

30-015-39730

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1900 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 15, 2009
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-39730	Pool Code 96757	Pool Name Cotton Draw; Delaware South
Property Code 38952	Property Name COTTON DRAW 11 FEDERAL COM	Well Number #2H
GRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3394.2

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	11	25 S	31 E		330	SOUTH	860	WEST	EDDY

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	11	25 S	31 E		330	NORTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Judy A. Barnett</i> Date: 8/23/11 Printed Name: Judy A. Barnett Regulatory Specialist 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. DECEMBER 7, 2010 Date of Survey: <i>Frank A. Maramilla</i> Signature and Seal of Professional Surveyor Certificate Number: D 11360 (FRANK A. MARAMILLA) PLS 12797 SURVEY NO 334R
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DRILLING PROGRAM

Devon Energy Production Company, LP

Cotton Draw 11 Fed Com 2H

Surface Location: 330' FSL & 860' FWL, Unit M, Sec 11 T25S R31E, Eddy, NM

Bottom Hole Location: 330' FNL & 660' FWL, Unit D, Sec 11 T25S R31E, Eddy, NM

1. Geologic Name of Surface Formation

a. Quaternary Alluvium

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

a. Depth of Fresh Water	300'	
b. Rustler	608'	FW
c. Salt	1013'	
d. Base Salt	4120'	
e. Delaware/Lamar	4343'	Oil
f. Bell Canyon	4375'	Oil
g. Cherry Canyon	5288'	Oil
h. Brushy Canyon	6602'	Oil
i. Bone Spring	8249'	
j. Avalon	8651'	Oil/Gas
k. 1st Bone Spring Sandstone	9273'	Oil/Gas
l. Pilot Hole TD	9475'	
m. Total Depth	12579'	Oil

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 17 1/2" casing at ~~675'~~ 750' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at ~~4200'~~ 4300' and circulating cement to surface. The Delaware 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:

	<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
See COA	17 1/2"	0- 675'	13 3/8"	0- 675' 750	48#	STC	H-40
	12 1/4"	675-4200'	9 5/8"	0- 4200' 4300	40#	LTC	J-55
	8 3/4"	4200-9475'	Pilot	Hole			
	8 3/4"	4200-7500'	5 1/2"	0-7500'	17#	LTC	P110

8 3/4" 7500-12600' 5 1/2" 7500-12600' 17# BTC P110

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design</u>	<u>Burst Design</u>	<u>Tension Design</u>
	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
13 3/8" 48#	2.1	5.0	8.9
9 5/8" 40#	1.26	1.80	3.09
5 1/2" 17# LTC	1.91	2.72	2.07
5 1/2" 17# BTC	1.77	2.526	6.29

NOTE REGARDING COLLAPSE DESIGN FACTOR FOR INTERMEDIATE CASING: The maximum possible collapse load that the intermediate casing will experience will result from evacuated casing with the pore pressure exerting a collapse load at TD. The pore pressure is estimated to be 9.3 ppg for this calculation. This results in a collapse design factor of 1.26 for the 9-5/8" 40# J-55 LTC casing at a depth of 4,200'. While running the intermediate casing, the casing string will never be completely evacuated. There is no potential for the intermediate casing to be used as a production string.

Cement Program: (Cement volumes based on at least 25% excess)

13 3/8"

Lead: 420 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.4% Fresh Water 13.5 ppg **Yield:** 1.75 cf/sk **TOC @ Surface**
Tail: 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water 14.8 ppg **Yield:** 1.35 cf/sk

9 5/8" Intermediate

Lead: 1175 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.25% bwoc FL-52A + 107.7% Fresh Water 12.5 ppg **Yield:** 2.04 cf/sk **TOC @ surface**
Tail: 300 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% Fresh Water 13.8 ppg **Yield:** 1.37 cf/sk

5 1/2" Production

1st Stage

Lead: 430 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 6% bwoc Bentonite + 0.7% bwoc FL-52A + 102.5% Fresh Water 12.5 ppg **Yield:** 2.01 cf/sk
Tail: 1265 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.6% bwoc Sodium Metasilicate + 0.4% bwoc FL-52A + 57.3% Fresh Water 14.2 ppg **Yield:** 1.28 cf/sk **TOC @ 6,000'**
DV TOOL at 6,000'

2nd Stage

Lead: 290 sacks Class C Cement + 0.75% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157% Fresh Water 11.4 ppg **Yield:** 2.88 cf/sk **TOC @ 3,875'**
Tail: 150 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.1% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.4% Fresh Water 13.8 ppg **Yield:** 1.37cf/sk

8 3/4" Pilot Hole

Plug 1: 775 sacks Class H Cement + 0.1% bwoc R-3 + 46.4% Fresh Water 15.6 ppg, yield 1.18 cf/sk **TOC 7650'**

See POA

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 9 5/8" casing shoe. All casing is new and API approved.

Positive standoff centralizers will be utilized for the production string every other joint of casing from 100' MD above KOP or at the legal footage setback, whichever is the deeper MD, up to TOC.

Pressure Control Equipment BOP DESIGN:

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

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

Pipe rams will be operated and checked each 24 hour period and blind rams tested each time the drill pipe is out of the hole. These tests will be logged in the daily 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. See attached.

Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0-675' ⁷⁵⁰	8.4-9.0	30-34	NC	FW
675-4200' ⁴³⁰⁰	9.8-10.0	28-32	NC	Brine
4200-12,600'	8.6-9.3	28-32	NC	FW

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

3. 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 20" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 20" shoe until total depth is reached.

4. **Logging, Coring, and Testing Program:** *See COA*
- 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.
5. **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 4900 psi and Estimated BHT 145°. No H₂S is anticipated to be encountered.
6. **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.



Weatherford[®]

Drilling Services

Proposal



devon

COTTON DRAW 11 FED COM #2H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

AUGUST 5, 2011

Weatherford International, Ltd.

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Cotton Draw 11 Fed Com #2H
Eddy Co., New Mexico

KB ELEV: 3412
GL ELEV: 3494

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	357.17	0.00	0.00	0.00	0.00	0.00	0.00	
2	7615.04	0.00	357.17	7615.04	0.00	0.00	0.00	0.00	0.00	
3	8513.91	89.89	357.17	8188.00	571.13	-28.26	10.00	357.17	571.83	
4	12579.10	89.89	357.17	8196.00	4631.34	-229.16	0.00	0.00	4637.01	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Com #2H	0.00	0.00	414640.97	720519.00	32°08'18.963N	103°45'15.994W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Pbhl	8196.00	4631.34	-229.16	419272.31	720289.84	32°09'04.805N	103°45'18.370W	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)

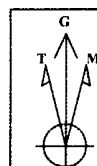
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Cotton Draw 11 Fed Com #2H

Site Centre Northing: 414640.97
Easting: 720519.00

Ground Level: 3394.00
Positional Uncertainty: 0.00
Convergence: 0.31



Azimuths to Grid North
True North: -0.31°
Magnetic North: 7.25°

Magnetic Field
Strength: 48487nT
Dip Angle: 60.06°
Date: 4/15/2012
Model: IGRF2010

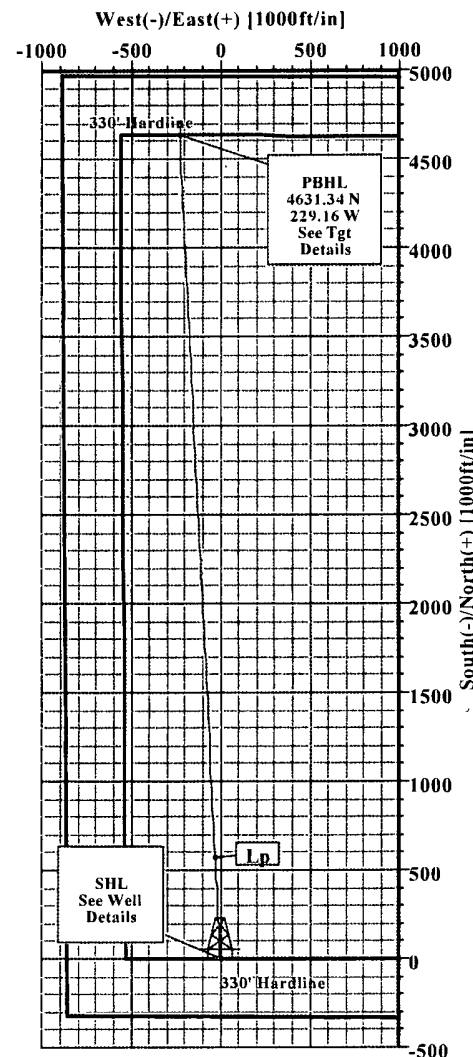
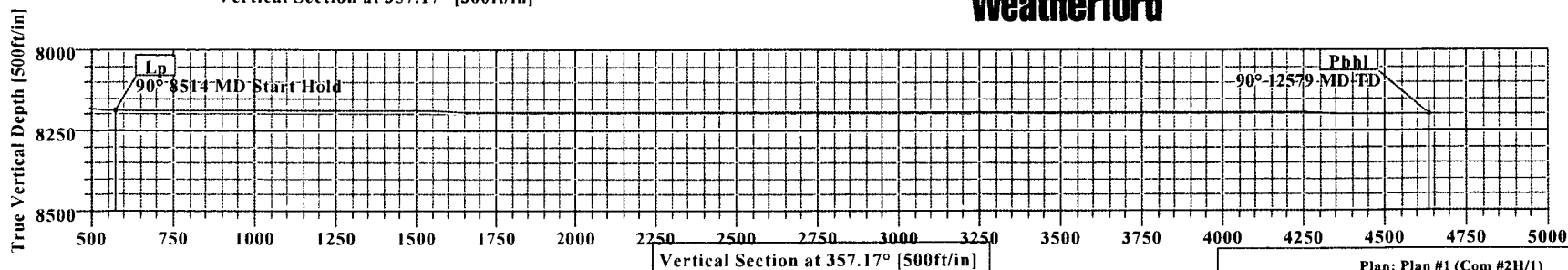
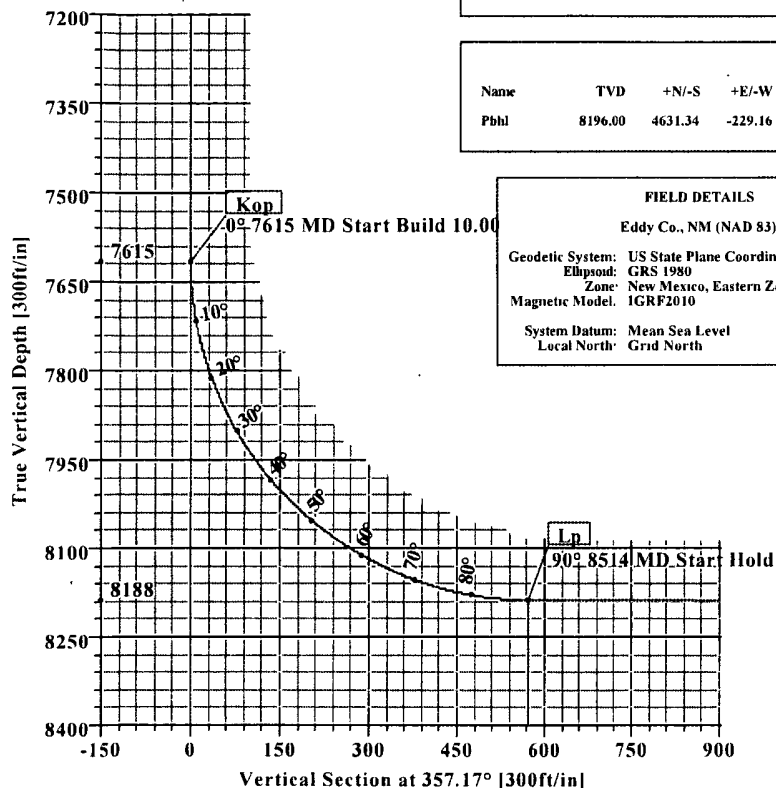
Total Correction to Grid North: 7.25°

LEGEND

1
Plan #1



Weatherford



Created By: Russell W. Joyner

Date: 8/5/2011



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WFT Plan Report - X & Y's



Company: Devon Energy	Date: 8/5/2011	Time: 14:32:10	Page: 1							
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Com #2H, Grid North									
Site: Cotton Draw 11 Fed Com #2H	Vertical (TVD) Reference: SITE 3412.0									
Well: Com #2H	Section (VS) Reference: Well (0-00N,0 00E,357 17Azi)									
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase								
Plan: Plan #1	Date Composed: 8/5/2011									
Principal: Yes	Version: 1									
	Tied-to: From Surface									
Field: Eddy Co., NM (NAD 83)										
Map System: US State Plane Coordinate System 1983		Map Zone: New Mexico, Eastern Zone								
Geo Datum: GRS 1980		Coordinate System: Well Centre								
Sys Datum: Mean Sea Level		Geomagnetic Model: IGRF2010								
Site: Cotton Draw 11 Fed Com #2H										
Site Position:	Northing: 414640 97 ft	Latitude: 32 8 18 963 N								
From: Map	Easting: 720519.00 ft	Longitude: 103 45 15 994 W								
Position Uncertainty: 0.00 ft		North Reference: Grid								
Ground Level: 3394.00 ft		Grid Convergence: 0 31 deg								
Well: Com #2H										
Slot Name:										
Well Position:	Northing: 414640 97 ft	Latitude: 32 8 18 963 N								
+N/-S 0.00 ft	Easting : 720519 00 ft	Longitude: 103 45 15 994 W								
+E/-W 0.00 ft										
Position Uncertainty: 0.00 ft										
Wellpath: 1										
Current Datum: SITE	Height 3412 00 ft	Drilled From: Surface								
Magnetic Data: 4/15/2012		Tie-on Depth: 0.00 ft								
Field Strength: 48487 nT		Above System Datum: Mean Sea Level								
Vertical Section: Depth From (TVD)	+N/-S ft	Declination: 7.56 deg								
	+E/-W ft	Mag Dip Angle: 60.06 deg								
		Direction deg								
8196 00	0 00	0 00	357 17							
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	357 17	0.00	0 00	0 00	0 00	0 00	0.00	0 00	
7615 04	0 00	357 17	7615.04	0 00	0 00	0 00	0 00	0.00	0 00	
8513 91	89 89	357.17	8188 00	571 13	-28.26	10 00	10 00	0.00	357 17	
12579.10	89 89	357.17	8196 00	4631 34	-229 16	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
7600 00	0 00	357 17	7600 00	0 00	0 00	0 00	0 00	414640.97	720519 00	
7615.04	0 00	357 17	7615 04	0 00	0 00	0 00	0 00	414640 97	720519 00	Kop
7700.00	8.50	357 17	7699 69	6 28	-0 31	6 29	10 00	414647 25	720518 69	
7800 00	18 50	357 17	7796 80	29.56	-1 46	29 60	10 00	414670 53	720517 54	
7900 00	28 50	357 17	7888 40	69 33	-3 43	69 41	10 00	414710 30	720515 57	
8000 00	38 50	357 17	7971 68	124 38	-6 15	124 53	10 00	414765 35	720512.85	
8100 00	48 50	357 17	8044 13	193 04	-9 55	193 27	10 00	414834 01	720509 45	
8200.00	58 50	357 17	8103.55	273 22	-13 52	273 55	10.00	414914 19	720505 48	
8300.00	68 50	357.17	8148 12	362.49	-17.94	362.93	10 00	415003 46	720501 06	
8400 00	78 50	357 17	8176 49	458.13	-22 67	458 69	10 00	415099 10	720496 33	
8500 00	88 50	357 17	8187 80	557 24	-27 57	557.92	10 00	415198 21	720491 43	
8513 91	89 89	357.17	8188 00	571 13	-28 26	571 83	10 00	415212 10	720490 74	Lp
8600 00	89 89	357 17	8188 17	657 11	-32 51	657 92	0 00	415298 08	720486 49	
8700 00	89 89	357 17	8188 36	756 99	-37 46	757 92	0 00	415397 96	720481 54	
8800 00	89 89	357 17	8188 56	856 87	-42 40	857 92	0 00	415497 84	720476 60	
8900 00	89 89	357 17	8188 76	956 75	-47 34	957 92	0 00	415597 72	720471.66	
9000 00	89 89	357 17	8188 95	1056.62	-52.28	1057 92	0.00	415697 59	720466 72	



Weatherford International Ltd.

WFT Plan Report - X & Y's



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw 11 Fed Com #2H
Well: Com #2H
Wellpath: 1

Date: 8/5/2011 Time: 14:32:10 Page: 2
Co-ordinate(NE) Reference: Well: Com #2H, Grid North
Vertical (TVD) Reference: SITE 3412 0
Section (VS) Reference: Well (0.00N,0.00E,357.17Azi)
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
9100.00	89.89	357.17	8189.15	1156.50	-57.22	1157.92	0.00	415797.47	720461.78	
9200.00	89.89	357.17	8189.35	1256.38	-62.17	1257.92	0.00	415897.35	720456.83	
9300.00	89.89	357.17	8189.54	1356.26	-67.11	1357.92	0.00	415997.23	720451.89	
9400.00	89.89	357.17	8189.74	1456.13	-72.05	1457.92	0.00	416097.10	720446.95	
9500.00	89.89	357.17	8189.94	1556.01	-76.99	1557.92	0.00	416196.98	720442.01	
9600.00	89.89	357.17	8190.13	1655.89	-81.93	1657.92	0.00	416296.86	720437.07	
9700.00	89.89	357.17	8190.33	1755.77	-86.88	1757.92	0.00	416396.74	720432.12	
9800.00	89.89	357.17	8190.53	1855.65	-91.82	1857.92	0.00	416496.62	720427.18	
9900.00	89.89	357.17	8190.73	1955.52	-96.76	1957.92	0.00	416596.49	720422.24	
10000.00	89.89	357.17	8190.92	2055.40	-101.70	2057.91	0.00	416696.37	720417.30	
10100.00	89.89	357.17	8191.12	2155.28	-106.64	2157.91	0.00	416796.25	720412.36	
10200.00	89.89	357.17	8191.32	2255.16	-111.59	2257.91	0.00	416896.13	720407.41	
10300.00	89.89	357.17	8191.51	2355.03	-116.53	2357.91	0.00	416996.00	720402.47	
10400.00	89.89	357.17	8191.71	2454.91	-121.47	2457.91	0.00	417095.88	720397.53	
10500.00	89.89	357.17	8191.91	2554.79	-126.41	2557.91	0.00	417195.76	720392.59	
10600.00	89.89	357.17	8192.10	2654.67	-131.35	2657.91	0.00	417295.64	720387.65	
10700.00	89.89	357.17	8192.30	2754.54	-136.30	2757.91	0.00	417395.51	720382.70	
10800.00	89.89	357.17	8192.50	2854.42	-141.24	2857.91	0.00	417495.39	720377.76	
10900.00	89.89	357.17	8192.69	2954.30	-146.18	2957.91	0.00	417595.27	720372.82	
11000.00	89.89	357.17	8192.89	3054.18	-151.12	3057.91	0.00	417695.15	720367.88	
11100.00	89.89	357.17	8193.09	3154.05	-156.06	3157.91	0.00	417795.02	720362.94	
11200.00	89.89	357.17	8193.28	3253.93	-161.01	3257.91	0.00	417894.90	720357.99	
11300.00	89.89	357.17	8193.48	3353.81	-165.95	3357.91	0.00	417994.78	720353.05	
11400.00	89.89	357.17	8193.68	3453.69	-170.89	3457.91	0.00	418094.66	720348.11	
11500.00	89.89	357.17	8193.88	3553.56	-175.83	3557.91	0.00	418194.53	720343.17	
11600.00	89.89	357.17	8194.07	3653.44	-180.77	3657.91	0.00	418294.41	720338.23	
11700.00	89.89	357.17	8194.27	3753.32	-185.72	3757.91	0.00	418394.29	720333.28	
11800.00	89.89	357.17	8194.47	3853.20	-190.66	3857.91	0.00	418494.17	720328.34	
11900.00	89.89	357.17	8194.66	3953.08	-195.60	3957.91	0.00	418594.05	720323.40	
12000.00	89.89	357.17	8194.86	4052.95	-200.54	4057.91	0.00	418693.92	720318.46	
12100.00	89.89	357.17	8195.06	4152.83	-205.48	4157.91	0.00	418793.80	720313.52	
12200.00	89.89	357.17	8195.25	4252.71	-210.43	4257.91	0.00	418893.68	720308.57	
12300.00	89.89	357.17	8195.45	4352.59	-215.37	4357.91	0.00	418993.56	720303.63	
12400.00	89.89	357.17	8195.65	4452.46	-220.31	4457.91	0.00	419093.43	720298.69	
12500.00	89.89	357.17	8195.84	4552.34	-225.25	4557.91	0.00	419193.31	720293.75	
12579.10	89.89	357.17	8196.00	4631.34	-229.16	4637.01	0.00	419272.31	720289.84	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
Pbhl			8196.00	4631.34	-229.16	419272.31	720289.84	32	9	4 805 N	103	45	18 370 W

Casing Points

MD	TVD	Diameter	Hole Size	Name



Weatherford International Ltd.

WFT Plan Report - X & Y's



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw 11 Fed Com #2H
Well: Com #2H
Wellpath: 1

Date: 8/5/2011 Time: 14 32 10 Page: 3
Co-ordinate(NE) Reference: Well: Com #2H, Grid North
Vertical (TVD) Reference: SITE 3412 0
Section (VS) Reference: Well (0 00N,0.00E,357.17Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Annotation

MD	TVD	
ft	ft	
7615 04	7615 04	Kop
8513 91	8188 00	Lp
12579 09	8196 00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

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

GeoDec v5.03

Report Date: August 05, 2011
Job Number: _____
Customer: Devon Energy
Well Name: Cotton Draw 11 Fed Com #2H
API Number: _____
Rig Name: _____
Location: Eddy Co., 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 414640.970 USFT	Latitude 32.1386030 DEG
East/West 720519.000 USFT	Longitude -103.7544380 DEG
Grid Convergence: .31°	
Total Correction: +7.25°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.13860° N	32° 8 min 18.971 sec
Longitude =	103.75444° W	103° 45 min 15.977 sec

Magnetic Declination =	7.56°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6576
Local Field Strength =	48483 nT	Magnetic Vector X = 23990 nT
Magnetic Dip =	60.06°	Magnetic Vector Y = 3185 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42011 nT
Spud Date =	Apr 15, 2012	Magnetic Vector H = 24201 nT

Signed: _____

Date: _____