

12-951

Form 3160-3
(August 2007)HOBBS OCD
OCD Hobbs

OCT 01 2012

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMLC-058698B	
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, OKLAHOMA 73102-8260		8. Lease Name and Well No. <39381> Caswell 23 Federal 4H	
3b. Phone No. (include area code) 405.552.7848		9. API Well No. 30-025-40801	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 2000 FNL & 330 FEL, Unit H At proposed prod. zone 1700 FNL & 330 FWL, Unit E PP: 1700 FNL & 330 FEL		10. Field and Pool, or Exploratory MALJAMAR WEST; PADDOCK 1/2 50	
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 23-T17S-R32E		12. County or Parish LEA	
13. State NM		14. Distance in miles and direction from nearest town or post office* APPROX. 2.5 MILES SE OF MALJAMAR, NM	
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) See Attached Map		16. No. of acres in lease 640 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 11,091' MD 6,580' TVD MAX 6702'		20. BLM/BIA Bond No. on file CO1104; NMB-000801	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4,035' GL		22. Approximate date work will start*	
23. Estimated duration 45 DAYS		24. Attachments To be pad drilled with the Caswell 23 Fed 2H	

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 D. Q.	Name (Printed/Typed) DAVID H. COOK	Date 07/10/2012
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Title REGULATORY SPECIALIST	
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Approved by (Signature) James A. Ames	Name (Printed/Typed)	Date SEP 28 2012
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Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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)

Roswell Controlled Water Basin

*K2/1/12*Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

OCT 02 2012

DRILLING PROGRAM

Devon Energy Production Company, LP

Caswell 23 Federal 4H

Surface Location: 2000 FNL & 330 FEL, Unit H, Sec 23 T17S R32E, Lea, NM

Bottom Hole Location: 1700 FNL & 330 FWL, Unit E, Sec 23 T17S R32E, Lea, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Formation	Depth(MD) (ft)	Hydrocarbon/Water Bearing Zones
Quaternary	Surface	
Water Sand	70'	Water
Rustler	954'	
Top of Salt	1,160'	
Base of Salt (Tansill)	2,211'	
Yates	2,360'	
7 Rivers	2,689'	
Queen	3,280'	
Grayburg	3,669'	Oil
San Andres	4,072'	Oil
Yeso Group	5,755'	Oil
TD	11,091'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 1,000' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at 2,250' and circulating cement to surface. The Yeso Group intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

Casing Program: (All casing is new and API approved)

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17 1/2"	0'-1,000'	13 3/8"	<i>See con</i> 0 - 1,000'	48#	STC	H-40
12 1/4"	1,000'-2,250'	9 5/8"	<i>See con</i> 0 - 2,250'	40#	LTC	J-55
8 3/4"	2,250'-5,900'	5 1/2"	0 - 5,900'	17#	LTC	HCP-110
8 3/4"	5,900'-11,091'	5 1/2"	5,900' - 11,091'	17#	BTC	HCP-110

Maximum TVD: 6,580'

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	1.65	3.70	6.71
9 5/8"	1.48	2.27	3.88
5 1/2"	2.42	3.46	2.36
5 1/2"	2.70	3.85	6.44

3. Cement Program:

13-3/8" Surface **Lead:** 625 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

Yield: 1.68 cf/sk

TOC @ surface

Tail: 340 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg

Yield: 1.35 cf/sk

9-5/8" Intermediate **Lead:** ⁴³²~~xxx~~ sacks (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.5 ppg

Yield: 2.04 cf/sk

TOC @ surface

Tail: 210 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

Yield: 1.33 cf/sk

5-1/2" Production

Lead: 625 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.125 lbs/sack Poly-E-Flake + 0.1% bwoc HR-601 + 74.1% Fresh Water, 11.8 ppg

Yield: 2.52 cf/sk

TOC @ 1,750'

Tail: 1035 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg

Yield: 1.22 cf/sk

The above cement volumes could be revised pending the caliper measurement from the open hole logs. All cement volumes based on at least 25% excess.

Pressure Control Equipment

The BOP system used to drill the intermediate hole will consist of a 13-5/8" ~~Double~~ ^{Triple per schematic} Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2, a 3M system will be installed prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" ~~Double~~ ^{Triple} Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 a 3M system will be installed prior to drilling out the intermediate casing shoe.

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 5,000 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.

Mud Program

Depth	Wt. (ppg)	VIS	Fluid Loss	Type System
0-1,000' ¹⁰⁶⁵	8.4-9.0	30-34	N/C	FW
1,000'-2,250' ²⁰²⁵	9.8-10.0	28-32	N/C	Brine
2,250'-11,091'	8.6-9.0	28-32	N/C-12	FW

NC= no control

The necessary mud products for weight addition and fluid loss control will be on location at all times.

4. 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.
- c. 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.

5. 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. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog
with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma
Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma
Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 ½” production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

6. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area. 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 of equipment being used to drill this well. Estimated BHP 2300 psi and Estimated BHT 110°. No H₂S is anticipated to be encountered.

7. 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 32 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.

Halliburton Cement Additives

Additive Name	Purpose
Calcium Chloride (CaCl)	Accelerator
Poly-E-Flake	Lost circulation material
Bentonite (gel)	Free water reduction additive
Sodium Chloride (NaCl)	Salt, accelerator, mixing aid
HR-601	Retarder
HR-800	Retarder
Econolite	Free water reduction additive
HALAD-9	Fluid loss reduction additive
HALAD-344	Fluid loss reduction additive
SA-1015	Suspending agent, viscosifier, fluid loss reduction additive
CFR-3	Cement friction reducer, dispersant



Weatherford[®]

Drilling Services

Proposal



devon

CASWELL 23 FED #4H

LEA COUNTY, NM

WELL FILE: **PLAN 1**

MAY 29, 2012

Weatherford International, Ltd.
P.O. Box 61028
Midland, TX 79711 USA
+1.432.561.8892 Main
+1.432.561.8895 Fax
www.weatherford.com

devon

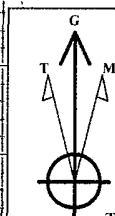
Caswell 23 Fed #4H
Lea County, NM

SITE DETAILS

Caswell 23 Fed #2H
Site Centre Northing: 663287.27
Easting: 726812.78
Ground Level: 4037.00
Positional Uncertainty: 0.00
Convergence: 0.33

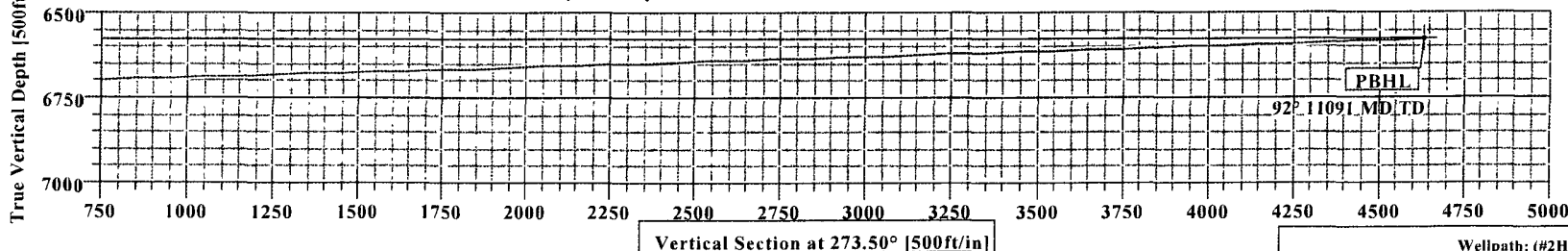
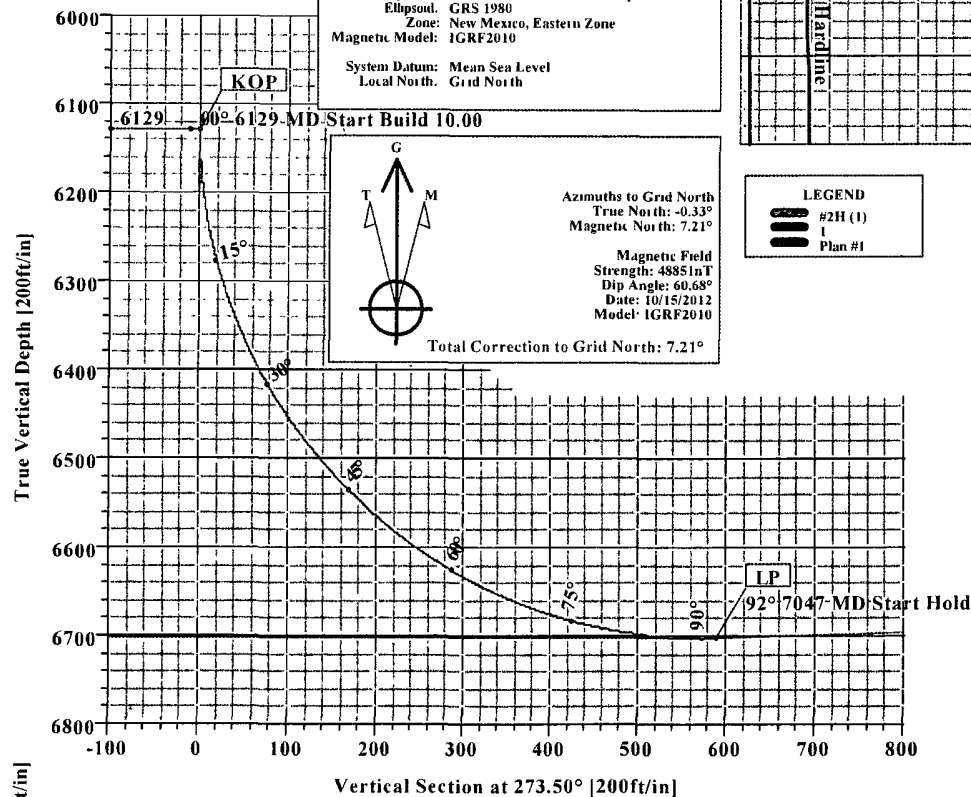
FIELD DETAILS

Lea County, New Mexico (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

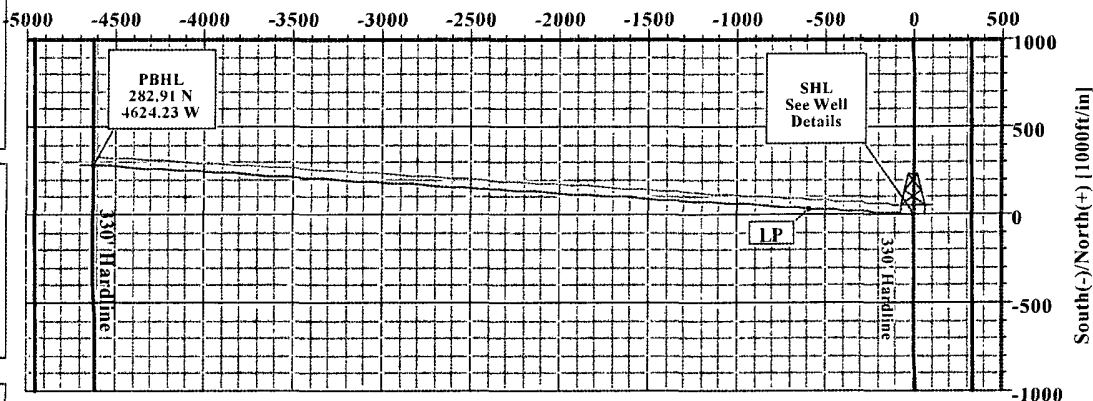


Azimuths to Grid North
True North: -0.33°
Magnetic North: 7.21°
Magnetic Field
Strength: 4885 InT
Dip Angle: 60.68°
Date: 10/15/2012
Model: IGRF2010

Total Correction to Grid North: 7.21°



West(-)/East(+) [1000ft/in]



LEGEND

#2H (1)
Plan #1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	273.50	0.00	0.00	0.00	0.00	0.00	0.00	
2	6129.30	0.00	273.50	6129.30	0.00	0.00	0.00	0.00	0.00	
3	7046.59	91.73	273.50	6702.00	36.04	-589.14	10.00	273.50	590.24	
4	11091.06	91.73	273.50	6580.00	282.91	-4624.23	0.00	0.00	4632.88	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#2H	0.00	0.00	663287.27	726812.78	32°49'19.001N	103°43'46.431W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	5640.00	282.93	-4624.21	663570.20	722188.57	Point

Weatherford

Wellpath: (#2H/1)

Created By: Russell W. Joyner

Date: 5/29/2012

Company: Devon Energy Field: Lea County, New Mexico (NAD 83) Site: Caswell 23 Fed #4H Well: #4H Wellpath: 1	Date: 5/29/2012 Time: 10 10:03 Page: 1 Co-ordinate(NE) Reference: Well, #4H, Grd North Vertical (TVD) Reference: SITE 4055.0 Section (VS) Reference: Well (0 00N,0 00E,273 50Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Plan: Plan #1 Principal: Yes	Date Composed: 5/29/2012 Version: 1 Tied-to: From Surface
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Field: Lea County, New Mexico (NAD 83)

Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level	Map Zone: New Mexico, Eastern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010
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Site: Caswell 23 Fed #4H

Site Position: From: Map Position Uncertainty: 0 00 ft Ground Level: 4035 00 ft	Northing: 663237 29 ft Easting: 726813 09 ft	Latitude: 32 49 18 506 N Longitude: 103 43 46 430 W North Reference: Grd Grid Convergence: 0 33 deg
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Well: #4H Well Position: +N/-S 0 00 ft Northing: 663237.29 ft +E/-W 0 00 ft Easting : 726813 09 ft Position Uncertainty: 0 00 ft	Slot Name: Latitude: 32 49 18 506 N Longitude: 103 43 46 430 W
--	---

Wellpath: 1 Current Datum: SITE Magnetic Data: 11/15/2012 Field Strength: 48842 nT Vertical Section: Depth From (TVD) ft	Height 4055 00 ft +N/-S ft ft	Drilled From: Surface Tie-on Depth: 0 00 ft Above System Datum: Mean Sea Level Declination: 7.53 deg Mag Dip Angle: 60 68 deg +E/-W Direction ft deg
0 00	0 00	0 00 273 50

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0 00	0 00	273 50	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
6129 30	0 00	273 50	6129 30	0 00	0 00	0 00	0 00	0 00	0 00	
7046 59	91 73	273 50	6702 00	36 04	-589.14	10 00	10 00	0 00	273.50	
11091 06	91 73	273.50	6580 00	282 91	-4624 23	0 00	0 00	0 00	0 00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
6100 00	0 00	273 50	6100.00	0 00	0 00	0 00	0 00	663237.29	726813 09	
6129.30	0 00	273 50	6129.30	0 00	0 00	0 00	0 00	663237 29	726813 09	KOP
6150 00	2 07	273 50	6150 00	0 02	-0 37	0 37	10 00	663237 31	726812 72	
6200 00	7 07	273 50	6199.82	0 27	-4 35	4 36	10 00	663237 56	726808 74	
6250 00	12 07	273 50	6249 11	0 77	-12 64	12 67	10 00	663238 06	726800 45	
6300 00	17 07	273 50	6297 49	1 54	-25 19	25 24	10 00	663238 83	726787 90	
6350 00	22 07	273 50	6344 58	2 56	-41 90	41 98	10 00	663239 85	726771.19	
6400 00	27 07	273 50	6390 04	3 83	-62 65	62 77	10 00	663241.12	726750 44	
6450 00	32 07	273 50	6433 51	5 34	-87 27	87 43	10 00	663242.63	726725 82	
6500 00	37 07	273.50	6474 67	7 07	-115 58	115 79	10 00	663244 36	726697 51	
6550 00	42 07	273 50	6513 20	9.02	-147 36	147 64	10 00	663246 31	726665.73	
6600 00	47 07	273 50	6548 81	11 16	-182 37	182 71	10 00	663248 45	726630 72	
6650 00	52.07	273 50	6581 23	13 48	-220 35	220 76	10 00	663250.77	726592 74	
6700 00	57.07	273 50	6610 20	15 97	-261 00	261 49	10 00	663253 26	726552 09	
6750 00	62.07	273 50	6635 52	18 60	-304 02	304 59	10 00	663255.89	726509 07	
6800.00	67 07	273 50	6656 98	21 36	-349 08	349 73	10.00	663258 65	726464 01	
6850 00	72 07	273 50	6674 43	24 22	-395 83	396 57	10 00	663261 51	726417 26	



Weatherford

WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Site: Caswell 23 Fed #4H
Well: #4H
Wellpath: 1

Date: 5/29/2012 Time: 10 10 03 Page: 2
Co-ordinate(NE) Reference: Well #4H, Grd North
Vertical (TVD) Reference: SITE 4055.0
Section (VS) Reference: Well (0.00N,0.00E,273.50Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
6900.00	77.07	273.50	6687.73	27.16	-443.92	444.75	10.00	663264.45	726369.17	
6950.00	82.07	273.50	6696.78	30.16	-492.99	493.91	10.00	663267.45	726320.10	
7000.00	87.07	273.50	6701.51	33.20	-542.66	543.67	10.00	663270.49	726270.43	
7046.59	91.73	273.50	6702.00	36.04	-589.14	590.24	10.00	663273.33	726223.95	LP
7100.00	91.73	273.50	6700.39	39.30	-642.43	643.63	0.00	663276.59	726170.66	
7200.00	91.73	273.50	6697.37	45.41	-742.20	743.59	0.00	663282.70	726070.89	
7300.00	91.73	273.50	6694.35	51.51	-841.97	843.54	0.00	663288.80	725971.12	
7400.00	91.73	273.50	6691.34	57.62	-941.73	943.49	0.00	663294.91	725871.36	
7500.00	91.73	273.50	6688.32	63.72	-1041.50	1043.45	0.00	663301.01	725771.59	
7600.00	91.73	273.50	6685.30	69.82	-1141.27	1143.40	0.00	663307.11	725671.82	
7700.00	91.73	273.50	6682.29	75.93	-1241.04	1243.36	0.00	663313.22	725572.05	
7800.00	91.73	273.50	6679.27	82.03	-1340.81	1343.31	0.00	663319.32	725472.28	
7900.00	91.73	273.50	6676.25	88.13	-1440.57	1443.27	0.00	663325.42	725372.52	
8000.00	91.73	273.50	6673.24	94.24	-1540.34	1543.22	0.00	663331.53	725272.75	
8100.00	91.73	273.50	6670.22	100.34	-1640.11	1643.18	0.00	663337.63	725172.98	
8200.00	91.73	273.50	6667.21	106.45	-1739.88	1743.13	0.00	663343.74	725073.21	
8300.00	91.73	273.50	6664.19	112.55	-1839.65	1843.08	0.00	663349.84	724973.44	
8400.00	91.73	273.50	6661.17	118.65	-1939.41	1943.04	0.00	663355.94	724873.68	
8500.00	91.73	273.50	6658.16	124.76	-2039.18	2042.99	0.00	663362.05	724773.91	
8600.00	91.73	273.50	6655.14	130.86	-2138.95	2142.95	0.00	663368.15	724674.14	
8700.00	91.73	273.50	6652.12	136.96	-2238.72	2242.90	0.00	663374.25	724574.37	
8800.00	91.73	273.50	6649.11	143.07	-2338.48	2342.86	0.00	663380.36	724474.61	
8900.00	91.73	273.50	6646.09	149.17	-2438.25	2442.81	0.00	663386.46	724374.84	
9000.00	91.73	273.50	6643.07	155.28	-2538.02	2542.77	0.00	663392.57	724275.07	
9100.00	91.73	273.50	6640.06	161.38	-2637.79	2642.72	0.00	663398.67	724175.30	
9200.00	91.73	273.50	6637.04	167.48	-2737.56	2742.68	0.00	663404.77	724075.53	
9300.00	91.73	273.50	6634.03	173.59	-2837.32	2842.63	0.00	663410.88	723975.77	
9400.00	91.73	273.50	6631.01	179.69	-2937.09	2942.58	0.00	663416.98	723876.00	
9500.00	91.73	273.50	6627.99	185.79	-3036.86	3042.54	0.00	663423.08	723776.23	
9600.00	91.73	273.50	6624.98	191.90	-3136.63	3142.49	0.00	663429.19	723676.46	
9700.00	91.73	273.50	6621.96	198.00	-3236.40	3242.45	0.00	663435.29	723576.69	
9800.00	91.73	273.50	6618.94	204.11	-3336.16	3342.40	0.00	663441.40	723476.93	
9900.00	91.73	273.50	6615.93	210.21	-3435.93	3442.36	0.00	663447.50	723377.16	
10000.00	91.73	273.50	6612.91	216.31	-3535.70	3542.31	0.00	663453.60	723277.39	
10100.00	91.73	273.50	6609.89	222.42	-3635.47	3642.27	0.00	663459.71	723177.62	
10200.00	91.73	273.50	6606.88	228.52	-3735.24	3742.22	0.00	663465.81	723077.85	
10300.00	91.73	273.50	6603.86	234.63	-3835.00	3842.17	0.00	663471.92	722978.09	
10400.00	91.73	273.50	6600.85	240.73	-3934.77	3942.13	0.00	663478.02	722878.32	
10500.00	91.73	273.50	6597.83	246.83	-4034.54	4042.08	0.00	663484.12	722778.55	
10600.00	91.73	273.50	6594.81	252.94	-4134.31	4142.04	0.00	663490.23	722678.78	
10700.00	91.73	273.50	6591.80	259.04	-4234.08	4241.99	0.00	663496.33	722579.01	
10800.00	91.73	273.50	6588.78	265.14	-4333.84	4341.95	0.00	663502.43	722479.25	
10900.00	91.73	273.50	6585.76	271.25	-4433.61	4441.90	0.00	663508.54	722379.48	
11000.00	91.73	273.50	6582.75	277.35	-4533.38	4541.86	0.00	663514.64	722279.71	
11091.06	91.73	273.50	6580.00	282.91	-4624.23	4632.88	0.00	663520.20	722188.86	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->	<--- Longitude --->
PBHL			6580.00	282.91	-4624.23	663520.20	722188.86	32 49 21 564 N	103 44 40 601 W



Weatherford

WFT Plan Report - X & Y's



Company: Devon Energy	Date: 5/29/2012	Time: 10 10:03	Page: 3
Field: Lea County, New Mexico (NAD 83)	Co-ordinate(NE) Reference: Well #4H, Grd North		
Site: Caswell 23 Fed #4H	Vertical (TVD) Reference: SITE 4055.0		
Well: #4H	Section (VS) Reference: Well (0 00N,0 00E,273 50Az)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature Db: Sybase		

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6129 30	6129 30	KOP
7046 59	6702 00	LP
11091 06	6580 00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP

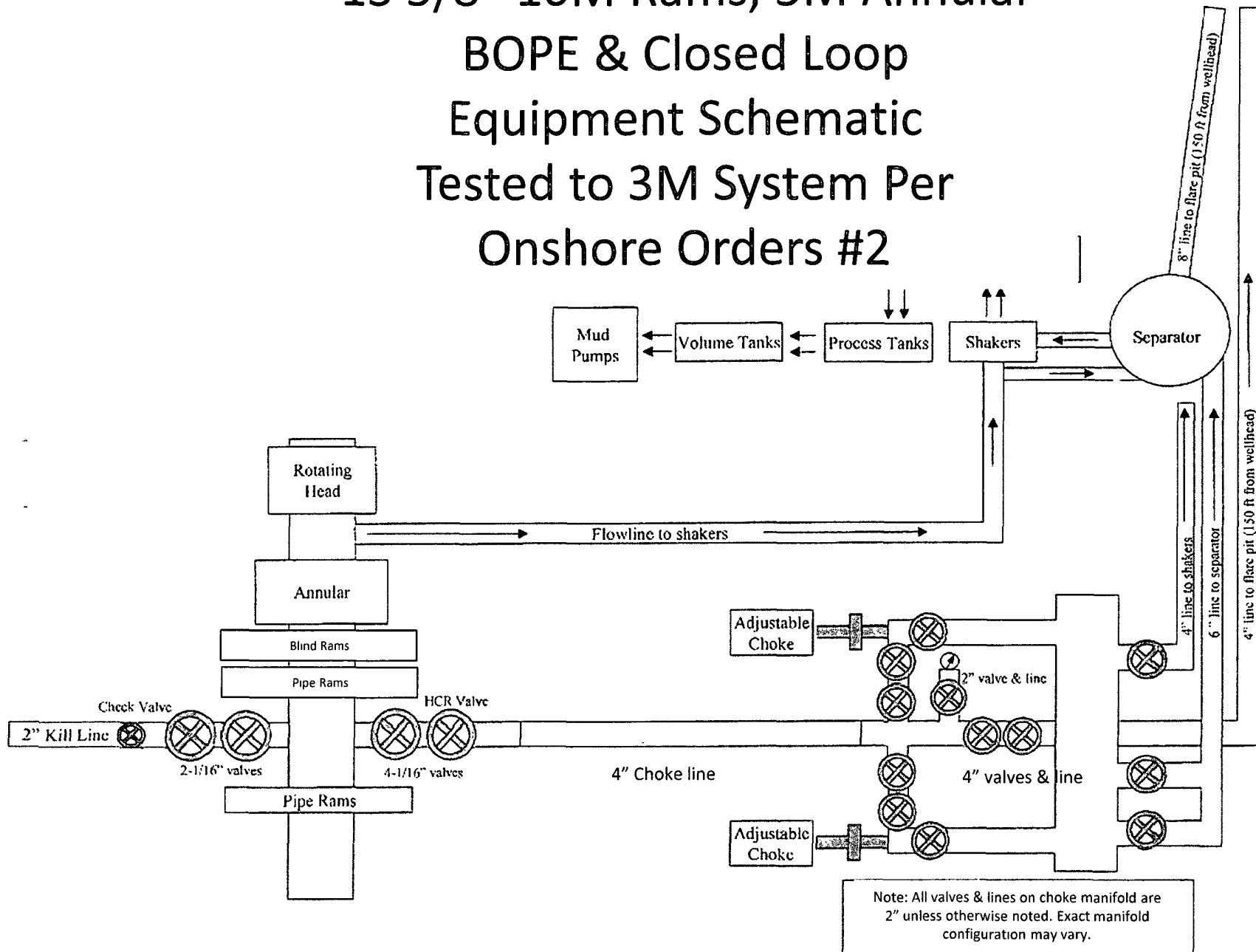
Caswell 23 Federal 4H

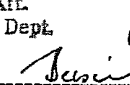
Surface Location: **2000 FNL & 330 FEL, Unit H, Sec 23 T17S R32E, Lea, NM**

Bottom Hole Location: **1700 FNL & 330 FWL, Unit E, Sec 23 T17S R32E, Lea, NM**

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 fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi 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.

13 5/8" 10M Rams, 5M Annular BOPE & Closed Loop Equipment Schematic Tested to 3M System Per Onshore Orders #2



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 &

