

30-015-40748

From:
Sent:
To:
Subject:

Schmitz, Kurtis <Kurtis.Schmitz@dm.com>
Thursday, October 04, 2012 11:45 AM
Sharp, Karen, EMNRD
screen shot

NW COR SEC 12 NMSPE (NAD 83) Y = 414275.2' N X = 714362.9' E LAT = N32° 05' 12.54" LONG = W103° 45' 27.76"	COTTON DRAW 15 FED 2H SHL NMSPE (NAD 83) Y = 413562.6' N X = 717633.6' E LAT = N32° 08' 12.41" LONG = W103° 45' 48.58"	330'	2030'	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 neither owns a working interest or unleased 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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
Include this block		330'	2030'	Signature _____ Print Name _____ Title/Address _____
SW COR SEC 14 NMSPE (NAD 83) Y = 401572.9' N X = 714348.2' E LAT = N32° 07' 23.20" LONG = W103° 46' 28.36"	COTTON DRAW 15 FED 2H SHL NMSPE (NAD 83) Y = 409103.7' N X = 718008.9' E LAT = N32° 07' 25.49" LONG = W103° 46' 08.87"	330'	1650'	SURVEYORS 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. MAY 31 2012 Surveyor Signature and Seal of James E. Tompkins Job No. WJL-48839 James E. Tompkins 14729 Certificate Number



Weatherford

Drilling Services

Amended

Proposal



COTTON DRAW 15 FED #2H

EDDY COUNTY, NM

WELL FILE: **PLAN 2**

AUGUST 7, 2012

Weatherford International, Ltd.

P O. Box 61028

Midland, TX 79711 USA

+1 432 561 8892 Main

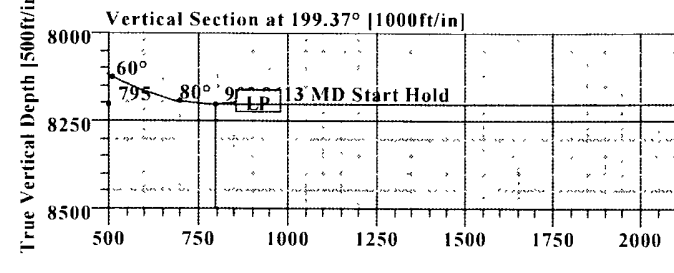
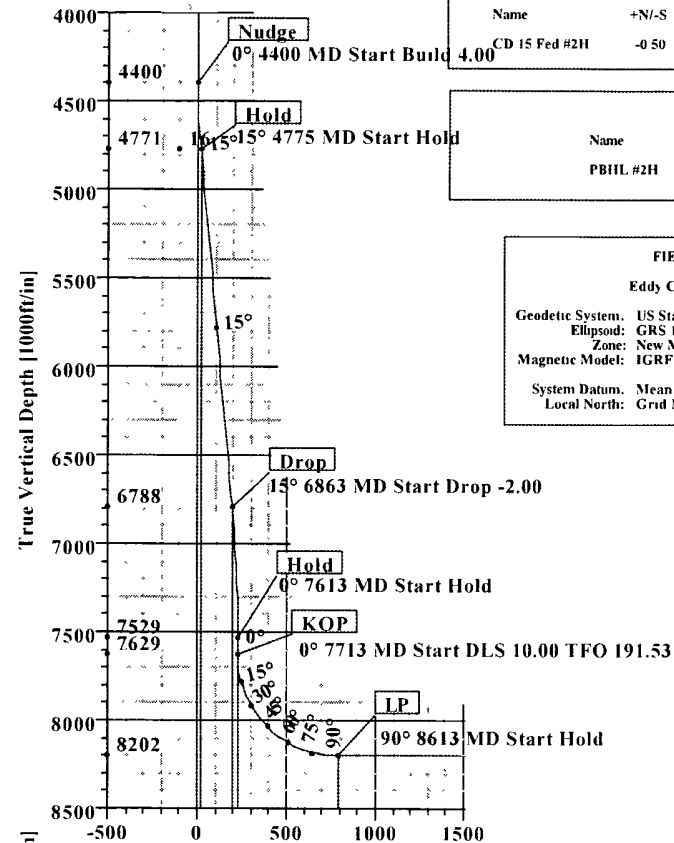
+1 432 561 8895 Fax

www.weatherford.com

devon

Cotton Draw 15 Fed #2H Eddy Co., New Mexico

KB ELEV: 3408
GL ELEV: 3383



Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4400.00	0.00	270.00	4400.00	0.00	0.00	0.00	270.00	0.00	
3	4775.00	15.00	270.00	4770.73	0.00	-48.81	4.00	-90.00	16.19	
4	6863.00	15.00	270.00	6787.58	0.00	-589.22	0.00	0.00	195.43	
5	7613.00	0.00	270.00	7529.05	0.00	-686.84	2.00	180.00	227.80	
6	7713.00	0.00	270.00	7629.05	0.00	-686.84	0.00	270.00	227.80	
7	8613.00	90.00	191.53	8202.00	-561.41	-801.31	10.00	191.53	795.40	
8	12784.61	90.00	191.53	8202.00	-4648.90	-1634.80	0.00	0.00	4927.97	PBHL #2H

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
CD 15 Fed #2H	-0.50	-50.10	413962.60	717633.60	32°08'12.402N	103°45'49.593W	N/A

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL #2H	8202.00	-4648.90	-1634.80	409313.70	715998.80	Point

FIELD DETAILS
Eddy Co., NM (NAD 83)

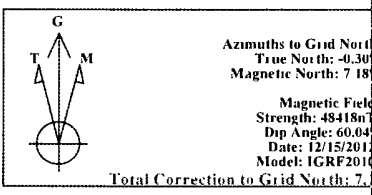
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: Grid North

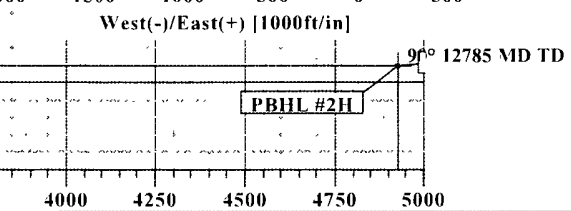
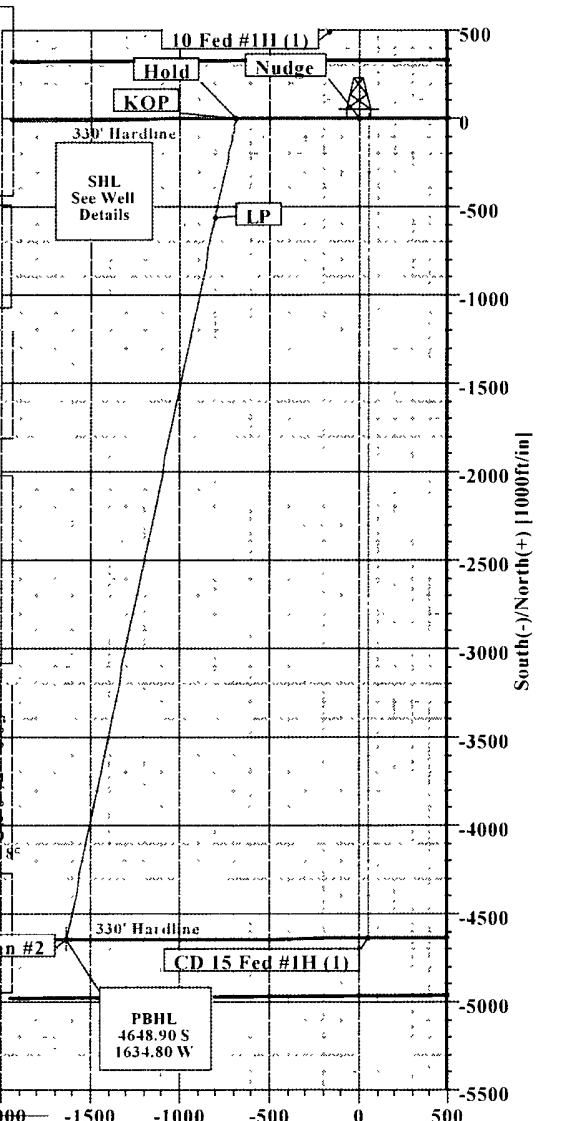
SITE DETAILS
Cotton Draw 15 Fed Pad

Site Centre Northing: 413963.10
Easting: 717683.70

Ground Level: 3383.00
Positional Uncertainty: 0.00
Convergence: 0.30



- LEGEND**
- CD 15 Fed #1H (1)
 - 10 Fed #1H (1)
 - 10 Fed #2H (1)
 - 1
 - Plan #2



Plan: Plan #2 (CD 15 Fed #2H/1)
Created By: Russell W. Joyner
Date: 8/7/2012



Company: Devon Energy	Date: 8/7/2012	Time: 13:00:43	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: CD 15 Fed #2H, Grid North		
Site: Cotton Draw 15 Fed Pad	Vertical (TVD) Reference: SITE 3408.0		
Well: CD 15 Fed #2H	Section (VS) Reference: Well (0.00N, 0.00E, 199.37Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature Db: Sybase		

Plan: Plan #2	Date Composed: 8/7/2012
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 15 Fed Pad

Site Position:	Northing: 413963 10 ft	Latitude: 32 8 12 404 N	
From: Map	Easting: 717683 70 ft	Longitude: 103 45 49 011 W	
Position Uncertainty: 0 00 ft		North Reference: Gnd	
Ground Level: 3383 00 ft		Grid Convergence: 0 30 deg	

Well: CD 15 Fed #2H	Slot Name:
Well Position: +N/-S -0 50 ft Northing: 413962.60 ft	Latitude: 32 8 12 402 N
+E/-W -50 10 ft Easting: 717633.60 ft	Longitude: 103 45 49 593 W
Position Uncertainty: 0 00 ft	

Wellpath: 1	Drilled From: Surface		
Current Datum: SITE	Tie-on Depth: 0 00 ft		
Magnetic Data: 12/15/2012	Above System Datum: Mean Sea Level		
Field Strength: 48418 nT	Declination: 7 49 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.04 deg		
ft	+N/-S ft	+E/-W ft	Direction deg
0 00	0 00	0 00	199 37

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	270.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	270.00	4400.00	0.00	0.00	0.00	0.00	0.00	270.00	
4775.00	15.00	270.00	4770.73	0.00	-48.81	4.00	4.00	0.00	-90.00	
6863.00	15.00	270.00	6787.58	0.00	-589.22	0.00	0.00	0.00	0.00	
7613.00	0.00	270.00	7529.05	0.00	-686.84	2.00	-2.00	0.00	180.00	
7713.00	0.00	270.00	7629.05	0.00	-686.84	0.00	0.00	0.00	270.00	
8613.00	90.00	191.53	8202.00	-561.41	-801.31	10.00	10.00	-8.72	191.53	
12784.61	90.00	191.53	8202.00	-4648.90	-1634.80	0.00	0.00	0.00	0.00	PBHL #2H

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
4400.00	0.00	270.00	4400.00	0.00	0.00	0.00	0.00	413962.60	717633.60	Nudge
4500.00	4.00	270.00	4499.92	0.00	-3.49	1.16	4.00	413962.60	717630.11	
4600.00	8.00	270.00	4599.35	0.00	-13.94	4.62	4.00	413962.60	717619.66	
4700.00	12.00	270.00	4697.81	0.00	-31.30	10.38	4.00	413962.60	717602.30	
4775.00	15.00	270.00	4770.73	0.00	-48.81	16.19	4.00	413962.60	717584.79	Hold
4800.00	15.00	270.00	4794.88	0.00	-55.28	18.33	0.00	413962.60	717578.32	
4900.00	15.00	270.00	4891.47	0.00	-81.16	26.92	0.00	413962.60	717552.44	
5000.00	15.00	270.00	4988.06	0.00	-107.04	35.50	0.00	413962.60	717526.56	
5100.00	15.00	270.00	5084.66	0.00	-132.92	44.09	0.00	413962.60	717500.68	
5200.00	15.00	270.00	5181.25	0.00	-158.81	52.67	0.00	413962.60	717474.79	
5300.00	15.00	270.00	5277.84	0.00	-184.69	61.25	0.00	413962.60	717448.91	
5400.00	15.00	270.00	5374.43	0.00	-210.57	69.84	0.00	413962.60	717423.03	
5500.00	15.00	270.00	5471.03	0.00	-236.45	78.42	0.00	413962.60	717397.15	
5600.00	15.00	270.00	5567.62	0.00	-262.33	87.01	0.00	413962.60	717371.27	

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

GeoDec v5.03

Report Date: June 14, 2012
Job Number: _____
Customer: Devon Energy
Well Name: Cotton Draw 15 Fed #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 413962.600 USFT	Latitude 32.1367806 DEG
East/West 717633.600 USFT	Longitude -103.7637713 DEG
Grid Convergence: .30°	
Total Correction: +7.19°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.13678° N	32° 8 min 12.410 sec
Longitude =	103.76377° W	103° 45 min 49.577 sec

Magnetic Declination =	7.49°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6552
Local Field Strength =	48414 nT	Magnetic Vector X = 23975 nT
Magnetic Dip =	60.04°	Magnetic Vector Y = 3150 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 41943 nT
Spud Date =	Dec 15, 2012	Magnetic Vector H = 24181 nT

Signed: _____

Date: _____

Company: Devon Energy Date: 8/7/2012 Time: 13:00:43 Page: 2
 Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well CD 15 Fed #2H Grid North
 Site: Cotton Draw 15 Fed Pad Vertical (TVD) Reference: SITE 3408.0
 Well: CD 15 Fed #2H Section (VS) Reference: Well (0.00N 0.00E 199.37Azi)
 Wellpath: 1 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
5700.00	15.00	270.00	5664.21	0.00	-288.22	95.59	0.00	413962.60	717345.38	
5800.00	15.00	270.00	5760.80	0.00	-314.10	104.18	0.00	413962.60	717319.50	
5900.00	15.00	270.00	5857.40	0.00	-339.98	112.76	0.00	413962.60	717293.62	
6000.00	15.00	270.00	5953.99	0.00	-365.86	121.34	0.00	413962.60	717267.74	
6100.00	15.00	270.00	6050.58	0.00	-391.74	129.93	0.00	413962.60	717241.86	
6200.00	15.00	270.00	6147.18	0.00	-417.62	138.51	0.00	413962.60	717215.98	
6300.00	15.00	270.00	6243.77	0.00	-443.51	147.10	0.00	413962.60	717190.09	
6400.00	15.00	270.00	6340.36	0.00	-469.39	155.68	0.00	413962.60	717164.21	
6500.00	15.00	270.00	6436.95	0.00	-495.27	164.26	0.00	413962.60	717138.33	
6600.00	15.00	270.00	6533.55	0.00	-521.15	172.85	0.00	413962.60	717112.45	
6700.00	15.00	270.00	6630.14	0.00	-547.03	181.43	0.00	413962.60	717086.57	
6800.00	15.00	270.00	6726.73	0.00	-572.92	190.02	0.00	413962.60	717060.68	
6863.00	15.00	270.00	6787.58	0.00	-589.22	195.43	0.00	413962.60	717044.38	Drop
6900.00	14.26	270.00	6823.38	0.00	-598.57	198.53	2.00	413962.60	717035.03	
7000.00	12.26	270.00	6920.71	0.00	-621.50	206.13	2.00	413962.60	717012.10	
7100.00	10.26	270.00	7018.78	0.00	-641.03	212.61	2.00	413962.60	716992.57	
7200.00	8.26	270.00	7117.48	0.00	-657.12	217.94	2.00	413962.60	716976.48	
7300.00	6.26	270.00	7216.67	0.00	-669.76	222.14	2.00	413962.60	716963.84	
7400.00	4.26	270.00	7316.24	0.00	-678.92	225.18	2.00	413962.60	716954.68	
7500.00	2.26	270.00	7416.08	0.00	-684.61	227.06	2.00	413962.60	716948.99	
7600.00	0.26	270.00	7516.05	0.00	-686.81	227.79	2.00	413962.60	716946.79	
7613.00	0.00	270.00	7529.05	0.00	-686.84	227.80	2.00	413962.60	716946.76	Hold
7700.00	0.00	270.00	7616.05	0.00	-686.84	227.80	0.00	413962.60	716946.76	
7712.95	0.00	270.00	7629.00	0.00	-686.84	227.80	0.00	413962.60	716946.76	Vertical Tgt #2H
7713.00	0.00	270.00	7629.05	0.00	-686.84	227.80	0.00	413962.60	716946.76	KOP
7750.00	3.70	191.53	7666.02	-1.17	-687.08	228.98	10.00	413961.43	716946.52	
7800.00	8.70	191.53	7715.71	-6.46	-688.15	234.33	10.00	413956.14	716945.45	
7850.00	13.70	191.53	7764.74	-15.97	-690.09	243.95	10.00	413946.63	716943.51	
7900.00	18.70	191.53	7812.74	-29.64	-692.88	257.76	10.00	413932.96	716940.72	
7950.00	23.70	191.53	7859.35	-47.35	-696.49	275.67	10.00	413915.25	716937.11	
8000.00	28.70	191.53	7904.19	-68.97	-700.90	297.53	10.00	413893.63	716932.70	
8050.00	33.70	191.53	7946.95	-94.34	-706.07	323.18	10.00	413868.26	716927.53	
8100.00	38.70	191.53	7987.28	-123.27	-711.97	352.43	10.00	413839.33	716921.63	
8150.00	43.70	191.53	8024.89	-155.53	-718.55	385.04	10.00	413807.07	716915.05	
8200.00	48.70	191.53	8059.49	-190.88	-725.76	420.78	10.00	413771.72	716907.84	
8250.00	53.70	191.53	8090.81	-229.05	-733.54	459.37	10.00	413733.55	716900.06	
8300.00	58.70	191.53	8118.61	-269.74	-741.84	500.52	10.00	413692.86	716891.76	
8350.00	63.70	191.53	8142.69	-312.66	-750.59	543.91	10.00	413649.94	716883.01	
8400.00	68.70	191.53	8162.87	-357.47	-759.73	589.22	10.00	413605.13	716873.87	
8450.00	73.70	191.53	8178.97	-403.84	-769.18	636.09	10.00	413558.76	716864.42	
8500.00	78.70	191.53	8190.90	-451.40	-778.88	684.18	10.00	413511.20	716854.72	
8550.00	83.70	191.53	8198.54	-499.80	-788.75	733.11	10.00	413462.80	716844.85	
8600.00	88.70	191.53	8201.86	-548.67	-798.72	782.52	10.00	413413.93	716834.88	
8613.00	90.00	191.53	8202.00	-561.41	-801.31	795.40	10.00	413401.19	716832.29	LP
8700.00	90.00	191.53	8202.00	-646.65	-818.70	881.58	0.00	413315.95	716814.90	
8800.00	90.00	191.53	8202.00	-744.63	-838.68	980.65	0.00	413217.97	716794.92	
8900.00	90.00	191.53	8202.00	-842.62	-858.66	1079.71	0.00	413119.98	716774.94	
9000.00	90.00	191.53	8202.00	-940.60	-878.64	1178.78	0.00	413022.00	716754.96	
9100.00	90.00	191.53	8202.00	-1038.59	-898.62	1277.84	0.00	412924.01	716734.98	
9200.00	90.00	191.53	8202.00	-1136.57	-918.60	1376.90	0.00	412826.03	716715.00	
9300.00	90.00	191.53	8202.00	-1234.55	-938.58	1475.97	0.00	412728.05	716695.02	
9400.00	90.00	191.53	8202.00	-1332.54	-958.56	1575.03	0.00	412630.06	716675.04	



Company: Devon Energy Date: 8/7/2012 Time: 13:00.43 Page: 3
 Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: CD 15 Fed #2H Grid North
 Site: Cotton Draw 15 Fed Pad Vertical(TVD) Reference: SITE 3408.0
 Well: CD 15 Fed #2H Section (VS) Reference: Well (0.00N,0.00E,199.37Azi)
 Wellpath: 1 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
9500.00	90.00	191.53	8202.00	-1430.52	-978.54	1674.10	0.00	412532.08	716655.06	
9600.00	90.00	191.53	8202.00	-1528.50	-998.52	1773.16	0.00	412434.10	716635.08	
9700.00	90.00	191.53	8202.00	-1626.49	-1018.50	1872.22	0.00	412336.11	716615.10	
9800.00	90.00	191.53	8202.00	-1724.47	-1038.48	1971.29	0.00	412238.13	716595.12	
9900.00	90.00	191.53	8202.00	-1822.46	-1058.46	2070.35	0.00	412140.14	716575.14	
10000.00	90.00	191.53	8202.00	-1920.44	-1078.44	2169.42	0.00	412042.16	716555.16	
10100.00	90.00	191.53	8202.00	-2018.42	-1098.42	2268.48	0.00	411944.18	716535.18	
10200.00	90.00	191.53	8202.00	-2116.41	-1118.40	2367.55	0.00	411846.19	716515.20	
10300.00	90.00	191.53	8202.00	-2214.39	-1138.38	2466.61	0.00	411748.21	716495.22	
10400.00	90.00	191.53	8202.00	-2312.37	-1158.36	2565.67	0.00	411650.23	716475.24	
10500.00	90.00	191.53	8202.00	-2410.36	-1178.34	2664.74	0.00	411552.24	716455.26	
10600.00	90.00	191.53	8202.00	-2508.34	-1198.32	2763.80	0.00	411454.26	716435.28	
10700.00	90.00	191.53	8202.00	-2606.32	-1218.30	2862.87	0.00	411356.28	716415.30	
10800.00	90.00	191.53	8202.00	-2704.31	-1238.28	2961.93	0.00	411258.29	716395.32	
10900.00	90.00	191.53	8202.00	-2802.29	-1258.26	3060.99	0.00	411160.31	716375.34	
11000.00	90.00	191.53	8202.00	-2900.28	-1278.24	3160.06	0.00	411062.32	716355.36	
11100.00	90.00	191.53	8202.00	-2998.26	-1298.22	3259.12	0.00	410964.34	716335.38	
11200.00	90.00	191.53	8202.00	-3096.24	-1318.20	3358.19	0.00	410866.36	716315.40	
11300.00	90.00	191.53	8202.00	-3194.23	-1338.18	3457.25	0.00	410768.37	716295.42	
11400.00	90.00	191.53	8202.00	-3292.21	-1358.16	3556.32	0.00	410670.39	716275.44	
11500.00	90.00	191.53	8202.00	-3390.19	-1378.14	3655.38	0.00	410572.41	716255.46	
11600.00	90.00	191.53	8202.00	-3488.18	-1398.12	3754.44	0.00	410474.42	716235.48	
11700.00	90.00	191.53	8202.00	-3586.16	-1418.10	3853.51	0.00	410376.44	716215.50	
11800.00	90.00	191.53	8202.00	-3684.14	-1438.08	3952.57	0.00	410278.46	716195.52	
11900.00	90.00	191.53	8202.00	-3782.13	-1458.06	4051.64	0.00	410180.47	716175.54	
12000.00	90.00	191.53	8202.00	-3880.11	-1478.04	4150.70	0.00	410082.49	716155.56	
12100.00	90.00	191.53	8202.00	-3978.10	-1498.02	4249.76	0.00	409984.50	716135.58	
12200.00	90.00	191.53	8202.00	-4076.08	-1518.00	4348.83	0.00	409886.52	716115.60	
12300.00	90.00	191.53	8202.00	-4174.06	-1537.98	4447.89	0.00	409788.54	716095.62	
12400.00	90.00	191.53	8202.00	-4272.05	-1557.96	4546.96	0.00	409690.55	716075.64	
12500.00	90.00	191.53	8202.00	-4370.03	-1577.94	4646.02	0.00	409592.57	716055.66	
12600.00	90.00	191.53	8202.00	-4468.01	-1597.92	4745.08	0.00	409494.59	716035.68	
12700.00	90.00	191.53	8202.00	-4566.00	-1617.90	4844.15	0.00	409396.60	716015.70	
12784.61	90.00	191.53	8202.00	-4648.90	-1634.80	4927.97	0.00	409313.70	715998.80	PBHL #2H

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
Vertical Tgt #2H		7629.00	100.00	-1126.75	414062.60	716506.85	32 8 13.450 N	103 46 2.691 W
PBHL #2H		8202.00	-4648.90	-1634.80	409313.70	715998.80	32 7 26.483 N	103 46 8.889 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Company: Devon Energy	Date: 8/7/2012	Time: 13:00:43	Page: 4
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: CD 15 Fed #2H, Grid North		
Site: Cotton Draw, 15 Fed Pad	Vertical (TVD) Reference: SITE 3408.0		
Well: CD 15 Fed #2H	Section (VS) Reference: Well (0 00N; 0 00E, 199.37Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature		Db: Sybase

Annotation

MD ft	TVD ft	
4400.00	4400.00	Nudge
4775.00	4770.73	Hold
6863.00	6787.58	Drop
7613.00	7529.05	Hold
7713.00	7629.05	KOP
8613.00	8202.00	LP
12784.60	8202.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction



Weatherford Anticollision Report

**Weatherford**

Company: Devon Energy Date: 8/7/2012 Time: 13:06:56 Page: 1
Field: Eddy Co., NM (NAD 83)
Reference Site: Cotton Draw 15 Fed Pad
Reference Well: CD 15 Fed #2H
Reference Wellpath: Co-ordinate(NE) Reference: Well CD 15 Fed #2H Grid North
Vertical (TVD) Reference: SITE 3408.0
Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria

Interpolation Method MD Interval: 100.00 ft

Depth Range: 0.00 to 12784.61 ft

Maximum Radius 0.0000 ft

Reference: Plan Plan #2

Error Model: ISCWSA Ellipse

Scan Method: Closest Approach 3D

Error Surface: Ellipse

Plan: Plan #2

Date Composed: 8/7/2012

Principal: Yes

Version: 1

Tied-to: From Surface

Summary

Site	Offset Wellpath	Wellpath	Reference	Offset	Ctr-Ctr	Edge	Separation	Warning
	Well		MD	MD	Distance	Distance	Factor	
			ft	ft	ft	ft		
Cotton Draw 15 Fed #2H	CD 15 Fed #1H	1 V0 Plan Plan #1 V1	4400.00	4400.00	50.10	30.60	2.57	
Cotton Draw 15 Fed #2H	CD 15 Fed #3H	1 V0 Plan Plan #2 V1	4400.00	4400.00	100.10	80.60	5.13	

Site: Cotton Draw 15 Fed Pad

Well: CD 15 Fed #1H

Wellpath: 1 V0 Plan. Plan #1 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr		Edge	Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor		
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
0 00	0 00	0 00	0 00	0.00	0 00	89.43	0.50	50 10	50 10				No Data
100 00	100 00	100 00	100 00	0.08	0 08	89 43	0.50	50.10	50 10	49 93	297 21		
200 00	200 00	200 00	200 00	0.31	0 31	89 43	0.50	50 10	50 10	49 48	81 06		
300 00	300 00	300 00	300 00	0.53	0 53	89 43	0.50	50 10	50 10	49.03	46 93		
400 00	400 00	400 00	400 00	0.76	0 76	89.43	0.50	50 10	50 10	48 59	33 02		
500 00	500 00	500 00	500 00	0.98	0 98	89 43	0.50	50.10	50 10	48 14	25.48		
600 00	600 00	600 00	600 00	1.21	1.21	89 43	0.50	50 10	50 10	47 69	20 74		
700 00	700 00	700 00	700 00	1.43	1 43	89 43	0.50	50 10	50 10	47 24	17 48		
800 00	800 00	800 00	800 00	1.66	1.66	89.43	0.50	50 10	50.10	46 79	15 11		
900 00	900 00	900 00	900 00	1.88	1 88	89 43	0.50	50.10	50 10	46 34	13.31		
1000 00	1000 00	1000 00	1000 00	2.11	2.11	89 43	0.50	50 10	50 10	45 89	11 89		
1100 00	1100 00	1100 00	1100 00	2.33	2.33	89.43	0.50	50 10	50 10	45 44	10 74		
1200 00	1200 00	1200 00	1200 00	2.56	2 56	89 43	0.50	50.10	50.10	44 99	9.80		
1300 00	1300 00	1300 00	1300 00	2.78	2 78	89 43	0.50	50 10	50 10	44.54	9 01		
1400 00	1400 00	1400 00	1400 00	3.01	3.01	89.43	0.50	50 10	50 10	44 09	8 33		
1500 00	1500 00	1500 00	1500 00	3.23	3 23	89 43	0.50	50 10	50 10	43 64	7 75		
1600 00	1600 00	1600 00	1600 00	3.46	3.46	89 43	0.50	50 10	50 10	43 19	7 25		
1700 00	1700 00	1700 00	1700 00	3.68	3 68	89.43	0.50	50 10	50.10	42 74	6 81		
1800 00	1800 00	1800 00	1800 00	3.91	3 91	89 43	0.50	50.10	50 10	42 29	6 41		
1900 00	1900 00	1900 00	1900 00	4.13	4 13	89 43	0.50	50 10	50 10	41 84	6 07		
2000 00	2000 00	2000 00	2000 00	4.35	4 35	89 43	0.50	50 10	50.10	41 39	5.75		
2100 00	2100 00	2100 00	2100 00	4.58	4 58	89 43	0.50	50 10	50 10	40.94	5 47		
2200 00	2200 00	2200 00	2200 00	4.80	4.80	89 43	0.50	50 10	50 10	40 49	5 21		
2300 00	2300 00	2300 00	2300 00	5.03	5.03	89 43	0.50	50 10	50 10	40 04	4 98		
2400 00	2400 00	2400 00	2400 00	5.25	5 25	89.43	0.50	50 10	50.10	39 59	4 77		
2500 00	2500 00	2500 00	2500 00	5.48	5 48	89 43	0.50	50 10	50 10	39 15	4 57		
2600 00	2600 00	2600 00	2600 00	5.70	5 70	89 43	0.50	50 10	50 10	38 70	4 39		
2700 00	2700 00	2700 00	2700 00	5.93	5 93	89 43	0.50	50 10	50 10	38.25	4 23		
2800 00	2800 00	2800 00	2800 00	6.15	6 15	89 43	0.50	50.10	50.10	37 80	4 07		
2900 00	2900 00	2900 00	2900 00	6.38	6 38	89 43	0.50	50 10	50 10	37 35	3 93		
3000 00	3000 00	3000 00	3000 00	6.60	6.60	89 43	0.50	50.10	50 10	36.90	3 79		
3100 00	3100 00	3100 00	3100 00	6.83	6 83	89 43	0.50	50 10	50 10	36 45	3.67		
3200 00	3200 00	3200 00	3200 00	7.05	7.05	89 43	0.50	50.10	50 10	36.00	3 55		
3300 00	3300 00	3300 00	3300 00	7.28	7 28	89 43	0.50	50 10	50.10	35 55	3 44		
3400 00	3400 00	3400 00	3400 00	7.50	7 50	89 43	0.50	50 10	50 10	35 10	3 34		
3500 00	3500 00	3500 00	3500 00	7.73	7 73	89.43	0.50	50 10	50 10	34.65	3 24		



Weatherford Anticollision Report

**Weatherford**

Company: Devon Energy Date: 8/7/2012 Time: 13:06:56 Page: 2
Field: Eddy Co. NM (NAD 83)
Reference Site: Cotton Draw 15 Fed Pad Co-ordinate(NE) Reference: Well: CD 15 Fed #2H; Grid North
Reference Well: CD 15 Fed #2H Vertical (TVD) Reference: SITE 3408.0
Reference Wellpath: Db: Sybase

Site: Cotton Draw 15 Fed Pad
Well: CD 15 Fed #1H
Wellpath: 1 V0 Plan Plan #1 V1

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3600 00	3600 00	3600 00	3600 00	7 95	7.95	89 43	0 50	50 10	50 10	34 20	3 15	
3700 00	3700 00	3700 00	3700 00	8 18	8.18	89 43	0 50	50 10	50 10	33.75	3 06	
3800 00	3800 00	3800 00	3800 00	8 40	8 40	89 43	0 50	50 10	50 10	33 30	2 98	
3900 00	3900 00	3900 00	3900 00	8 63	8 63	89 43	0 50	50 10	50 10	32 85	2 90	
4000 00	4000 00	4000 00	4000 00	8 85	8.85	89 43	0 50	50 10	50 10	32 40	2 83	
4100 00	4100 00	4100 00	4100 00	9 07	9 07	89 43	0 50	50 10	50 10	31 95	2 76	
4200 00	4200 00	4200 00	4200 00	9 30	9 30	89 43	0 50	50 10	50 10	31 50	2 69	
4300 00	4300 00	4300 00	4300 00	9 52	9 52	89 43	0 50	50 10	50 10	31 05	2 63	
4400 00	4400 00	4400 00	4400 00	9 75	9 75	89 43	0 50	50 10	50 10	30 60	2 57	
4500 00	4499 92	4499 92	4499 92	9 97	9 97	179 46	0 50	50 10	53 59	33.66	2 69	
4600 00	4599.35	4599.35	4599 35	10 20	10 20	179 55	0 50	50 10	64 04	43.73	3 15	
4700 00	4697 81	4697 81	4697 81	10 44	10 42	179 64	0 50	50 10	81 40	60.75	3 94	
4800 00	4794.88	4794 88	4794 88	10 69	10 64	179 72	0 50	50 10	105 38	84 40	5 02	
4900 00	4891 47	4891 47	4891 47	10 97	10 85	179 77	0 50	50 10	131.26	109.83	6 13	
5000 00	4988 06	4988 06	4988 06	11 26	11 07	179 81	0 50	50 10	157 14	135 27	7 18	
5100 00	5084.66	5084.66	5084.66	11 57	11 29	179 84	0 50	50 10	183 02	160 70	8 20	
5200 00	5181 25	5181 25	5181 25	11 90	11 51	179 86	0 50	50 10	208 91	186 13	9 17	
5300 00	5277 84	5277 84	5277 84	12 24	11 72	179 87	0 50	50 10	234 79	211 56	10 11	
5400 00	5374 43	5374 43	5374 43	12 60	11 94	179 89	0 50	50 10	260.67	236 99	11 01	
5500 00	5471.03	5471.03	5471 03	12 97	12 16	179 90	0 50	50 10	286 55	262 41	11 87	
5600 00	5567 62	5567 62	5567 62	13 35	12 37	179 91	0 50	50 10	312 43	287 83	12 70	
5700 00	5664 21	5664 21	5664 21	13 74	12 59	179 91	0 50	50 10	338 32	313 25	13 50	
5800 00	5760 80	5760 80	5760 80	14 14	12 81	179 92	0 50	50 10	364 20	338 67	14 27	
5900 00	5857 40	5857 40	5857 40	14 55	13 02	179 92	0 50	50 10	390 08	364 09	15 01	
6000 00	5953 99	5953 99	5953 99	14 97	13 24	179 93	0 50	50 10	415 96	389 50	15 72	
6100 00	6050 58	6050 58	6050 58	15 39	13 46	179 93	0 50	50 10	441 84	414 91	16 41	
6200 00	6147 18	6147 18	6147 18	15 82	13 68	179 94	0 50	50 10	467 73	440 32	17 07	
6300 00	6243 77	6243 77	6243 77	16 26	13 89	179 94	0 50	50 10	493 61	465 73	17 71	
6400 00	6340.36	6340 36	6340 36	16 70	14 11	179 94	0 50	50 10	519 49	491 14	18 32	
6500 00	6436 95	6436 95	6436 95	17 15	14 33	179 95	0 50	50 10	545 37	516 55	18 92	
6600 00	6533 55	6533 55	6533 55	17 61	14 54	179 95	0 50	50 10	571.25	541 95	19 50	
6700 00	6630 14	6630 14	6630 14	18 07	14 76	179 95	0 50	50 10	597 13	567 36	20 05	
6800 00	6726 73	6726 73	6726 73	18 53	14 98	179 95	0 50	50 10	623 02	592 76	20 59	
6900 00	6823 38	6823 38	6823 38	18 98	15 20	179 95	0 50	50 10	648 67	617 92	21 09	
7000 00	6920 71	6920 71	6920 71	19 31	15 41	179 96	0 50	50 10	671 60	640 37	21 50	
7100 00	7018 78	7018 78	7018 78	19 63	15 64	179 96	0 50	50 10	691 13	659 43	21 80	
7200 00	7117 48	7117 48	7117 48	19 91	15 86	179 96	0 50	50 10	707 22	675 07	22 00	
7300 00	7216 67	7216 56	7216 51	20 16	16 08	179 76	3 00	50 10	719 86	687 29	22 10	
7400 00	7316 24	7315 66	7315 33	20 38	16 30	179 18	10 40	50 10	729 10	696 12	22 11	
7500 00	7416 08	7415 11	7414 41	20 56	16 52	178 51	19 07	50 10	734 96	701 60	22 03	
7600 00	7516 05	7514 70	7513 62	20 72	16 74	177 84	27 75	50 10	737 43	703 72	21 87	
7700 00	7616 05	7616 29	7614 87	20 88	16 96	87 22	35 77	50 10	737 81	699 98	19 50	
7800 00	7715 71	7723 11	7721 35	20 86	17 13	255 79	29 40	50 09	739 14	704 61	21 41	
7900 00	7812 74	7829 74	7824 62	20 40	17 28	256 35	3 47	50 07	743 78	708 88	21 31	
8000 00	7904 19	7935 75	7920 78	19 60	17 45	257 36	-40 82	50 04	751 65	716 33	21 28	
8100 00	7987 28	8040 81	8006 41	19 01	17 66	258 76	-101 41	49 99	762 52	726 64	21 25	
8200 00	8059 49	8144 68	8078 82	19 18	17 95	260 50	-175 69	49 94	776 09	739 41	21 15	
8300 00	8118 61	8247 26	8136 03	19 69	18 36	262 52	-260 67	49 89	791 97	754 18	20 95	
8400 00	8162 87	8348 57	8176 79	20 39	18 90	264 72	-353 28	49 83	809 69	770 49	20 65	
8500 00	8190 90	8448 72	8200 45	21 27	19 59	267 04	-450 46	49 77	828 71	787 86	20 29	
8600 00	8201 86	8547 78	8207 00	22 31	20 39	269 38	-549 19	49 71	848.44	805 79	19 89	



Weatherford Anticollision Report

**Weatherford®**

Company: Devon Energy Date: 8/7/2012 Time: 13:06:56 Page: 3
Field: Eddy Co., NM (NAD 83)
Reference Site: Cotton Draw 15 Fed Pad Co-ordinate(NE) Reference: Well: CD 15 Fed #2H; Grid North
Reference Well: CD 15 Fed #2H Vertical (TVD) Reference: SITE 3408.0
Reference Wellpath: Db: Sybase

Site: Cotton Draw 15 Fed Pad
Well: CD 15 Fed #1H
Wellpath: 1 V0 Plan Plan #1 V1

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
8700 00	8202.00	8645.78	8207.00	23 39	21 31	269 66	-647.18	49 65	868 36	823 73	19.46	
8800 00	8202.00	8743 77	8207.00	24 55	22 32	269 67	-745.18	49.59	888.28	841.48	18.98	
8900 00	8202.00	8841 77	8207.00	25 78	23.43	269.68	-843 18	49 53	908 20	859.06	18 48	
9000 00	8202.00	8939 77	8207.00	27 08	24 62	269 69	-941 17	49 47	928 12	876 50	17 98	
9100 00	8202.00	9037 76	8207.00	28 44	25.87	269 69	-1039 17	49 41	948 04	893 80	17 48	
9200 00	8202.00	9135.76	8207.00	29 84	27 19	269 70	-1137 16	49 35	967 96	911 00	17 00	
9300 00	8202.00	9233.75	8207.00	31 28	28 55	269 70	-1235 16	49 29	987 88	928 11	16 53	
9400 00	8202.00	9331.75	8207.00	32 76	29.97	269 71	-1333 16	49 23	1007 80	945 14	16 08	
9500 00	8202.00	9429 74	8207.00	34 27	31 42	269.72	-1431 15	49 17	1027.72	962 09	15 66	
9600 00	8202.00	9527 74	8207.00	35 81	32.90	269 72	-1529.15	49.11	1047 64	978 99	15 26	
9700 00	8202.00	9625 74	8207.00	37 38	34 41	269 73	-1627.14	49 05	1067 56	995 83	14 88	
9800 00	8202.00	9723.73	8207.00	38 96	35 95	269 73	-1725.14	48 99	1087 48	1012 62	14 53	
9900 00	8202.00	9821 73	8207.00	40 57	37 51	269 74	-1823 13	48.93	1107 39	1029.37	14 19	
10000.00	8202.00	9919 72	8207.00	42 19	39.09	269 74	-1921 13	48.87	1127 31	1046.09	13 88	
10100 00	8202.00	10017.72	8207.00	43.83	40 69	269.75	-2019 13	48 81	1147.23	1062.77	13 58	
10200 00	8202.00	10115.72	8207.00	45.48	42 30	269 75	-2117 12	48 75	1167.15	1079 43	13 30	
10300 00	8202.00	10213 71	8207.00	47 14	43.93	269 75	-2215 12	48 69	1187.07	1096 06	13 04	
10400 00	8202.00	10311 71	8207.00	48 81	45.56	269 76	-2313.11	48 63	1206 99	1112 66	12 80	
10500 00	8202.00	10409 70	8207.00	50 49	47 21	269.76	-2411.11	48 57	1226.91	1129 25	12 56	
10600 00	8202.00	10507 70	8207.00	52 18	48 87	269 77	-2509 11	48 51	1246 83	1145 82	12 34	
10700 00	8202.00	10605 70	8207.00	53 88	50.54	269 77	-2607 10	48 45	1266.75	1162 37	12 14	
10800 00	8202.00	10703 69	8207.00	55 59	52 22	269.77	-2705 10	48 39	1286 67	1178 91	11 94	
10900 00	8202.00	10801 69	8207.00	57 30	53 90	269 78	-2803.09	48 33	1306 59	1195.43	11 75	
11000.00	8202.00	10899 68	8207.00	59 02	55 59	269 78	-2901 09	48.27	1326 51	1211.94	11 58	
11100 00	8202.00	10997 68	8207.00	60 74	57 29	269 78	-2999 09	48.21	1346 43	1228 44	11 41	
11200 00	8202.00	11095 68	8207.00	62 47	58 99	269 79	-3097 08	48.15	1366 35	1244.93	11 25	
11300 00	8202.00	11193.67	8207.00	64 21	60 69	269 79	-3195 08	48.09	1386 27	1261 41	11 10	
11400 00	8202.00	11291 67	8207.00	65 94	62 40	269 79	-3293 07	48.03	1406 19	1277 87	10 96	
11500 00	8202.00	11389 66	8207.00	67 69	64.12	269 80	-3391 07	47.97	1426 11	1294.34	10 82	
11600 00	8202.00	11487 66	8207.00	69 43	65.84	269 80	-3489 06	47 90	1446 03	1310 79	10 69	
11700 00	8202.00	11585 65	8207.00	71 18	67.56	269.80	-3587 06	47 84	1465 95	1327 24	10 57	
11800 00	8202.00	11683 65	8207.00	72 93	69 29	269.80	-3685 06	47 78	1485.87	1343 68	10 45	
11900 00	8202.00	11781 65	8207.00	74 69	71.02	269 81	-3783.05	47 72	1505.79	1360 11	10 34	
12000 00	8202.00	11879 64	8207.00	76 44	72.75	269 81	-3881 05	47 66	1525.71	1376 54	10 23	
12100 00	8202.00	11977 64	8207.00	78 21	74.48	269.81	-3979 04	47 60	1545.63	1392.97	10 12	
12200 00	8202.00	12075 63	8207.00	79 97	76 22	269.81	-4077 04	47 54	1565 55	1409.39	10 03	
12300 00	8202.00	12173 63	8207.00	81 73	77.96	269.82	-4175 04	47 48	1585 47	1425 80	9 93	
12400.00	8202.00	12271 63	8207.00	83 50	79.70	269.82	-4273 03	47 42	1605 39	1442.21	9 84	
12500 00	8202.00	12369 62	8207.00	85 27	81.45	269.82	-4371.03	47 36	1625 31	1458 62	9 75	
12600 00	8202.00	12467 62	8207.00	87 04	83.19	269 82	-4469 02	47 30	1645 23	1475 02	9 67	
12700 00	8202.00	12565 61	8207.00	88 81	84 94	269 82	-4567 02	47.24	1665 15	1491 42	9 58	
12784 61	8202.00	12636 59	8207.00	90 31	86 21	269 83	-4638.00	47 20	1682 04	1505 55	9 53	

Site: Cotton Draw 15 Fed Pad
Well: CD 15 Fed #3H
Wellpath: 1 V0 Plan Plan #2 V1

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
0 00	0 00	0.00	0 00	0 00	0 00	89 54	0 80	100 10	100 10			No Data
100 00	100 00	100.00	100 00	0 08	0.08	89 54	0 80	100 10	100 10	99 93	593 82	
200 00	200 00	200.00	200 00	0 31	0.31	89 54	0 80	100 10	100 10	99.49	161.95	



Company: Devon Energy Date: 8/7/2012 Time: 13:06:56 Page: 4
 Field: Eddy Co, NM (NAD 83)
 Reference Site: Cotton Draw 15 Fed Pad
 Reference Well: CD 15 Fed #2H
 Reference Wellpath: Co-ordinate(NE) Reference: Well: CD 15 Fed #2H; Grid North
 Vertical (TVD) Reference: SITE 3408.0
 Db: Sybase

Site: Cotton Draw 15 Fed Pad
 Well: CD 15 Fed #3H
 Wellpath: 1 V0 Plan. Plan #2 V1

Inter-Site Error: 0.00 ft

Reference MD	Reference TVD	Offset MD	Offset TVD	Semi-Major Axis Ref	Semi-Major Axis Offset	Semi-Major Axis TFO-HS	Offset Location North	Offset Location East	Ctr-Ctr Distance	Edge Distance	Separation Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
300 00	300 00	300 00	300 00	0 53	0 53	89.54	0 80	100.10	100 10	99 04	93 76	
400 00	400 00	400 00	400 00	0 76	0 76	89.54	0 80	100.10	100 10	98 59	65 98	
500 00	500 00	500 00	500 00	0 98	0 98	89.54	0 80	100 10	100 10	98 14	50 90	
600 00	600 00	600 00	600 00	1 21	1 21	89.54	0 80	100.10	100 10	97 69	41 43	
700 00	700 00	700 00	700 00	1 43	1 43	89.54	0 80	100 10	100.10	97 24	34 93	
800 00	800 00	800 00	800 00	1 66	1 66	89.54	0 80	100 10	100 10	96 79	30 19	
900 00	900 00	900 00	900 00	1 88	1 88	89.54	0 80	100.10	100.10	96 34	26 59	
1000 00	1000 00	1000 00	1000.00	2 11	2 11	89.54	0 80	100 10	100.10	95 89	23 75	
1100 00	1100.00	1100 00	1100 00	2 33	2 33	89.54	0 80	100 10	100.10	95 44	21 46	
1200 00	1200.00	1200 00	1200 00	2 56	2 56	89.54	0 80	100 10	100 10	94 99	19 58	
1300 00	1300 00	1300 00	1300 00	2 78	2 78	89.54	0 80	100 10	100 10	94 54	17 99	
1400 00	1400 00	1400 00	1400 00	3 01	3 01	89.54	0 80	100 10	100 10	94 09	16 65	
1500 00	1500 00	1500 00	1500.00	3 23	3 23	89.54	0 80	100 10	100 10	93 64	15 49	
1600 00	1600 00	1600 00	1600.00	3 46	3 46	89.54	0 80	100.10	100 10	93 19	14 48	
1700 00	1700 00	1700 00	1700.00	3 68	3 68	89.54	0 80	100 10	100 10	92 74	13 60	
1800 00	1800 00	1800 00	1800.00	3 91	3 91	89.54	0 80	100 10	100 10	92 29	12 82	
1900 00	1900 00	1900 00	1900.00	4 13	4 13	89.54	0 80	100 10	100.10	91 84	12 12	
2000.00	2000 00	2000 00	2000.00	4 35	4 35	89.54	0 80	100.10	100.10	91 39	11 49	
2100 00	2100 00	2100 00	2100.00	4 58	4 58	89.54	0 80	100.10	100 10	90 94	10 93	
2200 00	2200.00	2200 00	2200 00	4 80	4 80	89.54	0 80	100 10	100 10	90 49	10 42	
2300 00	2300 00	2300 00	2300.00	5 03	5 03	89.54	0 80	100.10	100 10	90 04	9 95	
2400.00	2400.00	2400 00	2400 00	5 25	5 25	89.54	0 80	100 10	100 10	89 60	9 53	
2500 00	2500.00	2500 00	2500 00	5 48	5 48	89.54	0 80	100 10	100 10	89 15	9 14	
2600 00	2600 00	2600 00	2600 00	5 70	5 70	89.54	0 80	100 10	100.10	88 70	8 78	
2700 00	2700 00	2700 00	2700 00	5 93	5 93	89.54	0 80	100.10	100 10	88 25	8 44	
2800 00	2800 00	2800.00	2800 00	6 15	6 15	89.54	0 80	100.10	100 10	87 80	8 13	
2900 00	2900.00	2900 00	2900 00	6 38	6 38	89.54	0 80	100.10	100 10	87 35	7 85	
3000 00	3000.00	3000 00	3000 00	6 60	6 60	89.54	0 80	100 10	100 10	86 90	7 58	
3100 00	3100 00	3100 00	3100 00	6 83	6 83	89.54	0 80	100 10	100 10	86 45	7 33	
3200 00	3200.00	3200 00	3200 00	7 05	7 05	89.54	0 80	100 10	100 10	86 00	7 10	
3300 00	3300 00	3300 00	3300 00	7 28	7 28	89.54	0 80	100 10	100 10	85 55	6 88	
3400 00	3400 00	3400 00	3400 00	7 50	7 50	89.54	0 80	100.10	100.10	85 10	6 67	
3500 00	3500 00	3500 00	3500.00	7 73	7 73	89.54	0 80	100.10	100.10	84 65	6 48	
3600 00	3600 00	3600 00	3600 00	7 95	7 95	89.54	0 80	100 10	100 10	84 20	6 29	
3700 00	3700 00	3700 00	3700.00	8 18	8 18	89.54	0 80	100.10	100.10	83 75	6 12	
3800 00	3800 00	3800 00	3800 00	8 40	8 40	89.54	0 80	100.10	100.10	83 30	5 96	
3900 00	3900 00	3900 00	3900 00	8 63	8 63	89.54	0 80	100 10	100.10	82 85	5 80	
4000 00	4000 00	4000 00	4000 00	8 85	8 85	89.54	0 80	100 10	100 10	82 40	5 66	
4100 00	4100 00	4100 00	4100 00	9 07	9 07	89.54	0 80	100 10	100 10	81 95	5 52	
4200 00	4200 00	4200 00	4200 00	9 30	9 30	89.54	0 80	100 10	100 10	81 50	5 38	
4300 00	4300 00	4300 00	4300 00	9 52	9 52	89.54	0 80	100.10	100 10	81 05	5 26	
4400 00	4400 00	4400 00	4400 00	9 75	9 75	89.54	0 80	100.10	100 10	80 60	5 13	
4500 00	4499 92	4493.05	4492.98	9 97	9 96	179 57	0 80	103 12	106 84	86 95	5 37	
4600 00	4599.35	4583 64	4583 13	10 20	10 16	179.63	0 80	111 86	126 84	106 64	6 28	
4700 00	4697 81	4669 56	4667 97	10 44	10 36	179.69	0 80	125 39	159 51	139 08	7 81	
4800 00	4794 88	4749 15	4745 71	10 69	10 55	179.74	0 80	142 44	203 75	183 13	9 88	
4900 00	4891 47	4832 08	4825 87	10 97	10 77	179 79	0 80	163 68	253 48	232 49	12 07	
5000 00	4988.06	4918 68	4909 52	11 26	11 01	179 83	0 80	186 10	303 48	282 06	14 17	
5100 00	5084.66	5005 29	4993 17	11 57	11 26	179 85	0 80	208 51	353 48	331 63	16 18	
5200 00	5181 25	5091 89	5076 82	11 90	11 53	179 87	0 80	230 92	403 48	381 20	18 11	
5300.00	5277.84	5178 49	5160 47	12 24	11 81	179 88	0 80	253 34	453 48	430 76	19 96	



Company: Devon Energy Date: 8/7/2012 Time: 13:06:56 Page: 5
 Field: Eddy Co., NM (NAD 83)
 Reference Site: Cotton Draw 15 Fed Pad Co-ordinate(NE) Reference: Well: CD 15 Fed #2H, Grid North
 Reference Well: CD 15 Fed #2H Vertical (TVD) Reference: SITE 3408.0
 Reference Wellpath: Db: Sybase

Site: Cotton Draw 15 Fed Pad
 Well: CD 15 Fed #3H
 Wellpath: 1 V0 Plan Plan #2 V1

Inter-Site Error: 0.00 ft

Reference MD	Reference TVD	Offset MD	Offset TVD	Semi-Major Axis Ref	Semi-Major Axis Offset	Semi-Major Axis TFO:HS	Offset Location North	Offset Location East	Ctr-Ctr Edge Distance	Ctr-Ctr Edge Distance	Separation Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
5400.00	5374.43	5265.09	5244.12	12.60	12.10	179.89	0.80	275.75	503.48	480.32	21.74	
5500.00	5471.03	5351.70	5327.78	12.97	12.40	179.90	0.80	298.17	553.48	529.87	23.44	
5600.00	5567.62	5438.30	5411.43	13.35	12.71	179.91	0.80	320.58	603.48	579.42	25.08	
5700.00	5664.21	5524.90	5495.08	13.74	13.03	179.92	0.80	343.00	653.48	628.96	26.65	
5800.00	5760.80	5611.50	5578.73	14.14	13.36	179.92	0.80	365.41	703.48	678.50	28.17	
5900.00	5857.40	5698.11	5662.38	14.55	13.69	179.93	0.80	387.83	753.48	728.04	29.62	
6000.00	5953.99	5784.71	5746.03	14.97	14.04	179.93	0.80	410.24	803.48	777.58	31.02	
6100.00	6050.58	5871.31	5829.69	15.39	14.39	179.94	0.80	432.65	853.48	827.11	32.37	
6200.00	6147.18	5957.91	5913.34	15.82	14.74	179.94	0.80	455.07	903.48	876.64	33.66	
6300.00	6243.77	6044.52	5996.99	16.26	15.10	179.94	0.80	477.48	953.48	926.16	34.91	
6400.00	6340.36	6131.12	6080.64	16.70	15.47	179.95	0.80	499.90	1003.48	975.69	36.11	
6500.00	6436.95	6217.72	6164.29	17.15	15.84	179.95	0.80	522.31	1053.48	1025.21	37.27	
6600.00	6533.55	6304.32	6247.94	17.61	16.22	179.95	0.80	544.73	1103.48	1074.73	38.38	
6700.00	6630.14	6390.93	6331.60	18.07	16.60	179.95	0.80	567.14	1153.48	1124.25	39.46	
6800.00	6726.73	6477.53	6415.25	18.53	16.99	179.96	0.80	589.55	1203.48	1173.76	40.50	
6900.00	6823.38	6564.25	6499.01	18.98	17.38	179.96	0.80	612.00	1253.27	1223.05	41.47	
7000.00	6920.71	6652.33	6584.09	19.31	17.78	179.96	0.80	634.80	1300.62	1269.90	42.35	
7100.00	7018.78	6742.00	6670.71	19.63	18.19	179.96	0.80	658.01	1344.86	1313.67	43.11	
7200.00	7117.48	6833.17	6758.77	19.91	18.61	179.96	0.80	681.60	1385.94	1354.29	43.78	
7300.00	7216.67	6927.40	6898.55	20.16	19.17	179.97	0.80	717.10	1422.87	1390.62	44.11	
7400.00	7316.24	7170.03	7087.62	20.38	19.77	179.97	0.80	753.83	1450.87	1417.97	44.09	
7500.00	7416.08	7370.67	7286.69	20.56	20.27	179.97	0.80	778.48	1468.80	1435.33	43.88	
7600.00	7516.05	7575.90	7491.60	20.72	20.65	179.97	0.80	789.22	1476.23	1442.30	43.50	
7700.00	7616.05	7700.35	7616.05	20.88	20.84	89.97	0.80	789.62	1476.45	1434.74	35.40	
7800.00	7715.71	7774.87	7690.49	20.86	20.89	258.56	-1.47	790.06	1478.44	1443.70	42.56	
7900.00	7812.74	7841.76	7756.61	20.40	20.74	259.07	-11.16	791.96	1486.02	1450.88	42.29	
8000.00	7904.19	7908.57	7821.05	19.60	20.39	259.99	-28.32	795.33	1499.09	1463.51	42.13	
8100.00	7987.28	7975.27	7882.93	19.01	19.88	261.30	-52.68	800.11	1517.32	1481.17	41.97	
8200.00	8059.49	8041.92	7941.45	19.18	19.34	262.97	-83.89	806.23	1540.25	1503.34	41.73	
8300.00	8118.61	8108.62	7995.93	19.69	19.04	264.95	-121.59	813.63	1567.32	1529.45	41.39	
8400.00	8162.87	8175.63	8045.79	20.39	19.11	267.19	-165.46	822.24	1597.87	1558.81	40.91	
8500.00	8190.90	8243.32	8090.52	21.27	19.38	269.63	-215.27	832.01	1631.20	1590.79	40.37	
8600.00	8201.86	8312.31	8129.63	22.31	19.78	272.16	-270.99	842.94	1666.54	1624.70	39.83	
8700.00	8202.00	8386.23	8163.63	23.39	20.31	271.39	-335.34	855.57	1703.39	1659.85	39.12	
8800.00	8202.00	8469.45	8191.46	24.55	21.04	270.38	-412.23	870.65	1741.38	1695.89	38.28	
8900.00	8202.00	8559.85	8208.49	25.78	21.97	269.77	-499.25	887.72	1779.83	1732.19	37.36	
9000.00	8202.00	8653.00	8212.00	27.08	23.05	269.66	-590.53	905.63	1818.31	1768.35	36.39	
9100.00	8202.00	8745.30	8212.00	28.44	24.15	269.67	-681.11	923.40	1856.78	1804.37	35.42	
9200.00	8202.00	8837.61	8212.00	29.84	25.32	269.67	-771.69	941.18	1895.25	1840.26	34.46	
9300.00	8202.00	8929.91	8212.00	31.28	26.56	269.68	-862.27	958.95	1933.72	1876.04	33.53	
9400.00	8202.00	9022.22	8212.00	32.76	27.85	269.69	-952.84	976.72	1972.19	1911.73	32.62	
9500.00	8202.00	9114.52	8212.00	34.27	29.20	269.69	-1043.42	994.49	2010.66	1947.34	31.75	
9600.00	8202.00	9206.82	8212.00	35.81	30.59	269.70	-1134.00	1012.26	2049.13	1982.88	30.93	
9700.00	8202.00	9299.13	8212.00	37.38	32.02	269.70	-1224.57	1030.03	2087.60	2018.35	30.14	
9800.00	8202.00	9391.43	8212.00	38.96	33.48	269.71	-1315.15	1047.80	2126.07	2053.76	29.40	
9900.00	8202.00	9483.74	8212.00	40.57	34.98	269.71	-1405.73	1065.57	2164.54	2089.13	28.70	
10000.00	8202.00	9576.04	8212.00	42.19	36.49	269.72	-1496.31	1083.34	2203.02	2124.46	28.04	
10100.00	8202.00	9668.34	8212.00	43.83	38.03	269.72	-1586.88	1101.11	2241.49	2159.75	27.42	
10200.00	8202.00	9760.65	8212.00	45.48	39.59	269.73	-1677.46	1118.88	2279.96	2195.00	26.84	
10300.00	8202.00	9852.95	8212.00	47.14	41.17	269.73	-1768.04	1136.66	2318.43	2230.23	26.29	
10400.00	8202.00	9945.26	8212.00	48.81	42.77	269.74	-1858.61	1154.43	2356.90	2265.43	25.77	



Company: Devon Energy	Date: 8/7/2012	Time: 13:06:56	Page: 6
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: CD 15 Fed #2H, Grid North		
Reference Site: Cotton Draw 15 Fed Pad	Vertical (TVD) Reference: SITE 3408.0		
Reference Well: CD 15 Fed #2H	Db: Sybase		
Reference Wellpath:			

Site: Cotton Draw 15 Fed Pad
 Well: CD 15 Fed #3H
 Wellpath: 1 V0 Plan Plan #2 V1

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis		Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft	
10500 00	8202.00	10037 56	8212 00	50 49	44.37	269.74 -1949 19	1172 20	2395.37	2300 61	25 28	
10600 00	8202.00	10129 86	8212 00	52.18	45.99	269.75 -2039 77	1189 97	2433.84	2335 76	24.82	
10700 00	8202.00	10222 17	8212 00	53 88	47.62	269.75 -2130 35	1207 74	2472.31	2370 90	24 38	
10800 00	8202.00	10314 47	8212 00	55 59	49.26	269.75 -2220 92	1225 51	2510.78	2406 02	23.97	
10900 00	8202.00	10406 78	8212 00	57 30	50.91	269.76 -2311 50	1243 28	2549.25	2441 13	23.58	
11000 00	8202.00	10499 08	8212 00	59.02	52.57	269.76 -2402.08	1261 05	2587.72	2476 22	23.21	
11100 00	8202.00	10591 38	8212 00	60.74	54.24	269.76 -2492 65	1278 82	2626.19	2511.29	22 86	
11200.00	8202.00	10683 69	8212 00	62 47	55.91	269.77 -2583.23	1296 59	2664.66	2546 36	22 52	
11300.00	8202.00	10775 99	8212 00	64 21	57.59	269.77 -2673 81	1314 36	2703.13	2581.41	22.21	
11400.00	8202.00	10868 30	8212 00	65 94	59.28	269.77 -2764 39	1332.13	2741.60	2616 46	21.91	
11500 00	8202.00	10960 60	8212 00	67 69	60.97	269.78 -2854 96	1349.91	2780.07	2651 49	21 62	
11600 00	8202.00	11052 90	8212 00	69 43	62.66	269.78 -2945 54	1367 68	2818.54	2686.52	21.35	
11700 00	8202.00	11145 21	8212 00	71 18	64.36	269.78 -3036 12	1385.45	2857.01	2721 54	21 09	
11800 00	8202.00	11237.51	8212 00	72.93	66.07	269.79 -3126.69	1403 22	2895.48	2756 55	20 84	
11900 00	8202.00	11329 81	8212.00	74 69	67.77	269.79 -3217 27	1420 99	2933.95	2791 56	20 60	
12000 00	8202.00	11422 12	8212 00	76.44	69.48	269.79 -3307.85	1438.76	2972.42	2826 56	20 38	
12100 00	8202.00	11514.42	8212 00	78 21	71.20	269.79 -3398 43	1456.53	3010.89	2861 55	20.16	
12200.00	8202.00	11606.73	8212 00	79 97	72.92	269.80 -3489 00	1474 30	3049.36	2896 54	19 95	
12300 00	8202.00	11699.03	8212 00	81.73	74.64	269.80 -3579.58	1492 07	3087.83	2931.53	19 76	
12400 00	8202.00	11791 33	8212.00	83 50	76.36	269.80 -3670 16	1509 84	3126.30	2966 51	19 56	
12500 00	8202.00	11883 64	8212 00	85.27	78.09	269.80 -3760 73	1527 61	3164.77	3001 48	19 38	
12600 00	8202.00	11975 94	8212 00	87.04	79.81	269.81 -3851 31	1545 39	3203.24	3036 45	19 20	
12700 00	8202.00	12068 25	8212.00	88.81	81.54	269.81 -3941 89	1563 16	3241.71	3071 42	19 04	
12784.61	8202.00	12146 34	8212 00	90 31	83.01	269.81 -4018 52	1578.19	3274.26	3101 00	18.90	