

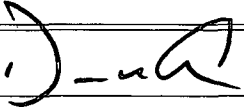
Form 3160-3
(March 2012)**UNORTHODOX
LOCATION**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**HOBBS OCD****SEP 22 2014**FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM43564
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Devon Energy Production Company, L.P. (6137)		7. If Unit or CA Agreement, Name and No.
3a. Address 333 W. Sheridan Ave. Oklahoma City, OK 73102		8. Lease Name and Well No. (30864) GAUCHO 21 FEDERAL 4H
3b. Phone No. (include area code) 405-552-7848		9. API Well No. 30-025-42137
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 200 FSL & 1500 FWL Unit N PP: 200 FSL & 1980 FWL At proposed prod. zone 330 FNL & 1980 FWL Unit C		10. Field and Pool, or Exploratory WC-025 G-06 5223421L; B5 (97922)
14. Distance in miles and direction from nearest town or post office* Approximately 19 miles SW of Eunice, NM		11. Sec., T. R. M. or Blk. and Survey or Area 21-22S-34E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200'	16. No. of acres in lease 1920 160 acres	17. Spacing Unit dedicated to this well 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See attached map	19. Proposed Depth TVD: 10,333' MD: 15,149'	20. BLM/BIA Bond No. on file CO-1104 & NMB-000801
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,432.2' GL	22. Approximate date work will start* 09/01/2014	23. Estimated duration 25 days

24. Attachments To Be Pad Drilled w/ Gaucho 21 Federal 3H

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) David H. Cook	Date 02/26/2014
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Title

Regulatory Specialist

Approved by (Signature) Steve Caffey	Name (Printed/Typed)	SEP 15 2014
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

K 29/22/14**PM**Approval Subject to General Requirements
& Special Stipulations Attached**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

HOBS OCD

SEP 22 2014

RECEIVED

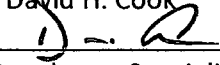
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 26th day of FEBRUARY, 2014.

Printed Name: David H. Cook

Signed Name: 

Position Title: Regulatory Specialist

Address: 333 W. Sheridan, OKC OK 73102

Telephone: (405)-552-6559

DRILLING PROGRAM

Devon Energy Production Company, L.P.
Gaucha 21 Fed 4H

HOBBS OCD

SEP 22 2014

RECEIVED

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/Castille	3700'	Barren
e. Yates	3930'	Oil/Gas
f. Delaware	5256'	Oil / Gas
g. Cherry Canyon	6016'	Oil / Gas
h. Lwr Brushy Canyon	8264'	Oil / Gas
i. Bone Spring Lime	8443'	Oil / Gas
j. 1 st Bone Spring SS	9497'	Oil / Gas
k. 2 nd Bone Spring SS	10046'	Oil / Gas
Total Depth	10333' TVD	15149' MD

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.

*See
COA*

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line); **if an H&P rig drills this well. Otherwise no flex line is needed.** The line will be kept as straight as possible with minimal turns.

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:

See COA

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	1.43	2.03	5.76
8-3/4"	4,000 - 15,149'	5-1/2"	0 - 15,149'	17	BTC	HCP-110	1.73	2.37	2.18

Casing Notes:

- All casing is new and API approved

Maximum Lateral TVD: 10,384'

5. Proposed mud Circulations System:

See COA

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'	9.8-10.0	1-3	N/C	Brine
4,000 - 15,149'	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	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield 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" Intermediate	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
5-1/2" Production	610	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

See COA

See COA

TOC for all Strings:

13-3/8" Surface 0ft

9-5/8" Intermediate 0ft

5-1/2" Production 3500ft See COA
tie back 50' above Capitan Reef

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 and caliper log data

7. Logging, Coring, and Testing Program: See COA

- Drill stem tests will be based on geological sample shows.
- 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.
- No logs are planned
- No coring program is planned

- e. Additional Testing will be initiated subsequent to setting the 5-1/2" 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: 4600 psi, and estimated BHT: 160 degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production string is cemented. Breathing equipment will be on location upon drilling the surface casing 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.

5D Plan Report**Devon Energy**

Field Name: *Lea Co, NM Nad 83 NM*
Site Name: *Gaucho 21 Federal 3,4H Pad*
Well Name: *Gaucho 21 Federal 4H*
Plan: *P1:V2*

04 April 2014



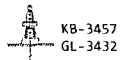


Gaucha 21 Federal 4H
Lea Co, NM



Plan Data for Gaucha 21 Federal 4H

Plan Point Information:									
Dogleg Severity Unit: */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	499563.92	805184.26	0.00	0.00
4100.00	0.00	0.00	4100.00	0.00	0.00	499563.92	805184.26	0.00	0.00
4454.66	7.09	111.14	4453.76	-7.91	20.45	499556.01	805204.71	-7.91	2.00
8082.41	7.09	111.14	8053.74	-169.48	438.27	499394.44	805622.53	-169.48	0.00
8437.08	0.00	0.00	8407.50	-177.39	458.72	499386.53	805642.98	-177.39	2.00
9937.08	0.00	0.00	9907.50	-177.39	458.72	499386.53	805642.98	-177.39	0.00
10692.64	90.67	0.00	10384.93	305.64	458.72	499869.56	805642.98	305.64	12.00
15148.61	90.67	0.00	10333.00	4761.31	458.72	504325.23	805642.98	4761.31	0.00



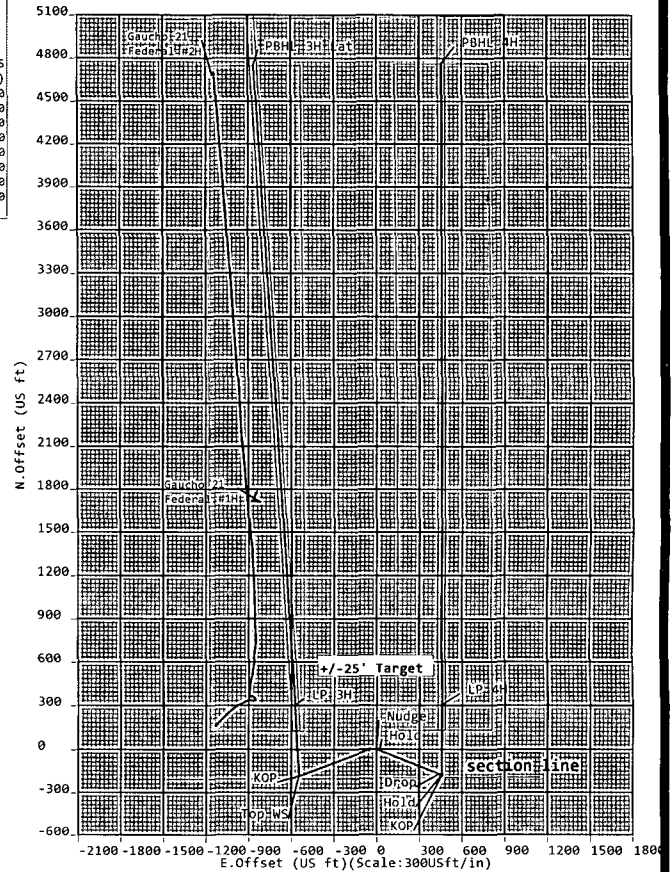
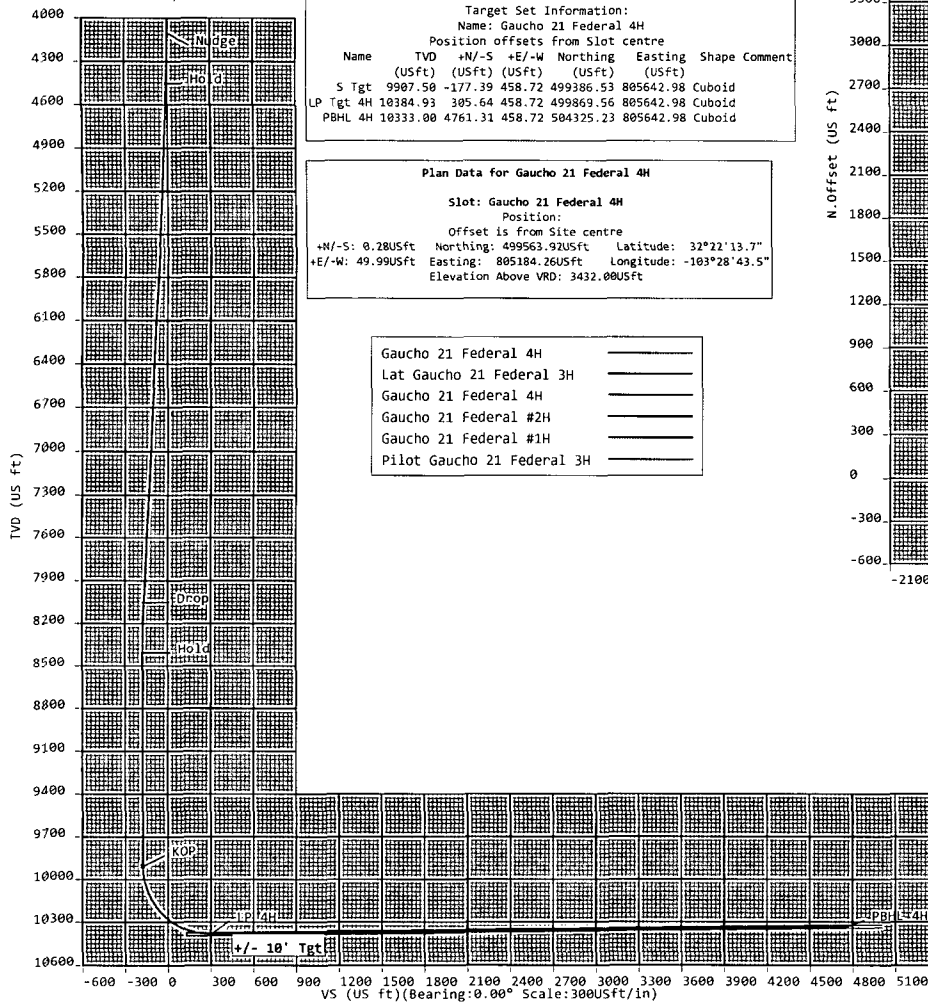
Plan Data for Gaucha 21 Federal 4H

Target Set Information:									
Name: Gaucha 21 Federal 4H									
Position offsets from Slot centre									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment		
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)				
S Tgt	9907.50	-177.39	458.72	499386.53	805642.98	Cuboid			
LP Tgt 4H	10384.93	305.64	458.72	499869.56	805642.98	Cuboid			
PBHL 4H	10333.00	4761.31	458.72	504325.23	805642.98	Cuboid			

Plan Data for Gaucha 21 Federal 4H

Slot: Gaucha 21 Federal 4H									
Position:									
Offset is from Site centre									
+N/-S:	0.280USft	Northing:	499563.92USft	Latitude:	32°22'13.7"				
+E/-W:	49.990USft	Easting:	805184.26USft	Longitude:	-103°28'43.5"				
Elevation Above VRD: 3432.00USft									

Gaucha 21 Federal 4H	_____
Lat Gaucha 21 Federal 3H	_____
Gaucha 21 Federal 4H	_____
Gaucha 21 Federal #2H	_____
Gaucha 21 Federal #1H	_____
Pilot Gaucha 21 Federal 3H	_____



Sign Off: Russell Joyner

Gaucha 21 Federal 4H

Field Name Lea Co, NM Nad 83 NM	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 21 Federal 3,4H Pad	<table border="1"> <tr> <td>Units : US ft</td> <td>North Reference : Grid</td> <td>Convergence Angle : 0.46</td> </tr> <tr> <td>Position</td> <td>Northing : 499563.64 US ft</td> <td>Latitude : 32° 22' 13.71"</td> </tr> <tr> <td></td> <td>Easting : 805134.27 US ft</td> <td>Longitude : -103° 28' 44.05"</td> </tr> <tr> <td colspan="3">Elevation above Mean Sea Level:3433.00 US ft</td> </tr> <tr> <td colspan="3">Comment :</td> </tr> </table>			Units : US ft	North Reference : Grid	Convergence Angle : 0.46	Position	Northing : 499563.64 US ft	Latitude : 32° 22' 13.71"		Easting : 805134.27 US ft	Longitude : -103° 28' 44.05"	Elevation above Mean Sea Level: 3433.00 US ft			Comment :																	
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Model : BGGM	Field Strength : 48393.8nT	Dec : 7.28°																															
		Dip : 60.24°																															
		Date : 30/Aug/2014																															

Target Set

Name : Gaucho 21 Federal **Number of Targets :** 3

4H

Comment :

Target Name:	Position (Relative to Slot centre)		
S Tgt	+N / -S : -177.39US ft	Northing : 499386.53 US ft	Latitude : 32°22'11.92"
Shape:	+E / -W : 458.72 US ft	Easting : 805642.98US ft	Longitude : -103°28'38.14"
Cuboid	TVD (Drill Floor) : 9907.50 US ft		
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 20.00 US ft	Breadth : 20.00 US ft	Height : 20.00 US ft

5D Plan Report

Target Name: LP Tgt 4H Shape: Cuboid	Position (Relative to Slot centre) +N / -S : 305.64US ft Northing : 499869.56 US ft Latitude : 32°22'16.70" +E / -W : 458.72 US ft Easting : 805642.98US ft Longitude : -103°28'38.09"		
	TVD (Drill Floor) : 10384.93 US ft Orientation Azimuth : 0.00° Inclination : 0.00° Dimensions Length : 0.00 US ft Breadth : 0.00 US ft Height : 0.00 US ft		
Target Name: PBHL 4H Shape: Cuboid	Position (Relative to Slot centre) +N / -S : 4761.31US ft Northing : 504325.23 US ft Latitude : 32°23'0.78" +E / -W : 458.72 US ft Easting : 805642.98US ft Longitude : -103°28'37.68"		
	TVD (Drill Floor) : 10333.00 US ft Orientation Azimuth : 0.00° Inclination : 0.67° Dimensions Length : 9258.00 US ft Breadth : 50.00 US ft Height : 20.00 US ft		

Casing 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)	Northing (US ft)	Easting (US ft)	Name
4000.00	0.00	0.00	4000.00	0.00	0.00	499563.92	805184.26	9 5/8 in

Well path created using minimum curvature

Salient 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)	DLS (°/100 US ft)	VS (US ft)	B.Rate (°/100 US ft)	T.Rate (°/100 US 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	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 5/8 in
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nudge
4454.66	7.09	111.14	4453.76	-7.91	20.45	2.00	-7.91	2.00	0.00	111.14	Hold
8082.41	7.09	111.14	8053.74	-169.48	438.27	0.00	-169.48	0.00	0.00	0.00	Drop
8437.08	0.00	0.00	8407.50	-177.39	458.72	2.00	-177.39	-2.00	0.00	180.00	Hold
9937.08	0.00	0.00	9907.50	-177.39	458.72	0.00	-177.39	0.00	0.00	0.00	KOP
10692.64	90.67	0.00	10384.93	305.64	458.72	12.00	305.64	12.00	0.00	0.00	LP 4H
15148.61	90.67	0.00	10333.00	4761.31	458.72	0.00	4761.31	0.00	0.00	0.00	PBHL 4H

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
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	499563.92	805184.26	Nudge
4200.00	2.00	111.14	4199.98	-0.63	1.63	-0.63	2.00	499563.29	805185.89	
4300.00	4.00	111.14	4299.84	-2.52	6.51	-2.52	2.00	499561.40	805190.77	
4400.00	6.00	111.14	4399.45	-5.66	14.64	-5.66	2.00	499558.26	805198.90	
4454.66	7.09	111.14	4453.76	-7.91	20.45	-7.91	2.00	499556.01	805204.71	Hold
4500.00	7.09	111.14	4498.75	-9.93	25.67	-9.93	0.00	499553.99	805209.93	
4600.00	7.09	111.14	4597.98	-14.38	37.19	-14.38	0.00	499549.54	805221.45	
4700.00	7.09	111.14	4697.22	-18.84	48.71	-18.84	0.00	499545.08	805232.97	
4800.00	7.09	111.14	4796.45	-23.29	60.22	-23.29	0.00	499540.63	805244.48	
4900.00	7.09	111.14	4895.69	-27.74	71.74	-27.74	0.00	499536.18	805256.00	
5000.00	7.09	111.14	4994.92	-32.20	83.26	-32.20	0.00	499531.72	805267.52	
5100.00	7.09	111.14	5094.16	-36.65	94.78	-36.65	0.00	499527.27	805279.04	
5200.00	7.09	111.14	5193.39	-41.10	106.29	-41.10	0.00	499522.82	805290.55	
5300.00	7.09	111.14	5292.62	-45.56	117.81	-45.56	0.00	499518.36	805302.07	
5400.00	7.09	111.14	5391.86	-50.01	129.33	-50.01	0.00	499513.91	805313.59	
5500.00	7.09	111.14	5491.09	-54.47	140.84	-54.47	0.00	499509.45	805325.10	

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
5600.00	7.09	111.14	5590.33	-58.92	152.36	-58.92	0.00	499505.00	805336.62	
5700.00	7.09	111.14	5689.56	-63.37	163.88	-63.37	0.00	499500.55	805348.14	
5800.00	7.09	111.14	5788.80	-67.83	175.40	-67.83	0.00	499496.09	805359.66	
5900.00	7.09	111.14	5888.03	-72.28	186.91	-72.28	0.00	499491.64	805371.17	
6000.00	7.09	111.14	5987.27	-76.73	198.43	-76.73	0.00	499487.19	805382.69	
6100.00	7.09	111.14	6086.50	-81.19	209.95	-81.19	0.00	499482.73	805394.21	
6200.00	7.09	111.14	6185.74	-85.64	221.47	-85.64	0.00	499478.28	805405.73	
6300.00	7.09	111.14	6284.97	-90.10	232.98	-90.10	0.00	499473.82	805417.24	
6400.00	7.09	111.14	6384.21	-94.55	244.50	-94.55	0.00	499469.37	805428.76	
6500.00	7.09	111.14	6483.44	-99.00	256.02	-99.00	0.00	499464.92	805440.28	
6600.00	7.09	111.14	6582.68	-103.46	267.54	-103.46	0.00	499460.46	805451.80	
6700.00	7.09	111.14	6681.91	-107.91	279.05	-107.91	0.00	499456.01	805463.31	
6800.00	7.09	111.14	6781.14	-112.37	290.57	-112.37	0.00	499451.55	805474.83	
6900.00	7.09	111.14	6880.38	-116.82	302.09	-116.82	0.00	499447.10	805486.35	
7000.00	7.09	111.14	6979.61	-121.27	313.60	-121.27	0.00	499442.65	805497.86	
7100.00	7.09	111.14	7078.85	-125.73	325.12	-125.73	0.00	499438.19	805509.38	
7200.00	7.09	111.14	7178.08	-130.18	336.64	-130.18	0.00	499433.74	805520.90	
7300.00	7.09	111.14	7277.32	-134.63	348.16	-134.63	0.00	499429.29	805532.42	
7400.00	7.09	111.14	7376.55	-139.09	359.67	-139.09	0.00	499424.83	805543.93	
7500.00	7.09	111.14	7475.79	-143.54	371.19	-143.54	0.00	499420.38	805555.45	
7600.00	7.09	111.14	7575.02	-148.00	382.71	-148.00	0.00	499415.92	805566.97	
7700.00	7.09	111.14	7674.26	-152.45	394.23	-152.45	0.00	499411.47	805578.49	
7800.00	7.09	111.14	7773.49	-156.90	405.74	-156.90	0.00	499407.02	805590.00	
7900.00	7.09	111.14	7872.73	-161.36	417.26	-161.36	0.00	499402.56	805601.52	
8000.00	7.09	111.14	7971.96	-165.81	428.78	-165.81	0.00	499398.11	805613.04	
8082.41	7.09	111.14	8053.74	-169.48	438.27	-169.48	0.00	499394.44	805622.53	Drop
8100.00	6.74	111.14	8071.20	-170.25	440.25	-170.25	2.00	499393.67	805624.51	
8200.00	4.74	111.14	8170.69	-173.85	449.58	-173.85	2.00	499390.07	805633.84	
8300.00	2.74	111.14	8270.48	-176.21	455.66	-176.21	2.00	499387.71	805639.92	
8400.00	0.74	111.14	8370.43	-177.30	458.50	-177.30	2.00	499386.62	805642.76	
8437.08	0.00	0.00	8407.50	-177.39	458.72	-177.39	2.00	499386.53	805642.98	Hold
8500.00	0.00	0.00	8470.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
8600.00	0.00	0.00	8570.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
8700.00	0.00	0.00	8670.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
8800.00	0.00	0.00	8770.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
8900.00	0.00	0.00	8870.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9000.00	0.00	0.00	8970.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9100.00	0.00	0.00	9070.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9200.00	0.00	0.00	9170.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9300.00	0.00	0.00	9270.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9400.00	0.00	0.00	9370.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9500.00	0.00	0.00	9470.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9600.00	0.00	0.00	9570.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9700.00	0.00	0.00	9670.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9800.00	0.00	0.00	9770.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9900.00	0.00	0.00	9870.42	-177.39	458.72	-177.39	0.00	499386.53	805642.98	
9937.08	0.00	0.00	9907.50	-177.39	458.72	-177.39	0.00	499386.53	805642.98	KOP
10000.00	7.55	0.00	9970.24	-173.25	458.72	-173.25	12.00	499390.67	805642.98	
10100.00	19.55	0.00	10067.28	-149.86	458.72	-149.86	12.00	499414.06	805642.98	
10200.00	31.55	0.00	10157.34	-106.81	458.72	-106.81	12.00	499457.11	805642.98	
10300.00	43.55	0.00	10236.47	-45.97	458.72	-45.97	12.00	499517.95	805642.98	
10400.00	55.55	0.00	10301.23	29.99	458.72	29.99	12.00	499593.91	805642.98	
10500.00	67.55	0.00	10348.78	117.75	458.72	117.75	12.00	499681.67	805642.98	
10600.00	79.55	0.00	10377.05	213.48	458.72	213.48	12.00	499777.40	805642.98	
10692.64	90.67	0.00	10384.93	305.64	458.72	305.64	12.00	499869.56	805642.98	LP 4H
10700.00	90.67	0.00	10384.85	313.00	458.72	313.00	0.00	499876.92	805642.98	
10800.00	90.67	0.00	10383.68	412.99	458.72	412.99	0.00	499976.91	805642.98	
10900.00	90.67	0.00	10382.52	512.98	458.72	512.98	0.00	500076.90	805642.98	
11000.00	90.67	0.00	10381.35	612.98	458.72	612.98	0.00	500176.90	805642.98	

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
11100.00	90.67	0.00	10380.18	712.97	458.72	712.97	0.00	500276.89	805642.98	
11200.00	90.67	0.00	10379.02	812.96	458.72	812.96	0.00	500376.88	805642.98	
11300.00	90.67	0.00	10377.85	912.96	458.72	912.96	0.00	500476.88	805642.98	
11400.00	90.67	0.00	10376.69	1012.95	458.72	1012.95	0.00	500576.87	805642.98	
11500.00	90.67	0.00	10375.52	1112.94	458.72	1112.94	0.00	500676.86	805642.98	
11600.00	90.67	0.00	10374.36	1212.94	458.72	1212.94	0.00	500776.86	805642.98	
11700.00	90.67	0.00	10373.19	1312.93	458.72	1312.93	0.00	500876.85	805642.98	
11800.00	90.67	0.00	10372.03	1412.92	458.72	1412.92	0.00	500976.84	805642.98	
11900.00	90.67	0.00	10370.86	1512.92	458.72	1512.92	0.00	501076.84	805642.98	
12000.00	90.67	0.00	10369.70	1612.91	458.72	1612.91	0.00	501176.83	805642.98	
12100.00	90.67	0.00	10368.53	1712.90	458.72	1712.90	0.00	501276.82	805642.98	
12200.00	90.67	0.00	10367.36	1812.90	458.72	1812.90	0.00	501376.82	805642.98	
12300.00	90.67	0.00	10366.20	1912.89	458.72	1912.89	0.00	501476.81	805642.98	
12400.00	90.67	0.00	10365.03	2012.88	458.72	2012.88	0.00	501576.80	805642.98	
12500.00	90.67	0.00	10363.87	2112.88	458.72	2112.88	0.00	501676.80	805642.98	
12600.00	90.67	0.00	10362.70	2212.87	458.72	2212.87	0.00	501776.79	805642.98	
12700.00	90.67	0.00	10361.54	2312.86	458.72	2312.86	0.00	501876.78	805642.98	
12800.00	90.67	0.00	10360.37	2412.86	458.72	2412.86	0.00	501976.78	805642.98	
12900.00	90.67	0.00	10359.21	2512.85	458.72	2512.85	0.00	502076.77	805642.98	
13000.00	90.67	0.00	10358.04	2612.84	458.72	2612.84	0.00	502176.76	805642.98	
13100.00	90.67	0.00	10356.88	2712.84	458.72	2712.84	0.00	502276.76	805642.98	
13200.00	90.67	0.00	10355.71	2812.83	458.72	2812.83	0.00	502376.75	805642.98	
13300.00	90.67	0.00	10354.54	2912.82	458.72	2912.82	0.00	502476.74	805642.98	
13400.00	90.67	0.00	10353.38	3012.82	458.72	3012.82	0.00	502576.74	805642.98	
13500.00	90.67	0.00	10352.21	3112.81	458.72	3112.81	0.00	502676.73	805642.98	
13600.00	90.67	0.00	10351.05	3212.80	458.72	3212.80	0.00	502776.72	805642.98	
13700.00	90.67	0.00	10349.88	3312.79	458.72	3312.79	0.00	502876.71	805642.98	
13800.00	90.67	0.00	10348.72	3412.79	458.72	3412.79	0.00	502976.71	805642.98	
13900.00	90.67	0.00	10347.55	3512.78	458.72	3512.78	0.00	503076.70	805642.98	
14000.00	90.67	0.00	10346.39	3612.77	458.72	3612.77	0.00	503176.69	805642.98	
14100.00	90.67	0.00	10345.22	3712.77	458.72	3712.77	0.00	503276.69	805642.98	
14200.00	90.67	0.00	10344.06	3812.76	458.72	3812.76	0.00	503376.68	805642.98	
14300.00	90.67	0.00	10342.89	3912.75	458.72	3912.75	0.00	503476.67	805642.98	
14400.00	90.67	0.00	10341.72	4012.75	458.72	4012.75	0.00	503576.67	805642.98	
14500.00	90.67	0.00	10340.56	4112.74	458.72	4112.74	0.00	503676.66	805642.98	
14600.00	90.67	0.00	10339.39	4212.73	458.72	4212.73	0.00	503776.65	805642.98	
14700.00	90.67	0.00	10338.23	4312.73	458.72	4312.73	0.00	503876.65	805642.98	
14800.00	90.67	0.00	10337.06	4412.72	458.72	4412.72	0.00	503976.64	805642.98	
14900.00	90.67	0.00	10335.90	4512.71	458.72	4512.71	0.00	504076.63	805642.98	
15000.00	90.67	0.00	10334.73	4612.71	458.72	4612.71	0.00	504176.63	805642.98	
15100.00	90.67	0.00	10333.57	4712.70	458.72	4712.70	0.00	504276.62	805642.98	
15148.61	90.67	0.00	10333.00	4761.31	458.72	4761.31	0.00	504325.23	805642.98	PBHL 4H

5D Anti-Collision Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NM***Site Name:** *Gaucho 21 Federal 3,4H Pad***Well Name:** *Gaucho 21 Federal 4H*

04 April 2014




Weatherford®

Gaucho 21 Federal 4H

Field Name Lea Co, NM Nad 83 NM	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 21 Federal 3,4H Pad	Units : US ft North Reference : Grid Convergence Angle : 0.46 Position Northing : 499563.64 US ft Latitude : 32° 22' 13.71" Easting : 805134.27 US ft Longitude : -103° 28' 44.05" Elevation above Mean Sea Level: 3433.00 US ft Comment :	
Slot Name Gaucho 21 Federal 4H	Position (Offsets relative to Site Centre) +N / -S : 0.28 US ft Northing : 499563.92 US ft Latitude : 32°22'13.71" +E / -W : 49.99 US ft Easting : 805184.26 US ft Longitude : -103°28'43.47" Slot TVD Reference : Ground Elevation Elevation above Mean Sea Level : 3432.00 US ft Comment :	
Well Name Gaucho 21 Federal 4H	Type : Main well UWI : Plan : Working Plan Rig Height Drill Floor : 25.00 US ft Comment : Relative to Mean Sea Level: 3457.00 US ft Closure Distance : 4783.36 US ft Closure Azimuth : 5.50308° Vertical Section (Position of Origin Relative to Slot) +N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 0.00° Magnetic Parameters Model : BGGM Field Strength : 48393.8nT Dec : 7.28° Dip : 60.24° Date : 30/Aug/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 21 Federal 4H (p)	0.00	15148.61	100.00	2

Secondary Well Names

Pilot Gaucho 21 Federal 3H (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

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

5D Anti-Collision Report

Anti-Collision Proximity Summary (TVD relative to)

Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Pilot Gaucho 21 Federal 3H (p)	4099.22	4100.22	4099.22	49.99	31.07	2.64	

Secondary Well : Pilot Gaucho 21 Federal 3H (p) (TVD Relative to Drill Floor (Primary)); 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)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	1.00	269.68	0.01	0.01	49.99	49.22	65.04	
100.00	100.00	101.00	269.68	0.12	0.12	49.99	49.00	50.28	
200.00	200.00	201.00	269.68	0.34	0.34	49.99	48.55	34.70	
300.00	300.00	301.00	269.68	0.57	0.57	49.99	48.10	26.46	
400.00	400.00	401.00	269.68	0.79	0.79	49.99	47.65	21.38	
500.00	500.00	501.00	269.68	1.02	1.02	49.99	47.20	17.93	
600.00	600.00	601.00	269.68	1.24	1.24	49.99	46.75	15.44	
700.00	700.00	701.00	269.68	1.47	1.47	49.99	46.30	13.56	
800.00	800.00	801.00	269.68	1.69	1.69	49.99	45.85	12.09	
900.00	900.00	901.00	269.68	1.92	1.92	49.99	45.41	10.90	
1000.00	1000.00	1001.00	269.68	2.14	2.14	49.99	44.96	9.93	
1100.00	1100.00	1101.00	269.68	2.37	2.37	49.99	44.51	9.11	
1200.00	1200.00	1201.00	269.68	2.59	2.59	49.99	44.06	8.42	
1300.00	1300.00	1301.00	269.68	2.82	2.82	49.99	43.61	7.83	
1400.00	1400.00	1401.00	269.68	3.04	3.04	49.99	43.16	7.32	
1500.00	1500.00	1501.00	269.68	3.26	3.26	49.99	42.71	6.86	
1600.00	1600.00	1601.00	269.68	3.49	3.49	49.99	42.26	6.47	
1700.00	1700.00	1701.00	269.68	3.71	3.71	49.99	41.81	6.11	
1800.00	1800.00	1801.00	269.68	3.94	3.94	49.99	41.36	5.79	
1900.00	1900.00	1901.00	269.68	4.16	4.16	49.99	40.91	5.51	
2000.00	2000.00	2001.00	269.68	4.39	4.39	49.99	40.46	5.25	
2100.00	2100.00	2101.00	269.68	4.61	4.61	49.99	40.01	5.01	
2200.00	2200.00	2201.00	269.68	4.84	4.84	49.99	39.56	4.79	
2300.00	2300.00	2301.00	269.68	5.06	5.06	49.99	39.11	4.60	
2400.00	2400.00	2401.00	269.68	5.29	5.29	49.99	38.66	4.41	
2500.00	2500.00	2501.00	269.68	5.51	5.51	49.99	38.21	4.24	
2600.00	2600.00	2601.00	269.68	5.74	5.74	49.99	37.76	4.09	
2700.00	2700.00	2701.00	269.68	5.96	5.96	49.99	37.31	3.94	
2800.00	2800.00	2801.00	269.68	6.19	6.19	49.99	36.86	3.81	
2900.00	2900.00	2901.00	269.68	6.41	6.41	49.99	36.42	3.68	
3000.00	3000.00	3001.00	269.68	6.64	6.64	49.99	35.97	3.56	
3100.00	3100.00	3101.00	269.68	6.86	6.86	49.99	35.52	3.45	
3200.00	3200.00	3201.00	269.68	7.09	7.09	49.99	35.07	3.35	
3300.00	3300.00	3301.00	269.68	7.31	7.31	49.99	34.62	3.25	
3400.00	3400.00	3401.00	269.68	7.54	7.54	49.99	34.17	3.16	
3500.00	3500.00	3501.00	269.68	7.76	7.76	49.99	33.72	3.07	
3600.00	3600.00	3601.00	269.68	7.98	7.98	49.99	33.27	2.99	
3700.00	3700.00	3701.00	269.68	8.21	8.21	49.99	32.82	2.91	
3800.00	3800.00	3801.00	269.68	8.43	8.43	49.99	32.37	2.84	
3900.00	3900.00	3901.00	269.68	8.66	8.66	49.99	31.92	2.77	
4000.00	4000.00	4001.00	269.68	8.88	8.88	49.99	31.47	2.70	
4100.00	4099.98	4100.98	269.68	9.11	9.11	49.99	31.08	2.64	
4200.00	4198.25	4199.27	158.56	9.30	9.29	53.26	34.00	2.77	
4300.00	4295.78	4296.93	158.62	9.48	9.46	62.98	43.38	3.21	
4400.00	4391.87	4393.38	158.67	9.67	9.61	79.07	59.13	3.96	
4500.00	4485.95	4488.14	158.69	9.86	9.75	101.10	80.86	4.99	
4600.00	4578.10	4581.36	158.34	10.06	9.89	126.59	106.07	6.17	
4700.00	4672.01	4676.71	157.82	10.27	10.07	154.09	133.20	7.38	
4800.00	4766.67	4772.83	157.45	10.49	10.26	181.66	160.38	8.54	
4900.00	4861.33	4868.95	157.18	10.73	10.45	209.23	187.57	9.66	
5000.00	4955.99	4965.07	156.97	10.97	10.64	236.80	214.76	10.74	
5100.00	5050.64	5061.19	156.80	11.22	10.83	264.38	241.94	11.78	

5D Anti-Collision Report

Secondary Well	Pilot Gaucho 21	Federal 3H (p)	TVD Relative to Drill Floor (Primary)	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)	CC (US ft)	ES (US ft)	SF	Risk
5200.00	5145.30	5157.31	156.67	11.47	11.03	291.96	269.11	12.78	
5300.00	5239.96	5253.43	156.56	11.73	11.23	319.54	296.28	13.74	
5400.00	5334.62	5349.54	156.46	12.00	11.43	347.12	323.44	14.66	
5500.00	5429.28	5445.66	156.38	12.28	11.63	374.71	350.61	15.55	
5600.00	5523.94	5541.78	156.31	12.56	11.83	402.29	377.77	16.41	
5700.00	5618.60	5637.90	156.25	12.84	12.04	429.87	404.93	17.23	
5800.00	5713.26	5734.02	156.20	13.13	12.25	457.46	432.09	18.03	
5900.00	5807.92	5830.14	156.15	13.42	12.46	485.04	459.24	18.80	
6000.00	5902.58	5926.26	156.11	13.72	12.67	512.62	486.39	19.54	
6100.00	5997.24	6022.38	156.08	14.02	12.88	540.21	513.54	20.26	
6200.00	6091.90	6118.50	156.04	14.33	13.10	567.79	540.68	20.95	
6300.00	6186.56	6214.62	156.01	14.63	13.31	595.38	567.83	21.61	
6400.00	6281.22	6310.74	155.98	14.95	13.53	622.96	594.97	22.25	
6500.00	6375.88	6406.86	155.96	15.26	13.75	650.55	622.10	22.87	
6600.00	6470.53	6502.98	155.93	15.58	13.96	678.13	649.23	23.46	
6700.00	6565.19	6599.10	155.91	15.90	14.18	705.72	676.36	24.04	
6800.00	6659.85	6695.22	155.89	16.22	14.40	733.30	703.49	24.59	
6900.00	6754.51	6791.34	155.87	16.55	14.62	760.89	730.61	25.13	
7000.00	6849.17	6887.46	155.86	16.87	14.84	788.48	757.73	25.65	
7100.00	6943.83	6983.58	155.84	17.20	15.07	816.06	784.85	26.15	
7200.00	7038.49	7079.70	155.82	17.53	15.29	843.65	811.97	26.64	
7300.00	7147.61	7190.43	155.82	17.90	15.57	870.93	838.71	27.03	
7400.00	7283.90	7327.94	155.91	18.26	15.92	894.69	861.85	27.24	
7500.00	7423.66	7468.21	156.13	18.58	16.22	913.95	880.47	27.30	
7600.00	7565.97	7610.63	156.48	18.86	16.48	928.59	894.56	27.29	
7700.00	7674.26	7718.91	156.81	19.05	16.69	940.04	905.57	27.27	
7800.00	7773.49	7818.15	157.10	19.24	16.90	951.42	916.50	27.25	
7900.00	7872.73	7917.38	157.38	19.43	17.11	962.82	927.46	27.23	
8000.00	7971.96	8016.62	157.66	19.62	17.32	974.24	938.45	27.22	
8100.00	8071.20	8115.86	157.95	19.81	17.53	985.63	949.41	27.21	
8200.00	8170.69	8215.35	158.24	20.00	17.75	994.92	958.28	27.15	
8300.00	8270.48	8315.13	158.42	20.19	17.96	1000.99	963.93	27.01	
8400.00	8370.43	8415.08	158.50	20.39	18.17	1003.82	966.35	26.79	
8500.00	8470.42	8515.08	269.65	20.58	18.39	1004.04	966.16	26.51	
8600.00	8570.42	8615.08	269.65	20.78	18.60	1004.04	965.74	26.21	
8700.00	8670.42	8715.08	269.65	20.97	18.82	1004.04	965.32	25.93	
8800.00	8770.42	8815.08	269.65	21.17	19.03	1004.04	964.89	25.65	
8900.00	8870.42	8915.08	269.65	21.36	19.25	1004.04	964.47	25.38	
9000.00	8970.42	9015.08	269.65	21.56	19.46	1004.04	964.05	25.11	
9100.00	9070.42	9115.08	269.65	21.76	19.68	1004.04	963.62	24.84	
9200.00	9170.42	9215.08	269.65	21.96	19.90	1004.04	963.20	24.59	
9300.00	9270.42	9315.08	269.65	22.15	20.11	1004.04	962.78	24.33	
9400.00	9370.42	9415.08	269.65	22.35	20.33	1004.04	962.35	24.08	
9500.00	9470.42	9515.08	269.65	22.55	20.55	1004.04	961.92	23.84	
9600.00	9570.42	9615.08	269.65	22.75	20.76	1004.04	961.50	23.60	
9700.00	9670.42	9715.08	269.65	22.95	20.98	1004.04	961.07	23.37	
9800.00	9770.42	9815.08	269.65	23.15	21.20	1004.04	960.64	23.14	
9900.00	9870.42	9915.08	269.65	23.36	21.41	1004.04	960.22	22.91	
10000.00	9970.24	10014.90	269.42	23.56	21.63	1004.07	959.83	22.70	
10100.00	10067.28	10111.94	268.19	23.75	21.84	1004.58	959.98	22.52	
10200.00	10157.34	10201.99	266.28	23.94	22.04	1006.94	962.07	22.44	
10300.00	10236.47	10281.13	264.33	24.10	22.21	1013.40	968.21	22.43	
10400.00	10301.23	10345.89	263.14	24.23	22.35	1026.47	981.07	22.61	
10500.00	10348.78	10393.44	263.46	24.33	22.45	1048.24	1002.60	22.97	
10600.00	10377.05	10421.70	265.90	24.38	22.51	1079.65	1033.82	23.56	
10700.00	10384.85	10429.50	270.33	24.40	22.53	1120.07	1074.04	24.33	
10800.00	10383.68	10428.34	270.40	24.40	22.53	1167.84	1121.65	25.28	
10900.00	10382.52	10427.17	270.46	24.39	22.53	1221.94	1175.47	26.29	

SD Anti-Collision Report

Secondary Well : Pilot Gaucho 21 Federal 3H (p) (TVD Relative to Drill Floor (Primary) ; 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)	CC (US ft)	ES (US ft)	SF	Risk
11000.00	10381.35	10426.01	270.53	24.39	22.52	1281.58	1234.87	27.44	
11100.00	10380.18	10424.84	270.60	24.39	22.52	1346.00	1299.17	28.74	
11200.00	10379.02	10423.68	270.66	24.39	22.52	1414.57	1367.46	30.03	
11300.00	10377.85	10422.51	270.73	24.38	22.52	1486.70	1439.34	31.39	
11400.00	10376.69	10421.35	270.80	24.38	22.51	1561.91	1514.37	32.86	
11500.00	10375.52	10420.18	270.86	24.38	22.51	1639.76	1592.08	34.39	
11600.00	10374.36	10419.02	270.93	24.38	22.51	1719.91	1672.01	35.90	
11700.00	10373.19	10417.85	271.00	24.37	22.51	1802.04	1753.97	37.49	
11800.00	10372.03	10416.68	271.06	24.37	22.50	1885.90	1837.71	39.13	
11900.00	10370.86	10415.52	271.13	24.37	22.50	1971.27	1923.00	40.85	
12000.00	10369.70	10414.35	271.19	24.37	22.50	2057.95	2009.55	42.52	
12100.00	10368.53	10413.19	271.26	24.37	22.50	2145.79	2097.24	44.20	
12200.00	10367.36	10412.02	271.33	24.36	22.49	2234.65	2185.98	45.92	
12300.00	10366.20	10410.86	271.39	24.36	22.49	2324.42	2275.60	47.62	
12400.00	10365.03	10409.69	271.46	24.36	22.49	2414.99	2366.11	49.41	
12500.00	10363.87	10408.53	271.53	24.36	22.49	2506.27	2457.25	51.13	
12600.00	10362.70	10407.36	271.59	24.35	22.48	2598.20	2549.12	52.94	
12700.00	10361.54	10406.20	271.66	24.35	22.48	2690.70	2641.49	54.67	
12800.00	10360.37	10405.03	271.73	24.35	22.48	2783.72	2734.51	56.57	
12900.00	10359.21	10403.86	271.79	24.35	22.48	2877.21	2827.94	58.39	
13000.00	10358.04	10402.70	271.86	24.34	22.47	2971.13	2921.76	60.18	
13100.00	10356.88	10401.53	271.93	24.34	22.47	3065.42	3016.01	62.03	
13200.00	10355.71	10400.37	271.99	24.34	22.47	3160.07	3110.59	63.87	
13300.00	10354.54	10399.20	272.06	24.34	22.47	3255.04	3205.50	65.71	
13400.00	10353.38	10398.04	272.12	24.33	22.46	3350.30	3300.69	67.54	
13500.00	10352.21	10396.87	272.19	24.33	22.46	3445.82	3396.16	69.38	
13600.00	10351.05	10395.71	272.26	24.33	22.46	3541.60	3491.87	71.22	
13700.00	10349.88	10394.54	272.32	24.33	22.46	3637.60	3587.82	73.08	
13800.00	10348.72	10393.38	272.39	24.33	22.45	3733.81	3683.98	74.94	
13900.00	10347.55	10392.21	272.46	24.32	22.45	3830.22	3780.33	76.79	
14000.00	10346.39	10391.04	272.52	24.32	22.45	3926.80	3876.86	78.63	
14100.00	10345.22	10389.88	272.59	24.32	22.45	4023.55	3973.56	80.49	
14200.00	10344.06	10388.71	272.66	24.32	22.44	4120.46	4070.42	82.34	
14300.00	10342.89	10387.55	272.72	24.31	22.44	4217.51	4167.42	84.20	
14400.00	10341.72	10386.38	272.79	24.31	22.44	4314.69	4264.55	86.06	
14500.00	10340.56	10385.22	272.85	24.31	22.44	4412.00	4361.82	87.92	
14600.00	10339.39	10384.05	272.92	24.31	22.43	4509.43	4459.20	89.78	
14700.00	10338.23	10382.89	272.99	24.30	22.43	4606.96	4556.69	91.64	
14800.00	10337.06	10381.72	273.05	24.30	22.43	4704.60	4654.29	93.50	
14900.00	10335.90	10380.56	273.12	24.30	22.43	4802.34	4751.98	95.36	
15000.00	10334.73	10379.39	273.19	24.30	22.42	4900.17	4849.76	97.22	
15100.00	10333.57	10378.22	273.25	24.29	22.42	4998.08	4947.64	99.07	
15148.61	10333.00	10377.66	273.29	24.29	22.42	5045.71	4995.24	99.98	

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

GeoDec v5.03

Report Date: February 11, 2014
Job Number: _____
Customer: Devon Energy
Well Name: Caucho 21 Federal 4H
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 499563.920 USFT	Latitude 32.3704748 DEG
East/West 805184.260 USFT	Longitude -103.4787415 DEG
Grid Convergence: .46°	
Total Correction: +6.82°	

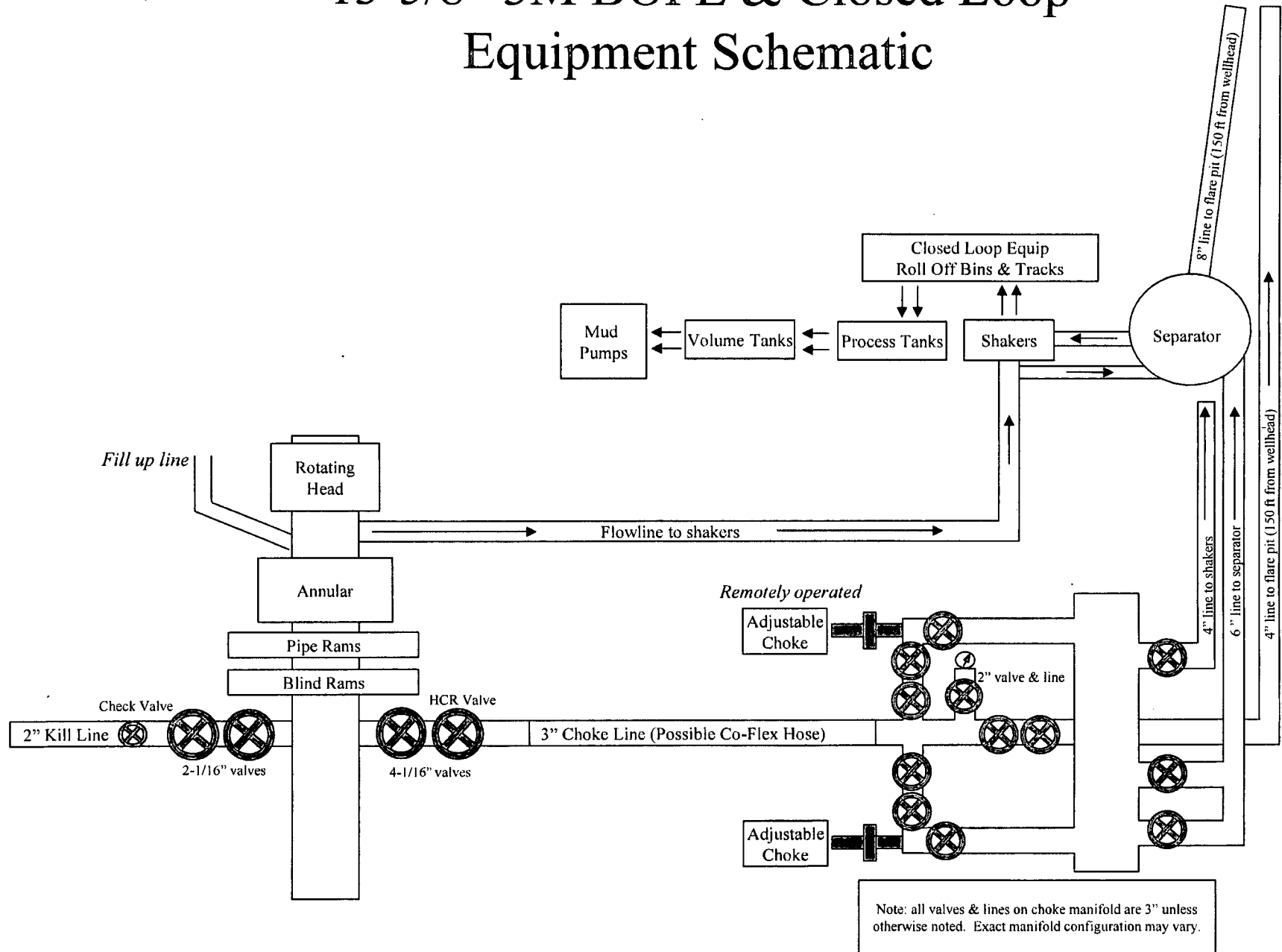
Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.37047° N	32° 22 min 13.709 sec
Longitude =	103.47874° W	103° 28 min 43.469 sec

Magnetic Declination =	7.28°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6597
Local Field Strength =	48394 nT	Magnetic Vector X = 23826 nT
Magnetic Dip =	60.24°	Magnetic Vector Y = 3042 nT
Magnetic Model =	bggm2013	Magnetic Vector Z = 42012 nT
Spud Date =	Aug 30, 2014	Magnetic Vector H = 24019 nT

Signed: _____

Date: _____

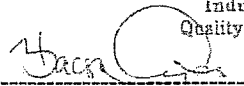
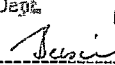
13-5/8" 3M BOPE & Closed Loop Equipment Schematic



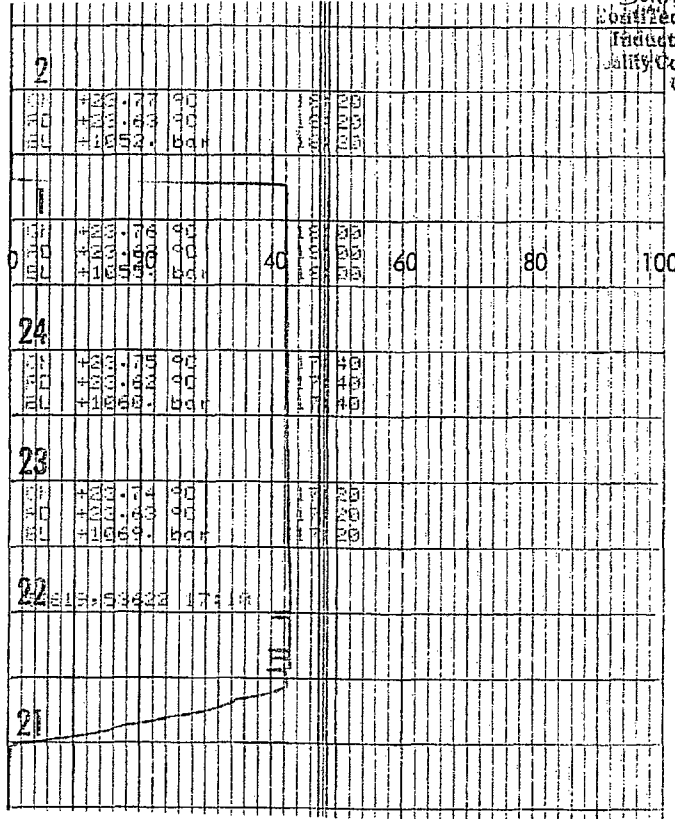
NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, L.P.
Gaucha 21 Fed 4H

1. Drilling Nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated filings will be in operable condition to withstand a minimum of 3000psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum of 3000psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 1713	
PURCHASER: ContiTech Beattie Co.				P.O. N°: 002808	
CONTITECH ORDER N°: 426127		HOSE TYPE: 3" ID Choke and Kill Hose			
HOSE SERIAL N°: 53622		NOMINAL / ACTUAL LENGTH: 10,67 m			
W.P. 68,96 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature See attachment. (1 page) ↑ 10 mm = 10 Min. → 10 mm = 25 MPa					
COUPLINGS Type		Serial N°		Quality	
3" coupling with 4 1/16" Flange end		5503 2029		AISI 4130 AISI 4130	
				Heat N° N1590P 27566	
INFOCHIP INSTALLED				API Spec 16 C Temperature rate:"B"	
All metal parts are flawless				Hose conform to NACE MR 01-75	
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
COUNTRY OF ORIGIN HUNGARY/EU					
Date: 25. August. 2008		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept.  	

HARTMANN &



Industech Rubber
Industrial Kft.
Quality Control Dept.
(2)



Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly. It is good practice to use lifting & safety equipment but not mandatory.

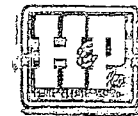
Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.contitechbeattie.com



H&P Flex Rig Location Layout

2 Well Pad

