

**5D Plan Report**

## Synergy Resources

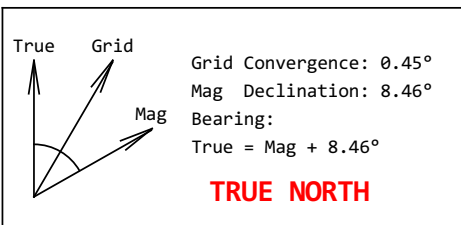
**Field Name:** *CO N - NAD 83*  
**Site Name:** *Goetzel 25-29 Pad*  
**Well Name:** *Goetzel 13N-30C-M*  
**Plan:** *P1:V1*

5 December 2016





**Goetzel 13N-30C-M**  
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

**Plan Data for Goetzel 13N-30C-M**

Plan Point Information:									
DogLeg Severity Unit: °/100.00ft									
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	
0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.0	
850.00	0.00	0.00	850.00	-0.00	-0.00	0.00	0.00	0.0	
1719.26	17.39	127.46	1705.99	-79.59	103.89	-84.35	2.00	127.5	
6337.65	17.39	127.46	6113.39	-918.81	1199.32	-973.77	0.00	0.0	
7626.25	90.00	266.73	6974.00	-1134.07	512.88	-257.10	8.00	137.9	
15286.68	90.00	266.73	6974.00	-1570.56	-7135.10	7305.91	0.00	0.0	

**Target Set Information:**

Name: Goetzel 13N-30C-M							
Position offsets from Slot centre							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP 13N-30C-M	6974.00	-1134.07	512.88	1409213.14	3194159.58	40.454595	-104.802295
PBHL 13N-30C-M	6974.00	-1570.56	-7135.10	1408716.64	3186515.26	40.453394	-104.829777

**Plan Data for Goetzel 13N-30C-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**

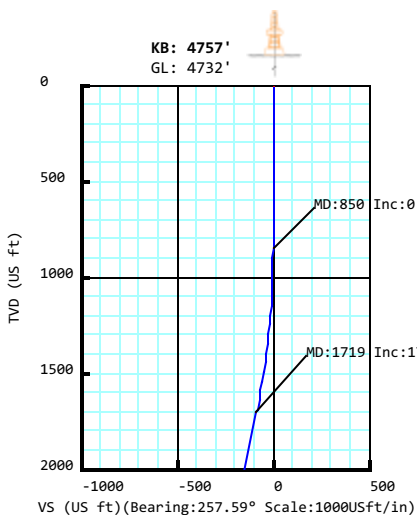
Unit: USFeet  
TVD Reference:  
Company Name: Synergy Resources  
Position: Northing: 1410483.05USft Latitude: 40.458092°  
Easting: 3193637.83USft Longitude: -104.804134°  
North Reference: True  
Grid Convergence: 0.45°  
Elevation Above VRD: 4732.00USft

**Slot: Goetzel 13N-30C-M**

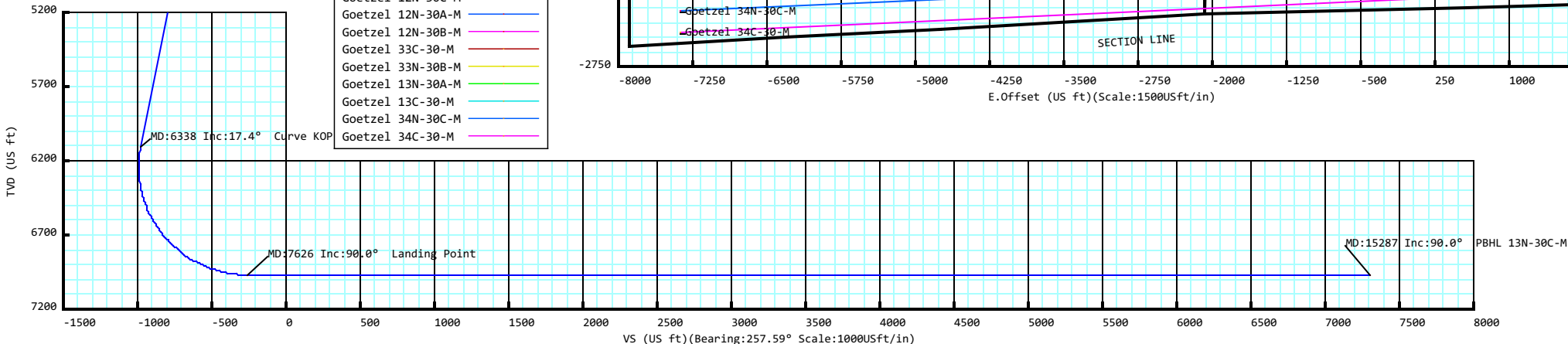
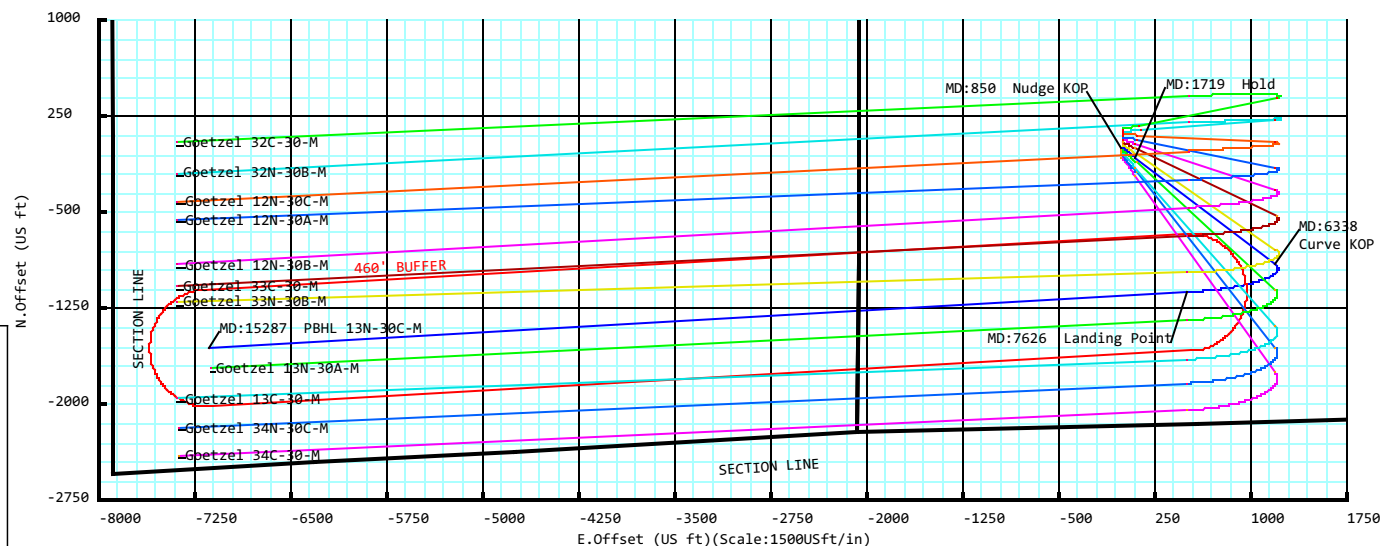
Position:  
Offset is from Site centre  
+N/-S: -139.89USft Northing: 1410343.15USft Latitude: 40.457708°  
+E/-W: -1.11USft Easting: 3193637.82USft Longitude: -104.804138°  
Elevation Above VRD: 4732.00USft

**Well: Goetzel 13N-30C-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: 257.59°  
Magnetic Parameters:  
Model: Field Strength: Declination: Dip: Date:  
bggm2016 52524(nT) 8.46° 66.93° 2016-11-18



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



## Goetzel 13N-30C-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-30C-M	Position (Relative to Site Centre)			
	+N/-S: -139.89 US ft	Northing: 1410343.15 US ft		Latitude: 40.457708000
	+E/-W: -1.11 US ft	Easting: 3193637.82 US ft		Longitude: -104.804138000
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 4732.00 US ft			
Comment:				
Well:  Goetzel 13N-30C-M	Type:Main well		UWI:	Plan:P1:V1
	File Number:	Comment:		
	Closure Distance:7305.91US ft		Closure Azimuth:257.59°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 257.59°
	Magnetic Parameters:			
	Model: bggm2016	Field Strength:	Declination: 8.46°	Dip: 66.93°
	52524.6nT		Date: 18/Nov/2016	

<b>Drill floor: Plan: P1:V1</b>			
<b>Rig Height (Drill Floor):</b>	<b>Elevation above MSL:</b>	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°
25.00 US ft	4757.00 US ft		

<b>Target set: Goetzel 13N-30C-M Comment:</b>							
<b>Target Name:</b>	<b>Shape:</b>	<b>TVD (US ft)</b>	<b>N.Offset (US ft)</b>	<b>E.Offset (US ft)</b>	<b>Northing (USFt)</b>	<b>Easting (USFt)</b>	<b>Comment</b>
LP 13N-30C-M	Point	6974.00	-1134.07	512.88	1409213.14	3194159.58	
PBHL 13N-30C-M	Point	6974.00	-1570.56	-7135.10	1408716.64	3186515.26	

Wellpath created using minimum curvature.

<b>Tie Point:</b>						
<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> -	<b>East Offset:</b> -	
				0.00 USFt	0.00 USFt	

<b>Salient Points: (Relative to Slot centre)(TVD relative to Drill Floor)</b>										
<b>MD (US ft)</b>	<b>Inc (°)</b>	<b>Az (°)</b>	<b>TVD (US ft)</b>	<b>VS (US ft)</b>	<b>N.Offset (US ft)</b>	<b>E.Offset (US ft)</b>	<b>B.Rate (°/100US ft)</b>	<b>T.Rate (°/100US ft)</b>	<b>DLS (°/100US ft)</b>	<b>Comment</b>
0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	-0.00	-0.00	0.00	0.00	0.00	Nudge KOP
1719.26	17.39	127.46	1705.99	-84.35	-79.59	103.89	2.00	0.00	2.00	Hold
6337.65	17.39	127.46	6113.39	-973.77	-918.81	1199.32	0.00	0.00	0.00	Curve KOP
7626.25	90.00	266.73	6974.00	-257.10	-1134.07	512.88	5.64	10.81	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
15286.68	90.00	266.73	6974.00	7305.91	-1570.56	-7135.10	0.00	0.00	0.00	PBHL 13N-30C-M
Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	B.Rate (°/100US ft)	T.Rate (°/100US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	-0.00	-0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	-0.00	-0.00	0.00	0.00	0.00	Nudge KOP
900.00	1.00	127.46	900.00	-0.28	-0.27	0.35	2.00	0.00	2.00	
1000.00	3.00	127.46	999.93	-2.53	-2.39	3.12	2.00	0.00	2.00	
1100.00	5.00	127.46	1099.68	-7.03	-6.63	8.65	2.00	0.00	2.00	
1200.00	7.00	127.46	1199.13	-13.76	-12.99	16.95	2.00	-0.00	2.00	
1300.00	9.00	127.46	1298.15	-22.73	-21.45	28.00	2.00	-0.00	2.00	
1400.00	11.00	127.46	1396.63	-33.92	-32.01	41.78	2.00	0.00	2.00	
1500.00	13.00	127.46	1494.44	-47.32	-44.65	58.29	2.00	-0.00	2.00	
1600.00	15.00	127.46	1591.46	-62.92	-59.36	77.49	2.00	-0.00	2.00	
1700.00	17.00	127.46	1687.58	-80.68	-76.13	99.37	2.00	0.00	2.00	
1719.26	17.39	127.46	1705.99	-84.35	-79.59	103.89	2.00	-0.00	2.00	Hold
1800.00	17.39	127.46	1783.03	-99.90	-94.26	123.04	0.00	0.00	0.00	
1900.00	17.39	127.46	1878.47	-119.16	-112.43	146.76	0.00	0.00	0.00	
2000.00	17.39	127.46	1973.90	-138.41	-130.60	170.48	0.00	0.00	0.00	
2100.00	17.39	127.46	2069.33	-157.67	-148.77	194.20	0.00	0.00	0.00	
2200.00	17.39	127.46	2164.76	-176.93	-166.95	217.91	0.00	0.00	0.00	
2300.00	17.39	127.46	2260.19	-196.19	-185.12	241.63	0.00	0.00	0.00	
2400.00	17.39	127.46	2355.62	-215.45	-203.29	265.35	0.00	0.00	0.00	
2500.00	17.39	127.46	2451.06	-234.71	-221.46	289.07	0.00	0.00	0.00	
2600.00	17.39	127.46	2546.49	-253.96	-239.63	312.79	0.00	0.00	0.00	
2700.00	17.39	127.46	2641.92	-273.22	-257.80	336.51	0.00	0.00	0.00	
2800.00	17.39	127.46	2737.35	-292.48	-275.97	360.23	0.00	0.00	0.00	
2900.00	17.39	127.46	2832.78	-311.74	-294.14	383.95	0.00	0.00	0.00	
3000.00	17.39	127.46	2928.21	-331.00	-312.32	407.67	0.00	0.00	0.00	
3100.00	17.39	127.46	3023.65	-350.25	-330.49	431.39	0.00	0.00	0.00	
3200.00	17.39	127.46	3119.08	-369.51	-348.66	455.10	0.00	0.00	0.00	
3300.00	17.39	127.46	3214.51	-388.77	-366.83	478.82	0.00	0.00	0.00	
3400.00	17.39	127.46	3309.94	-408.03	-385.00	502.54	0.00	0.00	0.00	
3500.00	17.39	127.46	3405.37	-427.29	-403.17	526.26	0.00	0.00	0.00	
3600.00	17.39	127.46	3500.81	-446.55	-421.34	549.98	0.00	0.00	0.00	
3700.00	17.39	127.46	3596.24	-465.80	-439.52	573.70	0.00	0.00	0.00	
3800.00	17.39	127.46	3691.67	-485.06	-457.69	597.42	0.00	0.00	0.00	
3900.00	17.39	127.46	3787.10	-504.32	-475.86	621.14	0.00	0.00	0.00	
4000.00	17.39	127.46	3882.53	-523.58	-494.03	644.86	0.00	0.00	0.00	
4100.00	17.39	127.46	3977.96	-542.84	-512.20	668.58	0.00	0.00	0.00	
4200.00	17.39	127.46	4073.40	-562.09	-530.37	692.29	0.00	0.00	0.00	
4300.00	17.39	127.46	4168.83	-581.35	-548.54	716.01	0.00	0.00	0.00	
4400.00	17.39	127.46	4264.26	-600.61	-566.71	739.73	0.00	0.00	0.00	
4500.00	17.39	127.46	4359.69	-619.87	-584.89	763.45	0.00	0.00	0.00	
4600.00	17.39	127.46	4455.12	-639.13	-603.06	787.17	0.00	0.00	0.00	
4700.00	17.39	127.46	4550.55	-658.38	-621.23	810.89	0.00	0.00	0.00	
4800.00	17.39	127.46	4645.99	-677.64	-639.40	834.61	0.00	0.00	0.00	
4900.00	17.39	127.46	4741.42	-696.90	-657.57	858.33	0.00	0.00	0.00	
5000.00	17.39	127.46	4836.85	-716.16	-675.74	882.05	0.00	0.00	0.00	
5100.00	17.39	127.46	4932.28	-735.42	-693.91	905.77	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	17.39	127.46	5027.71	-754.68	-712.08	929.48	0.00	0.00	0.00	
5300.00	17.39	127.46	5123.14	-773.93	-730.26	953.20	0.00	0.00	0.00	
5400.00	17.39	127.46	5218.58	-793.19	-748.43	976.92	0.00	0.00	0.00	
5500.00	17.39	127.46	5314.01	-812.45	-766.60	1000.64	0.00	0.00	0.00	
5600.00	17.39	127.46	5409.44	-831.71	-784.77	1024.36	0.00	0.00	0.00	
5700.00	17.39	127.46	5504.87	-850.97	-802.94	1048.08	0.00	0.00	0.00	
5800.00	17.39	127.46	5600.30	-870.22	-821.11	1071.80	0.00	0.00	0.00	
5900.00	17.39	127.46	5695.73	-889.48	-839.28	1095.52	0.00	0.00	0.00	
6000.00	17.39	127.46	5791.17	-908.74	-857.45	1119.24	0.00	0.00	0.00	
6100.00	17.39	127.46	5886.60	-928.00	-875.63	1142.96	0.00	0.00	0.00	
6200.00	17.39	127.46	5982.03	-947.26	-893.80	1166.67	0.00	0.00	0.00	
6300.00	17.39	127.46	6077.46	-966.52	-911.97	1190.39	0.00	0.00	0.00	
6337.65	17.39	127.46	6113.39	-973.77	-918.81	1199.32	0.00	0.00	0.00	Curve KOP
6400.00	14.07	141.32	6173.42	-983.13	-930.40	1211.46	-5.32	22.23	8.00	
6500.00	11.55	176.23	6271.07	-987.01	-949.90	1219.73	-2.53	34.92	8.00	
6600.00	13.96	211.47	6368.74	-977.13	-970.21	1214.08	2.41	35.24	8.00	
6700.00	19.56	231.64	6464.53	-953.68	-990.92	1194.63	5.60	20.17	8.00	
6800.00	26.39	242.43	6556.58	-917.11	-1011.63	1161.75	6.83	10.79	8.00	
6900.00	33.72	248.91	6643.10	-868.14	-1031.94	1116.07	7.32	6.48	8.00	
7000.00	41.27	253.27	6722.40	-807.72	-1051.45	1058.50	7.55	4.36	8.00	
7100.00	48.94	256.48	6792.94	-737.03	-1069.78	990.15	7.67	3.21	8.00	
7200.00	56.68	259.02	6853.35	-657.44	-1086.58	912.35	7.74	2.53	8.00	
7300.00	64.47	261.13	6902.44	-570.50	-1101.52	826.62	7.79	2.12	8.00	
7400.00	72.28	262.99	6939.28	-477.90	-1114.31	734.62	7.81	1.86	8.00	
7500.00	80.11	264.69	6963.13	-381.45	-1124.69	638.15	7.83	1.70	8.00	
7600.00	87.94	266.31	6973.53	-283.02	-1132.47	539.08	7.84	1.62	8.00	
7626.25	90.00	266.73	6974.00	-257.10	-1134.07	512.88	7.84	1.60	8.00	Landing Point
7700.00	90.00	266.73	6974.00	-184.29	-1138.27	439.25	0.00	0.00	0.00	
7800.00	90.00	266.73	6974.00	-85.56	-1143.97	339.41	0.00	0.00	0.00	
7900.00	90.00	266.73	6974.00	13.17	-1149.66	239.58	0.00	0.00	0.00	
8000.00	90.00	266.73	6974.00	111.90	-1155.36	139.74	0.00	0.00	0.00	
8100.00	90.00	266.73	6974.00	210.63	-1161.06	39.90	0.00	0.00	0.00	
8200.00	90.00	266.73	6974.00	309.35	-1166.76	-59.94	0.00	0.00	0.00	
8300.00	90.00	266.73	6974.00	408.08	-1172.46	-159.77	0.00	0.00	0.00	
8400.00	90.00	266.73	6974.00	506.81	-1178.15	-259.61	0.00	0.00	0.00	
8500.00	90.00	266.73	6974.00	605.54	-1183.85	-359.45	0.00	0.00	0.00	
8600.00	90.00	266.73	6974.00	704.27	-1189.55	-459.29	0.00	0.00	0.00	
8700.00	90.00	266.73	6974.00	803.00	-1195.25	-559.12	0.00	0.00	0.00	
8800.00	90.00	266.73	6974.00	901.72	-1200.95	-658.96	0.00	0.00	0.00	
8900.00	90.00	266.73	6974.00	1000.45	-1206.64	-758.80	0.00	0.00	0.00	
9000.00	90.00	266.73	6974.00	1099.18	-1212.34	-858.64	0.00	0.00	0.00	
9100.00	90.00	266.73	6974.00	1197.91	-1218.04	-958.47	0.00	0.00	0.00	
9200.00	90.00	266.73	6974.00	1296.64	-1223.74	-1058.31	0.00	0.00	0.00	
9300.00	90.00	266.73	6974.00	1395.37	-1229.44	-1158.15	0.00	0.00	0.00	
9400.00	90.00	266.73	6974.00	1494.09	-1235.14	-1257.99	0.00	0.00	0.00	
9500.00	90.00	266.73	6974.00	1592.82	-1240.83	-1357.82	0.00	0.00	0.00	
9600.00	90.00	266.73	6974.00	1691.55	-1246.53	-1457.66	0.00	0.00	0.00	
9700.00	90.00	266.73	6974.00	1790.28	-1252.23	-1557.50	0.00	0.00	0.00	
9800.00	90.00	266.73	6974.00	1889.01	-1257.93	-1657.34	0.00	0.00	0.00	
9900.00	90.00	266.73	6974.00	1987.74	-1263.63	-1757.17	0.00	0.00	0.00	
10000.00	90.00	266.73	6974.00	2086.46	-1269.32	-1857.01	0.00	0.00	0.00	
10100.00	90.00	266.73	6974.00	2185.19	-1275.02	-1956.85	0.00	0.00	0.00	
10200.00	90.00	266.73	6974.00	2283.92	-1280.72	-2056.69	0.00	0.00	0.00	
10300.00	90.00	266.73	6974.00	2382.65	-1286.42	-2156.52	0.00	0.00	0.00	
10400.00	90.00	266.73	6974.00	2481.38	-1292.12	-2256.36	0.00	0.00	0.00	
10500.00	90.00	266.73	6974.00	2580.11	-1297.81	-2356.20	0.00	0.00	0.00	
10600.00	90.00	266.73	6974.00	2678.83	-1303.51	-2456.04	0.00	0.00	0.00	
10700.00	90.00	266.73	6974.00	2777.56	-1309.21	-2555.87	0.00	0.00	0.00	
10800.00	90.00	266.73	6974.00	2876.29	-1314.91	-2655.71	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	266.73	6974.00	2975.02	-1320.61	-2755.55	0.00	0.00	0.00	
11000.00	90.00	266.73	6974.00	3073.75	-1326.31	-2855.39	0.00	0.00	0.00	
11100.00	90.00	266.73	6974.00	3172.48	-1332.00	-2955.22	0.00	0.00	0.00	
11200.00	90.00	266.73	6974.00	3271.20	-1337.70	-3055.06	0.00	0.00	0.00	
11300.00	90.00	266.73	6974.00	3369.93	-1343.40	-3154.90	0.00	0.00	0.00	
11400.00	90.00	266.73	6974.00	3468.66	-1349.10	-3254.74	0.00	0.00	0.00	
11500.00	90.00	266.73	6974.00	3567.39	-1354.80	-3354.57	0.00	0.00	0.00	
11600.00	90.00	266.73	6974.00	3666.12	-1360.49	-3454.41	0.00	0.00	0.00	
11700.00	90.00	266.73	6974.00	3764.84	-1366.19	-3554.25	0.00	0.00	0.00	
11800.00	90.00	266.73	6974.00	3863.57	-1371.89	-3654.09	0.00	0.00	0.00	
11900.00	90.00	266.73	6974.00	3962.30	-1377.59	-3753.92	0.00	0.00	0.00	
12000.00	90.00	266.73	6974.00	4061.03	-1383.29	-3853.76	0.00	0.00	0.00	
12100.00	90.00	266.73	6974.00	4159.76	-1388.98	-3953.60	0.00	0.00	0.00	
12200.00	90.00	266.73	6974.00	4258.49	-1394.68	-4053.44	0.00	0.00	0.00	
12300.00	90.00	266.73	6974.00	4357.21	-1400.38	-4153.27	0.00	0.00	0.00	
12400.00	90.00	266.73	6974.00	4455.94	-1406.08	-4253.11	0.00	0.00	0.00	
12500.00	90.00	266.73	6974.00	4554.67	-1411.78	-4352.95	0.00	0.00	0.00	
12600.00	90.00	266.73	6974.00	4653.40	-1417.47	-4452.79	0.00	0.00	0.00	
12700.00	90.00	266.73	6974.00	4752.13	-1423.17	-4552.62	0.00	0.00	0.00	
12800.00	90.00	266.73	6974.00	4850.86	-1428.87	-4652.46	0.00	0.00	0.00	
12900.00	90.00	266.73	6974.00	4949.58	-1434.57	-4752.30	0.00	0.00	0.00	
13000.00	90.00	266.73	6974.00	5048.31	-1440.27	-4852.14	0.00	0.00	0.00	
13100.00	90.00	266.73	6974.00	5147.04	-1445.97	-4951.98	0.00	0.00	0.00	
13200.00	90.00	266.73	6974.00	5245.77	-1451.66	-5051.81	0.00	0.00	0.00	
13300.00	90.00	266.73	6974.00	5344.50	-1457.36	-5151.65	0.00	0.00	0.00	
13400.00	90.00	266.73	6974.00	5443.23	-1463.06	-5251.49	0.00	0.00	0.00	
13500.00	90.00	266.73	6974.00	5541.95	-1468.76	-5351.33	0.00	0.00	0.00	
13600.00	90.00	266.73	6974.00	5640.68	-1474.46	-5451.16	0.00	0.00	0.00	
13700.00	90.00	266.73	6974.00	5739.41	-1480.15	-5551.00	0.00	0.00	0.00	
13800.00	90.00	266.73	6974.00	5838.14	-1485.85	-5650.84	0.00	0.00	0.00	
13900.00	90.00	266.73	6974.00	5936.87	-1491.55	-5750.68	0.00	0.00	0.00	
14000.00	90.00	266.73	6974.00	6035.60	-1497.25	-5850.51	0.00	0.00	0.00	
14100.00	90.00	266.73	6974.00	6134.32	-1502.95	-5950.35	0.00	0.00	0.00	
14200.00	90.00	266.73	6974.00	6233.05	-1508.64	-6050.19	0.00	0.00	0.00	
14300.00	90.00	266.73	6974.00	6331.78	-1514.34	-6150.03	0.00	0.00	0.00	
14400.00	90.00	266.73	6974.00	6430.51	-1520.04	-6249.86	0.00	0.00	0.00	
14500.00	90.00	266.73	6974.00	6529.24	-1525.74	-6349.70	0.00	0.00	0.00	
14600.00	90.00	266.73	6974.00	6627.97	-1531.44	-6449.54	0.00	0.00	0.00	
14700.00	90.00	266.73	6974.00	6726.69	-1537.14	-6549.38	0.00	0.00	0.00	
14800.00	90.00	266.73	6974.00	6825.42	-1542.83	-6649.21	0.00	0.00	0.00	
14900.00	90.00	266.73	6974.00	6924.15	-1548.53	-6749.05	0.00	0.00	0.00	
15000.00	90.00	266.73	6974.00	7022.88	-1554.23	-6848.89	0.00	0.00	0.00	
15100.00	90.00	266.73	6974.00	7121.61	-1559.93	-6948.73	0.00	0.00	0.00	
15200.00	90.00	266.73	6974.00	7220.33	-1565.63	-7048.56	0.00	0.00	0.00	
15286.68	90.00	266.73	6974.00	7305.91	-1570.56	-7135.10	0.00	0.00	0.00	PBHL 13N-30C-M



## Synergy Resources

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

5 December 2016

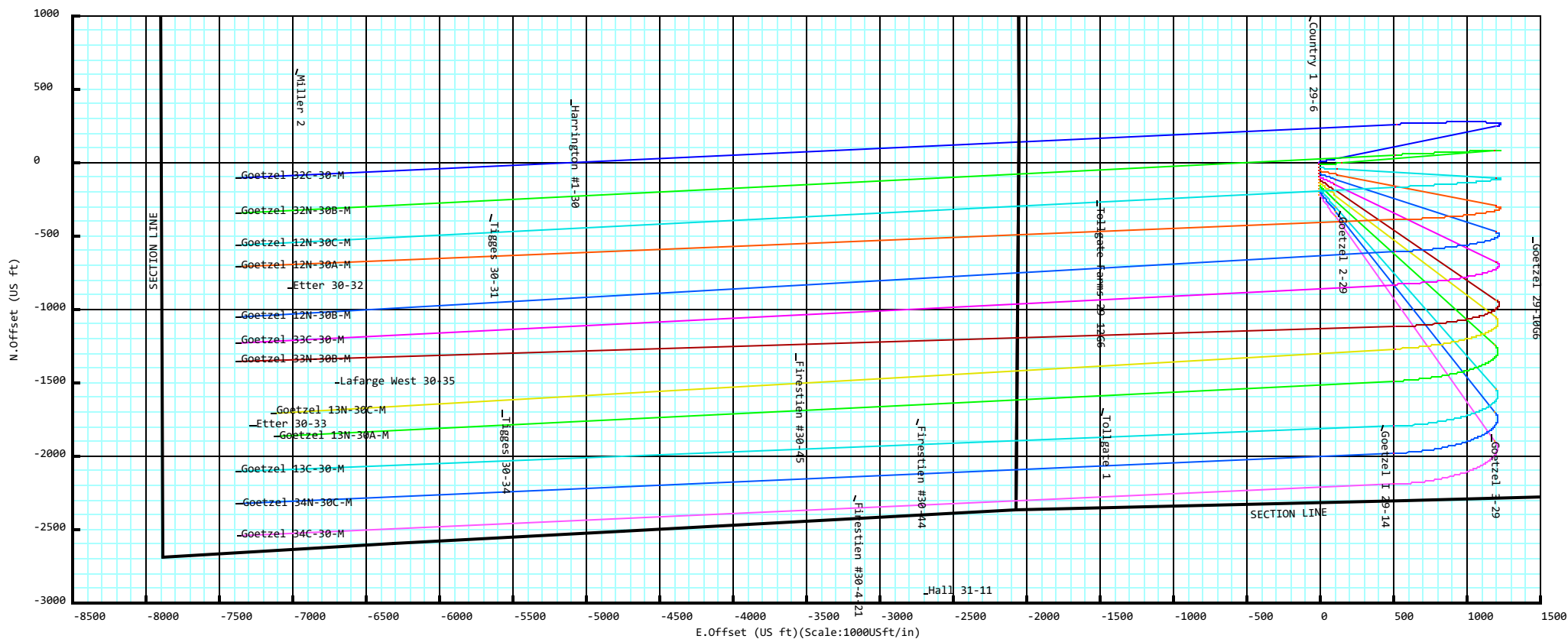




**Goetzel Pad**  
Weld County, CO  
Precision 562

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	





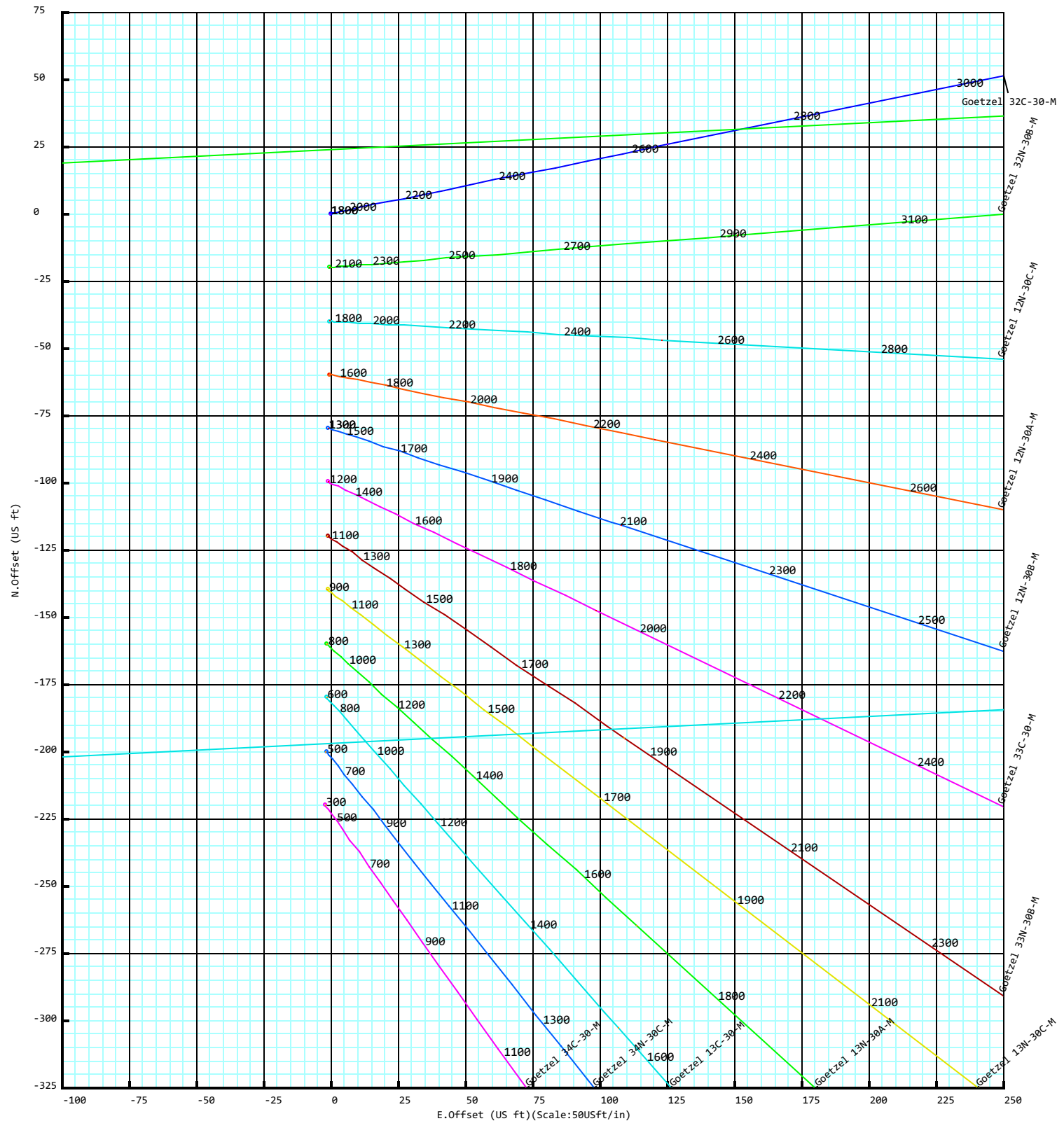


**Goetzl Pad**  
Weld County, CO  
Precision 562

- 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-30C-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-30C-M	Position (Relative to Site Centre)			
	+N/-S: -139.89 US ft	Northing: 1410343.15 US ft		Latitude: 40.457708000
	+E/-W: -1.11 US ft	Easting: 3193637.82 US ft		Longitude: -104.804138000
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 4732.00 US ft			
Comment:				
Well:  Goetzel 13N-30C-M	Type:Main well		UWI:	Plan:Working Plan
	File Number:	Comment:		
	Closure Distance:7305.91US ft		Closure Azimuth:257.59°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 257.59°
	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>	<b>Elevation above MSL:</b>	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°
25.00 US ft	4757.00 US ft		

## Collision / Uncertainty Analysis

Primary Well	Start MD (USFt)	End MD (USFt)	Collision Risk Interval	No. of Std. Deviations in Error Computation
Goetzel 13N-30C-M (p)	0.00	15286.68	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 32C-30-M (p)  
 Goetzel 32N-30B-M (p)  
 Goetzel 12N-30C-M (p)  
 Goetzel 12N-30A-M (p)  
 Goetzel 12N-30B-M (p)  
 Goetzel 33C-30-M (p)  
 Goetzel 33N-30B-M (p)

**Secondary Well Names:**

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

**Anti-Collision Report Terminology**

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

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

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

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

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

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

**Default Survey Tool: MWD**

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

## 5D Anti-Collision Report

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

Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Tigges 30-34 (s)	13722.07	6941.00	6974.00	74.36	-315.46	0.19	SF(Hi)
Lafarge West 30-35 (s)	14847.46	6949.00	6974.00	177.58	-243.65	0.42	SF(Hi)
Etter 30-33 (s)	15286.68	6949.00	6974.00	167.22	-136.53	0.55	SF(Hi)
Firestien #30-45 (s)	11706.25	6949.00	6974.00	194.64	-140.01	0.58	SF(Hi)
Goetzel 13N-30A-M (p)	15286.68	15136.85	6974.00	242.50	-78.63	0.76	SF(Hi)
Goetzel 33N-30B-M (p)	15286.68	15225.22	6974.00	365.37	-79.72	0.82	SF(Hi)
Goetzel 13C-30-M (p)	15286.68	15445.70	6974.00	398.37	-37.72	0.91	SF(Hi)
Firestien #30-44 (s)	10894.92	6941.00	6974.00	298.99	-13.29	0.96	SF(Hi)
Tollgate 1 (s)	9637.50	6935.00	6974.00	298.34	19.65	1.07	SF(Med)
Goetzel 2-29 (s)	2100.98	2042.26	2070.26	76.11	9.62	1.14	SF(Med)
Goetzel 33C-30-M (p)	15286.68	15382.70	6974.00	506.90	68.51	1.16	SF(Med)
Goetzel 34N-30C-M (p)	15286.68	15362.01	6974.00	610.24	160.86	1.36	SF(Med)
Goetzel 12N-30B-M (p)	15286.68	15235.35	6974.00	663.12	212.10	1.47	SF(Med)
Goetzel 34C-30-M (p)	15286.68	15492.53	6974.00	833.25	387.25	1.87	SF(Lo)
Etter 30-32 (s)	15155.66	6957.00	6974.00	842.65	412.72	1.96	SF(Lo)
Goetzel I 29-14 (s)	7721.09	6943.00	6974.00	514.58	276.14	2.16	SF(Lo)
Goetzel 12N-30A-M (p)	15286.68	15118.66	6974.00	1017.28	570.08	2.27	SF(Lo)
Firestien #30-4-21 (s)	11416.80	6944.00	6974.00	791.05	464.02	2.42	SF(Lo)
Goetzel 12N-30C-M (p)	15286.68	15314.81	6974.00	1154.53	702.01	2.55	
Goetzel 32N-30B-M (p)	15286.68	15297.84	6974.00	1376.04	922.57	3.03	
Goetzel 32C-30-M (p)	15286.68	15473.87	6974.00	1620.91	1170.12	3.60	

## 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 33N-30B-M (p)			50.00	50.00	50.00		20.04	19.19	23.75	CC (Med)		
Goetzel 13N-30A-M (p)			0.00	0.00	0.00		20.04	19.31	27.33	CC (Med)		
Goetzel 13C-30-M (p)			50.00	50.00	50.00		40.07	39.23	47.50	CC (Lo)		
Goetzel 33C-30-M (p)			0.00	0.00	0.00		40.07	39.34	54.65	CC (Lo)		
Goetzel 12N-30B-M (p)			50.00	50.00	50.00		60.11	59.27	71.25	CC (Lo)		
Goetzel 34N-30C-M (p)			0.00	0.00	0.00		60.11	59.38	81.97	CC (Lo)		
Tigges 30-34 (s)			13722.46	6941.00	6974.00		74.36	-315.44	0.19	SF(Hi)		
Goetzel 2-29 (s)			2056.45	1999.76	2027.76		74.95	9.96	1.15	SF(Med)		
Goetzel 12N-30A-M (p)			50.00	50.00	50.00		80.15	79.30	95.00			
Goetzel 34C-30-M (p)			0.00	0.00	0.00		80.15	79.42	109.30			
Goetzel 12N-30C-M (p)			50.00	50.00	50.00		99.82	98.98	118.32			
Goetzel 32N-30B-M (p)			0.00	0.00	0.00		119.86	119.12	163.45			
Goetzel 32C-30-M (p)			50.00	50.00	50.00		139.90	139.05	165.83			
Etter 30-33 (s)			15286.68	6949.00	6974.00		167.22	-136.53	0.55	SF(Hi)		
Lafarge West 30-35 (s)			14845.31	6949.00	6974.00		177.57	-243.57	0.42	SF(Hi)		
Firestien #30-45 (s)			11702.93	6949.00	6974.00		194.61	-139.88	0.58	SF(Hi)		
Tollgate 1 (s)			9635.74	6935.00	6974.00		298.33	19.63	1.07	SF(Med)		
Firestien #30-44 (s)			10894.53	6941.00	6974.00		298.99	-13.29	0.96	SF(Hi)		
Goetzel I 29-14 (s)			7738.87	6943.00	6974.00		514.27	276.25	2.16	SF(Lo)		
Firestien #30-4-21 (s)			11354.88	6944.00	6974.00		788.63	463.78	2.43	SF(Lo)		
Etter 30-32 (s)			15127.34	6957.00	6974.00		842.18	412.97	1.96	SF(Lo)		
Primary Well: Goetzel 13N-30C-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	359.55	20.04	19.30	27.32	Goetzel 33N-30B-M (p)	CC (Med)
100.00		0.00	0.00	100.00	0.11	0.11	359.55	20.04	19.08	21.00	Goetzel 33N-30B-M (p)	CC (Med)
200.00		0.00	0.00	200.00	0.34	0.34	359.55	20.04	18.63	14.28	Goetzel 33N-30B-M (p)	CC (Med)
300.00		0.00	0.00	300.00	0.56	0.56	359.55	20.04	18.18	10.81	Goetzel 33N-30B-M (p)	CC (Med)
400.00		0.00	0.00	400.00	0.79	0.79	359.55	20.04	17.73	8.70	Goetzel 33N-30B-M (p)	CC (Med)
500.00		0.00	0.00	500.00	1.01	1.01	359.55	20.04	17.28	7.28	Goetzel 33N-30B-M (p)	CC (Med)
600.00		0.00	0.00	600.00	1.24	1.24	359.55	20.04	16.83	6.26	Goetzel 33N-30B-M (p)	CC (Med)
700.00		0.00	0.00	700.00	1.46	1.46	359.55	20.04	16.39	5.49	Goetzel 33N-30B-M (p)	CC (Med)
800.00		0.00	0.00	800.00	1.69	1.69	359.55	20.04	15.94	4.89	Goetzel 33N-30B-M (p)	CC (Med)
900.00		1.00	127.01	900.00	1.90	1.90	231.57	20.30	15.77	4.48	Goetzel 33N-30B-M (p)	CC (Med)
1000.00		3.00	127.01	999.93	2.09	2.08	224.67	22.64	17.69	4.58	Goetzel 33N-30B-M (p)	CC (Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Nearest Well	Risk
1100.00	5.00	127.01	1099.68	2.29	2.27	216.91	26.68	21.33	4.99	Goetzel 33N-30B-M (p)	CC (Med)
1200.00	7.00	127.01	1199.13	2.51	2.47	211.58	31.16	25.42	5.43	Goetzel 33N-30B-M (p)	CC (Med)
1300.00	9.00	127.01	1298.15	2.76	2.67	21.13	210.19	170.86	5.35	Goetzel 2- 29 (s)	
1300.00	9.00	127.01	1298.15	2.76	2.67	35.31	35.41	29.29	5.78	Goetzel 13N-30A-M (p)	CC (Lo)
1400.00	11.00	127.01	1396.63	3.06	2.88	23.10	194.06	151.49	4.56	Goetzel 2- 29 (s)	
1400.00	11.00	127.01	1396.63	3.06	2.88	34.62	39.07	32.48	5.93	Goetzel 13N-30A-M (p)	CC (Lo)
1500.00	13.00	127.01	1494.44	3.41	3.09	25.93	175.07	129.31	3.83	Goetzel 2- 29 (s)	
1500.00	13.00	127.01	1494.44	3.41	3.09	34.39	42.85	35.73	6.02	Goetzel 13N-30A-M (p)	CC (Lo)
1600.00	15.00	127.01	1591.46	3.82	3.31	30.07	153.56	104.62	3.14	Goetzel 2- 29 (s)	
1600.00	15.00	127.01	1591.46	3.82	3.31	34.51	46.74	39.03	6.06	Goetzel 13N-30A-M (p)	CC (Lo)
1700.00	17.00	127.01	1687.58	4.29	3.54	36.36	130.20	77.91	2.49	Goetzel 2- 29 (s)	SF(Lo)
1700.00	17.00	127.01	1687.58	4.29	3.54	34.90	50.74	42.39	6.08	Goetzel 13N-30A-M (p)	CC (Lo)
1800.00	17.39	127.01	1783.03	4.82	3.79	45.70	107.20	51.49	1.92	Goetzel 2- 29 (s)	SF(Lo)
1800.00	17.39	127.01	1783.03	4.82	3.79	35.63	54.53	45.46	6.01	Goetzel 13N-30A-M (p)	CC (Lo)
1900.00	17.39	127.01	1878.47	5.37	4.06	59.23	88.34	29.24	1.49	Goetzel 2- 29 (s)	SF(Med)
1900.00	17.39	127.01	1878.47	5.37	4.06	36.31	58.30	48.42	5.90	Goetzel 13N-30A-M (p)	CC (Lo)
2000.00	17.39	127.01	1973.90	5.95	4.33	77.87	76.82	13.95	1.22	Goetzel 2- 29 (s)	SF(Med)
2000.00	17.39	127.01	1973.90	5.95	4.33	204.49	61.88	52.01	6.27	Goetzel 33N-30B-M (p)	CC (Lo)
2100.00	17.39	127.01	2069.33	6.53	4.60	99.39	76.06	9.62	1.14	Goetzel 2- 29 (s)	SF(Med)
2100.00	17.39	127.01	2069.33	6.53	4.60	206.00	62.38	51.77	5.88	Goetzel 33N-30B-M (p)	CC (Lo)
2200.00	17.39	127.01	2164.76	7.13	4.88	118.63	86.34	16.82	1.24	Goetzel 2- 29 (s)	SF(Med)
2200.00	17.39	127.01	2164.76	7.13	4.88	207.49	62.92	51.52	5.52	Goetzel 33N-30B-M (p)	CC (Lo)
2300.00	17.39	127.01	2260.19	7.73	5.16	132.81	104.45	31.98	1.44	Goetzel 2- 29 (s)	SF(Med)
2300.00	17.39	127.01	2260.19	7.73	5.16	208.95	63.51	51.27	5.19	Goetzel 33N-30B-M (p)	CC (Lo)
2400.00	17.39	127.01	2355.62	8.34	5.45	142.58	127.08	51.73	1.69	Goetzel 2- 29 (s)	SF(Lo)
2400.00	17.39	127.01	2355.62	8.34	5.45	210.38	64.14	51.03	4.89	Goetzel 33N-30B-M (p)	CC (Lo)
2500.00	17.39	127.01	2451.06	8.95	5.74	149.35	152.24	74.00	1.95	Goetzel 2- 29 (s)	SF(Lo)
2500.00	17.39	127.01	2451.06	8.95	5.74	211.79	64.80	50.79	4.63	Goetzel 33N-30B-M (p)	CC (Lo)
2600.00	17.39	127.01	2546.49	9.57	6.03	154.19	178.85	97.59	2.20	Goetzel 2- 29 (s)	SF(Lo)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
2600.00	17.39	127.01	2546.49	9.57	6.03	213.16	65.50	50.52	4.37	Goetzel 33N-30B-M (p)	CC (Lo)
2700.00	17.39	127.01	2641.92	10.19	6.32	157.78	206.36	122.21	2.45	Goetzel 2- 29 (s)	SF(Lo)
2700.00	17.39	127.01	2641.92	10.19	6.32	214.50	66.24	50.24	4.14	Goetzel 33N-30B-M (p)	
2800.00	17.39	127.01	2737.35	10.82	6.61	160.53	234.45	147.01	2.68	Goetzel 2- 29 (s)	SF(Lo)
2800.00	17.39	127.01	2737.35	10.82	6.61	215.82	67.02	49.97	3.93	Goetzel 33N-30B-M (p)	
2900.00	17.39	127.01	2832.78	11.44	6.90	162.69	262.94	172.36	2.90	Goetzel 2- 29 (s)	SF(Lo)
2900.00	17.39	127.01	2832.78	11.44	6.90	217.10	67.83	49.73	3.75	Goetzel 33N-30B-M (p)	
3000.00	17.39	127.01	2928.21	12.07	7.20	164.43	291.70	198.08	3.12	Goetzel 2- 29 (s)	SF(Lo)
3000.00	17.39	127.01	2928.21	12.07	7.20	218.35	68.67	49.50	3.58	Goetzel 33N-30B-M (p)	
3100.00	17.39	127.01	3023.65	12.70	7.50	165.86	320.67	224.00	3.32	Goetzel 2- 29 (s)	SF(Lo)
3100.00	17.39	127.01	3023.65	12.70	7.50	219.57	69.55	49.26	3.43	Goetzel 33N-30B-M (p)	
3200.00	17.39	127.01	3119.08	13.33	7.80	220.76	70.45	49.03	3.29	Goetzel 33N-30B-M (p)	SF(Lo)
3300.00	17.39	127.01	3214.51	13.96	8.09	221.92	71.39	48.77	3.16	Goetzel 33N-30B-M (p)	
3400.00	17.39	127.01	3309.94	14.59	8.39	223.05	72.35	48.53	3.04	Goetzel 33N-30B-M (p)	SF(Lo)
3500.00	17.39	127.01	3405.37	15.22	8.69	224.15	73.34	48.31	2.93	Goetzel 33N-30B-M (p)	
3600.00	17.39	127.01	3500.81	15.85	8.99	225.22	74.36	48.10	2.83	Goetzel 33N-30B-M (p)	SF(Lo)
3700.00	17.39	127.01	3596.24	16.49	9.30	226.26	75.40	47.92	2.74	Goetzel 33N-30B-M (p)	
3800.00	17.39	127.01	3691.67	17.12	9.60	227.27	76.47	47.75	2.66	Goetzel 33N-30B-M (p)	SF(Lo)
3900.00	17.39	127.01	3787.10	17.76	9.90	228.26	77.56	47.60	2.59	Goetzel 33N-30B-M (p)	
4000.00	17.39	127.01	3882.53	18.39	10.20	229.21	78.67	47.43	2.52	Goetzel 33N-30B-M (p)	SF(Lo)
4100.00	17.39	127.01	3977.96	19.03	10.51	230.14	79.81	47.28	2.45	Goetzel 33N-30B-M (p)	
4200.00	17.39	127.01	4073.40	19.67	10.81	231.04	80.96	47.13	2.39	Goetzel 33N-30B-M (p)	SF(Lo)
4300.00	17.39	127.01	4168.83	20.30	11.11	231.92	82.14	46.97	2.34	Goetzel 33N-30B-M (p)	
4400.00	17.39	127.01	4264.26	20.94	11.42	232.77	83.33	46.82	2.28	Goetzel 33N-30B-M (p)	SF(Lo)
4500.00	17.39	127.01	4359.69	21.58	11.72	233.60	84.54	46.70	2.23	Goetzel 33N-30B-M (p)	
4600.00	17.39	127.01	4455.12	22.22	12.03	234.41	85.77	46.59	2.19	Goetzel 33N-30B-M (p)	SF(Lo)
4700.00	17.39	127.01	4550.55	22.86	12.33	235.19	87.01	46.49	2.15	Goetzel 33N-30B-M (p)	

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
4800.00	17.39	127.01	4645.99	23.49	12.63	235.95	88.27	46.41	2.11	Goetzel 33N-30B-M (p)	SF(Lo)
4900.00	17.39	127.01	4741.42	24.13	12.94	236.68	89.54	46.35	2.07	Goetzel 33N-30B-M (p)	SF(Lo)
5000.00	17.39	127.01	4836.85	24.77	13.25	237.40	90.83	46.30	2.04	Goetzel 33N-30B-M (p)	SF(Lo)
5100.00	17.39	127.01	4932.28	25.41	13.55	238.10	92.14	46.26	2.01	Goetzel 33N-30B-M (p)	SF(Lo)
5200.00	17.39	127.01	5027.71	26.05	13.86	238.78	93.45	46.24	1.98	Goetzel 33N-30B-M (p)	SF(Lo)
5300.00	17.39	127.01	5123.14	26.69	14.16	239.43	94.78	46.23	1.95	Goetzel 33N-30B-M (p)	SF(Lo)
5400.00	17.39	127.01	5218.58	27.33	14.47	240.08	96.12	46.24	1.93	Goetzel 33N-30B-M (p)	SF(Lo)
5500.00	17.39	127.01	5314.01	27.97	14.77	240.70	97.47	46.26	1.90	Goetzel 33N-30B-M (p)	SF(Lo)
5600.00	17.39	127.01	5409.44	28.61	15.08	241.30	98.84	46.28	1.88	Goetzel 33N-30B-M (p)	SF(Lo)
5700.00	17.39	127.01	5504.87	29.25	15.39	241.89	100.21	46.29	1.86	Goetzel 33N-30B-M (p)	SF(Lo)
5800.00	17.39	127.01	5600.30	29.89	15.69	242.46	101.60	46.32	1.84	Goetzel 33N-30B-M (p)	SF(Lo)
5900.00	17.39	127.01	5695.73	30.53	16.00	243.02	102.99	46.36	1.82	Goetzel 33N-30B-M (p)	SF(Lo)
6000.00	17.39	127.01	5791.17	31.17	16.31	243.56	104.40	46.40	1.80	Goetzel 33N-30B-M (p)	SF(Lo)
6100.00	17.39	127.01	5886.60	31.81	16.61	244.09	105.81	46.44	1.78	Goetzel 33N-30B-M (p)	SF(Lo)
6200.00	17.39	127.01	5982.03	32.45	16.92	244.61	107.23	46.48	1.77	Goetzel 33N-30B-M (p)	SF(Lo)
6300.00	17.39	127.01	6077.46	33.09	17.23	244.19	108.21	46.50	1.75	Goetzel 33N-30B-M (p)	SF(Lo)
6400.00	14.07	140.87	6173.42	33.59	17.52	225.25	107.30	46.90	1.78	Goetzel 33N-30B-M (p)	SF(Lo)
6500.00	11.55	175.78	6271.07	33.58	17.61	184.85	107.68	49.68	1.86	Goetzel 33N-30B-M (p)	SF(Lo)
6600.00	13.96	211.02	6368.74	33.17	17.49	144.23	109.69	54.53	1.99	Goetzel 33N-30B-M (p)	SF(Lo)
6700.00	19.56	231.19	6464.53	32.40	17.14	119.05	113.18	60.69	2.16	Goetzel 33N-30B-M (p)	SF(Lo)
6800.00	26.39	241.98	6556.58	31.39	16.54	103.86	117.89	67.99	2.36	Goetzel 33N-30B-M (p)	SF(Lo)
6900.00	33.72	248.46	6643.10	30.23	15.68	93.68	123.47	75.60	2.58	Goetzel 33N-30B-M (p)	
7000.00	41.27	252.82	6722.40	29.08	14.56	86.39	129.57	82.96	2.78	Goetzel 33N-30B-M (p)	
7100.00	48.94	256.03	6792.94	28.08	13.22	80.99	135.84	89.90	2.96	Goetzel 33N-30B-M (p)	
7200.00	56.68	258.57	6853.35	27.36	11.78	76.97	142.00	96.05	3.09	Goetzel 33N-30B-M (p)	
7300.00	64.47	260.68	6902.44	27.02	10.46	293.00	680.23	441.43	2.85	Goetzel I 29-14 (s)	



## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
7300.00	64.47	260.68	6902.44	27.02	10.46	74.05	147.77	101.00	3.16	Goetzel 33N-30B-M (p)	
7400.00	72.28	262.54	6939.28	27.09	9.64	282.68	619.82	379.73	2.58	Goetzel I 29-14 (s)	
7400.00	72.28	262.54	6939.28	27.09	9.64	72.01	152.97	104.67	3.17	Goetzel 33N-30B-M (p)	
7500.00	80.11	264.24	6963.13	27.57	9.71	274.96	568.81	328.76	2.37	Goetzel I 29-14 (s)	SF(Lo)
7500.00	80.11	264.24	6963.13	27.57	9.71	70.74	157.43	106.99	3.12	Goetzel 33N-30B-M (p)	
7600.00	87.94	265.86	6973.53	28.39	10.78	270.57	532.80	293.34	2.23	Goetzel I 29-14 (s)	SF(Lo)
7600.00	87.94	265.86	6973.53	28.39	10.78	70.16	161.03	107.91	3.03	Goetzel 33N-30B-M (p)	
7700.00	90.00	266.28	6974.00	29.37	11.55	270.00	515.75	277.15	2.16	Goetzel I 29-14 (s)	SF(Lo)
7700.00	90.00	266.28	6974.00	29.37	11.55	70.36	163.71	108.51	2.97	Goetzel 33N-30B-M (p)	
7800.00	90.00	266.28	6974.00	30.54	12.06	270.00	517.89	279.71	2.17	Goetzel I 29-14 (s)	SF(Lo)
7800.00	90.00	266.28	6974.00	30.54	12.06	70.68	166.29	108.82	2.89	Goetzel 33N-30B-M (p)	
7900.00	90.00	266.28	6974.00	31.91	12.60	270.00	538.91	300.82	2.26	Goetzel I 29-14 (s)	SF(Lo)
7900.00	90.00	266.28	6974.00	31.91	12.60	70.99	168.86	108.67	2.81	Goetzel 33N-30B-M (p)	
8000.00	90.00	266.28	6974.00	33.45	13.16	270.00	576.74	338.25	2.42	Goetzel I 29-14 (s)	SF(Lo)
8000.00	90.00	266.28	6974.00	33.45	13.16	71.28	171.45	108.22	2.71	Goetzel 33N-30B-M (p)	
8100.00	90.00	266.28	6974.00	35.15	13.74	71.57	174.03	107.57	2.62	Goetzel 33N-30B-M (p)	
8200.00	90.00	266.28	6974.00	36.98	14.34	71.85	176.62	106.49	2.52	Goetzel 33N-30B-M (p)	
8300.00	90.00	266.28	6974.00	38.93	14.95	72.12	179.22	105.20	2.42	Goetzel 33N-30B-M (p)	SF(Lo)
8400.00	90.00	266.28	6974.00	40.97	15.57	72.39	181.82	103.82	2.33	Goetzel 33N-30B-M (p)	SF(Lo)
8500.00	90.00	266.28	6974.00	43.09	16.21	72.64	184.42	102.31	2.25	Goetzel 33N-30B-M (p)	SF(Lo)
8600.00	90.00	266.28	6974.00	45.29	16.85	72.89	187.03	100.67	2.17	Goetzel 33N-30B-M (p)	SF(Lo)
8700.00	90.00	266.28	6974.00	47.55	17.50	73.13	189.64	98.90	2.09	Goetzel 33N-30B-M (p)	SF(Lo)
8800.00	90.00	266.28	6974.00	49.87	18.16	73.37	192.25	97.03	2.02	Goetzel 33N-30B-M (p)	SF(Lo)
8900.00	90.00	266.28	6974.00	52.23	18.82	73.60	194.86	95.06	1.95	Goetzel 33N-30B-M (p)	SF(Lo)
9000.00	90.00	266.28	6974.00	54.64	19.49	73.82	197.48	92.99	1.89	Goetzel 33N-30B-M (p)	SF(Lo)
9100.00	90.00	266.28	6974.00	57.08	20.16	74.04	200.11	90.86	1.83	Goetzel 33N-30B-M (p)	SF(Lo)
9200.00	90.00	266.28	6974.00	59.55	20.84	74.25	202.73	88.65	1.78	Goetzel 33N-30B-M (p)	SF(Lo)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
9300.00	90.00	266.28	6974.00	62.05	21.52	74.46	205.36	86.35	1.73	Goetzel 33N-30B-M (p)	SF(Lo)
9400.00	90.00	266.28	6974.00	64.57	22.20	270.00	380.22	120.87	1.47	Tollgate 1 (s)	SF(Med)
9400.00	90.00	266.28	6974.00	64.57	22.20	74.66	207.99	83.95	1.68	Goetzel 33N-30B-M (p)	SF(Lo)
9500.00	90.00	266.28	6974.00	67.11	22.88	270.00	327.76	58.60	1.22	Tollgate 1 (s)	SF(Med)
9500.00	90.00	266.28	6974.00	67.11	22.88	74.86	210.62	81.48	1.63	Goetzel 33N-30B-M (p)	SF(Lo)
9600.00	90.00	266.28	6974.00	69.68	23.57	270.00	300.46	23.57	1.09	Tollgate 1 (s)	SF(Med)
9600.00	90.00	266.28	6974.00	69.68	23.57	75.05	213.26	78.99	1.59	Goetzel 33N-30B-M (p)	SF(Lo)
9700.00	90.00	266.28	6974.00	72.26	24.26	270.00	305.18	25.56	1.09	Tollgate 1 (s)	SF(Med)
9700.00	90.00	266.28	6974.00	72.26	24.26	75.24	215.89	76.46	1.55	Goetzel 33N-30B-M (p)	SF(Lo)
9800.00	90.00	266.28	6974.00	74.86	24.96	270.00	340.57	63.68	1.23	Tollgate 1 (s)	SF(Med)
9800.00	90.00	266.28	6974.00	74.86	24.96	75.42	218.53	73.90	1.51	Goetzel 33N-30B-M (p)	SF(Lo)
9900.00	90.00	266.28	6974.00	77.47	25.65	270.00	398.55	127.32	1.47	Tollgate 1 (s)	SF(Med)
9900.00	90.00	266.28	6974.00	77.47	25.65	75.60	221.17	71.33	1.48	Goetzel 33N-30B-M (p)	SF(Med)
10000.00	90.00	266.28	6974.00	80.09	26.35	75.77	223.82	68.73	1.44	Goetzel 33N-30B-M (p)	SF(Med)
10100.00	90.00	266.28	6974.00	82.72	27.05	75.94	226.46	66.12	1.41	Goetzel 33N-30B-M (p)	SF(Med)
10200.00	90.00	266.28	6974.00	85.37	27.75	76.11	229.11	63.50	1.38	Goetzel 33N-30B-M (p)	SF(Med)
10300.00	90.00	266.28	6974.00	88.02	28.45	76.27	231.76	60.87	1.36	Goetzel 33N-30B-M (p)	SF(Med)
10400.00	90.00	266.28	6974.00	90.69	29.16	76.43	234.41	58.23	1.33	Goetzel 33N-30B-M (p)	SF(Med)
10500.00	90.00	266.28	6974.00	93.36	29.86	76.58	237.07	55.57	1.31	Goetzel 33N-30B-M (p)	SF(Med)
10600.00	90.00	266.28	6974.00	96.03	30.57	76.73	239.72	52.89	1.28	Goetzel 33N-30B-M (p)	SF(Med)
10700.00	90.00	266.28	6974.00	98.72	31.27	270.00	356.73	67.04	1.23	Firestien #30-44 (s)	SF(Med)
10700.00	90.00	266.28	6974.00	98.72	31.27	76.88	242.38	50.20	1.26	Goetzel 33N-30B-M (p)	SF(Med)
10800.00	90.00	266.28	6974.00	101.41	31.98	270.00	313.59	10.48	1.03	Firestien #30-44 (s)	SF(Med)
10800.00	90.00	266.28	6974.00	101.41	31.98	77.02	245.04	47.50	1.24	Goetzel 33N-30B-M (p)	SF(Med)
10900.00	90.00	266.28	6974.00	104.10	32.69	270.00	299.04	-13.21	0.96	Firestien #30-44 (s)	SF(Hi)
10900.00	90.00	266.28	6974.00	104.10	32.69	77.17	247.70	44.79	1.22	Goetzel 33N-30B-M (p)	SF(Med)
11000.00	90.00	266.28	6974.00	106.80	33.40	270.00	317.03	5.73	1.02	Firestien #30-44 (s)	SF(Med)
11000.00	90.00	266.28	6974.00	106.80	33.40	77.30	250.36	42.06	1.20	Goetzel 33N-30B-M (p)	SF(Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
11100.00	90.00	266.28	6974.00	109.51	34.11	77.44	253.02	39.30	1.18	Goetzel 33N-30B-M (p)	SF(Med)
11200.00	90.00	266.28	6974.00	112.22	34.83	77.57	255.68	36.54	1.17	Goetzel 33N-30B-M (p)	SF(Med)
11300.00	90.00	266.28	6974.00	114.94	35.54	77.70	258.35	33.77	1.15	Goetzel 33N-30B-M (p)	SF(Med)
11400.00	90.00	266.28	6974.00	117.65	36.25	77.83	261.02	30.99	1.13	Goetzel 33N-30B-M (p)	SF(Med)
11500.00	90.00	266.28	6974.00	120.38	36.97	90.00	281.11	-17.65	0.94	Firestien #30-45 (s)	SF(Hi)
11500.00	90.00	266.28	6974.00	120.38	36.97	313.18	261.60	76.15	1.41	Goetzel 13N-30A-M (p)	SF(Med)
11600.00	90.00	266.28	6974.00	123.10	37.68	90.00	220.12	-100.92	0.69	Firestien #30-45 (s)	SF(Hi)
11700.00	90.00	266.28	6974.00	125.83	38.40	90.00	194.63	-139.65	0.58	Firestien #30-45 (s)	SF(Hi)
11800.00	90.00	266.28	6974.00	128.56	39.12	90.00	217.51	-103.53	0.68	Firestien #30-45 (s)	SF(Hi)
11900.00	90.00	266.28	6974.00	131.29	39.83	90.00	277.02	-21.19	0.93	Firestien #30-45 (s)	SF(Hi)
11900.00	90.00	266.28	6974.00	131.29	39.83	313.61	259.52	58.88	1.29	Goetzel 13N-30A-M (p)	SF(Med)
12000.00	90.00	266.28	6974.00	134.03	40.55	78.55	277.04	14.18	1.05	Goetzel 33N-30B-M (p)	SF(Med)
12000.00	90.00	266.28	6974.00	134.03	40.55	313.72	259.00	54.57	1.27	Goetzel 13N-30A-M (p)	SF(Med)
12100.00	90.00	266.28	6974.00	136.77	41.27	78.66	279.72	11.36	1.04	Goetzel 33N-30B-M (p)	SF(Med)
12100.00	90.00	266.28	6974.00	136.77	41.27	313.83	258.48	50.27	1.24	Goetzel 13N-30A-M (p)	SF(Med)
12200.00	90.00	266.28	6974.00	139.51	41.99	78.76	282.39	8.54	1.03	Goetzel 33N-30B-M (p)	SF(Med)
12200.00	90.00	266.28	6974.00	139.51	41.99	313.94	257.96	45.98	1.22	Goetzel 13N-30A-M (p)	SF(Med)
12300.00	90.00	266.28	6974.00	142.25	42.71	78.87	285.07	5.71	1.02	Goetzel 33N-30B-M (p)	SF(Med)
12300.00	90.00	266.28	6974.00	142.25	42.71	314.05	257.44	41.70	1.19	Goetzel 13N-30A-M (p)	SF(Med)
12400.00	90.00	266.28	6974.00	145.00	43.43	78.98	287.75	2.88	1.01	Goetzel 33N-30B-M (p)	SF(Med)
12400.00	90.00	266.28	6974.00	145.00	43.43	314.16	256.93	37.44	1.17	Goetzel 13N-30A-M (p)	SF(Med)
12500.00	90.00	266.28	6974.00	147.74	44.15	79.08	290.43	0.05	1.00	Goetzel 33N-30B-M (p)	SF(Med)
12500.00	90.00	266.28	6974.00	147.74	44.15	314.28	256.41	33.20	1.15	Goetzel 13N-30A-M (p)	SF(Med)
12600.00	90.00	266.28	6974.00	150.49	44.87	79.18	293.11	-2.79	0.99	Goetzel 33N-30B-M (p)	SF(Hi)
12600.00	90.00	266.28	6974.00	150.49	44.87	314.39	255.90	28.97	1.13	Goetzel 13N-30A-M (p)	SF(Med)
12700.00	90.00	266.28	6974.00	153.24	45.59	79.28	295.79	-5.63	0.98	Goetzel 33N-30B-M (p)	SF(Hi)
12700.00	90.00	266.28	6974.00	153.24	45.59	314.50	255.39	24.76	1.11	Goetzel 13N-30A-M (p)	SF(Med)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
12800.00	90.00	266.28	6974.00	156.00	46.31	79.38	298.47	-8.47	0.97	Goetzel 33N-30B-M (p)	SF(Hi)
12800.00	90.00	266.28	6974.00	156.00	46.31	314.61	254.87	20.56	1.09	Goetzel 13N-30A-M (p)	SF(Med)
12900.00	90.00	266.28	6974.00	158.75	47.03	79.47	301.15	-11.32	0.96	Goetzel 33N-30B-M (p)	SF(Hi)
12900.00	90.00	266.28	6974.00	158.75	47.03	314.73	254.36	16.38	1.07	Goetzel 13N-30A-M (p)	SF(Med)
13000.00	90.00	266.28	6974.00	161.51	47.75	79.57	303.83	-14.16	0.96	Goetzel 33N-30B-M (p)	SF(Hi)
13000.00	90.00	266.28	6974.00	161.51	47.75	314.84	253.85	12.21	1.05	Goetzel 13N-30A-M (p)	SF(Med)
13100.00	90.00	266.28	6974.00	164.26	48.48	79.66	306.52	-17.01	0.95	Goetzel 33N-30B-M (p)	SF(Hi)
13100.00	90.00	266.28	6974.00	164.26	48.48	314.96	253.34	8.06	1.03	Goetzel 13N-30A-M (p)	SF(Med)
13200.00	90.00	266.28	6974.00	167.02	49.20	79.75	309.20	-19.87	0.94	Goetzel 33N-30B-M (p)	SF(Hi)
13200.00	90.00	266.28	6974.00	167.02	49.20	315.07	252.84	3.93	1.02	Goetzel 13N-30A-M (p)	SF(Med)
13300.00	90.00	266.28	6974.00	169.78	49.92	79.84	311.89	-22.72	0.93	Goetzel 33N-30B-M (p)	SF(Hi)
13300.00	90.00	266.28	6974.00	169.78	49.92	315.19	252.33	-0.19	1.00	Goetzel 13N-30A-M (p)	SF(Hi)
13400.00	90.00	266.28	6974.00	172.54	50.65	79.93	314.57	-25.58	0.92	Goetzel 33N-30B-M (p)	SF(Hi)
13400.00	90.00	266.28	6974.00	172.54	50.65	315.30	251.82	-4.29	0.98	Goetzel 13N-30A-M (p)	SF(Hi)
13500.00	90.00	266.28	6974.00	175.30	51.37	270.00	234.53	-28.80	0.89	Tigges 30- 34 (s)	SF(Hi)
13600.00	90.00	266.28	6974.00	178.06	52.09	270.00	143.24	-153.26	0.48	Tigges 30- 34 (s)	SF(Hi)
13700.00	90.00	266.28	6974.00	180.83	52.82	270.00	77.67	-301.71	0.20	Tigges 30- 34 (s)	SF(Hi)
13800.00	90.00	266.28	6974.00	183.59	53.54	270.00	107.45	-235.08	0.31	Tigges 30- 34 (s)	SF(Hi)
13900.00	90.00	266.28	6974.00	186.36	54.27	270.00	192.51	-98.73	0.66	Tigges 30- 34 (s)	SF(Hi)
14000.00	90.00	266.28	6974.00	189.12	54.99	80.42	330.71	-42.75	0.89	Goetzel 33N-30B-M (p)	SF(Hi)
14000.00	90.00	266.28	6974.00	189.12	54.99	316.01	248.81	-28.56	0.90	Goetzel 13N-30A-M (p)	SF(Hi)
14100.00	90.00	266.28	6974.00	191.89	55.72	80.50	333.40	-45.62	0.88	Goetzel 33N-30B-M (p)	SF(Hi)
14100.00	90.00	266.28	6974.00	191.89	55.72	316.13	248.31	-32.54	0.88	Goetzel 13N-30A-M (p)	SF(Hi)
14200.00	90.00	266.28	6974.00	194.66	56.44	316.25	247.81	-36.51	0.87	Goetzel 13N-30A-M (p)	SF(Hi)
14300.00	90.00	266.28	6974.00	197.43	57.17	316.37	247.32	-40.46	0.86	Goetzel 13N-30A-M (p)	SF(Hi)
14400.00	90.00	266.28	6974.00	200.20	57.89	316.49	246.82	-44.39	0.85	Goetzel 13N-30A-M (p)	SF(Hi)
14500.00	90.00	266.28	6974.00	202.97	58.62	316.61	246.33	-48.30	0.84	Goetzel 13N-30A-M (p)	SF(Hi)

## 5D Anti-Collision Report

Primary Well: Goetzel 13N-30C-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
14600.00	90.00	266.28	6974.00	205.74	59.34	316.73	245.84	-52.20	0.82	Goetzel 13N-30A-M (p)	SF(Hi)
14700.00	90.00	266.28	6974.00	208.51	60.07	90.00	229.42	-145.99	0.61	Lafarge West 30-35 (s)	SF(Hi)
14800.00	90.00	266.28	6974.00	211.28	60.80	90.00	183.25	-232.39	0.44	Lafarge West 30-35 (s)	SF(Hi)
14900.00	90.00	266.28	6974.00	214.05	61.52	90.00	185.81	-225.04	0.45	Lafarge West 30-35 (s)	SF(Hi)
15000.00	90.00	266.28	6974.00	216.83	62.25	90.00	235.52	-132.13	0.64	Lafarge West 30-35 (s)	SF(Hi)
15100.00	90.00	266.28	6974.00	219.60	62.98	317.35	243.39	-71.39	0.77	Goetzel 13N-30A-M (p)	SF(Hi)
15200.00	90.00	266.28	6974.00	222.38	63.70	317.47	242.90	-75.17	0.76	Goetzel 13N-30A-M (p)	SF(Hi)
15286.68	90.00	266.28	6974.00	224.78	64.33	270.00	167.22	-136.53	0.55	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	144.93	245.07	244.30	318.37	
100.00	72.00	0.00	0.00	100.00	1.09	1.09	144.93	243.46	241.49	123.71	
200.00	172.00	0.00	0.00	200.00	2.69	2.69	144.93	243.46	239.68	64.34	
300.00	272.00	0.00	0.00	300.00	5.73	5.73	144.93	243.46	236.43	34.61	
400.00	372.00	0.00	0.00	400.00	8.77	8.77	144.93	243.46	233.18	23.68	
500.00	472.00	0.00	0.00	500.00	11.80	11.80	144.93	243.46	230.10	18.22	
600.00	572.00	0.00	0.00	600.00	14.84	14.84	144.93	243.46	226.85	14.66	
700.00	672.00	0.00	0.00	700.00	17.88	17.88	144.93	243.46	223.60	12.26	
800.00	772.00	0.00	0.00	800.00	20.91	20.91	144.93	243.46	220.35	10.54	
900.00	872.00	0.00	0.00	900.00	23.95	23.95	17.96	243.05	216.69	9.22	
1000.00	971.93	0.00	0.00	999.93	26.99	26.99	18.24	239.73	210.17	8.11	
1100.00	1071.68	0.00	0.00	1099.68	30.01	30.01	18.82	233.11	200.31	7.11	
1200.00	1171.13	0.00	0.00	1199.13	33.04	33.04	19.75	223.24	187.18	6.19	
1300.00	1270.15	0.00	0.00	1298.15	36.04	36.04	21.13	210.19	170.86	5.35	
1400.00	1368.63	0.00	0.00	1396.63	39.03	39.03	23.10	194.06	151.49	4.56	
1500.00	1466.44	0.00	0.00	1494.44	42.00	42.00	25.93	175.07	129.31	3.83	
1600.00	1563.46	0.00	0.00	1591.46	44.95	44.95	30.07	153.56	104.62	3.14	
1700.00	1659.58	0.00	0.00	1687.58	47.87	47.87	36.36	130.20	77.91	2.49	SF(Lo)
1800.00	1755.03	0.00	0.00	1783.03	50.77	50.77	45.70	107.20	51.49	1.92	SF(Lo)
1900.00	1850.47	0.00	0.00	1878.47	53.67	53.67	59.23	88.34	29.24	1.49	SF(Med)
2000.00	1945.90	0.00	0.00	1973.90	56.56	56.56	77.87	76.82	13.95	1.22	SF(Med)
2100.00	2041.33	0.00	0.00	2069.33	59.46	59.46	99.39	76.06	9.62	1.14	SF(Med)
2200.00	2136.76	0.00	0.00	2164.76	62.36	62.36	118.63	86.34	16.82	1.24	SF(Med)
2300.00	2232.19	0.00	0.00	2260.19	65.26	65.26	132.81	104.45	31.98	1.44	SF(Med)
2400.00	2327.62	0.00	0.00	2355.62	68.16	68.16	142.58	127.08	51.73	1.69	SF(Lo)
2500.00	2423.06	0.00	0.00	2451.06	71.05	71.05	149.35	152.24	74.00	1.95	SF(Lo)
2600.00	2518.49	0.00	0.00	2546.49	73.95	73.95	154.19	178.85	97.59	2.20	SF(Lo)
2700.00	2613.92	0.00	0.00	2641.92	76.85	76.85	157.78	206.36	122.21	2.45	SF(Lo)
2800.00	2709.35	0.00	0.00	2737.35	79.75	79.75	160.53	234.45	147.01	2.68	
2900.00	2804.78	0.00	0.00	2832.78	82.65	82.65	162.69	262.94	172.36	2.90	
3000.00	2900.21	0.00	0.00	2928.21	85.55	85.55	164.43	291.70	198.08	3.12	
3100.00	2995.65	0.00	0.00	3023.65	88.44	88.44	165.86	320.67	224.00	3.32	
3200.00	3091.08	0.00	0.00	3119.08	91.34	91.34	167.06	349.79	250.10	3.51	
3300.00	3186.51	0.00	0.00	3214.51	94.24	94.24	168.07	379.03	276.16	3.68	
3400.00	3281.94	0.00	0.00	3309.94	97.14	97.14	168.93	408.36	302.25	3.85	
3500.00	3377.37	0.00	0.00	3405.37	100.04	100.04	169.68	437.77	328.43	4.00	

## 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
3600.00	3472.81	0.00	0.00	3500.81	102.93	102.93	170.34	467.24	354.69	4.15	
3700.00	3568.24	0.00	0.00	3596.24	105.83	105.83	170.91	496.75	381.01	4.29	
3800.00	3663.67	0.00	0.00	3691.67	108.73	108.73	171.43	526.31	407.38	4.43	
3900.00	3759.10	0.00	0.00	3787.10	111.63	111.63	171.89	555.90	433.79	4.55	
4000.00	3854.53	0.00	0.00	3882.53	114.53	114.53	172.30	585.52	460.23	4.67	
4100.00	3949.96	0.00	0.00	3977.96	117.42	117.42	172.67	615.17	486.69	4.79	
4200.00	4045.40	0.00	0.00	4073.40	120.32	120.32	173.01	644.83	513.17	4.90	
4300.00	4140.83	0.00	0.00	4168.83	123.22	123.22	173.32	674.52	539.68	5.00	
4400.00	4236.26	0.00	0.00	4264.26	126.12	126.12	173.60	704.22	566.21	5.10	
4500.00	4331.69	0.00	0.00	4359.69	129.02	129.02	173.86	733.94	592.75	5.20	
4600.00	4427.12	0.00	0.00	4455.12	131.92	131.92	174.10	763.67	619.30	5.29	
4700.00	4522.55	0.00	0.00	4550.55	134.81	134.81	174.32	793.41	645.87	5.38	
4800.00	4617.99	0.00	0.00	4645.99	137.71	137.71	174.53	823.16	672.45	5.46	
4900.00	4713.42	0.00	0.00	4741.42	140.61	140.61	174.72	852.92	699.04	5.54	
5000.00	4808.85	0.00	0.00	4836.85	143.51	143.51	174.90	882.69	725.64	5.62	
5100.00	4904.28	0.00	0.00	4932.28	146.41	146.41	175.06	912.46	752.24	5.70	
5200.00	4999.71	0.00	0.00	5027.71	149.30	149.30	175.22	942.24	778.85	5.77	
5300.00	5095.14	0.00	0.00	5123.14	152.20	152.20	175.37	972.03	805.47	5.84	
5400.00	5190.58	0.00	0.00	5218.58	155.10	155.10	175.51	1001.83	832.10	5.90	
5500.00	5286.01	0.00	0.00	5314.01	158.00	158.00	175.64	1031.62	858.73	5.97	
5600.00	5381.44	0.00	0.00	5409.44	160.90	160.90	175.76	1061.43	885.36	6.03	
5700.00	5476.87	0.00	0.00	5504.87	163.79	163.79	175.87	1091.23	912.00	6.09	
5800.00	5572.30	0.00	0.00	5600.30	166.69	166.69	175.98	1121.04	938.64	6.15	
5900.00	5667.73	0.00	0.00	5695.73	169.59	169.59	176.09	1150.86	965.29	6.20	
6000.00	5763.17	0.00	0.00	5791.17	172.49	172.49	176.19	1180.68	991.94	6.26	
6100.00	5858.60	0.00	0.00	5886.60	175.39	175.39	176.28	1210.50	1018.59	6.31	
6200.00	5954.03	0.00	0.00	5982.03	178.29	178.29	176.37	1240.32	1045.25	6.36	
6300.00	6049.46	0.00	0.00	6077.46	181.18	181.18	176.46	1270.15	1071.91	6.41	
6400.00	6145.42	0.00	0.00	6173.42	184.10	184.10	162.41	1297.93	1096.54	6.45	
6500.00	6243.07	0.00	0.00	6271.07	187.06	187.06	127.92	1315.79	1111.37	6.44	
6600.00	6340.74	0.00	0.00	6368.74	190.03	190.03	94.00	1322.86	1115.52	6.38	
6700.00	6436.53	0.00	0.00	6464.53	192.94	192.94	75.99	1319.39	1108.78	6.26	
6800.00	6528.58	0.00	0.00	6556.58	195.73	195.73	68.23	1305.98	1092.22	6.11	
6900.00	6615.10	0.00	0.00	6643.10	198.36	198.36	65.67	1283.57	1066.94	5.93	
7000.00	6694.40	0.00	0.00	6722.40	200.77	200.77	66.11	1253.44	1034.43	5.72	
7100.00	6764.94	0.00	0.00	6792.94	202.91	202.91	68.54	1217.18	996.32	5.51	
7200.00	6825.35	0.00	0.00	6853.35	204.75	204.75	72.30	1176.66	952.73	5.25	
7300.00	6874.44	0.00	0.00	6902.44	206.24	206.24	76.82	1133.96	907.73	5.01	
7400.00	6911.28	0.00	0.00	6939.28	207.36	207.36	81.51	1091.28	862.93	4.78	
7500.00	6935.13	0.00	0.00	6963.13	208.08	208.08	85.81	1050.82	819.68	4.55	
7600.00	6945.53	0.00	0.00	6973.53	208.40	208.40	89.27	1014.62	781.58	4.35	
7700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	985.00	749.45	4.18	
7800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	964.79	727.03	4.06	
7900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	954.69	714.77	3.98	
8000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	955.00	712.51	3.94	
8100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	965.72	721.97	3.96	
8200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	986.52	740.47	4.01	
8300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1016.76	769.66	4.11	
8400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1055.65	807.44	4.25	
8500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1102.27	853.56	4.43	
8600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1155.68	906.17	4.63	
8700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1214.99	966.02	4.88	
8800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1279.37	1029.70	5.12	
8900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1348.11	1098.40	5.40	
9000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1420.56	1171.48	5.70	
9100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1496.19	1247.06	6.01	
9200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1574.54	1325.29	6.32	
9300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1655.23	1406.23	6.65	

## 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
9400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1737.92	1489.46	6.99	
9500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1822.35	1574.56	7.35	
9600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1908.29	1660.52	7.70	
9700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	1995.54	1747.76	8.05	
9800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2083.93	1836.18	8.41	
9900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2173.33	1925.77	8.78	
10000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2263.62	2016.38	9.16	
10100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2354.69	2107.89	9.54	
10200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2446.46	2200.02	9.93	
10300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2538.85	2292.73	10.32	
10400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2631.79	2386.03	10.71	
10500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2725.24	2479.43	11.09	
10600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2819.14	2573.34	11.47	
10700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	2913.44	2667.72	11.86	
10800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3008.11	2762.50	12.25	
10900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3103.12	2857.55	12.64	
11000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3198.42	2952.93	13.03	
11100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3294.01	3048.60	13.42	
11200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3389.85	3144.56	13.82	
11300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3485.93	3240.76	14.22	
11400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3582.22	3337.19	14.62	
11500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3678.71	3433.82	15.02	
11600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3775.38	3530.64	15.43	
11700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3872.22	3627.64	15.83	
11800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	3969.22	3724.80	16.24	
11900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4066.36	3822.10	16.65	
12000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4163.64	3919.52	17.06	
12100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4261.04	4017.07	17.47	
12200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4358.56	4114.74	17.88	
12300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4456.20	4212.52	18.29	
12400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4553.93	4310.40	18.70	
12500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4651.76	4408.37	19.11	
12600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4749.68	4506.44	19.53	
12700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4847.69	4604.58	19.94	
12800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	4945.77	4702.70	20.35	
12900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5043.93	4800.83	20.75	
13000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5142.16	4899.04	21.15	
13100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5240.46	4997.32	21.55	
13200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5338.82	5095.66	21.96	
13300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5437.25	5194.07	22.36	
13400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5535.72	5292.53	22.76	
13500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5634.26	5391.05	23.17	
13600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5732.84	5489.62	23.57	
13700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5831.47	5588.25	23.98	
13800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	5930.15	5686.92	24.38	
13900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6028.87	5785.63	24.79	
14000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6127.63	5884.39	25.19	
14100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6226.43	5983.18	25.60	
14200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6325.27	6082.02	26.00	
14300.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6424.14	6180.89	26.41	
14400.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6523.05	6279.80	26.82	
14500.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6621.99	6378.74	27.22	
14600.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6720.97	6477.71	27.63	
14700.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6819.97	6576.71	28.04	
14800.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	6919.00	6675.74	28.44	
14900.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	7018.06	6774.79	28.85	
15000.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	7117.15	6873.88	29.26	
15100.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	7216.26	6972.98	29.66	

## 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
15200.00	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	7315.39	7072.12	30.07	
15286.68	6946.00	0.00	0.00	6974.00	208.41	208.41	90.00	7401.34	7158.06	30.42	
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	263.69	7061.00	7060.27	9697.86	
100.00	83.00	0.00	0.00	100.00	1.26	1.26	263.69	7060.98	7058.88	3370.65	
200.00	183.00	0.00	0.00	200.00	3.03	3.03	263.69	7060.98	7056.89	1730.25	
300.00	283.00	0.00	0.00	300.00	6.06	6.06	263.69	7060.98	7053.64	962.54	
400.00	383.00	0.00	0.00	400.00	9.10	9.10	263.69	7060.98	7050.56	677.72	
500.00	483.00	0.00	0.00	500.00	12.14	12.14	263.69	7060.98	7047.30	516.39	
600.00	583.00	0.00	0.00	600.00	15.17	15.17	263.69	7060.98	7044.05	417.10	
700.00	683.00	0.00	0.00	700.00	18.21	18.21	263.69	7060.98	7040.79	349.84	
800.00	783.00	0.00	0.00	800.00	21.25	21.25	263.69	7060.98	7037.54	301.26	
900.00	883.00	0.00	0.00	900.00	24.28	24.28	136.68	7061.29	7034.61	264.61	
1000.00	982.93	0.00	0.00	999.93	27.32	27.32	136.67	7063.83	7033.94	236.28	
1100.00	1082.68	0.00	0.00	1099.68	30.35	30.35	136.64	7068.91	7035.80	213.46	
1200.00	1182.13	0.00	0.00	1199.13	33.37	33.37	136.59	7076.53	7040.19	194.77	
1300.00	1281.15	0.00	0.00	1298.15	36.38	36.38	136.53	7086.68	7047.12	179.12	
1400.00	1379.63	0.00	0.00	1396.63	39.37	39.37	136.45	7099.36	7056.57	165.88	
1500.00	1477.44	0.00	0.00	1494.44	42.34	42.34	136.35	7114.58	7068.54	154.55	
1600.00	1574.46	0.00	0.00	1591.46	45.28	45.28	136.23	7132.32	7083.02	144.69	
1700.00	1670.58	0.00	0.00	1687.58	48.20	48.20	136.10	7152.57	7100.02	136.12	
1800.00	1766.03	0.00	0.00	1783.03	51.10	51.10	136.20	7174.54	7118.71	128.51	
1900.00	1861.47	0.00	0.00	1878.47	54.00	54.00	136.36	7196.61	7137.49	121.74	
2000.00	1956.90	0.00	0.00	1973.90	56.90	56.90	136.52	7218.74	7156.33	115.68	
2100.00	2052.33	0.00	0.00	2069.33	59.80	59.80	136.68	7240.92	7175.22	110.21	
2200.00	2147.76	0.00	0.00	2164.76	62.69	62.69	136.84	7263.15	7194.12	105.22	
2300.00	2243.19	0.00	0.00	2260.19	65.59	65.59	136.99	7285.45	7213.08	100.68	
2400.00	2338.62	0.00	0.00	2355.62	68.49	68.49	137.15	7307.79	7232.09	96.54	
2500.00	2434.06	0.00	0.00	2451.06	71.39	71.39	137.31	7330.19	7251.15	92.74	
2600.00	2529.49	0.00	0.00	2546.49	74.29	74.29	137.46	7352.65	7270.26	89.24	
2700.00	2624.92	0.00	0.00	2641.92	77.18	77.18	137.62	7375.15	7289.41	86.01	
2800.00	2720.35	0.00	0.00	2737.35	80.08	80.08	137.77	7397.71	7308.61	83.03	
2900.00	2815.78	0.00	0.00	2832.78	82.98	82.98	137.92	7420.32	7327.86	80.26	
3000.00	2911.21	0.00	0.00	2928.21	85.88	85.88	138.07	7442.98	7347.17	77.68	
3100.00	3006.65	0.00	0.00	3023.65	88.78	88.78	138.22	7465.69	7366.52	75.28	
3200.00	3102.08	0.00	0.00	3119.08	91.68	91.68	138.37	7488.45	7385.93	73.04	
3300.00	3197.51	0.00	0.00	3214.51	94.57	94.57	138.52	7511.26	7405.38	70.94	
3400.00	3292.94	0.00	0.00	3309.94	97.47	97.47	138.67	7534.13	7424.89	68.97	
3500.00	3388.37	0.00	0.00	3405.37	100.37	100.37	138.81	7557.04	7444.45	67.12	
3600.00	3483.81	0.00	0.00	3500.81	103.27	103.27	138.96	7579.99	7464.05	65.38	
3700.00	3579.24	0.00	0.00	3596.24	106.17	106.17	139.10	7603.00	7483.70	63.73	
3800.00	3674.67	0.00	0.00	3691.67	109.06	109.06	139.25	7626.06	7503.41	62.18	
3900.00	3770.10	0.00	0.00	3787.10	111.96	111.96	139.39	7649.16	7523.16	60.71	
4000.00	3865.53	0.00	0.00	3882.53	114.86	114.86	139.53	7672.31	7542.96	59.31	
4100.00	3960.96	0.00	0.00	3977.96	117.76	117.76	139.68	7695.50	7562.80	57.99	
4200.00	4056.40	0.00	0.00	4073.40	120.66	120.66	139.82	7718.74	7582.70	56.74	
4300.00	4151.83	0.00	0.00	4168.83	123.55	123.55	139.96	7742.03	7602.64	55.54	
4400.00	4247.26	0.00	0.00	4264.26	126.45	126.45	140.10	7765.36	7622.63	54.40	
4500.00	4342.69	0.00	0.00	4359.69	129.35	129.35	140.23	7788.74	7642.66	53.32	
4600.00	4438.12	0.00	0.00	4455.12	132.25	132.25	140.37	7812.16	7662.74	52.29	
4700.00	4533.55	0.00	0.00	4550.55	135.15	135.15	140.51	7835.62	7682.87	51.30	
4800.00	4628.99	0.00	0.00	4645.99	138.05	138.05	140.64	7859.13	7703.04	50.35	
4900.00	4724.42	0.00	0.00	4741.42	140.94	140.94	140.78	7882.68	7723.26	49.44	
5000.00	4819.85	0.00	0.00	4836.85	143.84	143.84	140.91	7906.28	7743.52	48.58	
5100.00	4915.28	0.00	0.00	4932.28	146.74	146.74	141.05	7929.91	7763.82	47.75	



## 5D Anti-Collision Report

Secondary Well: Etter 30-32 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
5200.00	5010.71	0.00	0.00	5027.71	149.64	149.64	141.18	7953.59	7784.17	46.95	
5300.00	5106.14	0.00	0.00	5123.14	152.54	152.54	141.31	7977.31	7804.57	46.18	
5400.00	5201.58	0.00	0.00	5218.58	155.43	155.43	141.44	8001.07	7825.00	45.44	
5500.00	5297.01	0.00	0.00	5314.01	158.33	158.33	141.57	8024.87	7845.48	44.73	
5600.00	5392.44	0.00	0.00	5409.44	161.23	161.23	141.70	8048.72	7866.00	44.05	
5700.00	5487.87	0.00	0.00	5504.87	164.13	164.13	141.83	8072.60	7886.57	43.39	
5800.00	5583.30	0.00	0.00	5600.30	167.03	167.03	141.96	8096.52	7907.17	42.76	
5900.00	5678.73	0.00	0.00	5695.73	169.93	169.93	142.09	8120.48	7927.82	42.15	
6000.00	5774.17	0.00	0.00	5791.17	172.82	172.82	142.22	8144.49	7948.51	41.56	
6100.00	5869.60	0.00	0.00	5886.60	175.72	175.72	142.34	8168.53	7969.24	40.99	
6200.00	5965.03	0.00	0.00	5982.03	178.62	178.62	142.47	8192.60	7990.01	40.44	
6300.00	6060.46	0.00	0.00	6077.46	181.52	181.52	142.59	8216.72	8010.83	39.91	
6400.00	6156.42	0.00	0.00	6173.42	184.43	184.43	129.29	8238.23	8029.06	39.38	
6500.00	6254.07	0.00	0.00	6271.07	187.40	187.40	95.25	8247.02	8034.61	38.83	
6600.00	6351.74	0.00	0.00	6368.74	190.36	190.36	61.00	8241.96	8026.36	38.23	
6700.00	6447.53	0.00	0.00	6464.53	193.27	193.27	41.93	8223.17	8004.47	37.60	
6800.00	6539.58	0.00	0.00	6556.58	196.07	196.07	32.39	8191.02	7969.36	36.95	
6900.00	6626.10	0.00	0.00	6643.10	198.70	198.70	27.35	8146.12	7921.72	36.30	
7000.00	6705.40	0.00	0.00	6722.40	201.10	201.10	24.70	8089.37	7862.47	35.65	
7100.00	6775.94	0.00	0.00	6792.94	203.25	203.25	23.60	8021.85	7792.74	35.01	
7200.00	6836.35	0.00	0.00	6853.35	205.08	205.08	23.81	7944.88	7713.89	34.39	
7300.00	6885.44	0.00	0.00	6902.44	206.57	206.57	25.55	7859.95	7627.43	33.80	
7400.00	6922.28	0.00	0.00	6939.28	207.69	207.69	29.86	7768.70	7534.97	33.24	
7500.00	6946.13	0.00	0.00	6963.13	208.41	208.41	40.42	7672.89	7438.31	32.71	
7600.00	6956.53	0.00	0.00	6973.53	208.73	208.73	73.25	7574.38	7339.41	32.24	
7700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	7475.03	7239.94	31.80	
7800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	7375.67	7140.54	31.37	
7900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	7276.33	7041.03	30.92	
8000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	7177.02	6941.57	30.48	
8100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	7077.72	6842.15	30.05	
8200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6978.44	6742.80	29.62	
8300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6879.18	6643.30	29.16	
8400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6779.94	6543.99	28.73	
8500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6680.73	6444.53	28.28	
8600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6581.54	6345.15	27.84	
8700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6482.37	6245.86	27.41	
8800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6383.23	6146.51	26.97	
8900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6284.12	6047.16	26.52	
9000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6185.04	5947.87	26.08	
9100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	6085.98	5848.64	25.64	
9200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5986.96	5749.47	25.21	
9300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5887.97	5650.22	24.77	
9400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5789.02	5550.91	24.31	
9500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5690.10	5451.67	23.86	
9600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5591.22	5352.50	23.42	
9700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5492.38	5253.37	22.98	
9800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5393.59	5154.23	22.53	
9900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5294.84	5054.89	22.07	
10000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5196.14	4955.66	21.61	
10100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	5097.48	4856.53	21.16	
10200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4998.88	4757.46	20.71	
10300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4900.34	4658.34	20.25	
10400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4801.86	4559.29	19.80	
10500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4703.44	4460.32	19.35	
10600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4605.10	4361.33	18.89	
10700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4506.82	4262.30	18.43	
10800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4408.62	4163.36	17.98	
10900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4310.50	4064.50	17.52	

## 5D Anti-Collision Report

Secondary Well: Etter 30-32 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
11000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4212.48	3965.72	17.07	
11100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4114.54	3866.98	16.62	
11200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	4016.71	3768.19	16.16	
11300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3918.99	3669.46	15.71	
11400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3821.39	3570.82	15.25	
11500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3723.91	3472.26	14.80	
11600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3626.57	3373.79	14.35	
11700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3529.38	3275.43	13.90	
11800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3432.36	3177.18	13.45	
11900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3335.50	3079.00	13.00	
12000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3238.84	2980.90	12.56	
12100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3142.39	2882.95	12.11	
12200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	3046.16	2785.15	11.67	
12300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2950.19	2687.53	11.23	
12400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2854.50	2590.06	10.79	
12500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2759.11	2492.69	10.36	
12600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2664.05	2395.55	9.92	
12700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2569.38	2298.41	9.48	
12800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2475.12	2201.35	9.04	
12900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2381.33	2104.61	8.61	
13000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2288.06	2008.21	8.18	
13100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2195.39	1912.22	7.75	
13200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2103.39	1816.70	7.34	
13300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	2012.16	1721.74	6.93	
13400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1921.79	1627.43	6.53	
13500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1832.43	1533.65	6.13	
13600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1744.22	1440.56	5.74	
13700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1657.35	1347.59	5.35	
13800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1572.05	1255.83	4.97	
13900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1488.57	1165.56	4.61	
14000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1407.25	1077.15	4.26	
14100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1328.49	990.68	3.93	
14200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1252.75	905.71	3.61	
14300.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1180.64	824.28	3.31	
14400.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1112.84	747.09	3.04	
14500.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	1050.21	673.39	2.79	
14600.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	993.70	606.37	2.57	
14700.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	944.44	545.59	2.37	SF(Lo)
14800.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	903.59	495.24	2.21	SF(Lo)
14900.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	872.35	454.35	2.09	SF(Lo)
15000.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	851.76	427.05	2.01	SF(Lo)
15100.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	842.62	414.21	1.97	SF(Lo)
15200.00	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	845.30	415.20	1.97	SF(Lo)
15286.68	6957.00	0.00	0.00	6974.00	208.74	208.74	90.00	857.10	428.75	2.00	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	258.02	6842.75	6842.02	9398.03	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	258.02	6842.70	6840.72	3463.67	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	258.02	6842.70	6838.86	1780.54	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	258.02	6842.70	6835.60	963.39	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	258.02	6842.70	6832.34	660.34	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	258.02	6842.70	6829.25	508.74	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	258.02	6842.70	6825.99	409.50	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	258.02	6842.70	6822.73	342.65	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	258.02	6842.70	6819.47	294.57	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	131.01	6842.99	6816.51	258.49	

## 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
1000.00	974.93	0.00	0.00	999.93	27.08	27.08	131.00	6845.28	6815.58	230.53	
1100.00	1074.68	0.00	0.00	1099.68	30.11	30.11	130.97	6849.86	6816.94	208.08	
1200.00	1174.13	0.00	0.00	1199.13	33.13	33.13	130.93	6856.73	6820.57	189.64	
1300.00	1273.15	0.00	0.00	1298.15	36.13	36.13	130.88	6865.90	6826.50	174.29	
1400.00	1371.63	0.00	0.00	1396.63	39.12	39.12	130.82	6877.35	6834.70	161.23	
1500.00	1469.44	0.00	0.00	1494.44	42.09	42.09	130.73	6891.10	6845.18	150.05	
1600.00	1566.46	0.00	0.00	1591.46	45.04	45.04	130.64	6907.15	6857.94	140.37	
1700.00	1662.58	0.00	0.00	1687.58	47.96	47.96	130.52	6925.48	6872.99	131.92	
1800.00	1758.03	0.00	0.00	1783.03	50.86	50.86	130.65	6945.39	6889.57	124.43	
1900.00	1853.47	0.00	0.00	1878.47	53.76	53.76	130.83	6965.41	6906.26	117.76	
2000.00	1948.90	0.00	0.00	1973.90	56.65	56.65	131.01	6985.50	6923.00	111.77	
2100.00	2044.33	0.00	0.00	2069.33	59.55	59.55	131.19	7005.66	6939.80	106.37	
2200.00	2139.76	0.00	0.00	2164.76	62.45	62.45	131.37	7025.89	6956.67	101.50	
2300.00	2235.19	0.00	0.00	2260.19	65.35	65.35	131.55	7046.19	6973.60	97.07	
2400.00	2330.62	0.00	0.00	2355.62	68.25	68.25	131.72	7066.55	6990.59	93.03	
2500.00	2426.06	0.00	0.00	2451.06	71.15	71.15	131.90	7086.98	7007.66	89.34	
2600.00	2521.49	0.00	0.00	2546.49	74.04	74.04	132.07	7107.48	7024.78	85.94	
2700.00	2616.92	0.00	0.00	2641.92	76.94	76.94	132.25	7128.05	7041.98	82.81	
2800.00	2712.35	0.00	0.00	2737.35	79.84	79.84	132.42	7148.68	7059.23	79.92	
2900.00	2807.78	0.00	0.00	2832.78	82.74	82.74	132.59	7169.38	7076.56	77.24	
3000.00	2903.21	0.00	0.00	2928.21	85.64	85.64	132.76	7190.14	7093.95	74.75	
3100.00	2998.65	0.00	0.00	3023.65	88.53	88.53	132.93	7210.97	7111.41	72.43	
3200.00	3094.08	0.00	0.00	3119.08	91.43	91.43	133.10	7231.85	7128.93	70.26	
3300.00	3189.51	0.00	0.00	3214.51	94.33	94.33	133.27	7252.81	7146.51	68.23	
3400.00	3284.94	0.00	0.00	3309.94	97.23	97.23	133.44	7273.82	7164.16	66.33	
3500.00	3380.37	0.00	0.00	3405.37	100.13	100.13	133.60	7294.90	7181.87	64.54	
3600.00	3475.81	0.00	0.00	3500.81	103.03	103.03	133.77	7316.03	7199.65	62.86	
3700.00	3571.24	0.00	0.00	3596.24	105.92	105.92	133.93	7337.23	7217.49	61.28	
3800.00	3666.67	0.00	0.00	3691.67	108.82	108.82	134.10	7358.49	7235.40	59.78	
3900.00	3762.10	0.00	0.00	3787.10	111.72	111.72	134.26	7379.81	7253.36	58.36	
4000.00	3857.53	0.00	0.00	3882.53	114.62	114.62	134.42	7401.19	7271.39	57.02	
4100.00	3952.96	0.00	0.00	3977.96	117.52	117.52	134.58	7422.62	7289.48	55.75	
4200.00	4048.40	0.00	0.00	4073.40	120.41	120.41	134.74	7444.12	7307.63	54.54	
4300.00	4143.83	0.00	0.00	4168.83	123.31	123.31	134.90	7465.67	7325.84	53.39	
4400.00	4239.26	0.00	0.00	4264.26	126.21	126.21	135.06	7487.28	7344.11	52.30	
4500.00	4334.69	0.00	0.00	4359.69	129.11	129.11	135.22	7508.94	7362.44	51.25	
4600.00	4430.12	0.00	0.00	4455.12	132.01	132.01	135.37	7530.67	7380.83	50.26	
4700.00	4525.55	0.00	0.00	4550.55	134.90	134.90	135.53	7552.44	7399.27	49.31	
4800.00	4620.99	0.00	0.00	4645.99	137.80	137.80	135.69	7574.28	7417.78	48.40	
4900.00	4716.42	0.00	0.00	4741.42	140.70	140.70	135.84	7596.17	7436.35	47.53	
5000.00	4811.85	0.00	0.00	4836.85	143.60	143.60	135.99	7618.11	7454.97	46.70	
5100.00	4907.28	0.00	0.00	4932.28	146.50	146.50	136.14	7640.10	7473.65	45.90	
5200.00	5002.71	0.00	0.00	5027.71	149.40	149.40	136.30	7662.15	7492.39	45.13	
5300.00	5098.14	0.00	0.00	5123.14	152.29	152.29	136.45	7684.26	7511.18	44.40	
5400.00	5193.58	0.00	0.00	5218.58	155.19	155.19	136.60	7706.41	7530.03	43.69	
5500.00	5289.01	0.00	0.00	5314.01	158.09	158.09	136.75	7728.62	7548.89	43.00	
5600.00	5384.44	0.00	0.00	5409.44	160.99	160.99	136.89	7750.88	7567.78	42.33	
5700.00	5479.87	0.00	0.00	5504.87	163.89	163.89	137.04	7773.19	7586.72	41.69	
5800.00	5575.30	0.00	0.00	5600.30	166.78	166.78	137.19	7795.55	7605.71	41.06	
5900.00	5670.73	0.00	0.00	5695.73	169.68	169.68	137.33	7817.96	7624.75	40.46	
6000.00	5766.17	0.00	0.00	5791.17	172.58	172.58	137.48	7840.42	7643.85	39.89	
6100.00	5861.60	0.00	0.00	5886.60	175.48	175.48	137.62	7862.93	7662.99	39.33	
6200.00	5957.03	0.00	0.00	5982.03	178.38	178.38	137.77	7885.49	7682.19	38.79	
6300.00	6052.46	0.00	0.00	6077.46	181.27	181.27	137.91	7908.09	7701.44	38.27	
6400.00	6148.42	0.00	0.00	6173.42	184.19	184.19	124.70	7928.09	7718.10	37.76	
6500.00	6246.07	0.00	0.00	6271.07	187.15	187.15	90.73	7935.29	7722.04	37.21	
6600.00	6343.74	0.00	0.00	6368.74	190.12	190.12	56.45	7928.61	7712.13	36.62	
6700.00	6439.53	0.00	0.00	6464.53	193.03	193.03	37.25	7908.16	7688.56	36.01	

## 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
6800.00	6531.58	0.00	0.00	6556.58	195.83	195.83	27.48	7874.35	7651.78	35.38	
6900.00	6618.10	0.00	0.00	6643.10	198.45	198.45	22.06	7827.83	7602.50	34.74	
7000.00	6697.40	0.00	0.00	6722.40	200.86	200.86	18.85	7769.49	7541.66	34.10	
7100.00	6767.94	0.00	0.00	6792.94	203.00	203.00	16.91	7700.47	7470.41	33.47	
7200.00	6828.35	0.00	0.00	6853.35	204.84	204.84	15.85	7622.09	7390.13	32.86	
7300.00	6877.44	0.00	0.00	6902.44	206.33	206.33	15.55	7535.87	7302.37	32.27	
7400.00	6914.28	0.00	0.00	6939.28	207.45	207.45	16.20	7443.48	7208.83	31.72	
7500.00	6938.13	0.00	0.00	6963.13	208.17	208.17	19.12	7346.71	7111.36	31.22	
7600.00	6948.53	0.00	0.00	6973.53	208.49	208.49	41.57	7247.44	7011.70	30.74	
7700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	7147.48	6911.71	30.31	
7800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	7047.51	6811.71	29.89	
7900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6947.54	6711.78	29.47	
8000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6847.58	6611.78	29.04	
8100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6747.61	6511.72	28.61	
8200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6647.65	6411.74	28.18	
8300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6547.68	6311.72	27.75	
8400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6447.72	6211.74	27.32	
8500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6347.76	6111.68	26.89	
8600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6247.80	6011.68	26.46	
8700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6147.84	5911.72	26.04	
8800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	6047.88	5811.73	25.61	
8900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5947.93	5711.69	25.18	
9000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5847.97	5611.68	24.75	
9100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5748.02	5511.70	24.32	
9200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5648.07	5411.75	23.90	
9300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5548.12	5311.71	23.47	
9400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5448.17	5211.69	23.04	
9500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5348.22	5111.71	22.61	
9600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5248.28	5011.76	22.19	
9700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5148.34	4911.75	21.76	
9800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	5048.40	4811.65	21.32	
9900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4948.46	4711.63	20.89	
10000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4848.53	4611.68	20.47	
10100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4748.60	4511.67	20.04	
10200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4648.67	4411.63	19.61	
10300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4548.74	4311.64	19.19	
10400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4448.82	4211.64	18.76	
10500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4348.90	4111.65	18.33	
10600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4248.99	4011.58	17.90	
10700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4149.08	3911.55	17.47	
10800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4049.17	3811.55	17.04	
10900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3949.27	3711.50	16.61	
11000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3849.37	3611.47	16.18	
11100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3749.48	3511.45	15.75	
11200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3649.60	3411.44	15.32	
11300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3549.72	3311.44	14.90	
11400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3449.85	3211.41	14.47	
11500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3349.98	3111.36	14.04	
11600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3250.13	3011.31	13.61	
11700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3150.28	2911.26	13.18	
11800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3050.45	2811.21	12.75	
11900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2950.62	2711.17	12.32	
12000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2850.81	2611.12	11.89	
12100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2751.01	2511.02	11.46	
12200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2651.23	2410.92	11.03	
12300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2551.46	2310.82	10.60	
12400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2451.71	2210.72	10.17	
12500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2351.99	2110.61	9.74	

## 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
12600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2252.28	2010.50	9.32	
12700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2152.61	1910.38	8.89	
12800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2052.97	1810.24	8.46	
12900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1953.36	1710.07	8.03	
13000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1853.80	1609.88	7.60	
13100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1754.28	1509.56	7.17	
13200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1654.83	1409.21	6.74	
13300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1555.44	1308.83	6.31	
13400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1456.14	1208.42	5.88	
13500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1356.94	1107.97	5.45	
13600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1257.87	1007.47	5.02	
13700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1158.96	906.71	4.59	
13800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1060.25	805.19	4.16	
13900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	961.81	703.44	3.72	
14000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	863.72	601.41	3.29	
14100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	766.14	499.05	2.87	
14200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	669.26	395.76	2.45	SF(Lo)
14300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	573.46	291.91	2.04	SF(Lo)
14400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	479.37	185.69	1.63	SF(Lo)
14500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	388.26	77.29	1.25	SF(Med)
14600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	302.80	-34.83	0.90	SF(Hi)
14700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	229.42	-145.99	0.61	SF(Hi)
14800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	183.25	-232.39	0.44	SF(Hi)
14900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	185.81	-225.04	0.45	SF(Hi)
15000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	235.52	-132.13	0.64	SF(Hi)
15100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	310.51	-19.38	0.94	SF(Hi)
15200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	396.69	92.67	1.30	SF(Med)
15286.68	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	475.78	187.03	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	251.37	3755.84	3755.11	5158.37	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	251.37	3755.76	3753.78	1900.73	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	251.37	3755.76	3751.91	977.03	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	251.37	3755.76	3748.65	528.63	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	251.37	3755.76	3745.39	362.33	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	251.37	3755.76	3742.30	279.15	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	251.37	3755.76	3739.04	224.69	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	251.37	3755.76	3735.78	188.02	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	251.37	3755.76	3732.52	161.63	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	124.36	3756.00	3729.52	141.82	
1000.00	974.93	0.00	0.00	999.93	27.08	27.08	124.37	3757.97	3728.27	126.52	
1100.00	1074.68	0.00	0.00	1099.68	30.11	30.11	124.40	3761.92	3728.99	114.24	
1200.00	1174.13	0.00	0.00	1199.13	33.13	33.13	124.43	3767.85	3731.70	104.22	
1300.00	1273.15	0.00	0.00	1298.15	36.13	36.13	124.47	3775.78	3736.37	95.82	
1400.00	1371.63	0.00	0.00	1396.63	39.12	39.12	124.52	3785.71	3743.06	88.76	
1500.00	1469.44	0.00	0.00	1494.44	42.09	42.09	124.58	3797.68	3751.75	82.68	
1600.00	1566.46	0.00	0.00	1591.46	45.04	45.04	124.64	3811.70	3762.49	77.46	
1700.00	1662.58	0.00	0.00	1687.58	47.96	47.96	124.70	3827.80	3775.28	72.89	
1800.00	1758.03	0.00	0.00	1783.03	50.86	50.86	125.00	3845.36	3789.52	68.86	
1900.00	1853.47	0.00	0.00	1878.47	53.76	53.76	125.35	3863.11	3803.94	65.28	
2000.00	1948.90	0.00	0.00	1973.90	56.65	56.65	125.70	3881.01	3818.50	62.08	
2100.00	2044.33	0.00	0.00	2069.33	59.55	59.55	126.05	3899.06	3833.21	59.21	
2200.00	2139.76	0.00	0.00	2164.76	62.45	62.45	126.39	3917.25	3848.06	56.61	
2300.00	2235.19	0.00	0.00	2260.19	65.35	65.35	126.73	3935.58	3863.04	54.25	
2400.00	2330.62	0.00	0.00	2355.62	68.25	68.25	127.07	3954.06	3878.11	52.06	
2500.00	2426.06	0.00	0.00	2451.06	71.15	71.15	127.40	3972.67	3893.31	50.06	

## 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
2600.00	2521.49	0.00	0.00	2546.49	74.04	74.04	127.73	3991.42	3908.65	48.23	
2700.00	2616.92	0.00	0.00	2641.92	76.94	76.94	128.06	4010.31	3924.13	46.54	
2800.00	2712.35	0.00	0.00	2737.35	79.84	79.84	128.38	4029.32	3939.74	44.98	
2900.00	2807.78	0.00	0.00	2832.78	82.74	82.74	128.71	4048.47	3955.48	43.54	
3000.00	2903.21	0.00	0.00	2928.21	85.64	85.64	129.03	4067.75	3971.36	42.20	
3100.00	2998.65	0.00	0.00	3023.65	88.53	88.53	129.34	4087.16	3987.36	40.95	
3200.00	3094.08	0.00	0.00	3119.08	91.43	91.43	129.66	4106.69	4003.49	39.80	
3300.00	3189.51	0.00	0.00	3214.51	94.33	94.33	129.97	4126.34	4019.75	38.71	
3400.00	3284.94	0.00	0.00	3309.94	97.23	97.23	130.28	4146.12	4036.14	37.70	
3500.00	3380.37	0.00	0.00	3405.37	100.13	100.13	130.58	4166.02	4052.65	36.75	
3600.00	3475.81	0.00	0.00	3500.81	103.03	103.03	130.88	4186.04	4069.28	35.85	
3700.00	3571.24	0.00	0.00	3596.24	105.92	105.92	131.18	4206.17	4086.04	35.01	
3800.00	3666.67	0.00	0.00	3691.67	108.82	108.82	131.48	4226.42	4102.91	34.22	
3900.00	3762.10	0.00	0.00	3787.10	111.72	111.72	131.77	4246.78	4119.91	33.47	
4000.00	3857.53	0.00	0.00	3882.53	114.62	114.62	132.07	4267.26	4137.02	32.77	
4100.00	3952.96	0.00	0.00	3977.96	117.52	117.52	132.36	4287.84	4154.25	32.10	
4200.00	4048.40	0.00	0.00	4073.40	120.41	120.41	132.64	4308.54	4171.59	31.46	
4300.00	4143.83	0.00	0.00	4168.83	123.31	123.31	132.93	4329.34	4189.04	30.86	
4400.00	4239.26	0.00	0.00	4264.26	126.21	126.21	133.21	4350.25	4206.61	30.29	
4500.00	4334.69	0.00	0.00	4359.69	129.11	129.11	133.49	4371.26	4224.29	29.74	
4600.00	4430.12	0.00	0.00	4455.12	132.01	132.01	133.76	4392.37	4242.07	29.22	
4700.00	4525.55	0.00	0.00	4550.55	134.90	134.90	134.04	4413.59	4259.97	28.73	
4800.00	4620.99	0.00	0.00	4645.99	137.80	137.80	134.31	4434.90	4277.97	28.26	
4900.00	4716.42	0.00	0.00	4741.42	140.70	140.70	134.57	4456.32	4296.07	27.81	
5000.00	4811.85	0.00	0.00	4836.85	143.60	143.60	134.84	4477.83	4314.28	27.38	
5100.00	4907.28	0.00	0.00	4932.28	146.50	146.50	135.10	4499.43	4332.59	26.97	
5200.00	5002.71	0.00	0.00	5027.71	149.40	149.40	135.37	4521.13	4351.00	26.57	
5300.00	5098.14	0.00	0.00	5123.14	152.29	152.29	135.63	4542.93	4369.51	26.20	
5400.00	5193.58	0.00	0.00	5218.58	155.19	155.19	135.88	4564.81	4388.12	25.83	
5500.00	5289.01	0.00	0.00	5314.01	158.09	158.09	136.14	4586.79	4406.83	25.49	
5600.00	5384.44	0.00	0.00	5409.44	160.99	160.99	136.39	4608.85	4425.63	25.15	
5700.00	5479.87	0.00	0.00	5504.87	163.89	163.89	136.64	4631.00	4444.53	24.83	
5800.00	5575.30	0.00	0.00	5600.30	166.78	166.78	136.88	4653.24	4463.40	24.51	
5900.00	5670.73	0.00	0.00	5695.73	169.68	169.68	137.13	4675.56	4482.36	24.20	
6000.00	5766.17	0.00	0.00	5791.17	172.58	172.58	137.37	4697.97	4501.40	23.90	
6100.00	5861.60	0.00	0.00	5886.60	175.48	175.48	137.61	4720.46	4520.53	23.61	
6200.00	5957.03	0.00	0.00	5982.03	178.38	178.38	137.85	4743.03	4539.74	23.33	
6300.00	6052.46	0.00	0.00	6077.46	181.27	181.27	138.09	4765.69	4559.04	23.06	
6400.00	6148.42	0.00	0.00	6173.42	184.19	184.19	124.97	4785.76	4575.79	22.79	
6500.00	6246.07	0.00	0.00	6271.07	187.15	187.15	91.09	4793.07	4579.85	22.48	
6600.00	6343.74	0.00	0.00	6368.74	190.12	190.12	56.90	4786.53	4570.10	22.12	
6700.00	6439.53	0.00	0.00	6464.53	193.03	193.03	37.82	4766.26	4546.72	21.71	
6800.00	6531.58	0.00	0.00	6556.58	195.83	195.83	28.17	4732.65	4510.16	21.27	
6900.00	6618.10	0.00	0.00	6643.10	198.45	198.45	22.92	4686.36	4461.12	20.81	
7000.00	6697.40	0.00	0.00	6722.40	200.86	200.86	19.92	4628.26	4400.53	20.32	
7100.00	6767.94	0.00	0.00	6792.94	203.00	203.00	18.26	4559.49	4329.55	19.83	
7200.00	6828.35	0.00	0.00	6853.35	204.84	204.84	17.61	4481.36	4249.53	19.33	
7300.00	6877.44	0.00	0.00	6902.44	206.33	206.33	17.94	4395.38	4162.01	18.83	
7400.00	6914.28	0.00	0.00	6939.28	207.45	207.45	19.76	4303.20	4068.70	18.35	
7500.00	6938.13	0.00	0.00	6963.13	208.17	208.17	25.39	4206.60	3971.40	17.88	
7600.00	6948.53	0.00	0.00	6973.53	208.49	208.49	56.75	4107.46	3871.81	17.43	
7700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	4007.58	3771.94	17.01	
7800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3907.70	3671.96	16.58	
7900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3807.83	3572.08	16.15	
8000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3707.97	3472.22	15.73	
8100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3608.11	3372.25	15.30	
8200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3508.26	3272.29	14.87	
8300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3408.42	3172.46	14.44	

## 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
8400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3308.58	3072.45	14.01	
8500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3208.76	2972.56	13.58	
8600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3108.95	2872.73	13.16	
8700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3009.15	2772.76	12.73	
8800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2909.37	2672.85	12.30	
8900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2809.60	2572.99	11.87	
9000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2709.85	2473.17	11.45	
9100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2610.12	2373.40	11.03	
9200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2510.41	2273.55	10.60	
9300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2410.72	2173.63	10.17	
9400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2311.06	2073.75	9.74	
9500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2211.43	1973.94	9.31	
9600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2111.84	1874.21	8.89	
9700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2012.29	1774.49	8.46	
9800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1912.78	1674.64	8.03	
9900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1813.33	1574.84	7.60	
10000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1713.94	1475.16	7.18	
10100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1614.63	1375.50	6.75	
10200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1515.40	1275.86	6.33	
10300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1416.29	1176.28	5.90	
10400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1317.31	1076.68	5.47	
10500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1218.50	976.84	5.04	
10600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1119.89	876.98	4.61	
10700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1021.56	777.04	4.18	
10800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	923.59	677.13	3.75	
10900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	826.10	577.30	3.32	
11000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	729.30	477.48	2.90	
11100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	633.49	378.16	2.48	SF(Lo)
11200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	539.20	278.05	2.06	SF(Lo)
11300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	447.40	177.89	1.66	SF(Lo)
11400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	359.99	78.75	1.28	SF(Med)
11500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	281.11	-17.65	0.94	SF(Hi)
11600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	220.12	-100.92	0.69	SF(Hi)
11700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	194.63	-139.65	0.58	SF(Hi)
11800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	217.51	-103.53	0.68	SF(Hi)
11900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	277.02	-21.19	0.93	SF(Hi)
12000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	355.20	75.19	1.27	SF(Med)
12100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	442.26	174.11	1.65	SF(Lo)
12200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	533.88	274.75	2.06	SF(Lo)
12300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	628.06	373.92	2.47	SF(Lo)
12400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	723.80	473.60	2.89	
12500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	820.56	573.34	3.32	
12600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	918.01	673.34	3.75	
12700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1015.96	773.24	4.19	
12800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1114.27	872.48	4.61	
12900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1212.86	971.87	5.03	
13000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1311.66	1071.39	5.46	
13100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1410.63	1171.01	5.89	
13200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1509.74	1270.59	6.31	
13300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1608.96	1370.18	6.74	
13400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1708.27	1469.80	7.16	
13500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1807.65	1569.48	7.59	
13600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	1907.10	1669.19	8.02	
13700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2006.60	1768.94	8.44	
13800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2106.15	1868.71	8.87	
13900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2205.75	1968.50	9.30	
14000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2305.37	2068.29	9.72	
14100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2405.03	2168.05	10.15	

## 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
14200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2504.72	2267.82	10.57	
14300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2604.43	2367.61	11.00	
14400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2704.16	2467.42	11.42	
14500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2803.91	2567.24	11.85	
14600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	2903.67	2667.06	12.27	
14700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3003.46	2766.89	12.70	
14800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3103.25	2866.72	13.12	
14900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3203.06	2966.57	13.54	
15000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3302.88	3066.42	13.97	
15100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3402.71	3166.29	14.39	
15200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3502.55	3266.15	14.82	
15286.68	6949.00	0.00	0.00	6974.00	208.50	208.50	90.00	3589.10	3352.73	15.18	
Secondary Well: Tigges 30-34 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	33.00	0.00	0.00	253.94	5782.45	5781.72	7941.86	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	253.94	5782.35	5780.50	3121.78	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	253.94	5782.35	5778.76	1608.37	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	253.94	5782.35	5775.50	844.25	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	253.94	5782.35	5772.25	572.34	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	253.94	5782.35	5769.17	438.55	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	253.94	5782.35	5765.91	351.75	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	253.94	5782.35	5762.66	293.63	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	253.94	5782.35	5759.41	251.99	
900.00	867.00	0.00	0.00	900.00	23.80	23.80	126.94	5782.61	5756.42	220.77	
1000.00	966.93	0.00	0.00	999.93	26.83	26.83	126.93	5784.71	5755.31	196.76	
1100.00	1066.68	0.00	0.00	1099.68	29.86	29.86	126.92	5788.91	5756.29	177.45	
1200.00	1166.13	0.00	0.00	1199.13	32.88	32.88	126.90	5795.21	5759.37	161.70	
1300.00	1265.15	0.00	0.00	1298.15	35.89	35.89	126.87	5803.62	5764.53	148.50	
1400.00	1363.63	0.00	0.00	1396.63	38.88	38.88	126.84	5814.13	5771.81	137.37	
1500.00	1461.44	0.00	0.00	1494.44	41.85	41.85	126.80	5826.77	5781.20	127.85	
1600.00	1558.46	0.00	0.00	1591.46	44.80	44.80	126.75	5841.53	5792.69	119.60	
1700.00	1654.58	0.00	0.00	1687.58	47.72	47.72	126.68	5858.43	5806.30	112.37	
1800.00	1750.03	0.00	0.00	1783.03	50.62	50.62	126.85	5876.80	5821.33	105.94	
1900.00	1845.47	0.00	0.00	1878.47	53.51	53.51	127.08	5895.30	5836.47	100.21	
2000.00	1940.90	0.00	0.00	1973.90	56.41	56.41	127.30	5913.90	5851.70	95.07	
2100.00	2036.33	0.00	0.00	2069.33	59.31	59.31	127.52	5932.59	5867.00	90.46	
2200.00	2131.76	0.00	0.00	2164.76	62.21	62.21	127.75	5951.36	5882.40	86.29	
2300.00	2227.19	0.00	0.00	2260.19	65.11	65.11	127.97	5970.23	5897.87	82.51	
2400.00	2322.62	0.00	0.00	2355.62	68.00	68.00	128.19	5989.19	5913.44	79.06	
2500.00	2418.06	0.00	0.00	2451.06	70.90	70.90	128.40	6008.24	5929.09	75.91	
2600.00	2513.49	0.00	0.00	2546.49	73.80	73.80	128.62	6027.37	5944.83	73.02	
2700.00	2608.92	0.00	0.00	2641.92	76.70	76.70	128.83	6046.60	5960.65	70.35	
2800.00	2704.35	0.00	0.00	2737.35	79.60	79.60	129.05	6065.91	5976.56	67.89	
2900.00	2799.78	0.00	0.00	2832.78	82.50	82.50	129.26	6085.30	5992.55	65.61	
3000.00	2895.21	0.00	0.00	2928.21	85.39	85.39	129.47	6104.78	6008.63	63.49	
3100.00	2990.65	0.00	0.00	3023.65	88.29	88.29	129.68	6124.34	6024.79	61.52	
3200.00	3086.08	0.00	0.00	3119.08	91.19	91.19	129.89	6143.99	6041.04	59.68	
3300.00	3181.51	0.00	0.00	3214.51	94.09	94.09	130.10	6163.72	6057.37	57.96	
3400.00	3276.94	0.00	0.00	3309.94	96.99	96.99	130.30	6183.53	6073.79	56.35	
3500.00	3372.37	0.00	0.00	3405.37	99.88	99.88	130.51	6203.42	6090.28	54.83	
3600.00	3467.81	0.00	0.00	3500.81	102.78	102.78	130.71	6223.39	6106.86	53.41	
3700.00	3563.24	0.00	0.00	3596.24	105.68	105.68	130.92	6243.43	6123.52	52.07	
3800.00	3658.67	0.00	0.00	3691.67	108.58	108.58	131.12	6263.56	6140.26	50.80	
3900.00	3754.10	0.00	0.00	3787.10	111.48	111.48	131.32	6283.77	6157.08	49.60	
4000.00	3849.53	0.00	0.00	3882.53	114.37	114.37	131.52	6304.05	6173.98	48.47	
4100.00	3944.96	0.00	0.00	3977.96	117.27	117.27	131.71	6324.41	6190.96	47.39	



## 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
4200.00	4040.40	0.00	0.00	4073.40	120.17	120.17	131.91	6344.84	6208.02	46.37	
4300.00	4135.83	0.00	0.00	4168.83	123.07	123.07	132.11	6365.35	6225.15	45.40	
4400.00	4231.26	0.00	0.00	4264.26	125.97	125.97	132.30	6385.93	6242.37	44.48	
4500.00	4326.69	0.00	0.00	4359.69	128.87	128.87	132.49	6406.59	6259.66	43.60	
4600.00	4422.12	0.00	0.00	4455.12	131.76	131.76	132.68	6427.31	6277.02	42.76	
4700.00	4517.55	0.00	0.00	4550.55	134.66	134.66	132.87	6448.11	6294.46	41.97	
4800.00	4612.99	0.00	0.00	4645.99	137.56	137.56	133.06	6468.98	6311.97	41.20	
4900.00	4708.42	0.00	0.00	4741.42	140.46	140.46	133.25	6489.92	6329.56	40.47	
5000.00	4803.85	0.00	0.00	4836.85	143.36	143.36	133.44	6510.94	6347.22	39.77	
5100.00	4899.28	0.00	0.00	4932.28	146.25	146.25	133.62	6532.02	6364.95	39.10	
5200.00	4994.71	0.00	0.00	5027.71	149.15	149.15	133.81	6553.16	6382.76	38.46	
5300.00	5090.14	0.00	0.00	5123.14	152.05	152.05	133.99	6574.38	6400.64	37.84	
5400.00	5185.58	0.00	0.00	5218.58	154.95	154.95	134.17	6595.66	6418.59	37.25	
5500.00	5281.01	0.00	0.00	5314.01	157.85	157.85	134.36	6617.01	6436.61	36.68	
5600.00	5376.44	0.00	0.00	5409.44	160.74	160.74	134.54	6638.43	6454.69	36.13	
5700.00	5471.87	0.00	0.00	5504.87	163.64	163.64	134.72	6659.91	6472.85	35.60	
5800.00	5567.30	0.00	0.00	5600.30	166.54	166.54	134.89	6681.46	6491.08	35.10	
5900.00	5662.73	0.00	0.00	5695.73	169.44	169.44	135.07	6703.06	6509.37	34.61	
6000.00	5758.17	0.00	0.00	5791.17	172.34	172.34	135.25	6724.74	6527.73	34.14	
6100.00	5853.60	0.00	0.00	5886.60	175.24	175.24	135.42	6746.47	6546.16	33.68	
6200.00	5949.03	0.00	0.00	5982.03	178.13	178.13	135.59	6768.27	6564.66	33.24	
6300.00	6044.46	0.00	0.00	6077.46	181.03	181.03	135.77	6790.13	6583.22	32.82	
6400.00	6140.42	0.00	0.00	6173.42	183.95	183.95	122.62	6809.39	6599.21	32.40	
6500.00	6238.07	0.00	0.00	6271.07	186.91	186.91	88.69	6815.86	6602.49	31.94	
6600.00	6335.74	0.00	0.00	6368.74	189.88	189.88	54.41	6808.46	6591.95	31.45	
6700.00	6431.53	0.00	0.00	6464.53	192.79	192.79	35.17	6787.32	6567.78	30.92	
6800.00	6523.58	0.00	0.00	6556.58	195.58	195.58	25.30	6752.85	6530.44	30.36	
6900.00	6610.10	0.00	0.00	6643.10	198.21	198.21	19.73	6705.71	6480.58	29.79	
7000.00	6689.40	0.00	0.00	6722.40	200.62	200.62	16.27	6646.81	6419.18	29.20	
7100.00	6759.94	0.00	0.00	6792.94	202.76	202.76	13.97	6577.28	6347.43	28.62	
7200.00	6820.35	0.00	0.00	6853.35	204.59	204.59	12.32	6498.46	6266.72	28.04	
7300.00	6869.44	0.00	0.00	6902.44	206.09	206.09	11.03	6411.88	6178.60	27.49	
7400.00	6906.28	0.00	0.00	6939.28	207.20	207.20	9.78	6319.21	6084.77	26.96	
7500.00	6930.13	0.00	0.00	6963.13	207.93	207.93	7.73	6222.25	5987.10	26.46	
7600.00	6940.53	0.00	0.00	6973.53	208.24	208.24	352.35	6122.88	5887.48	26.01	
7700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	6022.89	5787.42	25.58	
7800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5922.90	5687.51	25.16	
7900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5822.90	5587.52	24.74	
8000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5722.91	5487.52	24.31	
8100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5622.92	5387.55	23.89	
8200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5522.93	5287.62	23.47	
8300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5422.94	5187.56	23.04	
8400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5322.95	5087.59	22.62	
8500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5222.96	4987.65	22.20	
8600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5122.97	4887.60	21.77	
8700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	5022.98	4787.59	21.34	
8800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4922.99	4687.62	20.92	
8900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4823.00	4587.66	20.49	
9000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4723.01	4487.73	20.07	
9100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4623.03	4387.82	19.65	
9200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4523.04	4287.91	19.24	
9300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4423.05	4187.87	18.81	
9400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4323.07	4087.85	18.38	
9500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4223.08	3987.87	17.95	
9600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4123.10	3887.94	17.53	
9700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4023.12	3787.96	17.11	
9800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3923.13	3687.94	16.68	
9900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3823.15	3587.99	16.26	

## 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
10000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3723.17	3488.10	15.84	
10100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3623.19	3388.06	15.41	
10200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3523.21	3288.10	14.98	
10300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3423.24	3188.19	14.56	
10400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3323.26	3088.25	14.14	
10500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3223.29	2988.23	13.71	
10600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3123.31	2888.26	13.29	
10700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3023.34	2788.31	12.86	
10800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2923.37	2688.39	12.44	
10900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2823.41	2588.43	12.02	
11000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2723.44	2488.43	11.59	
11100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2623.48	2388.44	11.16	
11200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2523.52	2288.47	10.74	
11300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2423.57	2188.51	10.31	
11400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2323.62	2088.56	9.89	
11500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2223.67	1988.62	9.46	
11600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2123.73	1888.69	9.04	
11700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2023.80	1788.77	8.61	
11800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1923.87	1688.85	8.19	
11900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1823.95	1588.94	7.76	
12000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1724.03	1488.99	7.33	
12100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1624.13	1389.05	6.91	
12200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1524.24	1289.10	6.48	
12300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1424.37	1189.17	6.06	
12400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1324.52	1089.25	5.63	
12500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1224.69	989.32	5.20	
12600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1124.89	889.39	4.78	
12700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1025.13	789.44	4.35	
12800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	925.42	689.47	3.92	
12900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	825.78	589.46	3.49	
13000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	726.25	489.18	3.06	
13100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	626.85	388.72	2.63	
13200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	527.69	287.87	2.20	SF(Lo)
13300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	428.92	186.11	1.77	SF(Lo)
13400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	330.89	81.53	1.33	SF(Med)
13500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	234.53	-28.80	0.89	SF(Hi)
13600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	143.24	-153.26	0.48	SF(Hi)
13700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	77.67	-301.71	0.20	SF(Hi)
13800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	107.45	-235.08	0.31	SF(Hi)
13900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	192.51	-98.73	0.66	SF(Hi)
14000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	287.36	16.60	1.06	SF(Med)
14100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	384.82	124.29	1.48	SF(Med)
14200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	483.32	229.21	1.90	SF(Lo)
14300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	582.34	331.59	2.32	SF(Lo)
14400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	681.64	433.06	2.74	
14500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	781.12	534.16	3.16	
14600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	880.72	635.04	3.58	
14700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	980.39	735.70	4.01	
14800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1080.13	836.14	4.43	
14900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1179.92	936.50	4.85	
15000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1279.73	1036.81	5.27	
15100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1379.58	1137.08	5.69	
15200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1479.44	1237.30	6.11	
15286.68	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1566.02	1324.15	6.47	

## 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
0.00	0.00	0.00	0.00	33.00	0.00	0.00	238.91	3176.71	3175.98	4362.97	
100.00	67.00	0.00	0.00	100.00	1.02	1.02	238.91	3176.53	3174.68	1712.66	
200.00	167.00	0.00	0.00	200.00	2.54	2.54	238.91	3176.53	3172.93	882.01	
300.00	267.00	0.00	0.00	300.00	5.58	5.58	238.91	3176.53	3169.67	462.88	
400.00	367.00	0.00	0.00	400.00	8.61	8.61	238.91	3176.53	3166.41	313.78	
500.00	467.00	0.00	0.00	500.00	11.65	11.65	238.91	3176.53	3163.32	240.41	
600.00	567.00	0.00	0.00	600.00	14.69	14.69	238.91	3176.53	3160.06	192.82	
700.00	667.00	0.00	0.00	700.00	17.73	17.73	238.91	3176.53	3156.80	160.96	
800.00	767.00	0.00	0.00	800.00	20.76	20.76	238.91	3176.53	3153.54	138.13	
900.00	867.00	0.00	0.00	900.00	23.80	23.80	111.91	3176.70	3150.46	121.07	
1000.00	966.93	0.00	0.00	999.93	26.83	26.83	111.94	3178.00	3148.54	107.86	
1100.00	1066.68	0.00	0.00	1099.68	29.86	29.86	112.01	3180.62	3147.93	97.30	
1200.00	1166.13	0.00	0.00	1199.13	32.88	32.88	112.11	3184.56	3148.63	88.63	
1300.00	1265.15	0.00	0.00	1298.15	35.89	35.89	112.24	3189.86	3150.67	81.39	
1400.00	1363.63	0.00	0.00	1396.63	38.88	38.88	112.40	3196.54	3154.08	75.28	
1500.00	1461.44	0.00	0.00	1494.44	41.85	41.85	112.59	3204.65	3158.89	70.03	
1600.00	1558.46	0.00	0.00	1591.46	44.80	44.80	112.80	3214.23	3165.14	65.48	
1700.00	1654.58	0.00	0.00	1687.58	47.72	47.72	113.03	3225.33	3172.88	61.50	
1800.00	1750.03	0.00	0.00	1783.03	50.62	50.62	113.46	3237.56	3181.73	57.99	
1900.00	1845.47	0.00	0.00	1878.47	53.51	53.51	113.92	3250.04	3190.82	54.88	
2000.00	1940.90	0.00	0.00	1973.90	56.41	56.41	114.38	3262.75	3200.13	52.11	
2100.00	2036.33	0.00	0.00	2069.33	59.31	59.31	114.84	3275.68	3209.66	49.62	
2200.00	2131.76	0.00	0.00	2164.76	62.21	62.21	115.30	3288.83	3219.42	47.38	
2300.00	2227.19	0.00	0.00	2260.19	65.11	65.11	115.75	3302.20	3229.39	45.35	
2400.00	2322.62	0.00	0.00	2355.62	68.00	68.00	116.20	3315.78	3239.58	43.51	
2500.00	2418.06	0.00	0.00	2451.06	70.90	70.90	116.64	3329.58	3249.99	41.84	
2600.00	2513.49	0.00	0.00	2546.49	73.80	73.80	117.08	3343.59	3260.58	40.28	
2700.00	2608.92	0.00	0.00	2641.92	76.70	76.70	117.52	3357.80	3271.32	38.83	
2800.00	2704.35	0.00	0.00	2737.35	79.60	79.60	117.95	3372.22	3282.26	37.49	
2900.00	2799.78	0.00	0.00	2832.78	82.50	82.50	118.39	3386.84	3293.41	36.25	
3000.00	2895.21	0.00	0.00	2928.21	85.39	85.39	118.81	3401.67	3304.77	35.11	
3100.00	2990.65	0.00	0.00	3023.65	88.29	88.29	119.24	3416.69	3316.33	34.04	
3200.00	3086.08	0.00	0.00	3119.08	91.19	91.19	119.66	3431.90	3328.08	33.06	
3300.00	3181.51	0.00	0.00	3214.51	94.09	94.09	120.07	3447.30	3340.04	32.14	
3400.00	3276.94	0.00	0.00	3309.94	96.99	96.99	120.49	3462.90	3352.19	31.28	
3500.00	3372.37	0.00	0.00	3405.37	99.88	99.88	120.90	3478.68	3364.54	30.48	
3600.00	3467.81	0.00	0.00	3500.81	102.78	102.78	121.30	3494.64	3377.07	29.72	
3700.00	3563.24	0.00	0.00	3596.24	105.68	105.68	121.71	3510.79	3389.80	29.02	
3800.00	3658.67	0.00	0.00	3691.67	108.58	108.58	122.11	3527.12	3402.71	28.35	
3900.00	3754.10	0.00	0.00	3787.10	111.48	111.48	122.50	3543.62	3415.81	27.73	
4000.00	3849.53	0.00	0.00	3882.53	114.37	114.37	122.89	3560.30	3429.10	27.14	
4100.00	3944.96	0.00	0.00	3977.96	117.27	117.27	123.28	3577.15	3442.56	26.58	
4200.00	4040.40	0.00	0.00	4073.40	120.17	120.17	123.67	3594.17	3456.21	26.05	
4300.00	4135.83	0.00	0.00	4168.83	123.07	123.07	124.05	3611.35	3470.03	25.55	
4400.00	4231.26	0.00	0.00	4264.26	125.97	125.97	124.43	3628.70	3484.02	25.08	
4500.00	4326.69	0.00	0.00	4359.69	128.87	128.87	124.81	3646.21	3498.19	24.63	
4600.00	4422.12	0.00	0.00	4455.12	131.76	131.76	125.18	3663.89	3512.53	24.21	
4700.00	4517.55	0.00	0.00	4550.55	134.66	134.66	125.55	3681.72	3527.04	23.80	
4800.00	4612.99	0.00	0.00	4645.99	137.56	137.56	125.91	3699.70	3541.71	23.42	
4900.00	4708.42	0.00	0.00	4741.42	140.46	140.46	126.27	3717.84	3556.55	23.05	
5000.00	4803.85	0.00	0.00	4836.85	143.36	143.36	126.63	3736.13	3571.56	22.70	
5100.00	4899.28	0.00	0.00	4932.28	146.25	146.25	126.99	3754.57	3586.59	22.35	
5200.00	4994.71	0.00	0.00	5027.71	149.15	149.15	127.34	3773.15	3601.74	22.01	
5300.00	5090.14	0.00	0.00	5123.14	152.05	152.05	127.69	3791.88	3617.05	21.69	
5400.00	5185.58	0.00	0.00	5218.58	154.95	154.95	128.03	3810.75	3632.51	21.38	
5500.00	5281.01	0.00	0.00	5314.01	157.85	157.85	128.38	3829.76	3648.11	21.08	
5600.00	5376.44	0.00	0.00	5409.44	160.74	160.74	128.72	3848.91	3663.87	20.80	
5700.00	5471.87	0.00	0.00	5504.87	163.64	163.64	129.05	3868.20	3679.76	20.53	

## 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
5800.00	5567.30	0.00	0.00	5600.30	166.54	166.54	129.38	3887.62	3695.80	20.27	
5900.00	5662.73	0.00	0.00	5695.73	169.44	169.44	129.71	3907.17	3711.97	20.02	
6000.00	5758.17	0.00	0.00	5791.17	172.34	172.34	130.04	3926.85	3728.29	19.78	
6100.00	5853.60	0.00	0.00	5886.60	175.24	175.24	130.36	3946.66	3744.74	19.55	
6200.00	5949.03	0.00	0.00	5982.03	178.13	178.13	130.68	3966.60	3761.33	19.32	
6300.00	6044.46	0.00	0.00	6077.46	181.03	181.03	131.00	3986.66	3778.05	19.11	
6400.00	6140.42	0.00	0.00	6173.42	183.95	183.95	118.05	4004.18	3792.28	18.90	
6500.00	6238.07	0.00	0.00	6271.07	186.91	186.91	84.28	4009.03	3793.91	18.64	
6600.00	6335.74	0.00	0.00	6368.74	189.88	189.88	50.05	4000.12	3781.83	18.33	
6700.00	6431.53	0.00	0.00	6464.53	192.79	192.79	30.75	3977.60	3756.26	17.97	
6800.00	6523.58	0.00	0.00	6556.58	195.58	195.58	20.71	3941.89	3717.65	17.58	
6900.00	6610.10	0.00	0.00	6643.10	198.21	198.21	14.83	3893.66	3666.73	17.16	
7000.00	6689.40	0.00	0.00	6722.40	200.62	200.62	10.88	3833.82	3604.45	16.71	
7100.00	6759.94	0.00	0.00	6792.94	202.76	202.76	7.78	3763.51	3532.01	16.26	
7200.00	6820.35	0.00	0.00	6853.35	204.59	204.59	4.86	3684.10	3450.79	15.79	
7300.00	6869.44	0.00	0.00	6902.44	206.09	206.09	1.39	3597.11	3362.36	15.32	
7400.00	6906.28	0.00	0.00	6939.28	207.20	207.20	355.84	3504.23	3268.35	14.86	
7500.00	6930.13	0.00	0.00	6963.13	207.93	207.93	342.88	3407.27	3170.65	14.40	
7600.00	6940.53	0.00	0.00	6973.53	208.24	208.24	293.29	3308.12	3071.23	13.96	
7700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3208.54	2971.75	13.55	
7800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3108.99	2872.18	13.13	
7900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3009.47	2772.73	12.71	
8000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2909.98	2673.38	12.30	
8100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2810.53	2573.89	11.88	
8200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2711.12	2474.56	11.46	
8300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2611.75	2375.19	11.04	
8400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2512.43	2275.96	10.62	
8500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2413.17	2176.75	10.21	
8600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2313.98	2077.55	9.79	
8700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2214.85	1978.44	9.37	
8800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2115.81	1879.43	8.95	
8900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2016.87	1780.53	8.53	
9000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1918.03	1681.75	8.12	
9100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1819.32	1583.12	7.70	
9200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1720.75	1484.64	7.29	
9300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1622.37	1386.20	6.87	
9400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1524.19	1287.91	6.45	
9500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1426.27	1189.44	6.02	
9600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1328.66	1091.27	5.60	
9700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1231.43	993.21	5.17	
9800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1134.68	895.61	4.75	
9900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1038.55	798.25	4.32	
10000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	943.22	701.53	3.90	
10100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	848.97	605.51	3.49	
10200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	756.20	509.55	3.07	
10300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	665.52	414.35	2.65	
10400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	577.93	321.61	2.25	SF(Lo)
10500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	495.07	230.11	1.87	SF(Lo)
10600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	419.73	143.82	1.52	SF(Lo)
10700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	356.73	67.04	1.23	SF(Med)
10800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	313.59	10.48	1.03	SF(Med)
10900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	299.04	-13.21	0.96	SF(Hi)
11000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	317.03	5.73	1.02	SF(Med)
11100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	362.76	59.49	1.20	SF(Med)
11200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	427.41	133.79	1.46	SF(Med)
11300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	503.75	219.08	1.77	SF(Lo)
11400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	587.24	309.60	2.12	SF(Lo)
11500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	675.23	402.91	2.48	SF(Lo)

## 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
11600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	766.17	498.04	2.86	
11700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	859.13	594.90	3.25	
11800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	953.51	692.50	3.65	
11900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1048.94	789.71	4.05	
12000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1145.14	887.58	4.45	
12100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1241.95	985.90	4.85	
12200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1339.22	1084.56	5.26	
12300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1436.87	1183.45	5.67	
12400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1534.82	1282.51	6.08	
12500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1633.02	1381.71	6.50	
12600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1731.43	1481.02	6.91	
12700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1830.01	1580.34	7.33	
12800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	1928.74	1679.74	7.75	
12900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2027.59	1779.06	8.16	
13000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2126.54	1878.34	8.57	
13100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2225.60	1977.69	8.98	
13200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2324.73	2077.11	9.39	
13300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2423.93	2176.58	9.80	
13400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2523.20	2276.09	10.21	
13500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2622.52	2375.64	10.62	
13600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2721.89	2475.23	11.03	
13700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2821.31	2574.85	11.45	
13800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	2920.76	2674.49	11.86	
13900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3020.26	2774.16	12.27	
14000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3119.78	2873.86	12.69	
14100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3219.33	2973.57	13.10	
14200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3318.92	3073.29	13.51	
14300.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3418.52	3173.04	13.93	
14400.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3518.15	3272.80	14.34	
14500.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3617.80	3372.57	14.75	
14600.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3717.46	3472.35	15.17	
14700.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3817.15	3572.15	15.58	
14800.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	3916.85	3671.93	15.99	
14900.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4016.56	3771.71	16.40	
15000.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4116.29	3871.51	16.82	
15100.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4216.04	3971.31	17.23	
15200.00	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4315.79	4071.12	17.64	
15286.68	6941.00	0.00	0.00	6974.00	208.26	208.26	270.00	4402.27	4157.65	18.00	
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	223.22	2138.34	2137.61	2936.87	
100.00	61.00	0.00	0.00	100.00	0.93	0.93	223.22	2137.98	2136.22	1213.20	
200.00	161.00	0.00	0.00	200.00	2.44	2.44	223.22	2137.98	2134.48	610.59	
300.00	261.00	0.00	0.00	300.00	5.40	5.40	223.22	2137.98	2131.31	320.44	
400.00	361.00	0.00	0.00	400.00	8.43	8.43	223.22	2137.98	2128.22	219.13	
500.00	461.00	0.00	0.00	500.00	11.47	11.47	223.22	2137.98	2124.97	164.29	
600.00	561.00	0.00	0.00	600.00	14.51	14.51	223.22	2137.98	2121.71	131.41	
700.00	661.00	0.00	0.00	700.00	17.54	17.54	223.22	2137.98	2118.45	109.49	
800.00	761.00	0.00	0.00	800.00	20.58	20.58	223.22	2137.98	2115.20	93.84	
900.00	861.00	0.00	0.00	900.00	23.62	23.62	96.23	2138.03	2112.00	82.14	
1000.00	960.93	0.00	0.00	999.93	26.65	26.65	96.31	2138.41	2109.17	73.13	
1100.00	1060.68	0.00	0.00	1099.68	29.68	29.68	96.48	2139.19	2106.73	65.90	
1200.00	1160.13	0.00	0.00	1199.13	32.70	32.70	96.73	2140.40	2104.71	59.97	
1300.00	1259.15	0.00	0.00	1298.15	35.71	35.71	97.07	2142.09	2103.16	55.04	
1400.00	1357.63	0.00	0.00	1396.63	38.70	38.70	97.48	2144.32	2102.14	50.84	
1500.00	1455.44	0.00	0.00	1494.44	41.67	41.67	97.96	2147.17	2101.70	47.22	

## 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
1600.00	1552.46	0.00	0.00	1591.46	44.62	44.62	98.51	2150.74	2101.89	44.03	
1700.00	1648.58	0.00	0.00	1687.58	47.53	47.53	99.12	2155.13	2102.86	41.23	
1800.00	1744.03	0.00	0.00	1783.03	50.43	50.43	99.84	2160.26	2104.54	38.77	
1900.00	1839.47	0.00	0.00	1878.47	53.33	53.33	100.59	2165.81	2106.62	36.59	
2000.00	1934.90	0.00	0.00	1973.90	56.23	56.23	101.33	2171.75	2109.09	34.66	
2100.00	2030.33	0.00	0.00	2069.33	59.13	59.13	102.07	2178.09	2111.95	32.93	
2200.00	2125.76	0.00	0.00	2164.76	62.03	62.03	102.80	2184.81	2115.20	31.39	
2300.00	2221.19	0.00	0.00	2260.19	64.92	64.92	103.53	2191.93	2118.85	30.00	
2400.00	2316.62	0.00	0.00	2355.62	67.82	67.82	104.25	2199.42	2122.89	28.74	
2500.00	2412.06	0.00	0.00	2451.06	70.72	70.72	104.97	2207.30	2127.33	27.60	
2600.00	2507.49	0.00	0.00	2546.49	73.62	73.62	105.69	2215.55	2132.15	26.57	
2700.00	2602.92	0.00	0.00	2641.92	76.52	76.52	106.40	2224.17	2137.37	25.62	
2800.00	2698.35	0.00	0.00	2737.35	79.41	79.41	107.10	2233.15	2142.97	24.76	
2900.00	2793.78	0.00	0.00	2832.78	82.31	82.31	107.80	2242.50	2148.80	23.93	
3000.00	2889.21	0.00	0.00	2928.21	85.21	85.21	108.50	2252.21	2154.97	23.16	
3100.00	2984.65	0.00	0.00	3023.65	88.11	88.11	109.18	2262.27	2161.51	22.45	
3200.00	3080.08	0.00	0.00	3119.08	91.01	91.01	109.87	2272.68	2168.41	21.80	
3300.00	3175.51	0.00	0.00	3214.51	93.91	93.91	110.54	2283.43	2175.67	21.19	
3400.00	3270.94	0.00	0.00	3309.94	96.80	96.80	111.22	2294.52	2183.28	20.63	
3500.00	3366.37	0.00	0.00	3405.37	99.70	99.70	111.88	2305.95	2191.25	20.11	
3600.00	3461.81	0.00	0.00	3500.81	102.60	102.60	112.54	2317.70	2199.57	19.62	
3700.00	3557.24	0.00	0.00	3596.24	105.50	105.50	113.19	2329.78	2208.23	19.17	
3800.00	3652.67	0.00	0.00	3691.67	108.40	108.40	113.84	2342.17	2217.23	18.75	
3900.00	3748.10	0.00	0.00	3787.10	111.29	111.29	114.48	2354.88	2226.56	18.35	
4000.00	3843.53	0.00	0.00	3882.53	114.19	114.19	115.11	2367.90	2236.23	17.98	
4100.00	3938.96	0.00	0.00	3977.96	117.09	117.09	115.74	2381.22	2246.23	17.64	
4200.00	4034.40	0.00	0.00	4073.40	119.99	119.99	116.36	2394.85	2256.54	17.32	
4300.00	4129.83	0.00	0.00	4168.83	122.89	122.89	116.97	2408.76	2267.14	17.01	
4400.00	4225.26	0.00	0.00	4264.26	125.79	125.79	117.58	2422.96	2277.83	16.69	
4500.00	4320.69	0.00	0.00	4359.69	128.68	128.68	118.18	2437.45	2288.82	16.40	
4600.00	4416.12	0.00	0.00	4455.12	131.58	131.58	118.77	2452.22	2300.10	16.12	
4700.00	4511.55	0.00	0.00	4550.55	134.48	134.48	119.36	2467.26	2311.68	15.86	
4800.00	4606.99	0.00	0.00	4645.99	137.38	137.38	119.94	2482.56	2323.55	15.61	
4900.00	4702.42	0.00	0.00	4741.42	140.28	140.28	120.52	2498.14	2335.69	15.38	
5000.00	4797.85	0.00	0.00	4836.85	143.17	143.17	121.08	2513.97	2348.12	15.16	
5100.00	4893.28	0.00	0.00	4932.28	146.07	146.07	121.64	2530.05	2360.82	14.95	
5200.00	4988.71	0.00	0.00	5027.71	148.97	148.97	122.20	2546.38	2373.79	14.75	
5300.00	5084.14	0.00	0.00	5123.14	151.87	151.87	122.74	2562.96	2387.02	14.57	
5400.00	5179.58	0.00	0.00	5218.58	154.77	154.77	123.29	2579.78	2400.51	14.39	
5500.00	5275.01	0.00	0.00	5314.01	157.66	157.66	123.82	2596.83	2414.26	14.22	
5600.00	5370.44	0.00	0.00	5409.44	160.56	160.56	124.35	2614.11	2428.25	14.07	
5700.00	5465.87	0.00	0.00	5504.87	163.46	163.46	124.87	2631.62	2442.50	13.92	
5800.00	5561.30	0.00	0.00	5600.30	166.36	166.36	125.38	2649.35	2456.98	13.77	
5900.00	5656.73	0.00	0.00	5695.73	169.26	169.26	125.89	2667.29	2471.71	13.64	
6000.00	5752.17	0.00	0.00	5791.17	172.16	172.16	126.39	2685.45	2486.67	13.51	
6100.00	5847.60	0.00	0.00	5886.60	175.05	175.05	126.89	2703.82	2501.76	13.38	
6200.00	5943.03	0.00	0.00	5982.03	177.95	177.95	127.37	2722.39	2516.90	13.25	
6300.00	6038.46	0.00	0.00	6077.46	180.85	180.85	127.86	2741.16	2532.26	13.12	
6400.00	6134.42	0.00	0.00	6173.42	183.76	183.76	115.10	2757.48	2545.23	12.99	
6500.00	6232.07	0.00	0.00	6271.07	186.73	186.73	81.46	2761.27	2545.76	12.81	
6600.00	6329.74	0.00	0.00	6368.74	189.70	189.70	47.30	2751.43	2532.73	12.58	
6700.00	6425.53	0.00	0.00	6464.53	192.60	192.60	28.00	2728.11	2506.34	12.30	
6800.00	6517.58	0.00	0.00	6556.58	195.40	195.40	17.87	2691.74	2467.05	11.98	
6900.00	6604.10	0.00	0.00	6643.10	198.03	198.03	11.81	2642.96	2415.58	11.62	
7000.00	6683.40	0.00	0.00	6722.40	200.44	200.44	7.54	2582.71	2352.89	11.24	
7100.00	6753.94	0.00	0.00	6792.94	202.58	202.58	3.92	2512.12	2280.16	10.83	
7200.00	6814.35	0.00	0.00	6853.35	204.41	204.41	0.16	2432.54	2198.78	10.41	
7300.00	6863.44	0.00	0.00	6902.44	205.90	205.90	355.21	2345.53	2110.33	9.97	

## 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
7400.00	6900.28	0.00	0.00	6939.28	207.02	207.02	346.91	2252.78	2016.55	9.54	
7500.00	6924.13	0.00	0.00	6963.13	207.75	207.75	328.67	2156.13	1919.23	9.10	
7600.00	6934.53	0.00	0.00	6973.53	208.06	208.06	284.47	2057.48	1820.29	8.67	
7700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1958.58	1721.52	8.26	
7800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1859.81	1622.87	7.85	
7900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1761.18	1524.42	7.44	
8000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1662.71	1426.06	7.03	
8100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1564.44	1328.07	6.62	
8200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1466.40	1229.90	6.20	
8300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1368.64	1131.93	5.78	
8400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1271.23	1034.25	5.36	
8500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1174.26	936.94	4.95	
8600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1077.84	840.12	4.53	
8700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	982.14	743.99	4.12	
8800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	887.38	648.86	3.72	
8900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	793.91	554.67	3.32	
9000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	702.25	460.84	2.91	
9100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	613.19	369.71	2.52	
9200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	528.07	280.90	2.14	SF(Lo)
9300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	449.13	197.19	1.78	SF(Lo)
9400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	380.22	120.87	1.47	SF(Med)
9500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	327.76	58.60	1.22	SF(Med)
9600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	300.46	23.57	1.09	SF(Med)
9700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	305.18	25.56	1.09	SF(Med)
9800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	340.57	63.68	1.23	SF(Med)
9900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	398.55	127.32	1.47	SF(Med)
10000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	470.85	204.93	1.77	SF(Lo)
10100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	551.86	289.81	2.11	SF(Lo)
10200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	638.28	380.05	2.47	SF(Lo)
10300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	728.19	472.13	2.84	
10400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	820.44	566.78	3.23	
10500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	914.31	662.95	3.64	
10600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1009.37	758.98	4.03	
10700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1105.30	855.74	4.43	
10800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1201.89	953.17	4.83	
10900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1298.99	1051.09	5.24	
11000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1396.51	1149.37	5.65	
11100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1494.35	1247.87	6.06	
11200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1592.47	1346.52	6.47	
11300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1690.80	1445.37	6.89	
11400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1789.32	1544.37	7.30	
11500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1887.99	1643.49	7.72	
11600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	1986.80	1742.67	8.14	
11700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2085.72	1841.72	8.55	
11800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2184.74	1940.87	8.96	
11900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2283.84	2040.10	9.37	
12000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2383.02	2139.40	9.78	
12100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2482.26	2238.76	10.19	
12200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2581.57	2338.17	10.61	
12300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2680.92	2437.63	11.02	
12400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2780.32	2537.13	11.43	
12500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2879.77	2636.67	11.85	
12600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	2979.25	2736.22	12.26	
12700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3078.76	2835.78	12.67	
12800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3178.30	2935.38	13.08	
12900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3277.88	3035.00	13.50	
13000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3377.47	3134.64	13.91	
13100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3477.09	3234.30	14.32	

## 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
13200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3576.74	3333.98	14.73	
13300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3676.40	3433.68	15.15	
13400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3776.08	3533.39	15.56	
13500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3875.77	3633.12	15.97	
13600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	3975.48	3732.86	16.39	
13700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4075.21	3832.61	16.80	
13800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4174.94	3932.37	17.21	
13900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4274.70	4032.15	17.62	
14000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4374.46	4131.93	18.04	
14100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4474.23	4231.72	18.45	
14200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4574.01	4331.52	18.86	
14300.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4673.80	4431.33	19.28	
14400.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4773.60	4531.15	19.69	
14500.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4873.41	4630.97	20.10	
14600.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	4973.23	4730.79	20.51	
14700.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5073.05	4830.63	20.93	
14800.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5172.88	4930.47	21.34	
14900.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5272.72	5030.31	21.75	
15000.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5372.56	5130.16	22.16	
15100.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5472.41	5230.01	22.58	
15200.00	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5572.26	5329.87	22.99	
15286.68	6935.00	0.00	0.00	6974.00	208.08	208.08	270.00	5658.82	5416.43	23.35	

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	256.76	7465.97	7465.25	10254.05	
100.00	75.00	0.00	0.00	100.00	1.14	1.14	256.76	7465.93	7463.96	3781.53	
200.00	175.00	0.00	0.00	200.00	2.78	2.78	256.76	7465.93	7462.09	1944.28	
300.00	275.00	0.00	0.00	300.00	5.82	5.82	256.76	7465.93	7458.84	1052.08	
400.00	375.00	0.00	0.00	400.00	8.86	8.86	256.76	7465.93	7455.58	721.15	
500.00	475.00	0.00	0.00	500.00	11.89	11.89	256.76	7465.93	7452.49	555.61	
600.00	575.00	0.00	0.00	600.00	14.93	14.93	256.76	7465.93	7449.24	447.23	
700.00	675.00	0.00	0.00	700.00	17.97	17.97	256.76	7465.93	7445.98	374.23	
800.00	775.00	0.00	0.00	800.00	21.01	21.01	256.76	7465.93	7442.72	321.71	
900.00	875.00	0.00	0.00	900.00	24.04	24.04	129.75	7466.21	7439.76	282.26	
1000.00	974.93	0.00	0.00	999.93	27.08	27.08	129.74	7468.44	7438.78	251.77	
1100.00	1074.68	0.00	0.00	1099.68	30.11	30.11	129.71	7472.91	7440.02	227.23	
1200.00	1174.13	0.00	0.00	1199.13	33.13	33.13	129.67	7479.60	7443.48	207.06	
1300.00	1273.15	0.00	0.00	1298.15	36.13	36.13	129.61	7488.54	7449.17	190.23	
1400.00	1371.63	0.00	0.00	1396.63	39.12	39.12	129.54	7499.70	7457.07	175.95	
1500.00	1469.44	0.00	0.00	1494.44	42.09	42.09	129.45	7513.10	7467.20	163.71	
1600.00	1566.46	0.00	0.00	1591.46	45.04	45.04	129.35	7528.73	7479.55	153.10	
1700.00	1662.58	0.00	0.00	1687.58	47.96	47.96	129.22	7546.59	7494.12	143.82	
1800.00	1758.03	0.00	0.00	1783.03	50.86	50.86	129.34	7565.99	7510.18	135.58	
1900.00	1853.47	0.00	0.00	1878.47	53.76	53.76	129.51	7585.49	7526.34	128.24	
2000.00	1948.90	0.00	0.00	1973.90	56.65	56.65	129.68	7605.06	7542.55	121.66	
2100.00	2044.33	0.00	0.00	2069.33	59.55	59.55	129.84	7624.69	7558.81	115.74	
2200.00	2139.76	0.00	0.00	2164.76	62.45	62.45	130.01	7644.39	7575.14	110.39	
2300.00	2235.19	0.00	0.00	2260.19	65.35	65.35	130.18	7664.16	7591.53	105.53	
2400.00	2330.62	0.00	0.00	2355.62	68.25	68.25	130.34	7683.99	7607.99	101.10	
2500.00	2426.06	0.00	0.00	2451.06	71.15	71.15	130.51	7703.89	7624.50	97.04	
2600.00	2521.49	0.00	0.00	2546.49	74.04	74.04	130.67	7723.85	7641.08	93.31	
2700.00	2616.92	0.00	0.00	2641.92	76.94	76.94	130.84	7743.88	7657.72	89.88	
2800.00	2712.35	0.00	0.00	2737.35	79.84	79.84	131.00	7763.97	7674.42	86.70	
2900.00	2807.78	0.00	0.00	2832.78	82.74	82.74	131.16	7784.12	7691.19	83.76	
3000.00	2903.21	0.00	0.00	2928.21	85.64	85.64	131.32	7804.33	7708.02	81.03	
3100.00	2998.65	0.00	0.00	3023.65	88.53	88.53	131.48	7824.61	7724.91	78.48	



## 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
3200.00	3094.08	0.00	0.00	3119.08	91.43	91.43	131.64	7844.95	7741.86	76.10	
3300.00	3189.51	0.00	0.00	3214.51	94.33	94.33	131.80	7865.34	7758.87	73.87	
3400.00	3284.94	0.00	0.00	3309.94	97.23	97.23	131.96	7885.80	7775.95	71.79	
3500.00	3380.37	0.00	0.00	3405.37	100.13	100.13	132.11	7906.32	7793.09	69.82	
3600.00	3475.81	0.00	0.00	3500.81	103.03	103.03	132.27	7926.90	7810.29	67.98	
3700.00	3571.24	0.00	0.00	3596.24	105.92	105.92	132.43	7947.54	7827.55	66.24	
3800.00	3666.67	0.00	0.00	3691.67	108.82	108.82	132.58	7968.23	7844.87	64.59	
3900.00	3762.10	0.00	0.00	3787.10	111.72	111.72	132.73	7988.99	7862.25	63.04	
4000.00	3857.53	0.00	0.00	3882.53	114.62	114.62	132.89	8009.80	7879.69	61.56	
4100.00	3952.96	0.00	0.00	3977.96	117.52	117.52	133.04	8030.67	7897.19	60.16	
4200.00	4048.40	0.00	0.00	4073.40	120.41	120.41	133.19	8051.60	7914.75	58.84	
4300.00	4143.83	0.00	0.00	4168.83	123.31	123.31	133.34	8072.58	7932.37	57.57	
4400.00	4239.26	0.00	0.00	4264.26	126.21	126.21	133.49	8093.62	7950.04	56.37	
4500.00	4334.69	0.00	0.00	4359.69	129.11	129.11	133.64	8114.71	7967.78	55.23	
4600.00	4430.12	0.00	0.00	4455.12	132.01	132.01	133.79	8135.86	7985.57	54.13	
4700.00	4525.55	0.00	0.00	4550.55	134.90	134.90	133.94	8157.06	8003.42	53.09	
4800.00	4620.99	0.00	0.00	4645.99	137.80	137.80	134.09	8178.32	8021.32	52.09	
4900.00	4716.42	0.00	0.00	4741.42	140.70	140.70	134.23	8199.63	8039.28	51.14	
5000.00	4811.85	0.00	0.00	4836.85	143.60	143.60	134.38	8220.99	8057.30	50.22	
5100.00	4907.28	0.00	0.00	4932.28	146.50	146.50	134.52	8242.41	8075.37	49.34	
5200.00	5002.71	0.00	0.00	5027.71	149.40	149.40	134.67	8263.88	8093.50	48.50	
5300.00	5098.14	0.00	0.00	5123.14	152.29	152.29	134.81	8285.40	8111.69	47.69	
5400.00	5193.58	0.00	0.00	5218.58	155.19	155.19	134.95	8306.98	8129.93	46.92	
5500.00	5289.01	0.00	0.00	5314.01	158.09	158.09	135.10	8328.60	8148.22	46.17	
5600.00	5384.44	0.00	0.00	5409.44	160.99	160.99	135.24	8350.28	8166.57	45.45	
5700.00	5479.87	0.00	0.00	5504.87	163.89	163.89	135.38	8372.01	8184.97	44.76	
5800.00	5575.30	0.00	0.00	5600.30	166.78	166.78	135.52	8393.78	8203.42	44.09	
5900.00	5670.73	0.00	0.00	5695.73	169.68	169.68	135.66	8415.61	8221.93	43.45	
6000.00	5766.17	0.00	0.00	5791.17	172.58	172.58	135.80	8437.48	8240.48	42.83	
6100.00	5861.60	0.00	0.00	5886.60	175.48	175.48	135.94	8459.41	8259.10	42.23	
6200.00	5957.03	0.00	0.00	5982.03	178.38	178.38	136.07	8481.38	8277.76	41.65	
6300.00	6052.46	0.00	0.00	6077.46	181.27	181.27	136.21	8503.40	8296.47	41.09	
6400.00	6148.42	0.00	0.00	6173.42	184.19	184.19	123.02	8522.81	8312.60	40.54	
6500.00	6246.07	0.00	0.00	6271.07	187.15	187.15	89.06	8529.42	8316.01	39.97	
6600.00	6343.74	0.00	0.00	6368.74	190.12	190.12	54.75	8522.14	8305.58	39.35	
6700.00	6439.53	0.00	0.00	6464.53	193.03	193.03	35.49	8501.11	8281.45	38.70	
6800.00	6531.58	0.00	0.00	6556.58	195.83	195.83	25.60	8466.73	8244.11	38.03	
6900.00	6618.10	0.00	0.00	6643.10	198.45	198.45	20.02	8419.67	8194.29	37.36	
7000.00	6697.40	0.00	0.00	6722.40	200.86	200.86	16.56	8360.83	8132.95	36.69	
7100.00	6767.94	0.00	0.00	6792.94	203.00	203.00	14.27	8291.35	8061.25	36.03	
7200.00	6828.35	0.00	0.00	6853.35	204.84	204.84	12.65	8212.57	7980.58	35.40	
7300.00	6877.44	0.00	0.00	6902.44	206.33	206.33	11.42	8126.02	7892.48	34.80	
7400.00	6914.28	0.00	0.00	6939.28	207.45	207.45	10.30	8033.37	7798.68	34.23	
7500.00	6938.13	0.00	0.00	6963.13	208.17	208.17	8.62	7936.42	7701.02	33.72	
7600.00	6948.53	0.00	0.00	6973.53	208.49	208.49	356.65	7837.05	7601.39	33.26	
7700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7737.06	7501.33	32.82	
7800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7637.06	7401.40	32.41	
7900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7537.07	7301.42	31.99	
8000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7437.07	7201.41	31.56	
8100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7337.08	7101.43	31.14	
8200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7237.08	7001.50	30.72	
8300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7137.09	6901.42	30.28	
8400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	7037.09	6801.45	29.86	
8500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6937.10	6701.48	29.44	
8600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6837.10	6601.43	29.01	
8700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6737.11	6501.42	28.58	
8800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6637.11	6401.44	28.16	
8900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6537.12	6301.47	27.74	

## 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
9000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6437.13	6201.53	27.32	
9100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6337.13	6101.61	26.91	
9200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6237.14	6001.66	26.49	
9300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6137.15	5901.60	26.05	
9400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	6037.16	5801.56	25.63	
9500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5937.16	5701.57	25.20	
9600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5837.17	5601.63	24.78	
9700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5737.18	5501.63	24.36	
9800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5637.19	5401.59	23.93	
9900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5537.20	5301.63	23.51	
10000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5437.21	5201.73	23.09	
10100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5337.21	5101.66	22.66	
10200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5237.22	5001.67	22.23	
10300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5137.23	4901.75	21.82	
10400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	5037.25	4801.79	21.39	
10500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4937.26	4701.77	20.97	
10600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4837.27	4601.78	20.54	
10700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4737.28	4501.81	20.12	
10800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4637.29	4401.86	19.70	
10900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4537.30	4301.92	19.28	
11000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4437.32	4201.89	18.85	
11100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4337.33	4101.89	18.42	
11200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4237.35	4001.90	18.00	
11300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4137.36	3901.92	17.57	
11400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	4037.38	3801.95	17.15	
11500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3937.40	3701.98	16.73	
11600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3837.41	3602.03	16.30	
11700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3737.43	3502.07	15.88	
11800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3637.45	3402.13	15.46	
11900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3537.47	3302.18	15.03	
12000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3437.50	3202.24	14.61	
12100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3337.52	3102.30	14.19	
12200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3237.55	3002.33	13.76	
12300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3137.57	2902.33	13.34	
12400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	3037.60	2802.34	12.91	
12500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2937.63	2702.35	12.49	
12600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2837.67	2602.37	12.06	
12700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2737.70	2502.39	11.63	
12800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2637.74	2402.41	11.21	
12900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2537.78	2302.44	10.78	
13000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2437.82	2202.48	10.36	
13100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2337.87	2102.51	9.93	
13200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2237.92	2002.54	9.51	
13300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2137.98	1902.57	9.08	
13400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	2038.04	1802.61	8.66	
13500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1938.11	1702.65	8.23	
13600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1838.19	1602.69	7.81	
13700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1738.27	1502.73	7.38	
13800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1638.37	1402.77	6.95	
13900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1538.48	1302.80	6.53	
14000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1438.60	1202.82	6.10	
14100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1338.74	1102.82	5.67	
14200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1238.91	1002.80	5.25	
14300.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1139.10	902.74	4.82	
14400.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	1039.33	802.64	4.39	
14500.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	939.61	702.47	3.96	
14600.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	839.96	602.03	3.53	
14700.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	740.40	501.35	3.10	

## 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
14800.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	640.97	400.35	2.66	
14900.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	541.76	298.39	2.23	SF(Lo)
15000.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	442.91	195.19	1.79	SF(Lo)
15100.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	344.71	88.74	1.35	SF(Med)
15200.00	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	247.96	-25.08	0.91	SF(Hi)
15286.68	6949.00	0.00	0.00	6974.00	208.50	208.50	270.00	167.22	-136.53	0.55	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	164.99	1709.11	1708.38	2347.39	
100.00	69.00	0.00	0.00	100.00	1.05	1.05	164.99	1708.83	1706.95	908.52	
200.00	169.00	0.00	0.00	200.00	2.60	2.60	164.99	1708.83	1705.18	467.97	
300.00	269.00	0.00	0.00	300.00	5.64	5.64	164.99	1708.83	1701.93	247.62	
400.00	369.00	0.00	0.00	400.00	8.68	8.68	164.99	1708.83	1698.68	168.35	
500.00	469.00	0.00	0.00	500.00	11.71	11.71	164.99	1708.83	1695.43	127.53	
600.00	569.00	0.00	0.00	600.00	14.75	14.75	164.99	1708.83	1692.18	102.64	
700.00	669.00	0.00	0.00	700.00	17.79	17.79	164.99	1708.83	1689.10	86.63	
800.00	769.00	0.00	0.00	800.00	20.82	20.82	164.99	1708.83	1685.85	74.38	
900.00	869.00	0.00	0.00	900.00	23.86	23.86	37.99	1708.48	1682.26	65.16	
1000.00	968.93	0.00	0.00	999.93	26.89	26.89	38.10	1705.74	1676.31	57.98	
1100.00	1068.68	0.00	0.00	1099.68	29.92	29.92	38.31	1700.25	1667.60	52.07	
1200.00	1168.13	0.00	0.00	1199.13	32.94	32.94	38.63	1692.05	1656.17	47.16	
1300.00	1267.15	0.00	0.00	1298.15	35.95	35.95	39.07	1681.17	1642.04	42.96	
1400.00	1365.63	0.00	0.00	1396.63	38.94	38.94	39.61	1667.66	1625.28	39.36	
1500.00	1463.44	0.00	0.00	1494.44	41.91	41.91	40.28	1651.57	1605.94	36.20	
1600.00	1560.46	0.00	0.00	1591.46	44.86	44.86	41.07	1632.99	1584.08	33.38	
1700.00	1656.58	0.00	0.00	1687.58	47.78	47.78	41.99	1612.00	1559.81	30.88	
1800.00	1752.03	0.00	0.00	1783.03	50.68	50.68	42.75	1589.52	1534.00	28.63	
1900.00	1847.47	0.00	0.00	1878.47	53.57	53.57	43.48	1567.24	1508.39	26.63	
2000.00	1942.90	0.00	0.00	1973.90	56.47	56.47	44.22	1545.22	1483.03	24.85	
2100.00	2038.33	0.00	0.00	2069.33	59.37	59.37	44.99	1523.46	1457.94	23.25	
2200.00	2133.76	0.00	0.00	2164.76	62.27	62.27	45.78	1501.98	1433.12	21.81	
2300.00	2229.19	0.00	0.00	2260.19	65.17	65.17	46.59	1480.80	1408.58	20.50	
2400.00	2324.62	0.00	0.00	2355.62	68.07	68.07	47.42	1459.91	1384.34	19.32	
2500.00	2420.06	0.00	0.00	2451.06	70.96	70.96	48.27	1439.35	1360.42	18.24	
2600.00	2515.49	0.00	0.00	2546.49	73.86	73.86	49.15	1419.12	1336.85	17.25	
2700.00	2610.92	0.00	0.00	2641.92	76.76	76.76	50.05	1399.23	1313.47	16.32	
2800.00	2706.35	0.00	0.00	2737.35	79.66	79.66	50.97	1379.70	1290.42	15.45	
2900.00	2801.78	0.00	0.00	2832.78	82.56	82.56	51.93	1360.55	1267.74	14.66	
3000.00	2897.21	0.00	0.00	2928.21	85.45	85.45	52.90	1341.79	1245.46	13.93	
3100.00	2992.65	0.00	0.00	3023.65	88.35	88.35	53.90	1323.44	1223.59	13.25	
3200.00	3088.08	0.00	0.00	3119.08	91.25	91.25	54.93	1305.51	1202.15	12.63	
3300.00	3183.51	0.00	0.00	3214.51	94.15	94.15	55.98	1288.03	1181.17	12.05	
3400.00	3278.94	0.00	0.00	3309.94	97.05	97.05	57.06	1271.01	1160.68	11.52	
3500.00	3374.37	0.00	0.00	3405.37	99.94	99.94	58.17	1254.48	1140.71	11.03	
3600.00	3469.81	0.00	0.00	3500.81	102.84	102.84	59.31	1238.44	1121.25	10.57	
3700.00	3565.24	0.00	0.00	3596.24	105.74	105.74	60.47	1222.92	1102.01	10.11	
3800.00	3660.67	0.00	0.00	3691.67	108.64	108.64	61.66	1207.94	1083.33	9.69	
3900.00	3756.10	0.00	0.00	3787.10	111.54	111.54	62.88	1193.52	1065.26	9.31	
4000.00	3851.53	0.00	0.00	3882.53	114.44	114.44	64.12	1179.69	1047.81	8.95	
4100.00	3946.96	0.00	0.00	3977.96	117.33	117.33	65.39	1166.45	1031.02	8.61	
4200.00	4042.40	0.00	0.00	4073.40	120.23	120.23	66.69	1153.84	1014.87	8.30	
4300.00	4137.83	0.00	0.00	4168.83	123.13	123.13	68.01	1141.86	999.43	8.02	
4400.00	4233.26	0.00	0.00	4264.26	126.03	126.03	69.36	1130.56	984.56	7.74	
4500.00	4328.69	0.00	0.00	4359.69	128.93	128.93	70.73	1119.93	970.08	7.47	
4600.00	4424.12	0.00	0.00	4455.12	131.82	131.82	72.13	1110.01	956.38	7.23	
4700.00	4519.55	0.00	0.00	4550.55	134.72	134.72	73.55	1100.81	943.48	7.00	

## 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
4800.00	4614.99	0.00	0.00	4645.99	137.62	137.62	74.99	1092.35	931.42	6.79	
4900.00	4710.42	0.00	0.00	4741.42	140.52	140.52	76.45	1084.65	920.22	6.60	
5000.00	4805.85	0.00	0.00	4836.85	143.42	143.42	77.92	1077.72	909.92	6.42	
5100.00	4901.28	0.00	0.00	4932.28	146.31	146.31	79.42	1071.58	900.12	6.25	
5200.00	4996.71	0.00	0.00	5027.71	149.21	149.21	80.92	1066.24	890.96	6.08	
5300.00	5092.14	0.00	0.00	5123.14	152.11	152.11	82.45	1061.72	882.69	5.93	
5400.00	5187.58	0.00	0.00	5218.58	155.01	155.01	83.98	1058.02	875.35	5.79	
5500.00	5283.01	0.00	0.00	5314.01	157.91	157.91	85.52	1055.15	868.98	5.67	
5600.00	5378.44	0.00	0.00	5409.44	160.81	160.81	87.06	1053.13	863.60	5.56	
5700.00	5473.87	0.00	0.00	5504.87	163.70	163.70	88.62	1051.95	858.96	5.45	
5800.00	5569.30	0.00	0.00	5600.30	166.60	166.60	90.17	1051.61	854.78	5.34	
5900.00	5664.73	0.00	0.00	5695.73	169.50	169.50	91.72	1052.13	851.59	5.25	
6000.00	5760.17	0.00	0.00	5791.17	172.40	172.40	93.27	1053.49	849.42	5.16	
6100.00	5855.60	0.00	0.00	5886.60	175.30	175.30	94.82	1055.70	848.25	5.09	
6200.00	5951.03	0.00	0.00	5982.03	178.19	178.19	96.36	1058.75	848.09	5.03	
6300.00	6046.46	0.00	0.00	6077.46	181.09	181.09	97.89	1062.63	848.80	4.97	
6400.00	6142.42	0.00	0.00	6173.42	184.01	184.01	86.02	1065.21	847.70	4.90	
6500.00	6240.07	0.00	0.00	6271.07	186.97	186.97	52.63	1058.22	837.36	4.79	
6600.00	6337.74	0.00	0.00	6368.74	189.94	189.94	17.95	1040.55	816.51	4.64	
6700.00	6433.53	0.00	0.00	6464.53	192.85	192.85	357.28	1012.28	785.24	4.46	
6800.00	6525.58	0.00	0.00	6556.58	195.64	195.64	344.79	973.89	744.04	4.24	
6900.00	6612.10	0.00	0.00	6643.10	198.27	198.27	335.12	926.28	693.94	3.99	
7000.00	6691.40	0.00	0.00	6722.40	200.68	200.68	325.81	870.86	636.51	3.72	
7100.00	6761.94	0.00	0.00	6792.94	202.82	202.82	315.69	809.54	572.99	3.42	
7200.00	6822.35	0.00	0.00	6853.35	204.66	204.66	304.51	744.88	506.41	3.12	
7300.00	6871.44	0.00	0.00	6902.44	206.15	206.15	293.00	680.23	441.43	2.85	
7400.00	6908.28	0.00	0.00	6939.28	207.26	207.26	282.68	619.82	379.73	2.58	
7500.00	6932.13	0.00	0.00	6963.13	207.99	207.99	274.96	568.81	328.76	2.37	SF(Lo)
7600.00	6942.53	0.00	0.00	6973.53	208.31	208.31	270.57	532.80	293.34	2.23	SF(Lo)
7700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	515.75	277.15	2.16	SF(Lo)
7800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	517.89	279.71	2.17	SF(Lo)
7900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	538.91	300.82	2.26	SF(Lo)
8000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	576.74	338.25	2.42	SF(Lo)
8100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	628.37	389.37	2.63	
8200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	690.69	451.69	2.89	
8300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	761.10	520.99	3.17	
8400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	837.55	597.48	3.49	
8500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	918.53	677.53	3.81	
8600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1002.95	761.86	4.16	
8700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1090.01	848.97	4.52	
8800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1179.12	937.35	4.88	
8900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1269.86	1027.72	5.24	
9000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1361.90	1119.65	5.62	
9100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1454.98	1212.81	6.01	
9200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1548.93	1306.95	6.40	
9300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1643.59	1401.60	6.79	
9400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1738.85	1496.57	7.18	
9500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1834.62	1592.04	7.56	
9600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	1930.81	1688.01	7.95	
9700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2027.38	1784.44	8.35	
9800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2124.26	1881.22	8.74	
9900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2221.41	1978.36	9.14	
10000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2318.81	2075.70	9.54	
10100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2416.42	2173.22	9.94	
10200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2514.22	2271.00	10.34	
10300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2612.19	2369.01	10.74	
10400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2710.30	2467.21	11.15	
10500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2808.55	2565.58	11.56	

## 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
10600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	2906.92	2663.98	11.97	
10700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3005.39	2762.44	12.37	
10800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3103.96	2861.01	12.78	
10900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3202.62	2959.69	13.18	
11000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3301.37	3058.47	13.59	
11100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3400.18	3157.32	14.00	
11200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3499.06	3256.11	14.40	
11300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3598.01	3354.96	14.80	
11400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3697.01	3453.89	15.21	
11500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3796.06	3552.88	15.61	
11600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3895.16	3651.92	16.01	
11700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	3994.31	3751.01	16.42	
11800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4093.50	3850.15	16.82	
11900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4192.72	3949.34	17.23	
12000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4291.99	4048.55	17.63	
12100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4391.28	4147.79	18.03	
12200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4490.61	4247.06	18.44	
12300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4589.97	4346.36	18.84	
12400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4689.35	4445.70	19.25	
12500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4788.76	4545.06	19.65	
12600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4888.19	4644.45	20.06	
12700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	4987.65	4743.87	20.46	
12800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5087.13	4843.31	20.86	
12900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5186.62	4942.77	21.27	
13000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5286.14	5042.25	21.67	
13100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5385.67	5141.75	22.08	
13200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5485.23	5241.27	22.48	
13300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5584.79	5340.80	22.89	
13400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5684.38	5440.34	23.29	
13500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5783.97	5539.90	23.70	
13600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5883.58	5639.47	24.10	
13700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	5983.21	5739.06	24.51	
13800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6082.84	5838.65	24.91	
13900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6182.49	5938.27	25.31	
14000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6282.15	6037.89	25.72	
14100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6381.82	6137.53	26.12	
14200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6481.50	6237.17	26.53	
14300.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6581.19	6336.83	26.93	
14400.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6680.89	6436.49	27.34	
14500.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6780.59	6536.17	27.74	
14600.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6880.31	6635.85	28.14	
14700.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	6980.04	6735.54	28.55	
14800.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7079.77	6835.24	28.95	
14900.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7179.51	6934.95	29.36	
15000.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7279.25	7034.66	29.76	
15100.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7379.01	7134.38	30.16	
15200.00	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7478.77	7234.11	30.57	
15286.68	6943.00	0.00	0.00	6974.00	208.32	208.32	270.00	7565.24	7320.56	30.92	
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	235.56	3817.10	3816.37	5242.59	
100.00	70.00	0.00	0.00	100.00	1.06	1.06	235.56	3816.98	3815.09	2012.19	
200.00	170.00	0.00	0.00	200.00	2.63	2.63	235.56	3816.98	3813.30	1036.05	
300.00	270.00	0.00	0.00	300.00	5.67	5.67	235.56	3816.98	3810.05	550.31	
400.00	370.00	0.00	0.00	400.00	8.71	8.71	235.56	3816.98	3806.80	374.66	
500.00	470.00	0.00	0.00	500.00	11.74	11.74	235.56	3816.98	3803.72	287.69	

## 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
600.00	570.00	0.00	0.00	600.00	14.78	14.78	235.56	3816.98	3800.46	231.06	
700.00	670.00	0.00	0.00	700.00	17.82	17.82	235.56	3816.98	3797.21	193.05	
800.00	770.00	0.00	0.00	800.00	20.85	20.85	235.56	3816.98	3793.96	165.79	
900.00	870.00	0.00	0.00	900.00	23.89	23.89	108.56	3817.12	3790.85	145.31	
1000.00	969.93	0.00	0.00	999.93	26.92	26.92	108.59	3818.23	3788.76	129.54	
1100.00	1069.68	0.00	0.00	1099.68	29.95	29.95	108.64	3820.47	3787.77	116.85	
1200.00	1169.13	0.00	0.00	1199.13	32.97	32.97	108.73	3823.83	3787.89	106.39	
1300.00	1268.15	0.00	0.00	1298.15	35.98	35.98	108.84	3828.35	3789.16	97.68	
1400.00	1366.63	0.00	0.00	1396.63	38.97	38.97	108.97	3834.06	3791.57	90.24	
1500.00	1464.44	0.00	0.00	1494.44	41.94	41.94	109.13	3840.98	3795.19	83.89	
1600.00	1561.46	0.00	0.00	1591.46	44.89	44.89	109.30	3849.16	3800.02	78.34	
1700.00	1657.58	0.00	0.00	1687.58	47.81	47.81	109.50	3858.64	3806.12	73.47	
1800.00	1753.03	0.00	0.00	1783.03	50.71	50.71	109.86	3869.09	3813.17	69.18	
1900.00	1848.47	0.00	0.00	1878.47	53.60	53.60	110.26	3879.77	3820.42	65.37	
2000.00	1943.90	0.00	0.00	1973.90	56.50	56.50	110.65	3890.65	3827.86	61.96	
2100.00	2039.33	0.00	0.00	2069.33	59.40	59.40	111.05	3901.72	3835.49	58.91	
2200.00	2134.76	0.00	0.00	2164.76	62.30	62.30	111.44	3913.00	3843.31	56.15	
2300.00	2230.19	0.00	0.00	2260.19	65.20	65.20	111.83	3924.47	3851.32	53.66	
2400.00	2325.62	0.00	0.00	2355.62	68.10	68.10	112.22	3936.13	3859.53	51.39	
2500.00	2421.06	0.00	0.00	2451.06	70.99	70.99	112.60	3947.98	3867.93	49.32	
2600.00	2516.49	0.00	0.00	2546.49	73.89	73.89	112.99	3960.02	3876.52	47.43	
2700.00	2611.92	0.00	0.00	2641.92	76.79	76.79	113.37	3972.25	3885.31	45.69	
2800.00	2707.35	0.00	0.00	2737.35	79.69	79.69	113.75	3984.67	3894.28	44.08	
2900.00	2802.78	0.00	0.00	2832.78	82.59	82.59	114.13	3997.27	3903.45	42.60	
3000.00	2898.21	0.00	0.00	2928.21	85.48	85.48	114.50	4010.06	3912.80	41.23	
3100.00	2993.65	0.00	0.00	3023.65	88.38	88.38	114.87	4023.03	3922.34	39.96	
3200.00	3089.08	0.00	0.00	3119.08	91.28	91.28	115.24	4036.17	3932.07	38.77	
3300.00	3184.51	0.00	0.00	3214.51	94.18	94.18	115.61	4049.50	3941.99	37.67	
3400.00	3279.94	0.00	0.00	3309.94	97.08	97.08	115.98	4063.00	3952.08	36.63	
3500.00	3375.37	0.00	0.00	3405.37	99.98	99.98	116.34	4076.67	3962.36	35.66	
3600.00	3470.81	0.00	0.00	3500.81	102.87	102.87	116.70	4090.52	3972.83	34.76	
3700.00	3566.24	0.00	0.00	3596.24	105.77	105.77	117.06	4104.54	3983.41	33.89	
3800.00	3661.67	0.00	0.00	3691.67	108.67	108.67	117.42	4118.72	3994.11	33.05	
3900.00	3757.10	0.00	0.00	3787.10	111.57	111.57	117.77	4133.08	4004.98	32.27	
4000.00	3852.53	0.00	0.00	3882.53	114.47	114.47	118.13	4147.60	4016.02	31.52	
4100.00	3947.96	0.00	0.00	3977.96	117.36	117.36	118.48	4162.28	4027.23	30.82	
4200.00	4043.40	0.00	0.00	4073.40	120.26	120.26	118.82	4177.13	4038.60	30.15	
4300.00	4138.83	0.00	0.00	4168.83	123.16	123.16	119.17	4192.13	4050.14	29.52	
4400.00	4234.26	0.00	0.00	4264.26	126.06	126.06	119.51	4207.30	4061.85	28.93	
4500.00	4329.69	0.00	0.00	4359.69	128.96	128.96	119.85	4222.62	4073.72	28.36	
4600.00	4425.12	0.00	0.00	4455.12	131.85	131.85	120.19	4238.10	4085.75	27.82	
4700.00	4520.55	0.00	0.00	4550.55	134.75	134.75	120.53	4253.73	4097.94	27.30	
4800.00	4615.99	0.00	0.00	4645.99	137.65	137.65	120.86	4269.51	4110.29	26.82	
4900.00	4711.42	0.00	0.00	4741.42	140.55	140.55	121.19	4285.44	4122.80	26.35	
5000.00	4806.85	0.00	0.00	4836.85	143.45	143.45	121.52	4301.52	4135.46	25.90	
5100.00	4902.28	0.00	0.00	4932.28	146.35	146.35	121.85	4317.75	4148.28	25.48	
5200.00	4997.71	0.00	0.00	5027.71	149.24	149.24	122.17	4334.12	4161.25	25.07	
5300.00	5093.14	0.00	0.00	5123.14	152.14	152.14	122.50	4350.64	4174.37	24.68	
5400.00	5188.58	0.00	0.00	5218.58	155.04	155.04	122.82	4367.30	4187.64	24.31	
5500.00	5284.01	0.00	0.00	5314.01	157.94	157.94	123.13	4384.10	4201.07	23.95	
5600.00	5379.44	0.00	0.00	5409.44	160.84	160.84	123.45	4401.04	4214.64	23.61	
5700.00	5474.87	0.00	0.00	5504.87	163.73	163.73	123.76	4418.11	4228.35	23.28	
5800.00	5570.30	0.00	0.00	5600.30	166.63	166.63	124.07	4435.32	4242.21	22.97	
5900.00	5665.73	0.00	0.00	5695.73	169.53	169.53	124.38	4452.67	4256.21	22.67	
6000.00	5761.17	0.00	0.00	5791.17	172.43	172.43	124.69	4470.14	4270.36	22.37	
6100.00	5856.60	0.00	0.00	5886.60	175.33	175.33	124.99	4487.75	4284.64	22.09	
6200.00	5952.03	0.00	0.00	5982.03	178.22	178.22	125.30	4505.49	4299.06	21.83	
6300.00	6047.46	0.00	0.00	6077.46	181.12	181.12	125.59	4523.36	4313.62	21.57	

## 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
6400.00	6143.42	0.00	0.00	6173.42	184.04	184.04	112.68	4538.72	4325.73	21.31	
6500.00	6241.07	0.00	0.00	6271.07	187.00	187.00	78.88	4541.57	4325.42	21.01	
6600.00	6338.74	0.00	0.00	6368.74	189.97	189.97	44.51	4530.86	4311.61	20.66	
6700.00	6434.53	0.00	0.00	6464.53	192.88	192.88	24.94	4506.77	4284.51	20.28	
6800.00	6526.58	0.00	0.00	6556.58	195.67	195.67	14.49	4469.72	4244.62	19.86	
6900.00	6613.10	0.00	0.00	6643.10	198.30	198.30	7.99	4420.42	4192.62	19.40	
7000.00	6692.40	0.00	0.00	6722.40	200.71	200.71	3.13	4359.81	4129.57	18.94	
7100.00	6762.94	0.00	0.00	6792.94	202.85	202.85	358.71	4289.04	4056.68	18.46	
7200.00	6823.35	0.00	0.00	6853.35	204.69	204.69	353.79	4209.51	3975.37	17.98	
7300.00	6872.44	0.00	0.00	6902.44	206.18	206.18	347.11	4122.76	3887.22	17.50	
7400.00	6909.28	0.00	0.00	6939.28	207.30	207.30	336.21	4030.51	3793.92	17.04	
7500.00	6933.13	0.00	0.00	6963.13	208.02	208.02	315.59	3934.57	3697.32	16.58	
7600.00	6943.53	0.00	0.00	6973.53	208.34	208.34	280.06	3836.86	3599.35	16.15	
7700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3739.04	3501.45	15.74	
7800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3641.35	3403.86	15.33	
7900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3543.79	3306.22	14.92	
8000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3446.37	3208.83	14.51	
8100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3349.10	3111.54	14.10	
8200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3252.00	3014.41	13.69	
8300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3155.07	2917.42	13.28	
8400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3058.35	2820.63	12.87	
8500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2961.84	2724.03	12.45	
8600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2865.58	2627.61	12.04	
8700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2769.58	2531.42	11.63	
8800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2673.87	2435.47	11.22	
8900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2578.48	2339.80	10.80	
9000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2483.47	2244.48	10.39	
9100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2388.85	2149.54	9.98	
9200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2294.70	2055.05	9.58	
9300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2201.06	1960.88	9.16	
9400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2108.00	1866.83	8.74	
9500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2015.61	1773.19	8.31	
9600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1923.98	1680.05	7.89	
9700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1833.22	1587.57	7.46	
9800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1743.48	1496.07	7.05	
9900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1654.91	1405.50	6.64	
10000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1567.72	1316.14	6.23	
10100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1482.15	1227.88	5.83	
10200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1398.49	1140.41	5.42	
10300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1317.12	1055.11	5.03	
10400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1238.47	972.61	4.66	
10500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1163.11	892.35	4.30	
10600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1091.72	814.76	3.94	
10700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1025.11	742.40	3.63	
10800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	964.30	674.44	3.33	
10900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	910.43	614.01	3.07	
11000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	864.81	560.85	2.85	
11100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	828.81	518.30	2.67	
11200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	803.70	486.20	2.53	
11300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	790.54	467.48	2.45	SF(Lo)
11400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	789.91	463.49	2.42	SF(Lo)
11500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	801.86	473.92	2.45	SF(Lo)
11600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	825.83	497.41	2.51	
11700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	860.82	534.13	2.63	
11800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	905.55	581.48	2.79	
11900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	958.67	637.34	2.98	
12000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1018.85	701.15	3.21	
12100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1084.93	770.81	3.45	

## 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
12200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1155.89	845.13	3.72	
12300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1230.89	924.10	4.01	
12400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1309.24	1005.66	4.31	
12500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1390.37	1089.60	4.62	
12600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1473.82	1175.98	4.95	
12700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1559.22	1264.32	5.29	
12800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1646.26	1354.23	5.64	
12900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1734.70	1444.43	5.98	
13000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1824.34	1535.77	6.32	
13100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	1915.00	1628.13	6.68	
13200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2006.55	1721.34	7.04	
13300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2098.87	1815.28	7.40	
13400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2191.86	1909.84	7.77	
13500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2285.45	2004.94	8.15	
13600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2379.56	2100.50	8.53	
13700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2474.13	2196.37	8.91	
13800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2569.11	2292.23	9.28	
13900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2664.46	2388.43	9.65	
14000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2760.14	2484.93	10.03	
14100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2856.11	2581.70	10.41	
14200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	2952.35	2678.71	10.79	
14300.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3048.84	2775.92	11.17	
14400.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3145.54	2873.34	11.56	
14500.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3242.44	2970.92	11.94	
14600.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3339.53	3068.66	12.33	
14700.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3436.78	3166.54	12.72	
14800.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3534.19	3264.55	13.11	
14900.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3631.73	3362.68	13.50	
15000.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3729.41	3460.92	13.89	
15100.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3827.21	3559.23	14.28	
15200.00	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	3925.12	3657.60	14.67	
15286.68	6944.00	0.00	0.00	6974.00	208.35	208.35	270.00	4010.07	3742.94	15.01	
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	0.01	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	0.01	139.90	135.80	34.11	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.86	140.16	135.62	30.91	
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	231.78	142.29	137.35	28.77	
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	229.71	146.72	141.35	27.33	
1200.00	1199.13	0.00	0.00	1199.13	2.58	2.58	226.84	153.70	147.89	26.47	
1300.00	1298.15	0.00	0.00	1298.15	2.81	2.81	223.44	163.57	157.31	26.16	
1400.00	1396.63	0.00	0.00	1396.63	3.03	3.03	219.75	176.65	169.93	26.28	
1500.00	1494.44	0.00	0.00	1494.44	3.25	3.25	216.04	193.20	185.99	26.80	
1600.00	1591.46	0.00	0.00	1591.46	3.46	3.46	212.46	213.39	205.69	27.72	
1700.00	1687.58	0.00	0.00	1687.58	3.68	3.68	209.16	237.31	229.14	29.02	
1800.00	1783.03	0.00	0.00	1783.03	3.90	3.90	206.08	263.99	255.31	30.39	
1900.00	1881.05	1.62	78.00	1881.04	4.11	4.11	203.67	290.99	281.82	31.72	
2000.00	1980.72	3.61	78.00	1980.60	4.32	4.31	202.24	317.26	307.60	32.85	
2100.00	2081.37	5.63	78.00	2080.91	4.53	4.50	201.59	342.50	332.34	33.70	



## 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
2200.00	2182.76	7.66	78.00	2181.62	4.76	4.70	201.57	366.58	355.86	34.21	
2300.00	2284.65	9.69	78.00	2282.35	5.02	4.90	202.06	389.47	378.18	34.48	
2400.00	2386.79	11.74	78.00	2382.69	5.30	5.10	202.99	411.26	399.33	34.47	
2500.00	2488.91	13.78	78.00	2482.29	5.62	5.30	204.28	432.06	419.42	34.18	
2600.00	2590.75	15.82	78.00	2580.75	5.99	5.50	205.90	452.06	438.64	33.67	
2700.00	2690.73	17.19	78.00	2676.50	6.40	5.71	207.74	471.54	457.24	32.97	
2800.00	2787.69	17.19	78.00	2769.13	6.84	5.95	209.48	491.25	476.03	32.26	
2900.00	2884.65	17.19	78.00	2861.76	7.30	6.19	211.08	511.38	495.20	31.60	
3000.00	2981.62	17.19	78.00	2954.40	7.79	6.43	212.57	531.87	514.70	30.98	
3100.00	3078.58	17.19	78.00	3047.03	8.28	6.68	213.95	552.69	534.48	30.36	
3200.00	3175.54	17.19	78.00	3139.66	8.80	6.93	215.22	573.79	554.54	29.81	
3300.00	3272.50	17.19	78.00	3232.29	9.32	7.19	216.41	595.15	574.85	29.32	
3400.00	3369.47	17.19	78.00	3324.93	9.86	7.45	217.52	616.74	595.38	28.88	
3500.00	3466.43	17.19	78.00	3417.56	10.40	7.71	218.55	638.53	616.08	28.45	
3600.00	3563.39	17.19	78.00	3510.19	10.95	7.97	219.51	660.51	636.97	28.06	
3700.00	3660.35	17.19	78.00	3602.83	11.50	8.24	220.42	682.67	658.02	27.69	
3800.00	3757.31	17.19	78.00	3695.46	12.06	8.51	221.26	704.97	679.18	27.34	
3900.00	3854.28	17.19	78.00	3788.09	12.63	8.78	222.06	727.41	700.48	27.01	
4000.00	3951.24	17.19	78.00	3880.73	13.20	9.05	222.80	749.98	721.91	26.72	
4100.00	4048.20	17.19	78.00	3973.36	13.77	9.33	223.51	772.67	743.45	26.45	
4200.00	4145.16	17.19	78.00	4065.99	14.34	9.60	224.17	795.45	765.10	26.21	
4300.00	4242.13	17.19	78.00	4158.62	14.92	9.88	224.80	818.34	786.84	25.98	
4400.00	4339.09	17.19	78.00	4251.26	15.50	10.16	225.39	841.31	808.67	25.78	
4500.00	4436.05	17.19	78.00	4343.89	16.08	10.44	225.95	864.37	830.59	25.59	
4600.00	4533.01	17.19	78.00	4436.52	16.67	10.72	226.49	887.50	852.58	25.41	
4700.00	4629.98	17.19	78.00	4529.16	17.25	11.00	226.99	910.70	874.63	25.25	
4800.00	4726.94	17.19	78.00	4621.79	17.84	11.28	227.47	933.97	896.76	25.10	
4900.00	4823.90	17.19	78.00	4714.42	18.43	11.56	227.93	957.29	918.94	24.96	
5000.00	4920.86	17.19	78.00	4807.05	19.02	11.84	228.37	980.67	941.18	24.83	
5100.00	5017.83	17.19	78.00	4899.69	19.61	12.13	228.78	1004.10	963.47	24.71	
5200.00	5114.79	17.19	78.00	4992.32	20.20	12.41	229.18	1027.58	985.81	24.60	
5300.00	5211.75	17.19	78.00	5084.95	20.79	12.70	229.56	1051.11	1008.19	24.49	
5400.00	5308.71	17.19	78.00	5177.59	21.39	12.99	229.92	1074.67	1030.62	24.39	
5500.00	5405.67	17.19	78.00	5270.22	21.98	13.27	230.27	1098.28	1053.06	24.29	
5600.00	5502.64	17.19	78.00	5362.85	22.58	13.56	230.60	1121.92	1075.54	24.19	
5700.00	5599.60	17.19	78.00	5455.48	23.17	13.85	230.92	1145.59	1098.06	24.10	
5800.00	5696.56	17.19	78.00	5548.12	23.77	14.13	231.23	1169.30	1120.61	24.01	
5900.00	5793.52	17.19	78.00	5640.75	24.37	14.42	231.52	1193.04	1143.19	23.93	
6000.00	5890.49	17.19	78.00	5733.38	24.96	14.71	231.81	1216.81	1165.80	23.85	
6100.00	5987.45	17.19	78.00	5826.02	25.56	15.00	232.08	1240.60	1188.43	23.78	
6200.00	6084.41	17.19	78.00	5918.65	26.16	15.29	232.34	1264.42	1211.09	23.71	
6300.00	6181.37	17.19	78.00	6011.28	26.76	15.58	232.59	1288.26	1233.77	23.64	
6400.00	6278.06	17.19	78.00	6103.65	27.36	15.87	218.36	1312.34	1256.73	23.60	
6500.00	6372.58	17.19	78.00	6193.95	27.94	16.15	183.08	1337.40	1280.81	23.64	
6600.00	6471.17	11.33	73.09	6289.14	28.38	16.43	147.84	1363.44	1306.08	23.77	
6700.00	6576.51	3.75	40.13	6393.53	28.63	16.44	127.70	1389.83	1332.02	24.04	
6800.00	6687.93	6.91	290.14	6504.65	28.68	16.09	116.98	1416.00	1358.04	24.43	
6900.00	6806.36	16.05	276.46	6620.61	28.55	15.34	110.62	1441.30	1383.52	24.95	
7000.00	6932.60	26.05	272.50	6738.28	28.25	14.16	106.46	1465.07	1407.76	25.56	
7100.00	7067.02	36.76	270.56	6852.85	27.87	12.61	103.53	1486.60	1429.95	26.24	
7200.00	7209.28	48.11	269.35	6957.68	27.54	10.90	101.34	1505.17	1449.21	26.90	
7300.00	7358.03	59.99	268.47	7044.85	27.47	9.50	99.62	1520.12	1464.45	27.31	
7400.00	7510.77	72.19	267.77	7106.64	27.84	9.13	98.21	1530.94	1474.98	27.36	
7500.00	7664.12	84.44	267.16	7137.63	28.77	10.16	97.04	1537.32	1480.22	26.93	
7600.00	7787.63	90.00	266.89	7141.00	29.85	11.24	96.28	1539.67	1480.88	26.19	
7700.00	7887.62	90.00	266.89	7141.00	30.98	11.72	96.22	1540.77	1479.90	25.31	
7800.00	7987.61	90.00	266.89	7141.00	32.32	12.22	96.22	1541.82	1478.53	24.36	
7900.00	8087.61	90.00	266.89	7141.00	33.83	12.75	96.21	1542.88	1476.68	23.31	

## 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
8000.00	8187.60	90.00	266.89	7141.00	35.49	13.30	96.21	1543.94	1474.59	22.27	
8100.00	8287.60	90.00	266.89	7141.00	37.30	13.86	96.21	1544.99	1472.12	21.20	
8200.00	8387.59	90.00	266.89	7141.00	39.22	14.44	96.20	1546.05	1469.47	20.19	
8300.00	8487.58	90.00	266.89	7141.00	41.24	15.04	96.20	1547.10	1466.68	19.24	
8400.00	8587.58	90.00	266.89	7141.00	43.35	15.64	96.19	1548.16	1463.52	18.29	
8500.00	8687.57	90.00	266.89	7141.00	45.53	16.26	96.19	1549.22	1460.27	17.42	
8600.00	8787.57	90.00	266.89	7141.00	47.78	16.88	96.18	1550.27	1456.90	16.60	
8700.00	8887.56	90.00	266.89	7141.00	50.08	17.52	96.18	1551.33	1453.42	15.84	
8800.00	8987.56	90.00	266.89	7141.00	52.43	18.16	96.18	1552.38	1449.84	15.14	
8900.00	9087.55	90.00	266.89	7141.00	54.82	18.81	96.17	1553.44	1446.17	14.48	
9000.00	9187.55	90.00	266.89	7141.00	57.25	19.46	96.17	1554.50	1442.43	13.87	
9100.00	9287.54	90.00	266.89	7141.00	59.71	20.12	96.16	1555.55	1438.62	13.30	
9200.00	9387.53	90.00	266.89	7141.00	62.20	20.79	96.16	1556.61	1434.74	12.77	
9300.00	9487.53	90.00	266.89	7141.00	64.72	21.45	96.15	1557.67	1430.81	12.28	
9400.00	9587.52	90.00	266.89	7141.00	67.26	22.13	96.15	1558.72	1426.84	11.82	
9500.00	9687.52	90.00	266.89	7141.00	69.81	22.80	96.15	1559.78	1422.82	11.39	
9600.00	9787.51	90.00	266.89	7141.00	72.39	23.48	96.14	1560.83	1418.77	10.99	
9700.00	9887.51	90.00	266.89	7141.00	74.98	24.17	96.14	1561.89	1414.68	10.61	
9800.00	9987.50	90.00	266.89	7141.00	77.59	24.85	96.13	1562.95	1410.57	10.26	
9900.00	10087.49	90.00	266.89	7141.00	80.21	25.54	96.13	1564.00	1406.42	9.93	
10000.00	10187.49	90.00	266.89	7141.00	82.84	26.23	96.13	1565.06	1402.26	9.61	
10100.00	10287.48	90.00	266.89	7141.00	85.48	26.93	96.12	1566.12	1398.07	9.32	
10200.00	10387.48	90.00	266.89	7141.00	88.13	27.62	96.12	1567.17	1393.86	9.04	
10300.00	10487.47	90.00	266.89	7141.00	90.79	28.32	96.11	1568.23	1389.63	8.78	
10400.00	10587.47	90.00	266.89	7141.00	93.46	29.02	96.11	1569.28	1385.38	8.53	
10500.00	10687.46	90.00	266.89	7141.00	96.14	29.72	96.11	1570.34	1381.13	8.30	
10600.00	10787.45	90.00	266.89	7141.00	98.82	30.42	96.10	1571.40	1376.85	8.08	
10700.00	10887.45	90.00	266.89	7141.00	101.51	31.13	96.10	1572.45	1372.57	7.87	
10800.00	10987.44	90.00	266.89	7141.00	104.20	31.83	96.09	1573.51	1368.27	7.67	
10900.00	11087.44	90.00	266.89	7141.00	106.90	32.54	96.09	1574.57	1363.96	7.48	
11000.00	11187.43	90.00	266.89	7141.00	109.61	33.25	96.08	1575.62	1359.64	7.30	
11100.00	11287.43	90.00	266.89	7141.00	112.32	33.95	96.08	1576.68	1355.31	7.12	
11200.00	11387.42	90.00	266.89	7141.00	115.03	34.66	96.08	1577.73	1350.97	6.96	
11300.00	11487.42	90.00	266.89	7141.00	117.75	35.37	96.07	1578.79	1346.63	6.80	
11400.00	11587.41	90.00	266.89	7141.00	120.47	36.09	96.07	1579.85	1342.28	6.65	
11500.00	11687.40	90.00	266.89	7141.00	123.19	36.80	96.06	1580.90	1337.92	6.51	
11600.00	11787.40	90.00	266.89	7141.00	125.92	37.51	96.06	1581.96	1333.55	6.37	
11700.00	11887.39	90.00	266.89	7141.00	128.65	38.23	96.06	1583.02	1329.18	6.24	
11800.00	11987.39	90.00	266.89	7141.00	131.39	38.94	96.05	1584.07	1324.80	6.11	
11900.00	12087.38	90.00	266.89	7141.00	134.12	39.66	96.05	1585.13	1320.41	5.99	
12000.00	12187.38	90.00	266.89	7141.00	136.86	40.37	96.04	1586.18	1316.02	5.87	
12100.00	12287.37	90.00	266.89	7141.00	139.60	41.09	96.04	1587.24	1311.63	5.76	
12200.00	12387.36	90.00	266.89	7141.00	142.35	41.80	96.04	1588.30	1307.23	5.65	
12300.00	12487.36	90.00	266.89	7141.00	145.09	42.52	96.03	1589.35	1302.83	5.55	
12400.00	12587.35	90.00	266.89	7141.00	147.84	43.24	96.03	1590.41	1298.42	5.45	
12500.00	12687.35	90.00	266.89	7141.00	150.59	43.96	96.02	1591.47	1294.01	5.35	
12600.00	12787.34	90.00	266.89	7141.00	153.34	44.68	96.02	1592.52	1289.60	5.26	
12700.00	12887.34	90.00	266.89	7141.00	156.10	45.40	96.02	1593.58	1285.18	5.17	
12800.00	12987.33	90.00	266.89	7141.00	158.85	46.12	96.01	1594.64	1280.76	5.08	
12900.00	13087.32	90.00	266.89	7141.00	161.61	46.84	96.01	1595.69	1276.34	5.00	
13000.00	13187.32	90.00	266.89	7141.00	164.37	47.56	96.00	1596.75	1271.91	4.92	
13100.00	13287.31	90.00	266.89	7141.00	167.12	48.28	96.00	1597.81	1267.48	4.84	
13200.00	13387.31	90.00	266.89	7141.00	169.89	49.00	96.00	1598.86	1263.05	4.76	
13300.00	13487.30	90.00	266.89	7141.00	172.65	49.72	95.99	1599.92	1258.61	4.69	
13400.00	13587.30	90.00	266.89	7141.00	175.41	50.45	95.99	1600.98	1254.18	4.62	
13500.00	13687.29	90.00	266.89	7141.00	178.17	51.17	95.98	1602.03	1249.74	4.55	
13600.00	13787.29	90.00	266.89	7141.00	180.94	51.89	95.98	1603.09	1245.29	4.48	
13700.00	13887.28	90.00	266.89	7141.00	183.70	52.62	95.98	1604.14	1240.85	4.42	

## 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
13800.00	13987.27	90.00	266.89	7141.00	186.47	53.34	95.97	1605.20	1236.41	4.35	
13900.00	14087.27	90.00	266.89	7141.00	189.24	54.06	95.97	1606.26	1231.96	4.29	
14000.00	14187.26	90.00	266.89	7141.00	192.01	54.79	95.96	1607.31	1227.51	4.23	
14100.00	14287.26	90.00	266.89	7141.00	194.78	55.51	95.96	1608.37	1223.06	4.17	
14200.00	14387.25	90.00	266.89	7141.00	197.55	56.24	95.96	1609.43	1218.60	4.12	
14300.00	14487.25	90.00	266.89	7141.00	200.32	56.96	95.95	1610.48	1214.15	4.06	
14400.00	14587.24	90.00	266.89	7141.00	203.09	57.69	95.95	1611.54	1209.69	4.01	
14500.00	14687.23	90.00	266.89	7141.00	205.86	58.41	95.94	1612.60	1205.23	3.96	
14600.00	14787.23	90.00	266.89	7141.00	208.64	59.14	95.94	1613.65	1200.78	3.91	
14700.00	14887.22	90.00	266.89	7141.00	211.41	59.86	95.94	1614.71	1196.31	3.86	
14800.00	14987.22	90.00	266.89	7141.00	214.19	60.59	95.93	1615.77	1191.85	3.81	
14900.00	15087.21	90.00	266.89	7141.00	216.96	61.31	95.93	1616.82	1187.39	3.77	
15000.00	15187.21	90.00	266.89	7141.00	219.74	62.04	95.93	1617.88	1182.92	3.72	
15100.00	15287.20	90.00	266.89	7141.00	222.51	62.77	95.92	1618.94	1178.46	3.68	
15200.00	15387.20	90.00	266.89	7141.00	225.29	63.49	95.92	1619.99	1173.99	3.63	
15286.68	15473.87	90.00	266.89	7141.00	227.70	64.12	95.91	1620.91	1170.12	3.60	

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	359.95	119.86	119.12	163.45	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.95	119.86	118.90	125.64	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.95	119.86	118.45	85.40	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.95	119.86	118.01	64.68	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.95	119.86	117.56	52.05	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.95	119.86	117.11	43.55	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.95	119.86	116.66	37.44	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.95	119.86	116.21	32.83	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	359.95	119.86	115.76	29.23	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.78	120.12	115.59	26.49	
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	231.51	122.26	117.32	24.72	
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	229.11	126.73	121.36	23.62	
1200.00	1199.13	0.00	0.00	1199.13	2.58	2.58	225.84	133.82	128.01	23.03	
1300.00	1298.15	0.00	0.00	1298.15	2.81	2.81	222.02	143.89	137.64	23.00	
1400.00	1396.63	0.00	0.00	1396.63	3.03	3.03	217.97	157.29	150.57	23.42	
1500.00	1494.44	0.00	0.00	1494.44	3.25	3.25	213.98	174.25	167.05	24.19	
1600.00	1591.46	0.00	0.00	1591.46	3.46	3.46	210.24	194.92	187.24	25.38	
1700.00	1687.58	0.00	0.00	1687.58	3.68	3.68	206.87	219.36	211.19	26.85	
1800.00	1783.03	0.00	0.00	1783.03	3.90	3.90	203.80	246.53	237.88	28.48	
1900.00	1878.47	0.00	0.00	1878.47	4.11	4.11	201.30	274.32	265.19	30.06	
2000.00	1973.90	0.00	0.00	1973.90	4.32	4.32	199.25	302.50	292.91	31.53	
2100.00	2073.73	1.47	85.04	2073.72	4.54	4.54	197.63	330.52	320.43	32.76	
2200.00	2176.49	3.53	85.04	2176.38	4.75	4.74	196.72	356.98	346.41	33.77	
2300.00	2280.52	5.61	85.04	2280.07	4.97	4.94	196.42	381.64	370.54	34.41	
2400.00	2385.54	7.71	85.04	2384.38	5.21	5.14	196.63	404.41	392.78	34.78	
2500.00	2491.30	9.83	85.04	2488.89	5.47	5.34	197.28	425.30	413.12	34.91	
2600.00	2597.50	11.95	85.04	2593.18	5.76	5.55	198.30	444.39	431.57	34.67	
2700.00	2703.86	14.08	85.04	2696.80	6.09	5.75	199.66	461.79	448.26	34.12	
2800.00	2810.09	16.20	85.04	2799.34	6.47	5.95	201.33	477.70	463.38	33.38	
2900.00	2915.90	18.32	85.04	2900.38	6.91	6.16	203.29	492.33	477.17	32.49	
3000.00	3014.98	18.74	85.04	2994.23	7.39	6.38	205.27	506.43	490.30	31.40	
3100.00	3112.49	18.74	85.04	3086.57	7.88	6.62	207.12	521.07	503.92	30.39	
3200.00	3210.00	18.74	85.04	3178.92	8.39	6.87	208.88	536.22	518.04	29.50	
3300.00	3307.51	18.74	85.04	3271.26	8.93	7.12	210.53	551.85	532.62	28.71	
3400.00	3405.02	18.74	85.04	3363.60	9.48	7.38	212.10	567.91	547.58	27.94	
3500.00	3502.53	18.74	85.04	3455.95	10.05	7.64	213.58	584.37	562.87	27.18	
3600.00	3600.04	18.74	85.04	3548.29	10.63	7.90	214.98	601.20	578.52	26.51	
3700.00	3697.55	18.74	85.04	3640.63	11.22	8.17	216.30	618.37	594.51	25.91	

## 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
3800.00	3795.06	18.74	85.04	3732.98	11.82	8.44	217.56	635.85	610.80	25.38	
3900.00	3892.57	18.74	85.04	3825.32	12.42	8.71	218.75	653.61	627.37	24.90	
4000.00	3990.08	18.74	85.04	3917.66	13.03	8.99	219.87	671.64	644.19	24.47	
4100.00	4087.59	18.74	85.04	4010.01	13.65	9.27	220.94	689.91	661.21	24.04	
4200.00	4185.10	18.74	85.04	4102.35	14.27	9.55	221.95	708.40	678.46	23.66	
4300.00	4282.61	18.74	85.04	4194.70	14.89	9.83	222.91	727.09	695.91	23.32	
4400.00	4380.12	18.74	85.04	4287.04	15.52	10.11	223.83	745.98	713.53	22.99	
4500.00	4477.63	18.74	85.04	4379.38	16.15	10.40	224.70	765.04	731.33	22.69	
4600.00	4575.14	18.74	85.04	4471.73	16.79	10.69	225.52	784.27	749.29	22.42	
4700.00	4672.65	18.74	85.04	4564.07	17.42	10.97	226.31	803.65	767.40	22.17	
4800.00	4770.17	18.74	85.04	4656.41	18.06	11.26	227.06	823.17	785.66	21.94	
4900.00	4867.68	18.74	85.04	4748.76	18.70	11.56	227.78	842.82	804.05	21.74	
5000.00	4965.19	18.74	85.04	4841.10	19.35	11.85	228.47	862.59	822.56	21.55	
5100.00	5062.70	18.74	85.04	4933.44	19.99	12.14	229.12	882.48	841.19	21.37	
5200.00	5160.21	18.74	85.04	5025.79	20.64	12.43	229.74	902.47	859.93	21.21	
5300.00	5257.72	18.74	85.04	5118.13	21.29	12.73	230.34	922.57	878.75	21.05	
5400.00	5355.23	18.74	85.04	5210.48	21.93	13.02	230.92	942.76	897.65	20.90	
5500.00	5452.74	18.74	85.04	5302.82	22.58	13.32	231.46	963.03	916.65	20.76	
5600.00	5550.25	18.74	85.04	5395.16	23.23	13.62	231.99	983.39	935.73	20.63	
5700.00	5647.76	18.74	85.04	5487.51	23.89	13.92	232.50	1003.82	954.88	20.51	
5800.00	5745.27	18.74	85.04	5579.85	24.54	14.21	232.98	1024.33	974.12	20.40	
5900.00	5842.78	18.74	85.04	5672.19	25.19	14.51	233.45	1044.90	993.42	20.30	
6000.00	5940.29	18.74	85.04	5764.54	25.85	14.81	233.90	1065.54	1012.79	20.20	
6100.00	6037.80	18.74	85.04	5856.88	26.50	15.11	234.33	1086.24	1032.22	20.11	
6200.00	6135.31	18.74	85.04	5949.22	27.16	15.41	234.74	1107.00	1051.71	20.02	
6300.00	6236.22	16.21	84.76	6045.00	27.78	15.75	235.12	1127.76	1071.23	19.95	
6400.00	6345.94	7.45	82.40	6152.29	28.21	15.94	220.66	1148.11	1090.64	19.98	
6500.00	6455.30	1.44	289.64	6261.38	28.38	15.77	184.67	1168.78	1110.93	20.21	
6600.00	6564.17	10.05	269.85	6369.61	28.38	15.26	148.31	1189.50	1131.67	20.57	
6700.00	6672.50	18.71	268.34	6474.44	28.23	14.44	127.02	1209.89	1152.37	21.04	
6800.00	6780.22	27.32	267.77	6573.50	28.00	13.38	115.16	1229.55	1172.58	21.58	
6900.00	6887.29	35.89	267.46	6664.60	27.74	12.16	107.69	1248.10	1191.80	22.17	
7000.00	6993.64	44.39	267.26	6745.83	27.53	10.92	102.49	1265.20	1209.47	22.70	
7100.00	7099.19	52.84	267.11	6815.54	27.42	9.81	98.61	1280.51	1225.20	23.15	
7200.00	7203.84	61.21	267.00	6872.46	27.50	9.06	95.62	1293.74	1238.57	23.45	
7300.00	7307.49	69.50	266.90	6915.64	27.80	8.86	93.31	1304.65	1249.21	23.53	
7400.00	7410.02	77.70	266.81	6944.56	28.35	9.29	91.54	1313.02	1256.86	23.38	
7500.00	7511.33	85.81	266.73	6959.08	29.10	10.25	90.25	1318.71	1261.35	22.99	
7600.00	7611.36	90.00	266.69	6961.00	30.05	11.11	89.49	1321.61	1262.59	22.39	
7700.00	7711.35	90.00	266.69	6961.00	31.21	11.60	89.44	1322.42	1261.30	21.64	
7800.00	7811.35	90.00	266.69	6961.00	32.57	12.12	89.44	1323.13	1259.57	20.82	
7900.00	7911.35	90.00	266.69	6961.00	34.11	12.66	89.44	1323.83	1257.29	19.89	
8000.00	8011.34	90.00	266.69	6961.00	35.80	13.21	89.44	1324.54	1254.85	19.01	
8100.00	8111.34	90.00	266.69	6961.00	37.62	13.79	89.44	1325.25	1251.94	18.08	
8200.00	8211.34	90.00	266.69	6961.00	39.55	14.38	89.44	1325.95	1248.94	17.22	
8300.00	8311.34	90.00	266.69	6961.00	41.59	14.98	89.44	1326.66	1245.67	16.38	
8400.00	8411.33	90.00	266.69	6961.00	43.70	15.59	89.44	1327.37	1242.15	15.58	
8500.00	8511.33	90.00	266.69	6961.00	45.89	16.21	89.44	1328.07	1238.52	14.83	
8600.00	8611.33	90.00	266.69	6961.00	48.15	16.84	89.44	1328.78	1234.76	14.13	
8700.00	8711.33	90.00	266.69	6961.00	50.46	17.48	89.44	1329.49	1230.90	13.49	
8800.00	8811.32	90.00	266.69	6961.00	52.81	18.13	89.44	1330.19	1226.94	12.88	
8900.00	8911.32	90.00	266.69	6961.00	55.21	18.78	89.44	1330.90	1222.89	12.32	
9000.00	9011.32	90.00	266.69	6961.00	57.64	19.44	89.44	1331.61	1218.76	11.80	
9100.00	9111.32	90.00	266.69	6961.00	60.11	20.10	89.44	1332.31	1214.56	11.31	
9200.00	9211.31	90.00	266.69	6961.00	62.60	20.77	89.44	1333.02	1210.31	10.86	
9300.00	9311.31	90.00	266.69	6961.00	65.12	21.44	89.44	1333.73	1206.00	10.44	
9400.00	9411.31	90.00	266.69	6961.00	67.66	22.12	89.44	1334.43	1201.64	10.05	
9500.00	9511.31	90.00	266.69	6961.00	70.22	22.80	89.44	1335.14	1197.24	9.68	

## 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
9600.00	9611.30	90.00	266.69	6961.00	72.80	23.48	89.44	1335.85	1192.80	9.34	
9700.00	9711.30	90.00	266.69	6961.00	75.39	24.17	89.44	1336.55	1188.33	9.02	
9800.00	9811.30	90.00	266.69	6961.00	78.00	24.86	89.44	1337.26	1183.83	8.72	
9900.00	9911.30	90.00	266.69	6961.00	80.61	25.55	89.44	1337.97	1179.31	8.43	
10000.00	10011.29	90.00	266.69	6961.00	83.25	26.24	89.44	1338.67	1174.76	8.17	
10100.00	10111.29	90.00	266.69	6961.00	85.89	26.94	89.44	1339.38	1170.18	7.92	
10200.00	10211.29	90.00	266.69	6961.00	88.54	27.64	89.44	1340.09	1165.59	7.68	
10300.00	10311.29	90.00	266.69	6961.00	91.20	28.33	89.44	1340.79	1160.98	7.46	
10400.00	10411.28	90.00	266.69	6961.00	93.87	29.04	89.44	1341.50	1156.36	7.25	
10500.00	10511.28	90.00	266.69	6961.00	96.54	29.74	89.45	1342.21	1151.71	7.05	
10600.00	10611.28	90.00	266.69	6961.00	99.23	30.44	89.45	1342.91	1147.06	6.86	
10700.00	10711.28	90.00	266.69	6961.00	101.91	31.15	89.45	1343.62	1142.39	6.68	
10800.00	10811.27	90.00	266.69	6961.00	104.61	31.85	89.45	1344.33	1137.71	6.51	
10900.00	10911.27	90.00	266.69	6961.00	107.31	32.56	89.45	1345.03	1133.02	6.34	
11000.00	11011.27	90.00	266.69	6961.00	110.01	33.27	89.45	1345.74	1128.32	6.19	
11100.00	11111.27	90.00	266.69	6961.00	112.72	33.98	89.45	1346.45	1123.61	6.04	
11200.00	11211.26	90.00	266.69	6961.00	115.43	34.69	89.45	1347.16	1118.89	5.90	
11300.00	11311.26	90.00	266.69	6961.00	118.15	35.40	89.45	1347.86	1114.17	5.77	
11400.00	11411.26	90.00	266.69	6961.00	120.87	36.12	89.45	1348.57	1109.44	5.64	
11500.00	11511.26	90.00	266.69	6961.00	123.60	36.83	89.45	1349.28	1104.70	5.52	
11600.00	11611.25	90.00	266.69	6961.00	126.32	37.55	89.45	1349.98	1099.95	5.40	
11700.00	11711.25	90.00	266.69	6961.00	129.05	38.26	89.45	1350.69	1095.20	5.29	
11800.00	11811.25	90.00	266.69	6961.00	131.79	38.98	89.45	1351.40	1090.44	5.18	
11900.00	11911.25	90.00	266.69	6961.00	134.52	39.69	89.45	1352.10	1085.67	5.07	
12000.00	12011.24	90.00	266.69	6961.00	137.26	40.41	89.45	1352.81	1080.91	4.98	
12100.00	12111.24	90.00	266.69	6961.00	140.00	41.13	89.45	1353.52	1076.13	4.88	
12200.00	12211.24	90.00	266.69	6961.00	142.75	41.85	89.45	1354.22	1071.35	4.79	
12300.00	12311.24	90.00	266.69	6961.00	145.49	42.56	89.45	1354.93	1066.57	4.70	
12400.00	12411.23	90.00	266.69	6961.00	148.24	43.28	89.45	1355.64	1061.79	4.61	
12500.00	12511.23	90.00	266.69	6961.00	150.99	44.00	89.45	1356.34	1057.00	4.53	
12600.00	12611.23	90.00	266.69	6961.00	153.74	44.72	89.45	1357.05	1052.20	4.45	
12700.00	12711.23	90.00	266.69	6961.00	156.49	45.44	89.45	1357.76	1047.41	4.37	
12800.00	12811.22	90.00	266.69	6961.00	159.24	46.16	89.45	1358.46	1042.61	4.30	
12900.00	12911.22	90.00	266.69	6961.00	162.00	46.89	89.45	1359.17	1037.80	4.23	
13000.00	13011.22	90.00	266.69	6961.00	164.76	47.61	89.45	1359.88	1033.00	4.16	
13100.00	13111.22	90.00	266.69	6961.00	167.52	48.33	89.45	1360.58	1028.19	4.09	
13200.00	13211.21	90.00	266.69	6961.00	170.27	49.05	89.45	1361.29	1023.38	4.03	
13300.00	13311.21	90.00	266.69	6961.00	173.04	49.77	89.45	1362.00	1018.56	3.97	
13400.00	13411.21	90.00	266.69	6961.00	175.80	50.50	89.45	1362.70	1013.75	3.91	
13500.00	13511.21	90.00	266.69	6961.00	178.56	51.22	89.45	1363.41	1008.93	3.85	
13600.00	13611.20	90.00	266.69	6961.00	181.32	51.94	89.45	1364.12	1004.11	3.79	
13700.00	13711.20	90.00	266.69	6961.00	184.09	52.67	89.45	1364.82	999.29	3.73	
13800.00	13811.20	90.00	266.69	6961.00	186.86	53.39	89.45	1365.53	994.46	3.68	
13900.00	13911.20	90.00	266.69	6961.00	189.62	54.12	89.45	1366.24	989.64	3.63	
14000.00	14011.19	90.00	266.69	6961.00	192.39	54.84	89.46	1366.94	984.81	3.58	
14100.00	14111.19	90.00	266.69	6961.00	195.16	55.57	89.46	1367.65	979.98	3.53	
14200.00	14211.19	90.00	266.69	6961.00	197.93	56.29	89.46	1368.36	975.15	3.48	
14300.00	14311.19	90.00	266.69	6961.00	200.70	57.02	89.46	1369.06	970.32	3.43	
14400.00	14411.18	90.00	266.69	6961.00	203.47	57.74	89.46	1369.77	965.48	3.39	
14500.00	14511.18	90.00	266.69	6961.00	206.24	58.47	89.46	1370.48	960.65	3.34	
14600.00	14611.18	90.00	266.69	6961.00	209.02	59.19	89.46	1371.18	955.81	3.30	
14700.00	14711.18	90.00	266.69	6961.00	211.79	59.92	89.46	1371.89	950.97	3.26	
14800.00	14811.17	90.00	266.69	6961.00	214.56	60.64	89.46	1372.60	946.13	3.22	
14900.00	14911.17	90.00	266.69	6961.00	217.34	61.37	89.46	1373.31	941.29	3.18	
15000.00	15011.17	90.00	266.69	6961.00	220.11	62.10	89.46	1374.01	936.45	3.14	
15100.00	15111.17	90.00	266.69	6961.00	222.89	62.82	89.46	1374.72	931.61	3.10	
15200.00	15211.16	90.00	266.69	6961.00	225.66	63.55	89.46	1375.43	926.77	3.07	
15286.68	15297.84	90.00	266.69	6961.00	228.07	64.18	89.46	1376.04	922.57	3.03	

## 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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.82	99.09	136.12	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	0.03	99.82	98.87	104.64	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	0.03	99.82	98.42	71.12	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	0.03	99.82	97.97	53.87	
400.00	400.00	0.00	0.00	400.00	0.79	0.79	0.03	99.82	97.52	43.35	
500.00	500.00	0.00	0.00	500.00	1.01	1.01	0.03	99.82	97.07	36.27	
600.00	600.00	0.00	0.00	600.00	1.24	1.24	0.03	99.82	96.62	31.18	
700.00	700.00	0.00	0.00	700.00	1.46	1.46	0.03	99.82	96.17	27.34	
800.00	800.00	0.00	0.00	800.00	1.69	1.69	0.03	99.82	95.72	24.34	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.83	100.09	95.55	22.07	
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	231.30	102.23	97.29	20.67	
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	228.45	106.74	101.37	19.91	
1200.00	1199.13	0.00	0.00	1199.13	2.58	2.58	224.63	113.95	108.14	19.60	
1300.00	1298.15	0.00	0.00	1298.15	2.81	2.81	220.27	124.27	118.02	19.86	
1400.00	1396.63	0.00	0.00	1396.63	3.03	3.03	215.79	138.04	131.32	20.55	
1500.00	1494.44	0.00	0.00	1494.44	3.25	3.25	211.52	155.48	148.29	21.64	
1600.00	1591.46	0.00	0.00	1591.46	3.46	3.46	207.64	176.68	169.01	23.04	
1700.00	1687.58	0.00	0.00	1687.58	3.68	3.68	204.24	201.66	193.51	24.76	
1800.00	1787.05	1.74	92.75	1787.03	3.89	3.89	201.40	228.62	220.02	26.57	
1900.00	1888.58	3.77	92.75	1888.44	4.10	4.09	199.75	254.02	244.93	27.95	
2000.00	1991.49	5.83	92.75	1990.99	4.32	4.29	199.01	277.46	267.88	28.97	
2100.00	2095.55	7.91	92.75	2094.30	4.55	4.48	198.97	298.78	288.69	29.61	
2200.00	2200.49	10.01	92.75	2197.95	4.81	4.69	199.48	317.94	307.28	29.82	
2300.00	2306.04	12.12	92.75	2301.53	5.11	4.89	200.48	334.99	323.71	29.68	
2400.00	2411.91	14.24	92.75	2404.60	5.46	5.10	201.90	350.04	338.06	29.24	
2500.00	2517.82	16.36	92.75	2506.75	5.86	5.31	203.72	363.25	350.50	28.49	
2600.00	2618.21	16.91	92.75	2602.85	6.30	5.53	205.67	375.39	361.80	27.62	
2700.00	2716.70	16.91	92.75	2697.08	6.76	5.77	207.47	387.86	373.37	26.77	
2800.00	2815.19	16.91	92.75	2791.31	7.24	6.01	209.17	400.69	385.26	25.98	
2900.00	2913.68	16.91	92.75	2885.54	7.74	6.26	210.75	413.84	397.43	25.22	
3000.00	3012.17	16.91	92.75	2979.77	8.25	6.51	212.25	427.29	409.87	24.53	
3100.00	3110.66	16.91	92.75	3074.01	8.78	6.77	213.65	441.01	422.53	23.85	
3200.00	3209.15	16.91	92.75	3168.24	9.32	7.03	214.96	454.98	435.42	23.26	
3300.00	3307.63	16.91	92.75	3262.47	9.87	7.29	216.20	469.17	448.53	22.72	
3400.00	3406.12	16.91	92.75	3356.70	10.42	7.56	217.36	483.57	461.83	22.25	
3500.00	3504.61	16.91	92.75	3450.93	10.98	7.83	218.46	498.15	475.29	21.79	
3600.00	3603.10	16.91	92.75	3545.16	11.55	8.10	219.50	512.90	488.91	21.38	
3700.00	3701.59	16.91	92.75	3639.40	12.12	8.37	220.47	527.80	502.66	20.99	
3800.00	3800.08	16.91	92.75	3733.63	12.70	8.65	221.40	542.85	516.53	20.62	
3900.00	3898.57	16.91	92.75	3827.86	13.28	8.92	222.27	558.04	530.53	20.29	
4000.00	3997.06	16.91	92.75	3922.09	13.86	9.20	223.10	573.34	544.64	19.98	
4100.00	4095.55	16.91	92.75	4016.32	14.44	9.48	223.89	588.75	558.87	19.70	
4200.00	4194.04	16.91	92.75	4110.55	15.03	9.76	224.63	604.27	573.20	19.45	
4300.00	4292.53	16.91	92.75	4204.79	15.62	10.04	225.34	619.88	587.63	19.22	
4400.00	4391.01	16.91	92.75	4299.02	16.21	10.32	226.01	635.58	602.14	19.01	
4500.00	4489.50	16.91	92.75	4393.25	16.80	10.61	226.65	651.37	616.74	18.81	
4600.00	4587.99	16.91	92.75	4487.48	17.40	10.89	227.26	667.23	631.41	18.63	
4700.00	4686.48	16.91	92.75	4581.71	17.99	11.18	227.85	683.16	646.15	18.46	
4800.00	4784.97	16.91	92.75	4675.94	18.59	11.46	228.40	699.15	660.96	18.31	
4900.00	4883.46	16.91	92.75	4770.18	19.19	11.75	228.93	715.21	675.84	18.17	
5000.00	4981.95	16.91	92.75	4864.41	19.78	12.04	229.44	731.32	690.77	18.03	
5100.00	5080.44	16.91	92.75	4958.64	20.38	12.33	229.93	747.49	705.75	17.91	
5200.00	5178.93	16.91	92.75	5052.87	20.98	12.62	230.39	763.71	720.74	17.77	
5300.00	5277.42	16.91	92.75	5147.10	21.59	12.90	230.84	779.98	735.78	17.65	
5400.00	5375.91	16.91	92.75	5241.33	22.19	13.19	231.27	796.29	750.86	17.53	
5500.00	5474.39	16.91	92.75	5335.57	22.79	13.49	231.68	812.64	765.98	17.42	
5600.00	5572.88	16.91	92.75	5429.80	23.39	13.78	232.07	829.03	781.15	17.31	
5700.00	5671.37	16.91	92.75	5524.03	24.00	14.07	232.45	845.46	796.35	17.21	

## 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
5800.00	5769.86	16.91	92.75	5618.26	24.60	14.36	232.82	861.92	811.58	17.12	
5900.00	5868.35	16.91	92.75	5712.49	25.21	14.65	233.17	878.42	826.86	17.04	
6000.00	5966.84	16.91	92.75	5806.73	25.81	14.94	233.51	894.95	842.16	16.95	
6100.00	6065.33	16.91	92.75	5900.96	26.42	15.24	233.83	911.50	857.49	16.88	
6200.00	6163.82	16.91	92.75	5995.19	27.02	15.53	234.15	928.09	872.85	16.80	
6300.00	6262.74	16.52	92.90	6089.84	27.63	15.83	234.45	944.70	888.24	16.73	
6400.00	6371.07	7.97	99.96	6195.61	28.02	16.05	220.24	961.07	903.72	16.76	
6500.00	6479.20	2.05	202.69	6303.39	28.19	15.92	184.63	977.69	919.97	16.94	
6600.00	6586.99	9.70	255.84	6410.58	28.17	15.46	148.64	994.36	936.68	17.24	
6700.00	6694.35	18.20	261.07	6514.68	28.00	14.68	127.69	1010.77	953.44	17.63	
6800.00	6801.20	26.72	263.02	6613.34	27.74	13.66	116.16	1026.60	969.87	18.10	
6900.00	6907.47	35.20	264.07	6704.38	27.44	12.46	109.00	1041.56	985.53	18.59	
7000.00	7013.07	43.64	264.75	6785.89	27.18	11.20	104.06	1055.36	999.95	19.05	
7100.00	7117.93	52.02	265.24	6856.22	27.02	10.05	100.41	1067.73	1012.81	19.44	
7200.00	7221.96	60.34	265.63	6914.08	27.04	9.20	97.62	1078.45	1023.73	19.71	
7300.00	7325.08	68.58	265.96	6958.50	27.27	8.88	95.45	1087.31	1032.39	19.80	
7400.00	7427.22	76.75	266.25	6988.91	27.75	9.17	93.80	1094.15	1038.56	19.68	
7500.00	7528.29	84.83	266.51	7005.08	28.45	10.03	92.58	1098.84	1042.08	19.36	
7600.00	7628.32	90.00	266.68	7008.00	29.36	10.96	91.82	1101.30	1042.90	18.86	
7700.00	7728.31	90.00	266.68	7008.00	30.47	11.44	91.77	1102.07	1041.60	18.22	
7800.00	7828.31	90.00	266.68	7008.00	31.79	11.94	91.77	1102.76	1039.87	17.53	
7900.00	7928.31	90.00	266.68	7008.00	33.30	12.46	91.77	1103.46	1037.62	16.76	
8000.00	8028.30	90.00	266.68	7008.00	34.96	13.01	91.76	1104.15	1035.17	16.01	
8100.00	8128.30	90.00	266.68	7008.00	36.76	13.57	91.76	1104.84	1032.28	15.23	
8200.00	8228.30	90.00	266.68	7008.00	38.68	14.15	91.76	1105.53	1029.26	14.50	
8300.00	8328.30	90.00	266.68	7008.00	40.70	14.75	91.76	1106.22	1026.03	13.79	
8400.00	8428.29	90.00	266.68	7008.00	42.81	15.35	91.76	1106.91	1022.49	13.11	
8500.00	8528.29	90.00	266.68	7008.00	45.00	15.97	91.76	1107.60	1018.85	12.48	
8600.00	8628.29	90.00	266.68	7008.00	47.25	16.59	91.76	1108.30	1015.08	11.89	
8700.00	8728.29	90.00	266.68	7008.00	49.55	17.23	91.76	1108.99	1011.21	11.34	
8800.00	8828.28	90.00	266.68	7008.00	51.91	17.87	91.76	1109.68	1007.24	10.83	
8900.00	8928.28	90.00	266.68	7008.00	54.30	18.52	91.75	1110.37	1003.18	10.36	
9000.00	9028.28	90.00	266.68	7008.00	56.74	19.17	91.75	1111.06	999.04	9.92	
9100.00	9128.28	90.00	266.68	7008.00	59.20	19.83	91.75	1111.75	994.83	9.51	
9200.00	9228.27	90.00	266.68	7008.00	61.69	20.50	91.75	1112.45	990.56	9.13	
9300.00	9328.27	90.00	266.68	7008.00	64.21	21.17	91.75	1113.14	986.23	8.77	
9400.00	9428.27	90.00	266.68	7008.00	66.75	21.84	91.75	1113.83	981.86	8.44	
9500.00	9528.27	90.00	266.68	7008.00	69.32	22.52	91.75	1114.52	977.45	8.13	
9600.00	9628.26	90.00	266.68	7008.00	71.89	23.20	91.75	1115.21	973.00	7.84	
9700.00	9728.26	90.00	266.68	7008.00	74.49	23.88	91.75	1115.90	968.52	7.57	
9800.00	9828.26	90.00	266.68	7008.00	77.10	24.57	91.74	1116.59	964.00	7.32	
9900.00	9928.26	90.00	266.68	7008.00	79.72	25.26	91.74	1117.29	959.47	7.08	
10000.00	10028.26	90.00	266.68	7008.00	82.35	25.95	91.74	1117.98	954.90	6.86	
10100.00	10128.25	90.00	266.68	7008.00	84.99	26.65	91.74	1118.67	950.32	6.64	
10200.00	10228.25	90.00	266.68	7008.00	87.65	27.34	91.74	1119.36	945.71	6.45	
10300.00	10328.25	90.00	266.68	7008.00	90.31	28.04	91.74	1120.05	941.09	6.26	
10400.00	10428.25	90.00	266.68	7008.00	92.98	28.74	91.74	1120.74	936.45	6.08	
10500.00	10528.24	90.00	266.68	7008.00	95.66	29.44	91.74	1121.43	931.79	5.91	
10600.00	10628.24	90.00	266.68	7008.00	98.34	30.14	91.74	1122.13	927.13	5.75	
10700.00	10728.24	90.00	266.68	7008.00	101.03	30.85	91.74	1122.82	922.44	5.60	
10800.00	10828.24	90.00	266.68	7008.00	103.73	31.55	91.73	1123.51	917.75	5.46	
10900.00	10928.23	90.00	266.68	7008.00	106.43	32.26	91.73	1124.20	913.05	5.32	
11000.00	11028.23	90.00	266.68	7008.00	109.13	32.97	91.73	1124.89	908.33	5.19	
11100.00	11128.23	90.00	266.68	7008.00	111.84	33.68	91.73	1125.58	903.61	5.07	
11200.00	11228.23	90.00	266.68	7008.00	114.56	34.39	91.73	1126.27	898.88	4.95	
11300.00	11328.22	90.00	266.68	7008.00	117.28	35.10	91.73	1126.97	894.14	4.84	
11400.00	11428.22	90.00	266.68	7008.00	120.00	35.81	91.73	1127.66	889.39	4.73	
11500.00	11528.22	90.00	266.68	7008.00	122.72	36.52	91.73	1128.35	884.64	4.63	

## 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
11600.00	11628.22	90.00	266.68	7008.00	125.45	37.24	91.73	1129.04	879.88	4.53	
11700.00	11728.21	90.00	266.68	7008.00	128.18	37.95	91.72	1129.73	875.11	4.44	
11800.00	11828.21	90.00	266.68	7008.00	130.92	38.67	91.72	1130.42	870.34	4.35	
11900.00	11928.21	90.00	266.68	7008.00	133.66	39.38	91.72	1131.12	865.57	4.26	
12000.00	12028.21	90.00	266.68	7008.00	136.39	40.10	91.72	1131.81	860.78	4.18	
12100.00	12128.20	90.00	266.68	7008.00	139.14	40.82	91.72	1132.50	856.00	4.10	
12200.00	12228.20	90.00	266.68	7008.00	141.88	41.53	91.72	1133.19	851.21	4.02	
12300.00	12328.20	90.00	266.68	7008.00	144.63	42.25	91.72	1133.88	846.41	3.94	
12400.00	12428.20	90.00	266.68	7008.00	147.37	42.97	91.72	1134.57	841.61	3.87	
12500.00	12528.20	90.00	266.68	7008.00	150.12	43.69	91.72	1135.26	836.81	3.80	
12600.00	12628.19	90.00	266.68	7008.00	152.88	44.41	91.72	1135.96	832.00	3.74	
12700.00	12728.19	90.00	266.68	7008.00	155.63	45.13	91.71	1136.65	827.19	3.67	
12800.00	12828.19	90.00	266.68	7008.00	158.38	45.85	91.71	1137.34	822.38	3.61	
12900.00	12928.19	90.00	266.68	7008.00	161.14	46.57	91.71	1138.03	817.56	3.55	
13000.00	13028.18	90.00	266.68	7008.00	163.90	47.29	91.71	1138.72	812.74	3.49	
13100.00	13128.18	90.00	266.68	7008.00	166.66	48.01	91.71	1139.41	807.92	3.44	
13200.00	13228.18	90.00	266.68	7008.00	169.42	48.74	91.71	1140.10	803.10	3.38	
13300.00	13328.18	90.00	266.68	7008.00	172.18	49.46	91.71	1140.80	798.27	3.33	
13400.00	13428.17	90.00	266.68	7008.00	174.94	50.18	91.71	1141.49	793.44	3.28	
13500.00	13528.17	90.00	266.68	7008.00	177.71	50.90	91.71	1142.18	788.61	3.23	
13600.00	13628.17	90.00	266.68	7008.00	180.47	51.63	91.70	1142.87	783.78	3.18	
13700.00	13728.17	90.00	266.68	7008.00	183.24	52.35	91.70	1143.56	778.94	3.14	
13800.00	13828.16	90.00	266.68	7008.00	186.00	53.07	91.70	1144.25	774.11	3.09	
13900.00	13928.16	90.00	266.68	7008.00	188.77	53.80	91.70	1144.95	769.27	3.05	
14000.00	14028.16	90.00	266.68	7008.00	191.54	54.52	91.70	1145.64	764.43	3.01	
14100.00	14128.16	90.00	266.68	7008.00	194.31	55.25	91.70	1146.33	759.58	2.96	
14200.00	14228.15	90.00	266.68	7008.00	197.08	55.97	91.70	1147.02	754.74	2.92	
14300.00	14328.15	90.00	266.68	7008.00	199.85	56.70	91.70	1147.71	749.89	2.89	
14400.00	14428.15	90.00	266.68	7008.00	202.62	57.42	91.70	1148.40	745.05	2.85	
14500.00	14528.15	90.00	266.68	7008.00	205.39	58.15	91.70	1149.09	740.20	2.81	
14600.00	14628.15	90.00	266.68	7008.00	208.17	58.87	91.69	1149.79	735.35	2.77	
14700.00	14728.14	90.00	266.68	7008.00	210.94	59.60	91.69	1150.48	730.50	2.74	
14800.00	14828.14	90.00	266.68	7008.00	213.72	60.33	91.69	1151.17	725.64	2.71	
14900.00	14928.14	90.00	266.68	7008.00	216.49	61.05	91.69	1151.86	720.79	2.67	
15000.00	15028.14	90.00	266.68	7008.00	219.27	61.78	91.69	1152.55	715.94	2.64	
15100.00	15128.13	90.00	266.68	7008.00	222.04	62.50	91.69	1153.24	711.08	2.61	
15200.00	15228.13	90.00	266.68	7008.00	224.82	63.23	91.69	1153.93	706.22	2.58	
15286.68	15314.81	90.00	266.68	7008.00	227.23	63.86	91.69	1154.53	702.01	2.55	
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	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	359.95	80.15	76.05	19.54	
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.70	80.41	75.88	17.73	
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	230.81	82.57	77.63	16.70	
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	227.32	87.15	81.79	16.26	
1200.00	1199.13	0.00	0.00	1199.13	2.58	2.58	222.77	94.56	88.75	16.27	
1300.00	1298.15	0.00	0.00	1298.15	2.81	2.81	217.77	105.24	98.98	16.83	
1400.00	1396.63	0.00	0.00	1396.63	3.03	3.03	212.84	119.49	112.78	17.80	
1500.00	1495.73	0.91	100.92	1495.73	3.24	3.24	208.40	137.30	130.13	19.16	



## 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
1600.00	1596.61	2.93	100.92	1596.54	3.44	3.43	205.27	157.00	149.39	20.61	
1700.00	1698.04	4.96	100.92	1697.73	3.65	3.63	203.28	177.94	169.87	22.04	
1800.00	1800.26	7.01	100.92	1799.38	3.87	3.83	202.11	198.84	190.27	23.20	
1900.00	1903.58	9.07	100.92	1901.69	4.12	4.03	201.86	217.47	208.38	23.93	
2000.00	2007.78	11.16	100.92	2004.26	4.41	4.23	202.33	233.69	224.02	24.17	
2100.00	2112.59	13.25	100.92	2106.70	4.74	4.44	203.40	247.53	237.23	24.03	
2200.00	2217.72	15.35	100.92	2208.57	5.13	4.65	205.01	259.11	248.11	23.56	
2300.00	2321.26	16.88	100.92	2307.93	5.57	4.88	207.06	268.69	256.90	22.79	
2400.00	2420.37	16.88	100.92	2402.77	6.04	5.12	209.05	278.01	265.33	21.93	
2500.00	2519.48	16.88	100.92	2497.61	6.53	5.36	210.91	287.64	274.05	21.16	
2600.00	2618.59	16.88	100.92	2592.45	7.05	5.61	212.65	297.55	283.02	20.47	
2700.00	2717.71	16.88	100.92	2687.29	7.57	5.87	214.27	307.72	292.18	19.80	
2800.00	2816.82	16.88	100.92	2782.13	8.12	6.13	215.79	318.12	301.51	19.16	
2900.00	2915.93	16.88	100.92	2876.97	8.67	6.39	217.22	328.73	311.04	18.58	
3000.00	3015.04	16.88	100.92	2971.81	9.23	6.66	218.55	339.52	320.74	18.07	
3100.00	3114.15	16.88	100.92	3066.65	9.80	6.93	219.80	350.49	330.61	17.62	
3200.00	3213.26	16.88	100.92	3161.49	10.37	7.21	220.98	361.62	340.62	17.22	
3300.00	3312.38	16.88	100.92	3256.33	10.95	7.48	222.09	372.89	350.73	16.83	
3400.00	3411.49	16.88	100.92	3351.17	11.53	7.76	223.13	384.29	360.97	16.48	
3500.00	3510.60	16.88	100.92	3446.01	12.12	8.04	224.11	395.80	371.32	16.16	
3600.00	3609.71	16.88	100.92	3540.85	12.71	8.32	225.03	407.43	381.74	15.86	
3700.00	3708.82	16.88	100.92	3635.69	13.30	8.60	225.91	419.15	392.27	15.59	
3800.00	3807.94	16.88	100.92	3730.53	13.89	8.88	226.74	430.97	402.88	15.34	
3900.00	3907.05	16.88	100.92	3825.37	14.49	9.17	227.52	442.87	413.58	15.12	
4000.00	4006.16	16.88	100.92	3920.21	15.09	9.45	228.26	454.85	424.35	14.91	
4100.00	4105.27	16.88	100.92	4015.05	15.69	9.74	228.96	466.90	435.19	14.73	
4200.00	4204.38	16.88	100.92	4109.89	16.29	10.03	229.63	479.01	446.10	14.56	
4300.00	4303.49	16.88	100.92	4204.73	16.89	10.32	230.27	491.19	457.07	14.40	
4400.00	4402.61	16.88	100.92	4299.57	17.50	10.61	230.87	503.42	468.09	14.25	
4500.00	4501.72	16.88	100.92	4394.41	18.10	10.90	231.45	515.71	479.14	14.10	
4600.00	4600.83	16.88	100.92	4489.25	18.71	11.19	232.00	528.04	490.24	13.97	
4700.00	4699.94	16.88	100.92	4584.09	19.31	11.48	232.52	540.42	501.39	13.84	
4800.00	4799.05	16.88	100.92	4678.93	19.92	11.77	233.02	552.85	512.58	13.73	
4900.00	4898.17	16.88	100.92	4773.77	20.53	12.06	233.50	565.31	523.81	13.62	
5000.00	4997.28	16.88	100.92	4868.61	21.14	12.36	233.96	577.81	535.07	13.52	
5100.00	5096.39	16.88	100.92	4963.45	21.75	12.65	234.40	590.34	546.38	13.43	
5200.00	5195.50	16.88	100.92	5058.29	22.36	12.94	234.82	602.91	557.71	13.34	
5300.00	5294.61	16.88	100.92	5153.13	22.97	13.24	235.22	615.51	569.08	13.26	
5400.00	5393.73	16.88	100.92	5247.97	23.58	13.53	235.61	628.14	580.48	13.18	
5500.00	5492.84	16.88	100.92	5342.81	24.19	13.83	235.98	640.79	591.90	13.11	
5600.00	5591.95	16.88	100.92	5437.65	24.80	14.12	236.34	653.47	603.36	13.04	
5700.00	5691.06	16.88	100.92	5532.49	25.41	14.42	236.68	666.18	614.83	12.97	
5800.00	5790.17	16.88	100.92	5627.33	26.03	14.71	237.01	678.90	626.33	12.91	
5900.00	5889.28	16.88	100.92	5722.17	26.64	15.01	237.33	691.65	637.84	12.85	
6000.00	5988.40	16.88	100.92	5817.01	27.25	15.30	237.64	704.42	649.37	12.80	
6100.00	6087.51	16.88	100.92	5911.85	27.87	15.60	237.93	717.21	660.92	12.74	
6200.00	6200.90	8.47	116.03	6022.38	28.27	15.83	237.57	729.04	671.81	12.74	
6300.00	6310.87	4.33	195.82	6131.81	28.38	15.70	235.92	739.26	681.71	12.85	
6400.00	6413.69	10.43	244.32	6233.80	28.30	15.27	219.62	749.34	692.03	13.07	
6500.00	6511.64	17.90	254.41	6328.72	28.08	14.60	182.24	761.07	704.44	13.44	
6600.00	6605.66	25.27	258.51	6416.10	27.79	13.75	144.63	774.25	718.50	13.89	
6700.00	6696.35	32.45	260.77	6495.47	27.47	12.77	122.22	788.47	733.60	14.37	
6800.00	6784.23	39.43	262.24	6566.58	27.16	11.74	109.40	803.25	749.28	14.88	
6900.00	6869.74	46.23	263.30	6629.26	26.93	10.73	101.11	818.12	764.95	15.39	
7000.00	6953.31	52.88	264.13	6683.44	26.78	9.82	95.23	832.61	780.03	15.84	
7100.00	7035.25	59.41	264.81	6729.06	26.76	9.13	90.81	846.26	793.97	16.18	
7200.00	7115.87	65.84	265.40	6766.11	26.88	8.74	87.41	858.68	806.31	16.39	
7300.00	7195.43	72.19	265.92	6794.58	27.14	8.73	84.81	869.51	816.66	16.45	

## 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
7400.00	7274.14	78.47	266.41	6814.51	27.60	9.12	82.87	878.46	824.70	16.34	
7500.00	7352.22	84.70	266.86	6825.93	28.18	9.84	81.51	885.29	830.26	16.09	
7600.00	7433.07	90.00	267.24	6829.00	28.90	10.71	80.70	889.78	833.07	15.69	
7700.00	7533.05	90.00	267.24	6829.00	29.99	11.19	80.64	891.61	832.92	15.19	
7800.00	7633.03	90.00	267.24	6829.00	31.28	11.70	80.66	893.26	832.18	14.62	
7900.00	7733.02	90.00	267.24	6829.00	32.76	12.23	80.67	894.91	830.99	14.00	
8000.00	7833.00	90.00	267.24	6829.00	34.40	12.78	80.69	896.57	829.59	13.39	
8100.00	7932.99	90.00	267.24	6829.00	36.19	13.35	80.71	898.22	827.76	12.75	
8200.00	8032.98	90.00	267.24	6829.00	38.10	13.93	80.73	899.88	825.87	12.16	
8300.00	8132.96	90.00	267.24	6829.00	40.11	14.53	80.74	901.53	823.53	11.56	
8400.00	8232.95	90.00	267.24	6829.00	42.22	15.14	80.76	903.18	821.09	11.00	
8500.00	8332.93	90.00	267.24	6829.00	44.40	15.76	80.78	904.84	818.51	10.48	
8600.00	8432.92	90.00	267.24	6829.00	46.64	16.39	80.79	906.49	815.78	9.99	
8700.00	8532.91	90.00	267.24	6829.00	48.95	17.03	80.81	908.15	812.94	9.54	
8800.00	8632.89	90.00	267.24	6829.00	51.30	17.67	80.83	909.80	809.98	9.11	
8900.00	8732.88	90.00	267.24	6829.00	53.70	18.32	80.84	911.46	806.94	8.72	
9000.00	8832.86	90.00	267.24	6829.00	56.13	18.98	80.86	913.11	803.82	8.35	
9100.00	8932.85	90.00	267.24	6829.00	58.60	19.65	80.88	914.77	800.62	8.01	
9200.00	9032.84	90.00	267.24	6829.00	61.09	20.31	80.89	916.42	797.36	7.70	
9300.00	9132.82	90.00	267.24	6829.00	63.61	20.99	80.91	918.08	794.05	7.40	
9400.00	9232.81	90.00	267.24	6829.00	66.16	21.66	80.93	919.73	790.69	7.13	
9500.00	9332.79	90.00	267.24	6829.00	68.72	22.34	80.94	921.39	787.29	6.87	
9600.00	9432.78	90.00	267.24	6829.00	71.30	23.03	80.96	923.04	783.85	6.63	
9700.00	9532.77	90.00	267.24	6829.00	73.90	23.71	80.98	924.70	780.38	6.41	
9800.00	9632.75	90.00	267.24	6829.00	76.51	24.40	80.99	926.35	776.87	6.20	
9900.00	9732.74	90.00	267.24	6829.00	79.14	25.09	81.01	928.01	773.34	6.00	
10000.00	9832.72	90.00	267.24	6829.00	81.77	25.79	81.03	929.66	769.79	5.81	
10100.00	9932.71	90.00	267.24	6829.00	84.42	26.48	81.04	931.32	766.21	5.64	
10200.00	10032.70	90.00	267.24	6829.00	87.07	27.18	81.06	932.97	762.62	5.48	
10300.00	10132.68	90.00	267.24	6829.00	89.74	27.88	81.07	934.63	759.00	5.32	
10400.00	10232.67	90.00	267.24	6829.00	92.41	28.58	81.09	936.29	755.37	5.18	
10500.00	10332.65	90.00	267.24	6829.00	95.09	29.28	81.11	937.94	751.73	5.04	
10600.00	10432.64	90.00	267.24	6829.00	97.78	29.99	81.12	939.60	748.07	4.91	
10700.00	10532.62	90.00	267.24	6829.00	100.47	30.69	81.14	941.25	744.40	4.78	
10800.00	10632.61	90.00	267.24	6829.00	103.17	31.40	81.15	942.91	740.71	4.66	
10900.00	10732.60	90.00	267.24	6829.00	105.88	32.11	81.17	944.57	737.02	4.55	
11000.00	10832.58	90.00	267.24	6829.00	108.58	32.82	81.18	946.22	733.31	4.44	
11100.00	10932.57	90.00	267.24	6829.00	111.30	33.53	81.20	947.88	729.60	4.34	
11200.00	11032.55	90.00	267.24	6829.00	114.02	34.24	81.21	949.53	725.88	4.25	
11300.00	11132.54	90.00	267.24	6829.00	116.74	34.95	81.23	951.19	722.15	4.15	
11400.00	11232.53	90.00	267.24	6829.00	119.46	35.67	81.25	952.85	718.41	4.06	
11500.00	11332.51	90.00	267.24	6829.00	122.19	36.38	81.26	954.50	714.66	3.98	
11600.00	11432.50	90.00	267.24	6829.00	124.92	37.09	81.28	956.16	710.91	3.90	
11700.00	11532.48	90.00	267.24	6829.00	127.66	37.81	81.29	957.82	707.15	3.82	
11800.00	11632.47	90.00	267.24	6829.00	130.40	38.53	81.31	959.47	703.39	3.75	
11900.00	11732.46	90.00	267.24	6829.00	133.14	39.24	81.32	961.13	699.62	3.68	
12000.00	11832.44	90.00	267.24	6829.00	135.88	39.96	81.34	962.79	695.84	3.61	
12100.00	11932.43	90.00	267.24	6829.00	138.62	40.68	81.35	964.45	692.06	3.54	
12200.00	12032.41	90.00	267.24	6829.00	141.37	41.40	81.37	966.10	688.28	3.48	
12300.00	12132.40	90.00	267.24	6829.00	144.12	42.11	81.38	967.76	684.49	3.42	
12400.00	12232.39	90.00	267.24	6829.00	146.87	42.83	81.40	969.42	680.70	3.36	
12500.00	12332.37	90.00	267.24	6829.00	149.62	43.55	81.41	971.07	676.90	3.30	
12600.00	12432.36	90.00	267.24	6829.00	152.38	44.27	81.43	972.73	673.10	3.25	
12700.00	12532.34	90.00	267.24	6829.00	155.14	44.99	81.44	974.39	669.30	3.19	
12800.00	12632.33	90.00	267.24	6829.00	157.89	45.72	81.46	976.05	665.49	3.14	
12900.00	12732.32	90.00	267.24	6829.00	160.65	46.44	81.47	977.70	661.68	3.09	
13000.00	12832.30	90.00	267.24	6829.00	163.41	47.16	81.48	979.36	657.87	3.05	
13100.00	12932.29	90.00	267.24	6829.00	166.17	47.88	81.50	981.02	654.05	3.00	

## 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
13200.00	13032.27	90.00	267.24	6829.00	168.94	48.60	81.51	982.68	650.23	2.96	
13300.00	13132.26	90.00	267.24	6829.00	171.70	49.33	81.53	984.33	646.41	2.91	
13400.00	13232.25	90.00	267.24	6829.00	174.47	50.05	81.54	985.99	642.59	2.87	
13500.00	13332.23	90.00	267.24	6829.00	177.23	50.77	81.56	987.65	638.76	2.83	
13600.00	13432.22	90.00	267.24	6829.00	180.00	51.50	81.57	989.31	634.93	2.79	
13700.00	13532.20	90.00	267.24	6829.00	182.77	52.22	81.59	990.97	631.10	2.75	
13800.00	13632.19	90.00	267.24	6829.00	185.54	52.95	81.60	992.62	627.27	2.72	
13900.00	13732.18	90.00	267.24	6829.00	188.31	53.67	81.61	994.28	623.44	2.68	
14000.00	13832.16	90.00	267.24	6829.00	191.08	54.39	81.63	995.94	619.60	2.65	
14100.00	13932.15	90.00	267.24	6829.00	193.86	55.12	81.64	997.60	615.76	2.61	
14200.00	14032.13	90.00	267.24	6829.00	196.63	55.84	81.66	999.26	611.92	2.58	
14300.00	14132.12	90.00	267.24	6829.00	199.40	56.57	81.67	1000.92	608.08	2.55	
14400.00	14232.11	90.00	267.24	6829.00	202.18	57.30	81.68	1002.57	604.23	2.52	
14500.00	14332.09	90.00	267.24	6829.00	204.95	58.02	81.70	1004.23	600.39	2.49	SF(Lo)
14600.00	14432.08	90.00	267.24	6829.00	207.73	58.75	81.71	1005.89	596.54	2.46	SF(Lo)
14700.00	14532.06	90.00	267.24	6829.00	210.50	59.47	81.72	1007.55	592.69	2.43	SF(Lo)
14800.00	14632.05	90.00	267.24	6829.00	213.28	60.20	81.74	1009.21	588.84	2.40	SF(Lo)
14900.00	14732.03	90.00	267.24	6829.00	216.06	60.93	81.75	1010.87	584.99	2.37	SF(Lo)
15000.00	14832.02	90.00	267.24	6829.00	218.84	61.65	81.77	1012.53	581.13	2.35	SF(Lo)
15100.00	14932.01	90.00	267.24	6829.00	221.62	62.38	81.78	1014.18	577.28	2.32	SF(Lo)
15200.00	15031.99	90.00	267.24	6829.00	224.40	63.11	81.79	1015.84	573.42	2.30	SF(Lo)
15286.68	15118.66	90.00	267.24	6829.00	226.81	63.74	81.80	1017.28	570.08	2.27	SF(Lo)
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	359.82	60.11	59.38	81.97	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.82	60.11	59.16	63.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.82	60.11	58.71	42.83	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.82	60.11	58.26	32.44	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.82	60.11	57.81	26.11	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.82	60.11	57.36	21.84	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.82	60.11	56.91	18.77	CC (Lo)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.82	60.11	56.46	16.46	CC (Lo)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	359.82	60.11	56.01	14.66	CC (Lo)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.48	60.38	55.84	13.32	CC (Lo)
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	229.98	62.56	57.62	12.66	CC (Lo)
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	225.50	67.26	61.89	12.53	
1200.00	1199.13	0.00	0.00	1199.13	2.58	2.58	219.91	74.97	69.17	12.92	
1300.00	1298.15	0.00	0.00	1298.15	2.81	2.81	214.10	86.14	79.89	13.77	
1400.00	1398.95	1.98	107.85	1398.93	3.01	3.01	209.34	99.92	93.23	14.95	
1500.00	1500.27	4.01	107.85	1500.11	3.21	3.20	206.25	114.85	107.72	16.12	
1600.00	1602.07	6.04	107.85	1601.51	3.43	3.40	204.33	130.63	123.05	17.24	
1700.00	1704.32	8.09	107.85	1702.98	3.66	3.59	203.25	147.08	139.01	18.23	
1800.00	1807.19	10.14	107.85	1804.55	3.93	3.80	202.83	163.06	154.48	19.01	
1900.00	1910.88	12.22	107.85	1906.26	4.24	4.00	203.26	176.44	167.30	19.30	
2000.00	2015.13	14.30	107.85	2007.72	4.61	4.21	204.42	187.18	177.41	19.16	
2100.00	2119.37	16.27	107.85	2108.25	5.03	4.43	206.21	195.39	184.92	18.66	
2200.00	2218.89	16.27	107.85	2203.78	5.49	4.67	208.11	202.65	191.38	17.97	
2300.00	2318.41	16.27	107.85	2299.31	5.97	4.92	209.88	210.12	198.00	17.34	
2400.00	2417.92	16.27	107.85	2394.84	6.47	5.17	211.53	217.77	204.78	16.76	
2500.00	2517.44	16.27	107.85	2490.37	6.98	5.42	213.06	225.59	211.68	16.21	
2600.00	2616.96	16.27	107.85	2585.90	7.51	5.68	214.49	233.56	218.66	15.68	
2700.00	2716.48	16.27	107.85	2681.43	8.05	5.94	215.83	241.67	225.76	15.19	
2800.00	2815.99	16.27	107.85	2776.96	8.60	6.21	217.07	249.89	232.97	14.76	
2900.00	2915.51	16.27	107.85	2872.49	9.16	6.48	218.24	258.23	240.27	14.38	
3000.00	3015.03	16.27	107.85	2968.02	9.72	6.75	219.34	266.67	247.65	14.02	
3100.00	3114.55	16.27	107.85	3063.55	10.28	7.03	220.37	275.20	255.10	13.69	

## 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
3200.00	3214.06	16.27	107.85	3159.08	10.85	7.30	221.33	283.81	262.62	13.39	
3300.00	3313.58	16.27	107.85	3254.61	11.42	7.58	222.24	292.50	270.17	13.10	
3400.00	3413.10	16.27	107.85	3350.14	12.00	7.86	223.10	301.26	277.80	12.84	
3500.00	3512.62	16.27	107.85	3445.67	12.58	8.14	223.91	310.08	285.48	12.61	
3600.00	3612.13	16.27	107.85	3541.21	13.16	8.42	224.67	318.96	293.22	12.39	
3700.00	3711.65	16.27	107.85	3636.74	13.74	8.70	225.39	327.89	301.01	12.20	
3800.00	3811.17	16.27	107.85	3732.27	14.32	8.99	226.07	336.87	308.84	12.02	
3900.00	3910.69	16.27	107.85	3827.80	14.91	9.27	226.72	345.90	316.72	11.85	
4000.00	4010.20	16.27	107.85	3923.33	15.50	9.56	227.34	354.96	324.63	11.70	
4100.00	4109.72	16.27	107.85	4018.86	16.08	9.84	227.92	364.07	332.59	11.56	
4200.00	4209.24	16.27	107.85	4114.39	16.67	10.13	228.48	373.21	340.58	11.44	
4300.00	4308.76	16.27	107.85	4209.92	17.26	10.42	229.01	382.39	348.59	11.31	
4400.00	4408.27	16.27	107.85	4305.45	17.85	10.71	229.51	391.59	356.61	11.20	
4500.00	4507.79	16.27	107.85	4400.98	18.44	11.00	229.99	400.83	364.67	11.09	
4600.00	4607.31	16.27	107.85	4496.51	19.03	11.29	230.45	410.09	372.75	10.98	
4700.00	4706.83	16.27	107.85	4592.04	19.63	11.58	230.89	419.37	380.83	10.88	
4800.00	4806.34	16.27	107.85	4687.57	20.22	11.87	231.31	428.68	388.94	10.79	
4900.00	4905.86	16.27	107.85	4783.10	20.81	12.16	231.71	438.02	397.07	10.70	
5000.00	5005.38	16.27	107.85	4878.63	21.41	12.45	232.10	447.37	405.22	10.61	
5100.00	5104.90	16.27	107.85	4974.16	22.00	12.74	232.47	456.74	413.38	10.53	
5200.00	5204.41	16.27	107.85	5069.69	22.60	13.03	232.82	466.13	421.57	10.46	
5300.00	5303.93	16.27	107.85	5165.22	23.19	13.32	233.16	475.54	429.77	10.39	
5400.00	5403.45	16.27	107.85	5260.76	23.79	13.62	233.49	484.96	437.99	10.33	
5500.00	5502.97	16.27	107.85	5356.29	24.38	13.91	233.81	494.40	446.22	10.26	
5600.00	5602.48	16.27	107.85	5451.82	24.98	14.20	234.11	503.85	454.47	10.20	
5700.00	5702.00	16.27	107.85	5547.35	25.58	14.50	234.40	513.31	462.73	10.15	
5800.00	5801.52	16.27	107.85	5642.88	26.17	14.79	234.68	522.79	471.01	10.10	
5900.00	5901.04	16.27	107.85	5738.41	26.77	15.08	234.96	532.28	479.29	10.05	
6000.00	6000.55	16.27	107.85	5833.94	27.37	15.38	235.22	541.78	487.59	10.00	
6100.00	6100.07	16.27	107.85	5929.47	27.96	15.67	235.47	551.30	495.90	9.95	
6200.00	6199.59	16.27	107.85	6025.00	28.56	15.97	235.72	560.82	504.22	9.91	
6300.00	6306.85	10.17	123.02	6129.13	29.03	16.23	235.44	569.81	512.24	9.90	
6400.00	6413.82	6.13	180.27	6235.15	29.12	16.19	220.16	577.72	520.01	10.01	
6500.00	6518.21	10.68	231.67	6338.52	28.98	15.85	183.76	586.05	528.74	10.23	
6600.00	6620.22	17.98	247.00	6437.32	28.65	15.23	147.05	594.79	538.22	10.51	
6700.00	6719.98	25.61	253.37	6529.90	28.22	14.38	125.46	603.78	548.05	10.83	
6800.00	6817.68	33.24	256.88	6614.93	27.74	13.35	113.37	612.80	557.90	11.16	
6900.00	6913.48	40.78	259.16	6691.39	27.29	12.22	105.73	621.64	567.54	11.49	
7000.00	7007.59	48.22	260.80	6758.47	26.92	11.07	100.40	630.09	576.66	11.79	
7100.00	7100.19	55.56	262.08	6815.58	26.70	10.04	96.44	637.90	584.90	12.04	
7200.00	7191.47	62.80	263.14	6862.31	26.68	9.29	93.41	644.88	591.95	12.18	
7300.00	7281.60	69.97	264.06	6898.40	26.88	8.96	91.08	650.83	597.54	12.21	
7400.00	7370.75	77.05	264.89	6923.69	27.29	9.16	89.32	655.58	601.37	12.09	
7500.00	7459.10	84.08	265.66	6938.16	27.91	9.87	88.07	658.99	603.40	11.85	
7600.00	7548.67	90.00	266.30	6942.00	28.70	10.84	87.28	660.94	603.64	11.54	
7700.00	7648.67	90.00	266.30	6942.00	29.78	11.32	87.23	661.08	601.81	11.15	
7800.00	7748.67	90.00	266.30	6942.00	31.05	11.82	87.23	661.11	599.55	10.74	
7900.00	7848.67	90.00	266.30	6942.00	32.51	12.34	87.23	661.13	596.62	10.25	
8000.00	7948.67	90.00	266.30	6942.00	34.14	12.89	87.23	661.16	593.51	9.77	
8100.00	8048.67	90.00	266.30	6942.00	35.91	13.45	87.23	661.19	589.94	9.28	
8200.00	8148.67	90.00	266.30	6942.00	37.81	14.03	87.23	661.22	586.28	8.82	
8300.00	8248.67	90.00	266.30	6942.00	39.82	14.63	87.23	661.24	582.36	8.38	
8400.00	8348.67	90.00	266.30	6942.00	41.91	15.24	87.23	661.27	578.17	7.96	
8500.00	8448.67	90.00	266.30	6942.00	44.08	15.85	87.23	661.30	573.87	7.56	
8600.00	8548.67	90.00	266.30	6942.00	46.32	16.48	87.23	661.32	569.45	7.20	
8700.00	8648.67	90.00	266.30	6942.00	48.62	17.12	87.23	661.35	564.92	6.86	
8800.00	8748.67	90.00	266.30	6942.00	50.96	17.76	87.23	661.38	560.29	6.54	
8900.00	8848.67	90.00	266.30	6942.00	53.35	18.41	87.23	661.40	555.57	6.25	

## 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
9000.00	8948.67	90.00	266.30	6942.00	55.78	19.07	87.23	661.43	550.76	5.98	
9100.00	9048.67	90.00	266.30	6942.00	58.24	19.73	87.23	661.46	545.89	5.72	
9200.00	9148.67	90.00	266.30	6942.00	60.73	20.40	87.23	661.48	540.96	5.49	
9300.00	9248.67	90.00	266.30	6942.00	63.25	21.07	87.23	661.51	535.97	5.27	
9400.00	9348.67	90.00	266.30	6942.00	65.79	21.75	87.23	661.54	530.93	5.07	
9500.00	9448.67	90.00	266.30	6942.00	68.35	22.42	87.23	661.56	525.86	4.87	
9600.00	9548.67	90.00	266.30	6942.00	70.92	23.11	87.23	661.59	520.74	4.70	
9700.00	9648.67	90.00	266.30	6942.00	73.51	23.79	87.23	661.62	515.59	4.53	
9800.00	9748.67	90.00	266.30	6942.00	76.12	24.48	87.23	661.64	510.42	4.38	
9900.00	9848.67	90.00	266.30	6942.00	78.74	25.17	87.23	661.67	505.21	4.23	
10000.00	9948.67	90.00	266.30	6942.00	81.37	25.86	87.23	661.70	499.98	4.09	
10100.00	10048.67	90.00	266.30	6942.00	84.01	26.56	87.23	661.72	494.73	3.96	
10200.00	10148.67	90.00	266.30	6942.00	86.67	27.26	87.23	661.75	489.47	3.84	
10300.00	10248.67	90.00	266.30	6942.00	89.33	27.96	87.23	661.78	484.18	3.73	
10400.00	10348.67	90.00	266.30	6942.00	92.00	28.66	87.23	661.81	478.87	3.62	
10500.00	10448.67	90.00	266.30	6942.00	94.67	29.36	87.23	661.83	473.56	3.52	
10600.00	10548.67	90.00	266.30	6942.00	97.35	30.06	87.23	661.86	468.22	3.42	
10700.00	10648.67	90.00	266.30	6942.00	100.04	30.77	87.23	661.89	462.88	3.33	
10800.00	10748.67	90.00	266.30	6942.00	102.74	31.47	87.23	661.91	457.52	3.24	
10900.00	10848.67	90.00	266.30	6942.00	105.44	32.18	87.23	661.94	452.16	3.16	
11000.00	10948.67	90.00	266.30	6942.00	108.14	32.89	87.23	661.97	446.78	3.08	
11100.00	11048.67	90.00	266.30	6942.00	110.85	33.60	87.23	661.99	441.39	3.00	
11200.00	11148.67	90.00	266.30	6942.00	113.57	34.31	87.23	662.02	436.00	2.93	
11300.00	11248.67	90.00	266.30	6942.00	116.28	35.02	87.23	662.05	430.60	2.86	
11400.00	11348.67	90.00	266.30	6942.00	119.00	35.74	87.23	662.07	425.19	2.79	
11500.00	11448.67	90.00	266.30	6942.00	121.73	36.45	87.23	662.10	419.77	2.73	
11600.00	11548.67	90.00	266.30	6942.00	124.46	37.16	87.23	662.13	414.35	2.67	
11700.00	11648.67	90.00	266.30	6942.00	127.19	37.88	87.23	662.15	408.92	2.61	
11800.00	11748.67	90.00	266.30	6942.00	129.92	38.59	87.23	662.18	403.48	2.56	
11900.00	11848.67	90.00	266.30	6942.00	132.66	39.31	87.23	662.21	398.05	2.51	
12000.00	11948.67	90.00	266.30	6942.00	135.39	40.03	87.23	662.23	392.60	2.46	SF(Lo)
12100.00	12048.67	90.00	266.30	6942.00	138.14	40.74	87.23	662.26	387.15	2.41	SF(Lo)
12200.00	12148.67	90.00	266.30	6942.00	140.88	41.46	87.23	662.29	381.70	2.36	SF(Lo)
12300.00	12248.67	90.00	266.30	6942.00	143.62	42.18	87.23	662.31	376.24	2.32	SF(Lo)
12400.00	12348.67	90.00	266.30	6942.00	146.37	42.90	87.23	662.34	370.78	2.27	SF(Lo)
12500.00	12448.67	90.00	266.30	6942.00	149.12	43.62	87.23	662.37	365.32	2.23	SF(Lo)
12600.00	12548.67	90.00	266.30	6942.00	151.87	44.34	87.23	662.39	359.85	2.19	SF(Lo)
12700.00	12648.67	90.00	266.30	6942.00	154.62	45.06	87.23	662.42	354.38	2.15	SF(Lo)
12800.00	12748.67	90.00	266.30	6942.00	157.38	45.78	87.23	662.45	348.90	2.11	SF(Lo)
12900.00	12848.67	90.00	266.30	6942.00	160.13	46.50	87.23	662.48	343.42	2.08	SF(Lo)
13000.00	12948.67	90.00	266.30	6942.00	162.89	47.22	87.23	662.50	337.94	2.04	SF(Lo)
13100.00	13048.67	90.00	266.30	6942.00	165.64	47.95	87.23	662.53	332.46	2.01	SF(Lo)
13200.00	13148.67	90.00	266.30	6942.00	168.40	48.67	87.23	662.56	326.97	1.97	SF(Lo)
13300.00	13248.67	90.00	266.30	6942.00	171.16	49.39	87.23	662.58	321.49	1.94	SF(Lo)
13400.00	13348.67	90.00	266.30	6942.00	173.93	50.11	87.23	662.61	316.00	1.91	SF(Lo)
13500.00	13448.67	90.00	266.30	6942.00	176.69	50.84	87.23	662.64	310.50	1.88	SF(Lo)
13600.00	13548.67	90.00	266.30	6942.00	179.45	51.56	87.23	662.66	305.01	1.85	SF(Lo)
13700.00	13648.67	90.00	266.30	6942.00	182.22	52.28	87.23	662.69	299.51	1.82	SF(Lo)
13800.00	13748.67	90.00	266.30	6942.00	184.98	53.01	87.23	662.72	294.01	1.80	SF(Lo)
13900.00	13848.67	90.00	266.30	6942.00	187.75	53.73	87.23	662.74	288.51	1.77	SF(Lo)
14000.00	13948.67	90.00	266.30	6942.00	190.51	54.46	87.23	662.77	283.01	1.75	SF(Lo)
14100.00	14048.67	90.00	266.30	6942.00	193.28	55.18	87.23	662.80	277.51	1.72	SF(Lo)
14200.00	14148.67	90.00	266.30	6942.00	196.05	55.91	87.23	662.82	272.00	1.70	SF(Lo)
14300.00	14248.67	90.00	266.30	6942.00	198.82	56.63	87.23	662.85	266.50	1.67	SF(Lo)
14400.00	14348.67	90.00	266.30	6942.00	201.59	57.36	87.23	662.88	260.99	1.65	SF(Lo)
14500.00	14448.67	90.00	266.30	6942.00	204.36	58.08	87.23	662.90	255.48	1.63	SF(Lo)
14600.00	14548.67	90.00	266.30	6942.00	207.13	58.81	87.23	662.93	249.97	1.61	SF(Lo)
14700.00	14648.67	90.00	266.30	6942.00	209.91	59.53	87.23	662.96	244.46	1.58	SF(Lo)

## 5D Anti-Collision Report

Secondary Well: Goetzel 12N-30B-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
14800.00	14748.67	90.00	266.30	6942.00	212.68	60.26	87.23	662.98	238.94	1.56	SF(Lo)
14900.00	14848.67	90.00	266.30	6942.00	215.45	60.99	87.23	663.01	233.43	1.54	SF(Lo)
15000.00	14948.67	90.00	266.30	6942.00	218.23	61.71	87.23	663.04	227.91	1.52	SF(Lo)
15100.00	15048.67	90.00	266.30	6942.00	221.00	62.44	87.23	663.07	222.40	1.50	SF(Lo)
15200.00	15148.67	90.00	266.30	6942.00	223.78	63.17	87.23	663.09	216.88	1.49	SF(Med)
15286.68	15235.35	90.00	266.30	6942.00	226.18	63.80	87.23	663.12	212.10	1.47	SF(Med)
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	359.95	40.07	39.34	54.65	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.95	40.07	39.12	42.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.95	40.07	38.67	28.55	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.95	40.07	38.22	21.63	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.95	40.07	37.77	17.40	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.95	40.07	37.32	14.56	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.95	40.07	36.87	12.52	CC (Lo)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.95	40.07	36.42	10.98	CC (Lo)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	359.95	40.07	35.97	9.77	CC (Lo)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	232.45	40.34	35.81	8.90	CC (Lo)
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	228.76	42.56	37.62	8.62	CC (Lo)
1100.00	1099.68	0.00	0.00	1099.68	2.36	2.36	222.49	47.45	42.07	8.83	CC (Lo)
1200.00	1199.79	1.00	115.27	1199.78	2.57	2.57	215.58	55.33	49.54	9.56	CC (Lo)
1300.00	1300.73	3.01	115.27	1300.66	2.77	2.76	210.69	64.54	58.35	10.43	CC (Lo)
1400.00	1402.03	5.04	115.27	1401.71	2.97	2.95	207.52	74.47	67.84	11.24	
1500.00	1503.68	7.07	115.27	1502.78	3.19	3.15	205.56	84.89	77.83	12.02	
1600.00	1605.66	9.11	115.27	1603.74	3.45	3.35	204.43	95.69	88.16	12.71	
1700.00	1707.98	11.16	115.27	1704.46	3.74	3.55	203.90	106.80	98.76	13.28	
1800.00	1810.72	13.21	115.27	1804.88	4.08	3.76	203.98	117.15	108.55	13.62	
1900.00	1913.95	15.28	115.27	1904.93	4.48	3.98	205.00	124.66	115.44	13.52	
2000.00	2014.98	15.98	115.27	2002.11	4.93	4.22	206.64	129.97	120.07	13.12	
2100.00	2114.78	15.98	115.27	2098.05	5.40	4.46	208.19	135.22	124.58	12.70	
2200.00	2214.57	15.98	115.27	2194.00	5.90	4.71	209.62	140.56	129.11	12.27	
2300.00	2314.37	15.98	115.27	2289.94	6.41	4.97	210.95	145.99	133.69	11.87	
2400.00	2414.17	15.98	115.27	2385.88	6.94	5.23	212.18	151.48	138.33	11.51	
2500.00	2513.97	15.98	115.27	2481.82	7.48	5.49	213.33	157.04	143.01	11.19	
2600.00	2613.77	15.98	115.27	2577.77	8.02	5.76	214.39	162.66	147.69	10.87	
2700.00	2713.56	15.98	115.27	2673.71	8.57	6.03	215.39	168.34	152.40	10.56	
2800.00	2813.36	15.98	115.27	2769.65	9.13	6.30	216.32	174.05	157.13	10.28	
2900.00	2913.16	15.98	115.27	2865.59	9.69	6.58	217.19	179.82	161.89	10.03	
3000.00	3012.96	15.98	115.27	2961.53	10.26	6.85	218.01	185.62	166.69	9.81	
3100.00	3112.75	15.98	115.27	3057.48	10.82	7.13	218.77	191.45	171.51	9.60	
3200.00	3212.55	15.98	115.27	3153.42	11.40	7.41	219.49	197.32	176.36	9.41	
3300.00	3312.35	15.98	115.27	3249.36	11.97	7.69	220.17	203.22	181.23	9.24	
3400.00	3412.15	15.98	115.27	3345.30	12.54	7.97	220.81	209.14	186.11	9.08	
3500.00	3511.95	15.98	115.27	3441.25	13.12	8.26	221.42	215.09	191.00	8.93	
3600.00	3611.74	15.98	115.27	3537.19	13.70	8.54	221.99	221.06	195.91	8.79	
3700.00	3711.54	15.98	115.27	3633.13	14.28	8.83	222.54	227.06	200.83	8.66	
3800.00	3811.34	15.98	115.27	3729.07	14.86	9.11	223.05	233.07	205.75	8.53	
3900.00	3911.14	15.98	115.27	3825.02	15.44	9.40	223.54	239.10	210.69	8.42	
4000.00	4010.93	15.98	115.27	3920.96	16.02	9.69	224.01	245.14	215.63	8.31	
4100.00	4110.73	15.98	115.27	4016.90	16.61	9.97	224.45	251.20	220.59	8.21	
4200.00	4210.53	15.98	115.27	4112.84	17.19	10.26	224.87	257.28	225.57	8.11	
4300.00	4310.33	15.98	115.27	4208.78	17.78	10.55	225.27	263.37	230.55	8.02	
4400.00	4410.13	15.98	115.27	4304.73	18.36	10.84	225.66	269.47	235.54	7.94	
4500.00	4509.92	15.98	115.27	4400.67	18.95	11.13	226.02	275.58	240.55	7.87	
4600.00	4609.72	15.98	115.27	4496.61	19.53	11.42	226.37	281.71	245.56	7.79	
4700.00	4709.52	15.98	115.27	4592.55	20.12	11.71	226.71	287.84	250.59	7.73	

## 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
4800.00	4809.32	15.98	115.27	4688.50	20.71	12.00	227.03	293.98	255.62	7.66	
4900.00	4909.11	15.98	115.27	4784.44	21.30	12.29	227.34	300.14	260.66	7.60	
5000.00	5008.91	15.98	115.27	4880.38	21.88	12.58	227.64	306.30	265.70	7.55	
5100.00	5108.71	15.98	115.27	4976.32	22.47	12.88	227.92	312.46	270.76	7.49	
5200.00	5208.51	15.98	115.27	5072.27	23.06	13.17	228.20	318.64	275.82	7.44	
5300.00	5308.31	15.98	115.27	5168.21	23.65	13.46	228.46	324.82	280.88	7.39	
5400.00	5408.10	15.98	115.27	5264.15	24.24	13.75	228.71	331.01	285.96	7.35	
5500.00	5507.90	15.98	115.27	5360.09	24.83	14.05	228.96	337.21	291.03	7.30	
5600.00	5607.70	15.98	115.27	5456.03	25.42	14.34	229.19	343.41	296.12	7.26	
5700.00	5707.50	15.98	115.27	5551.98	26.01	14.63	229.42	349.61	301.20	7.22	
5800.00	5807.29	15.98	115.27	5647.92	26.60	14.92	229.64	355.83	306.28	7.18	
5900.00	5907.09	15.98	115.27	5743.86	27.19	15.22	229.85	362.04	311.36	7.14	
6000.00	6006.89	15.98	115.27	5839.80	27.78	15.51	230.06	368.27	316.45	7.11	
6100.00	6106.69	15.98	115.27	5935.75	28.37	15.81	230.25	374.49	321.54	7.07	
6200.00	6206.49	15.98	115.27	6031.69	28.96	16.10	230.44	380.72	326.64	7.04	
6300.00	6306.28	15.98	115.27	6127.63	29.55	16.39	230.63	386.96	331.74	7.01	
6400.00	6406.12	15.42	116.45	6223.62	30.13	16.69	217.52	393.33	336.90	6.97	
6500.00	6508.11	9.36	142.90	6323.27	30.39	16.87	184.13	400.19	342.72	6.96	
6600.00	6611.42	8.38	198.29	6425.52	30.35	16.78	150.32	407.30	349.22	7.01	
6700.00	6716.04	13.82	232.84	6528.24	30.02	16.41	131.48	414.48	356.22	7.11	
6800.00	6821.90	21.33	246.14	6629.13	29.48	15.75	121.92	421.56	363.50	7.26	
6900.00	6928.95	29.44	252.63	6725.78	28.79	14.80	116.58	428.36	370.82	7.45	
7000.00	7037.04	37.82	256.52	6815.71	28.07	13.59	113.27	434.69	377.91	7.66	
7100.00	7146.02	46.36	259.17	6896.51	27.43	12.22	111.04	440.40	384.40	7.86	
7200.00	7255.67	54.99	261.17	6965.94	26.99	10.86	109.42	445.33	389.99	8.05	
7300.00	7365.77	63.69	262.80	7022.03	26.85	9.78	108.19	449.38	394.44	8.18	
7400.00	7476.04	72.42	264.19	7063.21	27.06	9.31	107.21	452.45	397.46	8.23	
7500.00	7586.22	81.14	265.46	7088.38	27.65	9.73	106.40	454.48	398.88	8.17	
7600.00	7696.04	89.85	266.66	7097.00	28.55	10.97	105.75	455.45	398.62	8.01	
7700.00	7796.20	90.00	266.68	7097.00	29.56	11.45	105.65	456.08	397.35	7.77	
7800.00	7896.20	90.00	266.68	7097.00	30.78	11.94	105.62	456.75	395.68	7.48	
7900.00	7996.19	90.00	266.68	7097.00	32.20	12.46	105.60	457.42	393.64	7.17	
8000.00	8096.19	90.00	266.68	7097.00	33.79	13.00	105.58	458.08	391.24	6.85	
8100.00	8196.19	90.00	266.68	7097.00	35.52	13.56	105.55	458.75	388.67	6.55	
8200.00	8296.19	90.00	266.68	7097.00	37.39	14.14	105.53	459.42	385.78	6.24	
8300.00	8396.19	90.00	266.68	7097.00	39.37	14.73	105.51	460.09	382.75	5.95	
8400.00	8496.18	90.00	266.68	7097.00	41.44	15.33	105.48	460.75	379.44	5.67	
8500.00	8596.18	90.00	266.68	7097.00	43.59	15.95	105.46	461.42	375.91	5.40	
8600.00	8696.18	90.00	266.68	7097.00	45.81	16.58	105.44	462.09	372.29	5.15	
8700.00	8796.18	90.00	266.68	7097.00	48.10	17.21	105.41	462.76	368.56	4.91	
8800.00	8896.17	90.00	266.68	7097.00	50.43	17.85	105.39	463.43	364.74	4.70	
8900.00	8996.17	90.00	266.68	7097.00	52.81	18.50	105.37	464.09	360.84	4.49	
9000.00	9096.17	90.00	266.68	7097.00	55.23	19.16	105.35	464.76	356.85	4.31	
9100.00	9196.17	90.00	266.68	7097.00	57.68	19.82	105.32	465.43	352.80	4.13	
9200.00	9296.16	90.00	266.68	7097.00	60.16	20.48	105.30	466.10	348.69	3.97	
9300.00	9396.16	90.00	266.68	7097.00	62.67	21.15	105.28	466.77	344.53	3.82	
9400.00	9496.16	90.00	266.68	7097.00	65.21	21.83	105.26	467.43	340.32	3.68	
9500.00	9596.16	90.00	266.68	7097.00	67.76	22.50	105.23	468.10	336.07	3.55	
9600.00	9696.15	90.00	266.68	7097.00	70.33	23.18	105.21	468.77	331.78	3.42	
9700.00	9796.15	90.00	266.68	7097.00	72.92	23.87	105.19	469.44	327.46	3.31	
9800.00	9896.15	90.00	266.68	7097.00	75.53	24.55	105.17	470.11	323.10	3.20	
9900.00	9996.15	90.00	266.68	7097.00	78.14	25.24	105.15	470.78	318.72	3.10	
10000.00	10096.14	90.00	266.68	7097.00	80.77	25.94	105.12	471.45	314.32	3.00	
10100.00	10196.14	90.00	266.68	7097.00	83.41	26.63	105.10	472.11	309.89	2.91	
10200.00	10296.14	90.00	266.68	7097.00	86.06	27.33	105.08	472.78	305.44	2.83	
10300.00	10396.14	90.00	266.68	7097.00	88.72	28.02	105.06	473.45	300.97	2.74	
10400.00	10496.13	90.00	266.68	7097.00	91.39	28.72	105.04	474.12	296.48	2.67	
10500.00	10596.13	90.00	266.68	7097.00	94.07	29.42	105.01	474.79	291.98	2.60	

## 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
10600.00	10696.13	90.00	266.68	7097.00	96.75	30.13	104.99	475.46	287.47	2.53	
10700.00	10796.13	90.00	266.68	7097.00	99.44	30.83	104.97	476.13	282.94	2.46	SF(Lo)
10800.00	10896.13	90.00	266.68	7097.00	102.13	31.54	104.95	476.80	278.39	2.40	SF(Lo)
10900.00	10996.12	90.00	266.68	7097.00	104.83	32.24	104.93	477.47	273.84	2.34	SF(Lo)
11000.00	11096.12	90.00	266.68	7097.00	107.54	32.95	104.91	478.14	269.27	2.29	SF(Lo)
11100.00	11196.12	90.00	266.68	7097.00	110.24	33.66	104.89	478.81	264.70	2.24	SF(Lo)
11200.00	11296.12	90.00	266.68	7097.00	112.96	34.37	104.86	479.48	260.11	2.19	SF(Lo)
11300.00	11396.11	90.00	266.68	7097.00	115.68	35.08	104.84	480.15	255.52	2.14	SF(Lo)
11400.00	11496.11	90.00	266.68	7097.00	118.40	35.79	104.82	480.82	250.92	2.09	SF(Lo)
11500.00	11596.11	90.00	266.68	7097.00	121.12	36.50	104.80	481.49	246.31	2.05	SF(Lo)
11600.00	11696.11	90.00	266.68	7097.00	123.85	37.22	104.78	482.16	241.69	2.01	SF(Lo)
11700.00	11796.10	90.00	266.68	7097.00	126.58	37.93	104.76	482.83	237.07	1.96	SF(Lo)
11800.00	11896.10	90.00	266.68	7097.00	129.32	38.65	104.74	483.50	232.44	1.93	SF(Lo)
11900.00	11996.10	90.00	266.68	7097.00	132.05	39.36	104.72	484.17	227.80	1.89	SF(Lo)
12000.00	12096.10	90.00	266.68	7097.00	134.79	40.08	104.70	484.84	223.16	1.85	SF(Lo)
12100.00	12196.09	90.00	266.68	7097.00	137.53	40.80	104.68	485.51	218.51	1.82	SF(Lo)
12200.00	12296.09	90.00	266.68	7097.00	140.28	41.51	104.66	486.18	213.85	1.79	SF(Lo)
12300.00	12396.09	90.00	266.68	7097.00	143.02	42.23	104.63	486.85	209.20	1.75	SF(Lo)
12400.00	12496.09	90.00	266.68	7097.00	145.77	42.95	104.61	487.52	204.53	1.72	SF(Lo)
12500.00	12596.08	90.00	266.68	7097.00	148.52	43.67	104.59	488.19	199.86	1.69	SF(Lo)
12600.00	12696.08	90.00	266.68	7097.00	151.27	44.39	104.57	488.86	195.19	1.66	SF(Lo)
12700.00	12796.08	90.00	266.68	7097.00	154.03	45.11	104.55	489.53	190.52	1.64	SF(Lo)
12800.00	12896.08	90.00	266.68	7097.00	156.78	45.83	104.53	490.20	185.83	1.61	SF(Lo)
12900.00	12996.07	90.00	266.68	7097.00	159.54	46.55	104.51	490.87	181.15	1.58	SF(Lo)
13000.00	13096.07	90.00	266.68	7097.00	162.30	47.27	104.49	491.54	176.46	1.56	SF(Lo)
13100.00	13196.07	90.00	266.68	7097.00	165.06	47.99	104.47	492.21	171.77	1.54	SF(Lo)
13200.00	13296.07	90.00	266.68	7097.00	167.82	48.71	104.45	492.88	167.08	1.51	SF(Lo)
13300.00	13396.07	90.00	266.68	7097.00	170.58	49.43	104.43	493.55	162.38	1.49	SF(Med)
13400.00	13496.06	90.00	266.68	7097.00	173.34	50.16	104.41	494.22	157.68	1.47	SF(Med)
13500.00	13596.06	90.00	266.68	7097.00	176.10	50.88	104.39	494.90	152.97	1.45	SF(Med)
13600.00	13696.06	90.00	266.68	7097.00	178.87	51.60	104.37	495.57	148.27	1.43	SF(Med)
13700.00	13796.06	90.00	266.68	7097.00	181.63	52.33	104.35	496.24	143.56	1.41	SF(Med)
13800.00	13896.05	90.00	266.68	7097.00	184.40	53.05	104.33	496.91	138.84	1.39	SF(Med)
13900.00	13996.05	90.00	266.68	7097.00	187.17	53.77	104.31	497.58	134.13	1.37	SF(Med)
14000.00	14096.05	90.00	266.68	7097.00	189.94	54.50	104.29	498.25	129.41	1.35	SF(Med)
14100.00	14196.05	90.00	266.68	7097.00	192.71	55.22	104.27	498.92	124.69	1.33	SF(Med)
14200.00	14296.04	90.00	266.68	7097.00	195.48	55.95	104.25	499.59	119.97	1.32	SF(Med)
14300.00	14396.04	90.00	266.68	7097.00	198.25	56.67	104.23	500.27	115.24	1.30	SF(Med)
14400.00	14496.04	90.00	266.68	7097.00	201.02	57.40	104.21	500.94	110.51	1.28	SF(Med)
14500.00	14596.04	90.00	266.68	7097.00	203.79	58.12	104.19	501.61	105.78	1.27	SF(Med)
14600.00	14696.03	90.00	266.68	7097.00	206.57	58.85	104.18	502.28	101.05	1.25	SF(Med)
14700.00	14796.03	90.00	266.68	7097.00	209.34	59.57	104.16	502.95	96.32	1.24	SF(Med)
14800.00	14896.03	90.00	266.68	7097.00	212.11	60.30	104.14	503.62	91.58	1.22	SF(Med)
14900.00	14996.03	90.00	266.68	7097.00	214.89	61.02	104.12	504.30	86.85	1.21	SF(Med)
15000.00	15096.02	90.00	266.68	7097.00	217.67	61.75	104.10	504.97	82.11	1.19	SF(Med)
15100.00	15196.02	90.00	266.68	7097.00	220.44	62.48	104.08	505.64	77.37	1.18	SF(Med)
15200.00	15296.02	90.00	266.68	7097.00	223.22	63.20	104.06	506.31	72.62	1.17	SF(Med)
15286.68	15382.70	90.00	266.68	7097.00	225.63	63.83	104.04	506.90	68.51	1.16	SF(Med)
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	359.55	20.04	19.30	27.32	CC (Med)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	359.55	20.04	19.08	21.00	CC (Med)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	359.55	20.04	18.63	14.28	CC (Med)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	359.55	20.04	18.18	10.81	CC (Med)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	359.55	20.04	17.73	8.70	CC (Med)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	359.55	20.04	17.28	7.28	CC (Med)



## 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
600.00	600.00	0.00	0.00	600.00	1.24	1.24	359.55	20.04	16.83	6.26	CC (Med)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	359.55	20.04	16.39	5.49	CC (Med)
800.00	800.00	0.00	0.00	800.00	1.69	1.69	359.55	20.04	15.94	4.89	CC (Med)
900.00	900.00	0.00	0.00	900.00	1.91	1.91	231.57	20.30	15.77	4.48	CC (Med)
1000.00	999.93	0.00	0.00	999.93	2.14	2.14	224.67	22.64	17.69	4.58	CC (Med)
1100.00	1100.42	2.01	123.78	1100.40	2.34	2.34	216.91	26.68	21.33	4.99	CC (Med)
1200.00	1201.09	4.02	123.78	1200.93	2.53	2.52	211.58	31.16	25.42	5.43	CC (Med)
1300.00	1301.95	6.04	123.78	1301.39	2.74	2.71	207.92	35.92	29.77	5.84	CC (Lo)
1400.00	1402.99	8.06	123.78	1401.66	2.98	2.91	205.40	40.85	34.28	6.22	CC (Lo)
1500.00	1504.21	10.08	123.78	1501.61	3.25	3.11	203.66	45.89	38.88	6.55	CC (Lo)
1600.00	1605.61	12.11	123.78	1601.11	3.56	3.32	202.50	51.00	43.50	6.80	CC (Lo)
1700.00	1707.19	14.14	123.78	1700.03	3.93	3.53	201.76	56.15	48.15	7.02	CC (Lo)
1800.00	1808.99	16.18	123.78	1798.28	4.37	3.76	201.71	60.28	51.74	7.06	CC (Lo)
1900.00	1910.29	17.55	123.78	1895.11	4.87	3.99	202.96	61.42	52.26	6.70	CC (Lo)
2000.00	2010.28	17.55	123.78	1990.44	5.41	4.25	204.49	61.88	52.01	6.27	CC (Lo)
2100.00	2110.26	17.55	123.78	2085.77	5.97	4.51	206.00	62.38	51.77	5.88	CC (Lo)
2200.00	2210.25	17.55	123.78	2181.10	6.54	4.78	207.49	62.92	51.52	5.52	CC (Lo)
2300.00	2310.24	17.55	123.78	2276.43	7.13	5.05	208.95	63.51	51.27	5.19	CC (Lo)
2400.00	2410.22	17.55	123.78	2371.76	7.73	5.33	210.38	64.14	51.03	4.89	CC (Lo)
2500.00	2510.21	17.55	123.78	2467.09	8.33	5.61	211.79	64.80	50.79	4.63	CC (Lo)
2600.00	2610.19	17.55	123.78	2562.42	8.94	5.89	213.16	65.50	50.52	4.37	CC (Lo)
2700.00	2710.18	17.55	123.78	2657.75	9.56	6.18	214.50	66.24	50.24	4.14	
2800.00	2810.16	17.55	123.78	2753.08	10.18	6.47	215.82	67.02	49.97	3.93	
2900.00	2910.15	17.55	123.78	2848.41	10.80	6.76	217.10	67.83	49.73	3.75	
3000.00	3010.13	17.55	123.78	2943.74	11.43	7.05	218.35	68.67	49.50	3.58	
3100.00	3110.12	17.55	123.78	3039.07	12.06	7.34	219.57	69.55	49.26	3.43	
3200.00	3210.10	17.55	123.78	3134.40	12.69	7.64	220.76	70.45	49.03	3.29	
3300.00	3310.09	17.55	123.78	3229.73	13.32	7.94	221.92	71.39	48.77	3.16	
3400.00	3410.07	17.55	123.78	3325.06	13.95	8.23	223.05	72.35	48.53	3.04	
3500.00	3510.06	17.55	123.78	3420.39	14.59	8.53	224.15	73.34	48.31	2.93	
3600.00	3610.04	17.55	123.78	3515.72	15.23	8.83	225.22	74.36	48.10	2.83	
3700.00	3710.03	17.55	123.78	3611.05	15.86	9.13	226.26	75.40	47.92	2.74	
3800.00	3810.02	17.55	123.78	3706.38	16.50	9.43	227.27	76.47	47.75	2.66	
3900.00	3910.00	17.55	123.78	3801.71	17.14	9.73	228.26	77.56	47.60	2.59	
4000.00	4009.99	17.55	123.78	3897.04	17.78	10.03	229.21	78.67	47.43	2.52	
4100.00	4109.97	17.55	123.78	3992.37	18.42	10.33	230.14	79.81	47.28	2.45	SF(Lo)
4200.00	4209.96	17.55	123.78	4087.70	19.06	10.64	231.04	80.96	47.13	2.39	SF(Lo)
4300.00	4309.94	17.55	123.78	4183.03	19.70	10.94	231.92	82.14	46.97	2.34	SF(Lo)
4400.00	4409.93	17.55	123.78	4278.36	20.34	11.24	232.77	83.33	46.82	2.28	SF(Lo)
4500.00	4509.91	17.55	123.78	4373.70	20.99	11.55	233.60	84.54	46.70	2.23	SF(Lo)
4600.00	4609.90	17.55	123.78	4469.03	21.63	11.85	234.41	85.77	46.59	2.19	SF(Lo)
4700.00	4709.88	17.55	123.78	4564.36	22.27	12.16	235.19	87.01	46.49	2.15	SF(Lo)
4800.00	4809.87	17.55	123.78	4659.69	22.92	12.46	235.95	88.27	46.41	2.11	SF(Lo)
4900.00	4909.85	17.55	123.78	4755.02	23.56	12.77	236.68	89.54	46.35	2.07	SF(Lo)
5000.00	5009.84	17.55	123.78	4850.35	24.20	13.07	237.40	90.83	46.30	2.04	SF(Lo)
5100.00	5109.82	17.55	123.78	4945.68	24.85	13.38	238.10	92.14	46.26	2.01	SF(Lo)
5200.00	5209.81	17.55	123.78	5041.01	25.49	13.68	238.78	93.45	46.24	1.98	SF(Lo)
5300.00	5309.79	17.55	123.78	5136.34	26.14	13.99	239.43	94.78	46.23	1.95	SF(Lo)
5400.00	5409.78	17.55	123.78	5231.67	26.78	14.30	240.08	96.12	46.24	1.93	SF(Lo)
5500.00	5509.77	17.55	123.78	5327.00	27.43	14.60	240.70	97.47	46.26	1.90	SF(Lo)
5600.00	5609.75	17.55	123.78	5422.33	28.07	14.91	241.30	98.84	46.28	1.88	SF(Lo)
5700.00	5709.74	17.55	123.78	5517.66	28.72	15.21	241.89	100.21	46.29	1.86	SF(Lo)
5800.00	5809.72	17.55	123.78	5612.99	29.36	15.52	242.46	101.60	46.32	1.84	SF(Lo)
5900.00	5909.71	17.55	123.78	5708.32	30.01	15.83	243.02	102.99	46.36	1.82	SF(Lo)
6000.00	6009.69	17.55	123.78	5803.65	30.65	16.14	243.56	104.40	46.40	1.80	SF(Lo)
6100.00	6109.68	17.55	123.78	5898.98	31.30	16.44	244.09	105.81	46.44	1.78	SF(Lo)
6200.00	6209.66	17.55	123.78	5994.31	31.94	16.75	244.61	107.23	46.48	1.77	SF(Lo)
6300.00	6311.62	14.51	133.68	6091.92	32.49	17.05	244.19	108.21	46.50	1.75	SF(Lo)

## 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
6400.00	6414.29	10.67	167.87	6192.23	32.58	17.16	225.25	107.30	46.90	1.78	SF(Lo)
6500.00	6515.18	12.21	208.74	6291.27	32.30	17.03	184.85	107.68	49.68	1.86	SF(Lo)
6600.00	6614.43	17.58	231.99	6387.23	31.72	16.66	144.23	109.69	54.53	1.99	SF(Lo)
6700.00	6712.14	24.26	243.52	6478.49	30.94	16.05	119.05	113.18	60.69	2.16	SF(Lo)
6800.00	6808.42	31.34	250.10	6563.62	30.04	15.20	103.86	117.89	67.99	2.36	SF(Lo)
6900.00	6903.39	38.53	254.37	6641.44	29.13	14.16	93.68	123.47	75.60	2.58	
7000.00	6997.19	45.75	257.43	6710.95	28.32	12.96	86.39	129.57	82.96	2.78	
7100.00	7089.96	52.96	259.79	6771.34	27.70	11.70	80.99	135.84	89.90	2.96	
7200.00	7181.85	60.13	261.73	6821.97	27.34	10.53	76.97	142.00	96.05	3.09	
7300.00	7273.01	67.27	263.39	6862.34	27.28	9.67	74.05	147.77	101.00	3.16	
7400.00	7363.57	74.38	264.87	6892.07	27.53	9.36	72.01	152.97	104.67	3.17	
7500.00	7453.70	81.46	266.25	6910.92	28.05	9.76	70.74	157.43	106.99	3.12	
7600.00	7543.54	88.53	267.57	6918.76	28.81	10.84	70.16	161.03	107.91	3.03	
7700.00	7641.36	90.00	267.85	6919.00	29.79	11.52	70.36	163.71	108.51	2.97	
7800.00	7741.32	90.00	267.85	6919.00	30.97	12.03	70.68	166.29	108.82	2.89	
7900.00	7841.29	90.00	267.85	6919.00	32.35	12.56	70.99	168.86	108.67	2.81	
8000.00	7941.25	90.00	267.85	6919.00	33.90	13.12	71.28	171.45	108.22	2.71	
8100.00	8041.21	90.00	267.85	6919.00	35.60	13.70	71.57	174.03	107.57	2.62	
8200.00	8141.17	90.00	267.85	6919.00	37.44	14.29	71.85	176.62	106.49	2.52	
8300.00	8241.14	90.00	267.85	6919.00	39.39	14.90	72.12	179.22	105.20	2.42	SF(Lo)
8400.00	8341.10	90.00	267.85	6919.00	41.43	15.52	72.39	181.82	103.82	2.33	SF(Lo)
8500.00	8441.06	90.00	267.85	6919.00	43.56	16.15	72.64	184.42	102.31	2.25	SF(Lo)
8600.00	8541.03	90.00	267.85	6919.00	45.76	16.79	72.89	187.03	100.67	2.17	SF(Lo)
8700.00	8640.99	90.00	267.85	6919.00	48.03	17.44	73.13	189.64	98.90	2.09	SF(Lo)
8800.00	8740.95	90.00	267.85	6919.00	50.35	18.09	73.37	192.25	97.03	2.02	SF(Lo)
8900.00	8840.91	90.00	267.85	6919.00	52.72	18.75	73.60	194.86	95.06	1.95	SF(Lo)
9000.00	8940.88	90.00	267.85	6919.00	55.12	19.41	73.82	197.48	92.99	1.89	SF(Lo)
9100.00	9040.84	90.00	267.85	6919.00	57.57	20.08	74.04	200.11	90.86	1.83	SF(Lo)
9200.00	9140.80	90.00	267.85	6919.00	60.04	20.76	74.25	202.73	88.65	1.78	SF(Lo)
9300.00	9240.77	90.00	267.85	6919.00	62.54	21.43	74.46	205.36	86.35	1.73	SF(Lo)
9400.00	9340.73	90.00	267.85	6919.00	65.07	22.11	74.66	207.99	83.95	1.68	SF(Lo)
9500.00	9440.69	90.00	267.85	6919.00	67.62	22.80	74.86	210.62	81.48	1.63	SF(Lo)
9600.00	9540.65	90.00	267.85	6919.00	70.19	23.49	75.05	213.26	78.99	1.59	SF(Lo)
9700.00	9640.62	90.00	267.85	6919.00	72.77	24.17	75.24	215.89	76.46	1.55	SF(Lo)
9800.00	9740.58	90.00	267.85	6919.00	75.37	24.87	75.42	218.53	73.90	1.51	SF(Lo)
9900.00	9840.54	90.00	267.85	6919.00	77.99	25.56	75.60	221.17	71.33	1.48	SF(Med)
10000.00	9940.50	90.00	267.85	6919.00	80.62	26.26	75.77	223.82	68.73	1.44	SF(Med)
10100.00	10040.47	90.00	267.85	6919.00	83.25	26.96	75.94	226.46	66.12	1.41	SF(Med)
10200.00	10140.43	90.00	267.85	6919.00	85.90	27.65	76.11	229.11	63.50	1.38	SF(Med)
10300.00	10240.39	90.00	267.85	6919.00	88.56	28.36	76.27	231.76	60.87	1.36	SF(Med)
10400.00	10340.36	90.00	267.85	6919.00	91.23	29.06	76.43	234.41	58.23	1.33	SF(Med)
10500.00	10440.32	90.00	267.85	6919.00	93.91	29.76	76.58	237.07	55.57	1.31	SF(Med)
10600.00	10540.28	90.00	267.85	6919.00	96.59	30.47	76.73	239.72	52.89	1.28	SF(Med)
10700.00	10640.24	90.00	267.85	6919.00	99.28	31.18	76.88	242.38	50.20	1.26	SF(Med)
10800.00	10740.21	90.00	267.85	6919.00	101.97	31.88	77.02	245.04	47.50	1.24	SF(Med)
10900.00	10840.17	90.00	267.85	6919.00	104.67	32.59	77.17	247.70	44.79	1.22	SF(Med)
11000.00	10940.13	90.00	267.85	6919.00	107.38	33.30	77.30	250.36	42.06	1.20	SF(Med)
11100.00	11040.10	90.00	267.85	6919.00	110.09	34.01	77.44	253.02	39.30	1.18	SF(Med)
11200.00	11140.06	90.00	267.85	6919.00	112.81	34.73	77.57	255.68	36.54	1.17	SF(Med)
11300.00	11240.02	90.00	267.85	6919.00	115.53	35.44	77.70	258.35	33.77	1.15	SF(Med)
11400.00	11339.98	90.00	267.85	6919.00	118.25	36.15	77.83	261.02	30.99	1.13	SF(Med)
11500.00	11439.95	90.00	267.85	6919.00	120.98	36.87	77.96	263.68	28.20	1.12	SF(Med)
11600.00	11539.91	90.00	267.85	6919.00	123.71	37.58	78.08	266.35	25.41	1.11	SF(Med)
11700.00	11639.87	90.00	267.85	6919.00	126.44	38.30	78.20	269.02	22.61	1.09	SF(Med)
11800.00	11739.83	90.00	267.85	6919.00	129.18	39.01	78.32	271.70	19.81	1.08	SF(Med)
11900.00	11839.80	90.00	267.85	6919.00	131.92	39.73	78.43	274.37	17.00	1.07	SF(Med)
12000.00	11939.76	90.00	267.85	6919.00	134.66	40.45	78.55	277.04	14.18	1.05	SF(Med)
12100.00	12039.72	90.00	267.85	6919.00	137.40	41.17	78.66	279.72	11.36	1.04	SF(Med)

## 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
12200.00	12139.69	90.00	267.85	6919.00	140.15	41.88	78.76	282.39	8.54	1.03	SF(Med)
12300.00	12239.65	90.00	267.85	6919.00	142.90	42.60	78.87	285.07	5.71	1.02	SF(Med)
12400.00	12339.61	90.00	267.85	6919.00	145.65	43.32	78.98	287.75	2.88	1.01	SF(Med)
12500.00	12439.57	90.00	267.85	6919.00	148.40	44.04	79.08	290.43	0.05	1.00	SF(Med)
12600.00	12539.54	90.00	267.85	6919.00	151.16	44.76	79.18	293.11	-2.79	0.99	SF(Hi)
12700.00	12639.50	90.00	267.85	6919.00	153.91	45.48	79.28	295.79	-5.63	0.98	SF(Hi)
12800.00	12739.46	90.00	267.85	6919.00	156.67	46.20	79.38	298.47	-8.47	0.97	SF(Hi)
12900.00	12839.42	90.00	267.85	6919.00	159.43	46.93	79.47	301.15	-11.32	0.96	SF(Hi)
13000.00	12939.39	90.00	267.85	6919.00	162.19	47.65	79.57	303.83	-14.16	0.96	SF(Hi)
13100.00	13039.35	90.00	267.85	6919.00	164.95	48.37	79.66	306.52	-17.01	0.95	SF(Hi)
13200.00	13139.31	90.00	267.85	6919.00	167.72	49.09	79.75	309.20	-19.87	0.94	SF(Hi)
13300.00	13239.28	90.00	267.85	6919.00	170.48	49.82	79.84	311.89	-22.72	0.93	SF(Hi)
13400.00	13339.24	90.00	267.85	6919.00	173.25	50.54	79.93	314.57	-25.58	0.92	SF(Hi)
13500.00	13439.20	90.00	267.85	6919.00	176.02	51.26	80.01	317.26	-28.44	0.92	SF(Hi)
13600.00	13539.16	90.00	267.85	6919.00	178.79	51.99	80.10	319.95	-31.30	0.91	SF(Hi)
13700.00	13639.13	90.00	267.85	6919.00	181.55	52.71	80.18	322.64	-34.16	0.90	SF(Hi)
13800.00	13739.09	90.00	267.85	6919.00	184.33	53.43	80.26	325.33	-37.02	0.90	SF(Hi)
13900.00	13839.05	90.00	267.85	6919.00	187.10	54.16	80.34	328.01	-39.88	0.89	SF(Hi)
14000.00	13939.02	90.00	267.85	6919.00	189.87	54.88	80.42	330.71	-42.75	0.89	SF(Hi)
14100.00	14038.98	90.00	267.85	6919.00	192.64	55.61	80.50	333.40	-45.62	0.88	SF(Hi)
14200.00	14138.94	90.00	267.85	6919.00	195.42	56.33	80.58	336.09	-48.49	0.87	SF(Hi)
14300.00	14238.90	90.00	267.85	6919.00	198.19	57.06	80.65	338.78	-51.36	0.87	SF(Hi)
14400.00	14338.87	90.00	267.85	6919.00	200.97	57.78	80.73	341.47	-54.23	0.86	SF(Hi)
14500.00	14438.83	90.00	267.85	6919.00	203.74	58.51	80.80	344.17	-57.10	0.86	SF(Hi)
14600.00	14538.79	90.00	267.85	6919.00	206.52	59.23	80.87	346.86	-59.97	0.85	SF(Hi)
14700.00	14638.75	90.00	267.85	6919.00	209.30	59.96	80.94	349.55	-62.84	0.85	SF(Hi)
14800.00	14738.72	90.00	267.85	6919.00	212.08	60.69	81.01	352.25	-65.72	0.84	SF(Hi)
14900.00	14838.68	90.00	267.85	6919.00	214.86	61.41	81.08	354.94	-68.59	0.84	SF(Hi)
15000.00	14938.64	90.00	267.85	6919.00	217.64	62.14	81.15	357.64	-71.47	0.83	SF(Hi)
15100.00	15038.61	90.00	267.85	6919.00	220.42	62.87	81.22	360.34	-74.35	0.83	SF(Hi)
15200.00	15138.57	90.00	267.85	6919.00	223.20	63.59	81.28	363.03	-77.22	0.82	SF(Hi)
15286.68	15225.22	90.00	267.85	6919.00	225.61	64.22	81.34	365.37	-79.72	0.82	SF(Hi)
Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.35	20.04	19.31	27.33	CC (Med)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	180.35	20.04	19.08	21.01	CC (Med)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	180.35	20.04	18.64	14.28	CC (Med)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	180.35	20.04	18.19	10.81	CC (Med)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	180.35	20.04	17.74	8.70	CC (Med)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	180.35	20.04	17.29	7.28	CC (Med)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	180.35	20.04	16.84	6.26	CC (Med)
700.00	700.00	0.00	0.00	700.00	1.46	1.46	180.35	20.04	16.39	5.49	CC (Med)
800.00	799.76	1.00	131.86	799.76	1.67	1.67	179.43	20.33	16.24	4.97	CC (Med)
900.00	899.19	2.98	131.86	899.13	1.86	1.86	46.79	22.51	18.03	5.02	CC (Med)
1000.00	998.49	4.97	131.86	998.18	2.06	2.04	42.04	25.37	20.52	5.22	CC (Med)
1100.00	1097.67	6.95	131.86	1096.82	2.28	2.24	38.78	28.52	23.27	5.43	CC (Med)
1200.00	1196.73	8.93	131.86	1194.92	2.54	2.44	36.63	31.88	26.21	5.62	CC (Med)
1300.00	1295.67	10.91	131.86	1292.38	2.84	2.65	35.31	35.41	29.29	5.78	CC (Lo)
1400.00	1394.49	12.89	131.86	1389.07	3.19	2.86	34.62	39.07	32.48	5.93	CC (Lo)
1500.00	1493.20	14.86	131.86	1484.89	3.59	3.09	34.39	42.85	35.73	6.02	CC (Lo)
1600.00	1591.78	16.84	131.86	1579.72	4.07	3.32	34.51	46.74	39.03	6.06	CC (Lo)
1700.00	1690.25	18.81	131.86	1673.46	4.61	3.56	34.90	50.74	42.39	6.08	CC (Lo)
1800.00	1790.05	18.97	131.86	1767.84	5.20	3.83	35.63	54.53	45.46	6.01	CC (Lo)
1900.00	1889.98	18.97	131.86	1862.34	5.83	4.11	36.31	58.30	48.42	5.90	CC (Lo)
2000.00	1989.90	18.97	131.86	1956.84	6.46	4.39	36.90	62.07	51.36	5.80	CC (Lo)
2100.00	2089.83	18.97	131.86	2051.34	7.11	4.68	37.43	65.84	54.30	5.70	

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
2200.00	2189.76	18.97	131.86	2145.84	7.76	4.98	37.89	69.63	57.23	5.61	
2300.00	2289.68	18.97	131.86	2240.34	8.43	5.27	38.31	73.41	60.12	5.52	
2400.00	2389.61	18.97	131.86	2334.84	9.09	5.57	38.69	77.20	63.00	5.44	
2500.00	2489.54	18.97	131.86	2429.34	9.76	5.87	39.04	80.99	65.87	5.36	
2600.00	2589.47	18.97	131.86	2523.84	10.44	6.18	39.35	84.79	68.73	5.28	
2700.00	2689.39	18.97	131.86	2618.34	11.11	6.48	39.64	88.58	71.59	5.21	
2800.00	2789.32	18.97	131.86	2712.84	11.79	6.79	39.90	92.38	74.44	5.15	
2900.00	2889.25	18.97	131.86	2807.34	12.47	7.10	40.14	96.18	77.30	5.09	
3000.00	2989.17	18.97	131.86	2901.84	13.15	7.41	40.36	99.99	80.15	5.04	
3100.00	3089.10	18.97	131.86	2996.34	13.83	7.72	40.57	103.79	83.00	4.99	
3200.00	3189.03	18.97	131.86	3090.84	14.52	8.03	40.76	107.60	85.84	4.94	
3300.00	3288.95	18.97	131.86	3185.34	15.20	8.34	40.94	111.40	88.67	4.90	
3400.00	3388.88	18.97	131.86	3279.84	15.89	8.66	41.11	115.21	91.50	4.86	
3500.00	3488.81	18.97	131.86	3374.34	16.58	8.97	41.27	119.02	94.33	4.82	
3600.00	3588.74	18.97	131.86	3468.84	17.26	9.28	41.41	122.83	97.16	4.79	
3700.00	3688.66	18.97	131.86	3563.34	17.95	9.60	41.55	126.64	99.99	4.75	
3800.00	3788.59	18.97	131.86	3657.83	18.64	9.91	41.68	130.45	102.82	4.72	
3900.00	3888.52	18.97	131.86	3752.33	19.33	10.23	41.80	134.26	105.65	4.69	
4000.00	3988.44	18.97	131.86	3846.83	20.01	10.55	41.92	138.07	108.47	4.66	
4100.00	4088.37	18.97	131.86	3941.33	20.70	10.86	42.03	141.88	111.30	4.64	
4200.00	4188.30	18.97	131.86	4035.83	21.39	11.18	42.13	145.70	114.12	4.61	
4300.00	4288.22	18.97	131.86	4130.33	22.08	11.50	42.23	149.51	116.93	4.59	
4400.00	4388.15	18.97	131.86	4224.83	22.77	11.81	42.32	153.32	119.75	4.57	
4500.00	4488.08	18.97	131.86	4319.33	23.46	12.13	42.41	157.14	122.56	4.54	
4600.00	4588.00	18.97	131.86	4413.83	24.15	12.45	42.50	160.95	125.38	4.52	
4700.00	4687.93	18.97	131.86	4508.33	24.84	12.77	42.58	164.77	128.19	4.50	
4800.00	4787.86	18.97	131.86	4602.83	25.54	13.08	42.66	168.58	131.00	4.49	
4900.00	4887.79	18.97	131.86	4697.33	26.23	13.40	42.73	172.40	133.81	4.47	
5000.00	4987.71	18.97	131.86	4791.83	26.92	13.72	42.80	176.21	136.63	4.45	
5100.00	5087.64	18.97	131.86	4886.33	27.61	14.04	42.87	180.03	139.44	4.44	
5200.00	5187.57	18.97	131.86	4980.83	28.30	14.36	42.93	183.84	142.25	4.42	
5300.00	5287.49	18.97	131.86	5075.33	28.99	14.68	43.00	187.66	145.06	4.41	
5400.00	5387.42	18.97	131.86	5169.83	29.68	15.00	43.06	191.48	147.87	4.39	
5500.00	5487.35	18.97	131.86	5264.33	30.38	15.32	43.11	195.29	150.68	4.38	
5600.00	5587.27	18.97	131.86	5358.83	31.07	15.64	43.17	199.11	153.49	4.36	
5700.00	5687.20	18.97	131.86	5453.33	31.76	15.95	43.22	202.93	156.30	4.35	
5800.00	5787.13	18.97	131.86	5547.83	32.45	16.27	43.27	206.75	159.11	4.34	
5900.00	5887.05	18.97	131.86	5642.33	33.14	16.59	43.32	210.56	161.92	4.33	
6000.00	5986.98	18.97	131.86	5736.83	33.84	16.91	43.37	214.38	164.73	4.32	
6100.00	6086.91	18.97	131.86	5831.32	34.53	17.23	43.42	218.20	167.54	4.31	
6200.00	6186.84	18.97	131.86	5925.82	35.22	17.55	43.46	222.02	170.35	4.30	
6300.00	6288.42	15.05	151.71	6022.86	35.65	17.83	44.84	225.50	172.14	4.23	
6400.00	6387.60	13.79	183.58	6119.07	35.50	17.92	35.74	229.05	172.87	4.08	
6500.00	6484.39	16.55	211.60	6212.59	34.90	17.81	6.00	233.76	175.31	4.00	
6600.00	6579.12	21.67	228.86	6302.14	33.96	17.51	335.63	239.44	179.54	4.00	
6700.00	6672.01	27.77	239.12	6386.52	32.77	17.00	319.96	245.76	185.33	4.07	
6800.00	6763.28	34.24	245.71	6464.74	31.46	16.29	313.29	252.40	192.29	4.20	
6900.00	6853.15	40.86	250.33	6535.96	30.16	15.35	310.51	259.00	199.93	4.38	
7000.00	6941.81	47.53	253.80	6599.50	29.00	14.19	309.46	265.25	207.73	4.61	
7100.00	7029.48	54.21	256.57	6654.80	28.09	12.87	309.18	270.87	215.08	4.86	
7200.00	7116.33	60.88	258.89	6701.39	27.51	11.50	309.23	275.62	221.61	5.10	
7300.00	7202.55	67.53	260.91	6738.90	27.28	10.31	309.37	279.32	226.84	5.32	
7400.00	7288.33	74.17	262.73	6767.02	27.43	9.64	309.49	281.81	230.58	5.50	
7500.00	7373.82	80.81	264.43	6785.53	27.90	9.77	309.50	283.00	232.36	5.59	
7600.00	7459.21	87.44	266.07	6794.27	28.63	10.77	309.38	282.84	232.08	5.57	
7700.00	7553.58	90.00	266.70	6795.00	29.57	11.66	309.38	282.13	230.10	5.42	
7800.00	7653.58	90.00	266.70	6795.00	30.72	12.18	309.47	281.58	227.54	5.21	
7900.00	7753.58	90.00	266.70	6795.00	32.06	12.73	309.57	281.02	224.79	5.00	

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
8000.00	7853.57	90.00	266.70	6795.00	33.58	13.32	309.66	280.47	221.80	4.78	
8100.00	7953.57	90.00	266.70	6795.00	35.26	13.92	309.75	279.92	218.70	4.57	
8200.00	8053.57	90.00	266.70	6795.00	37.06	14.54	309.85	279.36	215.23	4.36	
8300.00	8153.57	90.00	266.70	6795.00	38.99	15.17	309.94	278.81	211.69	4.15	
8400.00	8253.56	90.00	266.70	6795.00	41.01	15.81	310.04	278.26	207.98	3.96	
8500.00	8353.56	90.00	266.70	6795.00	43.13	16.46	310.13	277.71	204.27	3.78	
8600.00	8453.56	90.00	266.70	6795.00	45.31	17.12	310.23	277.16	200.48	3.61	
8700.00	8553.56	90.00	266.70	6795.00	47.56	17.79	310.32	276.62	196.58	3.46	
8800.00	8653.55	90.00	266.70	6795.00	49.87	18.46	310.42	276.07	192.53	3.30	
8900.00	8753.55	90.00	266.70	6795.00	52.22	19.13	310.52	275.52	188.42	3.16	
9000.00	8853.55	90.00	266.70	6795.00	54.61	19.81	310.62	274.98	184.26	3.03	
9100.00	8953.55	90.00	266.70	6795.00	57.05	20.49	310.71	274.43	180.06	2.91	
9200.00	9053.54	90.00	266.70	6795.00	59.51	21.18	310.81	273.89	175.81	2.79	
9300.00	9153.54	90.00	266.70	6795.00	62.00	21.87	310.91	273.34	171.53	2.68	
9400.00	9253.54	90.00	266.70	6795.00	64.52	22.56	311.01	272.80	167.23	2.58	
9500.00	9353.54	90.00	266.70	6795.00	67.06	23.25	311.11	272.26	162.87	2.49	SF(Lo)
9600.00	9453.53	90.00	266.70	6795.00	69.62	23.95	311.21	271.72	158.46	2.40	SF(Lo)
9700.00	9553.53	90.00	266.70	6795.00	72.20	24.65	311.31	271.18	154.04	2.31	SF(Lo)
9800.00	9653.53	90.00	266.70	6795.00	74.79	25.35	311.41	270.64	149.60	2.24	SF(Lo)
9900.00	9753.53	90.00	266.70	6795.00	77.40	26.05	311.51	270.10	145.16	2.16	SF(Lo)
10000.00	9853.52	90.00	266.70	6795.00	80.02	26.75	311.61	269.56	140.73	2.09	SF(Lo)
10100.00	9953.52	90.00	266.70	6795.00	82.66	27.45	311.71	269.03	136.31	2.03	SF(Lo)
10200.00	10053.52	90.00	266.70	6795.00	85.30	28.16	311.81	268.49	131.90	1.97	SF(Lo)
10300.00	10153.52	90.00	266.70	6795.00	87.95	28.86	311.92	267.96	127.52	1.91	SF(Lo)
10400.00	10253.51	90.00	266.70	6795.00	90.61	29.57	312.02	267.42	123.17	1.85	SF(Lo)
10500.00	10353.51	90.00	266.70	6795.00	93.28	30.28	312.12	266.89	118.84	1.80	SF(Lo)
10600.00	10453.51	90.00	266.70	6795.00	95.96	30.99	312.22	266.36	114.53	1.75	SF(Lo)
10700.00	10553.51	90.00	266.70	6795.00	98.64	31.70	312.33	265.82	110.25	1.71	SF(Lo)
10800.00	10653.50	90.00	266.70	6795.00	101.33	32.41	312.43	265.29	105.98	1.67	SF(Lo)
10900.00	10753.50	90.00	266.70	6795.00	104.03	33.12	312.54	264.76	101.73	1.62	SF(Lo)
11000.00	10853.50	90.00	266.70	6795.00	106.73	33.84	312.64	264.23	97.49	1.58	SF(Lo)
11100.00	10953.49	90.00	266.70	6795.00	109.44	34.55	312.75	263.71	93.27	1.55	SF(Lo)
11200.00	11053.49	90.00	266.70	6795.00	112.15	35.27	312.86	263.18	88.99	1.51	SF(Lo)
11300.00	11153.49	90.00	266.70	6795.00	114.86	35.98	312.96	262.65	84.70	1.48	SF(Med)
11400.00	11253.49	90.00	266.70	6795.00	117.58	36.70	313.07	262.13	80.43	1.44	SF(Med)
11500.00	11353.48	90.00	266.70	6795.00	120.30	37.42	313.18	261.60	76.15	1.41	SF(Med)
11600.00	11453.48	90.00	266.70	6795.00	123.03	38.13	313.28	261.08	71.81	1.38	SF(Med)
11700.00	11553.48	90.00	266.70	6795.00	125.76	38.85	313.39	260.56	67.49	1.35	SF(Med)
11800.00	11653.48	90.00	266.70	6795.00	128.49	39.57	313.50	260.04	63.19	1.32	SF(Med)
11900.00	11753.47	90.00	266.70	6795.00	131.22	40.29	313.61	259.52	58.88	1.29	SF(Med)
12000.00	11853.47	90.00	266.70	6795.00	133.96	41.01	313.72	259.00	54.57	1.27	SF(Med)
12100.00	11953.47	90.00	266.70	6795.00	136.70	41.73	313.83	258.48	50.27	1.24	SF(Med)
12200.00	12053.47	90.00	266.70	6795.00	139.44	42.45	313.94	257.96	45.98	1.22	SF(Med)
12300.00	12153.46	90.00	266.70	6795.00	142.19	43.17	314.05	257.44	41.70	1.19	SF(Med)
12400.00	12253.46	90.00	266.70	6795.00	144.93	43.89	314.16	256.93	37.44	1.17	SF(Med)
12500.00	12353.46	90.00	266.70	6795.00	147.68	44.61	314.28	256.41	33.20	1.15	SF(Med)
12600.00	12453.46	90.00	266.70	6795.00	150.43	45.33	314.39	255.90	28.97	1.13	SF(Med)
12700.00	12553.45	90.00	266.70	6795.00	153.18	46.06	314.50	255.39	24.76	1.11	SF(Med)
12800.00	12653.45	90.00	266.70	6795.00	155.93	46.78	314.61	254.87	20.56	1.09	SF(Med)
12900.00	12753.45	90.00	266.70	6795.00	158.69	47.50	314.73	254.36	16.38	1.07	SF(Med)
13000.00	12853.45	90.00	266.70	6795.00	161.45	48.22	314.84	253.85	12.21	1.05	SF(Med)
13100.00	12953.44	90.00	266.70	6795.00	164.20	48.95	314.96	253.34	8.06	1.03	SF(Med)
13200.00	13053.44	90.00	266.70	6795.00	166.96	49.67	315.07	252.84	3.93	1.02	SF(Med)
13300.00	13153.44	90.00	266.70	6795.00	169.72	50.39	315.19	252.33	-0.19	1.00	SF(Hi)
13400.00	13253.44	90.00	266.70	6795.00	172.49	51.12	315.30	251.82	-4.29	0.98	SF(Hi)
13500.00	13353.43	90.00	266.70	6795.00	175.25	51.84	315.42	251.32	-8.38	0.97	SF(Hi)
13600.00	13453.43	90.00	266.70	6795.00	178.01	52.57	315.54	250.81	-12.45	0.95	SF(Hi)
13700.00	13553.43	90.00	266.70	6795.00	180.78	53.29	315.65	250.31	-16.50	0.94	SF(Hi)

## 5D Anti-Collision Report

Secondary Well: Goetzel 13N-30A-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
13800.00	13653.43	90.00	266.70	6795.00	183.54	54.02	315.77	249.81	-20.54	0.92	SF(Hi)
13900.00	13753.42	90.00	266.70	6795.00	186.31	54.74	315.89	249.31	-24.56	0.91	SF(Hi)
14000.00	13853.42	90.00	266.70	6795.00	189.08	55.47	316.01	248.81	-28.56	0.90	SF(Hi)
14100.00	13953.42	90.00	266.70	6795.00	191.85	56.19	316.13	248.31	-32.54	0.88	SF(Hi)
14200.00	14053.41	90.00	266.70	6795.00	194.62	56.92	316.25	247.81	-36.51	0.87	SF(Hi)
14300.00	14153.41	90.00	266.70	6795.00	197.39	57.65	316.37	247.32	-40.46	0.86	SF(Hi)
14400.00	14253.41	90.00	266.70	6795.00	200.16	58.37	316.49	246.82	-44.39	0.85	SF(Hi)
14500.00	14353.41	90.00	266.70	6795.00	202.93	59.10	316.61	246.33	-48.30	0.84	SF(Hi)
14600.00	14453.40	90.00	266.70	6795.00	205.70	59.83	316.73	245.84	-52.20	0.82	SF(Hi)
14700.00	14553.40	90.00	266.70	6795.00	208.47	60.55	316.85	245.34	-56.07	0.81	SF(Hi)
14800.00	14653.40	90.00	266.70	6795.00	211.25	61.28	316.98	244.85	-59.93	0.80	SF(Hi)
14900.00	14753.40	90.00	266.70	6795.00	214.02	62.01	317.10	244.36	-63.77	0.79	SF(Hi)
15000.00	14853.39	90.00	266.70	6795.00	216.80	62.73	317.22	243.88	-67.59	0.78	SF(Hi)
15100.00	14953.39	90.00	266.70	6795.00	219.57	63.46	317.35	243.39	-71.39	0.77	SF(Hi)
15200.00	15053.39	90.00	266.70	6795.00	222.35	64.19	317.47	242.90	-75.17	0.76	SF(Hi)
15286.68	15136.85	90.00	266.70	6795.00	224.67	64.80	317.58	242.50	-78.63	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	179.95	40.07	39.34	54.65	CC (Lo)
100.00	100.00	0.00	0.00	100.00	0.11	0.11	179.95	40.07	39.12	42.01	CC (Lo)
200.00	200.00	0.00	0.00	200.00	0.34	0.34	179.95	40.07	38.67	28.55	CC (Lo)
300.00	300.00	0.00	0.00	300.00	0.56	0.56	179.95	40.07	38.22	21.63	CC (Lo)
400.00	400.00	0.00	0.00	400.00	0.79	0.79	179.95	40.07	37.77	17.40	CC (Lo)
500.00	500.00	0.00	0.00	500.00	1.01	1.01	179.95	40.07	37.32	14.56	CC (Lo)
600.00	600.00	0.00	0.00	600.00	1.24	1.24	179.95	40.07	36.87	12.52	CC (Lo)
700.00	698.93	1.98	138.18	698.91	1.44	1.43	178.37	41.38	37.76	11.43	CC (Lo)
800.00	797.62	3.95	138.18	797.46	1.62	1.62	174.21	45.45	41.43	11.29	CC (Lo)
900.00	895.89	5.92	138.18	895.36	1.83	1.81	42.03	52.34	47.90	11.79	CC (Lo)
1000.00	993.83	7.88	138.18	992.59	2.07	2.01	38.34	60.20	55.37	12.46	CC (Lo)
1100.00	1091.48	9.83	138.18	1089.07	2.35	2.21	36.01	68.51	63.27	13.06	
1200.00	1188.83	11.78	138.18	1184.69	2.68	2.43	34.62	77.16	71.49	13.60	
1300.00	1285.89	13.72	138.18	1279.35	3.06	2.65	33.91	86.07	79.94	14.04	
1400.00	1382.65	15.65	138.18	1372.95	3.51	2.88	33.69	95.20	88.58	14.40	
1500.00	1479.12	17.58	138.18	1465.38	4.01	3.11	33.82	104.53	97.38	14.63	
1600.00	1575.35	19.47	138.18	1556.62	4.57	3.36	34.22	114.06	106.33	14.76	
1700.00	1674.99	19.47	138.18	1650.56	5.20	3.64	35.20	122.22	113.80	14.51	
1800.00	1774.73	19.47	138.18	1744.59	5.85	3.93	36.75	128.53	119.32	13.95	
1900.00	1874.47	19.47	138.18	1838.63	6.51	4.22	38.17	134.87	124.79	13.39	
2000.00	1974.22	19.47	138.18	1932.68	7.18	4.52	39.47	141.29	130.33	12.89	
2100.00	2073.96	19.47	138.18	2026.72	7.86	4.82	40.66	147.77	135.91	12.45	
2200.00	2173.71	19.47	138.18	2120.76	8.54	5.13	41.74	154.32	141.52	12.06	
2300.00	2273.45	19.47	138.18	2214.80	9.23	5.43	42.74	160.91	147.13	11.68	
2400.00	2373.20	19.47	138.18	2308.84	9.91	5.74	43.66	167.55	152.77	11.33	
2500.00	2472.94	19.47	138.18	2402.88	10.60	6.05	44.51	174.23	158.41	11.01	
2600.00	2572.69	19.47	138.18	2496.92	11.30	6.36	45.29	180.94	164.07	10.72	
2700.00	2672.43	19.47	138.18	2590.96	11.99	6.68	46.02	187.69	169.75	10.46	
2800.00	2772.18	19.47	138.18	2685.00	12.68	6.99	46.70	194.46	175.45	10.23	
2900.00	2871.92	19.47	138.18	2779.04	13.38	7.31	47.33	201.26	181.18	10.02	
3000.00	2971.67	19.47	138.18	2873.08	14.08	7.62	47.92	208.08	186.92	9.83	
3100.00	3071.41	19.47	138.18	2967.12	14.78	7.94	48.48	214.92	192.68	9.66	
3200.00	3171.16	19.47	138.18	3061.16	15.48	8.26	49.00	221.78	198.43	9.50	
3300.00	3270.90	19.47	138.18	3155.20	16.17	8.58	49.48	228.66	204.19	9.35	
3400.00	3370.65	19.47	138.18	3249.25	16.87	8.90	49.94	235.55	209.97	9.21	
3500.00	3470.39	19.47	138.18	3343.29	17.58	9.22	50.38	242.46	215.75	9.08	
3600.00	3570.14	19.47	138.18	3437.33	18.28	9.54	50.79	249.38	221.55	8.96	
3700.00	3669.88	19.47	138.18	3531.37	18.98	9.86	51.17	256.31	227.34	8.85	

## 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
3800.00	3769.63	19.47	138.18	3625.41	19.68	10.18	51.54	263.25	233.14	8.74	
3900.00	3869.37	19.47	138.18	3719.45	20.38	10.50	51.89	270.21	238.94	8.64	
4000.00	3969.12	19.47	138.18	3813.49	21.08	10.82	52.22	277.17	244.76	8.55	
4100.00	4068.86	19.47	138.18	3907.53	21.79	11.14	52.53	284.14	250.57	8.47	
4200.00	4168.61	19.47	138.18	4001.57	22.49	11.46	52.83	291.12	256.40	8.38	
4300.00	4268.35	19.47	138.18	4095.61	23.19	11.78	53.12	298.11	262.23	8.31	
4400.00	4368.10	19.47	138.18	4189.65	23.89	12.11	53.39	305.10	268.07	8.24	
4500.00	4467.84	19.47	138.18	4283.69	24.60	12.43	53.65	312.10	273.91	8.17	
4600.00	4567.59	19.47	138.18	4377.73	25.30	12.75	53.90	319.11	279.76	8.11	
4700.00	4667.33	19.47	138.18	4471.77	26.00	13.07	54.14	326.12	285.61	8.05	
4800.00	4767.07	19.47	138.18	4565.82	26.71	13.40	54.37	333.14	291.47	7.99	
4900.00	4866.82	19.47	138.18	4659.86	27.41	13.72	54.58	340.16	297.33	7.94	
5000.00	4966.56	19.47	138.18	4753.90	28.12	14.04	54.79	347.19	303.19	7.89	
5100.00	5066.31	19.47	138.18	4847.94	28.82	14.36	55.00	354.22	309.06	7.84	
5200.00	5166.05	19.47	138.18	4941.98	29.52	14.69	55.19	361.26	314.93	7.80	
5300.00	5265.80	19.47	138.18	5036.02	30.23	15.01	55.38	368.30	320.81	7.75	
5400.00	5365.54	19.47	138.18	5130.06	30.93	15.33	55.55	375.35	326.69	7.71	
5500.00	5465.29	19.47	138.18	5224.10	31.64	15.66	55.73	382.39	332.57	7.67	
5600.00	5565.03	19.47	138.18	5318.14	32.34	15.98	55.89	389.44	338.45	7.64	
5700.00	5664.78	19.47	138.18	5412.18	33.05	16.31	56.05	396.50	344.34	7.60	
5800.00	5764.52	19.47	138.18	5506.22	33.75	16.63	56.21	403.56	350.23	7.57	
5900.00	5864.27	19.47	138.18	5600.26	34.46	16.95	56.36	410.62	356.12	7.53	
6000.00	5964.01	19.47	138.18	5694.30	35.16	17.28	56.50	417.68	362.02	7.50	
6100.00	6063.76	19.47	138.18	5788.34	35.86	17.60	56.64	424.74	367.91	7.47	
6200.00	6163.50	19.47	138.18	5882.39	36.57	17.93	56.78	431.81	373.81	7.44	
6300.00	6263.25	19.47	138.18	5976.43	37.27	18.25	56.91	438.88	379.71	7.42	
6400.00	6362.97	19.47	138.18	6070.45	37.98	18.57	43.65	445.53	385.44	7.41	
6500.00	6461.73	19.47	138.18	6163.56	38.68	18.89	8.11	450.37	390.49	7.52	
6600.00	6556.80	18.38	142.92	6253.26	39.30	19.20	330.73	454.46	396.09	7.79	
6700.00	6650.20	15.58	166.88	6342.69	39.43	19.41	308.12	459.84	403.67	8.19	
6800.00	6747.66	16.11	195.65	6436.60	38.99	19.47	294.90	466.90	412.98	8.66	
6900.00	6849.85	20.12	218.85	6533.83	37.98	19.34	286.06	475.48	423.85	9.21	
7000.00	6957.46	26.43	233.83	6632.71	36.39	18.97	279.47	485.26	435.45	9.74	
7100.00	7071.13	34.14	243.46	6730.85	34.33	18.27	274.24	495.74	447.29	10.23	
7200.00	7191.43	42.84	250.12	6824.96	32.04	17.07	269.96	506.28	458.63	10.62	
7300.00	7318.65	52.34	255.10	6910.69	29.94	15.20	266.45	516.11	468.25	10.79	
7400.00	7452.64	62.51	259.11	6982.76	28.60	12.71	263.66	524.40	475.26	10.67	
7500.00	7592.62	73.24	262.58	7035.41	28.30	10.50	261.58	530.35	478.91	10.31	
7600.00	7737.09	84.37	265.77	7063.42	29.06	10.62	260.26	533.26	478.38	9.72	
7700.00	7860.26	90.00	267.32	7067.00	30.21	12.13	259.94	532.39	474.60	9.21	
7800.00	7960.24	90.00	267.32	7067.00	31.29	12.65	259.90	530.61	470.71	8.86	
7900.00	8060.22	90.00	267.32	7067.00	32.56	13.20	259.87	528.84	466.33	8.46	
8000.00	8160.21	90.00	267.32	7067.00	34.01	13.79	259.84	527.06	461.63	8.06	
8100.00	8260.19	90.00	267.32	7067.00	35.62	14.40	259.80	525.29	456.58	7.65	
8200.00	8360.18	90.00	267.32	7067.00	37.37	15.02	259.77	523.51	451.39	7.26	
8300.00	8460.16	90.00	267.32	7067.00	39.24	15.67	259.73	521.74	445.81	6.87	
8400.00	8560.14	90.00	267.32	7067.00	41.21	16.32	259.70	519.96	440.06	6.51	
8500.00	8660.13	90.00	267.32	7067.00	43.27	16.98	259.66	518.19	434.22	6.17	
8600.00	8760.11	90.00	267.32	7067.00	45.41	17.65	259.62	516.41	428.18	5.85	
8700.00	8860.09	90.00	267.32	7067.00	47.62	18.33	259.59	514.64	422.07	5.56	
8800.00	8960.08	90.00	267.32	7067.00	49.89	19.00	259.55	512.86	415.85	5.29	
8900.00	9060.06	90.00	267.32	7067.00	52.21	19.69	259.51	511.09	409.53	5.03	
9000.00	9160.05	90.00	267.32	7067.00	54.58	20.37	259.48	509.32	403.11	4.80	
9100.00	9260.03	90.00	267.32	7067.00	56.98	21.06	259.44	507.54	396.60	4.57	
9200.00	9360.01	90.00	267.32	7067.00	59.42	21.75	259.40	505.77	390.03	4.37	
9300.00	9460.00	90.00	267.32	7067.00	61.89	22.45	259.36	504.00	383.40	4.18	
9400.00	9559.98	90.00	267.32	7067.00	64.39	23.14	259.33	502.23	376.70	4.00	
9500.00	9659.96	90.00	267.32	7067.00	66.91	23.84	259.29	500.45	369.94	3.83	



## 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
9600.00	9759.95	90.00	267.32	7067.00	69.46	24.54	259.25	498.68	363.14	3.68	
9700.00	9859.93	90.00	267.32	7067.00	72.02	25.24	259.21	496.91	356.31	3.53	
9800.00	9959.92	90.00	267.32	7067.00	74.60	25.94	259.17	495.14	349.45	3.40	
9900.00	10059.90	90.00	267.32	7067.00	77.20	26.64	259.13	493.37	342.56	3.27	
10000.00	10159.88	90.00	267.32	7067.00	79.81	27.35	259.09	491.60	335.65	3.15	
10100.00	10259.87	90.00	267.32	7067.00	82.43	28.05	259.05	489.82	328.72	3.04	
10200.00	10359.85	90.00	267.32	7067.00	85.06	28.76	259.01	488.05	321.77	2.94	
10300.00	10459.83	90.00	267.32	7067.00	87.71	29.46	258.97	486.28	314.80	2.84	
10400.00	10559.82	90.00	267.32	7067.00	90.36	30.17	258.93	484.51	307.82	2.74	
10500.00	10659.80	90.00	267.32	7067.00	93.02	30.88	258.89	482.74	300.82	2.65	
10600.00	10759.79	90.00	267.32	7067.00	95.69	31.59	258.85	480.97	293.82	2.57	
10700.00	10859.77	90.00	267.32	7067.00	98.37	32.30	258.81	479.20	286.80	2.49	SF(Lo)
10800.00	10959.75	90.00	267.32	7067.00	101.06	33.02	258.77	477.43	279.77	2.42	SF(Lo)
10900.00	11059.74	90.00	267.32	7067.00	103.75	33.73	258.72	475.67	272.74	2.34	SF(Lo)
11000.00	11159.72	90.00	267.32	7067.00	106.44	34.44	258.68	473.90	265.69	2.28	SF(Lo)
11100.00	11259.70	90.00	267.32	7067.00	109.15	35.16	258.64	472.13	258.64	2.21	SF(Lo)
11200.00	11359.69	90.00	267.32	7067.00	111.85	35.87	258.59	470.36	251.59	2.15	SF(Lo)
11300.00	11459.67	90.00	267.32	7067.00	114.56	36.59	258.55	468.59	244.53	2.09	SF(Lo)
11400.00	11559.66	90.00	267.32	7067.00	117.28	37.30	258.51	466.82	237.46	2.04	SF(Lo)
11500.00	11659.64	90.00	267.32	7067.00	120.00	38.02	258.46	465.06	230.39	1.98	SF(Lo)
11600.00	11759.62	90.00	267.32	7067.00	122.72	38.74	258.42	463.29	223.31	1.93	SF(Lo)
11700.00	11859.61	90.00	267.32	7067.00	125.45	39.45	258.37	461.52	216.23	1.88	SF(Lo)
11800.00	11959.59	90.00	267.32	7067.00	128.18	40.17	258.33	459.76	209.15	1.83	SF(Lo)
11900.00	12059.57	90.00	267.32	7067.00	130.91	40.89	258.28	457.99	202.07	1.79	SF(Lo)
12000.00	12159.56	90.00	267.32	7067.00	133.64	41.61	258.24	456.22	194.98	1.75	SF(Lo)
12100.00	12259.54	90.00	267.32	7067.00	136.38	42.33	258.19	454.46	187.89	1.70	SF(Lo)
12200.00	12359.53	90.00	267.32	7067.00	139.12	43.05	258.14	452.69	180.80	1.66	SF(Lo)
12300.00	12459.51	90.00	267.32	7067.00	141.87	43.77	258.10	450.93	173.71	1.63	SF(Lo)
12400.00	12559.49	90.00	267.32	7067.00	144.61	44.49	258.05	449.16	166.62	1.59	SF(Lo)
12500.00	12659.48	90.00	267.32	7067.00	147.36	45.21	258.00	447.40	159.52	1.55	SF(Lo)
12600.00	12759.46	90.00	267.32	7067.00	150.11	45.93	257.95	445.64	152.43	1.52	SF(Lo)
12700.00	12859.44	90.00	267.32	7067.00	152.86	46.66	257.90	443.87	145.34	1.49	SF(Med)
12800.00	12959.43	90.00	267.32	7067.00	155.61	47.38	257.85	442.11	138.24	1.45	SF(Med)
12900.00	13059.41	90.00	267.32	7067.00	158.37	48.10	257.81	440.35	131.15	1.42	SF(Med)
13000.00	13159.40	90.00	267.32	7067.00	161.12	48.82	257.76	438.58	124.05	1.39	SF(Med)
13100.00	13259.38	90.00	267.32	7067.00	163.88	49.55	257.71	436.82	116.96	1.37	SF(Med)
13200.00	13359.36	90.00	267.32	7067.00	166.64	50.27	257.65	435.06	109.87	1.34	SF(Med)
13300.00	13459.35	90.00	267.32	7067.00	169.40	50.99	257.60	433.30	102.77	1.31	SF(Med)
13400.00	13559.33	90.00	267.32	7067.00	172.16	51.72	257.55	431.53	95.68	1.28	SF(Med)
13500.00	13659.31	90.00	267.32	7067.00	174.92	52.44	257.50	429.77	88.59	1.26	SF(Med)
13600.00	13759.30	90.00	267.32	7067.00	177.69	53.16	257.45	428.01	81.50	1.24	SF(Med)
13700.00	13859.28	90.00	267.32	7067.00	180.45	53.89	257.40	426.25	74.42	1.21	SF(Med)
13800.00	13959.27	90.00	267.32	7067.00	183.22	54.61	257.34	424.49	67.33	1.19	SF(Med)
13900.00	14059.25	90.00	267.32	7067.00	185.99	55.34	257.29	422.73	60.25	1.17	SF(Med)
14000.00	14159.23	90.00	267.32	7067.00	188.76	56.06	257.24	420.97	53.16	1.14	SF(Med)
14100.00	14259.22	90.00	267.32	7067.00	191.53	56.79	257.18	419.21	46.09	1.12	SF(Med)
14200.00	14359.20	90.00	267.32	7067.00	194.30	57.51	257.13	417.46	39.01	1.10	SF(Med)
14300.00	14459.18	90.00	267.32	7067.00	197.07	58.24	257.07	415.70	31.93	1.08	SF(Med)
14400.00	14559.17	90.00	267.32	7067.00	199.84	58.97	257.01	413.94	24.86	1.06	SF(Med)
14500.00	14659.15	90.00	267.32	7067.00	202.61	59.69	256.96	412.18	17.79	1.05	SF(Med)
14600.00	14759.14	90.00	267.32	7067.00	205.39	60.42	256.90	410.43	10.72	1.03	SF(Med)
14700.00	14859.12	90.00	267.32	7067.00	208.16	61.14	256.84	408.67	3.66	1.01	SF(Med)
14800.00	14959.10	90.00	267.32	7067.00	210.93	61.87	256.79	406.91	-3.40	0.99	SF(Hi)
14900.00	15059.09	90.00	267.32	7067.00	213.71	62.60	256.73	405.16	-10.46	0.97	SF(Hi)
15000.00	15159.07	90.00	267.32	7067.00	216.49	63.32	256.67	403.40	-17.52	0.96	SF(Hi)
15100.00	15259.05	90.00	267.32	7067.00	219.26	64.05	256.61	401.65	-24.57	0.94	SF(Hi)
15200.00	15359.04	90.00	267.32	7067.00	222.04	64.78	256.55	399.89	-31.62	0.93	SF(Hi)
15286.68	15445.70	90.00	267.32	7067.00	224.45	65.41	256.50	398.37	-37.72	0.91	SF(Hi)



## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	400.00	0.00	0.00	400.00	0.79	0.79	180.08	60.11	57.81	26.11	CC (Lo)
500.00	499.19	0.98	141.02	499.19	1.00	1.00	179.83	60.45	57.71	22.08	CC (Lo)
600.00	597.46	2.95	141.02	597.40	1.18	1.18	177.91	63.16	60.01	20.09	CC (Lo)
700.00	695.39	4.91	141.02	695.09	1.39	1.38	174.54	68.76	65.19	19.26	
800.00	792.74	6.85	141.02	791.93	1.62	1.58	170.45	77.52	73.51	19.31	
900.00	889.37	8.79	141.02	887.65	1.89	1.79	39.36	89.31	84.87	20.11	
1000.00	985.50	10.71	141.02	982.39	2.21	2.00	36.45	102.09	97.25	21.09	
1100.00	1081.18	12.62	141.02	1076.09	2.57	2.22	34.56	115.31	110.05	21.91	
1200.00	1176.42	14.53	141.02	1168.66	2.99	2.45	33.39	128.85	123.14	22.57	
1300.00	1271.22	16.42	141.02	1260.02	3.46	2.69	32.73	142.63	136.45	23.08	
1400.00	1365.58	18.31	141.02	1350.07	4.00	2.93	32.45	156.59	149.92	23.46	
1500.00	1459.50	20.19	141.02	1438.74	4.59	3.19	32.46	170.72	163.51	23.69	
1600.00	1557.90	20.44	141.02	1530.95	5.25	3.48	32.84	183.85	176.01	23.45	
1700.00	1657.30	20.44	141.02	1624.09	5.94	3.78	33.74	194.14	185.59	22.69	
1800.00	1756.85	20.44	141.02	1717.37	6.64	4.08	35.02	202.57	193.24	21.72	
1900.00	1856.39	20.44	141.02	1810.64	7.35	4.39	36.22	211.03	200.91	20.84	
2000.00	1955.94	20.44	141.02	1903.92	8.06	4.70	37.33	219.59	208.58	19.94	
2100.00	2055.49	20.44	141.02	1997.20	8.78	5.02	38.36	228.21	216.30	19.15	
2200.00	2155.03	20.44	141.02	2090.47	9.50	5.34	39.31	236.91	224.06	18.44	
2300.00	2254.58	20.44	141.02	2183.75	10.22	5.66	40.20	245.66	231.87	17.81	
2400.00	2354.13	20.44	141.02	2277.03	10.94	5.98	41.02	254.47	239.73	17.25	
2500.00	2453.67	20.44	141.02	2370.30	11.66	6.30	41.79	263.33	247.62	16.76	
2600.00	2553.22	20.44	141.02	2463.58	12.39	6.62	42.51	272.24	255.52	16.29	
2700.00	2652.77	20.44	141.02	2556.86	13.12	6.95	43.18	281.18	263.43	15.84	
2800.00	2752.32	20.44	141.02	2650.13	13.84	7.27	43.81	290.16	271.35	15.43	
2900.00	2851.86	20.44	141.02	2743.41	14.57	7.60	44.40	299.17	279.30	15.06	
3000.00	2951.41	20.44	141.02	2836.69	15.30	7.92	44.96	308.21	287.28	14.73	
3100.00	3050.96	20.44	141.02	2929.96	16.03	8.25	45.49	317.28	295.27	14.42	
3200.00	3150.50	20.44	141.02	3023.24	16.76	8.58	45.98	326.37	303.29	14.14	
3300.00	3250.05	20.44	141.02	3116.52	17.49	8.91	46.45	335.49	311.33	13.89	
3400.00	3349.60	20.44	141.02	3209.79	18.22	9.23	46.90	344.62	319.38	13.65	
3500.00	3449.14	20.44	141.02	3303.07	18.95	9.56	47.32	353.78	327.45	13.44	
3600.00	3548.69	20.44	141.02	3396.35	19.69	9.89	47.72	362.96	335.54	13.24	
3700.00	3648.24	20.44	141.02	3489.62	20.42	10.22	48.10	372.15	343.64	13.05	
3800.00	3747.78	20.44	141.02	3582.90	21.15	10.55	48.47	381.36	351.75	12.88	
3900.00	3847.33	20.44	141.02	3676.18	21.88	10.88	48.81	390.58	359.87	12.72	
4000.00	3946.88	20.44	141.02	3769.45	22.61	11.21	49.14	399.82	368.01	12.57	
4100.00	4046.42	20.44	141.02	3862.73	23.35	11.54	49.46	409.06	376.14	12.42	
4200.00	4145.97	20.44	141.02	3956.01	24.08	11.87	49.76	418.32	384.28	12.29	
4300.00	4245.52	20.44	141.02	4049.28	24.81	12.20	50.05	427.59	392.42	12.16	
4400.00	4345.06	20.44	141.02	4142.56	25.55	12.53	50.32	436.88	400.57	12.03	
4500.00	4444.61	20.44	141.02	4235.84	26.28	12.86	50.59	446.17	408.72	11.91	
4600.00	4544.16	20.44	141.02	4329.11	27.01	13.19	50.84	455.47	416.87	11.80	
4700.00	4643.70	20.44	141.02	4422.39	27.75	13.52	51.08	464.78	425.03	11.70	
4800.00	4743.25	20.44	141.02	4515.67	28.48	13.86	51.32	474.09	433.20	11.59	
4900.00	4842.80	20.44	141.02	4608.94	29.21	14.19	51.54	483.42	441.38	11.50	
5000.00	4942.35	20.44	141.02	4702.22	29.95	14.52	51.76	492.75	449.56	11.41	
5100.00	5041.89	20.44	141.02	4795.50	30.68	14.85	51.97	502.08	457.75	11.32	
5200.00	5141.44	20.44	141.02	4888.77	31.41	15.18	52.17	511.43	465.94	11.24	
5300.00	5240.99	20.44	141.02	4982.05	32.15	15.51	52.36	520.78	474.14	11.17	
5400.00	5340.53	20.44	141.02	5075.33	32.88	15.84	52.55	530.13	482.34	11.09	
5500.00	5440.08	20.44	141.02	5168.60	33.62	16.18	52.73	539.50	490.55	11.02	
5600.00	5539.63	20.44	141.02	5261.88	34.35	16.51	52.90	548.86	498.76	10.96	
5700.00	5639.17	20.44	141.02	5355.16	35.08	16.84	53.07	558.23	506.98	10.89	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
5800.00	5738.72	20.44	141.02	5448.43	35.82	17.17	53.23	567.61	515.20	10.83	
5900.00	5838.27	20.44	141.02	5541.71	36.55	17.50	53.39	576.99	523.42	10.77	
6000.00	5937.81	20.44	141.02	5634.99	37.29	17.83	53.54	586.37	531.65	10.71	
6100.00	6037.36	20.44	141.02	5728.26	38.02	18.17	53.69	595.76	539.88	10.66	
6200.00	6136.91	20.44	141.02	5821.54	38.75	18.50	53.83	605.15	548.11	10.61	
6300.00	6236.45	20.44	141.02	5914.82	39.49	18.83	53.97	614.55	556.35	10.56	
6400.00	6335.99	20.44	141.02	6008.08	40.22	19.16	40.95	623.66	564.52	10.55	
6500.00	6434.61	20.44	141.02	6100.50	40.95	19.49	6.20	631.49	572.40	10.69	
6600.00	6527.70	18.07	154.61	6188.19	41.41	19.78	330.30	638.82	580.77	11.01	
6700.00	6621.45	16.79	179.48	6277.76	41.26	19.94	309.41	646.71	589.98	11.40	
6800.00	6718.50	18.74	204.32	6370.30	40.50	19.97	297.88	655.11	599.72	11.83	
6900.00	6819.29	23.39	222.83	6464.44	39.14	19.82	290.67	663.89	609.93	12.30	
7000.00	6924.28	29.75	235.19	6558.37	37.22	19.44	285.61	672.81	620.22	12.79	
7100.00	7033.90	37.20	243.63	6649.78	34.85	18.74	281.79	681.60	629.88	13.18	
7200.00	7148.45	45.43	249.76	6735.78	32.33	17.55	278.76	689.91	638.54	13.43	
7300.00	7268.09	54.29	254.52	6812.85	30.14	15.65	276.32	697.32	645.71	13.51	
7400.00	7392.70	63.67	258.45	6877.01	28.77	13.07	274.37	703.41	650.83	13.38	
7500.00	7521.80	73.49	261.91	6924.10	28.47	10.71	272.88	707.76	653.35	13.01	
7600.00	7654.53	83.64	265.11	6950.39	29.12	10.52	271.85	709.99	652.83	12.42	
7700.00	7775.98	90.00	267.03	6955.00	30.23	12.17	271.53	709.54	649.71	11.86	
7800.00	7875.97	90.00	267.03	6955.00	31.29	12.70	271.54	708.23	646.29	11.43	
7900.00	7975.96	90.00	267.03	6955.00	32.54	13.27	271.54	706.92	642.29	10.94	
8000.00	8075.95	90.00	267.03	6955.00	33.97	13.88	271.54	705.61	638.08	10.45	
8100.00	8175.95	90.00	267.03	6955.00	35.56	14.51	271.55	704.30	633.33	9.92	
8200.00	8275.94	90.00	267.03	6955.00	37.29	15.16	271.55	702.99	628.54	9.44	
8300.00	8375.93	90.00	267.03	6955.00	39.13	15.82	271.55	701.68	623.49	8.97	
8400.00	8475.92	90.00	267.03	6955.00	41.09	16.49	271.55	700.37	617.97	8.50	
8500.00	8575.91	90.00	267.03	6955.00	43.13	17.17	271.56	699.07	612.50	8.08	
8600.00	8675.90	90.00	267.03	6955.00	45.26	17.86	271.56	697.76	606.77	7.67	
8700.00	8775.89	90.00	267.03	6955.00	47.46	18.55	271.56	696.45	601.01	7.30	
8800.00	8875.89	90.00	267.03	6955.00	49.71	19.24	271.57	695.14	595.16	6.95	
8900.00	8975.88	90.00	267.03	6955.00	52.02	19.94	271.57	693.83	589.21	6.63	
9000.00	9075.87	90.00	267.03	6955.00	54.38	20.64	271.57	692.52	583.16	6.33	
9100.00	9175.86	90.00	267.03	6955.00	56.78	21.34	271.58	691.21	577.02	6.05	
9200.00	9275.85	90.00	267.03	6955.00	59.21	22.04	271.58	689.90	570.80	5.79	
9300.00	9375.84	90.00	267.03	6955.00	61.67	22.74	271.58	688.60	564.52	5.55	
9400.00	9475.83	90.00	267.03	6955.00	64.16	23.45	271.58	687.29	558.18	5.32	
9500.00	9575.83	90.00	267.03	6955.00	66.68	24.15	271.59	685.98	551.79	5.11	
9600.00	9675.82	90.00	267.03	6955.00	69.22	24.86	271.59	684.67	545.37	4.92	
9700.00	9775.81	90.00	267.03	6955.00	71.78	25.56	271.59	683.36	538.90	4.73	
9800.00	9875.80	90.00	267.03	6955.00	74.35	26.27	271.60	682.05	532.41	4.56	
9900.00	9975.79	90.00	267.03	6955.00	76.94	26.98	271.60	680.74	525.88	4.40	
10000.00	10075.78	90.00	267.03	6955.00	79.55	27.69	271.60	679.43	519.33	4.24	
10100.00	10175.77	90.00	267.03	6955.00	82.17	28.40	271.61	678.12	512.76	4.10	
10200.00	10275.77	90.00	267.03	6955.00	84.80	29.11	271.61	676.82	506.16	3.97	
10300.00	10375.76	90.00	267.03	6955.00	87.44	29.82	271.61	675.51	499.55	3.84	
10400.00	10475.75	90.00	267.03	6955.00	90.09	30.53	271.62	674.20	492.92	3.72	
10500.00	10575.74	90.00	267.03	6955.00	92.75	31.25	271.62	672.89	486.27	3.61	
10600.00	10675.73	90.00	267.03	6955.00	95.41	31.96	271.62	671.58	479.61	3.50	
10700.00	10775.72	90.00	267.03	6955.00	98.09	32.68	271.62	670.27	472.93	3.40	
10800.00	10875.71	90.00	267.03	6955.00	100.77	33.39	271.63	668.96	466.25	3.30	
10900.00	10975.71	90.00	267.03	6955.00	103.46	34.11	271.63	667.65	459.55	3.21	
11000.00	11075.70	90.00	267.03	6955.00	106.15	34.82	271.63	666.35	452.84	3.12	
11100.00	11175.69	90.00	267.03	6955.00	108.85	35.54	271.64	665.04	446.12	3.04	
11200.00	11275.68	90.00	267.03	6955.00	111.56	36.26	271.64	663.73	439.39	2.96	
11300.00	11375.67	90.00	267.03	6955.00	114.27	36.97	271.64	662.42	432.66	2.88	
11400.00	11475.66	90.00	267.03	6955.00	116.98	37.69	271.65	661.11	425.92	2.81	
11500.00	11575.65	90.00	267.03	6955.00	119.70	38.41	271.65	659.80	419.17	2.74	

## 5D Anti-Collision Report

Secondary Well: Goetzel 34N-30C-M (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Sec MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	CC (US ft)	ES (US ft)	SF	Risk
11600.00	11675.65	90.00	267.03	6955.00	122.42	39.13	271.65	658.49	412.41	2.68	
11700.00	11775.64	90.00	267.03	6955.00	125.14	39.85	271.66	657.18	405.65	2.61	
11800.00	11875.63	90.00	267.03	6955.00	127.87	40.57	271.66	655.88	398.88	2.55	
11900.00	11975.62	90.00	267.03	6955.00	130.60	41.29	271.66	654.57	392.10	2.49	SF(Lo)
12000.00	12075.61	90.00	267.03	6955.00	133.33	42.01	271.67	653.26	385.32	2.44	SF(Lo)
12100.00	12175.60	90.00	267.03	6955.00	136.07	42.73	271.67	651.95	378.54	2.38	SF(Lo)
12200.00	12275.59	90.00	267.03	6955.00	138.81	43.45	271.67	650.64	371.75	2.33	SF(Lo)
12300.00	12375.59	90.00	267.03	6955.00	141.55	44.17	271.68	649.33	364.96	2.28	SF(Lo)
12400.00	12475.58	90.00	267.03	6955.00	144.29	44.90	271.68	648.02	358.16	2.24	SF(Lo)
12500.00	12575.57	90.00	267.03	6955.00	147.04	45.62	271.68	646.71	351.36	2.19	SF(Lo)
12600.00	12675.56	90.00	267.03	6955.00	149.79	46.34	271.69	645.41	344.55	2.15	SF(Lo)
12700.00	12775.55	90.00	267.03	6955.00	152.53	47.06	271.69	644.10	337.75	2.10	SF(Lo)
12800.00	12875.54	90.00	267.03	6955.00	155.29	47.79	271.69	642.79	330.94	2.06	SF(Lo)
12900.00	12975.53	90.00	267.03	6955.00	158.04	48.51	271.70	641.48	324.12	2.02	SF(Lo)
13000.00	13075.53	90.00	267.03	6955.00	160.79	49.23	271.70	640.17	317.30	1.98	SF(Lo)
13100.00	13175.52	90.00	267.03	6955.00	163.55	49.96	271.70	638.86	310.48	1.95	SF(Lo)
13200.00	13275.51	90.00	267.03	6955.00	166.31	50.68	271.71	637.55	303.66	1.91	SF(Lo)
13300.00	13375.50	90.00	267.03	6955.00	169.07	51.41	271.71	636.24	296.84	1.87	SF(Lo)
13400.00	13475.49	90.00	267.03	6955.00	171.83	52.13	271.71	634.94	290.01	1.84	SF(Lo)
13500.00	13575.48	90.00	267.03	6955.00	174.59	52.86	271.72	633.63	283.18	1.81	SF(Lo)
13600.00	13675.47	90.00	267.03	6955.00	177.35	53.58	271.72	632.32	276.35	1.78	SF(Lo)
13700.00	13775.47	90.00	267.03	6955.00	180.11	54.31	271.73	631.01	269.51	1.75	SF(Lo)
13800.00	13875.46	90.00	267.03	6955.00	182.88	55.03	271.73	629.70	262.68	1.72	SF(Lo)
13900.00	13975.45	90.00	267.03	6955.00	185.65	55.76	271.73	628.39	255.84	1.69	SF(Lo)
14000.00	14075.44	90.00	267.03	6955.00	188.41	56.48	271.74	627.08	249.00	1.66	SF(Lo)
14100.00	14175.43	90.00	267.03	6955.00	191.18	57.21	271.74	625.77	242.16	1.63	SF(Lo)
14200.00	14275.42	90.00	267.03	6955.00	193.95	57.94	271.74	624.47	235.31	1.60	SF(Lo)
14300.00	14375.41	90.00	267.03	6955.00	196.72	58.66	271.75	623.16	228.47	1.58	SF(Lo)
14400.00	14475.41	90.00	267.03	6955.00	199.49	59.39	271.75	621.85	221.62	1.55	SF(Lo)
14500.00	14575.40	90.00	267.03	6955.00	202.26	60.12	271.75	620.54	214.78	1.53	SF(Lo)
14600.00	14675.39	90.00	267.03	6955.00	205.03	60.84	271.76	619.23	207.93	1.51	SF(Lo)
14700.00	14775.38	90.00	267.03	6955.00	207.81	61.57	271.76	617.92	201.08	1.48	SF(Med)
14800.00	14875.37	90.00	267.03	6955.00	210.58	62.30	271.77	616.61	194.23	1.46	SF(Med)
14900.00	14975.36	90.00	267.03	6955.00	213.35	63.02	271.77	615.30	187.37	1.44	SF(Med)
15000.00	15075.35	90.00	267.03	6955.00	216.13	63.75	271.77	614.00	180.52	1.42	SF(Med)
15100.00	15175.35	90.00	267.03	6955.00	218.90	64.48	271.78	612.69	173.66	1.40	SF(Med)
15200.00	15275.34	90.00	267.03	6955.00	221.68	65.21	271.78	611.38	166.81	1.38	SF(Med)
15286.68	15362.01	90.00	267.03	6955.00	224.09	65.84	271.78	610.24	160.86	1.36	SF(Med)
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	180.15	80.15	79.42	109.30	
100.00	100.00	0.00	0.00	100.00	0.11	0.11	180.15	80.15	79.20	84.02	
200.00	200.00	0.00	0.00	200.00	0.34	0.34	180.15	80.15	78.75	57.11	
300.00	300.00	0.00	0.00	300.00	0.56	0.56	180.15	80.15	78.30	43.25	
400.00	397.75	1.95	144.12	397.73	0.76	0.76	179.46	81.54	79.26	35.85	
500.00	495.27	3.91	144.12	495.12	0.96	0.95	177.53	85.76	83.06	31.79	
600.00	592.34	5.85	144.12	591.84	1.18	1.15	174.72	92.98	89.84	29.66	
700.00	688.75	7.77	144.12	687.55	1.44	1.36	171.47	103.38	99.79	28.80	
800.00	784.27	9.69	144.12	781.97	1.75	1.58	168.16	117.09	113.05	29.00	
900.00	878.80	11.58	144.12	874.87	2.10	1.80	38.07	133.85	129.36	29.86	
1000.00	972.68	13.45	144.12	966.52	2.50	2.03	35.83	151.53	146.63	30.94	
1100.00	1065.99	15.32	144.12	1056.89	2.95	2.27	34.34	169.60	164.27	31.81	
1200.00	1158.73	17.17	144.12	1145.92	3.45	2.51	33.41	187.94	182.15	32.48	
1300.00	1250.90	19.02	144.12	1233.53	4.01	2.76	32.88	206.48	200.21	32.94	
1400.00	1342.51	20.85	144.12	1319.65	4.62	3.02	32.65	225.16	218.40	33.28	
1500.00	1440.85	20.88	144.12	1411.54	5.31	3.32	32.78	242.52	235.17	32.97	

## 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
1600.00	1539.75	20.88	144.12	1503.93	6.02	3.63	33.33	257.01	249.00	32.08	
1700.00	1638.94	20.88	144.12	1596.62	6.74	3.95	34.25	268.67	259.92	30.73	
1800.00	1738.28	20.88	144.12	1689.43	7.47	4.26	35.47	278.50	268.98	29.26	
1900.00	1837.63	20.88	144.12	1782.25	8.19	4.58	36.64	288.40	278.07	27.91	
2000.00	1936.97	20.88	144.12	1875.06	8.93	4.91	37.72	298.42	287.21	26.63	
2100.00	2036.31	20.88	144.12	1967.88	9.66	5.23	38.74	308.53	296.40	25.43	
2200.00	2135.65	20.88	144.12	2060.70	10.40	5.56	39.69	318.73	305.66	24.39	
2300.00	2235.00	20.88	144.12	2153.52	11.13	5.88	40.59	329.02	315.00	23.46	
2400.00	2334.34	20.88	144.12	2246.33	11.87	6.21	41.43	339.38	324.39	22.65	
2500.00	2433.68	20.88	144.12	2339.15	12.61	6.54	42.21	349.81	333.85	21.92	
2600.00	2533.02	20.88	144.12	2431.97	13.35	6.87	42.96	360.30	343.33	21.24	
2700.00	2632.37	20.88	144.12	2524.79	14.09	7.20	43.66	370.84	352.86	20.62	
2800.00	2731.71	20.88	144.12	2617.60	14.83	7.53	44.32	381.44	362.41	20.04	
2900.00	2831.05	20.88	144.12	2710.42	15.57	7.86	44.95	392.09	371.99	19.50	
3000.00	2930.39	20.88	144.12	2803.24	16.31	8.19	45.54	402.78	381.60	19.02	
3100.00	3029.74	20.88	144.12	2896.06	17.05	8.52	46.11	413.51	391.25	18.57	
3200.00	3129.08	20.88	144.12	2988.87	17.79	8.86	46.64	424.28	400.93	18.17	
3300.00	3228.42	20.88	144.12	3081.69	18.54	9.19	47.15	435.08	410.64	17.80	
3400.00	3327.76	20.88	144.12	3174.51	19.28	9.52	47.63	445.92	420.38	17.46	
3500.00	3427.11	20.88	144.12	3267.32	20.02	9.86	48.09	456.78	430.14	17.15	
3600.00	3526.45	20.88	144.12	3360.14	20.76	10.19	48.53	467.68	439.93	16.86	
3700.00	3625.79	20.88	144.12	3452.96	21.51	10.52	48.95	478.60	449.75	16.59	
3800.00	3725.13	20.88	144.12	3545.78	22.25	10.86	49.35	489.54	459.58	16.34	
3900.00	3824.48	20.88	144.12	3638.59	22.99	11.19	49.73	500.50	469.43	16.11	
4000.00	3923.82	20.88	144.12	3731.41	23.74	11.52	50.10	511.49	479.31	15.89	
4100.00	4023.16	20.88	144.12	3824.23	24.48	11.86	50.45	522.50	489.19	15.69	
4200.00	4122.50	20.88	144.12	3917.05	25.22	12.19	50.79	533.52	499.08	15.49	
4300.00	4221.85	20.88	144.12	4009.86	25.97	12.53	51.11	544.57	508.99	15.31	
4400.00	4321.19	20.88	144.12	4102.68	26.71	12.86	51.42	555.63	518.90	15.13	
4500.00	4420.53	20.88	144.12	4195.50	27.46	13.20	51.72	566.70	528.81	14.96	
4600.00	4519.87	20.88	144.12	4288.31	28.20	13.53	52.00	577.79	538.74	14.80	
4700.00	4619.22	20.88	144.12	4381.13	28.94	13.86	52.28	588.89	548.68	14.64	
4800.00	4718.56	20.88	144.12	4473.95	29.69	14.20	52.55	600.01	558.63	14.50	
4900.00	4817.90	20.88	144.12	4566.77	30.43	14.53	52.80	611.14	568.59	14.36	
5000.00	4917.24	20.88	144.12	4659.58	31.18	14.87	53.05	622.28	578.56	14.24	
5100.00	5016.59	20.88	144.12	4752.40	31.92	15.20	53.29	633.43	588.55	14.11	
5200.00	5115.93	20.88	144.12	4845.22	32.67	15.54	53.52	644.59	598.54	14.00	
5300.00	5215.27	20.88	144.12	4938.04	33.41	15.87	53.74	655.76	608.54	13.89	
5400.00	5314.61	20.88	144.12	5030.85	34.15	16.21	53.95	666.94	618.54	13.78	
5500.00	5413.96	20.88	144.12	5123.67	34.90	16.54	54.16	678.13	628.56	13.68	
5600.00	5513.30	20.88	144.12	5216.49	35.64	16.88	54.36	689.33	638.59	13.58	
5700.00	5612.64	20.88	144.12	5309.31	36.39	17.22	54.56	700.54	648.62	13.49	
5800.00	5711.98	20.88	144.12	5402.12	37.13	17.55	54.74	711.75	658.66	13.40	
5900.00	5811.33	20.88	144.12	5494.94	37.88	17.89	54.93	722.97	668.70	13.32	
6000.00	5910.67	20.88	144.12	5587.76	38.62	18.22	55.10	734.20	678.75	13.24	
6100.00	6010.01	20.88	144.12	5680.57	39.37	18.56	55.27	745.44	688.81	13.16	
6200.00	6109.35	20.88	144.12	5773.39	40.11	18.89	55.44	756.68	698.87	13.09	
6300.00	6208.70	20.88	144.12	5866.21	40.86	19.23	55.60	767.93	708.94	13.02	
6400.00	6308.06	20.88	144.12	5959.04	41.60	19.56	42.74	778.81	718.84	12.99	
6500.00	6406.66	20.88	144.12	6051.17	42.34	19.90	8.39	787.97	727.85	13.11	
6600.00	6502.65	20.88	144.12	6140.86	43.06	20.22	332.73	795.78	736.38	13.40	
6700.00	6594.14	20.88	144.12	6226.34	43.75	20.53	311.39	803.40	745.55	13.89	
6800.00	6680.53	18.70	158.18	6307.51	44.17	20.80	299.17	812.45	756.54	14.53	
6900.00	6771.26	17.82	181.32	6393.79	43.97	20.97	291.26	823.73	770.13	15.37	
7000.00	6868.90	19.91	204.78	6486.31	43.08	21.02	285.45	837.14	785.52	16.22	
7100.00	6975.41	24.85	223.19	6584.89	41.41	20.91	280.80	852.34	802.38	17.06	
7200.00	7093.29	32.03	236.16	6688.58	38.87	20.51	276.81	868.76	819.92	17.79	
7300.00	7225.54	41.08	245.41	6794.78	35.50	19.62	273.26	885.47	837.04	18.28	

## 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
7400.00	7375.29	51.94	252.44	6897.76	31.88	17.66	270.08	901.19	852.13	18.37	
7500.00	7544.71	64.58	258.21	6986.77	29.45	13.93	267.37	914.25	863.19	17.91	
7600.00	7732.99	78.83	263.35	7045.75	29.27	10.53	265.38	922.76	868.13	16.89	
7700.00	7906.40	90.00	266.98	7060.00	30.62	12.36	264.66	924.35	865.48	15.70	
7800.00	8006.40	90.00	266.98	7060.00	31.63	12.89	264.65	923.15	862.29	15.17	
7900.00	8106.39	90.00	266.98	7060.00	32.83	13.47	264.65	921.95	858.41	14.51	
8000.00	8206.38	90.00	266.98	7060.00	34.22	14.08	264.64	920.75	854.38	13.87	
8100.00	8306.37	90.00	266.98	7060.00	35.76	14.73	264.63	919.54	849.83	13.19	
8200.00	8406.37	90.00	266.98	7060.00	37.44	15.39	264.63	918.34	845.20	12.56	
8300.00	8506.36	90.00	266.98	7060.00	39.25	16.07	264.62	917.14	840.19	11.92	
8400.00	8606.35	90.00	266.98	7060.00	41.17	16.75	264.61	915.94	834.97	11.31	
8500.00	8706.35	90.00	266.98	7060.00	43.18	17.45	264.60	914.74	829.62	10.75	
8600.00	8806.34	90.00	266.98	7060.00	45.27	18.15	264.60	913.54	824.13	10.22	
8700.00	8906.33	90.00	266.98	7060.00	47.44	18.85	264.59	912.34	818.69	9.74	
8800.00	9006.32	90.00	266.98	7060.00	49.67	19.56	264.58	911.14	812.88	9.27	
8900.00	9106.32	90.00	266.98	7060.00	51.95	20.27	264.58	909.93	806.99	8.84	
9000.00	9206.31	90.00	266.98	7060.00	54.29	20.98	264.57	908.73	801.04	8.44	
9100.00	9306.30	90.00	266.98	7060.00	56.66	21.69	264.56	907.53	795.02	8.07	
9200.00	9406.29	90.00	266.98	7060.00	59.08	22.39	264.55	906.33	788.93	7.72	
9300.00	9506.29	90.00	266.98	7060.00	61.53	23.10	264.55	905.13	782.79	7.40	
9400.00	9606.28	90.00	266.98	7060.00	64.00	23.82	264.54	903.93	776.61	7.10	
9500.00	9706.27	90.00	266.98	7060.00	66.50	24.53	264.53	902.73	770.38	6.82	
9600.00	9806.27	90.00	266.98	7060.00	69.03	25.24	264.53	901.53	764.12	6.56	
9700.00	9906.26	90.00	266.98	7060.00	71.57	25.95	264.52	900.32	757.82	6.32	
9800.00	10006.25	90.00	266.98	7060.00	74.14	26.66	264.51	899.12	751.48	6.09	
9900.00	10106.24	90.00	266.98	7060.00	76.72	27.37	264.50	897.92	745.13	5.88	
10000.00	10206.24	90.00	266.98	7060.00	79.32	28.09	264.50	896.72	738.71	5.68	
10100.00	10306.23	90.00	266.98	7060.00	81.93	28.80	264.49	895.52	732.26	5.49	
10200.00	10406.22	90.00	266.98	7060.00	84.55	29.52	264.48	894.32	725.79	5.31	
10300.00	10506.21	90.00	266.98	7060.00	87.18	30.23	264.47	893.12	719.29	5.14	
10400.00	10606.21	90.00	266.98	7060.00	89.82	30.95	264.47	891.92	712.79	4.98	
10500.00	10706.20	90.00	266.98	7060.00	92.48	31.66	264.46	890.72	706.26	4.83	
10600.00	10806.19	90.00	266.98	7060.00	95.14	32.38	264.45	889.52	699.72	4.69	
10700.00	10906.19	90.00	266.98	7060.00	97.81	33.09	264.44	888.31	693.17	4.55	
10800.00	11006.18	90.00	266.98	7060.00	100.48	33.81	264.44	887.11	686.61	4.42	
10900.00	11106.17	90.00	266.98	7060.00	103.16	34.53	264.43	885.91	680.04	4.30	
11000.00	11206.16	90.00	266.98	7060.00	105.85	35.24	264.42	884.71	673.46	4.19	
11100.00	11306.16	90.00	266.98	7060.00	108.55	35.96	264.41	883.51	666.87	4.08	
11200.00	11406.15	90.00	266.98	7060.00	111.25	36.68	264.41	882.31	660.27	3.97	
11300.00	11506.14	90.00	266.98	7060.00	113.95	37.40	264.40	881.11	653.66	3.87	
11400.00	11606.13	90.00	266.98	7060.00	116.66	38.12	264.39	879.91	647.05	3.78	
11500.00	11706.13	90.00	266.98	7060.00	119.37	38.84	264.38	878.71	640.43	3.69	
11600.00	11806.12	90.00	266.98	7060.00	122.09	39.56	264.38	877.51	633.80	3.60	
11700.00	11906.11	90.00	266.98	7060.00	124.81	40.28	264.37	876.31	627.17	3.52	
11800.00	12006.11	90.00	266.98	7060.00	127.54	41.00	264.36	875.10	620.53	3.44	
11900.00	12106.10	90.00	266.98	7060.00	130.26	41.72	264.35	873.90	613.89	3.36	
12000.00	12206.09	90.00	266.98	7060.00	133.00	42.44	264.34	872.70	607.24	3.29	
12100.00	12306.08	90.00	266.98	7060.00	135.73	43.16	264.34	871.50	600.59	3.22	
12200.00	12406.08	90.00	266.98	7060.00	138.46	43.89	264.33	870.30	593.93	3.15	
12300.00	12506.07	90.00	266.98	7060.00	141.20	44.61	264.32	869.10	587.27	3.08	
12400.00	12606.06	90.00	266.98	7060.00	143.94	45.33	264.31	867.90	580.61	3.02	
12500.00	12706.05	90.00	266.98	7060.00	146.69	46.05	264.30	866.70	573.94	2.96	
12600.00	12806.05	90.00	266.98	7060.00	149.43	46.78	264.30	865.50	567.27	2.90	
12700.00	12906.04	90.00	266.98	7060.00	152.18	47.50	264.29	864.30	560.59	2.85	
12800.00	13006.03	90.00	266.98	7060.00	154.93	48.22	264.28	863.10	553.91	2.79	
12900.00	13106.03	90.00	266.98	7060.00	157.68	48.95	264.27	861.90	547.23	2.74	
13000.00	13206.02	90.00	266.98	7060.00	160.43	49.67	264.27	860.70	540.55	2.69	
13100.00	13306.01	90.00	266.98	7060.00	163.19	50.39	264.26	859.50	533.87	2.64	

## 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
13200.00	13406.00	90.00	266.98	7060.00	165.94	51.12	264.25	858.30	527.18	2.59	
13300.00	13506.00	90.00	266.98	7060.00	168.70	51.84	264.24	857.09	520.49	2.55	
13400.00	13605.99	90.00	266.98	7060.00	171.46	52.57	264.23	855.89	513.80	2.50	
13500.00	13705.98	90.00	266.98	7060.00	174.22	53.29	264.22	854.69	507.10	2.46	SF(Lo)
13600.00	13805.97	90.00	266.98	7060.00	176.98	54.02	264.22	853.49	500.41	2.42	SF(Lo)
13700.00	13905.97	90.00	266.98	7060.00	179.74	54.74	264.21	852.29	493.71	2.38	SF(Lo)
13800.00	14005.96	90.00	266.98	7060.00	182.50	55.47	264.20	851.09	487.01	2.34	SF(Lo)
13900.00	14105.95	90.00	266.98	7060.00	185.27	56.20	264.19	849.89	480.31	2.30	SF(Lo)
14000.00	14205.95	90.00	266.98	7060.00	188.03	56.92	264.18	848.69	473.61	2.26	SF(Lo)
14100.00	14305.94	90.00	266.98	7060.00	190.80	57.65	264.18	847.49	466.90	2.23	SF(Lo)
14200.00	14405.93	90.00	266.98	7060.00	193.57	58.37	264.17	846.29	460.20	2.19	SF(Lo)
14300.00	14505.92	90.00	266.98	7060.00	196.33	59.10	264.16	845.09	453.49	2.16	SF(Lo)
14400.00	14605.92	90.00	266.98	7060.00	199.10	59.83	264.15	843.89	446.78	2.13	SF(Lo)
14500.00	14705.91	90.00	266.98	7060.00	201.87	60.55	264.14	842.69	440.07	2.09	SF(Lo)
14600.00	14805.90	90.00	266.98	7060.00	204.64	61.28	264.13	841.49	433.36	2.06	SF(Lo)
14700.00	14905.89	90.00	266.98	7060.00	207.42	62.01	264.13	840.29	426.65	2.03	SF(Lo)
14800.00	15005.89	90.00	266.98	7060.00	210.19	62.73	264.12	839.09	419.94	2.00	SF(Lo)
14900.00	15105.88	90.00	266.98	7060.00	212.96	63.46	264.11	837.89	413.22	1.97	SF(Lo)
15000.00	15205.87	90.00	266.98	7060.00	215.74	64.19	264.10	836.69	406.51	1.94	SF(Lo)
15100.00	15305.86	90.00	266.98	7060.00	218.51	64.92	264.09	835.49	399.79	1.92	SF(Lo)
15200.00	15405.86	90.00	266.98	7060.00	221.28	65.64	264.08	834.29	393.08	1.89	SF(Lo)
15286.68	15492.53	90.00	266.98	7060.00	223.69	66.28	264.08	833.25	387.25	1.87	SF(Lo)