



## Synergy Resources

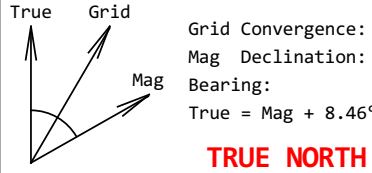
**Field Name:** *CO N - NAD 83*  
**Site Name:** *Goetzel 25-29 Pad*  
**Well Name:** *Goetzel 33N-30B-M*  
**Plan:** *P1:V1*

5 December 2016





**Goetzel 33N-30B-M**  
Weld County, CO  
Precision 562



Drawing By: GWR Date: 12/05/2016  
Weatherford Drilling Services  
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Oklahoma City, OK 73127  
+1.405.773.1100 Main  
+1.405.773.1887 Fax

**Plan Data for Goetzel 33N-30B-M**

Plan Point Information:								
DogLeg Severity Unit: °/100.00ft			Position offsets from Slot centre					
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.0
1000.00	0.00	0.00	1000.00	0.00	0.00	-0.00	0.00	0.0
1877.62	17.55	124.23	1863.95	-75.03	110.27	-96.35	2.00	124.2
6260.62	17.55	124.23	6042.89	-818.62	1203.09	-1051.22	0.00	0.0
7562.28	90.00	268.30	6919.00	-1001.82	513.71	-341.05	8.00	142.8
15456.59	90.00	268.30	6919.00	-1236.43	-7377.11	7480.01	0.00	0.0

**Target Set Information:**

Name: Goetzel 33N-30B-M							
Position offsets from Slot centre							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP 33N-30B-M	6919.00	-1001.82	513.71	1409365.42	3194159.22	40.455013	-104.802292
PBHL 33N-30B-M	6919.00	-1236.43	-7377.11	1409068.90	3186270.48	40.454366	-104.830647

**Plan Data for Goetzel 33N-30B-M**

Field: CO N - NAD 83  
Map Unit: USFt  
Vertical Reference Datum (VRD): Mean Sea Level  
Projected Coordinate System: NAD83 / Colorado North (ftUS)

**Site: Goetzel 25-29 Pad**

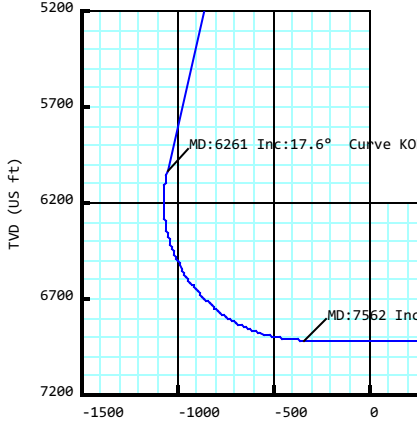
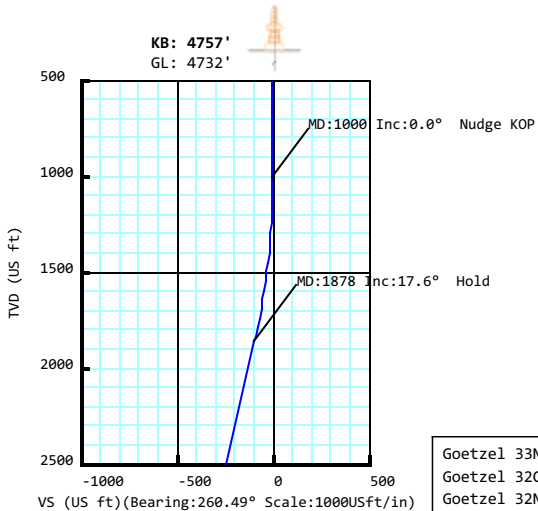
Unit: USFeet  
TVD Reference:  
Company Name: Synergy Resources  
Position: Northing: 1410483.05USft Latitude: 40.458092°  
Easting: 3193637.83USft Longitude: -104.804134°  
North Reference: True  
Grid Convergence: 0.45°  
Elevation Above VRD: 4732.00USft

**Slot: Goetzel 33N-30B-M**

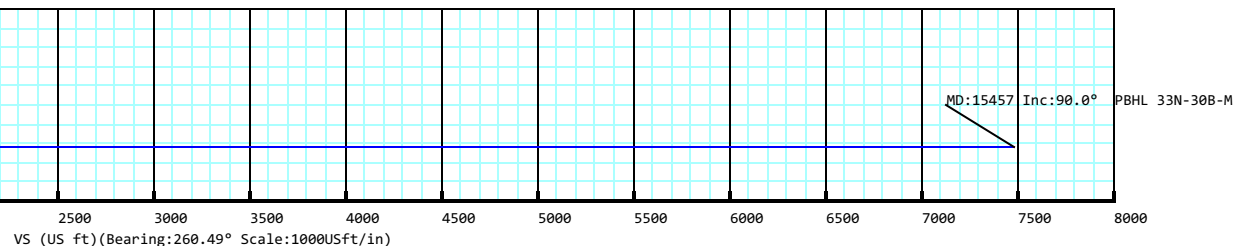
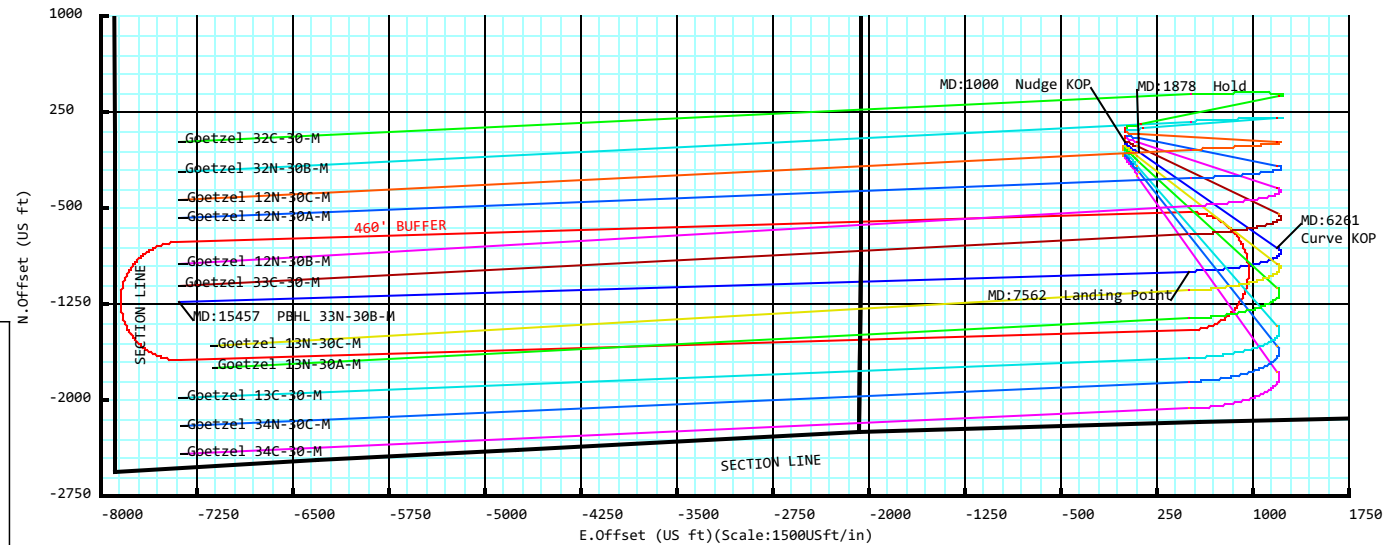
Position:  
Offset is from Site centre  
+N/-S: -119.86USft Northing: 1410363.19USft Latitude: 40.457763°  
+E/-W: -1.11USft Easting: 3193637.66USft Longitude: -104.804138°  
Elevation Above VRD: 4732.00USft

**Well: Goetzel 33N-30B-M**

Type: Main-Well  
File Number:  
Plan Folder: P1  
Plan: P1:V1  
Vertical Section: Position offset of origin from Slot centre:  
+N/-S: 0.00USft  
+E/-W: 0.00USft  
Azimuth: 260.49°  
Magnetic Parameters:  
Model: Field Strength: Declination: Dip: Date:  
bggm2016 52524(nT) 8.46° 66.93° 2016-11-18



Goetzel 33N-30B-M	—
Goetzel 32C-30-M	—
Goetzel 32N-30B-M	—
Goetzel 12N-30C-M	—
Goetzel 12N-30A-M	—
Goetzel 12N-30B-M	—
Goetzel 33C-30-M	—
Goetzel 13N-30C-M	—
Goetzel 13N-30A-M	—
Goetzel 13C-30-M	—
Goetzel 34N-30C-M	—
Goetzel 34C-30-M	—



## Goetzel 33N-30B-M

Field Name:  CO N - NAD 83	Map Units: US ft		Company Name: Synergy Resources	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / Colorado North (ftUS)			
	Comment:			
Site:  Goetzel 25-29 Pad	Units: US ft	North Reference: True	Convergence Angle: 0.45	
	Position:	Northing: 1410483.05 US ft	Latitude: 40.458092000	
		Easting: 3193637.83 US ft	Longitude: -104.804134000	
	Elevation above MSL:4732.00 US ft			
Comment:				
Slot:  Goetzel 33N-30B-M	Position (Relative to Site Centre)			
	+N/-S: -119.86 US ft	Northing: 1410363.19 US ft	Latitude: 40.457763000	
	+E/-W: -1.11 US ft	Easting: 3193637.66 US ft	Longitude: -104.804138000	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 4732.00 US ft			
Comment:				
Well:  Goetzel 33N-30B-M	Type:Main well		UWI:	Plan:P1:V1
	File Number:	Comment:		
	Closure Distance:7480.01US ft		Closure Azimuth:260.49°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 260.49°
	Magnetic Parameters:			
	Model: bggm2016	Field Strength: 52524.6nT	Declination: 8.46°	Dip: 66.93°
				Date: 18/Nov/2016

## Drill floor: Plan: P1:V1

<b>Rig Height (Drill Floor):</b> 25.00 US ft	<b>Elevation above MSL:</b> 4757.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°
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## Target set: Goetzel 33N-30B-M Comment:

Target Name:	Shape:	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (USFt)	Easting (USFt)	Comment
LP 33N-30B-M	Point	6919.00	-1001.82	513.71	1409365.42	3194159.22	
PBHL 33N-30B-M	Point	6919.00	-1236.43	-7377.11	1409068.90	3186270.48	

## Wellpath created using minimum curvature.

## Tie Point:

<b>MD:</b> 0.00 USFt	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°	<b>TVD:</b> 0.00 USFt	<b>North Offset:</b> 0.00 USFt	<b>East Offset:</b> 0.00 USFt
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## Salient Points: (Relative to Slot centre)(TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	B.Rate (°/100US ft)	T.Rate (°/100US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	-0.00	0.00	0.00	0.00	0.00	0.00	Nudge KOP
1877.62	17.55	124.23	1863.95	-96.35	-75.03	110.27	2.00	0.00	2.00	Hold
6260.62	17.55	124.23	6042.89	-1051.22	-818.62	1203.09	0.00	0.00	0.00	Curve KOP
7562.28	90.00	268.30	6919.00	-341.05	-1001.82	513.71	5.57	11.07	8.00	Landing Point

## 5D Plan Report

Salient Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	B.Rate (°/100US ft)	T.Rate (°/100US ft)	DLS (°/100US ft)	Comment
15456.59	90.00	268.30	6919.00	7480.01	-1236.43	-7377.11	0.00	0.00	0.00	PBHL 33N-30B-M
Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	B.Rate (°/100US ft)	T.Rate (°/100US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	-0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	-0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	-0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	-0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	-0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	-0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	-0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	-0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	-0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	-0.00	0.00	0.00	0.00	0.00	0.00	Nudge KOP
1100.00	2.00	124.23	1099.98	-1.26	-0.98	1.44	2.00	0.00	2.00	
1200.00	4.00	124.23	1199.84	-5.04	-3.93	5.77	2.00	-0.00	2.00	
1300.00	6.00	124.23	1299.45	-11.34	-8.83	12.97	2.00	0.00	2.00	
1400.00	8.00	124.23	1398.70	-20.14	-15.68	23.05	2.00	0.00	2.00	
1500.00	10.00	124.23	1497.47	-31.44	-24.48	35.98	2.00	-0.00	2.00	
1600.00	12.00	124.23	1595.62	-45.22	-35.22	51.76	2.00	-0.00	2.00	
1700.00	14.00	124.23	1693.06	-61.47	-47.87	70.35	2.00	0.00	2.00	
1800.00	16.00	124.23	1789.64	-80.17	-62.43	91.75	2.00	0.00	2.00	
1877.62	17.55	124.23	1863.95	-96.35	-75.03	110.27	2.00	-0.00	2.00	Hold
1900.00	17.55	124.23	1885.30	-101.23	-78.83	115.85	0.00	0.00	0.00	
2000.00	17.55	124.23	1980.64	-123.01	-95.80	140.79	0.00	0.00	0.00	
2100.00	17.55	124.23	2075.98	-144.80	-112.76	165.72	0.00	0.00	0.00	
2200.00	17.55	124.23	2171.33	-166.59	-129.73	190.65	0.00	0.00	0.00	
2300.00	17.55	124.23	2266.67	-188.37	-146.69	215.59	0.00	0.00	0.00	
2400.00	17.55	124.23	2362.02	-210.16	-163.66	240.52	0.00	0.00	0.00	
2500.00	17.55	124.23	2457.36	-231.94	-180.62	265.45	0.00	0.00	0.00	
2600.00	17.55	124.23	2552.70	-253.73	-197.59	290.39	0.00	0.00	0.00	
2700.00	17.55	124.23	2648.05	-275.52	-214.55	315.32	0.00	0.00	0.00	
2800.00	17.55	124.23	2743.39	-297.30	-231.52	340.25	0.00	0.00	0.00	
2900.00	17.55	124.23	2838.74	-319.09	-248.48	365.18	0.00	0.00	0.00	
3000.00	17.55	124.23	2934.08	-340.87	-265.45	390.12	0.00	0.00	0.00	
3100.00	17.55	124.23	3029.43	-362.66	-282.41	415.05	0.00	0.00	0.00	
3200.00	17.55	124.23	3124.77	-384.44	-299.38	439.98	0.00	0.00	0.00	
3300.00	17.55	124.23	3220.11	-406.23	-316.35	464.92	0.00	0.00	0.00	
3400.00	17.55	124.23	3315.46	-428.02	-333.31	489.85	0.00	0.00	0.00	
3500.00	17.55	124.23	3410.80	-449.80	-350.28	514.78	0.00	0.00	0.00	
3600.00	17.55	124.23	3506.15	-471.59	-367.24	539.72	0.00	0.00	0.00	
3700.00	17.55	124.23	3601.49	-493.37	-384.21	564.65	0.00	0.00	0.00	
3800.00	17.55	124.23	3696.83	-515.16	-401.17	589.58	0.00	0.00	0.00	
3900.00	17.55	124.23	3792.18	-536.95	-418.14	614.52	0.00	0.00	0.00	
4000.00	17.55	124.23	3887.52	-558.73	-435.10	639.45	0.00	0.00	0.00	
4100.00	17.55	124.23	3982.87	-580.52	-452.07	664.38	0.00	0.00	0.00	
4200.00	17.55	124.23	4078.21	-602.30	-469.03	689.32	0.00	0.00	0.00	
4300.00	17.55	124.23	4173.56	-624.09	-486.00	714.25	0.00	0.00	0.00	
4400.00	17.55	124.23	4268.90	-645.87	-502.96	739.18	0.00	0.00	0.00	
4500.00	17.55	124.23	4364.24	-667.66	-519.93	764.11	0.00	0.00	0.00	
4600.00	17.55	124.23	4459.59	-689.45	-536.89	789.05	0.00	0.00	0.00	
4700.00	17.55	124.23	4554.93	-711.23	-553.86	813.98	0.00	0.00	0.00	
4800.00	17.55	124.23	4650.28	-733.02	-570.82	838.91	0.00	0.00	0.00	
4900.00	17.55	124.23	4745.62	-754.80	-587.79	863.85	0.00	0.00	0.00	
5000.00	17.55	124.23	4840.97	-776.59	-604.76	888.78	0.00	0.00	0.00	
5100.00	17.55	124.23	4936.31	-798.37	-621.72	913.71	0.00	0.00	0.00	
5200.00	17.55	124.23	5031.65	-820.16	-638.69	938.65	0.00	0.00	0.00	

## 5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										Comment
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	B. Rate (°/100US ft)	T. Rate (°/100US ft)	DLS (°/100US ft)	
5300.00	17.55	124.23	5127.00	-841.95	-655.65	963.58	0.00	0.00	0.00	
5400.00	17.55	124.23	5222.34	-863.73	-672.62	988.51	0.00	0.00	0.00	
5500.00	17.55	124.23	5317.69	-885.52	-689.58	1013.45	0.00	0.00	0.00	
5600.00	17.55	124.23	5413.03	-907.30	-706.55	1038.38	0.00	0.00	0.00	
5700.00	17.55	124.23	5508.37	-929.09	-723.51	1063.31	0.00	0.00	0.00	
5800.00	17.55	124.23	5603.72	-950.88	-740.48	1088.25	0.00	0.00	0.00	
5900.00	17.55	124.23	5699.06	-972.66	-757.44	1113.18	0.00	0.00	0.00	
6000.00	17.55	124.23	5794.41	-994.45	-774.41	1138.11	0.00	0.00	0.00	
6100.00	17.55	124.23	5889.75	-1016.23	-791.37	1163.04	0.00	0.00	0.00	
6200.00	17.55	124.23	5985.10	-1038.02	-808.34	1187.98	0.00	0.00	0.00	
6260.62	17.55	124.23	6042.89	-1051.22	-818.62	1203.09	0.00	0.00	0.00	Curve KOP
6300.00	15.16	131.54	6080.68	-1058.75	-825.38	1211.86	-6.07	18.55	8.00	
6400.00	10.93	162.36	6178.19	-1068.33	-843.11	1224.54	-4.23	30.82	8.00	
6500.00	11.64	203.99	6276.42	-1064.09	-861.39	1223.31	0.71	41.62	8.00	
6600.00	16.68	230.01	6373.44	-1046.13	-879.86	1208.19	5.04	26.02	8.00	
6700.00	23.39	242.89	6467.38	-1014.79	-898.16	1179.48	6.72	12.88	8.00	
6800.00	30.71	250.08	6556.41	-970.68	-915.93	1137.73	7.31	7.20	8.00	
6900.00	38.28	254.69	6638.78	-914.66	-932.84	1083.76	7.57	4.61	8.00	
7000.00	45.97	257.96	6712.91	-847.82	-948.54	1018.63	7.70	3.27	8.00	
7100.00	53.74	260.47	6777.33	-771.47	-962.73	943.59	7.77	2.51	8.00	
7200.00	61.55	262.52	6830.81	-687.08	-975.15	860.10	7.81	2.05	8.00	
7300.00	69.39	264.29	6872.31	-596.30	-985.54	769.80	7.84	1.77	8.00	
7400.00	77.24	265.89	6901.00	-500.90	-993.70	674.44	7.85	1.59	8.00	
7500.00	85.10	267.39	6916.34	-402.74	-999.48	575.87	7.86	1.50	8.00	
7562.28	90.00	268.30	6919.00	-341.05	-1001.82	513.71	7.87	1.46	8.00	Landing Point
7600.00	90.00	268.30	6919.00	-303.68	-1002.94	476.01	0.00	0.00	0.00	
7700.00	90.00	268.30	6919.00	-204.61	-1005.92	376.06	0.00	0.00	0.00	
7800.00	90.00	268.30	6919.00	-105.53	-1008.89	276.10	0.00	0.00	0.00	
7900.00	90.00	268.30	6919.00	-6.46	-1011.86	176.14	0.00	0.00	0.00	
8000.00	90.00	268.30	6919.00	92.61	-1014.83	76.19	0.00	0.00	0.00	
8100.00	90.00	268.30	6919.00	191.68	-1017.80	-23.77	0.00	0.00	0.00	
8200.00	90.00	268.30	6919.00	290.75	-1020.78	-123.72	0.00	0.00	0.00	
8300.00	90.00	268.30	6919.00	389.83	-1023.75	-223.68	0.00	0.00	0.00	
8400.00	90.00	268.30	6919.00	488.90	-1026.72	-323.64	0.00	0.00	0.00	
8500.00	90.00	268.30	6919.00	587.97	-1029.69	-423.59	0.00	0.00	0.00	
8600.00	90.00	268.30	6919.00	687.04	-1032.66	-523.55	0.00	0.00	0.00	
8700.00	90.00	268.30	6919.00	786.11	-1035.63	-623.50	0.00	0.00	0.00	
8800.00	90.00	268.30	6919.00	885.19	-1038.61	-723.46	0.00	0.00	0.00	
8900.00	90.00	268.30	6919.00	984.26	-1041.58	-823.41	0.00	0.00	0.00	
9000.00	90.00	268.30	6919.00	1083.33	-1044.55	-923.37	0.00	0.00	0.00	
9100.00	90.00	268.30	6919.00	1182.40	-1047.52	-1023.33	0.00	0.00	0.00	
9200.00	90.00	268.30	6919.00	1281.47	-1050.49	-1123.28	0.00	0.00	0.00	
9300.00	90.00	268.30	6919.00	1380.55	-1053.47	-1223.24	0.00	0.00	0.00	
9400.00	90.00	268.30	6919.00	1479.62	-1056.44	-1323.19	0.00	0.00	0.00	
9500.00	90.00	268.30	6919.00	1578.69	-1059.41	-1423.15	0.00	0.00	0.00	
9600.00	90.00	268.30	6919.00	1677.76	-1062.38	-1523.11	0.00	0.00	0.00	
9700.00	90.00	268.30	6919.00	1776.83	-1065.35	-1623.06	0.00	0.00	0.00	
9800.00	90.00	268.30	6919.00	1875.91	-1068.33	-1723.02	0.00	0.00	0.00	
9900.00	90.00	268.30	6919.00	1974.98	-1071.30	-1822.97	0.00	0.00	0.00	
10000.00	90.00	268.30	6919.00	2074.05	-1074.27	-1922.93	0.00	0.00	0.00	
10100.00	90.00	268.30	6919.00	2173.12	-1077.24	-2022.88	0.00	0.00	0.00	
10200.00	90.00	268.30	6919.00	2272.19	-1080.21	-2122.84	0.00	0.00	0.00	
10300.00	90.00	268.30	6919.00	2371.27	-1083.18	-2222.80	0.00	0.00	0.00	
10400.00	90.00	268.30	6919.00	2470.34	-1086.16	-2322.75	0.00	0.00	0.00	
10500.00	90.00	268.30	6919.00	2569.41	-1089.13	-2422.71	0.00	0.00	0.00	
10600.00	90.00	268.30	6919.00	2668.48	-1092.10	-2522.66	0.00	0.00	0.00	
10700.00	90.00	268.30	6919.00	2767.55	-1095.07	-2622.62	0.00	0.00	0.00	
10800.00	90.00	268.30	6919.00	2866.63	-1098.04	-2722.58	0.00	0.00	0.00	
10900.00	90.00	268.30	6919.00	2965.70	-1101.02	-2822.53	0.00	0.00	0.00	

## 5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										Comment
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	B.Rate (°/100US ft)	T.Rate (°/100US ft)	DLS (°/100US ft)	
11000.00	90.00	268.30	6919.00	3064.77	-1103.99	-2922.49	0.00	0.00	0.00	
11100.00	90.00	268.30	6919.00	3163.84	-1106.96	-3022.44	0.00	0.00	0.00	
11200.00	90.00	268.30	6919.00	3262.91	-1109.93	-3122.40	0.00	0.00	0.00	
11300.00	90.00	268.30	6919.00	3361.99	-1112.90	-3222.35	0.00	0.00	0.00	
11400.00	90.00	268.30	6919.00	3461.06	-1115.87	-3322.31	0.00	0.00	0.00	
11500.00	90.00	268.30	6919.00	3560.13	-1118.85	-3422.27	0.00	0.00	0.00	
11600.00	90.00	268.30	6919.00	3659.20	-1121.82	-3522.22	0.00	0.00	0.00	
11700.00	90.00	268.30	6919.00	3758.28	-1124.79	-3622.18	0.00	0.00	0.00	
11800.00	90.00	268.30	6919.00	3857.35	-1127.76	-3722.13	0.00	0.00	0.00	
11900.00	90.00	268.30	6919.00	3956.42	-1130.73	-3822.09	0.00	0.00	0.00	
12000.00	90.00	268.30	6919.00	4055.49	-1133.71	-3922.05	0.00	0.00	0.00	
12100.00	90.00	268.30	6919.00	4154.56	-1136.68	-4022.00	0.00	0.00	0.00	
12200.00	90.00	268.30	6919.00	4253.64	-1139.65	-4121.96	0.00	0.00	0.00	
12300.00	90.00	268.30	6919.00	4352.71	-1142.62	-4221.91	0.00	0.00	0.00	
12400.00	90.00	268.30	6919.00	4451.78	-1145.59	-4321.87	0.00	0.00	0.00	
12500.00	90.00	268.30	6919.00	4550.85	-1148.56	-4421.82	0.00	0.00	0.00	
12600.00	90.00	268.30	6919.00	4649.92	-1151.54	-4521.78	0.00	0.00	0.00	
12700.00	90.00	268.30	6919.00	4749.00	-1154.51	-4621.74	0.00	0.00	0.00	
12800.00	90.00	268.30	6919.00	4848.07	-1157.48	-4721.69	0.00	0.00	0.00	
12900.00	90.00	268.30	6919.00	4947.14	-1160.45	-4821.65	0.00	0.00	0.00	
13000.00	90.00	268.30	6919.00	5046.21	-1163.42	-4921.60	0.00	0.00	0.00	
13100.00	90.00	268.30	6919.00	5145.28	-1166.40	-5021.56	0.00	0.00	0.00	
13200.00	90.00	268.30	6919.00	5244.36	-1169.37	-5121.52	0.00	0.00	0.00	
13300.00	90.00	268.30	6919.00	5343.43	-1172.34	-5221.47	0.00	0.00	0.00	
13400.00	90.00	268.30	6919.00	5442.50	-1175.31	-5321.43	0.00	0.00	0.00	
13500.00	90.00	268.30	6919.00	5541.57	-1178.28	-5421.38	0.00	0.00	0.00	
13600.00	90.00	268.30	6919.00	5640.64	-1181.25	-5521.34	0.00	0.00	0.00	
13700.00	90.00	268.30	6919.00	5739.72	-1184.23	-5621.29	0.00	0.00	0.00	
13800.00	90.00	268.30	6919.00	5838.79	-1187.20	-5721.25	0.00	0.00	0.00	
13900.00	90.00	268.30	6919.00	5937.86	-1190.17	-5821.21	0.00	0.00	0.00	
14000.00	90.00	268.30	6919.00	6036.93	-1193.14	-5921.16	0.00	0.00	0.00	
14100.00	90.00	268.30	6919.00	6136.00	-1196.11	-6021.12	0.00	0.00	0.00	
14200.00	90.00	268.30	6919.00	6235.08	-1199.09	-6121.07	0.00	0.00	0.00	
14300.00	90.00	268.30	6919.00	6334.15	-1202.06	-6221.03	0.00	0.00	0.00	
14400.00	90.00	268.30	6919.00	6433.22	-1205.03	-6320.99	0.00	0.00	0.00	
14500.00	90.00	268.30	6919.00	6532.29	-1208.00	-6420.94	0.00	0.00	0.00	
14600.00	90.00	268.30	6919.00	6631.36	-1210.97	-6520.90	0.00	0.00	0.00	
14700.00	90.00	268.30	6919.00	6730.44	-1213.94	-6620.85	0.00	0.00	0.00	
14800.00	90.00	268.30	6919.00	6829.51	-1216.92	-6720.81	0.00	0.00	0.00	
14900.00	90.00	268.30	6919.00	6928.58	-1219.89	-6820.76	0.00	0.00	0.00	
15000.00	90.00	268.30	6919.00	7027.65	-1222.86	-6920.72	0.00	0.00	0.00	
15100.00	90.00	268.30	6919.00	7126.72	-1225.83	-7020.68	0.00	0.00	0.00	
15200.00	90.00	268.30	6919.00	7225.80	-1228.80	-7120.63	0.00	0.00	0.00	
15300.00	90.00	268.30	6919.00	7324.87	-1231.78	-7220.59	0.00	0.00	0.00	
15400.00	90.00	268.30	6919.00	7423.94	-1234.75	-7320.54	0.00	0.00	0.00	
15456.59	90.00	268.30	6919.00	7480.01	-1236.43	-7377.11	0.00	0.00	0.00	PBHL 33N-30B-M



## Synergy Resources

**Field Name:** *CO N - NAD 83*  
**Site Name:** *Goetzel 25-29 Pad*  
**Well Name:** *Goetzel 33N-30B-M*

5 December 2016

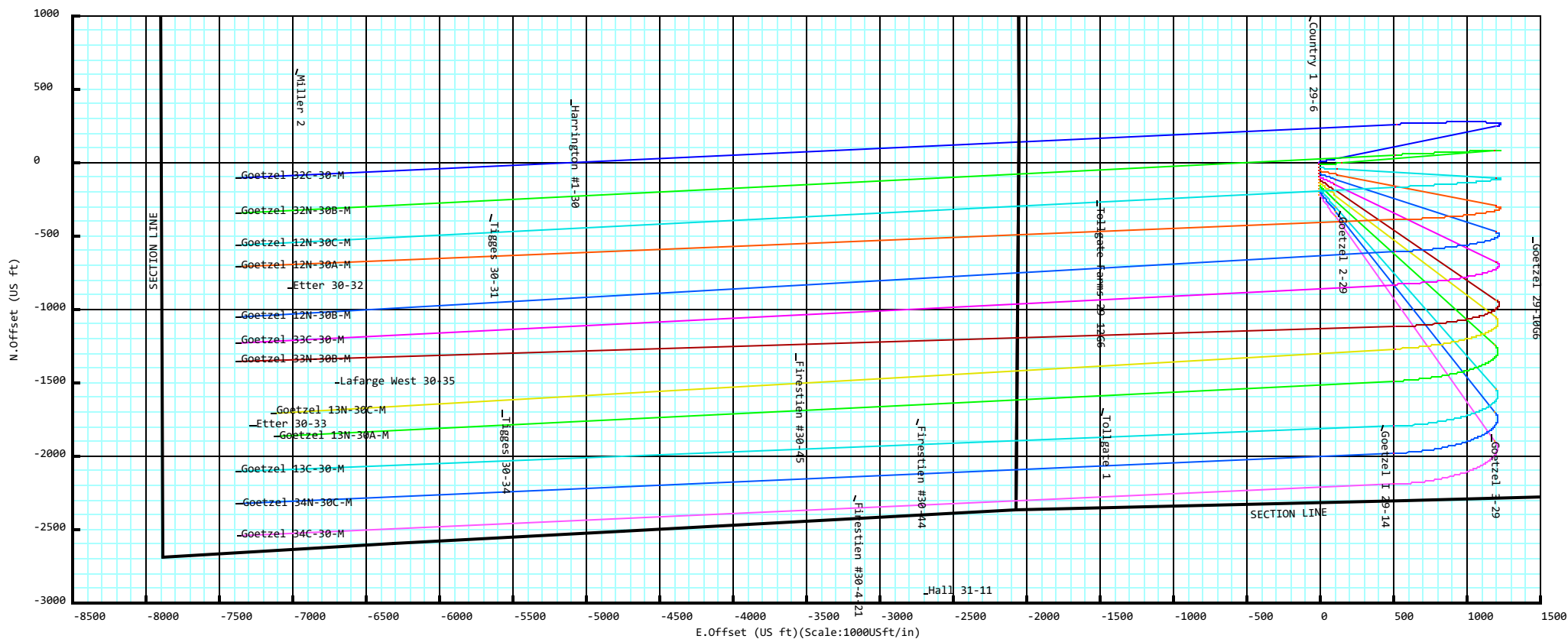




**Goetzel Pad**  
Weld County, CO  
Precision 562

Drawing By: GWR Date: 12/05/2016  
Weatherford Drilling Services  
7725 W. Reno, Ste. #220  
Oklahoma City, OK 73127  
+1.405.773.1100 Main  
+1.405.773.1887 Fax

Goetzel 32C-30-M	
Goetzel 32N-30B-M	
Goetzel 12N-30C-M	
Goetzel 12N-30A-M	
Goetzel 12N-30B-M	
Goetzel 33C-30-M	
Goetzel 33N-30B-M	
Goetzel 13N-30C-M	
Goetzel 13N-30A-M	
Goetzel 13C-30-M	
Goetzel 34N-30C-M	
Goetzel 34C-30-M	
Von Trotha Bros Inc #1	
Harrington #1-30	
Goetzel 2-29	
Goetzel 3-29	
Miller 2	
Tollgate 1	
Tollgate Farms 29-12G6	
Goetzel 29-10G6	
Tigges 30-31	
Etter 30-32	
Etter 30-33	
Tigges 30-34	
Hall 31-11	
Goetzel I 29-14	
Firestien #30-45	
Firestien #30-4-21	
Country 1 29-6	
Firestien #30-44	
Lafarge West 30-35	
Feuerstein #I2963HN	





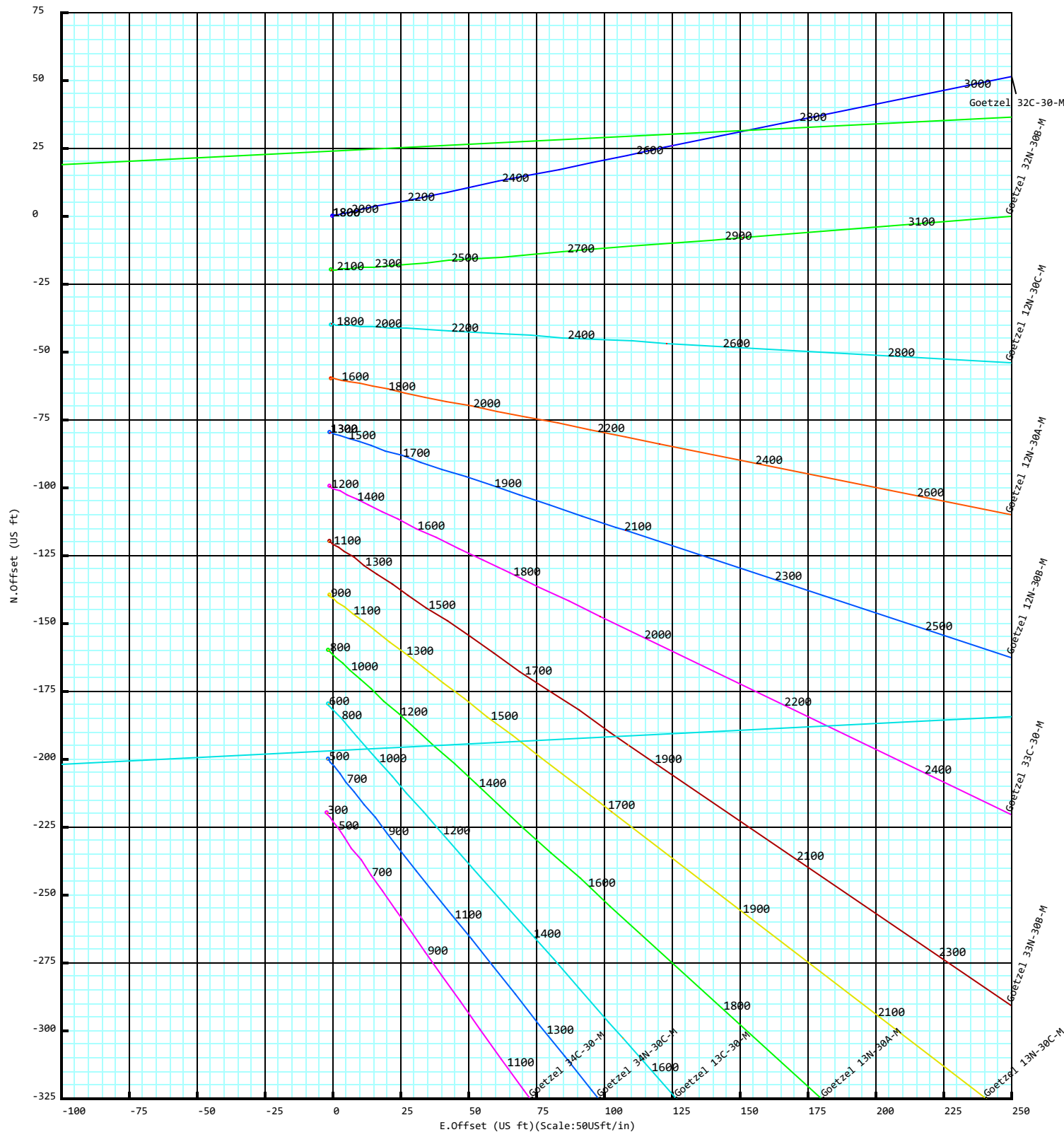


# Goetzl Pad Weld County, CO Precision 562

- Goetzl 32C-30-M
- Goetzl 32N-30B-M
- Goetzl 12N-30C-M
- Goetzl 12N-30A-M
- Goetzl 12N-30B-M
- Goetzl 33C-30-M
- Goetzl 33N-30B-M
- Goetzl 13N-30C-M
- Goetzl 13N-30A-M
- Goetzl 13C-30-M
- Goetzl 34N-30C-M
- Goetzl 34C-30-M



Drawing By: GWR Date: 12/05/2016  
Weatherford Drilling Services  
7725 W. Reno, Ste. #220  
Oklahoma City, OK 73127  
+1.405.773.1100 Main  
+1.405.773.1887 Fax



## Goetzel 33N-30B-M

Field Name:  CO N - NAD 83	Map Units: US ft		Company Name: Synergy Resources	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / Colorado North (ftUS)			
	Comment:			
Site:  Goetzel 25-29 Pad	Units: US ft	North Reference: True	Convergence Angle: 0.45	
	Position:	Northing: 1410483.05 US ft	Latitude: 40.458092000	
		Easting: 3193637.83 US ft	Longitude: -104.804134000	
	Elevation above MSL:4732.00 US ft			
Comment:				
Slot:  Goetzel 33N-30B-M	Position (Relative to Site Centre)			
	+N/-S: -119.86 US ft	Northing: 1410363.19 US ft	Latitude: 40.457763000	
	+E/-W: -1.11 US ft	Easting: 3193637.66 US ft	Longitude: -104.804138000	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 4732.00 US ft			
	Comment:			
Well:  Goetzel 33N-30B-M	Type:Main well		UWI:	Plan:Working Plan
	File Number:	Comment:		
	Closure Distance:7480.01US ft		Closure Azimuth:260.49°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 260.49°
	Magnetic Parameters:			
	Model: bggm2016	Field Strength: 52524.6nT	Declination: 8.46°	Dip: 66.93°
				Date: 18/Nov/2016

## Drill floor: Plan: Working Plan

<b>Rig Height (Drill Floor):</b> 25.00 US ft	<b>Elevation above MSL:</b> 4757.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°
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## Collision / Uncertainty Analysis

Primary Well	Start MD (USFt)	End MD (USFt)	Collision Risk Interval	No. of Std. Deviations in Error Computation
Goetzel 33N-30B-M (p)	0.00	15456.59	100.00	2

## Secondary Well Names:

Goetzel 2-29 (s)  
 Tigges 30-31 (s)  
 Etter 30-32 (s)  
 Goetzel 29-10G6 (s)  
 Lafarge West 30-35 (s)  
 Firestien #30-45 (s)  
 Tigges 30-34 (s)  
 Firestien #30-44 (s)  
 Tollgate 1 (s)  
 Etter 30-33 (s)  
 Goetzel 32C-30-M (p)  
 Goetzel 32N-30B-M (p)  
 Goetzel 12N-30C-M (p)  
 Goetzel 12N-30A-M (p)  
 Goetzel 12N-30B-M (p)  
 Goetzel 33C-30-M (p)  
 Goetzel 13N-30C-M (p)

**Secondary Well Names:**

Goetzel 13N-30A-M (p)  
 Goetzel 13C-30-M (p)  
 Goetzel 34N-30C-M (p)  
 Goetzel 34C-30-M (p)

**Anti-Collision Report Terminology**

**S.Minor, S.Major:** Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.

**PHI:** Angle between high-side vector and semi-minor axis

**TVD Spread:** Total TVD range of the ellipsoid of uncertainty at the current location.

**ES:** Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr.

**T.Face to Sec:** Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells.

**AC Filter Info: No filter has been applied.**

**Default Survey Tool: MWD**

Separation factors calculated using Pedal Curve (Independent Uncertainty). Surface Uncertainty (S.U.) Not Applied. Wellpath created using minimum curvature.

## 5D Anti-Collision Report

**Anti-Collision Summary (TVD relative to Drill Floor)**

SF							
Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Firestien #30-45 (s)	11648.05	6894.00	6919.00	68.89	-264.99	0.21	SF(Hi)
Lafarge West 30-35 (s)	14789.65	6894.00	6919.00	171.66	-249.05	0.41	SF(Hi)
Goetzel 12N-30B-M (p)	15445.76	15440.87	6919.00	296.25	-166.84	0.64	SF(Hi)
Goetzel 33C-30-M (p)	15449.52	15599.60	6919.00	218.11	-72.94	0.75	SF(Hi)
Goetzel 13N-30C-M (p)	15238.09	15286.68	6919.00	365.60	-80.32	0.82	SF(Hi)
Etter 30-33 (s)	15378.91	6894.00	6919.00	439.17	2.11	1.00	SF(Med)
Tigges 30-34 (s)	13664.45	6886.00	6919.00	392.89	3.69	1.01	SF(Med)
Etter 30-32 (s)	15097.07	6902.00	6919.00	485.07	55.60	1.13	SF(Med)
Goetzel 13N-30A-M (p)	15240.43	15136.85	6919.00	539.57	99.02	1.22	SF(Med)
Goetzel 12N-30A-M (p)	15443.55	15322.07	6919.00	649.77	189.76	1.41	SF(Med)
Goetzel 2-29 (s)	2302.54	2241.09	2269.09	106.96	33.97	1.47	SF(Med)
Goetzel 13C-30-M (p)	15456.59	15673.73	6919.00	765.15	311.25	1.69	SF(Lo)
Goetzel 12N-30C-M (p)	15443.11	15501.26	6919.00	793.83	332.01	1.72	SF(Lo)
Firestien #30-44 (s)	10868.36	6886.00	6919.00	541.86	229.60	1.74	SF(Lo)
Tollgate 1 (s)	9609.18	6880.00	6919.00	506.90	228.31	1.82	SF(Lo)
Goetzel 34N-30C-M (p)	15456.59	15588.24	6919.00	975.07	512.40	2.11	SF(Lo)
Goetzel 32N-30B-M (p)	15447.31	15473.86	6919.00	1011.97	547.18	2.18	SF(Lo)
Goetzel 29-10G6 (s)	6316.41	6063.55	6096.55	495.50	281.07	2.31	SF(Lo)
Tigges 30-31 (s)	13726.76	6902.00	6919.00	940.87	549.61	2.40	SF(Lo)
Goetzel 34C-30-M (p)	15456.59	15718.38	6919.00	1201.79	742.89	2.62	
Goetzel 32C-30-M (p)	15456.59	15644.54	6919.00	1268.05	810.33	2.77	

## 5D Anti-Collision Report

CC												
Secondary Well Name			Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)		CC (US ft)	ES (US ft)	SF	Risk		
Goetzel 13N-30C-M (p)			50.00	50.00	50.00		20.04	19.19	23.75	CC (Med)		
Goetzel 33C-30-M (p)			0.00	0.00	0.00		20.04	19.31	27.33	CC (Med)		
Goetzel 12N-30B-M (p)			0.00	0.00	0.00		40.07	39.34	54.65	CC (Lo)		
Goetzel 13N-30A-M (p)			50.00	50.00	50.00		40.07	39.23	47.50	CC (Lo)		
Goetzel 13C-30-M (p)			50.00	50.00	50.00		60.11	59.27	71.25	CC (Lo)		
Goetzel 12N-30A-M (p)			0.00	0.00	0.00		60.11	59.38	81.97	CC (Lo)		
Firestien #30-45 (s)			11648.05	6894.00	6919.00		68.89	-264.99	0.21	SF(Hi)		
Goetzel 12N-30C-M (p)			0.00	0.00	0.00		79.79	79.05	108.80			
Goetzel 34N-30C-M (p)			50.00	50.00	50.00		80.15	79.30	95.00			
Goetzel 32N-30B-M (p)			0.00	0.00	0.00		99.82	99.09	136.12			
Goetzel 34C-30-M (p)			50.00	50.00	50.00		100.19	99.34	118.76			
Goetzel 2-29 (s)			2225.59	2167.72	2195.72		104.42	34.03	1.48	SF(Med)		
Goetzel 32C-30-M (p)			0.00	0.00	0.00		119.86	119.13	163.45			
Lafarge West 30-35 (s)			14788.87	6894.00	6919.00		171.66	-249.04	0.41	SF(Hi)		
Tigges 30-34 (s)			13659.57	6886.00	6919.00		392.85	3.75	1.01	SF(Med)		
Etter 30-33 (s)			15373.24	6894.00	6919.00		439.13	2.18	1.00	SF(Med)		
Etter 30-32 (s)			15089.06	6902.00	6919.00		485.00	55.71	1.13	SF(Med)		
Goetzel 29-10G6 (s)			6168.36	5921.93	5954.93		492.32	283.24	2.35	SF(Lo)		
Tollgate 1 (s)			9568.16	6880.00	6919.00		505.24	227.59	1.82	SF(Lo)		
Firestien #30-44 (s)			10826.56	6886.00	6919.00		540.25	228.98	1.74	SF(Lo)		
Tigges 30-31 (s)			13693.95	6902.00	6919.00		940.30	549.75	2.41	SF(Lo)		
Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)												
MD (US ft)		Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
0.00		0.00	0.00	0.00	0.00	0.00	179.55	20.04	19.30	27.32	Goetzel 13N-30C-M (p)	CC (Med)
100.00		0.00	0.00	100.00	0.11	0.11	179.55	20.04	19.08	21.00	Goetzel 13N-30C-M (p)	CC (Med)
200.00		0.00	0.00	200.00	0.34	0.34	179.55	20.04	18.63	14.28	Goetzel 13N-30C-M (p)	CC (Med)
300.00		0.00	0.00	300.00	0.56	0.56	179.55	20.04	18.18	10.81	Goetzel 13N-30C-M (p)	CC (Med)
400.00		0.00	0.00	400.00	0.79	0.79	179.55	20.04	17.73	8.70	Goetzel 13N-30C-M (p)	CC (Med)
500.00		0.00	0.00	500.00	1.01	1.01	179.55	20.04	17.28	7.28	Goetzel 13N-30C-M (p)	CC (Med)
600.00		0.00	0.00	600.00	1.24	1.24	179.55	20.04	16.83	6.26	Goetzel 13N-30C-M (p)	CC (Med)
700.00		0.00	0.00	700.00	1.46	1.46	179.55	20.04	16.39	5.49	Goetzel 13N-30C-M (p)	CC (Med)
800.00		0.00	0.00	800.00	1.69	1.69	179.55	20.04	15.94	4.89	Goetzel 13N-30C-M (p)	CC (Med)
900.00		0.00	0.00	900.00	1.91	1.91	0.35	20.04	15.49	4.40	Goetzel 33C-30-M (p)	CC (Med)
1000.00		0.00	0.00	1000.00	2.14	2.14	0.35	20.04	15.04	4.01	Goetzel 33C-30-M (p)	CC (Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
1100.00	2.00	123.78	1099.98	2.34	2.34	232.61	21.05	15.63	3.88	Goetzel 33C-30-M (p)	CC (Med)
1200.00	4.00	123.78	1199.84	2.53	2.52	223.71	24.31	18.48	4.17	Goetzel 33C-30-M (p)	CC (Med)
1300.00	6.00	123.78	1299.45	2.74	2.71	217.19	28.66	22.45	4.62	Goetzel 33C-30-M (p)	CC (Med)
1400.00	8.00	123.78	1398.70	2.97	2.90	213.18	33.58	26.96	5.07	Goetzel 33C-30-M (p)	CC (Lo)
1500.00	10.00	123.78	1497.47	3.23	3.10	28.56	221.03	175.20	4.82	Goetzel 2-29 (s)	CC (Lo)
1500.00	10.00	123.78	1497.47	3.23	3.10	210.86	38.89	31.85	5.52	Goetzel 33C-30-M (p)	
1600.00	12.00	123.78	1595.62	3.54	3.31	31.28	204.41	155.48	4.18	Goetzel 2-29 (s)	CC (Lo)
1600.00	12.00	123.78	1595.62	3.54	3.31	209.70	44.51	37.05	5.97	Goetzel 33C-30-M (p)	
1700.00	14.00	123.78	1693.06	3.90	3.52	35.08	185.43	133.14	3.55	Goetzel 2-29 (s)	CC (Lo)
1700.00	14.00	123.78	1693.06	3.90	3.52	209.32	50.40	42.45	6.34	Goetzel 33C-30-M (p)	
1800.00	16.00	123.78	1789.64	4.33	3.74	40.46	164.69	109.18	2.97	Goetzel 2-29 (s)	CC (Lo)
1800.00	16.00	123.78	1789.64	4.33	3.74	209.50	56.53	48.04	6.66	Goetzel 33C-30-M (p)	
1900.00	17.55	123.78	1885.30	4.82	3.97	48.12	143.34	84.39	2.43	Goetzel 2-29 (s)	SF(Lo)
1900.00	17.55	123.78	1885.30	4.82	3.97	25.87	61.38	52.29	6.75	Goetzel 13N-30C-M (p)	CC (Lo)
2000.00	17.55	123.78	1980.64	5.35	4.22	58.15	124.63	62.21	2.00	Goetzel 2-29 (s)	SF(Lo)
2000.00	17.55	123.78	1980.64	5.35	4.22	27.41	61.83	52.04	6.32	Goetzel 13N-30C-M (p)	CC (Lo)
2100.00	17.55	123.78	2075.98	5.91	4.48	70.92	111.08	45.20	1.69	Goetzel 2-29 (s)	SF(Lo)
2100.00	17.55	123.78	2075.98	5.91	4.48	28.92	62.33	51.80	5.92	Goetzel 13N-30C-M (p)	CC (Lo)
2200.00	17.55	123.78	2171.33	6.48	4.75	85.96	104.70	35.09	1.50	Goetzel 2-29 (s)	SF(Lo)
2200.00	17.55	123.78	2171.33	6.48	4.75	30.41	62.87	51.55	5.56	Goetzel 13N-30C-M (p)	CC (Lo)
2300.00	17.55	123.78	2266.67	7.07	5.02	101.57	106.80	33.92	1.47	Goetzel 2-29 (s)	SF(Med)
2300.00	17.55	123.78	2266.67	7.07	5.02	31.87	63.45	51.30	5.22	Goetzel 13N-30C-M (p)	CC (Lo)
2400.00	17.55	123.78	2362.02	7.66	5.30	115.65	116.91	40.71	1.53	Goetzel 2-29 (s)	SF(Lo)
2400.00	17.55	123.78	2362.02	7.66	5.30	33.31	64.07	51.06	4.93	Goetzel 13N-30C-M (p)	CC (Lo)
2500.00	17.55	123.78	2457.36	8.27	5.58	127.07	133.23	54.07	1.68	Goetzel 2-29 (s)	SF(Lo)
2500.00	17.55	123.78	2457.36	8.27	5.58	34.71	64.73	50.83	4.66	Goetzel 13N-30C-M (p)	CC (Lo)
2600.00	17.55	123.78	2552.70	8.88	5.86	135.87	153.78	71.66	1.87	Goetzel 2-29 (s)	SF(Lo)
2600.00	17.55	123.78	2552.70	8.88	5.86	36.09	65.43	50.56	4.40	Goetzel 13N-30C-M (p)	CC (Lo)
2700.00	17.55	123.78	2648.05	9.50	6.15	142.56	177.11	92.05	2.08	Goetzel 2-29 (s)	SF(Lo)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
2700.00	17.55	123.78	2648.05	9.50	6.15	37.44	66.16	50.28	4.16	Goetzel 13N-30C-M (p)	SF(Lo)
2800.00	17.55	123.78	2743.39	10.12	6.44	147.70	202.25	114.24	2.30	Goetzel 2- 29 (s)	
2800.00	17.55	123.78	2743.39	10.12	6.44	38.76	66.94	50.01	3.95	Goetzel 13N-30C-M (p)	
2900.00	17.55	123.78	2838.74	10.74	6.73	151.70	228.61	137.61	2.51	Goetzel 2- 29 (s)	
2900.00	17.55	123.78	2838.74	10.74	6.73	40.04	67.74	49.76	3.77	Goetzel 13N-30C-M (p)	
3000.00	17.55	123.78	2934.08	11.36	7.02	154.88	255.81	161.62	2.72	Goetzel 2- 29 (s)	
3000.00	17.55	123.78	2934.08	11.36	7.02	41.30	68.58	49.53	3.60	Goetzel 13N-30C-M (p)	
3100.00	17.55	123.78	3029.43	11.99	7.31	157.45	283.61	186.41	2.92	Goetzel 2- 29 (s)	
3100.00	17.55	123.78	3029.43	11.99	7.31	42.52	69.45	49.30	3.45	Goetzel 13N-30C-M (p)	
3200.00	17.55	123.78	3124.77	12.62	7.61	159.56	311.85	211.71	3.11	Goetzel 2- 29 (s)	
3200.00	17.55	123.78	3124.77	12.62	7.61	43.72	70.36	49.06	3.30	Goetzel 13N-30C-M (p)	
3300.00	17.55	123.78	3220.11	13.26	7.91	44.88	71.29	48.80	3.17	Goetzel 13N-30C-M (p)	
3400.00	17.55	123.78	3315.46	13.89	8.20	46.01	72.25	48.56	3.05	Goetzel 13N-30C-M (p)	
3500.00	17.55	123.78	3410.80	14.53	8.50	47.11	73.24	48.34	2.94	Goetzel 13N-30C-M (p)	
3600.00	17.55	123.78	3506.15	15.16	8.80	48.19	74.25	48.13	2.84	Goetzel 13N-30C-M (p)	
3700.00	17.55	123.78	3601.49	15.80	9.10	49.23	75.29	47.94	2.75	Goetzel 13N-30C-M (p)	
3800.00	17.55	123.78	3696.83	16.44	9.40	50.24	76.36	47.78	2.67	Goetzel 13N-30C-M (p)	
3900.00	17.55	123.78	3792.18	17.08	9.70	51.23	77.45	47.62	2.60	Goetzel 13N-30C-M (p)	
4000.00	17.55	123.78	3887.52	17.72	10.00	52.19	78.56	47.46	2.53	Goetzel 13N-30C-M (p)	
4100.00	17.55	123.78	3982.87	18.36	10.30	53.12	79.69	47.30	2.46	Goetzel 13N-30C-M (p)	SF(Lo)
4200.00	17.55	123.78	4078.21	19.00	10.61	54.03	80.84	47.15	2.40	Goetzel 13N-30C-M (p)	SF(Lo)
4300.00	17.55	123.78	4173.56	19.64	10.91	54.91	82.01	46.99	2.34	Goetzel 13N-30C-M (p)	SF(Lo)
4400.00	17.55	123.78	4268.90	20.28	11.21	55.76	83.20	46.84	2.29	Goetzel 13N-30C-M (p)	SF(Lo)
4500.00	17.55	123.78	4364.24	20.92	11.52	56.59	84.41	46.72	2.24	Goetzel 13N-30C-M (p)	SF(Lo)
4600.00	17.55	123.78	4459.59	21.57	11.82	57.40	85.64	46.60	2.19	Goetzel 13N-30C-M (p)	SF(Lo)
4700.00	17.55	123.78	4554.93	22.21	12.13	58.18	86.88	46.51	2.15	Goetzel 13N-30C-M (p)	SF(Lo)
4800.00	17.55	123.78	4650.28	22.85	12.43	58.94	88.14	46.43	2.11	Goetzel 13N-30C-M (p)	SF(Lo)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
4900.00	17.55	123.78	4745.62	23.50	12.74	59.68	89.41	46.36	2.08	Goetzel 13N-30C-M (p)	SF(Lo)
5000.00	17.55	123.78	4840.97	24.14	13.04	60.40	90.70	46.31	2.04	Goetzel 13N-30C-M (p)	SF(Lo)
5100.00	17.55	123.78	4936.31	24.78	13.35	61.10	92.00	46.27	2.01	Goetzel 13N-30C-M (p)	SF(Lo)
5200.00	17.55	123.78	5031.65	25.43	13.65	61.78	93.31	46.25	1.98	Goetzel 13N-30C-M (p)	SF(Lo)
5300.00	17.55	123.78	5127.00	26.07	13.96	62.44	94.64	46.24	1.96	Goetzel 13N-30C-M (p)	SF(Lo)
5400.00	17.55	123.78	5222.34	26.72	14.27	63.08	95.98	46.25	1.93	Goetzel 13N-30C-M (p)	SF(Lo)
5500.00	17.55	123.78	5317.69	27.36	14.57	63.71	97.33	46.27	1.91	Goetzel 13N-30C-M (p)	SF(Lo)
5600.00	17.55	123.78	5413.03	28.01	14.88	64.32	98.70	46.28	1.88	Goetzel 13N-30C-M (p)	SF(Lo)
5700.00	17.55	123.78	5508.37	28.65	15.18	64.91	100.07	46.30	1.86	Goetzel 13N-30C-M (p)	SF(Lo)
5800.00	17.55	123.78	5603.72	29.30	15.49	65.48	101.45	46.32	1.84	Goetzel 13N-30C-M (p)	SF(Lo)
5900.00	17.55	123.78	5699.06	29.94	15.80	66.04	102.85	46.36	1.82	Goetzel 13N-30C-M (p)	SF(Lo)
6000.00	17.55	123.78	5794.41	30.59	16.11	66.58	104.25	46.40	1.80	Goetzel 13N-30C-M (p)	SF(Lo)
6100.00	17.55	123.78	5889.75	31.24	16.41	67.11	105.66	46.44	1.78	Goetzel 13N-30C-M (p)	SF(Lo)
6200.00	17.55	123.78	5985.10	31.88	16.72	67.63	107.08	46.48	1.77	Goetzel 13N-30C-M (p)	SF(Lo)
6300.00	15.16	131.09	6080.68	32.46	17.03	60.59	108.23	46.50	1.75	Goetzel 13N-30C-M (p)	SF(Lo)
6400.00	10.93	161.91	6178.19	32.60	17.16	25.52	107.37	46.70	1.77	Goetzel 13N-30C-M (p)	SF(Lo)
6500.00	11.64	203.54	6276.42	32.37	17.07	338.62	107.52	49.16	1.84	Goetzel 13N-30C-M (p)	SF(Lo)
6600.00	16.68	229.56	6373.44	31.83	16.73	307.30	109.26	53.96	1.98	Goetzel 13N-30C-M (p)	SF(Lo)
6700.00	23.39	242.44	6467.38	31.05	16.13	289.40	112.58	60.23	2.15	Goetzel 13N-30C-M (p)	SF(Lo)
6800.00	30.71	249.63	6556.41	30.12	15.29	277.72	117.27	67.83	2.37	Goetzel 13N-30C-M (p)	SF(Lo)
6900.00	38.28	254.24	6638.78	29.16	14.20	269.33	123.03	75.82	2.61	Goetzel 13N-30C-M (p)	
7000.00	45.97	257.51	6712.91	28.30	12.92	263.06	129.48	83.91	2.84	Goetzel 13N-30C-M (p)	
7100.00	53.74	260.02	6777.33	27.64	11.56	258.35	136.24	91.41	3.04	Goetzel 13N-30C-M (p)	
7200.00	61.55	262.07	6830.81	27.29	10.32	254.89	142.90	97.96	3.18	Goetzel 13N-30C-M (p)	
7300.00	69.39	263.84	6872.31	27.30	9.50	252.47	149.15	103.21	3.25	Goetzel 13N-30C-M (p)	
7400.00	77.24	265.44	6901.00	27.68	9.42	250.94	154.69	106.70	3.22		



## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
7500.00	85.10	266.94	6916.34	28.40	10.24	250.20	159.28	108.45	3.13	Goetzel 13N-30C-M (p)	
7600.00	90.00	267.85	6919.00	29.34	11.31	250.22	162.60	108.76	3.02	Goetzel 13N-30C-M (p)	
7700.00	90.00	267.85	6919.00	30.43	11.81	250.54	165.17	109.20	2.95	Goetzel 13N-30C-M (p)	
7800.00	90.00	267.85	6919.00	31.73	12.33	250.85	167.74	109.19	2.86	Goetzel 13N-30C-M (p)	
7900.00	90.00	267.85	6919.00	33.22	12.88	251.15	170.32	108.86	2.77	Goetzel 13N-30C-M (p)	
8000.00	90.00	267.85	6919.00	34.87	13.45	251.45	172.91	108.14	2.67	Goetzel 13N-30C-M (p)	
8100.00	90.00	267.85	6919.00	36.65	14.04	251.73	175.50	107.30	2.57	Goetzel 13N-30C-M (p)	
8200.00	90.00	267.85	6919.00	38.56	14.64	252.00	178.09	106.01	2.47	Goetzel 13N-30C-M (p)	SF(Lo)
8300.00	90.00	267.85	6919.00	40.57	15.26	252.27	180.69	104.58	2.37	Goetzel 13N-30C-M (p)	SF(Lo)
8400.00	90.00	267.85	6919.00	42.67	15.89	252.53	183.29	103.06	2.28	Goetzel 13N-30C-M (p)	SF(Lo)
8500.00	90.00	267.85	6919.00	44.84	16.52	252.78	185.89	101.41	2.20	Goetzel 13N-30C-M (p)	SF(Lo)
8600.00	90.00	267.85	6919.00	47.09	17.17	253.03	188.50	99.65	2.12	Goetzel 13N-30C-M (p)	SF(Lo)
8700.00	90.00	267.85	6919.00	49.39	17.82	253.27	191.11	97.78	2.05	Goetzel 13N-30C-M (p)	SF(Lo)
8800.00	90.00	267.85	6919.00	51.74	18.48	253.50	193.73	95.82	1.98	Goetzel 13N-30C-M (p)	SF(Lo)
8900.00	90.00	267.85	6919.00	54.13	19.14	253.73	196.34	93.78	1.91	Goetzel 13N-30C-M (p)	SF(Lo)
9000.00	90.00	267.85	6919.00	56.56	19.81	253.95	198.97	91.66	1.85	Goetzel 13N-30C-M (p)	SF(Lo)
9100.00	90.00	267.85	6919.00	59.02	20.48	254.16	201.59	89.49	1.80	Goetzel 13N-30C-M (p)	SF(Lo)
9200.00	90.00	267.85	6919.00	61.52	21.16	254.37	204.22	87.25	1.75	Goetzel 13N-30C-M (p)	SF(Lo)
9300.00	90.00	267.85	6919.00	64.03	21.84	254.57	206.84	84.92	1.70	Goetzel 13N-30C-M (p)	SF(Lo)
9400.00	90.00	267.85	6919.00	66.58	22.52	254.77	209.48	82.50	1.65	Goetzel 13N-30C-M (p)	SF(Lo)
9500.00	90.00	267.85	6919.00	69.14	23.21	254.97	212.11	80.03	1.61	Goetzel 13N-30C-M (p)	SF(Lo)
9600.00	90.00	267.85	6919.00	71.72	23.89	255.16	214.75	77.51	1.56	Goetzel 13N-30C-M (p)	SF(Lo)
9700.00	90.00	267.85	6919.00	74.31	24.59	255.34	217.39	74.96	1.53	Goetzel 13N-30C-M (p)	SF(Lo)
9800.00	90.00	267.85	6919.00	76.92	25.28	255.52	220.03	72.38	1.49	Goetzel 13N-30C-M (p)	SF(Med)
9900.00	90.00	267.85	6919.00	79.55	25.97	255.69	222.67	69.78	1.46		SF(Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
10000.00	90.00	267.85	6919.00	82.18	26.67	255.87	225.31	67.16	1.42	Goetzel 13N-30C-M (p)	SF(Med)
10100.00	90.00	267.85	6919.00	84.83	27.37	256.03	227.96	64.53	1.39	Goetzel 13N-30C-M (p)	SF(Med)
10200.00	90.00	267.85	6919.00	87.49	28.07	256.20	230.61	61.88	1.37	Goetzel 13N-30C-M (p)	SF(Med)
10300.00	90.00	267.85	6919.00	90.15	28.78	256.36	233.26	59.21	1.34	Goetzel 13N-30C-M (p)	SF(Med)
10400.00	90.00	267.85	6919.00	92.82	29.48	256.51	235.91	56.54	1.32	Goetzel 13N-30C-M (p)	SF(Med)
10500.00	90.00	267.85	6919.00	95.51	30.18	256.67	238.57	53.85	1.29	Goetzel 13N-30C-M (p)	SF(Med)
10600.00	90.00	267.85	6919.00	98.19	30.89	256.82	241.22	51.15	1.27	Goetzel 13N-30C-M (p)	SF(Med)
10700.00	90.00	267.85	6919.00	100.89	31.60	256.96	243.88	48.43	1.25	Goetzel 13N-30C-M (p)	SF(Med)
10800.00	90.00	267.85	6919.00	103.59	32.31	257.10	246.54	45.69	1.23	Goetzel 13N-30C-M (p)	SF(Med)
10900.00	90.00	267.85	6919.00	106.29	33.02	257.24	249.20	42.95	1.21	Goetzel 13N-30C-M (p)	SF(Med)
11000.00	90.00	267.85	6919.00	109.00	33.73	257.38	251.86	40.19	1.19	Goetzel 13N-30C-M (p)	SF(Med)
11100.00	90.00	267.85	6919.00	111.72	34.44	257.52	254.53	37.42	1.17	Goetzel 13N-30C-M (p)	SF(Med)
11200.00	90.00	267.85	6919.00	114.44	35.15	257.65	257.19	34.65	1.16	Goetzel 13N-30C-M (p)	SF(Med)
11300.00	90.00	267.85	6919.00	117.16	35.87	257.78	259.86	31.87	1.14	Goetzel 13N-30C-M (p)	SF(Med)
11400.00	90.00	267.85	6919.00	119.89	36.58	270.00	257.42	14.40	1.06	Firestien #30-45 (s)	SF(Med)
11500.00	90.00	267.85	6919.00	122.62	37.30	270.00	163.28	-95.61	0.63	Firestien #30-45 (s)	SF(Hi)
11600.00	90.00	267.85	6919.00	125.35	38.01	270.00	83.98	-223.49	0.27	Firestien #30-45 (s)	SF(Hi)
11700.00	90.00	267.85	6919.00	128.09	38.73	270.00	86.29	-227.38	0.28	Firestien #30-45 (s)	SF(Hi)
11800.00	90.00	267.85	6919.00	130.83	39.44	270.00	166.85	-103.58	0.62	Firestien #30-45 (s)	SF(Hi)
11900.00	90.00	267.85	6919.00	133.57	40.16	270.00	261.21	7.14	1.03	Firestien #30-45 (s)	SF(Med)
12000.00	90.00	267.85	6919.00	136.31	40.88	258.61	278.55	12.24	1.05	Goetzel 13N-30C-M (p)	SF(Med)
12000.00	90.00	267.85	6919.00	136.31	40.88	132.21	264.97	53.75	1.25	Goetzel 33C-30-M (p)	SF(Med)
12100.00	90.00	267.85	6919.00	139.06	41.60	258.72	281.23	9.42	1.03	Goetzel 13N-30C-M (p)	SF(Med)
12100.00	90.00	267.85	6919.00	139.06	41.60	132.51	263.46	48.98	1.23	Goetzel 33C-30-M (p)	SF(Med)
12200.00	90.00	267.85	6919.00	141.81	42.32	258.83	283.91	6.59	1.02	Goetzel 13N-30C-M (p)	SF(Med)
12200.00	90.00	267.85	6919.00	141.81	42.32	132.81	261.97	44.25	1.20	Goetzel 33C-30-M (p)	SF(Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
12300.00	90.00	267.85	6919.00	144.56	43.04	258.93	286.58	3.76	1.01	Goetzel 13N-30C-M (p)	SF(Med)
12300.00	90.00	267.85	6919.00	144.56	43.04	133.11	260.48	39.59	1.18	Goetzel 33C-30-M (p)	SF(Med)
12400.00	90.00	267.85	6919.00	147.31	43.76	259.04	289.26	0.92	1.00	Goetzel 13N-30C-M (p)	SF(Med)
12400.00	90.00	267.85	6919.00	147.31	43.76	133.42	258.99	34.92	1.16	Goetzel 33C-30-M (p)	SF(Med)
12500.00	90.00	267.85	6919.00	150.07	44.48	259.14	291.94	-1.92	0.99	Goetzel 13N-30C-M (p)	SF(Hi)
12500.00	90.00	267.85	6919.00	150.07	44.48	133.73	257.52	30.27	1.13	Goetzel 33C-30-M (p)	SF(Med)
12600.00	90.00	267.85	6919.00	152.82	45.20	259.24	294.62	-4.76	0.98	Goetzel 13N-30C-M (p)	SF(Hi)
12600.00	90.00	267.85	6919.00	152.82	45.20	134.05	256.05	25.68	1.11	Goetzel 33C-30-M (p)	SF(Med)
12700.00	90.00	267.85	6919.00	155.58	45.92	259.34	297.30	-7.60	0.98	Goetzel 13N-30C-M (p)	SF(Hi)
12700.00	90.00	267.85	6919.00	155.58	45.92	134.37	254.59	21.16	1.09	Goetzel 33C-30-M (p)	SF(Med)
12800.00	90.00	267.85	6919.00	158.34	46.64	259.43	299.98	-10.45	0.97	Goetzel 13N-30C-M (p)	SF(Hi)
12800.00	90.00	267.85	6919.00	158.34	46.64	134.69	253.14	16.69	1.07	Goetzel 33C-30-M (p)	SF(Med)
12900.00	90.00	267.85	6919.00	161.10	47.36	259.53	302.67	-13.30	0.96	Goetzel 13N-30C-M (p)	SF(Hi)
12900.00	90.00	267.85	6919.00	161.10	47.36	135.01	251.70	12.29	1.05	Goetzel 33C-30-M (p)	SF(Med)
13000.00	90.00	267.85	6919.00	163.87	48.09	259.62	305.35	-16.15	0.95	Goetzel 13N-30C-M (p)	SF(Hi)
13000.00	90.00	267.85	6919.00	163.87	48.09	135.34	250.26	7.95	1.03	Goetzel 33C-30-M (p)	SF(Med)
13100.00	90.00	267.85	6919.00	166.63	48.81	259.71	308.03	-19.00	0.94	Goetzel 13N-30C-M (p)	SF(Hi)
13100.00	90.00	267.85	6919.00	166.63	48.81	135.68	248.83	3.68	1.02	Goetzel 33C-30-M (p)	SF(Med)
13200.00	90.00	267.85	6919.00	169.40	49.53	259.80	310.72	-21.86	0.93	Goetzel 13N-30C-M (p)	SF(Hi)
13200.00	90.00	267.85	6919.00	169.40	49.53	136.01	247.42	-0.52	1.00	Goetzel 33C-30-M (p)	SF(Hi)
13300.00	90.00	267.85	6919.00	172.16	50.25	259.89	313.41	-24.71	0.93	Goetzel 13N-30C-M (p)	SF(Hi)
13300.00	90.00	267.85	6919.00	172.16	50.25	136.35	246.01	-4.65	0.98	Goetzel 33C-30-M (p)	SF(Hi)
13400.00	90.00	267.85	6919.00	174.93	50.98	259.98	316.09	-27.57	0.92	Goetzel 13N-30C-M (p)	SF(Hi)
13400.00	90.00	267.85	6919.00	174.93	50.98	136.70	244.61	-8.72	0.97	Goetzel 33C-30-M (p)	SF(Hi)
13500.00	90.00	267.85	6919.00	177.70	51.70	260.06	318.78	-30.44	0.91	Goetzel 13N-30C-M (p)	SF(Hi)
13500.00	90.00	267.85	6919.00	177.70	51.70	137.05	243.21	-12.70	0.95		SF(Hi)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
13600.00	90.00	267.85	6919.00	180.47	52.43	260.15	321.47	-33.30	0.91	Goetzel 33C-30-M (p)	SF(Hi)
13600.00	90.00	267.85	6919.00	180.47	52.43	137.40	241.83	-16.61	0.94	Goetzel 13N-30C-M (p)	SF(Hi)
13700.00	90.00	267.85	6919.00	183.24	53.15	260.23	324.16	-36.16	0.90	Goetzel 33C-30-M (p)	SF(Hi)
13700.00	90.00	267.85	6919.00	183.24	53.15	137.76	240.46	-20.45	0.92	Goetzel 13N-30C-M (p)	SF(Hi)
13800.00	90.00	267.85	6919.00	186.01	53.87	260.31	326.85	-39.03	0.89	Goetzel 33C-30-M (p)	SF(Hi)
13800.00	90.00	267.85	6919.00	186.01	53.87	138.12	239.09	-24.20	0.91	Goetzel 13N-30C-M (p)	SF(Hi)
13900.00	90.00	267.85	6919.00	188.79	54.60	260.39	329.54	-41.89	0.89	Goetzel 33C-30-M (p)	SF(Hi)
13900.00	90.00	267.85	6919.00	188.79	54.60	138.49	237.74	-27.88	0.90	Goetzel 13N-30C-M (p)	SF(Hi)
14000.00	90.00	267.85	6919.00	191.56	55.32	93.94	335.16	-48.46	0.87	Goetzel 33C-30-M (p)	SF(Hi)
14000.00	90.00	267.85	6919.00	191.56	55.32	138.86	236.39	-31.47	0.88	Goetzel 12N-30B-M (p)	SF(Hi)
14100.00	90.00	267.85	6919.00	194.34	56.05	93.97	332.46	-56.67	0.85	Goetzel 33C-30-M (p)	SF(Hi)
14100.00	90.00	267.85	6919.00	194.34	56.05	139.23	235.06	-34.98	0.87	Goetzel 12N-30B-M (p)	SF(Hi)
14200.00	90.00	267.85	6919.00	197.11	56.77	94.00	329.77	-64.88	0.84	Goetzel 33C-30-M (p)	SF(Hi)
14200.00	90.00	267.85	6919.00	197.11	56.77	139.61	233.73	-38.40	0.86	Goetzel 12N-30B-M (p)	SF(Hi)
14300.00	90.00	267.85	6919.00	199.89	57.50	94.03	327.07	-73.09	0.82	Goetzel 33C-30-M (p)	SF(Hi)
14300.00	90.00	267.85	6919.00	199.89	57.50	139.99	232.42	-41.73	0.85	Goetzel 12N-30B-M (p)	SF(Hi)
14400.00	90.00	267.85	6919.00	202.66	58.23	94.07	324.38	-81.31	0.80	Goetzel 33C-30-M (p)	SF(Hi)
14400.00	90.00	267.85	6919.00	202.66	58.23	140.38	231.12	-44.97	0.84	Goetzel 12N-30B-M (p)	SF(Hi)
14500.00	90.00	267.85	6919.00	205.44	58.95	94.10	321.68	-89.52	0.78	Goetzel 33C-30-M (p)	SF(Hi)
14500.00	90.00	267.85	6919.00	205.44	58.95	140.77	229.82	-48.12	0.83	Goetzel 12N-30B-M (p)	SF(Hi)
14600.00	90.00	267.85	6919.00	208.22	59.68	270.00	255.19	-87.68	0.74	Goetzel 33C-30-M (p)	SF(Hi)
14600.00	90.00	267.85	6919.00	208.22	59.68	141.16	228.54	-51.17	0.82	Lafarge West 30-35 (s)	SF(Hi)
14700.00	90.00	267.85	6919.00	211.00	60.40	270.00	193.28	-197.64	0.49	Goetzel 33C-30-M (p)	SF(Hi)
14800.00	90.00	267.85	6919.00	213.78	61.13	270.00	172.03	-248.59	0.41	Lafarge West 30-35 (s)	SF(Hi)
14900.00	90.00	267.85	6919.00	216.56	61.86	270.00	204.52	-187.59	0.52		SF(Hi)

## 5D Anti-Collision Report

Primary Well: Goetzel 33N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
15000.00	90.00	267.85	6919.00	219.34	62.58	94.28	308.21	-130.58	0.70	Lafarge West 30-35 (s) Goetzel 12N-30B-M (p)	SF(Hi)
15000.00	90.00	267.85	6919.00	219.34	62.58	142.79	223.52	-62.38	0.78	Goetzel 33C-30-M (p)	SF(Hi)
15100.00	90.00	267.85	6919.00	222.12	63.31	94.32	305.52	-138.79	0.69	Goetzel 12N-30B-M (p)	SF(Hi)
15100.00	90.00	267.85	6919.00	222.12	63.31	143.21	222.30	-64.92	0.77	Goetzel 33C-30-M (p)	SF(Hi)
15200.00	90.00	267.85	6919.00	224.91	64.04	94.36	302.82	-147.00	0.67	Goetzel 12N-30B-M (p)	SF(Hi)
15200.00	90.00	267.85	6919.00	224.91	64.04	143.63	221.08	-67.36	0.77	Goetzel 33C-30-M (p)	SF(Hi)
15300.00	90.00	267.85	6919.00	227.69	64.77	94.40	300.13	-155.21	0.66	Goetzel 12N-30B-M (p)	SF(Hi)
15300.00	90.00	267.85	6919.00	227.69	64.77	144.06	219.88	-69.68	0.76	Goetzel 33C-30-M (p)	SF(Hi)
15400.00	90.00	267.85	6919.00	230.47	65.49	94.44	297.44	-163.43	0.65	Goetzel 12N-30B-M (p)	SF(Hi)
15400.00	90.00	267.85	6919.00	230.47	65.49	144.49	218.69	-71.89	0.75	Goetzel 33C-30-M (p)	SF(Hi)
15456.59	90.00	267.85	6919.00	232.05	65.91	94.45	296.34	-166.28	0.64	Goetzel 12N-30B-M (p)	SF(Hi)
15456.59	90.00	267.85	6919.00	232.05	65.91	144.71	218.11	-72.44	0.75	Goetzel 33C-30-M (p)	SF(Hi)
Secondary Well: Goetzel 2-29 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	28.00	0.00	0.00	147.44	261.70	260.93	339.98	
100.00	72.00	0.00	0.00	100.00	1.09	1.09	147.44	260.20	258.23	132.00	
200.00	172.00	0.00	0.00	200.00	2.69	2.69	147.44	260.20	256.41	68.61	
300.00	272.00	0.00	0.00	300.00	5.73	5.73	147.44	260.20	253.15	36.90	
400.00	372.00	0.00	0.00	400.00	8.77	8.77	147.44	260.20	249.89	25.24	
500.00	472.00	0.00	0.00	500.00	11.80	11.80	147.44	260.20	246.81	19.42	
600.00	572.00	0.00	0.00	600.00	14.84	14.84	147.44	260.20	243.55	15.62	
700.00	672.00	0.00	0.00	700.00	17.88	17.88	147.44	260.20	240.29	13.07	
800.00	772.00	0.00	0.00	800.00	20.91	20.91	147.44	260.20	237.03	11.23	
900.00	872.00	0.00	0.00	900.00	23.95	23.95	147.44	260.20	233.77	9.85	
1000.00	972.00	0.00	0.00	1000.00	26.99	26.99	147.44	260.20	230.51	8.76	
1100.00	1071.98	0.00	0.00	1099.98	30.02	30.02	23.83	258.60	225.68	7.86	
1200.00	1171.84	0.00	0.00	1199.84	33.06	33.06	24.34	253.82	217.67	7.02	
1300.00	1271.45	0.00	0.00	1299.45	36.08	36.08	25.25	245.91	206.51	6.24	
1400.00	1370.70	0.00	0.00	1398.70	39.10	39.10	26.61	234.93	192.30	5.51	
1500.00	1469.47	0.00	0.00	1497.47	42.10	42.10	28.56	221.03	175.20	4.82	
1600.00	1567.62	0.00	0.00	1595.62	45.08	45.08	31.28	204.41	155.48	4.18	
1700.00	1665.06	0.00	0.00	1693.06	48.03	48.03	35.08	185.43	133.14	3.55	
1800.00	1761.64	0.00	0.00	1789.64	50.97	50.97	40.46	164.69	109.18	2.97	
1900.00	1857.30	0.00	0.00	1885.30	53.87	53.87	48.12	143.34	84.39	2.43	SF(Lo)
2000.00	1952.64	0.00	0.00	1980.64	56.77	56.77	58.15	124.63	62.21	2.00	SF(Lo)
2100.00	2047.98	0.00	0.00	2075.98	59.66	59.66	70.92	111.08	45.20	1.69	SF(Lo)
2200.00	2143.33	0.00	0.00	2171.33	62.56	62.56	85.96	104.70	35.09	1.50	SF(Lo)
2300.00	2238.67	0.00	0.00	2266.67	65.45	65.45	101.57	106.80	33.92	1.47	SF(Med)

## 5D Anti-Collision Report

Secondary Well: Goetzel 2-29 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
2400.00	2334.02	0.00	0.00	2362.02	68.35	68.35	115.65	116.91	40.71	1.53	SF(Lo)
2500.00	2429.36	0.00	0.00	2457.36	71.25	71.25	127.07	133.23	54.07	1.68	SF(Lo)
2600.00	2524.70	0.00	0.00	2552.70	74.14	74.14	135.87	153.78	71.66	1.87	SF(Lo)
2700.00	2620.05	0.00	0.00	2648.05	77.04	77.04	142.56	177.11	92.05	2.08	SF(Lo)
2800.00	2715.39	0.00	0.00	2743.39	79.93	79.93	147.70	202.25	114.24	2.30	SF(Lo)
2900.00	2810.74	0.00	0.00	2838.74	82.83	82.83	151.70	228.61	137.61	2.51	
3000.00	2906.08	0.00	0.00	2934.08	85.72	85.72	154.88	255.81	161.62	2.72	
3100.00	3001.43	0.00	0.00	3029.43	88.62	88.62	157.45	283.61	186.41	2.92	
3200.00	3096.77	0.00	0.00	3124.77	91.51	91.51	159.56	311.85	211.71	3.11	
3300.00	3192.11	0.00	0.00	3220.11	94.41	94.41	161.32	340.41	237.15	3.30	
3400.00	3287.46	0.00	0.00	3315.46	97.31	97.31	162.82	369.23	262.72	3.47	
3500.00	3382.80	0.00	0.00	3410.80	100.20	100.20	164.09	398.25	288.54	3.63	
3600.00	3478.15	0.00	0.00	3506.15	103.10	103.10	165.20	427.43	314.56	3.79	
3700.00	3573.49	0.00	0.00	3601.49	105.99	105.99	166.16	456.73	340.71	3.94	
3800.00	3668.83	0.00	0.00	3696.83	108.89	108.89	167.01	486.14	366.98	4.08	
3900.00	3764.18	0.00	0.00	3792.18	111.78	111.78	167.76	515.63	393.36	4.22	
4000.00	3859.52	0.00	0.00	3887.52	114.68	114.68	168.43	545.20	419.82	4.35	
4100.00	3954.87	0.00	0.00	3982.87	117.57	117.57	169.04	574.83	446.35	4.47	
4200.00	4050.21	0.00	0.00	4078.21	120.47	120.47	169.58	604.51	472.94	4.59	
4300.00	4145.56	0.00	0.00	4173.56	123.36	123.36	170.07	634.24	499.57	4.71	
4400.00	4240.90	0.00	0.00	4268.90	126.26	126.26	170.52	664.00	526.26	4.82	
4500.00	4336.24	0.00	0.00	4364.24	129.16	129.16	170.93	693.80	552.92	4.92	
4600.00	4431.59	0.00	0.00	4459.59	132.05	132.05	171.30	723.63	579.53	5.02	
4700.00	4526.93	0.00	0.00	4554.93	134.95	134.95	171.65	753.48	606.17	5.11	
4800.00	4622.28	0.00	0.00	4650.28	137.84	137.84	171.97	783.36	632.83	5.20	
4900.00	4717.62	0.00	0.00	4745.62	140.74	140.74	172.27	813.26	659.52	5.29	
5000.00	4812.97	0.00	0.00	4840.97	143.63	143.63	172.54	843.17	686.23	5.37	
5100.00	4908.31	0.00	0.00	4936.31	146.53	146.53	172.80	873.11	712.95	5.45	
5200.00	5003.65	0.00	0.00	5031.65	149.42	149.42	173.04	903.06	739.68	5.53	
5300.00	5099.00	0.00	0.00	5127.00	152.32	152.32	173.26	933.02	766.43	5.60	
5400.00	5194.34	0.00	0.00	5222.34	155.21	155.21	173.47	962.99	793.20	5.67	
5500.00	5289.69	0.00	0.00	5317.69	158.11	158.11	173.67	992.98	819.98	5.74	
5600.00	5385.03	0.00	0.00	5413.03	161.01	161.01	173.86	1022.97	846.77	5.81	
5700.00	5480.37	0.00	0.00	5508.37	163.90	163.90	174.03	1052.98	873.58	5.87	
5800.00	5575.72	0.00	0.00	5603.72	166.80	166.80	174.20	1082.99	900.39	5.93	
5900.00	5671.06	0.00	0.00	5699.06	169.69	169.69	174.36	1113.01	927.21	5.99	
6000.00	5766.41	0.00	0.00	5794.41	172.59	172.59	174.50	1143.04	954.04	6.05	
6100.00	5861.75	0.00	0.00	5889.75	175.48	175.48	174.65	1173.07	980.88	6.10	
6200.00	5957.10	0.00	0.00	5985.10	178.38	178.38	174.78	1203.12	1007.73	6.16	
6300.00	6052.68	0.00	0.00	6080.68	181.28	181.28	167.44	1232.28	1033.70	6.21	
6400.00	6150.19	0.00	0.00	6178.19	184.24	184.24	136.94	1252.07	1050.30	6.21	
6500.00	6248.42	0.00	0.00	6276.42	187.23	187.23	96.45	1260.20	1055.30	6.15	
6600.00	6345.44	0.00	0.00	6373.44	190.17	190.17	72.36	1256.80	1048.91	6.05	
6700.00	6439.38	0.00	0.00	6467.38	193.03	193.03	62.25	1242.33	1031.73	5.90	
6800.00	6528.41	0.00	0.00	6556.41	195.73	195.73	58.72	1217.63	1004.70	5.72	
6900.00	6610.78	0.00	0.00	6638.78	198.23	198.23	58.76	1183.83	968.07	5.49	
7000.00	6684.91	0.00	0.00	6712.91	200.48	200.48	61.18	1142.43	923.92	5.23	
7100.00	6749.33	0.00	0.00	6777.33	202.44	202.44	65.35	1095.23	874.53	4.96	
7200.00	6802.81	0.00	0.00	6830.81	204.06	204.06	70.75	1044.33	821.74	4.69	
7300.00	6844.31	0.00	0.00	6872.31	205.32	205.32	76.72	992.08	766.58	4.40	
7400.00	6873.00	0.00	0.00	6901.00	206.19	206.19	82.55	940.98	713.80	4.14	
7500.00	6888.34	0.00	0.00	6916.34	206.66	206.66	87.54	893.55	663.24	3.88	
7600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	852.30	620.10	3.67	
7700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	820.71	585.76	3.49	
7800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	800.44	562.66	3.37	
7900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	792.36	552.43	3.30	
8000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	796.85	555.00	3.29	
8100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	813.71	569.56	3.33	

## 5D Anti-Collision Report

Secondary Well: Goetzel 2-29 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
8200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	842.17	596.88	3.43	
8300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	881.13	635.41	3.59	
8400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	929.27	682.64	3.77	
8500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	985.23	739.07	4.00	
8600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1047.77	801.30	4.25	
8700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1115.77	869.72	4.53	
8800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1188.31	942.76	4.84	
8900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1264.61	1018.91	5.15	
9000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1344.01	1098.78	5.48	
9100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1426.01	1181.65	5.84	
9200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1510.18	1266.22	6.19	
9300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1596.18	1352.37	6.55	
9400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1683.72	1440.17	6.91	
9500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1772.59	1529.37	7.29	
9600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1862.58	1619.86	7.67	
9700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	1953.55	1711.43	8.07	
9800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2045.36	1803.91	8.47	
9900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2137.90	1896.41	8.85	
10000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2231.09	1989.58	9.24	
10100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2324.84	2083.41	9.63	
10200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2419.10	2177.80	10.03	
10300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2513.80	2272.69	10.43	
10400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2608.89	2368.01	10.83	
10500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2704.34	2463.72	11.24	
10600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2800.11	2559.66	11.65	
10700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2896.16	2655.90	12.05	
10800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	2992.47	2752.42	12.47	
10900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3089.02	2849.18	12.88	
11000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3185.77	2946.17	13.30	
11100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3282.73	3043.35	13.71	
11200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3379.86	3140.71	14.13	
11300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3477.15	3238.24	14.55	
11400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3574.59	3335.89	14.97	
11500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3672.17	3433.48	15.38	
11600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3769.88	3531.20	15.79	
11700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3867.70	3629.05	16.21	
11800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	3965.64	3727.01	16.62	
11900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4063.67	3825.08	17.03	
12000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4161.80	3923.25	17.45	
12100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4260.01	4021.50	17.86	
12200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4358.31	4119.83	18.28	
12300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4456.68	4218.21	18.69	
12400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4555.12	4316.67	19.10	
12500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4653.63	4415.20	19.52	
12600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4752.20	4513.79	19.93	
12700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4850.83	4612.44	20.35	
12800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	4949.51	4711.14	20.76	
12900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5048.25	4809.90	21.18	
13000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5147.03	4908.71	21.60	
13100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5245.86	5007.56	22.01	
13200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5344.74	5106.46	22.43	
13300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5443.65	5205.40	22.85	
13400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5542.61	5304.37	23.27	
13500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5641.60	5403.39	23.68	
13600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5740.63	5502.44	24.10	
13700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5839.68	5601.52	24.52	
13800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	5938.78	5700.63	24.94	
13900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6037.90	5799.77	25.36	

## 5D Anti-Collision Report

Secondary Well: Goetzel 2-29 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
14000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6137.05	5898.94	25.77	
14100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6236.22	5998.13	26.19	
14200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6335.43	6097.35	26.61	
14300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6434.65	6196.60	27.03	
14400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6533.90	6295.86	27.45	
14500.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6633.18	6395.15	27.87	
14600.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6732.47	6494.46	28.29	
14700.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6831.79	6593.79	28.71	
14800.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	6931.12	6693.14	29.12	
14900.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7030.48	6792.50	29.54	
15000.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7129.85	6891.88	29.96	
15100.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7229.24	6991.28	30.38	
15200.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7328.64	7090.70	30.80	
15300.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7428.06	7190.13	31.22	
15400.00	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7527.50	7289.57	31.64	
15456.59	6891.00	0.00	0.00	6919.00	206.74	206.74	90.00	7583.78	7345.86	31.87	
Secondary Well: Tigges 30-31 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	17.00	0.00	0.00	267.07	5648.46	5647.73	7757.79	
100.00	83.00	0.00	0.00	100.00	1.26	1.26	267.07	5648.43	5646.34	2694.99	
200.00	183.00	0.00	0.00	200.00	3.03	3.03	267.07	5648.43	5644.35	1383.24	
300.00	283.00	0.00	0.00	300.00	6.06	6.06	267.07	5648.43	5641.09	769.45	
400.00	383.00	0.00	0.00	400.00	9.10	9.10	267.07	5648.43	5638.01	541.74	
500.00	483.00	0.00	0.00	500.00	12.14	12.14	267.07	5648.43	5634.75	412.78	
600.00	583.00	0.00	0.00	600.00	15.17	15.17	267.07	5648.43	5631.49	333.41	
700.00	683.00	0.00	0.00	700.00	18.21	18.21	267.07	5648.43	5628.24	279.64	
800.00	783.00	0.00	0.00	800.00	21.25	21.25	267.07	5648.43	5624.98	240.81	
900.00	883.00	0.00	0.00	900.00	24.28	24.28	267.07	5648.43	5621.72	211.45	
1000.00	983.00	0.00	0.00	1000.00	27.32	27.32	267.07	5648.43	5618.46	188.46	
1100.00	1082.98	0.00	0.00	1099.98	30.36	30.36	143.28	5649.83	5616.63	170.14	
1200.00	1182.84	0.00	0.00	1199.84	33.39	33.39	143.27	5654.03	5617.61	155.23	
1300.00	1282.45	0.00	0.00	1299.45	36.42	36.42	143.23	5661.02	5621.38	142.80	
1400.00	1381.70	0.00	0.00	1398.70	39.43	39.43	143.19	5670.81	5627.95	132.30	
1500.00	1480.47	0.00	0.00	1497.47	42.43	42.43	143.13	5683.39	5637.29	123.30	
1600.00	1578.62	0.00	0.00	1595.62	45.41	45.41	143.06	5698.74	5649.41	115.52	
1700.00	1676.06	0.00	0.00	1693.06	48.37	48.37	142.97	5716.88	5664.31	108.75	
1800.00	1772.64	0.00	0.00	1789.64	51.30	51.30	142.87	5737.79	5681.98	102.81	
1900.00	1868.30	0.00	0.00	1885.30	54.21	54.21	142.82	5761.38	5702.32	97.54	
2000.00	1963.64	0.00	0.00	1980.64	57.10	57.10	142.99	5785.84	5723.53	92.84	
2100.00	2058.98	0.00	0.00	2075.98	60.00	60.00	143.17	5810.36	5744.78	88.60	
2200.00	2154.33	0.00	0.00	2171.33	62.89	62.89	143.34	5834.93	5766.08	84.75	
2300.00	2249.67	0.00	0.00	2266.67	65.79	65.79	143.52	5859.55	5787.43	81.25	
2400.00	2345.02	0.00	0.00	2362.02	68.68	68.68	143.69	5884.22	5808.81	78.03	
2500.00	2440.36	0.00	0.00	2457.36	71.58	71.58	143.86	5908.95	5830.24	75.07	
2600.00	2535.70	0.00	0.00	2552.70	74.48	74.48	144.03	5933.72	5851.71	72.35	
2700.00	2631.05	0.00	0.00	2648.05	77.37	77.37	144.20	5958.55	5873.24	69.85	
2800.00	2726.39	0.00	0.00	2743.39	80.27	80.27	144.36	5983.42	5894.81	67.52	
2900.00	2821.74	0.00	0.00	2838.74	83.16	83.16	144.53	6008.34	5916.43	65.37	
3000.00	2917.08	0.00	0.00	2934.08	86.06	86.06	144.69	6033.31	5938.09	63.36	
3100.00	3012.43	0.00	0.00	3029.43	88.95	88.95	144.85	6058.33	5959.80	61.49	
3200.00	3107.77	0.00	0.00	3124.77	91.85	91.85	145.01	6083.39	5981.56	59.74	
3300.00	3203.11	0.00	0.00	3220.11	94.74	94.74	145.17	6108.50	6003.37	58.11	
3400.00	3298.46	0.00	0.00	3315.46	97.64	97.64	145.33	6133.65	6025.23	56.57	
3500.00	3393.80	0.00	0.00	3410.80	100.53	100.53	145.49	6158.85	6047.12	55.12	
3600.00	3489.15	0.00	0.00	3506.15	103.43	103.43	145.65	6184.10	6069.07	53.76	
3700.00	3584.49	0.00	0.00	3601.49	106.33	106.33	145.80	6209.38	6091.06	52.48	



## 5D Anti-Collision Report

Secondary Well: Tigges 30-31 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
3800.00	3679.83	0.00	0.00	3696.83	109.22	109.22	145.95	6234.72	6113.10	51.26	
3900.00	3775.18	0.00	0.00	3792.18	112.12	112.12	146.11	6260.09	6135.18	50.12	
4000.00	3870.52	0.00	0.00	3887.52	115.01	115.01	146.26	6285.50	6157.30	49.03	
4100.00	3965.87	0.00	0.00	3982.87	117.91	117.91	146.41	6310.96	6179.47	47.99	
4200.00	4061.21	0.00	0.00	4078.21	120.80	120.80	146.56	6336.46	6201.68	47.01	
4300.00	4156.56	0.00	0.00	4173.56	123.70	123.70	146.70	6362.00	6223.93	46.08	
4400.00	4251.90	0.00	0.00	4268.90	126.59	126.59	146.85	6387.58	6246.23	45.19	
4500.00	4347.24	0.00	0.00	4364.24	129.49	129.49	147.00	6413.20	6268.57	44.34	
4600.00	4442.59	0.00	0.00	4459.59	132.39	132.39	147.14	6438.86	6290.95	43.53	
4700.00	4537.93	0.00	0.00	4554.93	135.28	135.28	147.28	6464.56	6313.37	42.76	
4800.00	4633.28	0.00	0.00	4650.28	138.18	138.18	147.43	6490.29	6335.83	42.02	
4900.00	4728.62	0.00	0.00	4745.62	141.07	141.07	147.57	6516.07	6358.33	41.31	
5000.00	4823.97	0.00	0.00	4840.97	143.97	143.97	147.71	6541.88	6380.88	40.63	
5100.00	4919.31	0.00	0.00	4936.31	146.86	146.86	147.85	6567.73	6403.46	39.98	
5200.00	5014.65	0.00	0.00	5031.65	149.76	149.76	147.98	6593.61	6426.08	39.36	
5300.00	5110.00	0.00	0.00	5127.00	152.65	152.65	148.12	6619.54	6448.74	38.76	
5400.00	5205.34	0.00	0.00	5222.34	155.55	155.55	148.25	6645.49	6471.44	38.18	
5500.00	5300.69	0.00	0.00	5317.69	158.44	158.44	148.39	6671.49	6494.17	37.62	
5600.00	5396.03	0.00	0.00	5413.03	161.34	161.34	148.52	6697.51	6516.94	37.09	
5700.00	5491.37	0.00	0.00	5508.37	164.24	164.24	148.66	6723.58	6539.75	36.58	
5800.00	5586.72	0.00	0.00	5603.72	167.13	167.13	148.79	6749.67	6562.60	36.08	
5900.00	5682.06	0.00	0.00	5699.06	170.03	170.03	148.92	6775.80	6585.48	35.60	
6000.00	5777.41	0.00	0.00	5794.41	172.92	172.92	149.05	6801.97	6608.40	35.14	
6100.00	5872.75	0.00	0.00	5889.75	175.82	175.82	149.18	6828.16	6631.36	34.70	
6200.00	5968.10	0.00	0.00	5985.10	178.71	178.71	149.30	6854.39	6654.35	34.26	
6300.00	6063.68	0.00	0.00	6080.68	181.62	181.62	142.33	6879.61	6676.35	33.85	
6400.00	6161.19	0.00	0.00	6178.19	184.58	184.58	112.25	6893.76	6687.32	33.39	
6500.00	6259.42	0.00	0.00	6276.42	187.56	187.56	71.51	6894.15	6684.55	32.89	
6600.00	6356.44	0.00	0.00	6373.44	190.51	190.51	46.52	6880.77	6668.10	32.35	
6700.00	6450.38	0.00	0.00	6467.38	193.36	193.36	34.86	6853.90	6638.28	31.79	
6800.00	6539.41	0.00	0.00	6556.41	196.06	196.06	29.10	6814.08	6595.60	31.19	
6900.00	6621.78	0.00	0.00	6638.78	198.56	198.56	26.24	6762.08	6540.98	30.58	
7000.00	6695.91	0.00	0.00	6712.91	200.82	200.82	25.15	6698.92	6475.44	29.98	
7100.00	6760.33	0.00	0.00	6777.33	202.77	202.77	25.50	6625.82	6400.27	29.38	
7200.00	6813.81	0.00	0.00	6830.81	204.40	204.40	27.43	6544.21	6316.92	28.79	
7300.00	6855.31	0.00	0.00	6872.31	205.66	205.66	31.77	6455.67	6227.02	28.23	
7400.00	6884.00	0.00	0.00	6901.00	206.53	206.53	41.03	6361.90	6132.21	27.70	
7500.00	6899.34	0.00	0.00	6916.34	206.99	206.99	63.06	6264.73	6034.37	27.20	
7600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6166.03	5935.44	26.74	
7700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6067.22	5836.41	26.29	
7800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5968.45	5737.40	25.83	
7900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5869.72	5638.48	25.38	
8000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5771.03	5539.55	24.93	
8100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5672.39	5440.61	24.47	
8200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5573.80	5341.81	24.03	
8300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5475.26	5242.92	23.57	
8400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5376.77	5144.13	23.11	
8500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5278.34	5045.42	22.66	
8600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5179.97	4946.65	22.20	
8700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5081.67	4847.99	21.75	
8800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4983.43	4749.45	21.30	
8900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4885.26	4650.87	20.84	
9000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4787.17	4552.25	20.38	
9100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4689.16	4453.73	19.92	
9200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4591.23	4355.34	19.46	
9300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4493.40	4256.95	19.00	
9400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4395.66	4158.62	18.54	
9500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4298.03	4060.44	18.09	

## 5D Anti-Collision Report

Secondary Well: Tigges 30-31 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
9600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4200.51	3962.35	17.64	
9700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4103.11	3864.18	17.17	
9800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4005.84	3766.12	16.71	
9900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3908.70	3668.22	16.25	
10000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3811.71	3570.46	15.80	
10100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3714.89	3472.69	15.34	
10200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3618.23	3375.10	14.88	
10300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3521.76	3277.68	14.43	
10400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3425.50	3180.44	13.98	
10500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3329.45	3083.25	13.52	
10600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3233.65	2986.25	13.07	
10700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3138.10	2889.29	12.61	
10800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3042.84	2792.41	12.15	
10900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2947.90	2695.77	11.69	
11000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2853.30	2599.40	11.24	
11100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2759.08	2503.14	10.78	
11200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2665.29	2407.12	10.32	
11300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2571.96	2311.47	9.87	
11400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2479.15	2216.23	9.43	
11500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2386.93	2121.45	8.99	
11600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2295.35	2027.20	8.56	
11700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2204.51	1933.56	8.14	
11800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2114.49	1840.62	7.72	
11900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2025.41	1748.17	7.31	
12000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1937.40	1656.10	6.89	
12100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1850.60	1564.84	6.48	
12200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1765.20	1474.77	6.08	
12300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1681.41	1386.13	5.69	
12400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1599.49	1299.08	5.32	
12500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1519.73	1213.38	4.96	
12600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1442.50	1129.30	4.61	
12700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1368.22	1048.10	4.27	
12800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1297.40	970.45	3.97	
12900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1230.63	895.48	3.67	
13000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1168.62	825.25	3.40	
13100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1112.16	760.86	3.17	
13200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1062.12	701.55	2.95	
13300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1019.47	651.32	2.77	
13400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	985.16	608.65	2.62	
13500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	960.08	577.57	2.51	
13600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	944.97	557.28	2.44	SF(Lo)
13700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	940.32	549.61	2.41	SF(Lo)
13800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	946.26	555.13	2.42	SF(Lo)
13900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	962.61	572.01	2.46	SF(Lo)
14000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	988.86	601.69	2.55	
14100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1024.24	640.91	2.67	
14200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1067.84	690.31	2.83	
14300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1118.70	746.74	3.01	
14400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1175.89	810.81	3.22	
14500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1238.52	878.95	3.44	
14600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1305.81	952.34	3.69	
14700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1377.09	1030.11	3.97	
14800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1451.75	1109.88	4.25	
14900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1529.31	1192.56	4.54	
15000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1609.35	1277.73	4.85	
15100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1691.52	1364.95	5.18	
15200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1775.51	1453.32	5.51	
15300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1861.09	1542.62	5.84	

## 5D Anti-Collision Report

Secondary Well: Tigges 30-31 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
15400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1948.05	1633.19	6.19	
15456.59	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1997.80	1684.93	6.39	
Secondary Well: Etter 30-32 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	17.00	0.00	0.00	263.53	7063.07	7062.34	9700.70	
100.00	83.00	0.00	0.00	100.00	1.26	1.26	263.53	7063.05	7060.95	3371.25	
200.00	183.00	0.00	0.00	200.00	3.03	3.03	263.53	7063.05	7058.97	1730.51	
300.00	283.00	0.00	0.00	300.00	6.06	6.06	263.53	7063.05	7055.71	962.67	
400.00	383.00	0.00	0.00	400.00	9.10	9.10	263.53	7063.05	7052.63	677.80	
500.00	483.00	0.00	0.00	500.00	12.14	12.14	263.53	7063.05	7049.37	516.46	
600.00	583.00	0.00	0.00	600.00	15.17	15.17	263.53	7063.05	7046.12	417.16	
700.00	683.00	0.00	0.00	700.00	18.21	18.21	263.53	7063.05	7042.86	349.88	
800.00	783.00	0.00	0.00	800.00	21.25	21.25	263.53	7063.05	7039.61	301.29	
900.00	883.00	0.00	0.00	900.00	24.28	24.28	263.53	7063.05	7036.35	264.55	
1000.00	983.00	0.00	0.00	1000.00	27.32	27.32	263.53	7063.05	7033.10	235.80	
1100.00	1082.98	0.00	0.00	1099.98	30.36	30.36	139.74	7064.38	7031.19	212.85	
1200.00	1182.84	0.00	0.00	1199.84	33.39	33.39	139.72	7068.38	7031.98	194.20	
1300.00	1282.45	0.00	0.00	1299.45	36.42	36.42	139.67	7075.03	7035.41	178.57	
1400.00	1381.70	0.00	0.00	1398.70	39.43	39.43	139.62	7084.35	7041.52	165.40	
1500.00	1480.47	0.00	0.00	1497.47	42.43	42.43	139.54	7096.32	7050.27	154.10	
1600.00	1578.62	0.00	0.00	1595.62	45.41	45.41	139.45	7110.94	7061.65	144.26	
1700.00	1676.06	0.00	0.00	1693.06	48.37	48.37	139.34	7128.21	7075.69	135.74	
1800.00	1772.64	0.00	0.00	1789.64	51.30	51.30	139.21	7148.11	7092.36	128.23	
1900.00	1868.30	0.00	0.00	1885.30	54.21	54.21	139.12	7170.57	7111.58	121.56	
2000.00	1963.64	0.00	0.00	1980.64	57.10	57.10	139.28	7193.85	7131.62	115.59	
2100.00	2058.98	0.00	0.00	2075.98	60.00	60.00	139.43	7217.19	7151.69	110.18	
2200.00	2154.33	0.00	0.00	2171.33	62.89	62.89	139.58	7240.58	7171.80	105.28	
2300.00	2249.67	0.00	0.00	2266.67	65.79	65.79	139.74	7264.02	7191.96	100.81	
2400.00	2345.02	0.00	0.00	2362.02	68.68	68.68	139.89	7287.50	7212.17	96.73	
2500.00	2440.36	0.00	0.00	2457.36	71.58	71.58	140.03	7311.04	7232.38	92.95	
2600.00	2535.70	0.00	0.00	2552.70	74.48	74.48	140.18	7334.62	7252.65	89.47	
2700.00	2631.05	0.00	0.00	2648.05	77.37	77.37	140.33	7358.26	7272.95	86.26	
2800.00	2726.39	0.00	0.00	2743.39	80.27	80.27	140.48	7381.94	7293.31	83.29	
2900.00	2821.74	0.00	0.00	2838.74	83.16	83.16	140.62	7405.66	7313.70	80.53	
3000.00	2917.08	0.00	0.00	2934.08	86.06	86.06	140.77	7429.44	7334.15	77.97	
3100.00	3012.43	0.00	0.00	3029.43	88.95	88.95	140.91	7453.26	7354.63	75.57	
3200.00	3107.77	0.00	0.00	3124.77	91.85	91.85	141.06	7477.12	7375.17	73.34	
3300.00	3203.11	0.00	0.00	3220.11	94.74	94.74	141.20	7501.03	7395.74	71.24	
3400.00	3298.46	0.00	0.00	3315.46	97.64	97.64	141.34	7524.99	7416.36	69.28	
3500.00	3393.80	0.00	0.00	3410.80	100.53	100.53	141.48	7548.99	7437.03	67.43	
3600.00	3489.15	0.00	0.00	3506.15	103.43	103.43	141.62	7573.03	7457.74	65.69	
3700.00	3584.49	0.00	0.00	3601.49	106.33	106.33	141.76	7597.12	7478.49	64.04	
3800.00	3679.83	0.00	0.00	3696.83	109.22	109.22	141.90	7621.25	7499.29	62.49	
3900.00	3775.18	0.00	0.00	3792.18	112.12	112.12	142.03	7645.43	7520.13	61.02	
4000.00	3870.52	0.00	0.00	3887.52	115.01	115.01	142.17	7669.64	7541.01	59.63	
4100.00	3965.87	0.00	0.00	3982.87	117.91	117.91	142.30	7693.90	7561.94	58.31	
4200.00	4061.21	0.00	0.00	4078.21	120.80	120.80	142.44	7718.20	7582.91	57.05	
4300.00	4156.56	0.00	0.00	4173.56	123.70	123.70	142.57	7742.54	7603.92	55.85	
4400.00	4251.90	0.00	0.00	4268.90	126.59	126.59	142.71	7766.92	7624.97	54.72	
4500.00	4347.24	0.00	0.00	4364.24	129.49	129.49	142.84	7791.34	7646.07	53.63	
4600.00	4442.59	0.00	0.00	4459.59	132.39	132.39	142.97	7815.81	7667.20	52.59	
4700.00	4537.93	0.00	0.00	4554.93	135.28	135.28	143.10	7840.31	7688.38	51.60	
4800.00	4633.28	0.00	0.00	4650.28	138.18	138.18	143.23	7864.85	7709.59	50.66	
4900.00	4728.62	0.00	0.00	4745.62	141.07	141.07	143.36	7889.43	7730.85	49.75	
5000.00	4823.97	0.00	0.00	4840.97	143.97	143.97	143.49	7914.05	7752.15	48.88	
5100.00	4919.31	0.00	0.00	4936.31	146.86	146.86	143.61	7938.71	7773.48	48.05	

## 5D Anti-Collision Report

Secondary Well: Etter 30-32 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
5200.00	5014.65	0.00	0.00	5031.65	149.76	149.76	143.74	7963.40	7794.86	47.25	
5300.00	5110.00	0.00	0.00	5127.00	152.65	152.65	143.87	7988.13	7816.27	46.48	
5400.00	5205.34	0.00	0.00	5222.34	155.55	155.55	143.99	8012.90	7837.73	45.74	
5500.00	5300.69	0.00	0.00	5317.69	158.44	158.44	144.12	8037.71	7859.22	45.03	
5600.00	5396.03	0.00	0.00	5413.03	161.34	161.34	144.24	8062.55	7880.75	44.35	
5700.00	5491.37	0.00	0.00	5508.37	164.24	164.24	144.36	8087.43	7902.31	43.69	
5800.00	5586.72	0.00	0.00	5603.72	167.13	167.13	144.48	8112.35	7923.92	43.05	
5900.00	5682.06	0.00	0.00	5699.06	170.03	170.03	144.61	8137.30	7945.56	42.44	
6000.00	5777.41	0.00	0.00	5794.41	172.92	172.92	144.73	8162.28	7967.24	41.85	
6100.00	5872.75	0.00	0.00	5889.75	175.82	175.82	144.85	8187.30	7988.95	41.28	
6200.00	5968.10	0.00	0.00	5985.10	178.71	178.71	144.97	8212.36	8010.71	40.73	
6300.00	6063.68	0.00	0.00	6080.68	181.62	181.62	138.04	8236.39	8031.46	40.19	
6400.00	6161.19	0.00	0.00	6178.19	184.58	184.58	108.04	8249.27	8041.10	39.63	
6500.00	6259.42	0.00	0.00	6276.42	187.56	187.56	67.28	8248.29	8036.91	39.02	
6600.00	6356.44	0.00	0.00	6373.44	190.51	190.51	42.18	8233.46	8018.96	38.38	
6700.00	6450.38	0.00	0.00	6467.38	193.36	193.36	30.31	8205.09	7987.60	37.73	
6800.00	6539.41	0.00	0.00	6556.41	196.06	196.06	24.22	8163.71	7943.43	37.06	
6900.00	6621.78	0.00	0.00	6638.78	198.56	198.56	20.88	8110.14	7887.29	36.39	
7000.00	6695.91	0.00	0.00	6712.91	200.82	200.82	19.08	8045.41	7820.26	35.73	
7100.00	6760.33	0.00	0.00	6777.33	202.77	202.77	18.39	7970.78	7743.62	35.09	
7200.00	6813.81	0.00	0.00	6830.81	204.40	204.40	18.74	7887.69	7658.85	34.47	
7300.00	6855.31	0.00	0.00	6872.31	205.66	205.66	20.52	7797.75	7567.59	33.88	
7400.00	6884.00	0.00	0.00	6901.00	206.53	206.53	25.43	7702.70	7471.63	33.34	
7500.00	6899.34	0.00	0.00	6916.34	206.99	206.99	43.07	7604.38	7372.86	32.85	
7600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7504.70	7272.96	32.38	
7700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7404.91	7173.16	31.95	
7800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7305.12	7073.29	31.51	
7900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7205.35	6973.41	31.07	
8000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7105.58	6873.65	30.64	
8100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	7005.82	6773.73	30.19	
8200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6906.06	6673.97	29.76	
8300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6806.31	6574.06	29.31	
8400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6706.57	6474.24	28.87	
8500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6606.83	6374.50	28.44	
8600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6507.11	6274.63	27.99	
8700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6407.39	6174.82	27.55	
8800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6307.68	6075.05	27.11	
8900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6207.98	5975.25	26.68	
9000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6108.29	5875.46	26.23	
9100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	6008.61	5775.60	25.79	
9200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5908.94	5675.79	25.34	
9300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5809.29	5576.04	24.91	
9400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5709.64	5476.26	24.46	
9500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5610.01	5376.46	24.02	
9600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5510.39	5276.70	23.58	
9700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5410.79	5176.92	23.14	
9800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5311.20	5077.20	22.70	
9900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5211.62	4977.39	22.25	
10000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5112.07	4877.64	21.81	
10100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	5012.53	4777.87	21.36	
10200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4913.00	4678.11	20.92	
10300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4813.50	4578.39	20.47	
10400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4714.02	4478.71	20.03	
10500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4614.57	4379.01	19.59	
10600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4515.13	4279.28	19.14	
10700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4415.72	4179.57	18.70	
10800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4316.34	4079.89	18.25	
10900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4216.99	3980.23	17.81	

## 5D Anti-Collision Report

Secondary Well: Etter 30-32 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
11000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4117.67	3880.55	17.37	
11100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	4018.38	3780.85	16.92	
11200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3919.13	3681.17	16.47	
11300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3819.92	3581.43	16.02	
11400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3720.75	3481.68	15.56	
11500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3621.63	3381.94	15.11	
11600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3522.56	3282.24	14.66	
11700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3423.54	3182.48	14.20	
11800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3324.57	3082.75	13.75	
11900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3225.68	2983.04	13.29	
12000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3126.85	2883.36	12.84	
12100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	3028.10	2783.71	12.39	
12200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2929.43	2684.10	11.94	
12300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2830.86	2584.47	11.49	
12400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2732.40	2484.82	11.04	
12500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2634.04	2385.21	10.59	
12600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2535.82	2285.62	10.14	
12700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2437.74	2186.03	9.68	
12800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2339.82	2086.50	9.24	
12900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2242.09	1987.03	8.79	
13000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2144.57	1887.65	8.35	
13100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	2047.28	1788.37	7.91	
13200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1950.28	1689.08	7.47	
13300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1853.58	1589.83	7.03	
13400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1757.26	1490.74	6.59	
13500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1661.38	1391.83	6.16	
13600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1566.00	1292.60	5.73	
13700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1471.25	1193.48	5.30	
13800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1377.23	1094.66	4.87	
13900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1284.12	996.24	4.46	
14000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1192.13	898.15	4.06	
14100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1101.53	800.62	3.66	
14200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	1012.70	703.18	3.27	
14300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	926.15	606.39	2.90	
14400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	842.59	511.65	2.55	
14500.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	762.99	418.75	2.22	SF(Lo)
14600.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	688.73	329.34	1.92	SF(Lo)
14700.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	621.73	245.27	1.65	SF(Lo)
14800.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	564.58	170.08	1.43	SF(Med)
14900.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	520.53	109.01	1.26	SF(Med)
15000.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	493.10	68.71	1.16	SF(Med)
15100.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	485.13	55.62	1.13	SF(Med)
15200.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	497.54	72.25	1.17	SF(Med)
15300.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	528.91	115.33	1.28	SF(Med)
15400.00	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	576.14	178.28	1.45	SF(Med)
15456.59	6902.00	0.00	0.00	6919.00	207.07	207.07	90.00	608.56	221.00	1.57	SF(Lo)
Secondary Well: Goetzel 29-10G6 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	33.00	0.00	0.00	104.75	1510.26	1509.60	2286.95	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	104.75	1509.90	1508.12	846.67	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	104.75	1509.90	1506.38	428.42	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	104.75	1509.90	1503.13	222.87	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	104.75	1509.90	1499.88	150.61	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	104.75	1509.90	1496.80	115.23	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	104.75	1509.90	1493.55	92.32	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	104.75	1509.90	1490.30	77.02	

## 5D Anti-Collision Report

Secondary Well: Goetzel 29-10G6 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
800.00	767.00	0.00	0.00	800.00	20.76	20.76	104.75	1509.90	1487.05	66.06	
900.00	867.00	0.00	0.00	900.00	23.80	23.80	104.75	1509.90	1483.80	57.84	
1000.00	967.00	0.00	0.00	1000.00	26.84	26.84	104.75	1509.90	1480.55	51.43	
1100.00	1066.98	0.00	0.00	1099.98	29.87	29.87	340.94	1508.25	1475.66	46.28	
1200.00	1166.84	0.00	0.00	1199.84	32.90	32.90	340.84	1503.31	1467.50	41.99	
1300.00	1266.45	0.00	0.00	1299.45	35.93	35.93	340.68	1495.08	1456.05	38.31	
1400.00	1365.70	0.00	0.00	1398.70	38.94	38.94	340.44	1483.57	1441.33	35.12	
1500.00	1464.47	0.00	0.00	1497.47	41.94	41.94	340.14	1468.83	1423.37	32.31	
1600.00	1562.62	0.00	0.00	1595.62	44.92	44.92	339.76	1450.86	1402.18	29.80	
1700.00	1660.06	0.00	0.00	1693.06	47.88	47.88	339.29	1429.73	1377.83	27.55	
1800.00	1756.64	0.00	0.00	1789.64	50.82	50.82	338.74	1405.46	1350.36	25.51	
1900.00	1852.30	0.00	0.00	1885.30	53.72	53.72	338.14	1378.19	1319.89	23.64	
2000.00	1947.64	0.00	0.00	1980.64	56.62	56.62	337.67	1350.06	1288.55	21.95	
2100.00	2042.98	0.00	0.00	2075.98	59.51	59.51	337.18	1322.03	1257.29	20.42	
2200.00	2138.33	0.00	0.00	2171.33	62.41	62.41	336.66	1294.09	1226.12	19.04	
2300.00	2233.67	0.00	0.00	2266.67	65.30	65.30	336.13	1266.25	1195.04	17.78	
2400.00	2329.02	0.00	0.00	2362.02	68.20	68.20	335.57	1238.52	1164.07	16.64	
2500.00	2424.36	0.00	0.00	2457.36	71.09	71.09	334.98	1210.91	1133.22	15.59	
2600.00	2519.70	0.00	0.00	2552.70	73.99	73.99	334.37	1183.42	1102.48	14.62	
2700.00	2615.05	0.00	0.00	2648.05	76.88	76.88	333.73	1156.06	1071.85	13.73	
2800.00	2710.39	0.00	0.00	2743.39	79.78	79.78	333.06	1128.85	1041.37	12.90	
2900.00	2805.74	0.00	0.00	2838.74	82.68	82.68	332.35	1101.79	1011.04	12.14	
3000.00	2901.08	0.00	0.00	2934.08	85.57	85.57	331.61	1074.90	980.89	11.43	
3100.00	2996.43	0.00	0.00	3029.43	88.47	88.47	330.84	1048.18	950.93	10.78	
3200.00	3091.77	0.00	0.00	3124.77	91.36	91.36	330.02	1021.65	921.17	10.17	
3300.00	3187.11	0.00	0.00	3220.11	94.26	94.26	329.17	995.33	891.41	9.58	
3400.00	3282.46	0.00	0.00	3315.46	97.15	97.15	328.26	969.24	861.83	9.02	
3500.00	3377.80	0.00	0.00	3410.80	100.05	100.05	327.31	943.38	832.49	8.51	
3600.00	3473.15	0.00	0.00	3506.15	102.94	102.94	326.31	917.79	803.42	8.02	
3700.00	3568.49	0.00	0.00	3601.49	105.84	105.84	325.25	892.49	774.64	7.57	
3800.00	3663.83	0.00	0.00	3696.83	108.74	108.74	324.14	867.49	746.20	7.15	
3900.00	3759.18	0.00	0.00	3792.18	111.63	111.63	322.95	842.84	718.13	6.76	
4000.00	3854.52	0.00	0.00	3887.52	114.53	114.53	321.71	818.55	690.47	6.39	
4100.00	3949.87	0.00	0.00	3982.87	117.42	117.42	320.38	794.66	663.22	6.05	
4200.00	4045.21	0.00	0.00	4078.21	120.32	120.32	318.98	771.22	636.14	5.71	
4300.00	4140.56	0.00	0.00	4173.56	123.21	123.21	317.50	748.25	609.39	5.39	
4400.00	4235.90	0.00	0.00	4268.90	126.11	126.11	315.93	725.81	583.21	5.09	
4500.00	4331.24	0.00	0.00	4364.24	129.00	129.00	314.26	703.95	557.69	4.81	
4600.00	4426.59	0.00	0.00	4459.59	131.90	131.90	312.49	682.72	532.90	4.56	
4700.00	4521.93	0.00	0.00	4554.93	134.79	134.79	310.62	662.18	508.93	4.32	
4800.00	4617.28	0.00	0.00	4650.28	137.69	137.69	308.63	642.41	485.29	4.09	
4900.00	4712.62	0.00	0.00	4745.62	140.59	140.59	306.53	623.46	462.30	3.87	
5000.00	4807.97	0.00	0.00	4840.97	143.48	143.48	304.31	605.43	440.39	3.67	
5100.00	4903.31	0.00	0.00	4936.31	146.38	146.38	301.96	588.39	419.71	3.49	
5200.00	4998.65	0.00	0.00	5031.65	149.27	149.27	299.49	572.43	400.16	3.32	
5300.00	5094.00	0.00	0.00	5127.00	152.17	152.17	296.89	557.64	381.17	3.16	
5400.00	5189.34	0.00	0.00	5222.34	155.06	155.06	294.17	544.13	363.67	3.02	
5500.00	5284.69	0.00	0.00	5317.69	157.96	157.96	291.33	531.99	347.96	2.89	
5600.00	5380.03	0.00	0.00	5413.03	160.85	160.85	288.37	521.31	333.23	2.77	
5700.00	5475.37	0.00	0.00	5508.37	163.75	163.75	285.30	512.19	320.06	2.67	
5800.00	5570.72	0.00	0.00	5603.72	166.64	166.64	282.14	504.70	309.12	2.58	
5900.00	5666.06	0.00	0.00	5699.06	169.54	169.54	278.91	498.93	299.55	2.50	
6000.00	5761.41	0.00	0.00	5794.41	172.44	172.44	275.62	494.93	291.55	2.43	SF(Lo)
6100.00	5856.75	0.00	0.00	5889.75	175.33	175.33	272.29	492.75	286.10	2.38	SF(Lo)
6200.00	5952.10	0.00	0.00	5985.10	178.23	178.23	268.94	492.41	282.03	2.34	SF(Lo)
6300.00	6047.68	0.00	0.00	6080.68	181.13	181.13	258.59	494.50	280.56	2.31	SF(Lo)
6400.00	6145.19	0.00	0.00	6178.19	184.09	184.09	225.63	504.00	287.15	2.32	SF(Lo)
6500.00	6243.42	0.00	0.00	6276.42	187.07	187.07	182.74	520.84	301.07	2.37	SF(Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 29-10G6 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
6600.00	6340.44	0.00	0.00	6373.44	190.02	190.02	156.32	544.15	321.28	2.44	SF(Lo)
6700.00	6434.38	0.00	0.00	6467.38	192.87	192.87	143.73	573.82	347.82	2.54	
6800.00	6523.41	0.00	0.00	6556.41	195.58	195.58	137.20	610.21	381.49	2.67	
6900.00	6605.78	0.00	0.00	6638.78	198.08	198.08	133.22	653.91	423.31	2.84	
7000.00	6679.91	0.00	0.00	6712.91	200.33	200.33	130.10	705.39	472.29	3.03	
7100.00	6744.33	0.00	0.00	6777.33	202.29	202.29	126.83	764.79	530.00	3.26	
7200.00	6797.81	0.00	0.00	6830.81	203.91	203.91	122.62	831.76	596.33	3.53	
7300.00	6839.31	0.00	0.00	6872.31	205.17	205.17	116.76	905.50	668.57	3.82	
7400.00	6868.00	0.00	0.00	6901.00	206.04	206.04	108.61	984.78	747.49	4.15	
7500.00	6883.34	0.00	0.00	6916.34	206.51	206.51	97.84	1068.05	831.42	4.51	
7600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1153.65	916.71	4.87	
7700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1241.22	1004.66	5.25	
7800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1330.55	1094.40	5.63	
7900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1421.30	1185.85	6.04	
8000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1513.22	1278.27	6.44	
8100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1606.10	1371.09	6.83	
8200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1699.79	1464.76	7.23	
8300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1794.16	1559.28	7.64	
8400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1889.11	1654.32	8.05	
8500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	1984.56	1749.91	8.46	
8600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2080.43	1845.98	8.87	
8700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2176.68	1942.47	9.29	
8800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2273.25	2039.31	9.72	
8900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2370.11	2136.47	10.14	
9000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2467.21	2233.83	10.57	
9100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2564.54	2331.36	11.00	
9200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2662.07	2428.91	11.42	
9300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2759.77	2526.59	11.84	
9400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2857.63	2624.49	12.26	
9500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	2955.64	2722.38	12.67	
9600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3053.77	2820.47	13.09	
9700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3152.02	2918.73	13.51	
9800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3250.38	3017.13	13.94	
9900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3348.84	3115.51	14.35	
10000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3447.38	3214.04	14.77	
10100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3546.01	3312.68	15.20	
10200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3644.71	3411.44	15.62	
10300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3743.48	3510.24	16.05	
10400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3842.31	3609.04	16.47	
10500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	3941.20	3707.93	16.90	
10600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4040.15	3806.89	17.32	
10700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4139.15	3905.92	17.75	
10800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4238.19	4005.00	18.17	
10900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4337.28	4104.13	18.60	
11000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4436.41	4203.30	19.03	
11100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4535.58	4302.50	19.46	
11200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4634.78	4401.72	19.89	
11300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4734.02	4500.95	20.31	
11400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4833.29	4600.21	20.74	
11500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	4932.59	4699.51	21.16	
11600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5031.91	4798.83	21.59	
11700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5131.26	4898.19	22.02	
11800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5230.64	4997.57	22.44	
11900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5330.04	5096.98	22.87	
12000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5429.46	5196.41	23.30	
12100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5528.91	5295.86	23.72	
12200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5628.37	5395.33	24.15	
12300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5727.85	5494.81	24.58	

## 5D Anti-Collision Report

Secondary Well: Goetzel 29-10G6 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
12400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5827.35	5594.32	25.01	
12500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	5926.86	5693.84	25.43	
12600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6026.40	5793.38	25.86	
12700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6125.94	5892.93	26.29	
12800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6225.50	5992.50	26.72	
12900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6325.08	6092.08	27.15	
13000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6424.67	6191.67	27.57	
13100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6524.27	6291.27	28.00	
13200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6623.88	6390.89	28.43	
13300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6723.51	6490.51	28.86	
13400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6823.14	6590.15	29.28	
13500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	6922.79	6689.80	29.71	
13600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7022.45	6789.45	30.14	
13700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7122.11	6889.11	30.57	
13800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7221.79	6988.79	30.99	
13900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7321.47	7088.46	31.42	
14000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7421.16	7188.15	31.85	
14100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7520.87	7287.85	32.28	
14200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7620.57	7387.55	32.70	
14300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7720.29	7487.26	33.13	
14400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7820.01	7586.97	33.56	
14500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	7919.74	7686.69	33.98	
14600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8019.48	7786.42	34.41	
14700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8119.22	7886.15	34.84	
14800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8218.97	7985.89	35.26	
14900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8318.73	8085.63	35.69	
15000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8418.49	8185.38	36.11	
15100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8518.26	8285.13	36.54	
15200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8618.03	8384.89	36.97	
15300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8717.81	8484.65	37.39	
15400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8817.59	8584.42	37.82	
15456.59	6886.00	0.00	0.00	6919.00	206.59	206.59	90.00	8874.06	8640.88	38.06	
Secondary Well: Lafarge West 30-35 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	25.00	0.00	0.00	257.85	6846.78	6846.05	9403.57	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	257.85	6846.73	6844.76	3465.94	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	257.85	6846.73	6842.89	1781.73	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	257.85	6846.73	6839.63	964.04	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	257.85	6846.73	6836.37	660.79	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	257.85	6846.73	6833.28	509.09	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	257.85	6846.73	6830.03	409.78	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	257.85	6846.73	6826.77	342.89	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	257.85	6846.73	6823.51	294.77	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	257.85	6846.73	6820.25	258.50	
1000.00	975.00	0.00	0.00	1000.00	27.08	27.08	257.85	6846.73	6816.99	230.18	
1100.00	1074.98	0.00	0.00	1099.98	30.12	30.12	134.06	6847.95	6814.97	207.65	
1200.00	1174.84	0.00	0.00	1199.84	33.15	33.15	134.04	6851.59	6815.39	189.26	
1300.00	1274.45	0.00	0.00	1299.45	36.17	36.17	134.01	6857.66	6818.23	173.95	
1400.00	1373.70	0.00	0.00	1398.70	39.19	39.19	133.96	6866.15	6823.50	160.96	
1500.00	1472.47	0.00	0.00	1497.47	42.19	42.19	133.89	6877.08	6831.18	149.84	
1600.00	1570.62	0.00	0.00	1595.62	45.17	45.17	133.81	6890.42	6841.29	140.23	
1700.00	1668.06	0.00	0.00	1693.06	48.13	48.13	133.71	6906.19	6853.80	131.82	
1800.00	1764.64	0.00	0.00	1789.64	51.06	51.06	133.60	6924.38	6868.71	124.38	
1900.00	1860.30	0.00	0.00	1885.30	53.96	53.96	133.54	6944.93	6885.97	117.78	
2000.00	1955.64	0.00	0.00	1980.64	56.86	56.86	133.71	6966.25	6903.99	111.89	
2100.00	2050.98	0.00	0.00	2075.98	59.76	59.76	133.88	6987.63	6922.06	106.56	



## 5D Anti-Collision Report

Secondary Well: Lafarge West 30-35 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
2200.00	2146.33	0.00	0.00	2171.33	62.65	62.65	134.06	7009.08	6940.19	101.74	
2300.00	2241.67	0.00	0.00	2266.67	65.55	65.55	134.23	7030.60	6958.38	97.35	
2400.00	2337.02	0.00	0.00	2362.02	68.44	68.44	134.40	7052.17	6976.62	93.34	
2500.00	2432.36	0.00	0.00	2457.36	71.34	71.34	134.57	7073.81	6994.91	89.66	
2600.00	2527.70	0.00	0.00	2552.70	74.23	74.23	134.74	7095.52	7013.26	86.27	
2700.00	2623.05	0.00	0.00	2648.05	77.13	77.13	134.91	7117.28	7031.67	83.14	
2800.00	2718.39	0.00	0.00	2743.39	80.02	80.02	135.08	7139.10	7050.14	80.25	
2900.00	2813.74	0.00	0.00	2838.74	82.92	82.92	135.24	7160.99	7068.67	77.57	
3000.00	2909.08	0.00	0.00	2934.08	85.81	85.81	135.41	7182.93	7087.26	75.08	
3100.00	3004.43	0.00	0.00	3029.43	88.71	88.71	135.57	7204.94	7105.91	72.75	
3200.00	3099.77	0.00	0.00	3124.77	91.61	91.61	135.74	7227.00	7124.62	70.59	
3300.00	3195.11	0.00	0.00	3220.11	94.50	94.50	135.90	7249.12	7143.38	68.56	
3400.00	3290.46	0.00	0.00	3315.46	97.40	97.40	136.06	7271.30	7162.21	66.65	
3500.00	3385.80	0.00	0.00	3410.80	100.29	100.29	136.22	7293.54	7181.10	64.86	
3600.00	3481.15	0.00	0.00	3506.15	103.19	103.19	136.38	7315.83	7200.04	63.18	
3700.00	3576.49	0.00	0.00	3601.49	106.08	106.08	136.54	7338.18	7219.04	61.59	
3800.00	3671.83	0.00	0.00	3696.83	108.98	108.98	136.70	7360.59	7238.10	60.09	
3900.00	3767.18	0.00	0.00	3792.18	111.87	111.87	136.86	7383.05	7257.22	58.67	
4000.00	3862.52	0.00	0.00	3887.52	114.77	114.77	137.01	7405.56	7276.39	57.33	
4100.00	3957.87	0.00	0.00	3982.87	117.66	117.66	137.17	7428.13	7295.62	56.06	
4200.00	4053.21	0.00	0.00	4078.21	120.56	120.56	137.32	7450.76	7314.91	54.85	
4300.00	4148.56	0.00	0.00	4173.56	123.46	123.46	137.48	7473.43	7334.25	53.70	
4400.00	4243.90	0.00	0.00	4268.90	126.35	126.35	137.63	7496.16	7353.65	52.60	
4500.00	4339.24	0.00	0.00	4364.24	129.25	129.25	137.78	7518.94	7373.11	51.56	
4600.00	4434.59	0.00	0.00	4459.59	132.14	132.14	137.93	7541.78	7392.61	50.56	
4700.00	4529.93	0.00	0.00	4554.93	135.04	135.04	138.08	7564.66	7412.17	49.61	
4800.00	4625.28	0.00	0.00	4650.28	137.93	137.93	138.23	7587.60	7431.79	48.70	
4900.00	4720.62	0.00	0.00	4745.62	140.83	140.83	138.38	7610.58	7451.46	47.83	
5000.00	4815.97	0.00	0.00	4840.97	143.72	143.72	138.53	7633.62	7471.18	46.99	
5100.00	4911.31	0.00	0.00	4936.31	146.62	146.62	138.67	7656.70	7490.96	46.20	
5200.00	5006.65	0.00	0.00	5031.65	149.51	149.51	138.82	7679.84	7510.78	45.43	
5300.00	5102.00	0.00	0.00	5127.00	152.41	152.41	138.96	7703.02	7530.66	44.69	
5400.00	5197.34	0.00	0.00	5222.34	155.31	155.31	139.11	7726.25	7550.59	43.98	
5500.00	5292.69	0.00	0.00	5317.69	158.20	158.20	139.25	7749.53	7570.57	43.30	
5600.00	5388.03	0.00	0.00	5413.03	161.10	161.10	139.39	7772.86	7590.60	42.65	
5700.00	5483.37	0.00	0.00	5508.37	163.99	163.99	139.53	7796.23	7610.68	42.02	
5800.00	5578.72	0.00	0.00	5603.72	166.89	166.89	139.67	7819.65	7630.82	41.41	
5900.00	5674.06	0.00	0.00	5699.06	169.78	169.78	139.81	7843.11	7651.00	40.82	
6000.00	5769.41	0.00	0.00	5794.41	172.68	172.68	139.95	7866.62	7671.19	40.25	
6100.00	5864.75	0.00	0.00	5889.75	175.57	175.57	140.09	7890.18	7691.39	39.69	
6200.00	5960.10	0.00	0.00	5985.10	178.47	178.47	140.23	7913.78	7711.64	39.15	
6300.00	6055.68	0.00	0.00	6080.68	181.37	181.37	133.38	7936.37	7730.90	38.63	
6400.00	6153.19	0.00	0.00	6178.19	184.33	184.33	103.46	7947.78	7739.05	38.08	
6500.00	6251.42	0.00	0.00	6276.42	187.32	187.32	62.70	7945.32	7733.35	37.48	
6600.00	6348.44	0.00	0.00	6373.44	190.26	190.26	37.50	7929.03	7713.90	36.86	
6700.00	6442.38	0.00	0.00	6467.38	193.12	193.12	25.41	7899.22	7681.08	36.21	
6800.00	6531.41	0.00	0.00	6556.41	195.82	195.82	18.98	7856.47	7635.51	35.56	
6900.00	6613.78	0.00	0.00	6638.78	198.32	198.32	15.11	7801.59	7578.06	34.90	
7000.00	6687.91	0.00	0.00	6712.91	200.57	200.57	12.53	7735.66	7509.83	34.25	
7100.00	6752.33	0.00	0.00	6777.33	202.53	202.53	10.65	7659.94	7432.13	33.62	
7200.00	6805.81	0.00	0.00	6830.81	204.15	204.15	9.07	7575.90	7346.47	33.02	
7300.00	6847.31	0.00	0.00	6872.31	205.41	205.41	7.42	7485.17	7254.53	32.45	
7400.00	6876.00	0.00	0.00	6901.00	206.28	206.28	4.75	7389.51	7157.99	31.92	
7500.00	6891.34	0.00	0.00	6916.34	206.75	206.75	354.84	7290.77	7058.77	31.42	
7600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7190.87	6958.89	31.00	
7700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7090.90	6858.85	30.56	
7800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6990.93	6758.95	30.14	
7900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6890.96	6658.96	29.70	

## 5D Anti-Collision Report

Secondary Well: Lafarge West 30-35 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
8000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6790.99	6559.00	29.27	
8100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6691.02	6459.05	28.84	
8200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6591.06	6359.11	28.42	
8300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6491.09	6259.11	27.98	
8400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6391.13	6159.19	27.56	
8500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6291.16	6059.30	27.13	
8600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6191.20	5959.36	26.70	
8700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6091.24	5859.42	26.28	
8800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5991.28	5759.51	25.85	
8900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5891.32	5659.54	25.42	
9000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5791.36	5559.57	24.98	
9100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5691.41	5459.62	24.55	
9200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5591.46	5359.72	24.13	
9300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5491.50	5259.87	23.71	
9400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5391.55	5159.88	23.27	
9500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5291.61	5059.94	22.84	
9600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5191.66	4960.06	22.42	
9700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5091.71	4860.17	21.99	
9800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4991.77	4760.20	21.56	
9900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4891.83	4660.29	21.13	
10000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4791.90	4560.42	20.70	
10100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4691.96	4460.51	20.27	
10200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4592.03	4360.56	19.84	
10300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4492.10	4260.65	19.41	
10400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4392.18	4160.76	18.98	
10500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4292.25	4060.89	18.55	
10600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4192.34	3961.04	18.13	
10700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4092.42	3861.11	17.69	
10800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3992.51	3761.19	17.26	
10900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3892.61	3661.29	16.83	
11000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3792.71	3561.41	16.40	
11100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3692.81	3461.53	15.97	
11200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3592.92	3361.67	15.54	
11300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3493.04	3261.81	15.11	
11400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3393.16	3161.94	14.67	
11500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3293.30	3062.05	14.24	
11600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3193.44	2962.17	13.81	
11700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3093.59	2862.26	13.37	
11800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2993.75	2762.37	12.94	
11900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2893.92	2662.48	12.50	
12000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2794.10	2562.60	12.07	
12100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2694.29	2462.72	11.63	
12200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2594.51	2362.81	11.20	
12300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2494.73	2262.91	10.76	
12400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2394.98	2163.02	10.33	
12500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2295.25	2063.10	9.89	
12600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2195.54	1963.18	9.45	
12700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2095.86	1863.26	9.01	
12800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1996.21	1763.30	8.57	
12900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1896.60	1663.34	8.13	
13000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1797.04	1563.39	7.69	
13100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1697.52	1463.37	7.25	
13200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1598.07	1363.36	6.81	
13300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1498.68	1263.34	6.37	
13400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1399.39	1163.07	5.92	
13500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1300.20	1062.76	5.48	
13600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1201.15	962.43	5.03	
13700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1102.27	861.86	4.58	

## 5D Anti-Collision Report

Secondary Well: Lafarge West 30-35 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1003.61	760.95	4.14	
13900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	905.25	659.93	3.69	
14000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	807.28	558.49	3.24	
14100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	709.89	455.65	2.79	
14200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	613.33	351.75	2.34	SF(Lo)
14300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	518.09	246.31	1.91	SF(Lo)
14400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	425.03	139.31	1.49	SF(Med)
14500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	335.98	27.64	1.09	SF(Med)
14600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	255.19	-87.68	0.74	SF(Hi)
14700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	193.28	-197.64	0.49	SF(Hi)
14800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	172.03	-248.59	0.41	SF(Hi)
14900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	204.52	-187.59	0.52	SF(Hi)
15000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	272.15	-79.59	0.77	SF(Hi)
15100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	355.39	33.15	1.10	SF(Med)
15200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	445.57	142.79	1.47	SF(Med)
15300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	539.23	250.14	1.87	SF(Lo)
15400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	634.83	354.85	2.27	SF(Lo)
15456.59	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	689.48	413.36	2.50	SF(Lo)
Secondary Well: Firestien #30-45 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	25.00	0.00	0.00	251.08	3762.14	3761.41	5167.02	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	251.08	3762.06	3760.08	1903.78	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	251.08	3762.06	3758.21	978.59	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	251.08	3762.06	3754.95	529.46	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	251.08	3762.06	3751.69	362.90	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	251.08	3762.06	3748.60	279.59	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	251.08	3762.06	3745.34	225.05	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	251.08	3762.06	3742.08	188.31	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	251.08	3762.06	3738.82	161.89	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	251.08	3762.06	3735.56	141.96	
1000.00	975.00	0.00	0.00	1000.00	27.08	27.08	251.08	3762.06	3732.30	126.41	
1100.00	1074.98	0.00	0.00	1099.98	30.12	30.12	127.30	3763.12	3730.12	114.05	
1200.00	1174.84	0.00	0.00	1199.84	33.15	33.15	127.31	3766.29	3730.07	103.99	
1300.00	1274.45	0.00	0.00	1299.45	36.17	36.17	127.33	3771.59	3732.14	95.62	
1400.00	1373.70	0.00	0.00	1398.70	39.19	39.19	127.36	3779.02	3736.34	88.55	
1500.00	1472.47	0.00	0.00	1497.47	42.19	42.19	127.39	3788.59	3742.67	82.52	
1600.00	1570.62	0.00	0.00	1595.62	45.17	45.17	127.43	3800.31	3751.15	77.30	
1700.00	1668.06	0.00	0.00	1693.06	48.13	48.13	127.47	3814.22	3761.81	72.78	
1800.00	1764.64	0.00	0.00	1789.64	51.06	51.06	127.52	3830.32	3774.63	68.78	
1900.00	1860.30	0.00	0.00	1885.30	53.96	53.96	127.62	3848.58	3789.60	65.25	
2000.00	1955.64	0.00	0.00	1980.64	56.86	56.86	127.97	3867.61	3805.32	62.10	
2100.00	2050.98	0.00	0.00	2075.98	59.76	59.76	128.31	3886.78	3821.18	59.25	
2200.00	2146.33	0.00	0.00	2171.33	62.65	62.65	128.65	3906.09	3837.17	56.67	
2300.00	2241.67	0.00	0.00	2266.67	65.55	65.55	128.98	3925.54	3853.29	54.33	
2400.00	2337.02	0.00	0.00	2362.02	68.44	68.44	129.31	3945.12	3869.54	52.20	
2500.00	2432.36	0.00	0.00	2457.36	71.34	71.34	129.64	3964.83	3885.93	50.25	
2600.00	2527.70	0.00	0.00	2552.70	74.23	74.23	129.96	3984.68	3902.43	48.45	
2700.00	2623.05	0.00	0.00	2648.05	77.13	77.13	130.29	4004.65	3919.01	46.76	
2800.00	2718.39	0.00	0.00	2743.39	80.02	80.02	130.61	4024.75	3935.72	45.20	
2900.00	2813.74	0.00	0.00	2838.74	82.92	82.92	130.92	4044.98	3952.55	43.76	
3000.00	2909.08	0.00	0.00	2934.08	85.81	85.81	131.23	4065.33	3969.50	42.42	
3100.00	3004.43	0.00	0.00	3029.43	88.71	88.71	131.54	4085.80	3986.58	41.18	
3200.00	3099.77	0.00	0.00	3124.77	91.61	91.61	131.85	4106.39	4003.78	40.02	
3300.00	3195.11	0.00	0.00	3220.11	94.50	94.50	132.15	4127.09	4021.09	38.94	
3400.00	3290.46	0.00	0.00	3315.46	97.40	97.40	132.46	4147.92	4038.53	37.92	
3500.00	3385.80	0.00	0.00	3410.80	100.29	100.29	132.75	4168.85	4056.09	36.97	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-45 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
3600.00	3481.15	0.00	0.00	3506.15	103.19	103.19	133.05	4189.90	4073.76	36.07	
3700.00	3576.49	0.00	0.00	3601.49	106.08	106.08	133.34	4211.06	4091.54	35.23	
3800.00	3671.83	0.00	0.00	3696.83	108.98	108.98	133.63	4232.33	4109.44	34.44	
3900.00	3767.18	0.00	0.00	3792.18	111.87	111.87	133.92	4253.71	4127.45	33.69	
4000.00	3862.52	0.00	0.00	3887.52	114.77	114.77	134.20	4275.19	4145.57	32.98	
4100.00	3957.87	0.00	0.00	3982.87	117.66	117.66	134.48	4296.78	4163.80	32.31	
4200.00	4053.21	0.00	0.00	4078.21	120.56	120.56	134.76	4318.47	4182.14	31.68	
4300.00	4148.56	0.00	0.00	4173.56	123.46	123.46	135.04	4340.26	4200.58	31.07	
4400.00	4243.90	0.00	0.00	4268.90	126.35	126.35	135.31	4362.15	4219.13	30.50	
4500.00	4339.24	0.00	0.00	4364.24	129.25	129.25	135.58	4384.14	4237.78	29.95	
4600.00	4434.59	0.00	0.00	4459.59	132.14	132.14	135.85	4406.22	4256.53	29.44	
4700.00	4529.93	0.00	0.00	4554.93	135.04	135.04	136.12	4428.40	4275.39	28.94	
4800.00	4625.28	0.00	0.00	4650.28	137.93	137.93	136.38	4450.68	4294.34	28.47	
4900.00	4720.62	0.00	0.00	4745.62	140.83	140.83	136.64	4473.05	4313.39	28.02	
5000.00	4815.97	0.00	0.00	4840.97	143.72	143.72	136.90	4495.50	4332.54	27.59	
5100.00	4911.31	0.00	0.00	4936.31	146.62	146.62	137.16	4518.05	4351.79	27.17	
5200.00	5006.65	0.00	0.00	5031.65	149.51	149.51	137.41	4540.69	4371.13	26.78	
5300.00	5102.00	0.00	0.00	5127.00	152.41	152.41	137.66	4563.41	4390.56	26.40	
5400.00	5197.34	0.00	0.00	5222.34	155.31	155.31	137.91	4586.22	4410.08	26.04	
5500.00	5292.69	0.00	0.00	5317.69	158.20	158.20	138.15	4609.11	4429.70	25.69	
5600.00	5388.03	0.00	0.00	5413.03	161.10	161.10	138.40	4632.09	4449.40	25.36	
5700.00	5483.37	0.00	0.00	5508.37	163.99	163.99	138.64	4655.15	4469.20	25.03	
5800.00	5578.72	0.00	0.00	5603.72	166.89	166.89	138.88	4678.28	4489.08	24.73	
5900.00	5674.06	0.00	0.00	5699.06	169.78	169.78	139.12	4701.50	4509.04	24.43	
6000.00	5769.41	0.00	0.00	5794.41	172.68	172.68	139.35	4724.80	4529.09	24.14	
6100.00	5864.75	0.00	0.00	5889.75	175.57	175.57	139.58	4748.17	4549.23	23.87	
6200.00	5960.10	0.00	0.00	5985.10	178.47	178.47	139.81	4771.62	4569.44	23.60	
6300.00	6055.68	0.00	0.00	6080.68	181.37	181.37	133.06	4794.09	4588.61	23.33	
6400.00	6153.19	0.00	0.00	6178.19	184.33	184.33	103.24	4805.42	4596.67	23.02	
6500.00	6251.42	0.00	0.00	6276.42	187.32	187.32	62.56	4802.89	4590.91	22.66	
6600.00	6348.44	0.00	0.00	6373.44	190.26	190.26	37.43	4786.57	4571.44	22.25	
6700.00	6442.38	0.00	0.00	6467.38	193.12	193.12	25.42	4756.76	4538.62	21.81	
6800.00	6531.41	0.00	0.00	6556.41	195.82	195.82	19.07	4714.02	4493.06	21.33	
6900.00	6613.78	0.00	0.00	6638.78	198.32	198.32	15.30	4659.17	4435.64	20.84	
7000.00	6687.91	0.00	0.00	6712.91	200.57	200.57	12.84	4593.28	4367.45	20.34	
7100.00	6752.33	0.00	0.00	6777.33	202.53	202.53	11.10	4517.60	4289.80	19.83	
7200.00	6805.81	0.00	0.00	6830.81	204.15	204.15	9.73	4433.60	4204.19	19.33	
7300.00	6847.31	0.00	0.00	6872.31	205.41	205.41	8.41	4342.91	4112.28	18.83	
7400.00	6876.00	0.00	0.00	6901.00	206.28	206.28	6.47	4247.27	4015.74	18.34	
7500.00	6891.34	0.00	0.00	6916.34	206.75	206.75	359.45	4148.54	3916.53	17.88	
7600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4048.62	3816.64	17.45	
7700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3948.64	3716.58	17.02	
7800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3848.65	3616.64	16.59	
7900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3748.67	3516.65	16.16	
8000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3648.69	3416.65	15.72	
8100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3548.70	3316.70	15.30	
8200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3448.72	3216.72	14.87	
8300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3348.74	3116.72	14.43	
8400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3248.77	3016.79	14.00	
8500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3148.79	2916.89	13.58	
8600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3048.81	2816.91	13.15	
8700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2948.84	2716.95	12.72	
8800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2848.87	2617.04	12.29	
8900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2748.90	2517.06	11.86	
9000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2648.93	2417.08	11.43	
9100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2548.97	2317.14	11.00	
9200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2449.01	2217.24	10.57	
9300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2349.05	2117.39	10.14	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-45 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
9400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2249.09	2017.40	9.71	
9500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2149.14	1917.47	9.28	
9600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2049.19	1817.60	8.85	
9700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1949.25	1717.73	8.42	
9800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1849.32	1617.79	7.99	
9900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1749.39	1517.91	7.56	
10000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1649.48	1418.09	7.13	
10100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1549.57	1318.24	6.70	
10200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1449.67	1218.37	6.27	
10300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1349.80	1118.50	5.84	
10400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1249.94	1018.60	5.40	
10500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1150.10	918.72	4.97	
10600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1050.30	818.85	4.54	
10700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	950.54	718.91	4.10	
10800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	850.83	618.99	3.67	
10900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	751.20	519.04	3.24	
11000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	651.69	419.09	2.80	
11100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	552.35	319.08	2.37	SF(Lo)
11200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	453.30	218.71	1.93	SF(Lo)
11300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	354.79	117.97	1.50	SF(Med)
11400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	257.42	14.40	1.06	SF(Med)
11500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	163.28	-95.61	0.63	SF(Hi)
11600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	83.98	-223.49	0.27	SF(Hi)
11700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	86.29	-227.38	0.28	SF(Hi)
11800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	166.85	-103.58	0.62	SF(Hi)
11900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	261.21	7.14	1.03	SF(Med)
12000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	358.64	111.41	1.45	SF(Med)
12100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	457.18	214.06	1.88	SF(Lo)
12200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	556.25	315.81	2.31	SF(Lo)
12300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	655.59	416.45	2.74	
12400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	755.11	516.82	3.17	
12500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	854.74	617.02	3.60	
12600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	954.45	717.19	4.02	
12700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1054.22	817.34	4.45	
12800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1154.02	917.47	4.88	
12900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1253.86	1017.57	5.31	
13000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1353.72	1117.66	5.73	
13100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1453.60	1217.73	6.16	
13200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1553.49	1317.80	6.59	
13300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1653.40	1417.85	7.02	
13400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1753.32	1517.88	7.45	
13500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1853.24	1617.88	7.87	
13600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1953.18	1717.88	8.30	
13700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2053.12	1817.87	8.73	
13800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2153.07	1917.86	9.15	
13900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2253.02	2017.85	9.58	
14000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2352.97	2117.83	10.01	
14100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2452.93	2217.82	10.43	
14200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2552.89	2317.80	10.86	
14300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2652.86	2417.78	11.28	
14400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2752.83	2517.76	11.71	
14500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2852.80	2617.74	12.14	
14600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2952.77	2717.71	12.56	
14700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3052.74	2817.69	12.99	
14800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3152.72	2917.66	13.41	
14900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3252.69	3017.64	13.84	
15000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3352.67	3117.61	14.26	
15100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3452.65	3217.58	14.69	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-45 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
15200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3552.63	3317.55	15.11	
15300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3652.61	3417.53	15.54	
15400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3752.60	3517.50	15.96	
15456.59	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3809.18	3574.07	16.20	
Secondary Well: Tigges 30-34 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	33.00	0.00	0.00	253.75	5787.87	5787.14	7949.30	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	253.75	5787.78	5785.92	3124.28	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	253.75	5787.78	5784.18	1609.59	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	253.75	5787.78	5780.92	844.87	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	253.75	5787.78	5777.67	572.76	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	253.75	5787.78	5774.59	438.87	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	253.75	5787.78	5771.33	352.00	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	253.75	5787.78	5768.08	293.84	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	253.75	5787.78	5764.82	252.17	
900.00	867.00	0.00	0.00	900.00	23.80	23.80	253.75	5787.78	5761.57	220.85	
1000.00	967.00	0.00	0.00	1000.00	26.84	26.84	253.75	5787.78	5758.31	196.45	
1100.00	1066.98	0.00	0.00	1099.98	29.87	29.87	129.97	5788.90	5756.20	177.05	
1200.00	1166.84	0.00	0.00	1199.84	32.90	32.90	129.95	5792.26	5756.36	161.34	
1300.00	1266.45	0.00	0.00	1299.45	35.93	35.93	129.93	5797.87	5758.75	148.21	
1400.00	1365.70	0.00	0.00	1398.70	38.94	38.94	129.90	5805.72	5763.38	137.10	
1500.00	1464.47	0.00	0.00	1497.47	41.94	41.94	129.87	5815.83	5770.26	127.63	
1600.00	1562.62	0.00	0.00	1595.62	44.92	44.92	129.82	5828.19	5779.37	119.40	
1700.00	1660.06	0.00	0.00	1693.06	47.88	47.88	129.76	5842.80	5790.75	112.25	
1800.00	1756.64	0.00	0.00	1789.64	50.82	50.82	129.68	5859.68	5804.37	105.93	
1900.00	1852.30	0.00	0.00	1885.30	53.72	53.72	129.67	5878.77	5820.18	100.34	
2000.00	1947.64	0.00	0.00	1980.64	56.62	56.62	129.89	5898.61	5836.74	95.34	
2100.00	2042.98	0.00	0.00	2075.98	59.51	59.51	130.11	5918.53	5853.32	90.76	
2200.00	2138.33	0.00	0.00	2171.33	62.41	62.41	130.32	5938.54	5869.97	86.61	
2300.00	2233.67	0.00	0.00	2266.67	65.30	65.30	130.54	5958.63	5886.70	82.84	
2400.00	2329.02	0.00	0.00	2362.02	68.20	68.20	130.75	5978.81	5903.51	79.40	
2500.00	2424.36	0.00	0.00	2457.36	71.09	71.09	130.96	5999.08	5920.40	76.25	
2600.00	2519.70	0.00	0.00	2552.70	73.99	73.99	131.17	6019.42	5937.36	73.36	
2700.00	2615.05	0.00	0.00	2648.05	76.88	76.88	131.38	6039.85	5954.41	70.69	
2800.00	2710.39	0.00	0.00	2743.39	79.78	79.78	131.59	6060.36	5971.53	68.23	
2900.00	2805.74	0.00	0.00	2838.74	82.68	82.68	131.80	6080.95	5988.74	65.95	
3000.00	2901.08	0.00	0.00	2934.08	85.57	85.57	132.01	6101.62	6006.02	63.83	
3100.00	2996.43	0.00	0.00	3029.43	88.47	88.47	132.21	6122.36	6023.38	61.86	
3200.00	3091.77	0.00	0.00	3124.77	91.36	91.36	132.41	6143.19	6040.82	60.01	
3300.00	3187.11	0.00	0.00	3220.11	94.26	94.26	132.62	6164.09	6058.34	58.29	
3400.00	3282.46	0.00	0.00	3315.46	97.15	97.15	132.82	6185.07	6075.94	56.67	
3500.00	3377.80	0.00	0.00	3410.80	100.05	100.05	133.01	6206.13	6093.61	55.16	
3600.00	3473.15	0.00	0.00	3506.15	102.94	102.94	133.21	6227.26	6111.36	53.73	
3700.00	3568.49	0.00	0.00	3601.49	105.84	105.84	133.41	6248.46	6129.18	52.39	
3800.00	3663.83	0.00	0.00	3696.83	108.74	108.74	133.60	6269.74	6147.08	51.12	
3900.00	3759.18	0.00	0.00	3792.18	111.63	111.63	133.80	6291.09	6165.06	49.92	
4000.00	3854.52	0.00	0.00	3887.52	114.53	114.53	133.99	6312.51	6183.11	48.78	
4100.00	3949.87	0.00	0.00	3982.87	117.42	117.42	134.18	6334.00	6201.23	47.71	
4200.00	4045.21	0.00	0.00	4078.21	120.32	120.32	134.37	6355.56	6219.42	46.68	
4300.00	4140.56	0.00	0.00	4173.56	123.21	123.21	134.56	6377.20	6237.69	45.71	
4400.00	4235.90	0.00	0.00	4268.90	126.11	126.11	134.75	6398.90	6256.03	44.79	
4500.00	4331.24	0.00	0.00	4364.24	129.00	129.00	134.94	6420.67	6274.44	43.91	
4600.00	4426.59	0.00	0.00	4459.59	131.90	131.90	135.12	6442.51	6292.92	43.07	
4700.00	4521.93	0.00	0.00	4554.93	134.79	134.79	135.31	6464.41	6311.47	42.27	
4800.00	4617.28	0.00	0.00	4650.28	137.69	137.69	135.49	6486.38	6330.09	41.50	
4900.00	4712.62	0.00	0.00	4745.62	140.59	140.59	135.67	6508.42	6348.78	40.77	

## 5D Anti-Collision Report

Secondary Well: Tigges 30-34 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
5000.00	4807.97	0.00	0.00	4840.97	143.48	143.48	135.85	6530.52	6367.53	40.07	
5100.00	4903.31	0.00	0.00	4936.31	146.38	146.38	136.03	6552.68	6386.36	39.40	
5200.00	4998.65	0.00	0.00	5031.65	149.27	149.27	136.21	6574.91	6405.25	38.75	
5300.00	5094.00	0.00	0.00	5127.00	152.17	152.17	136.39	6597.21	6424.20	38.13	
5400.00	5189.34	0.00	0.00	5222.34	155.06	155.06	136.56	6619.56	6443.23	37.54	
5500.00	5284.69	0.00	0.00	5317.69	157.96	157.96	136.74	6641.98	6462.32	36.97	
5600.00	5380.03	0.00	0.00	5413.03	160.85	160.85	136.91	6664.45	6481.47	36.42	
5700.00	5475.37	0.00	0.00	5508.37	163.75	163.75	137.09	6686.99	6500.69	35.89	
5800.00	5570.72	0.00	0.00	5603.72	166.64	166.64	137.26	6709.59	6519.97	35.38	
5900.00	5666.06	0.00	0.00	5699.06	169.54	169.54	137.43	6732.25	6539.31	34.89	
6000.00	5761.41	0.00	0.00	5794.41	172.44	172.44	137.60	6754.96	6558.71	34.42	
6100.00	5856.75	0.00	0.00	5889.75	175.33	175.33	137.77	6777.74	6578.18	33.96	
6200.00	5952.10	0.00	0.00	5985.10	178.23	178.23	137.93	6800.57	6597.71	33.52	
6300.00	6047.68	0.00	0.00	6080.68	181.13	181.13	131.14	6822.40	6616.26	33.10	
6400.00	6145.19	0.00	0.00	6178.19	184.09	184.09	101.28	6833.08	6623.74	32.64	
6500.00	6243.42	0.00	0.00	6276.42	187.07	187.07	60.52	6829.92	6617.40	32.14	
6600.00	6340.44	0.00	0.00	6373.44	190.02	190.02	35.28	6812.97	6597.37	31.60	
6700.00	6434.38	0.00	0.00	6467.38	192.87	192.87	23.10	6782.56	6564.01	31.04	
6800.00	6523.41	0.00	0.00	6556.41	195.58	195.58	16.51	6739.26	6517.96	30.45	
6900.00	6605.78	0.00	0.00	6638.78	198.08	198.08	12.40	6683.91	6460.10	29.86	
7000.00	6679.91	0.00	0.00	6712.91	200.33	200.33	9.45	6617.57	6391.51	29.27	
7100.00	6744.33	0.00	0.00	6777.33	202.29	202.29	7.00	6541.52	6313.53	28.69	
7200.00	6797.81	0.00	0.00	6830.81	203.91	203.91	4.48	6457.25	6227.67	28.13	
7300.00	6839.31	0.00	0.00	6872.31	205.17	205.17	1.10	6366.37	6135.58	27.59	
7400.00	6868.00	0.00	0.00	6901.00	206.04	206.04	354.52	6270.66	6039.11	27.08	
7500.00	6883.34	0.00	0.00	6916.34	206.51	206.51	330.71	6171.99	5939.94	26.60	
7600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	6072.24	5840.15	26.16	
7700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5972.45	5740.41	25.74	
7800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5872.67	5640.66	25.31	
7900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5772.90	5540.87	24.88	
8000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5673.14	5441.19	24.46	
8100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5573.38	5341.37	24.02	
8200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5473.64	5241.65	23.60	
8300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5373.90	5141.98	23.17	
8400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5274.17	5042.21	22.74	
8500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5174.45	4942.49	22.31	
8600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	5074.75	4842.81	21.88	
8700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4975.05	4743.16	21.45	
8800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4875.37	4643.54	21.03	
8900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4775.70	4543.87	20.60	
9000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4676.05	4444.19	20.17	
9100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4576.41	4344.53	19.74	
9200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4476.79	4244.93	19.31	
9300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4377.18	4145.38	18.88	
9400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4277.60	4045.71	18.45	
9500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4178.03	3946.09	18.01	
9600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4078.48	3846.55	17.58	
9700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3978.96	3747.04	17.16	
9800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3879.46	3647.44	16.72	
9900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3779.99	3547.92	16.29	
10000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3680.55	3448.47	15.86	
10100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3581.13	3349.03	15.43	
10200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3481.75	3249.49	14.99	
10300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3382.41	3150.00	14.55	
10400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3283.11	3050.57	14.12	
10500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3183.85	2951.19	13.68	
10600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3084.64	2851.78	13.25	
10700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2985.48	2752.43	12.81	

## 5D Anti-Collision Report

Secondary Well: Tigges 30-34 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
10800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2886.38	2653.12	12.37	
10900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2787.34	2553.81	11.94	
11000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2688.38	2454.51	11.50	
11100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2589.49	2355.28	11.06	
11200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2490.70	2256.05	10.61	
11300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2392.00	2156.85	10.17	
11400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2293.42	2057.72	9.73	
11500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2194.96	1958.66	9.29	
11600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2096.65	1859.61	8.85	
11700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1998.51	1760.62	8.40	
11800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1900.56	1661.65	7.95	
11900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1802.84	1562.76	7.51	
12000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1705.38	1463.64	7.05	
12100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1608.24	1364.49	6.60	
12200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1511.47	1265.39	6.14	
12300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1415.14	1166.32	5.69	
12400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1319.36	1067.43	5.24	
12500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1224.26	968.75	4.79	
12600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1130.01	870.37	4.35	
12700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1036.83	772.28	3.92	
12800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	945.04	673.93	3.49	
12900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	855.10	576.16	3.07	
13000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	767.66	479.82	2.67	
13100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	683.66	384.25	2.28	SF(Lo)
13200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	604.56	290.93	1.93	SF(Lo)
13300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	532.53	201.81	1.61	SF(Lo)
13400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	470.83	121.21	1.35	SF(Med)
13500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	424.01	54.69	1.15	SF(Med)
13600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	397.34	13.15	1.03	SF(Med)
13700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	394.93	4.98	1.01	SF(Med)
13800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	417.22	32.81	1.09	SF(Med)
13900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	460.61	89.42	1.24	SF(Med)
14000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	519.87	163.61	1.46	SF(Med)
14100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	590.22	247.83	1.72	SF(Lo)
14200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	668.17	338.80	2.03	SF(Lo)
14300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	751.37	432.24	2.35	SF(Lo)
14400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	838.24	528.68	2.71	
14500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	927.76	625.50	3.07	
14600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1019.23	723.14	3.44	
14700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1112.18	821.47	3.83	
14800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1206.25	920.13	4.22	
14900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1301.20	1019.19	4.61	
15000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1396.86	1118.03	5.01	
15100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1493.09	1216.89	5.41	
15200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1589.78	1315.98	5.81	
15300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1686.86	1415.24	6.21	
15400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1784.27	1514.63	6.62	
15456.59	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1839.51	1570.93	6.85	
Secondary Well: Firestien #30-44 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	33.00	0.00	0.00	238.60	3186.96	3186.23	4377.06	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	238.60	3186.79	3184.94	1718.31	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	238.60	3186.79	3183.19	884.94	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	238.60	3186.79	3179.93	464.42	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	238.60	3186.79	3176.67	314.82	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	238.60	3186.79	3173.58	241.22	



## 5D Anti-Collision Report

Secondary Well: Firestien #30-44 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
600.00	567.00	0.00	0.00	600.00	14.69	14.69	238.60	3186.79	3170.32	193.47	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	238.60	3186.79	3167.06	161.50	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	238.60	3186.79	3163.80	138.60	
900.00	867.00	0.00	0.00	900.00	23.80	23.80	238.60	3186.79	3160.54	121.38	
1000.00	967.00	0.00	0.00	1000.00	26.84	26.84	238.60	3186.79	3157.28	107.97	
1100.00	1066.98	0.00	0.00	1099.98	29.87	29.87	114.83	3187.52	3154.78	97.34	
1200.00	1166.84	0.00	0.00	1199.84	32.90	32.90	114.88	3189.73	3153.75	88.67	
1300.00	1266.45	0.00	0.00	1299.45	35.93	35.93	114.95	3193.41	3154.21	81.46	
1400.00	1365.70	0.00	0.00	1398.70	38.94	38.94	115.06	3198.59	3156.15	75.36	
1500.00	1464.47	0.00	0.00	1497.47	41.94	41.94	115.19	3205.30	3159.60	70.13	
1600.00	1562.62	0.00	0.00	1595.62	44.92	44.92	115.34	3213.57	3164.61	65.64	
1700.00	1660.06	0.00	0.00	1693.06	47.88	47.88	115.51	3223.44	3171.18	61.68	
1800.00	1756.64	0.00	0.00	1789.64	50.82	50.82	115.71	3234.94	3179.36	58.20	
1900.00	1852.30	0.00	0.00	1885.30	53.72	53.72	115.97	3248.10	3189.17	55.12	
2000.00	1947.64	0.00	0.00	1980.64	56.62	56.62	116.43	3261.93	3199.64	52.36	
2100.00	2042.98	0.00	0.00	2075.98	59.51	59.51	116.89	3275.99	3210.31	49.88	
2200.00	2138.33	0.00	0.00	2171.33	62.41	62.41	117.34	3290.25	3221.20	47.65	
2300.00	2233.67	0.00	0.00	2266.67	65.30	65.30	117.78	3304.73	3232.29	45.62	
2400.00	2329.02	0.00	0.00	2362.02	68.20	68.20	118.23	3319.43	3243.60	43.78	
2500.00	2424.36	0.00	0.00	2457.36	71.09	71.09	118.67	3334.33	3255.11	42.09	
2600.00	2519.70	0.00	0.00	2552.70	73.99	73.99	119.11	3349.43	3266.84	40.55	
2700.00	2615.05	0.00	0.00	2648.05	76.88	76.88	119.54	3364.74	3278.78	39.14	
2800.00	2710.39	0.00	0.00	2743.39	79.78	79.78	119.97	3380.24	3290.92	37.84	
2900.00	2805.74	0.00	0.00	2838.74	82.68	82.68	120.39	3395.95	3303.17	36.60	
3000.00	2901.08	0.00	0.00	2934.08	85.57	85.57	120.82	3411.85	3315.61	35.45	
3100.00	2996.43	0.00	0.00	3029.43	88.47	88.47	121.23	3427.94	3328.24	34.38	
3200.00	3091.77	0.00	0.00	3124.77	91.36	91.36	121.65	3444.22	3341.06	33.39	
3300.00	3187.11	0.00	0.00	3220.11	94.26	94.26	122.06	3460.68	3354.08	32.46	
3400.00	3282.46	0.00	0.00	3315.46	97.15	97.15	122.47	3477.33	3367.28	31.60	
3500.00	3377.80	0.00	0.00	3410.80	100.05	100.05	122.87	3494.16	3380.67	30.79	
3600.00	3473.15	0.00	0.00	3506.15	102.94	102.94	123.27	3511.17	3394.25	30.03	
3700.00	3568.49	0.00	0.00	3601.49	105.84	105.84	123.67	3528.35	3408.01	29.32	
3800.00	3663.83	0.00	0.00	3696.83	108.74	108.74	124.06	3545.71	3421.95	28.65	
3900.00	3759.18	0.00	0.00	3792.18	111.63	111.63	124.45	3563.24	3436.06	28.02	
4000.00	3854.52	0.00	0.00	3887.52	114.53	114.53	124.83	3580.93	3450.36	27.42	
4100.00	3949.87	0.00	0.00	3982.87	117.42	117.42	125.22	3598.79	3464.83	26.86	
4200.00	4045.21	0.00	0.00	4078.21	120.32	120.32	125.59	3616.82	3479.47	26.33	
4300.00	4140.56	0.00	0.00	4173.56	123.21	123.21	125.97	3635.01	3494.28	25.83	
4400.00	4235.90	0.00	0.00	4268.90	126.11	126.11	126.34	3653.35	3509.26	25.35	
4500.00	4331.24	0.00	0.00	4364.24	129.00	129.00	126.71	3671.85	3524.40	24.90	
4600.00	4426.59	0.00	0.00	4459.59	131.90	131.90	127.07	3690.50	3539.71	24.47	
4700.00	4521.93	0.00	0.00	4554.93	134.79	134.79	127.43	3709.31	3555.18	24.07	
4800.00	4617.28	0.00	0.00	4650.28	137.69	137.69	127.79	3728.26	3570.81	23.68	
4900.00	4712.62	0.00	0.00	4745.62	140.59	140.59	128.14	3747.37	3586.59	23.31	
5000.00	4807.97	0.00	0.00	4840.97	143.48	143.48	128.50	3766.61	3602.53	22.96	
5100.00	4903.31	0.00	0.00	4936.31	146.38	146.38	128.84	3786.00	3618.63	22.62	
5200.00	4998.65	0.00	0.00	5031.65	149.27	149.27	129.19	3805.53	3634.87	22.30	
5300.00	5094.00	0.00	0.00	5127.00	152.17	152.17	129.53	3825.19	3651.27	21.99	
5400.00	5189.34	0.00	0.00	5222.34	155.06	155.06	129.86	3845.00	3667.81	21.70	
5500.00	5284.69	0.00	0.00	5317.69	157.96	157.96	130.20	3864.93	3684.33	21.40	
5600.00	5380.03	0.00	0.00	5413.03	160.85	160.85	130.53	3885.00	3700.99	21.11	
5700.00	5475.37	0.00	0.00	5508.37	163.75	163.75	130.86	3905.20	3717.79	20.84	
5800.00	5570.72	0.00	0.00	5603.72	166.64	166.64	131.18	3925.52	3734.73	20.57	
5900.00	5666.06	0.00	0.00	5699.06	169.54	169.54	131.50	3945.98	3751.80	20.32	
6000.00	5761.41	0.00	0.00	5794.41	172.44	172.44	131.82	3966.55	3768.99	20.08	
6100.00	5856.75	0.00	0.00	5889.75	175.33	175.33	132.13	3987.25	3786.32	19.84	
6200.00	5952.10	0.00	0.00	5985.10	178.23	178.23	132.45	4008.07	3803.76	19.62	
6300.00	6047.68	0.00	0.00	6080.68	181.13	181.13	125.84	4027.95	3820.30	19.40	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-44 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
6400.00	6145.19	0.00	0.00	6178.19	184.09	184.09	96.15	4036.84	3825.94	19.14	
6500.00	6243.42	0.00	0.00	6276.42	187.07	187.07	55.45	4032.07	3817.96	18.83	
6600.00	6340.44	0.00	0.00	6373.44	190.02	190.02	30.15	4013.70	3796.49	18.48	
6700.00	6434.38	0.00	0.00	6467.38	192.87	192.87	17.77	3982.07	3761.90	18.09	
6800.00	6523.41	0.00	0.00	6556.41	195.58	195.58	10.83	3937.76	3714.83	17.66	
6900.00	6605.78	0.00	0.00	6638.78	198.08	198.08	6.14	3881.61	3656.16	17.22	
7000.00	6679.91	0.00	0.00	6712.91	200.33	200.33	2.32	3814.71	3587.02	16.75	
7100.00	6744.33	0.00	0.00	6777.33	202.29	202.29	358.49	3738.33	3508.71	16.28	
7200.00	6797.81	0.00	0.00	6830.81	203.91	203.91	353.74	3653.98	3422.76	15.80	
7300.00	6839.31	0.00	0.00	6872.31	205.17	205.17	346.43	3563.30	3330.84	15.33	
7400.00	6868.00	0.00	0.00	6901.00	206.04	206.04	332.32	3468.07	3234.79	14.87	
7500.00	6883.34	0.00	0.00	6916.34	206.51	206.51	300.28	3370.18	3136.54	14.43	
7600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3271.51	3037.92	14.01	
7700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3172.92	2939.39	13.59	
7800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3074.43	2841.05	13.17	
7900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2976.04	2742.71	12.75	
8000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2877.76	2644.56	12.34	
8100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2779.60	2546.41	11.92	
8200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2681.58	2448.47	11.50	
8300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2583.71	2350.69	11.09	
8400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2486.00	2253.08	10.67	
8500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2388.49	2155.48	10.25	
8600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2291.20	2057.87	9.82	
8700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2194.14	1960.44	9.39	
8800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2097.37	1863.25	8.96	
8900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2000.91	1766.34	8.53	
9000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1904.81	1669.76	8.10	
9100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1809.14	1573.48	7.68	
9200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1713.96	1477.48	7.25	
9300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1619.37	1382.01	6.82	
9400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1525.46	1287.21	6.40	
9500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1432.38	1192.96	5.98	
9600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1340.30	1099.09	5.56	
9700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1249.43	1005.71	5.13	
9800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1160.07	913.49	4.70	
9900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1072.59	823.06	4.30	
10000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	987.48	734.41	3.90	
10100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	905.43	647.05	3.50	
10200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	827.34	563.60	3.14	
10300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	754.43	483.53	2.78	
10400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	688.37	409.92	2.47	SF(Lo)
10500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	631.29	343.98	2.20	SF(Lo)
10600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	585.84	289.98	1.98	SF(Lo)
10700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	554.88	250.73	1.82	SF(Lo)
10800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	540.90	230.60	1.74	SF(Lo)
10900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	545.21	232.07	1.74	SF(Lo)
11000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	567.39	254.87	1.82	SF(Lo)
11100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	605.49	296.29	1.96	SF(Lo)
11200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	656.73	352.17	2.16	SF(Lo)
11300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	718.32	418.83	2.40	SF(Lo)
11400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	787.82	493.11	2.67	
11500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	863.33	573.63	2.98	
11600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	943.41	657.88	3.30	
11700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1026.99	745.09	3.64	
11800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1113.28	835.05	4.00	
11900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1201.69	926.65	4.37	
12000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1291.80	1018.84	4.73	
12100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1383.27	1112.37	5.11	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-44 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
12200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1475.84	1206.96	5.49	
12300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1569.33	1302.36	5.88	
12400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1663.57	1398.43	6.27	
12500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1758.45	1495.02	6.68	
12600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1853.87	1591.92	7.08	
12700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	1949.75	1688.77	7.47	
12800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2046.02	1785.97	7.87	
12900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2142.63	1883.47	8.27	
13000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2239.55	1981.16	8.67	
13100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2336.72	2079.04	9.07	
13200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2434.12	2177.11	9.47	
13300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2531.72	2275.35	9.88	
13400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2629.50	2373.74	10.28	
13500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2727.45	2472.26	10.69	
13600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2825.54	2570.89	11.10	
13700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	2923.75	2669.63	11.51	
13800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3022.09	2768.45	11.92	
13900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3120.53	2867.36	12.33	
14000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3219.06	2966.34	12.74	
14100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3317.69	3065.39	13.15	
14200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3416.39	3164.49	13.56	
14300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3515.17	3263.65	13.98	
14400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3614.01	3362.86	14.39	
14500.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3712.92	3462.12	14.80	
14600.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3811.88	3561.41	15.22	
14700.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	3910.90	3660.74	15.63	
14800.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4009.97	3760.11	16.05	
14900.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4109.08	3859.51	16.46	
15000.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4208.23	3958.94	16.88	
15100.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4307.42	4058.40	17.30	
15200.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4406.65	4157.81	17.71	
15300.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4505.91	4257.22	18.12	
15400.00	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4605.21	4356.65	18.53	
15456.59	6886.00	0.00	0.00	6919.00	206.59	206.59	270.00	4661.41	4412.93	18.76	
Secondary Well: Tollgate 1 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	39.00	0.00	0.00	222.85	2152.87	2152.14	2956.83	
100.00	61.00	0.00	0.00	100.00	0.93	0.93	222.85	2152.52	2150.75	1221.20	
200.00	161.00	0.00	0.00	200.00	2.44	2.44	222.85	2152.52	2149.01	614.58	
300.00	261.00	0.00	0.00	300.00	5.40	5.40	222.85	2152.52	2145.84	322.52	
400.00	361.00	0.00	0.00	400.00	8.43	8.43	222.85	2152.52	2142.76	220.55	
500.00	461.00	0.00	0.00	500.00	11.47	11.47	222.85	2152.52	2139.50	165.36	
600.00	561.00	0.00	0.00	600.00	14.51	14.51	222.85	2152.52	2136.24	132.26	
700.00	661.00	0.00	0.00	700.00	17.54	17.54	222.85	2152.52	2132.98	110.20	
800.00	761.00	0.00	0.00	800.00	20.58	20.58	222.85	2152.52	2129.73	94.45	
900.00	861.00	0.00	0.00	900.00	23.62	23.62	222.85	2152.52	2126.47	82.64	
1000.00	961.00	0.00	0.00	1000.00	26.65	26.65	222.85	2152.52	2123.21	73.45	
1100.00	1060.98	0.00	0.00	1099.98	29.69	29.69	99.11	2152.79	2120.25	66.15	
1200.00	1160.84	0.00	0.00	1199.84	32.72	32.72	99.23	2153.63	2117.88	60.25	
1300.00	1260.45	0.00	0.00	1299.45	35.75	35.75	99.43	2155.05	2116.08	55.30	
1400.00	1359.70	0.00	0.00	1398.70	38.76	38.76	99.71	2157.09	2114.90	51.13	
1500.00	1458.47	0.00	0.00	1497.47	41.76	41.76	100.06	2159.81	2114.38	47.54	
1600.00	1556.62	0.00	0.00	1595.62	44.74	44.74	100.48	2163.27	2114.58	44.43	
1700.00	1654.06	0.00	0.00	1693.06	47.70	47.70	100.97	2167.56	2115.60	41.71	
1800.00	1750.64	0.00	0.00	1789.64	50.63	50.63	101.51	2172.78	2117.43	39.25	
1900.00	1846.30	0.00	0.00	1885.30	53.54	53.54	102.14	2179.01	2120.23	37.07	

## 5D Anti-Collision Report

Secondary Well: Tollgate 1 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
2000.00	1941.64	0.00	0.00	1980.64	56.43	56.43	102.88	2185.84	2123.62	35.13	
2100.00	2036.98	0.00	0.00	2075.98	59.33	59.33	103.61	2193.07	2127.39	33.39	
2200.00	2132.33	0.00	0.00	2171.33	62.23	62.23	104.34	2200.69	2131.54	31.83	
2300.00	2227.67	0.00	0.00	2266.67	65.12	65.12	105.07	2208.69	2136.07	30.42	
2400.00	2323.02	0.00	0.00	2362.02	68.02	68.02	105.79	2217.07	2141.00	29.14	
2500.00	2418.36	0.00	0.00	2457.36	70.91	70.91	106.50	2225.83	2146.31	27.99	
2600.00	2513.70	0.00	0.00	2552.70	73.81	73.81	107.21	2234.97	2152.00	26.94	
2700.00	2609.05	0.00	0.00	2648.05	76.70	76.70	107.92	2244.47	2158.07	25.98	
2800.00	2704.39	0.00	0.00	2743.39	79.60	79.60	108.61	2254.33	2164.53	25.10	
2900.00	2799.74	0.00	0.00	2838.74	82.49	82.49	109.31	2264.56	2171.36	24.30	
3000.00	2895.08	0.00	0.00	2934.08	85.39	85.39	110.00	2275.14	2178.56	23.56	
3100.00	2990.43	0.00	0.00	3029.43	88.28	88.28	110.68	2286.06	2186.04	22.85	
3200.00	3085.77	0.00	0.00	3124.77	91.18	91.18	111.35	2297.33	2193.78	22.19	
3300.00	3181.11	0.00	0.00	3220.11	94.08	94.08	112.02	2308.94	2201.88	21.57	
3400.00	3276.46	0.00	0.00	3315.46	96.97	96.97	112.68	2320.89	2210.32	20.99	
3500.00	3371.80	0.00	0.00	3410.80	99.87	99.87	113.34	2333.16	2219.11	20.46	
3600.00	3467.15	0.00	0.00	3506.15	102.76	102.76	113.99	2345.75	2228.24	19.96	
3700.00	3562.49	0.00	0.00	3601.49	105.66	105.66	114.63	2358.67	2237.71	19.50	
3800.00	3657.83	0.00	0.00	3696.83	108.55	108.55	115.27	2371.89	2247.51	19.07	
3900.00	3753.18	0.00	0.00	3792.18	111.45	111.45	115.90	2385.43	2257.62	18.66	
4000.00	3848.52	0.00	0.00	3887.52	114.34	114.34	116.53	2399.27	2268.06	18.29	
4100.00	3943.87	0.00	0.00	3982.87	117.24	117.24	117.14	2413.40	2278.81	17.93	
4200.00	4039.21	0.00	0.00	4078.21	120.14	120.14	117.75	2427.83	2289.87	17.60	
4300.00	4134.56	0.00	0.00	4173.56	123.03	123.03	118.36	2442.54	2301.25	17.29	
4400.00	4229.90	0.00	0.00	4268.90	125.93	125.93	118.95	2457.54	2312.93	16.99	
4500.00	4325.24	0.00	0.00	4364.24	128.82	128.82	119.54	2472.81	2324.90	16.72	
4600.00	4420.59	0.00	0.00	4459.59	131.72	131.72	120.13	2488.36	2337.13	16.45	
4700.00	4515.93	0.00	0.00	4554.93	134.61	134.61	120.70	2504.17	2349.45	16.19	
4800.00	4611.28	0.00	0.00	4650.28	137.51	137.51	121.27	2520.25	2362.05	15.93	
4900.00	4706.62	0.00	0.00	4745.62	140.40	140.40	121.84	2536.58	2374.92	15.69	
5000.00	4801.97	0.00	0.00	4840.97	143.30	143.30	122.39	2553.16	2388.06	15.46	
5100.00	4897.31	0.00	0.00	4936.31	146.19	146.19	122.94	2569.99	2401.47	15.25	
5200.00	4992.65	0.00	0.00	5031.65	149.09	149.09	123.48	2587.06	2415.13	15.05	
5300.00	5088.00	0.00	0.00	5127.00	151.99	151.99	124.02	2604.37	2429.05	14.86	
5400.00	5183.34	0.00	0.00	5222.34	154.88	154.88	124.55	2621.91	2443.22	14.67	
5500.00	5278.69	0.00	0.00	5317.69	157.78	157.78	125.07	2639.68	2457.64	14.50	
5600.00	5374.03	0.00	0.00	5413.03	160.67	160.67	125.59	2657.67	2472.30	14.34	
5700.00	5469.37	0.00	0.00	5508.37	163.57	163.57	126.10	2675.88	2487.20	14.18	
5800.00	5564.72	0.00	0.00	5603.72	166.46	166.46	126.60	2694.31	2502.33	14.03	
5900.00	5660.06	0.00	0.00	5699.06	169.36	169.36	127.10	2712.94	2517.69	13.89	
6000.00	5755.41	0.00	0.00	5794.41	172.25	172.25	127.59	2731.78	2533.28	13.76	
6100.00	5850.75	0.00	0.00	5889.75	175.15	175.15	128.07	2750.83	2549.09	13.64	
6200.00	5946.10	0.00	0.00	5985.10	178.04	178.04	128.55	2770.07	2565.11	13.52	
6300.00	6041.68	0.00	0.00	6080.68	180.95	180.95	122.13	2788.47	2580.33	13.40	
6400.00	6139.19	0.00	0.00	6178.19	183.91	183.91	92.59	2796.05	2584.84	13.24	
6500.00	6237.42	0.00	0.00	6276.42	186.89	186.89	51.96	2790.19	2575.93	13.02	
6600.00	6334.44	0.00	0.00	6373.44	189.84	189.84	26.62	2770.93	2553.58	12.75	
6700.00	6428.38	0.00	0.00	6467.38	192.69	192.69	14.11	2738.60	2518.27	12.43	
6800.00	6517.41	0.00	0.00	6556.41	195.39	195.39	6.90	2693.79	2470.68	12.07	
6900.00	6599.78	0.00	0.00	6638.78	197.90	197.90	1.79	2637.34	2411.72	11.69	
7000.00	6673.91	0.00	0.00	6712.91	200.15	200.15	357.31	2570.34	2342.49	11.28	
7100.00	6738.33	0.00	0.00	6777.33	202.10	202.10	352.46	2494.09	2264.36	10.86	
7200.00	6791.81	0.00	0.00	6830.81	203.73	203.73	346.10	2410.10	2178.86	10.42	
7300.00	6833.31	0.00	0.00	6872.31	204.99	204.99	336.28	2320.04	2087.73	9.99	
7400.00	6862.00	0.00	0.00	6901.00	205.86	205.86	319.19	2225.73	1992.49	9.54	
7500.00	6877.34	0.00	0.00	6916.34	206.33	206.33	290.55	2129.09	1895.22	9.10	
7600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2032.04	1797.98	8.68	
7700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1935.34	1701.20	8.27	

## 5D Anti-Collision Report

Secondary Well: Tollgate 1 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
7800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1838.99	1604.65	7.85	
7900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1743.06	1508.66	7.44	
8000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1647.61	1413.01	7.02	
8100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1552.73	1317.95	6.61	
8200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1458.53	1223.58	6.21	
8300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1365.16	1130.05	5.81	
8400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1272.80	1037.22	5.40	
8500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1181.68	944.86	4.99	
8600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1092.12	854.01	4.59	
8700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1004.53	764.95	4.19	
8800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	919.48	678.36	3.81	
8900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	837.73	593.27	3.43	
9000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	760.36	512.90	3.07	
9100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	688.84	436.58	2.73	
9200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	625.19	368.22	2.43	SF(Lo)
9300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	572.02	309.18	2.18	SF(Lo)
9400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	532.51	263.31	1.98	SF(Lo)
9500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	509.82	235.47	1.86	SF(Lo)
9600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	506.24	228.11	1.82	SF(Lo)
9700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	522.14	242.72	1.87	SF(Lo)
9800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	555.86	277.69	2.00	SF(Lo)
9900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	604.43	328.52	2.19	SF(Lo)
10000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	664.60	391.03	2.43	SF(Lo)
10100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	733.52	462.82	2.71	
10200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	808.95	541.56	3.03	
10300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	889.24	624.41	3.36	
10400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	973.20	710.41	3.70	
10500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1059.94	799.54	4.07	
10600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1148.83	890.26	4.44	
10700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1239.42	982.05	4.82	
10800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1331.36	1075.27	5.20	
10900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1424.39	1169.58	5.59	
11000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1518.30	1264.75	5.99	
11100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1612.94	1360.51	6.39	
11200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1708.20	1456.82	6.80	
11300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1803.97	1553.04	7.19	
11400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1900.17	1649.67	7.59	
11500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	1996.75	1746.68	7.98	
11600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2093.65	1844.00	8.39	
11700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2190.83	1941.60	8.79	
11800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2288.25	2039.43	9.20	
11900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2385.88	2137.46	9.60	
12000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2483.70	2235.66	10.01	
12100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2581.69	2334.01	10.42	
12200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2679.83	2432.50	10.83	
12300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2778.10	2531.10	11.25	
12400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2876.49	2629.81	11.66	
12500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	2974.99	2728.61	12.07	
12600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3073.58	2827.50	12.49	
12700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3172.26	2926.46	12.91	
12800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3271.03	3025.47	13.32	
12900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3369.86	3124.53	13.74	
13000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3468.76	3223.63	14.15	
13100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3567.73	3322.80	14.57	
13200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3666.75	3422.00	14.98	
13300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3765.82	3521.26	15.40	
13400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3864.94	3620.55	15.81	
13500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	3964.10	3719.88	16.23	

## 5D Anti-Collision Report

Secondary Well: Tollgate 1 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4063.31	3819.23	16.65	
13700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4162.55	3918.52	17.06	
13800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4261.83	4017.84	17.47	
13900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4361.14	4117.19	17.88	
14000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4460.48	4216.57	18.29	
14100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4559.85	4315.98	18.70	
14200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4659.25	4415.41	19.11	
14300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4758.67	4514.87	19.52	
14400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4858.12	4614.35	19.93	
14500.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	4957.58	4713.85	20.34	
14600.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5057.07	4813.37	20.75	
14700.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5156.58	4912.90	21.16	
14800.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5256.11	5012.46	21.57	
14900.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5355.66	5112.03	21.98	
15000.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5455.22	5211.61	22.39	
15100.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5554.80	5311.21	22.80	
15200.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5654.39	5410.82	23.22	
15300.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5754.00	5510.45	23.63	
15400.00	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5853.62	5610.09	24.04	
15456.59	6880.00	0.00	0.00	6919.00	206.41	206.41	270.00	5910.00	5666.48	24.27	
Secondary Well: Etter 30-33 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	25.00	0.00	0.00	256.61	7470.43	7469.71	10260.18	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	256.61	7470.39	7468.42	3784.16	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	256.61	7470.39	7466.55	1945.69	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	256.61	7470.39	7463.30	1052.85	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	256.61	7470.39	7460.04	721.68	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	256.61	7470.39	7456.96	556.02	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	256.61	7470.39	7453.70	447.56	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	256.61	7470.39	7450.45	374.51	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	256.61	7470.39	7447.19	321.95	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	256.61	7470.39	7443.93	282.34	
1000.00	975.00	0.00	0.00	1000.00	27.08	27.08	256.61	7470.39	7440.68	251.40	
1100.00	1074.98	0.00	0.00	1099.98	30.12	30.12	132.82	7471.58	7438.63	226.76	
1200.00	1174.84	0.00	0.00	1199.84	33.15	33.15	132.80	7475.14	7438.97	206.69	
1300.00	1274.45	0.00	0.00	1299.45	36.17	36.17	132.76	7481.07	7441.69	189.96	
1400.00	1373.70	0.00	0.00	1398.70	39.19	39.19	132.70	7489.37	7446.76	175.73	
1500.00	1472.47	0.00	0.00	1497.47	42.19	42.19	132.63	7500.05	7454.19	163.56	
1600.00	1570.62	0.00	0.00	1595.62	45.17	45.17	132.55	7513.09	7463.99	153.01	
1700.00	1668.06	0.00	0.00	1693.06	48.13	48.13	132.44	7528.50	7476.14	143.79	
1800.00	1764.64	0.00	0.00	1789.64	51.06	51.06	132.32	7546.27	7490.63	135.63	
1900.00	1860.30	0.00	0.00	1885.30	53.96	53.96	132.24	7566.35	7507.41	128.38	
2000.00	1955.64	0.00	0.00	1980.64	56.86	56.86	132.41	7587.18	7524.94	121.90	
2100.00	2050.98	0.00	0.00	2075.98	59.76	59.76	132.57	7608.07	7542.51	116.05	
2200.00	2146.33	0.00	0.00	2171.33	62.65	62.65	132.73	7629.03	7560.14	110.75	
2300.00	2241.67	0.00	0.00	2266.67	65.55	65.55	132.90	7650.04	7577.82	105.92	
2400.00	2337.02	0.00	0.00	2362.02	68.44	68.44	133.06	7671.12	7595.54	101.49	
2500.00	2432.36	0.00	0.00	2457.36	71.34	71.34	133.22	7692.26	7613.32	97.44	
2600.00	2527.70	0.00	0.00	2552.70	74.23	74.23	133.38	7713.46	7631.15	93.71	
2700.00	2623.05	0.00	0.00	2648.05	77.13	77.13	133.53	7734.72	7649.04	90.28	
2800.00	2718.39	0.00	0.00	2743.39	80.02	80.02	133.69	7756.03	7666.99	87.10	
2900.00	2813.74	0.00	0.00	2838.74	82.92	82.92	133.85	7777.41	7685.00	84.16	
3000.00	2909.08	0.00	0.00	2934.08	85.81	85.81	134.00	7798.84	7703.06	81.42	
3100.00	3004.43	0.00	0.00	3029.43	88.71	88.71	134.16	7820.33	7721.18	78.87	
3200.00	3099.77	0.00	0.00	3124.77	91.61	91.61	134.31	7841.88	7739.36	76.49	
3300.00	3195.11	0.00	0.00	3220.11	94.50	94.50	134.47	7863.48	7757.59	74.26	

## 5D Anti-Collision Report

Secondary Well: Etter 30-33 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
3400.00	3290.46	0.00	0.00	3315.46	97.40	97.40	134.62	7885.15	7775.88	72.17	
3500.00	3385.80	0.00	0.00	3410.80	100.29	100.29	134.77	7906.86	7794.23	70.20	
3600.00	3481.15	0.00	0.00	3506.15	103.19	103.19	134.92	7928.63	7812.64	68.35	
3700.00	3576.49	0.00	0.00	3601.49	106.08	106.08	135.07	7950.46	7831.10	66.61	
3800.00	3671.83	0.00	0.00	3696.83	108.98	108.98	135.22	7972.34	7849.61	64.96	
3900.00	3767.18	0.00	0.00	3792.18	111.87	111.87	135.37	7994.27	7868.19	63.40	
4000.00	3862.52	0.00	0.00	3887.52	114.77	114.77	135.52	8016.26	7886.81	61.93	
4100.00	3957.87	0.00	0.00	3982.87	117.66	117.66	135.67	8038.30	7905.49	60.53	
4200.00	4053.21	0.00	0.00	4078.21	120.56	120.56	135.81	8060.40	7924.23	59.20	
4300.00	4148.56	0.00	0.00	4173.56	123.46	123.46	135.96	8082.54	7943.02	57.93	
4400.00	4243.90	0.00	0.00	4268.90	126.35	126.35	136.10	8104.74	7961.87	56.73	
4500.00	4339.24	0.00	0.00	4364.24	129.25	129.25	136.25	8126.99	7980.76	55.58	
4600.00	4434.59	0.00	0.00	4459.59	132.14	132.14	136.39	8149.29	7999.71	54.48	
4700.00	4529.93	0.00	0.00	4554.93	135.04	135.04	136.53	8171.64	8018.72	53.44	
4800.00	4625.28	0.00	0.00	4650.28	137.93	137.93	136.68	8194.04	8037.77	52.44	
4900.00	4720.62	0.00	0.00	4745.62	140.83	140.83	136.82	8216.49	8056.88	51.48	
5000.00	4815.97	0.00	0.00	4840.97	143.72	143.72	136.96	8238.99	8076.04	50.56	
5100.00	4911.31	0.00	0.00	4936.31	146.62	146.62	137.10	8261.53	8095.25	49.68	
5200.00	5006.65	0.00	0.00	5031.65	149.51	149.51	137.24	8284.13	8114.52	48.84	
5300.00	5102.00	0.00	0.00	5127.00	152.41	152.41	137.38	8306.77	8133.83	48.03	
5400.00	5197.34	0.00	0.00	5222.34	155.31	155.31	137.51	8329.46	8153.19	47.25	
5500.00	5292.69	0.00	0.00	5317.69	158.20	158.20	137.65	8352.20	8172.60	46.50	
5600.00	5388.03	0.00	0.00	5413.03	161.10	161.10	137.79	8374.99	8192.07	45.78	
5700.00	5483.37	0.00	0.00	5508.37	163.99	163.99	137.92	8397.82	8211.58	45.09	
5800.00	5578.72	0.00	0.00	5603.72	166.89	166.89	138.06	8420.70	8231.14	44.42	
5900.00	5674.06	0.00	0.00	5699.06	169.78	169.78	138.19	8443.62	8250.75	43.78	
6000.00	5769.41	0.00	0.00	5794.41	172.68	172.68	138.32	8466.59	8270.41	43.16	
6100.00	5864.75	0.00	0.00	5889.75	175.57	175.57	138.46	8489.61	8290.11	42.56	
6200.00	5960.10	0.00	0.00	5985.10	178.47	178.47	138.59	8512.67	8309.86	41.98	
6300.00	6055.68	0.00	0.00	6080.68	181.37	181.37	131.75	8534.72	8328.63	41.41	
6400.00	6153.19	0.00	0.00	6178.19	184.33	184.33	101.85	8545.59	8336.29	40.83	
6500.00	6251.42	0.00	0.00	6276.42	187.32	187.32	61.07	8542.61	8330.13	40.20	
6600.00	6348.44	0.00	0.00	6373.44	190.26	190.26	35.82	8525.82	8310.24	39.55	
6700.00	6442.38	0.00	0.00	6467.38	193.12	193.12	23.63	8495.55	8277.02	38.88	
6800.00	6531.41	0.00	0.00	6556.41	195.82	195.82	17.06	8452.37	8231.08	38.20	
6900.00	6613.78	0.00	0.00	6638.78	198.32	198.32	12.98	8397.11	8173.30	37.52	
7000.00	6687.91	0.00	0.00	6712.91	200.57	200.57	10.09	8330.85	8104.78	36.85	
7100.00	6752.33	0.00	0.00	6777.33	202.53	202.53	7.74	8254.86	8026.86	36.20	
7200.00	6805.81	0.00	0.00	6830.81	204.15	204.15	5.40	8170.62	7941.03	35.59	
7300.00	6847.31	0.00	0.00	6872.31	205.41	205.41	2.35	8079.76	7848.96	35.01	
7400.00	6876.00	0.00	0.00	6901.00	206.28	206.28	356.53	7984.05	7752.49	34.48	
7500.00	6891.34	0.00	0.00	6916.34	206.75	206.75	334.96	7885.35	7653.28	33.98	
7600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7785.56	7553.46	33.54	
7700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7685.72	7453.65	33.12	
7800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7585.89	7353.87	32.70	
7900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7486.06	7254.00	32.26	
8000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7386.23	7154.27	31.84	
8100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7286.41	7054.38	31.40	
8200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7186.60	6954.62	30.98	
8300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	7086.79	6854.82	30.55	
8400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6986.98	6754.99	30.12	
8500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6887.18	6655.21	29.69	
8600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6787.39	6555.46	29.26	
8700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6687.60	6455.73	28.84	
8800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6587.82	6356.03	28.42	
8900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6488.05	6256.27	27.99	
9000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6388.28	6156.49	27.56	
9100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6288.52	6056.73	27.13	

## 5D Anti-Collision Report

Secondary Well: Etter 30-33 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
9200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6188.77	5957.00	26.70	
9300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	6089.02	5857.33	26.28	
9400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5989.29	5757.53	25.84	
9500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5889.56	5657.79	25.41	
9600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5789.85	5558.09	24.98	
9700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5690.14	5458.39	24.55	
9800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5590.44	5358.62	24.11	
9900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5490.76	5258.90	23.68	
10000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5391.08	5159.24	23.25	
10100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5291.42	5059.57	22.82	
10200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5191.77	4959.84	22.39	
10300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	5092.14	4860.16	21.95	
10400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4992.52	4760.51	21.52	
10500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4892.91	4660.89	21.09	
10600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4793.33	4561.27	20.66	
10700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4693.76	4461.64	20.22	
10800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4594.20	4361.99	19.78	
10900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4494.67	4262.35	19.35	
11000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4395.16	4162.74	18.91	
11100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4295.67	4063.12	18.47	
11200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4196.21	3963.51	18.03	
11300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	4096.77	3863.91	17.59	
11400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3997.36	3764.35	17.15	
11500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3897.98	3664.78	16.72	
11600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3798.64	3565.21	16.27	
11700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3699.33	3465.67	15.83	
11800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3600.05	3366.15	15.39	
11900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3500.82	3266.64	14.95	
12000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3401.63	3167.13	14.51	
12100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3302.49	3067.58	14.06	
12200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3203.41	2968.05	13.61	
12300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3104.38	2868.55	13.16	
12400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	3005.42	2769.02	12.71	
12500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2906.53	2669.52	12.26	
12600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2807.72	2570.06	11.81	
12700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2709.00	2470.65	11.37	
12800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2610.37	2371.29	10.92	
12900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2511.85	2271.78	10.46	
13000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2413.46	2172.28	10.01	
13100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2315.20	2072.84	9.55	
13200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2217.09	1973.46	9.10	
13300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2119.17	1874.16	8.65	
13400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	2021.44	1774.93	8.20	
13500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1923.95	1675.35	7.74	
13600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1826.74	1575.56	7.27	
13700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1729.84	1475.83	6.81	
13800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1633.31	1376.21	6.35	
13900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1537.23	1276.71	5.90	
14000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1441.68	1177.06	5.45	
14100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1346.77	1077.59	5.00	
14200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1252.66	978.39	4.57	
14300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1159.54	879.58	4.14	
14400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	1067.66	780.45	3.72	
14500.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	977.38	681.30	3.30	
14600.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	889.17	582.81	2.90	
14700.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	803.74	485.64	2.53	
14800.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	722.05	388.64	2.17	SF(Lo)
14900.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	645.54	295.71	1.85	SF(Lo)



## 5D Anti-Collision Report

Secondary Well: Etter 30-33 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
15000.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	576.28	206.01	1.56	SF(Lo)
15100.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	517.17	124.83	1.32	SF(Med)
15200.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	472.05	58.00	1.14	SF(Med)
15300.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	445.19	14.59	1.03	SF(Med)
15400.00	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	439.95	2.71	1.01	SF(Med)
15456.59	6894.00	0.00	0.00	6919.00	206.83	206.83	270.00	446.99	10.61	1.02	SF(Med)
Secondary Well: Goetzel 32C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	119.86	119.13	163.45	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.08	119.86	118.91	125.65	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.08	119.86	118.46	85.40	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.08	119.86	118.01	64.68	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.08	119.86	117.56	52.05	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.08	119.86	117.11	43.55	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.08	119.86	116.66	37.44	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.08	119.86	116.21	32.83	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.08	119.86	115.76	29.23	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	0.08	119.86	115.31	26.34	
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	0.08	119.86	114.86	23.97	
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	235.63	120.84	115.42	22.30	
1200.00	1199.84	0.00	0.00	1199.84	2.58	2.58	233.68	123.87	118.03	21.21	
1300.00	1299.45	0.00	0.00	1299.45	2.81	2.81	230.66	129.23	122.97	20.65	
1400.00	1398.70	0.00	0.00	1398.70	3.03	3.03	226.85	137.30	130.59	20.45	
1500.00	1497.47	0.00	0.00	1497.47	3.25	3.25	222.62	148.49	141.34	20.75	
1600.00	1595.62	0.00	0.00	1595.62	3.47	3.47	218.30	163.13	155.50	21.36	
1700.00	1693.06	0.00	0.00	1693.06	3.69	3.69	214.13	181.46	173.35	22.39	
1800.00	1789.64	0.00	0.00	1789.64	3.91	3.91	210.31	203.58	195.01	23.75	
1900.00	1887.49	1.75	78.00	1887.47	4.12	4.12	207.09	229.03	219.95	25.24	
2000.00	1986.48	3.73	78.00	1986.35	4.33	4.32	204.97	254.85	245.30	26.69	
2100.00	2086.54	5.73	78.00	2086.06	4.54	4.51	203.91	279.69	269.64	27.83	
2200.00	2187.42	7.75	78.00	2186.24	4.77	4.71	203.66	303.35	292.76	28.65	
2300.00	2288.89	9.78	78.00	2286.52	5.03	4.91	204.04	325.77	314.60	29.19	
2400.00	2390.69	11.81	78.00	2386.51	5.31	5.11	204.95	346.98	335.21	29.48	
2500.00	2492.57	13.85	78.00	2485.85	5.63	5.31	206.29	367.13	354.66	29.44	
2600.00	2594.28	15.89	78.00	2584.14	6.00	5.51	208.00	386.39	373.11	29.10	
2700.00	2694.19	17.19	78.00	2679.81	6.42	5.72	209.97	405.06	390.91	28.63	
2800.00	2791.49	17.19	78.00	2772.76	6.86	5.96	211.81	423.97	408.91	28.15	
2900.00	2888.80	17.19	78.00	2865.72	7.32	6.20	213.50	443.27	427.25	27.67	
3000.00	2986.10	17.19	78.00	2958.68	7.81	6.44	215.05	462.92	445.88	27.16	
3100.00	3083.40	17.19	78.00	3051.63	8.31	6.69	216.47	482.88	464.80	26.71	
3200.00	3180.70	17.19	78.00	3144.59	8.82	6.95	217.78	503.10	483.97	26.30	
3300.00	3278.00	17.19	78.00	3237.55	9.35	7.20	219.00	523.55	503.37	25.94	
3400.00	3375.30	17.19	78.00	3330.51	9.89	7.46	220.11	544.22	522.97	25.62	
3500.00	3472.61	17.19	78.00	3423.46	10.43	7.73	221.15	565.07	542.75	25.31	
3600.00	3569.91	17.19	78.00	3516.42	10.98	7.99	222.12	586.09	562.63	24.98	
3700.00	3667.21	17.19	78.00	3609.38	11.54	8.26	223.02	607.26	582.66	24.69	
3800.00	3764.51	17.19	78.00	3702.33	12.10	8.53	223.85	628.56	602.81	24.42	
3900.00	3861.81	17.19	78.00	3795.29	12.67	8.80	224.64	649.98	623.09	24.17	
4000.00	3959.11	17.19	78.00	3888.25	13.24	9.07	225.37	671.51	643.48	23.95	
4100.00	4056.41	17.19	78.00	3981.20	13.82	9.35	226.06	693.15	663.96	23.75	
4200.00	4153.72	17.19	78.00	4074.16	14.39	9.63	226.71	714.87	684.53	23.56	
4300.00	4251.02	17.19	78.00	4167.12	14.97	9.90	227.32	736.67	705.18	23.40	
4400.00	4348.32	17.19	78.00	4260.08	15.56	10.18	227.89	758.55	725.91	23.24	
4500.00	4445.62	17.19	78.00	4353.03	16.14	10.46	228.43	780.50	746.71	23.10	
4600.00	4542.92	17.19	78.00	4445.99	16.73	10.74	228.94	802.51	767.57	22.97	
4700.00	4640.22	17.19	78.00	4538.95	17.31	11.03	229.43	824.58	788.49	22.85	

## 5D Anti-Collision Report

Secondary Well: Goetzel 32C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
4800.00	4737.53	17.19	78.00	4631.90	17.90	11.31	229.89	846.70	809.46	22.74	
4900.00	4834.83	17.19	78.00	4724.86	18.49	11.59	230.33	868.87	830.48	22.63	
5000.00	4932.13	17.19	78.00	4817.82	19.09	11.88	230.74	891.09	851.54	22.53	
5100.00	5029.43	17.19	78.00	4910.77	19.68	12.16	231.14	913.35	872.62	22.43	
5200.00	5126.73	17.19	78.00	5003.73	20.27	12.45	231.51	935.65	893.75	22.33	
5300.00	5224.03	17.19	78.00	5096.69	20.87	12.74	231.87	957.99	914.91	22.24	
5400.00	5321.34	17.19	78.00	5189.64	21.46	13.02	232.21	980.36	936.11	22.16	
5500.00	5418.64	17.19	78.00	5282.60	22.06	13.31	232.54	1002.76	957.34	22.08	
5600.00	5515.94	17.19	78.00	5375.56	22.66	13.60	232.85	1025.19	978.60	22.00	
5700.00	5613.24	17.19	78.00	5468.52	23.26	13.89	233.15	1047.65	999.89	21.93	
5800.00	5710.54	17.19	78.00	5561.47	23.86	14.18	233.44	1070.14	1021.20	21.87	
5900.00	5807.84	17.19	78.00	5654.43	24.45	14.47	233.71	1092.65	1042.54	21.80	
6000.00	5905.14	17.19	78.00	5747.39	25.05	14.76	233.98	1115.18	1063.90	21.75	
6100.00	6002.45	17.19	78.00	5840.34	25.65	15.05	234.23	1137.74	1085.29	21.69	
6200.00	6099.75	17.19	78.00	5933.30	26.26	15.34	234.48	1160.32	1106.69	21.64	
6300.00	6196.97	17.19	78.00	6026.18	26.86	15.63	227.02	1182.94	1128.18	21.60	
6400.00	6292.75	17.19	78.00	6117.69	27.45	15.91	195.86	1205.90	1150.16	21.64	
6500.00	6385.15	17.19	78.00	6205.96	28.02	16.19	154.41	1229.39	1172.74	21.70	
6600.00	6482.02	10.49	71.93	6299.80	28.42	16.45	128.93	1253.59	1196.27	21.87	
6700.00	6585.87	3.29	30.57	6402.87	28.64	16.42	116.65	1278.00	1220.28	22.14	
6800.00	6697.43	7.61	287.86	6514.08	28.69	16.05	110.15	1302.04	1244.24	22.52	
6900.00	6818.25	16.98	275.90	6632.01	28.52	15.24	106.34	1325.08	1267.50	23.01	
7000.00	6949.79	27.42	272.18	6753.64	28.20	13.97	103.98	1346.36	1289.26	23.58	
7100.00	7093.01	38.83	270.30	6873.39	27.79	12.30	102.45	1365.03	1308.58	24.18	
7200.00	7247.74	51.18	269.10	6982.58	27.49	10.48	101.41	1380.20	1324.37	24.72	
7300.00	7411.95	64.30	268.21	7070.04	27.54	9.22	100.61	1391.02	1335.49	25.05	
7400.00	7581.47	77.84	267.48	7124.91	28.21	9.45	99.89	1396.88	1340.67	24.85	
7500.00	7743.78	90.00	266.89	7141.00	29.43	11.03	99.21	1397.55	1339.73	24.17	
7600.00	7843.69	90.00	266.89	7141.00	30.48	11.50	99.15	1395.97	1336.27	23.38	
7700.00	7943.68	90.00	266.89	7141.00	31.72	12.00	99.16	1394.32	1332.21	22.45	
7800.00	8043.67	90.00	266.89	7141.00	33.15	12.52	99.17	1392.68	1327.83	21.47	
7900.00	8143.65	90.00	266.89	7141.00	34.75	13.05	99.18	1391.03	1323.22	20.51	
8000.00	8243.64	90.00	266.89	7141.00	36.50	13.61	99.20	1389.39	1318.10	19.49	
8100.00	8343.62	90.00	266.89	7141.00	38.37	14.19	99.21	1387.74	1312.84	18.53	
8200.00	8443.61	90.00	266.89	7141.00	40.35	14.77	99.22	1386.10	1307.43	17.62	
8300.00	8543.60	90.00	266.89	7141.00	42.42	15.37	99.23	1384.45	1301.76	16.74	
8400.00	8643.58	90.00	266.89	7141.00	44.57	15.99	99.24	1382.81	1295.86	15.90	
8500.00	8743.57	90.00	266.89	7141.00	46.78	16.61	99.25	1381.16	1289.84	15.12	
8600.00	8843.55	90.00	266.89	7141.00	49.06	17.24	99.26	1379.52	1283.71	14.40	
8700.00	8943.54	90.00	266.89	7141.00	51.39	17.88	99.27	1377.87	1277.49	13.73	
8800.00	9043.53	90.00	266.89	7141.00	53.77	18.52	99.28	1376.23	1271.17	13.10	
8900.00	9143.51	90.00	266.89	7141.00	56.18	19.17	99.30	1374.58	1264.78	12.52	
9000.00	9243.50	90.00	266.89	7141.00	58.63	19.83	99.31	1372.94	1258.31	11.98	
9100.00	9343.49	90.00	266.89	7141.00	61.10	20.49	99.32	1371.29	1251.79	11.47	
9200.00	9443.47	90.00	266.89	7141.00	63.61	21.16	99.33	1369.65	1245.21	11.01	
9300.00	9543.46	90.00	266.89	7141.00	66.14	21.83	99.34	1368.01	1238.59	10.57	
9400.00	9643.44	90.00	266.89	7141.00	68.69	22.51	99.35	1366.36	1231.92	10.16	
9500.00	9743.43	90.00	266.89	7141.00	71.25	23.18	99.36	1364.72	1225.22	9.78	
9600.00	9843.42	90.00	266.89	7141.00	73.84	23.87	99.37	1363.07	1218.48	9.43	
9700.00	9943.40	90.00	266.89	7141.00	76.44	24.55	99.39	1361.43	1211.71	9.09	
9800.00	10043.39	90.00	266.89	7141.00	79.05	25.24	99.40	1359.78	1204.92	8.78	
9900.00	10143.37	90.00	266.89	7141.00	81.68	25.93	99.41	1358.14	1198.10	8.49	
10000.00	10243.36	90.00	266.89	7141.00	84.31	26.62	99.42	1356.50	1191.26	8.21	
10100.00	10343.35	90.00	266.89	7141.00	86.96	27.32	99.43	1354.85	1184.40	7.95	
10200.00	10443.33	90.00	266.89	7141.00	89.62	28.01	99.44	1353.21	1177.52	7.70	
10300.00	10543.32	90.00	266.89	7141.00	92.28	28.71	99.46	1351.56	1170.62	7.47	
10400.00	10643.30	90.00	266.89	7141.00	94.95	29.41	99.47	1349.92	1163.71	7.25	
10500.00	10743.29	90.00	266.89	7141.00	97.63	30.11	99.48	1348.28	1156.79	7.04	

## 5D Anti-Collision Report

Secondary Well: Goetzel 32C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
10600.00	10843.28	90.00	266.89	7141.00	100.32	30.82	99.49	1346.63	1149.85	6.84	
10700.00	10943.26	90.00	266.89	7141.00	103.01	31.52	99.50	1344.99	1142.90	6.66	
10800.00	11043.25	90.00	266.89	7141.00	105.71	32.23	99.51	1343.34	1135.94	6.48	
10900.00	11143.24	90.00	266.89	7141.00	108.41	32.93	99.53	1341.70	1128.97	6.31	
11000.00	11243.22	90.00	266.89	7141.00	111.12	33.64	99.54	1340.06	1121.99	6.15	
11100.00	11343.21	90.00	266.89	7141.00	113.83	34.35	99.55	1338.41	1115.01	5.99	
11200.00	11443.19	90.00	266.89	7141.00	116.55	35.06	99.56	1336.77	1108.01	5.84	
11300.00	11543.18	90.00	266.89	7141.00	119.26	35.77	99.57	1335.13	1101.01	5.70	
11400.00	11643.17	90.00	266.89	7141.00	121.99	36.48	99.58	1333.48	1094.00	5.57	
11500.00	11743.15	90.00	266.89	7141.00	124.71	37.20	99.60	1331.84	1086.99	5.44	
11600.00	11843.14	90.00	266.89	7141.00	127.44	37.91	99.61	1330.20	1079.97	5.32	
11700.00	11943.12	90.00	266.89	7141.00	130.18	38.62	99.62	1328.55	1072.95	5.20	
11800.00	12043.11	90.00	266.89	7141.00	132.91	39.34	99.63	1326.91	1065.92	5.08	
11900.00	12143.10	90.00	266.89	7141.00	135.65	40.05	99.64	1325.27	1058.88	4.97	
12000.00	12243.08	90.00	266.89	7141.00	138.39	40.77	99.66	1323.63	1051.84	4.87	
12100.00	12343.07	90.00	266.89	7141.00	141.13	41.49	99.67	1321.98	1044.80	4.77	
12200.00	12443.05	90.00	266.89	7141.00	143.88	42.20	99.68	1320.34	1037.75	4.67	
12300.00	12543.04	90.00	266.89	7141.00	146.62	42.92	99.69	1318.70	1030.70	4.58	
12400.00	12643.03	90.00	266.89	7141.00	149.37	43.64	99.71	1317.05	1023.65	4.49	
12500.00	12743.01	90.00	266.89	7141.00	152.12	44.36	99.72	1315.41	1016.59	4.40	
12600.00	12843.00	90.00	266.89	7141.00	154.88	45.08	99.73	1313.77	1009.53	4.32	
12700.00	12942.99	90.00	266.89	7141.00	157.63	45.80	99.74	1312.13	1002.47	4.24	
12800.00	13042.97	90.00	266.89	7141.00	160.39	46.52	99.75	1310.48	995.40	4.16	
12900.00	13142.96	90.00	266.89	7141.00	163.14	47.24	99.77	1308.84	988.34	4.08	
13000.00	13242.94	90.00	266.89	7141.00	165.90	47.96	99.78	1307.20	981.27	4.01	
13100.00	13342.93	90.00	266.89	7141.00	168.66	48.68	99.79	1305.56	974.19	3.94	
13200.00	13442.92	90.00	266.89	7141.00	171.42	49.40	99.80	1303.91	967.12	3.87	
13300.00	13542.90	90.00	266.89	7141.00	174.18	50.13	99.82	1302.27	960.05	3.81	
13400.00	13642.89	90.00	266.89	7141.00	176.95	50.85	99.83	1300.63	952.97	3.74	
13500.00	13742.87	90.00	266.89	7141.00	179.71	51.57	99.84	1298.99	945.89	3.68	
13600.00	13842.86	90.00	266.89	7141.00	182.48	52.29	99.85	1297.35	938.81	3.62	
13700.00	13942.85	90.00	266.89	7141.00	185.24	53.02	99.87	1295.70	931.73	3.56	
13800.00	14042.83	90.00	266.89	7141.00	188.01	53.74	99.88	1294.06	924.64	3.50	
13900.00	14142.82	90.00	266.89	7141.00	190.78	54.47	99.89	1292.42	917.56	3.45	
14000.00	14242.80	90.00	266.89	7141.00	193.55	55.19	99.90	1290.78	910.47	3.39	
14100.00	14342.79	90.00	266.89	7141.00	196.32	55.91	99.92	1289.14	903.39	3.34	
14200.00	14442.78	90.00	266.89	7141.00	199.09	56.64	99.93	1287.50	896.30	3.29	
14300.00	14542.76	90.00	266.89	7141.00	201.86	57.36	99.94	1285.85	889.21	3.24	
14400.00	14642.75	90.00	266.89	7141.00	204.63	58.09	99.96	1284.21	882.12	3.19	
14500.00	14742.74	90.00	266.89	7141.00	207.40	58.81	99.97	1282.57	875.03	3.15	
14600.00	14842.72	90.00	266.89	7141.00	210.18	59.54	99.98	1280.93	867.94	3.10	
14700.00	14942.71	90.00	266.89	7141.00	212.95	60.26	99.99	1279.29	860.85	3.06	
14800.00	15042.69	90.00	266.89	7141.00	215.73	60.99	100.01	1277.65	853.75	3.01	
14900.00	15142.68	90.00	266.89	7141.00	218.50	61.72	100.02	1276.01	846.66	2.97	
15000.00	15242.67	90.00	266.89	7141.00	221.28	62.44	100.03	1274.36	839.57	2.93	
15100.00	15342.65	90.00	266.89	7141.00	224.05	63.17	100.05	1272.72	832.47	2.89	
15200.00	15442.64	90.00	266.89	7141.00	226.83	63.89	100.06	1271.08	825.38	2.85	
15300.00	15542.62	90.00	266.89	7141.00	229.61	64.62	100.07	1269.44	818.28	2.81	
15400.00	15642.61	90.00	266.89	7141.00	232.39	65.35	100.09	1267.80	811.19	2.78	
15456.59	15644.54	90.00	266.89	7141.00	232.44	65.36	100.09	1268.05	810.33	2.77	
Secondary Well: Goetzel 32N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.82	99.09	136.12	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.03	99.82	98.87	104.64	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.03	99.82	98.42	71.12	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.03	99.82	97.97	53.87	

## 5D Anti-Collision Report

Secondary Well: Goetzel 32N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.03	99.82	97.52	43.35	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.03	99.82	97.07	36.27	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.03	99.82	96.62	31.18	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.03	99.82	96.17	27.34	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.03	99.82	95.72	24.34	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	0.03	99.82	95.27	21.94	
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	0.03	99.82	94.82	19.96	
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	235.44	100.80	95.38	18.60	
1200.00	1199.84	0.00	0.00	1199.84	2.58	2.58	233.11	103.86	98.02	17.78	
1300.00	1299.45	0.00	0.00	1299.45	2.81	2.81	229.55	109.32	103.06	17.45	
1400.00	1398.70	0.00	0.00	1398.70	3.03	3.03	225.16	117.62	110.91	17.53	
1500.00	1497.47	0.00	0.00	1497.47	3.25	3.25	220.41	129.18	122.03	18.07	
1600.00	1595.62	0.00	0.00	1595.62	3.47	3.47	215.70	144.32	136.69	18.91	
1700.00	1693.06	0.00	0.00	1693.06	3.69	3.69	211.32	163.23	155.16	20.21	
1800.00	1789.64	0.00	0.00	1789.64	3.91	3.91	207.42	185.99	177.42	21.72	
1900.00	1885.30	0.00	0.00	1885.30	4.13	4.13	203.99	212.47	203.44	23.51	
2000.00	1980.64	0.00	0.00	1980.64	4.34	4.34	201.09	240.52	231.02	25.32	
2100.00	2080.09	1.60	85.04	2080.08	4.55	4.55	198.90	268.45	258.48	26.92	
2200.00	2181.97	3.64	85.04	2181.85	4.76	4.75	197.69	294.77	284.31	28.19	
2300.00	2285.17	5.70	85.04	2284.70	4.98	4.95	197.22	319.20	308.25	29.16	
2400.00	2389.45	7.79	85.04	2388.25	5.22	5.15	197.35	341.64	330.17	29.76	
2500.00	2494.54	9.89	85.04	2492.08	5.47	5.35	197.98	362.08	350.05	30.10	
2600.00	2600.16	12.00	85.04	2595.78	5.76	5.55	199.04	380.58	367.95	30.13	
2700.00	2706.04	14.12	85.04	2698.92	6.10	5.75	200.47	397.26	383.93	29.80	
2800.00	2811.88	16.24	85.04	2801.06	6.48	5.95	202.25	412.31	398.20	29.22	
2900.00	2917.40	18.35	85.04	2901.80	6.92	6.16	204.35	425.96	411.01	28.50	
3000.00	3016.61	18.74	85.04	2995.77	7.39	6.39	206.49	439.02	423.12	27.62	
3100.00	3114.45	18.74	85.04	3088.43	7.89	6.63	208.48	452.61	435.69	26.75	
3200.00	3212.30	18.74	85.04	3181.09	8.41	6.88	210.35	466.72	448.77	25.99	
3300.00	3310.15	18.74	85.04	3273.76	8.95	7.13	212.12	481.31	462.29	25.31	
3400.00	3407.99	18.74	85.04	3366.42	9.50	7.39	213.78	496.32	476.17	24.64	
3500.00	3505.84	18.74	85.04	3459.08	10.07	7.65	215.34	511.72	490.42	24.02	
3600.00	3603.69	18.74	85.04	3551.74	10.65	7.91	216.82	527.49	505.00	23.45	
3700.00	3701.53	18.74	85.04	3644.41	11.24	8.18	218.21	543.58	519.89	22.95	
3800.00	3799.38	18.74	85.04	3737.07	11.84	8.45	219.52	559.97	535.08	22.50	
3900.00	3897.23	18.74	85.04	3829.73	12.45	8.73	220.75	576.63	550.53	22.09	
4000.00	3995.07	18.74	85.04	3922.39	13.06	9.00	221.92	593.54	566.18	21.70	
4100.00	4092.92	18.74	85.04	4015.05	13.68	9.28	223.02	610.68	582.07	21.35	
4200.00	4190.77	18.74	85.04	4107.72	14.30	9.56	224.07	628.03	598.17	21.03	
4300.00	4288.61	18.74	85.04	4200.38	14.93	9.85	225.06	645.58	614.46	20.75	
4400.00	4386.46	18.74	85.04	4293.04	15.56	10.13	225.99	663.30	630.94	20.50	
4500.00	4484.31	18.74	85.04	4385.70	16.20	10.42	226.88	681.19	647.55	20.25	
4600.00	4582.15	18.74	85.04	4478.36	16.83	10.71	227.72	699.23	664.31	20.03	
4700.00	4680.00	18.74	85.04	4571.03	17.47	11.00	228.52	717.41	681.22	19.82	
4800.00	4777.85	18.74	85.04	4663.69	18.11	11.29	229.28	735.72	698.25	19.64	
4900.00	4875.69	18.74	85.04	4756.35	18.76	11.58	230.00	754.15	715.41	19.47	
5000.00	4973.54	18.74	85.04	4849.01	19.40	11.87	230.69	772.69	732.67	19.31	
5100.00	5071.39	18.74	85.04	4941.68	20.05	12.17	231.35	791.33	750.02	19.15	
5200.00	5169.24	18.74	85.04	5034.34	20.70	12.46	231.98	810.07	767.46	19.01	
5300.00	5267.08	18.74	85.04	5127.00	21.35	12.76	232.58	828.91	784.99	18.88	
5400.00	5364.93	18.74	85.04	5219.66	22.00	13.05	233.15	847.82	802.61	18.75	
5500.00	5462.78	18.74	85.04	5312.32	22.65	13.35	233.70	866.82	820.32	18.64	
5600.00	5560.62	18.74	85.04	5404.99	23.30	13.65	234.22	885.89	838.09	18.54	
5700.00	5658.47	18.74	85.04	5497.65	23.96	13.95	234.73	905.02	855.94	18.44	
5800.00	5756.32	18.74	85.04	5590.31	24.61	14.25	235.21	924.23	873.86	18.35	
5900.00	5854.16	18.74	85.04	5682.97	25.27	14.55	235.67	943.49	891.84	18.27	
6000.00	5952.01	18.74	85.04	5775.64	25.92	14.85	236.11	962.81	909.87	18.19	
6100.00	6049.86	18.74	85.04	5868.30	26.58	15.15	236.54	982.18	927.97	18.12	

## 5D Anti-Collision Report

Secondary Well: Goetzel 32N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
6200.00	6147.70	18.74	85.04	5960.96	27.24	15.45	236.95	1001.61	946.11	18.05	
6300.00	6248.68	15.22	84.63	6056.99	27.84	15.79	229.71	1021.10	964.40	18.01	
6400.00	6354.82	6.74	81.94	6161.10	28.23	15.94	198.38	1040.74	983.29	18.12	
6500.00	6462.13	1.95	283.37	6268.20	28.39	15.75	156.22	1060.23	1002.46	18.35	
6600.00	6570.57	10.56	269.70	6375.91	28.37	15.22	129.66	1079.18	1021.44	18.69	
6700.00	6680.10	19.32	268.29	6481.63	28.22	14.38	116.26	1097.20	1039.77	19.10	
6800.00	6790.57	28.15	267.74	6582.66	27.98	13.27	108.60	1113.93	1057.01	19.57	
6900.00	6901.81	37.05	267.43	6676.28	27.71	11.99	103.62	1129.01	1072.71	20.05	
7000.00	7013.54	45.99	267.23	6759.85	27.50	10.69	100.09	1142.15	1086.43	20.50	
7100.00	7125.45	54.94	267.08	6831.02	27.44	9.58	97.47	1153.09	1097.73	20.83	
7200.00	7237.15	63.87	266.96	6887.82	27.59	8.93	95.47	1161.61	1106.22	20.97	
7300.00	7348.27	72.76	266.86	6928.83	28.01	8.96	93.97	1167.55	1111.65	20.88	
7400.00	7458.42	81.57	266.77	6953.27	28.70	9.70	92.87	1170.83	1113.90	20.57	
7500.00	7566.97	90.00	266.69	6961.00	29.60	10.90	92.16	1171.40	1112.99	20.06	
7600.00	7666.88	90.00	266.69	6961.00	30.68	11.38	92.06	1169.78	1109.38	19.37	
7700.00	7766.86	90.00	266.69	6961.00	31.96	11.89	92.06	1167.76	1104.91	18.58	
7800.00	7866.84	90.00	266.69	6961.00	33.41	12.42	92.07	1165.74	1100.13	17.77	
7900.00	7966.82	90.00	266.69	6961.00	35.04	12.97	92.07	1163.72	1095.01	16.94	
8000.00	8066.80	90.00	266.69	6961.00	36.80	13.53	92.07	1161.70	1089.49	16.09	
8100.00	8166.78	90.00	266.69	6961.00	38.68	14.11	92.08	1159.68	1083.82	15.29	
8200.00	8266.76	90.00	266.69	6961.00	40.67	14.71	92.08	1157.65	1077.98	14.53	
8300.00	8366.74	90.00	266.69	6961.00	42.75	15.32	92.08	1155.63	1071.77	13.78	
8400.00	8466.72	90.00	266.69	6961.00	44.91	15.93	92.09	1153.61	1065.44	13.08	
8500.00	8566.70	90.00	266.69	6961.00	47.14	16.56	92.09	1151.59	1058.98	12.43	
8600.00	8666.68	90.00	266.69	6961.00	49.42	17.20	92.09	1149.57	1052.41	11.83	
8700.00	8766.65	90.00	266.69	6961.00	51.76	17.84	92.10	1147.55	1045.74	11.27	
8800.00	8866.63	90.00	266.69	6961.00	54.14	18.49	92.10	1145.53	1038.99	10.75	
8900.00	8966.61	90.00	266.69	6961.00	56.55	19.14	92.11	1143.51	1032.15	10.27	
9000.00	9066.59	90.00	266.69	6961.00	59.00	19.81	92.11	1141.49	1025.24	9.82	
9100.00	9166.57	90.00	266.69	6961.00	61.48	20.47	92.11	1139.47	1018.27	9.40	
9200.00	9266.55	90.00	266.69	6961.00	63.99	21.14	92.12	1137.45	1011.25	9.01	
9300.00	9366.53	90.00	266.69	6961.00	66.52	21.82	92.12	1135.43	1004.17	8.65	
9400.00	9466.51	90.00	266.69	6961.00	69.07	22.49	92.12	1133.41	997.06	8.31	
9500.00	9566.49	90.00	266.69	6961.00	71.64	23.18	92.13	1131.39	989.90	8.00	
9600.00	9666.47	90.00	266.69	6961.00	74.23	23.86	92.13	1129.37	982.72	7.70	
9700.00	9766.45	90.00	266.69	6961.00	76.83	24.55	92.14	1127.35	975.50	7.42	
9800.00	9866.43	90.00	266.69	6961.00	79.44	25.24	92.14	1125.32	968.25	7.16	
9900.00	9966.41	90.00	266.69	6961.00	82.06	25.93	92.14	1123.30	960.98	6.92	
10000.00	10066.39	90.00	266.69	6961.00	84.70	26.63	92.15	1121.28	953.69	6.69	
10100.00	10166.37	90.00	266.69	6961.00	87.35	27.32	92.15	1119.26	946.38	6.47	
10200.00	10266.35	90.00	266.69	6961.00	90.00	28.02	92.15	1117.24	939.05	6.27	
10300.00	10366.33	90.00	266.69	6961.00	92.67	28.72	92.16	1115.22	931.70	6.08	
10400.00	10466.31	90.00	266.69	6961.00	95.34	29.42	92.16	1113.20	924.33	5.89	
10500.00	10566.29	90.00	266.69	6961.00	98.02	30.13	92.17	1111.18	916.95	5.72	
10600.00	10666.27	90.00	266.69	6961.00	100.70	30.83	92.17	1109.16	909.56	5.56	
10700.00	10766.25	90.00	266.69	6961.00	103.39	31.54	92.17	1107.14	902.16	5.40	
10800.00	10866.23	90.00	266.69	6961.00	106.09	32.24	92.18	1105.12	894.74	5.25	
10900.00	10966.21	90.00	266.69	6961.00	108.79	32.95	92.18	1103.10	887.32	5.11	
11000.00	11066.18	90.00	266.69	6961.00	111.50	33.66	92.19	1101.08	879.89	4.98	
11100.00	11166.16	90.00	266.69	6961.00	114.21	34.37	92.19	1099.06	872.44	4.85	
11200.00	11266.14	90.00	266.69	6961.00	116.93	35.08	92.19	1097.04	864.99	4.73	
11300.00	11366.12	90.00	266.69	6961.00	119.64	35.80	92.20	1095.02	857.53	4.61	
11400.00	11466.10	90.00	266.69	6961.00	122.37	36.51	92.20	1093.00	850.07	4.50	
11500.00	11566.08	90.00	266.69	6961.00	125.09	37.22	92.21	1090.98	842.59	4.39	
11600.00	11666.06	90.00	266.69	6961.00	127.82	37.94	92.21	1088.95	835.11	4.29	
11700.00	11766.04	90.00	266.69	6961.00	130.55	38.65	92.21	1086.93	827.63	4.19	
11800.00	11866.02	90.00	266.69	6961.00	133.29	39.37	92.22	1084.91	820.14	4.10	
11900.00	11966.00	90.00	266.69	6961.00	136.02	40.09	92.22	1082.89	812.64	4.01	

## 5D Anti-Collision Report

Secondary Well: Goetzel 32N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
12000.00	12065.98	90.00	266.69	6961.00	138.76	40.80	92.23	1080.87	805.14	3.92	
12100.00	12165.96	90.00	266.69	6961.00	141.50	41.52	92.23	1078.85	797.64	3.84	
12200.00	12265.94	90.00	266.69	6961.00	144.25	42.24	92.24	1076.83	790.13	3.76	
12300.00	12365.92	90.00	266.69	6961.00	146.99	42.96	92.24	1074.81	782.62	3.68	
12400.00	12465.90	90.00	266.69	6961.00	149.74	43.68	92.24	1072.79	775.10	3.60	
12500.00	12565.88	90.00	266.69	6961.00	152.49	44.40	92.25	1070.77	767.58	3.53	
12600.00	12665.86	90.00	266.69	6961.00	155.24	45.12	92.25	1068.75	760.06	3.46	
12700.00	12765.84	90.00	266.69	6961.00	157.99	45.84	92.26	1066.73	752.53	3.40	
12800.00	12865.82	90.00	266.69	6961.00	160.75	46.56	92.26	1064.71	745.00	3.33	
12900.00	12965.80	90.00	266.69	6961.00	163.50	47.28	92.27	1062.69	737.47	3.27	
13000.00	13065.78	90.00	266.69	6961.00	166.26	48.00	92.27	1060.67	729.93	3.21	
13100.00	13165.76	90.00	266.69	6961.00	169.02	48.72	92.27	1058.65	722.40	3.15	
13200.00	13265.73	90.00	266.69	6961.00	171.78	49.45	92.28	1056.63	714.86	3.09	
13300.00	13365.71	90.00	266.69	6961.00	174.54	50.17	92.28	1054.61	707.31	3.04	
13400.00	13465.69	90.00	266.69	6961.00	177.30	50.89	92.29	1052.59	699.77	2.98	
13500.00	13565.67	90.00	266.69	6961.00	180.07	51.61	92.29	1050.57	692.22	2.93	
13600.00	13665.65	90.00	266.69	6961.00	182.83	52.34	92.30	1048.55	684.67	2.88	
13700.00	13765.63	90.00	266.69	6961.00	185.60	53.06	92.30	1046.53	677.12	2.83	
13800.00	13865.61	90.00	266.69	6961.00	188.36	53.79	92.30	1044.51	669.57	2.79	
13900.00	13965.59	90.00	266.69	6961.00	191.13	54.51	92.31	1042.49	662.02	2.74	
14000.00	14065.57	90.00	266.69	6961.00	193.90	55.23	92.31	1040.46	654.46	2.70	
14100.00	14165.55	90.00	266.69	6961.00	196.67	55.96	92.32	1038.44	646.90	2.65	
14200.00	14265.53	90.00	266.69	6961.00	199.43	56.68	92.32	1036.42	639.34	2.61	
14300.00	14365.51	90.00	266.69	6961.00	202.21	57.41	92.33	1034.40	631.78	2.57	
14400.00	14465.49	90.00	266.69	6961.00	204.98	58.14	92.33	1032.38	624.22	2.53	
14500.00	14565.47	90.00	266.69	6961.00	207.75	58.86	92.34	1030.36	616.66	2.49	SF(Lo)
14600.00	14665.45	90.00	266.69	6961.00	210.52	59.59	92.34	1028.34	609.09	2.45	SF(Lo)
14700.00	14765.43	90.00	266.69	6961.00	213.29	60.31	92.35	1026.32	601.52	2.42	SF(Lo)
14800.00	14865.41	90.00	266.69	6961.00	216.07	61.04	92.35	1024.30	593.96	2.38	SF(Lo)
14900.00	14965.39	90.00	266.69	6961.00	218.84	61.77	92.36	1022.28	586.39	2.35	SF(Lo)
15000.00	15065.37	90.00	266.69	6961.00	221.62	62.49	92.36	1020.26	578.82	2.31	SF(Lo)
15100.00	15165.35	90.00	266.69	6961.00	224.39	63.22	92.36	1018.24	571.25	2.28	SF(Lo)
15200.00	15265.33	90.00	266.69	6961.00	227.17	63.94	92.37	1016.22	563.68	2.25	SF(Lo)
15300.00	15365.31	90.00	266.69	6961.00	229.94	64.67	92.37	1014.20	556.10	2.21	SF(Lo)
15400.00	15465.29	90.00	266.69	6961.00	232.72	65.40	92.38	1012.18	548.53	2.18	SF(Lo)
15456.59	15473.86	90.00	266.69	6961.00	232.96	65.46	92.38	1012.18	547.33	2.18	SF(Lo)
Secondary Well: Goetzel 12N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	79.79	79.05	108.80	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.15	79.79	78.83	83.64	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.15	79.79	78.38	56.85	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.15	79.79	77.93	43.06	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.15	79.79	77.48	34.65	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.15	79.79	77.03	28.99	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.15	79.79	76.58	24.92	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.15	79.79	76.14	21.85	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.15	79.79	75.69	19.46	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	0.15	79.79	75.24	17.53	
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	0.15	79.79	74.79	15.96	
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	235.35	80.77	75.35	14.91	
1200.00	1199.84	0.00	0.00	1199.84	2.58	2.58	232.46	83.85	78.01	14.36	
1300.00	1299.45	0.00	0.00	1299.45	2.81	2.81	228.12	89.44	83.17	14.27	
1400.00	1398.70	0.00	0.00	1398.70	3.03	3.03	222.95	98.02	91.32	14.63	
1500.00	1497.47	0.00	0.00	1497.47	3.25	3.25	217.56	110.03	102.88	15.40	
1600.00	1595.62	0.00	0.00	1595.62	3.47	3.47	212.45	125.77	118.16	16.54	
1700.00	1693.06	0.00	0.00	1693.06	3.69	3.69	207.90	145.36	137.27	17.98	

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
1800.00	1792.81	1.86	92.75	1792.79	3.90	3.90	204.31	167.95	159.42	19.69	
1900.00	1893.36	3.87	92.75	1893.22	4.11	4.10	201.99	192.04	183.06	21.40	
2000.00	1995.05	5.90	92.75	1994.53	4.32	4.29	200.72	215.17	205.72	22.77	
2100.00	2097.92	7.96	92.75	2096.64	4.56	4.49	200.39	236.16	226.21	23.73	
2200.00	2201.74	10.03	92.75	2199.18	4.82	4.69	200.78	254.92	244.41	24.26	
2300.00	2306.24	12.12	92.75	2301.72	5.11	4.89	201.75	271.48	260.36	24.42	
2400.00	2411.14	14.22	92.75	2403.86	5.46	5.10	203.22	285.93	274.16	24.28	
2500.00	2516.17	16.32	92.75	2505.17	5.86	5.30	205.15	298.46	285.94	23.83	
2600.00	2616.64	16.91	92.75	2601.35	6.29	5.53	207.26	309.80	296.43	23.17	
2700.00	2715.38	16.91	92.75	2695.82	6.75	5.77	209.21	321.45	307.19	22.54	
2800.00	2814.12	16.91	92.75	2790.29	7.23	6.01	211.02	333.45	318.26	21.96	
2900.00	2912.86	16.91	92.75	2884.76	7.74	6.26	212.71	345.75	329.59	21.40	
3000.00	3011.60	16.91	92.75	2979.23	8.25	6.51	214.28	358.33	341.13	20.83	
3100.00	3110.34	16.91	92.75	3073.70	8.78	6.77	215.74	371.16	352.89	20.31	
3200.00	3209.07	16.91	92.75	3168.17	9.32	7.03	217.11	384.22	364.87	19.86	
3300.00	3307.81	16.91	92.75	3262.64	9.87	7.29	218.38	397.47	377.04	19.45	
3400.00	3406.55	16.91	92.75	3357.11	10.43	7.56	219.58	410.91	389.39	19.09	
3500.00	3505.29	16.91	92.75	3451.58	10.99	7.83	220.69	424.52	401.89	18.76	
3600.00	3604.03	16.91	92.75	3546.05	11.56	8.10	221.74	438.27	414.48	18.42	
3700.00	3702.77	16.91	92.75	3640.52	12.13	8.37	222.73	452.16	427.19	18.10	
3800.00	3801.50	16.91	92.75	3734.99	12.71	8.65	223.65	466.18	440.02	17.82	
3900.00	3900.24	16.91	92.75	3829.46	13.29	8.93	224.53	480.31	452.96	17.56	
4000.00	3998.98	16.91	92.75	3923.93	13.87	9.21	225.35	494.54	466.00	17.33	
4100.00	4097.72	16.91	92.75	4018.40	14.46	9.49	226.13	508.86	479.14	17.12	
4200.00	4196.46	16.91	92.75	4112.87	15.04	9.77	226.86	523.28	492.36	16.93	
4300.00	4295.20	16.91	92.75	4207.34	15.63	10.05	227.56	537.77	505.66	16.75	
4400.00	4393.93	16.91	92.75	4301.81	16.23	10.33	228.21	552.34	519.04	16.59	
4500.00	4492.67	16.91	92.75	4396.28	16.82	10.62	228.84	566.97	532.48	16.44	
4600.00	4591.41	16.91	92.75	4490.75	17.42	10.90	229.43	581.67	545.99	16.30	
4700.00	4690.15	16.91	92.75	4585.22	18.01	11.19	230.00	596.42	559.55	16.18	
4800.00	4788.89	16.91	92.75	4679.69	18.61	11.48	230.53	611.23	573.17	16.06	
4900.00	4887.63	16.91	92.75	4774.16	19.21	11.76	231.04	626.09	586.81	15.94	
5000.00	4986.36	16.91	92.75	4868.63	19.81	12.05	231.53	641.00	600.50	15.83	
5100.00	5085.10	16.91	92.75	4963.10	20.41	12.34	232.00	655.95	614.23	15.72	
5200.00	5183.84	16.91	92.75	5057.57	21.01	12.63	232.44	670.94	628.01	15.63	
5300.00	5282.58	16.91	92.75	5152.04	21.62	12.92	232.87	685.97	641.82	15.54	
5400.00	5381.32	16.91	92.75	5246.51	22.22	13.21	233.28	701.03	655.65	15.45	
5500.00	5480.06	16.91	92.75	5340.98	22.82	13.50	233.67	716.13	669.51	15.36	
5600.00	5578.79	16.91	92.75	5435.45	23.43	13.79	234.04	731.26	683.41	15.28	
5700.00	5677.53	16.91	92.75	5529.92	24.03	14.09	234.40	746.42	697.33	15.21	
5800.00	5776.27	16.91	92.75	5624.39	24.64	14.38	234.74	761.60	711.29	15.14	
5900.00	5875.01	16.91	92.75	5718.86	25.25	14.67	235.08	776.81	725.26	15.07	
6000.00	5973.75	16.91	92.75	5813.33	25.85	14.96	235.39	792.05	739.27	15.01	
6100.00	6072.49	16.91	92.75	5907.80	26.46	15.26	235.70	807.31	753.30	14.95	
6200.00	6171.23	16.91	92.75	6002.27	27.07	15.55	236.00	822.59	767.35	14.89	
6300.00	6270.56	15.90	93.16	6097.35	27.66	15.86	228.84	837.95	781.50	14.85	
6400.00	6375.15	7.65	100.53	6199.66	28.03	16.05	198.04	853.54	796.30	14.91	
6500.00	6481.07	2.12	206.33	6305.26	28.19	15.92	156.39	868.98	811.36	15.08	
6600.00	6588.30	9.80	255.95	6411.87	28.17	15.45	130.33	883.96	826.31	15.33	
6700.00	6696.77	18.39	261.13	6516.98	28.00	14.66	117.41	898.16	840.80	15.66	
6800.00	6806.37	27.13	263.08	6617.94	27.73	13.60	110.19	911.28	854.45	16.03	
6900.00	6916.90	35.95	264.14	6712.05	27.42	12.35	105.61	923.04	866.87	16.43	
7000.00	7028.12	44.84	264.83	6796.67	27.15	11.02	102.44	933.20	877.69	16.81	
7100.00	7139.74	53.76	265.33	6869.38	27.02	9.84	100.13	941.54	886.52	17.11	
7200.00	7251.40	62.69	265.73	6928.12	27.09	9.05	98.39	947.91	892.97	17.25	
7300.00	7362.75	71.59	266.07	6971.33	27.43	8.91	97.07	952.17	896.84	17.21	
7400.00	7473.41	80.44	266.37	6998.05	28.05	9.50	96.12	954.26	898.01	16.96	
7500.00	7583.06	89.21	266.65	7007.93	28.91	10.67	95.47	954.17	896.50	16.54	

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
7600.00	7683.82	90.00	266.68	7008.00	29.94	11.22	95.36	952.39	892.82	15.99	
7700.00	7783.80	90.00	266.68	7008.00	31.18	11.71	95.37	950.36	888.36	15.33	
7800.00	7883.78	90.00	266.68	7008.00	32.60	12.23	95.39	948.34	883.58	14.64	
7900.00	7983.75	90.00	266.68	7008.00	34.20	12.76	95.40	946.31	878.52	13.96	
8000.00	8083.73	90.00	266.68	7008.00	35.94	13.32	95.41	944.28	873.00	13.25	
8100.00	8183.71	90.00	266.68	7008.00	37.81	13.89	95.42	942.25	867.34	12.58	
8200.00	8283.69	90.00	266.68	7008.00	39.79	14.48	95.43	940.22	861.51	11.94	
8300.00	8383.67	90.00	266.68	7008.00	41.86	15.08	95.44	938.20	855.36	11.33	
8400.00	8483.65	90.00	266.68	7008.00	44.01	15.69	95.46	936.17	849.04	10.74	
8500.00	8583.63	90.00	266.68	7008.00	46.23	16.31	95.47	934.14	842.60	10.20	
8600.00	8683.61	90.00	266.68	7008.00	48.52	16.94	95.48	932.11	836.04	9.70	
8700.00	8783.59	90.00	266.68	7008.00	50.85	17.58	95.49	930.09	829.39	9.24	
8800.00	8883.57	90.00	266.68	7008.00	53.23	18.23	95.50	928.06	822.64	8.80	
8900.00	8983.55	90.00	266.68	7008.00	55.64	18.88	95.52	926.03	815.82	8.40	
9000.00	9083.53	90.00	266.68	7008.00	58.09	19.54	95.53	924.00	808.92	8.03	
9100.00	9183.51	90.00	266.68	7008.00	60.57	20.20	95.54	921.98	801.97	7.68	
9200.00	9283.48	90.00	266.68	7008.00	63.08	20.87	95.55	919.95	794.96	7.36	
9300.00	9383.46	90.00	266.68	7008.00	65.61	21.54	95.57	917.92	787.91	7.06	
9400.00	9483.44	90.00	266.68	7008.00	68.16	22.21	95.58	915.89	780.81	6.78	
9500.00	9583.42	90.00	266.68	7008.00	70.73	22.89	95.59	913.87	773.67	6.52	
9600.00	9683.40	90.00	266.68	7008.00	73.32	23.58	95.60	911.84	766.50	6.27	
9700.00	9783.38	90.00	266.68	7008.00	75.92	24.26	95.61	909.81	759.30	6.04	
9800.00	9883.36	90.00	266.68	7008.00	78.54	24.95	95.63	907.78	752.07	5.83	
9900.00	9983.34	90.00	266.68	7008.00	81.17	25.64	95.64	905.76	744.82	5.63	
10000.00	10083.32	90.00	266.68	7008.00	83.80	26.33	95.65	903.73	737.54	5.44	
10100.00	10183.30	90.00	266.68	7008.00	86.45	27.03	95.67	901.70	730.25	5.26	
10200.00	10283.28	90.00	266.68	7008.00	89.11	27.73	95.68	899.68	722.94	5.09	
10300.00	10383.26	90.00	266.68	7008.00	91.78	28.42	95.69	897.65	715.61	4.93	
10400.00	10483.24	90.00	266.68	7008.00	94.45	29.12	95.70	895.62	708.26	4.78	
10500.00	10583.22	90.00	266.68	7008.00	97.13	29.83	95.72	893.60	700.90	4.64	
10600.00	10683.19	90.00	266.68	7008.00	99.82	30.53	95.73	891.57	693.53	4.50	
10700.00	10783.17	90.00	266.68	7008.00	102.51	31.24	95.74	889.54	686.15	4.37	
10800.00	10883.15	90.00	266.68	7008.00	105.21	31.94	95.76	887.52	678.76	4.25	
10900.00	10983.13	90.00	266.68	7008.00	107.91	32.65	95.77	885.49	671.35	4.14	
11000.00	11083.11	90.00	266.68	7008.00	110.62	33.36	95.78	883.46	663.94	4.02	
11100.00	11183.09	90.00	266.68	7008.00	113.33	34.07	95.80	881.44	656.52	3.92	
11200.00	11283.07	90.00	266.68	7008.00	116.05	34.78	95.81	879.41	649.09	3.82	
11300.00	11383.05	90.00	266.68	7008.00	118.77	35.49	95.82	877.38	641.66	3.72	
11400.00	11483.03	90.00	266.68	7008.00	121.49	36.20	95.84	875.36	634.21	3.63	
11500.00	11583.01	90.00	266.68	7008.00	124.22	36.92	95.85	873.33	626.76	3.54	
11600.00	11682.99	90.00	266.68	7008.00	126.95	37.63	95.86	871.30	619.31	3.46	
11700.00	11782.97	90.00	266.68	7008.00	129.68	38.34	95.88	869.28	611.85	3.38	
11800.00	11882.95	90.00	266.68	7008.00	132.42	39.06	95.89	867.25	604.38	3.30	
11900.00	11982.92	90.00	266.68	7008.00	135.15	39.78	95.91	865.22	596.91	3.22	
12000.00	12082.90	90.00	266.68	7008.00	137.89	40.49	95.92	863.20	589.44	3.15	
12100.00	12182.88	90.00	266.68	7008.00	140.64	41.21	95.93	861.17	581.96	3.08	
12200.00	12282.86	90.00	266.68	7008.00	143.38	41.93	95.95	859.15	574.48	3.02	
12300.00	12382.84	90.00	266.68	7008.00	146.13	42.65	95.96	857.12	566.99	2.95	
12400.00	12482.82	90.00	266.68	7008.00	148.88	43.36	95.98	855.09	559.50	2.89	
12500.00	12582.80	90.00	266.68	7008.00	151.63	44.08	95.99	853.07	552.01	2.83	
12600.00	12682.78	90.00	266.68	7008.00	154.38	44.80	96.00	851.04	544.51	2.78	
12700.00	12782.76	90.00	266.68	7008.00	157.13	45.52	96.02	849.02	537.01	2.72	
12800.00	12882.74	90.00	266.68	7008.00	159.89	46.24	96.03	846.99	529.51	2.67	
12900.00	12982.72	90.00	266.68	7008.00	162.64	46.96	96.05	844.96	522.01	2.62	
13000.00	13082.70	90.00	266.68	7008.00	165.40	47.69	96.06	842.94	514.50	2.57	
13100.00	13182.68	90.00	266.68	7008.00	168.16	48.41	96.08	840.91	506.99	2.52	
13200.00	13282.66	90.00	266.68	7008.00	170.92	49.13	96.09	838.89	499.48	2.47	SF(Lo)
13300.00	13382.63	90.00	266.68	7008.00	173.68	49.85	96.11	836.86	491.97	2.43	SF(Lo)



## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13400.00	13482.61	90.00	266.68	7008.00	176.45	50.57	96.12	834.84	484.46	2.38	SF(Lo)
13500.00	13582.59	90.00	266.68	7008.00	179.21	51.30	96.14	832.81	476.94	2.34	SF(Lo)
13600.00	13682.57	90.00	266.68	7008.00	181.98	52.02	96.15	830.79	469.42	2.30	SF(Lo)
13700.00	13782.55	90.00	266.68	7008.00	184.74	52.74	96.17	828.76	461.91	2.26	SF(Lo)
13800.00	13882.53	90.00	266.68	7008.00	187.51	53.47	96.18	826.74	454.38	2.22	SF(Lo)
13900.00	13982.51	90.00	266.68	7008.00	190.28	54.19	96.20	824.71	446.86	2.18	SF(Lo)
14000.00	14082.49	90.00	266.68	7008.00	193.04	54.92	96.21	822.69	439.34	2.15	SF(Lo)
14100.00	14182.47	90.00	266.68	7008.00	195.81	55.64	96.23	820.66	431.82	2.11	SF(Lo)
14200.00	14282.45	90.00	266.68	7008.00	198.58	56.37	96.24	818.64	424.29	2.08	SF(Lo)
14300.00	14382.43	90.00	266.68	7008.00	201.35	57.09	96.26	816.61	416.76	2.04	SF(Lo)
14400.00	14482.41	90.00	266.68	7008.00	204.13	57.82	96.27	814.59	409.24	2.01	SF(Lo)
14500.00	14582.39	90.00	266.68	7008.00	206.90	58.54	96.29	812.56	401.71	1.98	SF(Lo)
14600.00	14682.36	90.00	266.68	7008.00	209.67	59.27	96.31	810.54	394.18	1.95	SF(Lo)
14700.00	14782.34	90.00	266.68	7008.00	212.45	59.99	96.32	808.51	386.65	1.92	SF(Lo)
14800.00	14882.32	90.00	266.68	7008.00	215.22	60.72	96.34	806.49	379.12	1.89	SF(Lo)
14900.00	14982.30	90.00	266.68	7008.00	217.99	61.45	96.35	804.46	371.59	1.86	SF(Lo)
15000.00	15082.28	90.00	266.68	7008.00	220.77	62.17	96.37	802.44	364.06	1.83	SF(Lo)
15100.00	15182.26	90.00	266.68	7008.00	223.55	62.90	96.39	800.41	356.53	1.80	SF(Lo)
15200.00	15282.24	90.00	266.68	7008.00	226.32	63.62	96.40	798.39	348.99	1.78	SF(Lo)
15300.00	15382.22	90.00	266.68	7008.00	229.10	64.35	96.42	796.37	341.46	1.75	SF(Lo)
15400.00	15482.20	90.00	266.68	7008.00	231.88	65.08	96.43	794.34	333.93	1.73	SF(Lo)
15456.59	15501.26	90.00	266.68	7008.00	232.41	65.22	96.44	794.08	332.25	1.72	SF(Lo)
Secondary Well: Goetzel 12N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	60.11	59.38	81.97	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.08	60.11	59.16	63.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.08	60.11	58.71	42.83	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.08	60.11	58.26	32.44	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.08	60.11	57.81	26.11	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.08	60.11	57.36	21.84	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.08	60.11	56.91	18.77	CC (Lo)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.08	60.11	56.46	16.46	CC (Lo)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.08	60.11	56.01	14.66	CC (Lo)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	0.08	60.11	55.56	13.21	CC (Lo)
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	0.08	60.11	55.11	12.02	CC (Lo)
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	234.95	61.10	55.68	11.28	CC (Lo)
1200.00	1199.84	0.00	0.00	1199.84	2.58	2.58	231.18	64.25	58.41	11.01	CC (Lo)
1300.00	1299.45	0.00	0.00	1299.45	2.81	2.81	225.71	70.05	63.78	11.18	
1400.00	1398.70	0.00	0.00	1398.70	3.03	3.03	219.51	79.06	72.37	11.81	
1500.00	1498.33	0.97	100.92	1498.33	3.25	3.25	213.61	91.49	84.35	12.81	
1600.00	1599.08	2.98	100.92	1599.01	3.44	3.44	209.50	105.83	98.27	14.00	
1700.00	1700.27	5.01	100.92	1699.96	3.65	3.63	206.92	121.40	113.40	15.17	
1800.00	1801.88	7.04	100.92	1801.00	3.87	3.83	205.44	137.93	129.45	16.26	
1900.00	1903.89	9.08	100.92	1902.00	4.12	4.03	204.72	155.20	146.21	17.26	
2000.00	2006.63	11.13	100.92	2003.13	4.40	4.23	204.80	171.02	161.49	17.95	
2100.00	2110.02	13.20	100.92	2104.20	4.73	4.43	205.71	184.44	174.31	18.22	
2200.00	2213.82	15.28	100.92	2204.80	5.11	4.64	207.34	195.55	184.75	18.12	
2300.00	2316.70	16.88	100.92	2303.56	5.55	4.86	209.55	204.58	193.01	17.67	
2400.00	2416.00	16.88	100.92	2398.59	6.02	5.10	211.74	213.24	200.78	17.12	
2500.00	2515.30	16.88	100.92	2493.61	6.51	5.35	213.76	222.19	208.82	16.63	
2600.00	2614.61	16.88	100.92	2588.63	7.02	5.60	215.62	231.39	217.06	16.15	
2700.00	2713.91	16.88	100.92	2683.66	7.55	5.86	217.33	240.81	225.47	15.70	
2800.00	2813.22	16.88	100.92	2778.68	8.10	6.12	218.92	250.43	234.02	15.27	
2900.00	2912.52	16.88	100.92	2873.71	8.65	6.39	220.39	260.23	242.74	14.88	
3000.00	3011.83	16.88	100.92	2968.73	9.21	6.65	221.75	270.18	251.61	14.54	
3100.00	3111.13	16.88	100.92	3063.76	9.78	6.92	223.01	280.28	260.58	14.23	

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
3200.00	3210.44	16.88	100.92	3158.78	10.35	7.20	224.19	290.50	269.65	13.93	
3300.00	3309.74	16.88	100.92	3253.81	10.93	7.47	225.28	300.84	278.83	13.67	
3400.00	3409.05	16.88	100.92	3348.83	11.52	7.75	226.30	311.28	288.11	13.44	
3500.00	3508.35	16.88	100.92	3443.86	12.10	8.03	227.26	321.81	297.47	13.22	
3600.00	3607.66	16.88	100.92	3538.88	12.69	8.31	228.16	332.42	306.89	13.02	
3700.00	3706.96	16.88	100.92	3633.91	13.29	8.59	229.00	343.11	316.38	12.84	
3800.00	3806.27	16.88	100.92	3728.93	13.88	8.88	229.79	353.87	325.94	12.67	
3900.00	3905.57	16.88	100.92	3823.95	14.48	9.16	230.53	364.69	335.56	12.52	
4000.00	4004.88	16.88	100.92	3918.98	15.08	9.45	231.23	375.56	345.23	12.38	
4100.00	4104.18	16.88	100.92	4014.00	15.68	9.74	231.89	386.49	354.94	12.25	
4200.00	4203.49	16.88	100.92	4109.03	16.28	10.03	232.51	397.47	364.69	12.12	
4300.00	4302.79	16.88	100.92	4204.05	16.89	10.31	233.10	408.49	374.48	12.01	
4400.00	4402.10	16.88	100.92	4299.08	17.49	10.60	233.66	419.56	384.30	11.90	
4500.00	4501.40	16.88	100.92	4394.10	18.10	10.90	234.20	430.66	394.17	11.80	
4600.00	4600.71	16.88	100.92	4489.13	18.71	11.19	234.70	441.79	404.07	11.71	
4700.00	4700.01	16.88	100.92	4584.15	19.31	11.48	235.18	452.96	414.01	11.63	
4800.00	4799.32	16.88	100.92	4679.18	19.92	11.77	235.64	464.16	423.97	11.55	
4900.00	4898.62	16.88	100.92	4774.20	20.53	12.06	236.07	475.38	433.96	11.48	
5000.00	4997.92	16.88	100.92	4869.23	21.14	12.36	236.48	486.63	443.98	11.41	
5100.00	5097.23	16.88	100.92	4964.25	21.75	12.65	236.88	497.90	454.02	11.35	
5200.00	5196.53	16.88	100.92	5059.28	22.36	12.95	237.26	509.20	464.08	11.29	
5300.00	5295.84	16.88	100.92	5154.30	22.98	13.24	237.62	520.52	474.17	11.23	
5400.00	5395.14	16.88	100.92	5249.32	23.59	13.54	237.97	531.86	484.27	11.18	
5500.00	5494.45	16.88	100.92	5344.35	24.20	13.83	238.30	543.21	494.40	11.13	
5600.00	5593.75	16.88	100.92	5439.37	24.81	14.13	238.62	554.59	504.54	11.08	
5700.00	5693.06	16.88	100.92	5534.40	25.43	14.42	238.92	565.98	514.70	11.04	
5800.00	5792.36	16.88	100.92	5629.42	26.04	14.72	239.22	577.38	524.87	11.00	
5900.00	5891.67	16.88	100.92	5724.45	26.65	15.02	239.50	588.80	535.06	10.96	
6000.00	5990.97	16.88	100.92	5819.47	27.27	15.31	239.77	600.23	545.27	10.92	
6100.00	6090.43	16.75	101.03	5914.65	27.88	15.61	240.03	611.68	555.48	10.88	
6200.00	6199.71	8.56	115.72	6021.20	28.27	15.83	239.52	622.30	565.20	10.90	
6300.00	6305.57	4.21	190.33	6126.52	28.39	15.72	230.40	631.84	574.46	11.01	
6400.00	6407.75	10.00	243.24	6227.96	28.31	15.31	197.54	641.90	584.78	11.24	
6500.00	6506.93	17.53	254.12	6324.24	28.10	14.64	153.94	652.59	596.06	11.55	
6600.00	6603.41	25.10	258.43	6414.06	27.80	13.77	126.06	663.63	607.92	11.91	
6700.00	6697.49	32.54	260.79	6496.43	27.46	12.76	111.48	674.75	619.94	12.31	
6800.00	6789.46	39.84	262.31	6570.61	27.15	11.68	102.78	685.63	631.61	12.69	
6900.00	6879.60	47.01	263.41	6636.03	26.90	10.61	96.92	695.97	642.60	13.04	
7000.00	6968.16	54.07	264.26	6692.28	26.77	9.68	92.65	705.45	652.53	13.33	
7100.00	7055.37	61.02	264.97	6739.05	26.78	9.00	89.43	713.82	661.01	13.52	
7200.00	7141.44	67.88	265.57	6776.15	26.96	8.70	86.99	720.83	667.73	13.57	
7300.00	7226.59	74.67	266.12	6803.47	27.31	8.84	85.18	726.27	672.45	13.50	
7400.00	7310.98	81.41	266.62	6820.94	27.84	9.42	83.91	729.99	675.07	13.29	
7500.00	7394.79	88.10	267.11	6828.60	28.53	10.34	83.13	731.86	675.41	12.96	
7600.00	7490.06	90.00	267.24	6829.00	29.48	10.98	82.93	731.54	673.12	12.52	
7700.00	7590.06	90.00	267.24	6829.00	30.69	11.48	82.92	730.49	669.77	12.03	
7800.00	7690.05	90.00	267.24	6829.00	32.09	12.00	82.91	729.45	666.12	11.52	
7900.00	7790.05	90.00	267.24	6829.00	33.67	12.54	82.90	728.40	661.96	10.96	
8000.00	7890.04	90.00	267.24	6829.00	35.40	13.10	82.89	727.36	657.57	10.42	
8100.00	7990.04	90.00	267.24	6829.00	37.26	13.68	82.88	726.32	652.99	9.91	
8200.00	8090.03	90.00	267.24	6829.00	39.23	14.27	82.87	725.27	648.01	9.39	
8300.00	8190.03	90.00	267.24	6829.00	41.30	14.88	82.86	724.23	642.85	8.90	
8400.00	8290.02	90.00	267.24	6829.00	43.45	15.49	82.85	723.18	637.56	8.45	
8500.00	8390.01	90.00	267.24	6829.00	45.67	16.12	82.84	722.14	632.14	8.02	
8600.00	8490.01	90.00	267.24	6829.00	47.95	16.75	82.83	721.09	626.60	7.63	
8700.00	8590.00	90.00	267.24	6829.00	50.28	17.39	82.82	720.05	620.95	7.27	
8800.00	8690.00	90.00	267.24	6829.00	52.66	18.04	82.81	719.00	615.21	6.93	
8900.00	8789.99	90.00	267.24	6829.00	55.08	18.70	82.80	717.96	609.38	6.61	

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
9000.00	8889.99	90.00	267.24	6829.00	57.54	19.36	82.79	716.91	603.49	6.32	
9100.00	8989.98	90.00	267.24	6829.00	60.02	20.03	82.78	715.87	597.53	6.05	
9200.00	9089.98	90.00	267.24	6829.00	62.53	20.70	82.77	714.83	591.51	5.80	
9300.00	9189.97	90.00	267.24	6829.00	65.06	21.37	82.76	713.78	585.45	5.56	
9400.00	9289.96	90.00	267.24	6829.00	67.62	22.05	82.75	712.74	579.34	5.34	
9500.00	9389.96	90.00	267.24	6829.00	70.19	22.73	82.73	711.69	573.20	5.14	
9600.00	9489.95	90.00	267.24	6829.00	72.78	23.42	82.72	710.65	567.02	4.95	
9700.00	9589.95	90.00	267.24	6829.00	75.39	24.11	82.71	709.60	560.81	4.77	
9800.00	9689.94	90.00	267.24	6829.00	78.01	24.80	82.70	708.56	554.58	4.60	
9900.00	9789.94	90.00	267.24	6829.00	80.64	25.49	82.69	707.52	548.31	4.44	
10000.00	9889.93	90.00	267.24	6829.00	83.28	26.18	82.68	706.47	542.03	4.30	
10100.00	9989.93	90.00	267.24	6829.00	85.94	26.88	82.67	705.43	535.73	4.16	
10200.00	10089.92	90.00	267.24	6829.00	88.60	27.58	82.66	704.38	529.41	4.03	
10300.00	10189.91	90.00	267.24	6829.00	91.27	28.28	82.65	703.34	523.07	3.90	
10400.00	10289.91	90.00	267.24	6829.00	93.95	28.98	82.64	702.29	516.72	3.78	
10500.00	10389.90	90.00	267.24	6829.00	96.63	29.69	82.63	701.25	510.35	3.67	
10600.00	10489.90	90.00	267.24	6829.00	99.32	30.39	82.61	700.21	503.97	3.57	
10700.00	10589.89	90.00	267.24	6829.00	102.02	31.10	82.60	699.16	497.58	3.47	
10800.00	10689.89	90.00	267.24	6829.00	104.72	31.81	82.59	698.12	491.18	3.37	
10900.00	10789.88	90.00	267.24	6829.00	107.43	32.52	82.58	697.07	484.77	3.28	
11000.00	10889.88	90.00	267.24	6829.00	110.14	33.23	82.57	696.03	478.35	3.20	
11100.00	10989.87	90.00	267.24	6829.00	112.86	33.94	82.56	694.99	471.92	3.12	
11200.00	11089.86	90.00	267.24	6829.00	115.58	34.65	82.55	693.94	465.48	3.04	
11300.00	11189.86	90.00	267.24	6829.00	118.30	35.36	82.54	692.90	459.04	2.96	
11400.00	11289.85	90.00	267.24	6829.00	121.03	36.07	82.53	691.86	452.59	2.89	
11500.00	11389.85	90.00	267.24	6829.00	123.76	36.79	82.51	690.81	446.13	2.82	
11600.00	11489.84	90.00	267.24	6829.00	126.49	37.50	82.50	689.77	439.67	2.76	
11700.00	11589.84	90.00	267.24	6829.00	129.23	38.22	82.49	688.72	433.20	2.70	
11800.00	11689.83	90.00	267.24	6829.00	131.97	38.94	82.48	687.68	426.73	2.64	
11900.00	11789.83	90.00	267.24	6829.00	134.71	39.65	82.47	686.64	420.25	2.58	
12000.00	11889.82	90.00	267.24	6829.00	137.45	40.37	82.46	685.59	413.77	2.52	
12100.00	11989.82	90.00	267.24	6829.00	140.20	41.09	82.44	684.55	407.29	2.47	SF(Lo)
12200.00	12089.81	90.00	267.24	6829.00	142.95	41.81	82.43	683.51	400.80	2.42	SF(Lo)
12300.00	12189.80	90.00	267.24	6829.00	145.70	42.53	82.42	682.46	394.30	2.37	SF(Lo)
12400.00	12289.80	90.00	267.24	6829.00	148.45	43.25	82.41	681.42	387.81	2.32	SF(Lo)
12500.00	12389.79	90.00	267.24	6829.00	151.21	43.97	82.40	680.38	381.31	2.27	SF(Lo)
12600.00	12489.79	90.00	267.24	6829.00	153.96	44.69	82.39	679.33	374.80	2.23	SF(Lo)
12700.00	12589.78	90.00	267.24	6829.00	156.72	45.41	82.37	678.29	368.30	2.19	SF(Lo)
12800.00	12689.78	90.00	267.24	6829.00	159.48	46.13	82.36	677.24	361.79	2.15	SF(Lo)
12900.00	12789.77	90.00	267.24	6829.00	162.24	46.85	82.35	676.20	355.28	2.11	SF(Lo)
13000.00	12889.77	90.00	267.24	6829.00	165.00	47.57	82.34	675.16	348.77	2.07	SF(Lo)
13100.00	12989.76	90.00	267.24	6829.00	167.76	48.30	82.33	674.11	342.25	2.03	SF(Lo)
13200.00	13089.75	90.00	267.24	6829.00	170.53	49.02	82.32	673.07	335.74	2.00	SF(Lo)
13300.00	13189.75	90.00	267.24	6829.00	173.29	49.74	82.30	672.03	329.22	1.96	SF(Lo)
13400.00	13289.74	90.00	267.24	6829.00	176.06	50.47	82.29	670.98	322.70	1.93	SF(Lo)
13500.00	13389.74	90.00	267.24	6829.00	178.83	51.19	82.28	669.94	316.17	1.89	SF(Lo)
13600.00	13489.73	90.00	267.24	6829.00	181.60	51.91	82.27	668.90	309.65	1.86	SF(Lo)
13700.00	13589.73	90.00	267.24	6829.00	184.36	52.64	82.25	667.86	303.13	1.83	SF(Lo)
13800.00	13689.72	90.00	267.24	6829.00	187.14	53.36	82.24	666.81	296.60	1.80	SF(Lo)
13900.00	13789.72	90.00	267.24	6829.00	189.91	54.09	82.23	665.77	290.07	1.77	SF(Lo)
14000.00	13889.71	90.00	267.24	6829.00	192.68	54.81	82.22	664.73	283.54	1.74	SF(Lo)
14100.00	13989.70	90.00	267.24	6829.00	195.45	55.54	82.21	663.68	277.01	1.72	SF(Lo)
14200.00	14089.70	90.00	267.24	6829.00	198.23	56.26	82.19	662.64	270.48	1.69	SF(Lo)
14300.00	14189.69	90.00	267.24	6829.00	201.00	56.99	82.18	661.60	263.94	1.66	SF(Lo)
14400.00	14289.69	90.00	267.24	6829.00	203.77	57.71	82.17	660.55	257.41	1.64	SF(Lo)
14500.00	14389.68	90.00	267.24	6829.00	206.55	58.44	82.16	659.51	250.88	1.61	SF(Lo)
14600.00	14489.68	90.00	267.24	6829.00	209.33	59.17	82.14	658.47	244.34	1.59	SF(Lo)
14700.00	14589.67	90.00	267.24	6829.00	212.10	59.89	82.13	657.43	237.80	1.57	SF(Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
14800.00	14689.67	90.00	267.24	6829.00	214.88	60.62	82.12	656.38	231.27	1.54	SF(Lo)
14900.00	14789.66	90.00	267.24	6829.00	217.66	61.34	82.11	655.34	224.73	1.52	SF(Lo)
15000.00	14889.65	90.00	267.24	6829.00	220.44	62.07	82.09	654.30	218.19	1.50	SF(Lo)
15100.00	14989.65	90.00	267.24	6829.00	223.22	62.80	82.08	653.25	211.65	1.48	SF(Med)
15200.00	15089.64	90.00	267.24	6829.00	226.00	63.53	82.07	652.21	205.11	1.46	SF(Med)
15300.00	15189.64	90.00	267.24	6829.00	228.78	64.25	82.06	651.17	198.57	1.44	SF(Med)
15400.00	15289.63	90.00	267.24	6829.00	231.56	64.98	82.04	650.13	192.03	1.42	SF(Med)
15456.59	15322.07	90.00	267.24	6829.00	232.46	65.22	82.04	649.98	190.01	1.41	SF(Med)
Secondary Well: Goetzel 12N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	359.95	40.07	39.34	54.65	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.95	40.07	39.12	42.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.95	40.07	38.67	28.55	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.95	40.07	38.22	21.63	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.95	40.07	37.77	17.40	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.95	40.07	37.32	14.56	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.95	40.07	36.87	12.52	CC (Lo)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.95	40.07	36.42	10.98	CC (Lo)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	359.95	40.07	35.97	9.77	CC (Lo)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	359.95	40.07	35.52	8.81	CC (Lo)
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	359.95	40.07	35.07	8.01	CC (Lo)
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	234.16	41.07	35.65	7.58	CC (Lo)
1200.00	1199.84	0.00	0.00	1199.84	2.58	2.58	228.72	44.34	38.50	7.60	CC (Lo)
1300.00	1299.45	0.00	0.00	1299.45	2.81	2.81	221.37	50.52	44.27	8.08	CC (Lo)
1400.00	1400.03	2.00	107.85	1400.01	3.02	3.02	215.00	59.12	52.45	8.86	CC (Lo)
1500.00	1500.94	4.02	107.85	1500.78	3.21	3.20	210.95	68.85	61.75	9.70	
1600.00	1602.17	6.04	107.85	1601.61	3.43	3.40	208.51	79.37	71.85	10.56	
1700.00	1703.72	8.07	107.85	1702.38	3.66	3.59	207.19	90.50	82.52	11.33	
1800.00	1805.56	10.11	107.85	1802.94	3.92	3.79	206.65	102.17	93.69	12.05	
1900.00	1907.69	12.15	107.85	1903.14	4.23	3.99	206.66	114.24	105.23	12.67	
2000.00	2010.29	14.21	107.85	2003.03	4.59	4.20	207.52	124.63	115.01	12.96	
2100.00	2113.24	16.26	107.85	2102.36	5.00	4.42	209.34	132.47	122.16	12.85	
2200.00	2212.90	16.27	107.85	2198.03	5.46	4.66	211.44	139.18	128.09	12.55	
2300.00	2312.55	16.27	107.85	2293.69	5.94	4.90	213.35	146.06	134.15	12.26	
2400.00	2412.20	16.27	107.85	2389.35	6.44	5.15	215.08	153.09	140.31	11.98	
2500.00	2511.85	16.27	107.85	2485.01	6.96	5.41	216.66	160.25	146.51	11.67	
2600.00	2611.50	16.27	107.85	2580.66	7.48	5.67	218.10	167.51	152.79	11.38	
2700.00	2711.15	16.27	107.85	2676.32	8.02	5.93	219.43	174.88	159.15	11.12	
2800.00	2810.80	16.27	107.85	2771.98	8.57	6.20	220.64	182.33	165.59	10.89	
2900.00	2910.46	16.27	107.85	2867.64	9.13	6.47	221.76	189.85	172.09	10.69	
3000.00	3010.11	16.27	107.85	2963.30	9.69	6.74	222.80	197.44	178.61	10.49	
3100.00	3109.76	16.27	107.85	3058.95	10.26	7.01	223.76	205.09	185.16	10.29	
3200.00	3209.41	16.27	107.85	3154.61	10.83	7.29	224.64	212.80	191.75	10.11	
3300.00	3309.06	16.27	107.85	3250.27	11.40	7.57	225.47	220.55	198.38	9.95	
3400.00	3408.71	16.27	107.85	3345.93	11.97	7.85	226.24	228.34	205.05	9.80	
3500.00	3508.36	16.27	107.85	3441.59	12.55	8.13	226.96	236.17	211.75	9.67	
3600.00	3608.01	16.27	107.85	3537.24	13.13	8.41	227.63	244.04	218.49	9.55	
3700.00	3707.66	16.27	107.85	3632.90	13.72	8.69	228.27	251.94	225.25	9.44	
3800.00	3807.31	16.27	107.85	3728.56	14.30	8.98	228.86	259.86	232.04	9.34	
3900.00	3906.96	16.27	107.85	3824.22	14.89	9.26	229.42	267.82	238.86	9.25	
4000.00	4006.61	16.27	107.85	3919.88	15.47	9.55	229.94	275.79	245.69	9.16	
4100.00	4106.26	16.27	107.85	4015.54	16.06	9.83	230.44	283.79	252.55	9.08	
4200.00	4205.91	16.27	107.85	4111.19	16.65	10.12	230.91	291.81	259.42	9.01	
4300.00	4305.56	16.27	107.85	4206.85	17.24	10.41	231.35	299.85	266.30	8.94	
4400.00	4405.21	16.27	107.85	4302.51	17.83	10.70	231.77	307.90	273.18	8.87	
4500.00	4504.86	16.27	107.85	4398.17	18.42	10.99	232.17	315.97	280.07	8.80	

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
4600.00	4604.51	16.27	107.85	4493.83	19.02	11.28	232.55	324.05	286.96	8.74	
4700.00	4704.16	16.27	107.85	4589.48	19.61	11.57	232.91	332.15	293.87	8.68	
4800.00	4803.81	16.27	107.85	4685.14	20.20	11.86	233.25	340.26	300.79	8.62	
4900.00	4903.46	16.27	107.85	4780.80	20.80	12.15	233.58	348.38	307.72	8.57	
5000.00	5003.11	16.27	107.85	4876.46	21.39	12.44	233.89	356.51	314.66	8.52	
5100.00	5102.76	16.27	107.85	4972.12	21.99	12.73	234.19	364.65	321.61	8.47	
5200.00	5202.41	16.27	107.85	5067.77	22.58	13.03	234.48	372.80	328.57	8.43	
5300.00	5302.06	16.27	107.85	5163.43	23.18	13.32	234.75	380.96	335.54	8.39	
5400.00	5401.72	16.27	107.85	5259.09	23.78	13.61	235.01	389.13	342.51	8.35	
5500.00	5501.37	16.27	107.85	5354.75	24.37	13.91	235.26	397.31	349.50	8.31	
5600.00	5601.02	16.27	107.85	5450.41	24.97	14.20	235.50	405.49	356.49	8.27	
5700.00	5700.67	16.27	107.85	5546.07	25.57	14.49	235.73	413.68	363.48	8.24	
5800.00	5800.32	16.27	107.85	5641.72	26.16	14.79	235.96	421.88	370.49	8.21	
5900.00	5899.97	16.27	107.85	5737.38	26.76	15.08	236.17	430.08	377.50	8.18	
6000.00	5999.62	16.27	107.85	5833.04	27.36	15.37	236.38	438.29	384.51	8.15	
6100.00	6099.27	16.27	107.85	5928.70	27.96	15.67	236.57	446.50	391.53	8.12	
6200.00	6198.92	16.27	107.85	6024.36	28.56	15.96	236.77	454.72	398.56	8.10	
6300.00	6302.60	10.44	121.89	6124.95	29.02	16.23	229.25	462.67	405.59	8.11	
6400.00	6406.79	6.12	175.00	6228.16	29.13	16.20	197.94	470.29	412.96	8.20	
6500.00	6510.31	10.17	229.61	6330.75	29.00	15.88	155.82	477.61	420.42	8.35	
6600.00	6613.12	17.44	246.35	6430.55	28.68	15.28	129.32	484.50	427.77	8.54	
6700.00	6715.17	25.24	253.15	6525.55	28.24	14.43	116.00	490.84	434.79	8.76	
6800.00	6816.45	33.14	256.85	6613.90	27.75	13.37	108.44	496.51	441.25	8.98	
6900.00	6916.95	41.05	259.23	6694.01	27.27	12.18	103.57	501.40	446.83	9.19	
7000.00	7016.67	48.94	260.94	6764.47	26.90	10.97	100.16	505.41	451.36	9.35	
7100.00	7115.63	56.78	262.27	6824.18	26.69	9.89	97.65	508.47	454.68	9.45	
7200.00	7213.85	64.58	263.38	6872.23	26.71	9.16	95.77	510.51	456.64	9.48	
7300.00	7311.36	72.33	264.34	6908.01	26.98	8.97	94.37	511.49	457.05	9.39	
7400.00	7408.21	80.03	265.22	6931.13	27.51	9.40	93.38	511.38	455.84	9.21	
7500.00	7504.44	87.69	266.05	6941.41	28.27	10.39	92.74	510.17	453.11	8.94	
7600.00	7603.16	90.00	266.30	6942.00	29.24	11.09	92.60	507.80	448.88	8.62	
7700.00	7703.12	90.00	266.30	6942.00	30.42	11.58	92.61	505.10	443.83	8.24	
7800.00	7803.08	90.00	266.30	6942.00	31.80	12.10	92.62	502.41	438.49	7.86	
7900.00	7903.05	90.00	266.30	6942.00	33.36	12.63	92.64	499.71	432.76	7.46	
8000.00	8003.01	90.00	266.30	6942.00	35.07	13.19	92.65	497.01	426.56	7.05	
8100.00	8102.97	90.00	266.30	6942.00	36.92	13.76	92.67	494.31	420.21	6.67	
8200.00	8202.94	90.00	266.30	6942.00	38.88	14.35	92.68	491.61	413.70	6.31	
8300.00	8302.90	90.00	266.30	6942.00	40.93	14.95	92.70	488.91	406.86	5.96	
8400.00	8402.86	90.00	266.30	6942.00	43.07	15.57	92.71	486.21	399.85	5.63	
8500.00	8502.83	90.00	266.30	6942.00	45.28	16.19	92.73	483.51	392.73	5.33	
8600.00	8602.79	90.00	266.30	6942.00	47.55	16.82	92.74	480.81	385.49	5.04	
8700.00	8702.76	90.00	266.30	6942.00	49.88	17.47	92.76	478.12	378.15	4.78	
8800.00	8802.72	90.00	266.30	6942.00	52.25	18.11	92.77	475.42	370.72	4.54	
8900.00	8902.68	90.00	266.30	6942.00	54.66	18.77	92.79	472.72	363.21	4.32	
9000.00	9002.65	90.00	266.30	6942.00	57.10	19.43	92.81	470.02	355.63	4.11	
9100.00	9102.61	90.00	266.30	6942.00	59.58	20.09	92.82	467.32	347.98	3.92	
9200.00	9202.57	90.00	266.30	6942.00	62.08	20.76	92.84	464.62	340.29	3.74	
9300.00	9302.54	90.00	266.30	6942.00	64.61	21.43	92.86	461.92	332.54	3.57	
9400.00	9402.50	90.00	266.30	6942.00	67.16	22.11	92.87	459.23	324.75	3.41	
9500.00	9502.46	90.00	266.30	6942.00	69.73	22.79	92.89	456.53	316.92	3.27	
9600.00	9602.43	90.00	266.30	6942.00	72.31	23.48	92.91	453.83	309.06	3.13	
9700.00	9702.39	90.00	266.30	6942.00	74.91	24.16	92.92	451.13	301.17	3.01	
9800.00	9802.35	90.00	266.30	6942.00	77.52	24.85	92.94	448.43	293.25	2.89	
9900.00	9902.32	90.00	266.30	6942.00	80.15	25.54	92.96	445.74	285.31	2.78	
10000.00	10002.28	90.00	266.30	6942.00	82.79	26.24	92.98	443.04	277.34	2.67	
10100.00	10102.24	90.00	266.30	6942.00	85.43	26.93	93.00	440.34	269.36	2.58	
10200.00	10202.21	90.00	266.30	6942.00	88.09	27.63	93.01	437.64	261.35	2.48	SF(Lo)
10300.00	10302.17	90.00	266.30	6942.00	90.75	28.33	93.03	434.94	253.33	2.39	SF(Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
10400.00	10402.13	90.00	266.30	6942.00	93.42	29.03	93.05	432.24	245.30	2.31	SF(Lo)
10500.00	10502.10	90.00	266.30	6942.00	96.10	29.73	93.07	429.55	237.25	2.23	SF(Lo)
10600.00	10602.06	90.00	266.30	6942.00	98.79	30.44	93.09	426.85	229.18	2.16	SF(Lo)
10700.00	10702.03	90.00	266.30	6942.00	101.48	31.14	93.11	424.15	221.11	2.09	SF(Lo)
10800.00	10801.99	90.00	266.30	6942.00	104.18	31.85	93.13	421.45	213.02	2.02	SF(Lo)
10900.00	10901.95	90.00	266.30	6942.00	106.88	32.56	93.15	418.76	204.93	1.96	SF(Lo)
11000.00	11001.92	90.00	266.30	6942.00	109.58	33.27	93.17	416.06	196.82	1.90	SF(Lo)
11100.00	11101.88	90.00	266.30	6942.00	112.30	33.98	93.19	413.36	188.71	1.84	SF(Lo)
11200.00	11201.84	90.00	266.30	6942.00	115.01	34.69	93.21	410.66	180.59	1.78	SF(Lo)
11300.00	11301.81	90.00	266.30	6942.00	117.73	35.40	93.23	407.97	172.46	1.73	SF(Lo)
11400.00	11401.77	90.00	266.30	6942.00	120.45	36.11	93.25	405.27	164.33	1.68	SF(Lo)
11500.00	11501.73	90.00	266.30	6942.00	123.18	36.83	93.28	402.57	156.19	1.63	SF(Lo)
11600.00	11601.70	90.00	266.30	6942.00	125.90	37.54	93.30	399.87	148.04	1.59	SF(Lo)
11700.00	11701.66	90.00	266.30	6942.00	128.63	38.26	93.32	397.18	139.89	1.54	SF(Lo)
11800.00	11801.62	90.00	266.30	6942.00	131.37	38.97	93.34	394.48	131.74	1.50	SF(Lo)
11900.00	11901.59	90.00	266.30	6942.00	134.11	39.69	93.37	391.78	123.58	1.46	SF(Med)
12000.00	12001.55	90.00	266.30	6942.00	136.84	40.41	93.39	389.08	115.41	1.42	SF(Med)
12100.00	12101.51	90.00	266.30	6942.00	139.58	41.12	93.41	386.39	107.24	1.38	SF(Med)
12200.00	12201.48	90.00	266.30	6942.00	142.33	41.84	93.44	383.69	99.07	1.35	SF(Med)
12300.00	12301.44	90.00	266.30	6942.00	145.07	42.56	93.46	380.99	90.89	1.31	SF(Med)
12400.00	12401.40	90.00	266.30	6942.00	147.82	43.28	93.49	378.30	82.71	1.28	SF(Med)
12500.00	12501.37	90.00	266.30	6942.00	150.57	44.00	93.51	375.60	74.53	1.25	SF(Med)
12600.00	12601.33	90.00	266.30	6942.00	153.32	44.72	93.54	372.90	66.34	1.22	SF(Med)
12700.00	12701.30	90.00	266.30	6942.00	156.07	45.44	93.56	370.21	58.15	1.19	SF(Med)
12800.00	12801.26	90.00	266.30	6942.00	158.82	46.16	93.59	367.51	49.96	1.16	SF(Med)
12900.00	12901.22	90.00	266.30	6942.00	161.58	46.88	93.62	364.81	41.77	1.13	SF(Med)
13000.00	13001.19	90.00	266.30	6942.00	164.33	47.60	93.64	362.12	33.57	1.10	SF(Med)
13100.00	13101.15	90.00	266.30	6942.00	167.09	48.32	93.67	359.42	25.38	1.08	SF(Med)
13200.00	13201.11	90.00	266.30	6942.00	169.85	49.05	93.70	356.73	17.18	1.05	SF(Med)
13300.00	13301.08	90.00	266.30	6942.00	172.61	49.77	93.73	354.03	8.98	1.03	SF(Med)
13400.00	13401.04	90.00	266.30	6942.00	175.37	50.49	93.75	351.33	0.78	1.00	SF(Med)
13500.00	13501.00	90.00	266.30	6942.00	178.13	51.21	93.78	348.64	-7.43	0.98	SF(Hi)
13600.00	13600.97	90.00	266.30	6942.00	180.90	51.94	93.81	345.94	-15.63	0.96	SF(Hi)
13700.00	13700.93	90.00	266.30	6942.00	183.66	52.66	93.84	343.25	-23.84	0.94	SF(Hi)
13800.00	13800.89	90.00	266.30	6942.00	186.43	53.39	93.87	340.55	-32.05	0.91	SF(Hi)
13900.00	13900.86	90.00	266.30	6942.00	189.19	54.11	93.90	337.85	-40.25	0.89	SF(Hi)
14000.00	14000.82	90.00	266.30	6942.00	191.96	54.83	93.94	335.16	-48.46	0.87	SF(Hi)
14100.00	14100.78	90.00	266.30	6942.00	194.73	55.56	93.97	332.46	-56.67	0.85	SF(Hi)
14200.00	14200.75	90.00	266.30	6942.00	197.49	56.28	94.00	329.77	-64.88	0.84	SF(Hi)
14300.00	14300.71	90.00	266.30	6942.00	200.26	57.01	94.03	327.07	-73.09	0.82	SF(Hi)
14400.00	14400.67	90.00	266.30	6942.00	203.03	57.73	94.07	324.38	-81.31	0.80	SF(Hi)
14500.00	14500.64	90.00	266.30	6942.00	205.80	58.46	94.10	321.68	-89.52	0.78	SF(Hi)
14600.00	14600.60	90.00	266.30	6942.00	208.57	59.19	94.14	318.99	-97.73	0.77	SF(Hi)
14700.00	14700.57	90.00	266.30	6942.00	211.35	59.91	94.17	316.29	-105.94	0.75	SF(Hi)
14800.00	14800.53	90.00	266.30	6942.00	214.12	60.64	94.21	313.60	-114.15	0.73	SF(Hi)
14900.00	14900.49	90.00	266.30	6942.00	216.89	61.36	94.24	310.91	-122.37	0.72	SF(Hi)
15000.00	15000.46	90.00	266.30	6942.00	219.66	62.09	94.28	308.21	-130.58	0.70	SF(Hi)
15100.00	15100.42	90.00	266.30	6942.00	222.44	62.82	94.32	305.52	-138.79	0.69	SF(Hi)
15200.00	15200.38	90.00	266.30	6942.00	225.21	63.54	94.36	302.82	-147.00	0.67	SF(Hi)
15300.00	15300.35	90.00	266.30	6942.00	227.99	64.27	94.40	300.13	-155.21	0.66	SF(Hi)
15400.00	15400.31	90.00	266.30	6942.00	230.76	65.00	94.44	297.44	-163.43	0.65	SF(Hi)
15456.59	15440.87	90.00	266.30	6942.00	231.89	65.29	94.45	296.34	-166.28	0.64	SF(Hi)
Secondary Well: Goetzel 33C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	20.04	19.31	27.33	CC (Med)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.35	20.04	19.08	21.01	CC (Med)

## 5D Anti-Collision Report

Secondary Well: Goetzel 33C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.35	20.04	18.64	14.28	CC (Med)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.35	20.04	18.19	10.81	CC (Med)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.35	20.04	17.74	8.70	CC (Med)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.35	20.04	17.29	7.28	CC (Med)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.35	20.04	16.84	6.26	CC (Med)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.35	20.04	16.39	5.49	CC (Med)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.35	20.04	15.94	4.89	CC (Med)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	0.35	20.04	15.49	4.40	CC (Med)
1000.00	1000.00	0.00	0.00	1000.00	2.14	2.14	0.35	20.04	15.04	4.01	CC (Med)
1100.00	1099.98	0.00	0.00	1099.98	2.36	2.36	232.61	21.05	15.63	3.88	CC (Med)
1200.00	1200.10	1.00	115.27	1200.10	2.57	2.57	223.71	24.31	18.48	4.17	CC (Med)
1300.00	1300.57	3.01	115.27	1300.50	2.77	2.76	217.19	28.66	22.45	4.62	CC (Med)
1400.00	1401.22	5.02	115.27	1400.90	2.97	2.95	213.18	33.58	26.96	5.07	CC (Lo)
1500.00	1502.04	7.04	115.27	1501.16	3.19	3.15	210.86	38.89	31.85	5.52	CC (Lo)
1600.00	1603.03	9.06	115.27	1601.14	3.44	3.34	209.70	44.51	37.05	5.97	CC (Lo)
1700.00	1704.18	11.08	115.27	1700.73	3.72	3.55	209.32	50.40	42.45	6.34	CC (Lo)
1800.00	1805.49	13.11	115.27	1799.78	4.06	3.75	209.50	56.53	48.04	6.66	CC (Lo)
1900.00	1906.95	15.14	115.27	1898.17	4.45	3.97	210.09	62.83	53.74	6.92	CC (Lo)
2000.00	2007.55	15.98	115.27	1994.97	4.89	4.20	211.64	67.76	57.98	6.93	
2100.00	2107.42	15.98	115.27	2090.98	5.37	4.44	213.12	72.51	61.97	6.88	
2200.00	2207.29	15.98	115.27	2186.99	5.86	4.69	214.42	77.30	65.98	6.83	
2300.00	2307.16	15.98	115.27	2283.00	6.38	4.95	215.57	82.13	69.99	6.77	
2400.00	2407.03	15.98	115.27	2379.02	6.90	5.21	216.59	86.98	73.98	6.69	
2500.00	2506.90	15.98	115.27	2475.03	7.44	5.47	217.50	91.87	77.96	6.61	
2600.00	2606.77	15.98	115.27	2571.04	7.98	5.74	218.32	96.77	81.95	6.53	
2700.00	2706.64	15.98	115.27	2667.05	8.53	6.01	219.06	101.69	85.91	6.45	
2800.00	2806.51	15.98	115.27	2763.07	9.09	6.28	219.74	106.62	89.89	6.37	
2900.00	2906.38	15.98	115.27	2859.08	9.65	6.56	220.35	111.57	93.87	6.30	
3000.00	3006.25	15.98	115.27	2955.09	10.22	6.83	220.91	116.53	97.85	6.24	
3100.00	3106.12	15.98	115.27	3051.10	10.79	7.11	221.43	121.50	101.84	6.18	
3200.00	3205.99	15.98	115.27	3147.11	11.36	7.39	221.90	126.48	105.83	6.12	
3300.00	3305.87	15.98	115.27	3243.13	11.93	7.67	222.34	131.46	109.80	6.07	
3400.00	3405.74	15.98	115.27	3339.14	12.51	7.96	222.75	136.46	113.78	6.02	
3500.00	3505.61	15.98	115.27	3435.15	13.08	8.24	223.12	141.46	117.76	5.97	
3600.00	3605.48	15.98	115.27	3531.16	13.66	8.52	223.48	146.46	121.74	5.92	
3700.00	3705.35	15.98	115.27	3627.18	14.24	8.81	223.80	151.48	125.72	5.88	
3800.00	3805.22	15.98	115.27	3723.19	14.82	9.09	224.11	156.49	129.71	5.84	
3900.00	3905.09	15.98	115.27	3819.20	15.41	9.38	224.40	161.51	133.70	5.81	
4000.00	4004.96	15.98	115.27	3915.21	15.99	9.67	224.67	166.54	137.69	5.77	
4100.00	4104.83	15.98	115.27	4011.23	16.57	9.96	224.93	171.56	141.68	5.74	
4200.00	4204.70	15.98	115.27	4107.24	17.16	10.25	225.17	176.59	145.66	5.71	
4300.00	4304.57	15.98	115.27	4203.25	17.74	10.53	225.39	181.63	149.64	5.68	
4400.00	4404.44	15.98	115.27	4299.26	18.33	10.82	225.61	186.66	153.63	5.65	
4500.00	4504.31	15.98	115.27	4395.28	18.91	11.11	225.81	191.70	157.61	5.62	
4600.00	4604.18	15.98	115.27	4491.29	19.50	11.40	226.01	196.74	161.59	5.60	
4700.00	4704.06	15.98	115.27	4587.30	20.09	11.70	226.19	201.79	165.58	5.57	
4800.00	4803.93	15.98	115.27	4683.31	20.68	11.99	226.37	206.83	169.57	5.55	
4900.00	4903.80	15.98	115.27	4779.33	21.27	12.28	226.53	211.88	173.55	5.53	
5000.00	5003.67	15.98	115.27	4875.34	21.85	12.57	226.69	216.93	177.54	5.51	
5100.00	5103.54	15.98	115.27	4971.35	22.44	12.86	226.84	221.98	181.53	5.49	
5200.00	5203.41	15.98	115.27	5067.36	23.03	13.15	226.99	227.03	185.52	5.47	
5300.00	5303.28	15.98	115.27	5163.38	23.62	13.45	227.13	232.08	189.51	5.45	
5400.00	5403.15	15.98	115.27	5259.39	24.21	13.74	227.26	237.14	193.50	5.43	
5500.00	5503.02	15.98	115.27	5355.40	24.80	14.03	227.38	242.19	197.49	5.42	
5600.00	5602.89	15.98	115.27	5451.41	25.39	14.32	227.51	247.25	201.49	5.40	
5700.00	5702.76	15.98	115.27	5547.43	25.98	14.62	227.62	252.31	205.48	5.39	
5800.00	5802.63	15.98	115.27	5643.44	26.57	14.91	227.74	257.37	209.47	5.37	
5900.00	5902.50	15.98	115.27	5739.45	27.16	15.20	227.84	262.43	213.47	5.36	

## 5D Anti-Collision Report

Secondary Well: Goetzel 33C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
6000.00	6002.37	15.98	115.27	5835.46	27.75	15.50	227.95	267.49	217.46	5.35	
6100.00	6102.25	15.98	115.27	5931.48	28.34	15.79	228.05	272.55	221.46	5.33	
6200.00	6202.12	15.98	115.27	6027.49	28.94	16.09	228.14	277.61	225.45	5.32	
6300.00	6301.97	15.98	115.27	6123.48	29.53	16.38	221.29	282.59	229.31	5.30	
6400.00	6400.95	15.78	115.68	6218.64	30.11	16.67	193.39	286.97	231.80	5.20	
6500.00	6499.42	9.76	139.48	6314.70	30.39	16.86	155.85	291.87	234.73	5.11	
6600.00	6600.64	8.11	192.58	6414.84	30.37	16.81	133.82	297.67	239.13	5.08	
6700.00	6704.80	13.09	230.59	6517.31	30.07	16.47	124.79	304.16	244.80	5.12	
6800.00	6812.09	20.60	245.31	6619.96	29.54	15.82	121.25	311.05	251.59	5.23	
6900.00	6922.58	28.95	252.34	6720.21	28.84	14.86	120.06	317.98	259.11	5.40	
7000.00	7036.24	37.76	256.49	6815.08	28.08	13.60	119.95	324.54	266.88	5.63	
7100.00	7152.93	46.90	259.32	6901.25	27.40	12.14	120.30	330.33	274.30	5.90	
7200.00	7272.29	56.30	261.44	6975.32	26.94	10.67	120.81	334.94	280.62	6.17	
7300.00	7393.84	65.91	263.17	7033.98	26.85	9.58	121.30	338.03	285.14	6.39	
7400.00	7516.91	75.65	264.67	7074.45	27.24	9.36	121.66	339.34	287.21	6.51	
7500.00	7640.70	85.46	266.06	7094.73	28.08	10.26	121.82	338.71	286.49	6.49	
7600.00	7751.71	90.00	266.68	7097.00	29.11	11.25	121.92	336.75	283.23	6.29	
7700.00	7851.69	90.00	266.68	7097.00	30.23	11.72	122.10	335.02	279.60	6.04	
7800.00	7951.67	90.00	266.68	7097.00	31.56	12.23	122.29	333.30	275.66	5.78	
7900.00	8051.65	90.00	266.68	7097.00	33.08	12.76	122.47	331.58	271.28	5.50	
8000.00	8151.62	90.00	266.68	7097.00	34.75	13.31	122.66	329.86	266.81	5.23	
8100.00	8251.60	90.00	266.68	7097.00	36.56	13.88	122.85	328.15	262.02	4.96	
8200.00	8351.58	90.00	266.68	7097.00	38.48	14.46	123.05	326.44	257.09	4.71	
8300.00	8451.56	90.00	266.68	7097.00	40.51	15.06	123.24	324.74	252.06	4.47	
8400.00	8551.54	90.00	266.68	7097.00	42.63	15.67	123.44	323.04	246.92	4.24	
8500.00	8651.52	90.00	266.68	7097.00	44.82	16.30	123.64	321.34	241.68	4.03	
8600.00	8751.50	90.00	266.68	7097.00	47.08	16.93	123.84	319.65	236.35	3.84	
8700.00	8851.48	90.00	266.68	7097.00	49.39	17.57	124.05	317.96	230.94	3.65	
8800.00	8951.46	90.00	266.68	7097.00	51.74	18.21	124.26	316.27	225.47	3.48	
8900.00	9051.44	90.00	266.68	7097.00	54.15	18.86	124.46	314.59	219.95	3.32	
9000.00	9151.42	90.00	266.68	7097.00	56.58	19.52	124.68	312.91	214.39	3.18	
9100.00	9251.40	90.00	266.68	7097.00	59.05	20.18	124.89	311.24	208.80	3.04	
9200.00	9351.38	90.00	266.68	7097.00	61.55	20.85	125.10	309.57	203.20	2.91	
9300.00	9451.36	90.00	266.68	7097.00	64.07	21.52	125.32	307.91	197.59	2.79	
9400.00	9551.33	90.00	266.68	7097.00	66.61	22.20	125.54	306.25	191.99	2.68	
9500.00	9651.31	90.00	266.68	7097.00	69.18	22.88	125.76	304.60	186.39	2.58	
9600.00	9751.29	90.00	266.68	7097.00	71.76	23.56	125.99	302.95	180.81	2.48	SF(Lo)
9700.00	9851.27	90.00	266.68	7097.00	74.36	24.25	126.22	301.30	175.24	2.39	SF(Lo)
9800.00	9951.25	90.00	266.68	7097.00	76.97	24.93	126.45	299.66	169.70	2.31	SF(Lo)
9900.00	10051.23	90.00	266.68	7097.00	79.59	25.62	126.68	298.03	164.18	2.23	SF(Lo)
10000.00	10151.21	90.00	266.68	7097.00	82.23	26.32	126.91	296.40	158.67	2.15	SF(Lo)
10100.00	10251.19	90.00	266.68	7097.00	84.87	27.01	127.15	294.77	153.13	2.08	SF(Lo)
10200.00	10351.17	90.00	266.68	7097.00	87.53	27.71	127.39	293.15	147.63	2.01	SF(Lo)
10300.00	10451.15	90.00	266.68	7097.00	90.19	28.41	127.64	291.54	142.15	1.95	SF(Lo)
10400.00	10551.13	90.00	266.68	7097.00	92.86	29.11	127.88	289.93	136.71	1.89	SF(Lo)
10500.00	10651.11	90.00	266.68	7097.00	95.54	29.81	128.13	288.32	131.25	1.84	SF(Lo)
10600.00	10751.09	90.00	266.68	7097.00	98.22	30.51	128.38	286.72	125.79	1.78	SF(Lo)
10700.00	10851.07	90.00	266.68	7097.00	100.92	31.22	128.63	285.13	120.37	1.73	SF(Lo)
10800.00	10951.04	90.00	266.68	7097.00	103.61	31.92	128.89	283.54	114.99	1.68	SF(Lo)
10900.00	11051.02	90.00	266.68	7097.00	106.32	32.63	129.15	281.96	109.64	1.64	SF(Lo)
11000.00	11151.00	90.00	266.68	7097.00	109.02	33.34	129.41	280.38	104.34	1.59	SF(Lo)
11100.00	11250.98	90.00	266.68	7097.00	111.73	34.05	129.68	278.81	99.07	1.55	SF(Lo)
11200.00	11350.96	90.00	266.68	7097.00	114.45	34.76	129.95	277.25	93.85	1.51	SF(Lo)
11300.00	11450.94	90.00	266.68	7097.00	117.17	35.47	130.22	275.69	88.67	1.47	SF(Med)
11400.00	11550.92	90.00	266.68	7097.00	119.89	36.18	130.49	274.14	83.54	1.44	SF(Med)
11500.00	11650.90	90.00	266.68	7097.00	122.62	36.90	130.77	272.60	78.45	1.40	SF(Med)
11600.00	11750.88	90.00	266.68	7097.00	125.35	37.61	131.05	271.06	73.41	1.37	SF(Med)
11700.00	11850.86	90.00	266.68	7097.00	128.08	38.32	131.34	269.52	68.42	1.34	SF(Med)



## 5D Anti-Collision Report

Secondary Well: Goetzel 33C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
11800.00	11950.84	90.00	266.68	7097.00	130.81	39.04	131.63	268.00	63.48	1.31	SF(Med)
11900.00	12050.82	90.00	266.68	7097.00	133.55	39.75	131.92	266.48	58.59	1.28	SF(Med)
12000.00	12150.80	90.00	266.68	7097.00	136.29	40.47	132.21	264.97	53.75	1.25	SF(Med)
12100.00	12250.78	90.00	266.68	7097.00	139.04	41.19	132.51	263.46	48.98	1.23	SF(Med)
12200.00	12350.75	90.00	266.68	7097.00	141.78	41.91	132.81	261.97	44.25	1.20	SF(Med)
12300.00	12450.73	90.00	266.68	7097.00	144.53	42.62	133.11	260.48	39.59	1.18	SF(Med)
12400.00	12550.71	90.00	266.68	7097.00	147.27	43.34	133.42	258.99	34.92	1.16	SF(Med)
12500.00	12650.69	90.00	266.68	7097.00	150.02	44.06	133.73	257.52	30.27	1.13	SF(Med)
12600.00	12750.67	90.00	266.68	7097.00	152.78	44.78	134.05	256.05	25.68	1.11	SF(Med)
12700.00	12850.65	90.00	266.68	7097.00	155.53	45.50	134.37	254.59	21.16	1.09	SF(Med)
12800.00	12950.63	90.00	266.68	7097.00	158.29	46.22	134.69	253.14	16.69	1.07	SF(Med)
12900.00	13050.61	90.00	266.68	7097.00	161.04	46.94	135.01	251.70	12.29	1.05	SF(Med)
13000.00	13150.59	90.00	266.68	7097.00	163.80	47.66	135.34	250.26	7.95	1.03	SF(Med)
13100.00	13250.57	90.00	266.68	7097.00	166.56	48.38	135.68	248.83	3.68	1.02	SF(Med)
13200.00	13350.55	90.00	266.68	7097.00	169.32	49.11	136.01	247.42	-0.52	1.00	SF(Hi)
13300.00	13450.53	90.00	266.68	7097.00	172.08	49.83	136.35	246.01	-4.65	0.98	SF(Hi)
13400.00	13550.51	90.00	266.68	7097.00	174.84	50.55	136.70	244.61	-8.72	0.97	SF(Hi)
13500.00	13650.48	90.00	266.68	7097.00	177.61	51.27	137.05	243.21	-12.70	0.95	SF(Hi)
13600.00	13750.46	90.00	266.68	7097.00	180.37	52.00	137.40	241.83	-16.61	0.94	SF(Hi)
13700.00	13850.44	90.00	266.68	7097.00	183.14	52.72	137.76	240.46	-20.45	0.92	SF(Hi)
13800.00	13950.42	90.00	266.68	7097.00	185.91	53.44	138.12	239.09	-24.20	0.91	SF(Hi)
13900.00	14050.40	90.00	266.68	7097.00	188.67	54.17	138.49	237.74	-27.88	0.90	SF(Hi)
14000.00	14150.38	90.00	266.68	7097.00	191.44	54.89	138.86	236.39	-31.47	0.88	SF(Hi)
14100.00	14250.36	90.00	266.68	7097.00	194.21	55.62	139.23	235.06	-34.98	0.87	SF(Hi)
14200.00	14350.34	90.00	266.68	7097.00	196.98	56.34	139.61	233.73	-38.40	0.86	SF(Hi)
14300.00	14450.32	90.00	266.68	7097.00	199.75	57.06	139.99	232.42	-41.73	0.85	SF(Hi)
14400.00	14550.30	90.00	266.68	7097.00	202.53	57.79	140.38	231.12	-44.97	0.84	SF(Hi)
14500.00	14650.28	90.00	266.68	7097.00	205.30	58.51	140.77	229.82	-48.12	0.83	SF(Hi)
14600.00	14750.26	90.00	266.68	7097.00	208.07	59.24	141.16	228.54	-51.17	0.82	SF(Hi)
14700.00	14850.24	90.00	266.68	7097.00	210.84	59.97	141.56	227.27	-54.12	0.81	SF(Hi)
14800.00	14950.22	90.00	266.68	7097.00	213.62	60.69	141.97	226.01	-56.98	0.80	SF(Hi)
14900.00	15050.19	90.00	266.68	7097.00	216.39	61.42	142.37	224.76	-59.73	0.79	SF(Hi)
15000.00	15150.17	90.00	266.68	7097.00	219.17	62.14	142.79	223.52	-62.38	0.78	SF(Hi)
15100.00	15250.15	90.00	266.68	7097.00	221.95	62.87	143.21	222.30	-64.92	0.77	SF(Hi)
15200.00	15350.13	90.00	266.68	7097.00	224.72	63.60	143.63	221.08	-67.36	0.77	SF(Hi)
15300.00	15450.11	90.00	266.68	7097.00	227.50	64.32	144.06	219.88	-69.68	0.76	SF(Hi)
15400.00	15550.09	90.00	266.68	7097.00	230.28	65.05	144.49	218.69	-71.89	0.75	SF(Hi)
15456.59	15600.60	90.00	266.68	7097.00	231.68	65.42	144.71	218.11	-72.44	0.75	SF(Hi)
Secondary Well: Goetzel 13N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	179.55	20.04	19.30	27.32	CC (Med)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	179.55	20.04	19.08	21.00	CC (Med)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	179.55	20.04	18.63	14.28	CC (Med)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	179.55	20.04	18.18	10.81	CC (Med)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	179.55	20.04	17.73	8.70	CC (Med)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	179.55	20.04	17.28	7.28	CC (Med)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	179.55	20.04	16.83	6.26	CC (Med)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	179.55	20.04	16.39	5.49	CC (Med)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	179.55	20.04	15.94	4.89	CC (Med)
900.00	899.78	1.00	127.01	899.78	1.90	1.90	178.58	20.30	15.77	4.48	CC (Med)
1000.00	999.23	2.98	127.01	999.16	2.08	2.08	171.71	22.63	17.68	4.58	CC (Med)
1100.00	1098.45	4.97	127.01	1098.14	2.28	2.27	40.19	26.63	21.30	4.99	CC (Med)
1200.00	1197.49	6.95	127.01	1196.64	2.50	2.46	34.87	31.08	25.35	5.43	CC (Med)
1300.00	1296.35	8.93	127.01	1294.55	2.76	2.66	31.20	35.78	29.66	5.84	CC (Lo)
1400.00	1395.04	10.90	127.01	1391.76	3.05	2.87	28.66	40.65	34.12	6.22	CC (Lo)
1500.00	1493.56	12.87	127.01	1488.16	3.39	3.08	26.90	45.62	38.64	6.54	CC (Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
1600.00	1591.91	14.84	127.01	1583.64	3.78	3.29	25.70	50.65	43.22	6.82	CC (Lo)
1700.00	1690.09	16.80	127.01	1678.10	4.24	3.52	24.92	55.71	47.79	7.03	CC (Lo)
1800.00	1789.46	17.39	127.01	1772.98	4.76	3.77	24.74	60.01	51.55	7.09	CC (Lo)
1900.00	1889.44	17.39	127.01	1868.39	5.32	4.03	25.87	61.38	52.29	6.75	CC (Lo)
2000.00	1989.43	17.39	127.01	1963.81	5.89	4.30	27.41	61.83	52.04	6.32	CC (Lo)
2100.00	2089.41	17.39	127.01	2059.22	6.47	4.57	28.92	62.33	51.80	5.92	CC (Lo)
2200.00	2189.40	17.39	127.01	2154.64	7.07	4.85	30.41	62.87	51.55	5.56	CC (Lo)
2300.00	2289.38	17.39	127.01	2250.06	7.67	5.13	31.87	63.45	51.30	5.22	CC (Lo)
2400.00	2389.37	17.39	127.01	2345.48	8.28	5.42	33.31	64.07	51.06	4.93	CC (Lo)
2500.00	2489.35	17.39	127.01	2440.89	8.89	5.71	34.71	64.73	50.83	4.66	CC (Lo)
2600.00	2589.34	17.39	127.01	2536.31	9.51	6.00	36.09	65.43	50.56	4.40	CC (Lo)
2700.00	2689.32	17.39	127.01	2631.73	10.13	6.29	37.44	66.16	50.28	4.16	
2800.00	2789.31	17.39	127.01	2727.15	10.75	6.58	38.76	66.94	50.01	3.95	
2900.00	2889.29	17.39	127.01	2822.57	11.37	6.87	40.04	67.74	49.76	3.77	
3000.00	2989.28	17.39	127.01	2917.98	12.00	7.17	41.30	68.58	49.53	3.60	
3100.00	3089.26	17.39	127.01	3013.40	12.63	7.47	42.52	69.45	49.30	3.45	
3200.00	3189.25	17.39	127.01	3108.82	13.26	7.76	43.72	70.36	49.06	3.30	
3300.00	3289.23	17.39	127.01	3204.24	13.89	8.06	44.88	71.29	48.80	3.17	
3400.00	3389.22	17.39	127.01	3299.65	14.52	8.36	46.01	72.25	48.56	3.05	
3500.00	3489.21	17.39	127.01	3395.07	15.15	8.66	47.11	73.24	48.34	2.94	
3600.00	3589.19	17.39	127.01	3490.49	15.79	8.96	48.19	74.25	48.13	2.84	
3700.00	3689.18	17.39	127.01	3585.91	16.42	9.26	49.23	75.29	47.94	2.75	
3800.00	3789.16	17.39	127.01	3681.33	17.05	9.56	50.24	76.36	47.78	2.67	
3900.00	3889.15	17.39	127.01	3776.74	17.69	9.87	51.23	77.45	47.62	2.60	
4000.00	3989.13	17.39	127.01	3872.16	18.33	10.17	52.19	78.56	47.46	2.53	
4100.00	4089.12	17.39	127.01	3967.58	18.96	10.47	53.12	79.69	47.30	2.46	SF(Lo)
4200.00	4189.10	17.39	127.01	4063.00	19.60	10.78	54.03	80.84	47.15	2.40	SF(Lo)
4300.00	4289.09	17.39	127.01	4158.41	20.23	11.08	54.91	82.01	46.99	2.34	SF(Lo)
4400.00	4389.07	17.39	127.01	4253.83	20.87	11.38	55.76	83.20	46.84	2.29	SF(Lo)
4500.00	4489.06	17.39	127.01	4349.25	21.51	11.69	56.59	84.41	46.72	2.24	SF(Lo)
4600.00	4589.04	17.39	127.01	4444.67	22.15	11.99	57.40	85.64	46.60	2.19	SF(Lo)
4700.00	4689.03	17.39	127.01	4540.08	22.79	12.30	58.18	86.88	46.51	2.15	SF(Lo)
4800.00	4789.01	17.39	127.01	4635.50	23.42	12.60	58.94	88.14	46.43	2.11	SF(Lo)
4900.00	4889.00	17.39	127.01	4730.92	24.06	12.91	59.68	89.41	46.36	2.08	SF(Lo)
5000.00	4988.99	17.39	127.01	4826.34	24.70	13.21	60.40	90.70	46.31	2.04	SF(Lo)
5100.00	5088.97	17.39	127.01	4921.76	25.34	13.52	61.10	92.00	46.27	2.01	SF(Lo)
5200.00	5188.96	17.39	127.01	5017.17	25.98	13.82	61.78	93.31	46.25	1.98	SF(Lo)
5300.00	5288.94	17.39	127.01	5112.59	26.62	14.13	62.44	94.64	46.24	1.96	SF(Lo)
5400.00	5388.93	17.39	127.01	5208.01	27.26	14.43	63.08	95.98	46.25	1.93	SF(Lo)
5500.00	5488.91	17.39	127.01	5303.43	27.90	14.74	63.71	97.33	46.27	1.91	SF(Lo)
5600.00	5588.90	17.39	127.01	5398.84	28.54	15.05	64.32	98.70	46.28	1.88	SF(Lo)
5700.00	5688.88	17.39	127.01	5494.26	29.18	15.35	64.91	100.07	46.30	1.86	SF(Lo)
5800.00	5788.87	17.39	127.01	5589.68	29.81	15.66	65.48	101.45	46.32	1.84	SF(Lo)
5900.00	5888.85	17.39	127.01	5685.10	30.45	15.97	66.04	102.85	46.36	1.82	SF(Lo)
6000.00	5988.84	17.39	127.01	5780.51	31.09	16.27	66.58	104.25	46.40	1.80	SF(Lo)
6100.00	6088.82	17.39	127.01	5875.93	31.73	16.58	67.11	105.66	46.44	1.78	SF(Lo)
6200.00	6188.81	17.39	127.01	5971.35	32.37	16.89	67.63	107.08	46.48	1.77	SF(Lo)
6300.00	6288.79	17.39	127.01	6066.76	33.01	17.19	60.59	108.23	46.50	1.75	SF(Lo)
6400.00	6386.65	14.70	137.40	6160.49	33.54	17.48	25.52	107.37	46.70	1.77	SF(Lo)
6500.00	6483.84	11.63	169.35	6255.23	33.60	17.60	338.62	107.52	49.16	1.84	SF(Lo)
6600.00	6582.55	13.23	205.95	6351.78	33.26	17.52	307.30	109.26	53.96	1.98	SF(Lo)
6700.00	6682.90	18.48	228.61	6448.37	32.55	17.21	289.40	112.58	60.23	2.15	SF(Lo)
6800.00	6784.96	25.33	240.71	6543.05	31.55	16.64	277.72	117.27	67.83	2.37	SF(Lo)
6900.00	6888.77	32.88	247.86	6633.71	30.36	15.79	269.33	123.03	75.82	2.61	
7000.00	6994.34	40.84	252.61	6718.13	29.14	14.63	263.06	129.48	83.91	2.84	
7100.00	7101.62	49.06	256.08	6794.00	28.06	13.20	258.35	136.24	91.41	3.04	
7200.00	7210.52	57.50	258.81	6859.06	27.31	11.64	254.89	142.90	97.96	3.18	
7300.00	7320.87	66.10	261.09	6911.17	27.01	10.24	252.47	149.15	103.21	3.25	

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
7400.00	7432.47	74.82	263.11	6948.47	27.23	9.56	250.94	154.69	106.70	3.22	
7500.00	7545.03	83.63	264.98	6969.49	27.93	10.08	250.20	159.28	108.45	3.13	
7600.00	7654.45	90.00	266.28	6974.00	28.93	11.34	250.22	162.60	108.76	3.02	
7700.00	7754.41	90.00	266.28	6974.00	30.01	11.83	250.54	165.17	109.20	2.95	
7800.00	7854.37	90.00	266.28	6974.00	31.29	12.35	250.85	167.74	109.19	2.86	
7900.00	7954.34	90.00	266.28	6974.00	32.75	12.90	251.15	170.32	108.86	2.77	
8000.00	8054.30	90.00	266.28	6974.00	34.38	13.47	251.45	172.91	108.14	2.67	
8100.00	8154.26	90.00	266.28	6974.00	36.15	14.06	251.73	175.50	107.30	2.57	
8200.00	8254.22	90.00	266.28	6974.00	38.04	14.67	252.00	178.09	106.01	2.47	SF(Lo)
8300.00	8354.19	90.00	266.28	6974.00	40.03	15.29	252.27	180.69	104.58	2.37	SF(Lo)
8400.00	8454.15	90.00	266.28	6974.00	42.12	15.92	252.53	183.29	103.06	2.28	SF(Lo)
8500.00	8554.11	90.00	266.28	6974.00	44.28	16.56	252.78	185.89	101.41	2.20	SF(Lo)
8600.00	8654.07	90.00	266.28	6974.00	46.52	17.20	253.03	188.50	99.65	2.12	SF(Lo)
8700.00	8754.04	90.00	266.28	6974.00	48.81	17.86	253.27	191.11	97.78	2.05	SF(Lo)
8800.00	8854.00	90.00	266.28	6974.00	51.15	18.52	253.50	193.73	95.82	1.98	SF(Lo)
8900.00	8953.96	90.00	266.28	6974.00	53.53	19.18	253.73	196.34	93.78	1.91	SF(Lo)
9000.00	9053.93	90.00	266.28	6974.00	55.95	19.85	253.95	198.97	91.66	1.85	SF(Lo)
9100.00	9153.89	90.00	266.28	6974.00	58.41	20.52	254.16	201.59	89.49	1.80	SF(Lo)
9200.00	9253.85	90.00	266.28	6974.00	60.89	21.20	254.37	204.22	87.25	1.75	SF(Lo)
9300.00	9353.81	90.00	266.28	6974.00	63.40	21.88	254.57	206.84	84.92	1.70	SF(Lo)
9400.00	9453.78	90.00	266.28	6974.00	65.94	22.57	254.77	209.48	82.50	1.65	SF(Lo)
9500.00	9553.74	90.00	266.28	6974.00	68.49	23.25	254.97	212.11	80.03	1.61	SF(Lo)
9600.00	9653.70	90.00	266.28	6974.00	71.06	23.94	255.16	214.75	77.51	1.56	SF(Lo)
9700.00	9753.67	90.00	266.28	6974.00	73.65	24.64	255.34	217.39	74.96	1.53	SF(Lo)
9800.00	9853.63	90.00	266.28	6974.00	76.26	25.33	255.52	220.03	72.38	1.49	SF(Med)
9900.00	9953.59	90.00	266.28	6974.00	78.87	26.03	255.69	222.67	69.78	1.46	SF(Med)
10000.00	10053.55	90.00	266.28	6974.00	81.50	26.72	255.87	225.31	67.16	1.42	SF(Med)
10100.00	10153.52	90.00	266.28	6974.00	84.14	27.42	256.03	227.96	64.53	1.39	SF(Med)
10200.00	10253.48	90.00	266.28	6974.00	86.79	28.12	256.20	230.61	61.88	1.37	SF(Med)
10300.00	10353.44	90.00	266.28	6974.00	89.45	28.83	256.36	233.26	59.21	1.34	SF(Med)
10400.00	10453.40	90.00	266.28	6974.00	92.11	29.53	256.51	235.91	56.54	1.32	SF(Med)
10500.00	10553.37	90.00	266.28	6974.00	94.78	30.24	256.67	238.57	53.85	1.29	SF(Med)
10600.00	10653.33	90.00	266.28	6974.00	97.47	30.94	256.82	241.22	51.15	1.27	SF(Med)
10700.00	10753.29	90.00	266.28	6974.00	100.15	31.65	256.96	243.88	48.43	1.25	SF(Med)
10800.00	10853.26	90.00	266.28	6974.00	102.84	32.36	257.10	246.54	45.69	1.23	SF(Med)
10900.00	10953.22	90.00	266.28	6974.00	105.54	33.07	257.24	249.20	42.95	1.21	SF(Med)
11000.00	11053.18	90.00	266.28	6974.00	108.24	33.78	257.38	251.86	40.19	1.19	SF(Med)
11100.00	11153.14	90.00	266.28	6974.00	110.95	34.49	257.52	254.53	37.42	1.17	SF(Med)
11200.00	11253.11	90.00	266.28	6974.00	113.66	35.21	257.65	257.19	34.65	1.16	SF(Med)
11300.00	11353.07	90.00	266.28	6974.00	116.38	35.92	257.78	259.86	31.87	1.14	SF(Med)
11400.00	11453.03	90.00	266.28	6974.00	119.10	36.63	257.90	262.52	29.08	1.12	SF(Med)
11500.00	11552.99	90.00	266.28	6974.00	121.82	37.35	258.03	265.19	26.29	1.11	SF(Med)
11600.00	11652.96	90.00	266.28	6974.00	124.54	38.06	258.15	267.86	23.49	1.10	SF(Med)
11700.00	11752.92	90.00	266.28	6974.00	127.27	38.78	258.27	270.53	20.68	1.08	SF(Med)
11800.00	11852.88	90.00	266.28	6974.00	130.01	39.50	258.38	273.21	17.87	1.07	SF(Med)
11900.00	11952.85	90.00	266.28	6974.00	132.74	40.21	258.50	275.88	15.06	1.06	SF(Med)
12000.00	12052.81	90.00	266.28	6974.00	135.48	40.93	258.61	278.55	12.24	1.05	SF(Med)
12100.00	12152.77	90.00	266.28	6974.00	138.21	41.65	258.72	281.23	9.42	1.03	SF(Med)
12200.00	12252.73	90.00	266.28	6974.00	140.96	42.37	258.83	283.91	6.59	1.02	SF(Med)
12300.00	12352.70	90.00	266.28	6974.00	143.70	43.09	258.93	286.58	3.76	1.01	SF(Med)
12400.00	12452.66	90.00	266.28	6974.00	146.44	43.81	259.04	289.26	0.92	1.00	SF(Med)
12500.00	12552.62	90.00	266.28	6974.00	149.19	44.53	259.14	291.94	-1.92	0.99	SF(Hi)
12600.00	12652.59	90.00	266.28	6974.00	151.94	45.25	259.24	294.62	-4.76	0.98	SF(Hi)
12700.00	12752.55	90.00	266.28	6974.00	154.69	45.97	259.34	297.30	-7.60	0.98	SF(Hi)
12800.00	12852.51	90.00	266.28	6974.00	157.44	46.69	259.43	299.98	-10.45	0.97	SF(Hi)
12900.00	12952.47	90.00	266.28	6974.00	160.20	47.41	259.53	302.67	-13.30	0.96	SF(Hi)
13000.00	13052.44	90.00	266.28	6974.00	162.95	48.13	259.62	305.35	-16.15	0.95	SF(Hi)
13100.00	13152.40	90.00	266.28	6974.00	165.71	48.86	259.71	308.03	-19.00	0.94	SF(Hi)

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13200.00	13252.36	90.00	266.28	6974.00	168.46	49.58	259.80	310.72	-21.86	0.93	SF(Hi)
13300.00	13352.32	90.00	266.28	6974.00	171.22	50.30	259.89	313.41	-24.71	0.93	SF(Hi)
13400.00	13452.29	90.00	266.28	6974.00	173.98	51.02	259.98	316.09	-27.57	0.92	SF(Hi)
13500.00	13552.25	90.00	266.28	6974.00	176.74	51.75	260.06	318.78	-30.44	0.91	SF(Hi)
13600.00	13652.21	90.00	266.28	6974.00	179.51	52.47	260.15	321.47	-33.30	0.91	SF(Hi)
13700.00	13752.18	90.00	266.28	6974.00	182.27	53.20	260.23	324.16	-36.16	0.90	SF(Hi)
13800.00	13852.14	90.00	266.28	6974.00	185.03	53.92	260.31	326.85	-39.03	0.89	SF(Hi)
13900.00	13952.10	90.00	266.28	6974.00	187.80	54.64	260.39	329.54	-41.89	0.89	SF(Hi)
14000.00	14052.06	90.00	266.28	6974.00	190.56	55.37	260.47	332.23	-44.76	0.88	SF(Hi)
14100.00	14152.03	90.00	266.28	6974.00	193.33	56.09	260.54	334.92	-47.63	0.88	SF(Hi)
14200.00	14251.99	90.00	266.28	6974.00	196.10	56.82	260.62	337.61	-50.50	0.87	SF(Hi)
14300.00	14351.95	90.00	266.28	6974.00	198.87	57.54	260.70	340.30	-53.37	0.86	SF(Hi)
14400.00	14451.92	90.00	266.28	6974.00	201.63	58.27	260.77	342.99	-56.25	0.86	SF(Hi)
14500.00	14551.88	90.00	266.28	6974.00	204.40	59.00	260.84	345.69	-59.12	0.85	SF(Hi)
14600.00	14651.84	90.00	266.28	6974.00	207.17	59.72	260.91	348.38	-62.00	0.85	SF(Hi)
14700.00	14751.80	90.00	266.28	6974.00	209.95	60.45	260.98	351.08	-64.87	0.84	SF(Hi)
14800.00	14851.77	90.00	266.28	6974.00	212.72	61.17	261.05	353.77	-67.75	0.84	SF(Hi)
14900.00	14951.73	90.00	266.28	6974.00	215.49	61.90	261.12	356.47	-70.62	0.83	SF(Hi)
15000.00	15051.69	90.00	266.28	6974.00	218.26	62.63	261.19	359.16	-73.50	0.83	SF(Hi)
15100.00	15151.65	90.00	266.28	6974.00	221.04	63.35	261.25	361.86	-76.38	0.83	SF(Hi)
15200.00	15251.62	90.00	266.28	6974.00	223.81	64.08	261.32	364.56	-79.26	0.82	SF(Hi)
15300.00	15286.68	90.00	266.28	6974.00	224.78	64.33	261.34	372.95	-69.39	0.84	SF(Hi)
15400.00	15286.68	90.00	266.28	6974.00	224.78	64.33	261.34	405.02	-10.07	0.98	SF(Hi)
15456.59	15286.68	90.00	266.28	6974.00	224.78	64.33	261.34	432.47	39.57	1.10	SF(Med)
Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	179.95	40.07	39.34	54.65	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	179.95	40.07	39.12	42.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	179.95	40.07	38.67	28.55	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	179.95	40.07	38.22	21.63	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	179.95	40.07	37.77	17.40	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	179.95	40.07	37.32	14.56	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	179.95	40.07	36.87	12.52	CC (Lo)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	179.95	40.07	36.42	10.98	CC (Lo)
800.00	799.53	0.99	131.86	799.53	1.67	1.67	179.50	40.36	36.28	9.87	CC (Lo)
900.00	898.48	2.97	131.86	898.41	1.86	1.85	176.11	42.77	38.28	9.53	CC (Lo)
1000.00	997.07	4.94	131.86	996.77	2.06	2.04	170.42	47.96	43.05	9.78	CC (Lo)
1100.00	1095.27	6.91	131.86	1094.43	2.28	2.24	41.23	55.09	49.77	10.37	CC (Lo)
1200.00	1193.17	8.86	131.86	1191.41	2.53	2.44	37.48	62.80	57.10	11.02	CC (Lo)
1300.00	1290.79	10.82	131.86	1287.58	2.82	2.64	34.91	70.89	64.77	11.58	
1400.00	1388.12	12.76	131.86	1382.86	3.16	2.85	33.19	79.25	72.71	12.11	
1500.00	1485.17	14.70	131.86	1477.13	3.56	3.07	32.08	87.81	80.81	12.55	
1600.00	1581.94	16.64	131.86	1570.30	4.02	3.30	31.43	96.50	89.02	12.89	
1700.00	1678.44	18.57	131.86	1662.27	4.54	3.53	31.13	105.32	97.30	13.13	
1800.00	1777.43	18.97	131.86	1755.91	5.13	3.80	31.31	113.28	104.66	13.14	
1900.00	1877.27	18.97	131.86	1850.33	5.75	4.07	32.35	118.42	109.10	12.71	
2000.00	1977.14	18.97	131.86	1944.77	6.38	4.36	33.61	122.72	112.65	12.18	
2100.00	2077.01	18.97	131.86	2039.22	7.03	4.65	34.78	127.08	116.20	11.68	
2200.00	2176.89	18.97	131.86	2133.67	7.68	4.94	35.87	131.49	119.78	11.23	
2300.00	2276.76	18.97	131.86	2228.12	8.34	5.23	36.90	135.95	123.36	10.80	
2400.00	2376.63	18.97	131.86	2322.56	9.01	5.53	37.86	140.44	126.95	10.41	
2500.00	2476.50	18.97	131.86	2417.01	9.68	5.83	38.76	144.98	130.56	10.06	
2600.00	2576.37	18.97	131.86	2511.46	10.35	6.14	39.60	149.54	134.17	9.73	
2700.00	2676.25	18.97	131.86	2605.91	11.02	6.44	40.39	154.14	137.78	9.42	
2800.00	2776.12	18.97	131.86	2700.36	11.70	6.75	41.14	158.76	141.41	9.15	
2900.00	2875.99	18.97	131.86	2794.80	12.38	7.06	41.85	163.41	145.05	8.90	

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
3000.00	2975.86	18.97	131.86	2889.25	13.06	7.37	42.51	168.08	148.68	8.66	
3100.00	3075.74	18.97	131.86	2983.70	13.74	7.68	43.14	172.78	152.32	8.45	
3200.00	3175.61	18.97	131.86	3078.15	14.43	7.99	43.74	177.49	155.98	8.25	
3300.00	3275.48	18.97	131.86	3172.59	15.11	8.30	44.31	182.23	159.64	8.07	
3400.00	3375.35	18.97	131.86	3267.04	15.80	8.61	44.84	186.97	163.32	7.91	
3500.00	3475.22	18.97	131.86	3361.49	16.48	8.93	45.35	191.74	167.01	7.75	
3600.00	3575.10	18.97	131.86	3455.94	17.17	9.24	45.84	196.52	170.71	7.61	
3700.00	3674.97	18.97	131.86	3550.39	17.86	9.56	46.30	201.31	174.40	7.48	
3800.00	3774.84	18.97	131.86	3644.83	18.54	9.87	46.74	206.12	178.09	7.35	
3900.00	3874.71	18.97	131.86	3739.28	19.23	10.19	47.16	210.93	181.79	7.24	
4000.00	3974.59	18.97	131.86	3833.73	19.92	10.50	47.57	215.76	185.50	7.13	
4100.00	4074.46	18.97	131.86	3928.18	20.61	10.82	47.95	220.60	189.21	7.03	
4200.00	4174.33	18.97	131.86	4022.62	21.30	11.13	48.32	225.45	192.94	6.93	
4300.00	4274.20	18.97	131.86	4117.07	21.99	11.45	48.67	230.30	196.66	6.85	
4400.00	4374.07	18.97	131.86	4211.52	22.68	11.77	49.01	235.17	200.40	6.76	
4500.00	4473.95	18.97	131.86	4305.97	23.37	12.09	49.33	240.04	204.14	6.69	
4600.00	4573.82	18.97	131.86	4400.42	24.06	12.40	49.65	244.92	207.89	6.61	
4700.00	4673.69	18.97	131.86	4494.86	24.75	12.72	49.94	249.81	211.64	6.54	
4800.00	4773.56	18.97	131.86	4589.31	25.44	13.04	50.23	254.70	215.39	6.48	
4900.00	4873.43	18.97	131.86	4683.76	26.13	13.36	50.51	259.60	219.13	6.41	
5000.00	4973.31	18.97	131.86	4778.21	26.82	13.68	50.78	264.50	222.88	6.35	
5100.00	5073.18	18.97	131.86	4872.65	27.51	13.99	51.03	269.41	226.63	6.30	
5200.00	5173.05	18.97	131.86	4967.10	28.20	14.31	51.28	274.33	230.39	6.24	
5300.00	5272.92	18.97	131.86	5061.55	28.89	14.63	51.52	279.25	234.14	6.19	
5400.00	5372.80	18.97	131.86	5156.00	29.58	14.95	51.75	284.18	237.91	6.14	
5500.00	5472.67	18.97	131.86	5250.45	30.27	15.27	51.97	289.11	241.67	6.10	
5600.00	5572.54	18.97	131.86	5344.89	30.97	15.59	52.19	294.04	245.44	6.05	
5700.00	5672.41	18.97	131.86	5439.34	31.66	15.91	52.40	298.98	249.22	6.01	
5800.00	5772.28	18.97	131.86	5533.79	32.35	16.23	52.60	303.92	252.99	5.97	
5900.00	5872.16	18.97	131.86	5628.24	33.04	16.55	52.79	308.87	256.77	5.93	
6000.00	5972.03	18.97	131.86	5722.68	33.73	16.87	52.98	313.82	260.55	5.89	
6100.00	6071.90	18.97	131.86	5817.13	34.43	17.19	53.16	318.77	264.34	5.86	
6200.00	6171.77	18.97	131.86	5911.58	35.12	17.51	53.34	323.72	268.12	5.82	
6300.00	6270.09	15.71	146.77	6005.19	35.60	17.79	47.05	328.83	272.02	5.79	
6400.00	6367.13	13.70	176.70	6099.18	35.56	17.91	18.21	334.39	276.73	5.80	
6500.00	6463.54	15.68	206.46	6192.57	35.06	17.85	338.48	340.30	282.22	5.86	
6600.00	6559.41	20.49	225.98	6283.76	34.17	17.59	314.25	346.40	288.31	5.96	
6700.00	6654.82	26.59	237.56	6371.23	33.00	17.11	303.06	352.58	294.80	6.10	
6800.00	6749.87	33.27	244.89	6453.58	31.66	16.41	297.45	358.67	301.48	6.27	
6900.00	6844.64	40.23	249.95	6529.49	30.28	15.45	294.32	364.57	308.12	6.46	
7000.00	6939.24	47.34	253.71	6597.76	29.03	14.23	292.42	370.13	314.48	6.65	
7100.00	7033.77	54.54	256.70	6657.30	28.05	12.80	291.18	375.26	320.22	6.82	
7200.00	7128.30	61.80	259.18	6707.13	27.46	11.32	290.33	379.86	325.20	6.95	
7300.00	7222.95	69.11	261.36	6746.43	27.30	10.10	289.69	383.84	329.12	7.02	
7400.00	7317.79	76.46	263.33	6774.49	27.56	9.59	289.18	387.12	331.85	7.00	
7500.00	7412.91	83.84	265.19	6790.75	28.19	10.12	288.77	389.67	333.35	6.92	
7600.00	7509.13	90.00	266.70	6795.00	29.11	11.43	288.47	391.56	333.71	6.77	
7700.00	7609.11	90.00	266.70	6795.00	30.16	11.94	288.37	393.47	333.53	6.56	
7800.00	7709.09	90.00	266.70	6795.00	31.42	12.48	288.28	395.38	332.93	6.33	
7900.00	7809.07	90.00	266.70	6795.00	32.87	13.05	288.19	397.29	331.98	6.08	
8000.00	7909.05	90.00	266.70	6795.00	34.48	13.65	288.10	399.20	330.82	5.84	
8100.00	8009.03	90.00	266.70	6795.00	36.23	14.26	288.01	401.11	329.19	5.58	
8200.00	8109.01	90.00	266.70	6795.00	38.11	14.88	287.92	403.02	327.49	5.34	
8300.00	8208.99	90.00	266.70	6795.00	40.09	15.52	287.84	404.94	325.64	5.11	
8400.00	8308.97	90.00	266.70	6795.00	42.17	16.17	287.75	406.85	323.70	4.89	
8500.00	8408.95	90.00	266.70	6795.00	44.32	16.83	287.66	408.77	321.34	4.68	
8600.00	8508.93	90.00	266.70	6795.00	46.54	17.49	287.58	410.68	318.91	4.47	
8700.00	8608.91	90.00	266.70	6795.00	48.83	18.16	287.49	412.60	316.40	4.29	

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
8800.00	8708.89	90.00	266.70	6795.00	51.16	18.83	287.41	414.52	313.80	4.12	
8900.00	8808.87	90.00	266.70	6795.00	53.54	19.51	287.33	416.44	311.13	3.95	
9000.00	8908.85	90.00	266.70	6795.00	55.95	20.19	287.24	418.36	308.39	3.80	
9100.00	9008.83	90.00	266.70	6795.00	58.40	20.87	287.16	420.28	305.58	3.66	
9200.00	9108.81	90.00	266.70	6795.00	60.88	21.56	287.08	422.20	302.71	3.53	
9300.00	9208.79	90.00	266.70	6795.00	63.39	22.25	287.00	424.12	299.80	3.41	
9400.00	9308.77	90.00	266.70	6795.00	65.92	22.94	286.92	426.04	296.83	3.30	
9500.00	9408.75	90.00	266.70	6795.00	68.47	23.64	286.85	427.97	293.83	3.19	
9600.00	9508.73	90.00	266.70	6795.00	71.04	24.33	286.77	429.89	290.78	3.09	
9700.00	9608.71	90.00	266.70	6795.00	73.63	25.03	286.69	431.82	287.70	3.00	
9800.00	9708.69	90.00	266.70	6795.00	76.23	25.73	286.61	433.74	284.59	2.91	
9900.00	9808.67	90.00	266.70	6795.00	78.84	26.43	286.54	435.67	281.46	2.83	
10000.00	9908.65	90.00	266.70	6795.00	81.47	27.14	286.46	437.60	278.29	2.75	
10100.00	10008.62	90.00	266.70	6795.00	84.11	27.84	286.39	439.52	275.11	2.67	
10200.00	10108.60	90.00	266.70	6795.00	86.76	28.55	286.32	441.45	271.90	2.60	
10300.00	10208.58	90.00	266.70	6795.00	89.42	29.25	286.24	443.38	268.67	2.54	
10400.00	10308.56	90.00	266.70	6795.00	92.08	29.96	286.17	445.31	265.43	2.48	SF(Lo)
10500.00	10408.54	90.00	266.70	6795.00	94.75	30.67	286.10	447.25	262.16	2.42	SF(Lo)
10600.00	10508.52	90.00	266.70	6795.00	97.43	31.38	286.03	449.18	258.89	2.36	SF(Lo)
10700.00	10608.50	90.00	266.70	6795.00	100.12	32.09	285.96	451.11	255.59	2.31	SF(Lo)
10800.00	10708.48	90.00	266.70	6795.00	102.81	32.80	285.89	453.04	252.29	2.26	SF(Lo)
10900.00	10808.46	90.00	266.70	6795.00	105.51	33.52	285.82	454.98	248.97	2.21	SF(Lo)
11000.00	10908.44	90.00	266.70	6795.00	108.22	34.23	285.75	456.91	245.64	2.16	SF(Lo)
11100.00	11008.42	90.00	266.70	6795.00	110.92	34.94	285.68	458.85	242.29	2.12	SF(Lo)
11200.00	11108.40	90.00	266.70	6795.00	113.64	35.66	285.61	460.78	238.94	2.08	SF(Lo)
11300.00	11208.38	90.00	266.70	6795.00	116.35	36.38	285.55	462.72	235.58	2.04	SF(Lo)
11400.00	11308.36	90.00	266.70	6795.00	119.07	37.09	285.48	464.66	232.21	2.00	SF(Lo)
11500.00	11408.34	90.00	266.70	6795.00	121.80	37.81	285.41	466.59	228.83	1.96	SF(Lo)
11600.00	11508.32	90.00	266.70	6795.00	124.52	38.53	285.35	468.53	225.44	1.93	SF(Lo)
11700.00	11608.30	90.00	266.70	6795.00	127.25	39.24	285.28	470.47	222.04	1.89	SF(Lo)
11800.00	11708.28	90.00	266.70	6795.00	129.99	39.96	285.22	472.41	218.64	1.86	SF(Lo)
11900.00	11808.26	90.00	266.70	6795.00	132.72	40.68	285.16	474.35	215.23	1.83	SF(Lo)
12000.00	11908.24	90.00	266.70	6795.00	135.46	41.40	285.09	476.29	211.81	1.80	SF(Lo)
12100.00	12008.22	90.00	266.70	6795.00	138.20	42.12	285.03	478.23	208.39	1.77	SF(Lo)
12200.00	12108.20	90.00	266.70	6795.00	140.94	42.84	284.97	480.18	204.96	1.74	SF(Lo)
12300.00	12208.18	90.00	266.70	6795.00	143.69	43.56	284.91	482.12	201.52	1.72	SF(Lo)
12400.00	12308.16	90.00	266.70	6795.00	146.43	44.28	284.85	484.06	198.08	1.69	SF(Lo)
12500.00	12408.14	90.00	266.70	6795.00	149.18	45.01	284.78	486.01	194.63	1.67	SF(Lo)
12600.00	12508.12	90.00	266.70	6795.00	151.93	45.73	284.72	487.95	191.18	1.64	SF(Lo)
12700.00	12608.10	90.00	266.70	6795.00	154.69	46.45	284.66	489.89	187.72	1.62	SF(Lo)
12800.00	12708.08	90.00	266.70	6795.00	157.44	47.17	284.61	491.84	184.26	1.60	SF(Lo)
12900.00	12808.06	90.00	266.70	6795.00	160.19	47.90	284.55	493.78	180.80	1.58	SF(Lo)
13000.00	12908.04	90.00	266.70	6795.00	162.95	48.62	284.49	495.73	177.33	1.56	SF(Lo)
13100.00	13008.02	90.00	266.70	6795.00	165.71	49.34	284.43	497.68	173.86	1.54	SF(Lo)
13200.00	13108.00	90.00	266.70	6795.00	168.47	50.07	284.37	499.63	170.38	1.52	SF(Lo)
13300.00	13207.98	90.00	266.70	6795.00	171.23	50.79	284.32	501.57	166.90	1.50	SF(Med)
13400.00	13307.96	90.00	266.70	6795.00	173.99	51.51	284.26	503.52	163.41	1.48	SF(Med)
13500.00	13407.94	90.00	266.70	6795.00	176.75	52.24	284.20	505.47	159.92	1.46	SF(Med)
13600.00	13507.92	90.00	266.70	6795.00	179.52	52.96	284.15	507.42	156.43	1.45	SF(Med)
13700.00	13607.90	90.00	266.70	6795.00	182.28	53.69	284.09	509.37	152.94	1.43	SF(Med)
13800.00	13707.88	90.00	266.70	6795.00	185.05	54.41	284.04	511.32	149.44	1.41	SF(Med)
13900.00	13807.86	90.00	266.70	6795.00	187.82	55.14	283.98	513.27	145.94	1.40	SF(Med)
14000.00	13907.84	90.00	266.70	6795.00	190.58	55.86	283.93	515.22	142.43	1.38	SF(Med)
14100.00	14007.82	90.00	266.70	6795.00	193.35	56.59	283.88	517.17	138.93	1.37	SF(Med)
14200.00	14107.80	90.00	266.70	6795.00	196.12	57.32	283.82	519.12	135.42	1.35	SF(Med)
14300.00	14207.78	90.00	266.70	6795.00	198.89	58.04	283.77	521.08	131.90	1.34	SF(Med)
14400.00	14307.76	90.00	266.70	6795.00	201.66	58.77	283.72	523.03	128.39	1.33	SF(Med)
14500.00	14407.74	90.00	266.70	6795.00	204.44	59.49	283.66	524.98	124.87	1.31	SF(Med)

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
14600.00	14507.72	90.00	266.70	6795.00	207.21	60.22	283.61	526.94	121.35	1.30	SF(Med)
14700.00	14607.70	90.00	266.70	6795.00	209.98	60.95	283.56	528.89	117.83	1.29	SF(Med)
14800.00	14707.67	90.00	266.70	6795.00	212.75	61.67	283.51	530.85	114.30	1.27	SF(Med)
14900.00	14807.65	90.00	266.70	6795.00	215.53	62.40	283.46	532.80	110.78	1.26	SF(Med)
15000.00	14907.63	90.00	266.70	6795.00	218.30	63.13	283.41	534.76	107.25	1.25	SF(Med)
15100.00	15007.61	90.00	266.70	6795.00	221.08	63.86	283.36	536.71	103.72	1.24	SF(Med)
15200.00	15107.59	90.00	266.70	6795.00	223.86	64.58	283.31	538.67	100.19	1.23	SF(Med)
15300.00	15136.85	90.00	266.70	6795.00	224.67	64.80	283.30	545.23	105.37	1.24	SF(Med)
15400.00	15136.85	90.00	266.70	6795.00	224.67	64.80	283.30	568.80	140.89	1.33	SF(Med)
15456.59	15136.85	90.00	266.70	6795.00	224.67	64.80	283.30	589.29	172.81	1.41	SF(Med)

Secondary Well: Goetzel 13C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	179.82	60.11	59.38	81.97	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	179.82	60.11	59.16	63.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	179.82	60.11	58.71	42.83	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	179.82	60.11	58.26	32.44	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	179.82	60.11	57.81	26.11	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	179.82	60.11	57.36	21.84	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	179.82	60.11	56.91	18.77	CC (Lo)
700.00	698.42	1.97	138.18	698.40	1.43	1.43	178.77	61.41	57.79	16.97	CC (Lo)
800.00	796.60	3.93	138.18	796.45	1.62	1.62	175.88	65.40	61.38	16.25	CC (Lo)
900.00	894.33	5.89	138.18	893.81	1.83	1.81	171.81	72.37	67.91	16.24	
1000.00	991.37	7.83	138.18	990.15	2.07	2.00	167.33	82.59	77.70	16.89	
1100.00	1087.78	9.76	138.18	1085.42	2.34	2.21	39.71	94.92	89.61	17.89	
1200.00	1183.74	11.67	138.18	1179.70	2.66	2.42	37.16	107.87	102.16	18.91	
1300.00	1279.25	13.58	138.18	1272.90	3.04	2.63	35.52	121.24	115.12	19.81	
1400.00	1374.31	15.49	138.18	1364.92	3.47	2.86	34.52	134.93	128.36	20.55	
1500.00	1468.93	17.38	138.18	1455.67	3.95	3.09	33.98	148.86	141.82	21.15	
1600.00	1563.11	19.26	138.18	1545.07	4.50	3.33	33.80	162.99	155.46	21.64	
1700.00	1661.67	19.47	138.18	1638.00	5.12	3.61	34.04	176.10	167.97	21.67	
1800.00	1761.09	19.47	138.18	1731.74	5.76	3.89	34.87	186.39	177.59	21.19	
1900.00	1860.69	19.47	138.18	1825.64	6.42	4.18	36.24	193.98	184.46	20.37	
2000.00	1960.32	19.47	138.18	1919.57	7.09	4.48	37.75	200.85	190.54	19.47	
2100.00	2059.94	19.47	138.18	2013.50	7.76	4.78	39.16	207.86	196.66	18.56	
2200.00	2159.57	19.47	138.18	2107.43	8.44	5.08	40.47	214.98	202.88	17.76	
2300.00	2259.20	19.47	138.18	2201.36	9.13	5.39	41.71	222.21	209.17	17.04	
2400.00	2358.83	19.47	138.18	2295.29	9.81	5.70	42.86	229.53	215.54	16.40	
2500.00	2458.46	19.47	138.18	2389.22	10.50	6.01	43.94	236.94	221.97	15.83	
2600.00	2558.08	19.47	138.18	2483.15	11.19	6.32	44.96	244.43	228.41	15.26	
2700.00	2657.71	19.47	138.18	2577.08	11.89	6.63	45.91	251.99	234.92	14.76	
2800.00	2757.34	19.47	138.18	2671.01	12.58	6.95	46.81	259.62	241.46	14.30	
2900.00	2856.97	19.47	138.18	2764.94	13.28	7.26	47.66	267.30	248.05	13.89	
3000.00	2956.60	19.47	138.18	2858.87	13.97	7.58	48.46	275.05	254.70	13.52	
3100.00	3056.22	19.47	138.18	2952.80	14.67	7.89	49.22	282.84	261.38	13.18	
3200.00	3155.85	19.47	138.18	3046.73	15.37	8.21	49.94	290.68	268.11	12.88	
3300.00	3255.48	19.47	138.18	3140.66	16.07	8.53	50.61	298.56	274.87	12.60	
3400.00	3355.11	19.47	138.18	3234.60	16.77	8.85	51.26	306.48	281.67	12.35	
3500.00	3454.74	19.47	138.18	3328.53	17.47	9.17	51.87	314.44	288.47	12.11	
3600.00	3554.36	19.47	138.18	3422.46	18.17	9.49	52.45	322.43	295.27	11.87	
3700.00	3653.99	19.47	138.18	3516.39	18.87	9.81	53.00	330.45	302.11	11.66	
3800.00	3753.62	19.47	138.18	3610.32	19.57	10.13	53.53	338.51	308.97	11.46	
3900.00	3853.25	19.47	138.18	3704.25	20.27	10.45	54.03	346.59	315.85	11.28	
4000.00	3952.88	19.47	138.18	3798.18	20.97	10.77	54.51	354.69	322.76	11.11	
4100.00	4052.51	19.47	138.18	3892.11	21.67	11.09	54.97	362.82	329.68	10.95	
4200.00	4152.13	19.47	138.18	3986.04	22.37	11.41	55.41	370.97	336.63	10.80	
4300.00	4251.76	19.47	138.18	4079.97	23.07	11.73	55.83	379.14	343.59	10.67	



## 5D Anti-Collision Report

Secondary Well: Goetzel 13C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
4400.00	4351.39	19.47	138.18	4173.90	23.78	12.05	56.23	387.33	350.58	10.54	
4500.00	4451.02	19.47	138.18	4267.83	24.48	12.37	56.61	395.54	357.58	10.42	
4600.00	4550.65	19.47	138.18	4361.76	25.18	12.70	56.98	403.77	364.59	10.31	
4700.00	4650.27	19.47	138.18	4455.69	25.88	13.02	57.33	412.01	371.62	10.20	
4800.00	4749.90	19.47	138.18	4549.62	26.59	13.34	57.67	420.26	378.66	10.10	
4900.00	4849.53	19.47	138.18	4643.56	27.29	13.66	58.00	428.53	385.72	10.01	
5000.00	4949.16	19.47	138.18	4737.49	27.99	13.99	58.32	436.82	392.79	9.92	
5100.00	5048.79	19.47	138.18	4831.42	28.70	14.31	58.62	445.12	399.87	9.84	
5200.00	5148.41	19.47	138.18	4925.35	29.40	14.63	58.91	453.42	406.96	9.76	
5300.00	5248.04	19.47	138.18	5019.28	30.10	14.95	59.19	461.74	414.06	9.68	
5400.00	5347.67	19.47	138.18	5113.21	30.81	15.28	59.47	470.07	421.18	9.61	
5500.00	5447.30	19.47	138.18	5207.14	31.51	15.60	59.73	478.42	428.30	9.55	
5600.00	5546.93	19.47	138.18	5301.07	32.21	15.92	59.98	486.77	435.43	9.48	
5700.00	5646.56	19.47	138.18	5395.00	32.92	16.25	60.22	495.12	442.57	9.42	
5800.00	5746.18	19.47	138.18	5488.93	33.62	16.57	60.46	503.49	449.72	9.36	
5900.00	5845.81	19.47	138.18	5582.86	34.32	16.89	60.69	511.87	456.87	9.31	
6000.00	5945.44	19.47	138.18	5676.79	35.03	17.22	60.91	520.25	464.03	9.25	
6100.00	6045.07	19.47	138.18	5770.72	35.73	17.54	61.13	528.64	471.18	9.20	
6200.00	6144.70	19.47	138.18	5864.65	36.44	17.86	61.33	537.04	478.34	9.15	
6300.00	6244.34	19.47	138.18	5958.60	37.14	18.19	54.66	545.28	485.44	9.11	
6400.00	6343.50	19.47	138.18	6052.09	37.84	18.51	24.02	551.85	491.70	9.17	
6500.00	6440.41	19.47	138.18	6143.46	38.53	18.82	341.16	557.00	497.41	9.35	
6600.00	6533.18	19.47	138.18	6230.92	39.18	19.13	312.81	562.32	504.38	9.71	
6700.00	6621.94	16.13	158.84	6315.50	39.46	19.36	297.36	570.00	514.61	10.29	
6800.00	6715.88	15.53	186.56	6406.01	39.20	19.47	287.65	580.76	527.76	10.96	
6900.00	6816.27	18.51	212.33	6502.13	38.37	19.41	280.60	594.39	543.92	11.78	
7000.00	6924.63	24.36	230.05	6603.06	36.93	19.12	275.01	610.42	561.77	12.55	
7100.00	7042.77	32.16	241.46	6707.11	34.87	18.48	270.34	628.07	580.84	13.30	
7200.00	7172.62	41.46	249.23	6811.01	32.39	17.30	266.34	646.24	599.72	13.89	
7300.00	7315.90	52.13	255.00	6909.01	29.98	15.25	262.97	663.57	616.57	14.12	
7400.00	7473.40	64.10	259.66	6992.08	28.48	12.31	260.29	678.43	629.67	13.91	
7500.00	7643.95	77.19	263.74	7048.50	28.48	10.18	258.46	689.16	636.95	13.20	
7600.00	7817.47	90.00	267.32	7067.00	29.79	11.91	257.69	693.98	637.27	12.24	
7700.00	7917.47	90.00	267.32	7067.00	30.79	12.42	257.70	694.88	636.21	11.84	
7800.00	8017.46	90.00	267.32	7067.00	31.99	12.96	257.72	695.78	634.78	11.41	
7900.00	8117.46	90.00	267.32	7067.00	33.36	13.53	257.73	696.69	632.75	10.90	
8000.00	8217.45	90.00	267.32	7067.00	34.91	14.13	257.75	697.59	630.50	10.40	
8100.00	8317.45	90.00	267.32	7067.00	36.60	14.75	257.77	698.50	628.07	9.92	
8200.00	8417.45	90.00	267.32	7067.00	38.42	15.39	257.78	699.40	625.22	9.43	
8300.00	8517.44	90.00	267.32	7067.00	40.35	16.04	257.80	700.31	622.21	8.97	
8400.00	8617.44	90.00	267.32	7067.00	42.38	16.70	257.81	701.21	619.16	8.55	
8500.00	8717.43	90.00	267.32	7067.00	44.49	17.36	257.83	702.11	615.75	8.13	
8600.00	8817.43	90.00	267.32	7067.00	46.67	18.04	257.85	703.02	612.36	7.75	
8700.00	8917.42	90.00	267.32	7067.00	48.91	18.71	257.86	703.92	608.86	7.41	
8800.00	9017.42	90.00	267.32	7067.00	51.21	19.40	257.88	704.83	605.24	7.08	
8900.00	9117.42	90.00	267.32	7067.00	53.56	20.08	257.89	705.73	601.51	6.77	
9000.00	9217.41	90.00	267.32	7067.00	55.95	20.77	257.91	706.64	597.70	6.49	
9100.00	9317.41	90.00	267.32	7067.00	58.38	21.46	257.93	707.54	593.82	6.22	
9200.00	9417.40	90.00	267.32	7067.00	60.84	22.15	257.94	708.45	589.87	5.97	
9300.00	9517.40	90.00	267.32	7067.00	63.32	22.84	257.96	709.35	585.87	5.74	
9400.00	9617.39	90.00	267.32	7067.00	65.84	23.54	257.97	710.26	581.82	5.53	
9500.00	9717.39	90.00	267.32	7067.00	68.37	24.24	257.99	711.16	577.73	5.33	
9600.00	9817.39	90.00	267.32	7067.00	70.93	24.94	258.00	712.07	573.59	5.14	
9700.00	9917.38	90.00	267.32	7067.00	73.50	25.64	258.02	712.97	569.39	4.97	
9800.00	10017.38	90.00	267.32	7067.00	76.09	26.34	258.03	713.88	565.17	4.80	
9900.00	10117.37	90.00	267.32	7067.00	78.70	27.05	258.05	714.78	560.92	4.65	
10000.00	10217.37	90.00	267.32	7067.00	81.31	27.75	258.06	715.69	556.64	4.50	
10100.00	10317.36	90.00	267.32	7067.00	83.94	28.46	258.08	716.59	552.34	4.36	



## 5D Anti-Collision Report

Secondary Well: Goetzel 13C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
10200.00	10417.36	90.00	267.32	7067.00	86.58	29.16	258.10	717.50	548.03	4.23	
10300.00	10517.36	90.00	267.32	7067.00	89.23	29.87	258.11	718.40	543.70	4.11	
10400.00	10617.35	90.00	267.32	7067.00	91.89	30.58	258.13	719.31	539.35	4.00	
10500.00	10717.35	90.00	267.32	7067.00	94.56	31.29	258.14	720.21	534.98	3.89	
10600.00	10817.34	90.00	267.32	7067.00	97.24	32.00	258.16	721.12	530.61	3.79	
10700.00	10917.34	90.00	267.32	7067.00	99.92	32.71	258.17	722.02	526.22	3.69	
10800.00	11017.33	90.00	267.32	7067.00	102.61	33.43	258.19	722.93	521.81	3.59	
10900.00	11117.33	90.00	267.32	7067.00	105.30	34.14	258.20	723.83	517.40	3.51	
11000.00	11217.33	90.00	267.32	7067.00	108.00	34.85	258.22	724.74	512.98	3.42	
11100.00	11317.32	90.00	267.32	7067.00	110.70	35.57	258.23	725.65	508.55	3.34	
11200.00	11417.32	90.00	267.32	7067.00	113.41	36.28	258.25	726.55	504.11	3.27	
11300.00	11517.31	90.00	267.32	7067.00	116.13	37.00	258.26	727.46	499.66	3.19	
11400.00	11617.31	90.00	267.32	7067.00	118.85	37.72	258.28	728.36	495.21	3.12	
11500.00	11717.30	90.00	267.32	7067.00	121.57	38.43	258.29	729.27	490.75	3.06	
11600.00	11817.30	90.00	267.32	7067.00	124.29	39.15	258.31	730.17	486.28	2.99	
11700.00	11917.30	90.00	267.32	7067.00	127.02	39.87	258.32	731.08	481.80	2.93	
11800.00	12017.29	90.00	267.32	7067.00	129.75	40.59	258.33	731.99	477.32	2.87	
11900.00	12117.29	90.00	267.32	7067.00	132.49	41.31	258.35	732.89	472.84	2.82	
12000.00	12217.28	90.00	267.32	7067.00	135.22	42.03	258.36	733.80	468.35	2.76	
12100.00	12317.28	90.00	267.32	7067.00	137.96	42.75	258.38	734.70	463.85	2.71	
12200.00	12417.27	90.00	267.32	7067.00	140.71	43.47	258.39	735.61	459.35	2.66	
12300.00	12517.27	90.00	267.32	7067.00	143.45	44.19	258.41	736.52	454.85	2.61	
12400.00	12617.27	90.00	267.32	7067.00	146.20	44.91	258.42	737.42	450.34	2.57	
12500.00	12717.26	90.00	267.32	7067.00	148.95	45.63	258.44	738.33	445.83	2.52	
12600.00	12817.26	90.00	267.32	7067.00	151.70	46.35	258.45	739.24	441.31	2.48	SF(Lo)
12700.00	12917.25	90.00	267.32	7067.00	154.45	47.07	258.46	740.14	436.79	2.44	SF(Lo)
12800.00	13017.25	90.00	267.32	7067.00	157.20	47.80	258.48	741.05	432.27	2.40	SF(Lo)
12900.00	13117.24	90.00	267.32	7067.00	159.96	48.52	258.49	741.96	427.74	2.36	SF(Lo)
13000.00	13217.24	90.00	267.32	7067.00	162.72	49.24	258.51	742.86	423.21	2.32	SF(Lo)
13100.00	13317.24	90.00	267.32	7067.00	165.48	49.96	258.52	743.77	418.68	2.29	SF(Lo)
13200.00	13417.23	90.00	267.32	7067.00	168.24	50.69	258.54	744.68	414.15	2.25	SF(Lo)
13300.00	13517.23	90.00	267.32	7067.00	171.00	51.41	258.55	745.58	409.61	2.22	SF(Lo)
13400.00	13617.22	90.00	267.32	7067.00	173.76	52.14	258.56	746.49	405.07	2.19	SF(Lo)
13500.00	13717.22	90.00	267.32	7067.00	176.53	52.86	258.58	747.40	400.53	2.15	SF(Lo)
13600.00	13817.21	90.00	267.32	7067.00	179.29	53.58	258.59	748.30	395.98	2.12	SF(Lo)
13700.00	13917.21	90.00	267.32	7067.00	182.06	54.31	258.61	749.21	391.43	2.09	SF(Lo)
13800.00	14017.21	90.00	267.32	7067.00	184.82	55.03	258.62	750.12	386.88	2.07	SF(Lo)
13900.00	14117.20	90.00	267.32	7067.00	187.59	55.76	258.63	751.02	382.33	2.04	SF(Lo)
14000.00	14217.20	90.00	267.32	7067.00	190.36	56.48	258.65	751.93	377.78	2.01	SF(Lo)
14100.00	14317.19	90.00	267.32	7067.00	193.13	57.21	258.66	752.84	373.22	1.98	SF(Lo)
14200.00	14417.19	90.00	267.32	7067.00	195.90	57.94	258.68	753.74	368.66	1.96	SF(Lo)
14300.00	14517.19	90.00	267.32	7067.00	198.67	58.66	258.69	754.65	364.10	1.93	SF(Lo)
14400.00	14617.18	90.00	267.32	7067.00	201.45	59.39	258.70	755.56	359.54	1.91	SF(Lo)
14500.00	14717.18	90.00	267.32	7067.00	204.22	60.11	258.72	756.47	354.98	1.88	SF(Lo)
14600.00	14817.17	90.00	267.32	7067.00	207.00	60.84	258.73	757.37	350.42	1.86	SF(Lo)
14700.00	14917.17	90.00	267.32	7067.00	209.77	61.57	258.74	758.28	345.85	1.84	SF(Lo)
14800.00	15017.16	90.00	267.32	7067.00	212.55	62.29	258.76	759.19	341.28	1.82	SF(Lo)
14900.00	15117.16	90.00	267.32	7067.00	215.32	63.02	258.77	760.10	336.71	1.80	SF(Lo)
15000.00	15217.16	90.00	267.32	7067.00	218.10	63.75	258.79	761.00	332.14	1.77	SF(Lo)
15100.00	15317.15	90.00	267.32	7067.00	220.88	64.47	258.80	761.91	327.57	1.75	SF(Lo)
15200.00	15417.15	90.00	267.32	7067.00	223.65	65.20	258.81	762.82	322.99	1.73	SF(Lo)
15300.00	15517.14	90.00	267.32	7067.00	226.43	65.93	258.83	763.73	318.42	1.72	SF(Lo)
15400.00	15617.14	90.00	267.32	7067.00	229.21	66.66	258.84	764.63	313.84	1.70	SF(Lo)
15456.59	15673.73	90.00	267.32	7067.00	230.79	67.07	258.85	765.15	311.25	1.69	SF(Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	179.95	80.15	79.41	109.30	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	179.95	80.15	79.19	84.02	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	179.95	80.15	78.74	57.11	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	179.95	80.15	78.30	43.25	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	179.95	80.15	77.85	34.81	
500.00	498.93	0.98	141.02	498.93	1.00	1.00	179.76	80.48	77.74	29.40	
600.00	596.68	2.93	141.02	596.61	1.18	1.18	178.32	83.17	80.03	26.46	
700.00	694.08	4.88	141.02	693.79	1.39	1.37	175.72	88.69	85.12	24.86	
800.00	790.93	6.82	141.02	790.12	1.62	1.57	172.39	97.26	93.25	24.27	
900.00	886.99	8.74	141.02	885.30	1.89	1.78	168.80	109.06	104.61	24.48	
1000.00	982.08	10.64	141.02	979.03	2.19	1.99	165.30	124.24	119.34	25.38	
1100.00	1076.32	12.53	141.02	1071.35	2.55	2.21	38.54	141.48	136.16	26.57	
1200.00	1169.99	14.40	141.02	1162.43	2.96	2.44	36.52	159.29	153.55	27.75	
1300.00	1263.08	16.26	141.02	1252.21	3.42	2.67	35.19	177.46	171.29	28.73	
1400.00	1355.60	18.11	141.02	1340.59	3.94	2.91	34.36	195.91	189.29	29.59	
1500.00	1447.55	19.95	141.02	1427.51	4.51	3.15	33.89	214.56	207.46	30.25	
1600.00	1544.12	20.44	141.02	1518.04	5.16	3.44	33.78	232.56	224.91	30.41	
1700.00	1642.92	20.44	141.02	1610.62	5.84	3.73	34.13	247.82	239.56	30.01	
1800.00	1742.06	20.44	141.02	1703.51	6.54	4.04	34.90	260.27	251.32	29.08	
1900.00	1841.41	20.44	141.02	1796.60	7.24	4.34	36.05	270.03	260.34	27.88	
2000.00	1940.81	20.44	141.02	1889.74	7.95	4.66	37.34	279.08	268.60	26.63	
2100.00	2040.21	20.44	141.02	1982.88	8.67	4.97	38.54	288.26	276.93	25.45	
2200.00	2139.61	20.44	141.02	2076.02	9.38	5.29	39.68	297.56	285.31	24.30	
2300.00	2239.01	20.44	141.02	2169.16	10.10	5.61	40.74	306.97	293.78	23.29	
2400.00	2338.41	20.44	141.02	2262.30	10.83	5.93	41.74	316.47	302.34	22.39	
2500.00	2437.81	20.44	141.02	2355.44	11.55	6.25	42.68	326.07	310.97	21.59	
2600.00	2537.21	20.44	141.02	2448.57	12.27	6.57	43.57	335.75	319.66	20.87	
2700.00	2636.61	20.44	141.02	2541.71	13.00	6.89	44.40	345.51	328.40	20.20	
2800.00	2736.01	20.44	141.02	2634.85	13.73	7.22	45.19	355.33	337.18	19.58	
2900.00	2835.41	20.44	141.02	2727.99	14.45	7.54	45.94	365.22	345.99	19.00	
3000.00	2934.81	20.44	141.02	2821.13	15.18	7.87	46.65	375.16	354.85	18.47	
3100.00	3034.21	20.44	141.02	2914.27	15.91	8.20	47.32	385.16	363.76	17.99	
3200.00	3133.60	20.44	141.02	3007.41	16.64	8.52	47.96	395.21	372.71	17.56	
3300.00	3233.00	20.44	141.02	3100.54	17.37	8.85	48.57	405.31	381.69	17.16	
3400.00	3332.40	20.44	141.02	3193.68	18.10	9.18	49.15	415.45	390.72	16.80	
3500.00	3431.80	20.44	141.02	3286.82	18.83	9.51	49.70	425.63	399.78	16.47	
3600.00	3531.20	20.44	141.02	3379.96	19.56	9.83	50.22	435.84	408.88	16.16	
3700.00	3630.60	20.44	141.02	3473.10	20.29	10.16	50.72	446.10	418.00	15.88	
3800.00	3730.00	20.44	141.02	3566.24	21.02	10.49	51.20	456.38	427.16	15.62	
3900.00	3829.40	20.44	141.02	3659.38	21.75	10.82	51.65	466.69	436.32	15.36	
4000.00	3928.80	20.44	141.02	3752.51	22.48	11.15	52.09	477.03	445.50	15.13	
4100.00	4028.20	20.44	141.02	3845.65	23.21	11.48	52.51	487.40	454.69	14.90	
4200.00	4127.60	20.44	141.02	3938.79	23.94	11.81	52.91	497.79	463.90	14.69	
4300.00	4227.00	20.44	141.02	4031.93	24.68	12.14	53.29	508.21	473.12	14.49	
4400.00	4326.40	20.44	141.02	4125.07	25.41	12.47	53.66	518.64	482.37	14.30	
4500.00	4425.80	20.44	141.02	4218.21	26.14	12.80	54.02	529.10	491.63	14.12	
4600.00	4525.20	20.44	141.02	4311.35	26.87	13.13	54.36	539.58	500.91	13.96	
4700.00	4624.60	20.44	141.02	4404.48	27.61	13.46	54.69	550.07	510.21	13.80	
4800.00	4724.00	20.44	141.02	4497.62	28.34	13.79	55.00	560.58	519.53	13.65	
4900.00	4823.40	20.44	141.02	4590.76	29.07	14.12	55.31	571.11	528.86	13.52	
5000.00	4922.79	20.44	141.02	4683.90	29.80	14.45	55.60	581.65	538.20	13.38	
5100.00	5022.19	20.44	141.02	4777.04	30.54	14.78	55.88	592.21	547.55	13.26	
5200.00	5121.59	20.44	141.02	4870.18	31.27	15.11	56.15	602.78	556.92	13.14	
5300.00	5220.99	20.44	141.02	4963.32	32.00	15.45	56.42	613.37	566.30	13.03	
5400.00	5320.39	20.44	141.02	5056.45	32.73	15.78	56.67	623.97	575.69	12.93	
5500.00	5419.79	20.44	141.02	5149.59	33.47	16.11	56.92	634.57	585.10	12.83	
5600.00	5519.19	20.44	141.02	5242.73	34.20	16.44	57.15	645.19	594.51	12.73	
5700.00	5618.59	20.44	141.02	5335.87	34.93	16.77	57.38	655.83	603.93	12.64	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
5800.00	5717.99	20.44	141.02	5429.01	35.66	17.10	57.61	666.47	613.36	12.55	
5900.00	5817.39	20.44	141.02	5522.15	36.40	17.43	57.82	677.12	622.81	12.47	
6000.00	5916.79	20.44	141.02	5615.29	37.13	17.76	58.03	687.78	632.25	12.39	
6100.00	6016.19	20.44	141.02	5708.43	37.86	18.10	58.23	698.44	641.71	12.31	
6200.00	6115.59	20.44	141.02	5801.56	38.60	18.43	58.43	709.12	651.18	12.24	
6300.00	6215.01	20.44	141.02	5894.72	39.33	18.76	51.85	719.69	660.62	12.18	
6400.00	6313.98	20.44	141.02	5987.46	40.06	19.09	21.73	729.11	669.65	12.26	
6500.00	6410.74	20.44	141.02	6078.13	40.77	19.41	339.73	737.50	678.47	12.49	
6600.00	6501.63	18.92	148.61	6163.46	41.36	19.71	312.64	746.01	688.31	12.93	
6700.00	6591.44	16.86	171.19	6249.03	41.38	19.91	298.66	756.03	700.09	13.51	
6800.00	6685.85	17.75	196.60	6339.29	40.82	19.98	290.37	767.66	713.37	14.14	
6900.00	6785.83	21.63	217.55	6433.53	39.66	19.89	284.69	780.71	728.15	14.85	
7000.00	6892.54	27.72	232.02	6530.53	37.85	19.58	280.40	794.85	743.75	15.55	
7100.00	7007.25	35.34	241.87	6628.30	35.45	18.94	276.95	809.58	759.38	16.13	
7200.00	7131.25	44.18	248.96	6723.58	32.70	17.76	274.07	824.22	774.34	16.53	
7300.00	7265.63	54.11	254.43	6811.41	30.17	15.70	271.67	837.95	787.61	16.65	
7400.00	7410.81	65.05	258.97	6884.84	28.66	12.69	269.75	849.78	797.80	16.35	
7500.00	7566.06	76.87	263.00	6935.42	28.59	10.30	268.37	858.71	803.91	15.67	
7600.00	7729.04	89.34	266.84	6954.95	29.78	11.77	267.61	863.62	805.09	14.76	
7700.00	7832.42	90.00	267.03	6955.00	30.81	12.46	267.61	865.05	804.28	14.24	
7800.00	7932.41	90.00	267.03	6955.00	31.98	13.02	267.62	866.47	803.30	13.72	
7900.00	8032.40	90.00	267.03	6955.00	33.33	13.61	267.62	867.88	801.86	13.14	
8000.00	8132.39	90.00	267.03	6955.00	34.85	14.23	267.63	869.30	800.04	12.55	
8100.00	8232.38	90.00	267.03	6955.00	36.52	14.87	267.63	870.72	798.05	11.98	
8200.00	8332.37	90.00	267.03	6955.00	38.32	15.53	267.63	872.14	795.74	11.42	
8300.00	8432.36	90.00	267.03	6955.00	40.23	16.20	267.64	873.56	793.24	10.88	
8400.00	8532.35	90.00	267.03	6955.00	42.23	16.87	267.64	874.98	790.35	10.34	
8500.00	8632.34	90.00	267.03	6955.00	44.33	17.56	267.65	876.39	787.47	9.86	
8600.00	8732.33	90.00	267.03	6955.00	46.49	18.25	267.65	877.81	784.40	9.40	
8700.00	8832.32	90.00	267.03	6955.00	48.72	18.94	267.65	879.23	781.31	8.98	
8800.00	8932.31	90.00	267.03	6955.00	51.01	19.64	267.66	880.65	778.11	8.59	
8900.00	9032.30	90.00	267.03	6955.00	53.35	20.33	267.66	882.07	774.80	8.22	
9000.00	9132.29	90.00	267.03	6955.00	55.73	21.03	267.66	883.49	771.40	7.88	
9100.00	9232.28	90.00	267.03	6955.00	58.14	21.73	267.67	884.90	767.92	7.56	
9200.00	9332.27	90.00	267.03	6955.00	60.59	22.44	267.67	886.32	764.38	7.27	
9300.00	9432.26	90.00	267.03	6955.00	63.07	23.14	267.68	887.74	760.77	6.99	
9400.00	9532.25	90.00	267.03	6955.00	65.58	23.84	267.68	889.16	757.11	6.73	
9500.00	9632.24	90.00	267.03	6955.00	68.11	24.55	267.68	890.58	753.42	6.49	
9600.00	9732.23	90.00	267.03	6955.00	70.66	25.25	267.69	892.00	749.68	6.27	
9700.00	9832.22	90.00	267.03	6955.00	73.23	25.96	267.69	893.41	745.91	6.06	
9800.00	9932.21	90.00	267.03	6955.00	75.81	26.67	267.69	894.83	742.11	5.86	
9900.00	10032.20	90.00	267.03	6955.00	78.41	27.38	267.70	896.25	738.28	5.67	
10000.00	10132.19	90.00	267.03	6955.00	81.02	28.09	267.70	897.67	734.43	5.50	
10100.00	10232.18	90.00	267.03	6955.00	83.65	28.80	267.70	899.09	730.56	5.34	
10200.00	10332.17	90.00	267.03	6955.00	86.29	29.51	267.71	900.51	726.67	5.18	
10300.00	10432.16	90.00	267.03	6955.00	88.93	30.22	267.71	901.92	722.76	5.03	
10400.00	10532.15	90.00	267.03	6955.00	91.59	30.94	267.72	903.34	718.83	4.90	
10500.00	10632.14	90.00	267.03	6955.00	94.25	31.65	267.72	904.76	714.89	4.77	
10600.00	10732.13	90.00	267.03	6955.00	96.92	32.36	267.72	906.18	710.94	4.64	
10700.00	10832.12	90.00	267.03	6955.00	99.60	33.08	267.73	907.60	706.97	4.52	
10800.00	10932.11	90.00	267.03	6955.00	102.29	33.79	267.73	909.02	703.00	4.41	
10900.00	11032.10	90.00	267.03	6955.00	104.98	34.51	267.73	910.43	699.01	4.31	
11000.00	11132.09	90.00	267.03	6955.00	107.67	35.23	267.74	911.85	695.01	4.21	
11100.00	11232.08	90.00	267.03	6955.00	110.38	35.94	267.74	913.27	691.00	4.11	
11200.00	11332.07	90.00	267.03	6955.00	113.08	36.66	267.74	914.69	686.99	4.02	
11300.00	11432.06	90.00	267.03	6955.00	115.79	37.38	267.75	916.11	682.97	3.93	
11400.00	11532.05	90.00	267.03	6955.00	118.51	38.10	267.75	917.53	678.94	3.85	
11500.00	11632.04	90.00	267.03	6955.00	121.23	38.82	267.75	918.94	674.90	3.77	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
11600.00	11732.03	90.00	267.03	6955.00	123.95	39.54	267.76	920.36	670.86	3.69	
11700.00	11832.02	90.00	267.03	6955.00	126.68	40.26	267.76	921.78	666.81	3.62	
11800.00	11932.01	90.00	267.03	6955.00	129.41	40.98	267.76	923.20	662.75	3.54	
11900.00	12032.00	90.00	267.03	6955.00	132.14	41.70	267.77	924.62	658.69	3.48	
12000.00	12131.99	90.00	267.03	6955.00	134.88	42.42	267.77	926.04	654.63	3.41	
12100.00	12231.98	90.00	267.03	6955.00	137.61	43.14	267.78	927.46	650.56	3.35	
12200.00	12331.97	90.00	267.03	6955.00	140.35	43.86	267.78	928.87	646.48	3.29	
12300.00	12431.96	90.00	267.03	6955.00	143.10	44.58	267.78	930.29	642.40	3.23	
12400.00	12531.95	90.00	267.03	6955.00	145.84	45.30	267.79	931.71	638.32	3.18	
12500.00	12631.94	90.00	267.03	6955.00	148.59	46.03	267.79	933.13	634.24	3.12	
12600.00	12731.93	90.00	267.03	6955.00	151.34	46.75	267.79	934.55	630.15	3.07	
12700.00	12831.92	90.00	267.03	6955.00	154.09	47.47	267.80	935.97	626.05	3.02	
12800.00	12931.91	90.00	267.03	6955.00	156.84	48.20	267.80	937.38	621.96	2.97	
12900.00	13031.90	90.00	267.03	6955.00	159.59	48.92	267.80	938.80	617.86	2.93	
13000.00	13131.89	90.00	267.03	6955.00	162.35	49.64	267.81	940.22	613.76	2.88	
13100.00	13231.88	90.00	267.03	6955.00	165.10	50.37	267.81	941.64	609.65	2.84	
13200.00	13331.87	90.00	267.03	6955.00	167.86	51.09	267.81	943.06	605.55	2.79	
13300.00	13431.86	90.00	267.03	6955.00	170.62	51.82	267.82	944.48	601.44	2.75	
13400.00	13531.85	90.00	267.03	6955.00	173.38	52.54	267.82	945.90	597.33	2.71	
13500.00	13631.84	90.00	267.03	6955.00	176.15	53.27	267.82	947.31	593.21	2.68	
13600.00	13731.83	90.00	267.03	6955.00	178.91	53.99	267.83	948.73	589.10	2.64	
13700.00	13831.82	90.00	267.03	6955.00	181.67	54.72	267.83	950.15	584.98	2.60	
13800.00	13931.81	90.00	267.03	6955.00	184.44	55.44	267.83	951.57	580.86	2.57	
13900.00	14031.80	90.00	267.03	6955.00	187.20	56.17	267.83	952.99	576.74	2.53	
14000.00	14131.79	90.00	267.03	6955.00	189.97	56.89	267.84	954.41	572.62	2.50	SF(Lo)
14100.00	14231.78	90.00	267.03	6955.00	192.74	57.62	267.84	955.83	568.49	2.47	SF(Lo)
14200.00	14331.77	90.00	267.03	6955.00	195.51	58.35	267.84	957.24	564.37	2.44	SF(Lo)
14300.00	14431.76	90.00	267.03	6955.00	198.28	59.07	267.85	958.66	560.24	2.41	SF(Lo)
14400.00	14531.75	90.00	267.03	6955.00	201.05	59.80	267.85	960.08	556.11	2.38	SF(Lo)
14500.00	14631.74	90.00	267.03	6955.00	203.82	60.53	267.85	961.50	551.98	2.35	SF(Lo)
14600.00	14731.73	90.00	267.03	6955.00	206.60	61.25	267.86	962.92	547.85	2.32	SF(Lo)
14700.00	14831.72	90.00	267.03	6955.00	209.37	61.98	267.86	964.34	543.71	2.29	SF(Lo)
14800.00	14931.71	90.00	267.03	6955.00	212.14	62.71	267.86	965.76	539.58	2.27	SF(Lo)
14900.00	15031.70	90.00	267.03	6955.00	214.92	63.43	267.87	967.17	535.44	2.24	SF(Lo)
15000.00	15131.69	90.00	267.03	6955.00	217.69	64.16	267.87	968.59	531.30	2.22	SF(Lo)
15100.00	15231.68	90.00	267.03	6955.00	220.47	64.89	267.87	970.01	527.17	2.19	SF(Lo)
15200.00	15331.67	90.00	267.03	6955.00	223.24	65.62	267.88	971.43	523.03	2.17	SF(Lo)
15300.00	15431.66	90.00	267.03	6955.00	226.02	66.34	267.88	972.85	518.89	2.14	SF(Lo)
15400.00	15531.65	90.00	267.03	6955.00	228.80	67.07	267.88	974.27	514.75	2.12	SF(Lo)
15456.59	15588.24	90.00	267.03	6955.00	230.37	67.48	267.88	975.07	512.40	2.11	SF(Lo)
Secondary Well: Goetzel 34C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.03	100.19	99.45	136.62	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	180.03	100.19	99.23	105.02	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	180.03	100.19	98.78	71.38	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	180.03	100.19	98.33	54.07	
400.00	397.21	1.94	144.12	397.19	0.76	0.76	179.48	101.57	99.29	44.68	
500.00	494.19	3.88	144.12	494.04	0.95	0.95	177.93	105.75	103.06	39.22	
600.00	590.73	5.81	144.12	590.24	1.18	1.15	175.62	112.88	109.75	36.05	
700.00	686.62	7.73	144.12	685.45	1.44	1.36	172.85	123.11	119.52	34.34	
800.00	781.64	9.63	144.12	779.37	1.74	1.57	169.92	136.56	132.52	33.81	
900.00	875.60	11.51	144.12	871.74	2.08	1.79	167.07	153.33	148.84	34.16	
1000.00	968.32	13.37	144.12	962.28	2.48	2.02	164.43	173.43	168.48	35.07	
1100.00	1060.03	15.20	144.12	1051.14	2.92	2.25	38.31	195.48	190.10	36.29	
1200.00	1151.05	17.02	144.12	1138.59	3.41	2.49	36.70	218.01	212.19	37.48	
1300.00	1241.39	18.83	144.12	1224.54	3.95	2.74	35.63	240.85	234.60	38.52	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
1400.00	1331.05	20.62	144.12	1308.94	4.54	2.99	34.95	263.91	257.20	39.32	
1500.00	1427.40	20.88	144.12	1398.96	5.22	3.28	34.63	286.05	278.81	39.49	
1600.00	1525.48	20.88	144.12	1490.61	5.92	3.59	34.72	305.42	297.61	39.10	
1700.00	1624.04	20.88	144.12	1582.69	6.63	3.90	35.18	321.99	313.55	38.15	
1800.00	1722.93	20.88	144.12	1675.08	7.35	4.21	35.95	335.80	326.67	36.75	
1900.00	1822.04	20.88	144.12	1767.69	8.08	4.53	37.04	347.00	337.11	35.09	
2000.00	1921.20	20.88	144.12	1860.34	8.81	4.85	38.26	357.52	346.82	33.40	
2100.00	2020.36	20.88	144.12	1952.98	9.54	5.18	39.42	368.19	356.61	31.80	
2200.00	2119.53	20.88	144.12	2045.63	10.28	5.50	40.51	379.00	366.53	30.37	
2300.00	2218.69	20.88	144.12	2138.28	11.01	5.83	41.54	389.94	376.52	29.05	
2400.00	2317.85	20.88	144.12	2230.93	11.75	6.16	42.51	401.00	386.62	27.88	
2500.00	2417.01	20.88	144.12	2323.58	12.48	6.48	43.43	412.17	396.82	26.84	
2600.00	2516.17	20.88	144.12	2416.22	13.22	6.81	44.30	423.44	407.07	25.87	
2700.00	2615.33	20.88	144.12	2508.87	13.96	7.14	45.13	434.80	417.41	25.00	
2800.00	2714.49	20.88	144.12	2601.52	14.70	7.47	45.91	446.24	427.82	24.22	
2900.00	2813.66	20.88	144.12	2694.17	15.44	7.80	46.66	457.76	438.29	23.51	
3000.00	2912.82	20.88	144.12	2786.82	16.18	8.13	47.37	469.36	448.80	22.83	
3100.00	3011.98	20.88	144.12	2879.46	16.92	8.47	48.04	481.02	459.36	22.21	
3200.00	3111.14	20.88	144.12	2972.11	17.66	8.80	48.69	492.75	469.98	21.64	
3300.00	3210.30	20.88	144.12	3064.76	18.40	9.13	49.30	504.53	480.65	21.13	
3400.00	3309.46	20.88	144.12	3157.41	19.14	9.46	49.88	516.37	491.37	20.66	
3500.00	3408.62	20.88	144.12	3250.06	19.88	9.79	50.44	528.26	502.14	20.22	
3600.00	3507.79	20.88	144.12	3342.71	20.62	10.13	50.98	540.20	512.95	19.82	
3700.00	3606.95	20.88	144.12	3435.35	21.37	10.46	51.49	552.18	523.79	19.45	
3800.00	3706.11	20.88	144.12	3528.00	22.11	10.79	51.98	564.21	534.66	19.10	
3900.00	3805.27	20.88	144.12	3620.65	22.85	11.13	52.45	576.27	545.56	18.77	
4000.00	3904.43	20.88	144.12	3713.30	23.59	11.46	52.90	588.37	556.50	18.46	
4100.00	4003.59	20.88	144.12	3805.95	24.33	11.79	53.33	600.50	567.46	18.18	
4200.00	4102.75	20.88	144.12	3898.59	25.08	12.13	53.74	612.67	578.46	17.91	
4300.00	4201.92	20.88	144.12	3991.24	25.82	12.46	54.14	624.86	589.48	17.66	
4400.00	4301.08	20.88	144.12	4083.89	26.56	12.79	54.52	637.09	600.52	17.42	
4500.00	4400.24	20.88	144.12	4176.54	27.30	13.13	54.89	649.34	611.57	17.19	
4600.00	4499.40	20.88	144.12	4269.19	28.05	13.46	55.25	661.62	622.65	16.98	
4700.00	4598.56	20.88	144.12	4361.83	28.79	13.79	55.59	673.92	633.74	16.77	
4800.00	4697.72	20.88	144.12	4454.48	29.53	14.13	55.92	686.25	644.86	16.58	
4900.00	4796.88	20.88	144.12	4547.13	30.28	14.46	56.24	698.59	656.00	16.40	
5000.00	4896.04	20.88	144.12	4639.78	31.02	14.80	56.55	710.96	667.16	16.23	
5100.00	4995.21	20.88	144.12	4732.43	31.76	15.13	56.84	723.35	678.34	16.07	
5200.00	5094.37	20.88	144.12	4825.07	32.50	15.47	57.13	735.75	689.53	15.92	
5300.00	5193.53	20.88	144.12	4917.72	33.25	15.80	57.41	748.17	700.74	15.77	
5400.00	5292.69	20.88	144.12	5010.37	33.99	16.14	57.67	760.61	711.96	15.63	
5500.00	5391.85	20.88	144.12	5103.02	34.73	16.47	57.93	773.07	723.20	15.50	
5600.00	5491.01	20.88	144.12	5195.67	35.48	16.80	58.18	785.54	734.46	15.38	
5700.00	5590.17	20.88	144.12	5288.32	36.22	17.14	58.43	798.02	745.72	15.26	
5800.00	5689.34	20.88	144.12	5380.96	36.96	17.47	58.66	810.52	757.01	15.15	
5900.00	5788.50	20.88	144.12	5473.61	37.71	17.81	58.89	823.03	768.30	15.04	
6000.00	5887.66	20.88	144.12	5566.26	38.45	18.14	59.12	835.55	779.60	14.93	
6100.00	5986.82	20.88	144.12	5658.91	39.19	18.48	59.33	848.09	790.92	14.83	
6200.00	6085.98	20.88	144.12	5751.56	39.94	18.81	59.54	860.64	802.25	14.74	
6300.00	6185.17	20.88	144.12	5844.23	40.68	19.15	53.04	873.06	813.53	14.67	
6400.00	6284.05	20.88	144.12	5936.61	41.42	19.48	23.23	884.08	824.06	14.73	
6500.00	6380.88	20.88	144.12	6027.08	42.15	19.81	341.68	893.61	833.82	14.95	
6600.00	6473.77	20.88	144.12	6113.87	42.84	20.12	314.97	902.47	843.67	15.35	
6700.00	6560.92	20.88	144.12	6195.30	43.50	20.42	300.95	911.99	854.88	15.97	
6800.00	6641.58	19.87	149.43	6270.75	44.04	20.69	292.48	923.80	868.78	16.79	
6900.00	6725.32	17.92	169.33	6350.05	44.15	20.90	286.64	938.98	886.38	17.85	
7000.00	6816.72	18.43	192.87	6437.01	43.64	21.02	282.15	957.52	906.98	18.95	
7100.00	6918.93	21.97	214.39	6533.04	42.39	20.99	278.38	979.06	930.18	20.03	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
7200.00	7036.72	28.43	230.68	6639.69	40.16	20.74	274.93	1002.90	955.02	20.95	
7300.00	7177.32	37.70	242.48	6757.52	36.76	20.01	271.53	1027.81	980.30	21.64	
7400.00	7350.94	50.14	251.46	6882.45	32.40	18.07	268.06	1051.77	1003.41	21.75	
7500.00	7568.63	66.38	258.92	6996.70	29.29	13.34	264.80	1071.64	1020.51	20.96	
7600.00	7831.97	86.37	265.81	7058.49	29.93	11.19	262.59	1082.87	1025.98	19.04	
7700.00	7962.69	90.00	266.98	7060.00	31.18	12.66	262.53	1084.62	1024.79	18.13	
7800.00	8062.68	90.00	266.98	7060.00	32.30	13.22	262.54	1086.13	1023.99	17.48	
7900.00	8162.67	90.00	266.98	7060.00	33.61	13.81	262.55	1087.64	1022.60	16.72	
8000.00	8262.65	90.00	266.98	7060.00	35.08	14.44	262.56	1089.15	1020.99	15.98	
8100.00	8362.64	90.00	266.98	7060.00	36.70	15.10	262.57	1090.65	1019.18	15.26	
8200.00	8462.63	90.00	266.98	7060.00	38.46	15.77	262.58	1092.16	1016.93	14.52	
8300.00	8562.62	90.00	266.98	7060.00	40.33	16.45	262.59	1093.67	1014.64	13.84	
8400.00	8662.61	90.00	266.98	7060.00	42.30	17.15	262.60	1095.18	1012.05	13.17	
8500.00	8762.60	90.00	266.98	7060.00	44.35	17.84	262.61	1096.69	1009.29	12.55	
8600.00	8862.58	90.00	266.98	7060.00	46.49	18.55	262.62	1098.20	1006.37	11.96	
8700.00	8962.57	90.00	266.98	7060.00	48.69	19.25	262.63	1099.71	1003.39	11.42	
8800.00	9062.56	90.00	266.98	7060.00	50.95	19.96	262.64	1101.22	1000.26	10.91	
8900.00	9162.55	90.00	266.98	7060.00	53.27	20.67	262.65	1102.73	997.07	10.44	
9000.00	9262.54	90.00	266.98	7060.00	55.62	21.37	262.66	1104.24	993.82	10.00	
9100.00	9362.53	90.00	266.98	7060.00	58.02	22.08	262.67	1105.75	990.49	9.59	
9200.00	9462.51	90.00	266.98	7060.00	60.45	22.79	262.68	1107.26	987.08	9.21	
9300.00	9562.50	90.00	266.98	7060.00	62.92	23.50	262.69	1108.77	983.62	8.86	
9400.00	9662.49	90.00	266.98	7060.00	65.41	24.22	262.70	1110.28	980.11	8.53	
9500.00	9762.48	90.00	266.98	7060.00	67.92	24.93	262.71	1111.79	976.57	8.22	
9600.00	9862.47	90.00	266.98	7060.00	70.46	25.64	262.72	1113.30	972.99	7.93	
9700.00	9962.46	90.00	266.98	7060.00	73.01	26.35	262.73	1114.81	969.38	7.67	
9800.00	10062.45	90.00	266.98	7060.00	75.59	27.06	262.74	1116.32	965.74	7.41	
9900.00	10162.43	90.00	266.98	7060.00	78.18	27.78	262.75	1117.83	962.08	7.18	
10000.00	10262.42	90.00	266.98	7060.00	80.78	28.49	262.76	1119.34	958.37	6.95	
10100.00	10362.41	90.00	266.98	7060.00	83.40	29.20	262.77	1120.85	954.61	6.74	
10200.00	10462.40	90.00	266.98	7060.00	86.03	29.92	262.78	1122.36	950.84	6.54	
10300.00	10562.39	90.00	266.98	7060.00	88.66	30.63	262.79	1123.87	947.05	6.36	
10400.00	10662.38	90.00	266.98	7060.00	91.31	31.35	262.80	1125.38	943.24	6.18	
10500.00	10762.36	90.00	266.98	7060.00	93.97	32.06	262.81	1126.89	939.42	6.01	
10600.00	10862.35	90.00	266.98	7060.00	96.64	32.78	262.82	1128.40	935.58	5.85	
10700.00	10962.34	90.00	266.98	7060.00	99.31	33.50	262.83	1129.91	931.74	5.70	
10800.00	11062.33	90.00	266.98	7060.00	101.99	34.21	262.84	1131.42	927.88	5.56	
10900.00	11162.32	90.00	266.98	7060.00	104.67	34.93	262.85	1132.93	924.01	5.42	
11000.00	11262.31	90.00	266.98	7060.00	107.37	35.65	262.86	1134.44	920.13	5.29	
11100.00	11362.29	90.00	266.98	7060.00	110.06	36.37	262.87	1135.95	916.25	5.17	
11200.00	11462.28	90.00	266.98	7060.00	112.77	37.08	262.88	1137.46	912.35	5.05	
11300.00	11562.27	90.00	266.98	7060.00	115.47	37.80	262.89	1138.97	908.45	4.94	
11400.00	11662.26	90.00	266.98	7060.00	118.18	38.52	262.90	1140.48	904.54	4.83	
11500.00	11762.25	90.00	266.98	7060.00	120.90	39.24	262.91	1142.00	900.63	4.73	
11600.00	11862.24	90.00	266.98	7060.00	123.62	39.96	262.92	1143.51	896.70	4.63	
11700.00	11962.23	90.00	266.98	7060.00	126.34	40.68	262.93	1145.02	892.77	4.54	
11800.00	12062.21	90.00	266.98	7060.00	129.07	41.40	262.94	1146.53	888.84	4.45	
11900.00	12162.20	90.00	266.98	7060.00	131.80	42.13	262.94	1148.04	884.90	4.36	
12000.00	12262.19	90.00	266.98	7060.00	134.53	42.85	262.95	1149.55	880.96	4.28	
12100.00	12362.18	90.00	266.98	7060.00	137.26	43.57	262.96	1151.06	877.01	4.20	
12200.00	12462.17	90.00	266.98	7060.00	140.00	44.29	262.97	1152.57	873.06	4.12	
12300.00	12562.16	90.00	266.98	7060.00	142.74	45.01	262.98	1154.08	869.10	4.05	
12400.00	12662.14	90.00	266.98	7060.00	145.48	45.74	262.99	1155.59	865.14	3.98	
12500.00	12762.13	90.00	266.98	7060.00	148.23	46.46	263.00	1157.10	861.17	3.91	
12600.00	12862.12	90.00	266.98	7060.00	150.97	47.18	263.01	1158.61	857.21	3.84	
12700.00	12962.11	90.00	266.98	7060.00	153.72	47.90	263.02	1160.12	853.23	3.78	
12800.00	13062.10	90.00	266.98	7060.00	156.47	48.63	263.03	1161.64	849.26	3.72	
12900.00	13162.09	90.00	266.98	7060.00	159.22	49.35	263.04	1163.15	845.28	3.66	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34C-30-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13000.00	13262.07	90.00	266.98	7060.00	161.98	50.08	263.05	1164.66	841.30	3.60	
13100.00	13362.06	90.00	266.98	7060.00	164.73	50.80	263.05	1166.17	837.32	3.55	
13200.00	13462.05	90.00	266.98	7060.00	167.49	51.53	263.06	1167.68	833.33	3.49	
13300.00	13562.04	90.00	266.98	7060.00	170.24	52.25	263.07	1169.19	829.34	3.44	
13400.00	13662.03	90.00	266.98	7060.00	173.00	52.98	263.08	1170.70	825.35	3.39	
13500.00	13762.02	90.00	266.98	7060.00	175.76	53.70	263.09	1172.21	821.36	3.34	
13600.00	13862.01	90.00	266.98	7060.00	178.53	54.43	263.10	1173.72	817.37	3.29	
13700.00	13961.99	90.00	266.98	7060.00	181.29	55.15	263.11	1175.23	813.37	3.25	
13800.00	14061.98	90.00	266.98	7060.00	184.05	55.88	263.12	1176.75	809.37	3.20	
13900.00	14161.97	90.00	266.98	7060.00	186.82	56.60	263.13	1178.26	805.37	3.16	
14000.00	14261.96	90.00	266.98	7060.00	189.58	57.33	263.14	1179.77	801.37	3.12	
14100.00	14361.95	90.00	266.98	7060.00	192.35	58.05	263.14	1181.28	797.36	3.08	
14200.00	14461.94	90.00	266.98	7060.00	195.12	58.78	263.15	1182.79	793.35	3.04	
14300.00	14561.92	90.00	266.98	7060.00	197.89	59.51	263.16	1184.30	789.35	3.00	
14400.00	14661.91	90.00	266.98	7060.00	200.66	60.23	263.17	1185.81	785.34	2.96	
14500.00	14761.90	90.00	266.98	7060.00	203.43	60.96	263.18	1187.33	781.33	2.92	
14600.00	14861.89	90.00	266.98	7060.00	206.20	61.69	263.19	1188.84	777.31	2.89	
14700.00	14961.88	90.00	266.98	7060.00	208.97	62.41	263.20	1190.35	773.30	2.85	
14800.00	15061.87	90.00	266.98	7060.00	211.74	63.14	263.21	1191.86	769.28	2.82	
14900.00	15161.85	90.00	266.98	7060.00	214.51	63.87	263.21	1193.37	765.27	2.79	
15000.00	15261.84	90.00	266.98	7060.00	217.29	64.60	263.22	1194.88	761.25	2.76	
15100.00	15361.83	90.00	266.98	7060.00	220.06	65.32	263.23	1196.39	757.23	2.72	
15200.00	15461.82	90.00	266.98	7060.00	222.84	66.05	263.24	1197.91	753.21	2.69	
15300.00	15561.81	90.00	266.98	7060.00	225.61	66.78	263.25	1199.42	749.19	2.66	
15400.00	15661.80	90.00	266.98	7060.00	228.39	67.51	263.26	1200.93	745.17	2.63	
15456.59	15718.38	90.00	266.98	7060.00	229.96	67.92	263.26	1201.79	742.89	2.62	