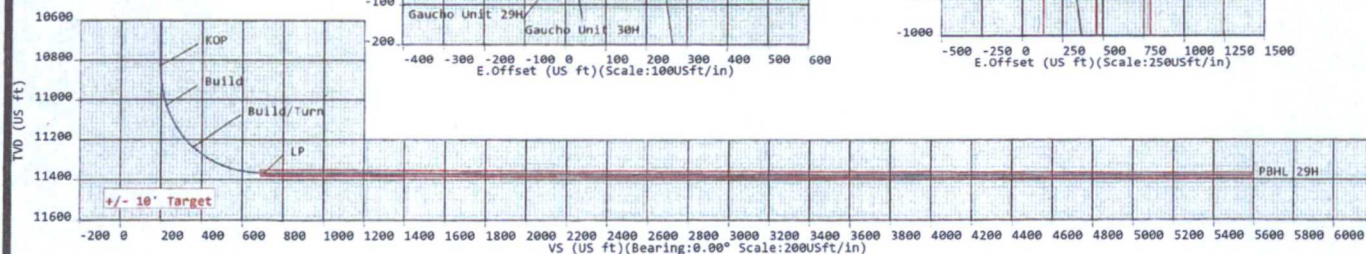
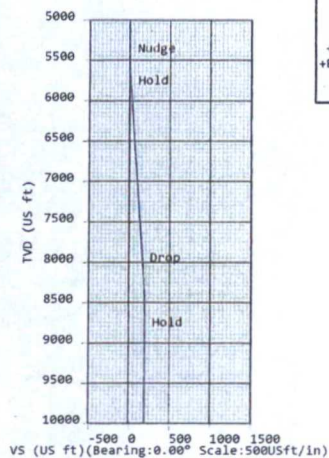


KB-3487.50
GL-3464.00



Plan Data for Gaucho Unit 29H

Plan Point Information:										
Dogleg Severity Unit: <u>1300.00ft</u>					Position Offsets from Slot centre					
UD	Inc	Az	TVD	N/+/-	E/+/-	Northing	Easting	VSec	DLS	
(Mft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	503971.54	799915.43	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	503971.54	799915.43	0.00	0.00	
11607.50	4.00	0.00	5799.58	13.00	0.00	504055.50	799915.43	13.00	10.00	
8800.00	4.00	0.00	7994.32	167.42	0.00	504018.36	799915.43	167.42	0.00	
8800.00	0.00	0.00	8793.67	195.34	0.00	504166.88	799915.43	195.34	0.50	
10837.55	0.00	0.00	10831.22	195.34	0.00	504166.88	799915.43	195.34	0.00	
11037.55	20.00	30.00	11027.18	225.26	17.28	504196.80	799932.71	225.26	10.00	
11301.72	51.70	30.00	11238.58	357.54	91.65	504329.08	800009.08	357.54	12.00	
11610.00	85.00	30.00	11382.00	588.14	174.90	505050.68	800090.38	588.14	15.00	
15575.10	89.38	86.00	11286.00	588.14	174.90	505050.68	800090.38	588.14	15.00	

Plan Data for Gaucho Unit 29H

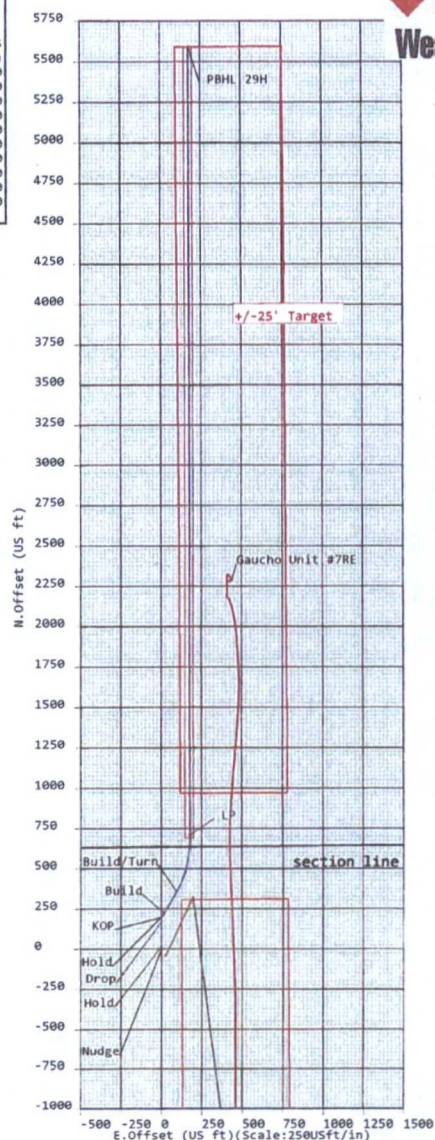
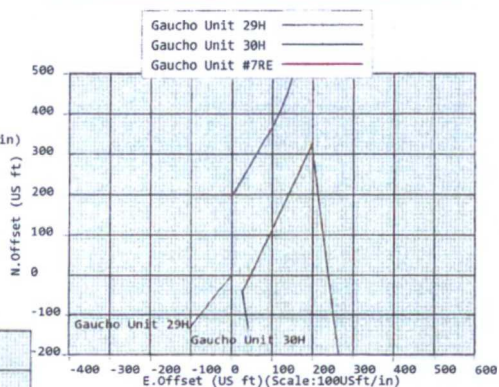
Target Set Information:						
Name: Gauchon Unit 29H						
Position offsets from Slot centre						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape Comment
	(usft)	(usft)	(usft)	(usft)	(usft)	
PBHL 29H	11382.00	5589.14	174.90	509560.68	800090.33	Cuboid

Plan Data for Gaucho Unit 29H

Slot: Gaucho Unit 29H
Position:
Offset is from Site centre
+N/-S: -304.07USft Northing: 503971.54USft Latitude: 32°22'57.7"
+E/-W: 124.81USft Easting: 799915.43USft Longitude: -103°29'44.5"
Elevation Above VRO: 3464.00USft

Plan Data for Gaucho Unit 29H

Well: Gaucho Unit 29H
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P1:V2
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00Uft Azimuth: 0.00°
+E/-W: 0.00Uft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bggm2015 48384(nT) 7.26° 60.31° 2015-02-15





5D Plan Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Gaucha Unit 29H,30H Pad*
Well Name: *Gaucha Unit 29H*
Plan: *P1:V2*

9 December 2015





Gaucho Unit 29H

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 29H	Position (Relative to Site Centre)			
	+N/-S: -304.07US ft	Northing: 503971.54US ft	Latitude: 32°22'57.73"	
	+E/-W: 124.81US ft	Easting: 799915.43US ft	Longitude: -103°29'44.50"	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3464.00US ft				
Comment:				
Well: Gaucho Unit 29H	Type:Main well	UWI:	Plan:P1:V2	
	File Number:	Comment:		
	Closure Distance:5591.88US ft	Closure Azimuth:1.79°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00US ft	+E/-W: 0.00US ft	Az: 0.00°	
	Magnetic Parameters:			
	Model: bggm2015	Field Strength:	Declination: 7.26°	Dip: 60.31°
	48384.7nT			Date: 15/Feb/2015

Drill floor: Plan: P1:V2

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

3487.50us ft

Inclination: 0.00°

Azimuth: 0.00°

Target set: Gaucho Unit 29H Comment:

Target Name:	Shape:	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (USft)	Easting (USft)	Comment
PBHL 29H	Cuboid	11382.00	5589.14	174.90	509560.68	800090.33	

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

SD 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	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nudge
5800.00	4.00	0.00	5799.68	13.96	0.00	13.96	1.00	1.00	0.00	0.00	Hold
8000.00	4.00	0.00	7994.32	167.42	0.00	167.42	0.00	0.00	0.00	0.00	Drop
8800.00	0.00	0.00	8793.67	195.34	0.00	195.34	0.50	-0.50	0.00	180.00	Hold
10837.55	0.00	0.00	10831.22	195.34	0.00	195.34	0.00	0.00	0.00	0.00	KOP
11037.55	20.00	30.00	11027.18	225.26	17.28	225.26	10.00	10.00	0.00	30.00	Build
11301.72	51.70	30.00	11238.58	357.54	93.65	357.54	12.00	12.00	0.00	0.00	Build/Turn
11693.79	89.84	360.00	11368.00	706.65	175.19	706.65	12.00	9.73	-7.65	316.91	LP
16576.30	89.84	360.00	11382.00	5589.14	174.90	5589.14	0.00	0.00	0.00	0.00	PBHL 29H

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	503971.54	799915.43	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	

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
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	503971.54	799915.43	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	503971.54	799915.43	Nudge
5500.00	1.00	0.00	5499.99	0.87	0.00	0.87	1.00	503972.41	799915.43	
5600.00	2.00	0.00	5599.96	3.49	0.00	3.49	1.00	503975.03	799915.43	
5700.00	3.00	0.00	5699.86	7.85	0.00	7.85	1.00	503979.39	799915.43	
5800.00	4.00	0.00	5799.68	13.96	0.00	13.96	1.00	503985.50	799915.43	Hold
5900.00	4.00	0.00	5899.43	20.93	0.00	20.93	0.00	503992.47	799915.43	
6000.00	4.00	0.00	5999.19	27.91	0.00	27.91	0.00	503999.45	799915.43	
6100.00	4.00	0.00	6098.94	34.88	0.00	34.88	0.00	504006.42	799915.43	
6200.00	4.00	0.00	6198.70	41.86	0.00	41.86	0.00	504013.40	799915.43	
6300.00	4.00	0.00	6298.46	48.84	0.00	48.84	0.00	504020.38	799915.43	
6400.00	4.00	0.00	6398.21	55.81	0.00	55.81	0.00	504027.35	799915.43	
6500.00	4.00	0.00	6497.97	62.79	0.00	62.79	0.00	504034.33	799915.43	
6600.00	4.00	0.00	6597.73	69.76	0.00	69.76	0.00	504041.30	799915.43	
6700.00	4.00	0.00	6697.48	76.74	0.00	76.74	0.00	504048.28	799915.43	
6800.00	4.00	0.00	6797.24	83.71	0.00	83.71	0.00	504055.25	799915.43	
6900.00	4.00	0.00	6897.00	90.69	0.00	90.69	0.00	504062.23	799915.43	
7000.00	4.00	0.00	6996.75	97.66	0.00	97.66	0.00	504069.20	799915.43	
7100.00	4.00	0.00	7096.51	104.64	0.00	104.64	0.00	504076.18	799915.43	
7200.00	4.00	0.00	7196.26	111.62	0.00	111.62	0.00	504083.16	799915.43	
7300.00	4.00	0.00	7296.02	118.59	0.00	118.59	0.00	504090.13	799915.43	
7400.00	4.00	0.00	7395.78	125.57	0.00	125.57	0.00	504097.11	799915.43	
7500.00	4.00	0.00	7495.53	132.54	0.00	132.54	0.00	504104.08	799915.43	
7600.00	4.00	0.00	7595.29	139.52	0.00	139.52	0.00	504111.06	799915.43	
7700.00	4.00	0.00	7695.05	146.49	0.00	146.49	0.00	504118.03	799915.43	
7800.00	4.00	0.00	7794.80	153.47	0.00	153.47	0.00	504125.01	799915.43	
7900.00	4.00	0.00	7894.56	160.45	0.00	160.45	0.00	504131.99	799915.43	
8000.00	4.00	0.00	7994.32	167.42	0.00	167.42	0.00	504138.96	799915.43	Drop
8100.00	3.50	0.00	8094.10	173.96	0.00	173.96	0.50	504145.50	799915.43	
8200.00	3.00	0.00	8193.94	179.63	0.00	179.63	0.50	504151.17	799915.43	
8300.00	2.50	0.00	8293.83	184.43	0.00	184.43	0.50	504155.97	799915.43	
8400.00	2.00	0.00	8393.75	188.35	0.00	188.35	0.50	504159.89	799915.43	
8500.00	1.50	0.00	8493.70	191.41	0.00	191.41	0.50	504162.95	799915.43	
8600.00	1.00	0.00	8593.68	193.59	0.00	193.59	0.50	504165.13	799915.43	
8700.00	0.50	0.00	8693.67	194.90	0.00	194.90	0.50	504166.44	799915.43	
8800.00	0.00	0.00	8793.67	195.34	0.00	195.34	0.50	504166.88	799915.43	Hold
8900.00	0.00	0.00	8893.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9000.00	0.00	0.00	8993.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9100.00	0.00	0.00	9093.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9200.00	0.00	0.00	9193.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9300.00	0.00	0.00	9293.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9400.00	0.00	0.00	9393.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9500.00	0.00	0.00	9493.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9600.00	0.00	0.00	9593.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9700.00	0.00	0.00	9693.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9800.00	0.00	0.00	9793.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
9900.00	0.00	0.00	9893.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10000.00	0.00	0.00	9993.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10100.00	0.00	0.00	10093.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10200.00	0.00	0.00	10193.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10300.00	0.00	0.00	10293.67	195.34	0.00	195.34	0.00	504166.88	799915.43	

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	0.00	0.00	10393.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10500.00	0.00	0.00	10493.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10600.00	0.00	0.00	10593.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10700.00	0.00	0.00	10693.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10800.00	0.00	0.00	10793.67	195.34	0.00	195.34	0.00	504166.88	799915.43	
10837.55	0.00	0.00	10831.22	195.34	0.00	195.34	0.00	504166.88	799915.43	KOP
10900.00	6.24	30.00	10893.54	198.28	1.70	198.28	10.00	504169.82	799917.13	
11000.00	16.24	30.00	10991.50	215.15	11.44	215.15	10.00	504186.69	799926.87	
11037.55	20.00	30.00	11027.18	225.26	17.28	225.26	10.00	504196.80	799932.71	Build
11100.00	27.49	30.00	11084.30	247.02	29.84	247.02	12.00	504218.56	799945.27	
11200.00	39.49	30.00	11167.54	294.73	57.38	294.73	12.00	504266.27	799972.81	
11300.00	51.49	30.00	11237.52	356.38	92.98	356.38	12.00	504327.92	800008.41	
11301.72	51.70	30.00	11238.58	357.54	93.65	357.54	12.00	504329.08	800009.08	Build/Turn
11400.00	60.69	20.78	11293.29	431.26	128.26	431.26	12.00	504402.80	800043.69	
11500.00	70.37	12.98	11334.72	518.23	154.41	518.23	12.00	504489.77	800069.84	
11600.00	80.35	6.09	11359.98	613.48	170.28	613.48	12.00	504585.02	800085.71	
11693.79	89.84	360.00	11368.00	706.65	175.19	706.65	12.00	504678.19	800090.62	LP
11700.00	89.84	360.00	11368.02	712.86	175.19	712.86	0.00	504684.40	800090.62	
11800.00	89.84	360.00	11368.30	812.86	175.19	812.86	0.00	504784.40	800090.62	
11900.00	89.84	360.00	11368.59	912.86	175.18	912.86	0.00	504884.40	800090.61	
12000.00	89.84	360.00	11368.88	1012.86	175.18	1012.86	0.00	504984.40	800090.61	
12100.00	89.84	360.00	11369.16	1112.86	175.17	1112.86	0.00	505084.40	800090.60	
12200.00	89.84	360.00	11369.45	1212.86	175.16	1212.86	0.00	505184.40	800090.59	
12300.00	89.84	360.00	11369.74	1312.86	175.16	1312.86	0.00	505284.40	800090.59	
12400.00	89.84	360.00	11370.02	1412.86	175.15	1412.86	0.00	505384.40	800090.58	
12500.00	89.84	360.00	11370.31	1512.86	175.15	1512.86	0.00	505484.40	800090.58	
12600.00	89.84	360.00	11370.60	1612.86	175.14	1612.86	0.00	505584.40	800090.57	
12700.00	89.84	360.00	11370.88	1712.86	175.13	1712.86	0.00	505684.40	800090.56	
12800.00	89.84	360.00	11371.17	1812.86	175.13	1812.86	0.00	505784.40	800090.56	
12900.00	89.84	360.00	11371.46	1912.85	175.12	1912.85	0.00	505884.39	800090.55	
13000.00	89.84	360.00	11371.74	2012.85	175.12	2012.85	0.00	505984.39	800090.55	
13100.00	89.84	360.00	11372.03	2112.85	175.11	2112.85	0.00	506084.39	800090.54	
13200.00	89.84	360.00	11372.32	2212.85	175.10	2212.85	0.00	506184.39	800090.53	
13300.00	89.84	360.00	11372.60	2312.85	175.10	2312.85	0.00	506284.39	800090.53	
13400.00	89.84	360.00	11372.89	2412.85	175.09	2412.85	0.00	506384.39	800090.52	
13500.00	89.84	360.00	11373.18	2512.85	175.09	2512.85	0.00	506484.39	800090.52	
13600.00	89.84	360.00	11373.46	2612.85	175.08	2612.85	0.00	506584.39	800090.51	
13700.00	89.84	360.00	11373.75	2712.85	175.07	2712.85	0.00	506684.39	800090.50	
13800.00	89.84	360.00	11374.04	2812.85	175.07	2812.85	0.00	506784.39	800090.50	
13900.00	89.84	360.00	11374.32	2912.85	175.06	2912.85	0.00	506884.39	800090.49	
14000.00	89.84	360.00	11374.61	3012.85	175.06	3012.85	0.00	506984.39	800090.49	
14100.00	89.84	360.00	11374.90	3112.85	175.05	3112.85	0.00	507084.39	800090.48	
14200.00	89.84	360.00	11375.19	3212.85	175.04	3212.85	0.00	507184.39	800090.47	
14300.00	89.84	360.00	11375.47	3312.85	175.04	3312.85	0.00	507284.39	800090.47	
14400.00	89.84	360.00	11375.76	3412.85	175.03	3412.85	0.00	507384.39	800090.46	
14500.00	89.84	360.00	11376.05	3512.85	175.02	3512.85	0.00	507484.39	800090.45	
14600.00	89.84	360.00	11376.33	3612.85	175.02	3612.85	0.00	507584.39	800090.45	
14700.00	89.84	360.00	11376.62	3712.85	175.01	3712.85	0.00	507684.39	800090.44	
14800.00	89.84	360.00	11376.91	3812.85	175.01	3812.85	0.00	507784.39	800090.44	
14900.00	89.84	360.00	11377.19	3912.85	175.00	3912.85	0.00	507884.39	800090.43	
15000.00	89.84	360.00	11377.48	4012.85	174.99	4012.85	0.00	507984.39	800090.42	
15100.00	89.84	360.00	11377.77	4112.85	174.99	4112.85	0.00	508084.39	800090.42	
15200.00	89.84	360.00	11378.05	4212.85	174.98	4212.85	0.00	508184.39	800090.41	
15300.00	89.84	360.00	11378.34	4312.84	174.98	4312.84	0.00	508284.38	800090.41	
15400.00	89.84	360.00	11378.63	4412.84	174.97	4412.84	0.00	508384.38	800090.40	
15500.00	89.84	360.00	11378.91	4512.84	174.96	4512.84	0.00	508484.38	800090.39	
15600.00	89.84	360.00	11379.20	4612.84	174.96	4612.84	0.00	508584.38	800090.39	
15700.00	89.84	360.00	11379.49	4712.84	174.95	4712.84	0.00	508684.38	800090.38	
15800.00	89.84	360.00	11379.77	4812.84	174.95	4812.84	0.00	508784.38	800090.38	

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
15900.00	89.84	360.00	11380.06	4912.84	174.94	4912.84	0.00	508884.38	800090.37	
16000.00	89.84	360.00	11380.35	5012.84	174.93	5012.84	0.00	508984.38	800090.36	
16100.00	89.84	360.00	11380.63	5112.84	174.93	5112.84	0.00	509084.38	800090.36	
16200.00	89.84	360.00	11380.92	5212.84	174.92	5212.84	0.00	509184.38	800090.35	
16300.00	89.84	360.00	11381.21	5312.84	174.92	5312.84	0.00	509284.38	800090.35	
16400.00	89.84	360.00	11381.49	5412.84	174.91	5412.84	0.00	509384.38	800090.34	
16500.00	89.84	360.00	11381.78	5512.84	174.90	5512.84	0.00	509484.38	800090.33	
16576.30	89.84	360.00	11382.00	5589.14	174.90	5589.14	0.00	509560.68	800090.33	PBHL 29H



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 29H*

9 December 2015





Gaucho Unit 29H

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 29H	Position (Relative to Site Centre)			
	+N/-S: -304.07US ft	Northing: 503971.54US ft	Latitude: 32°22'57.73"	
	+E/-W: 124.81US ft	Easting: 799915.43US ft	Longitude: -103°29'44.50"	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3464.00US ft				
Comment:				
Well: Gaucho Unit 29H	Type:Main well	UWI:	Plan:Working Plan	
	File Number:	Comment:		
	Closure Distance:5591.88US ft	Closure Azimuth:1.79°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00US ft		+E/-W: 0.00US ft	Az: 0.00°
	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): 23.50us ft	Elevation above MSL: 3487.50us ft	Inclination: 0.00°	Azimuth: 0.00°

Collision / Uncertainty Analysis				
Primary Well	Start MD (USFt)	End MD (USFt)	Collision Risk Interval	No. of Std. Deviations in Error Computation
Gaucho Unit 29H (p)	0.00	30000.00	100.00	2

Secondary Well Names:				
Gaucho Unit #7RE (s)				
Gaucho Unit 30H (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
Gaucho Unit 30H (p)	5463.28	5463.28	5463.28	25.67	50.52	2.03	
Gaucho Unit #7RE (s)	10334.57	10328.24	12112.82	376.28	439.35	6.97	

Primary Well: Gaucho Unit 29H (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	148.47	0.00	0.00	0.00	Gaucho Unit 30H (p)	49.66	50.22	88.63	
100.00	100.00	148.47	0.11	0.11	4.60	Gaucho Unit 30H (p)	49.44	50.22	63.80	
200.00	200.00	148.47	0.34	0.34	4.62	Gaucho Unit 30H (p)	48.99	50.22	40.61	
300.00	300.00	148.47	0.56	0.56	4.65	Gaucho Unit 30H (p)	48.54	50.22	29.79	
400.00	400.00	148.47	0.79	0.79	4.69	Gaucho Unit 30H (p)	48.09	50.22	23.52	
500.00	500.00	148.47	1.01	1.01	4.75	Gaucho Unit 30H (p)	47.64	50.22	19.43	
600.00	600.00	148.47	1.24	1.24	4.81	Gaucho Unit 30H (p)	47.19	50.22	16.55	
700.00	700.00	148.47	1.46	1.46	4.89	Gaucho Unit 30H (p)	46.74	50.22	14.42	
800.00	800.00	148.47	1.69	1.69	4.97	Gaucho Unit 30H (p)	46.29	50.22	12.77	
900.00	900.00	148.47	1.91	1.91	5.07	Gaucho Unit 30H (p)	45.84	50.22	11.46	
1000.00	1000.00	148.47	2.14	2.14	5.17	Gaucho Unit 30H (p)	45.39	50.22	10.39	
1100.00	1100.00	148.47	2.36	2.36	5.27	Gaucho Unit 30H (p)	44.94	50.22	9.51	
1200.00	1200.00	148.47	2.59	2.59	5.39	Gaucho Unit 30H (p)	44.49	50.22	8.76	
1300.00	1300.00	148.47	2.81	2.81	5.51	Gaucho Unit 30H (p)	44.04	50.22	8.13	
1400.00	1400.00	148.47	3.03	3.03	5.63	Gaucho Unit 30H (p)	43.59	50.22	7.58	
1500.00	1500.00	148.47	3.26	3.26	5.76	Gaucho Unit 30H (p)	43.14	50.22	7.09	
1600.00	1600.00	148.47	3.48	3.48	5.90	Gaucho Unit 30H (p)	42.69	50.22	6.67	
1700.00	1700.00	148.47	3.71	3.71	6.04	Gaucho Unit 30H (p)	42.24	50.22	6.30	
1800.00	1800.00	148.47	3.93	3.93	6.18	Gaucho Unit 30H (p)	41.80	50.22	5.96	
1900.00	1900.00	148.47	4.16	4.16	6.33	Gaucho Unit 30H (p)	41.35	50.22	5.66	
2000.00	2000.00	148.47	4.38	4.38	6.48	Gaucho Unit 30H (p)	40.90	50.22	5.39	
2100.00	2100.00	148.47	4.61	4.61	6.63	Gaucho Unit 30H (p)	40.45	50.22	5.14	
2200.00	2200.00	148.47	4.83	4.83	6.79	Gaucho Unit 30H (p)	40.00	50.22	4.91	
2300.00	2300.00	148.47	5.06	5.06	6.95	Gaucho Unit 30H (p)	39.55	50.22	4.70	
2400.00	2400.00	148.47	5.28	5.28	7.12	Gaucho Unit 30H (p)	39.10	50.22	4.51	
2500.00	2500.00	148.47	5.51	5.51	7.28	Gaucho Unit 30H (p)	38.65	50.22	4.34	
2600.00	2600.00	148.47	5.73	5.73	7.45	Gaucho Unit 30H (p)	38.20	50.22	4.18	
2700.00	2700.00	148.47	5.96	5.96	7.62	Gaucho Unit 30H (p)	37.75	50.22	4.03	

Primary Well: Gaucho Unit 29H (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	148.47	6.18	6.18	7.80	Gaucha Unit 30H (p)	37.30	50.22	3.89	
2900.00	2900.00	148.47	6.41	6.41	7.97	Gaucha Unit 30H (p)	36.85	50.22	3.76	
3000.00	3000.00	148.47	6.63	6.63	8.15	Gaucha Unit 30H (p)	36.40	50.22	3.63	
3100.00	3100.00	148.47	6.86	6.86	8.33	Gaucha Unit 30H (p)	35.95	50.22	3.52	
3200.00	3200.00	148.47	7.08	7.08	8.52	Gaucha Unit 30H (p)	35.50	50.22	3.41	
3300.00	3300.00	148.47	7.31	7.31	8.70	Gaucha Unit 30H (p)	35.05	50.22	3.31	
3400.00	3400.00	148.47	7.53	7.53	8.89	Gaucha Unit 30H (p)	34.60	50.22	3.22	
3500.00	3500.00	148.47	7.76	7.76	9.09	Gaucha Unit 30H (p)	34.16	50.22	3.13	
3600.00	3600.00	148.47	7.98	7.98	9.28	Gaucha Unit 30H (p)	33.71	50.22	3.04	
3700.00	3700.00	148.47	8.20	8.20	9.48	Gaucha Unit 30H (p)	33.26	50.22	2.96	
3800.00	3800.00	148.47	8.43	8.43	9.68	Gaucha Unit 30H (p)	32.81	50.22	2.88	
3900.00	3900.00	148.47	8.65	8.65	9.88	Gaucha Unit 30H (p)	32.36	50.22	2.81	
4000.00	4000.00	148.47	8.88	8.88	10.09	Gaucha Unit 30H (p)	31.91	50.22	2.74	
4100.00	4100.00	148.47	9.10	9.10	10.30	Gaucha Unit 30H (p)	31.46	50.22	2.68	
4200.00	4200.00	148.47	9.33	9.33	10.51	Gaucha Unit 30H (p)	31.01	50.22	2.61	
4300.00	4300.00	148.47	9.55	9.55	10.72	Gaucha Unit 30H (p)	30.56	50.22	2.55	
4400.00	4400.00	148.47	9.78	9.78	10.94	Gaucha Unit 30H (p)	30.11	50.22	2.50	
4500.00	4500.00	148.47	10.00	10.00	11.16	Gaucha Unit 30H (p)	29.66	50.22	2.44	
4600.00	4600.00	148.47	10.23	10.23	11.39	Gaucha Unit 30H (p)	29.21	50.22	2.39	
4700.00	4700.00	148.47	10.45	10.45	11.62	Gaucha Unit 30H (p)	28.76	50.22	2.34	
4800.00	4800.00	148.47	10.68	10.68	11.85	Gaucha Unit 30H (p)	28.31	50.22	2.29	
4900.00	4900.00	148.47	10.90	10.90	12.08	Gaucha Unit 30H (p)	27.86	50.22	2.25	
5000.00	5000.00	148.47	11.13	11.13	12.32	Gaucha Unit 30H (p)	27.41	50.22	2.20	
5100.00	5100.00	148.47	11.35	11.35	12.57	Gaucha Unit 30H (p)	26.96	50.22	2.16	
5200.00	5200.00	148.47	11.58	11.58	12.81	Gaucha Unit 30H (p)	26.52	50.22	2.12	
5300.00	5300.00	148.47	11.80	11.80	13.06	Gaucha Unit 30H (p)	26.07	50.22	2.08	
5400.00	5400.00	148.47	12.03	12.03	13.32	Gaucha Unit 30H (p)	25.62	50.22	2.04	
5500.00	5499.99	148.98	12.25	12.25	13.57	Gaucha Unit 30H (p)	25.95	50.97	2.04	
5600.00	5599.96	150.42	12.47	12.47	13.84	Gaucha Unit 30H (p)	27.74	53.23	2.09	
5700.00	5699.86	152.57	12.70	12.69	14.10	Gaucha Unit 30H (p)	31.12	57.06	2.20	
5800.00	5799.68	154.52	12.92	12.90	14.37	Gaucha Unit 30H (p)	35.58	61.99	2.35	
5900.00	5899.43	155.36	13.14	13.13	14.64	Gaucha Unit 30H (p)	39.78	66.62	2.48	
6000.00	5999.19	155.01	13.37	13.35	14.92	Gaucha Unit 30H (p)	42.87	70.13	2.57	
6100.00	6098.94	153.61	13.59	13.58	15.21	Gaucha Unit 30H (p)	44.85	72.52	2.62	
6200.00	6198.70	151.21	13.82	13.80	15.49	Gaucha Unit 30H (p)	45.75	73.91	2.62	
6300.00	6298.46	147.78	14.05	14.03	15.79	Gaucha Unit 30H (p)	45.86	74.45	2.60	

SD Anti-Collision Report

Primary Well: Gaucho Unit 29H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										Risk
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	
6400.00	6398.21	143.89	14.28	14.25	16.08	Gaucha Unit 30H (p)	45.83	74.85	2.58	
6500.00	6497.97	140.07	14.51	14.48	16.38	Gaucha Unit 30H (p)	46.08	75.59	2.56	
6600.00	6597.73	136.33	14.74	14.70	16.69	Gaucha Unit 30H (p)	46.76	76.66	2.56	
6700.00	6697.48	132.72	14.97	14.93	17.00	Gaucha Unit 30H (p)	47.63	78.05	2.57	
6800.00	6797.24	129.24	15.20	15.16	17.32	Gaucha Unit 30H (p)	48.91	79.74	2.59	
6900.00	6897.00	125.92	15.43	15.38	17.64	Gaucha Unit 30H (p)	50.35	81.71	2.61	
7000.00	6996.75	122.76	15.67	15.61	17.97	Gaucha Unit 30H (p)	52.12	83.95	2.64	
7100.00	7096.51	119.78	15.90	15.84	18.30	Gaucha Unit 30H (p)	54.10	86.42	2.67	
7200.00	7196.26	116.96	16.13	16.06	18.63	Gaucha Unit 30H (p)	56.29	89.12	2.71	
7300.00	7296.02	114.32	16.37	16.29	18.97	Gaucha Unit 30H (p)	58.74	92.02	2.77	
7400.00	7395.78	111.85	16.60	16.52	19.32	Gaucha Unit 30H (p)	61.39	95.10	2.82	
7500.00	7495.53	109.53	16.84	16.74	19.67	Gaucha Unit 30H (p)	64.15	98.35	2.88	
7600.00	7595.29	107.37	17.08	16.97	20.03	Gaucha Unit 30H (p)	67.05	101.74	2.93	
7700.00	7695.05	105.35	17.31	17.20	20.39	Gaucha Unit 30H (p)	70.10	105.28	2.99	
7800.00	7794.80	103.46	17.55	17.42	20.76	Gaucha Unit 30H (p)	73.30	108.93	3.06	
7900.00	7894.56	101.69	17.79	17.65	21.13	Gaucha Unit 30H (p)	76.56	112.70	3.12	
8000.00	7994.32	100.04	18.03	17.88	21.51	Gaucha Unit 30H (p)	79.93	116.57	3.18	
8100.00	8094.10	98.32	18.24	18.08	21.89	Gaucha Unit 30H (p)	83.38	120.46	3.25	
8200.00	8193.94	96.30	18.42	18.25	22.28	Gaucha Unit 30H (p)	86.91	124.36	3.32	
8300.00	8293.83	94.03	18.60	18.43	22.68	Gaucha Unit 30H (p)	90.49	128.35	3.39	
8400.00	8393.75	91.52	18.78	18.60	23.08	Gaucha Unit 30H (p)	94.15	132.50	3.46	
8500.00	8493.70	88.80	18.96	18.77	23.48	Gaucha Unit 30H (p)	98.14	136.91	3.53	
8600.00	8593.68	85.92	19.14	18.94	23.90	Gaucha Unit 30H (p)	102.58	141.67	3.62	
8700.00	8693.67	82.89	19.31	19.12	24.31	Gaucha Unit 30H (p)	107.38	146.88	3.72	
8800.00	8793.67	79.77	19.49	19.29	24.74	Gaucha Unit 30H (p)	112.68	152.63	3.82	
8900.00	8893.67	76.70	19.68	19.49	25.16	Gaucha Unit 30H (p)	118.60	158.91	3.94	
9000.00	8993.67	73.87	19.91	19.71	25.60	Gaucha Unit 30H (p)	124.96	165.62	4.07	
9100.00	9093.67	71.26	20.13	19.94	26.04	Gaucha Unit 30H (p)	131.51	172.69	4.19	
9200.00	9193.67	68.87	20.35	20.16	26.48	Gaucha Unit 30H (p)	138.46	180.10	4.33	
9300.00	9293.67	66.66	20.57	20.38	26.93	Gaucha Unit 30H (p)	145.72	187.75	4.47	
9400.00	9393.67	64.75	20.79	20.61	27.39	Gaucha Unit 30H (p)	152.75	195.11	4.61	
9500.00	9493.67	63.13	21.01	20.83	27.85	Gaucha Unit 30H (p)	159.24	201.98	4.73	
9600.00	9593.67	61.76	21.23	21.05	28.32	Gaucha Unit 30H (p)	165.09	208.29	4.82	
9700.00	9693.67	60.62	21.45	21.28	28.80	Gaucha Unit 30H (p)	170.35	214.00	4.90	
9800.00	9793.67	59.66	21.67	21.50	29.28	Gaucha Unit 30H (p)	174.98	219.05	4.97	
9900.00	9893.67	58.88	21.90	21.73	29.76	Gaucha Unit 30H (p)	178.94	223.43	5.02	

5D Air Collision Report

Primary Well: Gaucho Unit 29H (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	9993.67	58.25	22.12	21.95	30.26	Gaucho Unit 30H (p)	182.21	227.10	5.06	
10100.00	10093.67	57.76	22.34	22.17	30.75	Gaucho Unit 30H (p)	184.76	230.05	5.08	
10200.00	10193.67	57.40	22.56	22.40	31.26	Gaucho Unit 30H (p)	186.58	232.28	5.08	
10300.00	10293.67	57.17	22.78	22.62	31.77	Gaucho Unit 30H (p)	187.66	233.75	5.07	
10400.00	10393.67	57.05	23.00	22.85	32.28	Gaucho Unit 30H (p)	187.99	234.48	5.04	
10500.00	10493.67	57.04	23.23	23.07	32.81	Gaucho Unit 30H (p)	187.66	234.56	5.00	
10600.00	10593.67	57.04	23.45	23.29	33.33	Gaucho Unit 30H (p)	187.22	234.56	4.95	
10700.00	10693.67	57.04	23.67	23.52	33.87	Gaucho Unit 30H (p)	186.78	234.56	4.91	
10800.00	10793.67	57.04	23.89	23.74	34.41	Gaucho Unit 30H (p)	186.34	234.56	4.86	
10900.00	10893.54	28.49	24.11	23.93	34.95	Gaucho Unit 30H (p)	181.70	230.31	4.74	
11000.00	10991.50	38.34	24.34	23.81	35.48	Gaucho Unit 30H (p)	157.80	206.66	4.23	
11100.00	11084.30	56.12	24.63	23.25	35.95	Gaucho Unit 30H (p)	125.56	175.19	3.53	
11200.00	11167.54	71.48	24.98	22.30	36.36	Gaucho Unit 30H (p)	113.11	162.51	3.29	
11300.00	11237.52	75.06	25.41	21.14	36.68	Gaucho Unit 30H (p)	144.82	192.34	4.05	
11400.00	11293.29	71.19	25.95	20.28	36.96	Gaucho Unit 30H (p)	213.50	259.96	5.60	
11500.00	11334.72	50.80	26.54	19.52	37.22	Gaucho Unit 30H (p)	300.06	346.51	7.46	
11600.00	11359.98	24.10	27.17	18.99	37.47	Gaucho Unit 30H (p)	390.84	437.49	9.38	
11700.00	11368.02	6.66	27.80	18.86	37.72	Gaucho Unit 30H (p)	479.17	526.36	11.15	
11800.00	11368.30	5.95	28.62	19.00	38.01	Gaucho Unit 30H (p)	566.75	614.50	12.87	
11900.00	11368.59	5.43	29.52	19.18	38.35	Gaucho Unit 30H (p)	656.44	704.55	14.65	
12000.00	11368.88	5.04	30.51	19.37	38.74	Gaucho Unit 30H (p)	747.77	796.10	16.47	
12100.00	11369.16	4.73	31.58	19.60	39.19	Gaucho Unit 30H (p)	840.31	888.85	18.31	
12200.00	11369.45	4.48	32.71	19.84	39.69	Gaucho Unit 30H (p)	933.82	982.56	20.16	
12300.00	11369.74	4.25	33.90	20.11	40.23	Gaucho Unit 30H (p)	1028.15	1077.04	22.03	
12400.00	11370.02	4.07	35.15	20.41	40.82	Gaucho Unit 30H (p)	1123.07	1172.14	23.89	
12500.00	11370.31	3.91	36.44	20.72	41.45	Gaucho Unit 30H (p)	1218.50	1267.75	25.74	
12600.00	11370.60	16.63	37.78	21.06	42.12	Gaucho Unit #7RE (s)	1033.46	1074.32	26.29	
12700.00	11370.88	16.60	39.16	21.42	42.83	Gaucho Unit #7RE (s)	1033.90	1075.15	26.06	
12800.00	11371.17	16.50	40.57	21.79	43.59	Gaucho Unit #7RE (s)	1039.72	1081.40	25.95	
12900.00	11371.46	16.37	42.02	22.18	44.37	Gaucho Unit #7RE (s)	1051.16	1093.35	25.92	
13000.00	11371.74	16.22	43.50	22.60	45.19	Gaucho Unit #7RE (s)	1068.78	1111.51	26.01	
13100.00	11372.03	16.06	45.00	23.02	46.05	Gaucho Unit #7RE (s)	1092.71	1135.99	26.25	
13200.00	11372.32	15.87	46.52	23.46	46.93	Gaucho Unit #7RE (s)	1122.38	1166.31	26.55	
13300.00	11372.60	15.65	48.07	23.92	47.84	Gaucho Unit #7RE (s)	1157.54	1202.02	27.02	
13400.00	11372.89	15.41	49.63	24.39	48.78	Gaucho Unit #7RE (s)	1197.78	1242.76	27.63	
13500.00	11373.18	15.17	51.22	24.87	49.74	Gaucho Unit #7RE (s)	1242.81	1288.19	28.38	

Primary Well: Gaucho Unit 29H (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	11373.46	14.93	52.81	25.36	50.73	Gaucha Unit #7RE (s)	1292.11	1338.03	29.13	
13700.00	11373.75	14.70	54.43	25.87	51.74	Gaucha Unit #7RE (s)	1345.67	1392.00	30.05	
13800.00	11374.04	14.49	56.05	26.39	52.77	Gaucha Unit #7RE (s)	1403.06	1449.75	31.05	
13900.00	11374.32	14.28	57.69	26.91	53.83	Gaucha Unit #7RE (s)	1463.85	1510.97	32.07	
14000.00	11374.61	14.02	59.34	27.45	54.90	Gaucha Unit #7RE (s)	1527.76	1575.20	33.20	
14100.00	11374.90	13.80	61.00	27.99	55.99	Gaucha Unit #7RE (s)	1594.44	1642.12	34.44	
14200.00	11375.19	13.61	62.67	28.55	57.10	Gaucha Unit #7RE (s)	1663.75	1711.60	35.77	
14300.00	11375.47	13.32	64.34	29.11	58.22	Gaucha Unit #7RE (s)	1735.18	1783.29	37.07	
14400.00	11375.76	13.05	66.03	29.68	59.36	Gaucha Unit #7RE (s)	1808.22	1856.62	38.36	
14500.00	11376.05	12.84	67.72	30.25	60.51	Gaucha Unit #7RE (s)	1883.10	1931.74	39.71	
14600.00	11376.33	12.67	69.42	30.83	61.67	Gaucha Unit #7RE (s)	1959.71	2008.55	41.13	
14700.00	11376.62	12.51	71.13	31.42	62.85	Gaucha Unit #7RE (s)	2037.95	2086.94	42.60	
14800.00	11376.91	12.36	72.84	32.02	64.04	Gaucha Unit #7RE (s)	2117.67	2166.78	44.12	
14900.00	11377.19	12.24	74.56	32.62	65.24	Gaucha Unit #7RE (s)	2198.71	2247.97	45.63	
15000.00	11377.48	12.12	76.28	33.22	66.45	Gaucha Unit #7RE (s)	2281.00	2330.40	47.18	
15100.00	11377.77	12.01	78.01	33.83	67.67	Gaucha Unit #7RE (s)	2364.45	2413.96	48.76	
15200.00	11378.05	11.90	79.74	34.45	68.90	Gaucha Unit #7RE (s)	2448.95	2498.54	50.38	
15300.00	11378.34	11.79	81.47	35.07	70.14	Gaucha Unit #7RE (s)	2534.40	2584.06	52.03	
15400.00	11378.63	11.69	83.21	35.69	71.39	Gaucha Unit #7RE (s)	2620.65	2670.42	53.65	
15500.00	11378.91	11.59	84.96	36.32	72.65	Gaucha Unit #7RE (s)	2707.70	2757.57	55.29	
15600.00	11379.20	11.50	86.70	36.95	73.92	Gaucha Unit #7RE (s)	2795.48	2845.45	56.95	
15700.00	11379.49	11.43	88.45	37.59	75.19	Gaucha Unit #7RE (s)	2883.95	2934.00	58.62	
15800.00	11379.77	11.35	90.21	38.23	76.47	Gaucha Unit #7RE (s)	2973.06	3023.18	60.32	
15900.00	11380.06	11.29	91.96	38.87	77.75	Gaucha Unit #7RE (s)	3062.72	3112.94	61.98	
16000.00	11380.35	11.22	93.72	39.52	79.04	Gaucha Unit #7RE (s)	3152.93	3203.24	63.66	
16100.00	11380.63	11.16	95.49	40.17	80.34	Gaucha Unit #7RE (s)	3243.64	3294.03	65.36	
16200.00	11380.92	11.11	97.25	40.82	81.65	Gaucha Unit #7RE (s)	3334.82	3385.29	67.06	
16300.00	11381.21	11.06	99.02	41.47	82.96	Gaucha Unit #7RE (s)	3426.44	3476.99	68.78	
16400.00	11381.49	11.02	100.78	42.13	84.27	Gaucha Unit #7RE (s)	3518.46	3569.08	70.51	
16500.00	11381.78	10.97	102.55	42.79	85.59	Gaucha Unit #7RE (s)	3610.87	3661.56	72.24	
16576.30	11382.00	10.94	103.91	43.30	86.60	Gaucha Unit #7RE (s)	3681.62	3732.35	73.57	

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	0.41	25.91	10.94	0.04	0.04	0.68	2329.01	2330.58	1485.15	
100.00	100.83	126.33	10.94	0.20	0.20	2.63	2328.70	2330.54	1267.36	
200.00	200.08	225.58	10.93	0.43	0.43	2.63	2328.25	2330.55	1013.35	
300.00	303.07	328.57	10.92	0.68	0.68	2.63	2327.67	2330.44	841.49	

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
400.00	400.97	426.47	10.91	0.92	0.92	2.64	2327.14	2330.38	719.63	
500.00	505.22	530.72	10.91	1.16	1.16	2.64	2326.58	2330.28	628.58	
600.00	608.94	634.44	10.90	1.40	1.40	2.65	2325.72	2329.88	559.47	
700.00	706.56	732.07	10.89	1.64	1.64	2.66	2325.02	2329.64	503.81	
800.00	820.74	846.25	10.88	1.90	1.90	2.67	2323.95	2329.07	454.92	
900.00	924.35	949.87	10.87	2.15	2.15	2.68	2322.39	2327.98	416.28	
1000.00	1019.84	1045.37	10.85	2.40	2.40	2.69	2320.99	2327.06	383.70	
1100.00	1121.22	1146.75	10.82	2.66	2.66	2.70	2319.67	2326.22	355.17	
1200.00	1226.31	1251.85	10.81	2.93	2.93	2.71	2318.15	2325.19	330.35	
1300.00	1321.20	1346.75	10.78	3.18	3.18	2.72	2316.57	2324.07	309.63	
1400.00	1416.09	1441.65	10.76	3.43	3.42	2.73	2315.39	2323.37	291.11	
1500.00	1518.83	1544.40	10.74	3.70	3.69	2.74	2314.09	2322.57	273.93	
1600.00	1617.99	1643.57	10.71	3.96	3.96	2.75	2312.83	2321.80	258.91	
1700.00	1723.65	1749.23	10.68	4.24	4.24	2.77	2311.47	2320.95	244.98	
1800.00	1824.83	1850.43	10.64	4.51	4.50	2.78	2309.84	2319.81	232.72	
1900.00	1922.77	1948.39	10.60	4.77	4.76	2.79	2308.38	2318.84	221.83	
2000.00	2026.96	2052.60	10.56	5.04	5.04	2.81	2306.82	2317.78	211.59	
2100.00	2122.42	2148.07	10.53	5.29	5.29	2.82	2305.19	2316.62	202.67	
2200.00	2215.58	2241.24	10.50	5.54	5.54	2.83	2303.97	2315.87	194.60	
2300.00	2313.94	2339.62	10.47	5.80	5.79	2.85	2302.81	2315.19	187.00	
2400.00	2406.24	2431.93	10.44	6.03	6.03	2.86	2301.90	2314.74	180.33	
2500.00	2498.26	2523.95	10.41	6.26	6.25	2.87	2301.40	2314.68	174.37	
2600.00	2598.29	2623.99	10.38	6.50	6.49	2.89	2301.02	2314.76	168.42	
2700.00	2697.45	2723.15	10.36	6.71	6.71	2.90	2300.61	2314.80	163.10	
2800.00	2787.83	2813.53	10.35	6.83	6.83	2.92	2300.59	2315.13	159.20	
2900.00	2882.38	2908.08	10.36	6.88	6.88	2.93	2300.97	2315.79	156.28	
3000.00	2982.34	3008.05	10.36	6.92	6.92	2.95	2301.45	2316.53	153.57	
3100.00	3073.50	3099.21	10.38	6.95	6.94	2.97	2302.15	2317.48	151.18	
3200.00	3171.53	3197.26	10.41	6.96	6.96	2.99	2303.10	2318.67	148.93	
3300.00	3265.01	3290.76	10.44	6.99	6.98	3.00	2304.22	2320.04	146.70	
3400.00	3364.49	3390.27	10.48	7.02	7.02	3.02	2305.50	2321.57	144.49	
3500.00	3465.04	3490.85	10.53	7.07	7.06	3.05	2306.75	2323.09	142.25	
3600.00	3561.49	3587.32	10.58	7.12	7.11	3.07	2308.06	2324.66	140.02	
3700.00	3662.28	3688.14	10.62	7.18	7.18	3.09	2309.42	2326.31	137.71	
3800.00	3761.31	3787.19	10.65	7.27	7.27	3.12	2310.74	2327.95	135.27	
3900.00	3864.85	3890.75	10.66	7.38	7.38	3.15	2312.00	2329.55	132.76	
4000.00	3961.49	3987.40	10.68	7.50	7.49	3.17	2313.23	2331.11	130.35	
4100.00	4062.07	4088.00	10.69	7.63	7.63	3.20	2314.50	2332.76	127.72	
4200.00	4157.86	4183.80	10.69	7.78	7.78	3.24	2315.83	2334.47	125.27	
4300.00	4266.66	4292.62	10.68	7.97	7.97	3.27	2317.09	2336.13	122.69	
4400.00	4360.13	4386.10	10.67	8.15	8.15	3.31	2318.22	2337.67	120.20	
4500.00	4463.70	4489.68	10.65	8.36	8.36	3.35	2319.45	2339.34	117.62	
4600.00	4565.85	4591.86	10.63	8.57	8.57	3.39	2320.53	2340.84	115.26	
4700.00	4673.25	4699.26	10.60	8.80	8.80	3.43	2321.38	2342.15	112.79	
4800.00	4776.14	4802.16	10.58	9.04	9.04	3.48	2321.98	2343.22	110.33	
4900.00	4866.73	4892.77	10.56	9.24	9.24	3.52	2322.77	2344.44	108.17	
5000.00	4964.21	4990.26	10.54	9.46	9.46	3.57	2323.81	2345.92	106.08	
5100.00	5067.40	5093.47	10.51	9.69	9.69	3.63	2324.82	2347.39	103.99	
5200.00	5168.59	5194.68	10.48	9.93	9.93	3.68	2325.72	2348.75	101.99	
5300.00	5275.02	5301.12	10.45	10.19	10.18	3.75	2326.46	2349.95	100.01	
5400.00	5375.31	5401.42	10.41	10.43	10.43	3.81	2327.06	2351.01	98.17	
5500.00	5472.54	5498.67	10.39	10.66	10.66	3.87	2326.87	2351.26	96.42	
5600.00	5573.57	5599.71	10.38	10.91	10.90	3.94	2324.97	2349.83	94.51	
5700.00	5684.58	5710.73	10.37	11.18	11.18	4.02	2321.04	2346.41	92.50	
5800.00	5785.13	5811.29	10.39	11.43	11.42	4.09	2315.20	2341.03	90.62	
5900.00	5884.87	5911.03	10.40	11.67	11.67	4.17	2308.50	2334.80	88.77	
6000.00	5987.38	6013.54	10.42	11.93	11.92	4.25	2301.68	2328.49	86.84	
6100.00	6086.06	6112.24	10.43	12.17	12.17	4.33	2294.87	2322.16	85.09	

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
6200.00	6186.07	6212.25	10.44	12.42	12.42	4.42	2288.07	2315.84	83.38	
6300.00	6283.98	6310.16	10.45	12.67	12.66	4.51	2281.38	2309.59	81.88	
6400.00	6391.04	6417.23	10.46	12.94	12.93	4.61	2274.47	2303.20	80.17	
6500.00	6495.57	6521.76	10.47	13.19	13.19	4.71	2267.30	2296.50	78.65	
6600.00	6591.52	6617.71	10.49	13.43	13.43	4.81	2260.16	2289.84	77.15	
6700.00	6692.62	6718.82	10.50	13.69	13.68	4.91	2253.09	2283.23	75.75	
6800.00	6795.32	6821.52	10.52	13.95	13.94	5.02	2245.91	2276.51	74.40	
6900.00	6895.13	6921.33	10.54	14.19	14.19	5.13	2238.70	2269.74	73.11	
7000.00	6998.57	7024.78	10.56	14.44	14.43	5.25	2231.38	2262.90	71.79	
7100.00	7102.86	7129.07	10.58	14.66	14.66	5.37	2223.87	2255.84	70.58	
7200.00	7203.36	7229.56	10.61	14.85	14.85	5.49	2216.31	2248.68	69.46	
7300.00	7306.24	7332.44	10.63	15.04	15.04	5.62	2208.67	2241.48	68.32	
7400.00	7411.59	7437.80	10.65	15.23	15.22	5.75	2200.75	2233.99	67.21	
7500.00	7511.02	7537.23	10.68	15.37	15.36	5.88	2192.81	2226.44	66.21	
7600.00	7611.32	7637.53	10.71	15.51	15.51	6.02	2184.88	2218.88	65.25	
7700.00	7712.61	7738.83	10.74	15.67	15.66	6.15	2176.89	2211.28	64.30	
7800.00	8101.95	8130.24	11.03	16.15	15.98	6.72	2156.52	2191.26	63.08	
7900.00	8201.94	8231.27	11.14	16.26	16.09	6.87	2135.47	2170.49	61.97	
8000.00	8304.77	8335.23	11.27	16.39	16.21	7.04	2113.94	2149.34	60.72	
8100.00	8394.30	8425.73	11.35	16.51	16.33	7.19	2093.00	2128.73	59.58	
8200.00	8483.36	8515.69	11.42	16.63	16.46	7.34	2073.31	2109.36	58.52	
8300.00	10325.14	12144.83	101.84	39.17	20.96	41.89	2043.10	2078.49	58.74	
8400.00	10325.20	12139.55	99.01	39.09	20.93	41.84	1945.27	1980.95	55.52	
8500.00	10325.24	12135.23	96.36	39.02	20.91	41.80	1847.63	1883.63	52.33	
8600.00	10325.28	12131.86	93.92	38.97	20.90	41.77	1750.16	1786.57	49.07	
8700.00	10325.30	12129.43	91.70	38.94	20.88	41.74	1652.98	1689.83	45.86	
8800.00	10325.32	12127.93	89.70	38.91	20.88	41.73	1556.17	1593.49	42.70	
8900.00	10325.33	12126.89	89.57	38.90	20.87	41.72	1459.77	1497.62	39.57	
9000.00	10325.34	12125.85	89.43	38.88	20.87	41.71	1363.88	1402.33	36.47	
9100.00	10325.35	12124.83	89.30	38.87	20.86	41.70	1268.66	1307.75	33.46	
9200.00	10325.36	12123.81	89.17	38.85	20.86	41.69	1174.13	1214.03	30.42	
9300.00	10325.37	12122.80	89.04	38.84	20.85	41.68	1080.58	1121.39	27.47	
9400.00	10325.38	12121.80	88.91	38.82	20.85	41.67	988.30	1030.14	24.62	
9500.00	10325.39	12120.81	88.78	38.81	20.84	41.66	897.57	940.66	21.83	
9600.00	10325.40	12119.82	88.65	38.79	20.84	41.65	808.83	853.52	19.10	
9700.00	10325.41	12118.85	88.52	38.78	20.83	41.64	723.03	769.51	16.56	
9800.00	10325.42	12117.88	88.39	38.76	20.83	41.63	640.97	689.78	14.13	
9900.00	10325.43	12116.91	88.27	38.75	20.82	41.63	564.52	615.99	11.97	
10000.00	10325.43	12115.96	88.14	38.74	20.82	41.62	495.88	550.54	10.07	
10100.00	10325.44	12115.01	88.02	38.72	20.81	41.61	438.78	496.73	8.57	
10200.00	10325.45	12114.07	87.90	38.71	20.81	41.60	397.57	458.68	7.51	
10300.00	10325.46	12113.14	87.78	38.69	20.81	41.59	377.64	440.49	7.01	
10400.00	10325.47	12112.21	87.66	38.68	20.80	41.58	382.06	444.60	7.11	
10500.00	10325.48	12111.29	87.54	38.67	20.80	41.57	409.71	470.43	7.75	
10600.00	10325.49	12110.38	87.42	38.65	20.79	41.56	456.81	514.73	8.89	
10700.00	10325.50	12109.48	87.30	38.64	20.79	41.55	518.28	573.22	10.43	
10800.00	10325.50	12108.58	87.18	38.63	20.78	41.55	589.61	642.04	12.25	
10900.00	10325.54	12104.93	50.93	38.57	20.77	41.51	666.80	717.00	14.28	
11000.00	10325.68	12088.34	41.21	38.32	20.69	41.35	742.69	791.07	16.35	
11100.00	10325.93	12057.87	32.06	37.87	20.54	41.06	814.50	860.96	18.53	
11200.00	10326.61	12002.22	24.08	37.04	20.30	40.55	877.33	922.20	20.55	
11300.00	10328.00	11937.74	18.45	36.05	20.01	39.97	928.07	971.32	22.46	
11400.00	10329.01	11872.53	16.91	35.03	19.71	39.39	968.47	1010.63	23.97	
11500.00	10329.57	11792.56	15.10	33.83	19.35	38.70	1000.19	1041.55	25.19	
11600.00	10329.93	11703.68	13.86	32.55	18.99	37.96	1020.30	1061.02	26.05	
11700.00	10330.30	11613.90	13.52	31.26	18.62	37.25	1026.95	1067.31	26.44	
11800.00	10330.21	11517.14	13.59	29.95	18.26	36.52	1027.83	1068.01	26.58	
11900.00	10331.47	11411.01	13.93	28.52	17.90	35.76	1028.51	1068.53	26.70	

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
12000.00	10333.05	11319.58	14.31	27.30	17.59	35.16	1029.01	1069.01	26.73	
12100.00	10333.76	11229.95	14.68	26.18	17.30	34.60	1030.51	1070.52	26.76	
12200.00	10334.81	11112.97	15.18	24.80	16.98	33.94	1032.11	1072.05	26.84	
12300.00	10336.22	11024.59	15.58	23.81	16.75	33.49	1032.91	1073.04	26.74	
12400.00	10338.21	10906.83	16.05	22.59	16.49	32.97	1033.32	1073.65	26.62	
12500.00	10339.72	10816.59	16.37	21.69	16.30	32.62	1033.55	1074.15	26.46	
12600.00	10341.27	10697.32	16.63	20.70	16.11	32.23	1033.46	1074.32	26.29	
12700.00	10341.08	10645.56	16.60	20.28	16.01	32.09	1033.90	1075.15	26.06	
12800.00	10338.11	10603.22	16.50	19.95	15.93	31.98	1039.72	1081.40	25.95	
12900.00	10333.85	10571.05	16.37	19.71	15.90	31.90	1051.16	1093.35	25.92	
13000.00	10328.37	10543.27	16.22	19.52	15.89	31.84	1068.78	1111.51	26.01	
13100.00	10321.69	10517.99	16.06	19.35	15.91	31.78	1092.71	1135.99	26.25	
13200.00	10312.48	10489.41	15.87	19.18	15.94	31.72	1122.38	1166.31	26.55	
13300.00	10302.00	10461.67	15.65	19.02	15.98	31.65	1157.54	1202.02	27.02	
13400.00	10290.49	10434.91	15.41	18.89	16.04	31.59	1197.78	1242.76	27.63	
13500.00	10278.60	10410.03	15.17	18.77	16.12	31.53	1242.81	1288.19	28.38	
13600.00	10266.76	10387.37	14.93	18.68	16.19	31.48	1292.11	1338.03	29.13	
13700.00	10255.26	10366.92	14.70	18.60	16.28	31.43	1345.67	1392.00	30.05	
13800.00	10243.85	10347.88	14.49	18.53	16.36	31.38	1403.06	1449.75	31.05	
13900.00	10232.29	10329.63	14.28	18.47	16.44	31.33	1463.85	1510.97	32.07	
14000.00	10218.24	10308.39	14.02	18.41	16.52	31.27	1527.76	1575.20	33.20	
14100.00	10205.89	10290.40	13.80	18.36	16.59	31.22	1594.44	1642.12	34.44	
14200.00	10194.85	10274.87	13.61	18.32	16.66	31.17	1663.75	1711.60	35.77	
14300.00	10177.01	10250.54	13.32	18.27	16.72	31.09	1735.18	1783.29	37.07	
14400.00	10159.88	10227.55	13.05	18.22	16.77	31.02	1808.22	1856.62	38.36	
14500.00	10147.32	10211.11	12.84	18.19	16.82	30.97	1883.10	1931.74	39.71	
14600.00	10136.39	10197.07	12.67	18.17	16.88	30.92	1959.71	2008.55	41.13	
14700.00	10126.45	10184.55	12.51	18.15	16.93	30.88	2037.95	2086.94	42.60	
14800.00	10117.07	10172.92	12.36	18.13	16.98	30.85	2117.67	2166.78	44.12	
14900.00	10109.06	10163.15	12.24	18.12	17.03	30.81	2198.71	2247.97	45.63	
15000.00	10101.43	10153.97	12.12	18.11	17.08	30.78	2281.00	2330.40	47.18	
15100.00	10094.16	10145.33	12.01	18.09	17.12	30.75	2364.45	2413.96	48.76	
15200.00	10086.65	10136.50	11.90	18.08	17.16	30.72	2448.95	2498.54	50.38	
15300.00	10079.11	10127.73	11.79	18.08	17.19	30.69	2534.40	2584.06	52.03	
15400.00	10071.93	10119.44	11.69	18.07	17.22	30.66	2620.65	2670.42	53.65	
15500.00	10065.10	10111.61	11.59	18.06	17.25	30.63	2707.70	2757.57	55.29	
15600.00	10059.30	10105.04	11.50	18.05	17.28	30.61	2795.48	2845.45	56.95	
15700.00	10053.83	10098.87	11.43	18.05	17.31	30.58	2883.95	2934.00	58.62	
15800.00	10048.61	10093.01	11.35	18.04	17.34	30.56	2973.06	3023.18	60.32	
15900.00	10043.61	10087.44	11.29	18.04	17.37	30.54	3062.72	3112.94	61.98	
16000.00	10038.82	10082.14	11.22	18.04	17.39	30.52	3152.93	3203.24	63.66	
16100.00	10034.41	10077.29	11.16	18.03	17.41	30.50	3243.64	3294.03	65.36	
16200.00	10030.47	10072.96	11.11	18.03	17.43	30.48	3334.82	3385.29	67.06	
16300.00	10026.69	10068.84	11.06	18.03	17.45	30.47	3426.44	3476.99	68.78	
16400.00	10023.07	10064.91	11.02	18.02	17.47	30.45	3518.46	3569.08	70.51	
16500.00	10019.61	10061.15	10.97	18.02	17.49	30.44	3610.87	3661.56	72.24	
16576.30	10017.06	10058.40	10.94	18.02	17.50	30.43	3681.62	3732.35	73.57	

Secondary Well: Gaucho Unit 30H (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	148.47	0.00	0.00	0.00	49.66	50.22	88.63	
100.00	100.00	100.00	148.47	0.11	0.11	4.60	49.44	50.22	63.80	
200.00	200.00	200.00	148.47	0.34	0.34	4.62	48.99	50.22	40.61	
300.00	300.00	300.00	148.47	0.56	0.56	4.65	48.54	50.22	29.79	
400.00	400.00	400.00	148.47	0.79	0.79	4.69	48.09	50.22	23.52	
500.00	500.00	500.00	148.47	1.01	1.01	4.75	47.64	50.22	19.43	
600.00	600.00	600.00	148.47	1.24	1.24	4.81	47.19	50.22	16.55	
700.00	700.00	700.00	148.47	1.46	1.46	4.89	46.74	50.22	14.42	

5D Anti Collision Report

Secondary Well: Gaucho Unit 30H (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
800.00	800.00	800.00	148.47	1.69	1.69	4.97	46.29	50.22	12.77	
900.00	900.00	900.00	148.47	1.91	1.91	5.07	45.84	50.22	11.46	
1000.00	1000.00	1000.00	148.47	2.14	2.14	5.17	45.39	50.22	10.39	
1100.00	1100.00	1100.00	148.47	2.36	2.36	5.27	44.94	50.22	9.51	
1200.00	1200.00	1200.00	148.47	2.59	2.59	5.39	44.49	50.22	8.76	
1300.00	1300.00	1300.00	148.47	2.81	2.81	5.51	44.04	50.22	8.13	
1400.00	1400.00	1400.00	148.47	3.03	3.03	5.63	43.59	50.22	7.58	
1500.00	1500.00	1500.00	148.47	3.26	3.26	5.76	43.14	50.22	7.09	
1600.00	1600.00	1600.00	148.47	3.48	3.48	5.90	42.69	50.22	6.67	
1700.00	1700.00	1700.00	148.47	3.71	3.71	6.04	42.24	50.22	6.30	
1800.00	1800.00	1800.00	148.47	3.93	3.93	6.18	41.80	50.22	5.96	
1900.00	1900.00	1900.00	148.47	4.16	4.16	6.33	41.35	50.22	5.66	
2000.00	2000.00	2000.00	148.47	4.38	4.38	6.48	40.90	50.22	5.39	
2100.00	2100.00	2100.00	148.47	4.61	4.61	6.63	40.45	50.22	5.14	
2200.00	2200.00	2200.00	148.47	4.83	4.83	6.79	40.00	50.22	4.91	
2300.00	2300.00	2300.00	148.47	5.06	5.06	6.95	39.55	50.22	4.70	
2400.00	2400.00	2400.00	148.47	5.28	5.28	7.12	39.10	50.22	4.51	
2500.00	2500.00	2500.00	148.47	5.51	5.51	7.28	38.65	50.22	4.34	
2600.00	2600.00	2600.00	148.47	5.73	5.73	7.45	38.20	50.22	4.18	
2700.00	2700.00	2700.00	148.47	5.96	5.96	7.62	37.75	50.22	4.03	
2800.00	2800.00	2800.00	148.47	6.18	6.18	7.80	37.30	50.22	3.89	
2900.00	2900.00	2900.00	148.47	6.41	6.41	7.97	36.85	50.22	3.76	
3000.00	3000.00	3000.00	148.47	6.63	6.63	8.15	36.40	50.22	3.63	
3100.00	3100.00	3100.00	148.47	6.86	6.86	8.33	35.95	50.22	3.52	
3200.00	3200.00	3200.00	148.47	7.08	7.08	8.52	35.50	50.22	3.41	
3300.00	3300.00	3300.00	148.47	7.31	7.31	8.70	35.05	50.22	3.31	
3400.00	3400.00	3400.00	148.47	7.53	7.53	8.89	34.60	50.22	3.22	
3500.00	3500.00	3500.00	148.47	7.76	7.76	9.09	34.16	50.22	3.13	
3600.00	3600.00	3600.00	148.47	7.98	7.98	9.28	33.71	50.22	3.04	
3700.00	3700.00	3700.00	148.47	8.20	8.20	9.48	33.26	50.22	2.96	
3800.00	3800.00	3800.00	148.47	8.43	8.43	9.68	32.81	50.22	2.88	
3900.00	3900.00	3900.00	148.47	8.65	8.65	9.88	32.36	50.22	2.81	
4000.00	4000.00	4000.00	148.47	8.88	8.88	10.09	31.91	50.22	2.74	
4100.00	4100.00	4100.00	148.47	9.10	9.10	10.30	31.46	50.22	2.68	
4200.00	4200.00	4200.00	148.47	9.33	9.33	10.51	31.01	50.22	2.61	
4300.00	4300.00	4300.00	148.47	9.55	9.55	10.72	30.56	50.22	2.55	
4400.00	4400.00	4400.00	148.47	9.78	9.78	10.94	30.11	50.22	2.50	
4500.00	4500.00	4500.00	148.47	10.00	10.00	11.16	29.66	50.22	2.44	
4600.00	4600.00	4600.00	148.47	10.23	10.23	11.39	29.21	50.22	2.39	
4700.00	4700.00	4700.00	148.47	10.45	10.45	11.62	28.76	50.22	2.34	
4800.00	4800.00	4800.00	148.47	10.68	10.68	11.85	28.31	50.22	2.29	
4900.00	4900.00	4900.00	148.47	10.90	10.90	12.08	27.86	50.22	2.25	
5000.00	5000.00	5000.00	148.47	11.13	11.13	12.32	27.41	50.22	2.20	
5100.00	5100.00	5100.00	148.47	11.35	11.35	12.57	26.96	50.22	2.16	
5200.00	5200.00	5200.00	148.47	11.58	11.58	12.81	26.52	50.22	2.12	
5300.00	5300.00	5300.00	148.47	11.80	11.80	13.06	26.07	50.22	2.08	
5400.00	5400.00	5400.00	148.47	12.03	12.03	13.32	25.62	50.22	2.04	
5500.00	5499.99	5499.99	148.98	12.25	12.25	13.57	25.95	50.97	2.04	
5600.00	5599.96	5599.96	150.42	12.48	12.48	13.84	27.74	53.23	2.09	
5700.00	5699.86	5699.86	152.57	12.70	12.70	14.10	31.12	57.06	2.20	
5800.00	5800.37	5800.37	154.52	12.92	12.92	14.37	35.58	61.99	2.35	
5900.00	5900.95	5900.99	155.36	13.15	13.14	14.65	39.78	66.62	2.48	
6000.00	6001.56	6001.70	155.01	13.37	13.36	14.93	42.87	70.13	2.57	
6100.00	6102.12	6102.45	153.61	13.59	13.57	15.22	44.85	72.52	2.62	
6200.00	6202.54	6203.18	151.21	13.82	13.78	15.50	45.75	73.91	2.62	
6300.00	6302.68	6303.80	147.78	14.04	13.99	15.79	45.86	74.45	2.60	
6400.00	6402.00	6403.67	143.89	14.27	14.21	16.09	45.83	74.85	2.58	
6500.00	6501.33	6503.54	140.07	14.49	14.43	16.39	46.08	75.59	2.56	

SD Anti-Collision Report

Secondary Well: Gaucho Unit 30H (p)(TVD relative to Kelly Bushing)(All Azimuth Relative to GRID NORTH)										
Pr 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
6600.00	6600.65	6603.41	136.33	14.73	14.66	16.70	46.76	76.66	2.56	
6700.00	6699.97	6703.28	132.72	14.96	14.88	17.01	47.63	78.05	2.57	
6800.00	6799.30	6803.15	129.24	15.19	15.10	17.32	48.91	79.74	2.59	
6900.00	6898.62	6903.02	125.92	15.43	15.33	17.64	50.35	81.71	2.61	
7000.00	6997.95	7002.89	122.76	15.67	15.55	17.97	52.12	83.95	2.64	
7100.00	7097.27	7102.76	119.78	15.90	15.78	18.30	54.10	86.42	2.67	
7200.00	7196.59	7202.63	116.96	16.15	16.00	18.63	56.29	89.12	2.71	
7300.00	7295.92	7302.50	114.32	16.39	16.23	18.97	58.74	92.02	2.77	
7400.00	7395.24	7402.38	111.85	16.63	16.45	19.32	61.39	95.10	2.82	
7500.00	7494.56	7502.25	109.53	16.88	16.68	19.67	64.15	98.35	2.88	
7600.00	7593.89	7602.12	107.37	17.12	16.91	20.02	67.05	101.74	2.93	
7700.00	7693.21	7701.99	105.35	17.37	17.13	20.38	70.10	105.28	2.99	
7800.00	7792.53	7801.86	103.46	17.62	17.36	20.75	73.30	108.93	3.06	
7900.00	7891.86	7901.73	101.69	17.87	17.59	21.12	76.56	112.70	3.12	
8000.00	7991.18	8001.60	100.04	18.12	17.81	21.50	79.93	116.57	3.18	
8100.00	8090.49	8101.46	98.32	18.38	18.04	21.88	83.38	120.46	3.25	
8200.00	8189.78	8201.29	96.30	18.63	18.27	22.27	86.91	124.36	3.32	
8300.00	8289.02	8301.08	94.03	18.89	18.50	22.66	90.49	128.35	3.39	
8400.00	8388.22	8400.83	91.52	19.14	18.72	23.06	94.15	132.50	3.46	
8500.00	8487.37	8500.52	88.80	19.40	18.95	23.46	98.14	136.91	3.53	
8600.00	8586.46	8600.16	85.92	19.65	19.18	23.87	102.58	141.67	3.62	
8700.00	8685.48	8699.72	82.89	19.91	19.41	24.29	107.38	146.88	3.72	
8800.00	8784.43	8799.22	79.77	20.17	19.64	24.70	112.68	152.63	3.82	
8900.00	8883.34	8898.67	76.70	20.43	19.87	25.13	118.60	158.91	3.94	
9000.00	8982.24	8998.12	73.87	20.69	20.09	25.56	124.96	165.62	4.07	
9100.00	9081.15	9097.57	71.26	20.95	20.32	26.00	131.51	172.69	4.19	
9200.00	9180.06	9197.02	68.87	21.21	20.55	26.44	138.46	180.10	4.33	
9300.00	9279.42	9296.93	66.66	21.46	20.77	26.89	145.72	187.75	4.47	
9400.00	9379.76	9397.74	64.75	21.67	20.96	27.35	152.75	195.11	4.61	
9500.00	9480.34	9498.71	63.13	21.88	21.14	27.81	159.24	201.98	4.73	
9600.00	9581.14	9599.84	61.76	22.08	21.33	28.28	165.09	208.29	4.82	
9700.00	9682.15	9701.09	60.62	22.29	21.51	28.76	170.35	214.00	4.90	
9800.00	9783.33	9802.47	59.66	22.49	21.70	29.25	174.98	219.05	4.97	
9900.00	9884.67	9903.95	58.88	22.68	21.88	29.74	178.94	223.43	5.02	
10000.00	9986.13	10005.52	58.25	22.87	22.06	30.24	182.21	227.10	5.06	
10100.00	10087.71	10107.16	57.76	23.06	22.24	30.75	184.76	230.05	5.08	
10200.00	10189.37	10208.85	57.40	23.25	22.42	31.26	186.58	232.28	5.08	
10300.00	10291.09	10310.59	57.17	23.43	22.60	31.78	187.66	233.75	5.07	
10400.00	10392.84	10412.34	57.05	23.61	22.78	32.30	187.99	234.48	5.04	
10500.00	10493.67	10513.17	57.04	23.80	22.97	32.83	187.66	234.56	5.00	
10600.00	10593.67	10613.17	57.04	24.01	23.19	33.36	187.22	234.56	4.95	
10700.00	10693.67	10713.17	57.04	24.23	23.41	33.89	186.78	234.56	4.91	
10800.00	10793.67	10813.17	57.04	24.44	23.64	34.43	186.34	234.56	4.86	
10900.00	10904.17	10923.81	28.49	24.61	23.78	35.03	181.70	230.31	4.74	
11000.00	11009.44	11031.48	38.34	24.62	23.58	35.59	157.80	206.66	4.23	
11100.00	11084.12	11111.80	56.12	24.58	23.08	35.96	125.56	175.19	3.53	
11200.00	11125.69	11159.36	71.48	24.55	22.64	36.16	113.11	162.51	3.29	
11300.00	11144.03	11181.28	75.06	24.54	22.42	36.25	144.82	192.34	4.05	
11400.00	11147.46	11185.45	71.19	24.54	22.37	36.27	213.50	259.96	5.60	
11500.00	11140.92	11177.51	50.80	24.55	22.46	36.24	300.06	346.51	7.46	
11600.00	11127.42	11161.40	24.10	24.55	22.62	36.17	390.84	437.49	9.38	
11700.00	11108.90	11139.84	6.66	24.56	22.83	36.08	479.17	526.36	11.15	
11800.00	11090.14	11118.53	5.95	24.58	23.03	35.99	566.75	614.50	12.87	
11900.00	11073.85	11100.42	5.43	24.59	23.18	35.91	656.44	704.55	14.65	
12000.00	11059.63	11084.88	5.04	24.60	23.29	35.84	747.77	796.10	16.47	
12100.00	11047.17	11071.42	4.73	24.60	23.39	35.78	840.31	888.85	18.31	
12200.00	11036.09	11059.59	4.48	24.61	23.46	35.72	933.82	982.56	20.16	
12300.00	11025.07	11047.91	4.25	24.61	23.51	35.67	1028.15	1077.04	22.03	

5D Anti-Collision Report

Secondary Well: Gaucho Unit 30H (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
12400.00	11015.18	11037.49	4.07	24.62	23.55	35.61	1123.07	1172.14	23.89	
12500.00	11006.26	11028.15	3.91	24.62	23.59	35.57	1218.50	1267.75	25.74	
12600.00	10998.18	11019.73	3.78	24.62	23.62	35.53	1314.40	1363.81	27.60	
12700.00	10990.83	11012.10	3.67	24.62	23.64	35.49	1410.70	1460.25	29.47	
12800.00	10984.12	11005.16	3.57	24.63	23.66	35.46	1507.35	1557.02	31.35	
12900.00	10977.98	10998.82	3.49	24.63	23.68	35.42	1604.31	1654.08	33.23	
13000.00	10972.33	10993.01	3.41	24.63	23.69	35.39	1701.52	1751.39	35.12	
13100.00	10967.12	10987.67	3.35	24.63	23.71	35.37	1798.96	1848.91	37.01	
13200.00	10962.31	10982.74	3.29	24.63	23.72	35.34	1896.61	1946.63	38.91	
13300.00	10957.85	10978.18	3.23	24.63	23.73	35.31	1994.44	2044.52	40.82	
13400.00	10953.70	10973.94	3.19	24.63	23.73	35.29	2092.45	2142.57	42.75	
13500.00	10949.83	10970.00	3.14	24.62	23.74	35.27	2190.57	2240.75	44.65	
13600.00	10946.22	10966.33	3.11	24.62	23.75	35.25	2288.85	2339.06	46.59	
13700.00	10942.84	10962.89	3.07	24.62	23.75	35.23	2387.15	2437.48	48.43	
13800.00	10939.67	10959.67	3.04	24.62	23.76	35.22	2485.62	2536.00	50.34	
13900.00	10936.69	10956.65	3.01	24.62	23.76	35.20	2584.18	2634.61	52.24	
14000.00	10933.89	10953.81	2.98	24.62	23.76	35.19	2682.85	2733.31	54.17	
14100.00	10931.25	10951.13	2.96	24.62	23.77	35.17	2781.59	2832.08	56.09	
14200.00	10928.75	10948.60	2.93	24.62	23.77	35.16	2880.39	2930.92	58.00	
14300.00	10926.39	10946.21	2.91	24.62	23.77	35.15	2979.25	3029.82	59.91	
14400.00	10924.15	10943.95	2.89	24.62	23.77	35.13	3078.17	3128.78	61.82	
14500.00	10922.03	10941.81	2.87	24.62	23.77	35.12	3177.15	3227.80	63.72	
14600.00	10920.02	10939.77	2.86	24.62	23.78	35.11	3276.17	3326.87	65.62	
14700.00	10918.10	10937.84	2.84	24.62	23.78	35.10	3375.24	3425.98	67.52	
14800.00	10916.28	10936.00	2.82	24.62	23.78	35.09	3474.35	3525.14	69.40	
14900.00	10914.54	10934.25	2.81	24.62	23.78	35.08	3573.49	3624.34	71.27	
15000.00	10912.88	10932.57	2.80	24.62	23.78	35.07	3672.67	3723.57	73.15	
15100.00	10911.29	10930.98	2.78	24.62	23.78	35.07	3771.88	3822.84	75.02	
15200.00	10909.78	10929.45	2.77	24.62	23.78	35.06	3871.13	3922.14	76.88	
15300.00	10908.33	10927.99	2.76	24.62	23.78	35.05	3970.41	4021.48	78.74	
15400.00	10906.94	10926.59	2.75	24.61	23.78	35.04	4069.71	4120.84	80.60	
15500.00	10905.60	10925.25	2.74	24.61	23.78	35.03	4169.04	4220.22	82.46	
15600.00	10904.32	10923.96	2.73	24.61	23.78	35.03	4268.40	4319.63	84.31	
15700.00	10903.10	10922.72	2.72	24.61	23.78	35.02	4367.78	4419.07	86.15	
15800.00	10901.92	10921.53	2.71	24.61	23.79	35.02	4467.18	4518.53	88.00	
15900.00	10900.78	10920.39	2.70	24.61	23.79	35.01	4566.60	4618.00	89.83	
16000.00	10899.69	10919.29	2.69	24.61	23.79	35.00	4666.04	4717.50	91.67	
16100.00	10898.63	10918.23	2.69	24.61	23.79	35.00	4765.50	4817.02	93.49	
16200.00	10897.62	10917.21	2.68	24.61	23.79	34.99	4864.97	4916.55	95.32	
16300.00	10896.64	10916.23	2.67	24.61	23.79	34.99	4964.46	5016.10	97.13	
16400.00	10895.69	10915.28	2.66	24.61	23.79	34.98	5063.97	5115.67	98.94	
16500.00	10894.78	10914.36	2.66	24.61	23.79	34.98	5163.48	5215.25	100.74	
16576.30	10894.10	10913.68	2.65	24.61	23.79	34.97	5239.42	5291.24	102.11	



Weatherford

Weatherford Drilling Services

GeoDec4 v2.4.0.0

Report Date: December 09, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Gaucho Unit 29H
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: 503971.54 US Survey Foot	Latitude: 32.382704 Degree
East: 799915.43 US Survey Foot	Longitude: -103.495694 Degree
Convergence: 0.45°	
Declination: 7.15°	
Total Correction: 6.70°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 22' 57.73" N
Longitude = 103° 29' 44.50" W

Magnetic Declination = 7.15 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6497
Local Field Strength = 48281 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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