

DRILLING PROGRAM

Devon Energy Production Company, L.P.
Gaucho Unit 16H

1. **Geologic Name of Surface Formation:** Quaternary

2. **Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:**

a. Fresh Water	300'	
b. Rustler	1640'	Barren
c. Top of Salt	1925'	Barren
d. Base of Salt	3700'	Barren
e. Yates	3930'	Barren
f. Queen	4101'	Barren
g. Greyburg	4548'	Barren.
h. Delaware	5256'	Oil/Gas
i. Cherry Canyon	6016'	Oil/Gas
j. Lower Brushy Canyon	8264'	Oil/Gas
k. Bone Spring Lime	8443'	Oil/Gas
l. 1 st Bone Spring Sand	9497'	Oil/Gas
m. 2 nd Bone Spring Sand	10046'	Oil/Gas
Total Depth	10533' TVD	15036' MD 10700 TVD - PH

DEC 11 2014

3. Pressure Control Equipment:

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns and will be secured with anchors and/or safety clamps as per the manufacturer's requirements. (See attached spec sheets).

Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

4. **Casing Program:**

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0 - 1,700'	13-3/8"	0 - 1,700'	54.5	STC	J-55	1.49	3.71	5.55
12-1/4"	1,700-4,000'	9-5/8"	0 - 4,000'	36	BTC	HCK-55	1.40	2.03	5.76
8-3/4"	4,000-15,036'	5-1/2"	0 - 15,036'	17	BTC	HCP-110	1.70	2.33	2.22

Casing Notes:

- All casing is new and API approved
- An 8-3/4" pilot hole will be drilled to 10,700' and plugged back to KOP (for volumes & TOC see cement table)

Maximum Lateral TVD: 10,533'

5. **Proposed mud Circulations System:**

Depth	Mud Weight	Viscosity (cp)	Fluid Loss	Type System
0-1,700'	8.4-8.6	1 - 3	N/C	FW
1,700-4,000'	10.0-10.2	1 - 3	N/C	Brine
4,000-15,036'	8.8-9.2	1 - 3	NC-12	FW/Cut Brine

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

6. Cementing Table:

String	# of sx	Weight lbs/gal	Water Volume g/sx	Yld cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8" Surface	970	13.5	9.07	1.72	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.8% Fresh Water
	560	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
9-5/8" Interm.	740	12.9	9.81	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	430	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
Pilot Hole Plug Back	350	15.6	5.39	1.19	Plug Cement	Class H Cement + 0.2% Halad-9 + 0.2% HR-601 + 60.5 % Fresh Water
5-1/2" Production	620	11.9	12.89	2.26	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR- 601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water
	330	12.5	10.86	1.96	Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	1320	14.5	5.31	1.2	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water

TOC for all Strings:

13-3/8" Surface

0ft

9-5/8" Intermediate

0ft

Pilot Hole Plug Back

Plug #1 = 9806ft

5-1/2" Production

3500ft

option for DV tool will still remain.

Notes:

- Cement volumes Surface 100%, Intermediate 75%, Pilot 10% and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper log data

7. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated, a procedure, equipment to be used, and safety measures will be provided via sundry notice to the BLM.
- c. Resistivity and porosity logs are planned below the intermediate casing point. Stated logs run will be named in the Completion Report and submitted to the BLM.
- d. No coring program is planned
- e. Additional Testing will be initiated subsequent to setting the production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area, and none is anticipated to be encountered. If H₂S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation being used to drill this well. Estimated BHP: 4740 psi, and estimated BHT: 166 degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13-3/8" casing shoe until the 5-1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13-3/8" shoe until total depth is reached.

9. Anticipated Starting Date and Duration of Operations:

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 20 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

devon

Gaucha Unit 16H
Lea Co., NM



Weatherford

Plan Data for Gaucha Unit 16H Lat

Plan Point Information:									
DogLeg Severity Unit: 1/100.00ft									
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	499511.79	798050.23	0.00	0.00
10905.57	0.00	0.00	10005.57	0.00	0.00	499511.79	798050.23	0.00	0.00
10750.06	89.33	356.14	10483.00	478.83	-31.77	499982.62	798018.46	471.90	12.00
15036.87	89.33	356.14	10533.00	4747.67	-320.41	504259.46	797729.82	4758.47	0.00

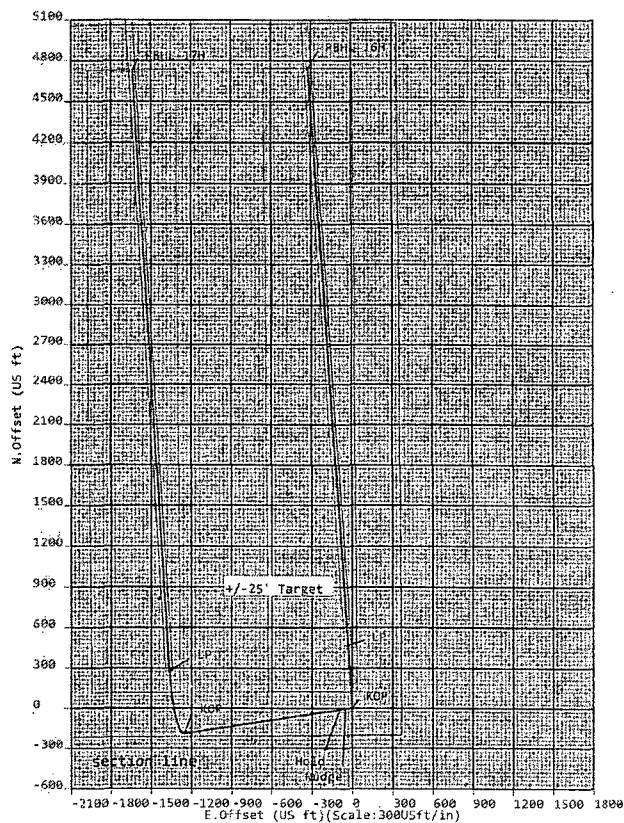
Plan Data for Gaucha Unit 16H Lat

Target Set Information:									
Name: Gaucha Unit 16H									
Position offsets from Slot centre									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment		
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)				
PBHL 16H	10533.00	4747.67	-320.41	504259.46	797729.82	Cuboid			

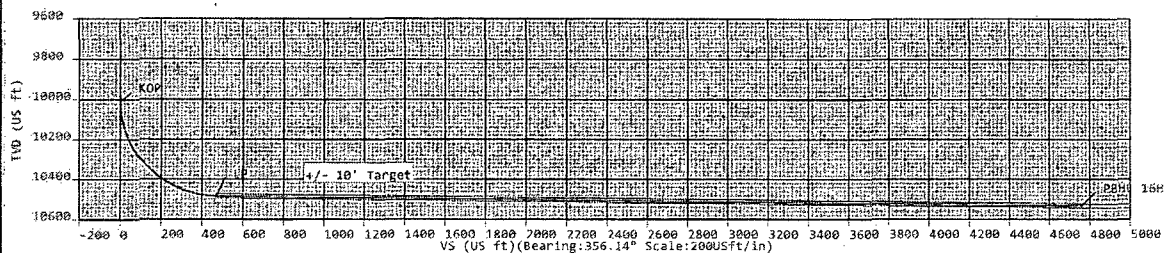
Plan Data for Gaucha Unit 16H Lat

Slot: Gaucha Unit 16H									
Position:									
Offset is from Site centre									
+N/-S:	0.00USft	Northing:	499511.79USft	Latitude:	32°22'13.7"				
+E/-W:	0.00USft	Easting:	798050.23USft	Longitude:	-103°30'5.7"				
Elevation Above VRD:						3444.00USft			

Gaucha Unit 16H Lat
Gaucha Unit 17H
Gaucha Unit 16H Pilot



KB-3469
GL-3444



Sign Off: Russell Joyner

5D Plan Report**Devon Energy**

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Gaucha Unit 16,17H Fed Pad*
Well Name: *Gaucha Unit 16H Lat*
Plan: *P1:V2*

29 May 2014



Gaucho Unit 16H Lat

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 Name Gaucho Unit 16,17H Fed Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.45	
	Position	Northing : 499511.79 US ft	Latitude : 32°22'13.75"	
		Easting : 798050.23 US ft	Longitude : -103°30'6.65"	
Elevation above Mean Sea Level:6888.00 US ft				
Comment :				
Slot Name Gaucho Unit 16H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 499511.79 US ft	Latitude : 32°22'13.75"	
	+E / -W : 0.00 US ft	Easting : 798050.23 US ft	Longitude : -103°30'6.65"	
Slot TVD Reference : Ground Elevation				
Elevation above Mean Sea Level : 3444.00 US ft				
Comment :				
Well Name Gaucho Unit 16H Lat	Type : Sidetrack	UWI :	Plan : P1:V2	
	Parent : Gaucho Unit 16H Pilot	Tie Point Method : MD	Tie Point :10005.57 US ft	
	Rig Height Drill Floor : 25.00 US ft	Comment :		
Relative to Mean Sea Level: 3469.00 US ft				
Closure Distance : 4758.47 US ft		Closure Azimuth : 356.139°		
Vertical Section (Position of Origin Relative to Slot)				
+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :356.14°	
Magnetic Parameters				
Model : BGGM	Field Strength : 48390.7nT	Dec : 7.34°	Dip : 60.25°	Date : 30/Jul/2014

Target Set	
Name : Gaucho Unit 16H	Number of Targets : 1

Comment :

Target Name: PBHL 16H	Position (Relative to Slot centre)		
	+N / -S : 4747.67US ft	Northing : 504259.46 US ft	Latitude : 32°23'0.75"
Shape: Cuboid	+E / -W : -320.41 US ft	Easting : 797729.82US ft	Longitude : -103°30'9.96"
	TVD (Drill Floor) : 10533.00 US ft		
	Orientation	Azimuth : 356.14°	Inclination : -0.67°
	Dimensions	Length : 8572.00 US ft	Breadth : 50.00 US ft Height : 20.00 US ft

Well path created using minimum curvature

Station Points (Relative to Slot centre, NVD relative to Drill Floor)									
MD (US\$)	Inc (°)	Az (°)	NVD (US\$)	NVD (US\$)	Offset (US\$)	DIS (ft/100US\$)	VS (US\$)	Face (ft)	Comment

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10005.57	0.00	0.00	10005.57	0.00	0.00	0.00	0.00	0.00	KOP
10750.00	89.33	356.14	10483.00	470.83	-31.77	12.00	471.90	356.14	LP
15036.87	89.33	356.14	10533.00	4747.67	-320.41	0.00	4758.47	0.00	P8HL 16H

Interpolated Points (Relative to Slot centre, NVD relative to Drill Floor)									
MD (US\$)	Inc (°)	Az (°)	NVD (US\$)	NVD (US\$)	Offset (US\$)	VS (US\$)	DIS (ft/100US\$)	North (US\$)	East (US\$)

10000.00	0.00	0.00	10000.00	0.00	0.00	0.00	0.00	499511.79	798050.23
10005.57	0.00	0.00	10005.57	0.00	0.00	0.00	0.00	499511.79	798050.23
10100.00	11.33	356.14	10099.39	9.29	-0.63	9.31	12.00	499521.08	798049.60
10200.00	23.33	356.14	10194.67	38.95	-2.63	39.04	12.00	499550.74	798047.60
10300.00	35.33	356.14	10281.69	87.74	-5.92	87.94	12.00	499599.53	798044.31
10400.00	47.33	356.14	10356.64	153.51	-10.36	153.86	12.00	499665.30	798039.87
10500.00	59.33	356.14	10416.25	233.39	-15.75	233.93	12.00	499745.18	798034.48
10600.00	71.33	356.14	10457.91	323.90	-21.86	324.63	12.00	499835.69	798028.37
10700.00	83.33	356.14	10479.80	421.06	-28.42	422.02	12.00	499932.85	798021.81
10750.00	89.33	356.14	10483.00	470.83	-31.77	471.90	12.00	499982.62	798018.46
10800.00	89.33	356.14	10483.59	520.71	-35.14	521.89	0.00	500032.50	798015.09
10900.00	89.33	356.14	10484.75	620.47	-41.87	621.88	0.00	500132.26	798008.36
11000.00	89.33	356.14	10485.92	720.24	-48.61	721.88	0.00	500232.03	798001.62
11100.00	89.33	356.14	10487.08	820.01	-55.34	821.87	0.00	500331.80	797994.89
11200.00	89.33	356.14	10488.25	919.77	-62.07	921.86	0.00	500431.56	797988.16
11300.00	89.33	356.14	10489.42	1019.54	-68.81	1021.86	0.00	500531.33	797981.42
11400.00	89.33	356.14	10490.58	1119.30	-75.54	1121.85	0.00	500631.09	797974.69
11500.00	89.33	356.14	10491.75	1219.07	-82.27	1221.84	0.00	500730.86	797967.96
11600.00	89.33	356.14	10492.92	1318.84	-89.01	1321.84	0.00	500830.63	797961.22
11700.00	89.33	356.14	10494.08	1418.60	-95.74	1421.83	0.00	500930.39	797954.49
11800.00	89.33	356.14	10495.25	1518.37	-102.47	1521.82	0.00	501030.16	797947.76
11900.00	89.33	356.14	10496.41	1618.14	-109.20	1621.82	0.00	501129.93	797941.03
12000.00	89.33	356.14	10497.58	1717.90	-115.94	1721.81	0.00	501229.69	797934.29
12100.00	89.33	356.14	10498.75	1817.67	-122.67	1821.80	0.00	501329.46	797927.56
12200.00	89.33	356.14	10499.91	1917.43	-129.40	1921.80	0.00	501429.22	797920.83
12300.00	89.33	356.14	10501.08	2017.20	-136.14	2021.79	0.00	501528.99	797914.09
12400.00	89.33	356.14	10502.25	2116.97	-142.87	2121.78	0.00	501628.76	797907.36
12500.00	89.33	356.14	10503.41	2216.73	-149.60	2221.78	0.00	501728.52	797900.63
12600.00	89.33	356.14	10504.58	2316.50	-156.34	2321.77	0.00	501828.29	797893.89
12700.00	89.33	356.14	10505.75	2416.27	-163.07	2421.76	0.00	501928.06	797887.16
12800.00	89.33	356.14	10506.91	2516.03	-169.80	2521.76	0.00	502027.82	797880.43
12900.00	89.33	356.14	10508.08	2615.80	-176.53	2621.75	0.00	502127.59	797873.70
13000.00	89.33	356.14	10509.24	2715.56	-183.27	2721.74	0.00	502227.35	797866.96
13100.00	89.33	356.14	10510.41	2815.33	-190.00	2821.74	0.00	502327.12	797860.23
13200.00	89.33	356.14	10511.58	2915.10	-196.73	2921.73	0.00	502426.89	797853.50
13300.00	89.33	356.14	10512.74	3014.86	-203.47	3021.72	0.00	502526.65	797846.76
13400.00	89.33	356.14	10513.91	3114.63	-210.20	3121.71	0.00	502626.42	797840.03
13500.00	89.33	356.14	10515.08	3214.40	-216.93	3221.71	0.00	502726.19	797833.30
13600.00	89.33	356.14	10516.24	3314.16	-223.67	3221.70	0.00	502825.95	797826.56
13700.00	89.33	356.14	10517.41	3413.93	-230.40	3421.69	0.00	502925.72	797819.83
13800.00	89.33	356.14	10518.57	3513.69	-237.13	3521.69	0.00	503025.48	797813.10
13900.00	89.33	356.14	10519.74	3613.46	-243.86	3621.68	0.00	503125.25	797806.37
14000.00	89.33	356.14	10520.91	3713.23	-250.60	3721.67	0.00	503225.02	797799.63
14100.00	89.33	356.14	10522.07	3812.99	-257.33	3821.67	0.00	503324.78	797792.90
14200.00	89.33	356.14	10523.24	3912.76	-264.06	3921.66	0.00	503424.55	797786.17
14300.00	89.33	356.14	10524.41	4012.53	-270.80	4021.65	0.00	503524.32	797779.43
14400.00	89.33	356.14	10525.57	4112.29	-277.53	4121.65	0.00	503624.08	797772.70
14500.00	89.33	356.14	10526.74	4212.06	-284.26	4221.64	0.00	503723.85	797765.97
14600.00	89.33	356.14	10527.90	4311.82	-291.00	4321.63	0.00	503823.61	797759.23
14700.00	89.33	356.14	10529.07	4411.59	-297.73	4421.63	0.00	503923.38	797752.50
14800.00	89.33	356.14	10530.24	4511.36	-304.46	4521.62	0.00	504023.15	797745.77

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14900.00	89.33	356.14	10531.40	4611.12	-311.19	4621.61	0.00	504122.91	797739.04	
15000.00	89.33	356.14	10532.57	4710.89	-317.93	4721.61	0.00	504222.68	797732.30	
15036.87	89.33	356.14	10533.00	4747.67	-320.41	4758.47	0.00	504259.46	797729.82	PBHL 16H

5D Anti-Collision Report

Devon Energy

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

Site Name: *Gaucha Unit 16,17H Fed Pad*

Well Name: *Gaucha Unit 16H Pilot*

29 May 2014





Weatherford®

Gaucho Unit 16H Pilot

Field Name Lea Co. NM Nad S3 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 Name Gaucho Unit 16, 17H Fed Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.45	
	Position	Northing : 499514.79 US ft	Latitude : 32° 22' 13.75"	
		Easting : 798050.23 US ft	Longitude : -103° 30' 6.65"	
	Elevation above Mean Sea Level: 6888.00 US ft		Comment :	
Slot Name Gaucho Unit 16H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 499514.79 US ft	Latitude : 32° 22' 13.75"	
	+E / -W : 0.00 US ft	Easting : 798050.23 US ft	Longitude : -103° 30' 6.65"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3444.00 US ft		Comment :		
Well Name Gaucho Unit 16H Pilot	Type : Main well	UWI :	Plan : Working Plan	
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft	Comment :		
	Relative to Mean Sea Level: 3469.00 US ft			
	Closure Distance : 0 US ft	Closure Azimuth : 0°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az : 356.14°	
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48400.5nT	Dec : 7.35°	Dip : 60.25° Date : 01/Jul/2014

Collision / Uncertainty Analysis				
Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Gaucho Unit 16H Pilot (p)	0.00	220000.00	100.00	2

Secondary Well Names
Gaucho Unit 17H (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(s) have been applied: Depth Range.

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

SD Anti-Collision Report

Anti-Collision Proximity Summary (TVD relative to)

Secondary Well Name	RH MD (US ft)	Sec MD (US ft)	TVD (US ft)	EC (US ft)	ES (US ft)	SF	Risk
Gaucho Unit 17H (p)	2894.34	2894.56	2894.34	50.34	36.87	3.74	

Secondary Well : Gaucho Unit 17H (p) (TVD Relative to Kelly Bushing (Primary) / All Azimuth Relative to GRID NORTH)								
RH MD (US ft)	TVD (US ft)	Sec MD (US ft)	Offset to Sec (ft)	S.Major (US ft)	S.Minor (US ft)	EC (US ft)	ES (US ft)	SF
0.00	0.00	1.00	269.53	0.01	0.01	49.99	49.27	69.26
100.00	100.00	101.00	269.53	0.12	0.12	49.99	49.04	52.76
200.00	200.00	201.00	269.53	0.34	0.34	49.99	48.60	35.87
300.00	300.00	301.00	269.53	0.57	0.57	49.99	48.15	27.13
400.00	400.00	401.00	269.53	0.79	0.79	49.99	47.70	21.81
500.00	500.00	501.00	269.53	1.02	1.02	49.99	47.25	18.24
600.00	600.00	601.00	269.53	1.24	1.24	49.99	46.80	15.67
700.00	700.00	701.00	269.53	1.47	1.47	49.99	46.35	13.73
800.00	800.00	801.00	269.53	1.69	1.69	49.99	45.90	12.22
900.00	900.00	901.00	269.53	1.92	1.92	49.99	45.45	11.01
1000.00	1000.00	1001.00	269.53	2.14	2.14	49.99	45.00	10.02
1100.00	1100.00	1101.00	269.53	2.37	2.37	49.99	44.55	9.19
1200.00	1200.00	1201.00	269.53	2.59	2.59	49.99	44.10	8.49
1300.00	1300.00	1301.00	269.53	2.82	2.82	49.99	43.65	7.89
1400.00	1400.00	1401.00	269.53	3.04	3.04	49.99	43.21	7.37
1500.00	1500.00	1501.00	269.53	3.27	3.27	49.99	42.76	6.91
1600.00	1600.00	1601.00	269.53	3.49	3.49	49.99	42.31	6.50
1700.00	1700.00	1701.00	269.53	3.71	3.71	49.99	41.86	6.15
1800.00	1800.00	1801.00	269.53	3.94	3.94	49.99	41.41	5.82
1900.00	1900.00	1901.00	269.53	4.16	4.16	49.99	40.96	5.53
2000.00	2000.00	2001.00	269.53	4.39	4.39	49.99	40.51	5.27
2100.00	2100.00	2101.00	269.53	4.61	4.61	49.99	40.06	5.03
2200.00	2200.00	2201.00	269.53	4.84	4.84	49.99	39.61	4.81
2300.00	2300.00	2301.00	269.53	5.06	5.06	49.99	39.16	4.62
2400.00	2400.00	2401.00	269.53	5.29	5.29	49.99	38.71	4.43
2500.00	2500.00	2501.00	269.53	5.51	5.51	49.99	38.26	4.26
2600.00	2600.00	2601.00	269.53	5.74	5.74	49.99	37.81	4.10
2700.00	2700.00	2701.00	269.53	5.96	5.96	49.99	37.36	3.96
2800.00	2800.00	2801.00	269.53	6.19	6.19	49.99	36.91	3.82
2900.00	2899.13	2900.13	269.46	6.39	6.39	50.43	36.94	3.74
3000.00	2997.24	2998.30	268.94	6.59	6.57	53.86	39.98	3.88
3100.00	3094.83	3096.13	268.08	6.78	6.75	60.69	46.41	4.25
3200.00	3191.57	3193.39	267.11	6.98	6.91	70.90	56.25	4.84
3300.00	3287.13	3289.86	266.18	7.20	7.08	84.47	69.46	5.63
3400.00	3382.48	3386.57	265.37	7.42	7.26	101.13	85.74	6.57
3500.00	3479.47	3485.06	264.76	7.67	7.46	118.46	102.65	7.49
3600.00	3576.45	3583.54	264.30	7.92	7.67	135.79	119.56	8.37
3700.00	3673.44	3682.02	263.95	8.19	7.87	153.14	136.48	9.19
3800.00	3770.42	3780.50	263.67	8.46	8.08	170.48	153.39	9.98
3900.00	3867.41	3878.98	263.44	8.75	8.29	187.83	170.31	10.72
4000.00	3964.39	3977.46	263.25	9.04	8.50	205.19	187.23	11.43
4100.00	4061.38	4075.94	263.09	9.34	8.71	222.54	204.15	12.10
4200.00	4158.36	4174.42	262.96	9.64	8.93	239.90	221.06	12.74
4300.00	4255.35	4272.90	262.84	9.95	9.16	257.26	237.98	13.34
4400.00	4352.33	4371.38	262.73	10.27	9.38	274.61	254.89	13.92
4500.00	4449.31	4469.86	262.64	10.59	9.60	291.97	271.80	14.48
4600.00	4546.30	4568.34	262.56	10.91	9.83	309.33	288.71	15.00
4700.00	4643.28	4666.82	262.49	11.24	10.06	326.69	305.63	15.51
4800.00	4740.27	4765.31	262.42	11.57	10.28	344.05	322.54	15.99
4900.00	4837.25	4863.79	262.37	11.91	10.51	361.42	339.45	16.45
5000.00	4934.24	4962.27	262.31	12.25	10.74	378.78	356.36	16.89
5100.00	5031.22	5060.75	262.26	12.59	10.97	396.14	373.27	17.32

5D Anti-Collision Report

Secondary Well: Gaudin Unit 17H (p) (NVD Relative to Kelly Bussling (Primary); All Azimuth Relative to GRID NORTH)									
ED MD (US ft)	TVD (US ft)	Sec MD (US ft)	T-True to Sec (°)	S-Major (US ft)	S-Minor (US ft)	GC (US ft)	ES (US ft)	SP	Rsk
5200.00	5128.21	5159.23	262.22	12.93	11.21	413.50	390.17	17.73	
5300.00	5225.19	5257.71	262.18	13.28	11.44	430.86	407.08	18.12	
5400.00	5322.18	5356.19	262.14	13.63	11.67	448.23	423.99	18.49	
5500.00	5419.16	5454.67	262.11	13.98	11.91	465.59	440.89	18.85	
5600.00	5516.15	5553.15	262.07	14.33	12.14	482.95	457.80	19.20	
5700.00	5613.13	5651.63	262.04	14.68	12.38	500.31	474.70	19.54	
5800.00	5710.12	5750.11	262.01	15.04	12.62	517.68	491.61	19.86	
5900.00	5807.10	5848.59	261.99	15.39	12.85	535.04	508.51	20.17	
6000.00	5904.08	5947.07	261.96	15.75	13.09	552.40	525.42	20.47	
6100.00	6001.07	6045.56	261.94	16.11	13.33	569.77	542.32	20.76	
6200.00	6098.05	6144.04	261.92	16.47	13.57	587.13	559.22	21.04	
6300.00	6195.04	6242.52	261.90	16.83	13.81	604.49	576.12	21.31	
6400.00	6292.02	6341.00	261.88	17.20	14.05	621.86	593.02	21.57	
6500.00	6389.01	6439.48	261.86	17.56	14.29	639.22	609.93	21.82	
6600.00	6485.99	6537.96	261.84	17.93	14.53	656.58	626.83	22.06	
6700.00	6582.98	6636.44	261.83	18.29	14.77	673.95	643.73	22.30	
6800.00	6679.96	6734.92	261.81	18.66	15.01	691.31	660.63	22.53	
6900.00	6776.95	6833.40	261.79	19.02	15.25	708.68	677.53	22.75	
7000.00	6873.93	6931.88	261.78	19.39	15.49	726.04	694.42	22.97	
7100.00	6970.92	7030.36	261.77	19.76	15.73	743.40	711.32	23.17	
7200.00	7067.90	7128.84	261.75	20.13	15.98	760.77	728.22	23.38	
7300.00	7164.88	7227.32	261.74	20.50	16.22	778.13	745.12	23.57	
7400.00	7261.87	7325.81	261.73	20.87	16.46	795.50	762.02	23.76	
7500.00	7358.85	7424.29	261.72	21.24	16.71	812.86	778.92	23.95	
7600.00	7455.84	7522.77	261.71	21.62	16.95	830.22	795.81	24.13	
7700.00	7552.82	7621.25	261.70	21.99	17.19	847.59	812.71	24.30	
7800.00	7649.81	7719.73	261.69	22.36	17.44	864.95	829.61	24.47	
7900.00	7746.79	7818.21	261.68	22.73	17.68	882.32	846.50	24.64	
8000.00	7843.78	7916.69	261.67	23.11	17.93	899.68	863.40	24.80	
8100.00	7940.76	8015.17	261.66	23.48	18.17	917.05	880.29	24.95	
8200.00	8037.75	8113.65	261.65	23.86	18.42	934.41	897.19	25.10	
8300.00	8134.73	8212.13	261.64	24.23	18.66	951.77	914.08	25.25	
8400.00	8231.72	8310.61	261.63	24.61	18.91	969.14	930.98	25.40	
8500.00	8328.70	8409.09	261.63	24.98	19.15	986.50	947.87	25.54	
8600.00	8425.68	8507.57	261.62	25.36	19.40	1003.87	964.77	25.68	
8700.00	8522.67	8606.06	261.61	25.73	19.64	1021.23	981.66	25.81	
8800.00	8619.65	8704.54	261.61	26.11	19.89	1038.60	998.56	25.94	
8900.00	8716.64	8803.02	261.60	26.49	20.14	1055.96	1015.45	26.07	
9000.00	8813.62	8901.50	261.59	26.86	20.38	1073.32	1032.34	26.19	
9100.00	8910.61	8999.98	261.59	27.24	20.63	1090.69	1049.24	26.31	
9200.00	9007.59	9098.46	261.58	27.62	20.88	1108.05	1066.13	26.43	
9300.00	9104.58	9196.94	261.57	28.00	21.12	1125.42	1083.02	26.55	
9400.00	9201.56	9295.42	261.57	28.37	21.37	1142.78	1099.92	26.66	
9500.00	9298.55	9393.90	261.56	28.75	21.62	1160.15	1116.81	26.77	
9600.00	9395.53	9492.38	261.56	29.13	21.86	1177.51	1133.70	26.88	
9700.00	9492.52	9590.86	261.55	29.51	22.11	1194.88	1150.59	26.98	
9800.00	9589.50	9689.34	261.55	29.89	22.36	1212.24	1167.48	27.09	
9900.00	9686.49	9787.82	261.54	30.27	22.60	1229.60	1184.38	27.19	
10000.00	9783.47	9886.31	261.54	30.65	22.85	1246.97	1201.27	27.29	
10100.00	9880.45	9984.79	261.53	31.03	23.10	1264.33	1218.16	27.38	
10200.00	9977.44	10083.27	261.53	31.40	23.35	1281.70	1235.05	27.48	
10300.00	10094.57	10202.63	261.92	31.29	23.65	1298.48	1251.29	27.52	
10400.00	10204.05	10319.24	263.50	29.94	23.93	1313.69	1266.02	27.56	
10500.00	10285.84	10415.19	265.61	27.87	24.15	1329.03	1280.97	27.65	
10600.00	10342.01	10489.85	267.70	25.73	24.31	1346.54	1298.10	27.80	
10700.00	10379.62	10546.99	269.53	24.59	23.83	1367.75	1319.11	28.12	
10700.00	10379.62	10546.99	269.53	24.59	23.83	1367.75	1319.11	28.12	

**Weatherford®****Weatherford Drilling Services**

GeoDec v5.03

Report Date: May 29, 2014
Job Number: _____
Customer: Devon Energy
Well Name: Caucho Unit 16H
API Number: _____
Rig Name: _____
Location: Lea County, NM
Block: _____
Engineer: RWJ

US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 499511.790 USFT	Latitude 32.3704860 DEG
East/West 798050.230 USFT	Longitude -103.5018476 DEG
Grid Convergence: .45°	
Total Correction: +6.90°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.37049° N	32° 22 min 13.750 sec
Longitude =	103.50185° W	103° 30 min 6.651 sec

Magnetic Declination =	7.35°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6554
Local Field Strength =	48401 nT	Magnetic Vector X = 23817. nT
Magnetic Dip =	60.25°	Magnetic Vector Y = 3071 nT
Magnetic Model =	bggm2014	Magnetic Vector Z = 42023 nT
Spud Date =	Jul 01, 2014	Magnetic Vector H = 24015 nT

Signed: _____

Date: _____