00	-94.53	-535.33	1,598.06	205.12	130.67	74.44	2.755		
5,900.00	5,552.68	5,844.29	5,570.15	39.06	37.54	-74.30	-546.20	1,618.80	194.09	119.22	74.88	2.592		
6,000.00	5,644.46	5,936.93	5,662.12	39.64	37.78	-63.10	-556.10	1,621.20	166.97	93.97	73.00	2.287		
6,100.00	5,732.30	6,012.42	5,736.57	40.06	37.86	-66.12	-564.22	1,612.12	135.07	69.79	65.29	2.069 SF		
6,189.03	5,805.01	6,065.02	5,787.43	40.31	37.88	-76.54	-569.82	1,600.01	120.85	71.44	49.41	2.446		
6,200.00	5,813.53	6,070.62	5,792.77	40.35	37.88	-77.87	-570.41	1,598.44	121.12	73.72	47.39	2.556		
6,300.00	5,885.68	6,113.51	5,833.16	40.51	37.87	-86.50	-574.89	1,584.72	148.19	103.75	44.44	3.334		
6,400.00	5,946.56	6,143.56	5,860.78	40.57	37.86	-87.13	-577.98	1,573.32	208.23	152.84	55.39	3.760		
6,500.00	5,994.33	6,162.84	5,878.17	40.54	37.85	-81.17	-579.93	1,565.25	283.83	220.81	63.01	4.504		
6,600.00	6,027.53	6,172.85	5,887.10	40.44	37.84	-71.28	-580.93	1,560.82	365.88	298.15	67.73	5.402		
6,700.00	6,045.15	6,174.50	5,888.56	40.29	37.84	-60.34	-581.10	1,560.08	449.89	379.03	70.87	6.349		
6,800.00	6,048.00	6,168.79	5,883.49	40.12	37.85	-53.76	-580.53	1,562.63	533.77	460.77	73.00	7.312		
6,900.00	6,048.00	6,161.63	5,877.09	39.97	37.85	-52.32	-579.81	1,565.77	621.23	547.00	74.23	8.369		
7,000.00	6,048.00	6,150.00	5,866.62	39.85	37.86	-50.03	-578.63	1,570.69	711.92	637.09	74.83	9.513		
7,100.00	6,048.00	6,150.00	5,866.62	39.76	37.86	-50.03	-578.63	1,570.69	804.69	729.34	75.36	10.678		
7,200.00	6,048.00	6,139.84	5,857.39	39.72	37.86	-48.08	-577.60	1,574.81	898.94	823.39	75.54	11.899		
7,300.00	6,048.00	6,132.47	5,850.65	39.71	37.86	-46.70	-576.85	1,577.70	994.24	918.56	75.68	13.137		
7,400.00	6,048.00	6,125.06	5,843.84	39.75	37.87	-45.34	-576.08	1,580.52	1,090.30	1,014.54	75.76	14.392		
7,500.00	6,048.00	6,117.60	5,836.95	39.85	37.87	-44.01	-575.32	1,583.26	1,186.96	1,111.15	75.81	15.658		
7,600.00	6,048.00	6,110.10	5,829.98	40.01	37.87	-42.70	-574.54	1,585.93	1,284.06	1,208.23	75.83	16.933		
7,700.00	6,048.00	6,100.00	5,820.54	40.24	37.87	-41.01	-573.49	1,589.37	1,381.52	1,305.69	75.83	18.218		
7,800.00	6,048.00	6,100.00	5,820.54	40.57	37.87	-41.01	-573.49	1,589.37	1,479.27	1,403.40	75.87	19.497		
7,900.00	6,048.00	6,087.36	5,808.65	40.99	37.87	-38.98	-572.17	1,593.45	1,577.24	1,501.38	75.85	20.793		
8,000.00	6,048.00	6,079.71	5,801.41	41.53	37.87	-37.81	-571.37	1,595.79	1,675.40	1,599.55	75.85	22.088		
8,100.00	6,048.00	6,072.03	5,794.11	42.19	37.88	-36.68	-570.56	1,598.04	1,773.72	1,697.87	75.85	23.384		
8,200.00	6,048.00	6,064.32	5,786.76	42.97	37.88	-35.59	-569.75	1,600.20	1,872.18	1,796.33	75.85	24.682		
8,300.00	6,048.00	6,050.00	5,773.02	43.85	37.88	-33.68	-568.23	1,603.94	1,970.77	1,894.93	75.84	25.986		
8,400.00	6,048.00	6,050.00	5,773.02	44.83	37.88	-33.68	-568.23	1,603.94	2,069.42	1,993.56	75.86	27.281		
8,500.00	6,048.00	6,041.04	5,764.38	45.90	37.87	-32.56	-567.28	1,606.11	2,168.17	2,092.31	75.85	28.583		
8,600.00	6,048.00	6,033.24	5,756.83	47.05	37.87	-31.63	-566.45	1,607.89	2,266.99	2,191.14	75.86	29.885		
8,700.00	6,048.00	6,025.43	5,749.25	48.25	37.87	-30.74	-565.61	1,609.56	2,365.88	2,290.02	75.86	31.187		
8,800.00	6,048.00	6,017.61	5,741.63	49.51	37.86	-29.89	-564.78	1,611.14	2,464.82	2,388.95	75.87	32.489		
8,900.00	6,048.00	6,009.77	5,733.98	50.81	37.86	-29.08	-563.94	1,612.61	2,563.81	2,487.94	75.87	33.791		
9,000.00	6,048.00	6,000.00	5,724.41	52.15	37.86	-28.12	-562.89	1,614.29	2,662.85	2,586.97	75.88	35.093		
9,100.00	6,048.00	6,000.00	5,724.41	53.53	37.86	-28.12	-562.89	1,614.29	2,761.93	2,686.03	75.89	36.393		
9,200.00	6,048.00	5,986.25	5,710.90	54.94	37.84	-26.88	-561.41	1,616.39	2,861.02	2,785.13	75.89	37.699		
9,300.00	6,048.00	5,978.41	5,703.18	56.37	37.83	-26.22	-560.57	1,617.43	2,960.16	2,884.26	75.90	39.001		
9,400.00	6,048.00	5,970.57	5,695.44	57.82	37.83	-25.59	-559.73	1,618.38	3,059.33	2,983.42	75.91	40.303		
9,500.00	6,048.00	5,962.75	5,687.71	59.30	37.82	-25.01	-558.88	1,619.21	3,158.52	3,082.61	75.92	41.605		
9,600.00	6,048.00	5,950.00	5,675.09	60.79	37.81	-24.11	-557.51	1,620.34	3,257.74	3,181.82	75.92	42.908		
9,700.00	6,048.00	5,950.00	5,675.09	62.30	37.81	-24.11	-557.51	1,620.34	3,356.98	3,281.04	75.94	44.205		
9,800.00	6,048.00	5,939.35	5,664.52	63.82	37.79	-23.43	-556.36	1,621.07	3,456.23	3,380.29	75.94	45.511		
9,900.00	6,048.00	5,931.58	5,656.81	65.36	37.77	-22.97	-555.53	1,621.47	3,555.51	3,479.56	75.95	46.814		
10,000.00	6,048.00	5,923.84	5,649.12	66.91	37.76	-22.54	-554.70	1,621.77	3,654.80	3,578.84	75.96	48.117		
10,100.00	6,048.00	5,916.13	5,641.45	68.48	37.74	-22.13	-553.87	1,621.97	3,754.11	3,678.14	75.96	49.419		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
10,200.00	6,048.00	5,908.44	5,633.81	70.05	37.73	-21.75	-553.04	1,622.06	3,853.43	3,777.46	75.97	50.721			
10,300.00	6,048.00	5,900.00	5,625.42	71.63	37.72	-21.36	-552.14	1,622.04	3,952.76	3,876.78	75.98	52.023			
10,400.00	6,048.00	5,900.00	5,625.42	73.23	37.72	-21.36	-552.14	1,622.04	4,052.12	3,976.12	76.00	53.317			
10,500.00	6,048.00	5,885.57	5,611.08	74.83	37.67	-20.76	-550.59	1,621.72	4,151.47	4,075.48	75.99	54.635			
10,600.00	6,048.00	5,878.02	5,603.58	76.43	37.65	-20.47	-549.78	1,621.41	4,250.84	4,174.85	75.99	55.941			
10,700.00	6,048.00	5,870.51	5,596.12	78.05	37.63	-20.21	-548.98	1,621.00	4,350.22	4,274.23	75.99	57.247			
10,800.00	6,048.00	5,863.04	5,588.71	79.67	37.61	-19.96	-548.19	1,620.49	4,449.61	4,373.62	75.99	58.553			
10,900.00	6,048.00	5,850.00	5,575.80	81.30	37.57	-19.58	-546.80	1,619.38	4,549.01	4,473.03	75.98	59.870			
11,000.00	6,048.00	5,850.00	5,575.80	82.94	37.57	-19.58	-546.80	1,619.38	4,648.42	4,572.41	76.00	61.160			
11,100.00	6,048.00	5,840.92	5,566.81	84.58	37.53	-19.34	-545.84	1,618.43	4,747.84	4,671.84	75.99	62.478			
11,200.00	6,048.00	5,833.64	5,559.63	86.22	37.50	-19.17	-545.07	1,617.56	4,847.26	4,771.27	75.99	63.791			
11,300.00	6,048.00	5,826.42	5,552.51	87.87	37.47	-19.01	-544.31	1,616.62	4,946.69	4,870.71	75.98	65.103			
11,400.00	6,048.00	5,819.25	5,545.45	89.53	37.44	-18.87	-543.56	1,615.58	5,046.14	4,970.16	75.98	66.416			
11,500.00	6,048.00	5,812.13	5,538.47	91.19	37.41	-18.74	-542.82	1,614.47	5,145.58	5,069.61	75.97	67.728			
11,600.00	6,048.00	5,800.00	5,526.58	92.85	37.35	-18.55	-541.55	1,612.38	5,245.04	5,169.09	75.95	69.060			
11,700.00	6,048.00	5,800.00	5,526.58	94.52	37.35	-18.55	-541.55	1,612.38	5,344.50	5,268.53	75.98	70.345			
11,800.00	6,048.00	5,791.14	5,517.94	96.19	37.30	-18.44	-540.63	1,610.69	5,443.97	5,368.02	75.95	71.676			
11,900.00	6,048.00	5,784.27	5,511.24	97.86	37.27	-18.36	-539.92	1,609.29	5,543.44	5,467.50	75.94	72.997			
12,000.00	6,048.00	5,777.45	5,504.63	99.54	37.23	-18.29	-539.22	1,607.81	5,642.93	5,567.00	75.93	74.318			
12,100.00	6,048.00	5,770.70	5,498.09	101.22	37.19	-18.23	-538.53	1,606.28	5,742.41	5,666.49	75.92	75.639			
12,200.00	6,048.00	5,764.02	5,491.63	102.91	37.15	-18.18	-537.85	1,604.68	5,841.91	5,766.00	75.91	76.959			
12,300.00	6,048.00	5,750.00	5,478.16	104.59	37.07	-18.11	-536.43	1,601.09	5,941.41	5,865.56	75.86	78.325			
12,400.00	6,048.00	5,750.00	5,478.16	106.28	37.07	-18.11	-536.43	1,601.09	6,040.91	5,965.03	75.89	79.606			
12,500.00	6,048.00	5,744.35	5,472.76	107.97	37.04	-18.09	-535.86	1,599.55	6,140.42	6,064.55	75.88	80.927			
12,600.00	6,048.00	5,737.93	5,466.63	109.67	36.99	-18.07	-535.21	1,597.73	6,239.94	6,164.08	75.86	82.255			
12,700.00	6,048.00	5,731.58	5,460.60	111.37	36.95	-18.06	-534.58	1,595.87	6,339.46	6,263.61	75.85	83.582			
12,800.00	6,048.00	5,725.23	5,454.58	113.07	36.91	-18.06	-533.95	1,593.94	6,438.99	6,363.15	75.83	84.910			
12,900.00	6,048.00	5,715.53	5,445.41	114.77	36.84	-18.06	-532.98	1,590.94	6,538.51	6,462.72	75.79	86.269			
13,000.00	6,048.00	5,705.84	5,436.24	116.47	36.77	-18.06	-532.02	1,587.94	6,638.04	6,562.29	75.75	87.628			
13,100.00	6,048.00	5,696.15	5,427.07	118.18	36.71	-18.06	-531.06	1,584.95	6,737.57	6,661.86	75.71	88.989			
13,200.00	6,048.00	5,686.45	5,417.90	119.88	36.64	-18.07	-530.09	1,581.95	6,837.10	6,761.43	75.67	90.349			
13,300.00	6,048.00	5,676.76	5,408.73	121.59	36.57	-18.07	-529.13	1,578.95	6,936.63	6,860.99	75.64	91.710			
13,400.00	6,048.00	5,667.07	5,399.57	123.30	36.50	-18.07	-528.17	1,575.96	7,036.16	6,960.56	75.60	93.072			
13,500.00	6,048.00	5,657.37	5,390.40	125.02	36.44	-18.07	-527.21	1,572.96	7,135.69	7,060.13	75.56	94.434			
13,600.00	6,048.00	5,647.68	5,381.23	126.73	36.37	-18.07	-526.24	1,569.96	7,235.22	7,159.69	75.53	95.797			
13,700.00	6,048.00	5,637.99	5,372.06	128.45	36.30	-18.07	-525.28	1,566.97	7,334.75	7,259.26	75.49	97.160			
13,800.00	6,048.00	5,628.29	5,362.89	130.16	36.23	-18.07	-524.32	1,563.97	7,434.28	7,358.82	75.46	98.524			
13,900.00	6,048.00	5,618.60	5,353.72	131.88	36.16	-18.07	-523.36	1,560.97	7,533.80	7,458.38	75.42	99.887			
14,000.00	6,048.00	5,608.90	5,344.56	133.60	36.10	-18.07	-522.39	1,557.98	7,633.33	7,557.94	75.39	101.251			
14,100.00	6,048.00	5,599.21	5,335.39	135.32	36.03	-18.07	-521.43	1,554.98	7,732.86	7,657.51	75.36	102.616			
14,200.00	6,048.00	5,589.52	5,326.22	137.05	35.96	-18.08	-520.47	1,551.98	7,832.39	7,757.07	75.33	103.980			
14,300.00	6,048.00	5,579.82	5,317.05	138.77	35.89	-18.08	-519.50	1,548.98	7,931.92	7,856.63	75.29	105.345			
14,400.00	6,048.00	5,570.13	5,307.88	140.50	35.83	-18.08	-518.54	1,545.99	8,031.45	7,956.19	75.26	106.710			
14,500.00	6,048.00	5,560.44	5,298.71	142.22	35.76	-18.08	-517.58	1,542.99	8,130.98	8,055.74	75.23	108.075			
14,600.00	6,048.00	5,550.74	5,289.54	143.95	35.69	-18.08	-516.62	1,539.99	8,230.51	8,155.30	75.21	109.440			
14,700.00	6,048.00	5,541.05	5,280.38	145.68	35.62	-18.08	-515.65	1,537.00	8,330.04	8,254.86	75.18	110.805			
14,800.00	6,048.00	5,531.35	5,271.21	147.41	35.56	-18.08	-514.69	1,534.00	8,429.57	8,354.42	75.15	112.170			
14,900.00	6,048.00	5,521.66	5,262.04	149.14	35.49	-18.08	-513.73	1,531.00	8,529.10	8,453.97	75.12	113.535			
15,000.00	6,048.00	5,511.97	5,252.87	150.87	35.42	-18.08	-512.76	1,528.01	8,628.62	8,553.53	75.10	114.900			
15,100.00	6,048.00	5,502.27	5,243.70	152.60	35.35	-18.08	-511.80	1,525.01	8,728.15	8,653.08	75.07	116.265			
15,200.00	6,048.00	5,492.58	5,234.53	154.33	35.29	-18.08	-510.84	1,522.01	8,827.68	8,752.64	75.05	117.630			
15,300.00	6,048.00	5,482.89	5,225.37	156.07	35.22	-18.08	-509.88	1,519.02	8,927.21	8,852.19	75.02	118.994			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,400.00	6,048.00	5,473.19	5,216.20	157.80	35.15	-18.08	-508.91	1,516.02	9,026.74	8,951.74	75.00	120.359		
15,500.00	6,048.00	5,463.50	5,207.03	159.54	35.08	-18.08	-507.95	1,513.02	9,126.27	9,051.29	74.98	121.723		
15,600.00	6,048.00	5,453.80	5,197.86	161.27	35.02	-18.09	-506.99	1,510.03	9,225.80	9,150.85	74.95	123.087		
15,700.00	6,048.00	5,444.11	5,188.69	163.01	34.95	-18.09	-506.02	1,507.03	9,325.33	9,250.40	74.93	124.451		
15,800.00	6,048.00	5,434.42	5,179.52	164.75	34.88	-18.09	-505.06	1,504.03	9,424.86	9,349.95	74.91	125.814		
15,900.00	6,048.00	5,424.72	5,170.36	166.49	34.81	-18.09	-504.10	1,501.04	9,524.39	9,449.50	74.89	127.177		
16,000.00	6,048.00	5,415.03	5,161.19	168.23	34.74	-18.09	-503.14	1,498.04	9,623.91	9,549.04	74.87	128.540		
16,100.00	6,048.00	5,405.34	5,152.02	169.97	34.68	-18.09	-502.17	1,495.04	9,723.44	9,648.59	74.85	129.902		
16,200.00	6,048.00	5,395.64	5,142.85	171.71	34.61	-18.09	-501.21	1,492.05	9,822.97	9,748.14	74.83	131.264		
16,300.00	6,048.00	5,385.95	5,133.68	173.45	34.54	-18.09	-500.25	1,489.05	9,922.50	9,847.69	74.82	132.626		
16,400.00	6,048.00	5,376.25	5,124.51	175.19	34.47	-18.09	-499.29	1,486.05	10,022.03	9,947.23	74.80	133.986		

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-176.03	-40.07	-2.78	40.17					
100.00	100.00	100.00	100.00	0.27	0.27	-176.03	-40.07	-2.78	40.17	39.63	0.54	74.700		
200.00	200.00	200.00	200.00	0.63	0.63	-176.03	-40.07	-2.78	40.17	38.91	1.25	32.014		
300.00	300.00	300.00	300.00	0.99	0.99	-176.03	-40.07	-2.78	40.17	38.20	1.97	20.373 CC, ES		
400.00	400.00	399.25	399.23	1.34	1.33	-178.09	-41.05	-1.37	41.08	38.40	2.67	15.358		
500.00	500.00	498.26	498.11	1.70	1.67	176.28	-43.97	2.86	44.10	40.72	3.37	13.067		
600.00	600.00	596.81	596.27	2.06	2.03	168.58	-48.80	9.86	49.92	45.84	4.08	12.232		
700.00	700.00	694.65	693.40	2.42	2.40	160.59	-55.49	19.55	59.20	54.41	4.79	12.368		
800.00	800.00	791.57	789.16	2.78	2.79	153.54	-63.97	31.84	72.27	66.79	5.48	13.177		
900.00	900.00	887.37	883.27	3.14	3.21	147.85	-74.16	46.60	89.17	82.99	6.17	14.447		
1,000.00	999.98	982.23	975.80	3.48	3.66	28.33	-86.00	63.76	108.25	101.42	6.84	15.837		
1,100.00	1,099.84	1,076.47	1,067.00	3.82	4.14	25.65	-99.48	83.29	127.73	120.25	7.48	17.074		
1,200.00	1,199.45	1,170.11	1,156.79	4.17	4.65	23.88	-114.55	105.13	147.38	139.25	8.13	18.133		
1,300.00	1,298.70	1,263.16	1,245.11	4.53	5.21	22.69	-131.18	129.22	167.06	158.28	8.78	19.029		
1,400.00	1,397.47	1,355.62	1,331.90	4.91	5.81	21.91	-149.30	155.48	186.72	177.28	9.43	19.791		
1,500.00	1,495.62	1,447.53	1,417.09	5.31	6.45	21.41	-168.89	183.85	206.28	196.19	10.09	20.437		
1,600.00	1,593.06	1,545.19	1,506.90	5.74	7.18	21.19	-190.68	215.42	224.50	213.63	10.86	20.667		
1,700.00	1,689.64	1,644.05	1,597.81	6.21	7.93	21.31	-212.74	247.39	239.52	227.85	11.67	20.528		
1,800.00	1,785.27	1,743.32	1,689.09	6.71	8.69	21.73	-234.90	279.50	251.33	238.83	12.50	20.101		
1,900.00	1,879.82	1,842.89	1,780.65	7.27	9.46	22.41	-257.13	311.70	259.95	246.57	13.37	19.438		
2,000.00	1,973.17	1,942.63	1,872.37	7.88	10.25	23.36	-279.39	343.95	265.41	251.12	14.28	18.581		
2,100.00	2,065.27	2,042.43	1,964.14	8.54	11.03	24.59	-301.66	376.22	267.89	252.64	15.25	17.571		
2,200.00	2,157.01	2,142.22	2,055.91	9.24	11.83	25.90	-323.94	408.50	269.66	253.41	16.25	16.591		
2,300.00	2,248.74	2,242.02	2,147.68	9.96	12.62	27.19	-346.21	440.77	271.58	254.28	17.30	15.699		
2,400.00	2,340.48	2,341.81	2,239.44	10.70	13.42	28.46	-368.49	473.04	273.63	255.24	18.38	14.885		
2,500.00	2,432.22	2,441.61	2,331.21	11.45	14.22	29.71	-390.76	505.32	275.81	256.31	19.50	14.141		
2,600.00	2,523.96	2,541.40	2,422.98	12.21	15.03	30.94	-413.04	537.59	278.12	257.46	20.66	13.461		
2,700.00	2,615.70	2,641.20	2,514.75	12.99	15.83	32.15	-435.31	569.86	280.57	258.71	21.86	12.837		
2,800.00	2,707.44	2,740.99	2,606.51	13.77	16.64	33.34	-457.59	602.14	283.13	260.05	23.08	12.265		
2,900.00	2,799.17	2,840.79	2,698.28	14.55	17.44	34.51	-479.86	634.41	285.82	261.47	24.35	11.739		
3,000.00	2,890.91	2,940.58	2,790.05	15.35	18.25	35.66	-502.14	666.68	288.62	262.98	25.64	11.256		
3,100.00	2,982.65	3,040.38	2,881.82	16.14	19.06	36.78	-524.41	698.96	291.53	264.57	26.97	10.810		
3,200.00	3,074.39	3,140.17	2,973.59	16.95	19.87	37.88	-546.69	731.23	294.56	266.24	28.32	10.400		
3,300.00	3,166.13	3,239.97	3,065.35	17.75	20.68	38.96	-568.96	763.50	297.69	267.98	29.71	10.021		
3,400.00	3,257.87	3,339.76	3,157.12	18.56	21.50	40.02	-591.24	795.77	300.93	269.81	31.12	9.670		
3,500.00	3,349.61	3,439.56	3,248.89	19.37	22.31	41.05	-613.51	828.05	304.26	271.71	32.55	9.346		
3,600.00	3,441.34	3,539.35	3,340.66	20.18	23.12	42.06	-635.79	860.32	307.70	273.68	34.01	9.046		
3,700.00	3,533.08	3,639.15	3,432.42	21.00	23.93	43.05	-658.06	892.59	311.22	275.73	35.50	8.767		
3,800.00	3,624.82	3,738.94	3,524.19	21.81	24.75	44.02	-680.34	924.87	314.84	277.84	37.00	8.509		
3,900.00	3,716.56	3,838.74	3,615.96	22.63	25.56	44.96	-702.61	957.14	318.55	280.02	38.53	8.269		
4,000.00	3,808.30	3,938.53	3,707.73	23.45	26.37	45.88	-724.89	989.41	322.34	282.27	40.07	8.045		
4,100.00	3,900.04	4,038.33	3,799.49	24.27	27.19	46.78	-747.16	1,021.69	326.21	284.58	41.63	7.836		
4,200.00	3,991.78	4,138.12	3,891.26	25.09	28.00	47.66	-769.44	1,053.96	330.16	286.95	43.20	7.642		
4,300.00	4,083.51	4,237.92	3,983.03	25.92	28.82	48.52	-791.71	1,086.23	334.18	289.39	44.79	7.461		
4,400.00	4,175.25	4,337.71	4,074.80	26.74	29.63	49.35	-813.99	1,118.51	338.28	291.88	46.40	7.291		
4,500.00	4,266.99	4,437.51	4,166.57	27.57	30.45	50.17	-836.26	1,150.78	342.45	294.44	48.01	7.132		
4,600.00	4,358.73	4,537.30	4,258.33	28.39	31.27	50.97	-858.54	1,183.05	346.69	297.05	49.64	6.984		
4,700.00	4,450.47	4,637.10	4,350.10	29.22	32.08	51.75	-880.81	1,215.32	350.99	299.71	51.28	6.844		
4,800.00	4,542.21	4,736.89	4,441.87	30.05	32.90	52.51	-903.09	1,247.60	355.36	302.43	52.93	6.714		
4,900.00	4,633.95	4,836.69	4,533.64	30.88	33.71	53.25	-925.36	1,279.87	359.78	305.19	54.59	6.591		
5,000.00	4,725.68	4,936.48	4,625.40	31.70	34.53	53.97	-947.64	1,312.14	364.27	308.01	56.26	6.475		
5,100.00	4,817.42	5,036.28	4,717.17	32.53	35.35	54.67	-969.91	1,344.42	368.81	310.88	57.93	6.366		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,200.00	4,909.16	5,136.07	4,808.94	33.36	36.16	55.36	-992.19	1,376.69	373.41	313.79	59.61	6.264		
5,300.00	5,000.90	5,235.87	4,900.71	34.19	36.98	56.03	-1,014.46	1,408.96	378.06	316.76	61.30	6.167		
5,400.00	5,092.64	5,335.66	4,992.48	35.02	37.80	56.69	-1,036.74	1,441.24	382.75	319.76	62.99	6.076		
5,500.00	5,184.38	5,435.46	5,084.24	35.85	38.61	57.32	-1,059.01	1,473.51	387.50	322.81	64.69	5.990		
5,600.00	5,276.11	5,535.25	5,176.01	36.69	39.43	57.95	-1,081.29	1,505.78	392.30	325.90	66.40	5.908		
5,700.00	5,367.85	5,635.05	5,267.78	37.52	40.25	58.55	-1,103.56	1,538.06	397.14	329.03	68.10	5.831		
5,800.00	5,459.76	5,734.75	5,359.46	38.34	41.07	67.51	-1,125.82	1,570.30	403.22	333.39	69.83	5.775 SF		
5,900.00	5,552.68	5,832.45	5,449.30	39.06	41.87	93.02	-1,147.63	1,601.89	423.10	351.47	71.63	5.907		
6,000.00	5,644.46	5,924.76	5,535.53	39.64	42.54	115.73	-1,168.60	1,626.98	459.67	386.07	73.60	6.245		
6,100.00	5,732.30	6,003.94	5,611.75	40.06	42.96	132.57	-1,187.25	1,637.12	512.59	436.95	75.64	6.777		
6,200.00	5,813.53	6,066.49	5,672.46	40.35	43.17	144.52	-1,202.18	1,637.42	581.06	503.90	77.17	7.530		
6,300.00	5,885.68	6,112.38	5,716.82	40.51	43.28	153.55	-1,213.12	1,633.31	662.69	584.63	78.06	8.490		
6,400.00	5,946.56	6,143.08	5,746.26	40.57	43.33	161.90	-1,220.40	1,628.52	753.96	675.51	78.45	9.611		
6,500.00	5,994.33	6,160.31	5,762.66	40.54	43.35	176.35	-1,224.46	1,625.13	851.17	772.62	78.55	10.836		
6,600.00	6,027.53	6,165.46	5,767.53	40.44	43.35	-71.80	-1,225.67	1,624.01	950.81	872.32	78.49	12.114		
6,700.00	6,045.15	6,159.32	5,761.72	40.29	43.35	-32.36	-1,224.23	1,625.33	1,049.83	971.47	78.36	13.397		
6,800.00	6,048.00	6,143.09	5,746.27	40.12	43.33	-26.98	-1,220.40	1,628.52	1,146.00	1,067.79	78.20	14.654		
6,900.00	6,048.00	6,124.82	5,728.78	39.97	43.30	-25.26	-1,216.08	1,631.57	1,241.71	1,163.66	78.05	15.909		
7,000.00	6,048.00	6,106.44	5,711.11	39.85	43.27	-23.74	-1,211.71	1,634.05	1,337.72	1,259.80	77.92	17.167		
7,100.00	6,048.00	6,088.01	5,693.31	39.76	43.23	-22.42	-1,207.32	1,635.95	1,433.97	1,356.17	77.80	18.431		
7,200.00	6,048.00	6,069.55	5,675.43	39.72	43.18	-21.27	-1,202.91	1,637.26	1,530.42	1,452.72	77.70	19.697		
7,300.00	6,048.00	6,050.00	5,656.46	39.71	43.13	-20.23	-1,198.24	1,638.01	1,627.02	1,549.42	77.60	20.967		
7,400.00	6,048.00	6,032.72	5,639.68	39.75	43.07	-19.46	-1,194.11	1,638.11	1,723.75	1,646.24	77.51	22.238		
7,500.00	6,048.00	6,014.42	5,621.92	39.85	43.00	-18.76	-1,189.75	1,637.65	1,820.60	1,743.17	77.43	23.513		
7,600.00	6,048.00	6,000.00	5,607.93	40.01	42.94	-18.30	-1,186.32	1,636.87	1,917.55	1,840.16	77.39	24.778		
7,700.00	6,048.00	5,978.24	5,586.87	40.24	42.84	-17.73	-1,181.15	1,635.02	2,014.57	1,937.31	77.26	26.074		
7,800.00	6,048.00	5,960.42	5,569.69	40.57	42.75	-17.37	-1,176.95	1,632.89	2,111.68	2,034.49	77.18	27.359		
7,900.00	6,048.00	5,942.83	5,552.79	40.99	42.65	-17.09	-1,172.82	1,630.25	2,208.85	2,131.75	77.10	28.649		
8,000.00	6,048.00	5,925.49	5,536.23	41.53	42.54	-16.89	-1,168.77	1,627.12	2,306.10	2,229.09	77.01	29.945		
8,100.00	6,048.00	5,908.43	5,520.02	42.19	42.44	-16.76	-1,164.82	1,623.55	2,403.40	2,326.48	76.92	31.244		
8,200.00	6,048.00	5,891.67	5,504.21	42.97	42.32	-16.69	-1,160.97	1,619.55	2,500.76	2,423.93	76.83	32.550		
8,300.00	6,048.00	5,875.23	5,488.81	43.85	42.20	-16.67	-1,157.22	1,615.17	2,598.18	2,521.45	76.73	33.862		
8,400.00	6,048.00	5,859.13	5,473.86	44.83	42.08	-16.70	-1,153.59	1,610.44	2,695.65	2,619.02	76.63	35.177		
8,500.00	6,048.00	5,840.95	5,457.12	45.90	41.94	-16.77	-1,149.52	1,604.64	2,793.17	2,716.66	76.51	36.508		
8,600.00	6,048.00	5,818.88	5,436.82	47.05	41.75	-16.86	-1,144.60	1,597.50	2,890.69	2,814.35	76.34	37.866		
8,700.00	6,048.00	5,796.81	5,416.52	48.25	41.57	-16.95	-1,139.67	1,590.37	2,988.22	2,912.05	76.17	39.230		
8,800.00	6,048.00	5,774.74	5,396.23	49.51	41.39	-17.03	-1,134.74	1,583.23	3,085.75	3,009.75	76.01	40.598		
8,900.00	6,048.00	5,752.66	5,375.93	50.81	41.21	-17.10	-1,129.82	1,576.09	3,183.28	3,107.44	75.84	41.973		
9,000.00	6,048.00	5,730.59	5,355.64	52.15	41.03	-17.17	-1,124.89	1,568.95	3,280.81	3,205.14	75.68	43.352		
9,100.00	6,048.00	5,708.52	5,335.34	53.53	40.85	-17.24	-1,119.96	1,561.82	3,378.34	3,302.83	75.52	44.737		
9,200.00	6,048.00	5,686.45	5,315.05	54.94	40.67	-17.30	-1,115.04	1,554.68	3,475.87	3,400.52	75.35	46.128		
9,300.00	6,048.00	5,664.38	5,294.75	56.37	40.49	-17.36	-1,110.11	1,547.54	3,573.40	3,498.21	75.19	47.523		
9,400.00	6,048.00	5,642.31	5,274.46	57.82	40.31	-17.42	-1,105.19	1,540.40	3,670.93	3,595.90	75.03	48.924		
9,500.00	6,048.00	5,620.24	5,254.16	59.30	40.13	-17.47	-1,100.26	1,533.27	3,768.47	3,693.59	74.88	50.329		
9,600.00	6,048.00	5,598.17	5,233.86	60.79	39.95	-17.52	-1,095.33	1,526.13	3,866.00	3,791.28	74.72	51.740		
9,700.00	6,048.00	5,576.10	5,213.57	62.30	39.77	-17.57	-1,090.41	1,518.99	3,963.53	3,888.96	74.56	53.156		
9,800.00	6,048.00	5,554.03	5,193.27	63.82	39.59	-17.61	-1,085.48	1,511.85	4,061.06	3,986.65	74.41	54.576		
9,900.00	6,048.00	5,531.95	5,172.98	65.36	39.40	-17.66	-1,080.55	1,504.72	4,158.59	4,084.33	74.26	56.002		
10,000.00	6,048.00	5,509.88	5,152.68	66.91	39.22	-17.70	-1,075.63	1,497.58	4,256.12	4,182.02	74.11	57.432		
10,100.00	6,048.00	5,487.81	5,132.39	68.48	39.04	-17.74	-1,070.70	1,490.44	4,353.65	4,279.70	73.96	58.867		
10,200.00	6,048.00	5,465.74	5,112.09	70.05	38.86	-17.78	-1,065.77	1,483.30	4,451.19	4,377.38	73.81	60.306		
10,300.00	6,048.00	5,443.67	5,091.79	71.63	38.68	-17.81	-1,060.85	1,476.16	4,548.72	4,475.06	73.66	61.751		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,400.00	6,048.00	5,421.60	5,071.50	73.23	38.50	-17.85	-1,055.92	1,469.03	4,646.25	4,572.73	73.52	63.199		
10,500.00	6,048.00	5,399.53	5,051.20	74.83	38.32	-17.88	-1,050.99	1,461.89	4,743.78	4,670.41	73.37	64.652		
10,600.00	6,048.00	5,377.46	5,030.91	76.43	38.14	-17.91	-1,046.07	1,454.75	4,841.31	4,768.08	73.23	66.110		
10,700.00	6,048.00	5,355.39	5,010.61	78.05	37.96	-17.94	-1,041.14	1,447.61	4,938.85	4,865.76	73.09	67.572		
10,800.00	6,048.00	5,333.32	4,990.32	79.67	37.78	-17.97	-1,036.22	1,440.48	5,036.38	4,963.43	72.95	69.038		
10,900.00	6,048.00	5,311.24	4,970.02	81.30	37.60	-18.00	-1,031.29	1,433.34	5,133.91	5,061.10	72.81	70.508		
11,000.00	6,048.00	5,289.17	4,949.72	82.94	37.42	-18.03	-1,026.36	1,426.20	5,231.44	5,158.77	72.68	71.983		
11,100.00	6,048.00	5,267.10	4,929.43	84.58	37.24	-18.05	-1,021.44	1,419.06	5,328.98	5,256.43	72.54	73.461		
11,200.00	6,048.00	5,245.03	4,909.13	86.22	37.06	-18.08	-1,016.51	1,411.93	5,426.51	5,354.10	72.41	74.943		
11,300.00	6,048.00	5,222.96	4,888.84	87.87	36.88	-18.10	-1,011.58	1,404.79	5,524.04	5,451.77	72.28	76.430		
11,400.00	6,048.00	5,200.89	4,868.54	89.53	36.69	-18.13	-1,006.66	1,397.65	5,621.57	5,549.43	72.15	77.920		
11,500.00	6,048.00	5,178.82	4,848.25	91.19	36.51	-18.15	-1,001.73	1,390.51	5,719.11	5,647.09	72.02	79.414		
11,600.00	6,048.00	5,156.75	4,827.95	92.85	36.33	-18.17	-996.80	1,383.38	5,816.64	5,744.75	71.89	80.911		
11,700.00	6,048.00	5,134.68	4,807.66	94.52	36.15	-18.19	-991.88	1,376.24	5,914.17	5,842.41	71.76	82.412		
11,800.00	6,048.00	5,112.61	4,787.36	96.19	35.97	-18.22	-986.95	1,369.10	6,011.70	5,940.07	71.64	83.917		
11,900.00	6,048.00	5,090.53	4,767.06	97.86	35.79	-18.24	-982.02	1,361.96	6,109.24	6,037.72	71.52	85.425		
12,000.00	6,048.00	5,068.46	4,746.77	99.54	35.61	-18.25	-977.10	1,354.83	6,206.77	6,135.38	71.39	86.936		
12,100.00	6,048.00	5,046.39	4,726.47	101.22	35.43	-18.27	-972.17	1,347.69	6,304.30	6,233.03	71.27	88.451		
12,200.00	6,048.00	5,024.32	4,706.18	102.91	35.25	-18.29	-967.25	1,340.55	6,401.84	6,330.68	71.16	89.969		
12,300.00	6,048.00	5,002.25	4,685.88	104.59	35.07	-18.31	-962.32	1,333.41	6,499.37	6,428.33	71.04	91.490		
12,400.00	6,048.00	4,980.18	4,665.59	106.28	34.89	-18.33	-957.39	1,326.27	6,596.90	6,525.98	70.92	93.014		
12,500.00	6,048.00	4,958.11	4,645.29	107.97	34.71	-18.34	-952.47	1,319.14	6,694.44	6,623.63	70.81	94.541		
12,600.00	6,048.00	4,936.04	4,624.99	109.67	34.53	-18.36	-947.54	1,312.00	6,791.97	6,721.27	70.70	96.070		
12,700.00	6,048.00	4,913.97	4,604.70	111.37	34.35	-18.38	-942.61	1,304.86	6,889.50	6,818.91	70.59	97.603		
12,800.00	6,048.00	4,891.90	4,584.40	113.07	34.17	-18.39	-937.69	1,297.72	6,987.03	6,916.56	70.48	99.139		
12,900.00	6,048.00	4,869.82	4,564.11	114.77	33.99	-18.41	-932.76	1,290.59	7,084.57	7,014.20	70.37	100.677		
13,000.00	6,048.00	4,847.75	4,543.81	116.47	33.81	-18.42	-927.83	1,283.45	7,182.10	7,111.84	70.26	102.217		
13,100.00	6,048.00	4,825.68	4,523.52	118.18	33.62	-18.43	-922.91	1,276.31	7,279.63	7,209.48	70.16	103.760		
13,200.00	6,048.00	4,803.61	4,503.22	119.88	33.44	-18.45	-917.98	1,269.17	7,377.17	7,307.11	70.05	105.306		
13,300.00	6,048.00	4,781.54	4,482.92	121.59	33.26	-18.46	-913.06	1,262.04	7,474.70	7,404.75	69.95	106.853		
13,400.00	6,048.00	4,759.47	4,462.63	123.30	33.08	-18.47	-908.13	1,254.90	7,572.23	7,502.38	69.85	108.403		
13,500.00	6,048.00	4,737.40	4,442.33	125.02	32.90	-18.49	-903.20	1,247.76	7,669.77	7,600.01	69.75	109.956		
13,600.00	6,048.00	4,715.33	4,422.04	126.73	32.72	-18.50	-898.28	1,240.62	7,767.30	7,697.64	69.66	111.510		
13,700.00	6,048.00	4,693.26	4,401.74	128.45	32.54	-18.51	-893.35	1,233.49	7,864.83	7,795.27	69.56	113.066		
13,800.00	6,048.00	4,671.19	4,381.45	130.16	32.36	-18.52	-888.42	1,226.35	7,962.37	7,892.90	69.46	114.624		
13,900.00	6,048.00	4,649.11	4,361.15	131.88	32.18	-18.53	-883.50	1,219.21	8,059.90	7,990.53	69.37	116.184		
14,000.00	6,048.00	4,627.04	4,340.86	133.60	32.00	-18.55	-878.57	1,212.07	8,157.43	8,088.15	69.28	117.746		
14,100.00	6,048.00	4,604.97	4,320.56	135.32	31.82	-18.56	-873.64	1,204.94	8,254.97	8,185.78	69.19	119.310		
14,200.00	6,048.00	4,582.90	4,300.26	137.05	31.64	-18.57	-868.72	1,197.80	8,352.50	8,283.40	69.10	120.875		
14,300.00	6,048.00	4,560.83	4,279.97	138.77	31.46	-18.58	-863.79	1,190.66	8,450.03	8,381.02	69.01	122.441		
14,400.00	6,048.00	4,538.76	4,259.67	140.50	31.28	-18.59	-858.86	1,183.52	8,547.57	8,478.64	68.93	124.009		
14,500.00	6,048.00	4,516.69	4,239.38	142.22	31.10	-18.60	-853.94	1,176.39	8,645.10	8,576.26	68.84	125.579		
14,600.00	6,048.00	4,494.62	4,219.08	143.95	30.92	-18.61	-849.01	1,169.25	8,742.63	8,673.88	68.76	127.149		
14,700.00	6,048.00	4,472.55	4,198.79	145.68	30.74	-18.62	-844.09	1,162.11	8,840.17	8,771.49	68.68	128.721		
14,800.00	6,048.00	4,450.48	4,178.49	147.41	30.56	-18.63	-839.16	1,154.97	8,937.70	8,869.10	68.60	130.294		
14,900.00	6,048.00	4,428.41	4,158.19	149.14	30.38	-18.64	-834.23	1,147.83	9,035.23	8,966.72	68.52	131.868		
15,000.00	6,048.00	4,406.33	4,137.90	150.87	30.20	-18.64	-829.31	1,140.70	9,132.77	9,064.33	68.44	133.443		
15,100.00	6,048.00	4,384.26	4,117.60	152.60	30.02	-18.65	-824.38	1,133.56	9,230.30	9,161.94	68.36	135.019		
15,200.00	6,048.00	4,362.19	4,097.31	154.33	29.83	-18.66	-819.45	1,126.42	9,327.83	9,259.55	68.29	136.596		
15,300.00	6,048.00	4,340.12	4,077.01	156.07	29.65	-18.67	-814.53	1,119.28	9,425.37	9,357.15	68.21	138.174		
15,400.00	6,048.00	4,318.05	4,056.72	157.80	29.47	-18.68	-809.60	1,112.15	9,522.90	9,454.76	68.14	139.752		
15,500.00	6,048.00	4,295.98	4,036.42	159.54	29.29	-18.69	-804.67	1,105.01	9,620.43	9,552.36	68.07	141.330		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,600.00	6,048.00	4,273.91	4,016.13	161.27	29.11	-18.69	-799.75	1,097.87	9,717.97	9,649.97	68.00	142.910		
15,700.00	6,048.00	4,251.84	3,995.83	163.01	28.93	-18.70	-794.82	1,090.73	9,815.50	9,747.57	67.93	144.489		
15,800.00	6,048.00	4,229.77	3,975.53	164.75	28.75	-18.71	-789.89	1,083.60	9,913.04	9,845.17	67.87	146.069		
15,900.00	6,048.00	4,207.70	3,955.24	166.49	28.57	-18.72	-784.97	1,076.46	10,010.57	9,942.77	67.80	147.650		

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-GYRO-MWD													Offset Well Error:	0.00 usft
SEC 9-T5N-R61W - ABND VERT PRONGHORN 41-9 (GYRO) - GYRO SURVEY - GYRO SURVEY														
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)	Minimum Separation (usft)	Separation Factor	Warning	
100.00	100.00	82.20	82.20	0.27	0.13	144.79	-947.44	668.56	1,159.63	1,159.23	0.40	2,918.777		
200.00	200.00	180.03	180.02	0.63	0.45	144.77	-948.13	669.46	1,160.73	1,159.67	1.06	1,090.485		
300.00	300.00	279.62	279.61	0.99	0.80	144.76	-948.89	670.34	1,161.86	1,160.09	1.77	655.795		
400.00	400.00	382.18	382.16	1.34	1.16	144.77	-949.87	670.85	1,162.93	1,160.44	2.49	467.172		
500.00	500.00	486.74	486.72	1.70	1.52	144.80	-950.91	670.73	1,163.68	1,160.46	3.21	361.991		
600.00	600.00	585.14	585.11	2.06	1.86	144.83	-951.65	670.66	1,164.25	1,160.33	3.92	297.175		
700.00	700.00	685.10	685.06	2.42	2.21	144.85	-952.46	670.72	1,164.95	1,160.32	4.63	251.811		
800.00	800.00	789.86	789.82	2.78	2.58	144.87	-953.20	670.58	1,165.45	1,160.10	5.35	217.792		
900.00	900.00	887.38	887.35	3.14	2.92	144.88	-953.60	670.60	1,165.80	1,159.75	6.05	192.670		
1,000.00	999.98	988.54	988.50	3.48	3.27	29.58	-954.05	670.77	1,164.74	1,157.99	6.75	172.523		
1,100.00	1,099.84	1,093.73	1,093.69	3.82	3.64	29.77	-954.30	670.73	1,160.36	1,152.91	7.46	155.620		
1,200.00	1,199.45	1,192.65	1,192.61	4.17	3.98	30.05	-954.19	670.77	1,152.74	1,144.60	8.14	141.540		
1,300.00	1,298.70	1,288.61	1,288.57	4.53	4.31	30.45	-954.19	670.99	1,142.32	1,133.49	8.83	129.379		
1,400.00	1,397.47	1,388.68	1,388.64	4.91	4.66	30.99	-954.39	671.12	1,129.07	1,119.53	9.54	118.400		
1,500.00	1,495.62	1,488.90	1,488.86	5.31	5.01	31.68	-954.53	671.05	1,112.76	1,102.51	10.25	108.559		
1,600.00	1,593.06	1,585.53	1,585.49	5.74	5.35	32.50	-954.55	671.01	1,093.56	1,082.60	10.96	99.752		
1,700.00	1,689.64	1,676.60	1,676.56	6.21	5.67	33.45	-954.82	671.05	1,071.91	1,060.24	11.67	91.839		
1,800.00	1,785.27	1,764.77	1,764.73	6.71	5.98	34.54	-955.71	671.14	1,048.23	1,035.84	12.39	84.606		
1,900.00	1,879.82	1,854.37	1,854.31	7.27	6.29	35.85	-957.28	671.31	1,022.72	1,009.58	13.14	77.853		
2,000.00	1,973.17	1,949.17	1,949.09	7.88	6.62	37.43	-959.15	671.62	995.11	981.18	13.93	71.427		
2,100.00	2,065.27	2,045.86	2,045.77	8.54	6.96	39.18	-960.76	671.65	965.07	950.30	14.77	65.333		
2,200.00	2,157.01	2,142.60	2,142.49	9.24	7.30	40.82	-962.23	671.11	934.62	918.98	15.64	59.751		
2,300.00	2,248.74	2,239.84	2,239.73	9.96	7.64	42.56	-963.00	670.52	904.25	887.71	16.55	54.648		
2,400.00	2,340.48	2,334.54	2,334.43	10.70	7.97	44.36	-963.38	669.80	874.27	856.79	17.48	50.017		
2,500.00	2,432.22	2,428.78	2,428.67	11.45	8.30	46.27	-963.43	668.97	844.81	826.37	18.45	45.795		
2,600.00	2,523.96	2,521.26	2,521.14	12.21	8.63	48.27	-963.26	668.13	816.09	796.64	19.45	41.958		
2,700.00	2,615.70	2,612.02	2,611.89	12.99	8.94	50.37	-963.12	667.21	788.41	767.92	20.49	38.476		
2,800.00	2,707.44	2,702.46	2,702.33	13.77	9.26	52.59	-963.07	666.30	761.99	740.42	21.57	35.322		
2,900.00	2,799.17	2,795.51	2,795.38	14.55	9.58	55.01	-962.96	665.40	736.82	714.12	22.70	32.454		
3,000.00	2,890.91	2,884.53	2,884.39	15.35	9.89	57.51	-962.95	664.14	713.11	689.24	23.87	29.874		
3,100.00	2,982.65	2,971.28	2,971.12	16.14	10.20	60.11	-963.42	662.44	691.47	666.39	25.08	27.575		
3,200.00	3,074.39	3,061.52	3,061.34	16.95	10.52	62.95	-964.35	660.83	672.11	645.78	26.33	25.531		
3,300.00	3,166.13	3,154.80	3,154.61	17.75	10.84	66.00	-965.18	659.48	654.60	626.99	27.61	23.708		
3,400.00	3,257.87	3,246.92	3,246.72	18.56	11.16	69.11	-965.70	658.67	638.90	609.98	28.91	22.098		
3,500.00	3,349.61	3,337.97	3,337.77	19.37	11.48	72.31	-966.32	657.76	625.51	595.29	30.22	20.696		
3,600.00	3,441.34	3,430.92	3,430.71	20.18	11.81	75.71	-966.83	656.66	614.39	582.85	31.54	19.479		
3,700.00	3,533.08	3,524.26	3,524.04	21.00	12.14	79.21	-967.02	655.60	605.49	572.64	32.85	18.432		
3,800.00	3,624.82	3,616.15	3,615.92	21.81	12.46	82.73	-967.09	654.71	599.05	564.92	34.13	17.554		
3,900.00	3,716.56	3,708.05	3,707.82	22.63	12.78	86.29	-967.11	653.93	595.23	559.87	35.36	16.832		
3,993.29	3,802.15	3,793.88	3,793.65	23.40	13.08	89.64	-967.08	653.26	594.07	557.60	36.47	16.289 CC		
4,000.00	3,808.30	3,800.06	3,799.83	23.45	13.10	89.88	-967.07	653.21	594.08	557.53	36.55	16.255 ES		
4,100.00	3,900.04	3,893.37	3,893.14	24.27	13.42	93.52	-966.83	652.52	595.49	557.82	37.68	15.806		
4,200.00	3,991.78	3,989.45	3,989.21	25.09	13.76	97.24	-966.14	652.04	599.16	560.42	38.74	15.465		
4,300.00	4,083.51	4,081.93	4,081.69	25.92	14.08	100.78	-965.05	651.83	605.04	565.32	39.72	15.232		
4,400.00	4,175.25	4,171.45	4,171.20	26.74	14.39	104.13	-964.04	651.59	613.61	573.00	40.61	15.109		
4,500.00	4,266.99	4,257.14	4,256.88	27.57	14.69	107.24	-963.63	651.24	625.20	583.79	41.41	15.097 SF		
4,600.00	4,358.73	4,343.08	4,342.82	28.39	14.99	110.21	-964.20	650.56	640.08	597.93	42.14	15.188		
4,700.00	4,450.47	4,431.79	4,431.52	29.22	15.30	113.13	-965.42	649.67	657.65	614.81	42.84	15.352		
4,800.00	4,542.21	4,522.10	4,521.81	30.05	15.62	115.92	-967.19	648.89	677.36	633.86	43.50	15.572		
4,900.00	4,633.95	4,611.72	4,611.39	30.88	15.93	118.51	-969.47	648.16	699.05	654.93	44.12	15.843		
5,000.00	4,725.68	4,704.02	4,703.65	31.70	16.26	120.97	-972.54	647.73	722.35	677.60	44.75	16.142		
5,100.00	4,817.42	4,798.88	4,798.44	32.53	16.59	123.31	-976.07	647.74	746.74	701.36	45.39	16.453		

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

Civitas Resources

Anticollision Report

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Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-GYRO-MWD													Offset Well Error:	0.00 usft
Reference				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)	Minimum Separation (usft)	Separation Factor		
5,200.00	4,909.16	4,895.98	4,895.49	33.36	16.93	125.57	-979.26	648.06	771.84	725.82	46.02	16.772		
5,300.00	5,000.90	4,992.13	4,991.60	34.19	17.27	127.70	-981.88	648.70	797.49	750.86	46.63	17.104		
5,400.00	5,092.64	5,087.02	5,086.46	35.02	17.60	129.69	-984.13	649.59	823.76	776.55	47.21	17.449		
5,500.00	5,184.38	5,178.01	5,177.43	35.85	17.92	131.51	-985.92	650.38	850.85	803.09	47.75	17.818		
5,600.00	5,276.11	5,270.49	5,269.89	36.69	18.24	133.28	-987.51	650.97	878.91	830.61	48.30	18.197		
5,700.00	5,367.85	5,363.97	5,363.36	37.52	18.57	134.95	-989.15	651.68	907.64	858.79	48.85	18.579		
5,800.00	5,459.76	5,453.60	5,452.97	38.34	18.89	145.90	-990.90	652.42	937.46	888.08	49.38	18.983		
5,900.00	5,552.68	5,540.67	5,540.02	39.06	19.19	174.99	-992.41	652.59	972.43	922.49	49.94	19.472		
6,000.00	5,644.46	5,624.09	5,623.43	39.64	19.48	-159.65	-993.63	652.13	1,012.31	961.79	50.52	20.036		
6,100.00	5,732.30	5,700.00	5,699.32	40.06	19.75	-141.60	-994.06	650.72	1,056.45	1,005.34	51.11	20.670		
6,200.00	5,813.53	5,809.48	5,808.79	40.35	20.13	-130.18	-994.50	649.58	1,102.86	1,050.81	52.04	21.191		
6,300.00	5,885.68	5,907.63	5,906.91	40.51	20.47	-122.44	-995.77	651.45	1,150.45	1,097.50	52.95	21.727		
6,400.00	5,946.56	5,900.00	5,899.29	40.57	20.45	-112.46	-995.64	651.20	1,202.67	1,149.54	53.14	22.634		
6,500.00	5,994.33	5,900.00	5,899.29	40.54	20.45	-103.26	-995.64	651.20	1,259.80	1,206.45	53.35	23.613		
6,600.00	6,027.53	5,900.00	5,899.29	40.44	20.45	-94.65	-995.64	651.20	1,319.61	1,266.00	53.61	24.617		
6,700.00	6,045.15	5,900.00	5,899.29	40.29	20.45	-86.91	-995.64	651.20	1,380.03	1,326.12	53.92	25.596		
6,800.00	6,048.00	5,900.00	5,899.29	40.12	20.45	-82.87	-995.64	651.20	1,439.86	1,385.58	54.28	26.529		
6,900.00	6,048.00	5,900.00	5,899.29	39.97	20.45	-82.87	-995.64	651.20	1,502.90	1,448.30	54.60	27.526		
7,000.00	6,048.00	5,900.00	5,899.29	39.85	20.45	-82.87	-995.64	651.20	1,569.79	1,514.92	54.87	28.612		
7,100.00	6,048.00	5,900.00	5,899.29	39.76	20.45	-82.87	-995.64	651.20	1,640.05	1,584.96	55.08	29.773		
7,200.00	6,048.00	5,900.00	5,899.29	39.72	20.45	-82.87	-995.64	651.20	1,713.26	1,658.00	55.26	31.002		
7,300.00	6,048.00	5,900.00	5,899.29	39.71	20.45	-82.87	-995.64	651.20	1,789.08	1,733.67	55.41	32.290		
7,400.00	6,048.00	5,900.00	5,899.29	39.75	20.45	-82.87	-995.64	651.20	1,867.17	1,811.65	55.52	33.630		
7,500.00	6,048.00	5,900.00	5,899.29	39.85	20.45	-82.87	-995.64	651.20	1,947.26	1,891.65	55.61	35.015		
7,600.00	6,048.00	5,900.00	5,899.29	40.01	20.45	-82.87	-995.64	651.20	2,029.13	1,973.44	55.68	36.440		
7,700.00	6,048.00	5,900.00	5,899.29	40.24	20.45	-82.87	-995.64	651.20	2,112.55	2,056.81	55.74	37.901		
7,800.00	6,048.00	5,900.00	5,899.29	40.57	20.45	-82.87	-995.64	651.20	2,197.36	2,141.58	55.78	39.392		
7,900.00	6,048.00	5,900.00	5,899.29	40.99	20.45	-82.87	-995.64	651.20	2,283.40	2,227.59	55.81	40.911		
8,000.00	6,048.00	5,900.00	5,899.29	41.53	20.45	-82.87	-995.64	651.20	2,370.54	2,314.70	55.84	42.454		
8,100.00	6,048.00	5,900.00	5,899.29	42.19	20.45	-82.87	-995.64	651.20	2,458.65	2,402.80	55.85	44.019		
8,200.00	6,048.00	5,900.00	5,899.29	42.97	20.45	-82.87	-995.64	651.20	2,547.64	2,491.78	55.87	45.603		
8,300.00	6,048.00	5,900.00	5,899.29	43.85	20.45	-82.87	-995.64	651.20	2,637.42	2,581.55	55.87	47.204		
8,400.00	6,048.00	5,900.00	5,899.29	44.83	20.45	-82.87	-995.64	651.20	2,727.92	2,672.04	55.88	48.820		
8,500.00	6,048.00	5,900.00	5,899.29	45.90	20.45	-82.87	-995.64	651.20	2,819.05	2,763.17	55.88	50.450		
8,600.00	6,048.00	5,900.00	5,899.29	47.05	20.45	-82.87	-995.64	651.20	2,910.77	2,854.89	55.88	52.092		
8,700.00	6,048.00	5,900.00	5,899.29	48.25	20.45	-82.87	-995.64	651.20	3,003.01	2,947.14	55.87	53.745		
8,800.00	6,048.00	5,900.00	5,899.29	49.51	20.45	-82.87	-995.64	651.20	3,095.74	3,039.87	55.87	55.408		
8,900.00	6,048.00	5,900.00	5,899.29	50.81	20.45	-82.87	-995.64	651.20	3,188.91	3,133.04	55.87	57.080		
9,000.00	6,048.00	5,900.00	5,899.29	52.15	20.45	-82.87	-995.64	651.20	3,282.48	3,226.61	55.86	58.759		
9,100.00	6,048.00	5,900.00	5,899.29	53.53	20.45	-82.87	-995.64	651.20	3,376.41	3,320.56	55.86	60.446		
9,200.00	6,048.00	5,900.00	5,899.29	54.94	20.45	-82.87	-995.64	651.20	3,470.69	3,414.84	55.85	62.139		
9,300.00	6,048.00	5,900.00	5,899.29	56.37	20.45	-82.87	-995.64	651.20	3,565.28	3,509.43	55.85	63.837		
9,400.00	6,048.00	5,900.00	5,899.29	57.82	20.45	-82.87	-995.64	651.20	3,660.16	3,604.31	55.85	65.540		
9,500.00	6,048.00	5,900.00	5,899.29	59.30	20.45	-82.87	-995.64	651.20	3,755.30	3,699.45	55.84	67.248		
9,600.00	6,048.00	5,900.00	5,899.29	60.79	20.45	-82.87	-995.64	651.20	3,850.69	3,794.85	55.84	68.960		
9,700.00	6,048.00	5,900.00	5,899.29	62.30	20.45	-82.87	-995.64	651.20	3,946.30	3,890.46	55.84	70.675		
9,800.00	6,048.00	5,900.00	5,899.29	63.82	20.45	-82.87	-995.64	651.20	4,042.13	3,986.29	55.84	72.393		
9,900.00	6,048.00	5,900.00	5,899.29	65.36	20.45	-82.87	-995.64	651.20	4,138.16	4,082.32	55.84	74.113		
10,000.00	6,048.00	5,900.00	5,899.29	66.91	20.45	-82.87	-995.64	651.20	4,234.37	4,178.53	55.84	75.836		
10,100.00	6,048.00	5,900.00	5,899.29	68.48	20.45	-82.87	-995.64	651.20	4,330.75	4,274.91	55.84	77.561		
10,200.00	6,048.00	5,900.00	5,899.29	70.05	20.45	-82.87	-995.64	651.20	4,427.29	4,371.45	55.84	79.288		
10,300.00	6,048.00	5,900.00	5,899.29	71.63	20.45	-82.87	-995.64	651.20	4,523.98	4,468.14	55.84	81.015		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 100-GYRO-MWD													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
10,400.00	6,048.00	5,900.00	5,899.29	73.23	20.45	-82.87	-995.64	651.20	4,620.82	4,564.97	55.84	82.744			
10,500.00	6,048.00	5,900.00	5,899.29	74.83	20.45	-82.87	-995.64	651.20	4,717.78	4,661.93	55.85	84.474			
10,600.00	6,048.00	5,900.00	5,899.29	76.43	20.45	-82.87	-995.64	651.20	4,814.87	4,759.02	55.85	86.204			
10,700.00	6,048.00	5,900.00	5,899.29	78.05	20.45	-82.87	-995.64	651.20	4,912.08	4,856.22	55.86	87.934			
10,800.00	6,048.00	5,900.00	5,899.29	79.67	20.45	-82.87	-995.64	651.20	5,009.39	4,953.53	55.87	89.665			
10,900.00	6,048.00	5,900.00	5,899.29	81.30	20.45	-82.87	-995.64	651.20	5,106.81	5,050.94	55.88	91.395			
11,000.00	6,048.00	5,900.00	5,899.29	82.94	20.45	-82.87	-995.64	651.20	5,204.33	5,148.45	55.89	93.125			
11,100.00	6,048.00	5,900.00	5,899.29	84.58	20.45	-82.87	-995.64	651.20	5,301.94	5,246.05	55.90	94.855			
11,200.00	6,048.00	5,900.00	5,899.29	86.22	20.45	-82.87	-995.64	651.20	5,399.64	5,343.73	55.91	96.584			
11,300.00	6,048.00	5,900.00	5,899.29	87.87	20.45	-82.87	-995.64	651.20	5,497.42	5,441.50	55.92	98.312			
11,400.00	6,048.00	5,900.00	5,899.29	89.53	20.45	-82.87	-995.64	651.20	5,595.28	5,539.35	55.93	100.039			
11,500.00	6,048.00	5,900.00	5,899.29	91.19	20.45	-82.87	-995.64	651.20	5,693.21	5,637.27	55.94	101.766			
11,600.00	6,048.00	5,900.00	5,899.29	92.85	20.45	-82.87	-995.64	651.20	5,791.22	5,735.26	55.96	103.491			
11,700.00	6,048.00	5,900.00	5,899.29	94.52	20.45	-82.87	-995.64	651.20	5,889.29	5,833.31	55.97	105.214			
11,800.00	6,048.00	5,900.00	5,899.29	96.19	20.45	-82.87	-995.64	651.20	5,987.42	5,931.43	55.99	106.937			
11,900.00	6,048.00	5,900.00	5,899.29	97.86	20.45	-82.87	-995.64	651.20	6,085.62	6,029.61	56.01	108.657			
12,000.00	6,048.00	5,900.00	5,899.29	99.54	20.45	-82.87	-995.64	651.20	6,183.87	6,127.85	56.03	110.376			
12,100.00	6,048.00	5,900.00	5,899.29	101.22	20.45	-82.87	-995.64	651.20	6,282.18	6,226.14	56.04	112.093			
12,200.00	6,048.00	5,900.00	5,899.29	102.91	20.45	-82.87	-995.64	651.20	6,380.54	6,324.48	56.06	113.808			
12,300.00	6,048.00	5,900.00	5,899.29	104.59	20.45	-82.87	-995.64	651.20	6,478.95	6,422.87	56.08	115.522			
12,400.00	6,048.00	5,900.00	5,899.29	106.28	20.45	-82.87	-995.64	651.20	6,577.41	6,521.31	56.11	117.233			
12,500.00	6,048.00	5,900.00	5,899.29	107.97	20.45	-82.87	-995.64	651.20	6,675.92	6,619.79	56.13	118.941			
12,600.00	6,048.00	5,900.00	5,899.29	109.67	20.45	-82.87	-995.64	651.20	6,774.47	6,718.32	56.15	120.648			
12,700.00	6,048.00	5,900.00	5,899.29	111.37	20.45	-82.87	-995.64	651.20	6,873.06	6,816.88	56.17	122.352			
12,800.00	6,048.00	5,900.00	5,899.29	113.07	20.45	-82.87	-995.64	651.20	6,971.69	6,915.49	56.20	124.054			
12,900.00	6,048.00	5,900.00	5,899.29	114.77	20.45	-82.87	-995.64	651.20	7,070.36	7,014.13	56.22	125.753			
13,000.00	6,048.00	5,900.00	5,899.29	116.47	20.45	-82.87	-995.64	651.20	7,169.07	7,112.81	56.25	127.449			
13,100.00	6,048.00	5,900.00	5,899.29	118.18	20.45	-82.87	-995.64	651.20	7,267.81	7,211.53	56.28	129.143			
13,200.00	6,048.00	5,900.00	5,899.29	119.88	20.45	-82.87	-995.64	651.20	7,366.58	7,310.28	56.30	130.834			
13,300.00	6,048.00	5,900.00	5,899.29	121.59	20.45	-82.87	-995.64	651.20	7,465.39	7,409.06	56.33	132.522			
13,400.00	6,048.00	5,900.00	5,899.29	123.30	20.45	-82.87	-995.64	651.20	7,564.23	7,507.87	56.36	134.207			
13,500.00	6,048.00	5,900.00	5,899.29	125.02	20.45	-82.87	-995.64	651.20	7,663.10	7,606.71	56.39	135.889			
13,600.00	6,048.00	5,900.00	5,899.29	126.73	20.45	-82.87	-995.64	651.20	7,762.00	7,705.58	56.42	137.568			
13,700.00	6,048.00	5,900.00	5,899.29	128.45	20.45	-82.87	-995.64	651.20	7,860.92	7,804.47	56.45	139.244			
13,800.00	6,048.00	5,900.00	5,899.29	130.16	20.45	-82.87	-995.64	651.20	7,959.88	7,903.39	56.49	140.917			
13,900.00	6,048.00	5,900.00	5,899.29	131.88	20.45	-82.87	-995.64	651.20	8,058.86	8,002.34	56.52	142.587			
14,000.00	6,048.00	5,900.00	5,899.29	133.60	20.45	-82.87	-995.64	651.20	8,157.86	8,101.31	56.55	144.253			
14,100.00	6,048.00	5,900.00	5,899.29	135.32	20.45	-82.87	-995.64	651.20	8,256.89	8,200.30	56.59	145.916			
14,200.00	6,048.00	5,900.00	5,899.29	137.05	20.45	-82.87	-995.64	651.20	8,355.94	8,299.32	56.62	147.575			
14,300.00	6,048.00	5,900.00	5,899.29	138.77	20.45	-82.87	-995.64	651.20	8,455.01	8,398.36	56.66	149.231			
14,400.00	6,048.00	5,900.00	5,899.29	140.50	20.45	-82.87	-995.64	651.20	8,554.11	8,497.42	56.69	150.883			
14,500.00	6,048.00	5,900.00	5,899.29	142.22	20.45	-82.87	-995.64	651.20	8,653.23	8,596.49	56.73	152.532			
14,600.00	6,048.00	5,900.00	5,899.29	143.95	20.45	-82.87	-995.64	651.20	8,752.36	8,695.59	56.77	154.177			
14,700.00	6,048.00	5,900.00	5,899.29	145.68	20.45	-82.87	-995.64	651.20	8,851.52	8,794.71	56.81	155.819			
14,800.00	6,048.00	5,900.00	5,899.29	147.41	20.45	-82.87	-995.64	651.20	8,950.69	8,893.85	56.85	157.457			
14,900.00	6,048.00	5,900.00	5,899.29	149.14	20.45	-82.87	-995.64	651.20	9,049.88	8,993.00	56.89	159.091			
15,000.00	6,048.00	5,900.00	5,899.29	150.87	20.45	-82.87	-995.64	651.20	9,149.09	9,092.17	56.93	160.721			
15,100.00	6,048.00	5,900.00	5,899.29	152.60	20.45	-82.87	-995.64	651.20	9,248.32	9,191.35	56.97	162.347			
15,200.00	6,048.00	5,900.00	5,899.29	154.33	20.45	-82.87	-995.64	651.20	9,347.56	9,290.56	57.01	163.970			
15,300.00	6,048.00	5,900.00	5,899.29	156.07	20.45	-82.87	-995.64	651.20	9,446.82	9,389.77	57.05	165.588			
15,400.00	6,048.00	5,900.00	5,899.29	157.80	20.45	-82.87	-995.64	651.20	9,546.10	9,489.01	57.09	167.203			
15,500.00	6,048.00	5,900.00	5,899.29	159.54	20.45	-82.87	-995.64	651.20	9,645.39	9,588.25	57.14	168.813			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 100-GYRO-MWD												Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor	
15,600.00	6,048.00	5,900.00	5,899.29	161.27	20.45	-82.87	-995.64	651.20	9,744.69	9,687.51	57.18	170.420	
15,700.00	6,048.00	5,900.00	5,899.29	163.01	20.45	-82.87	-995.64	651.20	9,844.01	9,786.79	57.23	172.022	
15,800.00	6,048.00	5,900.00	5,899.29	164.75	20.45	-82.87	-995.64	651.20	9,943.34	9,886.07	57.27	173.621	
15,900.00	6,048.00	5,900.00	5,899.29	166.49	20.45	-82.87	-995.64	651.20	10,042.69	9,985.37	57.32	175.215	

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
100.00	100.00	93.00	93.00	0.27	2.18	144.80	-947.20	668.24	1,159.19	1,156.74	2.45	473.522			
200.00	200.00	193.00	193.00	0.63	4.29	144.80	-947.20	668.24	1,159.19	1,154.27	4.92	235.661			
300.00	300.00	293.00	293.00	0.99	6.34	144.80	-947.20	668.24	1,159.19	1,151.87	7.32	158.294			
400.00	400.00	393.00	393.00	1.34	8.37	144.80	-947.20	668.24	1,159.19	1,149.48	9.71	119.384			
500.00	500.00	493.00	493.00	1.70	10.39	144.80	-947.20	668.24	1,159.19	1,147.10	12.09	95.883			
600.00	600.00	593.00	593.00	2.06	12.40	144.80	-947.20	668.24	1,159.19	1,144.73	14.47	80.132			
700.00	700.00	693.00	693.00	2.42	14.42	144.80	-947.20	668.24	1,159.19	1,142.35	16.84	68.834			
800.00	800.00	793.00	793.00	2.78	16.44	144.80	-947.20	668.24	1,159.19	1,139.98	19.21	60.331			
900.00	900.00	893.00	893.00	3.14	18.45	144.80	-947.20	668.24	1,159.19	1,137.61	21.59	53.701			
1,000.00	999.98	992.98	992.98	3.48	20.46	29.49	-947.20	668.24	1,157.67	1,133.73	23.95	48.346			
1,100.00	1,099.84	1,092.84	1,092.84	3.82	22.47	29.67	-947.20	668.24	1,153.12	1,126.83	26.29	43.854			
1,200.00	1,199.45	1,192.45	1,192.45	4.17	24.48	29.96	-947.20	668.24	1,145.55	1,116.91	28.64	39.993			
1,300.00	1,298.70	1,291.70	1,291.70	4.53	26.47	30.37	-947.20	668.24	1,134.99	1,104.00	30.99	36.623			
1,400.00	1,397.47	1,390.47	1,390.47	4.91	28.46	30.91	-947.20	668.24	1,121.49	1,088.16	33.34	33.643			
1,500.00	1,495.62	1,488.62	1,488.62	5.31	30.44	31.59	-947.20	668.24	1,105.10	1,069.42	35.68	30.977			
1,600.00	1,593.06	1,586.06	1,586.06	5.74	32.40	32.42	-947.20	668.24	1,085.89	1,047.88	38.01	28.568			
1,700.00	1,689.64	1,682.64	1,682.64	6.21	34.34	33.41	-947.20	668.24	1,063.94	1,023.60	40.34	26.372			
1,800.00	1,785.27	1,778.27	1,778.27	6.71	36.26	34.57	-947.20	668.24	1,039.37	996.69	42.67	24.356			
1,900.00	1,879.82	1,872.82	1,872.82	7.27	38.17	35.92	-947.20	668.24	1,012.29	967.29	45.01	22.492			
2,000.00	1,973.17	1,966.17	1,966.17	7.88	40.04	37.49	-947.20	668.24	982.88	935.53	47.34	20.760			
2,100.00	2,065.27	2,058.27	2,058.27	8.54	41.90	39.18	-947.20	668.24	951.41	901.71	49.70	19.144			
2,200.00	2,157.01	2,150.01	2,150.01	9.24	43.74	40.69	-947.20	668.24	919.84	867.77	52.07	17.665			
2,300.00	2,248.74	2,241.74	2,241.74	9.96	45.59	42.30	-947.20	668.24	888.93	834.45	54.48	16.316			
2,400.00	2,340.48	2,333.48	2,333.48	10.70	47.43	44.02	-947.20	668.24	858.76	801.83	56.93	15.085			
2,500.00	2,432.22	2,425.22	2,425.22	11.45	49.28	45.85	-947.20	668.24	829.40	769.99	59.41	13.960			
2,600.00	2,523.96	2,516.96	2,516.96	12.21	51.12	47.80	-947.20	668.24	800.94	739.00	61.93	12.932			
2,700.00	2,615.70	2,608.70	2,608.70	12.99	52.97	49.88	-947.20	668.24	773.48	708.98	64.50	11.992			
2,800.00	2,707.44	2,700.44	2,700.44	13.77	54.81	52.10	-947.20	668.24	747.13	680.03	67.11	11.134			
2,900.00	2,799.17	2,792.17	2,792.17	14.55	56.66	54.46	-947.20	668.24	722.02	652.27	69.75	10.351			
3,000.00	2,890.91	2,883.91	2,883.91	15.35	58.50	56.97	-947.20	668.24	698.27	625.83	72.44	9.639			
3,100.00	2,982.65	2,975.65	2,975.65	16.14	60.35	59.62	-947.20	668.24	676.04	600.86	75.18	8.993			
3,200.00	3,074.39	3,067.39	3,067.39	16.95	62.19	62.43	-947.20	668.24	655.47	577.52	77.94	8.409			
3,300.00	3,166.13	3,159.13	3,159.13	17.75	64.04	65.39	-947.20	668.24	636.72	555.98	80.75	7.886			
3,400.00	3,257.87	3,250.87	3,250.87	18.56	65.88	68.50	-947.20	668.24	619.97	536.40	83.57	7.418			
3,500.00	3,349.61	3,342.61	3,342.61	19.37	67.73	71.75	-947.20	668.24	605.37	518.96	86.41	7.005			
3,600.00	3,441.34	3,434.34	3,434.34	20.18	69.57	75.12	-947.20	668.24	593.09	503.83	89.26	6.644			
3,700.00	3,533.08	3,526.08	3,526.08	21.00	71.42	78.60	-947.20	668.24	583.28	491.18	92.10	6.333			
3,800.00	3,624.82	3,617.82	3,617.82	21.81	73.26	82.17	-947.20	668.24	576.05	481.14	94.91	6.069			
3,900.00	3,716.56	3,709.56	3,709.56	22.63	75.11	85.80	-947.20	668.24	571.50	473.82	97.68	5.851			
4,000.00	3,808.30	3,801.30	3,801.30	23.45	76.95	89.47	-947.20	668.24	569.71	469.31	100.40	5.674			
4,014.00	3,821.14	3,814.14	3,814.14	23.57	77.21	89.98	-947.20	668.24	569.68	468.91	100.78	5.653 CC			
4,100.00	3,900.04	3,893.04	3,893.04	24.27	78.80	93.13	-947.20	668.24	570.70	467.64	103.05	5.538 ES			
4,200.00	3,991.78	3,984.78	3,984.78	25.09	80.64	96.78	-947.20	668.24	574.44	468.81	105.63	5.438			
4,300.00	4,083.51	4,076.51	4,076.51	25.92	82.49	100.37	-947.20	668.24	580.90	472.76	108.14	5.372			
4,400.00	4,175.25	4,168.25	4,168.25	26.74	84.33	103.88	-947.20	668.24	589.97	479.41	110.56	5.336			
4,500.00	4,266.99	4,259.99	4,259.99	27.57	86.18	107.28	-947.20	668.24	601.55	488.64	112.91	5.328 SF			
4,600.00	4,358.73	4,351.73	4,351.73	28.39	88.02	110.57	-947.20	668.24	615.49	500.30	115.19	5.343			
4,700.00	4,450.47	4,443.47	4,443.47	29.22	89.87	113.72	-947.20	668.24	631.63	514.23	117.41	5.380			
4,800.00	4,542.21	4,535.21	4,535.21	30.05	91.71	116.72	-947.20	668.24	649.81	530.24	119.57	5.435			
4,900.00	4,633.95	4,626.95	4,626.95	30.88	93.56	119.57	-947.20	668.24	669.87	548.18	121.69	5.505			
5,000.00	4,725.68	4,718.68	4,718.68	31.70	95.40	122.28	-947.20	668.24	691.64	567.86	123.78	5.588			
5,100.00	4,817.42	4,810.42	4,810.42	32.53	97.25	124.83	-947.20	668.24	714.96	589.12	125.84	5.682			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-INC													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,200.00	4,909.16	4,902.16	4,902.16	33.36	99.09	127.23	-947.20	668.24	739.69	611.81	127.88	5.784		
5,300.00	5,000.90	4,993.90	4,993.90	34.19	100.94	129.48	-947.20	668.24	765.69	635.78	129.90	5.894		
5,400.00	5,092.64	5,085.64	5,085.64	35.02	102.78	131.60	-947.20	668.24	792.83	660.91	131.92	6.010		
5,500.00	5,184.38	5,177.38	5,177.38	35.85	104.63	133.59	-947.20	668.24	821.01	687.07	133.94	6.130		
5,600.00	5,276.11	5,269.11	5,269.11	36.69	106.47	135.46	-947.20	668.24	850.12	714.17	135.95	6.253		
5,700.00	5,367.85	5,360.85	5,360.85	37.52	108.32	137.21	-947.20	668.24	880.07	742.10	137.97	6.379		
5,800.00	5,459.76	5,452.76	5,452.76	38.34	110.16	148.35	-947.20	668.24	911.12	771.11	140.00	6.508		
5,900.00	5,552.68	5,545.68	5,545.68	39.06	112.03	177.58	-947.20	668.24	946.28	804.16	142.13	6.658		
6,000.00	5,644.46	5,637.46	5,637.46	39.64	113.88	-157.24	-947.20	668.24	985.06	840.76	144.30	6.826		
6,100.00	5,732.30	5,725.30	5,725.30	40.06	115.64	-139.79	-947.20	668.24	1,026.62	880.14	146.48	7.009		
6,200.00	5,813.53	5,806.53	5,806.53	40.35	117.28	-128.08	-947.20	668.24	1,070.73	922.14	148.58	7.206		
6,300.00	5,885.68	5,878.68	5,878.68	40.51	118.73	-119.65	-947.20	668.24	1,117.52	966.97	150.55	7.423		
6,400.00	5,946.56	5,939.56	5,939.56	40.57	119.95	-112.84	-947.20	668.24	1,167.20	1,014.91	152.30	7.664		
6,500.00	5,994.33	5,987.33	5,987.33	40.54	120.91	-106.61	-947.20	668.24	1,219.83	1,066.05	153.77	7.933		
6,600.00	6,027.53	6,020.53	6,020.53	40.44	121.58	-100.37	-947.20	668.24	1,275.06	1,120.14	154.93	8.230		
6,700.00	6,045.15	6,038.15	6,038.15	40.29	121.94	-93.90	-947.20	668.24	1,332.13	1,176.41	155.72	8.555		
6,800.00	6,048.00	6,041.00	6,041.00	40.12	121.99	-90.00	-947.20	668.24	1,390.23	1,234.07	156.15	8.903		
6,900.00	6,048.00	6,041.00	6,041.00	39.97	121.99	-90.00	-947.20	668.24	1,452.08	1,295.61	156.47	9.280		
7,000.00	6,048.00	6,041.00	6,041.00	39.85	121.99	-90.00	-947.20	668.24	1,518.01	1,361.28	156.73	9.685		
7,100.00	6,048.00	6,041.00	6,041.00	39.76	121.99	-90.00	-947.20	668.24	1,587.50	1,430.56	156.94	10.115		
7,200.00	6,048.00	6,041.00	6,041.00	39.72	121.99	-90.00	-947.20	668.24	1,660.11	1,503.01	157.10	10.567		
7,300.00	6,048.00	6,041.00	6,041.00	39.71	121.99	-90.00	-947.20	668.24	1,735.44	1,578.21	157.23	11.038		
7,400.00	6,048.00	6,041.00	6,041.00	39.75	121.99	-90.00	-947.20	668.24	1,813.17	1,655.84	157.33	11.525		
7,500.00	6,048.00	6,041.00	6,041.00	39.85	121.99	-90.00	-947.20	668.24	1,892.98	1,735.58	157.40	12.026		
7,600.00	6,048.00	6,041.00	6,041.00	40.01	121.99	-90.00	-947.20	668.24	1,974.63	1,817.18	157.46	12.541		
7,700.00	6,048.00	6,041.00	6,041.00	40.24	121.99	-90.00	-947.20	668.24	2,057.91	1,900.41	157.50	13.066		
7,800.00	6,048.00	6,041.00	6,041.00	40.57	121.99	-90.00	-947.20	668.24	2,142.61	1,985.09	157.52	13.602		
7,900.00	6,048.00	6,041.00	6,041.00	40.99	121.99	-90.00	-947.20	668.24	2,228.59	2,071.05	157.54	14.146		
8,000.00	6,048.00	6,041.00	6,041.00	41.53	121.99	-90.00	-947.20	668.24	2,315.69	2,158.14	157.55	14.698		
8,100.00	6,048.00	6,041.00	6,041.00	42.19	121.99	-90.00	-947.20	668.24	2,403.79	2,246.24	157.55	15.257		
8,200.00	6,048.00	6,041.00	6,041.00	42.97	121.99	-90.00	-947.20	668.24	2,492.79	2,335.24	157.55	15.822		
8,300.00	6,048.00	6,041.00	6,041.00	43.85	121.99	-90.00	-947.20	668.24	2,582.60	2,425.05	157.55	16.393		
8,400.00	6,048.00	6,041.00	6,041.00	44.83	121.99	-90.00	-947.20	668.24	2,673.13	2,515.59	157.54	16.968		
8,500.00	6,048.00	6,041.00	6,041.00	45.90	121.99	-90.00	-947.20	668.24	2,764.31	2,606.79	157.53	17.548		
8,600.00	6,048.00	6,041.00	6,041.00	47.05	121.99	-90.00	-947.20	668.24	2,856.09	2,698.57	157.52	18.132		
8,700.00	6,048.00	6,041.00	6,041.00	48.25	121.99	-90.00	-947.20	668.24	2,948.40	2,790.89	157.51	18.719		
8,800.00	6,048.00	6,041.00	6,041.00	49.51	121.99	-90.00	-947.20	668.24	3,041.19	2,883.70	157.49	19.310		
8,900.00	6,048.00	6,041.00	6,041.00	50.81	121.99	-90.00	-947.20	668.24	3,134.43	2,976.95	157.48	19.904		
9,000.00	6,048.00	6,041.00	6,041.00	52.15	121.99	-90.00	-947.20	668.24	3,228.07	3,070.61	157.47	20.500		
9,100.00	6,048.00	6,041.00	6,041.00	53.53	121.99	-90.00	-947.20	668.24	3,322.09	3,164.63	157.46	21.098		
9,200.00	6,048.00	6,041.00	6,041.00	54.94	121.99	-90.00	-947.20	668.24	3,416.44	3,259.00	157.44	21.699		
9,300.00	6,048.00	6,041.00	6,041.00	56.37	121.99	-90.00	-947.20	668.24	3,511.11	3,353.67	157.43	22.302		
9,400.00	6,048.00	6,041.00	6,041.00	57.82	121.99	-90.00	-947.20	668.24	3,606.06	3,448.64	157.42	22.907		
9,500.00	6,048.00	6,041.00	6,041.00	59.30	121.99	-90.00	-947.20	668.24	3,701.28	3,543.87	157.41	23.513		
9,600.00	6,048.00	6,041.00	6,041.00	60.79	121.99	-90.00	-947.20	668.24	3,796.75	3,639.34	157.41	24.121		
9,700.00	6,048.00	6,041.00	6,041.00	62.30	121.99	-90.00	-947.20	668.24	3,892.44	3,735.04	157.40	24.730		
9,800.00	6,048.00	6,041.00	6,041.00	63.82	121.99	-90.00	-947.20	668.24	3,988.35	3,830.96	157.39	25.340		
9,900.00	6,048.00	6,041.00	6,041.00	65.36	121.99	-90.00	-947.20	668.24	4,084.45	3,927.06	157.39	25.952		
10,000.00	6,048.00	6,041.00	6,041.00	66.91	121.99	-90.00	-947.20	668.24	4,180.73	4,023.35	157.38	26.564		
10,100.00	6,048.00	6,041.00	6,041.00	68.48	121.99	-90.00	-947.20	668.24	4,277.19	4,119.81	157.38	27.178		
10,200.00	6,048.00	6,041.00	6,041.00	70.05	121.99	-90.00	-947.20	668.24	4,373.80	4,216.42	157.38	27.792		
10,300.00	6,048.00	6,041.00	6,041.00	71.63	121.99	-90.00	-947.20	668.24	4,470.56	4,313.19	157.38	28.407		

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

Civitas Resources

Anticollision Report

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Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft	
Survey Program: 0-INC													Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor			
10,400.00	6,048.00	6,041.00	6,041.00	73.23	121.99	-90.00	-947.20	668.24	4,567.47	4,410.09	157.37	29.023			
10,500.00	6,048.00	6,041.00	6,041.00	74.83	121.99	-90.00	-947.20	668.24	4,664.50	4,507.12	157.38	29.639			
10,600.00	6,048.00	6,041.00	6,041.00	76.43	121.99	-90.00	-947.20	668.24	4,761.65	4,604.28	157.38	30.256			
10,700.00	6,048.00	6,041.00	6,041.00	78.05	121.99	-90.00	-947.20	668.24	4,858.93	4,701.54	157.38	30.874			
10,800.00	6,048.00	6,041.00	6,041.00	79.67	121.99	-90.00	-947.20	668.24	4,956.31	4,798.92	157.39	31.492			
10,900.00	6,048.00	6,041.00	6,041.00	81.30	121.99	-90.00	-947.20	668.24	5,053.79	4,896.40	157.39	32.110			
11,000.00	6,048.00	6,041.00	6,041.00	82.94	121.99	-90.00	-947.20	668.24	5,151.37	4,993.97	157.40	32.728			
11,100.00	6,048.00	6,041.00	6,041.00	84.58	121.99	-90.00	-947.20	668.24	5,249.04	5,091.63	157.40	33.347			
11,200.00	6,048.00	6,041.00	6,041.00	86.22	121.99	-90.00	-947.20	668.24	5,346.79	5,189.38	157.41	33.967			
11,300.00	6,048.00	6,041.00	6,041.00	87.87	121.99	-90.00	-947.20	668.24	5,444.63	5,287.21	157.42	34.586			
11,400.00	6,048.00	6,041.00	6,041.00	89.53	121.99	-90.00	-947.20	668.24	5,542.55	5,385.11	157.43	35.206			
11,500.00	6,048.00	6,041.00	6,041.00	91.19	121.99	-90.00	-947.20	668.24	5,640.53	5,483.09	157.44	35.826			
11,600.00	6,048.00	6,041.00	6,041.00	92.85	121.99	-90.00	-947.20	668.24	5,738.59	5,581.13	157.46	36.446			
11,700.00	6,048.00	6,041.00	6,041.00	94.52	121.99	-90.00	-947.20	668.24	5,836.71	5,679.24	157.47	37.066			
11,800.00	6,048.00	6,041.00	6,041.00	96.19	121.99	-90.00	-947.20	668.24	5,934.90	5,777.42	157.48	37.686			
11,900.00	6,048.00	6,041.00	6,041.00	97.86	121.99	-90.00	-947.20	668.24	6,033.14	5,875.65	157.50	38.306			
12,000.00	6,048.00	6,041.00	6,041.00	99.54	121.99	-90.00	-947.20	668.24	6,131.45	5,973.93	157.52	38.926			
12,100.00	6,048.00	6,041.00	6,041.00	101.22	121.99	-90.00	-947.20	668.24	6,229.80	6,072.27	157.53	39.546			
12,200.00	6,048.00	6,041.00	6,041.00	102.91	121.99	-90.00	-947.20	668.24	6,328.21	6,170.66	157.55	40.166			
12,300.00	6,048.00	6,041.00	6,041.00	104.59	121.99	-90.00	-947.20	668.24	6,426.67	6,269.10	157.57	40.786			
12,400.00	6,048.00	6,041.00	6,041.00	106.28	121.99	-90.00	-947.20	668.24	6,525.17	6,367.58	157.59	41.406			
12,500.00	6,048.00	6,041.00	6,041.00	107.97	121.99	-90.00	-947.20	668.24	6,623.72	6,466.11	157.61	42.026			
12,600.00	6,048.00	6,041.00	6,041.00	109.67	121.99	-90.00	-947.20	668.24	6,722.31	6,564.68	157.63	42.646			
12,700.00	6,048.00	6,041.00	6,041.00	111.37	121.99	-90.00	-947.20	668.24	6,820.94	6,663.29	157.65	43.266			
12,800.00	6,048.00	6,041.00	6,041.00	113.07	121.99	-90.00	-947.20	668.24	6,919.62	6,761.94	157.68	43.885			
12,900.00	6,048.00	6,041.00	6,041.00	114.77	121.99	-90.00	-947.20	668.24	7,018.33	6,860.62	157.70	44.504			
13,000.00	6,048.00	6,041.00	6,041.00	116.47	121.99	-90.00	-947.20	668.24	7,117.07	6,959.34	157.73	45.123			
13,100.00	6,048.00	6,041.00	6,041.00	118.18	121.99	-90.00	-947.20	668.24	7,215.85	7,058.10	157.75	45.742			
13,200.00	6,048.00	6,041.00	6,041.00	119.88	121.99	-90.00	-947.20	668.24	7,314.66	7,156.89	157.78	46.360			
13,300.00	6,048.00	6,041.00	6,041.00	121.59	121.99	-90.00	-947.20	668.24	7,413.51	7,255.70	157.81	46.979			
13,400.00	6,048.00	6,041.00	6,041.00	123.30	121.99	-90.00	-947.20	668.24	7,512.38	7,354.55	157.83	47.597			
13,500.00	6,048.00	6,041.00	6,041.00	125.02	121.99	-90.00	-947.20	668.24	7,611.29	7,453.43	157.86	48.215			
13,600.00	6,048.00	6,041.00	6,041.00	126.73	121.99	-90.00	-947.20	668.24	7,710.22	7,552.33	157.89	48.832			
13,700.00	6,048.00	6,041.00	6,041.00	128.45	121.99	-90.00	-947.20	668.24	7,809.18	7,651.26	157.92	49.449			
13,800.00	6,048.00	6,041.00	6,041.00	130.16	121.99	-90.00	-947.20	668.24	7,908.17	7,750.22	157.95	50.066			
13,900.00	6,048.00	6,041.00	6,041.00	131.88	121.99	-90.00	-947.20	668.24	8,007.18	7,849.20	157.99	50.683			
14,000.00	6,048.00	6,041.00	6,041.00	133.60	121.99	-90.00	-947.20	668.24	8,106.22	7,948.20	158.02	51.299			
14,100.00	6,048.00	6,041.00	6,041.00	135.32	121.99	-90.00	-947.20	668.24	8,205.28	8,047.22	158.05	51.915			
14,200.00	6,048.00	6,041.00	6,041.00	137.05	121.99	-90.00	-947.20	668.24	8,304.36	8,146.27	158.09	52.530			
14,300.00	6,048.00	6,041.00	6,041.00	138.77	121.99	-90.00	-947.20	668.24	8,403.46	8,245.34	158.12	53.146			
14,400.00	6,048.00	6,041.00	6,041.00	140.50	121.99	-90.00	-947.20	668.24	8,502.59	8,344.43	158.16	53.760			
14,500.00	6,048.00	6,041.00	6,041.00	142.22	121.99	-90.00	-947.20	668.24	8,601.73	8,443.54	158.19	54.375			
14,600.00	6,048.00	6,041.00	6,041.00	143.95	121.99	-90.00	-947.20	668.24	8,700.90	8,542.67	158.23	54.989			
14,700.00	6,048.00	6,041.00	6,041.00	145.68	121.99	-90.00	-947.20	668.24	8,800.08	8,641.81	158.27	55.602			
14,800.00	6,048.00	6,041.00	6,041.00	147.41	121.99	-90.00	-947.20	668.24	8,899.28	8,740.98	158.31	56.216			
14,900.00	6,048.00	6,041.00	6,041.00	149.14	121.99	-90.00	-947.20	668.24	8,998.50	8,840.16	158.35	56.828			
15,000.00	6,048.00	6,041.00	6,041.00	150.87	121.99	-90.00	-947.20	668.24	9,097.74	8,939.35	158.39	57.441			
15,100.00	6,048.00	6,041.00	6,041.00	152.60	121.99	-90.00	-947.20	668.24	9,196.99	9,038.56	158.43	58.052			
15,200.00	6,048.00	6,041.00	6,041.00	154.33	121.99	-90.00	-947.20	668.24	9,296.26	9,137.79	158.47	58.664			
15,300.00	6,048.00	6,041.00	6,041.00	156.07	121.99	-90.00	-947.20	668.24	9,395.54	9,237.04	158.51	59.275			
15,400.00	6,048.00	6,041.00	6,041.00	157.80	121.99	-90.00	-947.20	668.24	9,494.84	9,336.29	158.55	59.885			
15,500.00	6,048.00	6,041.00	6,041.00	159.54	121.99	-90.00	-947.20	668.24	9,594.16	9,435.56	158.59	60.495			

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 0-INC												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,600.00	6,048.00	6,041.00	6,041.00	161.27	121.99	-90.00	-947.20	668.24	9,693.49	9,534.85	158.64	61.105		
15,700.00	6,048.00	6,041.00	6,041.00	163.01	121.99	-90.00	-947.20	668.24	9,792.83	9,634.15	158.68	61.714		
15,800.00	6,048.00	6,041.00	6,041.00	164.75	121.99	-90.00	-947.20	668.24	9,892.18	9,733.46	158.73	62.322		
15,900.00	6,048.00	6,041.00	6,041.00	166.49	121.99	-90.00	-947.20	668.24	9,991.55	9,832.78	158.77	62.930		
16,000.00	6,048.00	6,041.00	6,041.00	168.23	121.99	-90.00	-947.20	668.24	10,090.93	9,932.11	158.82	63.538		

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
SEC 9-T5N-R61W - EXIST HZ PRONGHORN 41-11-9HZ - OWB - FINAL SURVEY													Offset Well Error:	0.00 usft
Survey Program: 473-MWD OWSG														
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)	Minimum Separation (usft)	Separation Factor	Warning	
100.00	100.00	96.21	96.21	0.27	0.17	127.21	-801.34	1,055.29	1,325.06	1,324.63	0.44	3,032.093		
200.00	200.00	197.48	197.48	0.63	0.35	127.20	-800.97	1,055.40	1,324.92	1,323.95	0.97	1,362.417		
300.00	300.00	298.74	298.74	0.99	0.52	127.17	-800.35	1,055.57	1,324.69	1,323.18	1.51	878.477		
400.00	400.00	400.01	400.00	1.34	0.70	127.13	-799.47	1,055.82	1,324.36	1,322.32	2.04	648.120		
500.00	500.00	501.37	501.35	1.70	0.93	127.09	-798.34	1,056.13	1,323.93	1,321.30	2.63	503.179		
600.00	600.00	603.00	602.98	2.06	1.29	127.03	-797.02	1,056.44	1,323.39	1,320.04	3.35	394.565		
700.00	700.00	705.02	704.98	2.42	1.66	126.97	-795.39	1,056.80	1,322.71	1,318.64	4.08	324.312		
800.00	800.00	812.18	812.12	2.78	2.04	126.90	-793.48	1,056.91	1,321.73	1,316.91	4.82	274.221		
900.00	900.00	918.17	918.10	3.14	2.42	126.85	-791.68	1,056.21	1,320.17	1,314.62	5.56	237.609		
1,000.00	999.98	1,024.51	1,024.41	3.48	2.80	11.47	-789.43	1,055.28	1,316.51	1,310.22	6.28	209.572		
1,100.00	1,099.84	1,130.03	1,129.89	3.82	3.18	11.48	-786.60	1,054.07	1,308.85	1,301.86	7.00	187.051		
1,200.00	1,199.45	1,226.00	1,225.82	4.17	3.52	11.57	-784.58	1,052.42	1,297.68	1,290.00	7.68	168.937		
1,300.00	1,298.70	1,317.09	1,316.89	4.53	3.84	11.74	-783.66	1,050.58	1,283.55	1,275.21	8.35	153.805		
1,400.00	1,397.47	1,413.95	1,413.72	4.91	4.17	12.01	-783.65	1,048.63	1,266.64	1,257.61	9.03	140.261		
1,500.00	1,495.62	1,516.17	1,515.92	5.31	4.53	12.37	-783.78	1,046.18	1,246.18	1,236.44	9.74	127.977		
1,600.00	1,593.06	1,617.97	1,617.67	5.74	4.89	12.79	-783.75	1,043.30	1,222.00	1,211.55	10.45	116.956		
1,700.00	1,689.64	1,714.12	1,713.78	6.21	5.22	13.30	-783.83	1,040.28	1,194.39	1,183.24	11.15	107.163		
1,800.00	1,785.27	1,806.93	1,806.54	6.71	5.55	13.89	-784.26	1,037.14	1,163.65	1,151.81	11.84	98.308		
1,900.00	1,879.82	1,898.23	1,897.78	7.27	5.87	14.59	-785.02	1,034.02	1,129.95	1,117.42	12.53	90.178		
2,000.00	1,973.17	1,990.02	1,989.52	7.88	6.20	15.37	-785.41	1,031.42	1,093.37	1,080.14	13.23	82.619		
2,100.00	2,065.27	2,088.07	2,087.53	8.54	6.55	16.25	-785.31	1,028.60	1,053.58	1,039.61	13.97	75.424		
2,200.00	2,157.01	2,165.87	2,165.31	9.24	6.82	16.84	-784.98	1,026.79	1,013.30	998.65	14.65	69.188		
2,300.00	2,248.74	2,245.78	2,245.22	9.96	7.10	17.42	-784.59	1,026.49	974.42	959.08	15.34	63.519		
2,400.00	2,340.48	2,334.72	2,334.16	10.70	7.41	18.09	-784.34	1,026.71	936.23	920.16	16.07	58.265		
2,500.00	2,432.22	2,426.83	2,426.27	11.45	7.73	18.86	-784.22	1,027.00	898.31	881.50	16.82	53.420		
2,600.00	2,523.96	2,518.81	2,518.25	12.21	8.04	19.69	-784.02	1,027.28	860.49	842.91	17.58	48.951		
2,700.00	2,615.70	2,610.14	2,609.58	12.99	8.36	20.57	-783.69	1,027.73	822.86	804.50	18.36	44.827		
2,800.00	2,707.44	2,701.14	2,700.57	13.77	8.67	21.49	-783.11	1,028.55	785.50	766.35	19.15	41.018		
2,900.00	2,799.17	2,788.76	2,788.18	14.55	8.98	22.40	-782.21	1,030.06	748.61	728.65	19.96	37.515		
3,000.00	2,890.91	2,877.01	2,876.37	15.35	9.28	23.31	-780.94	1,032.84	712.54	691.76	20.78	34.295		
3,100.00	2,982.65	2,964.18	2,963.48	16.14	9.58	24.29	-780.00	1,035.86	677.11	655.49	21.62	31.319		
3,200.00	3,074.39	3,044.68	3,043.89	16.95	9.86	25.27	-779.92	1,039.60	643.31	620.84	22.48	28.620		
3,300.00	3,166.13	3,126.00	3,125.05	17.75	10.14	26.33	-781.02	1,044.66	611.73	588.37	23.36	26.186		
3,400.00	3,257.87	3,205.60	3,204.34	18.56	10.41	27.37	-782.98	1,051.40	582.58	558.31	24.26	24.013		
3,500.00	3,349.61	3,291.80	3,289.95	19.37	10.71	28.42	-785.42	1,061.10	555.62	530.43	25.19	22.059		
3,600.00	3,441.34	3,380.44	3,377.73	20.18	11.02	29.40	-787.95	1,073.20	530.29	504.15	26.13	20.292		
3,700.00	3,533.08	3,470.47	3,466.57	21.00	11.35	30.30	-790.52	1,087.49	506.41	479.32	27.09	18.692		
3,800.00	3,624.82	3,569.17	3,563.65	21.81	11.71	31.14	-792.74	1,105.17	483.35	455.27	28.08	17.213		
3,900.00	3,716.56	3,670.94	3,663.65	22.63	12.09	31.90	-793.42	1,124.02	459.45	430.37	29.08	15.800		
4,000.00	3,808.30	3,777.36	3,768.32	23.45	12.50	32.74	-792.53	1,143.22	434.15	404.06	30.09	14.428		
4,100.00	3,900.04	3,875.83	3,865.32	24.27	12.88	33.64	-790.52	1,160.11	407.49	376.36	31.13	13.091		
4,200.00	3,991.78	3,973.90	3,962.07	25.09	13.27	34.78	-788.54	1,175.96	380.43	348.21	32.22	11.809		
4,300.00	4,083.51	4,068.07	4,055.12	25.92	13.64	36.21	-787.11	1,190.37	353.53	320.15	33.38	10.590		
4,400.00	4,175.25	4,160.85	4,146.62	26.74	14.00	37.69	-785.90	1,205.66	327.61	293.01	34.60	9.468		
4,500.00	4,266.99	4,255.63	4,240.00	27.57	14.39	39.37	-785.07	1,221.89	302.60	266.73	35.88	8.435		
4,600.00	4,358.73	4,348.07	4,331.14	28.39	14.76	41.49	-785.61	1,237.25	278.95	241.67	37.28	7.482		
4,700.00	4,450.47	4,450.07	4,431.97	29.22	15.17	44.60	-786.32	1,252.73	255.35	216.53	38.82	6.578		
4,800.00	4,542.21	4,548.98	4,529.84	30.05	15.57	48.31	-785.58	1,266.92	230.95	190.43	40.52	5.699		
4,900.00	4,633.95	4,646.54	4,626.33	30.88	15.96	52.64	-783.64	1,281.22	206.57	164.19	42.38	4.874		
5,000.00	4,725.68	4,742.85	4,721.53	31.70	16.35	57.91	-780.99	1,295.54	182.88	138.43	44.44	4.115		
5,100.00	4,817.42	4,837.39	4,815.20	32.53	16.73	64.99	-778.71	1,308.17	161.37	114.55	46.82	3.447		
5,200.00	4,909.16	4,931.43	4,908.63	33.36	17.10	74.66	-776.88	1,318.65	143.83	94.49	49.34	2.915		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 473-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
5,300.00	5,000.90	5,024.31	5,001.14	34.19	17.45	86.94	-775.53	1,326.85	132.94	81.50	51.44	2.584		
5,366.21	5,061.64	5,085.48	5,062.15	34.74	17.68	96.08	-774.85	1,331.21	130.71	78.55	52.15	2.506	CC, ES, SF	
5,400.00	5,092.64	5,116.86	5,093.46	35.02	17.80	100.89	-774.54	1,333.19	131.28	79.04	52.24	2.513		
5,500.00	5,184.38	5,209.25	5,185.70	35.85	18.14	114.59	-773.58	1,338.44	139.44	87.94	51.50	2.708		
5,600.00	5,276.11	5,300.24	5,276.60	36.69	18.47	126.25	-773.07	1,342.44	156.79	106.84	49.95	3.139		
5,700.00	5,367.85	5,391.38	5,367.69	37.52	18.79	135.55	-772.88	1,345.41	181.04	132.59	48.46	3.736		
5,800.00	5,459.76	5,482.29	5,458.57	38.34	19.11	151.93	-772.76	1,347.45	210.34	162.91	47.43	4.435		
5,900.00	5,552.68	5,574.41	5,550.68	39.06	19.43	-177.72	-773.38	1,349.00	244.66	197.02	47.64	5.135		
6,000.00	5,644.46	5,666.47	5,642.72	39.64	19.74	-154.70	-774.51	1,350.14	282.03	233.20	48.83	5.776		
6,100.00	5,732.30	5,730.48	5,706.71	40.06	19.95	-139.25	-775.45	1,349.42	324.83	274.86	49.97	6.501		
6,200.00	5,813.53	5,772.00	5,747.97	40.35	20.07	-127.11	-775.98	1,344.93	379.33	328.59	50.73	7.477		
6,300.00	5,885.68	5,816.62	5,791.80	40.51	20.19	-117.52	-776.57	1,336.66	443.30	391.44	51.86	8.547		
6,400.00	5,946.56	5,850.94	5,825.05	40.57	20.29	-107.80	-776.65	1,328.17	514.12	461.21	52.91	9.717		
6,500.00	5,994.33	5,876.92	5,849.96	40.54	20.35	-97.53	-776.53	1,320.79	589.39	535.47	53.92	10.930		
6,600.00	6,027.53	5,896.00	5,868.05	40.44	20.40	-87.03	-776.40	1,314.73	667.33	612.43	54.90	12.155		
6,700.00	6,045.15	5,902.74	5,874.39	40.29	20.42	-76.27	-776.33	1,312.47	745.92	690.20	55.72	13.387		
6,800.00	6,048.00	5,905.27	5,876.77	40.12	20.43	-70.67	-776.30	1,311.60	823.97	767.48	56.49	14.587		
6,900.00	6,048.00	5,906.19	5,877.64	39.97	20.43	-70.78	-776.29	1,311.28	905.30	848.26	57.03	15.873		
7,000.00	6,048.00	5,907.23	5,878.61	39.85	20.43	-70.90	-776.27	1,310.92	990.05	932.65	57.40	17.247		
7,100.00	6,048.00	5,908.39	5,879.69	39.76	20.43	-71.03	-776.25	1,310.52	1,077.42	1,019.77	57.65	18.689		
7,200.00	6,048.00	5,909.70	5,880.93	39.72	20.44	-71.18	-776.23	1,310.06	1,166.81	1,109.00	57.81	20.182		
7,300.00	6,048.00	5,911.20	5,882.33	39.71	20.44	-71.35	-776.20	1,309.53	1,257.81	1,199.89	57.92	21.716		
7,400.00	6,048.00	5,912.94	5,883.95	39.75	20.45	-71.55	-776.17	1,308.92	1,350.07	1,292.08	57.99	23.282		
7,500.00	6,048.00	5,914.96	5,885.84	39.85	20.45	-71.78	-776.13	1,308.20	1,443.37	1,385.34	58.03	24.873		
7,600.00	6,048.00	5,917.34	5,888.07	40.01	20.46	-72.05	-776.08	1,307.34	1,537.50	1,479.45	58.05	26.486		
7,700.00	6,048.00	5,920.21	5,890.74	40.24	20.46	-72.37	-776.01	1,306.30	1,632.33	1,574.27	58.06	28.114		
7,800.00	6,048.00	5,923.70	5,893.99	40.57	20.47	-72.77	-775.93	1,305.02	1,727.74	1,669.68	58.06	29.757		
7,900.00	6,048.00	5,928.07	5,898.04	40.99	20.49	-73.27	-775.80	1,303.39	1,823.63	1,765.58	58.06	31.411		
8,000.00	6,048.00	5,922.01	5,892.38	41.53	20.47	-72.58	-775.93	1,305.56	1,919.94	1,861.92	58.02	33.090		
8,100.00	6,048.00	5,932.75	5,902.37	42.19	20.50	-73.80	-775.66	1,301.63	2,016.61	1,958.59	58.03	34.754		
8,200.00	6,048.00	5,935.63	5,905.03	42.97	20.50	-74.12	-775.57	1,300.53	2,113.58	2,055.58	58.01	36.436		
8,300.00	6,048.00	5,938.73	5,907.88	43.85	20.51	-74.47	-775.47	1,299.33	2,210.82	2,152.83	57.99	38.125		
8,400.00	6,048.00	5,942.05	5,910.94	44.83	20.52	-74.84	-775.36	1,298.03	2,308.29	2,250.32	57.97	39.819		
8,500.00	6,048.00	5,945.64	5,914.24	45.90	20.53	-75.25	-775.24	1,296.62	2,405.97	2,348.02	57.95	41.517		
8,600.00	6,048.00	5,949.53	5,917.80	47.05	20.54	-75.68	-775.10	1,295.07	2,503.82	2,445.89	57.93	43.219		
8,700.00	6,048.00	5,953.75	5,921.66	48.25	20.55	-76.15	-774.94	1,293.37	2,601.83	2,543.91	57.92	44.924		
8,800.00	6,048.00	5,958.39	5,925.89	49.51	20.56	-76.67	-774.76	1,291.47	2,699.98	2,642.08	57.90	46.631		
8,900.00	6,048.00	5,964.25	5,931.22	50.81	20.58	-77.31	-774.52	1,289.03	2,798.26	2,740.37	57.89	48.341		
9,000.00	6,048.00	5,971.00	5,937.32	52.15	20.60	-78.05	-774.22	1,286.16	2,896.64	2,838.77	57.87	50.052		
9,100.00	6,048.00	5,978.84	5,944.36	53.53	20.62	-78.90	-773.85	1,282.74	2,995.12	2,937.26	57.86	51.765		
9,200.00	6,048.00	5,988.07	5,952.59	54.94	20.64	-79.89	-773.38	1,278.59	3,093.69	3,035.84	57.85	53.480		
9,300.00	6,048.00	5,985.28	5,950.06	56.37	20.63	-79.59	-773.50	1,279.77	3,192.33	3,134.50	57.83	55.200		
9,400.00	6,048.00	5,989.61	5,953.96	57.82	20.64	-80.05	-773.30	1,277.88	3,291.06	3,233.24	57.82	56.918		
9,500.00	6,048.00	5,990.00	5,954.31	59.30	20.64	-80.09	-773.28	1,277.71	3,389.86	3,332.05	57.81	58.638		
9,600.00	6,048.00	5,990.00	5,954.31	60.79	20.64	-80.09	-773.28	1,277.71	3,488.73	3,430.93	57.80	60.358		
9,700.00	6,048.00	5,990.00	5,954.31	62.30	20.64	-80.09	-773.28	1,277.71	3,587.66	3,529.87	57.79	62.078		
9,800.00	6,048.00	5,990.00	5,954.31	63.82	20.64	-80.09	-773.28	1,277.71	3,686.65	3,628.87	57.79	63.797		
9,900.00	6,048.00	5,990.00	5,954.31	65.36	20.64	-80.09	-773.28	1,277.71	3,785.70	3,727.91	57.78	65.517		
10,000.00	6,048.00	5,990.00	5,954.31	66.91	20.64	-80.09	-773.28	1,277.71	3,884.79	3,827.01	57.78	67.236		
10,100.00	6,048.00	6,001.89	5,964.78	68.48	20.68	-81.34	-772.67	1,272.11	3,983.86	3,926.08	57.78	68.954		
10,200.00	6,048.00	6,003.10	5,965.83	70.05	20.68	-81.46	-772.61	1,271.52	4,083.03	4,025.25	57.77	70.672		
10,300.00	6,048.00	6,004.29	5,966.87	71.63	20.68	-81.59	-772.55	1,270.94	4,182.23	4,124.46	57.77	72.389		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 473-MWD OWSG													Offset Well Error:	0.00 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)	Minimum Separation (usft)	Separation Factor		
10,400.00	6,048.00	6,005.45	5,967.88	73.23	20.69	-81.70	-772.49	1,270.37	4,281.47	4,223.70	57.78	74.105		
10,500.00	6,048.00	6,006.59	5,968.87	74.83	20.69	-81.82	-772.44	1,269.81	4,380.75	4,322.97	57.78	75.820		
10,600.00	6,048.00	6,007.70	5,969.84	76.43	20.69	-81.94	-772.39	1,269.26	4,480.05	4,422.27	57.78	77.534		
10,700.00	6,048.00	6,008.80	5,970.78	78.05	20.69	-82.05	-772.34	1,268.71	4,579.39	4,521.60	57.79	79.247		
10,800.00	6,048.00	6,021.00	5,981.26	79.67	20.73	-83.27	-771.79	1,262.48	4,678.80	4,621.01	57.79	80.965		
10,900.00	6,048.00	6,021.00	5,981.26	81.30	20.73	-83.27	-771.79	1,262.48	4,778.18	4,720.38	57.79	82.675		
11,000.00	6,048.00	6,021.00	5,981.26	82.94	20.73	-83.27	-771.79	1,262.48	4,877.58	4,819.78	57.80	84.383		
11,100.00	6,048.00	6,021.00	5,981.26	84.58	20.73	-83.27	-771.79	1,262.48	4,977.01	4,919.20	57.81	86.089		
11,200.00	6,048.00	6,021.00	5,981.26	86.22	20.73	-83.27	-771.79	1,262.48	5,076.46	5,018.64	57.82	87.794		
11,300.00	6,048.00	6,021.00	5,981.26	87.87	20.73	-83.27	-771.79	1,262.48	5,175.93	5,118.09	57.83	89.497		
11,400.00	6,048.00	6,021.00	5,981.26	89.53	20.73	-83.27	-771.79	1,262.48	5,275.42	5,217.57	57.85	91.198		
11,500.00	6,048.00	6,021.00	5,981.26	91.19	20.73	-83.27	-771.79	1,262.48	5,374.93	5,317.07	57.86	92.897		
11,600.00	6,048.00	6,021.00	5,981.26	92.85	20.73	-83.27	-771.79	1,262.48	5,474.46	5,416.58	57.87	94.594		
11,700.00	6,048.00	6,021.00	5,981.26	94.52	20.73	-83.27	-771.79	1,262.48	5,574.00	5,516.11	57.89	96.289		
11,800.00	6,048.00	6,021.00	5,981.26	96.19	20.73	-83.27	-771.79	1,262.48	5,673.56	5,615.66	57.90	97.982		
11,900.00	6,048.00	6,021.00	5,981.26	97.86	20.73	-83.27	-771.79	1,262.48	5,773.14	5,715.21	57.92	99.672		
12,000.00	6,048.00	6,022.22	5,982.29	99.54	20.73	-83.39	-771.74	1,261.84	5,872.73	5,814.79	57.94	101.361		
12,100.00	6,048.00	6,026.50	5,985.92	101.22	20.74	-83.81	-771.56	1,259.56	5,972.33	5,914.37	57.96	103.051		
12,200.00	6,048.00	6,031.01	5,989.70	102.91	20.75	-84.24	-771.36	1,257.12	6,071.94	6,013.97	57.97	104.739		
12,300.00	6,048.00	6,035.77	5,993.67	104.59	20.77	-84.69	-771.14	1,254.49	6,171.56	6,113.57	57.99	106.425		
12,400.00	6,048.00	6,040.79	5,997.81	106.28	20.78	-85.16	-770.91	1,251.67	6,271.19	6,213.18	58.01	108.110		
12,500.00	6,048.00	6,046.10	6,002.15	107.97	20.79	-85.65	-770.66	1,248.62	6,370.83	6,312.80	58.03	109.793		
12,600.00	6,048.00	6,051.71	6,006.68	109.67	20.81	-86.15	-770.38	1,245.33	6,470.47	6,412.43	58.04	111.474		
12,700.00	6,048.00	6,052.00	6,006.92	111.37	20.81	-86.18	-770.37	1,245.16	6,570.13	6,512.06	58.07	113.145		
12,800.00	6,048.00	6,052.00	6,006.92	113.07	20.81	-86.18	-770.37	1,245.16	6,669.79	6,611.70	58.09	114.814		
12,900.00	6,048.00	6,052.00	6,006.92	114.77	20.81	-86.18	-770.37	1,245.16	6,769.47	6,711.35	58.12	116.479		
13,000.00	6,048.00	6,052.00	6,006.92	116.47	20.81	-86.18	-770.37	1,245.16	6,869.15	6,811.01	58.14	118.142		
13,100.00	6,048.00	6,052.00	6,006.92	118.18	20.81	-86.18	-770.37	1,245.16	6,968.85	6,910.68	58.17	119.802		
13,200.00	6,048.00	6,052.00	6,006.92	119.88	20.81	-86.18	-770.37	1,245.16	7,068.55	7,010.35	58.20	121.458		
13,300.00	6,048.00	6,052.00	6,006.92	121.59	20.81	-86.18	-770.37	1,245.16	7,168.26	7,110.03	58.23	123.112		
13,400.00	6,048.00	6,052.00	6,006.92	123.30	20.81	-86.18	-770.37	1,245.16	7,267.98	7,209.72	58.25	124.763		
13,500.00	6,048.00	6,063.68	6,016.20	125.02	20.84	-87.20	-769.80	1,238.10	7,367.67	7,309.39	58.28	126.427		
13,600.00	6,048.00	6,064.91	6,017.18	126.73	20.85	-87.30	-769.74	1,237.34	7,467.39	7,409.09	58.31	128.073		
13,700.00	6,048.00	6,066.14	6,018.14	128.45	20.85	-87.41	-769.68	1,236.58	7,567.13	7,508.79	58.34	129.717		
13,800.00	6,048.00	6,067.35	6,019.08	130.16	20.85	-87.51	-769.62	1,235.83	7,666.87	7,608.50	58.37	131.357		
13,900.00	6,048.00	6,068.55	6,020.02	131.88	20.86	-87.61	-769.57	1,235.08	7,766.61	7,708.21	58.40	132.994		
14,000.00	6,048.00	6,069.73	6,020.94	133.60	20.86	-87.71	-769.51	1,234.34	7,866.36	7,807.93	58.43	134.628		
14,100.00	6,048.00	6,070.91	6,021.85	135.32	20.86	-87.81	-769.46	1,233.60	7,966.12	7,907.66	58.46	136.259		
14,200.00	6,048.00	6,100.84	6,044.25	137.05	20.95	-90.13	-767.96	1,213.81	8,065.89	8,007.41	58.48	137.930		
14,300.00	6,048.00	6,105.65	6,047.79	138.77	20.97	-90.48	-767.70	1,210.57	8,165.64	8,107.13	58.51	139.559		
14,400.00	6,048.00	6,110.46	6,051.33	140.50	20.98	-90.83	-767.44	1,207.33	8,265.39	8,206.85	58.54	141.183		
14,500.00	6,048.00	6,115.00	6,054.68	142.22	21.00	-91.15	-767.20	1,204.27	8,365.15	8,306.57	58.58	142.804		
14,600.00	6,048.00	6,115.00	6,054.68	143.95	21.00	-91.15	-767.20	1,204.27	8,464.91	8,406.29	58.61	144.416		
14,700.00	6,048.00	6,115.00	6,054.68	145.68	21.00	-91.15	-767.20	1,204.27	8,564.68	8,506.02	58.65	146.024		
14,800.00	6,048.00	6,128.15	6,064.01	147.41	21.04	-92.04	-766.43	1,195.03	8,664.39	8,605.70	58.69	147.635		
14,900.00	6,048.00	6,129.01	6,064.61	149.14	21.05	-92.09	-766.38	1,194.43	8,764.16	8,705.43	58.73	149.237		
15,000.00	6,048.00	6,129.84	6,065.20	150.87	21.05	-92.15	-766.34	1,193.83	8,863.93	8,805.17	58.77	150.835		
15,100.00	6,048.00	6,130.67	6,065.77	152.60	21.05	-92.20	-766.29	1,193.25	8,963.71	8,904.91	58.81	152.429		
15,200.00	6,048.00	6,131.48	6,066.34	154.33	21.06	-92.25	-766.25	1,192.67	9,063.49	9,004.65	58.85	154.019		
15,300.00	6,048.00	6,132.28	6,066.90	156.07	21.06	-92.31	-766.20	1,192.10	9,163.28	9,104.39	58.89	155.606		
15,400.00	6,048.00	6,146.00	6,076.37	157.80	21.11	-93.16	-765.51	1,182.19	9,263.13	9,204.20	58.93	157.197		
15,500.00	6,048.00	6,146.00	6,076.37	159.54	21.11	-93.16	-765.51	1,182.19	9,362.92	9,303.95	58.97	158.776		

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

Civitas Resources

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well PH TITAN T4 03N-20-05
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4699.00usft
Reference Site:	SEC 4-T5N-R61W	MD Reference:	KB 25' @ 4699.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PH TITAN T4 03N-20-05	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Survey Program: 473-MWD OWSG												Offset Well Error:		0.00 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)	Minimum Separation (usft)	Separation Factor		
15,600.00	6,048.00	6,146.00	6,076.37	161.27	21.11	-93.16	-765.51	1,182.19	9,462.71	9,403.70	59.01	160.350		
15,700.00	6,048.00	6,146.00	6,076.37	163.01	21.11	-93.16	-765.51	1,182.19	9,562.51	9,503.45	59.06	161.921		
15,800.00	6,048.00	6,146.00	6,076.37	164.75	21.11	-93.16	-765.51	1,182.19	9,662.31	9,603.21	59.10	163.488		
15,900.00	6,048.00	6,146.00	6,076.37	166.49	21.11	-93.16	-765.51	1,182.19	9,762.12	9,702.97	59.15	165.051		
16,000.00	6,048.00	6,146.00	6,076.37	168.23	21.11	-93.16	-765.51	1,182.19	9,861.93	9,802.74	59.19	166.610		
16,100.00	6,048.00	6,146.00	6,076.37	169.97	21.11	-93.16	-765.51	1,182.19	9,961.74	9,902.50	59.24	168.165		

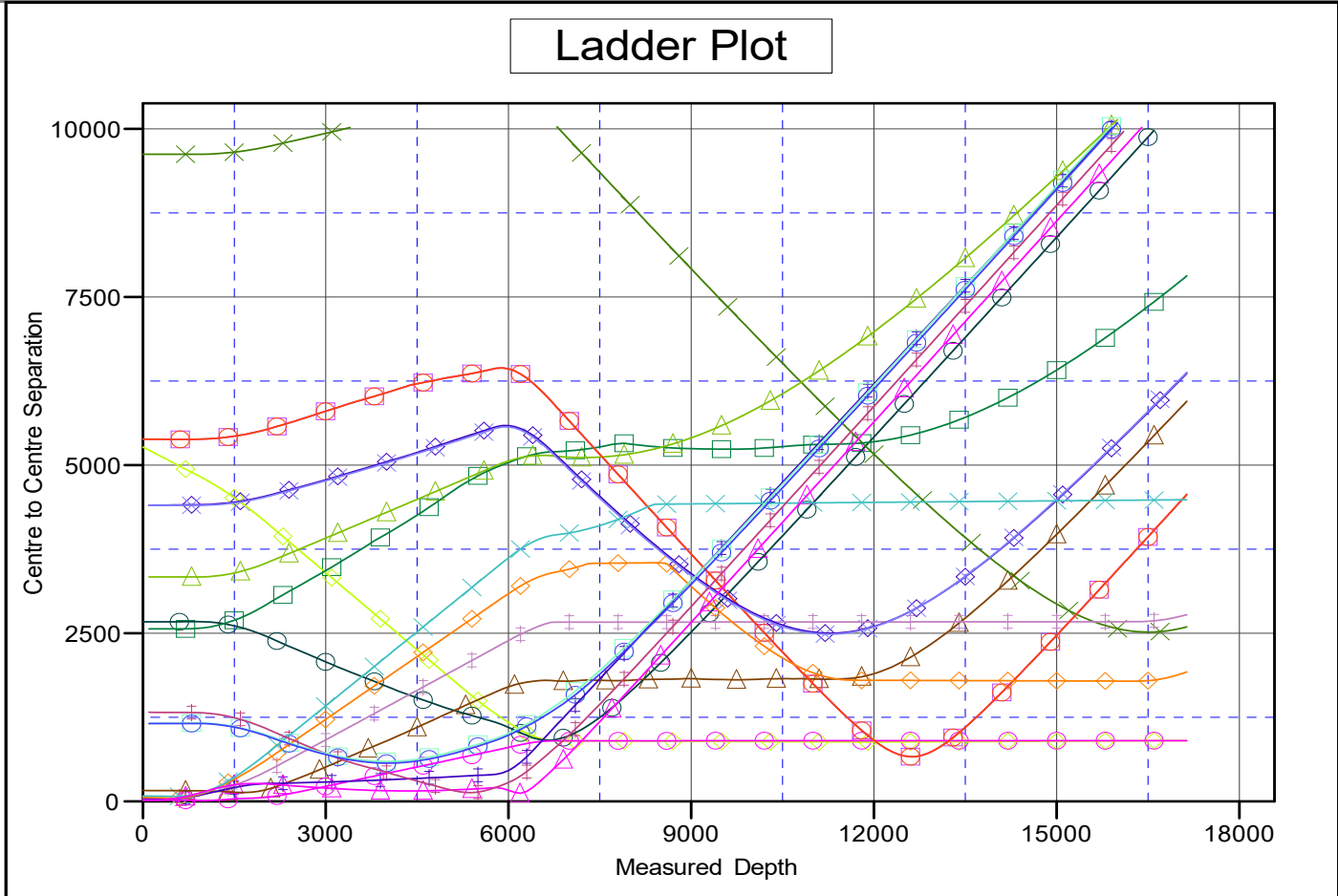
Civitas Resources

Anticollision Report

Company: BONANZA CREEK ENERGY	Local Co-ordinate Reference: Well PH TITAN T4 03N-20-05
Project: WELD COUNTY	TVD Reference: KB 25' @ 4699.00usft
Reference Site: SEC 4-T5N-R61W	MD Reference: KB 25' @ 4699.00usft
Site Error: 0.00 usft	North Reference: True
Reference Well: PH TITAN T4 03N-20-05	Survey Calculation Method: Minimum Curvature
Well Error: 0.00 usft	Output errors are at: 2.00 sigma
Reference Wellbore: OWB	Database: EDM
Reference Design: PROPOSAL 1	Offset TVD Reference: Offset Datum

Reference Depths are relative to KB 25' @ 4699.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 105.500000°W

Coordinates are relative to: PH TITAN T4 03N-20-05
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.83°



LEGEND

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| <ul style="list-style-type: none"> ◆ PH HYPERION P10 03N-20-01, OMB, PROPOSAL 1 V0 ◆ EXIST HZ PRONGHORN F-10HNB, OMB, FINAL SURVEY V0 ◆ ABND VERT SANBORN DRAW 1-33 (NO CSG), OMB, Design #1 V0 ◆ EXIST HZ PRONGHORN T-14HNB, OMB, FINAL SURVEY V0 ◆ PH TITANT 4 04U-30-03, OMB, PROPOSAL 1 V0 ◆ EXIST HZ PRONGHORN 16114-9NB, OMB, FINAL SURVEY V0 ◆ PH TITANT 4 04N-20-04, OMB, PROPOSAL 1 V0 | <ul style="list-style-type: none"> ◆ EXIST HZ ESTERLING 44-3H, OMB, FINAL SURVEY V0 ◆ PH TITANT 4 05U-20-07, OMB, PROPOSAL 1 V0 ◆ ABND VERT PRONGHORN 14-4, OMB, Design #1 V0 ◆ EXIST HZ ESTERLING 44-3H, STK 1, STK 1 V0 ◆ ABND VERT PRONGHORN 31-4 (GYRO), OMB, GYRO SURVEY V0 ◆ ABND VERT PRONGHORN 31-4 (GYRO), OMB, Design #1 V0 ◆ PH TITANT 4 04U-30-02, OMB, PROPOSAL 1 V0 | <ul style="list-style-type: none"> ◆ PH TITANT 4 04N-20-01, OMB, PROPOSAL 1 V0 ◆ PH TITANT 4 05U-20-06, OMB, PROPOSAL 1 V0 ◆ EXIST HZ PRONGHORN 4111-9HZ, OMB, FINAL SURVEY V0 ◆ ABND VERT PRONGHORN 41-9 (GYRO), GYRO SURVEY, GYRO SURVEY V0 ◆ ABND VERT PRONGHORN 41-9 (GYRO), OMB, Design #1 V0 |
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CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

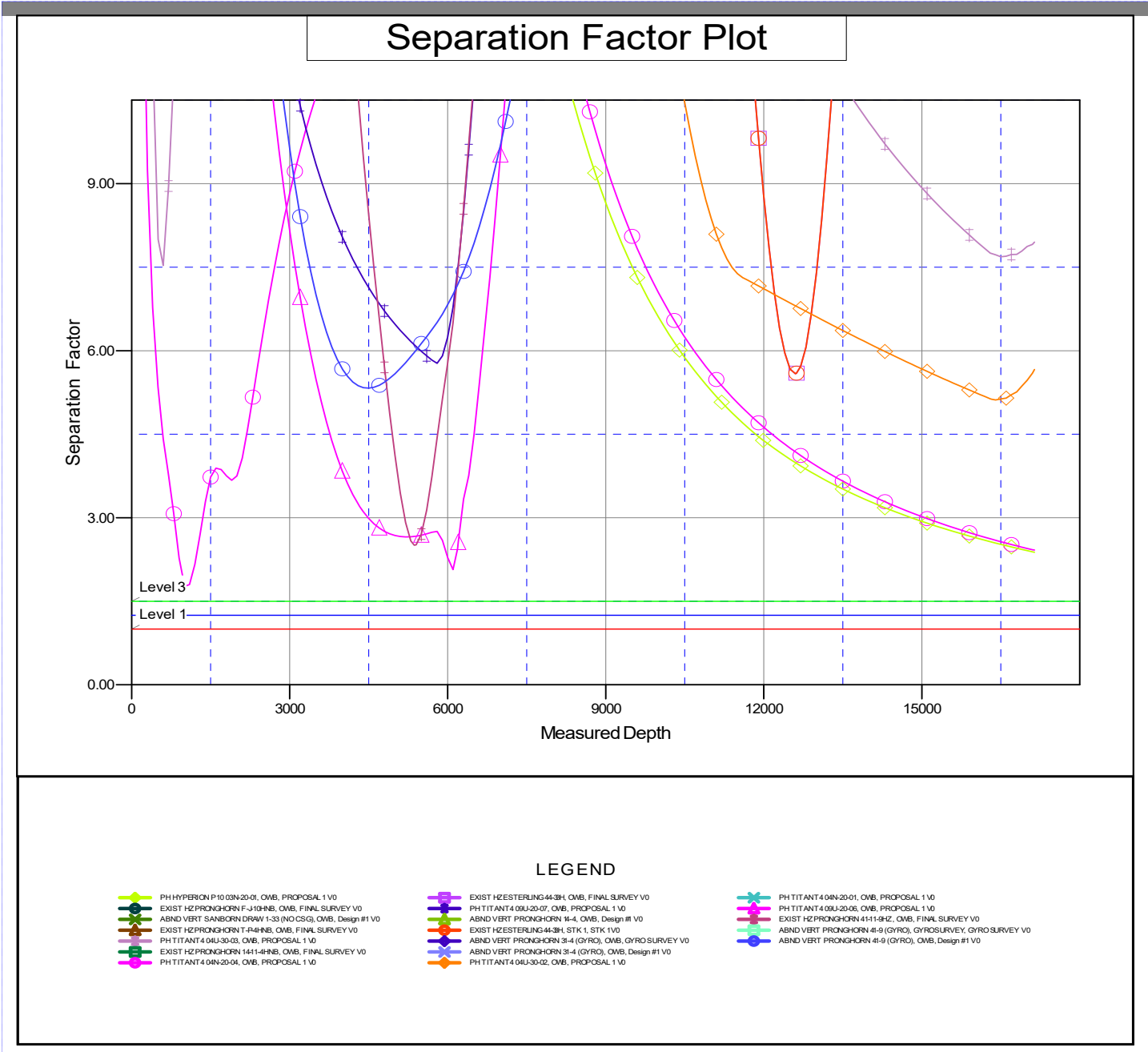
Civitas Resources

Anticollision Report

Company: BONANZA CREEK ENERGY	Local Co-ordinate Reference: Well PH TITAN T4 03N-20-05
Project: WELD COUNTY	TVD Reference: KB 25' @ 4699.00usft
Reference Site: SEC 4-T5N-R61W	MD Reference: KB 25' @ 4699.00usft
Site Error: 0.00 usft	North Reference: True
Reference Well: PH TITAN T4 03N-20-05	Survey Calculation Method: Minimum Curvature
Well Error: 0.00 usft	Output errors are at: 2.00 sigma
Reference Wellbore: OWB	Database: EDM
Reference Design: PROPOSAL 1	Offset TVD Reference: Offset Datum

Reference Depths are relative to KB 25' @ 4699.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 105.500000°W

Coordinates are relative to: PH TITAN T4 03N-20-05
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.83°



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