

**5D Plan Report**

## Synergy Resources

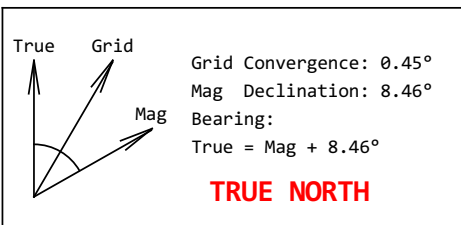
**Field Name:** *CO N - NAD 83*  
**Site Name:** *Goetzel 25-29 Pad*  
**Well Name:** *Goetzel 13N-30A-M*  
**Plan:** *P1:V1*

5 December 2016





**Goetzel 13N-30A-M**  
Weld County, CO  
Precision 562



Plan Data for Goetzel 13N-30A-M

Plan Point Information:									
DogLeg	Severity	Unit:	Position offsets from Slot centre						
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(DLSU)	(°)	(°)	
0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	0.0	
750.00	0.00	0.00	750.00	-0.00	0.00	-0.00	0.00	0.0	
1698.52	18.97	132.31	1681.29	-104.73	115.07	-87.38	2.00	132.3	
6201.49	18.97	132.31	5939.68	-1090.02	1197.65	-909.47	0.00	0.0	
7492.13	90.00	267.15	6795.00	-1332.97	511.77	-185.79	8.00	133.2	
15136.85	90.00	267.15	6795.00	-1713.74	-7123.46	7326.71	0.00	0.0	

Target Set Information:

Name: Goetzel 13N-30A-M

Position offsets from Slot centre						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat
	(USft)	(USft)	(USft)	(USft)	(USft)	(°)
LP 13N-30A-M	6795.00	-1332.97	511.77	1408994.19	3194159.91	40.453994
PBHL 13N-30A-M	6795.00	-1713.74	-7123.46	1408553.53	3186527.90	40.452946

- Goetzel 13N-30A-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 33N-30B-M
- Goetzel 13N-30C-M
- Goetzel 13C-30-M
- Goetzel 34N-30C-M
- Goetzel 34C-30-M

Plan Data for Goetzel 13N-30A-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 13N-30A-M  
Position:  
Offset is from Site centre  
+N/-S: -159.93USft  
Northing: 1410323.11USft  
Latitude: 40.457653°  
+E/-W: -1.39USft  
Easting: 3193637.70USft  
Longitude: -104.804139°  
Elevation Above VRD: 4732.00USft

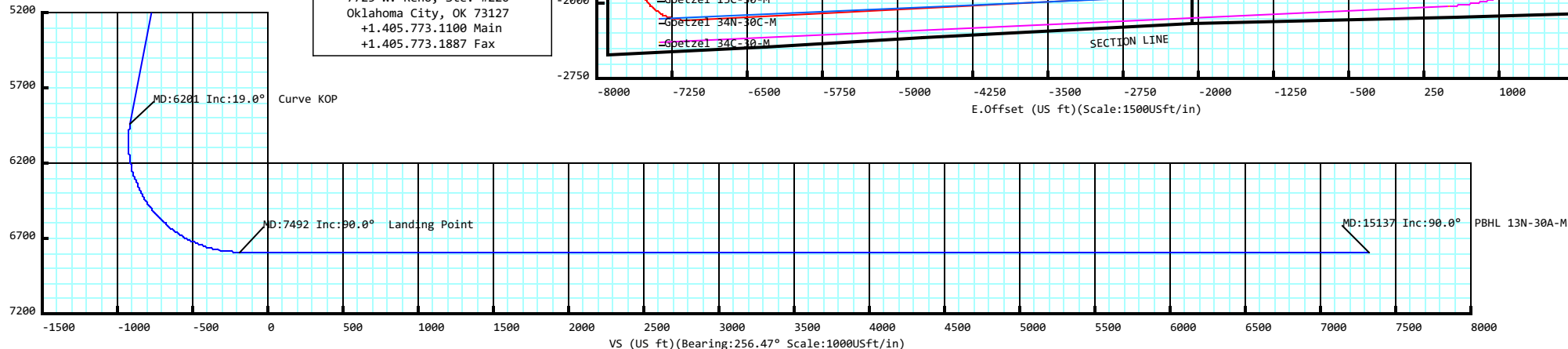
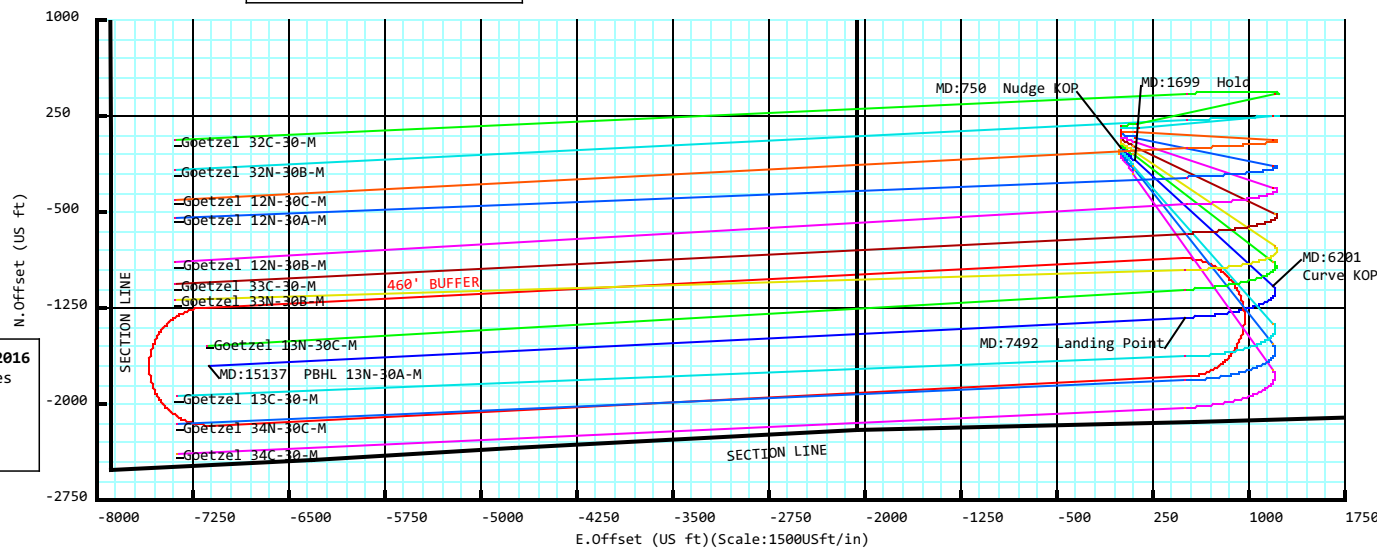
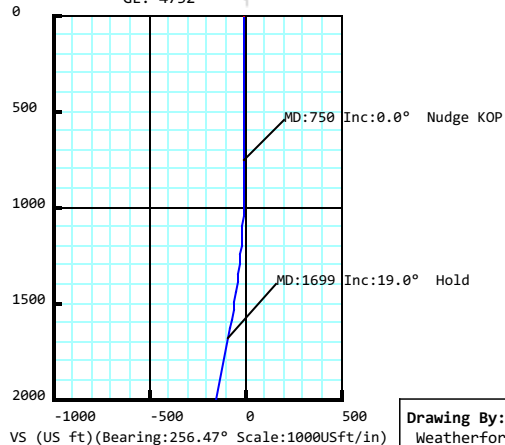
Well: Goetzel 13N-30A-M  
Type: Main-Well  
File Number:

Plan Folder: P1  
Plan: P1:V1  
Vertical Section: Position offset of origin from Slot centre:  
+N/-S: 0.00USft  
+E/-W: 0.00USft  
Azimuth: 256.47°

Magnetic Parameters:  
Model: Field Strength: Declination: Dip: Date:  
bggm2016 52524(nT) 8.46° 66.93° 2016-11-18



KB: 4757'  
GL: 4732'



## Goetzel 13N-30A-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 13N-30A-M	Position (Relative to Site Centre)			
	+N/-S: -159.93 US ft	Northing: 1410323.11 US ft		Latitude: 40.457653000
	+E/-W: -1.39 US ft	Easting: 3193637.70 US ft		Longitude: -104.804139000
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 4732.00 US ft			
	Comment:			
Well:  Goetzel 13N-30A-M	Type:Main well		UWI:	Plan:P1:V1
	File Number:	Comment:		
	Closure Distance:7326.71US ft		Closure Azimuth:256.47°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 256.47°
	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 13N-30A-M Comment:

Target Name:	Shape:	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (USFt)	Easting (USFt)	Comment
LP 13N-30A-M	Point	6795.00	-1332.97	511.77	1408994.19	3194159.91	
PBHL 13N-30A-M	Point	6795.00	-1713.74	-7123.46	1408553.53	3186527.90	

## 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	
750.00	0.00	0.00	750.00	-0.00	-0.00	0.00	0.00	0.00	0.00	Nudge KOP
1698.52	18.97	132.31	1681.29	-87.38	-104.73	115.07	2.00	0.00	2.00	Hold
6201.49	18.97	132.31	5939.68	-909.47	-1090.02	1197.65	0.00	0.00	0.00	Curve KOP
7492.13	90.00	267.15	6795.00	-185.79	-1332.97	511.77	5.50	10.45	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
15136.85	90.00	267.15	6795.00	7326.71	-1713.74	-7123.46	0.00	0.00	0.00	PBHL 13N-30A-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	
750.00	0.00	0.00	750.00	-0.00	-0.00	0.00	0.00	0.00	0.00	Nudge KOP
800.00	1.00	132.31	800.00	-0.25	-0.29	0.32	2.00	0.00	2.00	
900.00	3.00	132.31	899.93	-2.20	-2.64	2.90	2.00	0.00	2.00	
1000.00	5.00	132.31	999.68	-6.12	-7.34	8.06	2.00	-0.00	2.00	
1100.00	7.00	132.31	1099.13	-11.99	-14.37	15.79	2.00	-0.00	2.00	
1200.00	9.00	132.31	1198.15	-19.81	-23.74	26.08	2.00	-0.00	2.00	
1300.00	11.00	132.31	1296.63	-29.56	-35.43	38.93	2.00	0.00	2.00	
1400.00	13.00	132.31	1394.44	-41.24	-49.42	54.30	2.00	0.00	2.00	
1500.00	15.00	132.31	1491.46	-54.82	-65.70	72.19	2.00	-0.00	2.00	
1600.00	17.00	132.31	1587.58	-70.30	-84.26	92.58	2.00	0.00	2.00	
1698.52	18.97	132.31	1681.29	-87.38	-104.73	115.07	2.00	0.00	2.00	Hold
1700.00	18.97	132.31	1682.68	-87.65	-105.06	115.43	0.00	0.00	0.00	
1800.00	18.97	132.31	1777.25	-105.91	-126.94	139.47	0.00	0.00	0.00	
1900.00	18.97	132.31	1871.82	-124.17	-148.82	163.51	0.00	0.00	0.00	
2000.00	18.97	132.31	1966.39	-142.42	-170.70	187.55	0.00	0.00	0.00	
2100.00	18.97	132.31	2060.96	-160.68	-192.58	211.59	0.00	0.00	0.00	
2200.00	18.97	132.31	2155.53	-178.94	-214.46	235.64	0.00	0.00	0.00	
2300.00	18.97	132.31	2250.10	-197.19	-236.34	259.68	0.00	0.00	0.00	
2400.00	18.97	132.31	2344.66	-215.45	-258.22	283.72	0.00	0.00	0.00	
2500.00	18.97	132.31	2439.23	-233.71	-280.10	307.76	0.00	0.00	0.00	
2600.00	18.97	132.31	2533.80	-251.96	-301.98	331.80	0.00	0.00	0.00	
2700.00	18.97	132.31	2628.37	-270.22	-323.86	355.84	0.00	0.00	0.00	
2800.00	18.97	132.31	2722.94	-288.48	-345.75	379.88	0.00	0.00	0.00	
2900.00	18.97	132.31	2817.51	-306.73	-367.63	403.93	0.00	0.00	0.00	
3000.00	18.97	132.31	2912.08	-324.99	-389.51	427.97	0.00	0.00	0.00	
3100.00	18.97	132.31	3006.65	-343.24	-411.39	452.01	0.00	0.00	0.00	
3200.00	18.97	132.31	3101.21	-361.50	-433.27	476.05	0.00	0.00	0.00	
3300.00	18.97	132.31	3195.78	-379.76	-455.15	500.09	0.00	0.00	0.00	
3400.00	18.97	132.31	3290.35	-398.01	-477.03	524.13	0.00	0.00	0.00	
3500.00	18.97	132.31	3384.92	-416.27	-498.91	548.17	0.00	0.00	0.00	
3600.00	18.97	132.31	3479.49	-434.53	-520.79	572.22	0.00	0.00	0.00	
3700.00	18.97	132.31	3574.06	-452.78	-542.67	596.26	0.00	0.00	0.00	
3800.00	18.97	132.31	3668.63	-471.04	-564.56	620.30	0.00	0.00	0.00	
3900.00	18.97	132.31	3763.19	-489.30	-586.44	644.34	0.00	0.00	0.00	
4000.00	18.97	132.31	3857.76	-507.55	-608.32	668.38	0.00	0.00	0.00	
4100.00	18.97	132.31	3952.33	-525.81	-630.20	692.42	0.00	0.00	0.00	
4200.00	18.97	132.31	4046.90	-544.07	-652.08	716.46	0.00	0.00	0.00	
4300.00	18.97	132.31	4141.47	-562.32	-673.96	740.51	0.00	0.00	0.00	
4400.00	18.97	132.31	4236.04	-580.58	-695.84	764.55	0.00	0.00	0.00	
4500.00	18.97	132.31	4330.61	-598.84	-717.72	788.59	0.00	0.00	0.00	
4600.00	18.97	132.31	4425.18	-617.09	-739.60	812.63	0.00	0.00	0.00	
4700.00	18.97	132.31	4519.74	-635.35	-761.48	836.67	0.00	0.00	0.00	
4800.00	18.97	132.31	4614.31	-653.61	-783.37	860.71	0.00	0.00	0.00	
4900.00	18.97	132.31	4708.88	-671.86	-805.25	884.76	0.00	0.00	0.00	
5000.00	18.97	132.31	4803.45	-690.12	-827.13	908.80	0.00	0.00	0.00	
5100.00	18.97	132.31	4898.02	-708.38	-849.01	932.84	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)	
5200.00	18.97	132.31	4992.59	-726.63	-870.89	956.88	0.00	0.00	0.00	
5300.00	18.97	132.31	5087.16	-744.89	-892.77	980.92	0.00	0.00	0.00	
5400.00	18.97	132.31	5181.72	-763.14	-914.65	1004.96	0.00	0.00	0.00	
5500.00	18.97	132.31	5276.29	-781.40	-936.53	1029.00	0.00	0.00	0.00	
5600.00	18.97	132.31	5370.86	-799.66	-958.41	1053.05	0.00	0.00	0.00	
5700.00	18.97	132.31	5465.43	-817.91	-980.29	1077.09	0.00	0.00	0.00	
5800.00	18.97	132.31	5560.00	-836.17	-1002.18	1101.13	0.00	0.00	0.00	
5900.00	18.97	132.31	5654.57	-854.43	-1024.06	1125.17	0.00	0.00	0.00	
6000.00	18.97	132.31	5749.14	-872.68	-1045.94	1149.21	0.00	0.00	0.00	
6100.00	18.97	132.31	5843.70	-890.94	-1067.82	1173.25	0.00	0.00	0.00	
6200.00	18.97	132.31	5938.27	-909.20	-1089.70	1197.29	0.00	0.00	0.00	
6201.49	18.97	132.31	5939.68	-909.47	-1090.02	1197.65	0.00	0.00	0.00	Curve KOP
6300.00	14.69	155.50	6034.06	-920.86	-1112.21	1214.70	-4.34	23.54	8.00	
6400.00	13.94	188.12	6131.10	-918.83	-1135.71	1218.27	-0.75	32.63	8.00	
6500.00	17.28	215.54	6227.53	-903.14	-1159.76	1207.92	3.33	27.42	8.00	
6600.00	22.98	232.06	6321.46	-874.10	-1183.89	1183.85	5.70	16.51	8.00	
6700.00	29.72	241.86	6411.06	-832.27	-1207.62	1146.54	6.74	9.81	8.00	
6800.00	36.92	248.22	6494.59	-778.47	-1230.49	1096.71	7.21	6.35	8.00	
6900.00	44.37	252.72	6570.43	-713.75	-1252.06	1035.33	7.45	4.50	8.00	
7000.00	51.95	256.15	6637.09	-639.36	-1271.90	963.59	7.58	3.43	8.00	
7100.00	59.62	258.93	6693.29	-556.76	-1289.64	882.90	7.66	2.78	8.00	
7200.00	67.33	261.30	6737.92	-467.54	-1304.93	794.82	7.71	2.37	8.00	
7300.00	75.08	263.42	6770.11	-373.46	-1317.46	701.06	7.75	2.12	8.00	
7400.00	82.84	265.39	6789.25	-276.33	-1327.00	603.46	7.76	1.97	8.00	
7492.13	90.00	267.15	6795.00	-185.79	-1332.97	511.77	7.77	1.90	8.00	Landing Point
7500.00	90.00	267.15	6795.00	-178.05	-1333.37	503.91	0.00	0.00	0.00	
7600.00	90.00	267.15	6795.00	-79.78	-1338.35	404.03	0.00	0.00	0.00	
7700.00	90.00	267.15	6795.00	18.49	-1343.33	304.16	0.00	0.00	0.00	
7800.00	90.00	267.15	6795.00	116.76	-1348.31	204.28	0.00	0.00	0.00	
7900.00	90.00	267.15	6795.00	215.03	-1353.29	104.40	0.00	0.00	0.00	
8000.00	90.00	267.15	6795.00	313.30	-1358.27	4.53	0.00	0.00	0.00	
8100.00	90.00	267.15	6795.00	411.57	-1363.25	-95.35	0.00	0.00	0.00	
8200.00	90.00	267.15	6795.00	509.84	-1368.23	-195.22	0.00	0.00	0.00	
8300.00	90.00	267.15	6795.00	608.11	-1373.21	-295.10	0.00	0.00	0.00	
8400.00	90.00	267.15	6795.00	706.38	-1378.19	-394.98	0.00	0.00	0.00	
8500.00	90.00	267.15	6795.00	804.65	-1383.17	-494.85	0.00	0.00	0.00	
8600.00	90.00	267.15	6795.00	902.92	-1388.15	-594.73	0.00	0.00	0.00	
8700.00	90.00	267.15	6795.00	1001.19	-1393.14	-694.60	0.00	0.00	0.00	
8800.00	90.00	267.15	6795.00	1099.46	-1398.12	-794.48	0.00	0.00	0.00	
8900.00	90.00	267.15	6795.00	1197.73	-1403.10	-894.35	0.00	0.00	0.00	
9000.00	90.00	267.15	6795.00	1296.00	-1408.08	-994.23	0.00	0.00	0.00	
9100.00	90.00	267.15	6795.00	1394.27	-1413.06	-1094.11	0.00	0.00	0.00	
9200.00	90.00	267.15	6795.00	1492.54	-1418.04	-1193.98	0.00	0.00	0.00	
9300.00	90.00	267.15	6795.00	1590.82	-1423.02	-1293.86	0.00	0.00	0.00	
9400.00	90.00	267.15	6795.00	1689.09	-1428.00	-1393.73	0.00	0.00	0.00	
9500.00	90.00	267.15	6795.00	1787.36	-1432.98	-1493.61	0.00	0.00	0.00	
9600.00	90.00	267.15	6795.00	1885.63	-1437.96	-1593.49	0.00	0.00	0.00	
9700.00	90.00	267.15	6795.00	1983.90	-1442.94	-1693.36	0.00	0.00	0.00	
9800.00	90.00	267.15	6795.00	2082.17	-1447.92	-1793.24	0.00	0.00	0.00	
9900.00	90.00	267.15	6795.00	2180.44	-1452.90	-1893.11	0.00	0.00	0.00	
10000.00	90.00	267.15	6795.00	2278.71	-1457.88	-1992.99	0.00	0.00	0.00	
10100.00	90.00	267.15	6795.00	2376.98	-1462.87	-2092.87	0.00	0.00	0.00	
10200.00	90.00	267.15	6795.00	2475.25	-1467.85	-2192.74	0.00	0.00	0.00	
10300.00	90.00	267.15	6795.00	2573.52	-1472.83	-2292.62	0.00	0.00	0.00	
10400.00	90.00	267.15	6795.00	2671.79	-1477.81	-2392.49	0.00	0.00	0.00	
10500.00	90.00	267.15	6795.00	2770.06	-1482.79	-2492.37	0.00	0.00	0.00	
10600.00	90.00	267.15	6795.00	2868.33	-1487.77	-2592.24	0.00	0.00	0.00	
10700.00	90.00	267.15	6795.00	2966.60	-1492.75	-2692.12	0.00	0.00	0.00	
10800.00	90.00	267.15	6795.00	3064.87	-1497.73	-2792.00	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)	
10900.00	90.00	267.15	6795.00	3163.14	-1502.71	-2891.87	0.00	0.00	0.00	
11000.00	90.00	267.15	6795.00	3261.41	-1507.69	-2991.75	0.00	0.00	0.00	
11100.00	90.00	267.15	6795.00	3359.68	-1512.67	-3091.62	0.00	0.00	0.00	
11200.00	90.00	267.15	6795.00	3457.95	-1517.65	-3191.50	0.00	0.00	0.00	
11300.00	90.00	267.15	6795.00	3556.22	-1522.63	-3291.38	0.00	0.00	0.00	
11400.00	90.00	267.15	6795.00	3654.49	-1527.62	-3391.25	0.00	0.00	0.00	
11500.00	90.00	267.15	6795.00	3752.76	-1532.60	-3491.13	0.00	0.00	0.00	
11600.00	90.00	267.15	6795.00	3851.03	-1537.58	-3591.00	0.00	0.00	0.00	
11700.00	90.00	267.15	6795.00	3949.30	-1542.56	-3690.88	0.00	0.00	0.00	
11800.00	90.00	267.15	6795.00	4047.57	-1547.54	-3790.76	0.00	0.00	0.00	
11900.00	90.00	267.15	6795.00	4145.84	-1552.52	-3890.63	0.00	0.00	0.00	
12000.00	90.00	267.15	6795.00	4244.11	-1557.50	-3990.51	0.00	0.00	0.00	
12100.00	90.00	267.15	6795.00	4342.38	-1562.48	-4090.38	0.00	0.00	0.00	
12200.00	90.00	267.15	6795.00	4440.65	-1567.46	-4190.26	0.00	0.00	0.00	
12300.00	90.00	267.15	6795.00	4538.93	-1572.44	-4290.13	0.00	0.00	0.00	
12400.00	90.00	267.15	6795.00	4637.20	-1577.42	-4390.01	0.00	0.00	0.00	
12500.00	90.00	267.15	6795.00	4735.47	-1582.40	-4489.89	0.00	0.00	0.00	
12600.00	90.00	267.15	6795.00	4833.74	-1587.38	-4589.76	0.00	0.00	0.00	
12700.00	90.00	267.15	6795.00	4932.01	-1592.37	-4689.64	0.00	0.00	0.00	
12800.00	90.00	267.15	6795.00	5030.28	-1597.35	-4789.51	0.00	0.00	0.00	
12900.00	90.00	267.15	6795.00	5128.55	-1602.33	-4889.39	0.00	0.00	0.00	
13000.00	90.00	267.15	6795.00	5226.82	-1607.31	-4989.27	0.00	0.00	0.00	
13100.00	90.00	267.15	6795.00	5325.09	-1612.29	-5089.14	0.00	0.00	0.00	
13200.00	90.00	267.15	6795.00	5423.36	-1617.27	-5189.02	0.00	0.00	0.00	
13300.00	90.00	267.15	6795.00	5521.63	-1622.25	-5288.89	0.00	0.00	0.00	
13400.00	90.00	267.15	6795.00	5619.90	-1627.23	-5388.77	0.00	0.00	0.00	
13500.00	90.00	267.15	6795.00	5718.17	-1632.21	-5488.65	0.00	0.00	0.00	
13600.00	90.00	267.15	6795.00	5816.44	-1637.19	-5588.52	0.00	0.00	0.00	
13700.00	90.00	267.15	6795.00	5914.71	-1642.17	-5688.40	0.00	0.00	0.00	
13800.00	90.00	267.15	6795.00	6012.98	-1647.15	-5788.27	0.00	0.00	0.00	
13900.00	90.00	267.15	6795.00	6111.25	-1652.13	-5888.15	0.00	0.00	0.00	
14000.00	90.00	267.15	6795.00	6209.52	-1657.11	-5988.02	0.00	0.00	0.00	
14100.00	90.00	267.15	6795.00	6307.79	-1662.10	-6087.90	0.00	0.00	0.00	
14200.00	90.00	267.15	6795.00	6406.06	-1667.08	-6187.78	0.00	0.00	0.00	
14300.00	90.00	267.15	6795.00	6504.33	-1672.06	-6287.65	0.00	0.00	0.00	
14400.00	90.00	267.15	6795.00	6602.60	-1677.04	-6387.53	0.00	0.00	0.00	
14500.00	90.00	267.15	6795.00	6700.87	-1682.02	-6487.40	0.00	0.00	0.00	
14600.00	90.00	267.15	6795.00	6799.14	-1687.00	-6587.28	0.00	0.00	0.00	
14700.00	90.00	267.15	6795.00	6897.41	-1691.98	-6687.16	0.00	0.00	0.00	
14800.00	90.00	267.15	6795.00	6995.68	-1696.96	-6787.03	0.00	0.00	0.00	
14900.00	90.00	267.15	6795.00	7093.95	-1701.94	-6886.91	0.00	0.00	0.00	
15000.00	90.00	267.15	6795.00	7192.22	-1706.92	-6986.78	0.00	0.00	0.00	
15100.00	90.00	267.15	6795.00	7290.49	-1711.90	-7086.66	0.00	0.00	0.00	
15136.85	90.00	267.15	6795.00	7326.71	-1713.74	-7123.46	0.00	0.00	0.00	PBHL 13N-30A-M



## Synergy Resources

**Field Name:** *CO N - NAD 83*  
**Site Name:** *Goetzel 25-29 Pad*  
**Well Name:** *Goetzel 13N-30A-M*

5 December 2016

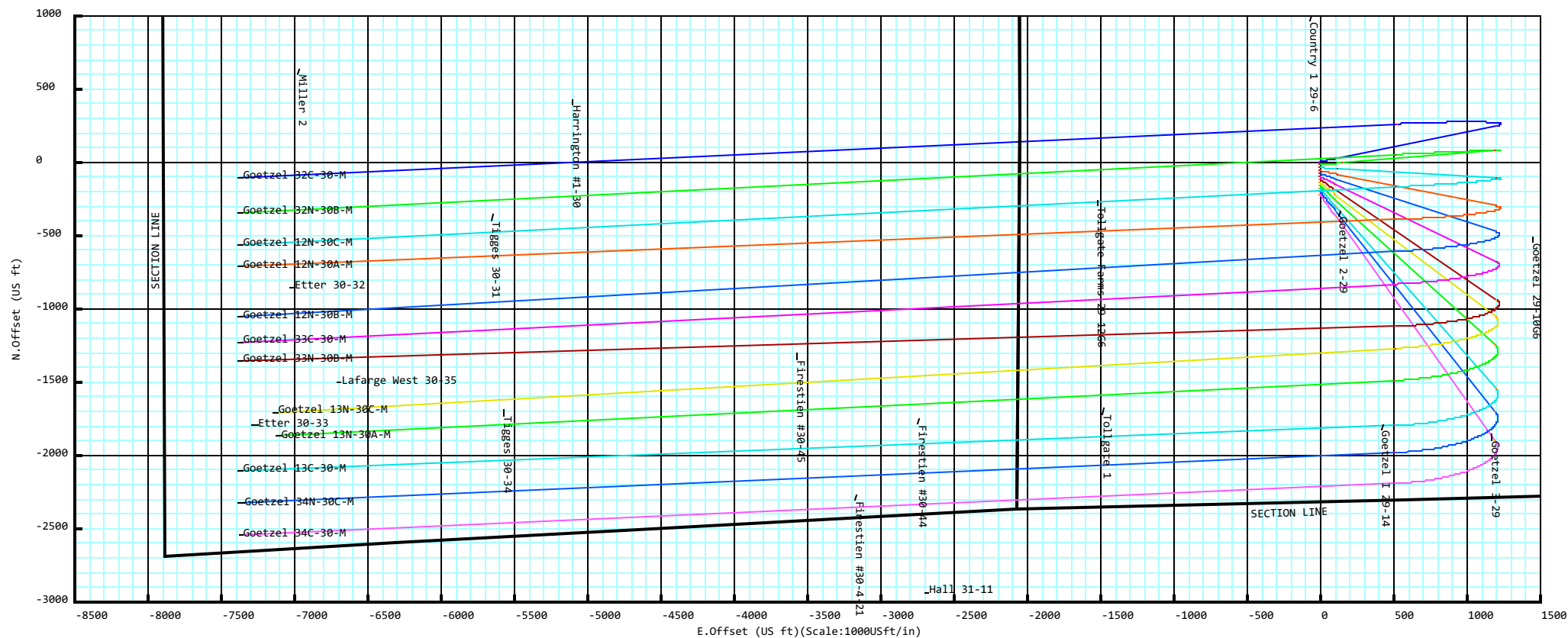




**Goetzel Pad**  
Weld County, CO  
Precision 562

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	





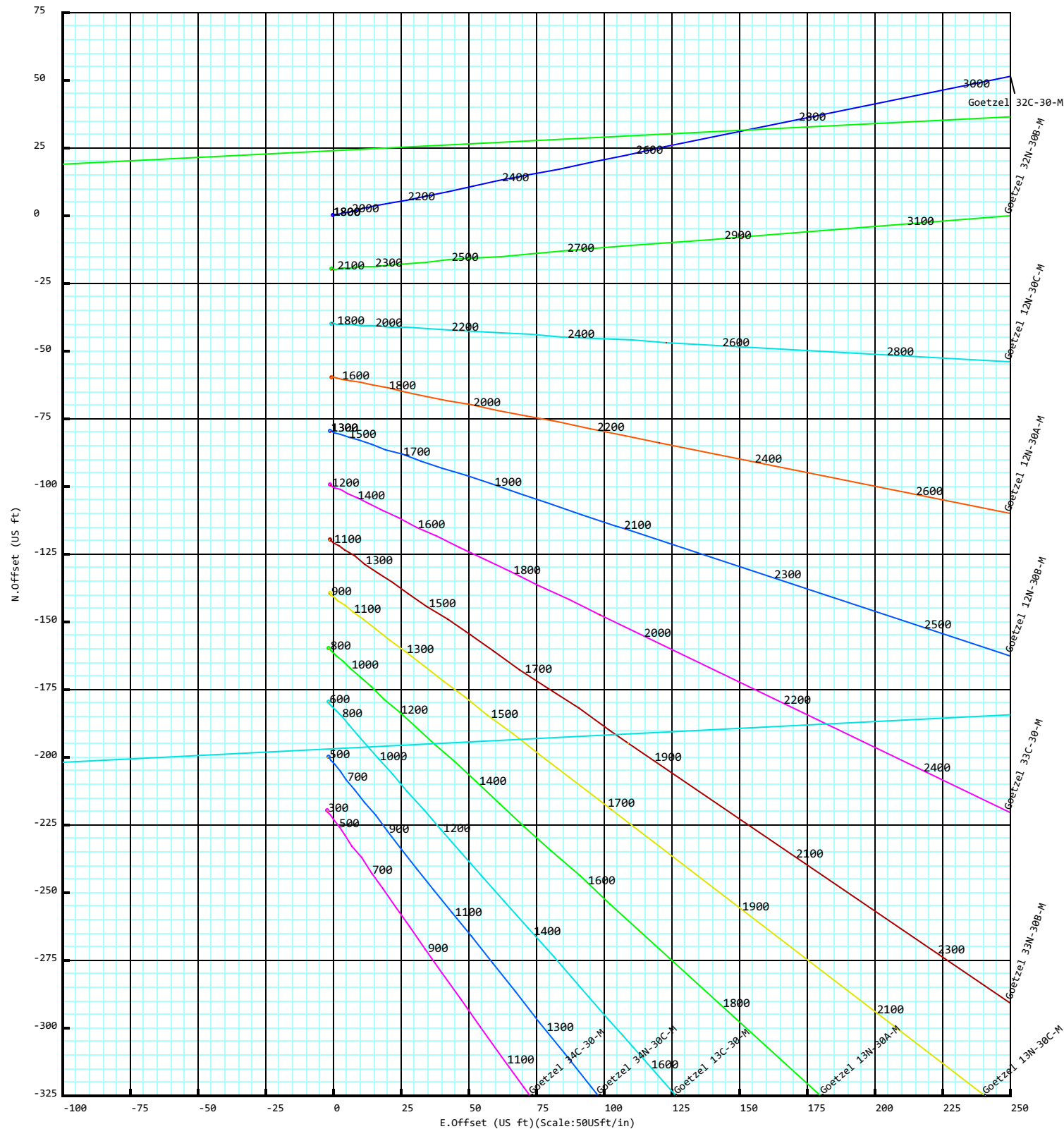


**Goetzl Pad**  
Weld County, CO  
Precision 562

- 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 13N-30A-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 13N-30A-M	Position (Relative to Site Centre)						
	+N/-S: -159.93 US ft		Northing: 1410323.11 US ft		Latitude: 40.457653000		
	+E/-W: -1.39 US ft		Easting: 3193637.70 US ft		Longitude: -104.804139000		
	Slot TVD Reference: Ground Elevation						
	Elevation above MSL: 4732.00 US ft						
	Comment:						
Well:  Goetzel 13N-30A-M	Type:Main well		UWI:		Plan:Working Plan		
	File Number:	Comment:					
	Closure Distance:7326.71US ft		Closure Azimuth:256.47°				
	Vertical Section: Position of Origin (Relative to Slot centre)						
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft		Az: 256.47°		
	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 13N-30A-M (p)	0.00	15136.85	100.00	2

## Secondary Well Names:

Goetzel 2-29 (s)  
 Etter 30-32 (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 I 29-14 (s)  
 Firestien #30-4-21 (s)  
 Goetzel 3-29 (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)

**Secondary Well Names:**

Goetzel 33N-30B-M (p)  
 Goetzel 13N-30C-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
Tigges 30-34 (s)	13575.00	6762.00	6795.00	100.46	-283.92	0.26	SF(Hi)
Firestien #30-44 (s)	10745.70	6762.00	6795.00	103.86	-202.93	0.34	SF(Hi)
Tollgate 1 (s)	9487.50	6756.00	6795.00	94.16	-179.03	0.34	SF(Hi)
Etter 30-33 (s)	15136.85	6770.00	6795.00	176.57	-150.04	0.54	SF(Hi)
Goetzel 2-29 (s)	1920.90	1863.58	1891.58	40.29	-20.32	0.66	SF(Hi); CC (Lo)
Goetzel 13N-30C-M (p)	15136.85	15284.64	6795.00	242.49	-78.44	0.76	SF(Hi)
Lafarge West 30-35 (s)	14704.88	6770.00	6795.00	344.34	-71.59	0.83	SF(Hi)
Goetzel 34N-30C-M (p)	15136.85	15357.82	6795.00	474.20	51.63	1.12	SF(Med)
Firestien #30-45 (s)	11566.02	6770.00	6795.00	384.01	54.68	1.17	SF(Med)
Goetzel 13C-30-M (p)	15136.85	15440.71	6795.00	352.26	52.83	1.18	SF(Med)
Goetzel 33N-30B-M (p)	15136.85	15218.71	6795.00	539.14	99.66	1.23	SF(Med)
Goetzel I 29-14 (s)	7601.17	6764.00	6795.00	296.72	64.56	1.28	SF(Med)
Goetzel 34C-30-M (p)	15136.85	15488.51	6795.00	716.08	298.89	1.72	SF(Lo)
Goetzel 33C-30-M (p)	15136.85	15379.52	6795.00	721.56	307.59	1.74	SF(Lo)
Firestien #30-4-21 (s)	11247.27	6765.00	6795.00	598.45	277.56	1.86	SF(Lo)
Goetzel 12N-30B-M (p)	15136.85	15233.26	6795.00	838.91	393.76	1.88	SF(Lo)
Goetzel 3-29 (s)	6913.87	6549.25	6580.25	470.45	251.16	2.15	SF(Lo)
Etter 30-32 (s)	15022.85	6778.00	6795.00	1007.52	582.70	2.37	SF(Lo)
Goetzel 12N-30A-M (p)	15136.85	15113.88	6795.00	1170.92	719.08	2.59	
Goetzel 12N-30C-M (p)	15136.85	15311.63	6795.00	1334.71	887.62	2.99	
Goetzel 32N-30B-M (p)	15136.85	15294.64	6795.00	1548.47	1097.53	3.43	
Goetzel 32C-30-M (p)	15136.85	15470.09	6795.00	1809.24	1364.38	4.07	

## 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 13C-30-M (p)	50.00	50.00	50.00	20.04	19.19	23.75	CC (Med)
Goetzel 13N-30C-M (p)	0.00	0.00	0.00	20.04	19.31	27.33	CC (Med)
Goetzel 34N-30C-M (p)	0.00	0.00	0.00	40.07	39.34	54.65	CC (Lo)
Goetzel 33N-30B-M (p)	50.00	50.00	50.00	40.07	39.23	47.50	CC (Lo)
Goetzel 2-29 (s)	1908.59	1851.95	1879.95	40.08	-20.13	0.67	SF(Hi); CC (Lo)
Goetzel 34C-30-M (p)	50.00	50.00	50.00	60.11	59.27	71.25	CC (Lo)
Goetzel 33C-30-M (p)	0.00	0.00	0.00	60.11	59.38	81.97	CC (Lo)
Goetzel 12N-30B-M (p)	0.00	0.00	0.00	80.15	79.41	109.30	
Tollgate 1 (s)	9487.11	6756.00	6795.00	94.16	-179.05	0.34	SF(Hi)
Goetzel 12N-30A-M (p)	0.00	0.00	0.00	100.19	99.45	136.62	
Tigges 30-34 (s)	13575.39	6762.00	6795.00	100.46	-283.94	0.26	SF(Hi)
Firestien #30-44 (s)	10745.90	6762.00	6795.00	103.86	-202.93	0.34	SF(Hi)
Goetzel 12N-30C-M (p)	0.00	0.00	0.00	119.86	119.13	163.45	
Goetzel 32N-30B-M (p)	0.00	0.00	0.00	139.90	139.16	190.77	
Goetzel 32C-30-M (p)	0.00	0.00	0.00	159.93	159.20	218.10	
Etter 30-33 (s)	15136.85	6770.00	6795.00	176.57	-150.04	0.54	SF(Hi)
Goetzel I 29-14 (s)	7588.87	6764.00	6795.00	296.47	63.83	1.27	SF(Med)
Lafarge West 30-35 (s)	14700.00	6770.00	6795.00	344.31	-71.49	0.83	SF(Hi)
Firestien #30-45 (s)	11557.81	6770.00	6795.00	383.92	54.82	1.17	SF(Med)
Goetzel 3-29 (s)	6903.91	6542.22	6573.22	470.38	251.18	2.15	SF(Lo)
Firestien #30-4-21 (s)	11202.73	6765.00	6795.00	596.79	277.52	1.87	SF(Lo)
Etter 30-32 (s)	14986.91	6778.00	6795.00	1006.87	582.86	2.37	SF(Lo)

Primary Well: Goetzel 13N-30A-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 13C-30-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 13C-30-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 13C-30-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 13C-30-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 13C-30-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 13C-30-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 13C-30-M (p)	CC (Med)
700.00	0.00	0.00	700.00	1.46	1.46	0.35	20.04	16.39	5.49	Goetzel 13N-30C-M (p)	CC (Med)
800.00	1.00	131.86	800.00	1.67	1.67	227.57	20.33	16.24	4.97	Goetzel 13N-30C-M (p)	CC (Med)
900.00	3.00	131.86	899.93	1.86	1.86	221.91	22.53	18.05	5.02	Goetzel 13N-30C-M (p)	CC (Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
1000.00	5.00	131.86	999.68	2.06	2.05	217.16	25.41	20.55	5.22	Goetzel 13N-30C-M (p)	CC (Med)
1100.00	7.00	131.86	1099.13	2.29	2.25	213.91	28.59	23.32	5.43	Goetzel 13N-30C-M (p)	CC (Med)
1200.00	9.00	131.86	1198.15	2.55	2.45	12.14	192.81	156.80	5.35	Goetzel 2- 29 (s)	
1200.00	9.00	131.86	1198.15	2.55	2.45	211.78	31.98	26.28	5.61	Goetzel 13N-30C-M (p)	CC (Med)
1300.00	11.00	131.86	1296.63	2.85	2.66	13.41	175.86	136.70	4.49	Goetzel 2- 29 (s)	
1300.00	11.00	131.86	1296.63	2.85	2.66	210.50	35.54	29.41	5.79	Goetzel 13N-30C-M (p)	CC (Lo)
1400.00	13.00	131.86	1394.44	3.21	2.88	15.29	155.69	113.24	3.67	Goetzel 2- 29 (s)	
1400.00	13.00	131.86	1394.44	3.21	2.88	209.85	39.25	32.61	5.91	Goetzel 13N-30C-M (p)	CC (Lo)
1500.00	15.00	131.86	1491.46	3.62	3.10	18.20	132.46	86.74	2.90	Goetzel 2- 29 (s)	
1500.00	15.00	131.86	1491.46	3.62	3.10	209.68	43.08	35.92	6.01	Goetzel 13N-30C-M (p)	CC (Lo)
1600.00	17.00	131.86	1587.58	4.11	3.34	23.01	106.52	57.67	2.18	Goetzel 2- 29 (s)	SF(Lo)
1600.00	17.00	131.86	1587.58	4.11	3.34	209.87	47.03	39.25	6.05	Goetzel 13N-30C-M (p)	CC (Lo)
1700.00	18.97	131.86	1682.68	4.66	3.58	32.02	78.75	26.54	1.51	Goetzel 2- 29 (s)	SF(Lo)
1700.00	18.97	131.86	1682.68	4.66	3.58	210.33	51.09	42.67	6.06	Goetzel 13N-30C-M (p)	CC (Lo)
1800.00	18.97	131.86	1777.25	5.27	3.86	50.23	53.40	-2.50	0.96	Goetzel 2- 29 (s)	SF(Hi); CC (Lo)
1900.00	18.97	131.86	1871.82	5.89	4.14	86.26	40.18	-19.71	0.67	Goetzel 2- 29 (s)	SF(Hi); CC (Lo)
2000.00	18.97	131.86	1966.39	6.53	4.42	125.05	49.91	-12.88	0.79	Goetzel 2- 29 (s)	SF(Hi); CC (Lo)
2100.00	18.97	131.86	2060.96	7.18	4.71	145.75	74.03	8.68	1.13	Goetzel 2- 29 (s)	SF(Med)
2100.00	18.97	131.86	2060.96	7.18	4.71	212.86	66.18	54.55	5.69	Goetzel 13N-30C-M (p)	
2200.00	18.97	131.86	2155.53	7.83	5.00	155.90	102.88	34.69	1.51	Goetzel 2- 29 (s)	SF(Lo)
2200.00	18.97	131.86	2155.53	7.83	5.00	213.32	69.96	57.47	5.60	Goetzel 13N-30C-M (p)	
2300.00	18.97	131.86	2250.10	8.50	5.30	161.58	133.42	62.40	1.88	Goetzel 2- 29 (s)	SF(Lo)
2300.00	18.97	131.86	2250.10	8.50	5.30	213.74	73.75	60.35	5.50	Goetzel 13N-30C-M (p)	
2400.00	18.97	131.86	2344.66	9.16	5.60	165.14	164.72	90.49	2.22	Goetzel 2- 29 (s)	SF(Lo)
2400.00	18.97	131.86	2344.66	9.16	5.60	214.12	77.54	63.22	5.41	Goetzel 13N-30C-M (p)	
2500.00	18.97	131.86	2439.23	9.83	5.90	167.57	196.41	119.02	2.54	Goetzel 2- 29 (s)	
2500.00	18.97	131.86	2439.23	9.83	5.90	214.46	81.33	66.08	5.33	Goetzel 13N-30C-M (p)	
2600.00	18.97	131.86	2533.80	10.51	6.21	169.32	228.33	147.86	2.84	Goetzel 2- 29 (s)	
2600.00	18.97	131.86	2533.80	10.51	6.21	214.77	85.13	68.95	5.26	Goetzel 13N-30C-M (p)	
2700.00	18.97	131.86	2628.37	11.18	6.51	170.64	260.39	176.87	3.12	Goetzel 2- 29 (s)	

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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	18.97	131.86	2628.37	11.18	6.51	215.05	88.92	71.81	5.19	Goetzel 13N-30C-M (p)	
2800.00	18.97	131.86	2722.94	11.86	6.82	171.68	292.56	205.99	3.38	Goetzel 2- 29 (s)	
2800.00	18.97	131.86	2722.94	11.86	6.82	215.31	92.72	74.66	5.13	Goetzel 13N-30C-M (p)	
2900.00	18.97	131.86	2817.51	12.54	7.13	172.51	324.79	235.15	3.62	Goetzel 2- 29 (s)	
2900.00	18.97	131.86	2817.51	12.54	7.13	215.55	96.52	77.52	5.08	Goetzel 13N-30C-M (p)	
3000.00	18.97	131.86	2912.08	13.23	7.44	173.19	357.07	264.27	3.85	Goetzel 2- 29 (s)	
3000.00	18.97	131.86	2912.08	13.23	7.44	215.77	100.33	80.37	5.03	Goetzel 13N-30C-M (p)	
3100.00	18.97	131.86	3006.65	13.91	7.75	173.75	389.39	293.37	4.06	Goetzel 2- 29 (s)	
3100.00	18.97	131.86	3006.65	13.91	7.75	215.98	104.13	83.22	4.98	Goetzel 13N-30C-M (p)	
3200.00	18.97	131.86	3101.21	14.59	8.06	174.23	421.74	322.52	4.25	Goetzel 2- 29 (s)	
3200.00	18.97	131.86	3101.21	14.59	8.06	216.17	107.94	86.06	4.93	Goetzel 13N-30C-M (p)	
3300.00	18.97	131.86	3195.78	15.28	8.38	174.65	454.11	351.70	4.43	Goetzel 2- 29 (s)	
3300.00	18.97	131.86	3195.78	15.28	8.38	216.35	111.74	88.89	4.89	Goetzel 13N-30C-M (p)	
3400.00	18.97	131.86	3290.35	15.97	8.69	53.70	123.42	95.13	4.36	Goetzel 13C-30-M (p)	
3400.00	18.97	131.86	3290.35	15.97	8.69	216.51	115.55	91.72	4.85	Goetzel 13N-30C-M (p)	
3500.00	18.97	131.86	3384.92	16.65	9.00	54.44	126.79	97.19	4.28	Goetzel 13C-30-M (p)	
3500.00	18.97	131.86	3384.92	16.65	9.00	216.67	119.36	94.56	4.81	Goetzel 13N-30C-M (p)	
3600.00	18.97	131.86	3479.49	17.34	9.32	55.14	130.19	99.26	4.21	Goetzel 13C-30-M (p)	
3600.00	18.97	131.86	3479.49	17.34	9.32	216.82	123.17	97.39	4.78	Goetzel 13N-30C-M (p)	
3700.00	18.97	131.86	3574.06	18.03	9.63	55.80	133.60	101.33	4.14	Goetzel 13C-30-M (p)	
3700.00	18.97	131.86	3574.06	18.03	9.63	216.95	126.98	100.21	4.74	Goetzel 13N-30C-M (p)	
3800.00	18.97	131.86	3668.63	18.72	9.95	56.42	137.03	103.42	4.08	Goetzel 13C-30-M (p)	
3800.00	18.97	131.86	3668.63	18.72	9.95	217.08	130.79	103.04	4.71	Goetzel 13N-30C-M (p)	
3900.00	18.97	131.86	3763.19	19.41	10.27	57.02	140.47	105.52	4.02	Goetzel 13C-30-M (p)	
3900.00	18.97	131.86	3763.19	19.41	10.27	217.20	134.60	105.87	4.68	Goetzel 13N-30C-M (p)	
4000.00	18.97	131.86	3857.76	20.09	10.58	57.59	143.93	107.63	3.96	Goetzel 13C-30-M (p)	
4000.00	18.97	131.86	3857.76	20.09	10.58	217.32	138.41	108.70	4.66	Goetzel 13N-30C-M (p)	

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
4100.00	18.97	131.86	3952.33	20.78	10.90	58.13	147.41	109.76	3.92	Goetzel 13C-30-M (p)	
4100.00	18.97	131.86	3952.33	20.78	10.90	217.43	142.22	111.52	4.63	Goetzel 13N-30C-M (p)	
4200.00	18.97	131.86	4046.90	21.47	11.22	58.65	150.89	111.89	3.87	Goetzel 13C-30-M (p)	
4200.00	18.97	131.86	4046.90	21.47	11.22	217.53	146.04	114.35	4.61	Goetzel 13N-30C-M (p)	
4300.00	18.97	131.86	4141.47	22.16	11.53	59.14	154.39	114.04	3.83	Goetzel 13C-30-M (p)	
4300.00	18.97	131.86	4141.47	22.16	11.53	217.63	149.85	117.16	4.58	Goetzel 13N-30C-M (p)	
4400.00	18.97	131.86	4236.04	22.86	11.85	59.61	157.90	116.20	3.79	Goetzel 13C-30-M (p)	
4400.00	18.97	131.86	4236.04	22.86	11.85	217.72	153.66	119.98	4.56	Goetzel 13N-30C-M (p)	
4500.00	18.97	131.86	4330.61	23.55	12.17	60.06	161.42	118.37	3.75	Goetzel 13C-30-M (p)	
4500.00	18.97	131.86	4330.61	23.55	12.17	217.81	157.48	122.79	4.54	Goetzel 13N-30C-M (p)	
4600.00	18.97	131.86	4425.18	24.24	12.49	60.50	164.94	120.55	3.72	Goetzel 13C-30-M (p)	
4600.00	18.97	131.86	4425.18	24.24	12.49	217.90	161.29	125.60	4.52	Goetzel 13N-30C-M (p)	
4700.00	18.97	131.86	4519.74	24.93	12.80	60.91	168.48	122.73	3.68	Goetzel 13C-30-M (p)	
4700.00	18.97	131.86	4519.74	24.93	12.80	217.98	165.11	128.42	4.50	Goetzel 13N-30C-M (p)	
4800.00	18.97	131.86	4614.31	25.62	13.12	61.31	172.03	124.93	3.65	Goetzel 13C-30-M (p)	
4800.00	18.97	131.86	4614.31	25.62	13.12	218.05	168.92	131.23	4.48	Goetzel 13N-30C-M (p)	
4900.00	18.97	131.86	4708.88	26.31	13.44	61.69	175.58	127.13	3.62	Goetzel 13C-30-M (p)	
4900.00	18.97	131.86	4708.88	26.31	13.44	218.13	172.74	134.04	4.46	Goetzel 13N-30C-M (p)	
5000.00	18.97	131.86	4803.45	27.00	13.76	62.05	179.14	129.34	3.60	Goetzel 13C-30-M (p)	
5000.00	18.97	131.86	4803.45	27.00	13.76	218.20	176.55	136.85	4.45	Goetzel 13N-30C-M (p)	
5100.00	18.97	131.86	4898.02	27.70	14.08	62.40	182.71	131.56	3.57	Goetzel 13C-30-M (p)	
5100.00	18.97	131.86	4898.02	27.70	14.08	218.27	180.37	139.66	4.43	Goetzel 13N-30C-M (p)	
5200.00	18.97	131.86	4992.59	28.39	14.40	62.74	186.28	133.79	3.55	Goetzel 13C-30-M (p)	
5200.00	18.97	131.86	4992.59	28.39	14.40	218.33	184.19	142.48	4.42	Goetzel 13N-30C-M (p)	
5300.00	18.97	131.86	5087.16	29.08	14.72	63.07	189.86	136.00	3.53	Goetzel 13C-30-M (p)	
5300.00	18.97	131.86	5087.16	29.08	14.72	218.39	188.00	145.29	4.40		



## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
5400.00	18.97	131.86	5181.72	29.77	15.04	63.38	193.45	138.22	3.50	Goetzel 13N-30C-M (p)	
5400.00	18.97	131.86	5181.72	29.77	15.04	218.45	191.82	148.10	4.39	Goetzel 13C-30-M (p)	
5500.00	18.97	131.86	5276.29	30.46	15.36	63.68	197.04	140.45	3.48	Goetzel 13N-30C-M (p)	
5500.00	18.97	131.86	5276.29	30.46	15.36	218.51	195.64	150.91	4.37	Goetzel 13C-30-M (p)	
5600.00	18.97	131.86	5370.86	31.16	15.68	63.97	200.64	142.68	3.46	Goetzel 13N-30C-M (p)	
5600.00	18.97	131.86	5370.86	31.16	15.68	218.56	199.45	153.72	4.36	Goetzel 13C-30-M (p)	
5700.00	18.97	131.86	5465.43	31.85	16.00	64.25	204.24	144.91	3.44	Goetzel 13N-30C-M (p)	
5700.00	18.97	131.86	5465.43	31.85	16.00	218.62	203.27	156.53	4.35	Goetzel 13C-30-M (p)	
5800.00	18.97	131.86	5560.00	32.54	16.32	64.52	207.85	147.16	3.42	Goetzel 13N-30C-M (p)	
5800.00	18.97	131.86	5560.00	32.54	16.32	218.67	207.09	159.34	4.34	Goetzel 13C-30-M (p)	
5900.00	18.97	131.86	5654.57	33.23	16.64	64.79	211.46	149.40	3.41	Goetzel 13N-30C-M (p)	
5900.00	18.97	131.86	5654.57	33.23	16.64	218.72	210.90	162.15	4.33	Goetzel 13C-30-M (p)	
6000.00	18.97	131.86	5749.14	33.93	16.96	47.36	656.79	458.69	3.32	Goetzel 3- 29 (s)	
6000.00	18.97	131.86	5749.14	33.93	16.96	218.76	214.72	164.96	4.31	Goetzel 13N-30C-M (p)	
6100.00	18.97	131.86	5843.70	34.62	17.28	49.45	634.54	432.25	3.14	Goetzel 3- 29 (s)	
6100.00	18.97	131.86	5843.70	34.62	17.28	218.81	218.54	167.77	4.30	Goetzel 13N-30C-M (p)	
6200.00	18.97	131.86	5938.27	35.31	17.60	51.69	613.20	406.90	2.97	Goetzel 3- 29 (s)	
6200.00	18.97	131.86	5938.27	35.31	17.60	65.52	222.32	156.16	3.36	Goetzel 13C-30-M (p)	
6300.00	14.69	155.05	6034.06	35.67	17.86	29.52	591.74	381.87	2.82	Goetzel 3- 29 (s)	
6300.00	14.69	155.05	6034.06	35.67	17.86	41.99	223.44	156.80	3.35	Goetzel 13C-30-M (p)	
6400.00	13.94	187.67	6131.10	35.45	17.92	356.51	568.58	355.56	2.67	Goetzel 3- 29 (s)	
6400.00	13.94	187.67	6131.10	35.45	17.92	5.44	220.38	155.19	3.38	Goetzel 13C-30-M (p)	
6500.00	17.28	215.09	6227.53	34.78	17.78	327.12	543.82	327.94	2.52	Goetzel 3- 29 (s)	
6500.00	17.28	215.09	6227.53	34.78	17.78	330.78	216.52	155.58	3.55	Goetzel 13C-30-M (p)	
6600.00	22.98	231.61	6321.46	33.72	17.41	307.02	518.62	300.50	2.38	Goetzel 3- 29 (s)	SF(Lo)
6600.00	22.98	231.61	6321.46	33.72	17.41	304.84	217.67	163.90	4.05	Goetzel 13C-30-M (p)	

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
6700.00	29.72	241.41	6411.06	32.39	16.80	292.29	495.36	276.27	2.26	Goetzel 3- 29 (s)	SF(Lo)
6700.00	29.72	241.41	6411.06	32.39	16.80	285.62	228.21	181.76	4.91	Goetzel 13C-30-M (p)	
6800.00	36.92	247.77	6494.59	30.93	15.92	280.29	477.73	258.10	2.18	Goetzel 3- 29 (s)	SF(Lo)
6800.00	36.92	247.77	6494.59	30.93	15.92	270.80	247.52	206.10	5.98	Goetzel 13C-30-M (p)	
6900.00	44.37	252.27	6570.43	29.52	14.75	270.34	470.39	251.25	2.15	Goetzel 3- 29 (s)	SF(Lo)
6900.00	44.37	252.27	6570.43	29.52	14.75	128.53	261.77	201.22	4.32	Goetzel 13N-30C-M (p)	
7000.00	51.95	255.70	6637.09	28.35	13.32	262.59	477.96	259.22	2.19	Goetzel 3- 29 (s)	SF(Lo)
7000.00	51.95	255.70	6637.09	28.35	13.32	128.58	268.58	210.07	4.59	Goetzel 13N-30C-M (p)	
7100.00	59.62	258.48	6693.29	27.58	11.74	257.38	503.51	284.43	2.30	Goetzel 3- 29 (s)	SF(Lo)
7100.00	59.62	258.48	6693.29	27.58	11.74	128.88	274.48	218.41	4.90	Goetzel 13N-30C-M (p)	
7200.00	67.33	260.85	6737.92	27.28	10.34	300.36	491.26	254.40	2.07	Goetzel I 29-14 (s)	SF(Lo)
7200.00	67.33	260.85	6737.92	27.28	10.34	129.20	279.06	225.39	5.20	Goetzel 13N-30C-M (p)	
7300.00	75.08	262.97	6770.11	27.46	9.60	285.52	416.68	179.18	1.75	Goetzel I 29-14 (s)	SF(Lo)
7300.00	75.08	262.97	6770.11	27.46	9.60	129.42	282.00	230.36	5.46	Goetzel 13N-30C-M (p)	
7400.00	82.84	264.94	6789.25	28.08	9.98	274.82	352.54	115.41	1.49	Goetzel I 29-14 (s)	SF(Med)
7400.00	82.84	264.94	6789.25	28.08	9.98	129.46	283.10	232.49	5.59	Goetzel 13N-30C-M (p)	
7500.00	90.00	266.70	6795.00	29.02	11.38	270.00	309.49	74.53	1.32	Goetzel I 29-14 (s)	SF(Med)
7500.00	90.00	266.70	6795.00	29.02	11.38	129.33	282.42	231.38	5.53	Goetzel 13N-30C-M (p)	
7600.00	90.00	266.70	6795.00	30.05	11.89	270.00	296.68	64.55	1.28	Goetzel I 29-14 (s)	SF(Med)
7600.00	90.00	266.70	6795.00	30.05	11.89	129.42	281.87	229.05	5.34	Goetzel 13N-30C-M (p)	
7700.00	90.00	266.70	6795.00	31.29	12.43	270.00	316.63	85.91	1.37	Goetzel I 29-14 (s)	SF(Med)
7700.00	90.00	266.70	6795.00	31.29	12.43	129.52	281.31	226.30	5.11	Goetzel 13N-30C-M (p)	
7800.00	90.00	266.70	6795.00	32.73	13.00	270.00	363.99	132.78	1.57	Goetzel I 29-14 (s)	SF(Lo)
7800.00	90.00	266.70	6795.00	32.73	13.00	129.61	280.76	223.57	4.91	Goetzel 13N-30C-M (p)	
7900.00	90.00	266.70	6795.00	34.32	13.59	270.00	429.79	197.74	1.85	Goetzel I 29-14 (s)	SF(Lo)
7900.00	90.00	266.70	6795.00	34.32	13.59	129.70	280.21	220.30	4.68	Goetzel 13N-30C-M (p)	
8000.00	90.00	266.70	6795.00	36.06	14.20	270.00	506.91	274.21	2.18	Goetzel I 29-14 (s)	SF(Lo)
8000.00	90.00	266.70	6795.00	36.06	14.20	129.80	279.65	217.11	4.47	Goetzel 13N-30C-M (p)	
8100.00	90.00	266.70	6795.00	37.93	14.83	270.00	590.93	357.64	2.53	Goetzel I 29-14 (s)	
8100.00	90.00	266.70	6795.00	37.93	14.83	129.89	279.10	213.62	4.26		

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
8200.00	90.00	266.70	6795.00	39.91	15.46	270.00	679.29	445.35	2.90	Goetzel 13N-30C-M (p)	
8200.00	90.00	266.70	6795.00	39.91	15.46	129.99	278.55	209.94	4.06	Goetzel I 29-14 (s)	
8300.00	90.00	266.70	6795.00	41.97	16.11	270.00	770.50	535.96	3.29	Goetzel 13N-30C-M (p)	
8300.00	90.00	266.70	6795.00	41.97	16.11	130.08	278.00	206.22	3.87	Goetzel I 29-14 (s)	
8400.00	90.00	266.70	6795.00	44.12	16.77	270.00	863.66	629.08	3.68	Goetzel 13N-30C-M (p)	
8400.00	90.00	266.70	6795.00	44.12	16.77	130.18	277.45	202.46	3.70	Goetzel I 29-14 (s)	
8500.00	90.00	266.70	6795.00	46.34	17.43	130.27	276.90	198.61	3.54	Goetzel 13N-30C-M (p)	
8600.00	90.00	266.70	6795.00	48.62	18.10	130.37	276.36	194.65	3.38	Goetzel 13N-30C-M (p)	
8700.00	90.00	266.70	6795.00	50.95	18.77	130.47	275.81	190.56	3.24	Goetzel 13N-30C-M (p)	
8800.00	90.00	266.70	6795.00	53.32	19.45	270.00	693.54	459.92	2.97	Goetzel 13N-30C-M (p)	
8800.00	90.00	266.70	6795.00	53.32	19.45	130.56	275.26	186.43	3.10	Tollgate 1 (s)	
8900.00	90.00	266.70	6795.00	55.73	20.13	270.00	594.62	361.03	2.55	Goetzel 13N-30C-M (p)	
8900.00	90.00	266.70	6795.00	55.73	20.13	130.66	274.72	182.24	2.97	Tollgate 1 (s)	
9000.00	90.00	266.70	6795.00	58.18	20.81	270.00	496.13	262.73	2.13	Goetzel 13N-30C-M (p)	SF(Lo)
9000.00	90.00	266.70	6795.00	58.18	20.81	130.76	274.17	178.01	2.85	Tollgate 1 (s)	
9100.00	90.00	266.70	6795.00	60.66	21.50	270.00	398.40	164.01	1.70	Goetzel 13N-30C-M (p)	SF(Lo)
9100.00	90.00	266.70	6795.00	60.66	21.50	130.86	273.63	173.75	2.74	Tollgate 1 (s)	
9200.00	90.00	266.70	6795.00	63.17	22.19	270.00	302.16	65.97	1.28	Goetzel 13N-30C-M (p)	SF(Med)
9200.00	90.00	266.70	6795.00	63.17	22.19	130.96	273.09	169.45	2.64	Tollgate 1 (s)	
9300.00	90.00	266.70	6795.00	65.70	22.88	270.00	209.47	-31.27	0.87	Goetzel 13N-30C-M (p)	SF(Hi)
9400.00	90.00	266.70	6795.00	68.25	23.58	270.00	128.28	-126.17	0.50	Tollgate 1 (s)	
9500.00	90.00	266.70	6795.00	70.82	24.27	270.00	95.03	-178.86	0.35	Tollgate 1 (s)	SF(Hi)
9600.00	90.00	266.70	6795.00	73.40	24.97	270.00	147.00	-111.19	0.57	Tollgate 1 (s)	SF(Hi)
9700.00	90.00	266.70	6795.00	76.00	25.67	270.00	232.78	-14.70	0.94	Tollgate 1 (s)	SF(Hi)
9800.00	90.00	266.70	6795.00	78.62	26.37	270.00	326.74	84.35	1.35	Tollgate 1 (s)	SF(Med)
9800.00	90.00	266.70	6795.00	78.62	26.37	131.56	269.85	142.99	2.13	Goetzel 13N-30C-M (p)	SF(Lo)
9900.00	90.00	266.70	6795.00	81.24	27.08	270.00	423.48	183.18	1.76	Tollgate 1 (s)	SF(Lo)
9900.00	90.00	266.70	6795.00	81.24	27.08	131.66	269.31	138.56	2.06	Goetzel 13N-30C-M (p)	SF(Lo)
10000.00	90.00	266.70	6795.00	83.88	27.78	131.76	268.77	134.15	2.00		SF(Lo)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
10100.00	90.00	266.70	6795.00	86.53	28.49	131.86	268.24	129.76	1.94	Goetzel 13N-30C-M (p)	SF(Lo)
10200.00	90.00	266.70	6795.00	89.19	29.19	131.96	267.70	125.40	1.88	Goetzel 13N-30C-M (p)	SF(Lo)
10300.00	90.00	266.70	6795.00	91.85	29.90	132.07	267.17	121.06	1.83	Goetzel 13N-30C-M (p)	SF(Lo)
10400.00	90.00	266.70	6795.00	94.53	30.61	270.00	361.19	122.37	1.51	Firestien #30-44 (s)	SF(Lo)
10400.00	90.00	266.70	6795.00	94.53	30.61	132.17	266.64	116.74	1.78	Goetzel 13N-30C-M (p)	SF(Lo)
10500.00	90.00	266.70	6795.00	97.21	31.32	270.00	266.96	21.97	1.09	Firestien #30-44 (s)	SF(Med)
10500.00	90.00	266.70	6795.00	97.21	31.32	132.27	266.10	112.45	1.73	Goetzel 13N-30C-M (p)	SF(Lo)
10600.00	90.00	266.70	6795.00	99.89	32.03	270.00	179.12	-82.12	0.69	Firestien #30-44 (s)	SF(Hi)
10700.00	90.00	266.70	6795.00	102.59	32.74	270.00	113.56	-181.32	0.39	Firestien #30-44 (s)	SF(Hi)
10800.00	90.00	266.70	6795.00	105.28	33.46	270.00	117.09	-183.22	0.39	Firestien #30-44 (s)	SF(Hi)
10900.00	90.00	266.70	6795.00	107.99	34.17	270.00	185.81	-87.81	0.68	Firestien #30-44 (s)	SF(Hi)
11000.00	90.00	266.70	6795.00	110.70	34.88	270.00	274.48	15.81	1.06	Firestien #30-44 (s)	SF(Med)
11000.00	90.00	266.70	6795.00	110.70	34.88	132.80	263.46	91.18	1.53	Goetzel 13N-30C-M (p)	SF(Lo)
11100.00	90.00	266.70	6795.00	113.41	35.60	270.00	368.99	117.89	1.47	Firestien #30-44 (s)	SF(Med)
11100.00	90.00	266.70	6795.00	113.41	35.60	132.91	262.93	86.89	1.49	Goetzel 13N-30C-M (p)	SF(Med)
11200.00	90.00	266.70	6795.00	116.12	36.32	133.01	262.41	82.61	1.46	Goetzel 13N-30C-M (p)	SF(Med)
11300.00	90.00	266.70	6795.00	118.84	37.03	133.12	261.88	78.34	1.43	Goetzel 13N-30C-M (p)	SF(Med)
11400.00	90.00	266.70	6795.00	121.57	37.75	90.00	415.06	96.64	1.30	Firestien #30-45 (s)	SF(Med)
11400.00	90.00	266.70	6795.00	121.57	37.75	133.23	261.36	74.00	1.39	Goetzel 13N-30C-M (p)	SF(Med)
11500.00	90.00	266.70	6795.00	124.30	38.47	90.00	388.24	60.68	1.19	Firestien #30-45 (s)	SF(Med)
11500.00	90.00	266.70	6795.00	124.30	38.47	133.34	260.83	69.67	1.36	Goetzel 13N-30C-M (p)	SF(Med)
11600.00	90.00	266.70	6795.00	127.03	39.18	90.00	386.24	57.56	1.18	Firestien #30-45 (s)	SF(Med)
11600.00	90.00	266.70	6795.00	127.03	39.18	133.44	260.31	65.36	1.34	Goetzel 13N-30C-M (p)	SF(Med)
11700.00	90.00	266.70	6795.00	129.76	39.90	90.00	409.43	87.23	1.27	Firestien #30-45 (s)	SF(Med)
11700.00	90.00	266.70	6795.00	129.76	39.90	133.55	259.79	61.05	1.31	Goetzel 13N-30C-M (p)	SF(Med)
11800.00	90.00	266.70	6795.00	132.50	40.62	133.66	259.27	56.74	1.28	Goetzel 13N-30C-M (p)	SF(Med)
11900.00	90.00	266.70	6795.00	135.23	41.34	133.77	258.75	52.42	1.25	Goetzel 13N-30C-M (p)	SF(Med)
12000.00	90.00	266.70	6795.00	137.97	42.06	133.88	258.23	48.13	1.23	Goetzel 13N-30C-M (p)	SF(Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
12100.00	90.00	266.70	6795.00	140.72	42.78	133.99	257.72	43.84	1.20	Goetzel 13N-30C-M (p)	SF(Med)
12200.00	90.00	266.70	6795.00	143.46	43.50	134.10	257.20	39.58	1.18	Goetzel 13N-30C-M (p)	SF(Med)
12300.00	90.00	266.70	6795.00	146.21	44.23	134.22	256.68	35.33	1.16	Goetzel 13N-30C-M (p)	SF(Med)
12400.00	90.00	266.70	6795.00	148.96	44.95	134.33	256.17	31.09	1.14	Goetzel 13N-30C-M (p)	SF(Med)
12500.00	90.00	266.70	6795.00	151.71	45.67	134.44	255.66	26.87	1.12	Goetzel 13N-30C-M (p)	SF(Med)
12600.00	90.00	266.70	6795.00	154.46	46.39	134.55	255.14	22.66	1.10	Goetzel 13N-30C-M (p)	SF(Med)
12700.00	90.00	266.70	6795.00	157.22	47.11	134.67	254.63	18.47	1.08	Goetzel 13N-30C-M (p)	SF(Med)
12800.00	90.00	266.70	6795.00	159.97	47.84	134.78	254.12	14.30	1.06	Goetzel 13N-30C-M (p)	SF(Med)
12900.00	90.00	266.70	6795.00	162.73	48.56	134.90	253.61	10.14	1.04	Goetzel 13N-30C-M (p)	SF(Med)
13000.00	90.00	266.70	6795.00	165.49	49.28	135.01	253.10	6.00	1.02	Goetzel 13N-30C-M (p)	SF(Med)
13100.00	90.00	266.70	6795.00	168.25	50.01	135.13	252.60	1.87	1.01	Goetzel 13N-30C-M (p)	SF(Med)
13200.00	90.00	266.70	6795.00	171.01	50.73	135.24	252.09	-2.24	0.99	Goetzel 13N-30C-M (p)	SF(Hi)
13300.00	90.00	266.70	6795.00	173.77	51.46	135.36	251.58	-6.33	0.98	Goetzel 13N-30C-M (p)	SF(Hi)
13400.00	90.00	266.70	6795.00	176.53	52.18	90.00	202.06	-99.10	0.67	Tigges 30- 34 (s)	SF(Hi)
13500.00	90.00	266.70	6795.00	179.30	52.91	90.00	125.56	-227.11	0.36	Tigges 30- 34 (s)	SF(Hi)
13600.00	90.00	266.70	6795.00	182.06	53.63	90.00	103.44	-274.56	0.27	Tigges 30- 34 (s)	SF(Hi)
13700.00	90.00	266.70	6795.00	184.83	54.36	90.00	160.11	-154.33	0.51	Tigges 30- 34 (s)	SF(Hi)
13800.00	90.00	266.70	6795.00	187.60	55.08	90.00	246.11	-30.67	0.89	Tigges 30- 34 (s)	SF(Hi)
13900.00	90.00	266.70	6795.00	190.37	55.81	136.06	248.58	-30.55	0.89	Goetzel 13N-30C-M (p)	SF(Hi)
14000.00	90.00	266.70	6795.00	193.14	56.53	136.18	248.08	-34.53	0.88	Goetzel 13N-30C-M (p)	SF(Hi)
14100.00	90.00	266.70	6795.00	195.91	57.26	136.30	247.58	-38.48	0.87	Goetzel 13N-30C-M (p)	SF(Hi)
14200.00	90.00	266.70	6795.00	198.68	57.99	136.42	247.08	-42.43	0.85	Goetzel 13N-30C-M (p)	SF(Hi)
14300.00	90.00	266.70	6795.00	201.45	58.71	136.54	246.59	-46.35	0.84	Goetzel 13N-30C-M (p)	SF(Hi)
14400.00	90.00	266.70	6795.00	204.22	59.44	136.67	246.10	-50.25	0.83	Goetzel 13N-30C-M (p)	SF(Hi)
14500.00	90.00	266.70	6795.00	206.99	60.16	136.79	245.60	-54.14	0.82	Goetzel 13N-30C-M (p)	SF(Hi)
14600.00	90.00	266.70	6795.00	209.77	60.89	136.91	245.11	-58.00	0.81	Goetzel 13N-30C-M (p)	SF(Hi)
14700.00	90.00	266.70	6795.00	212.54	61.62	137.03	244.62	-61.85	0.80	Goetzel 13N-30C-M (p)	SF(Hi)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30A-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
14800.00	90.00	266.70	6795.00	215.32	62.35	137.16	244.13	-65.68	0.79	Goetzel 13N-30C-M (p)	SF(Hi)
14900.00	90.00	266.70	6795.00	218.09	63.07	137.28	243.65	-69.49	0.78	Goetzel 13N-30C-M (p)	SF(Hi)
15000.00	90.00	266.70	6795.00	220.87	63.80	137.40	243.16	-73.28	0.77	Goetzel 13N-30C-M (p)	SF(Hi)
15100.00	90.00	266.70	6795.00	223.64	64.53	90.00	209.26	-100.39	0.68	Etter 30-33 (s)	SF(Hi)
15136.85	90.00	266.70	6795.00	224.67	64.80	90.00	176.57	-150.04	0.54	Etter 30-33 (s)	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	142.01	229.14	228.37	297.68	
100.00	72.00	0.00	0.00	100.00	1.09	1.09	142.01	227.43	225.46	115.34	
200.00	172.00	0.00	0.00	200.00	2.69	2.69	142.01	227.43	223.63	59.95	
300.00	272.00	0.00	0.00	300.00	5.73	5.73	142.01	227.43	220.37	32.24	
400.00	372.00	0.00	0.00	400.00	8.77	8.77	142.01	227.43	217.11	22.05	
500.00	472.00	0.00	0.00	500.00	11.80	11.80	142.01	227.43	214.03	16.97	
600.00	572.00	0.00	0.00	600.00	14.84	14.84	142.01	227.43	210.77	13.65	
700.00	672.00	0.00	0.00	700.00	17.88	17.88	142.01	227.43	207.51	11.42	
800.00	772.00	0.00	0.00	800.00	20.91	20.91	10.17	227.00	203.83	9.80	
900.00	871.93	0.00	0.00	899.93	23.95	23.95	10.34	223.56	197.18	8.47	
1000.00	971.68	0.00	0.00	999.68	26.98	26.98	10.70	216.71	187.10	7.32	
1100.00	1071.13	0.00	0.00	1099.13	30.00	30.00	11.28	206.44	173.63	6.29	
1200.00	1170.15	0.00	0.00	1198.15	33.01	33.01	12.14	192.81	156.80	5.35	
1300.00	1268.63	0.00	0.00	1296.63	36.00	36.00	13.41	175.86	136.70	4.49	
1400.00	1366.44	0.00	0.00	1394.44	38.97	38.97	15.29	155.69	113.24	3.67	
1500.00	1463.46	0.00	0.00	1491.46	41.91	41.91	18.20	132.46	86.74	2.90	
1600.00	1559.58	0.00	0.00	1587.58	44.83	44.83	23.01	106.52	57.67	2.18	SF(Lo)
1700.00	1654.68	0.00	0.00	1682.68	47.72	47.72	32.02	78.75	26.54	1.51	SF(Lo)
1800.00	1749.25	0.00	0.00	1777.25	50.59	50.59	50.23	53.40	-2.50	0.96	SF(Hi); CC (Lo)
1900.00	1843.82	0.00	0.00	1871.82	53.46	53.46	86.26	40.18	-19.71	0.67	SF(Hi); CC (Lo)
2000.00	1938.39	0.00	0.00	1966.39	56.34	56.34	125.05	49.91	-12.88	0.79	SF(Hi); CC (Lo)
2100.00	2032.96	0.00	0.00	2060.96	59.21	59.21	145.75	74.03	8.68	1.13	SF(Med)
2200.00	2127.53	0.00	0.00	2155.53	62.08	62.08	155.90	102.88	34.69	1.51	SF(Lo)
2300.00	2222.10	0.00	0.00	2250.10	64.95	64.95	161.58	133.42	62.40	1.88	SF(Lo)
2400.00	2316.66	0.00	0.00	2344.66	67.82	67.82	165.14	164.72	90.49	2.22	SF(Lo)
2500.00	2411.23	0.00	0.00	2439.23	70.70	70.70	167.57	196.41	119.02	2.54	
2600.00	2505.80	0.00	0.00	2533.80	73.57	73.57	169.32	228.33	147.86	2.84	
2700.00	2600.37	0.00	0.00	2628.37	76.44	76.44	170.64	260.39	176.87	3.12	
2800.00	2694.94	0.00	0.00	2722.94	79.31	79.31	171.68	292.56	205.99	3.38	
2900.00	2789.51	0.00	0.00	2817.51	82.18	82.18	172.51	324.79	235.15	3.62	
3000.00	2884.08	0.00	0.00	2912.08	85.06	85.06	173.19	357.07	264.27	3.85	
3100.00	2978.65	0.00	0.00	3006.65	87.93	87.93	173.75	389.39	293.37	4.06	
3200.00	3073.21	0.00	0.00	3101.21	90.80	90.80	174.23	421.74	322.52	4.25	
3300.00	3167.78	0.00	0.00	3195.78	93.67	93.67	174.65	454.11	351.70	4.43	
3400.00	3262.35	0.00	0.00	3290.35	96.54	96.54	175.00	486.50	380.90	4.61	
3500.00	3356.92	0.00	0.00	3384.92	99.41	99.41	175.32	518.90	410.12	4.77	
3600.00	3451.49	0.00	0.00	3479.49	102.29	102.29	175.59	551.32	439.35	4.92	
3700.00	3546.06	0.00	0.00	3574.06	105.16	105.16	175.84	583.75	468.60	5.07	
3800.00	3640.63	0.00	0.00	3668.63	108.03	108.03	176.06	616.18	497.86	5.21	
3900.00	3735.19	0.00	0.00	3763.19	110.90	110.90	176.25	648.63	527.12	5.34	
4000.00	3829.76	0.00	0.00	3857.76	113.77	113.77	176.43	681.07	556.40	5.46	
4100.00	3924.33	0.00	0.00	3952.33	116.65	116.65	176.59	713.53	585.68	5.58	

## 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
4200.00	4018.90	0.00	0.00	4046.90	119.52	119.52	176.74	745.99	614.96	5.69	
4300.00	4113.47	0.00	0.00	4141.47	122.39	122.39	176.88	778.45	644.25	5.80	
4400.00	4208.04	0.00	0.00	4236.04	125.26	125.26	177.00	810.92	673.54	5.90	
4500.00	4302.61	0.00	0.00	4330.61	128.13	128.13	177.12	843.39	702.84	6.00	
4600.00	4397.18	0.00	0.00	4425.18	131.01	131.01	177.23	875.86	732.14	6.09	
4700.00	4491.74	0.00	0.00	4519.74	133.88	133.88	177.33	908.34	761.44	6.18	
4800.00	4586.31	0.00	0.00	4614.31	136.75	136.75	177.42	940.81	790.75	6.27	
4900.00	4680.88	0.00	0.00	4708.88	139.62	139.62	177.50	973.29	820.06	6.35	
5000.00	4775.45	0.00	0.00	4803.45	142.49	142.49	177.58	1005.77	849.36	6.43	
5100.00	4870.02	0.00	0.00	4898.02	145.37	145.37	177.66	1038.26	878.68	6.51	
5200.00	4964.59	0.00	0.00	4992.59	148.24	148.24	177.73	1070.74	907.99	6.58	
5300.00	5059.16	0.00	0.00	5087.16	151.11	151.11	177.80	1103.23	937.30	6.65	
5400.00	5153.72	0.00	0.00	5181.72	153.98	153.98	177.86	1135.71	966.62	6.72	
5500.00	5248.29	0.00	0.00	5276.29	156.85	156.85	177.92	1168.20	995.93	6.78	
5600.00	5342.86	0.00	0.00	5370.86	159.73	159.73	177.98	1200.69	1025.25	6.84	
5700.00	5437.43	0.00	0.00	5465.43	162.60	162.60	178.03	1233.18	1054.57	6.90	
5800.00	5532.00	0.00	0.00	5560.00	165.47	165.47	178.08	1265.67	1083.88	6.96	
5900.00	5626.57	0.00	0.00	5654.57	168.34	168.34	178.13	1298.17	1113.20	7.02	
6000.00	5721.14	0.00	0.00	5749.14	171.21	171.21	178.17	1330.66	1142.52	7.07	
6100.00	5815.70	0.00	0.00	5843.70	174.08	174.08	178.22	1363.15	1171.84	7.13	
6200.00	5910.27	0.00	0.00	5938.27	176.96	176.96	178.26	1395.65	1201.16	7.18	
6300.00	6006.06	0.00	0.00	6034.06	179.87	179.87	154.67	1423.53	1225.87	7.20	
6400.00	6103.10	0.00	0.00	6131.10	182.81	182.81	122.60	1441.69	1240.91	7.18	
6500.00	6199.53	0.00	0.00	6227.53	185.74	185.74	96.63	1450.09	1246.30	7.12	
6600.00	6293.46	0.00	0.00	6321.46	188.59	188.59	82.42	1449.04	1242.47	7.01	
6700.00	6383.06	0.00	0.00	6411.06	191.31	191.31	75.73	1439.20	1230.17	6.89	
6800.00	6466.59	0.00	0.00	6494.59	193.85	193.85	73.28	1421.56	1209.40	6.70	
6900.00	6542.43	0.00	0.00	6570.43	196.15	196.15	73.40	1397.41	1182.45	6.50	
7000.00	6609.09	0.00	0.00	6637.09	198.18	198.18	75.18	1368.28	1150.96	6.30	
7100.00	6665.29	0.00	0.00	6693.29	199.89	199.89	78.00	1335.88	1116.56	6.09	
7200.00	6709.92	0.00	0.00	6737.92	201.24	201.24	81.34	1302.06	1079.66	5.85	
7300.00	6742.11	0.00	0.00	6770.11	202.22	202.22	84.72	1268.64	1044.17	5.65	
7400.00	6761.25	0.00	0.00	6789.25	202.80	202.80	87.76	1237.32	1010.32	5.45	
7500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1209.53	980.30	5.28	
7600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1188.05	956.98	5.14	
7700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1174.73	941.08	5.03	
7800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1169.83	934.30	4.97	
7900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1173.46	935.44	4.93	
8000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1185.54	946.01	4.95	
8100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1205.83	964.06	4.99	
8200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1233.91	991.33	5.09	
8300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1269.27	1024.80	5.19	
8400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1311.32	1066.15	5.35	
8500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1359.44	1113.28	5.52	
8600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1413.01	1166.13	5.72	
8700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1471.43	1224.59	5.96	
8800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1534.15	1286.72	6.20	
8900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1600.66	1352.76	6.46	
9000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1670.52	1422.69	6.74	
9100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1743.31	1496.00	7.05	
9200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1818.70	1571.11	7.35	
9300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1896.36	1648.52	7.65	
9400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	1976.02	1728.22	7.97	
9500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2057.47	1809.91	8.31	
9600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2140.49	1893.31	8.66	
9700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2224.91	1978.26	9.02	
9800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2310.57	2063.80	9.36	
9900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2397.34	2150.51	9.71	

## 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
10000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2485.10	2238.23	10.07	
10100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2573.76	2326.95	10.43	
10200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2663.22	2416.57	10.80	
10300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2753.41	2507.02	11.17	
10400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2844.26	2598.11	11.56	
10500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	2935.69	2689.74	11.94	
10600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3027.67	2781.99	12.32	
10700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3120.15	2874.79	12.72	
10800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3213.07	2967.88	13.10	
10900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3306.41	3061.23	13.49	
11000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3400.13	3155.01	13.87	
11100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3494.19	3249.14	14.26	
11200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3588.58	3343.54	14.64	
11300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3683.26	3438.26	15.03	
11400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3778.21	3533.23	15.42	
11500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3873.42	3628.48	15.81	
11600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	3968.87	3723.98	16.21	
11700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4064.53	3819.72	16.60	
11800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4160.40	3915.68	17.00	
11900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4256.46	4011.83	17.40	
12000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4352.70	4108.17	17.80	
12100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4449.10	4204.68	18.20	
12200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4545.66	4301.35	18.61	
12300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4642.36	4398.17	19.01	
12400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4739.20	4495.13	19.42	
12500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4836.17	4592.22	19.82	
12600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	4933.26	4689.43	20.23	
12700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5030.46	4786.76	20.64	
12800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5127.77	4884.20	21.05	
12900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5225.19	4981.73	21.46	
13000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5322.70	5079.36	21.87	
13100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5420.29	5177.08	22.29	
13200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5517.98	5274.89	22.70	
13300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5615.75	5372.78	23.11	
13400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5713.59	5470.74	23.53	
13500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5811.51	5568.72	23.94	
13600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	5909.50	5666.70	24.34	
13700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6007.55	5764.75	24.74	
13800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6105.67	5862.86	25.15	
13900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6203.84	5961.04	25.55	
14000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6302.08	6059.27	25.96	
14100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6400.37	6157.56	26.36	
14200.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6498.71	6255.90	26.77	
14300.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6597.10	6354.28	27.17	
14400.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6695.54	6452.71	27.57	
14500.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6794.02	6551.18	27.98	
14600.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6892.55	6649.70	28.38	
14700.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	6991.12	6748.26	28.79	
14800.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	7089.73	6846.86	29.19	
14900.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	7188.38	6945.50	29.60	
15000.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	7287.06	7044.18	30.00	
15100.00	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	7385.79	7142.89	30.41	
15136.85	6767.00	0.00	0.00	6795.00	202.97	202.97	90.00	7422.17	7179.27	30.56	
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	263.85	7058.70	7057.97	9694.72	



## 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
100.00	83.00	0.00	0.00	100.00	1.26	1.26	263.85	7058.68	7056.59	3369.97	
200.00	183.00	0.00	0.00	200.00	3.03	3.03	263.85	7058.68	7054.60	1729.95	
300.00	283.00	0.00	0.00	300.00	6.06	6.06	263.85	7058.68	7051.35	962.39	
400.00	383.00	0.00	0.00	400.00	9.10	9.10	263.85	7058.68	7048.27	677.62	
500.00	483.00	0.00	0.00	500.00	12.14	12.14	263.85	7058.68	7045.01	516.32	
600.00	583.00	0.00	0.00	600.00	15.17	15.17	263.85	7058.68	7041.76	417.04	
700.00	683.00	0.00	0.00	700.00	18.21	18.21	263.85	7058.68	7038.50	349.79	
800.00	783.00	0.00	0.00	800.00	21.25	21.25	132.00	7058.97	7035.55	301.37	
900.00	882.93	0.00	0.00	899.93	24.28	24.28	131.98	7061.31	7034.68	265.13	
1000.00	982.68	0.00	0.00	999.68	27.31	27.31	131.95	7065.98	7036.12	236.66	
1100.00	1082.13	0.00	0.00	1099.13	30.33	30.33	131.91	7072.99	7039.91	213.83	
1200.00	1181.15	0.00	0.00	1198.15	33.34	33.34	131.86	7082.33	7046.01	195.00	
1300.00	1279.63	0.00	0.00	1296.63	36.33	36.33	131.78	7094.01	7054.45	179.32	
1400.00	1377.44	0.00	0.00	1394.44	39.30	39.30	131.70	7108.02	7065.20	165.99	
1500.00	1474.46	0.00	0.00	1491.46	42.25	42.25	131.59	7124.36	7078.27	154.56	
1600.00	1570.58	0.00	0.00	1587.58	45.17	45.17	131.47	7143.04	7093.67	144.69	
1700.00	1665.68	0.00	0.00	1682.68	48.05	48.05	131.33	7164.05	7111.38	136.02	
1800.00	1760.25	0.00	0.00	1777.25	50.93	50.93	131.52	7186.23	7130.26	128.39	
1900.00	1854.82	0.00	0.00	1871.82	53.80	53.80	131.71	7208.49	7149.16	121.51	
2000.00	1949.39	0.00	0.00	1966.39	56.67	56.67	131.90	7230.82	7168.13	115.34	
2100.00	2043.96	0.00	0.00	2060.96	59.54	59.54	132.08	7253.23	7187.17	109.79	
2200.00	2138.53	0.00	0.00	2155.53	62.41	62.41	132.27	7275.72	7206.28	104.78	
2300.00	2233.10	0.00	0.00	2250.10	65.29	65.29	132.45	7298.28	7225.46	100.22	
2400.00	2327.66	0.00	0.00	2344.66	68.16	68.16	132.63	7320.92	7244.72	96.07	
2500.00	2422.23	0.00	0.00	2439.23	71.03	71.03	132.81	7343.63	7264.04	92.27	
2600.00	2516.80	0.00	0.00	2533.80	73.90	73.90	132.99	7366.42	7283.44	88.78	
2700.00	2611.37	0.00	0.00	2628.37	76.77	76.77	133.17	7389.28	7302.91	85.56	
2800.00	2705.94	0.00	0.00	2722.94	79.65	79.65	133.35	7412.21	7322.45	82.58	
2900.00	2800.51	0.00	0.00	2817.51	82.52	82.52	133.53	7435.21	7342.07	79.83	
3000.00	2895.08	0.00	0.00	2912.08	85.39	85.39	133.70	7458.28	7361.75	77.26	
3100.00	2989.65	0.00	0.00	3006.65	88.26	88.26	133.88	7481.43	7381.51	74.88	
3200.00	3084.21	0.00	0.00	3101.21	91.13	91.13	134.05	7504.64	7401.33	72.65	
3300.00	3178.78	0.00	0.00	3195.78	94.00	94.00	134.23	7527.92	7421.23	70.56	
3400.00	3273.35	0.00	0.00	3290.35	96.88	96.88	134.40	7551.27	7441.20	68.60	
3500.00	3367.92	0.00	0.00	3384.92	99.75	99.75	134.57	7574.68	7461.23	66.76	
3600.00	3462.49	0.00	0.00	3479.49	102.62	102.62	134.74	7598.17	7481.33	65.03	
3700.00	3557.06	0.00	0.00	3574.06	105.49	105.49	134.91	7621.72	7501.50	63.40	
3800.00	3651.63	0.00	0.00	3668.63	108.36	108.36	135.07	7645.33	7521.74	61.86	
3900.00	3746.19	0.00	0.00	3763.19	111.24	111.24	135.24	7669.01	7542.05	60.40	
4000.00	3840.76	0.00	0.00	3857.76	114.11	114.11	135.41	7692.76	7562.42	59.02	
4100.00	3935.33	0.00	0.00	3952.33	116.98	116.98	135.57	7716.57	7582.86	57.71	
4200.00	4029.90	0.00	0.00	4046.90	119.85	119.85	135.74	7740.44	7603.36	56.47	
4300.00	4124.47	0.00	0.00	4141.47	122.72	122.72	135.90	7764.37	7623.93	55.28	
4400.00	4219.04	0.00	0.00	4236.04	125.60	125.60	136.06	7788.37	7644.56	54.16	
4500.00	4313.61	0.00	0.00	4330.61	128.47	128.47	136.22	7812.43	7665.26	53.08	
4600.00	4408.18	0.00	0.00	4425.18	131.34	131.34	136.38	7836.55	7686.02	52.06	
4700.00	4502.74	0.00	0.00	4519.74	134.21	134.21	136.54	7860.73	7706.84	51.08	
4800.00	4597.31	0.00	0.00	4614.31	137.08	137.08	136.70	7884.97	7727.73	50.14	
4900.00	4691.88	0.00	0.00	4708.88	139.96	139.96	136.86	7909.27	7748.67	49.25	
5000.00	4786.45	0.00	0.00	4803.45	142.83	142.83	137.02	7933.63	7769.68	48.39	
5100.00	4881.02	0.00	0.00	4898.02	145.70	145.70	137.17	7958.04	7790.75	47.57	
5200.00	4975.59	0.00	0.00	4992.59	148.57	148.57	137.33	7982.52	7811.88	46.78	
5300.00	5070.16	0.00	0.00	5087.16	151.44	151.44	137.48	8007.05	7833.08	46.02	
5400.00	5164.72	0.00	0.00	5181.72	154.32	154.32	137.63	8031.64	7854.33	45.30	
5500.00	5259.29	0.00	0.00	5276.29	157.19	157.19	137.78	8056.28	7875.64	44.60	
5600.00	5353.86	0.00	0.00	5370.86	160.06	160.06	137.94	8080.98	7897.00	43.92	
5700.00	5448.43	0.00	0.00	5465.43	162.93	162.93	138.09	8105.74	7918.43	43.28	
5800.00	5543.00	0.00	0.00	5560.00	165.80	165.80	138.24	8130.54	7939.91	42.65	

## 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
5900.00	5637.57	0.00	0.00	5654.57	168.68	168.68	138.38	8155.41	7961.45	42.05	
6000.00	5732.14	0.00	0.00	5749.14	171.55	171.55	138.53	8180.32	7983.05	41.47	
6100.00	5826.70	0.00	0.00	5843.70	174.42	174.42	138.68	8205.29	8004.71	40.91	
6200.00	5921.27	0.00	0.00	5938.27	177.29	177.29	138.82	8230.32	8026.42	40.36	
6300.00	6017.06	0.00	0.00	6034.06	180.20	180.20	116.59	8248.80	8041.63	39.82	
6400.00	6114.10	0.00	0.00	6131.10	183.15	183.15	85.05	8253.57	8043.17	39.23	
6500.00	6210.53	0.00	0.00	6227.53	186.08	186.08	58.83	8244.53	8030.98	38.61	
6600.00	6304.46	0.00	0.00	6321.46	188.93	188.93	43.67	8221.89	8005.30	37.96	
6700.00	6394.06	0.00	0.00	6411.06	191.65	191.65	35.40	8186.08	7966.62	37.30	
6800.00	6477.59	0.00	0.00	6494.59	194.19	194.19	30.84	8137.80	7915.69	36.64	
6900.00	6553.43	0.00	0.00	6570.43	196.49	196.49	28.48	8077.99	7853.48	35.98	
7000.00	6620.09	0.00	0.00	6637.09	198.51	198.51	27.72	8007.82	7781.20	35.34	
7100.00	6676.29	0.00	0.00	6693.29	200.22	200.22	28.46	7928.63	7700.22	34.71	
7200.00	6720.92	0.00	0.00	6737.92	201.57	201.57	31.16	7841.96	7612.10	34.12	
7300.00	6753.11	0.00	0.00	6770.11	202.55	202.55	37.42	7749.47	7518.55	33.56	
7400.00	6772.25	0.00	0.00	6789.25	203.13	203.13	52.74	7652.96	7421.42	33.05	
7500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7554.27	7322.40	32.58	
7600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7455.18	7223.18	32.13	
7700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7356.11	7124.00	31.69	
7800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7257.06	7024.90	31.26	
7900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7158.04	6925.74	30.81	
8000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	7059.05	6826.60	30.37	
8100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6960.09	6727.44	29.92	
8200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6861.15	6628.21	29.45	
8300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6762.25	6529.15	29.01	
8400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6663.38	6429.90	28.54	
8500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6564.55	6330.80	28.08	
8600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6465.75	6231.74	27.63	
8700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6366.99	6132.58	27.16	
8800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6268.27	6033.51	26.70	
8900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6169.59	5934.50	26.24	
9000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	6070.95	5835.55	25.79	
9100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5972.36	5736.56	25.33	
9200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5873.81	5637.58	24.86	
9300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5775.32	5538.66	24.40	
9400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5676.88	5439.83	23.95	
9500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5578.49	5341.07	23.50	
9600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5480.16	5242.26	23.04	
9700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5381.90	5143.38	22.56	
9800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5283.70	5044.58	22.10	
9900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5185.56	4945.89	21.64	
10000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	5087.50	4847.32	21.18	
10100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4989.52	4748.84	20.73	
10200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4891.62	4650.13	20.26	
10300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4793.81	4551.56	19.79	
10400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4696.08	4453.12	19.33	
10500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4598.46	4354.82	18.87	
10600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4500.94	4256.42	18.41	
10700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4403.53	4158.15	17.95	
10800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4306.24	4060.00	17.49	
10900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4209.08	3961.96	17.03	
11000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4112.05	3863.92	16.57	
11100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	4015.17	3765.94	16.11	
11200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3918.44	3668.09	15.65	
11300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3821.89	3570.37	15.20	
11400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3725.51	3472.80	14.74	
11500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3629.34	3375.38	14.29	
11600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3533.37	3278.13	13.84	

## 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
11700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3437.63	3180.94	13.39	
11800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3342.15	3083.93	12.94	
11900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3246.93	2987.14	12.50	
12000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3152.02	2890.38	12.05	
12100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	3057.42	2793.63	11.59	
12200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2963.18	2697.05	11.13	
12300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2869.33	2600.74	10.68	
12400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2775.92	2504.75	10.24	
12500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2682.97	2409.10	9.80	
12600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2590.55	2313.84	9.36	
12700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2498.72	2219.02	8.93	
12800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2407.53	2124.71	8.51	
12900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2317.07	2030.98	8.10	
13000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2227.43	1937.90	7.69	
13100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2138.71	1845.58	7.30	
13200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	2051.03	1753.26	6.89	
13300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1964.52	1661.57	6.48	
13400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1879.35	1570.97	6.09	
13500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1795.71	1481.66	5.72	
13600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1713.83	1393.87	5.36	
13700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1633.96	1307.92	5.01	
13800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1556.43	1222.94	4.67	
13900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1481.58	1140.32	4.34	
14000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1409.86	1060.77	4.04	
14100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1341.77	984.77	3.76	
14200.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1277.87	911.48	3.49	
14300.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1218.85	843.58	3.25	
14400.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1165.42	780.88	3.03	
14500.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1118.41	724.21	2.84	
14600.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1078.64	676.23	2.68	
14700.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1046.94	636.16	2.55	
14800.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1024.07	607.27	2.46	SF(Lo)
14900.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1010.61	588.78	2.40	SF(Lo)
15000.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1006.96	582.59	2.37	SF(Lo)
15100.00	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1013.21	588.47	2.39	SF(Lo)
15136.85	6778.00	0.00	0.00	6795.00	203.31	203.31	90.00	1017.98	594.03	2.40	SF(Lo)
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	258.18	6838.49	6837.77	9392.19	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	258.18	6838.45	6836.47	3461.31	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	258.18	6838.45	6834.61	1779.29	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	258.18	6838.45	6831.35	962.71	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	258.18	6838.45	6828.09	659.87	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	258.18	6838.45	6825.00	508.38	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	258.18	6838.45	6821.74	409.21	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	258.18	6838.45	6818.48	342.41	
800.00	775.00	0.00	0.00	800.00	21.00	21.00	126.32	6838.71	6815.49	294.53	
900.00	874.93	0.00	0.00	899.93	24.04	24.04	126.31	6840.78	6814.34	258.77	
1000.00	974.68	0.00	0.00	999.68	27.07	27.07	126.29	6844.91	6815.25	230.77	
1100.00	1074.13	0.00	0.00	1099.13	30.09	30.09	126.26	6851.12	6818.22	208.22	
1200.00	1173.15	0.00	0.00	1198.15	33.10	33.10	126.22	6859.40	6823.25	189.77	
1300.00	1271.63	0.00	0.00	1296.63	36.09	36.09	126.17	6869.76	6830.34	174.28	
1400.00	1369.44	0.00	0.00	1394.44	39.06	39.06	126.11	6882.20	6839.49	161.17	
1500.00	1466.46	0.00	0.00	1491.46	42.00	42.00	126.03	6896.72	6850.71	149.90	
1600.00	1562.58	0.00	0.00	1587.58	44.92	44.92	125.94	6913.33	6864.01	140.16	
1700.00	1657.68	0.00	0.00	1682.68	47.81	47.81	125.83	6932.04	6879.35	131.57	

## 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
1800.00	1752.25	0.00	0.00	1777.25	50.68	50.68	126.04	6951.82	6895.76	124.01	
1900.00	1846.82	0.00	0.00	1871.82	53.55	53.55	126.25	6971.69	6912.25	117.30	
2000.00	1941.39	0.00	0.00	1966.39	56.43	56.43	126.46	6991.66	6928.83	111.29	
2100.00	2035.96	0.00	0.00	2060.96	59.30	59.30	126.66	7011.72	6945.50	105.90	
2200.00	2130.53	0.00	0.00	2155.53	62.17	62.17	126.87	7031.87	6962.26	101.02	
2300.00	2225.10	0.00	0.00	2250.10	65.04	65.04	127.07	7052.12	6979.11	96.59	
2400.00	2319.66	0.00	0.00	2344.66	67.91	67.91	127.28	7072.45	6996.04	92.56	
2500.00	2414.23	0.00	0.00	2439.23	70.79	70.79	127.48	7092.88	7013.07	88.87	
2600.00	2508.80	0.00	0.00	2533.80	73.66	73.66	127.68	7113.40	7030.19	85.49	
2700.00	2603.37	0.00	0.00	2628.37	76.53	76.53	127.88	7134.00	7047.39	82.36	
2800.00	2697.94	0.00	0.00	2722.94	79.40	79.40	128.08	7154.70	7064.68	79.48	
2900.00	2792.51	0.00	0.00	2817.51	82.27	82.27	128.27	7175.48	7082.05	76.80	
3000.00	2887.08	0.00	0.00	2912.08	85.15	85.15	128.47	7196.35	7099.52	74.32	
3100.00	2981.65	0.00	0.00	3006.65	88.02	88.02	128.67	7217.31	7117.08	72.01	
3200.00	3076.21	0.00	0.00	3101.21	90.89	90.89	128.86	7238.35	7134.73	69.85	
3300.00	3170.78	0.00	0.00	3195.78	93.76	93.76	129.05	7259.47	7152.46	67.84	
3400.00	3265.35	0.00	0.00	3290.35	96.63	96.63	129.25	7280.68	7170.28	65.95	
3500.00	3359.92	0.00	0.00	3384.92	99.51	99.51	129.44	7301.97	7188.19	64.17	
3600.00	3454.49	0.00	0.00	3479.49	102.38	102.38	129.63	7323.35	7206.18	62.50	
3700.00	3549.06	0.00	0.00	3574.06	105.25	105.25	129.82	7344.81	7224.26	60.93	
3800.00	3643.63	0.00	0.00	3668.63	108.12	108.12	130.01	7366.34	7242.42	59.45	
3900.00	3738.19	0.00	0.00	3763.19	110.99	110.99	130.19	7387.96	7260.67	58.04	
4000.00	3832.76	0.00	0.00	3857.76	113.87	113.87	130.38	7409.66	7279.00	56.71	
4100.00	3927.33	0.00	0.00	3952.33	116.74	116.74	130.56	7431.43	7297.42	55.45	
4200.00	4021.90	0.00	0.00	4046.90	119.61	119.61	130.75	7453.29	7315.92	54.26	
4300.00	4116.47	0.00	0.00	4141.47	122.48	122.48	130.93	7475.22	7334.50	53.12	
4400.00	4211.04	0.00	0.00	4236.04	125.35	125.35	131.11	7497.23	7353.16	52.04	
4500.00	4305.61	0.00	0.00	4330.61	128.23	128.23	131.29	7519.31	7371.90	51.01	
4600.00	4400.18	0.00	0.00	4425.18	131.10	131.10	131.47	7541.47	7390.72	50.02	
4700.00	4494.74	0.00	0.00	4519.74	133.97	133.97	131.65	7563.71	7409.58	49.07	
4800.00	4589.31	0.00	0.00	4614.31	136.84	136.84	131.83	7586.02	7428.48	48.15	
4900.00	4683.88	0.00	0.00	4708.88	139.71	139.71	132.01	7608.40	7447.46	47.28	
5000.00	4778.45	0.00	0.00	4803.45	142.58	142.58	132.18	7630.85	7466.52	46.43	
5100.00	4873.02	0.00	0.00	4898.02	145.46	145.46	132.36	7653.38	7485.65	45.63	
5200.00	4967.59	0.00	0.00	4992.59	148.33	148.33	132.53	7675.98	7504.85	44.85	
5300.00	5062.16	0.00	0.00	5087.16	151.20	151.20	132.71	7698.65	7524.13	44.11	
5400.00	5156.72	0.00	0.00	5181.72	154.07	154.07	132.88	7721.39	7543.47	43.40	
5500.00	5251.29	0.00	0.00	5276.29	156.94	156.94	133.05	7744.20	7562.90	42.71	
5600.00	5345.86	0.00	0.00	5370.86	159.82	159.82	133.22	7767.08	7582.39	42.05	
5700.00	5440.43	0.00	0.00	5465.43	162.69	162.69	133.39	7790.03	7601.95	41.42	
5800.00	5535.00	0.00	0.00	5560.00	165.56	165.56	133.56	7813.04	7621.57	40.81	
5900.00	5629.57	0.00	0.00	5654.57	168.43	168.43	133.72	7836.13	7641.27	40.22	
6000.00	5724.14	0.00	0.00	5749.14	171.30	171.30	133.89	7859.28	7661.04	39.65	
6100.00	5818.70	0.00	0.00	5843.70	174.18	174.18	134.06	7882.49	7680.87	39.10	
6200.00	5913.27	0.00	0.00	5938.27	177.05	177.05	134.22	7905.77	7700.78	38.57	
6300.00	6009.06	0.00	0.00	6034.06	179.96	179.96	112.13	7922.47	7714.15	38.03	
6400.00	6106.10	0.00	0.00	6131.10	182.90	182.90	80.62	7925.37	7713.78	37.46	
6500.00	6202.53	0.00	0.00	6227.53	185.83	185.83	54.35	7914.41	7699.63	36.85	
6600.00	6296.46	0.00	0.00	6321.46	188.68	188.68	39.04	7889.81	7671.96	36.22	
6700.00	6386.06	0.00	0.00	6411.06	191.41	191.41	30.52	7852.05	7631.29	35.57	
6800.00	6469.59	0.00	0.00	6494.59	193.94	193.94	25.55	7801.85	7578.39	34.91	
6900.00	6545.43	0.00	0.00	6570.43	196.25	196.25	22.60	7740.18	7514.29	34.27	
7000.00	6612.09	0.00	0.00	6637.09	198.27	198.27	20.96	7668.23	7440.22	33.63	
7100.00	6668.29	0.00	0.00	6693.29	199.98	199.98	20.36	7587.38	7357.59	33.02	
7200.00	6712.92	0.00	0.00	6737.92	201.33	201.33	20.89	7499.20	7267.94	32.43	
7300.00	6745.11	0.00	0.00	6770.11	202.31	202.31	23.35	7405.38	7173.03	31.87	
7400.00	6764.25	0.00	0.00	6789.25	202.89	202.89	31.95	7307.74	7074.73	31.36	
7500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7208.18	6974.97	30.91	

## 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
7600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7108.29	6875.06	30.48	
7700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7008.41	6775.11	30.04	
7800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6908.53	6675.16	29.60	
7900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6808.66	6575.25	29.17	
8000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6708.79	6475.34	28.74	
8100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6608.92	6375.48	28.31	
8200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6509.06	6275.53	27.87	
8300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6409.20	6175.59	27.44	
8400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6309.35	6075.64	27.00	
8500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6209.50	5975.77	26.57	
8600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6109.66	5875.81	26.13	
8700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6009.82	5775.83	25.68	
8800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5909.99	5675.89	25.25	
8900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5810.16	5575.98	24.81	
9000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5710.34	5476.10	24.38	
9100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5610.52	5376.24	23.95	
9200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5510.71	5276.33	23.51	
9300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5410.91	5176.42	23.07	
9400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5311.12	5076.54	22.64	
9500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5211.33	4976.58	22.20	
9600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5111.56	4876.63	21.76	
9700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5011.79	4776.73	21.32	
9800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4912.03	4676.90	20.89	
9900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4812.28	4577.12	20.46	
10000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4712.54	4477.12	20.02	
10100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4612.82	4377.17	19.58	
10200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4513.10	4277.31	19.14	
10300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4413.40	4177.49	18.71	
10400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4313.71	4077.57	18.27	
10500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4214.04	3977.67	17.83	
10600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4114.38	3877.77	17.39	
10700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4014.74	3777.93	16.95	
10800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3915.12	3678.14	16.52	
10900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3815.51	3578.32	16.09	
11000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3715.93	3478.40	15.64	
11100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3616.38	3378.52	15.20	
11200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3516.84	3278.68	14.77	
11300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3417.34	3178.86	14.33	
11400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3317.86	3079.00	13.89	
11500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3218.42	2979.15	13.45	
11600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3119.01	2879.33	13.01	
11700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3019.64	2779.54	12.58	
11800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2920.32	2679.76	12.14	
11900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2821.04	2579.96	11.70	
12000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2721.81	2480.09	11.26	
12100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2622.65	2380.24	10.82	
12200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2523.55	2280.41	10.38	
12300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2424.52	2180.61	9.94	
12400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2325.58	2080.70	9.50	
12500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2226.73	1980.73	9.05	
12600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2127.99	1880.78	8.61	
12700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2029.37	1780.86	8.17	
12800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1930.89	1680.92	7.72	
12900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1832.58	1580.82	7.28	
13000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1734.47	1480.69	6.83	
13100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1636.58	1380.59	6.39	
13200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1538.96	1280.53	5.95	
13300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1441.67	1180.53	5.52	

## 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
13400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1344.77	1080.62	5.09	
13500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1248.37	980.73	4.66	
13600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1152.58	880.78	4.24	
13700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1057.57	780.63	3.82	
13800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	963.56	680.09	3.40	
13900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	870.90	579.94	2.99	
14000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	780.05	480.36	2.60	
14100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	691.73	380.47	2.22	SF(Lo)
14200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	607.04	281.12	1.86	SF(Lo)
14300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	527.74	184.43	1.54	SF(Lo)
14400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	456.64	92.91	1.26	SF(Med)
14500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	398.15	11.27	1.03	SF(Med)
14600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	358.52	-49.11	0.88	SF(Hi)
14700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	344.31	-71.49	0.83	SF(Hi)
14800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	358.55	-48.95	0.88	SF(Hi)
14900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	398.21	11.05	1.03	SF(Med)
15000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	456.70	91.92	1.25	SF(Med)
15100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	527.82	184.15	1.54	SF(Lo)
15136.85	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	556.26	219.02	1.65	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	251.66	3749.37	3748.64	5149.49	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	251.66	3749.29	3747.31	1897.61	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	251.66	3749.29	3745.44	975.46	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	251.66	3749.29	3742.18	527.78	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	251.66	3749.29	3738.92	361.75	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	251.66	3749.29	3735.84	278.70	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	251.66	3749.29	3732.57	224.33	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	251.66	3749.29	3729.31	187.72	
800.00	775.00	0.00	0.00	800.00	21.00	21.00	119.80	3749.50	3726.28	161.47	
900.00	874.93	0.00	0.00	899.93	24.04	24.04	119.82	3751.24	3724.80	141.89	
1000.00	974.68	0.00	0.00	999.68	27.07	27.07	119.85	3754.72	3725.06	126.59	
1100.00	1074.13	0.00	0.00	1099.13	30.09	30.09	119.90	3759.95	3727.04	114.28	
1200.00	1173.15	0.00	0.00	1198.15	33.10	33.10	119.96	3766.94	3730.79	104.21	
1300.00	1271.63	0.00	0.00	1296.63	36.09	36.09	120.03	3775.72	3736.31	95.81	
1400.00	1369.44	0.00	0.00	1394.44	39.06	39.06	120.11	3786.31	3743.62	88.69	
1500.00	1466.46	0.00	0.00	1491.46	42.00	42.00	120.21	3798.74	3752.74	82.58	
1600.00	1562.58	0.00	0.00	1587.58	44.92	44.92	120.30	3813.04	3763.73	77.31	
1700.00	1657.68	0.00	0.00	1682.68	47.81	47.81	120.41	3829.25	3776.58	72.71	
1800.00	1752.25	0.00	0.00	1777.25	50.68	50.68	120.81	3846.49	3790.47	68.66	
1900.00	1846.82	0.00	0.00	1871.82	53.55	53.55	121.21	3863.93	3804.54	65.06	
2000.00	1941.39	0.00	0.00	1966.39	56.43	56.43	121.60	3881.56	3818.80	61.85	
2100.00	2035.96	0.00	0.00	2060.96	59.30	59.30	121.99	3899.38	3833.20	58.91	
2200.00	2130.53	0.00	0.00	2155.53	62.17	62.17	122.38	3917.40	3847.76	56.26	
2300.00	2225.10	0.00	0.00	2250.10	65.04	65.04	122.77	3935.60	3862.51	53.85	
2400.00	2319.66	0.00	0.00	2344.66	67.91	67.91	123.15	3953.98	3877.45	51.66	
2500.00	2414.23	0.00	0.00	2439.23	70.79	70.79	123.53	3972.54	3892.56	49.67	
2600.00	2508.80	0.00	0.00	2533.80	73.66	73.66	123.90	3991.28	3907.86	47.84	
2700.00	2603.37	0.00	0.00	2628.37	76.53	76.53	124.27	4010.20	3923.33	46.17	
2800.00	2697.94	0.00	0.00	2722.94	79.40	79.40	124.64	4029.29	3938.99	44.62	
2900.00	2792.51	0.00	0.00	2817.51	82.27	82.27	125.00	4048.55	3954.82	43.19	
3000.00	2887.08	0.00	0.00	2912.08	85.15	85.15	125.37	4067.98	3970.82	41.87	
3100.00	2981.65	0.00	0.00	3006.65	88.02	88.02	125.72	4087.58	3986.99	40.64	
3200.00	3076.21	0.00	0.00	3101.21	90.89	90.89	126.08	4107.34	4003.34	39.49	
3300.00	3170.78	0.00	0.00	3195.78	93.76	93.76	126.43	4127.26	4019.85	38.42	
3400.00	3265.35	0.00	0.00	3290.35	96.63	96.63	126.78	4147.34	4036.52	37.42	

## 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
3500.00	3359.92	0.00	0.00	3384.92	99.51	99.51	127.13	4167.58	4053.36	36.49	
3600.00	3454.49	0.00	0.00	3479.49	102.38	102.38	127.47	4187.97	4070.37	35.61	
3700.00	3549.06	0.00	0.00	3574.06	105.25	105.25	127.81	4208.52	4087.53	34.78	
3800.00	3643.63	0.00	0.00	3668.63	108.12	108.12	128.15	4229.21	4104.85	34.01	
3900.00	3738.19	0.00	0.00	3763.19	110.99	110.99	128.48	4250.05	4122.33	33.27	
4000.00	3832.76	0.00	0.00	3857.76	113.87	113.87	128.81	4271.04	4139.96	32.58	
4100.00	3927.33	0.00	0.00	3952.33	116.74	116.74	129.14	4292.17	4157.74	31.93	
4200.00	4021.90	0.00	0.00	4046.90	119.61	119.61	129.46	4313.45	4175.67	31.31	
4300.00	4116.47	0.00	0.00	4141.47	122.48	122.48	129.78	4334.86	4193.75	30.72	
4400.00	4211.04	0.00	0.00	4236.04	125.35	125.35	130.10	4356.41	4211.98	30.16	
4500.00	4305.61	0.00	0.00	4330.61	128.23	128.23	130.41	4378.10	4230.35	29.63	
4600.00	4400.18	0.00	0.00	4425.18	131.10	131.10	130.73	4399.91	4248.86	29.13	
4700.00	4494.74	0.00	0.00	4519.74	133.97	133.97	131.04	4421.86	4267.52	28.65	
4800.00	4589.31	0.00	0.00	4614.31	136.84	136.84	131.34	4443.94	4286.31	28.19	
4900.00	4683.88	0.00	0.00	4708.88	139.71	139.71	131.65	4466.15	4305.20	27.75	
5000.00	4778.45	0.00	0.00	4803.45	142.58	142.58	131.95	4488.48	4324.13	27.31	
5100.00	4873.02	0.00	0.00	4898.02	145.46	145.46	132.25	4510.94	4343.19	26.89	
5200.00	4967.59	0.00	0.00	4992.59	148.33	148.33	132.54	4533.52	4362.38	26.49	
5300.00	5062.16	0.00	0.00	5087.16	151.20	151.20	132.83	4556.21	4381.70	26.11	
5400.00	5156.72	0.00	0.00	5181.72	154.07	154.07	133.12	4579.03	4401.14	25.74	
5500.00	5251.29	0.00	0.00	5276.29	156.94	156.94	133.41	4601.96	4420.69	25.39	
5600.00	5345.86	0.00	0.00	5370.86	159.82	159.82	133.69	4625.01	4440.36	25.05	
5700.00	5440.43	0.00	0.00	5465.43	162.69	162.69	133.98	4648.17	4460.15	24.72	
5800.00	5535.00	0.00	0.00	5560.00	165.56	165.56	134.26	4671.44	4480.06	24.41	
5900.00	5629.57	0.00	0.00	5654.57	168.43	168.43	134.53	4694.83	4500.08	24.11	
6000.00	5724.14	0.00	0.00	5749.14	171.30	171.30	134.81	4718.32	4520.22	23.82	
6100.00	5818.70	0.00	0.00	5843.70	174.18	174.18	135.08	4741.91	4540.47	23.54	
6200.00	5913.27	0.00	0.00	5938.27	177.05	177.05	135.35	4765.61	4560.83	23.27	
6300.00	6009.06	0.00	0.00	6034.06	179.96	179.96	113.33	4782.78	4574.70	22.99	
6400.00	6106.10	0.00	0.00	6131.10	182.90	182.90	81.92	4786.21	4574.90	22.65	
6500.00	6202.53	0.00	0.00	6227.53	185.83	185.83	55.79	4775.83	4561.37	22.27	
6600.00	6296.46	0.00	0.00	6321.46	188.68	188.68	40.65	4751.87	4534.38	21.85	
6700.00	6386.06	0.00	0.00	6411.06	191.41	191.41	32.35	4714.78	4494.44	21.40	
6800.00	6469.59	0.00	0.00	6494.59	193.94	193.94	27.67	4665.28	4442.30	20.92	
6900.00	6545.43	0.00	0.00	6570.43	196.25	196.25	25.12	4604.33	4378.97	20.43	
7000.00	6612.09	0.00	0.00	6637.09	198.27	198.27	24.03	4533.09	4305.64	19.93	
7100.00	6668.29	0.00	0.00	6693.29	199.98	199.98	24.26	4452.94	4223.72	19.43	
7200.00	6712.92	0.00	0.00	6737.92	201.33	201.33	26.13	4365.41	4134.76	18.93	
7300.00	6745.11	0.00	0.00	6770.11	202.31	202.31	31.01	4272.18	4040.48	18.44	
7400.00	6764.25	0.00	0.00	6789.25	202.89	202.89	44.62	4175.04	3942.72	17.97	
7500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4075.85	3843.38	17.53	
7600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3976.31	3743.68	17.09	
7700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3876.79	3644.19	16.67	
7800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3777.29	3544.56	16.23	
7900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3677.83	3445.00	15.80	
8000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3578.39	3345.47	15.36	
8100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3478.98	3245.96	14.93	
8200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3379.61	3146.51	14.50	
8300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3280.28	3047.05	14.06	
8400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3180.99	2947.62	13.63	
8500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3081.74	2848.18	13.19	
8600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2982.55	2748.86	12.76	
8700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2883.41	2649.57	12.33	
8800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2784.33	2550.23	11.89	
8900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2685.32	2451.00	11.46	
9000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2586.39	2351.72	11.02	
9100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2487.54	2252.49	10.58	
9200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2388.79	2153.19	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
9300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2290.14	2053.98	9.70	
9400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2191.62	1954.90	9.26	
9500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2093.24	1855.96	8.82	
9600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1995.02	1756.98	8.38	
9700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1896.99	1658.01	7.94	
9800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1799.17	1559.25	7.50	
9900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1701.61	1460.75	7.06	
10000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1604.35	1362.33	6.63	
10100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1507.44	1264.14	6.20	
10200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1410.97	1166.36	5.77	
10300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1315.02	1068.77	5.34	
10400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1219.73	971.61	4.92	
10500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1125.25	874.23	4.48	
10600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1031.82	777.17	4.05	
10700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	939.73	681.15	3.63	
10800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	849.44	586.66	3.23	
10900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	761.58	492.81	2.83	
11000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	677.10	401.05	2.45	SF(Lo)
11100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	597.42	312.83	2.10	SF(Lo)
11200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	524.76	229.78	1.78	SF(Lo)
11300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	462.41	155.33	1.51	SF(Lo)
11400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	415.06	96.64	1.30	SF(Med)
11500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	388.24	60.68	1.19	SF(Med)
11600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	386.24	57.56	1.18	SF(Med)
11700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	409.43	87.23	1.27	SF(Med)
11800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	453.97	141.67	1.45	SF(Med)
11900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	514.34	213.37	1.71	SF(Lo)
12000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	585.66	295.58	2.02	SF(Lo)
12100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	664.42	382.40	2.36	SF(Lo)
12200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	748.27	473.81	2.73	
12300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	835.68	566.64	3.11	
12400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	925.64	661.73	3.51	
12500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1017.48	757.87	3.92	
12600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1110.73	854.12	4.33	
12700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1205.06	950.97	4.74	
12800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1300.24	1048.47	5.16	
12900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1396.09	1146.31	5.59	
13000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1492.49	1244.34	6.01	
13100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1589.33	1342.69	6.44	
13200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1686.55	1441.28	6.88	
13300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1784.07	1540.08	7.31	
13400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1881.85	1639.05	7.75	
13500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1979.85	1737.79	8.18	
13600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2078.04	1836.52	8.60	
13700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2176.40	1935.37	9.03	
13800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2274.90	2034.35	9.46	
13900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2373.52	2133.42	9.89	
14000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2472.26	2232.57	10.31	
14100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2571.09	2331.80	10.74	
14200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2670.01	2431.10	11.18	
14300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2769.01	2530.45	11.61	
14400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2868.08	2629.83	12.04	
14500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2967.21	2729.20	12.47	
14600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3066.40	2828.59	12.89	
14700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3165.63	2928.02	13.32	
14800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3264.92	3027.48	13.75	
14900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3364.24	3126.98	14.18	
15000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3463.61	3226.51	14.61	



## 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
15100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3563.01	3326.07	15.04	
15136.85	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3599.65	3362.76	15.20	
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	254.13	5776.82	5776.09	7934.15	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	254.13	5776.73	5774.87	3119.19	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	254.13	5776.73	5773.13	1607.11	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	254.13	5776.73	5769.88	843.61	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	254.13	5776.73	5766.63	571.91	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	254.13	5776.73	5763.54	438.22	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	254.13	5776.73	5760.29	351.48	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	254.13	5776.73	5757.04	293.41	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	122.28	5776.96	5754.03	251.94	
900.00	866.93	0.00	0.00	899.93	23.80	23.80	122.27	5778.82	5752.68	221.08	
1000.00	966.68	0.00	0.00	999.68	26.83	26.83	122.27	5782.55	5753.19	196.95	
1100.00	1066.13	0.00	0.00	1099.13	29.85	29.85	122.26	5788.16	5755.57	177.63	
1200.00	1165.15	0.00	0.00	1198.15	32.85	32.85	122.25	5795.64	5759.81	161.77	
1300.00	1263.63	0.00	0.00	1296.63	35.84	35.84	122.24	5805.00	5765.93	148.55	
1400.00	1361.44	0.00	0.00	1394.44	38.81	38.81	122.21	5816.27	5773.92	137.35	
1500.00	1458.46	0.00	0.00	1491.46	41.76	41.76	122.19	5829.44	5783.79	127.70	
1600.00	1554.58	0.00	0.00	1587.58	44.68	44.68	122.15	5844.53	5795.56	119.34	
1700.00	1649.68	0.00	0.00	1682.68	47.57	47.57	122.11	5861.56	5809.21	111.96	
1800.00	1744.25	0.00	0.00	1777.25	50.44	50.44	122.37	5879.60	5823.85	105.48	
1900.00	1838.82	0.00	0.00	1871.82	53.31	53.31	122.62	5897.76	5838.61	99.72	
2000.00	1933.39	0.00	0.00	1966.39	56.18	56.18	122.88	5916.04	5853.48	94.57	
2100.00	2027.96	0.00	0.00	2060.96	59.06	59.06	123.13	5934.45	5868.46	89.94	
2200.00	2122.53	0.00	0.00	2155.53	61.93	61.93	123.39	5952.97	5883.55	85.75	
2300.00	2217.10	0.00	0.00	2250.10	64.80	64.80	123.64	5971.62	5898.76	81.96	
2400.00	2311.66	0.00	0.00	2344.66	67.67	67.67	123.89	5990.38	5914.08	78.52	
2500.00	2406.23	0.00	0.00	2439.23	70.54	70.54	124.13	6009.26	5929.53	75.37	
2600.00	2500.80	0.00	0.00	2533.80	73.42	73.42	124.38	6028.26	5945.08	72.48	
2700.00	2595.37	0.00	0.00	2628.37	76.29	76.29	124.62	6047.37	5960.76	69.82	
2800.00	2689.94	0.00	0.00	2722.94	79.16	79.16	124.87	6066.60	5976.54	67.37	
2900.00	2784.51	0.00	0.00	2817.51	82.03	82.03	125.11	6085.94	5992.45	65.10	
3000.00	2879.08	0.00	0.00	2912.08	84.90	84.90	125.35	6105.39	6008.46	62.99	
3100.00	2973.65	0.00	0.00	3006.65	87.78	87.78	125.59	6124.95	6024.59	61.03	
3200.00	3068.21	0.00	0.00	3101.21	90.65	90.65	125.83	6144.62	6040.84	59.21	
3300.00	3162.78	0.00	0.00	3195.78	93.52	93.52	126.06	6164.40	6057.19	57.50	
3400.00	3257.35	0.00	0.00	3290.35	96.39	96.39	126.30	6184.29	6073.65	55.90	
3500.00	3351.92	0.00	0.00	3384.92	99.26	99.26	126.53	6204.28	6090.23	54.40	
3600.00	3446.49	0.00	0.00	3479.49	102.13	102.13	126.76	6224.38	6106.91	52.99	
3700.00	3541.06	0.00	0.00	3574.06	105.01	105.01	127.00	6244.59	6123.71	51.66	
3800.00	3635.63	0.00	0.00	3668.63	107.88	107.88	127.22	6264.89	6140.61	50.41	
3900.00	3730.19	0.00	0.00	3763.19	110.75	110.75	127.45	6285.30	6157.61	49.22	
4000.00	3824.76	0.00	0.00	3857.76	113.62	113.62	127.68	6305.82	6174.72	48.10	
4100.00	3919.33	0.00	0.00	3952.33	116.49	116.49	127.90	6326.43	6191.94	47.04	
4200.00	4013.90	0.00	0.00	4046.90	119.37	119.37	128.13	6347.14	6209.26	46.03	
4300.00	4108.47	0.00	0.00	4141.47	122.24	122.24	128.35	6367.95	6226.69	45.08	
4400.00	4203.04	0.00	0.00	4236.04	125.11	125.11	128.57	6388.86	6244.22	44.17	
4500.00	4297.61	0.00	0.00	4330.61	127.98	127.98	128.79	6409.86	6261.84	43.30	
4600.00	4392.18	0.00	0.00	4425.18	130.85	130.85	129.01	6430.96	6279.57	42.48	
4700.00	4486.74	0.00	0.00	4519.74	133.73	133.73	129.23	6452.16	6297.40	41.69	
4800.00	4581.31	0.00	0.00	4614.31	136.60	136.60	129.44	6473.45	6315.33	40.94	
4900.00	4675.88	0.00	0.00	4708.88	139.47	139.47	129.66	6494.83	6333.36	40.22	
5000.00	4770.45	0.00	0.00	4803.45	142.34	142.34	129.87	6516.31	6351.48	39.54	
5100.00	4865.02	0.00	0.00	4898.02	145.21	145.21	130.08	6537.87	6369.70	38.88	

## 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
5200.00	4959.59	0.00	0.00	4992.59	148.09	148.09	130.29	6559.53	6388.02	38.25	
5300.00	5054.16	0.00	0.00	5087.16	150.96	150.96	130.50	6581.27	6406.43	37.64	
5400.00	5148.72	0.00	0.00	5181.72	153.83	153.83	130.71	6603.10	6424.94	37.06	
5500.00	5243.29	0.00	0.00	5276.29	156.70	156.70	130.92	6625.03	6443.53	36.50	
5600.00	5337.86	0.00	0.00	5370.86	159.57	159.57	131.12	6647.03	6462.23	35.97	
5700.00	5432.43	0.00	0.00	5465.43	162.45	162.45	131.33	6669.13	6481.01	35.45	
5800.00	5527.00	0.00	0.00	5560.00	165.32	165.32	131.53	6691.30	6499.88	34.96	
5900.00	5621.57	0.00	0.00	5654.57	168.19	168.19	131.73	6713.57	6518.75	34.46	
6000.00	5716.14	0.00	0.00	5749.14	171.06	171.06	131.93	6735.91	6537.70	33.98	
6100.00	5810.70	0.00	0.00	5843.70	173.93	173.93	132.13	6758.34	6556.73	33.52	
6200.00	5905.27	0.00	0.00	5938.27	176.80	176.80	132.33	6780.85	6575.85	33.08	
6300.00	6001.06	0.00	0.00	6034.06	179.71	179.71	110.30	6796.78	6588.44	32.62	
6400.00	6098.10	0.00	0.00	6131.10	182.66	182.66	78.84	6798.92	6587.29	32.13	
6500.00	6194.53	0.00	0.00	6227.53	185.59	185.59	52.57	6787.21	6572.37	31.59	
6600.00	6288.46	0.00	0.00	6321.46	188.44	188.44	37.21	6761.88	6543.95	31.03	
6700.00	6378.06	0.00	0.00	6411.06	191.16	191.16	28.60	6723.42	6502.57	30.44	
6800.00	6461.59	0.00	0.00	6494.59	193.70	193.70	23.49	6672.57	6449.02	29.85	
6900.00	6537.43	0.00	0.00	6570.43	196.00	196.00	20.32	6610.29	6384.32	29.25	
7000.00	6604.09	0.00	0.00	6637.09	198.03	198.03	18.33	6537.79	6309.70	28.66	
7100.00	6660.29	0.00	0.00	6693.29	199.73	199.73	17.18	6456.47	6226.60	28.09	
7200.00	6704.92	0.00	0.00	6737.92	201.09	201.09	16.76	6367.88	6136.63	27.54	
7300.00	6737.11	0.00	0.00	6770.11	202.07	202.07	17.30	6273.74	6041.43	27.01	
7400.00	6756.25	0.00	0.00	6789.25	202.65	202.65	20.54	6175.86	5942.88	26.51	
7500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	6076.15	5842.97	26.06	
7600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5976.17	5743.07	25.64	
7700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5876.18	5642.97	25.20	
7800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5776.20	5542.99	24.77	
7900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5676.21	5443.03	24.34	
8000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5576.23	5343.06	23.91	
8100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5476.24	5243.04	23.48	
8200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5376.26	5142.99	23.05	
8300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5276.28	5043.08	22.63	
8400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5176.30	4942.97	22.18	
8500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	5076.32	4842.93	21.75	
8600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4976.34	4742.95	21.32	
8700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4876.36	4642.98	20.89	
8800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4776.38	4542.90	20.46	
8900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4676.40	4442.84	20.02	
9000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4576.43	4342.81	19.59	
9100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4476.45	4242.80	19.16	
9200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4376.48	4142.81	18.73	
9300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4276.50	4042.84	18.30	
9400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4176.53	3942.90	17.88	
9500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	4076.56	3842.84	17.44	
9600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3976.59	3742.81	17.01	
9700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3876.62	3642.78	16.58	
9800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3776.66	3542.78	16.15	
9900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3676.69	3442.74	15.72	
10000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3576.73	3342.64	15.28	
10100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3476.77	3242.62	14.85	
10200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3376.82	3142.68	14.42	
10300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3276.86	3042.60	13.99	
10400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3176.91	2942.57	13.56	
10500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	3076.96	2842.55	13.13	
10600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2977.02	2742.56	12.70	
10700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2877.08	2642.45	12.26	
10800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2777.14	2542.38	11.83	
10900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2677.21	2442.35	11.40	

## 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
11000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2577.28	2342.29	10.97	
11100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2477.36	2242.22	10.54	
11200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2377.45	2142.17	10.11	
11300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2277.54	2042.13	9.67	
11400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2177.64	1942.09	9.25	
11500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	2077.75	1842.00	8.81	
11600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1977.88	1741.89	8.38	
11700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1878.01	1641.77	7.95	
11800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1778.16	1541.65	7.52	
11900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1678.33	1441.52	7.09	
12000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1578.52	1341.34	6.66	
12100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1478.74	1241.11	6.22	
12200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1378.99	1140.86	5.79	
12300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1279.27	1040.58	5.36	
12400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1179.61	940.28	4.93	
12500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1080.00	839.91	4.50	
12600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	980.48	739.42	4.07	
12700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	881.07	638.75	3.64	
12800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	781.80	537.81	3.20	
12900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	682.75	436.59	2.77	
13000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	584.03	334.28	2.34	SF(Lo)
13100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	485.82	230.59	1.90	SF(Lo)
13200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	388.53	125.58	1.48	SF(Med)
13300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	293.08	16.97	1.06	SF(Med)
13400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	202.06	-99.10	0.67	SF(Hi)
13500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	125.56	-227.11	0.36	SF(Hi)
13600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	103.44	-274.56	0.27	SF(Hi)
13700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	160.11	-154.33	0.51	SF(Hi)
13800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	246.11	-30.67	0.89	SF(Hi)
13900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	339.86	80.89	1.31	SF(Med)
14000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	436.40	187.45	1.75	SF(Lo)
14100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	534.21	290.94	2.20	SF(Lo)
14200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	632.70	392.37	2.63	
14300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	731.61	493.43	3.07	
14400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	830.77	593.89	3.51	
14500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	930.12	694.23	3.94	
14600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1029.59	794.48	4.38	
14700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1129.16	894.59	4.81	
14800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1228.79	994.58	5.25	
14900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1328.48	1094.54	5.68	
15000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1428.21	1194.51	6.11	
15100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1527.98	1294.46	6.54	
15136.85	6762.00	0.00	0.00	6795.00	202.82	202.82	90.00	1564.75	1331.29	6.70	

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	239.22	3166.30	3165.57	4348.68	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	239.22	3166.13	3164.28	1706.96	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	239.22	3166.13	3162.53	879.06	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	239.22	3166.13	3159.27	461.33	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	239.22	3166.13	3156.01	312.72	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	239.22	3166.13	3152.92	239.61	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	239.22	3166.13	3149.65	192.18	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	239.22	3166.13	3146.39	160.42	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	107.37	3166.26	3143.27	137.75	
900.00	866.93	0.00	0.00	899.93	23.80	23.80	107.41	3167.30	3141.10	120.87	
1000.00	966.68	0.00	0.00	999.68	26.83	26.83	107.49	3169.40	3139.97	107.70	

## 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
1100.00	1066.13	0.00	0.00	1099.13	29.85	29.85	107.61	3172.57	3139.89	97.10	
1200.00	1165.15	0.00	0.00	1198.15	32.85	32.85	107.76	3176.84	3140.90	88.40	
1300.00	1263.63	0.00	0.00	1296.63	35.84	35.84	107.96	3182.24	3143.02	81.14	
1400.00	1361.44	0.00	0.00	1394.44	38.81	38.81	108.18	3188.81	3146.28	74.97	
1500.00	1458.46	0.00	0.00	1491.46	41.76	41.76	108.43	3196.62	3150.76	69.69	
1600.00	1554.58	0.00	0.00	1587.58	44.68	44.68	108.71	3205.72	3156.47	65.10	
1700.00	1649.68	0.00	0.00	1682.68	47.57	47.57	109.01	3216.16	3163.52	61.09	
1800.00	1744.25	0.00	0.00	1777.25	50.44	50.44	109.53	3227.44	3171.38	57.57	
1900.00	1838.82	0.00	0.00	1871.82	53.31	53.31	110.05	3239.00	3179.52	54.46	
2000.00	1933.39	0.00	0.00	1966.39	56.18	56.18	110.56	3250.84	3187.94	51.68	
2100.00	2027.96	0.00	0.00	2060.96	59.06	59.06	111.07	3262.97	3196.64	49.19	
2200.00	2122.53	0.00	0.00	2155.53	61.93	61.93	111.58	3275.37	3205.62	46.96	
2300.00	2217.10	0.00	0.00	2250.10	64.80	64.80	112.08	3288.05	3214.86	44.93	
2400.00	2311.66	0.00	0.00	2344.66	67.67	67.67	112.58	3301.00	3224.30	43.04	
2500.00	2406.23	0.00	0.00	2439.23	70.54	70.54	113.07	3314.21	3234.01	41.32	
2600.00	2500.80	0.00	0.00	2533.80	73.42	73.42	113.56	3327.70	3243.98	39.75	
2700.00	2595.37	0.00	0.00	2628.37	76.29	76.29	114.05	3341.44	3254.23	38.31	
2800.00	2689.94	0.00	0.00	2722.94	79.16	79.16	114.54	3355.44	3264.73	36.99	
2900.00	2784.51	0.00	0.00	2817.51	82.03	82.03	115.02	3369.70	3275.51	35.77	
3000.00	2879.08	0.00	0.00	2912.08	84.90	84.90	115.49	3384.21	3286.53	34.65	
3100.00	2973.65	0.00	0.00	3006.65	87.78	87.78	115.97	3398.97	3297.82	33.60	
3200.00	3068.21	0.00	0.00	3101.21	90.65	90.65	116.44	3413.98	3309.35	32.63	
3300.00	3162.78	0.00	0.00	3195.78	93.52	93.52	116.90	3429.23	3321.14	31.73	
3400.00	3257.35	0.00	0.00	3290.35	96.39	96.39	117.36	3444.71	3333.18	30.89	
3500.00	3351.92	0.00	0.00	3384.92	99.26	99.26	117.82	3460.44	3345.47	30.10	
3600.00	3446.49	0.00	0.00	3479.49	102.13	102.13	118.27	3476.39	3358.00	29.36	
3700.00	3541.06	0.00	0.00	3574.06	105.01	105.01	118.72	3492.58	3370.76	28.67	
3800.00	3635.63	0.00	0.00	3668.63	107.88	107.88	119.17	3508.99	3383.77	28.02	
3900.00	3730.19	0.00	0.00	3763.19	110.75	110.75	119.61	3525.63	3397.02	27.41	
4000.00	3824.76	0.00	0.00	3857.76	113.62	113.62	120.05	3542.48	3410.49	26.84	
4100.00	3919.33	0.00	0.00	3952.33	116.49	116.49	120.49	3559.56	3424.20	26.30	
4200.00	4013.90	0.00	0.00	4046.90	119.37	119.37	120.92	3576.84	3438.13	25.79	
4300.00	4108.47	0.00	0.00	4141.47	122.24	122.24	121.34	3594.34	3452.29	25.30	
4400.00	4203.04	0.00	0.00	4236.04	125.11	125.11	121.77	3612.05	3466.65	24.84	
4500.00	4297.61	0.00	0.00	4330.61	127.98	127.98	122.19	3629.96	3481.08	24.38	
4600.00	4392.18	0.00	0.00	4425.18	130.85	130.85	122.60	3648.07	3495.72	23.95	
4700.00	4486.74	0.00	0.00	4519.74	133.73	133.73	123.01	3666.38	3510.57	23.53	
4800.00	4581.31	0.00	0.00	4614.31	136.60	136.60	123.42	3684.89	3525.63	23.14	
4900.00	4675.88	0.00	0.00	4708.88	139.47	139.47	123.83	3703.59	3540.88	22.76	
5000.00	4770.45	0.00	0.00	4803.45	142.34	142.34	124.23	3722.48	3556.34	22.41	
5100.00	4865.02	0.00	0.00	4898.02	145.21	145.21	124.62	3741.55	3572.00	22.07	
5200.00	4959.59	0.00	0.00	4992.59	148.09	148.09	125.02	3760.81	3587.85	21.74	
5300.00	5054.16	0.00	0.00	5087.16	150.96	150.96	125.41	3780.25	3603.89	21.43	
5400.00	5148.72	0.00	0.00	5181.72	153.83	153.83	125.79	3799.88	3620.12	21.14	
5500.00	5243.29	0.00	0.00	5276.29	156.70	156.70	126.17	3819.67	3636.54	20.86	
5600.00	5337.86	0.00	0.00	5370.86	159.57	159.57	126.55	3839.64	3653.14	20.59	
5700.00	5432.43	0.00	0.00	5465.43	162.45	162.45	126.93	3859.78	3669.92	20.33	
5800.00	5527.00	0.00	0.00	5560.00	165.32	165.32	127.30	3880.09	3686.89	20.08	
5900.00	5621.57	0.00	0.00	5654.57	168.19	168.19	127.66	3900.56	3704.03	19.85	
6000.00	5716.14	0.00	0.00	5749.14	171.06	171.06	128.03	3921.20	3721.34	19.62	
6100.00	5810.70	0.00	0.00	5843.70	173.93	173.93	128.39	3942.00	3738.83	19.40	
6200.00	5905.27	0.00	0.00	5938.27	176.80	176.80	128.74	3962.95	3756.49	19.19	
6300.00	6001.06	0.00	0.00	6034.06	179.71	179.71	106.94	3977.40	3767.70	18.97	
6400.00	6098.10	0.00	0.00	6131.10	182.66	182.66	75.61	3978.13	3765.29	18.69	
6500.00	6194.53	0.00	0.00	6227.53	185.59	185.59	49.41	3965.12	3749.19	18.36	
6600.00	6288.46	0.00	0.00	6321.46	188.44	188.44	34.06	3938.59	3719.71	17.99	
6700.00	6378.06	0.00	0.00	6411.06	191.16	191.16	25.36	3899.03	3677.38	17.59	
6800.00	6461.59	0.00	0.00	6494.59	193.70	193.70	20.08	3847.20	3623.00	17.16	

## 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
6900.00	6537.43	0.00	0.00	6570.43	196.00	196.00	16.59	3784.07	3557.57	16.71	
7000.00	6604.09	0.00	0.00	6637.09	198.03	198.03	14.10	3710.84	3482.35	16.24	
7100.00	6660.29	0.00	0.00	6693.29	199.73	199.73	12.09	3628.91	3398.76	15.77	
7200.00	6704.92	0.00	0.00	6737.92	201.09	201.09	10.12	3539.86	3308.40	15.29	
7300.00	6737.11	0.00	0.00	6770.11	202.07	202.07	7.33	3445.39	3213.02	14.83	
7400.00	6756.25	0.00	0.00	6789.25	202.65	202.65	359.62	3347.33	3114.40	14.37	
7500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3247.59	3014.43	13.93	
7600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3147.65	2914.51	13.50	
7700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3047.70	2814.57	13.07	
7800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2947.76	2714.71	12.65	
7900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2847.83	2614.74	12.22	
8000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2747.90	2514.79	11.79	
8100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2647.97	2414.86	11.36	
8200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2548.05	2315.05	10.94	
8300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2448.14	2215.07	10.50	
8400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2348.23	2115.19	10.08	
8500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2248.33	2015.33	9.65	
8600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2148.44	1915.37	9.22	
8700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2048.57	1815.45	8.79	
8800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1948.70	1715.56	8.36	
8900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1848.85	1615.69	7.93	
9000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1749.02	1515.85	7.50	
9100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1649.21	1416.04	7.07	
9200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1549.42	1316.27	6.65	
9300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1449.66	1216.54	6.22	
9400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1349.93	1116.86	5.79	
9500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1250.25	1017.10	5.36	
9600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1150.63	917.43	4.93	
9700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1051.08	817.89	4.51	
9800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	951.62	718.46	4.08	
9900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	852.28	618.96	3.65	
10000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	753.13	519.62	3.23	
10100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	654.23	420.55	2.80	
10200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	555.72	321.72	2.37	SF(Lo)
10300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	457.87	222.38	1.94	SF(Lo)
10400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	361.19	122.37	1.51	SF(Lo)
10500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	266.96	21.97	1.09	SF(Med)
10600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	179.12	-82.12	0.69	SF(Hi)
10700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	113.56	-181.32	0.39	SF(Hi)
10800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	117.09	-183.22	0.39	SF(Hi)
10900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	185.81	-87.81	0.68	SF(Hi)
11000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	274.48	15.81	1.06	SF(Med)
11100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	368.99	117.89	1.47	SF(Med)
11200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	465.79	218.82	1.89	SF(Lo)
11300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	563.72	319.58	2.31	SF(Lo)
11400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	662.26	420.15	2.74	
11500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	761.19	520.40	3.16	
11600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	860.36	620.32	3.58	
11700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	959.70	720.17	4.01	
11800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1059.17	820.03	4.43	
11900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1158.73	919.93	4.85	
12000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1258.36	1019.86	5.28	
12100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1358.05	1119.81	5.70	
12200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1457.77	1219.76	6.12	
12300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1557.53	1319.73	6.55	
12400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1657.33	1419.70	6.97	
12500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1757.14	1519.68	7.40	
12600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1856.97	1619.66	7.82	

## 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
12700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	1956.83	1719.64	8.25	
12800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2056.69	1819.62	8.68	
12900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2156.57	1919.58	9.10	
13000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2256.46	2019.53	9.52	
13100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2356.36	2119.48	9.95	
13200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2456.26	2219.43	10.37	
13300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2556.18	2319.39	10.80	
13400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2656.10	2419.34	11.22	
13500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2756.03	2519.30	11.64	
13600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2855.96	2619.26	12.07	
13700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	2955.89	2719.22	12.49	
13800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3055.83	2819.18	12.91	
13900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3155.78	2919.15	13.34	
14000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3255.72	3019.11	13.76	
14100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3355.68	3119.08	14.18	
14200.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3455.63	3219.04	14.61	
14300.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3555.58	3319.00	15.03	
14400.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3655.54	3418.97	15.45	
14500.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3755.50	3518.93	15.87	
14600.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3855.47	3618.90	16.30	
14700.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	3955.43	3718.87	16.72	
14800.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	4055.40	3818.83	17.14	
14900.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	4155.37	3918.80	17.57	
15000.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	4255.34	4018.76	17.99	
15100.00	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	4355.31	4118.73	18.41	
15136.85	6762.00	0.00	0.00	6795.00	202.82	202.82	270.00	4392.14	4155.56	18.57	
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	223.59	2123.70	2122.97	2916.77	
100.00	61.00	0.00	0.00	100.00	0.93	0.93	223.59	2123.34	2121.58	1205.16	
200.00	161.00	0.00	0.00	200.00	2.44	2.44	223.59	2123.34	2119.84	606.60	
300.00	261.00	0.00	0.00	300.00	5.40	5.40	223.59	2123.34	2116.67	318.35	
400.00	361.00	0.00	0.00	400.00	8.43	8.43	223.59	2123.34	2113.59	217.71	
500.00	461.00	0.00	0.00	500.00	11.47	11.47	223.59	2123.34	2110.33	163.23	
600.00	561.00	0.00	0.00	600.00	14.51	14.51	223.59	2123.34	2107.08	130.56	
700.00	661.00	0.00	0.00	700.00	17.54	17.54	223.59	2123.34	2103.82	108.78	
800.00	761.00	0.00	0.00	800.00	20.58	20.58	91.74	2123.35	2100.59	93.28	
900.00	860.93	0.00	0.00	899.93	23.61	23.61	91.84	2123.46	2097.49	81.75	
1000.00	960.68	0.00	0.00	999.68	26.64	26.64	92.02	2123.70	2094.50	72.74	
1100.00	1060.13	0.00	0.00	1099.13	29.66	29.66	92.29	2124.09	2091.68	65.52	
1200.00	1159.15	0.00	0.00	1198.15	32.67	32.67	92.65	2124.70	2089.04	59.58	
1300.00	1257.63	0.00	0.00	1296.63	35.66	35.66	93.09	2125.58	2086.66	54.61	
1400.00	1355.44	0.00	0.00	1394.44	38.63	38.63	93.62	2126.83	2084.57	50.33	
1500.00	1452.46	0.00	0.00	1491.46	41.58	41.58	94.21	2128.53	2082.88	46.63	
1600.00	1548.58	0.00	0.00	1587.58	44.50	44.50	94.88	2130.80	2081.72	43.42	
1700.00	1643.68	0.00	0.00	1682.68	47.39	47.39	95.61	2133.77	2081.23	40.61	
1800.00	1738.25	0.00	0.00	1777.25	50.26	50.26	96.43	2137.37	2081.34	38.15	
1900.00	1832.82	0.00	0.00	1871.82	53.13	53.13	97.25	2141.46	2081.93	35.98	
2000.00	1927.39	0.00	0.00	1966.39	56.00	56.00	98.06	2146.03	2083.01	34.05	
2100.00	2021.96	0.00	0.00	2060.96	58.87	58.87	98.87	2151.09	2084.57	32.34	
2200.00	2116.53	0.00	0.00	2155.53	61.75	61.75	99.68	2156.62	2086.61	30.81	
2300.00	2211.10	0.00	0.00	2250.10	64.62	64.62	100.49	2162.63	2089.15	29.43	
2400.00	2305.66	0.00	0.00	2344.66	67.49	67.49	101.29	2169.11	2092.18	28.20	
2500.00	2400.23	0.00	0.00	2439.23	70.36	70.36	102.08	2176.05	2095.69	27.08	
2600.00	2494.80	0.00	0.00	2533.80	73.23	73.23	102.87	2183.46	2099.58	26.03	
2700.00	2589.37	0.00	0.00	2628.37	76.11	76.11	103.66	2191.32	2103.86	25.06	

## 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
2800.00	2683.94	0.00	0.00	2722.94	78.98	78.98	104.44	2199.64	2108.61	24.17	
2900.00	2778.51	0.00	0.00	2817.51	81.85	81.85	105.22	2208.40	2113.82	23.35	
3000.00	2873.08	0.00	0.00	2912.08	84.72	84.72	105.99	2217.61	2119.50	22.60	
3100.00	2967.65	0.00	0.00	3006.65	87.59	87.59	106.75	2227.25	2125.62	21.92	
3200.00	3062.21	0.00	0.00	3101.21	90.46	90.46	107.51	2237.32	2132.21	21.28	
3300.00	3156.78	0.00	0.00	3195.78	93.34	93.34	108.26	2247.82	2139.23	20.70	
3400.00	3251.35	0.00	0.00	3290.35	96.21	96.21	109.00	2258.73	2146.71	20.16	
3500.00	3345.92	0.00	0.00	3384.92	99.08	99.08	109.74	2270.06	2154.62	19.66	
3600.00	3440.49	0.00	0.00	3479.49	101.95	101.95	110.47	2281.80	2162.96	19.20	
3700.00	3535.06	0.00	0.00	3574.06	104.82	104.82	111.20	2293.94	2171.74	18.77	
3800.00	3629.63	0.00	0.00	3668.63	107.70	107.70	111.92	2306.47	2180.94	18.37	
3900.00	3724.19	0.00	0.00	3763.19	110.57	110.57	112.63	2319.39	2190.34	17.97	
4000.00	3818.76	0.00	0.00	3857.76	113.44	113.44	113.33	2332.69	2200.11	17.59	
4100.00	3913.33	0.00	0.00	3952.33	116.31	116.31	114.03	2346.37	2210.28	17.24	
4200.00	4007.90	0.00	0.00	4046.90	119.18	119.18	114.72	2360.41	2220.84	16.91	
4300.00	4102.47	0.00	0.00	4141.47	122.06	122.06	115.40	2374.82	2231.78	16.60	
4400.00	4197.04	0.00	0.00	4236.04	124.93	124.93	116.07	2389.58	2243.11	16.31	
4500.00	4291.61	0.00	0.00	4330.61	127.80	127.80	116.74	2404.69	2254.81	16.04	
4600.00	4386.18	0.00	0.00	4425.18	130.67	130.67	117.39	2420.14	2266.88	15.79	
4700.00	4480.74	0.00	0.00	4519.74	133.54	133.54	118.04	2435.93	2279.31	15.55	
4800.00	4575.31	0.00	0.00	4614.31	136.42	136.42	118.69	2452.05	2292.07	15.33	
4900.00	4669.88	0.00	0.00	4708.88	139.29	139.29	119.32	2468.49	2305.18	15.12	
5000.00	4764.45	0.00	0.00	4803.45	142.16	142.16	119.95	2485.25	2318.63	14.92	
5100.00	4859.02	0.00	0.00	4898.02	145.03	145.03	120.57	2502.32	2332.43	14.73	
5200.00	4953.59	0.00	0.00	4992.59	147.90	147.90	121.18	2519.69	2346.55	14.55	
5300.00	5048.16	0.00	0.00	5087.16	150.78	150.78	121.78	2537.36	2360.96	14.38	
5400.00	5142.72	0.00	0.00	5181.72	153.65	153.65	122.38	2555.32	2375.44	14.21	
5500.00	5237.29	0.00	0.00	5276.29	156.52	156.52	122.97	2573.56	2390.22	14.04	
5600.00	5331.86	0.00	0.00	5370.86	159.39	159.39	123.55	2592.09	2405.31	13.88	
5700.00	5426.43	0.00	0.00	5465.43	162.26	162.26	124.12	2610.89	2420.69	13.73	
5800.00	5521.00	0.00	0.00	5560.00	165.13	165.13	124.68	2629.95	2436.37	13.59	
5900.00	5615.57	0.00	0.00	5654.57	168.01	168.01	125.24	2649.28	2452.32	13.45	
6000.00	5710.14	0.00	0.00	5749.14	170.88	170.88	125.79	2668.87	2468.56	13.32	
6100.00	5804.70	0.00	0.00	5843.70	173.75	173.75	126.33	2688.70	2485.06	13.20	
6200.00	5899.27	0.00	0.00	5938.27	176.62	176.62	126.87	2708.78	2501.84	13.09	
6300.00	5993.84	0.00	0.00	6032.84	179.50	179.50	127.40	2729.07	2518.91	12.99	
6400.00	6088.41	0.00	0.00	6127.41	182.37	182.37	127.92	2749.57	2536.27	12.90	
6500.00	6182.98	0.00	0.00	6221.98	185.25	185.25	128.44	2770.27	2553.92	12.82	
6600.00	6277.55	0.00	0.00	6316.55	188.12	188.12	128.96	2791.17	2571.87	12.75	
6700.00	6372.12	0.00	0.00	6411.12	191.00	191.00	129.47	2812.27	2589.92	12.69	
6800.00	6466.69	0.00	0.00	6505.69	193.87	193.87	129.98	2833.57	2608.17	12.63	
6900.00	6561.26	0.00	0.00	6600.26	196.75	196.75	130.48	2855.07	2626.62	12.58	
7000.00	6655.83	0.00	0.00	6694.83	199.62	199.62	130.98	2876.77	2645.27	12.53	
7100.00	6750.40	0.00	0.00	6789.40	202.50	202.50	131.48	2898.67	2664.12	12.49	
7200.00	6844.97	0.00	0.00	6883.97	205.37	205.37	131.97	2920.77	2683.17	12.45	
7300.00	6939.54	0.00	0.00	6978.54	208.25	208.25	132.46	2943.07	2702.42	12.42	
7400.00	7034.11	0.00	0.00	7073.11	211.12	211.12	132.95	2965.57	2721.87	12.39	
7500.00	7128.68	0.00	0.00	7167.68	214.00	214.00	133.43	2988.27	2741.52	12.36	
7600.00	7223.25	0.00	0.00	7262.25	216.87	216.87	133.92	3011.17	2761.37	12.33	
7700.00	7317.82	0.00	0.00	7356.82	219.75	219.75	134.40	3034.27	2781.42	12.30	
7800.00	7412.39	0.00	0.00	7451.39	222.62	222.62	134.88	3057.57	2801.67	12.27	
7900.00	7506.96	0.00	0.00	7545.96	225.50	225.50	135.37	3081.07	2822.12	12.24	
8000.00	7601.53	0.00	0.00	7640.53	228.37	228.37	135.85	3104.77	2842.77	12.21	
8100.00	7696.10	0.00	0.00	7735.10	231.25	231.25	136.33	3128.67	2863.62	12.18	
8200.00	7790.67	0.00	0.00	7829.67	234.12	234.12	136.82	3152.77	2884.67	12.15	
8300.00	7885.24	0.00	0.00	7924.24	237.00	237.00	137.30	3177.07	2905.92	12.12	
8400.00	7979.81	0.00	0.00	8018.81	239.87	239.87	137.78	3201.57	2927.37	12.09	
8500.00	8074.38	0.00	0.00	8113.38	242.75	242.75	138.27	3226.27	2949.02	12.06	

## 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
8600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	892.10	658.54	3.82	
8700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	792.73	559.14	3.39	
8800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	693.54	459.92	2.97	
8900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	594.62	361.03	2.55	
9000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	496.13	262.73	2.13	SF(Lo)
9100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	398.40	164.01	1.70	SF(Lo)
9200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	302.16	65.97	1.28	SF(Med)
9300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	209.47	-31.27	0.87	SF(Hi)
9400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	128.28	-126.17	0.50	SF(Hi)
9500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	95.03	-178.86	0.35	SF(Hi)
9600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	147.00	-111.19	0.57	SF(Hi)
9700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	232.78	-14.70	0.94	SF(Hi)
9800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	326.74	84.35	1.35	SF(Med)
9900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	423.48	183.18	1.76	SF(Lo)
10000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	521.45	282.84	2.19	SF(Lo)
10100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	620.07	382.68	2.61	
10200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	719.07	482.16	3.04	
10300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	818.32	581.69	3.46	
10400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	917.73	681.28	3.88	
10500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1017.25	780.90	4.30	
10600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1116.86	880.65	4.73	
10700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1216.53	980.49	5.15	
10800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1316.25	1080.35	5.58	
10900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1416.02	1180.14	6.00	
11000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1515.81	1279.99	6.43	
11100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1615.63	1379.88	6.85	
11200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1715.47	1479.79	7.28	
11300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1815.33	1579.73	7.71	
11400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	1915.20	1679.67	8.13	
11500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2015.08	1779.61	8.56	
11600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2114.98	1879.56	8.98	
11700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2214.88	1979.49	9.41	
11800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2314.80	2079.40	9.83	
11900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2414.72	2179.32	10.26	
12000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2514.65	2279.25	10.68	
12100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2614.58	2379.19	11.11	
12200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2714.52	2479.13	11.53	
12300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2814.46	2579.07	11.96	
12400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	2914.40	2679.02	12.38	
12500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3014.35	2778.97	12.81	
12600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3114.31	2878.93	13.23	
12700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3214.26	2978.89	13.66	
12800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3314.22	3078.85	14.08	
12900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3414.18	3178.81	14.51	
13000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3514.14	3278.77	14.93	
13100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3614.11	3378.73	15.35	
13200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3714.08	3478.70	15.78	
13300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3814.04	3578.66	16.20	
13400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	3914.02	3678.63	16.63	
13500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4013.99	3778.59	17.05	
13600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4113.96	3878.55	17.48	
13700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4213.93	3978.52	17.90	
13800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4313.91	4078.48	18.32	
13900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4413.89	4178.44	18.75	
14000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4513.86	4278.40	19.17	
14100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4613.84	4378.36	19.59	
14200.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4713.82	4478.33	20.02	
14300.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4813.80	4578.29	20.44	



## 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
14400.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	4913.78	4678.25	20.86	
14500.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5013.77	4778.22	21.29	
14600.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5113.75	4878.18	21.71	
14700.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5213.73	4978.15	22.13	
14800.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5313.72	5078.11	22.55	
14900.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5413.70	5178.07	22.98	
15000.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5513.69	5278.04	23.40	
15100.00	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5613.67	5378.00	23.82	
15136.85	6756.00	0.00	0.00	6795.00	202.64	202.64	270.00	5650.51	5414.84	23.98	
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	256.91	7461.29	7460.56	10247.61	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	256.91	7461.25	7459.28	3778.82	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	256.91	7461.25	7457.41	1942.84	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	256.91	7461.25	7454.15	1051.28	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	256.91	7461.25	7450.90	720.60	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	256.91	7461.25	7447.81	555.18	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	256.91	7461.25	7444.55	446.88	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	256.91	7461.25	7441.30	373.94	
800.00	775.00	0.00	0.00	800.00	21.00	21.00	125.05	7461.50	7438.30	321.66	
900.00	874.93	0.00	0.00	899.93	24.04	24.04	125.04	7463.51	7437.09	282.59	
1000.00	974.68	0.00	0.00	999.68	27.07	27.07	125.02	7467.52	7437.88	251.96	
1100.00	1074.13	0.00	0.00	1099.13	30.09	30.09	124.99	7473.53	7440.66	227.34	
1200.00	1173.15	0.00	0.00	1198.15	33.10	33.10	124.94	7481.56	7445.44	207.13	
1300.00	1271.63	0.00	0.00	1296.63	36.09	36.09	124.88	7491.60	7452.22	190.21	
1400.00	1369.44	0.00	0.00	1394.44	39.06	39.06	124.81	7503.66	7460.98	175.83	
1500.00	1466.46	0.00	0.00	1491.46	42.00	42.00	124.73	7517.74	7471.75	163.46	
1600.00	1562.58	0.00	0.00	1587.58	44.92	44.92	124.63	7533.84	7484.53	152.78	
1700.00	1657.68	0.00	0.00	1682.68	47.81	47.81	124.51	7551.97	7499.29	143.35	
1800.00	1752.25	0.00	0.00	1777.25	50.68	50.68	124.71	7571.13	7515.08	135.06	
1900.00	1846.82	0.00	0.00	1871.82	53.55	53.55	124.90	7590.39	7530.94	127.69	
2000.00	1941.39	0.00	0.00	1966.39	56.43	56.43	125.10	7609.73	7546.89	121.10	
2100.00	2035.96	0.00	0.00	2060.96	59.30	59.30	125.29	7629.17	7562.92	115.17	
2200.00	2130.53	0.00	0.00	2155.53	62.17	62.17	125.48	7648.69	7579.04	109.82	
2300.00	2225.10	0.00	0.00	2250.10	65.04	65.04	125.67	7668.30	7595.24	104.95	
2400.00	2319.66	0.00	0.00	2344.66	67.91	67.91	125.86	7688.00	7611.51	100.51	
2500.00	2414.23	0.00	0.00	2439.23	70.79	70.79	126.05	7707.78	7627.87	96.45	
2600.00	2508.80	0.00	0.00	2533.80	73.66	73.66	126.24	7727.65	7644.32	92.73	
2700.00	2603.37	0.00	0.00	2628.37	76.53	76.53	126.43	7747.61	7660.85	89.30	
2800.00	2697.94	0.00	0.00	2722.94	79.40	79.40	126.61	7767.65	7677.47	86.13	
2900.00	2792.51	0.00	0.00	2817.51	82.27	82.27	126.80	7787.78	7694.17	83.20	
3000.00	2887.08	0.00	0.00	2912.08	85.15	85.15	126.98	7807.99	7710.96	80.47	
3100.00	2981.65	0.00	0.00	3006.65	88.02	88.02	127.17	7828.28	7727.84	77.94	
3200.00	3076.21	0.00	0.00	3101.21	90.89	90.89	127.35	7848.65	7744.79	75.57	
3300.00	3170.78	0.00	0.00	3195.78	93.76	93.76	127.53	7869.11	7761.83	73.36	
3400.00	3265.35	0.00	0.00	3290.35	96.63	96.63	127.71	7889.65	7778.96	71.28	
3500.00	3359.92	0.00	0.00	3384.92	99.51	99.51	127.89	7910.26	7796.17	69.33	
3600.00	3454.49	0.00	0.00	3479.49	102.38	102.38	128.07	7930.96	7813.46	67.50	
3700.00	3549.06	0.00	0.00	3574.06	105.25	105.25	128.25	7951.73	7830.83	65.77	
3800.00	3643.63	0.00	0.00	3668.63	108.12	108.12	128.43	7972.59	7848.29	64.14	
3900.00	3738.19	0.00	0.00	3763.19	110.99	110.99	128.60	7993.52	7865.82	62.60	
4000.00	3832.76	0.00	0.00	3857.76	113.87	113.87	128.78	8014.53	7883.44	61.14	
4100.00	3927.33	0.00	0.00	3952.33	116.74	116.74	128.95	8035.61	7901.13	59.75	
4200.00	4021.90	0.00	0.00	4046.90	119.61	119.61	129.13	8056.77	7918.91	58.44	
4300.00	4116.47	0.00	0.00	4141.47	122.48	122.48	129.30	8078.01	7936.76	57.19	
4400.00	4211.04	0.00	0.00	4236.04	125.35	125.35	129.47	8099.32	7954.69	56.00	

## 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
4500.00	4305.61	0.00	0.00	4330.61	128.23	128.23	129.64	8120.71	7972.70	54.87	
4600.00	4400.18	0.00	0.00	4425.18	131.10	131.10	129.81	8142.17	7990.79	53.79	
4700.00	4494.74	0.00	0.00	4519.74	133.97	133.97	129.98	8163.70	8008.96	52.76	
4800.00	4589.31	0.00	0.00	4614.31	136.84	136.84	130.15	8185.31	8027.20	51.77	
4900.00	4683.88	0.00	0.00	4708.88	139.71	139.71	130.32	8206.98	8045.51	50.83	
5000.00	4778.45	0.00	0.00	4803.45	142.58	142.58	130.49	8228.73	8063.91	49.92	
5100.00	4873.02	0.00	0.00	4898.02	145.46	145.46	130.65	8250.55	8082.37	49.06	
5200.00	4967.59	0.00	0.00	4992.59	148.33	148.33	130.82	8272.44	8100.92	48.23	
5300.00	5062.16	0.00	0.00	5087.16	151.20	151.20	130.99	8294.40	8119.53	47.43	
5400.00	5156.72	0.00	0.00	5181.72	154.07	154.07	131.15	8316.42	8138.22	46.67	
5500.00	5251.29	0.00	0.00	5276.29	156.94	156.94	131.31	8338.52	8156.98	45.93	
5600.00	5345.86	0.00	0.00	5370.86	159.82	159.82	131.47	8360.68	8175.82	45.22	
5700.00	5440.43	0.00	0.00	5465.43	162.69	162.69	131.64	8382.92	8194.68	44.53	
5800.00	5535.00	0.00	0.00	5560.00	165.56	165.56	131.80	8405.22	8213.57	43.86	
5900.00	5629.57	0.00	0.00	5654.57	168.43	168.43	131.96	8427.58	8232.54	43.21	
6000.00	5724.14	0.00	0.00	5749.14	171.30	171.30	132.12	8450.01	8251.57	42.58	
6100.00	5818.70	0.00	0.00	5843.70	174.18	174.18	132.27	8472.51	8270.67	41.98	
6200.00	5913.27	0.00	0.00	5938.27	177.05	177.05	132.43	8495.07	8289.84	41.39	
6300.00	6009.06	0.00	0.00	6034.06	179.96	179.96	110.37	8511.04	8302.46	40.80	
6400.00	6106.10	0.00	0.00	6131.10	182.90	182.90	78.86	8513.19	8301.33	40.18	
6500.00	6202.53	0.00	0.00	6227.53	185.83	185.83	52.55	8501.48	8286.40	39.53	
6600.00	6296.46	0.00	0.00	6321.46	188.68	188.68	37.16	8476.14	8257.96	38.85	
6700.00	6386.06	0.00	0.00	6411.06	191.41	191.41	28.50	8437.66	8216.55	38.16	
6800.00	6469.59	0.00	0.00	6494.59	193.94	193.94	23.34	8386.76	8162.95	37.47	
6900.00	6545.43	0.00	0.00	6570.43	196.25	196.25	20.10	8324.44	8098.20	36.79	
7000.00	6612.09	0.00	0.00	6637.09	198.27	198.27	18.03	8251.89	8023.53	36.14	
7100.00	6668.29	0.00	0.00	6693.29	199.98	199.98	16.77	8170.51	7940.37	35.50	
7200.00	6712.92	0.00	0.00	6737.92	201.33	201.33	16.16	8081.87	7850.35	34.91	
7300.00	6745.11	0.00	0.00	6770.11	202.31	202.31	16.34	7987.69	7755.12	34.35	
7400.00	6764.25	0.00	0.00	6789.25	202.89	202.89	18.50	7889.78	7656.55	33.83	
7500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7790.06	7556.62	33.37	
7600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7690.07	7456.72	32.96	
7700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7590.07	7356.61	32.51	
7800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7490.08	7256.65	32.09	
7900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7390.09	7156.68	31.66	
8000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7290.09	7056.72	31.24	
8100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7190.10	6956.67	30.80	
8200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	7090.11	6856.62	30.37	
8300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6990.12	6756.70	29.95	
8400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6890.13	6656.61	29.51	
8500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6790.13	6556.56	29.07	
8600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6690.14	6456.56	28.64	
8700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6590.15	6356.59	28.22	
8800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6490.16	6256.55	27.78	
8900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6390.17	6156.49	27.35	
9000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6290.18	6056.44	26.91	
9100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6190.19	5956.42	26.48	
9200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	6090.20	5856.42	26.05	
9300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5990.21	5756.45	25.62	
9400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5890.22	5656.49	25.20	
9500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5790.23	5556.42	24.76	
9600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5690.25	5456.38	24.33	
9700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5590.26	5356.39	23.90	
9800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5490.27	5256.45	23.48	
9900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5390.28	5156.40	23.05	
10000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5290.30	5056.29	22.61	
10100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5190.31	4956.26	22.18	
10200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	5090.33	4856.32	21.75	

## 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
10300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4990.34	4756.19	21.31	
10400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4890.36	4656.16	20.88	
10500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4790.38	4556.20	20.46	
10600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4690.39	4456.22	20.03	
10700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4590.41	4356.11	19.59	
10800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4490.43	4256.03	19.16	
10900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4390.45	4156.00	18.73	
11000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4290.47	4055.99	18.30	
11100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4190.49	3956.00	17.87	
11200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	4090.52	3856.02	17.44	
11300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3990.54	3755.95	17.01	
11400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3890.57	3655.87	16.58	
11500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3790.59	3555.80	16.14	
11600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3690.62	3455.74	15.71	
11700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3590.65	3355.68	15.28	
11800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3490.68	3255.63	14.85	
11900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3390.71	3155.58	14.42	
12000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3290.75	3055.51	13.99	
12100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3190.79	2955.43	13.56	
12200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	3090.83	2855.36	13.13	
12300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2990.87	2755.28	12.70	
12400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2890.92	2655.21	12.26	
12500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2790.96	2555.13	11.83	
12600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2691.02	2455.05	11.40	
12700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2591.07	2354.96	10.97	
12800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2491.13	2254.87	10.54	
12900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2391.20	2154.75	10.11	
13000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2291.27	2054.62	9.68	
13100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2191.35	1954.49	9.25	
13200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	2091.44	1854.35	8.82	
13300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1991.53	1754.20	8.39	
13400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1891.63	1654.04	7.96	
13500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1791.75	1553.81	7.53	
13600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1691.88	1453.54	7.10	
13700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1592.03	1353.25	6.67	
13800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1492.19	1252.88	6.24	
13900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1392.38	1152.46	5.80	
14000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1292.60	1051.99	5.37	
14100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1192.85	951.45	4.94	
14200.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	1093.16	850.83	4.51	
14300.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	993.52	750.08	4.08	
14400.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	893.96	648.97	3.65	
14500.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	794.52	547.58	3.22	
14600.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	695.23	445.77	2.79	
14700.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	596.18	343.17	2.36	SF(Lo)
14800.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	497.52	238.43	1.92	SF(Lo)
14900.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	399.51	131.81	1.49	SF(Med)
15000.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	302.82	20.97	1.07	SF(Med)
15100.00	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	209.26	-100.39	0.68	SF(Hi)
15136.85	6770.00	0.00	0.00	6795.00	203.07	203.07	90.00	176.57	-150.04	0.54	SF(Hi)
Secondary Well: Goetzel I 29-14 (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	31.00	0.00	0.00	164.81	1689.80	1689.07	2320.86	
100.00	69.00	0.00	0.00	100.00	1.05	1.05	164.81	1689.51	1687.63	898.11	
200.00	169.00	0.00	0.00	200.00	2.60	2.60	164.81	1689.51	1685.86	462.58	
300.00	269.00	0.00	0.00	300.00	5.64	5.64	164.81	1689.51	1682.61	244.77	

## 5D Anti-Collision Report

Secondary Well: Goetzel I 29-14 (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
400.00	369.00	0.00	0.00	400.00	8.68	8.68	164.81	1689.51	1679.36	166.41	
500.00	469.00	0.00	0.00	500.00	11.71	11.71	164.81	1689.51	1676.11	126.06	
600.00	569.00	0.00	0.00	600.00	14.75	14.75	164.81	1689.51	1672.86	101.45	
700.00	669.00	0.00	0.00	700.00	17.79	17.79	164.81	1689.51	1669.78	85.63	
800.00	769.00	0.00	0.00	800.00	20.82	20.82	32.96	1689.15	1666.18	73.54	
900.00	868.93	0.00	0.00	899.93	23.86	23.86	33.06	1686.22	1660.05	64.42	
1000.00	968.68	0.00	0.00	999.68	26.89	26.89	33.25	1680.38	1650.98	57.16	
1100.00	1068.13	0.00	0.00	1099.13	29.91	29.91	33.55	1671.64	1639.01	51.23	
1200.00	1167.15	0.00	0.00	1198.15	32.91	32.91	33.94	1660.03	1624.16	46.29	
1300.00	1265.63	0.00	0.00	1296.63	35.90	35.90	34.44	1645.60	1606.48	42.08	
1400.00	1363.44	0.00	0.00	1394.44	38.88	38.88	35.05	1628.39	1586.03	38.44	
1500.00	1460.46	0.00	0.00	1491.46	41.82	41.82	35.78	1608.48	1562.85	35.25	
1600.00	1556.58	0.00	0.00	1587.58	44.74	44.74	36.63	1585.93	1537.02	32.43	
1700.00	1651.68	0.00	0.00	1682.68	47.63	47.63	37.60	1560.85	1508.66	29.91	
1800.00	1746.25	0.00	0.00	1777.25	50.50	50.50	38.33	1534.70	1479.21	27.66	
1900.00	1840.82	0.00	0.00	1871.82	53.37	53.37	39.08	1508.79	1449.98	25.66	
2000.00	1935.39	0.00	0.00	1966.39	56.24	56.24	39.85	1483.13	1421.00	23.87	
2100.00	2029.96	0.00	0.00	2060.96	59.12	59.12	40.65	1457.76	1392.29	22.27	
2200.00	2124.53	0.00	0.00	2155.53	61.99	61.99	41.48	1432.67	1363.86	20.82	
2300.00	2219.10	0.00	0.00	2250.10	64.86	64.86	42.33	1407.88	1335.74	19.52	
2400.00	2313.66	0.00	0.00	2344.66	67.73	67.73	43.22	1383.42	1307.95	18.33	
2500.00	2408.23	0.00	0.00	2439.23	70.60	70.60	44.13	1359.29	1280.48	17.25	
2600.00	2502.80	0.00	0.00	2533.80	73.48	73.48	45.08	1335.52	1253.30	16.24	
2700.00	2597.37	0.00	0.00	2628.37	76.35	76.35	46.05	1312.12	1226.36	15.30	
2800.00	2691.94	0.00	0.00	2722.94	79.22	79.22	47.07	1289.12	1199.81	14.44	
2900.00	2786.51	0.00	0.00	2817.51	82.09	82.09	48.11	1266.53	1173.69	13.64	
3000.00	2881.08	0.00	0.00	2912.08	84.96	84.96	49.19	1244.38	1148.02	12.91	
3100.00	2975.65	0.00	0.00	3006.65	87.84	87.84	50.31	1222.70	1122.83	12.24	
3200.00	3070.21	0.00	0.00	3101.21	90.71	90.71	51.46	1201.50	1098.14	11.62	
3300.00	3164.78	0.00	0.00	3195.78	93.58	93.58	52.65	1180.82	1073.97	11.05	
3400.00	3259.35	0.00	0.00	3290.35	96.45	96.45	53.88	1160.68	1050.38	10.52	
3500.00	3353.92	0.00	0.00	3384.92	99.32	99.32	55.15	1141.12	1027.25	10.02	
3600.00	3448.49	0.00	0.00	3479.49	102.20	102.20	56.47	1122.15	1004.52	9.54	
3700.00	3543.06	0.00	0.00	3574.06	105.07	105.07	57.82	1103.81	982.45	9.10	
3800.00	3637.63	0.00	0.00	3668.63	107.94	107.94	59.21	1086.14	961.09	8.69	
3900.00	3732.19	0.00	0.00	3763.19	110.81	110.81	60.65	1069.16	940.49	8.31	
4000.00	3826.76	0.00	0.00	3857.76	113.68	113.68	62.12	1052.92	920.69	7.96	
4100.00	3921.33	0.00	0.00	3952.33	116.56	116.56	63.64	1037.44	901.75	7.65	
4200.00	4015.90	0.00	0.00	4046.90	119.43	119.43	65.20	1022.76	883.36	7.34	
4300.00	4110.47	0.00	0.00	4141.47	122.30	122.30	66.80	1008.91	865.59	7.04	
4400.00	4205.04	0.00	0.00	4236.04	125.17	125.17	68.44	995.93	848.77	6.77	
4500.00	4299.61	0.00	0.00	4330.61	128.04	128.04	70.12	983.86	832.97	6.52	
4600.00	4394.18	0.00	0.00	4425.18	130.91	130.91	71.83	972.72	818.24	6.30	
4700.00	4488.74	0.00	0.00	4519.74	133.79	133.79	73.58	962.55	804.62	6.09	
4800.00	4583.31	0.00	0.00	4614.31	136.66	136.66	75.36	953.38	791.59	5.89	
4900.00	4677.88	0.00	0.00	4708.88	139.53	139.53	77.16	945.24	779.55	5.70	
5000.00	4772.45	0.00	0.00	4803.45	142.40	142.40	79.00	938.16	768.74	5.54	
5100.00	4867.02	0.00	0.00	4898.02	145.27	145.27	80.86	932.16	759.19	5.39	
5200.00	4961.59	0.00	0.00	4992.59	148.15	148.15	82.73	927.26	750.87	5.26	
5300.00	5056.16	0.00	0.00	5087.16	151.02	151.02	84.63	923.48	743.35	5.13	
5400.00	5150.72	0.00	0.00	5181.72	153.89	153.89	86.53	920.83	736.78	5.00	
5500.00	5245.29	0.00	0.00	5276.29	156.76	156.76	88.45	919.32	731.57	4.90	
5600.00	5339.86	0.00	0.00	5370.86	159.63	159.63	90.36	918.97	727.75	4.81	
5700.00	5434.43	0.00	0.00	5465.43	162.51	162.51	92.28	919.76	725.32	4.73	
5800.00	5529.00	0.00	0.00	5560.00	165.38	165.38	94.19	921.70	723.64	4.65	
5900.00	5623.57	0.00	0.00	5654.57	168.25	168.25	96.09	924.78	722.98	4.58	
6000.00	5718.14	0.00	0.00	5749.14	171.12	171.12	97.98	928.98	723.69	4.53	
6100.00	5812.70	0.00	0.00	5843.70	173.99	173.99	99.85	934.30	725.76	4.48	

## 5D Anti-Collision Report

Secondary Well: Goetzel I 29-14 (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
6200.00	5907.27	0.00	0.00	5938.27	176.87	176.87	101.70	940.71	729.12	4.45	
6300.00	6003.06	0.00	0.00	6034.06	179.77	179.77	81.18	942.32	727.41	4.38	
6400.00	6100.10	0.00	0.00	6131.10	182.72	182.72	50.43	932.53	714.22	4.27	
6500.00	6196.53	0.00	0.00	6227.53	185.65	185.65	24.07	911.05	689.57	4.11	
6600.00	6290.46	0.00	0.00	6321.46	188.50	188.50	7.71	877.98	653.53	3.91	
6700.00	6380.06	0.00	0.00	6411.06	191.22	191.22	356.99	833.78	606.58	3.67	
6800.00	6463.59	0.00	0.00	6494.59	193.76	193.76	348.31	779.28	549.58	3.39	
6900.00	6539.43	0.00	0.00	6570.43	196.06	196.06	339.51	715.73	483.89	3.09	
7000.00	6606.09	0.00	0.00	6637.09	198.09	198.09	329.03	644.82	411.38	2.76	
7100.00	6662.29	0.00	0.00	6693.29	199.79	199.79	315.83	568.91	333.27	2.41	SF(Lo)
7200.00	6706.92	0.00	0.00	6737.92	201.15	201.15	300.36	491.26	254.40	2.07	SF(Lo)
7300.00	6739.11	0.00	0.00	6770.11	202.13	202.13	285.52	416.68	179.18	1.75	SF(Lo)
7400.00	6758.25	0.00	0.00	6789.25	202.71	202.71	274.82	352.54	115.41	1.49	SF(Med)
7500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	309.49	74.53	1.32	SF(Med)
7600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	296.68	64.55	1.28	SF(Med)
7700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	316.63	85.91	1.37	SF(Med)
7800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	363.99	132.78	1.57	SF(Lo)
7900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	429.79	197.74	1.85	SF(Lo)
8000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	506.91	274.21	2.18	SF(Lo)
8100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	590.93	357.64	2.53	
8200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	679.29	445.35	2.90	
8300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	770.50	535.96	3.29	
8400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	863.66	629.08	3.68	
8500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	958.19	723.66	4.09	
8600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1053.74	818.53	4.48	
8700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1150.05	914.41	4.88	
8800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1246.93	1011.03	5.29	
8900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1344.28	1108.22	5.69	
9000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1441.98	1205.84	6.11	
9100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1539.98	1303.82	6.52	
9200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1638.23	1402.08	6.94	
9300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1736.67	1500.57	7.36	
9400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1835.28	1599.27	7.78	
9500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1934.03	1698.12	8.20	
9600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2032.91	1796.99	8.62	
9700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2131.89	1895.81	9.03	
9800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2230.96	1994.75	9.44	
9900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2330.11	2093.84	9.86	
10000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2429.33	2192.96	10.28	
10100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2528.62	2292.11	10.69	
10200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2627.95	2391.36	11.11	
10300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2727.34	2490.69	11.52	
10400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2826.77	2590.01	11.94	
10500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2926.23	2689.34	12.35	
10600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3025.74	2788.77	12.77	
10700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3125.27	2888.29	13.19	
10800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3224.83	2987.88	13.61	
10900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3324.42	3087.45	14.03	
11000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3424.04	3186.95	14.44	
11100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3523.67	3286.49	14.86	
11200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3623.33	3386.08	15.27	
11300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3723.00	3485.71	15.69	
11400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3822.69	3585.36	16.11	
11500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3922.40	3685.04	16.53	
11600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4022.12	3784.74	16.94	
11700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4121.85	3884.46	17.36	
11800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4221.60	3984.19	17.78	
11900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4321.36	4083.91	18.20	

## 5D Anti-Collision Report

Secondary Well: Goetzel I 29-14 (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
12000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4421.13	4183.64	18.62	
12100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4520.91	4283.39	19.03	
12200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4620.70	4383.15	19.45	
12300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4720.50	4482.93	19.87	
12400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4820.30	4582.71	20.29	
12500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4920.12	4682.50	20.71	
12600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5019.94	4782.30	21.12	
12700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5119.77	4882.11	21.54	
12800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5219.60	4981.92	21.96	
12900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5319.44	5081.74	22.38	
13000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5419.29	5181.57	22.80	
13100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5519.15	5281.40	23.21	
13200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5619.00	5381.24	23.63	
13300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5718.87	5481.09	24.05	
13400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5818.73	5580.93	24.47	
13500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5918.61	5680.79	24.89	
13600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6018.48	5780.64	25.30	
13700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6118.36	5880.50	25.72	
13800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6218.25	5980.37	26.14	
13900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6318.14	6080.23	26.56	
14000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6418.03	6180.10	26.98	
14100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6517.92	6279.98	27.39	
14200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6617.82	6379.85	27.81	
14300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6717.72	6479.73	28.23	
14400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6817.63	6579.62	28.64	
14500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6917.53	6679.50	29.06	
14600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7017.44	6779.39	29.48	
14700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7117.35	6879.27	29.89	
14800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7217.27	6979.15	30.31	
14900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7317.19	7079.04	30.73	
15000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7417.10	7178.92	31.14	
15100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7517.03	7278.81	31.56	
15136.85	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7553.84	7315.62	31.71	
Secondary Well: Firestien #30-4-21 (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	30.00	0.00	0.00	235.81	3805.71	3804.98	5226.93	
100.00	70.00	0.00	0.00	100.00	1.06	1.06	235.81	3805.59	3803.69	2005.78	
200.00	170.00	0.00	0.00	200.00	2.63	2.63	235.81	3805.59	3801.90	1032.68	
300.00	270.00	0.00	0.00	300.00	5.67	5.67	235.81	3805.59	3798.65	548.51	
400.00	370.00	0.00	0.00	400.00	8.71	8.71	235.81	3805.59	3795.40	373.43	
500.00	470.00	0.00	0.00	500.00	11.74	11.74	235.81	3805.59	3792.32	286.74	
600.00	570.00	0.00	0.00	600.00	14.78	14.78	235.81	3805.59	3789.06	230.29	
700.00	670.00	0.00	0.00	700.00	17.82	17.82	235.81	3805.59	3785.81	192.42	
800.00	770.00	0.00	0.00	800.00	20.85	20.85	103.96	3805.69	3782.67	165.34	
900.00	869.93	0.00	0.00	899.93	23.89	23.89	103.99	3806.54	3780.31	145.12	
1000.00	969.68	0.00	0.00	999.68	26.92	26.92	104.06	3808.23	3778.77	129.27	
1100.00	1069.13	0.00	0.00	1099.13	29.94	29.94	104.16	3810.79	3778.09	116.55	
1200.00	1168.15	0.00	0.00	1198.15	32.94	32.94	104.29	3814.24	3778.29	106.09	
1300.00	1266.63	0.00	0.00	1296.63	35.94	35.94	104.46	3818.62	3779.37	97.28	
1400.00	1364.44	0.00	0.00	1394.44	38.91	38.91	104.65	3823.95	3781.38	89.82	
1500.00	1461.46	0.00	0.00	1491.46	41.85	41.85	104.87	3830.29	3784.36	83.39	
1600.00	1557.58	0.00	0.00	1587.58	44.77	44.77	105.11	3837.69	3788.35	77.79	
1700.00	1652.68	0.00	0.00	1682.68	47.66	47.66	105.37	3846.20	3793.43	72.88	
1800.00	1747.25	0.00	0.00	1777.25	50.53	50.53	105.81	3855.40	3799.17	68.56	
1900.00	1841.82	0.00	0.00	1871.82	53.40	53.40	106.25	3864.85	3805.14	64.73	
2000.00	1936.39	0.00	0.00	1966.39	56.27	56.27	106.69	3874.56	3811.36	61.31	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-4-21 (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
2100.00	2030.96	0.00	0.00	2060.96	59.15	59.15	107.13	3884.50	3817.82	58.25	
2200.00	2125.53	0.00	0.00	2155.53	62.02	62.02	107.56	3894.70	3824.53	55.50	
2300.00	2220.10	0.00	0.00	2250.10	64.89	64.89	108.00	3905.14	3831.48	53.01	
2400.00	2314.66	0.00	0.00	2344.66	67.76	67.76	108.43	3915.82	3838.67	50.76	
2500.00	2409.23	0.00	0.00	2439.23	70.63	70.63	108.85	3926.74	3846.11	48.70	
2600.00	2503.80	0.00	0.00	2533.80	73.51	73.51	109.28	3937.90	3853.80	46.82	
2700.00	2598.37	0.00	0.00	2628.37	76.38	76.38	109.70	3949.30	3861.72	45.10	
2800.00	2692.94	0.00	0.00	2722.94	79.25	79.25	110.13	3960.93	3869.89	43.51	
2900.00	2787.51	0.00	0.00	2817.51	82.12	82.12	110.55	3972.79	3878.30	42.05	
3000.00	2882.08	0.00	0.00	2912.08	84.99	84.99	110.96	3984.88	3886.95	40.69	
3100.00	2976.65	0.00	0.00	3006.65	87.87	87.87	111.38	3997.20	3895.83	39.43	
3200.00	3071.21	0.00	0.00	3101.21	90.74	90.74	111.79	4009.74	3904.96	38.26	
3300.00	3165.78	0.00	0.00	3195.78	93.61	93.61	112.20	4022.51	3914.25	37.16	
3400.00	3260.35	0.00	0.00	3290.35	96.48	96.48	112.61	4035.50	3923.72	36.10	
3500.00	3354.92	0.00	0.00	3384.92	99.35	99.35	113.01	4048.71	3933.41	35.11	
3600.00	3449.49	0.00	0.00	3479.49	102.23	102.23	113.42	4062.14	3943.32	34.19	
3700.00	3544.06	0.00	0.00	3574.06	105.10	105.10	113.82	4075.78	3953.45	33.32	
3800.00	3638.63	0.00	0.00	3668.63	107.97	107.97	114.21	4089.64	3963.80	32.50	
3900.00	3733.19	0.00	0.00	3763.19	110.84	110.84	114.61	4103.70	3974.37	31.73	
4000.00	3827.76	0.00	0.00	3857.76	113.71	113.71	115.00	4117.98	3985.16	31.00	
4100.00	3922.33	0.00	0.00	3952.33	116.59	116.59	115.39	4132.46	3996.16	30.32	
4200.00	4016.90	0.00	0.00	4046.90	119.46	119.46	115.78	4147.14	4007.37	29.67	
4300.00	4111.47	0.00	0.00	4141.47	122.33	122.33	116.17	4162.03	4018.80	29.06	
4400.00	4206.04	0.00	0.00	4236.04	125.20	125.20	116.55	4177.11	4030.43	28.48	
4500.00	4300.61	0.00	0.00	4330.61	128.07	128.07	116.93	4192.40	4042.28	27.93	
4600.00	4395.18	0.00	0.00	4425.18	130.95	130.95	117.31	4207.88	4054.33	27.40	
4700.00	4489.74	0.00	0.00	4519.74	133.82	133.82	117.68	4223.55	4066.58	26.91	
4800.00	4584.31	0.00	0.00	4614.31	136.69	136.69	118.05	4239.42	4079.03	26.43	
4900.00	4678.88	0.00	0.00	4708.88	139.56	139.56	118.42	4255.47	4091.67	25.98	
5000.00	4773.45	0.00	0.00	4803.45	142.43	142.43	118.79	4271.71	4104.51	25.55	
5100.00	4868.02	0.00	0.00	4898.02	145.30	145.30	119.16	4288.14	4117.54	25.14	
5200.00	4962.59	0.00	0.00	4992.59	148.18	148.18	119.52	4304.75	4130.77	24.74	
5300.00	5057.16	0.00	0.00	5087.16	151.05	151.05	119.88	4321.54	4144.19	24.37	
5400.00	5151.72	0.00	0.00	5181.72	153.92	153.92	120.24	4338.50	4157.80	24.01	
5500.00	5246.29	0.00	0.00	5276.29	156.79	156.79	120.59	4355.65	4171.59	23.66	
5600.00	5340.86	0.00	0.00	5370.86	159.66	159.66	120.94	4372.97	4185.58	23.34	
5700.00	5435.43	0.00	0.00	5465.43	162.54	162.54	121.29	4390.46	4199.75	23.02	
5800.00	5530.00	0.00	0.00	5560.00	165.41	165.41	121.64	4408.12	4214.10	22.72	
5900.00	5624.57	0.00	0.00	5654.57	168.28	168.28	121.98	4425.95	4228.48	22.41	
6000.00	5719.14	0.00	0.00	5749.14	171.15	171.15	122.33	4443.95	4243.00	22.11	
6100.00	5813.70	0.00	0.00	5843.70	174.02	174.02	122.67	4462.11	4257.70	21.83	
6200.00	5908.27	0.00	0.00	5938.27	176.90	176.90	123.00	4480.43	4272.57	21.55	
6300.00	6004.06	0.00	0.00	6034.06	179.80	179.80	101.25	4492.31	4281.06	21.27	
6400.00	6101.10	0.00	0.00	6131.10	182.75	182.75	69.86	4490.61	4276.08	20.93	
6500.00	6197.53	0.00	0.00	6227.53	185.68	185.68	43.47	4475.32	4257.61	20.56	
6600.00	6291.46	0.00	0.00	6321.46	188.53	188.53	27.78	4446.70	4225.94	20.14	
6700.00	6381.06	0.00	0.00	6411.06	191.25	191.25	18.57	4405.28	4181.66	19.70	
6800.00	6464.59	0.00	0.00	6494.59	193.79	193.79	12.52	4351.82	4125.59	19.24	
6900.00	6540.43	0.00	0.00	6570.43	196.09	196.09	7.93	4287.35	4058.77	18.76	
7000.00	6607.09	0.00	0.00	6637.09	198.12	198.12	3.77	4213.10	3982.47	18.27	
7100.00	6663.29	0.00	0.00	6693.29	199.82	199.82	359.13	4130.49	3898.16	17.78	
7200.00	6707.92	0.00	0.00	6737.92	201.18	201.18	352.64	4041.13	3807.47	17.30	
7300.00	6740.11	0.00	0.00	6770.11	202.16	202.16	341.02	3946.76	3712.18	16.82	
7400.00	6759.25	0.00	0.00	6789.25	202.74	202.74	314.67	3849.26	3614.18	16.37	
7500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3750.53	3515.44	15.95	
7600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3651.84	3416.93	15.55	
7700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3553.22	3318.37	15.13	
7800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3454.68	3220.02	14.72	

## 5D Anti-Collision Report

Secondary Well: Firestien #30-4-21 (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
7900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3356.23	3121.77	14.31	
8000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3257.87	3023.49	13.90	
8100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3159.62	2925.36	13.49	
8200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3061.48	2827.47	13.08	
8300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2963.46	2729.55	12.67	
8400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2865.58	2631.61	12.25	
8500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2767.85	2533.77	11.82	
8600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2670.29	2436.05	11.40	
8700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2572.92	2338.48	10.97	
8800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2475.75	2241.09	10.55	
8900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2378.82	2143.91	10.13	
9000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2282.16	2046.96	9.70	
9100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2185.80	1950.30	9.28	
9200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2089.77	1853.91	8.86	
9300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1994.14	1757.76	8.44	
9400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1898.96	1662.04	8.02	
9500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1804.30	1566.85	7.60	
9600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1710.25	1472.09	7.18	
9700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1616.91	1377.79	6.76	
9800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1524.42	1283.53	6.33	
9900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1432.94	1189.86	5.89	
10000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1342.67	1097.25	5.47	
10100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1253.88	1005.85	5.06	
10200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1166.90	915.97	4.65	
10300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1082.18	827.24	4.24	
10400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1000.28	740.18	3.85	
10500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	921.96	656.83	3.48	
10600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	848.21	576.15	3.12	
10700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	780.33	500.61	2.79	
10800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	719.97	431.46	2.50	SF(Lo)
10900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	669.19	372.32	2.25	SF(Lo)
11000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	630.29	325.09	2.07	SF(Lo)
11100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	605.57	292.08	1.93	SF(Lo)
11200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	596.79	277.59	1.87	SF(Lo)
11300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	604.66	282.90	1.88	SF(Lo)
11400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	628.54	307.30	1.96	SF(Lo)
11500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	666.72	348.43	2.09	SF(Lo)
11600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	716.91	402.92	2.28	SF(Lo)
11700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	776.80	467.62	2.51	
11800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	844.31	539.94	2.77	
11900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	917.78	618.43	3.07	
12000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	995.88	701.16	3.38	
12100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1077.60	786.58	3.70	
12200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1162.18	874.89	4.05	
12300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1249.05	965.34	4.40	
12400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1337.75	1056.43	4.76	
12500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1427.94	1148.87	5.12	
12600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1519.37	1242.49	5.49	
12700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1611.81	1337.05	5.87	
12800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1705.10	1432.37	6.25	
12900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1799.12	1528.30	6.64	
13000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1893.75	1624.73	7.04	
13100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	1988.90	1721.07	7.43	
13200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2084.51	1817.77	7.81	
13300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2180.51	1914.80	8.21	
13400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2276.86	2012.02	8.60	
13500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2373.51	2109.51	8.99	
13600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2470.42	2207.22	9.39	



## 5D Anti-Collision Report

Secondary Well: Firestien #30-4-21 (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
13700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2567.57	2305.13	9.78	
13800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2664.94	2403.22	10.18	
13900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2762.49	2501.45	10.58	
14000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2860.21	2599.83	10.98	
14100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	2958.08	2698.32	11.39	
14200.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3056.09	2796.92	11.79	
14300.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3154.22	2895.62	12.20	
14400.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3252.47	2994.40	12.60	
14500.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3350.83	3093.27	13.01	
14600.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3449.27	3192.20	13.42	
14700.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3547.81	3291.20	13.83	
14800.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3646.42	3390.26	14.23	
14900.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3745.11	3489.37	14.64	
15000.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3843.86	3588.53	15.05	
15100.00	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3942.68	3687.73	15.46	
15136.85	6765.00	0.00	0.00	6795.00	202.91	202.91	270.00	3979.11	3724.30	15.62	
Secondary Well: Goetzel 3-29 (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	31.00	0.00	0.00	145.02	2066.64	2065.87	2684.79	
100.00	69.00	0.00	0.00	100.00	1.05	1.05	145.02	2066.40	2064.48	1074.82	
200.00	169.00	0.00	0.00	200.00	2.60	2.60	145.02	2066.40	2062.71	559.50	
300.00	269.00	0.00	0.00	300.00	5.64	5.64	145.02	2066.40	2059.46	297.64	
400.00	369.00	0.00	0.00	400.00	8.68	8.68	145.02	2066.40	2056.21	202.75	
500.00	469.00	0.00	0.00	500.00	11.71	11.71	145.02	2066.40	2052.96	153.74	
600.00	569.00	0.00	0.00	600.00	14.75	14.75	145.02	2066.40	2049.89	125.09	
700.00	669.00	0.00	0.00	700.00	17.79	17.79	145.02	2066.40	2046.64	104.53	
800.00	769.00	0.00	0.00	800.00	20.82	20.82	13.17	2065.98	2042.97	89.80	
900.00	868.93	0.00	0.00	899.93	23.86	23.86	13.21	2062.58	2036.37	78.68	
1000.00	968.68	0.00	0.00	999.68	26.89	26.89	13.28	2055.79	2026.35	69.84	
1100.00	1068.13	0.00	0.00	1099.13	29.91	29.91	13.40	2045.62	2012.96	62.64	
1200.00	1167.15	0.00	0.00	1198.15	32.91	32.91	13.55	2032.08	1996.20	56.64	
1300.00	1265.63	0.00	0.00	1296.63	35.90	35.90	13.75	2015.19	1976.10	51.55	
1400.00	1363.44	0.00	0.00	1394.44	38.88	38.88	13.99	1994.98	1952.68	47.16	
1500.00	1460.46	0.00	0.00	1491.46	41.82	41.82	14.28	1971.48	1925.98	43.33	
1600.00	1556.58	0.00	0.00	1587.58	44.74	44.74	14.62	1944.72	1896.04	39.94	
1700.00	1651.68	0.00	0.00	1682.68	47.63	47.63	15.01	1914.76	1862.90	36.92	
1800.00	1746.25	0.00	0.00	1777.25	50.50	50.50	15.26	1883.26	1828.23	34.22	
1900.00	1840.82	0.00	0.00	1871.82	53.37	53.37	15.53	1851.80	1793.60	31.82	
2000.00	1935.39	0.00	0.00	1966.39	56.24	56.24	15.80	1820.38	1759.00	29.66	
2100.00	2029.96	0.00	0.00	2060.96	59.12	59.12	16.08	1789.00	1724.43	27.71	
2200.00	2124.53	0.00	0.00	2155.53	61.99	61.99	16.37	1757.66	1689.90	25.94	
2300.00	2219.10	0.00	0.00	2250.10	64.86	64.86	16.68	1726.36	1655.40	24.33	
2400.00	2313.66	0.00	0.00	2344.66	67.73	67.73	16.99	1695.10	1620.93	22.85	
2500.00	2408.23	0.00	0.00	2439.23	70.60	70.60	17.32	1663.90	1586.51	21.50	
2600.00	2502.80	0.00	0.00	2533.80	73.48	73.48	17.65	1632.74	1552.12	20.25	
2700.00	2597.37	0.00	0.00	2628.37	76.35	76.35	18.01	1601.64	1517.78	19.10	
2800.00	2691.94	0.00	0.00	2722.94	79.22	79.22	18.37	1570.60	1483.50	18.03	
2900.00	2786.51	0.00	0.00	2817.51	82.09	82.09	18.75	1539.61	1449.27	17.04	
3000.00	2881.08	0.00	0.00	2912.08	84.96	84.96	19.14	1508.69	1415.11	16.12	
3100.00	2975.65	0.00	0.00	3006.65	87.84	87.84	19.55	1477.84	1381.01	15.26	
3200.00	3070.21	0.00	0.00	3101.21	90.71	90.71	19.98	1447.06	1346.99	14.46	
3300.00	3164.78	0.00	0.00	3195.78	93.58	93.58	20.43	1416.36	1313.04	13.71	
3400.00	3259.35	0.00	0.00	3290.35	96.45	96.45	20.90	1385.74	1279.18	13.00	
3500.00	3353.92	0.00	0.00	3384.92	99.32	99.32	21.38	1355.21	1245.41	12.34	
3600.00	3448.49	0.00	0.00	3479.49	102.20	102.20	21.89	1324.77	1211.73	11.72	
3700.00	3543.06	0.00	0.00	3574.06	105.07	105.07	22.42	1294.44	1178.13	11.13	

## 5D Anti-Collision Report

Secondary Well: Goetzel 3-29 (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
3800.00	3637.63	0.00	0.00	3668.63	107.94	107.94	22.98	1264.21	1144.65	10.57	
3900.00	3732.19	0.00	0.00	3763.19	110.81	110.81	23.56	1234.10	1111.29	10.05	
4000.00	3826.76	0.00	0.00	3857.76	113.68	113.68	24.18	1204.11	1078.06	9.55	
4100.00	3921.33	0.00	0.00	3952.33	116.56	116.56	24.82	1174.25	1044.82	9.07	
4200.00	4015.90	0.00	0.00	4046.90	119.43	119.43	25.50	1144.54	1011.66	8.61	
4300.00	4110.47	0.00	0.00	4141.47	122.30	122.30	26.21	1114.99	978.65	8.18	
4400.00	4205.04	0.00	0.00	4236.04	125.17	125.17	26.96	1085.61	945.81	7.77	
4500.00	4299.61	0.00	0.00	4330.61	128.04	128.04	27.75	1056.40	913.15	7.37	
4600.00	4394.18	0.00	0.00	4425.18	130.91	130.91	28.58	1027.40	880.69	7.00	
4700.00	4488.74	0.00	0.00	4519.74	133.79	133.79	29.46	998.62	848.41	6.65	
4800.00	4583.31	0.00	0.00	4614.31	136.66	136.66	30.40	970.06	816.38	6.31	
4900.00	4677.88	0.00	0.00	4708.88	139.53	139.53	31.38	941.77	784.62	5.99	
5000.00	4772.45	0.00	0.00	4803.45	142.40	142.40	32.43	913.75	753.17	5.69	
5100.00	4867.02	0.00	0.00	4898.02	145.27	145.27	33.54	886.05	722.06	5.40	
5200.00	4961.59	0.00	0.00	4992.59	148.15	148.15	34.71	858.67	691.30	5.13	
5300.00	5056.16	0.00	0.00	5087.16	151.02	151.02	35.97	831.67	660.45	4.86	
5400.00	5150.72	0.00	0.00	5181.72	153.89	153.89	37.30	805.08	630.02	4.60	
5500.00	5245.29	0.00	0.00	5276.29	156.76	156.76	38.72	778.93	600.00	4.35	
5600.00	5339.86	0.00	0.00	5370.86	159.63	159.63	40.23	753.29	570.55	4.12	
5700.00	5434.43	0.00	0.00	5465.43	162.51	162.51	41.84	728.18	541.72	3.91	
5800.00	5529.00	0.00	0.00	5560.00	165.38	165.38	43.56	703.69	513.62	3.70	
5900.00	5623.57	0.00	0.00	5654.57	168.25	168.25	45.40	679.87	486.02	3.51	
6000.00	5718.14	0.00	0.00	5749.14	171.12	171.12	47.36	656.79	458.69	3.32	
6100.00	5812.70	0.00	0.00	5843.70	173.99	173.99	49.45	634.54	432.25	3.14	
6200.00	5907.27	0.00	0.00	5938.27	176.87	176.87	51.69	613.20	406.90	2.97	
6300.00	6003.06	0.00	0.00	6034.06	179.77	179.77	29.52	591.74	381.87	2.82	
6400.00	6100.10	0.00	0.00	6131.10	182.72	182.72	356.51	568.58	355.56	2.67	
6500.00	6196.53	0.00	0.00	6227.53	185.65	185.65	327.12	543.82	327.94	2.52	
6600.00	6290.46	0.00	0.00	6321.46	188.50	188.50	307.02	518.62	300.50	2.38	SF(Lo)
6700.00	6380.06	0.00	0.00	6411.06	191.22	191.22	292.29	495.36	276.27	2.26	SF(Lo)
6800.00	6463.59	0.00	0.00	6494.59	193.76	193.76	280.29	477.73	258.10	2.18	SF(Lo)
6900.00	6539.43	0.00	0.00	6570.43	196.06	196.06	270.34	470.39	251.25	2.15	SF(Lo)
7000.00	6606.09	0.00	0.00	6637.09	198.09	198.09	262.59	477.96	259.22	2.19	SF(Lo)
7100.00	6662.29	0.00	0.00	6693.29	199.79	199.79	257.38	503.51	284.43	2.30	SF(Lo)
7200.00	6706.92	0.00	0.00	6737.92	201.15	201.15	255.03	547.46	326.46	2.48	SF(Lo)
7300.00	6739.11	0.00	0.00	6770.11	202.13	202.13	255.98	607.70	383.98	2.72	
7400.00	6758.25	0.00	0.00	6789.25	202.71	202.71	260.96	680.71	454.96	3.02	
7500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	762.63	535.05	3.35	
7600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	849.27	621.08	3.72	
7700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	938.56	708.61	4.08	
7800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1029.83	798.86	4.46	
7900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1122.58	890.97	4.85	
8000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1216.48	984.56	5.25	
8100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1311.29	1079.03	5.65	
8200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1406.81	1173.67	6.03	
8300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1502.92	1269.27	6.43	
8400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1599.50	1365.29	6.83	
8500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1696.48	1461.87	7.23	
8600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1793.79	1558.89	7.64	
8700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1891.38	1656.28	8.04	
8800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	1989.22	1753.95	8.46	
8900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2087.25	1851.85	8.87	
9000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2185.47	1949.91	9.28	
9100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2283.84	2048.16	9.69	
9200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2382.34	2146.59	10.11	
9300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2480.97	2245.17	10.52	
9400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2579.70	2343.89	10.94	
9500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2678.52	2442.71	11.36	

## 5D Anti-Collision Report

Secondary Well: Goetzel 3-29 (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
9600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2777.43	2541.53	11.77	
9700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2876.42	2640.29	12.18	
9800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	2975.47	2739.18	12.59	
9900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3074.58	2838.21	13.01	
10000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3173.75	2937.27	13.42	
10100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3272.97	3036.31	13.83	
10200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3372.24	3135.40	14.24	
10300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3471.55	3234.61	14.65	
10400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3570.89	3333.86	15.06	
10500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3670.28	3433.07	15.47	
10600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3769.69	3532.38	15.89	
10700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3869.14	3631.78	16.30	
10800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	3968.61	3731.20	16.72	
10900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4068.11	3830.63	17.13	
11000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4167.63	3930.08	17.54	
11100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4267.18	4029.51	17.95	
11200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4366.74	4128.98	18.37	
11300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4466.33	4228.49	18.78	
11400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4565.93	4328.03	19.19	
11500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4665.55	4427.60	19.61	
11600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4765.19	4527.16	20.02	
11700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4864.84	4626.74	20.43	
11800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	4964.50	4726.34	20.84	
11900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5064.18	4825.96	21.26	
12000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5163.87	4925.59	21.67	
12100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5263.58	5025.24	22.09	
12200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5363.29	5124.91	22.50	
12300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5463.01	5224.59	22.91	
12400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5562.75	5324.28	23.33	
12500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5662.49	5423.98	23.74	
12600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5762.24	5523.70	24.16	
12700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5862.00	5623.42	24.57	
12800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	5961.77	5723.15	24.98	
12900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6061.55	5822.89	25.40	
13000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6161.33	5922.64	25.81	
13100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6261.12	6022.40	26.23	
13200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6360.92	6122.16	26.64	
13300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6460.72	6221.93	27.06	
13400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6560.53	6321.71	27.47	
13500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6660.35	6421.49	27.88	
13600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6760.17	6521.26	28.30	
13700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6860.00	6621.05	28.71	
13800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	6959.83	6720.84	29.12	
13900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7059.66	6820.63	29.53	
14000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7159.50	6920.43	29.95	
14100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7259.35	7020.24	30.36	
14200.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7359.20	7120.05	30.77	
14300.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7459.05	7219.86	31.19	
14400.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7558.90	7319.68	31.60	
14500.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7658.77	7419.50	32.01	
14600.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7758.63	7519.33	32.42	
14700.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7858.50	7619.16	32.83	
14800.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	7958.37	7718.99	33.25	
14900.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	8058.24	7818.83	33.66	
15000.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	8158.12	7918.67	34.07	
15100.00	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	8258.00	8018.51	34.48	
15136.85	6764.00	0.00	0.00	6795.00	202.88	202.88	270.00	8294.80	8055.30	34.63	

## 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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	159.93	159.20	218.10	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.05	159.93	158.98	167.66	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.05	159.93	158.53	113.95	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.05	159.93	158.08	86.31	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.05	159.93	157.63	69.46	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.05	159.93	157.18	58.11	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.05	159.93	156.73	49.95	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.05	159.93	156.28	43.80	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	228.08	160.23	156.14	39.19	
900.00	899.93	0.00	0.00	899.93	1.91	1.91	227.20	162.58	158.08	36.15	
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	225.52	167.40	162.48	34.05	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	223.18	174.90	169.54	32.68	
1200.00	1198.15	0.00	0.00	1198.15	2.58	2.58	220.39	185.32	179.51	31.87	
1300.00	1296.63	0.00	0.00	1296.63	2.80	2.80	217.33	198.93	192.64	31.65	
1400.00	1394.44	0.00	0.00	1394.44	3.02	3.02	214.20	215.93	209.18	31.97	
1500.00	1491.46	0.00	0.00	1491.46	3.24	3.24	211.14	236.48	229.24	32.64	
1600.00	1587.58	0.00	0.00	1587.58	3.46	3.46	208.27	260.65	252.89	33.57	
1700.00	1682.68	0.00	0.00	1682.68	3.67	3.67	205.63	288.48	280.23	34.95	
1800.00	1777.25	0.00	0.00	1777.25	3.88	3.88	203.12	318.37	309.61	36.36	
1900.00	1874.32	1.49	78.00	1874.31	4.09	4.09	201.15	348.46	339.22	37.69	
2000.00	1973.21	3.46	78.00	1973.11	4.30	4.29	199.96	377.92	368.18	38.78	
2100.00	2073.07	5.46	78.00	2072.66	4.51	4.49	199.42	406.49	396.23	39.64	
2200.00	2173.67	7.47	78.00	2172.61	4.74	4.69	199.41	434.05	423.23	40.13	
2300.00	2274.76	9.50	78.00	2272.59	4.99	4.88	199.84	460.60	449.20	40.40	
2400.00	2376.10	11.52	78.00	2372.22	5.27	5.08	200.63	486.19	474.12	40.30	
2500.00	2477.42	13.55	78.00	2471.13	5.58	5.28	201.75	510.93	498.15	40.00	
2600.00	2578.49	15.57	78.00	2568.95	5.94	5.48	203.13	534.98	521.43	39.50	
2700.00	2678.21	17.19	78.00	2664.54	6.35	5.69	204.72	558.53	544.12	38.75	
2800.00	2774.22	17.19	78.00	2756.26	6.78	5.92	206.23	582.23	566.88	37.92	
2900.00	2870.23	17.19	78.00	2847.99	7.23	6.15	207.63	606.30	589.98	37.17	
3000.00	2966.24	17.19	78.00	2939.71	7.71	6.39	208.93	630.68	613.39	36.48	
3100.00	3062.26	17.19	78.00	3031.44	8.20	6.64	210.13	655.35	637.07	35.86	
3200.00	3158.27	17.19	78.00	3123.16	8.71	6.89	211.24	680.28	660.96	35.22	
3300.00	3254.28	17.19	78.00	3214.88	9.22	7.14	212.27	705.43	685.06	34.63	
3400.00	3350.29	17.19	78.00	3306.61	9.75	7.40	213.24	730.79	709.34	34.08	
3500.00	3446.30	17.19	78.00	3398.33	10.28	7.65	214.14	756.33	733.79	33.56	
3600.00	3542.31	17.19	78.00	3490.06	10.83	7.92	214.98	782.03	758.39	33.08	
3700.00	3638.33	17.19	78.00	3581.78	11.38	8.18	215.77	807.89	783.14	32.65	
3800.00	3734.34	17.19	78.00	3673.51	11.93	8.45	216.51	833.88	808.03	32.25	
3900.00	3830.35	17.19	78.00	3765.23	12.49	8.71	217.21	859.99	833.03	31.89	
4000.00	3926.36	17.19	78.00	3856.96	13.05	8.98	217.86	886.22	858.14	31.56	
4100.00	4022.37	17.19	78.00	3948.68	13.61	9.25	218.48	912.55	883.34	31.24	
4200.00	4118.38	17.19	78.00	4040.41	14.18	9.53	219.07	938.98	908.62	30.93	
4300.00	4214.40	17.19	78.00	4132.13	14.75	9.80	219.62	965.49	933.98	30.64	
4400.00	4310.41	17.19	78.00	4223.86	15.33	10.07	220.14	992.08	959.42	30.37	
4500.00	4406.42	17.19	78.00	4315.58	15.90	10.35	220.64	1018.74	984.93	30.13	
4600.00	4502.43	17.19	78.00	4407.31	16.48	10.63	221.11	1045.47	1010.51	29.90	
4700.00	4598.44	17.19	78.00	4499.03	17.06	10.91	221.55	1072.27	1036.15	29.69	
4800.00	4694.46	17.19	78.00	4590.76	17.64	11.18	221.98	1099.12	1061.85	29.49	
4900.00	4790.47	17.19	78.00	4682.48	18.22	11.46	222.38	1126.02	1087.60	29.30	
5000.00	4886.48	17.19	78.00	4774.21	18.81	11.74	222.77	1152.98	1113.40	29.13	
5100.00	4982.49	17.19	78.00	4865.93	19.39	12.03	223.14	1179.98	1139.25	28.97	
5200.00	5078.50	17.19	78.00	4957.65	19.98	12.31	223.49	1207.03	1165.14	28.82	
5300.00	5174.51	17.19	78.00	5049.38	20.57	12.59	223.83	1234.12	1191.08	28.67	
5400.00	5270.53	17.19	78.00	5141.10	21.15	12.87	224.15	1261.24	1217.05	28.54	
5500.00	5366.54	17.19	78.00	5232.83	21.74	13.16	224.46	1288.40	1243.06	28.41	
5600.00	5462.55	17.19	78.00	5324.55	22.33	13.44	224.76	1315.60	1269.10	28.29	
5700.00	5558.56	17.19	78.00	5416.28	22.92	13.73	225.04	1342.82	1295.17	28.18	

## 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
5800.00	5654.57	17.19	78.00	5508.00	23.51	14.01	225.32	1370.08	1321.27	28.07	
5900.00	5750.58	17.19	78.00	5599.73	24.10	14.30	225.58	1397.36	1347.40	27.97	
6000.00	5846.60	17.19	78.00	5691.45	24.69	14.58	225.83	1424.67	1373.56	27.87	
6100.00	5942.61	17.19	78.00	5783.18	25.29	14.87	226.07	1452.01	1399.74	27.78	
6200.00	6038.62	17.19	78.00	5874.90	25.88	15.15	226.31	1479.36	1425.95	27.69	
6300.00	6133.83	17.19	78.00	5965.86	26.47	15.44	202.29	1507.05	1452.57	27.66	
6400.00	6226.19	17.19	78.00	6054.10	27.04	15.71	169.24	1535.30	1479.91	27.72	
6500.00	6313.89	17.19	78.00	6137.88	27.58	15.98	141.71	1564.21	1507.96	27.80	
6600.00	6395.23	17.19	78.00	6215.59	28.08	16.22	125.28	1594.11	1537.03	27.93	
6700.00	6489.72	9.90	70.99	6307.38	28.45	16.46	115.94	1624.97	1567.20	28.13	
6800.00	6595.10	2.94	18.50	6412.09	28.66	16.41	110.25	1656.05	1597.82	28.44	
6900.00	6715.61	8.98	284.50	6532.06	28.67	15.95	106.70	1686.62	1628.23	28.89	
7000.00	6857.50	20.09	274.40	6669.22	28.43	14.90	104.59	1715.68	1657.51	29.49	
7100.00	7028.71	33.70	271.00	6821.56	27.98	13.07	103.51	1741.84	1684.35	30.30	
7200.00	7236.11	50.25	269.17	6975.22	27.51	10.60	103.03	1763.18	1706.52	31.12	
7300.00	7477.67	69.55	267.91	7095.79	27.72	9.10	102.56	1777.43	1721.29	31.66	
7400.00	7733.39	89.98	266.89	7141.00	29.33	10.98	101.53	1782.88	1725.41	31.03	
7500.00	7833.29	90.00	266.89	7141.00	30.36	11.45	101.19	1783.46	1724.14	30.06	
7600.00	7933.29	90.00	266.89	7141.00	31.58	11.94	101.18	1783.80	1722.27	28.99	
7700.00	8033.28	90.00	266.89	7141.00	32.99	12.46	101.18	1784.14	1720.08	27.85	
7800.00	8133.28	90.00	266.89	7141.00	34.58	13.00	101.18	1784.48	1717.34	26.58	
7900.00	8233.28	90.00	266.89	7141.00	36.31	13.55	101.18	1784.81	1714.49	25.38	
8000.00	8333.28	90.00	266.89	7141.00	38.17	14.13	101.18	1785.15	1711.24	24.15	
8100.00	8433.28	90.00	266.89	7141.00	40.14	14.71	101.17	1785.49	1707.78	22.98	
8200.00	8533.28	90.00	266.89	7141.00	42.20	15.31	101.17	1785.83	1704.20	21.88	
8300.00	8633.28	90.00	266.89	7141.00	44.34	15.92	101.17	1786.16	1700.45	20.84	
8400.00	8733.28	90.00	266.89	7141.00	46.55	16.54	101.17	1786.50	1696.44	19.84	
8500.00	8833.28	90.00	266.89	7141.00	48.82	17.17	101.17	1786.84	1692.34	18.91	
8600.00	8933.28	90.00	266.89	7141.00	51.15	17.81	101.16	1787.18	1688.16	18.05	
8700.00	9033.28	90.00	266.89	7141.00	53.52	18.45	101.16	1787.51	1683.89	17.25	
8800.00	9133.28	90.00	266.89	7141.00	55.93	19.11	101.16	1787.85	1679.54	16.51	
8900.00	9233.28	90.00	266.89	7141.00	58.37	19.76	101.16	1788.19	1675.11	15.81	
9000.00	9333.28	90.00	266.89	7141.00	60.85	20.42	101.15	1788.53	1670.62	15.17	
9100.00	9433.28	90.00	266.89	7141.00	63.35	21.09	101.15	1788.86	1666.08	14.57	
9200.00	9533.28	90.00	266.89	7141.00	65.88	21.76	101.15	1789.20	1661.48	14.01	
9300.00	9633.28	90.00	266.89	7141.00	68.43	22.44	101.15	1789.54	1656.84	13.49	
9400.00	9733.27	90.00	266.89	7141.00	70.99	23.12	101.15	1789.88	1652.16	13.00	
9500.00	9833.27	90.00	266.89	7141.00	73.58	23.80	101.14	1790.21	1647.44	12.54	
9600.00	9933.27	90.00	266.89	7141.00	76.17	24.48	101.14	1790.55	1642.69	12.11	
9700.00	10033.27	90.00	266.89	7141.00	78.79	25.17	101.14	1790.89	1637.92	11.71	
9800.00	10133.27	90.00	266.89	7141.00	81.41	25.86	101.14	1791.23	1633.11	11.33	
9900.00	10233.27	90.00	266.89	7141.00	84.05	26.55	101.14	1791.56	1628.29	10.97	
10000.00	10333.27	90.00	266.89	7141.00	86.69	27.25	101.13	1791.90	1623.44	10.64	
10100.00	10433.27	90.00	266.89	7141.00	89.35	27.94	101.13	1792.24	1618.58	10.32	
10200.00	10533.27	90.00	266.89	7141.00	92.01	28.64	101.13	1792.58	1613.70	10.02	
10300.00	10633.27	90.00	266.89	7141.00	94.69	29.34	101.13	1792.91	1608.80	9.74	
10400.00	10733.27	90.00	266.89	7141.00	97.36	30.04	101.12	1793.25	1603.88	9.47	
10500.00	10833.27	90.00	266.89	7141.00	100.05	30.75	101.12	1793.59	1598.96	9.22	
10600.00	10933.27	90.00	266.89	7141.00	102.74	31.45	101.12	1793.92	1594.02	8.97	
10700.00	11033.27	90.00	266.89	7141.00	105.44	32.16	101.12	1794.26	1589.07	8.74	
10800.00	11133.27	90.00	266.89	7141.00	108.14	32.86	101.12	1794.60	1584.11	8.53	
10900.00	11233.27	90.00	266.89	7141.00	110.85	33.57	101.11	1794.94	1579.14	8.32	
11000.00	11333.27	90.00	266.89	7141.00	113.56	34.28	101.11	1795.27	1574.16	8.12	
11100.00	11433.26	90.00	266.89	7141.00	116.28	34.99	101.11	1795.61	1569.17	7.93	
11200.00	11533.26	90.00	266.89	7141.00	118.99	35.70	101.11	1795.95	1564.17	7.75	
11300.00	11633.26	90.00	266.89	7141.00	121.72	36.41	101.11	1796.29	1559.17	7.58	
11400.00	11733.26	90.00	266.89	7141.00	124.44	37.13	101.10	1796.62	1554.16	7.41	
11500.00	11833.26	90.00	266.89	7141.00	127.17	37.84	101.10	1796.96	1549.15	7.25	

## 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
11600.00	11933.26	90.00	266.89	7141.00	129.91	38.55	101.10	1797.30	1544.12	7.10	
11700.00	12033.26	90.00	266.89	7141.00	132.64	39.27	101.10	1797.64	1539.10	6.95	
11800.00	12133.26	90.00	266.89	7141.00	135.38	39.98	101.10	1797.97	1534.06	6.81	
11900.00	12233.26	90.00	266.89	7141.00	138.12	40.70	101.09	1798.31	1529.02	6.68	
12000.00	12333.26	90.00	266.89	7141.00	140.86	41.42	101.09	1798.65	1523.98	6.55	
12100.00	12433.26	90.00	266.89	7141.00	143.61	42.13	101.09	1798.99	1518.94	6.42	
12200.00	12533.26	90.00	266.89	7141.00	146.36	42.85	101.09	1799.32	1513.88	6.30	
12300.00	12633.26	90.00	266.89	7141.00	149.10	43.57	101.08	1799.66	1508.83	6.19	
12400.00	12733.26	90.00	266.89	7141.00	151.86	44.29	101.08	1800.00	1503.77	6.08	
12500.00	12833.26	90.00	266.89	7141.00	154.61	45.01	101.08	1800.34	1498.71	5.97	
12600.00	12933.26	90.00	266.89	7141.00	157.36	45.73	101.08	1800.67	1493.64	5.86	
12700.00	13033.26	90.00	266.89	7141.00	160.12	46.45	101.08	1801.01	1488.57	5.76	
12800.00	13133.25	90.00	266.89	7141.00	162.87	47.17	101.07	1801.35	1483.50	5.67	
12900.00	13233.25	90.00	266.89	7141.00	165.63	47.89	101.07	1801.69	1478.43	5.57	
13000.00	13333.25	90.00	266.89	7141.00	168.39	48.61	101.07	1802.02	1473.35	5.48	
13100.00	13433.25	90.00	266.89	7141.00	171.15	49.33	101.07	1802.36	1468.27	5.39	
13200.00	13533.25	90.00	266.89	7141.00	173.92	50.06	101.07	1802.70	1463.19	5.31	
13300.00	13633.25	90.00	266.89	7141.00	176.68	50.78	101.06	1803.04	1458.10	5.23	
13400.00	13733.25	90.00	266.89	7141.00	179.44	51.50	101.06	1803.37	1453.01	5.15	
13500.00	13833.25	90.00	266.89	7141.00	182.21	52.22	101.06	1803.71	1447.92	5.07	
13600.00	13933.25	90.00	266.89	7141.00	184.98	52.95	101.06	1804.05	1442.83	4.99	
13700.00	14033.25	90.00	266.89	7141.00	187.74	53.67	101.06	1804.39	1437.74	4.92	
13800.00	14133.25	90.00	266.89	7141.00	190.51	54.40	101.05	1804.72	1432.64	4.85	
13900.00	14233.25	90.00	266.89	7141.00	193.28	55.12	101.05	1805.06	1427.55	4.78	
14000.00	14333.25	90.00	266.89	7141.00	196.05	55.84	101.05	1805.40	1422.45	4.71	
14100.00	14433.25	90.00	266.89	7141.00	198.82	56.57	101.05	1805.74	1417.35	4.65	
14200.00	14533.25	90.00	266.89	7141.00	201.59	57.29	101.04	1806.08	1412.25	4.59	
14300.00	14633.25	90.00	266.89	7141.00	204.37	58.02	101.04	1806.41	1407.14	4.52	
14400.00	14733.25	90.00	266.89	7141.00	207.14	58.74	101.04	1806.75	1402.04	4.46	
14500.00	14833.24	90.00	266.89	7141.00	209.91	59.47	101.04	1807.09	1396.93	4.41	
14600.00	14933.24	90.00	266.89	7141.00	212.69	60.20	101.04	1807.43	1391.82	4.35	
14700.00	15033.24	90.00	266.89	7141.00	215.46	60.92	101.03	1807.76	1386.71	4.29	
14800.00	15133.24	90.00	266.89	7141.00	218.24	61.65	101.03	1808.10	1381.60	4.24	
14900.00	15233.24	90.00	266.89	7141.00	221.02	62.37	101.03	1808.44	1376.49	4.19	
15000.00	15333.24	90.00	266.89	7141.00	223.79	63.10	101.03	1808.78	1371.38	4.14	
15100.00	15433.24	90.00	266.89	7141.00	226.57	63.83	101.03	1809.11	1366.26	4.09	
15136.85	15470.09	90.00	266.89	7141.00	227.59	64.09	101.03	1809.24	1364.38	4.07	

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	0.01	139.90	139.16	190.77	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.01	139.90	138.94	146.65	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.01	139.90	138.49	99.68	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.01	139.90	138.04	75.49	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.01	139.90	137.59	60.76	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.01	139.90	137.14	50.83	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.01	139.90	136.69	43.69	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.01	139.90	136.24	38.31	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	228.02	140.19	136.10	34.29	
900.00	899.93	0.00	0.00	899.93	1.91	1.91	227.01	142.55	138.05	31.70	
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	225.10	147.39	142.48	29.98	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	222.47	154.96	149.61	28.94	
1200.00	1198.15	0.00	0.00	1198.15	2.58	2.58	219.36	165.53	159.71	28.47	
1300.00	1296.63	0.00	0.00	1296.63	2.80	2.80	216.03	179.35	173.07	28.56	
1400.00	1394.44	0.00	0.00	1394.44	3.02	3.02	212.67	196.64	189.89	29.12	
1500.00	1491.46	0.00	0.00	1491.46	3.24	3.24	209.47	217.54	210.30	30.05	
1600.00	1587.58	0.00	0.00	1587.58	3.46	3.46	206.50	242.09	234.34	31.25	

## 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
1700.00	1682.68	0.00	0.00	1682.68	3.67	3.67	203.84	270.31	262.08	32.86	
1800.00	1777.25	0.00	0.00	1777.25	3.88	3.88	201.35	300.57	291.84	34.45	
1900.00	1871.82	0.00	0.00	1871.82	4.10	4.10	199.31	331.25	322.04	35.96	
2000.00	1966.39	0.00	0.00	1966.39	4.31	4.31	197.62	362.25	352.55	37.36	
2100.00	2065.12	1.30	85.04	2065.12	4.52	4.52	196.24	393.17	382.98	38.59	
2200.00	2167.38	3.35	85.04	2167.29	4.73	4.72	195.44	422.75	412.05	39.54	
2300.00	2270.93	5.42	85.04	2270.52	4.95	4.92	195.17	450.72	439.50	40.20	
2400.00	2375.51	7.51	85.04	2374.43	5.18	5.12	195.35	477.02	465.27	40.60	
2500.00	2480.86	9.62	85.04	2478.61	5.44	5.32	195.91	501.64	489.30	40.63	
2600.00	2586.71	11.73	85.04	2582.62	5.73	5.53	196.80	524.66	511.67	40.39	
2700.00	2692.76	13.86	85.04	2686.03	6.05	5.73	197.99	546.18	532.47	39.84	
2800.00	2798.73	15.97	85.04	2788.42	6.43	5.93	199.44	566.35	551.86	39.08	
2900.00	2904.32	18.09	85.04	2889.38	6.86	6.13	201.14	585.37	569.99	38.06	
3000.00	3003.65	18.74	85.04	2983.50	7.33	6.36	202.87	603.79	587.46	36.98	
3100.00	3100.35	18.74	85.04	3075.08	7.81	6.59	204.47	622.65	605.31	35.91	
3200.00	3197.05	18.74	85.04	3166.66	8.32	6.84	205.99	641.96	623.59	34.94	
3300.00	3293.75	18.74	85.04	3258.23	8.85	7.09	207.41	661.68	642.27	34.07	
3400.00	3390.46	18.74	85.04	3349.81	9.40	7.34	208.75	681.79	661.28	33.23	
3500.00	3487.16	18.74	85.04	3441.39	9.96	7.60	210.02	702.25	680.60	32.44	
3600.00	3583.86	18.74	85.04	3532.97	10.53	7.86	211.22	723.02	700.20	31.67	
3700.00	3680.57	18.74	85.04	3624.55	11.12	8.12	212.35	744.09	720.08	30.99	
3800.00	3777.27	18.74	85.04	3716.13	11.71	8.39	213.42	765.42	740.22	30.37	
3900.00	3873.97	18.74	85.04	3807.71	12.31	8.66	214.43	787.00	760.60	29.81	
4000.00	3970.67	18.74	85.04	3899.28	12.91	8.93	215.39	808.81	781.21	29.31	
4100.00	4067.38	18.74	85.04	3990.86	13.52	9.21	216.30	830.82	802.02	28.85	
4200.00	4164.08	18.74	85.04	4082.44	14.13	9.49	217.17	853.03	823.03	28.43	
4300.00	4260.78	18.74	85.04	4174.02	14.75	9.77	217.99	875.41	844.20	28.04	
4400.00	4357.48	18.74	85.04	4265.60	15.38	10.05	218.77	897.96	865.49	27.65	
4500.00	4454.19	18.74	85.04	4357.18	16.00	10.33	219.51	920.66	886.91	27.28	
4600.00	4550.89	18.74	85.04	4448.76	16.63	10.61	220.21	943.50	908.48	26.94	
4700.00	4647.59	18.74	85.04	4540.33	17.26	10.90	220.89	966.48	930.18	26.63	
4800.00	4744.29	18.74	85.04	4631.91	17.89	11.19	221.53	989.57	952.00	26.34	
4900.00	4841.00	18.74	85.04	4723.49	18.53	11.48	222.14	1012.78	973.94	26.07	
5000.00	4937.70	18.74	85.04	4815.07	19.17	11.76	222.73	1036.10	995.98	25.83	
5100.00	5034.40	18.74	85.04	4906.65	19.80	12.05	223.29	1059.51	1018.12	25.60	
5200.00	5131.10	18.74	85.04	4998.23	20.44	12.35	223.83	1083.02	1040.36	25.39	
5300.00	5227.81	18.74	85.04	5089.81	21.09	12.64	224.34	1106.61	1062.69	25.19	
5400.00	5324.51	18.74	85.04	5181.38	21.73	12.93	224.83	1130.29	1085.09	25.01	
5500.00	5421.21	18.74	85.04	5272.96	22.37	13.22	225.31	1154.04	1107.58	24.84	
5600.00	5517.91	18.74	85.04	5364.54	23.02	13.52	225.76	1177.86	1130.13	24.68	
5700.00	5614.62	18.74	85.04	5456.12	23.66	13.81	226.19	1201.75	1152.76	24.53	
5800.00	5711.32	18.74	85.04	5547.70	24.31	14.11	226.61	1225.71	1175.45	24.39	
5900.00	5808.02	18.74	85.04	5639.28	24.96	14.41	227.02	1249.72	1198.20	24.26	
6000.00	5904.72	18.74	85.04	5730.86	25.61	14.70	227.40	1273.79	1221.01	24.13	
6100.00	6001.43	18.74	85.04	5822.43	26.26	15.00	227.78	1297.92	1243.87	24.02	
6200.00	6098.13	18.74	85.04	5914.01	26.91	15.30	228.14	1322.09	1266.78	23.90	
6300.00	6193.84	18.74	85.04	6004.65	27.55	15.59	204.53	1346.85	1290.33	23.83	
6400.00	6295.97	11.44	83.92	6103.01	28.08	15.91	171.77	1372.51	1315.00	23.87	
6500.00	6402.90	2.92	75.64	6209.00	28.35	15.90	144.22	1398.37	1340.30	24.08	
6600.00	6514.32	6.07	271.97	6320.25	28.41	15.54	127.58	1423.86	1365.62	24.45	
6700.00	6630.67	15.36	268.73	6434.46	28.30	14.79	117.69	1448.42	1390.34	24.94	
6800.00	6752.23	25.08	267.89	6548.38	28.06	13.67	111.31	1471.45	1413.81	25.53	
6900.00	6878.94	35.22	267.48	6657.81	27.76	12.26	106.89	1492.36	1435.29	26.15	
7000.00	7010.35	45.73	267.24	6757.63	27.50	10.73	103.63	1510.61	1454.13	26.75	
7100.00	7145.43	56.54	267.06	6842.27	27.45	9.43	101.14	1525.68	1469.60	27.20	
7200.00	7282.69	67.52	266.92	6906.55	27.72	8.86	99.20	1537.19	1481.11	27.41	
7300.00	7420.22	78.52	266.80	6946.66	28.42	9.37	97.68	1544.87	1488.15	27.24	
7400.00	7556.03	89.38	266.69	6960.96	29.50	10.79	96.54	1548.60	1490.45	26.64	

## 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
7500.00	7657.79	90.00	266.69	6961.00	30.58	11.34	96.15	1549.35	1489.31	25.80	
7600.00	7757.79	90.00	266.69	6961.00	31.84	11.84	96.15	1549.34	1487.04	24.87	
7700.00	7857.79	90.00	266.69	6961.00	33.28	12.37	96.15	1549.33	1484.39	23.86	
7800.00	7957.79	90.00	266.69	6961.00	34.88	12.92	96.15	1549.32	1481.25	22.76	
7900.00	8057.79	90.00	266.69	6961.00	36.64	13.48	96.15	1549.31	1477.96	21.72	
8000.00	8157.79	90.00	266.69	6961.00	38.51	14.06	96.15	1549.30	1474.33	20.67	
8100.00	8257.79	90.00	266.69	6961.00	40.49	14.65	96.15	1549.28	1470.42	19.65	
8200.00	8357.79	90.00	266.69	6961.00	42.57	15.26	96.15	1549.27	1466.45	18.70	
8300.00	8457.79	90.00	266.69	6961.00	44.72	15.88	96.15	1549.26	1462.23	17.80	
8400.00	8557.79	90.00	266.69	6961.00	46.94	16.50	96.15	1549.25	1457.80	16.94	
8500.00	8657.79	90.00	266.69	6961.00	49.22	17.14	96.15	1549.24	1453.29	16.15	
8600.00	8757.79	90.00	266.69	6961.00	51.55	17.78	96.15	1549.23	1448.69	15.41	
8700.00	8857.79	90.00	266.69	6961.00	53.93	18.43	96.15	1549.22	1444.00	14.72	
8800.00	8957.79	90.00	266.69	6961.00	56.34	19.09	96.15	1549.20	1439.23	14.09	
8900.00	9057.79	90.00	266.69	6961.00	58.79	19.75	96.15	1549.19	1434.39	13.49	
9000.00	9157.79	90.00	266.69	6961.00	61.27	20.41	96.15	1549.18	1429.48	12.94	
9100.00	9257.79	90.00	266.69	6961.00	63.77	21.08	96.15	1549.17	1424.51	12.43	
9200.00	9357.79	90.00	266.69	6961.00	66.30	21.76	96.15	1549.16	1419.50	11.95	
9300.00	9457.79	90.00	266.69	6961.00	68.85	22.44	96.15	1549.15	1414.43	11.50	
9400.00	9557.79	90.00	266.69	6961.00	71.42	23.12	96.15	1549.14	1409.33	11.08	
9500.00	9657.79	90.00	266.69	6961.00	74.00	23.80	96.15	1549.12	1404.20	10.69	
9600.00	9757.79	90.00	266.69	6961.00	76.60	24.49	96.15	1549.11	1399.03	10.32	
9700.00	9857.79	90.00	266.69	6961.00	79.21	25.18	96.15	1549.10	1393.83	9.98	
9800.00	9957.79	90.00	266.69	6961.00	81.84	25.87	96.15	1549.09	1388.61	9.65	
9900.00	10057.79	90.00	266.69	6961.00	84.47	26.57	96.15	1549.08	1383.36	9.35	
10000.00	10157.79	90.00	266.69	6961.00	87.12	27.26	96.15	1549.07	1378.10	9.06	
10100.00	10257.79	90.00	266.69	6961.00	89.78	27.96	96.15	1549.05	1372.81	8.79	
10200.00	10357.79	90.00	266.69	6961.00	92.44	28.66	96.15	1549.04	1367.51	8.53	
10300.00	10457.79	90.00	266.69	6961.00	95.11	29.36	96.15	1549.03	1362.19	8.29	
10400.00	10557.79	90.00	266.69	6961.00	97.79	30.07	96.15	1549.02	1356.86	8.06	
10500.00	10657.79	90.00	266.69	6961.00	100.48	30.77	96.15	1549.01	1351.51	7.84	
10600.00	10757.79	90.00	266.69	6961.00	103.17	31.48	96.15	1549.00	1346.15	7.64	
10700.00	10857.79	90.00	266.69	6961.00	105.86	32.18	96.15	1548.99	1340.78	7.44	
10800.00	10957.79	90.00	266.69	6961.00	108.57	32.89	96.15	1548.97	1335.40	7.25	
10900.00	11057.79	90.00	266.69	6961.00	111.27	33.60	96.15	1548.96	1330.01	7.07	
11000.00	11157.79	90.00	266.69	6961.00	113.98	34.31	96.15	1548.95	1324.61	6.90	
11100.00	11257.79	90.00	266.69	6961.00	116.70	35.02	96.15	1548.94	1319.20	6.74	
11200.00	11357.79	90.00	266.69	6961.00	119.42	35.74	96.15	1548.93	1313.79	6.59	
11300.00	11457.79	90.00	266.69	6961.00	122.14	36.45	96.15	1548.92	1308.37	6.44	
11400.00	11557.79	90.00	266.69	6961.00	124.87	37.16	96.15	1548.90	1302.94	6.30	
11500.00	11657.79	90.00	266.69	6961.00	127.59	37.88	96.15	1548.89	1297.50	6.16	
11600.00	11757.79	90.00	266.69	6961.00	130.33	38.59	96.15	1548.88	1292.06	6.03	
11700.00	11857.79	90.00	266.69	6961.00	133.06	39.31	96.15	1548.87	1286.61	5.91	
11800.00	11957.79	90.00	266.69	6961.00	135.80	40.03	96.15	1548.86	1281.16	5.79	
11900.00	12057.79	90.00	266.69	6961.00	138.54	40.74	96.15	1548.85	1275.70	5.67	
12000.00	12157.79	90.00	266.69	6961.00	141.28	41.46	96.15	1548.84	1270.24	5.56	
12100.00	12257.79	90.00	266.69	6961.00	144.02	42.18	96.15	1548.82	1264.77	5.45	
12200.00	12357.79	90.00	266.69	6961.00	146.77	42.90	96.15	1548.81	1259.30	5.35	
12300.00	12457.79	90.00	266.69	6961.00	149.52	43.62	96.15	1548.80	1253.83	5.25	
12400.00	12557.79	90.00	266.69	6961.00	152.27	44.34	96.15	1548.79	1248.35	5.16	
12500.00	12657.79	90.00	266.69	6961.00	155.02	45.06	96.15	1548.78	1242.87	5.06	
12600.00	12757.79	90.00	266.69	6961.00	157.77	45.78	96.15	1548.77	1237.39	4.97	
12700.00	12857.79	90.00	266.69	6961.00	160.53	46.50	96.15	1548.75	1231.90	4.89	
12800.00	12957.79	90.00	266.69	6961.00	163.28	47.22	96.15	1548.74	1226.41	4.80	
12900.00	13057.79	90.00	266.69	6961.00	166.04	47.94	96.15	1548.73	1220.92	4.72	
13000.00	13157.79	90.00	266.69	6961.00	168.80	48.67	96.15	1548.72	1215.42	4.65	
13100.00	13257.79	90.00	266.69	6961.00	171.56	49.39	96.15	1548.71	1209.92	4.57	
13200.00	13357.79	90.00	266.69	6961.00	174.32	50.11	96.15	1548.70	1204.42	4.50	



## 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
13300.00	13457.79	90.00	266.69	6961.00	177.08	50.83	96.15	1548.69	1198.92	4.43	
13400.00	13557.79	90.00	266.69	6961.00	179.85	51.56	96.15	1548.67	1193.41	4.36	
13500.00	13657.79	90.00	266.69	6961.00	182.61	52.28	96.15	1548.66	1187.90	4.29	
13600.00	13757.79	90.00	266.69	6961.00	185.38	53.00	96.15	1548.65	1182.40	4.23	
13700.00	13857.79	90.00	266.69	6961.00	188.15	53.73	96.15	1548.64	1176.88	4.17	
13800.00	13957.79	90.00	266.69	6961.00	190.91	54.45	96.15	1548.63	1171.37	4.10	
13900.00	14057.79	90.00	266.69	6961.00	193.68	55.18	96.15	1548.62	1165.86	4.05	
14000.00	14157.79	90.00	266.69	6961.00	196.45	55.90	96.15	1548.61	1160.34	3.99	
14100.00	14257.79	90.00	266.69	6961.00	199.22	56.63	96.15	1548.59	1154.82	3.93	
14200.00	14357.79	90.00	266.69	6961.00	201.99	57.35	96.15	1548.58	1149.30	3.88	
14300.00	14457.79	90.00	266.69	6961.00	204.76	58.08	96.15	1548.57	1143.78	3.83	
14400.00	14557.79	90.00	266.69	6961.00	207.54	58.81	96.15	1548.56	1138.26	3.77	
14500.00	14657.79	90.00	266.69	6961.00	210.31	59.53	96.15	1548.55	1132.73	3.72	
14600.00	14757.79	90.00	266.69	6961.00	213.08	60.26	96.15	1548.54	1127.21	3.68	
14700.00	14857.79	90.00	266.69	6961.00	215.86	60.98	96.15	1548.52	1121.68	3.63	
14800.00	14957.79	90.00	266.69	6961.00	218.63	61.71	96.15	1548.51	1116.15	3.58	
14900.00	15057.79	90.00	266.69	6961.00	221.41	62.44	96.15	1548.50	1110.62	3.54	
15000.00	15157.79	90.00	266.69	6961.00	224.18	63.16	96.15	1548.49	1105.09	3.49	
15100.00	15257.79	90.00	266.69	6961.00	226.96	63.89	96.15	1548.48	1099.56	3.45	
15136.85	15294.64	90.00	266.69	6961.00	227.98	64.16	96.15	1548.47	1097.53	3.43	
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	0.08	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	228.07	120.15	116.06	29.38	
900.00	899.93	0.00	0.00	899.93	1.91	1.91	226.90	122.51	118.01	27.25	
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	224.68	127.38	122.47	25.91	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	221.67	135.03	129.67	25.21	
1200.00	1198.15	0.00	0.00	1198.15	2.58	2.58	218.17	145.75	139.94	25.08	
1300.00	1296.63	0.00	0.00	1296.63	2.80	2.80	214.50	159.82	153.55	25.47	
1400.00	1394.44	0.00	0.00	1394.44	3.02	3.02	210.90	177.44	170.68	26.28	
1500.00	1491.46	0.00	0.00	1491.46	3.24	3.24	207.54	198.71	191.47	27.47	
1600.00	1587.58	0.00	0.00	1587.58	3.46	3.46	204.51	223.67	215.95	28.98	
1700.00	1682.68	0.00	0.00	1682.68	3.67	3.67	201.83	252.29	244.09	30.76	
1800.00	1781.56	1.63	92.75	1781.55	3.88	3.88	199.51	282.34	273.65	32.51	
1900.00	1882.90	3.66	92.75	1882.77	4.09	4.08	198.15	310.88	301.69	33.86	
2000.00	1985.69	5.71	92.75	1985.21	4.30	4.27	197.55	337.60	327.92	34.86	
2100.00	2089.69	7.79	92.75	2088.49	4.54	4.47	197.54	362.39	352.18	35.49	
2200.00	2194.64	9.89	92.75	2192.19	4.80	4.68	198.02	385.21	374.43	35.73	
2300.00	2300.28	12.01	92.75	2295.90	5.09	4.88	198.90	406.09	394.65	35.50	
2400.00	2406.32	14.13	92.75	2399.19	5.44	5.09	200.15	425.14	412.97	34.95	
2500.00	2512.47	16.25	92.75	2501.62	5.84	5.30	201.73	442.49	429.54	34.15	
2600.00	2612.85	16.91	92.75	2597.72	6.28	5.52	203.42	458.78	445.00	33.28	
2700.00	2710.67	16.91	92.75	2691.31	6.73	5.76	204.97	475.34	460.64	32.34	
2800.00	2808.49	16.91	92.75	2784.90	7.21	6.00	206.41	492.22	476.55	31.41	
2900.00	2906.30	16.91	92.75	2878.48	7.70	6.24	207.76	509.38	492.73	30.58	
3000.00	3004.12	16.91	92.75	2972.07	8.21	6.49	209.03	526.81	509.15	29.82	
3100.00	3101.94	16.91	92.75	3065.66	8.74	6.75	210.21	544.47	525.79	29.14	
3200.00	3199.75	16.91	92.75	3159.25	9.27	7.01	211.32	562.35	542.59	28.46	
3300.00	3297.57	16.91	92.75	3252.84	9.81	7.27	212.36	580.42	559.57	27.85	

## 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
3400.00	3395.39	16.91	92.75	3346.43	10.36	7.53	213.34	598.66	576.72	27.28	
3500.00	3493.21	16.91	92.75	3440.02	10.92	7.80	214.26	617.07	593.99	26.75	
3600.00	3591.02	16.91	92.75	3533.61	11.48	8.07	215.13	635.62	611.41	26.26	
3700.00	3688.84	16.91	92.75	3627.20	12.05	8.34	215.94	654.30	628.95	25.81	
3800.00	3786.66	16.91	92.75	3720.78	12.62	8.61	216.72	673.11	646.62	25.41	
3900.00	3884.47	16.91	92.75	3814.37	13.19	8.88	217.45	692.03	664.39	25.04	
4000.00	3982.29	16.91	92.75	3907.96	13.77	9.16	218.14	711.06	682.26	24.70	
4100.00	4080.11	16.91	92.75	4001.55	14.35	9.44	218.80	730.18	700.20	24.36	
4200.00	4177.93	16.91	92.75	4095.14	14.93	9.71	219.42	749.38	718.22	24.04	
4300.00	4275.74	16.91	92.75	4188.73	15.52	9.99	220.01	768.67	736.32	23.76	
4400.00	4373.56	16.91	92.75	4282.32	16.10	10.27	220.58	788.04	754.49	23.49	
4500.00	4471.38	16.91	92.75	4375.91	16.69	10.56	221.12	807.48	772.74	23.24	
4600.00	4569.19	16.91	92.75	4469.50	17.28	10.84	221.63	826.98	791.05	23.01	
4700.00	4667.01	16.91	92.75	4563.08	17.87	11.12	222.11	846.54	809.41	22.80	
4800.00	4764.83	16.91	92.75	4656.67	18.47	11.41	222.58	866.16	827.84	22.60	
4900.00	4862.65	16.91	92.75	4750.26	19.06	11.69	223.03	885.83	846.32	22.42	
5000.00	4960.46	16.91	92.75	4843.85	19.65	11.98	223.45	905.55	864.84	22.24	
5100.00	5058.28	16.91	92.75	4937.44	20.25	12.26	223.86	925.32	883.41	22.08	
5200.00	5156.10	16.91	92.75	5031.03	20.84	12.55	224.25	945.13	902.03	21.93	
5300.00	5253.92	16.91	92.75	5124.62	21.44	12.84	224.63	964.99	920.69	21.78	
5400.00	5351.73	16.91	92.75	5218.21	22.04	13.12	224.99	984.88	939.38	21.65	
5500.00	5449.55	16.91	92.75	5311.80	22.64	13.41	225.33	1004.80	958.10	21.52	
5600.00	5547.37	16.91	92.75	5405.38	23.24	13.70	225.67	1024.76	976.85	21.39	
5700.00	5645.18	16.91	92.75	5498.97	23.84	13.99	225.98	1044.76	995.63	21.27	
5800.00	5743.00	16.91	92.75	5592.56	24.44	14.28	226.29	1064.78	1014.44	21.15	
5900.00	5840.82	16.91	92.75	5686.15	25.04	14.57	226.59	1084.83	1033.28	21.05	
6000.00	5938.64	16.91	92.75	5779.74	25.64	14.86	226.87	1104.91	1052.15	20.94	
6100.00	6036.45	16.91	92.75	5873.33	26.24	15.15	227.15	1125.01	1071.04	20.85	
6200.00	6134.27	16.91	92.75	5966.92	26.84	15.44	227.42	1145.14	1089.96	20.75	
6300.00	6231.33	16.91	92.75	6059.78	27.44	15.73	204.11	1165.76	1109.42	20.69	
6400.00	6332.27	11.01	96.19	6157.34	27.91	16.01	171.80	1187.25	1129.89	20.70	
6500.00	6438.54	2.99	124.68	6262.76	28.14	16.01	144.70	1209.01	1151.02	20.85	
6600.00	6548.99	6.74	250.89	6372.98	28.19	15.65	128.50	1230.54	1172.31	21.13	
6700.00	6663.97	15.78	260.15	6485.63	28.06	14.93	119.02	1251.33	1193.24	21.54	
6800.00	6783.63	25.32	262.78	6597.55	27.79	13.84	113.03	1270.88	1213.22	22.04	
6900.00	6907.90	35.24	264.07	6704.74	27.44	12.45	108.94	1288.65	1231.62	22.60	
7000.00	7036.33	45.50	264.87	6802.46	27.14	10.93	105.97	1304.16	1247.83	23.15	
7100.00	7168.06	56.03	265.44	6885.67	27.01	9.59	103.73	1316.97	1261.20	23.62	
7200.00	7301.84	66.72	265.89	6949.67	27.18	8.89	101.98	1326.72	1271.17	23.88	
7300.00	7436.11	77.46	266.27	6990.90	27.81	9.23	100.62	1333.18	1277.15	23.79	
7400.00	7569.19	88.10	266.62	7007.61	28.80	10.50	99.58	1336.25	1278.95	23.32	
7500.00	7674.79	90.00	266.68	7008.00	29.85	11.18	99.17	1336.72	1277.57	22.60	
7600.00	7774.79	90.00	266.68	7008.00	31.06	11.67	99.17	1336.69	1275.32	21.78	
7700.00	7874.79	90.00	266.68	7008.00	32.47	12.18	99.17	1336.66	1272.72	20.90	
7800.00	7974.79	90.00	266.68	7008.00	34.05	12.72	99.17	1336.64	1269.58	19.93	
7900.00	8074.79	90.00	266.68	7008.00	35.78	13.27	99.17	1336.61	1266.33	19.02	
8000.00	8174.79	90.00	266.68	7008.00	37.64	13.84	99.17	1336.59	1262.70	18.09	
8100.00	8274.79	90.00	266.68	7008.00	39.61	14.43	99.17	1336.56	1258.83	17.20	
8200.00	8374.79	90.00	266.68	7008.00	41.67	15.03	99.17	1336.53	1254.86	16.36	
8300.00	8474.79	90.00	266.68	7008.00	43.82	15.64	99.17	1336.51	1250.70	15.58	
8400.00	8574.79	90.00	266.68	7008.00	46.04	16.26	99.17	1336.48	1246.29	14.82	
8500.00	8674.79	90.00	266.68	7008.00	48.31	16.89	99.17	1336.45	1241.79	14.12	
8600.00	8774.79	90.00	266.68	7008.00	50.64	17.52	99.17	1336.43	1237.21	13.47	
8700.00	8874.79	90.00	266.68	7008.00	53.02	18.17	99.17	1336.40	1232.54	12.87	
8800.00	8974.79	90.00	266.68	7008.00	55.43	18.82	99.17	1336.38	1227.79	12.31	
8900.00	9074.79	90.00	266.68	7008.00	57.88	19.48	99.17	1336.35	1222.97	11.79	
9000.00	9174.79	90.00	266.68	7008.00	60.36	20.14	99.17	1336.32	1218.08	11.30	
9100.00	9274.79	90.00	266.68	7008.00	62.86	20.81	99.17	1336.30	1213.14	10.85	

## 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
9200.00	9374.79	90.00	266.68	7008.00	65.39	21.48	99.17	1336.27	1208.14	10.43	
9300.00	9474.79	90.00	266.68	7008.00	67.94	22.16	99.17	1336.24	1203.10	10.04	
9400.00	9574.79	90.00	266.68	7008.00	70.51	22.83	99.17	1336.22	1198.02	9.67	
9500.00	9674.79	90.00	266.68	7008.00	73.10	23.52	99.17	1336.19	1192.91	9.33	
9600.00	9774.79	90.00	266.68	7008.00	75.70	24.20	99.17	1336.17	1187.76	9.00	
9700.00	9874.79	90.00	266.68	7008.00	78.31	24.89	99.17	1336.14	1182.59	8.70	
9800.00	9974.79	90.00	266.68	7008.00	80.94	25.58	99.17	1336.11	1177.39	8.42	
9900.00	10074.79	90.00	266.68	7008.00	83.58	26.27	99.17	1336.09	1172.17	8.15	
10000.00	10174.79	90.00	266.68	7008.00	86.23	26.97	99.17	1336.06	1166.93	7.90	
10100.00	10274.79	90.00	266.68	7008.00	88.88	27.67	99.17	1336.03	1161.66	7.66	
10200.00	10374.79	90.00	266.68	7008.00	91.55	28.36	99.17	1336.01	1156.38	7.44	
10300.00	10474.79	90.00	266.68	7008.00	94.22	29.07	99.17	1335.98	1151.09	7.23	
10400.00	10574.79	90.00	266.68	7008.00	96.90	29.77	99.17	1335.96	1145.78	7.02	
10500.00	10674.79	90.00	266.68	7008.00	99.59	30.47	99.17	1335.93	1140.46	6.83	
10600.00	10774.79	90.00	266.68	7008.00	102.28	31.18	99.17	1335.90	1135.12	6.65	
10700.00	10874.79	90.00	266.68	7008.00	104.98	31.88	99.17	1335.88	1129.78	6.48	
10800.00	10974.79	90.00	266.68	7008.00	107.69	32.59	99.17	1335.85	1124.42	6.32	
10900.00	11074.79	90.00	266.68	7008.00	110.39	33.30	99.18	1335.82	1119.05	6.16	
11000.00	11174.79	90.00	266.68	7008.00	113.11	34.01	99.18	1335.80	1113.68	6.01	
11100.00	11274.79	90.00	266.68	7008.00	115.82	34.72	99.18	1335.77	1108.30	5.87	
11200.00	11374.79	90.00	266.68	7008.00	118.54	35.43	99.18	1335.75	1102.90	5.74	
11300.00	11474.79	90.00	266.68	7008.00	121.27	36.14	99.18	1335.72	1097.51	5.61	
11400.00	11574.79	90.00	266.68	7008.00	123.99	36.86	99.18	1335.69	1092.10	5.48	
11500.00	11674.79	90.00	266.68	7008.00	126.72	37.57	99.18	1335.67	1086.69	5.36	
11600.00	11774.79	90.00	266.68	7008.00	129.46	38.29	99.18	1335.64	1081.27	5.25	
11700.00	11874.79	90.00	266.68	7008.00	132.19	39.00	99.18	1335.61	1075.85	5.14	
11800.00	11974.79	90.00	266.68	7008.00	134.93	39.72	99.18	1335.59	1070.42	5.04	
11900.00	12074.79	90.00	266.68	7008.00	137.67	40.43	99.18	1335.56	1064.99	4.94	
12000.00	12174.79	90.00	266.68	7008.00	140.41	41.15	99.18	1335.54	1059.55	4.84	
12100.00	12274.79	90.00	266.68	7008.00	143.16	41.87	99.18	1335.51	1054.11	4.75	
12200.00	12374.79	90.00	266.68	7008.00	145.91	42.59	99.18	1335.48	1048.67	4.66	
12300.00	12474.79	90.00	266.68	7008.00	148.66	43.31	99.18	1335.46	1043.22	4.57	
12400.00	12574.79	90.00	266.68	7008.00	151.41	44.03	99.18	1335.43	1037.76	4.49	
12500.00	12674.79	90.00	266.68	7008.00	154.16	44.75	99.18	1335.40	1032.31	4.41	
12600.00	12774.79	90.00	266.68	7008.00	156.91	45.47	99.18	1335.38	1026.85	4.33	
12700.00	12874.79	90.00	266.68	7008.00	159.67	46.19	99.18	1335.35	1021.38	4.25	
12800.00	12974.79	90.00	266.68	7008.00	162.43	46.91	99.18	1335.33	1015.92	4.18	
12900.00	13074.79	90.00	266.68	7008.00	165.18	47.63	99.18	1335.30	1010.45	4.11	
13000.00	13174.79	90.00	266.68	7008.00	167.94	48.35	99.18	1335.27	1004.98	4.04	
13100.00	13274.79	90.00	266.68	7008.00	170.71	49.07	99.18	1335.25	999.51	3.98	
13200.00	13374.79	90.00	266.68	7008.00	173.47	49.80	99.18	1335.22	994.03	3.91	
13300.00	13474.79	90.00	266.68	7008.00	176.23	50.52	99.18	1335.20	988.55	3.85	
13400.00	13574.79	90.00	266.68	7008.00	178.99	51.24	99.18	1335.17	983.07	3.79	
13500.00	13674.79	90.00	266.68	7008.00	181.76	51.96	99.18	1335.14	977.59	3.73	
13600.00	13774.79	90.00	266.68	7008.00	184.53	52.69	99.18	1335.12	972.10	3.68	
13700.00	13874.79	90.00	266.68	7008.00	187.29	53.41	99.18	1335.09	966.62	3.62	
13800.00	13974.79	90.00	266.68	7008.00	190.06	54.14	99.18	1335.06	961.13	3.57	
13900.00	14074.79	90.00	266.68	7008.00	192.83	54.86	99.18	1335.04	955.64	3.52	
14000.00	14174.79	90.00	266.68	7008.00	195.60	55.59	99.18	1335.01	950.15	3.47	
14100.00	14274.79	90.00	266.68	7008.00	198.37	56.31	99.18	1334.99	944.65	3.42	
14200.00	14374.79	90.00	266.68	7008.00	201.14	57.04	99.18	1334.96	939.16	3.37	
14300.00	14474.79	90.00	266.68	7008.00	203.92	57.76	99.18	1334.93	933.66	3.33	
14400.00	14574.79	90.00	266.68	7008.00	206.69	58.49	99.18	1334.91	928.17	3.28	
14500.00	14674.79	90.00	266.68	7008.00	209.46	59.21	99.18	1334.88	922.67	3.24	
14600.00	14774.79	90.00	266.68	7008.00	212.24	59.94	99.18	1334.85	917.17	3.20	
14700.00	14874.79	90.00	266.68	7008.00	215.01	60.66	99.18	1334.83	911.66	3.15	
14800.00	14974.79	90.00	266.68	7008.00	217.79	61.39	99.18	1334.80	906.16	3.11	
14900.00	15074.79	90.00	266.68	7008.00	220.56	62.12	99.18	1334.78	900.66	3.07	

## 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
15000.00	15174.79	90.00	266.68	7008.00	223.34	62.84	99.18	1334.75	895.15	3.04	
15100.00	15274.79	90.00	266.68	7008.00	226.11	63.57	99.18	1334.72	889.65	3.00	
15136.85	15311.63	90.00	266.68	7008.00	227.14	63.84	99.18	1334.71	887.62	2.99	
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	0.03	100.19	99.45	136.62	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.03	100.19	99.23	105.02	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.03	100.19	98.78	71.38	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.03	100.19	98.33	54.07	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.03	100.19	97.88	43.51	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.03	100.19	97.43	36.40	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.03	100.19	96.98	31.29	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.03	100.19	96.54	27.44	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	227.99	100.48	96.39	24.57	
900.00	899.93	0.00	0.00	899.93	1.91	1.91	226.58	102.85	98.35	22.88	
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	223.96	107.76	102.85	21.92	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	220.47	115.53	110.17	21.57	
1200.00	1198.15	0.00	0.00	1198.15	2.58	2.58	216.52	126.47	120.66	21.78	
1300.00	1296.63	0.00	0.00	1296.63	2.80	2.80	212.48	140.86	134.58	22.45	
1400.00	1394.44	0.00	0.00	1394.44	3.02	3.02	208.65	158.87	152.13	23.56	
1500.00	1493.00	0.86	100.92	1493.00	3.24	3.24	205.21	180.41	173.20	25.03	
1600.00	1593.81	2.88	100.92	1593.75	3.43	3.43	202.75	203.90	196.22	26.56	
1700.00	1695.19	4.90	100.92	1694.89	3.64	3.62	201.21	228.71	220.56	28.06	
1800.00	1797.57	6.95	100.92	1796.71	3.87	3.82	200.32	253.01	244.37	29.26	
1900.00	1901.17	9.02	100.92	1899.31	4.11	4.02	200.20	275.12	265.91	29.88	
2000.00	2005.76	11.12	100.92	2002.28	4.40	4.23	200.67	294.97	285.16	30.07	
2100.00	2111.07	13.22	100.92	2105.22	4.73	4.44	201.64	312.59	302.12	29.87	
2200.00	2216.81	15.34	100.92	2207.69	5.13	4.65	203.05	328.09	316.90	29.31	
2300.00	2320.73	16.88	100.92	2307.42	5.57	4.87	204.81	341.70	329.69	28.44	
2400.00	2419.32	16.88	100.92	2401.76	6.04	5.11	206.47	355.04	342.13	27.50	
2500.00	2517.91	16.88	100.92	2496.11	6.53	5.36	208.02	368.66	354.83	26.66	
2600.00	2616.50	16.88	100.92	2590.45	7.03	5.61	209.46	382.52	367.74	25.87	
2700.00	2715.09	16.88	100.92	2684.79	7.56	5.86	210.79	396.61	380.83	25.14	
2800.00	2813.68	16.88	100.92	2779.13	8.10	6.12	212.04	410.89	394.06	24.41	
2900.00	2912.27	16.88	100.92	2873.47	8.65	6.38	213.20	425.35	407.44	23.74	
3000.00	3010.86	16.88	100.92	2967.81	9.20	6.65	214.29	439.98	420.97	23.14	
3100.00	3109.45	16.88	100.92	3062.15	9.77	6.92	215.30	454.75	434.63	22.61	
3200.00	3208.04	16.88	100.92	3156.49	10.34	7.19	216.25	469.65	448.42	22.12	
3300.00	3306.63	16.88	100.92	3250.83	10.91	7.46	217.15	484.67	462.32	21.69	
3400.00	3405.22	16.88	100.92	3345.17	11.49	7.74	217.99	499.80	476.33	21.30	
3500.00	3503.81	16.88	100.92	3439.51	12.08	8.02	218.78	515.02	490.43	20.94	
3600.00	3602.40	16.88	100.92	3533.85	12.66	8.30	219.52	530.34	504.57	20.57	
3700.00	3700.99	16.88	100.92	3628.19	13.25	8.58	220.23	545.75	518.77	20.23	
3800.00	3799.58	16.88	100.92	3722.54	13.84	8.86	220.89	561.22	533.05	19.92	
3900.00	3898.17	16.88	100.92	3816.88	14.44	9.14	221.52	576.77	547.40	19.64	
4000.00	3996.76	16.88	100.92	3911.22	15.03	9.43	222.12	592.39	561.81	19.37	
4100.00	4095.35	16.88	100.92	4005.56	15.63	9.71	222.68	608.06	576.27	19.13	
4200.00	4193.94	16.88	100.92	4099.90	16.23	10.00	223.22	623.79	590.79	18.91	
4300.00	4292.53	16.88	100.92	4194.24	16.82	10.28	223.73	639.56	605.36	18.70	
4400.00	4391.12	16.88	100.92	4288.58	17.43	10.57	224.22	655.39	619.98	18.51	
4500.00	4489.71	16.88	100.92	4382.92	18.03	10.86	224.68	671.26	634.64	18.33	
4600.00	4588.30	16.88	100.92	4477.26	18.63	11.15	225.12	687.17	649.34	18.16	
4700.00	4686.89	16.88	100.92	4571.60	19.23	11.44	225.54	703.12	664.08	18.01	
4800.00	4785.49	16.88	100.92	4665.94	19.84	11.73	225.95	719.10	678.85	17.86	
4900.00	4884.08	16.88	100.92	4760.28	20.44	12.02	226.33	735.12	693.65	17.73	
5000.00	4982.67	16.88	100.92	4854.62	21.05	12.31	226.70	751.17	708.49	17.60	

## 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
5100.00	5081.26	16.88	100.92	4948.96	21.65	12.60	227.06	767.25	723.35	17.48	
5200.00	5179.85	16.88	100.92	5043.31	22.26	12.90	227.40	783.36	738.25	17.37	
5300.00	5278.44	16.88	100.92	5137.65	22.87	13.19	227.72	799.49	753.16	17.26	
5400.00	5377.03	16.88	100.92	5231.99	23.48	13.48	228.03	815.64	768.11	17.16	
5500.00	5475.62	16.88	100.92	5326.33	24.08	13.77	228.34	831.82	783.07	17.06	
5600.00	5574.21	16.88	100.92	5420.67	24.69	14.07	228.62	848.02	798.03	16.96	
5700.00	5672.80	16.88	100.92	5515.01	25.30	14.36	228.90	864.24	813.02	16.87	
5800.00	5771.39	16.88	100.92	5609.35	25.91	14.66	229.17	880.48	828.02	16.78	
5900.00	5869.98	16.88	100.92	5703.69	26.52	14.95	229.43	896.74	843.04	16.70	
6000.00	5968.57	16.88	100.92	5798.03	27.13	15.24	229.68	913.01	858.08	16.62	
6100.00	6067.16	16.88	100.92	5892.37	27.74	15.54	229.92	929.31	873.14	16.55	
6200.00	6173.38	10.45	110.13	5995.24	28.18	15.80	229.86	945.30	888.11	16.53	
6300.00	6280.68	4.23	163.03	6101.70	28.37	15.77	205.82	961.08	903.44	16.67	
6400.00	6386.59	8.49	238.51	6207.08	28.34	15.41	172.27	977.25	919.63	16.96	
6500.00	6491.14	16.31	253.05	6309.13	28.14	14.76	143.91	993.51	936.18	17.33	
6600.00	6594.34	24.38	258.14	6405.82	27.83	13.86	126.49	1009.55	952.74	17.77	
6700.00	6696.27	32.44	260.76	6495.40	27.47	12.78	115.86	1025.05	968.90	18.25	
6800.00	6797.00	40.44	262.42	6576.37	27.12	11.59	108.82	1039.73	984.25	18.74	
6900.00	6896.59	48.37	263.59	6647.47	26.86	10.42	103.79	1053.27	998.38	19.19	
7000.00	6995.12	56.22	264.49	6707.69	26.74	9.43	100.03	1065.42	1010.90	19.54	
7100.00	7092.66	63.99	265.24	6756.27	26.82	8.81	97.17	1075.93	1021.45	19.75	
7200.00	7189.25	71.70	265.88	6792.67	27.12	8.72	94.99	1084.59	1029.73	19.77	
7300.00	7284.94	79.33	266.47	6816.59	27.66	9.20	93.38	1091.22	1035.45	19.57	
7400.00	7379.79	86.90	267.02	6827.95	28.41	10.15	92.28	1095.69	1038.56	19.18	
7500.00	7477.38	90.00	267.24	6829.00	29.35	10.92	91.77	1097.81	1038.96	18.65	
7600.00	7577.37	90.00	267.24	6829.00	30.53	11.41	91.77	1098.77	1037.73	18.00	
7700.00	7677.37	90.00	267.24	6829.00	31.91	11.93	91.77	1099.73	1036.00	17.26	
7800.00	7777.36	90.00	267.24	6829.00	33.47	12.47	91.77	1100.69	1033.91	16.48	
7900.00	7877.36	90.00	267.24	6829.00	35.18	13.03	91.77	1101.64	1031.57	15.72	
8000.00	7977.35	90.00	267.24	6829.00	37.02	13.61	91.77	1102.60	1029.00	14.98	
8100.00	8077.35	90.00	267.24	6829.00	38.98	14.20	91.77	1103.56	1026.02	14.23	
8200.00	8177.35	90.00	267.24	6829.00	41.03	14.80	91.76	1104.51	1023.06	13.56	
8300.00	8277.34	90.00	267.24	6829.00	43.17	15.41	91.76	1105.47	1019.72	12.89	
8400.00	8377.34	90.00	267.24	6829.00	45.39	16.04	91.76	1106.43	1016.28	12.27	
8500.00	8477.33	90.00	267.24	6829.00	47.66	16.67	91.76	1107.39	1012.74	11.70	
8600.00	8577.33	90.00	267.24	6829.00	49.99	17.31	91.76	1108.34	1009.09	11.17	
8700.00	8677.32	90.00	267.24	6829.00	52.36	17.96	91.76	1109.30	1005.36	10.67	
8800.00	8777.32	90.00	267.24	6829.00	54.77	18.62	91.75	1110.26	1001.54	10.21	
8900.00	8877.31	90.00	267.24	6829.00	57.22	19.28	91.75	1111.22	997.64	9.78	
9000.00	8977.31	90.00	267.24	6829.00	59.70	19.94	91.75	1112.17	993.67	9.39	
9100.00	9077.30	90.00	267.24	6829.00	62.21	20.61	91.75	1113.13	989.65	9.01	
9200.00	9177.30	90.00	267.24	6829.00	64.74	21.29	91.75	1114.09	985.57	8.67	
9300.00	9277.29	90.00	267.24	6829.00	67.30	21.96	91.75	1115.05	981.44	8.35	
9400.00	9377.29	90.00	267.24	6829.00	69.87	22.65	91.75	1116.00	977.28	8.04	
9500.00	9477.29	90.00	267.24	6829.00	72.46	23.33	91.74	1116.96	973.08	7.76	
9600.00	9577.28	90.00	267.24	6829.00	75.06	24.02	91.74	1117.92	968.85	7.50	
9700.00	9677.28	90.00	267.24	6829.00	77.68	24.71	91.74	1118.87	964.59	7.25	
9800.00	9777.27	90.00	267.24	6829.00	80.31	25.40	91.74	1119.83	960.30	7.02	
9900.00	9877.27	90.00	267.24	6829.00	82.95	26.10	91.74	1120.79	955.99	6.80	
10000.00	9977.26	90.00	267.24	6829.00	85.60	26.79	91.74	1121.75	951.66	6.60	
10100.00	10077.26	90.00	267.24	6829.00	88.26	27.49	91.74	1122.70	947.31	6.40	
10200.00	10177.25	90.00	267.24	6829.00	90.93	28.19	91.73	1123.66	942.94	6.22	
10300.00	10277.25	90.00	267.24	6829.00	93.61	28.89	91.73	1124.62	938.55	6.04	
10400.00	10377.24	90.00	267.24	6829.00	96.29	29.60	91.73	1125.58	934.16	5.88	
10500.00	10477.24	90.00	267.24	6829.00	98.98	30.30	91.73	1126.53	929.74	5.72	
10600.00	10577.24	90.00	267.24	6829.00	101.68	31.01	91.73	1127.49	925.32	5.58	
10700.00	10677.23	90.00	267.24	6829.00	104.38	31.72	91.73	1128.45	920.88	5.44	
10800.00	10777.23	90.00	267.24	6829.00	107.08	32.43	91.73	1129.40	916.44	5.30	

## 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
10900.00	10877.22	90.00	267.24	6829.00	109.80	33.14	91.72	1130.36	911.98	5.18	
11000.00	10977.22	90.00	267.24	6829.00	112.51	33.85	91.72	1131.32	907.52	5.05	
11100.00	11077.21	90.00	267.24	6829.00	115.23	34.56	91.72	1132.28	903.04	4.94	
11200.00	11177.21	90.00	267.24	6829.00	117.95	35.27	91.72	1133.23	898.56	4.83	
11300.00	11277.20	90.00	267.24	6829.00	120.68	35.98	91.72	1134.19	894.07	4.72	
11400.00	11377.20	90.00	267.24	6829.00	123.41	36.70	91.72	1135.15	889.58	4.62	
11500.00	11477.19	90.00	267.24	6829.00	126.15	37.41	91.72	1136.11	885.08	4.53	
11600.00	11577.19	90.00	267.24	6829.00	128.88	38.13	91.71	1137.06	880.57	4.43	
11700.00	11677.18	90.00	267.24	6829.00	131.62	38.85	91.71	1138.02	876.06	4.34	
11800.00	11777.18	90.00	267.24	6829.00	134.36	39.56	91.71	1138.98	871.54	4.26	
11900.00	11877.18	90.00	267.24	6829.00	137.11	40.28	91.71	1139.94	867.02	4.18	
12000.00	11977.17	90.00	267.24	6829.00	139.85	41.00	91.71	1140.89	862.49	4.10	
12100.00	12077.17	90.00	267.24	6829.00	142.60	41.72	91.71	1141.85	857.96	4.02	
12200.00	12177.16	90.00	267.24	6829.00	145.35	42.44	91.70	1142.81	853.42	3.95	
12300.00	12277.16	90.00	267.24	6829.00	148.10	43.16	91.70	1143.76	848.88	3.88	
12400.00	12377.15	90.00	267.24	6829.00	150.86	43.88	91.70	1144.72	844.34	3.81	
12500.00	12477.15	90.00	267.24	6829.00	153.61	44.60	91.70	1145.68	839.79	3.75	
12600.00	12577.14	90.00	267.24	6829.00	156.37	45.32	91.70	1146.64	835.24	3.68	
12700.00	12677.14	90.00	267.24	6829.00	159.13	46.04	91.70	1147.59	830.69	3.62	
12800.00	12777.13	90.00	267.24	6829.00	161.89	46.76	91.70	1148.55	826.13	3.56	
12900.00	12877.13	90.00	267.24	6829.00	164.65	47.48	91.70	1149.51	821.57	3.51	
13000.00	12977.13	90.00	267.24	6829.00	167.41	48.21	91.69	1150.47	817.01	3.45	
13100.00	13077.12	90.00	267.24	6829.00	170.18	48.93	91.69	1151.42	812.45	3.40	
13200.00	13177.12	90.00	267.24	6829.00	172.94	49.65	91.69	1152.38	807.88	3.35	
13300.00	13277.11	90.00	267.24	6829.00	175.71	50.37	91.69	1153.34	803.31	3.29	
13400.00	13377.11	90.00	267.24	6829.00	178.48	51.10	91.69	1154.30	798.74	3.25	
13500.00	13477.10	90.00	267.24	6829.00	181.25	51.82	91.69	1155.25	794.17	3.20	
13600.00	13577.10	90.00	267.24	6829.00	184.01	52.55	91.69	1156.21	789.59	3.15	
13700.00	13677.09	90.00	267.24	6829.00	186.79	53.27	91.68	1157.17	785.01	3.11	
13800.00	13777.09	90.00	267.24	6829.00	189.56	54.00	91.68	1158.12	780.44	3.07	
13900.00	13877.08	90.00	267.24	6829.00	192.33	54.72	91.68	1159.08	775.86	3.02	
14000.00	13977.08	90.00	267.24	6829.00	195.10	55.45	91.68	1160.04	771.27	2.98	
14100.00	14077.07	90.00	267.24	6829.00	197.87	56.17	91.68	1161.00	766.69	2.94	
14200.00	14177.07	90.00	267.24	6829.00	200.65	56.90	91.68	1161.95	762.10	2.91	
14300.00	14277.07	90.00	267.24	6829.00	203.42	57.62	91.68	1162.91	757.52	2.87	
14400.00	14377.06	90.00	267.24	6829.00	206.20	58.35	91.67	1163.87	752.93	2.83	
14500.00	14477.06	90.00	267.24	6829.00	208.98	59.07	91.67	1164.83	748.34	2.80	
14600.00	14577.05	90.00	267.24	6829.00	211.75	59.80	91.67	1165.78	743.75	2.76	
14700.00	14677.05	90.00	267.24	6829.00	214.53	60.53	91.67	1166.74	739.16	2.73	
14800.00	14777.04	90.00	267.24	6829.00	217.31	61.25	91.67	1167.70	734.56	2.70	
14900.00	14877.04	90.00	267.24	6829.00	220.09	61.98	91.67	1168.66	729.97	2.66	
15000.00	14977.03	90.00	267.24	6829.00	222.87	62.71	91.67	1169.61	725.37	2.63	
15100.00	15077.03	90.00	267.24	6829.00	225.65	63.43	91.66	1170.57	720.78	2.60	
15136.85	15113.88	90.00	267.24	6829.00	226.67	63.70	91.66	1170.92	719.08	2.59	
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	80.15	79.41	109.30	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.95	80.15	79.19	84.02	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.95	80.15	78.74	57.11	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.95	80.15	78.30	43.25	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.95	80.15	77.85	34.81	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.95	80.15	77.40	29.12	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.95	80.15	76.95	25.03	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.95	80.15	76.50	21.95	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	227.86	80.44	76.35	19.67	
900.00	899.93	0.00	0.00	899.93	1.91	1.91	226.11	82.82	78.33	18.43	

## 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
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	222.90	87.81	82.89	17.86	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	218.75	95.74	90.38	17.88	
1200.00	1198.15	0.00	0.00	1198.15	2.58	2.58	214.22	106.98	101.17	18.43	
1300.00	1296.63	0.00	0.00	1296.63	2.80	2.80	209.78	121.78	115.50	19.41	
1400.00	1397.52	1.95	107.85	1397.50	3.01	3.01	206.14	139.23	132.51	20.74	
1500.00	1499.06	3.98	107.85	1498.90	3.21	3.20	203.77	157.90	150.73	22.01	
1600.00	1601.13	6.02	107.85	1600.58	3.42	3.40	202.33	177.54	169.90	23.24	
1700.00	1703.71	8.07	107.85	1702.38	3.66	3.59	201.57	197.97	189.81	24.25	
1800.00	1807.11	10.14	107.85	1804.47	3.93	3.79	201.35	217.47	208.78	25.00	
1900.00	1911.48	12.23	107.85	1906.85	4.24	4.00	201.83	234.45	225.16	25.24	
2000.00	2016.54	14.33	107.85	2009.09	4.61	4.22	202.88	248.93	238.97	24.99	
2100.00	2121.51	16.27	107.85	2110.30	5.04	4.44	204.42	261.01	250.31	24.39	
2200.00	2220.61	16.27	107.85	2205.43	5.49	4.68	205.99	272.23	260.72	23.66	
2300.00	2319.71	16.27	107.85	2300.56	5.97	4.92	207.44	283.63	271.26	22.93	
2400.00	2418.81	16.27	107.85	2395.69	6.47	5.17	208.77	295.20	281.93	22.24	
2500.00	2517.91	16.27	107.85	2490.82	6.99	5.42	210.01	306.92	292.71	21.60	
2600.00	2617.01	16.27	107.85	2585.95	7.51	5.68	211.15	318.77	303.61	21.02	
2700.00	2716.11	16.27	107.85	2681.08	8.05	5.94	212.21	330.74	314.58	20.46	
2800.00	2815.22	16.27	107.85	2776.21	8.60	6.21	213.20	342.81	325.62	19.95	
2900.00	2914.32	16.27	107.85	2871.35	9.15	6.48	214.12	354.97	336.76	19.49	
3000.00	3013.42	16.27	107.85	2966.48	9.71	6.75	214.98	367.22	347.94	19.05	
3100.00	3112.52	16.27	107.85	3061.61	10.27	7.02	215.78	379.54	359.19	18.65	
3200.00	3211.62	16.27	107.85	3156.74	10.84	7.29	216.54	391.94	370.50	18.28	
3300.00	3310.72	16.27	107.85	3251.87	11.41	7.57	217.24	404.39	381.87	17.95	
3400.00	3409.82	16.27	107.85	3347.00	11.98	7.85	217.91	416.91	393.29	17.65	
3500.00	3508.92	16.27	107.85	3442.13	12.56	8.13	218.53	429.47	404.75	17.37	
3600.00	3608.03	16.27	107.85	3537.26	13.13	8.41	219.12	442.08	416.24	17.11	
3700.00	3707.13	16.27	107.85	3632.39	13.71	8.69	219.68	454.74	427.76	16.86	
3800.00	3806.23	16.27	107.85	3727.52	14.29	8.97	220.21	467.44	439.32	16.63	
3900.00	3905.33	16.27	107.85	3822.65	14.88	9.26	220.71	480.17	450.91	16.41	
4000.00	4004.43	16.27	107.85	3917.79	15.46	9.54	221.18	492.94	462.54	16.22	
4100.00	4103.53	16.27	107.85	4012.92	16.05	9.83	221.63	505.74	474.19	16.03	
4200.00	4202.63	16.27	107.85	4108.05	16.63	10.11	222.06	518.57	485.88	15.86	
4300.00	4301.73	16.27	107.85	4203.18	17.22	10.40	222.46	531.42	497.58	15.70	
4400.00	4400.84	16.27	107.85	4298.31	17.81	10.69	222.85	544.30	509.31	15.56	
4500.00	4499.94	16.27	107.85	4393.44	18.40	10.97	223.22	557.21	521.07	15.42	
4600.00	4599.04	16.27	107.85	4488.57	18.98	11.26	223.58	570.13	532.84	15.29	
4700.00	4698.14	16.27	107.85	4583.70	19.57	11.55	223.91	583.08	544.62	15.16	
4800.00	4797.24	16.27	107.85	4678.83	20.17	11.84	224.24	596.04	556.41	15.04	
4900.00	4896.34	16.27	107.85	4773.96	20.76	12.13	224.54	609.03	568.22	14.93	
5000.00	4995.44	16.27	107.85	4869.09	21.35	12.42	224.84	622.03	580.05	14.82	
5100.00	5094.54	16.27	107.85	4964.23	21.94	12.71	225.12	635.04	591.89	14.72	
5200.00	5193.64	16.27	107.85	5059.36	22.53	13.00	225.40	648.07	603.75	14.62	
5300.00	5292.75	16.27	107.85	5154.49	23.12	13.29	225.66	661.12	615.62	14.53	
5400.00	5391.85	16.27	107.85	5249.62	23.72	13.58	225.91	674.17	627.50	14.44	
5500.00	5490.95	16.27	107.85	5344.75	24.31	13.87	226.15	687.24	639.39	14.36	
5600.00	5590.05	16.27	107.85	5439.88	24.90	14.17	226.39	700.33	651.30	14.28	
5700.00	5689.15	16.27	107.85	5535.01	25.50	14.46	226.61	713.42	663.21	14.21	
5800.00	5788.25	16.27	107.85	5630.14	26.09	14.75	226.83	726.52	675.14	14.14	
5900.00	5887.35	16.27	107.85	5725.27	26.69	15.04	227.04	739.63	687.07	14.07	
6000.00	5986.45	16.27	107.85	5820.40	27.28	15.34	227.24	752.75	699.02	14.01	
6100.00	6085.56	16.27	107.85	5915.53	27.88	15.63	227.43	765.88	710.97	13.95	
6200.00	6184.66	16.27	107.85	6010.67	28.47	15.92	227.62	779.02	722.93	13.89	
6300.00	6287.84	11.42	118.37	6110.45	28.97	16.20	204.79	792.50	735.32	13.86	
6400.00	6394.33	6.22	165.77	6215.77	29.13	16.22	172.51	806.12	748.35	13.95	
6500.00	6501.99	9.65	227.21	6322.55	29.02	15.92	145.38	819.55	761.60	14.14	
6600.00	6610.72	17.27	246.12	6428.27	28.69	15.30	129.13	832.49	774.73	14.41	
6700.00	6720.40	25.64	253.39	6530.27	28.21	14.38	119.57	844.68	787.40	14.75	

## 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
6800.00	6830.81	34.27	257.24	6625.86	27.68	13.20	113.49	855.86	799.26	15.12	
6900.00	6941.73	43.01	259.70	6712.42	27.17	11.87	109.30	865.79	809.95	15.50	
7000.00	7052.89	51.81	261.46	6787.57	26.81	10.55	106.25	874.29	819.10	15.84	
7100.00	7163.97	60.62	262.84	6849.28	26.68	9.48	103.95	881.18	826.38	16.08	
7200.00	7274.66	69.41	263.99	6895.99	26.86	8.97	102.20	886.33	831.49	16.16	
7300.00	7384.64	78.16	265.01	6926.67	27.37	9.24	100.87	889.67	834.11	16.01	
7400.00	7493.63	86.83	265.96	6940.90	28.18	10.25	99.92	891.16	834.32	15.68	
7500.00	7596.60	90.00	266.30	6942.00	29.17	11.06	99.50	890.96	832.33	15.20	
7600.00	7696.59	90.00	266.30	6942.00	30.34	11.55	99.50	890.27	829.47	14.64	
7700.00	7796.59	90.00	266.30	6942.00	31.71	12.06	99.51	889.59	826.30	14.05	
7800.00	7896.59	90.00	266.30	6942.00	33.26	12.60	99.52	888.91	822.59	13.40	
7900.00	7996.59	90.00	266.30	6942.00	34.96	13.15	99.53	888.23	818.75	12.78	
8000.00	8096.58	90.00	266.30	6942.00	36.80	13.73	99.53	887.55	814.42	12.14	
8100.00	8196.58	90.00	266.30	6942.00	38.75	14.31	99.54	886.86	809.91	11.52	
8200.00	8296.58	90.00	266.30	6942.00	40.80	14.92	99.55	886.18	805.26	10.95	
8300.00	8396.58	90.00	266.30	6942.00	42.93	15.53	99.56	885.50	800.48	10.42	
8400.00	8496.57	90.00	266.30	6942.00	45.14	16.15	99.56	884.82	795.41	9.90	
8500.00	8596.57	90.00	266.30	6942.00	47.41	16.79	99.57	884.14	790.27	9.42	
8600.00	8696.57	90.00	266.30	6942.00	49.73	17.43	99.58	883.46	785.04	8.98	
8700.00	8796.57	90.00	266.30	6942.00	52.10	18.07	99.59	882.77	779.72	8.57	
8800.00	8896.56	90.00	266.30	6942.00	54.51	18.73	99.59	882.09	774.32	8.18	
8900.00	8996.56	90.00	266.30	6942.00	56.95	19.39	99.60	881.41	768.85	7.83	
9000.00	9096.56	90.00	266.30	6942.00	59.43	20.05	99.61	880.73	763.31	7.50	
9100.00	9196.56	90.00	266.30	6942.00	61.93	20.72	99.62	880.05	757.72	7.19	
9200.00	9296.55	90.00	266.30	6942.00	64.46	21.39	99.62	879.36	752.08	6.91	
9300.00	9396.55	90.00	266.30	6942.00	67.01	22.07	99.63	878.68	746.40	6.64	
9400.00	9496.55	90.00	266.30	6942.00	69.57	22.75	99.64	878.00	740.67	6.39	
9500.00	9596.55	90.00	266.30	6942.00	72.16	23.43	99.65	877.32	734.91	6.16	
9600.00	9696.55	90.00	266.30	6942.00	74.76	24.12	99.65	876.64	729.12	5.94	
9700.00	9796.54	90.00	266.30	6942.00	77.37	24.81	99.66	875.96	723.30	5.74	
9800.00	9896.54	90.00	266.30	6942.00	80.00	25.50	99.67	875.27	717.46	5.55	
9900.00	9996.54	90.00	266.30	6942.00	82.63	26.20	99.68	874.59	711.60	5.37	
10000.00	10096.54	90.00	266.30	6942.00	85.28	26.89	99.68	873.91	705.71	5.20	
10100.00	10196.53	90.00	266.30	6942.00	87.94	27.59	99.69	873.23	699.80	5.04	
10200.00	10296.53	90.00	266.30	6942.00	90.60	28.29	99.70	872.55	693.88	4.88	
10300.00	10396.53	90.00	266.30	6942.00	93.27	28.99	99.71	871.86	687.94	4.74	
10400.00	10496.53	90.00	266.30	6942.00	95.95	29.70	99.71	871.18	681.99	4.60	
10500.00	10596.52	90.00	266.30	6942.00	98.64	30.40	99.72	870.50	676.03	4.48	
10600.00	10696.52	90.00	266.30	6942.00	101.33	31.11	99.73	869.82	670.05	4.35	
10700.00	10796.52	90.00	266.30	6942.00	104.03	31.81	99.74	869.14	664.06	4.24	
10800.00	10896.52	90.00	266.30	6942.00	106.73	32.52	99.75	868.46	658.07	4.13	
10900.00	10996.51	90.00	266.30	6942.00	109.44	33.23	99.75	867.78	652.06	4.02	
11000.00	11096.51	90.00	266.30	6942.00	112.15	33.94	99.76	867.09	646.04	3.92	
11100.00	11196.51	90.00	266.30	6942.00	114.86	34.65	99.77	866.41	640.02	3.83	
11200.00	11296.51	90.00	266.30	6942.00	117.58	35.36	99.78	865.73	633.99	3.74	
11300.00	11396.50	90.00	266.30	6942.00	120.31	36.08	99.78	865.05	627.95	3.65	
11400.00	11496.50	90.00	266.30	6942.00	123.03	36.79	99.79	864.37	621.91	3.56	
11500.00	11596.50	90.00	266.30	6942.00	125.76	37.50	99.80	863.69	615.86	3.49	
11600.00	11696.50	90.00	266.30	6942.00	128.49	38.22	99.81	863.00	609.80	3.41	
11700.00	11796.50	90.00	266.30	6942.00	131.23	38.94	99.82	862.32	603.74	3.33	
11800.00	11896.49	90.00	266.30	6942.00	133.97	39.65	99.82	861.64	597.67	3.26	
11900.00	11996.49	90.00	266.30	6942.00	136.71	40.37	99.83	860.96	591.60	3.20	
12000.00	12096.49	90.00	266.30	6942.00	139.45	41.09	99.84	860.28	585.53	3.13	
12100.00	12196.49	90.00	266.30	6942.00	142.19	41.81	99.85	859.60	579.45	3.07	
12200.00	12296.48	90.00	266.30	6942.00	144.94	42.52	99.85	858.92	573.37	3.01	
12300.00	12396.48	90.00	266.30	6942.00	147.68	43.24	99.86	858.24	567.28	2.95	
12400.00	12496.48	90.00	266.30	6942.00	150.43	43.96	99.87	857.55	561.19	2.89	
12500.00	12596.48	90.00	266.30	6942.00	153.18	44.68	99.88	856.87	555.10	2.84	



## 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
12600.00	12696.47	90.00	266.30	6942.00	155.94	45.40	99.89	856.19	549.01	2.79	
12700.00	12796.47	90.00	266.30	6942.00	158.69	46.13	99.89	855.51	542.91	2.74	
12800.00	12896.47	90.00	266.30	6942.00	161.45	46.85	99.90	854.83	536.81	2.69	
12900.00	12996.47	90.00	266.30	6942.00	164.20	47.57	99.91	854.15	530.71	2.64	
13000.00	13096.46	90.00	266.30	6942.00	166.96	48.29	99.92	853.47	524.60	2.60	
13100.00	13196.46	90.00	266.30	6942.00	169.72	49.01	99.93	852.79	518.49	2.55	
13200.00	13296.46	90.00	266.30	6942.00	172.48	49.74	99.93	852.10	512.38	2.51	
13300.00	13396.46	90.00	266.30	6942.00	175.25	50.46	99.94	851.42	506.27	2.47	SF(Lo)
13400.00	13496.45	90.00	266.30	6942.00	178.01	51.18	99.95	850.74	500.16	2.43	SF(Lo)
13500.00	13596.45	90.00	266.30	6942.00	180.77	51.91	99.96	850.06	494.04	2.39	SF(Lo)
13600.00	13696.45	90.00	266.30	6942.00	183.54	52.63	99.97	849.38	487.93	2.35	SF(Lo)
13700.00	13796.45	90.00	266.30	6942.00	186.30	53.35	99.97	848.70	481.81	2.31	SF(Lo)
13800.00	13896.44	90.00	266.30	6942.00	189.07	54.08	99.98	848.02	475.69	2.28	SF(Lo)
13900.00	13996.44	90.00	266.30	6942.00	191.84	54.80	99.99	847.34	469.57	2.24	SF(Lo)
14000.00	14096.44	90.00	266.30	6942.00	194.61	55.53	100.00	846.66	463.44	2.21	SF(Lo)
14100.00	14196.44	90.00	266.30	6942.00	197.37	56.25	100.01	845.97	457.32	2.18	SF(Lo)
14200.00	14296.44	90.00	266.30	6942.00	200.14	56.98	100.02	845.29	451.20	2.14	SF(Lo)
14300.00	14396.43	90.00	266.30	6942.00	202.91	57.70	100.02	844.61	445.07	2.11	SF(Lo)
14400.00	14496.43	90.00	266.30	6942.00	205.69	58.43	100.03	843.93	438.94	2.08	SF(Lo)
14500.00	14596.43	90.00	266.30	6942.00	208.46	59.15	100.04	843.25	432.81	2.05	SF(Lo)
14600.00	14696.43	90.00	266.30	6942.00	211.23	59.88	100.05	842.57	426.68	2.03	SF(Lo)
14700.00	14796.42	90.00	266.30	6942.00	214.00	60.61	100.06	841.89	420.55	2.00	SF(Lo)
14800.00	14896.42	90.00	266.30	6942.00	216.78	61.33	100.06	841.21	414.42	1.97	SF(Lo)
14900.00	14996.42	90.00	266.30	6942.00	219.55	62.06	100.07	840.53	408.29	1.94	SF(Lo)
15000.00	15096.42	90.00	266.30	6942.00	222.33	62.79	100.08	839.85	402.16	1.92	SF(Lo)
15100.00	15196.41	90.00	266.30	6942.00	225.10	63.51	100.09	839.16	396.03	1.89	SF(Lo)
15136.85	15233.26	90.00	266.30	6942.00	226.12	63.78	100.09	838.91	393.76	1.88	SF(Lo)
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	0.08	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	227.92	60.40	56.32	14.77	CC (Lo)
900.00	899.93	0.00	0.00	899.93	1.91	1.91	225.59	62.80	58.30	13.98	CC (Lo)
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	221.45	67.86	62.94	13.79	
1100.00	1099.13	0.00	0.00	1099.13	2.36	2.36	216.34	76.03	70.67	14.19	
1200.00	1199.17	0.98	115.27	1199.16	2.57	2.57	211.22	87.37	81.57	15.07	
1300.00	1300.49	3.01	115.27	1300.42	2.77	2.76	207.58	100.14	93.93	16.13	
1400.00	1402.25	5.05	115.27	1401.93	2.97	2.95	205.23	113.73	107.07	17.08	
1500.00	1504.46	7.09	115.27	1503.55	3.20	3.15	203.80	127.94	120.82	17.97	
1600.00	1607.09	9.14	115.27	1605.15	3.45	3.35	203.05	142.65	135.05	18.77	
1700.00	1710.13	11.20	115.27	1706.56	3.74	3.56	202.79	157.81	149.64	19.33	
1800.00	1813.79	13.28	115.27	1807.87	4.09	3.77	203.04	171.73	162.97	19.61	
1900.00	1918.11	15.36	115.27	1908.94	4.49	3.99	204.01	182.88	173.48	19.45	
2000.00	2019.11	15.98	115.27	2006.08	4.95	4.23	205.37	192.02	181.89	18.95	
2100.00	2118.60	15.98	115.27	2101.73	5.42	4.47	206.63	201.14	190.22	18.41	
2200.00	2218.09	15.98	115.27	2197.38	5.92	4.72	207.77	210.35	198.59	17.88	
2300.00	2317.58	15.98	115.27	2293.02	6.43	4.98	208.82	219.63	207.02	17.41	
2400.00	2417.07	15.98	115.27	2388.67	6.96	5.24	209.78	228.99	215.50	16.98	
2500.00	2516.56	15.98	115.27	2484.32	7.49	5.50	210.67	238.40	224.01	16.58	
2600.00	2616.06	15.98	115.27	2579.97	8.03	5.77	211.49	247.86	232.54	16.19	

## 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
2700.00	2715.55	15.98	115.27	2675.61	8.58	6.03	212.24	257.37	241.08	15.80	
2800.00	2815.04	15.98	115.27	2771.26	9.14	6.31	212.95	266.92	249.64	15.45	
2900.00	2914.53	15.98	115.27	2866.91	9.70	6.58	213.60	276.50	258.23	15.13	
3000.00	3014.02	15.98	115.27	2962.56	10.26	6.86	214.22	286.13	266.85	14.85	
3100.00	3113.51	15.98	115.27	3058.20	10.83	7.13	214.79	295.78	275.49	14.58	
3200.00	3213.00	15.98	115.27	3153.85	11.40	7.41	215.32	305.46	284.16	14.34	
3300.00	3312.49	15.98	115.27	3249.50	11.97	7.69	215.83	315.16	292.84	14.12	
3400.00	3411.99	15.98	115.27	3345.15	12.54	7.97	216.30	324.89	301.55	13.92	
3500.00	3511.48	15.98	115.27	3440.79	13.12	8.26	216.75	334.63	310.27	13.73	
3600.00	3610.97	15.98	115.27	3536.44	13.69	8.54	217.17	344.40	319.00	13.56	
3700.00	3710.46	15.98	115.27	3632.09	14.27	8.82	217.56	354.18	327.75	13.40	
3800.00	3809.95	15.98	115.27	3727.74	14.85	9.11	217.94	363.98	336.51	13.25	
3900.00	3909.44	15.98	115.27	3823.38	15.43	9.39	218.29	373.80	345.25	13.09	
4000.00	4008.93	15.98	115.27	3919.03	16.01	9.68	218.63	383.62	354.00	12.95	
4100.00	4108.42	15.98	115.27	4014.68	16.59	9.97	218.95	393.46	362.76	12.81	
4200.00	4207.91	15.98	115.27	4110.33	17.18	10.26	219.26	403.32	371.52	12.69	
4300.00	4307.41	15.98	115.27	4205.97	17.76	10.54	219.55	413.18	380.30	12.57	
4400.00	4406.90	15.98	115.27	4301.62	18.34	10.83	219.83	423.05	389.08	12.45	
4500.00	4506.39	15.98	115.27	4397.27	18.93	11.12	220.09	432.93	397.87	12.35	
4600.00	4605.88	15.98	115.27	4492.92	19.51	11.41	220.34	442.82	406.67	12.25	
4700.00	4705.37	15.98	115.27	4588.56	20.10	11.70	220.59	452.72	415.48	12.16	
4800.00	4804.86	15.98	115.27	4684.21	20.68	11.99	220.82	462.63	424.29	12.07	
4900.00	4904.35	15.98	115.27	4779.86	21.27	12.28	221.04	472.54	433.11	11.98	
5000.00	5003.84	15.98	115.27	4875.51	21.85	12.57	221.25	482.46	441.93	11.90	
5100.00	5103.33	15.98	115.27	4971.15	22.44	12.86	221.45	492.39	450.76	11.83	
5200.00	5202.83	15.98	115.27	5066.80	23.03	13.15	221.65	502.32	459.60	11.76	
5300.00	5302.32	15.98	115.27	5162.45	23.62	13.44	221.84	512.26	468.44	11.69	
5400.00	5401.81	15.98	115.27	5258.10	24.20	13.73	222.02	522.20	477.28	11.62	
5500.00	5501.30	15.98	115.27	5353.74	24.79	14.03	222.19	532.15	486.13	11.56	
5600.00	5600.79	15.98	115.27	5449.39	25.38	14.32	222.36	542.10	494.98	11.50	
5700.00	5700.28	15.98	115.27	5545.04	25.97	14.61	222.52	552.06	503.84	11.45	
5800.00	5799.77	15.98	115.27	5640.69	26.56	14.90	222.68	562.02	512.70	11.39	
5900.00	5899.26	15.98	115.27	5736.33	27.14	15.19	222.83	571.99	521.56	11.34	
6000.00	5998.75	15.98	115.27	5831.98	27.73	15.49	222.98	581.96	530.43	11.29	
6100.00	6098.25	15.98	115.27	5927.63	28.32	15.78	223.12	591.93	539.30	11.25	
6200.00	6197.74	15.98	115.27	6023.28	28.91	16.07	223.25	601.91	548.17	11.20	
6300.00	6296.82	15.98	115.27	6118.54	29.50	16.36	200.99	611.91	556.91	11.13	
6400.00	6393.81	15.98	115.27	6211.78	30.07	16.65	170.45	622.35	565.77	11.00	
6500.00	6493.03	10.07	137.14	6308.40	30.38	16.86	145.69	633.93	575.92	10.93	
6600.00	6596.84	8.03	190.48	6411.08	30.38	16.81	131.78	646.52	587.34	10.93	
6700.00	6705.71	13.15	230.78	6518.20	30.07	16.46	124.52	659.71	599.91	11.03	
6800.00	6820.18	21.20	246.00	6627.52	29.49	15.76	120.61	673.05	613.25	11.26	
6900.00	6940.61	30.34	253.14	6735.89	28.71	14.68	118.46	685.97	626.81	11.60	
7000.00	7067.13	40.17	257.34	6839.09	27.88	13.22	117.25	697.87	639.89	12.04	
7100.00	7199.42	50.56	260.21	6931.92	27.17	11.54	116.52	708.10	651.46	12.50	
7200.00	7336.62	61.38	262.39	7008.59	26.85	10.02	116.01	716.09	660.75	12.94	
7300.00	7477.29	72.51	264.21	7063.58	27.07	9.31	115.56	721.36	666.92	13.25	
7400.00	7619.49	83.78	265.83	7092.75	27.90	10.03	115.06	723.61	668.99	13.25	
7500.00	7742.67	90.00	266.68	7097.00	29.02	11.20	114.68	723.33	667.39	12.93	
7600.00	7842.67	90.00	266.68	7097.00	30.12	11.68	114.68	723.31	665.39	12.49	
7700.00	7942.67	90.00	266.68	7097.00	31.43	12.18	114.68	723.29	663.00	12.00	
7800.00	8042.67	90.00	266.68	7097.00	32.93	12.71	114.68	723.26	660.17	11.46	
7900.00	8142.67	90.00	266.68	7097.00	34.59	13.26	114.68	723.24	657.14	10.94	
8000.00	8242.67	90.00	266.68	7097.00	36.39	13.83	114.68	723.22	653.80	10.42	
8100.00	8342.67	90.00	266.68	7097.00	38.31	14.41	114.68	723.19	650.37	9.93	
8200.00	8442.67	90.00	266.68	7097.00	40.33	15.01	114.68	723.17	646.66	9.45	
8300.00	8542.67	90.00	266.68	7097.00	42.44	15.62	114.68	723.15	642.92	9.01	
8400.00	8642.67	90.00	266.68	7097.00	44.62	16.24	114.69	723.12	638.97	8.59	

## 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
8500.00	8742.67	90.00	266.68	7097.00	46.87	16.87	114.69	723.10	634.83	8.19	
8600.00	8842.67	90.00	266.68	7097.00	49.18	17.51	114.69	723.08	630.62	7.82	
8700.00	8942.67	90.00	266.68	7097.00	51.54	18.15	114.69	723.05	626.32	7.47	
8800.00	9042.67	90.00	266.68	7097.00	53.93	18.81	114.69	723.03	621.95	7.15	
8900.00	9142.67	90.00	266.68	7097.00	56.37	19.46	114.69	723.01	617.52	6.85	
9000.00	9242.67	90.00	266.68	7097.00	58.83	20.13	114.69	722.98	613.03	6.58	
9100.00	9342.67	90.00	266.68	7097.00	61.33	20.79	114.69	722.96	608.50	6.32	
9200.00	9442.67	90.00	266.68	7097.00	63.85	21.46	114.69	722.94	603.92	6.07	
9300.00	9542.67	90.00	266.68	7097.00	66.39	22.14	114.69	722.91	599.27	5.85	
9400.00	9642.67	90.00	266.68	7097.00	68.96	22.82	114.69	722.89	594.57	5.63	
9500.00	9742.67	90.00	266.68	7097.00	71.54	23.50	114.69	722.87	589.84	5.43	
9600.00	9842.67	90.00	266.68	7097.00	74.13	24.19	114.70	722.84	585.10	5.25	
9700.00	9942.67	90.00	266.68	7097.00	76.74	24.88	114.70	722.82	580.33	5.07	
9800.00	10042.67	90.00	266.68	7097.00	79.37	25.57	114.70	722.80	575.56	4.91	
9900.00	10142.67	90.00	266.68	7097.00	82.00	26.26	114.70	722.77	570.77	4.75	
10000.00	10242.67	90.00	266.68	7097.00	84.65	26.95	114.70	722.75	565.98	4.61	
10100.00	10342.67	90.00	266.68	7097.00	87.30	27.65	114.70	722.73	561.18	4.47	
10200.00	10442.67	90.00	266.68	7097.00	89.96	28.35	114.70	722.71	556.38	4.35	
10300.00	10542.67	90.00	266.68	7097.00	92.63	29.05	114.70	722.68	551.55	4.22	
10400.00	10642.67	90.00	266.68	7097.00	95.31	29.75	114.70	722.66	546.65	4.11	
10500.00	10742.67	90.00	266.68	7097.00	98.00	30.45	114.70	722.64	541.74	3.99	
10600.00	10842.67	90.00	266.68	7097.00	100.69	31.16	114.70	722.61	536.75	3.89	
10700.00	10942.67	90.00	266.68	7097.00	103.39	31.87	114.70	722.59	531.75	3.79	
10800.00	11042.67	90.00	266.68	7097.00	106.09	32.57	114.71	722.57	526.75	3.69	
10900.00	11142.67	90.00	266.68	7097.00	108.80	33.28	114.71	722.54	521.76	3.60	
11000.00	11242.67	90.00	266.68	7097.00	111.51	33.99	114.71	722.52	516.75	3.51	
11100.00	11342.67	90.00	266.68	7097.00	114.22	34.70	114.71	722.50	511.75	3.43	
11200.00	11442.67	90.00	266.68	7097.00	116.94	35.41	114.71	722.47	506.74	3.35	
11300.00	11542.67	90.00	266.68	7097.00	119.67	36.12	114.71	722.45	501.73	3.27	
11400.00	11642.67	90.00	266.68	7097.00	122.39	36.84	114.71	722.43	496.71	3.20	
11500.00	11742.67	90.00	266.68	7097.00	125.12	37.55	114.71	722.40	491.70	3.13	
11600.00	11842.67	90.00	266.68	7097.00	127.86	38.27	114.71	722.38	486.68	3.06	
11700.00	11942.67	90.00	266.68	7097.00	130.59	38.98	114.71	722.36	481.65	3.00	
11800.00	12042.67	90.00	266.68	7097.00	133.33	39.70	114.71	722.33	476.63	2.94	
11900.00	12142.67	90.00	266.68	7097.00	136.07	40.41	114.71	722.31	471.59	2.88	
12000.00	12242.67	90.00	266.68	7097.00	138.81	41.13	114.72	722.29	466.56	2.82	
12100.00	12342.67	90.00	266.68	7097.00	141.56	41.85	114.72	722.26	461.52	2.77	
12200.00	12442.67	90.00	266.68	7097.00	144.30	42.57	114.72	722.24	456.48	2.72	
12300.00	12542.67	90.00	266.68	7097.00	147.05	43.28	114.72	722.22	451.44	2.67	
12400.00	12642.67	90.00	266.68	7097.00	149.80	44.00	114.72	722.19	446.40	2.62	
12500.00	12742.67	90.00	266.68	7097.00	152.56	44.72	114.72	722.17	441.35	2.57	
12600.00	12842.67	90.00	266.68	7097.00	155.31	45.44	114.72	722.15	436.30	2.53	
12700.00	12942.67	90.00	266.68	7097.00	158.07	46.16	114.72	722.13	431.25	2.48	SF(Lo)
12800.00	13042.67	90.00	266.68	7097.00	160.82	46.88	114.72	722.10	426.19	2.44	SF(Lo)
12900.00	13142.67	90.00	266.68	7097.00	163.58	47.61	114.72	722.08	421.13	2.40	SF(Lo)
13000.00	13242.67	90.00	266.68	7097.00	166.34	48.33	114.72	722.06	416.07	2.36	SF(Lo)
13100.00	13342.67	90.00	266.68	7097.00	169.10	49.05	114.73	722.03	411.01	2.32	SF(Lo)
13200.00	13442.67	90.00	266.68	7097.00	171.86	49.77	114.73	722.01	405.95	2.28	SF(Lo)
13300.00	13542.67	90.00	266.68	7097.00	174.63	50.49	114.73	721.99	400.88	2.25	SF(Lo)
13400.00	13642.67	90.00	266.68	7097.00	177.39	51.22	114.73	721.96	395.82	2.21	SF(Lo)
13500.00	13742.67	90.00	266.68	7097.00	180.16	51.94	114.73	721.94	390.75	2.18	SF(Lo)
13600.00	13842.67	90.00	266.68	7097.00	182.92	52.66	114.73	721.92	385.68	2.15	SF(Lo)
13700.00	13942.67	90.00	266.68	7097.00	185.69	53.39	114.73	721.89	380.61	2.12	SF(Lo)
13800.00	14042.67	90.00	266.68	7097.00	188.46	54.11	114.73	721.87	375.53	2.08	SF(Lo)
13900.00	14142.67	90.00	266.68	7097.00	191.23	54.84	114.73	721.85	370.46	2.05	SF(Lo)
14000.00	14242.67	90.00	266.68	7097.00	194.00	55.56	114.73	721.82	365.38	2.03	SF(Lo)
14100.00	14342.67	90.00	266.68	7097.00	196.77	56.28	114.73	721.80	360.30	2.00	SF(Lo)
14200.00	14442.67	90.00	266.68	7097.00	199.54	57.01	114.73	721.78	355.22	1.97	SF(Lo)

## 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
14300.00	14542.67	90.00	266.68	7097.00	202.31	57.73	114.74	721.75	350.14	1.94	SF(Lo)
14400.00	14642.67	90.00	266.68	7097.00	205.09	58.46	114.74	721.73	345.06	1.92	SF(Lo)
14500.00	14742.67	90.00	266.68	7097.00	207.86	59.19	114.74	721.71	339.98	1.89	SF(Lo)
14600.00	14842.67	90.00	266.68	7097.00	210.63	59.91	114.74	721.68	334.90	1.87	SF(Lo)
14700.00	14942.67	90.00	266.68	7097.00	213.41	60.64	114.74	721.66	329.81	1.84	SF(Lo)
14800.00	15042.67	90.00	266.68	7097.00	216.18	61.36	114.74	721.64	324.72	1.82	SF(Lo)
14900.00	15142.67	90.00	266.68	7097.00	218.96	62.09	114.74	721.61	319.64	1.80	SF(Lo)
15000.00	15242.67	90.00	266.68	7097.00	221.74	62.82	114.74	721.59	314.55	1.77	SF(Lo)
15100.00	15342.67	90.00	266.68	7097.00	224.51	63.54	114.74	721.57	309.46	1.75	SF(Lo)
15136.85	15379.52	90.00	266.68	7097.00	225.54	63.81	114.74	721.56	307.59	1.74	SF(Lo)
Secondary Well: Goetzel 33N-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	227.63	40.37	36.28	9.87	CC (Lo)
900.00	899.93	0.00	0.00	899.93	1.91	1.91	224.22	42.80	38.31	9.54	CC (Lo)
1000.00	999.68	0.00	0.00	999.68	2.13	2.13	218.48	48.05	43.12	9.76	CC (Lo)
1100.00	1100.62	2.01	123.78	1100.59	2.34	2.34	213.06	55.29	49.95	10.36	CC (Lo)
1200.00	1201.86	4.04	123.78	1201.69	2.53	2.53	209.32	63.15	57.41	11.01	CC (Lo)
1300.00	1303.40	6.07	123.78	1302.83	2.74	2.72	206.79	71.42	65.26	11.60	
1400.00	1405.24	8.10	123.78	1403.89	2.98	2.92	205.13	79.99	73.38	12.10	
1500.00	1507.38	10.15	123.78	1504.73	3.26	3.12	204.11	88.78	81.69	12.51	
1600.00	1609.81	12.20	123.78	1605.22	3.58	3.33	203.56	97.75	90.13	12.82	
1700.00	1712.53	14.25	123.78	1705.21	3.96	3.55	203.36	106.87	98.70	13.07	
1800.00	1815.65	16.31	123.78	1804.68	4.40	3.77	203.75	114.47	105.68	13.01	
1900.00	1917.64	17.55	123.78	1902.11	4.91	4.01	204.94	119.28	109.78	12.55	
2000.00	2017.51	17.55	123.78	1997.34	5.45	4.27	206.18	123.60	113.33	12.04	
2100.00	2117.38	17.55	123.78	2092.56	6.01	4.53	207.34	127.97	116.90	11.55	
2200.00	2217.26	17.55	123.78	2187.78	6.58	4.80	208.42	132.39	120.48	11.11	
2300.00	2317.13	17.55	123.78	2283.00	7.17	5.07	209.43	136.85	124.05	10.69	
2400.00	2417.00	17.55	123.78	2378.22	7.77	5.35	210.37	141.36	127.65	10.31	
2500.00	2516.87	17.55	123.78	2473.45	8.37	5.63	211.26	145.90	131.25	9.96	
2600.00	2616.74	17.55	123.78	2568.67	8.98	5.91	212.09	150.47	134.85	9.64	
2700.00	2716.62	17.55	123.78	2663.89	9.60	6.20	212.88	155.07	138.46	9.34	
2800.00	2816.49	17.55	123.78	2759.11	10.22	6.49	213.62	159.70	142.09	9.07	
2900.00	2916.36	17.55	123.78	2854.34	10.84	6.78	214.32	164.35	145.73	8.83	
3000.00	3016.23	17.55	123.78	2949.56	11.47	7.07	214.97	169.03	149.37	8.60	
3100.00	3116.11	17.55	123.78	3044.78	12.09	7.36	215.60	173.73	153.02	8.39	
3200.00	3215.98	17.55	123.78	3140.00	12.72	7.66	216.19	178.45	156.68	8.20	
3300.00	3315.85	17.55	123.78	3235.23	13.36	7.95	216.75	183.18	160.35	8.02	
3400.00	3415.72	17.55	123.78	3330.45	13.99	8.25	217.28	187.94	164.03	7.86	
3500.00	3515.59	17.55	123.78	3425.67	14.62	8.55	217.78	192.70	167.72	7.71	
3600.00	3615.47	17.55	123.78	3520.89	15.26	8.85	218.27	197.49	171.42	7.58	
3700.00	3715.34	17.55	123.78	3616.12	15.90	9.15	218.72	202.28	175.11	7.44	
3800.00	3815.21	17.55	123.78	3711.34	16.53	9.45	219.16	207.09	178.80	7.32	
3900.00	3915.08	17.55	123.78	3806.56	17.17	9.75	219.58	211.91	182.51	7.21	
4000.00	4014.95	17.55	123.78	3901.78	17.81	10.05	219.98	216.74	186.22	7.10	
4100.00	4114.83	17.55	123.78	3997.00	18.45	10.35	220.36	221.58	189.93	7.00	
4200.00	4214.70	17.55	123.78	4092.23	19.09	10.65	220.72	226.43	193.66	6.91	
4300.00	4314.57	17.55	123.78	4187.45	19.73	10.95	221.07	231.28	197.39	6.82	

## 5D Anti-Collision Report

Secondary Well: Goetzel 33N-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
4400.00	4414.44	17.55	123.78	4282.67	20.37	11.26	221.41	236.15	201.12	6.74	
4500.00	4514.32	17.55	123.78	4377.89	21.01	11.56	221.73	241.02	204.86	6.67	
4600.00	4614.19	17.55	123.78	4473.12	21.66	11.87	222.04	245.91	208.61	6.59	
4700.00	4714.06	17.55	123.78	4568.34	22.30	12.17	222.33	250.79	212.36	6.53	
4800.00	4813.93	17.55	123.78	4663.56	22.94	12.47	222.62	255.69	216.12	6.46	
4900.00	4913.80	17.55	123.78	4758.78	23.58	12.78	222.89	260.59	219.86	6.40	
5000.00	5013.68	17.55	123.78	4854.01	24.23	13.08	223.16	265.49	223.61	6.34	
5100.00	5113.55	17.55	123.78	4949.23	24.87	13.39	223.41	270.41	227.36	6.28	
5200.00	5213.42	17.55	123.78	5044.45	25.51	13.69	223.66	275.32	231.12	6.23	
5300.00	5313.29	17.55	123.78	5139.67	26.16	14.00	223.90	280.25	234.88	6.18	
5400.00	5413.17	17.55	123.78	5234.90	26.80	14.31	224.13	285.17	238.64	6.13	
5500.00	5513.04	17.55	123.78	5330.12	27.45	14.61	224.35	290.10	242.41	6.08	
5600.00	5612.91	17.55	123.78	5425.34	28.09	14.92	224.56	295.04	246.18	6.04	
5700.00	5712.78	17.55	123.78	5520.56	28.74	15.22	224.77	299.98	249.95	6.00	
5800.00	5812.65	17.55	123.78	5615.78	29.38	15.53	224.97	304.92	253.73	5.96	
5900.00	5912.53	17.55	123.78	5711.01	30.02	15.84	225.16	309.87	257.51	5.92	
6000.00	6012.40	17.55	123.78	5806.23	30.67	16.14	225.35	314.82	261.29	5.88	
6100.00	6112.27	17.55	123.78	5901.45	31.31	16.45	225.53	319.77	265.08	5.85	
6200.00	6212.14	17.55	123.78	5996.67	31.96	16.76	225.71	324.72	268.86	5.81	
6300.00	6312.36	14.47	133.85	6092.63	32.49	17.05	204.09	329.99	272.73	5.76	
6400.00	6413.81	10.68	167.66	6191.76	32.58	17.16	173.23	335.78	277.49	5.76	
6500.00	6516.34	12.25	209.12	6292.41	32.30	17.02	147.48	341.94	283.05	5.81	
6600.00	6619.95	17.94	232.85	6392.49	31.68	16.63	132.52	348.33	289.26	5.90	
6700.00	6724.58	25.16	244.56	6489.79	30.82	15.95	124.17	354.79	295.91	6.03	
6800.00	6830.19	32.97	251.22	6582.05	29.82	14.98	119.17	361.15	302.79	6.19	
6900.00	6936.67	41.09	255.56	6667.00	28.83	13.75	115.94	367.26	309.63	6.37	
7000.00	7043.89	49.37	258.68	6742.46	27.99	12.33	113.70	372.97	316.15	6.56	
7100.00	7151.71	57.77	261.13	6806.43	27.44	10.90	112.07	378.13	322.05	6.74	
7200.00	7259.95	66.25	263.16	6857.19	27.27	9.76	110.82	382.63	326.92	6.87	
7300.00	7368.41	74.76	264.95	6893.36	27.55	9.36	109.83	386.37	330.54	6.92	
7400.00	7476.87	83.28	266.59	6914.00	28.22	9.98	109.04	389.26	332.68	6.88	
7500.00	7583.40	90.00	267.85	6919.00	29.19	11.24	108.48	391.32	333.39	6.76	
7600.00	7683.38	90.00	267.85	6919.00	30.25	11.73	108.38	393.22	333.28	6.56	
7700.00	7783.36	90.00	267.85	6919.00	31.52	12.25	108.29	395.13	332.80	6.34	
7800.00	7883.34	90.00	267.85	6919.00	32.97	12.79	108.20	397.04	331.91	6.10	
7900.00	7983.32	90.00	267.85	6919.00	34.59	13.36	108.11	398.95	330.80	5.85	
8000.00	8083.30	90.00	267.85	6919.00	36.35	13.94	108.02	400.86	329.28	5.60	
8100.00	8183.28	90.00	267.85	6919.00	38.24	14.54	107.93	402.78	327.63	5.36	
8200.00	8283.26	90.00	267.85	6919.00	40.23	15.16	107.85	404.69	325.88	5.13	
8300.00	8383.24	90.00	267.85	6919.00	42.32	15.78	107.76	406.60	323.89	4.92	
8400.00	8483.22	90.00	267.85	6919.00	44.48	16.42	107.67	408.52	321.58	4.70	
8500.00	8583.20	90.00	267.85	6919.00	46.71	17.06	107.59	410.44	319.20	4.50	
8600.00	8683.18	90.00	267.85	6919.00	49.00	17.71	107.50	412.35	316.74	4.31	
8700.00	8783.16	90.00	267.85	6919.00	51.34	18.37	107.42	414.27	314.19	4.14	
8800.00	8883.14	90.00	267.85	6919.00	53.73	19.03	107.34	416.19	311.55	3.98	
8900.00	8983.12	90.00	267.85	6919.00	56.15	19.70	107.26	418.11	308.83	3.83	
9000.00	9083.10	90.00	267.85	6919.00	58.61	20.37	107.17	420.03	306.05	3.69	
9100.00	9183.08	90.00	267.85	6919.00	61.09	21.04	107.09	421.95	303.21	3.55	
9200.00	9283.06	90.00	267.85	6919.00	63.61	21.72	107.01	423.87	300.31	3.43	
9300.00	9383.04	90.00	267.85	6919.00	66.15	22.40	106.93	425.79	297.36	3.32	
9400.00	9483.02	90.00	267.85	6919.00	68.70	23.09	106.86	427.72	294.37	3.21	
9500.00	9583.00	90.00	267.85	6919.00	71.28	23.78	106.78	429.64	291.34	3.11	
9600.00	9682.98	90.00	267.85	6919.00	73.87	24.47	106.70	431.57	288.28	3.01	
9700.00	9782.96	90.00	267.85	6919.00	76.48	25.16	106.62	433.49	285.18	2.92	
9800.00	9882.94	90.00	267.85	6919.00	79.10	25.86	106.55	435.42	282.05	2.84	
9900.00	9982.92	90.00	267.85	6919.00	81.73	26.55	106.47	437.35	278.90	2.76	
10000.00	10082.90	90.00	267.85	6919.00	84.38	27.25	106.40	439.28	275.72	2.69	
10100.00	10182.88	90.00	267.85	6919.00	87.03	27.95	106.33	441.21	272.52	2.62	

## 5D Anti-Collision Report

Secondary Well: Goetzel 33N-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
10200.00	10282.86	90.00	267.85	6919.00	89.69	28.65	106.25	443.14	269.30	2.55	
10300.00	10382.84	90.00	267.85	6919.00	92.37	29.36	106.18	445.07	266.07	2.49	SF(Lo)
10400.00	10482.82	90.00	267.85	6919.00	95.04	30.06	106.11	447.00	262.81	2.43	SF(Lo)
10500.00	10582.80	90.00	267.85	6919.00	97.73	30.77	106.04	448.93	259.54	2.37	SF(Lo)
10600.00	10682.78	90.00	267.85	6919.00	100.42	31.48	105.97	450.86	256.25	2.32	SF(Lo)
10700.00	10782.76	90.00	267.85	6919.00	103.12	32.19	105.90	452.79	252.95	2.27	SF(Lo)
10800.00	10882.74	90.00	267.85	6919.00	105.83	32.90	105.83	454.73	249.64	2.22	SF(Lo)
10900.00	10982.72	90.00	267.85	6919.00	108.53	33.61	105.76	456.66	246.31	2.17	SF(Lo)
11000.00	11082.70	90.00	267.85	6919.00	111.25	34.32	105.69	458.60	242.97	2.13	SF(Lo)
11100.00	11182.68	90.00	267.85	6919.00	113.97	35.03	105.62	460.53	239.63	2.08	SF(Lo)
11200.00	11282.66	90.00	267.85	6919.00	116.69	35.74	105.56	462.47	236.27	2.04	SF(Lo)
11300.00	11382.64	90.00	267.85	6919.00	119.41	36.46	105.49	464.41	232.90	2.01	SF(Lo)
11400.00	11482.62	90.00	267.85	6919.00	122.14	37.17	105.42	466.35	229.52	1.97	SF(Lo)
11500.00	11582.60	90.00	267.85	6919.00	124.87	37.89	105.36	468.28	226.14	1.93	SF(Lo)
11600.00	11682.58	90.00	267.85	6919.00	127.61	38.60	105.29	470.22	222.75	1.90	SF(Lo)
11700.00	11782.56	90.00	267.85	6919.00	130.35	39.32	105.23	472.16	219.35	1.87	SF(Lo)
11800.00	11882.54	90.00	267.85	6919.00	133.09	40.04	105.16	474.10	215.94	1.84	SF(Lo)
11900.00	11982.52	90.00	267.85	6919.00	135.83	40.75	105.10	476.04	212.52	1.81	SF(Lo)
12000.00	12082.50	90.00	267.85	6919.00	138.58	41.47	105.04	477.98	209.10	1.78	SF(Lo)
12100.00	12182.48	90.00	267.85	6919.00	141.33	42.19	104.98	479.93	205.68	1.75	SF(Lo)
12200.00	12282.45	90.00	267.85	6919.00	144.08	42.91	104.91	481.87	202.24	1.72	SF(Lo)
12300.00	12382.43	90.00	267.85	6919.00	146.83	43.63	104.85	483.81	198.81	1.70	SF(Lo)
12400.00	12482.41	90.00	267.85	6919.00	149.58	44.35	104.79	485.76	195.36	1.67	SF(Lo)
12500.00	12582.39	90.00	267.85	6919.00	152.34	45.07	104.73	487.70	191.91	1.65	SF(Lo)
12600.00	12682.37	90.00	267.85	6919.00	155.10	45.79	104.67	489.64	188.46	1.63	SF(Lo)
12700.00	12782.35	90.00	267.85	6919.00	157.86	46.51	104.61	491.59	185.00	1.60	SF(Lo)
12800.00	12882.33	90.00	267.85	6919.00	160.62	47.24	104.55	493.53	181.54	1.58	SF(Lo)
12900.00	12982.31	90.00	267.85	6919.00	163.38	47.96	104.50	495.48	178.07	1.56	SF(Lo)
13000.00	13082.29	90.00	267.85	6919.00	166.14	48.68	104.44	497.43	174.60	1.54	SF(Lo)
13100.00	13182.27	90.00	267.85	6919.00	168.91	49.40	104.38	499.37	171.12	1.52	SF(Lo)
13200.00	13282.25	90.00	267.85	6919.00	171.67	50.13	104.32	501.32	167.64	1.50	SF(Lo)
13300.00	13382.23	90.00	267.85	6919.00	174.44	50.85	104.27	503.27	164.16	1.48	SF(Med)
13400.00	13482.21	90.00	267.85	6919.00	177.21	51.57	104.21	505.22	160.67	1.47	SF(Med)
13500.00	13582.19	90.00	267.85	6919.00	179.98	52.30	104.15	507.17	157.18	1.45	SF(Med)
13600.00	13682.17	90.00	267.85	6919.00	182.75	53.02	104.10	509.12	153.69	1.43	SF(Med)
13700.00	13782.15	90.00	267.85	6919.00	185.52	53.75	104.04	511.07	150.19	1.42	SF(Med)
13800.00	13882.13	90.00	267.85	6919.00	188.29	54.47	103.99	513.02	146.69	1.40	SF(Med)
13900.00	13982.11	90.00	267.85	6919.00	191.06	55.19	103.94	514.97	143.19	1.39	SF(Med)
14000.00	14082.09	90.00	267.85	6919.00	193.84	55.92	103.88	516.92	139.69	1.37	SF(Med)
14100.00	14182.07	90.00	267.85	6919.00	196.61	56.64	103.83	518.87	136.18	1.36	SF(Med)
14200.00	14282.05	90.00	267.85	6919.00	199.39	57.37	103.78	520.83	132.67	1.34	SF(Med)
14300.00	14382.03	90.00	267.85	6919.00	202.17	58.10	103.72	522.78	129.15	1.33	SF(Med)
14400.00	14482.01	90.00	267.85	6919.00	204.94	58.82	103.67	524.73	125.64	1.31	SF(Med)
14500.00	14581.99	90.00	267.85	6919.00	207.72	59.55	103.62	526.69	122.12	1.30	SF(Med)
14600.00	14681.97	90.00	267.85	6919.00	210.50	60.27	103.57	528.64	118.60	1.29	SF(Med)
14700.00	14781.95	90.00	267.85	6919.00	213.28	61.00	103.52	530.59	115.07	1.28	SF(Med)
14800.00	14881.93	90.00	267.85	6919.00	216.06	61.73	103.47	532.55	111.55	1.26	SF(Med)
14900.00	14981.91	90.00	267.85	6919.00	218.84	62.45	103.42	534.50	108.02	1.25	SF(Med)
15000.00	15081.89	90.00	267.85	6919.00	221.62	63.18	103.37	536.46	104.49	1.24	SF(Med)
15100.00	15181.87	90.00	267.85	6919.00	224.40	63.91	103.32	538.42	100.96	1.23	SF(Med)
15136.85	15218.71	90.00	267.85	6919.00	225.43	64.17	103.30	539.14	99.66	1.23	SF(Med)
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	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)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.35	20.04	18.64	14.28	CC (Med)

## 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
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	227.57	20.33	16.24	4.97	CC (Med)
900.00	900.20	1.00	127.01	900.20	1.90	1.90	221.91	22.53	18.05	5.02	CC (Med)
1000.00	1000.75	3.01	127.01	1000.68	2.09	2.08	217.16	25.41	20.55	5.22	CC (Med)
1100.00	1101.41	5.03	127.01	1101.08	2.29	2.28	213.91	28.59	23.32	5.43	CC (Med)
1200.00	1202.19	7.04	127.01	1201.30	2.52	2.47	211.78	31.98	26.28	5.61	CC (Med)
1300.00	1303.08	9.06	127.01	1301.20	2.77	2.68	210.50	35.54	29.41	5.79	CC (Lo)
1400.00	1404.10	11.08	127.01	1400.65	3.07	2.89	209.85	39.25	32.61	5.91	CC (Lo)
1500.00	1505.22	13.10	127.01	1499.52	3.43	3.10	209.68	43.08	35.92	6.01	CC (Lo)
1600.00	1606.45	15.13	127.01	1597.70	3.85	3.33	209.87	47.03	39.25	6.05	CC (Lo)
1700.00	1707.80	17.16	127.01	1695.04	4.33	3.56	210.33	51.09	42.67	6.06	CC (Lo)
1800.00	1807.89	17.39	127.01	1790.57	4.86	3.82	211.09	54.87	45.68	5.97	CC (Lo)
1900.00	1907.82	17.39	127.01	1885.93	5.42	4.08	211.75	58.63	48.65	5.87	CC (Lo)
2000.00	2007.75	17.39	127.01	1981.29	5.99	4.35	212.34	62.40	51.61	5.78	CC (Lo)
2100.00	2107.67	17.39	127.01	2076.65	6.58	4.62	212.86	66.18	54.55	5.69	
2200.00	2207.60	17.39	127.01	2172.01	7.17	4.90	213.32	69.96	57.47	5.60	
2300.00	2307.53	17.39	127.01	2267.38	7.78	5.18	213.74	73.75	60.35	5.50	
2400.00	2407.45	17.39	127.01	2362.74	8.39	5.47	214.12	77.54	63.22	5.41	
2500.00	2507.38	17.39	127.01	2458.10	9.00	5.76	214.46	81.33	66.08	5.33	
2600.00	2607.31	17.39	127.01	2553.46	9.62	6.05	214.77	85.13	68.95	5.26	
2700.00	2707.23	17.39	127.01	2648.82	10.24	6.34	215.05	88.92	71.81	5.19	
2800.00	2807.16	17.39	127.01	2744.19	10.86	6.63	215.31	92.72	74.66	5.13	
2900.00	2907.09	17.39	127.01	2839.55	11.48	6.93	215.55	96.52	77.52	5.08	
3000.00	3007.02	17.39	127.01	2934.91	12.11	7.22	215.77	100.33	80.37	5.03	
3100.00	3106.94	17.39	127.01	3030.27	12.74	7.52	215.98	104.13	83.22	4.98	
3200.00	3206.87	17.39	127.01	3125.63	13.37	7.82	216.17	107.94	86.06	4.93	
3300.00	3306.80	17.39	127.01	3221.00	14.00	8.11	216.35	111.74	88.89	4.89	
3400.00	3406.72	17.39	127.01	3316.36	14.63	8.41	216.51	115.55	91.72	4.85	
3500.00	3506.65	17.39	127.01	3411.72	15.26	8.71	216.67	119.36	94.56	4.81	
3600.00	3606.58	17.39	127.01	3507.08	15.90	9.01	216.82	123.17	97.39	4.78	
3700.00	3706.50	17.39	127.01	3602.44	16.53	9.32	216.95	126.98	100.21	4.74	
3800.00	3806.43	17.39	127.01	3697.81	17.16	9.62	217.08	130.79	103.04	4.71	
3900.00	3906.36	17.39	127.01	3793.17	17.80	9.92	217.20	134.60	105.87	4.68	
4000.00	4006.29	17.39	127.01	3888.53	18.43	10.22	217.32	138.41	108.70	4.66	
4100.00	4106.21	17.39	127.01	3983.89	19.07	10.52	217.43	142.22	111.52	4.63	
4200.00	4206.14	17.39	127.01	4079.25	19.71	10.83	217.53	146.04	114.35	4.61	
4300.00	4306.07	17.39	127.01	4174.62	20.34	11.13	217.63	149.85	117.16	4.58	
4400.00	4405.99	17.39	127.01	4269.98	20.98	11.43	217.72	153.66	119.98	4.56	
4500.00	4505.92	17.39	127.01	4365.34	21.62	11.74	217.81	157.48	122.79	4.54	
4600.00	4605.85	17.39	127.01	4460.70	22.25	12.04	217.90	161.29	125.60	4.52	
4700.00	4705.77	17.39	127.01	4556.06	22.89	12.35	217.98	165.11	128.42	4.50	
4800.00	4805.70	17.39	127.01	4651.43	23.53	12.65	218.05	168.92	131.23	4.48	
4900.00	4905.63	17.39	127.01	4746.79	24.17	12.96	218.13	172.74	134.04	4.46	
5000.00	5005.55	17.39	127.01	4842.15	24.81	13.26	218.20	176.55	136.85	4.45	
5100.00	5105.48	17.39	127.01	4937.51	25.44	13.57	218.27	180.37	139.66	4.43	
5200.00	5205.41	17.39	127.01	5032.87	26.08	13.87	218.33	184.19	142.48	4.42	
5300.00	5305.34	17.39	127.01	5128.24	26.72	14.18	218.39	188.00	145.29	4.40	
5400.00	5405.26	17.39	127.01	5223.60	27.36	14.48	218.45	191.82	148.10	4.39	
5500.00	5505.19	17.39	127.01	5318.96	28.00	14.79	218.51	195.64	150.91	4.37	
5600.00	5605.12	17.39	127.01	5414.32	28.64	15.10	218.56	199.45	153.72	4.36	
5700.00	5705.04	17.39	127.01	5509.68	29.28	15.40	218.62	203.27	156.53	4.35	
5800.00	5804.97	17.39	127.01	5605.05	29.92	15.71	218.67	207.09	159.34	4.34	
5900.00	5904.90	17.39	127.01	5700.41	30.56	16.02	218.72	210.90	162.15	4.33	
6000.00	6004.82	17.39	127.01	5795.77	31.20	16.32	218.76	214.72	164.96	4.31	

## 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
6100.00	6104.75	17.39	127.01	5891.13	31.84	16.63	218.81	218.54	167.77	4.30	
6200.00	6204.68	17.39	127.01	5986.49	32.48	16.93	218.85	222.36	170.58	4.29	
6300.00	6304.30	17.39	127.01	6081.57	33.11	17.24	198.10	225.75	172.10	4.21	
6400.00	6402.74	13.95	141.61	6176.08	33.59	17.52	170.50	229.37	172.71	4.05	
6500.00	6503.21	11.55	177.07	6274.21	33.57	17.61	148.16	234.27	175.01	3.95	
6600.00	6606.44	14.25	212.75	6374.98	33.12	17.47	136.51	240.31	179.17	3.93	
6700.00	6712.57	20.38	232.92	6476.35	32.28	17.07	131.29	247.18	185.20	3.99	
6800.00	6821.71	27.96	243.65	6575.90	31.14	16.37	129.17	254.48	192.72	4.12	
6900.00	6933.86	36.25	250.11	6670.84	29.83	15.33	128.53	261.77	201.22	4.32	
7000.00	7048.89	45.01	254.50	6758.07	28.56	13.94	128.58	268.58	210.07	4.59	
7100.00	7166.54	54.08	257.78	6834.34	27.57	12.28	128.88	274.48	218.41	4.90	
7200.00	7286.39	63.40	260.41	6896.46	27.05	10.63	129.20	279.06	225.39	5.20	
7300.00	7407.87	72.89	262.68	6941.63	27.12	9.61	129.42	282.00	230.36	5.46	
7400.00	7530.28	82.48	264.74	6967.71	27.81	9.93	129.46	283.10	232.49	5.59	
7500.00	7647.99	90.00	266.28	6974.00	28.86	11.31	129.33	282.42	231.38	5.53	
7600.00	7747.98	90.00	266.28	6974.00	29.93	11.80	129.42	281.87	229.05	5.34	
7700.00	7847.98	90.00	266.28	6974.00	31.20	12.32	129.52	281.31	226.30	5.11	
7800.00	7947.98	90.00	266.28	6974.00	32.65	12.86	129.61	280.76	223.57	4.91	
7900.00	8047.97	90.00	266.28	6974.00	34.27	13.43	129.70	280.21	220.30	4.68	
8000.00	8147.97	90.00	266.28	6974.00	36.03	14.02	129.80	279.65	217.11	4.47	
8100.00	8247.97	90.00	266.28	6974.00	37.91	14.63	129.89	279.10	213.62	4.26	
8200.00	8347.97	90.00	266.28	6974.00	39.91	15.25	129.99	278.55	209.94	4.06	
8300.00	8447.96	90.00	266.28	6974.00	41.99	15.88	130.08	278.00	206.22	3.87	
8400.00	8547.96	90.00	266.28	6974.00	44.15	16.52	130.18	277.45	202.46	3.70	
8500.00	8647.96	90.00	266.28	6974.00	46.38	17.16	130.27	276.90	198.61	3.54	
8600.00	8747.96	90.00	266.28	6974.00	48.67	17.82	130.37	276.36	194.65	3.38	
8700.00	8847.95	90.00	266.28	6974.00	51.00	18.48	130.47	275.81	190.56	3.24	
8800.00	8947.95	90.00	266.28	6974.00	53.39	19.14	130.56	275.26	186.43	3.10	
8900.00	9047.95	90.00	266.28	6974.00	55.81	19.81	130.66	274.72	182.24	2.97	
9000.00	9147.95	90.00	266.28	6974.00	58.26	20.48	130.76	274.17	178.01	2.85	
9100.00	9247.94	90.00	266.28	6974.00	60.75	21.16	130.86	273.63	173.75	2.74	
9200.00	9347.94	90.00	266.28	6974.00	63.26	21.84	130.96	273.09	169.45	2.64	
9300.00	9447.94	90.00	266.28	6974.00	65.79	22.53	131.05	272.54	165.11	2.54	
9400.00	9547.94	90.00	266.28	6974.00	68.34	23.21	131.15	272.00	160.71	2.44	SF(Lo)
9500.00	9647.93	90.00	266.28	6974.00	70.91	23.90	131.25	271.46	156.29	2.36	SF(Lo)
9600.00	9747.93	90.00	266.28	6974.00	73.50	24.60	131.35	270.92	151.86	2.28	SF(Lo)
9700.00	9847.93	90.00	266.28	6974.00	76.11	25.29	131.45	270.38	147.43	2.20	SF(Lo)
9800.00	9947.93	90.00	266.28	6974.00	78.72	25.99	131.56	269.85	142.99	2.13	SF(Lo)
9900.00	10047.92	90.00	266.28	6974.00	81.35	26.68	131.66	269.31	138.56	2.06	SF(Lo)
10000.00	10147.92	90.00	266.28	6974.00	83.99	27.38	131.76	268.77	134.15	2.00	SF(Lo)
10100.00	10247.92	90.00	266.28	6974.00	86.64	28.09	131.86	268.24	129.76	1.94	SF(Lo)
10200.00	10347.92	90.00	266.28	6974.00	89.30	28.79	131.96	267.70	125.40	1.88	SF(Lo)
10300.00	10447.91	90.00	266.28	6974.00	91.96	29.49	132.07	267.17	121.06	1.83	SF(Lo)
10400.00	10547.91	90.00	266.28	6974.00	94.64	30.20	132.17	266.64	116.74	1.78	SF(Lo)
10500.00	10647.91	90.00	266.28	6974.00	97.32	30.91	132.27	266.10	112.45	1.73	SF(Lo)
10600.00	10747.91	90.00	266.28	6974.00	100.01	31.61	132.38	265.57	108.17	1.69	SF(Lo)
10700.00	10847.90	90.00	266.28	6974.00	102.70	32.32	132.48	265.04	103.92	1.64	SF(Lo)
10800.00	10947.90	90.00	266.28	6974.00	105.40	33.03	132.59	264.51	99.67	1.60	SF(Lo)
10900.00	11047.90	90.00	266.28	6974.00	108.10	33.74	132.69	263.99	95.44	1.57	SF(Lo)
11000.00	11147.89	90.00	266.28	6974.00	110.81	34.46	132.80	263.46	91.18	1.53	SF(Lo)
11100.00	11247.89	90.00	266.28	6974.00	113.52	35.17	132.91	262.93	86.89	1.49	SF(Med)
11200.00	11347.89	90.00	266.28	6974.00	116.24	35.88	133.01	262.41	82.61	1.46	SF(Med)
11300.00	11447.89	90.00	266.28	6974.00	118.96	36.60	133.12	261.88	78.34	1.43	SF(Med)
11400.00	11547.88	90.00	266.28	6974.00	121.68	37.31	133.23	261.36	74.00	1.39	SF(Med)
11500.00	11647.88	90.00	266.28	6974.00	124.41	38.03	133.34	260.83	69.67	1.36	SF(Med)
11600.00	11747.88	90.00	266.28	6974.00	127.14	38.74	133.44	260.31	65.36	1.34	SF(Med)
11700.00	11847.88	90.00	266.28	6974.00	129.87	39.46	133.55	259.79	61.05	1.31	SF(Med)
11800.00	11947.87	90.00	266.28	6974.00	132.60	40.18	133.66	259.27	56.74	1.28	SF(Med)



## 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
11900.00	12047.87	90.00	266.28	6974.00	135.34	40.90	133.77	258.75	52.42	1.25	SF(Med)
12000.00	12147.87	90.00	266.28	6974.00	138.08	41.61	133.88	258.23	48.13	1.23	SF(Med)
12100.00	12247.87	90.00	266.28	6974.00	140.82	42.33	133.99	257.72	43.84	1.20	SF(Med)
12200.00	12347.86	90.00	266.28	6974.00	143.57	43.05	134.10	257.20	39.58	1.18	SF(Med)
12300.00	12447.86	90.00	266.28	6974.00	146.31	43.77	134.22	256.68	35.33	1.16	SF(Med)
12400.00	12547.86	90.00	266.28	6974.00	149.06	44.49	134.33	256.17	31.09	1.14	SF(Med)
12500.00	12647.86	90.00	266.28	6974.00	151.81	45.21	134.44	255.66	26.87	1.12	SF(Med)
12600.00	12747.85	90.00	266.28	6974.00	154.56	45.93	134.55	255.14	22.66	1.10	SF(Med)
12700.00	12847.85	90.00	266.28	6974.00	157.31	46.66	134.67	254.63	18.47	1.08	SF(Med)
12800.00	12947.85	90.00	266.28	6974.00	160.07	47.38	134.78	254.12	14.30	1.06	SF(Med)
12900.00	13047.85	90.00	266.28	6974.00	162.82	48.10	134.90	253.61	10.14	1.04	SF(Med)
13000.00	13147.84	90.00	266.28	6974.00	165.58	48.82	135.01	253.10	6.00	1.02	SF(Med)
13100.00	13247.84	90.00	266.28	6974.00	168.34	49.55	135.13	252.60	1.87	1.01	SF(Med)
13200.00	13347.84	90.00	266.28	6974.00	171.10	50.27	135.24	252.09	-2.24	0.99	SF(Hi)
13300.00	13447.84	90.00	266.28	6974.00	173.86	50.99	135.36	251.58	-6.33	0.98	SF(Hi)
13400.00	13547.83	90.00	266.28	6974.00	176.62	51.72	135.47	251.08	-10.41	0.96	SF(Hi)
13500.00	13647.83	90.00	266.28	6974.00	179.39	52.44	135.59	250.58	-14.47	0.95	SF(Hi)
13600.00	13747.83	90.00	266.28	6974.00	182.15	53.16	135.71	250.08	-18.52	0.93	SF(Hi)
13700.00	13847.83	90.00	266.28	6974.00	184.91	53.89	135.83	249.57	-22.55	0.92	SF(Hi)
13800.00	13947.82	90.00	266.28	6974.00	187.68	54.61	135.94	249.07	-26.56	0.90	SF(Hi)
13900.00	14047.82	90.00	266.28	6974.00	190.45	55.34	136.06	248.58	-30.55	0.89	SF(Hi)
14000.00	14147.82	90.00	266.28	6974.00	193.21	56.06	136.18	248.08	-34.53	0.88	SF(Hi)
14100.00	14247.81	90.00	266.28	6974.00	195.98	56.79	136.30	247.58	-38.48	0.87	SF(Hi)
14200.00	14347.81	90.00	266.28	6974.00	198.75	57.51	136.42	247.08	-42.43	0.85	SF(Hi)
14300.00	14447.81	90.00	266.28	6974.00	201.52	58.24	136.54	246.59	-46.35	0.84	SF(Hi)
14400.00	14547.81	90.00	266.28	6974.00	204.29	58.97	136.67	246.10	-50.25	0.83	SF(Hi)
14500.00	14647.80	90.00	266.28	6974.00	207.06	59.69	136.79	245.60	-54.14	0.82	SF(Hi)
14600.00	14747.80	90.00	266.28	6974.00	209.83	60.42	136.91	245.11	-58.00	0.81	SF(Hi)
14700.00	14847.80	90.00	266.28	6974.00	212.61	61.14	137.03	244.62	-61.85	0.80	SF(Hi)
14800.00	14947.80	90.00	266.28	6974.00	215.38	61.87	137.16	244.13	-65.68	0.79	SF(Hi)
14900.00	15047.79	90.00	266.28	6974.00	218.15	62.60	137.28	243.65	-69.49	0.78	SF(Hi)
15000.00	15147.79	90.00	266.28	6974.00	220.93	63.32	137.40	243.16	-73.28	0.77	SF(Hi)
15100.00	15247.79	90.00	266.28	6974.00	223.70	64.05	137.53	242.67	-77.05	0.76	SF(Hi)
15136.85	15284.64	90.00	266.28	6974.00	224.73	64.32	137.58	242.49	-78.44	0.76	SF(Hi)
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	179.55	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	699.44	1.99	138.18	699.42	1.44	1.44	176.49	21.37	17.75	5.90	CC (Med)
800.00	798.66	3.97	138.18	798.50	1.63	1.62	38.03	25.31	21.29	6.29	CC (Med)
900.00	897.69	5.95	138.18	897.16	1.84	1.81	33.43	30.03	25.63	6.83	CC (Med)
1000.00	996.55	7.93	138.18	995.28	2.08	2.01	30.66	35.03	30.22	7.28	CC (Lo)
1100.00	1095.22	9.90	138.18	1092.76	2.37	2.22	29.09	40.21	34.99	7.70	CC (Lo)
1200.00	1193.71	11.87	138.18	1189.47	2.70	2.44	28.33	45.53	39.86	8.03	CC (Lo)
1300.00	1292.03	13.84	138.18	1285.32	3.09	2.66	28.12	50.97	44.82	8.29	CC (Lo)
1400.00	1390.17	15.80	138.18	1380.19	3.54	2.89	28.31	56.50	49.85	8.49	CC (Lo)
1500.00	1488.13	17.76	138.18	1473.98	4.06	3.14	28.78	62.14	54.92	8.61	CC (Lo)
1600.00	1586.19	19.47	138.18	1566.84	4.64	3.39	29.48	67.85	60.01	8.65	
1700.00	1686.09	19.47	138.18	1661.03	5.28	3.67	31.06	71.75	63.17	8.36	
1800.00	1786.02	19.47	138.18	1755.24	5.93	3.96	33.22	74.29	64.84	7.86	
1900.00	1885.95	19.47	138.18	1849.46	6.59	4.26	35.23	76.92	66.54	7.41	

## 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
2000.00	1985.88	19.47	138.18	1943.67	7.26	4.56	37.10	79.64	68.29	7.02	
2100.00	2085.81	19.47	138.18	2037.89	7.94	4.86	38.85	82.43	70.07	6.67	
2200.00	2185.74	19.47	138.18	2132.10	8.62	5.16	40.49	85.30	71.86	6.35	
2300.00	2285.67	19.47	138.18	2226.32	9.31	5.47	42.01	88.24	73.70	6.07	
2400.00	2385.60	19.47	138.18	2320.53	10.00	5.78	43.44	91.23	75.52	5.81	
2500.00	2485.53	19.47	138.18	2414.75	10.69	6.09	44.78	94.28	77.39	5.58	
2600.00	2585.46	19.47	138.18	2508.97	11.38	6.40	46.03	97.37	79.28	5.38	
2700.00	2685.39	19.47	138.18	2603.18	12.08	6.72	47.20	100.51	81.18	5.20	
2800.00	2785.32	19.47	138.18	2697.40	12.78	7.03	48.31	103.69	83.11	5.04	
2900.00	2885.26	19.47	138.18	2791.61	13.47	7.35	49.34	106.90	85.07	4.90	
3000.00	2985.19	19.47	138.18	2885.83	14.17	7.67	50.32	110.15	87.06	4.77	
3100.00	3085.12	19.47	138.18	2980.04	14.87	7.99	51.24	113.43	89.05	4.65	
3200.00	3185.05	19.47	138.18	3074.26	15.57	8.30	52.11	116.73	91.06	4.55	
3300.00	3284.98	19.47	138.18	3168.47	16.27	8.62	52.93	120.06	93.08	4.45	
3400.00	3384.91	19.47	138.18	3262.69	16.97	8.94	53.70	123.42	95.13	4.36	
3500.00	3484.84	19.47	138.18	3356.90	17.68	9.26	54.44	126.79	97.19	4.28	
3600.00	3584.77	19.47	138.18	3451.12	18.38	9.58	55.14	130.19	99.26	4.21	
3700.00	3684.70	19.47	138.18	3545.34	19.08	9.90	55.80	133.60	101.33	4.14	
3800.00	3784.63	19.47	138.18	3639.55	19.78	10.22	56.42	137.03	103.42	4.08	
3900.00	3884.56	19.47	138.18	3733.77	20.49	10.55	57.02	140.47	105.52	4.02	
4000.00	3984.49	19.47	138.18	3827.98	21.19	10.87	57.59	143.93	107.63	3.96	
4100.00	4084.42	19.47	138.18	3922.20	21.90	11.19	58.13	147.41	109.76	3.92	
4200.00	4184.35	19.47	138.18	4016.41	22.60	11.51	58.65	150.89	111.89	3.87	
4300.00	4284.28	19.47	138.18	4110.63	23.30	11.84	59.14	154.39	114.04	3.83	
4400.00	4384.21	19.47	138.18	4204.84	24.01	12.16	59.61	157.90	116.20	3.79	
4500.00	4484.14	19.47	138.18	4299.06	24.71	12.48	60.06	161.42	118.37	3.75	
4600.00	4584.07	19.47	138.18	4393.27	25.42	12.80	60.50	164.94	120.55	3.72	
4700.00	4684.00	19.47	138.18	4487.49	26.12	13.13	60.91	168.48	122.73	3.68	
4800.00	4783.93	19.47	138.18	4581.71	26.83	13.45	61.31	172.03	124.93	3.65	
4900.00	4883.86	19.47	138.18	4675.92	27.53	13.77	61.69	175.58	127.13	3.62	
5000.00	4983.79	19.47	138.18	4770.14	28.24	14.10	62.05	179.14	129.34	3.60	
5100.00	5083.72	19.47	138.18	4864.35	28.94	14.42	62.40	182.71	131.56	3.57	
5200.00	5183.65	19.47	138.18	4958.57	29.65	14.74	62.74	186.28	133.79	3.55	
5300.00	5283.58	19.47	138.18	5052.78	30.35	15.07	63.07	189.86	136.00	3.53	
5400.00	5383.51	19.47	138.18	5147.00	31.06	15.39	63.38	193.45	138.22	3.50	
5500.00	5483.44	19.47	138.18	5241.21	31.77	15.72	63.68	197.04	140.45	3.48	
5600.00	5583.37	19.47	138.18	5335.43	32.47	16.04	63.97	200.64	142.68	3.46	
5700.00	5683.30	19.47	138.18	5429.64	33.18	16.37	64.25	204.24	144.91	3.44	
5800.00	5783.23	19.47	138.18	5523.86	33.88	16.69	64.52	207.85	147.16	3.42	
5900.00	5883.16	19.47	138.18	5618.08	34.59	17.01	64.79	211.46	149.40	3.41	
6000.00	5983.09	19.47	138.18	5712.29	35.29	17.34	65.04	215.08	151.65	3.39	
6100.00	6083.02	19.47	138.18	5806.51	36.00	17.66	65.28	218.70	153.90	3.38	
6200.00	6182.95	19.47	138.18	5900.72	36.71	17.99	65.52	222.32	156.16	3.36	
6300.00	6282.72	19.47	138.18	5994.79	37.41	18.31	41.99	223.44	156.80	3.35	
6400.00	6380.89	19.47	138.18	6087.34	38.11	18.63	5.44	220.38	155.19	3.38	
6500.00	6475.53	19.47	138.18	6176.57	38.77	18.94	330.78	216.52	155.58	3.55	
6600.00	6565.53	18.01	144.82	6261.56	39.34	19.23	304.84	217.67	163.90	4.05	
6700.00	6658.62	15.48	169.37	6350.81	39.42	19.42	285.62	228.21	181.76	4.91	
6800.00	6758.52	16.40	198.58	6447.02	38.91	19.46	270.80	247.52	206.10	5.98	
6900.00	6866.99	21.02	221.79	6549.87	37.76	19.30	259.10	273.39	234.48	7.03	
7000.00	6986.13	28.31	236.71	6658.17	35.91	18.83	249.81	303.10	265.44	8.05	
7100.00	7118.35	37.51	246.39	6769.13	33.43	17.86	242.46	333.80	297.81	9.27	
7200.00	7265.90	48.38	253.21	6877.04	30.73	16.06	236.74	362.63	328.62	10.66	
7300.00	7430.01	60.79	258.50	6972.01	28.75	13.14	232.50	386.69	353.99	11.83	
7400.00	7609.40	74.53	262.97	7040.07	28.34	10.35	229.72	403.20	368.27	11.54	
7500.00	7799.01	89.15	267.08	7066.92	29.61	11.64	228.44	409.92	368.22	9.83	
7600.00	7904.31	90.00	267.32	7067.00	30.64	12.35	228.33	409.14	365.63	9.40	
7700.00	8004.30	90.00	267.32	7067.00	31.81	12.88	228.23	408.33	363.02	9.01	

## 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
7800.00	8104.29	90.00	267.32	7067.00	33.16	13.45	228.13	407.52	360.10	8.59	
7900.00	8204.29	90.00	267.32	7067.00	34.69	14.05	228.03	406.72	357.00	8.18	
8000.00	8304.28	90.00	267.32	7067.00	36.36	14.67	227.92	405.91	353.56	7.75	
8100.00	8404.28	90.00	267.32	7067.00	38.17	15.30	227.82	405.11	349.96	7.35	
8200.00	8504.27	90.00	267.32	7067.00	40.08	15.95	227.72	404.30	346.20	6.96	
8300.00	8604.26	90.00	267.32	7067.00	42.10	16.61	227.61	403.50	342.33	6.60	
8400.00	8704.26	90.00	267.32	7067.00	44.20	17.28	227.51	402.70	338.32	6.26	
8500.00	8804.25	90.00	267.32	7067.00	46.37	17.95	227.41	401.90	334.15	5.93	
8600.00	8904.25	90.00	267.32	7067.00	48.61	18.62	227.30	401.10	329.90	5.63	
8700.00	9004.24	90.00	267.32	7067.00	50.90	19.31	227.19	400.30	325.62	5.36	
8800.00	9104.23	90.00	267.32	7067.00	53.25	19.99	227.09	399.51	321.30	5.11	
8900.00	9204.23	90.00	267.32	7067.00	55.63	20.68	226.98	398.71	316.93	4.88	
9000.00	9304.22	90.00	267.32	7067.00	58.05	21.37	226.88	397.92	312.54	4.66	
9100.00	9404.22	90.00	267.32	7067.00	60.51	22.06	226.77	397.13	308.12	4.46	
9200.00	9504.21	90.00	267.32	7067.00	62.99	22.75	226.66	396.34	303.68	4.28	
9300.00	9604.21	90.00	267.32	7067.00	65.50	23.45	226.55	395.55	299.24	4.11	
9400.00	9704.20	90.00	267.32	7067.00	68.04	24.15	226.45	394.76	294.78	3.95	
9500.00	9804.19	90.00	267.32	7067.00	70.59	24.85	226.34	393.98	290.33	3.80	
9600.00	9904.19	90.00	267.32	7067.00	73.16	25.55	226.23	393.19	285.88	3.66	
9700.00	10004.18	90.00	267.32	7067.00	75.75	26.25	226.12	392.41	281.45	3.54	
9800.00	10104.18	90.00	267.32	7067.00	78.35	26.95	226.01	391.63	277.00	3.42	
9900.00	10204.17	90.00	267.32	7067.00	80.97	27.66	225.90	390.85	272.49	3.30	
10000.00	10304.16	90.00	267.32	7067.00	83.59	28.36	225.79	390.07	268.00	3.20	
10100.00	10404.16	90.00	267.32	7067.00	86.23	29.07	225.68	389.29	263.48	3.09	
10200.00	10504.15	90.00	267.32	7067.00	88.88	29.78	225.56	388.52	258.95	3.00	
10300.00	10604.15	90.00	267.32	7067.00	91.54	30.49	225.45	387.74	254.47	2.91	
10400.00	10704.14	90.00	267.32	7067.00	94.21	31.20	225.34	386.97	250.05	2.83	
10500.00	10804.13	90.00	267.32	7067.00	96.88	31.91	225.23	386.20	245.54	2.75	
10600.00	10904.13	90.00	267.32	7067.00	99.56	32.62	225.11	385.43	241.06	2.67	
10700.00	11004.12	90.00	267.32	7067.00	102.25	33.33	225.00	384.66	236.53	2.60	
10800.00	11104.12	90.00	267.32	7067.00	104.94	34.05	224.88	383.89	232.01	2.53	
10900.00	11204.11	90.00	267.32	7067.00	107.64	34.76	224.77	383.13	227.53	2.46	SF(Lo)
11000.00	11304.10	90.00	267.32	7067.00	110.35	35.47	224.65	382.36	223.09	2.40	SF(Lo)
11100.00	11404.10	90.00	267.32	7067.00	113.06	36.19	224.54	381.60	218.70	2.34	SF(Lo)
11200.00	11504.09	90.00	267.32	7067.00	115.77	36.90	224.42	380.84	214.24	2.29	SF(Lo)
11300.00	11604.09	90.00	267.32	7067.00	118.49	37.62	224.30	380.08	209.81	2.23	SF(Lo)
11400.00	11704.08	90.00	267.32	7067.00	121.21	38.34	224.19	379.33	205.42	2.18	SF(Lo)
11500.00	11804.08	90.00	267.32	7067.00	123.93	39.06	224.07	378.57	201.06	2.13	SF(Lo)
11600.00	11904.07	90.00	267.32	7067.00	126.66	39.77	223.95	377.82	196.72	2.09	SF(Lo)
11700.00	12004.06	90.00	267.32	7067.00	129.39	40.49	223.83	377.06	192.40	2.04	SF(Lo)
11800.00	12104.06	90.00	267.32	7067.00	132.13	41.21	223.71	376.31	188.01	2.00	SF(Lo)
11900.00	12204.05	90.00	267.32	7067.00	134.86	41.93	223.59	375.56	183.61	1.96	SF(Lo)
12000.00	12304.05	90.00	267.32	7067.00	137.60	42.65	223.47	374.82	179.25	1.92	SF(Lo)
12100.00	12404.04	90.00	267.32	7067.00	140.34	43.37	223.35	374.07	174.90	1.88	SF(Lo)
12200.00	12504.03	90.00	267.32	7067.00	143.09	44.09	223.23	373.33	170.58	1.84	SF(Lo)
12300.00	12604.03	90.00	267.32	7067.00	145.83	44.81	223.11	372.58	166.28	1.81	SF(Lo)
12400.00	12704.02	90.00	267.32	7067.00	148.58	45.53	222.99	371.84	162.00	1.77	SF(Lo)
12500.00	12804.02	90.00	267.32	7067.00	151.33	46.26	222.86	371.10	157.75	1.74	SF(Lo)
12600.00	12904.01	90.00	267.32	7067.00	154.09	46.98	222.74	370.37	153.51	1.71	SF(Lo)
12700.00	13004.00	90.00	267.32	7067.00	156.84	47.70	222.62	369.63	149.29	1.68	SF(Lo)
12800.00	13104.00	90.00	267.32	7067.00	159.60	48.42	222.49	368.90	145.09	1.65	SF(Lo)
12900.00	13203.99	90.00	267.32	7067.00	162.35	49.15	222.37	368.16	140.91	1.62	SF(Lo)
13000.00	13303.99	90.00	267.32	7067.00	165.11	49.87	222.24	367.43	136.75	1.59	SF(Lo)
13100.00	13403.98	90.00	267.32	7067.00	167.87	50.59	222.12	366.70	132.61	1.57	SF(Lo)
13200.00	13503.98	90.00	267.32	7067.00	170.63	51.32	221.99	365.98	128.49	1.54	SF(Lo)
13300.00	13603.97	90.00	267.32	7067.00	173.39	52.04	221.87	365.25	124.39	1.52	SF(Lo)
13400.00	13703.96	90.00	267.32	7067.00	176.16	52.76	221.74	364.53	120.31	1.49	SF(Med)
13500.00	13803.96	90.00	267.32	7067.00	178.92	53.49	221.61	363.81	116.25	1.47	SF(Med)

## 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
13600.00	13903.95	90.00	267.32	7067.00	181.69	54.21	221.48	363.09	112.21	1.45	SF(Med)
13700.00	14003.95	90.00	267.32	7067.00	184.46	54.94	221.35	362.37	108.19	1.43	SF(Med)
13800.00	14103.94	90.00	267.32	7067.00	187.23	55.66	221.23	361.65	104.19	1.40	SF(Med)
13900.00	14203.93	90.00	267.32	7067.00	189.99	56.39	221.10	360.94	100.22	1.38	SF(Med)
14000.00	14303.93	90.00	267.32	7067.00	192.76	57.11	220.97	360.23	96.26	1.36	SF(Med)
14100.00	14403.92	90.00	267.32	7067.00	195.54	57.84	220.84	359.51	92.33	1.35	SF(Med)
14200.00	14503.92	90.00	267.32	7067.00	198.31	58.57	220.70	358.81	88.41	1.33	SF(Med)
14300.00	14603.91	90.00	267.32	7067.00	201.08	59.29	220.57	358.10	84.52	1.31	SF(Med)
14400.00	14703.90	90.00	267.32	7067.00	203.85	60.02	220.44	357.39	80.65	1.29	SF(Med)
14500.00	14803.90	90.00	267.32	7067.00	206.63	60.74	220.31	356.69	76.80	1.27	SF(Med)
14600.00	14903.89	90.00	267.32	7067.00	209.40	61.47	220.17	355.99	72.98	1.26	SF(Med)
14700.00	15003.89	90.00	267.32	7067.00	212.18	62.20	220.04	355.29	69.17	1.24	SF(Med)
14800.00	15103.88	90.00	267.32	7067.00	214.95	62.92	219.91	354.59	65.39	1.23	SF(Med)
14900.00	15203.88	90.00	267.32	7067.00	217.73	63.65	219.77	353.90	61.63	1.21	SF(Med)
15000.00	15303.87	90.00	267.32	7067.00	220.51	64.38	219.64	353.20	57.90	1.20	SF(Med)
15100.00	15403.86	90.00	267.32	7067.00	223.29	65.10	219.50	352.51	54.19	1.18	SF(Med)
15136.85	15440.71	90.00	267.32	7067.00	224.31	65.37	219.45	352.26	52.83	1.18	SF(Med)
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	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	499.46	0.99	141.02	499.45	1.00	1.00	179.57	40.41	37.67	14.76	CC (Lo)
600.00	598.25	2.97	141.02	598.19	1.18	1.18	176.75	43.16	40.02	13.74	CC (Lo)
700.00	696.70	4.93	141.02	696.39	1.39	1.38	172.09	48.92	45.35	13.68	CC (Lo)
800.00	794.61	6.89	141.02	793.78	1.63	1.58	35.25	57.65	53.64	14.41	CC (Lo)
900.00	892.14	8.84	141.02	890.39	1.90	1.79	31.79	67.24	62.84	15.30	
1000.00	989.33	10.79	141.02	986.15	2.22	2.01	29.57	77.16	72.34	16.03	
1100.00	1086.18	12.72	141.02	1080.97	2.59	2.23	28.20	87.28	82.03	16.63	
1200.00	1182.70	14.65	141.02	1174.74	3.02	2.47	27.41	97.54	91.83	17.08	
1300.00	1278.88	16.58	141.02	1267.37	3.50	2.71	27.04	107.91	101.72	17.44	
1400.00	1374.74	18.49	141.02	1358.76	4.05	2.96	26.98	118.35	111.63	17.62	
1500.00	1470.27	20.41	141.02	1448.84	4.66	3.21	27.14	128.85	121.58	17.71	
1600.00	1569.76	20.44	141.02	1542.06	5.33	3.51	27.73	137.91	129.99	17.40	
1700.00	1669.53	20.44	141.02	1635.54	6.03	3.81	28.92	143.94	135.25	16.57	
1800.00	1769.35	20.44	141.02	1729.08	6.73	4.12	30.40	148.56	139.08	15.66	
1900.00	1869.17	20.44	141.02	1822.61	7.44	4.43	31.79	153.28	142.94	14.82	
2000.00	1968.99	20.44	141.02	1916.15	8.15	4.75	33.09	158.08	146.84	14.06	
2100.00	2068.81	20.44	141.02	2009.68	8.87	5.06	34.32	162.96	150.77	13.37	
2200.00	2168.64	20.44	141.02	2103.22	9.59	5.38	35.47	167.91	154.73	12.74	
2300.00	2268.46	20.44	141.02	2196.75	10.32	5.70	36.56	172.92	158.74	12.19	
2400.00	2368.28	20.44	141.02	2290.29	11.04	6.02	37.58	178.00	162.80	11.71	
2500.00	2468.10	20.44	141.02	2383.82	11.77	6.35	38.55	183.12	166.86	11.26	
2600.00	2567.92	20.44	141.02	2477.35	12.50	6.67	39.47	188.30	170.94	10.85	
2700.00	2667.75	20.44	141.02	2570.89	13.23	7.00	40.33	193.52	175.06	10.48	
2800.00	2767.57	20.44	141.02	2664.42	13.96	7.32	41.16	198.78	179.18	10.14	
2900.00	2867.39	20.44	141.02	2757.96	14.69	7.65	41.93	204.08	183.34	9.84	
3000.00	2967.21	20.44	141.02	2851.49	15.42	7.98	42.67	209.42	187.52	9.56	
3100.00	3067.03	20.44	141.02	2945.03	16.15	8.30	43.38	214.79	191.73	9.31	
3200.00	3166.86	20.44	141.02	3038.56	16.88	8.63	44.04	220.19	195.96	9.09	
3300.00	3266.68	20.44	141.02	3132.10	17.61	8.96	44.68	225.62	200.22	8.88	
3400.00	3366.50	20.44	141.02	3225.63	18.35	9.29	45.29	231.07	204.49	8.69	
3500.00	3466.32	20.44	141.02	3319.17	19.08	9.62	45.86	236.55	208.76	8.51	
3600.00	3566.14	20.44	141.02	3412.70	19.81	9.95	46.41	242.06	213.04	8.34	

## 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
3700.00	3665.97	20.44	141.02	3506.23	20.55	10.28	46.94	247.58	217.35	8.19	
3800.00	3765.79	20.44	141.02	3599.77	21.28	10.61	47.45	253.12	221.67	8.05	
3900.00	3865.61	20.44	141.02	3693.30	22.02	10.94	47.93	258.69	226.01	7.92	
4000.00	3965.43	20.44	141.02	3786.84	22.75	11.27	48.39	264.27	230.36	7.79	
4100.00	4065.25	20.44	141.02	3880.37	23.49	11.60	48.83	269.86	234.72	7.68	
4200.00	4165.07	20.44	141.02	3973.91	24.22	11.93	49.26	275.48	239.08	7.57	
4300.00	4264.90	20.44	141.02	4067.44	24.96	12.27	49.67	281.10	243.45	7.47	
4400.00	4364.72	20.44	141.02	4160.98	25.69	12.60	50.06	286.74	247.83	7.37	
4500.00	4464.54	20.44	141.02	4254.51	26.43	12.93	50.44	292.40	252.22	7.28	
4600.00	4564.36	20.44	141.02	4348.04	27.16	13.26	50.80	298.06	256.62	7.19	
4700.00	4664.18	20.44	141.02	4441.58	27.90	13.59	51.15	303.74	261.04	7.11	
4800.00	4764.01	20.44	141.02	4535.11	28.63	13.92	51.48	309.43	265.46	7.04	
4900.00	4863.83	20.44	141.02	4628.65	29.37	14.26	51.81	315.13	269.89	6.97	
5000.00	4963.65	20.44	141.02	4722.18	30.10	14.59	52.12	320.83	274.32	6.90	
5100.00	5063.47	20.44	141.02	4815.72	30.84	14.92	52.42	326.55	278.77	6.83	
5200.00	5163.29	20.44	141.02	4909.25	31.58	15.25	52.71	332.28	283.22	6.77	
5300.00	5263.12	20.44	141.02	5002.79	32.31	15.59	52.99	338.01	287.68	6.72	
5400.00	5362.94	20.44	141.02	5096.32	33.05	15.92	53.27	343.75	292.15	6.66	
5500.00	5462.76	20.44	141.02	5189.86	33.78	16.25	53.53	349.50	296.63	6.61	
5600.00	5562.58	20.44	141.02	5283.39	34.52	16.58	53.78	355.26	301.11	6.56	
5700.00	5662.40	20.44	141.02	5376.92	35.26	16.92	54.03	361.02	305.60	6.51	
5800.00	5762.23	20.44	141.02	5470.46	35.99	17.25	54.27	366.79	310.09	6.47	
5900.00	5862.05	20.44	141.02	5563.99	36.73	17.58	54.50	372.57	314.59	6.43	
6000.00	5961.87	20.44	141.02	5657.53	37.46	17.92	54.72	378.35	319.09	6.39	
6100.00	6061.69	20.44	141.02	5751.06	38.20	18.25	54.94	384.13	323.60	6.35	
6200.00	6161.51	20.44	141.02	5844.60	38.94	18.58	55.15	389.93	328.10	6.31	
6300.00	6261.20	20.44	141.02	5938.00	39.67	18.91	32.50	394.34	331.95	6.32	
6400.00	6359.34	20.44	141.02	6029.96	40.40	19.24	358.35	396.46	334.94	6.44	
6500.00	6454.01	20.44	141.02	6118.67	41.09	19.56	327.67	398.12	339.08	6.74	
6600.00	6544.74	17.61	158.81	6204.41	41.42	19.82	307.25	402.24	346.84	7.26	
6700.00	6639.99	16.92	184.58	6295.50	41.15	19.96	293.59	410.10	358.45	7.94	
6800.00	6741.24	19.61	209.20	6391.78	40.24	19.95	283.54	421.54	373.16	8.71	
6900.00	6849.73	25.12	227.01	6492.19	38.63	19.73	275.61	435.98	390.07	9.50	
7000.00	6966.84	32.58	238.87	6594.78	36.33	19.21	269.09	452.50	408.48	10.28	
7100.00	7093.96	41.48	247.09	6696.23	33.51	18.17	263.66	469.88	426.60	10.86	
7200.00	7232.21	51.62	253.21	6791.24	30.72	16.30	259.20	486.60	443.29	11.23	
7300.00	7381.93	62.86	258.14	6872.16	28.85	13.31	255.72	501.03	456.21	11.18	
7400.00	7542.03	75.04	262.41	6929.59	28.52	10.49	253.29	511.54	463.54	10.66	
7500.00	7709.56	87.85	266.39	6954.47	29.58	11.36	252.02	516.73	463.68	9.74	
7600.00	7821.11	90.00	267.03	6955.00	30.69	12.40	251.95	516.35	460.69	9.28	
7700.00	7921.11	90.00	267.03	6955.00	31.83	12.95	251.93	515.79	457.86	8.90	
7800.00	8021.10	90.00	267.03	6955.00	33.16	13.54	251.91	515.23	454.75	8.52	
7900.00	8121.10	90.00	267.03	6955.00	34.67	14.16	251.89	514.67	451.13	8.10	
8000.00	8221.10	90.00	267.03	6955.00	36.32	14.80	251.87	514.10	447.37	7.70	
8100.00	8321.10	90.00	267.03	6955.00	38.10	15.45	251.85	513.54	443.25	7.31	
8200.00	8421.10	90.00	267.03	6955.00	40.00	16.12	251.83	512.98	439.04	6.94	
8300.00	8521.10	90.00	267.03	6955.00	42.00	16.80	251.81	512.42	434.41	6.57	
8400.00	8621.09	90.00	267.03	6955.00	44.08	17.48	251.78	511.86	429.79	6.24	
8500.00	8721.09	90.00	267.03	6955.00	46.24	18.17	251.76	511.30	425.08	5.93	
8600.00	8821.09	90.00	267.03	6955.00	48.47	18.86	251.74	510.74	420.33	5.65	
8700.00	8921.09	90.00	267.03	6955.00	50.75	19.56	251.72	510.18	415.35	5.38	
8800.00	9021.09	90.00	267.03	6955.00	53.08	20.25	251.70	509.61	410.29	5.13	
8900.00	9121.09	90.00	267.03	6955.00	55.46	20.95	251.68	509.05	405.16	4.90	
9000.00	9221.08	90.00	267.03	6955.00	57.87	21.65	251.66	508.49	399.95	4.68	
9100.00	9321.08	90.00	267.03	6955.00	60.32	22.36	251.64	507.93	394.69	4.49	
9200.00	9421.08	90.00	267.03	6955.00	62.80	23.06	251.62	507.37	389.39	4.30	
9300.00	9521.08	90.00	267.03	6955.00	65.30	23.76	251.60	506.81	384.04	4.13	
9400.00	9621.08	90.00	267.03	6955.00	67.83	24.47	251.58	506.25	378.67	3.97	

## 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
9500.00	9721.08	90.00	267.03	6955.00	70.37	25.18	251.55	505.69	373.26	3.82	
9600.00	9821.07	90.00	267.03	6955.00	72.94	25.88	251.53	505.13	367.83	3.68	
9700.00	9921.07	90.00	267.03	6955.00	75.52	26.59	251.51	504.57	362.38	3.55	
9800.00	10021.07	90.00	267.03	6955.00	78.12	27.30	251.49	504.01	356.90	3.43	
9900.00	10121.07	90.00	267.03	6955.00	80.73	28.01	251.47	503.45	351.38	3.31	
10000.00	10221.07	90.00	267.03	6955.00	83.36	28.72	251.45	502.89	345.79	3.20	
10100.00	10321.06	90.00	267.03	6955.00	85.99	29.43	251.43	502.33	340.19	3.10	
10200.00	10421.06	90.00	267.03	6955.00	88.64	30.14	251.40	501.77	334.57	3.00	
10300.00	10521.06	90.00	267.03	6955.00	91.29	30.86	251.38	501.21	328.94	2.91	
10400.00	10621.06	90.00	267.03	6955.00	93.96	31.57	251.36	500.65	323.30	2.82	
10500.00	10721.06	90.00	267.03	6955.00	96.63	32.28	251.34	500.09	317.66	2.74	
10600.00	10821.06	90.00	267.03	6955.00	99.30	33.00	251.32	499.53	312.01	2.66	
10700.00	10921.05	90.00	267.03	6955.00	101.99	33.72	251.30	498.97	306.37	2.59	
10800.00	11021.05	90.00	267.03	6955.00	104.68	34.43	251.27	498.41	300.68	2.52	
10900.00	11121.05	90.00	267.03	6955.00	107.38	35.15	251.25	497.85	294.93	2.45	SF(Lo)
11000.00	11221.05	90.00	267.03	6955.00	110.08	35.86	251.23	497.29	289.18	2.39	SF(Lo)
11100.00	11321.05	90.00	267.03	6955.00	112.78	36.58	251.21	496.73	283.42	2.33	SF(Lo)
11200.00	11421.05	90.00	267.03	6955.00	115.50	37.30	251.19	496.17	277.66	2.27	SF(Lo)
11300.00	11521.04	90.00	267.03	6955.00	118.21	38.02	251.17	495.61	271.91	2.22	SF(Lo)
11400.00	11621.04	90.00	267.03	6955.00	120.93	38.74	251.14	495.05	266.16	2.16	SF(Lo)
11500.00	11721.04	90.00	267.03	6955.00	123.65	39.46	251.12	494.49	260.42	2.11	SF(Lo)
11600.00	11821.04	90.00	267.03	6955.00	126.38	40.18	251.10	493.93	254.68	2.06	SF(Lo)
11700.00	11921.04	90.00	267.03	6955.00	129.11	40.90	251.08	493.37	248.95	2.02	SF(Lo)
11800.00	12021.03	90.00	267.03	6955.00	131.84	41.62	251.05	492.81	243.21	1.97	SF(Lo)
11900.00	12121.03	90.00	267.03	6955.00	134.58	42.34	251.03	492.25	237.48	1.93	SF(Lo)
12000.00	12221.03	90.00	267.03	6955.00	137.31	43.06	251.01	491.70	231.74	1.89	SF(Lo)
12100.00	12321.03	90.00	267.03	6955.00	140.05	43.78	250.99	491.14	226.01	1.85	SF(Lo)
12200.00	12421.03	90.00	267.03	6955.00	142.80	44.50	250.96	490.58	220.28	1.81	SF(Lo)
12300.00	12521.03	90.00	267.03	6955.00	145.54	45.22	250.94	490.02	214.54	1.78	SF(Lo)
12400.00	12621.02	90.00	267.03	6955.00	148.29	45.95	250.92	489.46	208.81	1.74	SF(Lo)
12500.00	12721.02	90.00	267.03	6955.00	151.04	46.67	250.90	488.90	203.07	1.71	SF(Lo)
12600.00	12821.02	90.00	267.03	6955.00	153.79	47.39	250.87	488.34	197.33	1.68	SF(Lo)
12700.00	12921.02	90.00	267.03	6955.00	156.54	48.12	250.85	487.79	191.59	1.65	SF(Lo)
12800.00	13021.02	90.00	267.03	6955.00	159.29	48.84	250.83	487.23	185.85	1.62	SF(Lo)
12900.00	13121.02	90.00	267.03	6955.00	162.05	49.56	250.81	486.67	180.11	1.59	SF(Lo)
13000.00	13221.01	90.00	267.03	6955.00	164.80	50.29	250.78	486.11	174.37	1.56	SF(Lo)
13100.00	13321.01	90.00	267.03	6955.00	167.56	51.01	250.76	485.55	168.63	1.53	SF(Lo)
13200.00	13421.01	90.00	267.03	6955.00	170.32	51.74	250.74	485.00	162.88	1.51	SF(Lo)
13300.00	13521.01	90.00	267.03	6955.00	173.08	52.46	250.71	484.44	157.14	1.48	SF(Med)
13400.00	13621.01	90.00	267.03	6955.00	175.85	53.19	250.69	483.88	151.39	1.46	SF(Med)
13500.00	13721.01	90.00	267.03	6955.00	178.61	53.91	250.67	483.32	145.65	1.43	SF(Med)
13600.00	13821.00	90.00	267.03	6955.00	181.37	54.64	250.64	482.76	139.91	1.41	SF(Med)
13700.00	13921.00	90.00	267.03	6955.00	184.14	55.36	250.62	482.21	134.16	1.39	SF(Med)
13800.00	14021.00	90.00	267.03	6955.00	186.91	56.09	250.60	481.65	128.41	1.36	SF(Med)
13900.00	14121.00	90.00	267.03	6955.00	189.67	56.82	250.57	481.09	122.67	1.34	SF(Med)
14000.00	14221.00	90.00	267.03	6955.00	192.44	57.54	250.55	480.53	116.92	1.32	SF(Med)
14100.00	14320.99	90.00	267.03	6955.00	195.21	58.27	250.53	479.98	111.18	1.30	SF(Med)
14200.00	14420.99	90.00	267.03	6955.00	197.98	58.99	250.50	479.42	105.43	1.28	SF(Med)
14300.00	14520.99	90.00	267.03	6955.00	200.75	59.72	250.48	478.86	99.69	1.26	SF(Med)
14400.00	14620.99	90.00	267.03	6955.00	203.52	60.45	250.46	478.31	93.94	1.24	SF(Med)
14500.00	14720.99	90.00	267.03	6955.00	206.30	61.17	250.43	477.75	88.20	1.23	SF(Med)
14600.00	14820.99	90.00	267.03	6955.00	209.07	61.90	250.41	477.19	82.45	1.21	SF(Med)
14700.00	14920.98	90.00	267.03	6955.00	211.84	62.63	250.39	476.64	76.71	1.19	SF(Med)
14800.00	15020.98	90.00	267.03	6955.00	214.62	63.36	250.36	476.08	70.97	1.18	SF(Med)
14900.00	15120.98	90.00	267.03	6955.00	217.39	64.08	250.34	475.52	65.22	1.16	SF(Med)
15000.00	15220.98	90.00	267.03	6955.00	220.17	64.81	250.31	474.97	59.48	1.14	SF(Med)
15100.00	15320.98	90.00	267.03	6955.00	222.95	65.54	250.29	474.41	53.74	1.13	SF(Med)
15136.85	15357.82	90.00	267.03	6955.00	223.97	65.81	250.28	474.20	51.63	1.12	SF(Med)

## 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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.08	60.11	59.38	81.97	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	180.08	60.11	59.16	63.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	180.08	60.11	58.71	42.83	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	180.08	60.11	58.26	32.44	CC (Lo)
400.00	398.29	1.97	144.12	398.27	0.76	0.76	179.16	61.51	59.23	27.03	CC (Lo)
500.00	496.35	3.93	144.12	496.20	0.96	0.95	176.63	65.79	63.09	24.38	
600.00	593.95	5.88	144.12	593.44	1.19	1.16	173.10	73.14	70.00	23.28	
700.00	690.88	7.82	144.12	689.66	1.45	1.37	169.24	83.79	80.19	23.33	
800.00	786.97	9.74	144.12	784.63	1.76	1.59	33.75	97.48	93.46	24.23	
900.00	882.53	11.65	144.12	878.52	2.11	1.81	31.18	112.01	107.57	25.23	
1000.00	977.60	13.55	144.12	971.30	2.52	2.04	29.50	126.84	121.97	26.04	
1100.00	1072.19	15.44	144.12	1062.88	2.98	2.28	28.44	141.85	136.54	26.69	
1200.00	1166.32	17.33	144.12	1153.17	3.50	2.53	27.83	156.98	151.19	27.11	
1300.00	1259.97	19.20	144.12	1242.11	4.07	2.79	27.53	172.17	165.88	27.37	
1400.00	1353.75	20.88	144.12	1330.15	4.70	3.05	27.48	187.40	180.59	27.53	
1500.00	1452.82	20.88	144.12	1422.72	5.40	3.36	27.80	200.83	193.39	27.00	
1600.00	1552.23	20.88	144.12	1515.60	6.11	3.67	28.55	211.22	203.10	26.02	
1700.00	1651.85	20.88	144.12	1608.67	6.83	3.99	29.68	218.63	209.74	24.58	
1800.00	1751.53	20.88	144.12	1701.81	7.56	4.31	31.04	224.68	214.98	23.17	
1900.00	1851.21	20.88	144.12	1794.94	8.29	4.63	32.31	230.84	220.29	21.87	
2000.00	1950.89	20.88	144.12	1888.07	9.03	4.95	33.53	237.12	225.67	20.70	
2100.00	2050.57	20.88	144.12	1981.20	9.77	5.28	34.68	243.50	231.08	19.60	
2200.00	2150.25	20.88	144.12	2074.34	10.50	5.60	35.77	249.97	236.56	18.64	
2300.00	2249.93	20.88	144.12	2167.47	11.24	5.93	36.80	256.52	242.11	17.79	
2400.00	2349.61	20.88	144.12	2260.60	11.98	6.26	37.79	263.16	247.72	17.05	
2500.00	2449.29	20.88	144.12	2353.73	12.72	6.59	38.72	269.87	253.40	16.39	
2600.00	2548.97	20.88	144.12	2446.87	13.47	6.92	39.61	276.64	259.11	15.78	
2700.00	2648.65	20.88	144.12	2540.00	14.21	7.25	40.46	283.48	264.84	15.20	
2800.00	2748.33	20.88	144.12	2633.13	14.95	7.59	41.27	290.38	270.60	14.68	
2900.00	2848.01	20.88	144.12	2726.27	15.70	7.92	42.04	297.34	276.40	14.20	
3000.00	2947.69	20.88	144.12	2819.40	16.44	8.25	42.77	304.34	282.25	13.78	
3100.00	3047.37	20.88	144.12	2912.53	17.18	8.58	43.47	311.39	288.14	13.39	
3200.00	3147.05	20.88	144.12	3005.66	17.93	8.92	44.14	318.49	294.06	13.04	
3300.00	3246.73	20.88	144.12	3098.80	18.67	9.25	44.78	325.63	300.02	12.72	
3400.00	3346.41	20.88	144.12	3191.93	19.42	9.58	45.39	332.80	306.01	12.42	
3500.00	3446.09	20.88	144.12	3285.06	20.16	9.92	45.98	340.02	312.04	12.15	
3600.00	3545.77	20.88	144.12	3378.20	20.91	10.25	46.54	347.26	318.09	11.90	
3700.00	3645.45	20.88	144.12	3471.33	21.65	10.59	47.08	354.54	324.18	11.67	
3800.00	3745.13	20.88	144.12	3564.46	22.40	10.92	47.60	361.85	330.26	11.45	
3900.00	3844.81	20.88	144.12	3657.59	23.15	11.26	48.10	369.19	336.36	11.25	
4000.00	3944.49	20.88	144.12	3750.73	23.89	11.59	48.58	376.56	342.49	11.05	
4100.00	4044.17	20.88	144.12	3843.86	24.64	11.93	49.04	383.95	348.64	10.87	
4200.00	4143.85	20.88	144.12	3936.99	25.38	12.26	49.48	391.36	354.79	10.70	
4300.00	4243.53	20.88	144.12	4030.12	26.13	12.60	49.91	398.79	360.96	10.54	
4400.00	4343.21	20.88	144.12	4123.26	26.88	12.93	50.32	406.25	367.14	10.39	
4500.00	4442.89	20.88	144.12	4216.39	27.62	13.27	50.71	413.73	373.35	10.25	
4600.00	4542.57	20.88	144.12	4309.52	28.37	13.61	51.09	421.22	379.57	10.11	
4700.00	4642.25	20.88	144.12	4402.66	29.12	13.94	51.46	428.74	385.81	9.99	
4800.00	4741.93	20.88	144.12	4495.79	29.86	14.28	51.82	436.27	392.06	9.87	
4900.00	4841.61	20.88	144.12	4588.92	30.61	14.61	52.16	443.81	398.33	9.76	
5000.00	4941.29	20.88	144.12	4682.05	31.36	14.95	52.49	451.38	404.61	9.65	
5100.00	5040.97	20.88	144.12	4775.19	32.10	15.29	52.81	458.95	410.91	9.55	
5200.00	5140.65	20.88	144.12	4868.32	32.85	15.62	53.12	466.54	417.21	9.46	
5300.00	5240.33	20.88	144.12	4961.45	33.60	15.96	53.42	474.15	423.53	9.37	
5400.00	5340.01	20.88	144.12	5054.59	34.35	16.30	53.72	481.76	429.87	9.28	
5500.00	5439.69	20.88	144.12	5147.72	35.09	16.63	54.00	489.39	436.21	9.20	
5600.00	5539.37	20.88	144.12	5240.85	35.84	16.97	54.27	497.03	442.56	9.12	
5700.00	5639.05	20.88	144.12	5333.98	36.59	17.30	54.54	504.68	448.92	9.05	

## 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
5800.00	5738.73	20.88	144.12	5427.12	37.33	17.64	54.79	512.34	455.30	8.98	
5900.00	5838.41	20.88	144.12	5520.25	38.08	17.98	55.04	520.01	461.68	8.91	
6000.00	5938.09	20.88	144.12	5613.38	38.83	18.31	55.29	527.69	468.07	8.85	
6100.00	6037.77	20.88	144.12	5706.51	39.58	18.65	55.52	535.38	474.47	8.79	
6200.00	6137.45	20.88	144.12	5799.65	40.32	18.99	55.75	543.08	480.87	8.73	
6300.00	6237.08	20.88	144.12	5892.73	41.07	19.32	33.53	549.32	486.37	8.73	
6400.00	6335.32	20.88	144.12	5984.51	41.81	19.66	0.31	552.84	490.29	8.84	
6500.00	6430.26	20.88	144.12	6073.22	42.52	19.98	330.96	554.88	493.95	9.11	
6600.00	6520.05	20.88	144.12	6157.11	43.19	20.28	311.59	557.56	499.40	9.59	
6700.00	6602.95	20.88	144.12	6234.56	43.81	20.56	298.57	563.67	509.24	10.36	
6800.00	6686.22	18.57	159.54	6312.91	44.18	20.82	288.91	575.84	525.47	11.43	
6900.00	6777.67	17.86	182.99	6399.89	43.93	20.98	281.20	594.38	547.47	12.67	
7000.00	6880.01	20.32	207.07	6496.74	42.94	21.02	274.64	618.71	574.19	13.90	
7100.00	6998.09	26.13	226.18	6605.36	40.98	20.85	268.70	647.57	604.51	15.04	
7200.00	7139.27	35.09	239.84	6726.89	37.73	20.27	263.04	678.94	636.40	15.96	
7300.00	7314.02	47.44	249.86	6858.13	33.26	18.61	257.57	709.74	667.33	16.73	
7400.00	7533.76	63.75	257.88	6982.00	29.54	14.20	252.70	735.37	691.44	16.74	
7500.00	7799.90	83.93	265.02	7055.78	29.66	10.73	249.61	749.88	699.54	14.90	
7600.00	7951.76	90.00	266.98	7060.00	31.07	12.60	249.32	750.39	695.91	13.77	
7700.00	8051.75	90.00	266.98	7060.00	32.17	13.15	249.31	749.93	693.34	13.25	
7800.00	8151.75	90.00	266.98	7060.00	33.46	13.75	249.29	749.48	690.46	12.70	
7900.00	8251.75	90.00	266.98	7060.00	34.91	14.37	249.28	749.02	686.96	12.07	
8000.00	8351.75	90.00	266.98	7060.00	36.52	15.03	249.27	748.56	683.30	11.47	
8100.00	8451.75	90.00	266.98	7060.00	38.26	15.70	249.25	748.11	679.42	10.89	
8200.00	8551.75	90.00	266.98	7060.00	40.12	16.38	249.24	747.65	675.34	10.34	
8300.00	8651.75	90.00	266.98	7060.00	42.08	17.07	249.23	747.19	670.93	9.80	
8400.00	8751.75	90.00	266.98	7060.00	44.13	17.77	249.21	746.74	666.52	9.31	
8500.00	8851.74	90.00	266.98	7060.00	46.25	18.47	249.20	746.28	661.97	8.85	
8600.00	8951.74	90.00	266.98	7060.00	48.45	19.17	249.19	745.83	657.22	8.42	
8700.00	9051.74	90.00	266.98	7060.00	50.71	19.88	249.17	745.37	652.40	8.02	
8800.00	9151.74	90.00	266.98	7060.00	53.01	20.59	249.16	744.91	647.50	7.65	
8900.00	9251.74	90.00	266.98	7060.00	55.37	21.30	249.15	744.46	642.50	7.30	
9000.00	9351.74	90.00	266.98	7060.00	57.76	22.01	249.13	744.00	637.45	6.98	
9100.00	9451.74	90.00	266.98	7060.00	60.19	22.72	249.12	743.54	632.35	6.69	
9200.00	9551.74	90.00	266.98	7060.00	62.65	23.43	249.11	743.09	627.21	6.41	
9300.00	9651.74	90.00	266.98	7060.00	65.14	24.14	249.09	742.63	622.03	6.16	
9400.00	9751.73	90.00	266.98	7060.00	67.65	24.85	249.08	742.18	616.81	5.92	
9500.00	9851.73	90.00	266.98	7060.00	70.19	25.56	249.07	741.72	611.56	5.70	
9600.00	9951.73	90.00	266.98	7060.00	72.74	26.27	249.05	741.26	606.29	5.49	
9700.00	10051.73	90.00	266.98	7060.00	75.31	26.99	249.04	740.81	600.99	5.30	
9800.00	10151.73	90.00	266.98	7060.00	77.90	27.70	249.03	740.35	595.68	5.12	
9900.00	10251.73	90.00	266.98	7060.00	80.50	28.41	249.01	739.90	590.35	4.95	
10000.00	10351.73	90.00	266.98	7060.00	83.12	29.13	249.00	739.44	585.01	4.79	
10100.00	10451.73	90.00	266.98	7060.00	85.75	29.84	248.99	738.98	579.60	4.64	
10200.00	10551.72	90.00	266.98	7060.00	88.38	30.56	248.97	738.53	574.14	4.49	
10300.00	10651.72	90.00	266.98	7060.00	91.03	31.27	248.96	738.07	568.66	4.36	
10400.00	10751.72	90.00	266.98	7060.00	93.69	31.99	248.94	737.62	563.18	4.23	
10500.00	10851.72	90.00	266.98	7060.00	96.35	32.70	248.93	737.16	557.68	4.11	
10600.00	10951.72	90.00	266.98	7060.00	99.02	33.42	248.92	736.71	552.19	3.99	
10700.00	11051.72	90.00	266.98	7060.00	101.70	34.14	248.90	736.25	546.68	3.88	
10800.00	11151.72	90.00	266.98	7060.00	104.39	34.85	248.89	735.79	541.18	3.78	
10900.00	11251.72	90.00	266.98	7060.00	107.08	35.57	248.88	735.34	535.67	3.68	
11000.00	11351.72	90.00	266.98	7060.00	109.78	36.29	248.86	734.88	530.16	3.59	
11100.00	11451.71	90.00	266.98	7060.00	112.48	37.01	248.85	734.43	524.66	3.50	
11200.00	11551.71	90.00	266.98	7060.00	115.19	37.73	248.84	733.97	519.16	3.42	
11300.00	11651.71	90.00	266.98	7060.00	117.90	38.45	248.82	733.52	513.67	3.34	
11400.00	11751.71	90.00	266.98	7060.00	120.61	39.17	248.81	733.06	508.06	3.26	
11500.00	11851.71	90.00	266.98	7060.00	123.33	39.89	248.79	732.61	502.42	3.18	



## 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
11600.00	11951.71	90.00	266.98	7060.00	126.06	40.61	248.78	732.15	496.79	3.11	
11700.00	12051.71	90.00	266.98	7060.00	128.78	41.33	248.77	731.70	491.17	3.04	
11800.00	12151.71	90.00	266.98	7060.00	131.51	42.05	248.75	731.24	485.56	2.98	
11900.00	12251.70	90.00	266.98	7060.00	134.24	42.77	248.74	730.79	479.95	2.91	
12000.00	12351.70	90.00	266.98	7060.00	136.98	43.49	248.72	730.33	474.35	2.85	
12100.00	12451.70	90.00	266.98	7060.00	139.71	44.22	248.71	729.88	468.76	2.80	
12200.00	12551.70	90.00	266.98	7060.00	142.45	44.94	248.70	729.42	463.17	2.74	
12300.00	12651.70	90.00	266.98	7060.00	145.20	45.66	248.68	728.97	457.58	2.69	
12400.00	12751.70	90.00	266.98	7060.00	147.94	46.38	248.67	728.51	451.99	2.63	
12500.00	12851.70	90.00	266.98	7060.00	150.69	47.11	248.65	728.06	446.40	2.58	
12600.00	12951.70	90.00	266.98	7060.00	153.43	47.83	248.64	727.60	440.82	2.54	
12700.00	13051.69	90.00	266.98	7060.00	156.18	48.55	248.63	727.15	435.23	2.49	SF(Lo)
12800.00	13151.69	90.00	266.98	7060.00	158.94	49.28	248.61	726.69	429.64	2.45	SF(Lo)
12900.00	13251.69	90.00	266.98	7060.00	161.69	50.00	248.60	726.24	424.05	2.40	SF(Lo)
13000.00	13351.69	90.00	266.98	7060.00	164.44	50.73	248.58	725.78	418.46	2.36	SF(Lo)
13100.00	13451.69	90.00	266.98	7060.00	167.20	51.45	248.57	725.33	412.87	2.32	SF(Lo)
13200.00	13551.69	90.00	266.98	7060.00	169.96	52.18	248.56	724.87	407.28	2.28	SF(Lo)
13300.00	13651.69	90.00	266.98	7060.00	172.72	52.90	248.54	724.42	401.69	2.24	SF(Lo)
13400.00	13751.69	90.00	266.98	7060.00	175.48	53.63	248.53	723.97	396.10	2.21	SF(Lo)
13500.00	13851.69	90.00	266.98	7060.00	178.24	54.35	248.51	723.51	390.51	2.17	SF(Lo)
13600.00	13951.68	90.00	266.98	7060.00	181.00	55.08	248.50	723.06	384.91	2.14	SF(Lo)
13700.00	14051.68	90.00	266.98	7060.00	183.77	55.80	248.49	722.60	379.32	2.10	SF(Lo)
13800.00	14151.68	90.00	266.98	7060.00	186.53	56.53	248.47	722.15	373.72	2.07	SF(Lo)
13900.00	14251.68	90.00	266.98	7060.00	189.30	57.25	248.46	721.69	368.13	2.04	SF(Lo)
14000.00	14351.68	90.00	266.98	7060.00	192.06	57.98	248.44	721.24	362.53	2.01	SF(Lo)
14100.00	14451.68	90.00	266.98	7060.00	194.83	58.71	248.43	720.79	356.93	1.98	SF(Lo)
14200.00	14551.68	90.00	266.98	7060.00	197.60	59.43	248.41	720.33	351.34	1.95	SF(Lo)
14300.00	14651.68	90.00	266.98	7060.00	200.37	60.16	248.40	719.88	345.74	1.92	SF(Lo)
14400.00	14751.67	90.00	266.98	7060.00	203.14	60.89	248.39	719.42	340.14	1.90	SF(Lo)
14500.00	14851.67	90.00	266.98	7060.00	205.91	61.61	248.37	718.97	334.55	1.87	SF(Lo)
14600.00	14951.67	90.00	266.98	7060.00	208.69	62.34	248.36	718.52	328.95	1.84	SF(Lo)
14700.00	15051.67	90.00	266.98	7060.00	211.46	63.07	248.34	718.06	323.35	1.82	SF(Lo)
14800.00	15151.67	90.00	266.98	7060.00	214.23	63.80	248.33	717.61	317.75	1.79	SF(Lo)
14900.00	15251.67	90.00	266.98	7060.00	217.01	64.52	248.31	717.15	312.15	1.77	SF(Lo)
15000.00	15351.67	90.00	266.98	7060.00	219.78	65.25	248.30	716.70	306.55	1.75	SF(Lo)
15100.00	15451.67	90.00	266.98	7060.00	222.56	65.98	248.29	716.25	300.96	1.72	SF(Lo)
15136.85	15488.51	90.00	266.98	7060.00	223.58	66.25	248.28	716.08	298.89	1.72	SF(Lo)