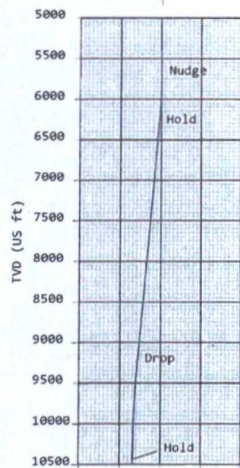




Gaucha Unit 30H
Lea Co, NM

KB-3487.50
GL-3464.00



VS (US ft)(Bearing:172.78° Scale:500USft/in)

Plan Data for Gaucha Unit 30H

Plan Point Information:									
Dogleg Severity Unit: */100.00ft									
Position offsets from Slot centre									
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	503928.73	799941.69	0.00	0.00
5700.00	0.00	0.00	5700.00	0.00	0.00	503928.73	799941.69	0.00	0.00
6300.00	6.00	25.00	6298.90	28.45	13.26	503957.18	799954.95	-26.55	1.00
9260.00	6.00	25.00	9242.69	308.86	144.02	504237.59	800085.71	-288.31	0.00
10460.00	0.00	0.00	10440.50	365.75	170.55	504294.48	800112.24	-341.42	0.50
10860.38	0.00	0.00	10840.88	365.75	170.55	504294.48	800112.24	-341.42	0.00
11060.38	20.00	172.78	11036.84	331.48	174.90	504260.21	800116.59	-306.87	10.00
11645.31	90.19	172.78	11351.00	-115.23	231.46	503813.50	800173.15	143.40	12.00
15830.77	90.19	172.78	11337.00	-4267.51	757.16	499661.22	800698.85	4328.83	0.00

Plan Data for Gaucha Unit 30H

Target Set Information:
Name: Gaucha Unit 30H
Position offsets from Slot centre
Name TVD +N/-S +E/-W Northing Easting Shape Comment
(USft) (USft) (USft) (USft) (USft)
PBHL 30H 11337.00 -4267.51 757.16 499661.22 800698.85 Cuboid

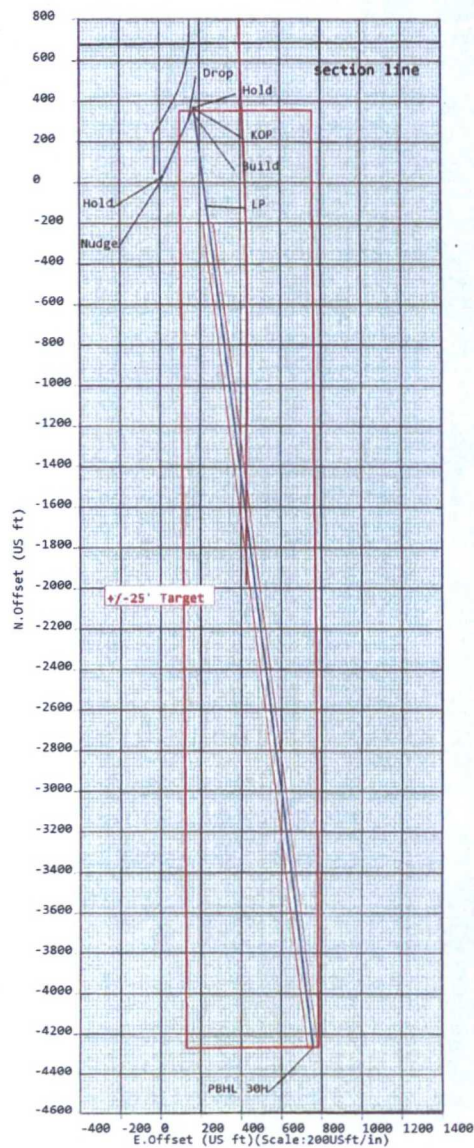
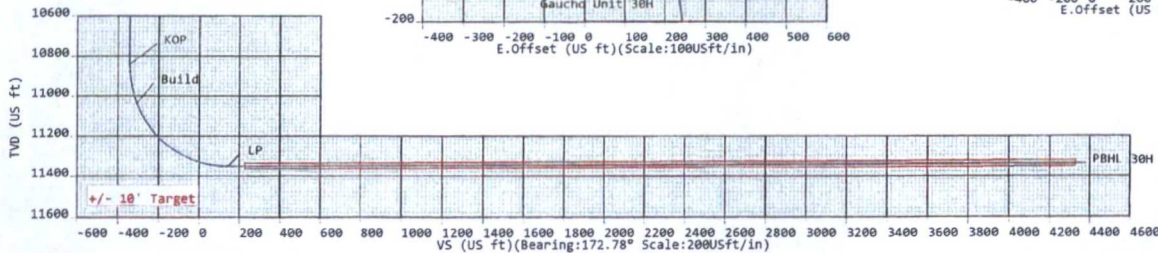
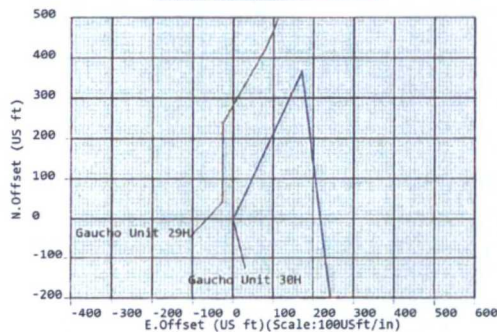
Plan Data for Gaucha Unit 30H

Slot: Gaucha Unit 30H
Position:
Offset is from Site centre
+N/-S: -346.88USft Northing: 503928.73USft Latitude: 32°22'57.3"
+E/-W: 151.07USft Easting: 799941.69USft Longitude: -103°29'44.2"
Elevation Above VRD: 3464.00USft

Plan Data for Gaucha Unit 30H

Well: Gaucha Unit 30H
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P1/V3
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 172.78°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bggn2015 48384(nT) 7.26° 60.31° 2015-02-15

Gaucha Unit 30H
Gaucha Unit 29H
Gaucha Unit #7RE





5D Plan Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Gaucha Unit 29H,30H Pad*
Well Name: *Gaucha Unit 30H*
Plan: *P1:V3*

9 December 2015





Gaucho Unit 30H

Field Name: Lea Co, NM Nad 83 NMEZ	Map Units: US ft		Company Name: Devon Energy	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)			
	Comment:			
Site: Gaucho Unit 29H,30H Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.45	
	Position:	Northing: 504275.61US ft	Latitude: 32° 23' 0.75"	
		Easting: 799790.62US ft	Longitude: -103° 29' 45.92"	
	Elevation above MSL:3463.00 US ft			
Comment:				
Slot: Gaucho Unit 30H	Position (Relative to Site Centre)			
	+N/-S: -346.88US ft	Northing: 503928.73US ft	Latitude: 32°22'57.31"	
	+E/-W: 151.07US ft	Easting: 799941.69US ft	Longitude: -103°29'44.20"	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3464.00US ft				
Comment:				
Well: Gaucho Unit 30H	Type:Main well	UWI:	Plan:P1:V3	
	File Number:	Comment:		
	Closure Distance:4334.16US ft	Closure Azimuth:169.94°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00US ft		+E/-W: 0.00US ft	Az: 172.78°
	Magnetic Parameters:			
	Model: bggm2015	Field Strength: 48384.7nT	Declination: 7.26°	Dip: 60.31°
				Date: 15/Feb/2015

Drill floor: Plan: P1:V3

Rig Height (Kelly Bushing): Elevation above MSL:
23.50us ft 3487.50us ft

Inclination: 0.00°

Azimuth: 0.00°

Target set: Gaucho Unit 30H Comment:

Target Name:	Shape:	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (USft)	Easting (USft)	Comment
PBHL 30H	Cuboid	11337.00	-4267.51	757.16	499661.22	800698.85	

Wellpath created using minimum curvature.

Tie Point:

MD: 0.00USft

Inclination:
0.00°

Azimuth: 0.00°

TVD: 0.00USft North Offset:
0.00USftEast Offset:
0.00USft

5D Plan Report

Salient Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100US ft)	B.Rate (%/100US ft)	T.Rate (%/100US ft)	T.Face (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	
5700.00	0.00	0.00	5700.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	Nudge
6300.00	6.00	25.00	6298.90	28.45	13.26	-26.55	1.00	1.00	0.00	25.00	Hold
9260.00	6.00	25.00	9242.69	308.86	144.02	-288.31	0.00	0.00	0.00	0.00	Drop
10460.00	0.00	0.00	10440.50	365.75	170.55	-341.42	0.50	-0.50	0.00	180.00	Hold
10860.38	0.00	0.00	10840.88	365.75	170.55	-341.42	0.00	0.00	0.00	0.00	KOP
11060.38	20.00	172.78	11036.84	331.48	174.90	-306.87	10.00	10.00	0.00	172.78	Build
11645.31	90.19	172.78	11351.00	-115.23	231.46	143.40	12.00	12.00	0.00	0.00	LP
15830.77	90.19	172.78	11337.00	-4267.51	757.16	4328.83	0.00	0.00	0.00	0.00	PBHL 30H

Interpolated Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100US ft)	Northing (US ft)	Easting (US ft)		Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
100.00	0.00	0.00	100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
200.00	0.00	0.00	200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
300.00	0.00	0.00	300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
400.00	0.00	0.00	400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
500.00	0.00	0.00	500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
600.00	0.00	0.00	600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
700.00	0.00	0.00	700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
800.00	0.00	0.00	800.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
900.00	0.00	0.00	900.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1000.00	0.00	0.00	1000.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1100.00	0.00	0.00	1100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1200.00	0.00	0.00	1200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1300.00	0.00	0.00	1300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1400.00	0.00	0.00	1400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1500.00	0.00	0.00	1500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1600.00	0.00	0.00	1600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1700.00	0.00	0.00	1700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1800.00	0.00	0.00	1800.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
1900.00	0.00	0.00	1900.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2000.00	0.00	0.00	2000.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2100.00	0.00	0.00	2100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2200.00	0.00	0.00	2200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2300.00	0.00	0.00	2300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2400.00	0.00	0.00	2400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2500.00	0.00	0.00	2500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2600.00	0.00	0.00	2600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2700.00	0.00	0.00	2700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2800.00	0.00	0.00	2800.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
2900.00	0.00	0.00	2900.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3000.00	0.00	0.00	3000.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3100.00	0.00	0.00	3100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3200.00	0.00	0.00	3200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3300.00	0.00	0.00	3300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3400.00	0.00	0.00	3400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3500.00	0.00	0.00	3500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3600.00	0.00	0.00	3600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3700.00	0.00	0.00	3700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3800.00	0.00	0.00	3800.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
3900.00	0.00	0.00	3900.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4000.00	0.00	0.00	4000.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4100.00	0.00	0.00	4100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4200.00	0.00	0.00	4200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4300.00	0.00	0.00	4300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4400.00	0.00	0.00	4400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		
4500.00	0.00	0.00	4500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69		

Interpolated Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	VS (US ft)	DLS (%/100US ft)	Northing (US ft)	Easting (US ft)	Comment
4600.00	0.00	0.00	4600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
4700.00	0.00	0.00	4700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
4800.00	0.00	0.00	4800.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
4900.00	0.00	0.00	4900.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5000.00	0.00	0.00	5000.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5100.00	0.00	0.00	5100.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5200.00	0.00	0.00	5200.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5300.00	0.00	0.00	5300.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5400.00	0.00	0.00	5400.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5500.00	0.00	0.00	5500.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5600.00	0.00	0.00	5600.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5700.00	0.00	0.00	5700.00	0.00	0.00	-0.00	0.00	503928.73	799941.69	
5800.00	1.00	25.00	5799.99	0.79	0.37	-0.74	1.00	503929.52	799942.06	
5900.00	2.00	25.00	5899.96	3.16	1.48	-2.95	1.00	503931.89	799943.17	
6000.00	3.00	25.00	5999.86	7.12	3.32	-6.64	1.00	503935.85	799945.01	
6100.00	4.00	25.00	6099.68	12.65	5.90	-11.81	1.00	503941.38	799947.59	
6200.00	5.00	25.00	6199.37	19.76	9.21	-18.45	1.00	503948.49	799950.90	
6300.00	6.00	25.00	6298.90	28.45	13.26	-26.55	1.00	503957.18	799954.95	
6400.00	6.00	25.00	6398.36	37.92	17.68	-35.40	0.00	503966.65	799959.37	
6500.00	6.00	25.00	6497.81	47.39	22.10	-44.24	0.00	503976.12	799963.79	
6600.00	6.00	25.00	6597.26	56.87	26.52	-53.08	0.00	503985.60	799968.21	
6700.00	6.00	25.00	6696.71	66.34	30.94	-61.93	0.00	503995.07	799972.63	
6800.00	6.00	25.00	6796.16	75.81	35.35	-70.77	0.00	504004.54	799977.04	
6900.00	6.00	25.00	6895.62	85.29	39.77	-79.61	0.00	504014.02	799981.46	
7000.00	6.00	25.00	6995.07	94.76	44.19	-88.46	0.00	504023.49	799985.88	
7100.00	6.00	25.00	7094.52	104.23	48.61	-97.30	0.00	504032.96	799990.30	
7200.00	6.00	25.00	7193.97	113.71	53.02	-106.14	0.00	504042.44	799994.71	
7300.00	6.00	25.00	7293.43	123.18	57.44	-114.99	0.00	504051.91	799999.13	
7400.00	6.00	25.00	7392.88	132.65	61.86	-123.83	0.00	504061.38	800003.55	
7500.00	6.00	25.00	7492.33	142.13	66.28	-132.67	0.00	504070.86	800007.97	
7600.00	6.00	25.00	7591.78	151.60	70.69	-141.52	0.00	504080.33	800012.38	
7700.00	6.00	25.00	7691.23	161.08	75.11	-150.36	0.00	504089.81	800016.80	
7800.00	6.00	25.00	7790.69	170.55	79.53	-159.20	0.00	504099.28	800021.22	
7900.00	6.00	25.00	7890.14	180.02	83.95	-168.04	0.00	504108.75	800025.64	
8000.00	6.00	25.00	7989.59	189.50	88.36	-176.89	0.00	504118.23	800030.05	
8100.00	6.00	25.00	8089.04	198.97	92.78	-185.73	0.00	504127.70	800034.47	
8200.00	6.00	25.00	8188.50	208.44	97.20	-194.57	0.00	504137.17	800038.89	
8300.00	6.00	25.00	8287.95	217.92	101.62	-203.42	0.00	504146.65	800043.31	
8400.00	6.00	25.00	8387.40	227.39	106.03	-212.26	0.00	504156.12	800047.72	
8500.00	6.00	25.00	8486.85	236.86	110.45	-221.10	0.00	504165.59	800052.14	
8600.00	6.00	25.00	8586.30	246.34	114.87	-229.95	0.00	504175.07	800056.56	
8700.00	6.00	25.00	8685.76	255.81	119.29	-238.79	0.00	504184.54	800060.98	
8800.00	6.00	25.00	8785.21	265.28	123.70	-247.63	0.00	504194.01	800065.39	
8900.00	6.00	25.00	8884.66	274.76	128.12	-256.48	0.00	504203.49	800069.81	
9000.00	6.00	25.00	8984.11	284.23	132.54	-265.32	0.00	504212.96	800074.23	
9100.00	6.00	25.00	9083.57	293.70	136.96	-274.16	0.00	504222.43	800078.65	
9200.00	6.00	25.00	9183.02	303.18	141.37	-283.01	0.00	504231.91	800083.06	
9260.00	6.00	25.00	9242.69	308.86	144.02	-288.31	0.00	504237.59	800085.71	
9300.00	5.80	25.00	9282.48	312.59	145.76	-291.79	0.50	504241.32	800087.45	
9400.00	5.30	25.00	9382.01	321.35	149.85	-299.97	0.50	504250.08	800091.54	
9500.00	4.80	25.00	9481.62	329.33	153.57	-307.42	0.50	504258.06	800095.26	
9600.00	4.30	25.00	9581.30	336.52	156.92	-314.13	0.50	504265.25	800098.61	
9700.00	3.80	25.00	9681.05	342.92	159.91	-320.11	0.50	504271.65	800101.60	
9800.00	3.30	25.00	9780.86	348.53	162.52	-325.34	0.50	504277.26	800104.21	
9900.00	2.80	25.00	9880.72	353.36	164.77	-329.85	0.50	504282.09	800106.46	
10000.00	2.30	25.00	9980.62	357.39	166.65	-333.61	0.50	504286.12	800108.34	
10100.00	1.80	25.00	10080.56	360.63	168.16	-336.64	0.50	504289.36	800109.85	
10200.00	1.30	25.00	10180.52	363.08	169.31	-338.92	0.50	504291.81	800111.00	
10300.00	0.80	25.00	10280.50	364.74	170.08	-340.47	0.50	504293.47	800111.77	

SD Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100US ft)	Northing (US ft)	Easting (US ft)	Comment
10400.00	0.30	25.00	10380.50	365.61	170.49	-341.29	0.50	504294.34	800112.18	
10460.00	0.00	0.00	10440.50	365.75	170.55	-341.42	0.50	504294.48	800112.24	Hold
10500.00	0.00	0.00	10480.50	365.75	170.55	-341.42	0.00	504294.48	800112.24	
10600.00	0.00	0.00	10580.50	365.75	170.55	-341.42	0.00	504294.48	800112.24	
10700.00	0.00	0.00	10680.50	365.75	170.55	-341.42	0.00	504294.48	800112.24	
10800.00	0.00	0.00	10780.50	365.75	170.55	-341.42	0.00	504294.48	800112.24	
10860.38	0.00	0.00	10840.88	365.75	170.55	-341.42	0.00	504294.48	800112.24	KOP
10900.00	3.96	172.78	10880.47	364.40	170.73	-340.05	10.00	504293.13	800112.42	
11000.00	13.96	172.78	10979.12	348.96	172.68	-324.49	10.00	504277.69	800114.37	
11060.38	20.00	172.78	11036.84	331.48	174.90	-306.87	10.00	504260.21	800116.59	Build
11100.00	24.75	172.78	11073.47	316.52	176.79	-291.79	12.00	504245.25	800118.48	
11200.00	36.75	172.78	11159.25	265.88	183.21	-240.75	12.00	504194.61	800124.90	
11300.00	48.75	172.78	11232.54	198.66	191.72	-172.99	12.00	504127.39	800133.41	
11400.00	60.75	172.78	11290.14	117.78	201.96	-91.47	12.00	504046.51	800143.65	
11500.00	72.75	172.78	11329.54	26.79	213.48	0.25	12.00	503955.52	800155.17	
11600.00	84.75	172.78	11349.01	-70.33	225.78	98.15	12.00	503858.40	800167.47	
11645.31	90.19	172.78	11351.00	-115.23	231.46	143.40	12.00	503813.50	800173.15	LP
11700.00	90.19	172.78	11350.82	-169.48	238.33	198.09	0.00	503759.25	800180.02	
11800.00	90.19	172.78	11350.49	-268.69	250.89	298.09	0.00	503660.04	800192.58	
11900.00	90.19	172.78	11350.15	-367.89	263.45	398.09	0.00	503560.84	800205.14	
12000.00	90.19	172.78	11349.82	-467.10	276.01	498.09	0.00	503461.63	800217.70	
12100.00	90.19	172.78	11349.48	-566.31	288.57	598.08	0.00	503362.42	800230.26	
12200.00	90.19	172.78	11349.15	-665.52	301.13	698.08	0.00	503263.21	800242.82	
12300.00	90.19	172.78	11348.81	-764.72	313.69	798.08	0.00	503164.01	800255.38	
12400.00	90.19	172.78	11348.48	-863.93	326.25	898.08	0.00	503064.80	800267.94	
12500.00	90.19	172.78	11348.14	-963.14	338.81	998.08	0.00	502965.59	800280.50	
12600.00	90.19	172.78	11347.81	-1062.35	351.37	1098.08	0.00	502866.38	800293.06	
12700.00	90.19	172.78	11347.47	-1161.55	363.93	1198.08	0.00	502767.18	800305.62	
12800.00	90.19	172.78	11347.14	-1260.76	376.49	1298.08	0.00	502667.97	800318.18	
12900.00	90.19	172.78	11346.81	-1359.97	389.05	1398.08	0.00	502568.76	800330.74	
13000.00	90.19	172.78	11346.47	-1459.18	401.61	1498.08	0.00	502469.55	800343.30	
13100.00	90.19	172.78	11346.14	-1558.38	414.17	1598.08	0.00	502370.35	800355.86	
13200.00	90.19	172.78	11345.80	-1657.59	426.73	1698.08	0.00	502271.14	800368.42	
13300.00	90.19	172.78	11345.47	-1756.80	439.29	1798.08	0.00	502171.93	800380.98	
13400.00	90.19	172.78	11345.13	-1856.01	451.85	1898.08	0.00	502072.72	800393.54	
13500.00	90.19	172.78	11344.80	-1955.21	464.41	1998.08	0.00	501973.52	800406.10	
13600.00	90.19	172.78	11344.46	-2054.42	476.97	2098.08	0.00	501874.31	800418.66	
13700.00	90.19	172.78	11344.13	-2153.63	489.53	2198.08	0.00	501775.10	800431.22	
13800.00	90.19	172.78	11343.79	-2252.84	502.09	2298.08	0.00	501675.89	800443.78	
13900.00	90.19	172.78	11343.46	-2352.04	514.65	2398.07	0.00	501576.69	800456.34	
14000.00	90.19	172.78	11343.12	-2451.25	527.21	2498.07	0.00	501477.48	800468.90	
14100.00	90.19	172.78	11342.79	-2550.46	539.77	2598.07	0.00	501378.27	800481.46	
14200.00	90.19	172.78	11342.46	-2649.67	552.33	2698.07	0.00	501279.06	800494.02	
14300.00	90.19	172.78	11342.12	-2748.87	564.89	2798.07	0.00	501179.86	800506.58	
14400.00	90.19	172.78	11341.79	-2848.08	577.45	2898.07	0.00	501080.65	800519.14	
14500.00	90.19	172.78	11341.45	-2947.29	590.01	2998.07	0.00	500981.44	800531.70	
14600.00	90.19	172.78	11341.12	-3046.50	602.57	3098.07	0.00	500882.23	800544.26	
14700.00	90.19	172.78	11340.78	-3145.70	615.13	3198.07	0.00	500783.03	800556.82	
14800.00	90.19	172.78	11340.45	-3244.91	627.69	3298.07	0.00	500683.82	800569.38	
14900.00	90.19	172.78	11340.11	-3344.12	640.25	3398.07	0.00	500584.61	800581.94	
15000.00	90.19	172.78	11339.78	-3443.33	652.81	3498.07	0.00	500485.40	800594.50	
15100.00	90.19	172.78	11339.44	-3542.53	665.37	3598.07	0.00	500386.20	800607.06	
15200.00	90.19	172.78	11339.11	-3641.74	677.93	3698.07	0.00	500286.99	800619.62	
15300.00	90.19	172.78	11338.78	-3740.95	690.49	3798.07	0.00	500187.78	800632.18	
15400.00	90.19	172.78	11338.44	-3840.16	703.05	3898.07	0.00	500088.57	800644.74	
15500.00	90.19	172.78	11338.11	-3939.36	715.62	3998.07	0.00	499989.37	800657.31	
15600.00	90.19	172.78	11337.77	-4038.57	728.18	4098.07	0.00	499890.16	800669.87	
15700.00	90.19	172.78	11337.44	-4137.78	740.74	4198.06	0.00	499790.95	800682.43	
15800.00	90.19	172.78	11337.10	-4236.99	753.30	4298.06	0.00	499691.74	800694.99	

SD Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
15830.77	90.19	172.78	11337.00	-4267.51	757.16	4328.83	0.00	499661.22	800698.85	PBHL 30H



5D Anti-Collision Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*

Site Name: *Gaucha Unit 29H,30H Pad*

Well Name: *Gaucha Unit 30H*

9 December 2015





Gaucha Unit 30H

Field Name: Lea Co, NM Nad 83 NMEZ	Map Units: US ft		Company Name: Devon Energy	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)			
	Comment:			
Site: Gaucha Unit 29H,30H Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.45	
	Position:	Northing: 504275.61US ft	Latitude: 32° 23' 0.75"	
		Easting: 799790.62US ft	Longitude: -103° 29' 45.92"	
	Elevation above MSL:3463.00 US ft			
Comment:				
Slot: Gaucha Unit 30H	Position (Relative to Site Centre)			
	+N/-S: -346.88US ft	Northing: 503928.73US ft	Latitude: 32°22'57.31"	
	+E/-W: 151.07US ft	Easting: 799941.69US ft	Longitude: -103°29'44.20"	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3464.00US ft				
Comment:				
Well: Gaucha Unit 30H	Type:Main well		UWI:	Plan:Working Plan
	File Number:	Comment:		
	Closure Distance:4334.16US ft		Closure Azimuth:169.94°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00US ft		+E/-W: 0.00US ft	Az: 172.78°
	Magnetic Parameters:			
	Model: bggm2015	Field Strength:	Declination: 7.26°	Dip: 60.31°
	48384.7nT			Date: 15/Feb/2015

Drill floor: Plan: Working Plan			
Rig Height (Kelly Bushing): Elevation above MSL:	Inclination: 0.00°	Azimuth: 0.00°	
23.50us ft	3487.50us ft		

Collision / Uncertainty Analysis				
Primary Well	Start MD (USFt)	End MD (USFt)	Collision Risk Interval	No. of Std. Deviations in Error Computation
Gaucha Unit 30H (p)	0.00	30000.00	100.00	2

Secondary Well Names:
Gaucha Unit #7RE (s)
Gaucha Unit 29H (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: the following filter has been applied: Depth Range.

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

Anti-Collision Summary (TVD relative to Kelly Bushing)

Secondary Well Name	Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	ES (US ft)	CC (US ft)	SF	Risk
Gaicho Unit 29H (p)	5462.89	5462.89	5462.42	25.67	50.51	2.03	
Gaicho Unit #7RE (s)	10347.46	10327.96	11994.22	176.41	238.14	3.86	

Primary Well: Gaicho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	Nearest Well	ES (US ft)	CC (US ft)	SF	Risk
0.00	0.00	328.47	0.00	0.00	0.00	Gaicho Unit 29H (p)	49.66	50.22	88.63	
100.00	100.00	328.47	0.11	0.11	4.60	Gaicho Unit 29H (p)	49.44	50.22	63.80	
200.00	200.00	328.47	0.34	0.34	4.62	Gaicho Unit 29H (p)	48.99	50.22	40.61	
300.00	300.00	328.47	0.56	0.56	4.65	Gaicho Unit 29H (p)	48.54	50.22	29.79	
400.00	400.00	328.47	0.79	0.79	4.69	Gaicho Unit 29H (p)	48.09	50.22	23.52	
500.00	500.00	328.47	1.01	1.01	4.75	Gaicho Unit 29H (p)	47.64	50.22	19.43	
600.00	600.00	328.47	1.24	1.24	4.81	Gaicho Unit 29H (p)	47.19	50.22	16.55	
700.00	700.00	328.47	1.46	1.46	4.89	Gaicho Unit 29H (p)	46.74	50.22	14.42	
800.00	800.00	328.47	1.69	1.69	4.97	Gaicho Unit 29H (p)	46.29	50.22	12.77	
900.00	900.00	328.47	1.91	1.91	5.07	Gaicho Unit 29H (p)	45.84	50.22	11.46	
1000.00	1000.00	328.47	2.14	2.14	5.17	Gaicho Unit 29H (p)	45.39	50.22	10.39	
1100.00	1100.00	328.47	2.36	2.36	5.27	Gaicho Unit 29H (p)	44.94	50.22	9.51	
1200.00	1200.00	328.47	2.59	2.59	5.39	Gaicho Unit 29H (p)	44.49	50.22	8.76	
1300.00	1300.00	328.47	2.81	2.81	5.51	Gaicho Unit 29H (p)	44.04	50.22	8.13	
1400.00	1400.00	328.47	3.03	3.03	5.63	Gaicho Unit 29H (p)	43.59	50.22	7.58	
1500.00	1500.00	328.47	3.26	3.26	5.76	Gaicho Unit 29H (p)	43.14	50.22	7.09	
1600.00	1600.00	328.47	3.48	3.48	5.90	Gaicho Unit 29H (p)	42.69	50.22	6.67	
1700.00	1700.00	328.47	3.71	3.71	6.04	Gaicho Unit 29H (p)	42.24	50.22	6.30	
1800.00	1800.00	328.47	3.93	3.93	6.18	Gaicho Unit 29H (p)	41.80	50.22	5.96	
1900.00	1900.00	328.47	4.16	4.16	6.33	Gaicho Unit 29H (p)	41.35	50.22	5.66	
2000.00	2000.00	328.47	4.38	4.38	6.48	Gaicho Unit 29H (p)	40.90	50.22	5.39	
2100.00	2100.00	328.47	4.61	4.61	6.63	Gaicho Unit 29H (p)	40.45	50.22	5.14	
2200.00	2200.00	328.47	4.83	4.83	6.79	Gaicho Unit 29H (p)	40.00	50.22	4.91	
2300.00	2300.00	328.47	5.06	5.06	6.95	Gaicho Unit 29H (p)	39.55	50.22	4.70	
2400.00	2400.00	328.47	5.28	5.28	7.12	Gaicho Unit 29H (p)	39.10	50.22	4.51	
2500.00	2500.00	328.47	5.51	5.51	7.28	Gaicho Unit 29H (p)	38.65	50.22	4.34	
2600.00	2600.00	328.47	5.73	5.73	7.45	Gaicho Unit 29H (p)	38.20	50.22	4.18	
2700.00	2700.00	328.47	5.96	5.96	7.62	Gaicho Unit 29H (p)	37.75	50.22	4.03	

Primary Well: Gaucho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	Nearest Well	ES (US ft)	CC (US ft)	SF	Risk
2800.00	2800.00	328.47	6.18	6.18	7.80	Gaucho Unit 29H (p)	37.30	50.22	3.89	
2900.00	2900.00	328.47	6.41	6.41	7.97	Gaucho Unit 29H (p)	36.85	50.22	3.76	
3000.00	3000.00	328.47	6.63	6.63	8.15	Gaucho Unit 29H (p)	36.40	50.22	3.63	
3100.00	3100.00	328.47	6.86	6.86	8.33	Gaucho Unit 29H (p)	35.95	50.22	3.52	
3200.00	3200.00	328.47	7.08	7.08	8.52	Gaucho Unit 29H (p)	35.50	50.22	3.41	
3300.00	3300.00	328.47	7.31	7.31	8.70	Gaucho Unit 29H (p)	35.05	50.22	3.31	
3400.00	3400.00	328.47	7.53	7.53	8.89	Gaucho Unit 29H (p)	34.60	50.22	3.22	
3500.00	3500.00	328.47	7.76	7.76	9.09	Gaucho Unit 29H (p)	34.16	50.22	3.13	
3600.00	3600.00	328.47	7.98	7.98	9.28	Gaucho Unit 29H (p)	33.71	50.22	3.04	
3700.00	3700.00	328.47	8.20	8.20	9.48	Gaucho Unit 29H (p)	33.26	50.22	2.96	
3800.00	3800.00	328.47	8.43	8.43	9.68	Gaucho Unit 29H (p)	32.81	50.22	2.88	
3900.00	3900.00	328.47	8.65	8.65	9.88	Gaucho Unit 29H (p)	32.36	50.22	2.81	
4000.00	4000.00	328.47	8.88	8.88	10.09	Gaucho Unit 29H (p)	31.91	50.22	2.74	
4100.00	4100.00	328.47	9.10	9.10	10.30	Gaucho Unit 29H (p)	31.46	50.22	2.68	
4200.00	4200.00	328.47	9.33	9.33	10.51	Gaucho Unit 29H (p)	31.01	50.22	2.61	
4300.00	4300.00	328.47	9.55	9.55	10.72	Gaucho Unit 29H (p)	30.56	50.22	2.55	
4400.00	4400.00	328.47	9.78	9.78	10.94	Gaucho Unit 29H (p)	30.11	50.22	2.50	
4500.00	4500.00	328.47	10.00	10.00	11.16	Gaucho Unit 29H (p)	29.66	50.22	2.44	
4600.00	4600.00	328.47	10.23	10.23	11.39	Gaucho Unit 29H (p)	29.21	50.22	2.39	
4700.00	4700.00	328.47	10.45	10.45	11.62	Gaucho Unit 29H (p)	28.76	50.22	2.34	
4800.00	4800.00	328.47	10.68	10.68	11.85	Gaucho Unit 29H (p)	28.31	50.22	2.29	
4900.00	4900.00	328.47	10.90	10.90	12.08	Gaucho Unit 29H (p)	27.86	50.22	2.25	
5000.00	5000.00	328.47	11.13	11.13	12.32	Gaucho Unit 29H (p)	27.41	50.22	2.20	
5100.00	5100.00	328.47	11.35	11.35	12.57	Gaucho Unit 29H (p)	26.96	50.22	2.16	
5200.00	5200.00	328.47	11.58	11.58	12.81	Gaucho Unit 29H (p)	26.52	50.22	2.12	
5300.00	5300.00	328.47	11.80	11.80	13.06	Gaucho Unit 29H (p)	26.07	50.22	2.08	
5400.00	5400.00	328.47	12.03	12.03	13.32	Gaucho Unit 29H (p)	25.62	50.22	2.04	
5500.00	5500.00	328.98	12.25	12.25	13.57	Gaucho Unit 29H (p)	25.94	50.96	2.04	
5600.00	5600.00	330.41	12.48	12.48	13.84	Gaucho Unit 29H (p)	27.73	53.21	2.09	
5700.00	5700.00	332.54	12.70	12.70	14.10	Gaucho Unit 29H (p)	31.10	57.01	2.20	
5800.00	5799.99	309.50	12.92	12.92	14.37	Gaucho Unit 29H (p)	35.53	61.89	2.35	
5900.00	5899.96	310.39	13.14	13.14	14.65	Gaucho Unit 29H (p)	39.74	66.53	2.48	
6000.00	5999.86	310.07	13.37	13.35	14.93	Gaucho Unit 29H (p)	42.84	70.05	2.57	
6100.00	6099.68	308.73	13.59	13.57	15.21	Gaucho Unit 29H (p)	44.83	72.46	2.62	
6200.00	6199.37	306.38	13.81	13.78	15.49	Gaucho Unit 29H (p)	45.75	73.87	2.63	
6300.00	6298.90	303.02	14.03	13.98	15.78	Gaucho Unit 29H (p)	45.89	74.44	2.61	

SD Anti-Collision Report

Primary Well: Gaucho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	Nearest Well	ES (US ft)	CC (US ft)	SF	Risk
6400.00	6398.36	299.13	14.26	14.20	16.08	Gaucha Unit 29H (p)	45.83	74.83	2.58	
6500.00	6497.81	295.30	14.49	14.43	16.38	Gaucha Unit 29H (p)	46.07	75.55	2.56	
6600.00	6597.26	291.57	14.72	14.65	16.68	Gaucha Unit 29H (p)	46.74	76.61	2.56	
6700.00	6696.71	287.94	14.95	14.87	17.00	Gaucha Unit 29H (p)	47.61	77.99	2.57	
6800.00	6796.16	284.46	15.18	15.10	17.31	Gaucha Unit 29H (p)	48.87	79.67	2.59	
6900.00	6895.62	281.13	15.42	15.32	17.63	Gaucha Unit 29H (p)	50.31	81.63	2.61	
7000.00	6995.07	277.97	15.66	15.55	17.96	Gaucha Unit 29H (p)	52.06	83.86	2.64	
7100.00	7094.52	274.98	15.90	15.77	18.29	Gaucha Unit 29H (p)	54.03	86.32	2.67	
7200.00	7193.97	272.16	16.14	16.00	18.62	Gaucha Unit 29H (p)	56.21	89.01	2.71	
7300.00	7293.43	269.51	16.38	16.22	18.96	Gaucha Unit 29H (p)	58.65	91.90	2.76	
7400.00	7392.88	267.03	16.63	16.45	19.31	Gaucha Unit 29H (p)	61.29	94.98	2.82	
7500.00	7492.33	264.71	16.87	16.67	19.66	Gaucha Unit 29H (p)	64.05	98.22	2.87	
7600.00	7591.78	262.54	17.12	16.90	20.01	Gaucha Unit 29H (p)	66.93	101.61	2.93	
7700.00	7691.23	260.51	17.37	17.13	20.38	Gaucha Unit 29H (p)	69.97	105.14	2.99	
7800.00	7790.69	258.62	17.62	17.35	20.74	Gaucha Unit 29H (p)	73.17	108.79	3.05	
7900.00	7890.14	256.85	17.87	17.58	21.11	Gaucha Unit 29H (p)	76.42	112.55	3.11	
8000.00	7989.59	255.19	18.12	17.81	21.49	Gaucha Unit 29H (p)	79.78	116.42	3.18	
8100.00	8089.04	253.47	18.37	18.04	21.87	Gaucha Unit 29H (p)	83.23	120.31	3.24	
8200.00	8188.50	251.45	18.63	18.27	22.26	Gaucha Unit 29H (p)	86.76	124.22	3.32	
8300.00	8287.95	249.17	18.88	18.49	22.66	Gaucha Unit 29H (p)	90.33	128.20	3.39	
8400.00	8387.40	246.66	19.14	18.72	23.06	Gaucha Unit 29H (p)	93.98	132.34	3.45	
8500.00	8486.85	243.94	19.40	18.95	23.46	Gaucha Unit 29H (p)	97.95	136.74	3.53	
8600.00	8586.30	241.05	19.65	19.18	23.87	Gaucha Unit 29H (p)	102.37	141.49	3.62	
8700.00	8685.76	238.02	19.91	19.41	24.29	Gaucha Unit 29H (p)	107.14	146.68	3.71	
8800.00	8785.21	234.89	20.17	19.64	24.71	Gaucha Unit 29H (p)	112.41	152.40	3.81	
8900.00	8884.66	231.81	20.43	19.87	25.14	Gaucha Unit 29H (p)	118.30	158.66	3.93	
9000.00	8984.11	228.97	20.69	20.10	25.57	Gaucha Unit 29H (p)	124.65	165.35	4.06	
9100.00	9083.57	226.36	20.96	20.33	26.01	Gaucha Unit 29H (p)	131.17	172.41	4.18	
9200.00	9183.02	223.95	21.22	20.56	26.45	Gaucha Unit 29H (p)	138.10	179.81	4.31	
9300.00	9282.48	221.75	21.47	20.78	26.90	Gaucha Unit 29H (p)	145.35	187.44	4.45	
9400.00	9382.01	219.83	21.68	20.96	27.36	Gaucha Unit 29H (p)	152.37	194.78	4.59	
9500.00	9481.62	218.21	21.88	21.15	27.82	Gaucha Unit 29H (p)	158.86	201.63	4.71	
9600.00	9581.30	216.84	22.08	21.33	28.29	Gaucha Unit 29H (p)	164.71	207.93	4.81	
9700.00	9681.05	215.69	22.28	21.51	28.76	Gaucha Unit 29H (p)	169.99	213.63	4.90	
9800.00	9780.86	214.73	22.48	21.69	29.24	Gaucha Unit 29H (p)	174.64	218.69	4.96	
9900.00	9880.72	213.94	22.67	21.87	29.72	Gaucha Unit 29H (p)	178.63	223.09	5.02	

SD Anti-Collision Report

Primary Well: Gaucho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	Nearest Well	ES (US ft)	CC (US ft)	SF	Risk
10000.00	9980.62	213.30	22.86	22.05	30.22	Gaucho Unit 29H (p)	181.94	226.79	5.06	
10100.00	10080.56	212.80	23.05	22.23	30.71	Gaucho Unit 29H (p)	184.54	229.79	5.08	
10200.00	10180.52	64.25	23.23	22.41	31.22	Gaucho Unit #7RE (s)	224.45	280.35	5.01	
10300.00	10280.50	63.24	23.41	22.58	31.72	Gaucho Unit #7RE (s)	182.03	242.84	3.99	
10400.00	10380.50	62.59	23.59	22.76	32.24	Gaucho Unit #7RE (s)	183.12	243.95	4.01	
10500.00	10480.50	237.04	23.77	22.94	32.76	Gaucho Unit 29H (p)	187.72	234.56	5.01	
10600.00	10580.50	237.04	23.98	23.16	33.29	Gaucho Unit 29H (p)	187.28	234.56	4.96	
10700.00	10680.50	237.04	24.20	23.39	33.82	Gaucho Unit 29H (p)	186.84	234.56	4.91	
10800.00	10780.50	237.04	24.41	23.61	34.36	Gaucho Unit 29H (p)	186.39	234.56	4.87	
10900.00	10880.47	65.64	24.60	23.78	34.90	Gaucho Unit 29H (p)	182.63	231.04	4.77	
11000.00	10979.12	78.96	24.63	23.68	35.43	Gaucho Unit 29H (p)	156.01	204.22	4.24	
11100.00	11073.47	103.48	24.59	23.18	35.91	Gaucho Unit 29H (p)	120.89	169.39	3.49	
11200.00	11159.25	119.43	24.54	22.21	36.33	Gaucho Unit 29H (p)	118.13	168.30	3.35	
11300.00	11232.54	119.30	24.50	21.02	36.67	Gaucho Unit 29H (p)	171.05	220.84	4.44	
11400.00	11290.14	102.31	24.50	19.86	36.95	Gaucho Unit 29H (p)	254.45	303.19	6.22	
11500.00	11329.54	70.35	24.57	19.00	37.19	Gaucho Unit 29H (p)	346.65	394.92	8.18	
11600.00	11349.01	43.91	24.75	18.69	37.42	Gaucho Unit 29H (p)	438.41	486.68	10.08	
11700.00	11350.82	35.80	25.03	18.83	37.66	Gaucho Unit 29H (p)	526.73	575.06	11.90	
11800.00	11350.49	34.77	25.45	18.97	37.96	Gaucho Unit 29H (p)	615.89	664.40	13.70	
11900.00	11350.15	33.87	26.00	19.15	38.31	Gaucho Unit 29H (p)	706.50	755.17	15.51	
12000.00	11349.82	33.07	26.67	19.35	38.71	Gaucho Unit 29H (p)	798.35	847.14	17.36	
12100.00	11349.48	32.38	27.45	19.57	39.16	Gaucho Unit 29H (p)	891.21	940.10	19.23	
12200.00	11349.15	31.76	28.33	19.82	39.66	Gaucho Unit 29H (p)	984.93	1033.89	21.12	
12300.00	11348.81	353.23	29.31	20.10	40.21	Gaucho Unit #7RE (s)	971.24	1019.79	21.00	
12400.00	11348.48	353.92	30.38	20.40	40.81	Gaucho Unit #7RE (s)	971.39	1020.74	20.68	
12500.00	11348.14	354.58	31.52	20.71	41.44	Gaucho Unit #7RE (s)	972.34	1022.50	20.38	
12600.00	11347.81	355.36	32.73	21.05	42.12	Gaucho Unit #7RE (s)	973.40	1024.42	20.08	
12700.00	11347.47	356.27	34.00	21.41	42.84	Gaucho Unit #7RE (s)	971.91	1023.78	19.73	
12800.00	11347.14	357.13	35.33	21.79	43.60	Gaucho Unit #7RE (s)	969.68	1022.42	19.39	
12900.00	11346.81	358.01	36.70	22.19	44.39	Gaucho Unit #7RE (s)	965.31	1018.89	19.02	
13000.00	11346.47	358.69	38.12	22.60	45.21	Gaucho Unit #7RE (s)	960.37	1015.01	18.58	
13100.00	11346.14	359.38	39.58	23.03	46.07	Gaucho Unit #7RE (s)	956.23	1011.93	18.17	
13200.00	11345.80	0.09	41.07	23.48	46.96	Gaucho Unit #7RE (s)	952.81	1009.50	17.81	
13300.00	11345.47	0.80	42.59	23.93	47.88	Gaucho Unit #7RE (s)	949.93	1007.79	17.42	
13400.00	11345.13	1.46	44.14	24.41	48.82	Gaucho Unit #7RE (s)	948.16	1007.05	17.10	
13500.00	11344.80	2.12	45.71	24.89	49.79	Gaucho Unit #7RE (s)	946.88	1006.96	16.76	

Primary Well: Gaucho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	Nearest Well	ES (US ft)	CC (US ft)	SF	Risk
13600.00	11344.46	2.28	47.31	25.39	50.78	Gaucho Unit #7RE (s)	948.70	1009.82	16.52	
13700.00	11344.13	2.28	48.93	25.90	51.80	Gaucho Unit #7RE (s)	960.40	1022.22	16.54	
13800.00	11343.79	2.28	50.57	26.41	52.83	Gaucho Unit #7RE (s)	981.81	1044.10	16.76	
13900.00	11343.46	2.28	52.22	26.94	53.89	Gaucho Unit #7RE (s)	1012.17	1074.87	17.14	
14000.00	11343.12	2.28	53.89	27.48	54.96	Gaucho Unit #7RE (s)	1051.10	1113.80	17.76	
14100.00	11342.79	2.28	55.57	28.03	56.06	Gaucho Unit #7RE (s)	1097.65	1160.06	18.59	
14200.00	11342.46	2.28	57.26	28.58	57.16	Gaucho Unit #7RE (s)	1150.58	1212.82	19.49	
14300.00	11342.12	2.28	58.97	29.15	58.29	Gaucho Unit #7RE (s)	1209.37	1271.28	20.53	
14400.00	11341.79	2.28	60.69	29.72	59.43	Gaucho Unit #7RE (s)	1273.19	1334.67	21.71	
14500.00	11341.45	2.28	62.41	30.29	60.58	Gaucho Unit #7RE (s)	1341.31	1402.34	22.98	
14600.00	11341.12	2.28	64.15	30.88	61.75	Gaucho Unit #7RE (s)	1413.09	1473.68	24.32	
14700.00	11340.78	2.28	65.89	31.47	62.93	Gaucho Unit #7RE (s)	1488.08	1548.21	25.75	
14800.00	11340.45	2.28	67.64	32.06	64.12	Gaucho Unit #7RE (s)	1565.73	1625.47	27.21	
14900.00	11340.11	2.28	69.40	32.67	65.33	Gaucho Unit #7RE (s)	1645.81	1705.09	28.76	
15000.00	11339.78	2.28	71.16	33.27	66.54	Gaucho Unit #7RE (s)	1727.98	1786.77	30.39	
15100.00	11339.44	2.28	72.93	33.89	67.76	Gaucho Unit #7RE (s)	1811.88	1870.23	32.05	
15200.00	11339.11	2.28	74.71	34.50	69.00	Gaucho Unit #7RE (s)	1897.19	1955.24	33.68	
15300.00	11338.78	2.28	76.49	35.12	70.24	Gaucho Unit #7RE (s)	1983.79	2041.60	35.31	
15400.00	11338.44	2.28	78.27	35.75	71.49	Gaucho Unit #7RE (s)	2071.61	2129.17	36.99	
15500.00	11338.11	2.28	80.06	36.38	72.75	Gaucho Unit #7RE (s)	2160.49	2217.78	38.71	
15600.00	11337.77	2.28	81.85	37.01	74.02	Gaucho Unit #7RE (s)	2250.30	2307.32	40.46	
15700.00	11337.44	2.28	83.65	37.65	75.29	Gaucho Unit #7RE (s)	2340.94	2397.70	42.25	
15800.00	11337.10	2.28	85.45	38.29	76.57	Gaucho Unit #7RE (s)	2432.32	2488.80	44.06	
15830.77	11337.00	2.28	86.01	38.49	76.97	Gaucho Unit #7RE (s)	2460.56	2516.97	44.62	

Secondary Well: Gaucho Unit #7RE (s)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
0.00	0.37	25.87	10.12	0.04	0.04	0.68	2366.30	2367.87	1508.96	
100.00	100.70	126.20	10.11	0.20	0.20	2.63	2365.99	2367.83	1287.70	
200.00	200.03	225.53	10.11	0.43	0.43	2.63	2365.55	2367.85	1029.73	
300.00	302.98	328.48	10.10	0.68	0.68	2.63	2364.97	2367.74	855.16	
400.00	400.84	426.34	10.09	0.92	0.92	2.64	2364.45	2367.68	731.23	
500.00	505.26	530.76	10.09	1.16	1.16	2.64	2363.89	2367.59	638.67	
600.00	608.97	634.48	10.08	1.40	1.40	2.65	2363.03	2367.19	568.59	
700.00	706.57	732.07	10.07	1.64	1.64	2.66	2362.34	2366.96	512.04	
800.00	820.94	846.45	10.06	1.90	1.90	2.67	2361.27	2366.39	462.11	
900.00	924.45	949.97	10.05	2.15	2.15	2.68	2359.72	2365.31	423.06	
1000.00	1019.85	1045.38	10.03	2.40	2.40	2.69	2358.34	2364.40	389.81	
1100.00	1121.30	1146.84	10.00	2.66	2.66	2.70	2357.02	2363.57	360.76	
1200.00	1226.46	1252.00	9.99	2.93	2.93	2.71	2355.51	2362.55	335.49	
1300.00	1321.18	1346.73	9.96	3.18	3.18	2.72	2353.94	2361.45	314.45	
1400.00	1416.01	1441.57	9.94	3.43	3.42	2.73	2352.79	2360.77	295.67	
1500.00	1518.80	1544.36	9.92	3.70	3.69	2.74	2351.49	2359.98	278.24	

SD Anti-Collision Report

Secondary Well: Gaucho Unit #7RE (s)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
1600.00	1617.89	1643.46	9.89	3.96	3.96	2.75	2350.26	2359.23	263.02	
1700.00	1723.59	1749.18	9.86	4.24	4.24	2.77	2348.91	2358.39	248.89	
1800.00	1824.71	1850.32	9.82	4.51	4.50	2.78	2347.31	2357.28	236.46	
1900.00	1922.60	1948.22	9.78	4.76	4.76	2.79	2345.87	2356.32	225.42	
2000.00	2026.91	2052.55	9.75	5.04	5.04	2.81	2344.33	2355.29	215.04	
2100.00	2122.36	2148.01	9.71	5.29	5.29	2.82	2342.71	2354.14	205.97	
2200.00	2215.37	2241.03	9.68	5.54	5.54	2.83	2341.52	2353.42	197.80	
2300.00	2313.70	2339.38	9.65	5.80	5.79	2.85	2340.38	2352.76	190.09	
2400.00	2405.91	2431.60	9.62	6.03	6.03	2.86	2339.49	2352.32	183.34	
2500.00	2497.85	2523.54	9.59	6.26	6.25	2.87	2339.00	2352.28	177.18	
2600.00	2597.93	2623.63	9.56	6.50	6.49	2.89	2338.63	2352.38	171.10	
2700.00	2697.23	2722.94	9.54	6.71	6.71	2.90	2338.23	2352.43	165.71	
2800.00	2787.65	2813.35	9.54	6.83	6.83	2.92	2338.22	2352.76	161.76	
2900.00	2882.12	2907.83	9.54	6.88	6.88	2.93	2338.60	2353.42	158.81	
3000.00	2982.19	3007.89	9.54	6.92	6.92	2.95	2339.07	2354.16	156.08	
3100.00	3073.44	3099.16	9.56	6.95	6.94	2.97	2339.77	2355.10	153.66	
3200.00	3171.53	3197.26	9.59	6.96	6.96	2.99	2340.70	2356.27	151.38	
3300.00	3264.95	3290.70	9.62	6.99	6.98	3.00	2341.80	2357.61	149.13	
3400.00	3364.58	3390.36	9.67	7.02	7.02	3.02	2343.06	2359.12	146.89	
3500.00	3465.16	3490.97	9.72	7.07	7.06	3.05	2344.29	2360.61	144.61	
3600.00	3561.51	3587.34	9.76	7.12	7.11	3.07	2345.55	2362.15	142.26	
3700.00	3662.17	3688.04	9.80	7.18	7.18	3.09	2346.88	2363.78	139.86	
3800.00	3760.94	3786.82	9.83	7.27	7.27	3.12	2348.19	2365.40	137.39	
3900.00	3864.45	3890.35	9.85	7.38	7.38	3.15	2349.44	2366.99	134.84	
4000.00	3961.08	3986.99	9.86	7.50	7.49	3.17	2350.67	2368.55	132.49	
4100.00	4061.51	4087.44	9.87	7.63	7.63	3.20	2351.93	2370.20	129.78	
4200.00	4157.18	4183.12	9.87	7.78	7.78	3.24	2353.26	2371.90	127.27	
4300.00	4265.95	4291.91	9.87	7.97	7.97	3.27	2354.52	2373.57	124.62	
4400.00	4359.31	4385.28	9.85	8.15	8.14	3.31	2355.66	2375.12	122.11	
4500.00	4462.78	4488.76	9.83	8.36	8.35	3.35	2356.91	2376.79	119.51	
4600.00	4565.02	4591.03	9.81	8.57	8.57	3.39	2357.99	2378.30	117.07	
4700.00	4672.46	4698.48	9.79	8.80	8.80	3.43	2358.87	2379.63	114.66	
4800.00	4775.51	4801.53	9.77	9.04	9.03	3.48	2359.48	2380.72	112.13	
4900.00	4865.93	4891.97	9.75	9.24	9.24	3.52	2360.28	2381.95	109.92	
5000.00	4963.37	4989.42	9.73	9.46	9.46	3.57	2361.33	2383.44	107.78	
5100.00	5066.50	5092.57	9.70	9.69	9.69	3.63	2362.35	2384.92	105.66	
5200.00	5167.62	5193.71	9.67	9.93	9.93	3.68	2363.27	2386.30	103.61	
5300.00	5274.16	5300.26	9.64	10.18	10.18	3.75	2364.03	2387.53	101.59	
5400.00	5374.56	5400.68	9.61	10.43	10.42	3.81	2364.64	2388.60	99.70	
5500.00	5471.75	5497.88	9.58	10.66	10.66	3.87	2365.32	2389.73	97.92	
5600.00	5572.71	5598.86	9.56	10.90	10.90	3.94	2366.02	2390.89	96.14	
5700.00	5684.03	5710.18	9.52	11.18	11.17	4.02	2366.39	2391.77	94.23	
5800.00	5784.90	5811.06	344.50	11.43	11.42	4.09	2365.76	2391.58	92.63	
5900.00	5884.76	5910.92	344.46	11.67	11.67	4.17	2363.41	2389.70	90.90	
6000.00	5987.49	6013.66	344.40	11.93	11.92	4.25	2359.26	2386.06	89.04	
6100.00	6086.12	6112.29	344.33	12.17	12.17	4.33	2353.45	2380.73	87.27	
6200.00	6186.01	6212.19	344.24	12.42	12.42	4.42	2346.01	2373.73	85.64	
6300.00	6283.69	6309.87	344.14	12.67	12.66	4.51	2336.91	2365.12	83.84	
6400.00	6390.50	6416.69	344.04	12.93	12.93	4.61	2326.85	2355.56	82.05	
6500.00	6494.98	6521.18	343.95	13.19	13.19	4.71	2316.48	2345.68	80.32	
6600.00	6590.47	6616.67	343.86	13.43	13.43	4.81	2306.21	2335.86	78.80	
6700.00	6691.40	6717.60	343.78	13.69	13.68	4.91	2295.94	2326.08	77.17	
6800.00	6793.79	6819.99	343.69	13.94	13.94	5.02	2285.62	2316.19	75.75	
6900.00	6893.22	6919.42	343.60	14.19	14.18	5.13	2275.20	2306.27	74.22	
7000.00	6996.46	7022.66	343.51	14.44	14.43	5.25	2264.72	2296.28	72.76	
7100.00	7100.66	7126.86	343.42	14.66	14.65	5.37	2254.06	2286.07	71.42	
7200.00	7200.88	7227.08	343.34	14.85	14.84	5.49	2243.34	2275.76	70.21	
7300.00	7303.10	7329.31	343.25	15.04	15.03	5.61	2232.60	2265.42	69.04	

Secondary Well: Gaucho Unit #7RE (s)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	FS (US ft)	CC (US ft)	SF	Risk
7400.00	7408.49	7434.70	343.16	15.22	15.21	5.75	2221.60	2254.80	67.92	
7500.00	7507.77	7533.98	343.07	15.37	15.36	5.88	2210.55	2244.11	66.87	
7600.00	7607.62	7633.83	342.99	15.51	15.50	6.01	2199.48	2233.41	65.81	
7700.00	7708.46	7734.68	342.90	15.66	15.66	6.15	2188.36	2222.69	64.76	
7800.00	8101.69	8129.97	342.68	16.15	15.98	6.72	2165.07	2199.75	63.42	
7900.00	8201.09	8230.41	342.66	16.26	16.09	6.87	2140.77	2175.79	62.14	
8000.00	8303.40	8333.85	342.63	16.39	16.21	7.04	2116.05	2151.43	60.82	
8100.00	8391.93	8423.33	342.60	16.51	16.33	7.18	2091.50	2127.19	59.61	
8200.00	8479.81	8512.10	342.57	16.62	16.45	7.33	2067.27	2103.35	58.30	
8300.00	10325.00	12157.96	107.09	39.36	21.02	42.02	2026.32	2060.96	59.50	
8400.00	10325.09	12149.38	105.90	39.23	20.98	41.93	1927.21	1962.06	56.29	
8500.00	10325.21	12138.38	104.32	39.07	20.93	41.83	1828.16	1863.22	53.14	
8600.00	10325.32	12127.48	102.66	38.91	20.87	41.73	1729.16	1764.45	50.00	
8700.00	10325.43	12116.65	100.93	38.75	20.82	41.62	1630.22	1665.75	46.88	
8800.00	10325.53	12105.91	99.12	38.59	20.77	41.52	1531.36	1567.16	43.78	
8900.00	10325.62	12095.25	97.25	38.43	20.72	41.42	1432.60	1468.67	40.71	
9000.00	10325.72	12084.67	95.29	38.27	20.67	41.32	1333.96	1370.33	37.68	
9100.00	10325.80	12074.17	93.27	38.11	20.62	41.22	1235.48	1272.16	34.68	
9200.00	10325.88	12063.75	91.17	37.96	20.57	41.12	1137.19	1174.21	31.72	
9300.00	10325.95	12054.29	88.29	37.82	20.52	41.03	1039.08	1076.54	28.74	
9400.00	10326.02	12046.26	84.44	37.69	20.49	40.96	941.27	979.26	25.78	
9500.00	10326.10	12038.64	80.81	37.58	20.46	40.89	843.95	882.54	22.87	
9600.00	10326.18	12031.47	77.46	37.47	20.42	40.82	747.23	786.59	19.98	
9700.00	10326.27	12024.76	74.42	37.37	20.39	40.76	651.40	691.78	17.13	
9800.00	10326.35	12018.53	71.70	37.28	20.37	40.70	556.94	598.67	14.34	
9900.00	10326.44	12012.82	69.32	37.19	20.34	40.65	464.61	508.24	11.65	
10000.00	10326.52	12007.64	67.29	37.12	20.32	40.60	375.86	422.24	9.10	
10100.00	10326.60	12003.02	65.59	37.05	20.30	40.56	293.59	344.06	6.82	
10200.00	10326.67	11999.00	64.25	36.99	20.28	40.52	224.45	280.35	5.01	
10300.00	10326.73	11995.60	63.24	36.94	20.27	40.49	182.03	242.84	3.99	
10400.00	10326.78	11992.87	62.59	36.90	20.25	40.47	183.12	243.95	4.01	
10500.00	10326.82	11990.76	87.18	36.86	20.25	40.45	227.26	283.22	5.06	
10600.00	10326.86	11988.73	86.69	36.83	20.24	40.43	296.85	347.77	6.83	
10700.00	10326.91	11986.61	86.18	36.80	20.23	40.41	378.86	426.22	9.00	
10800.00	10326.95	11984.42	85.65	36.77	20.22	40.39	467.15	512.23	11.36	
10900.00	10326.97	11983.65	281.41	36.76	20.21	40.38	558.76	602.51	13.77	
11000.00	10326.67	11998.88	305.15	36.99	20.28	40.52	651.12	694.05	16.17	
11100.00	10326.15	12034.53	324.24	37.52	20.44	40.85	740.39	782.99	18.38	
11200.00	10325.70	12086.64	335.82	38.30	20.68	41.34	821.89	864.45	20.31	
11300.00	10325.08	12150.57	342.03	39.25	20.99	41.95	891.90	934.55	21.92	
11400.00	10324.77	12247.33	345.88	40.72	21.44	42.89	946.22	989.27	22.98	
11500.00	10326.74	12361.34	348.09	42.42	21.99	44.05	980.96	1024.54	23.51	
11600.00	10330.57	12476.19	349.22	44.17	22.56	45.25	994.47	1038.65	23.51	
11700.00	10335.54	12576.72	349.66	45.75	23.10	46.32	989.11	1033.89	23.09	
11800.00	10338.05	12657.31	350.13	47.05	23.57	47.20	983.22	1028.51	22.71	
11900.00	10339.03	12741.35	350.67	48.42	24.06	48.12	979.16	1024.99	22.37	
12000.00	10339.34	12835.56	351.29	49.97	24.59	49.18	976.02	1022.45	22.02	
12100.00	10339.02	12927.65	351.91	51.49	25.12	50.22	973.58	1020.67	21.67	
12200.00	10337.99	13019.71	352.58	53.02	25.65	51.27	971.94	1019.70	21.35	
12300.00	10336.18	13108.89	353.23	54.51	26.18	52.30	971.24	1019.79	21.00	
12400.00	10333.61	13202.73	353.92	56.08	26.73	53.40	971.39	1020.74	20.68	
12500.00	10330.52	13294.95	354.58	57.63	27.29	54.49	972.34	1022.50	20.38	
12600.00	10326.85	13406.73	355.36	59.43	27.94	55.83	973.40	1024.42	20.08	
12700.00	10325.88	13529.32	356.27	61.38	28.66	57.32	971.91	1023.78	19.73	
12800.00	10326.24	13645.29	357.13	63.26	29.35	58.75	969.68	1022.42	19.39	
12900.00	10329.33	13764.94	358.01	65.17	30.06	60.24	965.31	1018.89	19.02	
13000.00	10332.22	13856.91	358.69	66.70	30.65	61.40	960.37	1015.01	18.58	
13100.00	10334.55	13949.95	359.38	68.28	31.25	62.57	956.23	1011.93	18.17	

5D Anti Collision Report

Secondary Well: Gaucho Unit #7RE (s)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
13200.00	10336.47	14045.33	0.09	69.91	31.87	63.79	952.81	1009.50	17.81	
13300.00	10337.82	14137.14	0.80	71.48	32.46	64.96	949.93	1007.79	17.42	
13400.00	10338.41	14227.37	1.46	73.01	33.06	66.12	948.16	1007.05	17.10	
13500.00	10338.54	14326.02	2.12	74.70	33.70	67.40	946.88	1006.96	16.76	
13600.00	10338.56	14350.00	2.28	75.11	33.85	67.71	948.70	1009.82	16.52	
13700.00	10338.56	14350.00	2.28	75.11	33.85	67.71	960.40	1022.22	16.54	
13800.00	10338.56	14350.00	2.28	75.11	33.85	67.71	981.81	1044.10	16.76	
13900.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1012.17	1074.87	17.14	
14000.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1051.10	1113.80	17.76	
14100.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1097.65	1160.06	18.59	
14200.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1150.58	1212.82	19.49	
14300.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1209.37	1271.28	20.53	
14400.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1273.19	1334.67	21.71	
14500.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1341.31	1402.34	22.98	
14600.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1413.09	1473.68	24.32	
14700.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1488.08	1548.21	25.75	
14800.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1565.73	1625.47	27.21	
14900.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1645.81	1705.09	28.76	
15000.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1727.98	1786.77	30.39	
15100.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1811.88	1870.23	32.05	
15200.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1897.19	1955.24	33.68	
15300.00	10338.56	14350.00	2.28	75.11	33.85	67.71	1983.79	2041.60	35.31	
15400.00	10338.56	14350.00	2.28	75.11	33.85	67.71	2071.61	2129.17	36.99	
15500.00	10338.56	14350.00	2.28	75.11	33.85	67.71	2160.49	2217.78	38.71	
15600.00	10338.56	14350.00	2.28	75.11	33.85	67.71	2250.30	2307.32	40.46	
15700.00	10338.56	14350.00	2.28	75.11	33.85	67.71	2340.94	2397.70	42.25	
15800.00	10338.56	14350.00	2.28	75.11	33.85	67.71	2432.32	2488.80	44.06	
15830.77	10338.56	14350.00	2.28	75.11	33.85	67.71	2460.56	2516.97	44.62	

Secondary Well: Gaucho Unit 29H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
0.00	0.00	0.00	328.47	0.00	0.00	0.00	49.66	50.22	88.63	
100.00	100.00	100.00	328.47	0.11	0.11	4.60	49.44	50.22	63.80	
200.00	200.00	200.00	328.47	0.34	0.34	4.62	48.99	50.22	40.61	
300.00	300.00	300.00	328.47	0.56	0.56	4.65	48.54	50.22	29.79	
400.00	400.00	400.00	328.47	0.79	0.79	4.69	48.09	50.22	23.52	
500.00	500.00	500.00	328.47	1.01	1.01	4.75	47.64	50.22	19.43	
600.00	600.00	600.00	328.47	1.24	1.24	4.81	47.19	50.22	16.55	
700.00	700.00	700.00	328.47	1.46	1.46	4.89	46.74	50.22	14.42	
800.00	800.00	800.00	328.47	1.69	1.69	4.97	46.29	50.22	12.77	
900.00	900.00	900.00	328.47	1.91	1.91	5.07	45.84	50.22	11.46	
1000.00	1000.00	1000.00	328.47	2.14	2.14	5.17	45.39	50.22	10.39	
1100.00	1100.00	1100.00	328.47	2.36	2.36	5.27	44.94	50.22	9.51	
1200.00	1200.00	1200.00	328.47	2.59	2.59	5.39	44.49	50.22	8.76	
1300.00	1300.00	1300.00	328.47	2.81	2.81	5.51	44.04	50.22	8.13	
1400.00	1400.00	1400.00	328.47	3.03	3.03	5.63	43.59	50.22	7.58	
1500.00	1500.00	1500.00	328.47	3.26	3.26	5.76	43.14	50.22	7.09	
1600.00	1600.00	1600.00	328.47	3.48	3.48	5.90	42.69	50.22	6.67	
1700.00	1700.00	1700.00	328.47	3.71	3.71	6.04	42.24	50.22	6.30	
1800.00	1800.00	1800.00	328.47	3.93	3.93	6.18	41.80	50.22	5.96	
1900.00	1900.00	1900.00	328.47	4.16	4.16	6.33	41.35	50.22	5.66	
2000.00	2000.00	2000.00	328.47	4.38	4.38	6.48	40.90	50.22	5.39	
2100.00	2100.00	2100.00	328.47	4.61	4.61	6.63	40.45	50.22	5.14	
2200.00	2200.00	2200.00	328.47	4.83	4.83	6.79	40.00	50.22	4.91	
2300.00	2300.00	2300.00	328.47	5.06	5.06	6.95	39.55	50.22	4.70	
2400.00	2400.00	2400.00	328.47	5.28	5.28	7.12	39.10	50.22	4.51	
2500.00	2500.00	2500.00	328.47	5.51	5.51	7.28	38.65	50.22	4.34	
2600.00	2600.00	2600.00	328.47	5.73	5.73	7.45	38.20	50.22	4.18	

SD Anti Collision Report

Secondary Well: Gaucho Unit 29H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
2700.00	2700.00	2700.00	328.47	5.96	5.96	7.62	37.75	50.22	4.03	
2800.00	2800.00	2800.00	328.47	6.18	6.18	7.80	37.30	50.22	3.89	
2900.00	2900.00	2900.00	328.47	6.41	6.41	7.97	36.85	50.22	3.76	
3000.00	3000.00	3000.00	328.47	6.63	6.63	8.15	36.40	50.22	3.63	
3100.00	3100.00	3100.00	328.47	6.86	6.86	8.33	35.95	50.22	3.52	
3200.00	3200.00	3200.00	328.47	7.08	7.08	8.52	35.50	50.22	3.41	
3300.00	3300.00	3300.00	328.47	7.31	7.31	8.70	35.05	50.22	3.31	
3400.00	3400.00	3400.00	328.47	7.53	7.53	8.89	34.60	50.22	3.22	
3500.00	3500.00	3500.00	328.47	7.76	7.76	9.09	34.16	50.22	3.13	
3600.00	3600.00	3600.00	328.47	7.98	7.98	9.28	33.71	50.22	3.04	
3700.00	3700.00	3700.00	328.47	8.20	8.20	9.48	33.26	50.22	2.96	
3800.00	3800.00	3800.00	328.47	8.43	8.43	9.68	32.81	50.22	2.88	
3900.00	3900.00	3900.00	328.47	8.65	8.65	9.88	32.36	50.22	2.81	
4000.00	4000.00	4000.00	328.47	8.88	8.88	10.09	31.91	50.22	2.74	
4100.00	4100.00	4100.00	328.47	9.10	9.10	10.30	31.46	50.22	2.68	
4200.00	4200.00	4200.00	328.47	9.33	9.33	10.51	31.01	50.22	2.61	
4300.00	4300.00	4300.00	328.47	9.55	9.55	10.72	30.56	50.22	2.55	
4400.00	4400.00	4400.00	328.47	9.78	9.78	10.94	30.11	50.22	2.50	
4500.00	4500.00	4500.00	328.47	10.00	10.00	11.16	29.66	50.22	2.44	
4600.00	4600.00	4600.00	328.47	10.23	10.23	11.39	29.21	50.22	2.39	
4700.00	4700.00	4700.00	328.47	10.45	10.45	11.62	28.76	50.22	2.34	
4800.00	4800.00	4800.00	328.47	10.68	10.68	11.85	28.31	50.22	2.29	
4900.00	4900.00	4900.00	328.47	10.90	10.90	12.08	27.86	50.22	2.25	
5000.00	5000.00	5000.00	328.47	11.13	11.13	12.32	27.41	50.22	2.20	
5100.00	5100.00	5100.00	328.47	11.35	11.35	12.57	26.96	50.22	2.16	
5200.00	5200.00	5200.00	328.47	11.58	11.58	12.81	26.52	50.22	2.12	
5300.00	5300.00	5300.00	328.47	11.80	11.80	13.06	26.07	50.22	2.08	
5400.00	5400.00	5400.00	328.47	12.03	12.03	13.32	25.62	50.22	2.04	
5500.00	5499.24	5499.25	328.98	12.25	12.25	13.57	25.94	50.96	2.04	
5600.00	5598.40	5598.44	330.41	12.47	12.47	13.83	27.73	53.21	2.09	
5700.00	5697.37	5697.51	332.54	12.69	12.68	14.09	31.10	57.01	2.20	
5800.00	5796.13	5796.45	309.50	12.91	12.90	14.36	35.53	61.89	2.35	
5900.00	5895.74	5896.30	310.39	13.14	13.12	14.63	39.74	66.53	2.48	
6000.00	5995.43	5996.24	310.07	13.36	13.34	14.91	42.84	70.05	2.57	
6100.00	6095.15	6096.19	308.73	13.59	13.57	15.19	44.83	72.46	2.62	
6200.00	6194.85	6196.14	306.38	13.81	13.79	15.48	45.75	73.87	2.63	
6300.00	6294.50	6296.04	303.02	14.04	14.02	15.77	45.89	74.44	2.61	
6400.00	6394.13	6395.91	299.13	14.27	14.24	16.07	45.83	74.83	2.58	
6500.00	6493.76	6495.78	295.30	14.50	14.47	16.37	46.07	75.55	2.56	
6600.00	6593.39	6595.65	291.57	14.73	14.69	16.68	46.74	76.61	2.56	
6700.00	6693.01	6695.52	287.94	14.96	14.92	16.99	47.61	77.99	2.57	
6800.00	6792.64	6795.39	284.46	15.19	15.15	17.30	48.87	79.67	2.59	
6900.00	6892.27	6895.26	281.13	15.42	15.37	17.62	50.31	81.63	2.61	
7000.00	6991.90	6995.13	277.97	15.65	15.60	17.95	52.06	83.86	2.64	
7100.00	7091.52	7095.00	274.98	15.89	15.82	18.28	54.03	86.32	2.67	
7200.00	7191.15	7194.87	272.16	16.12	16.05	18.62	56.21	89.01	2.71	
7300.00	7290.78	7294.74	269.51	16.36	16.28	18.96	58.65	91.90	2.76	
7400.00	7390.41	7394.62	267.03	16.59	16.50	19.30	61.29	94.98	2.82	
7500.00	7490.03	7494.49	264.71	16.83	16.73	19.65	64.05	98.22	2.87	
7600.00	7589.66	7594.36	262.54	17.06	16.96	20.01	66.93	101.61	2.93	
7700.00	7689.29	7694.23	260.51	17.30	17.18	20.37	69.97	105.14	2.99	
7800.00	7788.92	7794.10	258.62	17.54	17.41	20.74	73.17	108.79	3.05	
7900.00	7888.54	7893.97	256.85	17.78	17.64	21.11	76.42	112.55	3.11	
8000.00	7988.17	7993.84	255.19	18.01	17.86	21.49	79.78	116.42	3.18	
8100.00	8087.97	8093.86	253.47	18.23	18.07	21.87	83.23	120.31	3.24	
8200.00	8187.77	8193.82	251.45	18.41	18.24	22.26	86.76	124.22	3.32	
8300.00	8287.55	8293.72	249.17	18.59	18.42	22.65	90.33	128.20	3.39	
8400.00	8387.27	8393.52	246.66	18.77	18.59	23.05	93.98	132.34	3.45	

SD Anti-Collision Report

Secondary Well: Gaucho Unit 29H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										Risk
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	
8500.00	8486.93	8493.22	243.94	18.95	18.76	23.46	97.95	136.74	3.53	
8600.00	8586.49	8592.81	241.05	19.13	18.93	23.87	102.37	141.49	3.62	
8700.00	8685.93	8692.26	238.02	19.30	19.10	24.28	107.14	146.68	3.71	
8800.00	8785.23	8791.56	234.89	19.47	19.27	24.70	112.41	152.40	3.81	
8900.00	8884.66	8890.99	231.81	19.67	19.47	25.13	118.30	158.66	3.93	
9000.00	8984.11	8990.45	228.97	19.88	19.69	25.56	124.65	165.35	4.06	
9100.00	9083.57	9089.90	226.36	20.10	19.91	25.99	131.17	172.41	4.18	
9200.00	9183.02	9189.35	223.95	20.32	20.14	26.44	138.10	179.81	4.31	
9300.00	9282.48	9288.81	221.75	20.54	20.36	26.88	145.35	187.44	4.45	
9400.00	9382.01	9388.34	219.83	20.76	20.58	27.34	152.37	194.78	4.59	
9500.00	9481.62	9487.95	218.21	20.98	20.80	27.80	158.86	201.63	4.71	
9600.00	9581.30	9587.64	216.84	21.20	21.03	28.26	164.71	207.93	4.81	
9700.00	9681.05	9687.39	215.69	21.43	21.25	28.74	169.99	213.63	4.90	
9800.00	9780.86	9787.20	214.73	21.65	21.47	29.22	174.64	218.69	4.96	
9900.00	9880.72	9887.05	213.94	21.87	21.70	29.70	178.63	223.09	5.02	
10000.00	9980.62	9986.95	213.30	22.09	21.92	30.19	181.94	226.79	5.06	
10100.00	10080.56	10086.89	212.80	22.31	22.14	30.69	184.54	229.79	5.08	
10200.00	10180.52	10186.85	212.43	22.53	22.37	31.19	186.42	232.07	5.08	
10300.00	10280.50	10286.84	212.19	22.75	22.59	31.70	187.58	233.62	5.07	
10400.00	10380.50	10386.83	212.06	22.98	22.82	32.22	187.99	234.43	5.05	
10500.00	10480.50	10486.83	237.04	23.20	23.04	32.74	187.72	234.56	5.01	
10600.00	10580.50	10586.83	237.04	23.42	23.26	33.26	187.28	234.56	4.96	
10700.00	10680.50	10686.83	237.04	23.64	23.49	33.80	186.84	234.56	4.91	
10800.00	10780.50	10786.83	237.04	23.86	23.71	34.34	186.39	234.56	4.87	
10900.00	10907.80	10914.37	65.64	24.14	23.93	35.03	182.63	231.04	4.77	
11000.00	11041.37	11052.75	78.96	24.49	23.59	35.73	156.01	204.22	4.24	
11100.00	11129.05	11152.03	103.48	24.81	22.79	36.16	120.89	169.39	3.49	
11200.00	11169.53	11202.58	119.43	24.99	22.27	36.37	118.13	168.30	3.35	
11300.00	11183.80	11221.47	119.30	25.07	22.06	36.43	171.05	220.84	4.44	
11400.00	11183.39	11220.92	102.31	25.07	22.06	36.42	254.45	303.19	6.22	
11500.00	11173.58	11207.88	70.35	25.01	22.21	36.38	346.65	394.92	8.18	
11600.00	11156.83	11186.28	43.91	24.93	22.44	36.30	438.41	486.68	10.08	
11700.00	11135.51	11159.83	35.80	24.84	22.71	36.19	526.73	575.06	11.90	
11800.00	11115.77	11136.22	34.77	24.76	22.94	36.10	615.89	664.40	13.70	
11900.00	11098.22	11115.83	33.87	24.69	23.12	36.01	706.50	755.17	15.51	
12000.00	11082.62	11098.10	33.07	24.62	23.27	35.94	798.35	847.14	17.36	
12100.00	11068.71	11082.59	32.38	24.58	23.39	35.87	891.21	940.10	19.23	
12200.00	11056.28	11068.92	31.76	24.54	23.48	35.80	984.93	1033.89	21.12	
12300.00	11045.14	11056.81	31.22	24.50	23.56	35.75	1079.30	1128.38	22.99	
12400.00	11035.11	11046.02	30.73	24.47	23.63	35.70	1174.22	1223.45	24.85	
12500.00	11025.91	11036.20	30.29	24.44	23.68	35.65	1269.69	1319.03	26.73	
12600.00	11016.64	11026.37	29.85	24.41	23.72	35.60	1365.63	1415.03	28.64	
12700.00	11008.16	11017.43	29.45	24.39	23.75	35.56	1461.97	1511.39	30.59	
12800.00	11000.37	11009.26	29.09	24.37	23.78	35.52	1558.61	1608.06	32.52	
12900.00	10993.20	11001.78	28.77	24.35	23.80	35.48	1655.47	1705.00	34.42	
13000.00	10986.59	10994.89	28.47	24.33	23.82	35.45	1752.64	1802.19	36.37	
13100.00	10980.46	10988.54	28.19	24.31	23.84	35.42	1850.05	1899.59	38.35	
13200.00	10974.78	10982.66	27.94	24.30	23.85	35.38	1947.56	1997.18	40.25	
13300.00	10969.50	10977.21	27.71	24.29	23.87	35.36	2045.37	2094.95	42.26	
13400.00	10964.57	10972.14	27.49	24.27	23.88	35.33	2143.20	2192.87	44.14	
13500.00	10959.97	10967.41	27.29	24.26	23.89	35.30	2241.23	2290.93	46.10	
13600.00	10955.66	10962.99	27.10	24.25	23.89	35.28	2339.38	2389.12	48.03	
13700.00	10951.62	10958.85	26.93	24.24	23.90	35.26	2437.60	2487.42	49.93	
13800.00	10947.82	10954.97	26.77	24.23	23.91	35.24	2536.02	2585.82	51.92	
13900.00	10944.25	10951.32	26.62	24.22	23.91	35.22	2634.47	2684.32	53.84	
14000.00	10940.88	10947.89	26.47	24.22	23.91	35.20	2732.97	2782.91	55.73	
14100.00	10937.69	10944.65	26.34	24.21	23.92	35.19	2831.60	2881.57	57.67	
14200.00	10934.68	10941.59	26.21	24.20	23.92	35.17	2930.34	2980.31	59.64	

SD Anti-Collision Report

Secondary Well: Gaucho Unit 29H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	TVD Spread (US ft)	ES (US ft)	CC (US ft)	SF	Risk
14300.00	10931.83	10938.69	26.09	24.19	23.92	35.15	3029.15	3079.12	61.63	
14400.00	10929.13	10935.95	25.98	24.19	23.93	35.14	3127.95	3177.98	63.52	
14500.00	10926.56	10933.34	25.87	24.18	23.93	35.13	3226.80	3276.91	65.39	
14600.00	10924.12	10930.87	25.77	24.18	23.93	35.11	3325.71	3375.89	67.28	
14700.00	10921.80	10928.51	25.67	24.17	23.93	35.10	3424.68	3474.91	69.18	
14800.00	10919.58	10926.27	25.58	24.16	23.93	35.09	3523.71	3573.99	71.08	
14900.00	10917.47	10924.13	25.49	24.16	23.93	35.08	3622.78	3673.10	72.99	
15000.00	10915.45	10922.09	25.41	24.16	23.93	35.07	3721.90	3772.26	74.90	
15100.00	10913.52	10920.14	25.33	24.15	23.93	35.06	3821.05	3871.45	76.82	
15200.00	10911.68	10918.28	25.26	24.15	23.93	35.05	3920.25	3970.68	78.73	
15300.00	10909.91	10916.49	25.18	24.14	23.93	35.04	4019.47	4069.94	80.64	
15400.00	10908.22	10914.78	25.11	24.14	23.93	35.03	4118.72	4169.23	82.55	
15500.00	10906.59	10913.14	25.05	24.13	23.93	35.02	4218.01	4268.55	84.45	
15600.00	10905.03	10911.57	24.98	24.13	23.93	35.01	4317.32	4367.90	86.35	
15700.00	10903.53	10910.05	24.92	24.13	23.93	35.00	4416.65	4467.27	88.25	
15800.00	10902.09	10908.60	24.86	24.12	23.93	35.00	4515.98	4566.67	90.11	
15830.77	10901.65	10908.16	24.85	24.12	23.93	34.99	4546.55	4597.25	90.67	

**Weatherford**

Weatherford Drilling Services

GeoDec4 v2.4.0.0

Report Date: December 09, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Gaucho Unit 30H
API Number: _____
Rig Name: _____
Location: Lea Co, NM Nad83 NME
Block: _____
Engineer: _____

NAD83 / New Mexico East (ftUS)	NAD83 (1986)
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1983 (1986)	Datum: North American Datum 1983 (1986)
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
EPSG: 2257	EPSG: 4269
North: 503928.73 US Survey Foot	Latitude: 32.382586 Degree
East: 799941.69 US Survey Foot	Longitude: -103.49561 Degree
Convergence: 0.45°	
Declination: 7.15°	
Total Correction: 6.70°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 22' 57.31" N
Longitude = 103° 29' 44.20" W

Magnetic Declination = 7.15 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6492
Local Field Strength = 48280 nT	Magnetic Vector X = 23738 nT
Magnetic Dip = 60.30 deg	Magnetic Vector Y = 2978 nT
Magnetic Model = bggm2015.bgs	Magnetic Vector Z = 41936 nT
Run Date = February 15, 2016	Magnetic Vector H = 23924 nT

Signed: _____ Date: _____

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