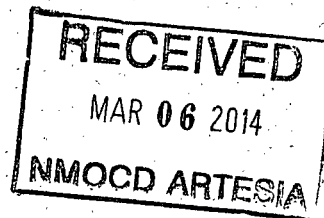


A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

July 29, 2013



Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

15-41385

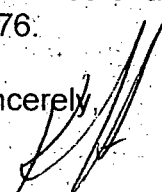
Attn: Patti Riechers

Re: **Cotton Draw Unit No 167H**

Please find enclosed a copy of the survey from 0' to 7,532' ran on the above referenced well.

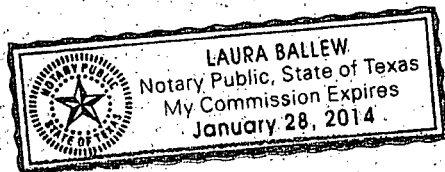
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

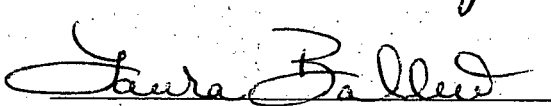
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 29th day of July, A.D., 2013, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: Devon Energy
Lease/Well: Cotton Draw Unit/No 167H

Rig Name: H&P 214
State/County: New Mexico/Eddy
Latitude: 32.19, Longitude: -103.73
GRID North is 0.32 Degrees East of True North
VS-Azi: 179.50 Degrees



DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: cottondraw167-01-de_01.ut

Minimum Curvature Method

Report Date/Time: 7/29/2013 / 09:24

Vaughn Energy Services

Corpus Christi, Texas

800-606-4976

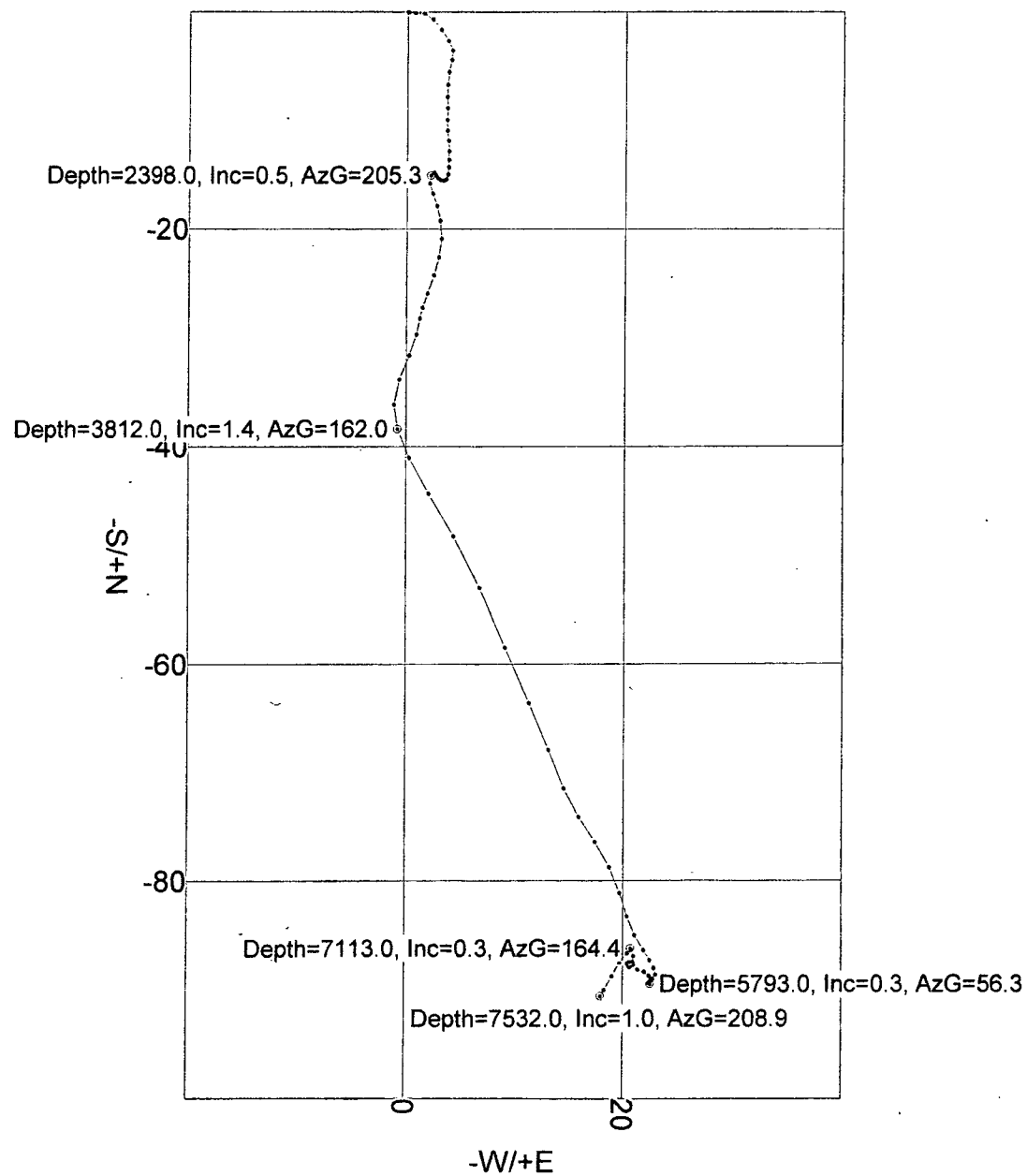
Survey Engineer: Daniel Miller

Cotton Draw Unit No 167H / API 30-015-41385

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
40.00	0.28	115.66	40.00	-0.04	0.09	0.04	0.10	115.66	0.70
135.00	0.46	85.55	135.00	-0.11	0.68	0.12	0.68	99.53	0.27
229.00	0.56	98.63	228.99	-0.15	1.50	0.17	1.51	95.81	0.16
323.00	0.73	141.99	322.99	-0.69	2.32	0.71	2.42	106.57	0.53
418.00	0.74	140.90	417.98	-1.64	3.08	1.67	3.49	118.04	0.02
512.00	0.76	153.77	511.97	-2.67	3.74	2.70	4.59	125.54	0.18
606.00	0.37	163.68	605.97	-3.52	4.10	3.56	5.40	130.68	0.42
700.00	0.75	194.01	699.96	-4.41	4.04	4.45	5.98	137.55	0.49
795.00	0.64	189.12	794.96	-5.54	3.80	5.57	6.72	145.52	0.13
889.00	0.78	183.71	888.95	-6.69	3.68	6.72	7.64	151.20	0.17
983.00	0.57	179.15	982.94	-7.80	3.64	7.83	8.61	154.95	0.23
1078.00	0.68	178.96	1077.94	-8.83	3.66	8.86	9.56	157.48	0.12
1172.00	0.66	182.79	1171.93	-9.92	3.64	9.95	10.57	159.83	0.05
1266.00	0.55	174.63	1265.93	-10.91	3.66	10.94	11.50	161.45	0.15
1361.00	0.58	172.49	1360.92	-11.83	3.77	11.86	12.42	162.35	0.04
1455.00	0.62	180.86	1454.92	-12.81	3.82	12.85	13.37	163.40	0.10
1549.00	0.38	178.80	1548.91	-13.63	3.82	13.66	14.16	164.35	0.26
1643.00	0.43	184.58	1642.91	-14.29	3.80	14.32	14.78	165.12	0.07
1738.00	0.38	188.97	1737.91	-14.95	3.72	14.99	15.41	166.03	0.06



Vaughn Energy Services
Corpus Christi, Texas
800-606-4976
Survey Engineer: Daniel Miller
Cotton Draw Unit No 167H / API 30-015-41385





Weatherford

**DRILLING SERVICES
END OF WELL REPORT
FOR
Ryan Clark
Devon Energy
Cotton Draw Unit #167H
Eddy County, New Mexico**

Weatherford Drilling Services job start date : 7-22-2013

Weatherford Drilling Services job end date : 9-4-2013

Presented By:

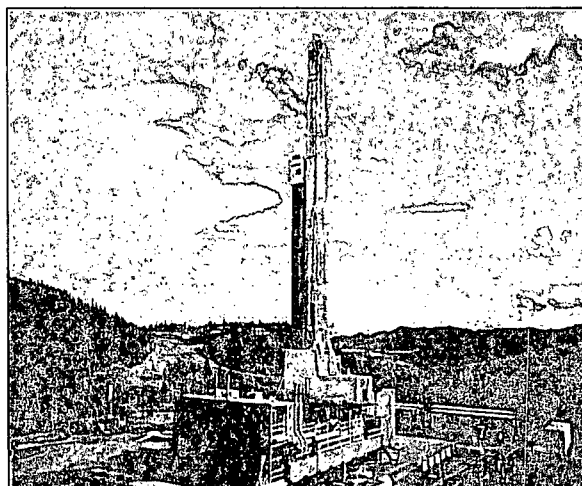
Damien Tarpley
Area Manager

Scott Dixon
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

H&P 214





10000 West County Road 116
P.O. Box 61028
Midland, Texas 79711
Phone (432) 561-8892

September 9, 2013

Ryan Clark
333 W. Sherridan Ave
Oklahoma City, OK 73102

Reference Well Name : Cotton Draw Unit #167H
Location : Eddy County, New Mexico
Wft Job # : 4030068
Rig : H&P 214

Dear Mr. Clark

Thank you for allowing us the opportunity to provide our services on your Cotton Draw Unit #167H in Eddy County, New Mexico.

Please find the final End Of Well (EOW) report enclosed behind this coverletter.

The EOW report contains the following information :

Section 1 - Weatherford (Wft) Final Definitive Survey & 8.5" x 11".

- * Note: This survey contains the Directional Survey's obtained by Weatherford Drilling Services via Weatherford MWD Services, and any gyro survey needed for Tie On (if required).

Section 2- Days vs. Feet Drilled (24 hrs) and Days vs. Depth Graphs

Section 3- Wft Gamma Logs

Section 4 - Wft Final BHA reports (BHA Graphic Reports, BHA Detail Reports, Motor Evaluation Reports, and BHA Slide Reports).

Section 5 - Wft Final Daily Drilling reports.

Section 6 - Wft Personnel list with contact numbers.

We at *Weatherford Drilling Services*' understand the importance of this project to you and hope that you were satisfied with our Directional Drilling and MWD services provided.

Please feel free to contact me if you have any questions.

Sincerely,

Damien Tarpley
Area Manager
Weatherford Drilling Services
Midland, TX (432) 561-8892



Weatherford

Devon Energy
Cotton Draw Unit #167H
Eddy County, New Mexico

Section 1

Weatherford (Wft) Final Definitive

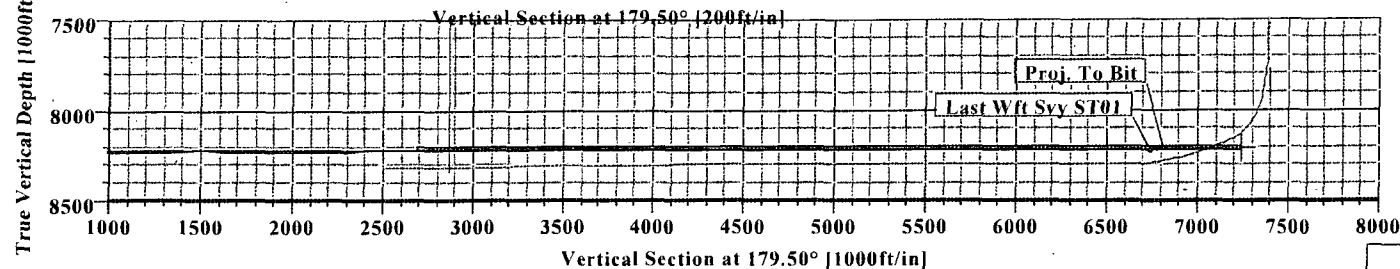
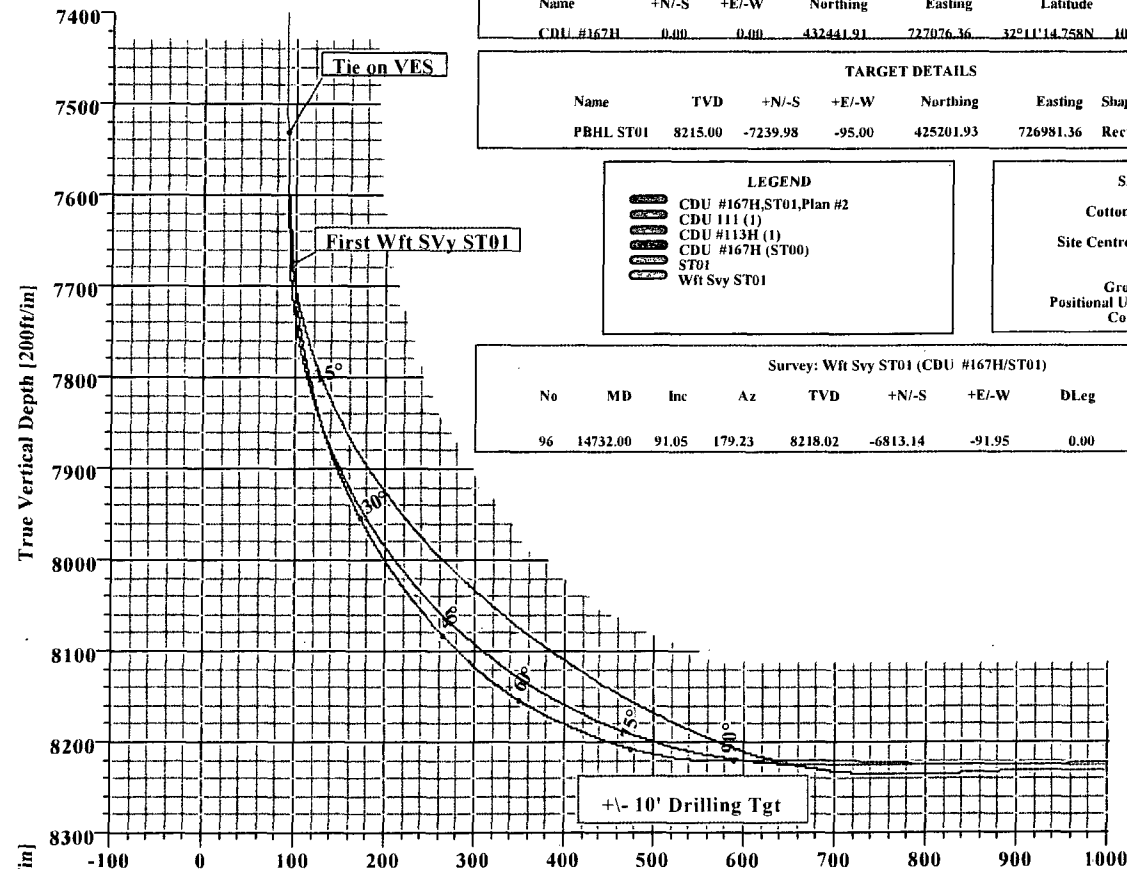
Plot & Survey

devon

Cotton Draw #167H
Eddy Co., New Mexico



KB ELEV: 3551
GL ELEV: 3526



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	10223.00	90.07	181.52	8223.35	-2306.89	-126.90	0.00	0.00	2305.70	
2	10302.26	91.50	179.62	8222.26	-2386.13	-127.69	3.00	306.98	2384.93	
3	10554.76	91.50	179.62	8215.65	-2639.54	-126.02	0.00	0.00	2637.34	
4	10604.76	90.00	179.61	8215.00	-2688.54	-125.68	3.00	-179.76	2687.34	
5	15156.31	90.00	179.61	8215.00	-7239.98	-95.00	0.00	0.00	7238.88	PBHL ST01

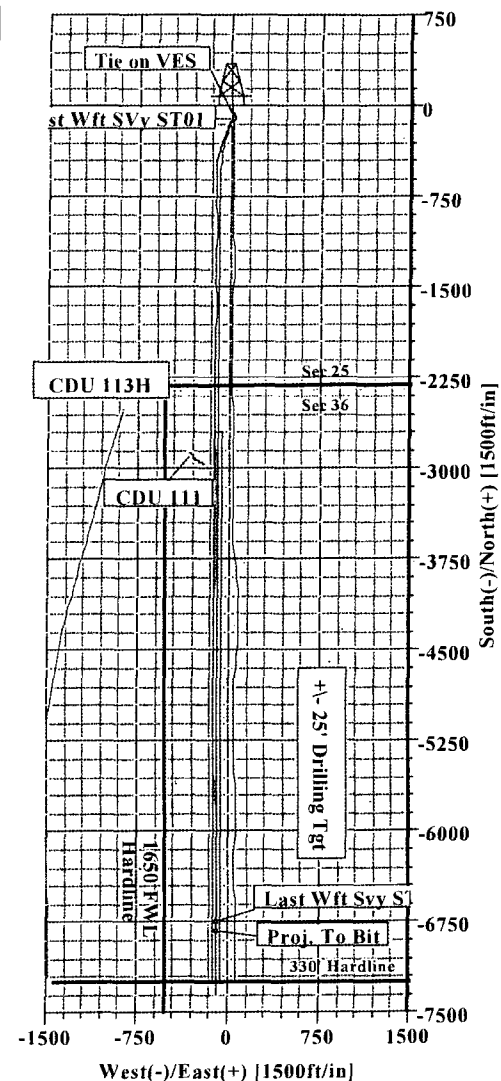
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
CDU #167H	0.00	0.00	432441.91	727076.36	32°11'14.758N	103°43'58.575W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL ST01	8215.00	-7239.98	-95.00	425201.93	726981.36	Rectangle (4552x50)

LEGEND	
	CDU #167H, ST01, Plan #2
	CDU 111 (1)
	CDU #113H (1)
	CDU #167H (ST00)
	ST01
	Wft SVy ST01

SITE DETAILS	
Cotton Draw Unit #167H	
Site Centre Northing:	432441.91
Easting:	727076.36
Ground Level:	3526.00
Positional Uncertainty:	0.00
Convergence:	0.32

Survey: Wft SVy ST01 (CDU #167H/ST01)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
96	14732.00	91.05	179.23	8218.02	-6813.14	-91.95	0.00	0.00	6812.08	





Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy Date: 9/4/2013 Time: 13:47:57 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate (NE) Reference: Well: CDU #167H Grid North
Site: Cotton Draw Unit #167H Vertical (TVD) Reference: SITE 3551.0
Well: CDU #167H Section (VS) Reference: Well (0.00N 0.00E 179.50Azi)
Wellpath: ST01 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy ST01 Start Date: 8/20/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Cotton Draw Unit #167H
Site Position: Northing: 432441.91 ft Latitude: 32 11 14.758 N
From: Map Easting: 727076.36 ft Longitude: 103 43 58.575 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3526.00 ft Grid Convergence: 0.32 deg

Well: CDU #167H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 432441.91 ft Latitude: 32 11 14.758 N
+E/-W 0.00 ft Easting: 727076.36 ft Longitude: 103 43 58.575 W
Position Uncertainty: 0.00 ft

Wellpath: ST01 Drilled From: ST00
Current Datum: SITE Height 3551.00 ft Tie-on Depth: 10223.00 ft
Magnetic Data: 8/13/2013 Above System Datum: Mean Sea Level
Field Strength: 48386 nT Declination: 7.39 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 179.50

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7532.00	0.98	208.93	7530.46	-90.54	17.95	0.00	90.69	432351.37	727094.31	Tie on VES First Wft Svy S
7676.00	6.39	229.62	7674.11	-96.81	11.24	3.81	96.91	432345.10	727087.60	
7708.00	7.95	223.70	7705.86	-99.57	8.36	5.39	99.64	432342.34	727084.72	
7739.00	10.04	215.21	7736.48	-103.33	5.32	7.97	103.37	432338.58	727081.68	
7771.00	12.59	207.47	7767.86	-108.70	2.10	9.26	108.71	432333.21	727078.46	
7802.00	14.39	207.12	7798.00	-115.13	-1.21	5.81	115.11	432326.78	727075.15	
7833.00	16.85	207.97	7827.85	-122.53	-5.08	7.97	122.48	432319.38	727071.28	
7865.00	20.03	206.28	7858.21	-131.54	-9.68	10.08	131.45	432310.37	727066.68	
7896.00	22.42	204.25	7887.10	-141.69	-14.46	8.06	141.56	432300.22	727061.90	
7928.00	26.29	202.88	7916.25	-153.79	-19.72	12.22	153.61	432288.12	727056.64	
7959.00	28.87	202.95	7943.72	-167.01	-25.31	8.32	166.78	432274.90	727051.05	
7991.00	31.99	203.04	7971.31	-181.92	-31.64	9.75	181.64	432259.99	727044.72	
8022.00	34.59	201.96	7997.22	-197.64	-38.15	8.60	197.30	432244.27	727038.21	
8053.00	37.66	201.04	8022.26	-214.65	-44.84	10.06	214.25	432227.26	727031.52	
8084.00	40.70	199.92	8046.29	-232.99	-51.68	10.07	232.53	432208.92	727024.68	
8116.00	43.54	200.62	8070.02	-253.12	-59.12	9.00	252.60	432188.79	727017.24	
8144.00	45.89	200.47	8089.92	-271.57	-66.04	8.40	270.98	432170.34	727010.32	
8175.00	49.20	200.47	8110.84	-292.99	-74.03	10.68	292.34	432148.92	727002.33	
8207.00	53.87	199.87	8130.74	-316.51	-82.67	14.67	315.77	432125.40	726993.69	
8238.00	58.25	199.28	8148.04	-340.73	-91.28	14.22	339.92	432101.18	726985.08	
8270.00	62.58	197.74	8163.84	-367.12	-100.10	14.16	366.23	432074.79	726976.26	
8301.00	66.00	194.67	8177.29	-393.93	-107.88	14.19	392.98	432047.98	726968.48	
8332.00	68.20	190.77	8189.35	-421.78	-114.16	13.59	420.77	432020.13	726962.20	
8364.00	71.70	187.53	8200.33	-451.45	-118.93	14.49	450.40	431990.46	726957.43	
8395.00	75.50	185.75	8209.08	-480.99	-122.36	13.44	479.90	431960.92	726954.00	
8427.00	80.37	184.36	8215.76	-512.15	-125.12	15.80	511.04	431929.76	726951.24	
8458.00	84.82	182.30	8219.76	-542.83	-126.90	15.79	541.70	431899.08	726949.46	
8490.00	88.81	180.28	8221.54	-574.76	-127.62	13.97	573.63	431867.15	726948.74	
8521.00	91.05	179.09	8221.57	-605.76	-127.45	8.18	604.62	431836.15	726948.91	
8553.00	91.12	179.21	8220.97	-637.75	-126.97	0.43	636.62	431804.16	726949.39	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #167H
Well: CDU #167H
Wellpath: ST01

Date: 9/4/2013 Time: 13:47:57 Page: 2
Co-ordinate(N/E) Reference: Well: CDU #167H, Grid: North
Vertical (TVD) Reference: SITE 3551.0
Section (VS) Reference: Well (0.00N, 0.00E, 179.50Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
8620.00	88.53	176.35	8221.17	-704.69	-124.38	5.76	703.57	431737.22	726951.98	
8714.00	87.55	176.45	8224.39	-798.44	-118.48	1.05	797.38	431643.47	726957.88	
8808.00	90.98	179.23	8225.59	-892.35	-114.94	4.70	891.31	431549.56	726961.42	
8902.00	92.03	180.24	8223.13	-986.31	-114.50	1.55	985.27	431455.60	726961.86	
8997.00	91.12	181.32	8220.51	-1081.26	-115.80	1.49	1080.21	431360.65	726960.56	
9091.00	88.95	180.67	8220.46	-1175.24	-117.43	2.41	1174.17	431266.67	726958.93	
9185.00	88.11	181.15	8222.87	-1269.20	-118.92	1.03	1268.11	431172.71	726957.44	
9280.00	88.95	179.45	8225.31	-1364.16	-119.42	2.00	1363.07	431077.75	726956.99	
9374.00	89.65	178.18	8226.45	-1458.13	-117.47	1.54	1457.05	430983.78	726958.89	
9469.00	90.84	179.22	8226.05	-1553.10	-115.32	1.66	1552.04	430888.81	726961.04	
9563.00	90.63	180.52	8224.84	-1647.09	-115.11	1.40	1646.03	430794.82	726961.25	
9657.00	90.77	181.08	8223.69	-1741.08	-116.42	0.61	1740.00	430700.83	726959.94	
9752.00	91.05	182.43	8222.18	-1836.02	-119.33	1.45	1834.91	430605.89	726957.03	
9846.00	90.00	181.98	8221.32	-1929.94	-122.94	1.22	1928.80	430511.97	726953.42	
9940.00	90.14	180.25	8221.21	-2023.92	-124.77	1.85	2022.76	430417.99	726951.59	
10034.00	89.30	179.72	8221.67	-2117.92	-124.75	1.06	2116.75	430323.99	726951.61	
10129.00	89.30	180.69	8222.83	-2212.91	-125.09	1.02	2211.74	430229.00	726951.27	
10223.00	90.07	181.52	8223.35	-2306.89	-126.90	1.20	2305.70	430135.02	726949.46	
10317.00	89.16	181.81	8223.98	-2400.85	-129.63	1.02	2399.63	430041.06	726946.73	
10412.00	88.46	179.37	8225.95	-2495.82	-130.61	2.67	2494.58	429946.09	726945.75	
10507.00	89.72	178.07	8227.46	-2590.78	-128.49	1.91	2589.56	429851.13	726947.87	
10601.00	91.75	177.21	8226.25	-2684.68	-124.62	2.35	2683.49	429757.23	726951.74	
10695.00	91.96	177.12	8223.21	-2778.52	-119.97	0.24	2777.37	429663.39	726956.39	
10790.00	91.89	176.83	8220.02	-2873.33	-114.96	0.31	2872.22	429568.58	726961.40	
10884.00	92.31	179.15	8216.57	-2967.20	-111.67	2.51	2966.12	429474.71	726964.69	
10979.00	89.58	179.70	8215.01	-3062.18	-110.71	2.93	3061.09	429379.73	726965.65	
11073.00	89.65	180.48	8215.64	-3156.17	-110.86	0.83	3155.09	429285.74	726965.50	
11168.00	88.88	180.82	8216.86	-3251.16	-111.94	0.89	3250.06	429190.75	726964.42	
11262.00	90.63	179.87	8217.26	-3345.15	-112.50	2.12	3344.04	429096.76	726963.86	
11357.00	89.02	179.68	8217.55	-3440.15	-112.13	1.71	3439.04	429001.76	726964.23	
11451.00	91.47	180.38	8217.15	-3534.14	-112.18	2.71	3533.03	428907.77	726964.18	
11545.00	88.74	180.04	8216.98	-3628.13	-112.52	2.93	3627.01	428813.78	726963.84	
11639.00	90.63	180.48	8217.49	-3722.12	-112.95	2.06	3721.00	428719.79	726963.41	
11733.00	91.96	181.45	8215.37	-3816.08	-114.53	1.75	3814.94	428625.83	726961.83	
11827.00	89.51	181.24	8214.16	-3910.04	-116.74	2.62	3908.87	428531.87	726959.62	
11922.00	89.65	182.33	8214.86	-4004.99	-119.70	1.16	4003.79	428436.92	726956.66	
12016.00	89.37	182.28	8215.66	-4098.91	-123.48	0.30	4097.68	428343.00	726952.88	
12110.00	87.41	180.46	8218.30	-4192.84	-125.73	2.84	4191.58	428249.07	726950.63	
12204.00	89.79	179.99	8220.60	-4286.80	-126.10	2.58	4285.54	428155.11	726950.26	
12299.00	90.84	179.64	8220.08	-4381.80	-125.79	1.17	4380.54	428060.11	726950.57	
12393.00	91.33	179.96	8218.30	-4475.78	-125.46	0.62	4474.52	427966.13	726950.90	
12487.00	91.19	179.97	8216.23	-4569.76	-125.40	0.15	4568.49	427872.15	726950.96	
12582.00	91.33	180.74	8214.14	-4664.73	-125.99	0.82	4663.46	427777.18	726950.37	
12676.00	88.88	179.34	8213.97	-4758.72	-126.06	3.00	4757.44	427683.19	726950.30	
12771.00	88.81	179.25	8215.88	-4853.70	-124.89	0.12	4852.42	427588.21	726951.47	
12865.00	89.79	179.83	8217.03	-4947.69	-124.13	1.21	4946.41	427494.22	726952.23	
12960.00	89.65	180.18	8217.50	-5042.68	-124.14	0.40	5041.41	427399.23	726952.22	
13054.00	88.88	180.62	8218.70	-5136.67	-124.80	0.94	5135.39	427305.24	726951.56	
13149.00	88.74	179.16	8220.68	-5231.65	-124.62	1.54	5230.36	427210.26	726951.74	
13243.00	92.10	180.96	8219.99	-5325.63	-124.71	4.05	5324.34	427116.28	726951.65	
13338.00	89.86	178.09	8218.36	-5420.60	-123.93	3.83	5419.31	427021.31	726952.43	
13432.00	89.37	174.92	8218.99	-5514.41	-118.20	3.41	5513.17	426927.50	726958.16	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Devon Energy
Field: Eddy Co. NM (NAD 83)
Site: Cotton Draw Unit #167H
Well: CDU #167H
Wellpath: ST01
Date: 9/4/2013
Time: 13:47:57
Page: 3
Co-ordinate(NE) Reference: Well CDU #167H; Grid North
Vertical (TVD) Reference: SITE 3551.0
Section (VS) Reference: Well (0.00N;0.00E;179.50Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
13526.00	89.79	175.90	8219.68	-5608.10	-110.67	1.13	5606.92	426833.81	726965.69	
13621.00	89.65	174.79	8220.15	-5702.79	-102.96	1.18	5701.67	426739.12	726973.40	
13716.00	88.81	175.46	8221.42	-5797.43	-94.89	1.13	5796.38	426644.48	726981.47	
13810.00	91.68	178.96	8221.02	-5891.30	-90.32	4.81	5890.28	426550.61	726986.04	
13904.00	91.12	180.77	8218.73	-5985.26	-90.10	2.02	5984.25	426456.65	726986.26	
13998.00	89.79	180.63	8217.98	-6079.25	-91.24	1.42	6078.22	426362.66	726985.12	
14092.00	88.53	181.01	8219.36	-6173.23	-92.59	1.40	6172.19	426268.68	726983.77	
14187.00	89.16	180.73	8221.27	-6268.20	-94.03	0.73	6267.14	426173.71	726982.33	
14281.00	90.28	180.43	8221.73	-6362.19	-94.98	1.23	6361.12	426079.72	726981.38	
14375.00	90.91	179.47	8220.75	-6456.18	-94.90	1.22	6455.11	425985.73	726981.46	
14469.00	89.79	180.41	8220.18	-6550.18	-94.80	1.56	6549.10	425891.73	726981.56	
14564.00	90.07	179.05	8220.30	-6645.18	-94.36	1.46	6644.10	425796.73	726982.00	
14658.00	91.05	179.23	8219.38	-6739.16	-92.94	1.06	6738.09	425702.75	726983.42	Last Wft Svy ST
14732.00	91.05	179.23	8218.02	-6813.14	-91.95	0.00	6812.08	425628.77	726984.41	Proj. To Bit

Annotation

MD ft	TVD ft	
7532.00	7530.46	Tie on VES
7676.00	7674.11	First Wft Svy ST01
14658.00	8219.38	Last Wft Svy ST01
14732.00	8218.02	Proj. To Bit



Cotton Draw #167H
Eddy Co., New Mexico

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7532.00	0.98	208.93	7530.46	-90.54	17.95	0.00	0.00	90.69	
2	7627.00	0.98	208.93	7625.45	-91.96	17.16	0.00	0.00	92.11	
3	8581.89	90.00	179.59	8230.00	-705.64	16.44	9.34	-29.34	705.76	
4	15116.39	90.00	179.59	8230.00	-7239.98	62.65	0.00	0.00	7240.25	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
CDU #167H	0.00	0.00	432441.91	727076.36	32°11'14.758N	103°43'58.575W	N/A

TARGET DETAILS

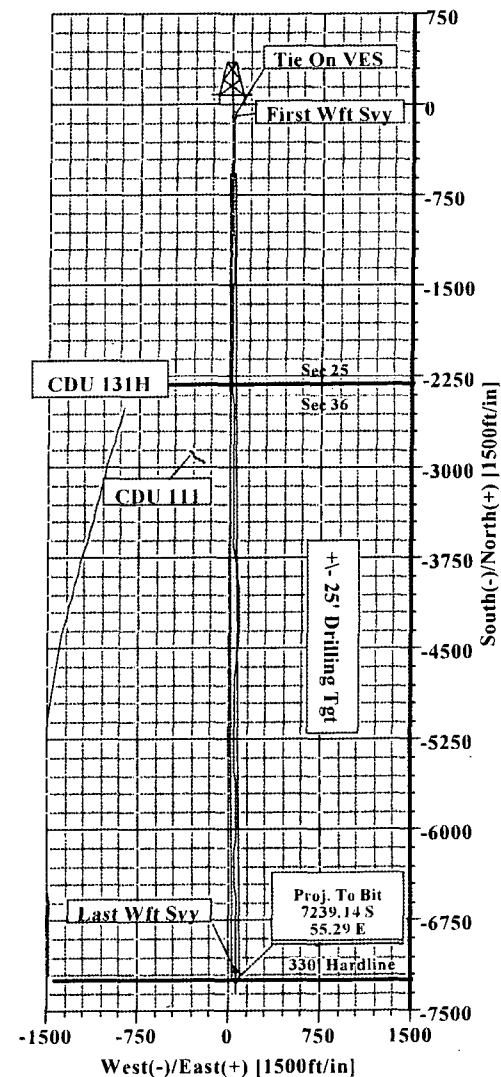
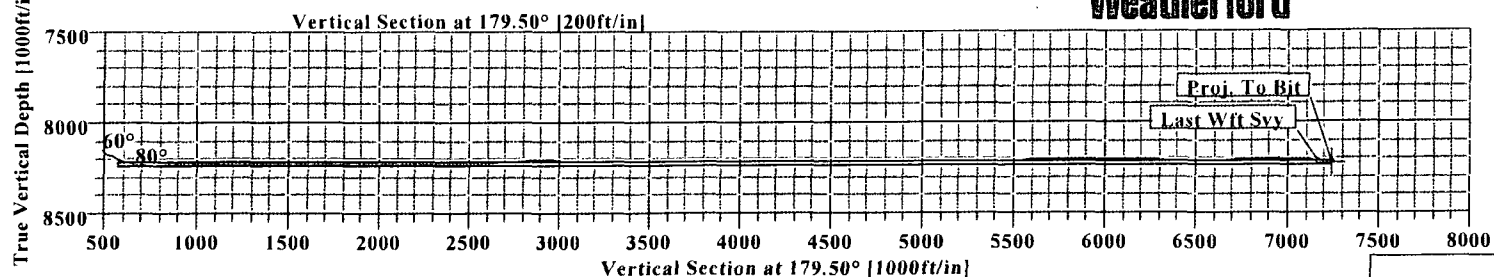
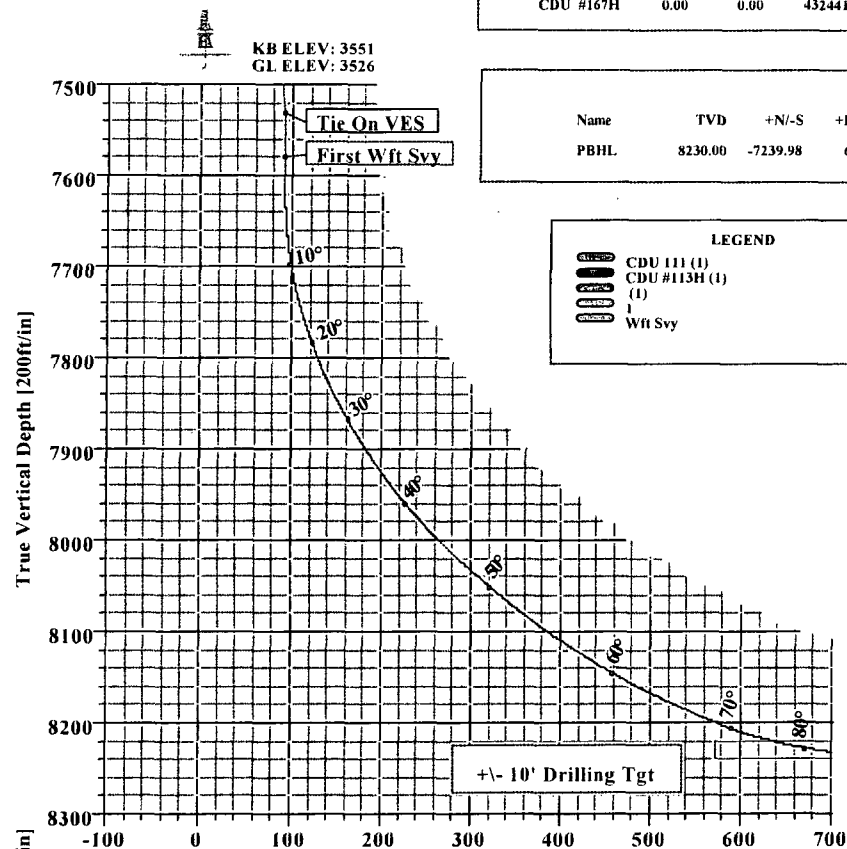
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8230.00	-7239.98	62.65	425201.93	727139.01	Rectangle (6667x50)

LEGEND

- CDU 111 (1)
- CDU #113H (1)
- Wft Svy

SITE DETAILS

Cotton Draw Unit #167H
Site Centre Northing: 432441.91
Easting: 727076.36
Ground Level: 3526.00
Positional Uncertainty: 0.00
Convergence: 0.32





Weatherford

Wft Survey Report X Y's.

**Weatherford**

Company: Devon Energy Date: 8/7/2013 Time: 06:30:50 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: CDU #167H; Grid North
Site: Cotton Draw Unit #167H Vertical (TVD) Reference: SITE 3551.0
Well: CDU #167H Section (VS) Reference: Well (0.00N;0.00E;179.50Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 7/24/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Cotton Draw Unit #167H
Site Position: Northing: 432441.91 ft Latitude: 32 11 14.758 N
From: Map Easting: 727076.36 ft Longitude: 103 43 58.575 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3526.00 ft Grid Convergence: 0.32 deg

Well: CDU #167H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 432441.91 ft Latitude: 32 11 14.758 N
+E/-W 0.00 ft Easting: 727076.36 ft Longitude: 103 43 58.575 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height 3551.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 5/15/2013 Above System Datum: Mean Sea Level
Field Strength: 48410 nT Declination: 7.42 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 179.50

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7532.00	0.98	208.93	7530.46	-90.54	17.95	0.00	90.69	432351.37	727094.31	Tie On VES First Wft Svy
7581.00	0.85	203.87	7579.45	-91.24	17.60	0.31	91.39	432350.67	727093.96	
7612.00	1.13	206.91	7610.45	-91.72	17.37	0.92	91.87	432350.19	727093.73	
7644.00	3.17	205.29	7642.42	-92.80	16.85	6.38	92.95	432349.11	727093.21	
7675.00	6.52	197.47	7673.31	-95.26	15.95	10.99	95.39	432346.65	727092.31	
7706.00	10.84	186.74	7703.95	-99.83	15.08	14.82	99.96	432342.08	727091.44	
7738.00	14.78	182.68	7735.15	-106.90	14.54	12.62	107.03	432335.01	727090.90	
7769.00	18.00	180.35	7764.88	-115.64	14.32	10.60	115.77	432326.27	727090.68	
7801.00	21.35	176.95	7795.01	-126.41	14.60	11.06	126.53	432315.50	727090.96	
7832.00	24.89	176.61	7823.52	-138.56	15.29	11.43	138.69	432303.35	727091.65	
7863.00	28.02	179.00	7851.27	-152.36	15.80	10.66	152.49	432289.55	727092.16	
7895.00	31.41	183.01	7879.06	-168.21	15.50	12.28	168.33	432273.70	727091.86	
7926.00	34.74	184.36	7905.03	-185.08	14.40	11.00	185.20	432256.83	727090.76	
7958.00	37.15	183.70	7930.94	-203.82	13.08	7.63	203.93	432238.09	727089.44	
7989.00	39.39	182.30	7955.28	-222.99	12.08	7.75	223.09	432218.92	727088.44	
8020.00	42.51	180.69	7978.69	-243.30	11.56	10.62	243.39	432198.61	727087.92	
8052.00	45.71	179.93	8001.66	-265.57	11.45	10.14	265.66	432176.34	727087.81	
8083.00	47.98	179.57	8022.86	-288.18	11.55	7.37	288.27	432153.73	727087.91	
8114.00	49.44	179.44	8043.32	-311.47	11.75	4.72	311.56	432130.44	727088.11	
8146.00	50.86	180.12	8063.82	-336.04	11.84	4.73	336.13	432105.87	727088.20	
8177.00	53.44	179.87	8082.84	-360.52	11.84	8.35	360.61	432081.39	727088.20	
8209.00	55.89	179.79	8101.35	-386.62	11.92	7.66	386.71	432055.29	727088.28	
8240.00	58.01	179.93	8118.25	-412.60	11.99	6.85	412.69	432029.31	727088.35	
8271.00	58.98	180.42	8134.45	-439.03	11.90	3.41	439.12	432002.88	727088.26	
8303.00	60.52	180.53	8150.57	-466.67	11.67	4.82	466.76	431975.24	727088.03	
8334.00	63.61	180.50	8165.09	-494.06	11.43	9.97	494.14	431947.85	727087.79	
8366.00	65.01	180.05	8178.97	-522.89	11.29	4.55	522.97	431919.02	727087.65	
8397.00	66.54	178.97	8191.69	-551.16	11.53	5.87	551.24	431890.75	727087.89	
8429.00	68.81	178.64	8203.84	-580.75	12.15	7.16	580.84	431861.16	727088.51	
8460.00	72.74	178.62	8214.05	-610.01	12.85	12.68	610.10	431831.90	727089.21	



Weatherford

Wft Survey Report X Y's.



Weatherford

Company: Devon Energy Date: 8/7/2013 Time: 06:30:50 Page: 2
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: CDU #167H, Grid North
Site: Cotton Draw Unit #167H Vertical(TVD) Reference: SITE 3551.0
Well: CDU #167H Section (VS) Reference: Well (0.00N,0.00E,179.50Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
8491.00	76.66	178.91	8222.22	-639.90	13.50	12.68	639.99	431802.01	727089.86	
8523.00	80.16	180.63	8228.65	-671.24	13.62	12.14	671.33	431770.67	727089.98	
8554.00	83.98	181.19	8232.93	-701.93	13.13	12.45	702.02	431739.98	727089.49	
8586.00	88.19	180.60	8235.11	-733.85	12.63	13.28	733.93	431708.06	727088.99	
8617.00	89.79	179.76	8235.66	-764.84	12.53	5.83	764.92	431677.07	727088.89	
8711.00	92.87	178.28	8233.48	-858.79	14.14	3.63	858.88	431583.12	727090.50	
8733.00	92.73	177.36	8232.40	-880.74	14.98	4.23	880.84	431561.17	727091.34	
8827.00	89.79	178.22	8230.34	-974.64	18.60	3.26	974.77	431467.27	727094.96	
8922.00	88.46	177.12	8231.79	-1069.55	22.46	1.82	1069.70	431372.36	727098.82	
9016.00	89.86	178.50	8233.17	-1163.46	26.05	2.09	1163.65	431278.45	727102.41	
9110.00	90.77	180.87	8232.65	-1257.45	26.57	2.70	1257.64	431184.46	727102.93	
9205.00	91.33	180.70	8230.91	-1352.43	25.27	0.62	1352.60	431089.48	727101.63	
9299.00	91.12	181.02	8228.90	-1446.40	23.86	0.41	1446.55	430995.51	727100.22	
9394.00	89.65	180.54	8228.26	-1541.38	22.56	1.63	1541.52	430900.53	727098.92	
9488.00	88.88	180.96	8229.47	-1635.37	21.33	0.93	1635.49	430806.54	727097.69	
9583.00	88.60	181.66	8231.56	-1730.32	19.16	0.79	1730.42	430711.59	727095.52	
9677.00	90.56	180.04	8232.24	-1824.30	17.77	2.71	1824.38	430617.61	727094.13	
9771.00	90.70	180.46	8231.21	-1918.29	17.36	0.47	1918.37	430523.62	727093.72	
9865.00	90.98	181.10	8229.83	-2012.27	16.08	0.74	2012.33	430429.64	727092.44	
9960.00	89.79	179.22	8229.19	-2107.26	15.81	2.34	2107.32	430334.65	727092.17	
10054.00	89.23	178.92	8230.00	-2201.25	17.34	0.68	2201.31	430240.66	727093.70	
10148.00	90.77	179.48	8230.00	-2295.23	18.65	1.74	2295.31	430146.68	727095.01	
10243.00	90.84	178.13	8228.66	-2390.20	20.63	1.42	2390.29	430051.71	727096.99	
10337.00	90.70	178.24	8227.40	-2484.15	23.61	0.19	2484.26	429957.76	727099.97	
10432.00	91.33	177.47	8225.72	-2579.06	27.17	1.05	2579.20	429862.85	727103.53	
10526.00	93.01	179.18	8222.16	-2672.95	29.91	2.55	2673.11	429768.96	727106.27	
10621.00	93.01	180.01	8217.17	-2767.81	30.58	0.87	2767.98	429674.10	727106.94	
10715.00	91.75	179.67	8213.27	-2861.73	30.84	1.39	2861.89	429580.18	727107.20	
10810.00	89.09	178.88	8212.57	-2956.71	32.05	2.92	2956.88	429485.20	727108.41	
10904.00	89.02	180.42	8214.12	-3050.69	32.62	1.64	3050.86	429391.22	727108.98	
10999.00	89.86	182.28	8215.05	-3145.66	30.38	2.15	3145.80	429296.25	727106.74	
11093.00	89.72	182.32	8215.39	-3239.58	26.61	0.15	3239.69	429202.33	727102.97	
11188.00	89.37	181.18	8216.15	-3334.53	23.71	1.26	3334.61	429107.38	727100.07	
11282.00	88.46	177.70	8217.93	-3428.50	24.63	3.83	3428.58	429013.41	727100.99	
11376.00	90.91	177.13	8218.44	-3522.39	28.87	2.68	3522.51	428919.52	727105.23	
11470.00	90.84	177.41	8217.01	-3616.27	33.34	0.31	3616.43	428825.64	727109.70	
11565.00	90.42	171.83	8215.96	-3710.81	42.25	5.89	3711.04	428731.10	727118.61	
11659.00	89.23	170.76	8216.25	-3803.73	56.47	1.70	3804.07	428638.18	727132.83	
11753.00	89.65	173.77	8217.17	-3896.85	69.12	3.23	3897.31	428545.06	727145.48	
11847.00	89.44	177.32	8217.92	-3990.55	76.42	3.78	3991.07	428451.36	727152.78	
11941.00	90.35	180.34	8218.09	-4084.52	78.34	3.36	4085.05	428357.39	727154.70	
12035.00	91.19	181.17	8216.83	-4178.50	77.10	1.26	4179.02	428263.41	727153.46	
12130.00	88.04	178.82	8217.46	-4273.48	77.11	4.14	4273.99	428168.43	727153.47	
12224.00	89.93	180.71	8219.13	-4367.46	77.50	2.84	4367.97	428074.45	727153.86	
12318.00	90.56	183.56	8218.73	-4461.38	73.99	3.11	4461.86	427980.53	727150.35	
12412.00	88.95	184.28	8219.13	-4555.16	67.57	1.88	4555.57	427886.75	727143.93	
12506.00	92.31	184.92	8218.10	-4648.83	60.03	3.64	4649.18	427793.08	727136.39	
12601.00	90.84	183.46	8215.48	-4743.54	53.09	2.18	4743.82	427698.37	727129.45	
12615.00	90.70	183.66	8215.30	-4757.51	52.22	1.74	4757.79	427684.40	727128.58	
12709.00	89.86	182.05	8214.84	-4851.39	47.54	1.93	4851.62	427590.52	727123.90	
12804.00	88.53	180.93	8216.17	-4946.34	45.07	1.83	4946.55	427495.57	727121.43	
12898.00	89.72	180.59	8217.61	-5040.32	43.83	1.32	5040.51	427401.59	727120.19	



Weatherford

Wft Survey Report X Y's.



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #167H
Well: CDU #167H
Wellpath: 1

Date: 8/7/2013 Time: 06:30:50 Page: 3
Co-ordinate(NE) Reference: Well: CDU #167H, Grid North
Vertical (TVD) Reference: SITE 3551.0
Section (VS) Reference: Well (0.00N,0.00E,179.50Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
12993.00	89.79	180.82	8218.01	-5135.32	42.66	0.25	5135.49	427306.59	727119.02	
13087.00	89.37	179.26	8218.70	-5229.31	42.59	1.72	5229.48	427212.60	727118.95	
13182.00	89.86	177.06	8219.34	-5324.25	45.64	2.37	5324.45	427117.66	727122.00	
13276.00	91.12	177.80	8218.54	-5418.15	49.86	1.55	5418.38	427023.76	727126.22	
13371.00	91.75	178.44	8216.16	-5513.07	52.97	0.95	5513.32	426928.84	727129.33	
13465.00	91.89	177.74	8213.17	-5606.97	56.10	0.76	5607.25	426834.94	727132.46	
13560.00	89.86	179.12	8211.72	-5701.92	58.71	2.58	5702.21	426739.99	727135.07	
13654.00	89.86	179.65	8211.95	-5795.91	59.71	0.56	5796.21	426646.00	727136.07	
13749.00	90.56	180.59	8211.60	-5890.91	59.52	1.23	5891.20	426551.00	727135.88	
13843.00	90.42	181.06	8210.80	-5984.89	58.16	0.52	5985.17	426457.02	727134.52	
13937.00	90.49	181.47	8210.05	-6078.87	56.09	0.44	6079.13	426363.04	727132.45	
14031.00	90.56	181.44	8209.19	-6172.83	53.70	0.08	6173.07	426269.08	727130.06	
14126.00	87.69	181.46	8210.64	-6267.78	51.30	3.02	6267.99	426174.13	727127.66	
14220.00	87.20	179.47	8214.83	-6361.68	50.53	2.18	6361.88	426080.23	727126.89	
14314.00	88.60	178.06	8218.28	-6455.59	52.56	2.11	6455.80	425986.32	727128.92	
14408.00	91.26	177.95	8218.39	-6549.53	55.83	2.83	6549.76	425892.38	727132.19	
14502.00	92.17	178.65	8215.58	-6643.44	58.62	1.22	6643.70	425798.47	727134.98	
14596.00	90.84	178.72	8213.11	-6737.38	60.78	1.42	6737.65	425704.53	727137.14	
14691.00	90.00	179.05	8212.41	-6832.36	62.62	0.95	6832.65	425609.55	727138.98	
14785.00	89.79	179.18	8212.59	-6926.35	64.08	0.26	6926.64	425515.56	727140.44	
14879.00	90.21	181.12	8212.59	-7020.34	63.83	2.11	7020.63	425421.57	727140.19	
14973.00	89.09	182.55	8213.16	-7114.29	60.82	1.93	7114.55	425327.62	727137.18	
15030.00	88.67	182.53	8214.27	-7171.22	58.29	0.74	7171.46	425270.69	727134.65	Last Wft Svy
15098.00	88.67	182.53	8215.85	-7239.14	55.29	0.00	7239.34	425202.77	727131.65	Proj. To Bit

Annotation

MD ft	TVD ft	
7532.00	7530.46	Tie On VES
7581.00	7579.45	First Wft Svy
15030.00	8214.27	Last Wft Svy
15098.00	8215.85	Proj. To Bit



COTTON DRAW UNIT 167H

WEST UNRESTRICTED

Perforation Summary

District		County		Field Name		Project Group		State/Province							
PERMIAN BASIN		EDDY		PADUCA		DELAWARE BASIN		NM							
Surface Legal Location		API/UWI		Latitude (°)		Longitude (°)		Ground Elev MSL (ft)		KB - Ground Level (ft)		Orig KB Elevation (ft)		Tubing Head Elevation (ft)	
SEC25 T24S R31E		3001541385		32° 10' 51.923" N		103° 43' 58.558" W		3,245.40		25.00		3,270.40			
Date	Zone	Top (ftKB)	Top (TVD) (ftKB)	Btm (ftKB)	Btm (TVD) (ftKB)	Current Status	Carrier Des	Gun Size (in)	Charge Type	Chg Sz (g)	Shot Dens (shots/ft)	Phasing (%)	Conveyance Method		
9/27/2013	DELAWARE, ST01	8,440.0	8,217.7	8,442.0	8,218.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/27/2013	DELAWARE, ST01	8,545.0	8,221.1	8,547.0	8,221.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/27/2013	DELAWARE, ST01	8,650.0	8,222.0	8,652.0	8,222.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/27/2013	DELAWARE, ST01	8,750.0	8,225.5	8,752.0	8,225.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	8,860.0	8,224.4	8,862.0	8,224.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	8,968.0	8,221.2	8,970.0	8,221.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,070.0	8,220.2	9,072.0	8,220.2			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,175.0	8,222.5	9,177.0	8,222.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,284.0	8,225.4	9,286.0	8,225.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,385.0	8,226.5	9,387.0	8,226.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,490.0	8,225.7	9,492.0	8,225.7			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,600.0	8,224.4	9,602.0	8,224.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,700.0	8,223.1	9,702.0	8,223.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,805.0	8,221.5	9,807.0	8,221.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	9,912.0	8,221.3	9,914.0	8,221.3			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	10,016.0	8,221.5	10,018.0	8,221.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	10,120.0	8,222.7	10,122.0	8,222.7			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	10,220.0	8,223.3	10,222.0	8,223.3			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	10,330.0	8,224.2	10,332.0	8,224.2			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/26/2013	DELAWARE, ST01	10,435.0	8,226.5	10,437.0	8,226.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	10,534.0	8,227.5	10,536.0	8,227.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	10,645.0	8,224.9	10,647.0	8,224.8			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	10,750.0	8,221.3	10,752.0	8,221.3			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	10,850.0	8,217.9	10,852.0	8,217.8			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	10,960.0	8,215.0	10,962.0	8,215.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,065.0	8,215.6	11,067.0	8,215.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,167.0	8,216.8	11,169.0	8,216.9			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,275.0	8,217.1	11,277.0	8,217.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,380.0	8,217.8	11,382.0	8,217.8			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,483.0	8,216.6	11,485.0	8,216.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,590.0	8,217.6	11,592.0	8,217.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,695.0	8,216.5	11,697.0	8,216.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,800.0	8,214.1	11,802.0	8,214.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	11,905.0	8,214.8	11,907.0	8,214.8			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,010.0	8,215.6	12,012.0	8,215.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,115.0	8,218.5	12,117.0	8,218.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,223.0	8,220.6	12,225.0	8,220.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,325.0	8,219.7	12,327.0	8,219.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,430.0	8,217.5	12,432.0	8,217.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/25/2013	DELAWARE, ST01	12,538.0	8,215.1	12,540.0	8,215.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		



COTTON DRAW UNIT 167H

WEST UNRESTRICTED

Perforation Summary

District PERMIAN BASIN		County EDDY		Field Name PADUCA		Project Group DELAWARE BASIN				State/Province NM					
Surface Legal Location SEC25 T24S R31E		API/UWI 3001541385		Latitude (°) 32° 10' 51.923" N		Longitude (°) 103° 43' 58.558" W		Ground Elev MSL (ft) 3,245.40		KB - Ground Level (ft) 25.00		Orig KB Elevation (ft) 3,270.40		Tubing Head Elevation (ft)	
Date	Zone	Top (ftKB)	Top (TVD) (ftKB)	Btm (ftKB)	Btm (TVD) (ftKB)	Current Status	Carrier Des	Gun Size (in)	Charge Type	Chg Sz (g)	Shot Dens (shots/ft)	Phasing (°)	Conveyance Method		
9/24/2013	DELAWARE, ST01	12,640.0	8,213.6	12,642.0	8,213.6			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	12,745.0	8,215.3	12,747.0	8,215.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	12,845.0	8,216.9	12,847.0	8,216.9			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	12,955.0	8,217.5	12,957.0	8,217.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,060.0	8,218.8	13,062.0	8,218.9			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,165.0	8,220.9	13,167.0	8,221.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,275.0	8,219.0	13,277.0	8,219.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,375.0	8,218.5	13,377.0	8,218.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,480.0	8,219.4	13,482.0	8,219.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,585.0	8,219.9	13,587.0	8,220.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,690.0	8,220.9	13,692.0	8,221.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/24/2013	DELAWARE, ST01	13,795.0	8,221.4	13,797.0	8,221.4			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/23/2013	DELAWARE, ST01	13,900.0	8,218.8	13,902.0	8,218.8			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/23/2013	DELAWARE, ST01	14,005.0	8,218.0	14,007.0	8,218.0			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/23/2013	DELAWARE, ST01	14,110.0	8,219.5	14,112.0	8,219.5			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/23/2013	DELAWARE, ST01	14,215.0	8,221.1	14,217.0	8,221.1			3 1/8	SHAPED	21.5	6.0	60	WIRELINE		
9/20/2013	DELAWARE, ST01	14,320.0	8,221.0	14,322.0	8,220.9			3 1/8	SHAPED	21.5	6.0	60	TUBING		
9/20/2013	DELAWARE, ST01	14,425.0	8,219.7	14,427.0	8,219.7			3 1/8	SHAPED	21.5	6.0	60	TUBING		
9/20/2013	DELAWARE, ST01	14,530.0	8,219.8	14,532.0	8,219.8			3 1/8	SHAPED	21.5	6.0	60	TUBING		
9/20/2013	DELAWARE, ST01	14,635.0	8,219.3	14,637.0	8,219.2			3 1/8	SHAPED	21.5	6.0	60	TUBING		