



# Scientific Drilling

Gyroscopic Survey Report  
for  
DEVON

30-015-38453

<b>Well Location</b>	EDDY COUNTY, NEW MEXICO
<b>Well Name</b>	COTTON DRAW UNIT 122H
<b>Rig Name</b>	H&P 214
<b>Survey Date</b>	1/21/2013
<b>Latitude</b>	32.1050380°N
<b>North Reference</b>	Grid North
<b>Grid Correction</b>	-0.31 deg
<b>Depth Reference</b>	RKB (25.00 ft)
<b>Calculation Method</b>	Minimum Curvature
<b>Section (VS) Ref</b>	0.00N (ft), 0.00E (ft), 0.00Azim (deg)
<b>Definitive Survey</b>	FINAL GYRO SURVEY
<b>Operator(s)</b>	JUSTIN PERKINS, RODRIGO ESCAMILLA

## Well Notes



# Scientific Drilling Survey Report

Survey:		FINAL GYRO SURVEY								
Survey Date:		1/21/2013								
MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Dogleg	Closure Distance	
ft	deg	deg	ft	ft	ft	ft	deg	deg	ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	
111.66	0.25	121.63	111.66	-0.13	-0.13	0.20	121.63	0.25	0.24	
173.24	0.28	203.61	173.24	-0.33	-0.33	0.26	142.69	0.35	0.42	
262.12	0.37	201.79	262.12	-0.80	-0.80	0.06	175.63	0.08	0.80	
351.18	0.43	208.99	351.18	-1.36	-1.36	-0.21	188.64	0.08	1.37	
438.38	0.76	213.61	438.37	-2.13	-2.13	-0.68	197.85	0.33	2.23	
470.09	0.83	215.68	470.08	-2.49	-2.49	-0.93	200.60	0.07	2.66	
560.35	0.84	220.40	560.33	-3.52	-3.52	-1.74	206.36	0.07	3.93	
650.61	1.09	218.28	650.58	-4.70	-4.70	-2.71	209.94	0.26	5.43	
741.98	1.04	216.46	741.93	-6.05	-6.05	-3.74	211.71	0.07	7.11	
833.35	0.93	208.43	833.29	-7.37	-7.37	-4.59	211.88	0.17	8.68	
923.62	0.99	228.10	923.54	-8.54	-8.54	-5.51	212.86	0.33	10.16	
1013.89	0.97	237.55	1013.80	-9.47	-9.47	-6.74	215.44	0.16	11.62	
1104.16	0.90	257.72	1104.06	-10.03	-10.03	-8.07	218.83	0.33	12.87	
1193.00	0.89	262.41	1192.89	-10.26	-10.26	-9.43	222.57	0.07	13.94	
1289.27	0.64	272.17	1289.15	-10.34	-10.34	-10.71	225.99	0.28	14.89	
1385.54	0.65	306.67	1385.41	-10.00	-10.00	-11.68	229.46	0.38	15.38	
1481.81	0.62	324.27	1481.68	-9.25	-9.25	-12.43	233.34	0.20	15.49	
1576.17	0.73	331.89	1576.03	-8.31	-8.31	-13.01	237.44	0.14	15.43	
1670.53	0.76	330.87	1670.38	-7.23	-7.23	-13.59	241.98	0.03	15.40	
1764.89	1.02	338.81	1764.73	-5.91	-5.91	-14.20	247.41	0.29	15.38	
1859.25	1.25	346.73	1859.07	-4.12	-4.12	-14.74	254.37	0.29	15.30	
1953.61	1.29	354.48	1953.41	-2.06	-2.06	-15.08	262.22	0.18	15.22	
2047.97	1.10	348.80	2047.75	-0.11	-0.11	-15.35	269.59	0.22	15.36	
2142.33	1.03	344.17	2142.09	1.60	1.60	-15.76	275.79	0.11	15.84	
2236.32	1.00	318.79	2236.07	3.03	3.03	-16.53	280.39	0.45	16.81	
2330.31	1.48	296.85	2330.04	4.20	4.20	-18.16	283.01	0.67	18.64	
2424.30	1.80	299.86	2423.99	5.48	5.48	-20.53	284.95	0.33	21.25	
2519.07	2.23	303.52	2518.70	7.24	7.24	-23.36	287.23	0.44	24.45	
2613.84	2.99	288.45	2613.37	9.04	9.04	-27.24	288.37	1.02	28.70	
2708.61	3.76	283.97	2707.98	10.58	10.58	-32.60	287.97	0.82	34.27	
2801.26	3.80	283.21	2800.43	12.01	12.01	-38.54	287.31	0.06	40.37	
2895.85	2.61	276.46	2894.87	12.97	12.97	-43.73	286.52	1.24	45.61	
2990.44	2.93	251.27	2989.35	12.44	12.44	-48.16	284.48	1.25	49.74	
3085.03	3.30	254.63	3083.80	10.94	10.94	-53.08	281.64	0.41	54.19	
3179.62	1.94	259.13	3178.29	9.91	9.91	-57.27	279.82	1.37	58.12	
3274.21	0.48	105.60	3272.86	9.51	9.51	-58.46	279.24	2.37	59.23	
3367.92	0.65	99.19	3366.57	9.32	9.32	-57.56	279.19	0.19	58.31	
3461.63	0.66	75.32	3460.27	9.37	9.37	-56.51	279.41	0.27	57.28	
3556.47	0.82	89.22	3555.10	9.52	9.52	-55.30	279.76	0.24	56.11	



# Scientific Drilling Survey Report

Survey:		FINAL GYRO SURVEY								
Survey Date:		1/21/2013								
MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Dogleg	Closure Distance	
ft	deg	deg	ft	ft	ft	ft	deg	deg	ft	
3650.41	1.79	99.50	3649.02	9.28	9.28	-53.17	279.90	0.99	53.98	
3744.35	3.53	117.57	3742.86	7.70	7.70	-49.16	278.91	1.90	49.76	
3838.29	3.80	109.51	3836.60	5.33	5.33	-43.67	276.96	0.58	43.99	
3933.03	3.46	125.59	3931.16	2.61	2.61	-38.38	273.90	1.07	38.47	
4029.28	4.96	140.27	4027.15	-2.28	-2.28	-33.36	266.09	1.83	33.44	
4122.88	6.86	146.09	4120.24	-10.04	-10.04	-27.65	250.05	1.99	29.42	
4216.48	6.42	143.25	4213.22	-18.87	-18.87	-21.40	228.60	0.55	28.53	
4310.08	5.08	144.84	4306.34	-26.45	-26.45	-15.88	210.98	1.34	30.85	
4403.68	4.28	144.22	4399.63	-32.67	-32.67	-11.46	199.32	0.81	34.62	
4497.34	4.00	135.59	4493.05	-37.84	-37.84	-7.13	190.67	0.68	38.50	
4591.00	3.81	137.85	4586.49	-42.47	-42.47	-2.76	183.72	0.25	42.56	
4685.23	3.58	224.74	4680.59	-46.88	-46.88	-2.73	183.33	5.08	46.96	
4779.66	3.25	144.62	4774.90	-51.16	-51.16	-3.25	183.64	4.40	51.26	
4873.27	3.06	130.96	4868.36	-54.96	-54.96	0.17	179.83	0.77	54.96	
4966.88	2.77	279.67	4961.93	-56.21	-56.21	-0.18	180.18	5.61	56.21	
5060.49	2.71	320.54	5055.44	-54.12	-54.12	-3.81	184.03	1.91	54.26	
5154.99	2.44	119.56	5149.91	-53.39	-53.39	-3.48	183.73	5.07	53.50	
5249.49	2.21	227.26	5244.36	-55.62	-55.62	-3.07	183.16	3.76	55.70	
5343.00	1.76	129.69	5337.84	-57.76	-57.76	-3.29	183.26	3.00	57.85	
5438.70	1.56	183.33	5433.50	-60.00	-60.00	-2.23	182.13	1.51	60.04	
5523.73	1.59	139.20	5518.50	-62.04	-62.04	-1.53	181.41	1.18	62.06	
5626.76	1.23	269.95	5621.52	-63.12	-63.12	-1.70	181.55	2.56	63.14	
5721.55	1.16	133.40	5716.30	-63.78	-63.78	-2.02	181.82	2.21	63.81	
5815.92	1.16	96.87	5810.65	-64.55	-64.55	-0.38	180.34	0.73	64.55	
5910.29	1.16	126.87	5905.00	-65.24	-65.24	1.34	178.83	0.60	65.25	
6004.66	1.34	267.95	5999.36	-65.85	-65.85	1.00	179.13	2.36	65.86	
6099.03	1.47	196.20	6093.71	-67.05	-67.05	-0.45	180.38	1.65	67.05	
6193.01	1.69	153.96	6187.66	-69.45	-69.45	-0.18	180.14	1.15	69.45	
6287.21	1.66	167.11	6281.82	-72.02	-72.02	0.74	179.41	0.38	72.03	
6381.41	1.96	92.00	6375.98	-73.40	-73.40	2.65	177.94	2.21	73.45	
6475.61	2.17	184.49	6470.14	-75.24	-75.24	4.11	176.87	2.98	75.35	
6568.16	1.95	296.86	6562.66	-76.27	-76.27	2.57	178.07	3.43	76.32	
6662.53	2.16	129.77	6657.01	-76.69	-76.69	2.50	178.13	4.09	76.73	
6756.90	2.36	157.70	6751.31	-79.63	-79.63	4.61	176.69	1.11	79.76	
6850.25	2.38	160.88	6844.58	-83.24	-83.24	5.97	175.90	0.13	83.45	
6943.60	2.69	162.60	6937.84	-87.16	-87.16	7.26	175.24	0.32	87.46	
7037.29	2.05	172.92	7031.45	-90.92	-90.92	8.13	174.89	0.77	91.28	
7130.98	1.88	139.42	7125.09	-93.75	-93.75	9.33	174.32	1.14	94.21	
7225.56	1.88	171.10	7219.62	-96.46	-96.46	10.58	173.74	1.03	97.04	
7319.17	1.74	171.15	7313.18	-99.39	-99.39	11.04	173.66	0.14	100.00	



# Scientific Drilling Survey Report

Survey:		FINAL GYRO SURVEY								
Survey Date:		1/21/2013								
MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Direction	Dogleg	Closure Distance	
ft	deg	deg	ft	ft	ft	ft	deg	deg	ft	
7412.78	1.59	193.25	7406.75	-102.06	-102.06	10.96	173.87	0.66	102.65	
7506.39	1.58	177.81	7500.33	-104.61	-104.61	10.71	174.15	0.43	105.16	
7600.00	1.59	173.72	7593.90	-107.19	-107.19	10.90	174.19	0.11	107.74	
7693.61	1.65	172.32	7687.47	-109.82	-109.82	11.22	174.16	0.07	110.39	
7789.12	1.64	168.64	7782.94	-112.52	-112.52	11.68	174.07	0.11	113.13	
7884.63	1.12	160.09	7878.43	-114.75	-114.75	12.27	173.90	0.56	115.40	
7978.31	1.45	177.91	7972.08	-116.80	-116.80	12.62	173.83	0.52	117.48	
8071.99	2.97	183.44	8065.69	-120.41	-120.41	12.52	174.06	1.53	121.06	
8166.95	1.94	198.10	8160.56	-124.40	-124.40	11.87	174.55	1.20	124.96	
8261.91	1.79	212.33	8255.47	-127.18	-127.18	10.58	175.24	0.49	127.62	
8355.81	1.82	201.32	8349.33	-129.81	-129.81	9.25	175.92	0.35	130.14	
8449.71	1.62	206.18	8443.18	-132.39	-132.39	8.13	176.49	0.25	132.64	
8543.61	1.70	210.04	8537.04	-134.79	-134.79	6.84	177.09	0.14	134.96	
8637.51	2.58	69.24	8630.92	-135.24	-135.24	8.12	176.56	4.04	135.49	
8703.41	2.19	222.70	8696.79	-135.64	-135.64	8.66	176.35	4.65	135.92	
8825.27	2.40	220.95	8818.56	-139.28	-139.28	5.41	177.78	0.22	139.38	
8920.13	3.23	243.75	8913.30	-141.96	-141.96	1.71	179.31	1.38	141.97	
9014.99	2.92	233.17	9008.03	-144.58	-144.58	-2.61	181.03	0.64	144.61	
9109.85	2.22	230.29	9102.79	-147.20	-147.20	-5.95	182.32	0.71	147.32	
9204.40	1.91	231.66	9197.28	-149.35	-149.35	-8.59	183.29	0.31	149.59	
9394.13	1.75	220.45	9386.92	-153.51	-153.51	-12.95	184.82	0.39	154.05	
9488.10	1.29	216.74	9480.85	-155.45	-155.45	-14.51	185.33	0.47	156.12	
9582.07	1.20	228.18	9574.80	-156.95	-156.95	-15.88	185.78	0.26	157.76	
9676.84	1.36	240.36	9669.55	-158.18	-158.18	-17.60	186.35	0.31	159.15	
9771.61	1.32	242.73	9764.29	-159.23	-159.23	-19.55	187.00	0.07	160.43	
9866.38	0.46	163.61	9859.05	-160.10	-160.10	-20.41	187.26	1.31	161.39	
9961.15	1.19	120.16	9953.81	-160.96	-160.96	-19.45	186.89	0.92	162.13	
10055.92	1.19	138.05	10048.56	-162.18	-162.18	-17.94	186.31	0.37	163.17	
10150.69	1.06	156.62	10143.31	-163.72	-163.72	-16.93	185.91	0.38	164.59	
10245.46	0.81	168.04	10238.07	-165.18	-165.18	-16.45	185.69	0.31	166.00	
10339.00	1.07	164.38	10331.60	-166.67	-166.67	-16.07	185.51	0.27	167.45	
10434.00	1.29	167.46	10426.58	-168.57	-168.57	-15.60	185.29	0.22	169.29	
10486.00	1.30	170.18	10478.56	-169.72	-169.72	-15.38	185.18	0.06	170.42	



# Weatherford™

Evaluation, Drilling & Intervention  
10000 West County Rd. 116  
P.O. Box 61028  
Midland, TX USA 79711  
Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy  
333 W. Sherridan Ave  
Oklahoma City, OK, 73102

Date: February 11, 2013

Attention: John Logemann

Re: Devon Energy  
Well: Cotton Draw Unit 122H  
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name &amp; Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
John Self MWD Supervisor	122H	9879' MD 14710' MD	1/21/2013 2/10/2013	Measurement While Drilling

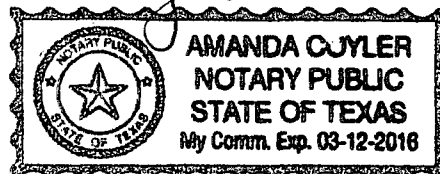
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar  
MWD Coordinator

On this, the 26<sup>th</sup> day of February, 2013, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public





# Weatherford

## WFT Survey Report X & Y's



<b>Company:</b> Devon Energy	<b>Date:</b> 2/10/2013	<b>Time:</b> 09:41:09	<b>Page:</b> 1
<b>Field:</b> Eddy Co., NM (NAD 83)	<b>Co-ordinate(NE) Reference:</b> Well: GDU 122H, Grid North		
<b>Site:</b> Cotton Draw Unit 122H	<b>Vertical (TYD) Reference:</b> SITE 3530.0		
<b>Well:</b> GDU 122H	<b>Section (VS) Reference:</b> Well: (0.00N,0.00E,176.24Azi)		
<b>Wellpath:</b> Lat	<b>Survey Calculation Method:</b> Minimum Curvature		<b>Db:</b> Sybase

<b>Survey:</b> Wft Svy	<b>Start Date:</b>	1/28/2013
<b>Company:</b> Weatherford	<b>Engineer:</b>	Russell W. Joyner
<b>Tool:</b> MWD;MWD - Standard	<b>Tied-to:</b>	User Defined

**Site:** Cotton Draw Unit 122H

<b>Site Position:</b>	<b>Northing:</b> 429943.93 ft	<b>Latitude:</b> 32 10 50.372 N
<b>From:</b> Map	<b>Easting:</b> 720949.11 ft	<b>Longitude:</b> 103 45 10.031 W
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b> Grid
<b>Ground Level:</b> 3505.00 ft		<b>Grid Convergence:</b> 0.31 deg

<b>Well:</b> CDU 122H	<b>Slot Name:</b>
<b>Well Position:</b> +N/-S 0.00 ft	<b>Northing:</b> 429943.93 ft
+E/-W 0.00 ft	<b>Easting:</b> 720949.11 ft
<b>Position Uncertainty:</b> 0.00 ft	<b>Latitude:</b> 32 10 50.372 N
	<b>Longitude:</b> 103 45 10.031 W

<b>Wellpath:</b> Lat	<b>Drilled From:</b> Pilot
<b>Current Datum:</b> SITE	<b>Tie-on Depth:</b> 11964.00 ft
<b>Magnetic Data:</b> 1/21/2013	<b>Above System Datum:</b> Mean Sea Level
<b>Field Strength:</b> 48435 nT	<b>Declination:</b> 7.47 deg
<b>Vertical Section: Depth From (TYD)</b>	<b>Mag Dip Angle:</b> 60.08 deg
ft	+N/-S
	ft
0.00	0.00
	+E/-W
	ft
	<b>Direction</b>
	deg
	176.24

**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
9771.61	1.32	242.73	9764.29	-159.23	-19.55	0.00	157.61	429784.70	720929.56	Tie On SDI First Wft Svy
9879.00	9.32	173.37	9871.17	-168.45	-19.65	8.32	166.80	429775.48	720929.46	
9910.00	10.50	170.10	9901.71	-173.73	-18.87	4.22	172.12	429770.20	720930.24	
9942.00	10.43	173.78	9933.18	-179.48	-18.06	2.10	177.91	429764.45	720931.05	
9973.00	10.23	171.50	9963.68	-184.99	-17.34	1.47	183.46	429758.94	720931.77	
10005.00	10.11	169.08	9995.17	-190.56	-16.39	1.39	189.08	429753.37	720932.72	
10036.00	13.42	173.54	10025.52	-196.81	-15.47	11.07	195.37	429747.12	720933.64	
10068.00	17.53	179.58	10056.35	-205.32	-15.02	13.78	203.90	429738.61	720934.09	
10099.00	21.71	183.27	10085.55	-215.72	-15.31	14.06	214.25	429728.21	720933.80	
10131.00	25.09	184.30	10114.91	-228.40	-16.16	10.64	226.85	429715.53	720932.95	
10163.00	28.65	183.75	10143.45	-242.82	-17.17	11.15	241.18	429701.11	720931.94	
10194.00	31.78	180.47	10170.24	-258.41	-17.72	11.41	256.69	429685.52	720931.39	
10226.00	35.74	178.66	10196.84	-276.18	-17.57	12.77	274.44	429667.75	720931.54	
10257.00	40.61	178.21	10221.20	-295.33	-17.05	15.74	293.58	429648.60	720932.06	
10289.00	44.23	176.73	10244.82	-316.89	-16.08	11.73	315.15	429627.04	720933.03	
10320.00	47.53	175.50	10266.40	-339.09	-14.57	11.02	337.40	429604.84	720934.54	
10352.00	49.33	174.94	10287.63	-362.95	-12.57	5.78	361.34	429580.98	720936.54	
10372.00	50.79	173.99	10300.47	-378.21	-11.09	8.16	376.67	429565.72	720938.02	
10384.00	52.10	173.66	10307.95	-387.54	-10.08	11.13	386.04	429556.39	720939.03	
10415.00	55.74	173.03	10326.20	-412.42	-7.18	11.86	411.06	429531.51	720941.93	
10447.00	58.99	174.63	10343.46	-439.21	-4.29	10.99	437.98	429504.72	720944.82	
10478.00	62.82	176.88	10358.53	-466.21	-2.29	13.89	465.06	429477.72	720946.82	
10510.00	67.74	178.32	10371.91	-495.24	-1.08	15.91	494.11	429448.69	720948.03	
10541.00	73.04	177.92	10382.31	-524.42	-0.12	17.14	523.28	429419.51	720948.99	
10570.00	78.46	176.59	10389.45	-552.48	1.23	19.21	551.38	429391.45	720950.34	
10617.00	83.20	176.13	10396.94	-598.78	4.17	10.13	597.76	429345.15	720953.28	
10649.00	82.85	176.03	10400.82	-630.47	6.34	1.14	629.52	429313.46	720955.45	
10680.00	83.90	175.58	10404.40	-661.18	8.60	3.68	660.32	429282.75	720957.71	
10712.00	85.24	174.99	10407.43	-692.92	11.22	4.57	692.17	429251.01	720960.33	
10743.00	86.43	174.78	10409.68	-723.72	13.97	3.90	723.08	429220.21	720963.08	



# Weatherford

## WFT Survey Report X & Y's



<b>Company:</b> Devon Energy <b>Field:</b> Eddy Co., NM (NAD 83) <b>Site:</b> Cotton Draw Unit 122H <b>Well:</b> CDU 122H <b>Wellpath:</b> Lat	<b>Date:</b> 2/10/2013 <b>Time:</b> 09:41:09 <b>Page:</b> 2 <b>Co-ordinate(NE) Reference:</b> Well: CDU 122H, Grid North <b>Vertical (TVD) Reference:</b> SITE: 3530.0 <b>Section (VS) Reference:</b> Well (0.00N;0.00E,176.24Azi) <b>Survey Calculation Method:</b> Minimum Curvature <b>Db:</b> Sybase
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### 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
10775.00	87.90	174.70	10411.26	-755.54	16.90	4.60	755.03	429188.39	720966.01	
10806.00	89.51	174.38	10411.96	-786.39	19.85	5.30	786.00	429157.54	720968.96	
10838.00	90.56	173.94	10411.94	-818.23	23.11	3.56	817.98	429125.70	720972.22	
10932.00	89.93	173.64	10411.54	-911.67	33.27	0.74	911.89	429032.26	720982.38	
11027.00	91.12	174.25	10410.67	-1006.14	43.29	1.41	1006.81	428937.79	720992.40	
11120.00	92.31	175.85	10407.89	-1098.74	51.32	2.14	1099.75	428845.19	721000.43	
11214.00	91.96	175.28	10404.38	-1192.40	58.58	0.71	1193.67	428751.53	721007.69	
11309.00	92.73	175.97	10400.50	-1287.04	65.82	1.09	1288.59	428656.89	721014.93	
11402.00	91.54	176.56	10397.03	-1379.78	71.87	1.43	1381.52	428564.15	721020.98	
11496.00	89.30	176.84	10396.34	-1473.61	77.28	2.40	1475.51	428470.32	721026.39	
11590.00	89.37	177.06	10397.43	-1567.47	82.29	0.25	1569.49	428376.46	721031.40	
11683.00	89.65	177.20	10398.23	-1660.35	86.94	0.34	1662.48	428283.58	721036.05	
11777.00	89.23	176.79	10399.15	-1754.22	91.87	0.62	1756.47	428189.71	721040.98	
11870.00	90.49	176.57	10399.38	-1847.06	97.26	1.38	1849.46	428096.87	721046.37	
11964.00	92.59	176.07	10396.85	-1940.83	103.29	2.30	1943.42	428003.10	721052.40	
12058.00	93.43	176.26	10391.91	-2034.49	109.56	0.92	2037.29	427909.44	721058.67	
12152.00	92.17	176.06	10387.32	-2128.16	115.85	1.36	2131.18	427815.77	721064.96	
12245.00	90.49	176.41	10385.16	-2220.93	121.96	1.85	2224.15	427723.00	721071.07	
12338.00	90.91	176.57	10384.03	-2313.75	127.65	0.48	2317.14	427630.18	721076.76	
12433.00	90.14	176.27	10383.16	-2408.56	133.58	0.87	2412.14	427535.37	721082.69	
12528.00	90.63	176.67	10382.52	-2503.38	139.43	0.67	2507.13	427440.55	721088.54	
12622.00	90.70	176.43	10381.43	-2597.20	145.09	0.27	2601.12	427346.73	721094.20	
12717.00	89.58	175.90	10381.20	-2691.99	151.44	1.30	2696.12	427251.94	721100.55	
12811.00	90.21	176.24	10381.37	-2785.76	157.88	0.76	2790.12	427158.17	721106.99	
12906.00	91.82	177.58	10379.68	-2880.61	163.00	2.20	2885.09	427063.32	721112.11	
13000.00	90.63	177.05	10377.67	-2974.48	167.41	1.39	2979.05	426969.45	721116.52	
13094.00	88.74	176.94	10378.19	-3068.34	172.33	2.01	3073.04	426875.59	721121.44	
13188.00	89.51	177.04	10379.63	-3162.20	177.27	0.83	3167.02	426781.73	721126.38	
13283.00	90.28	177.61	10379.80	-3257.10	181.70	1.01	3262.00	426686.83	721130.81	
13377.00	89.37	177.99	10380.09	-3351.03	185.31	1.05	3355.97	426592.90	721134.42	
13471.00	88.39	176.57	10381.93	-3444.90	189.77	1.84	3449.93	426499.03	721138.88	
13565.00	88.95	174.91	10384.11	-3538.61	196.75	1.86	3543.90	426405.32	721145.86	
13659.00	90.98	174.08	10384.17	-3632.17	205.77	2.33	3637.85	426311.76	721154.88	
13754.00	91.54	173.92	10382.08	-3726.63	215.70	0.61	3732.75	426217.30	721164.81	
13848.00	90.84	174.13	10380.12	-3820.10	225.48	0.78	3826.66	426123.83	721174.59	
13943.00	92.31	174.22	10377.51	-3914.57	235.12	1.55	3921.56	426029.36	721184.23	
14038.00	91.75	174.02	10374.15	-4009.01	244.84	0.63	4016.43	425934.92	721193.95	
14132.00	90.91	174.04	10371.97	-4102.47	254.62	0.89	4110.34	425841.46	721203.73	
14227.00	92.38	173.35	10369.24	-4196.86	265.04	1.71	4205.20	425747.07	721214.15	
14322.00	91.68	173.69	10365.87	-4291.19	275.76	0.82	4300.04	425652.74	721224.87	
14416.00	91.19	174.65	10363.52	-4384.67	285.30	1.15	4393.94	425559.26	721234.41	
14511.00	90.49	174.74	10362.13	-4479.25	294.09	0.74	4488.90	425464.68	721243.20	
14606.00	90.14	175.15	10361.60	-4573.88	302.46	0.57	4583.87	425370.05	721251.57	
14700.00	89.16	174.45	10362.18	-4667.49	310.98	1.28	4677.84	425276.44	721260.09	
14710.00	89.16	174.15	10362.33	-4677.44	311.97	3.00	4687.83	425266.49	721261.08	Last Wft Svy
14763.00	89.16	174.15	10363.10	-4730.16	317.37	0.00	4740.79	425213.77	721266.48	Proj. To Bit



# Weatherford

## WFT Survey Report X & Y's



<b>Company:</b> Devon Energy	<b>Date:</b> 2/10/2013	<b>Time:</b> 09:41:09	<b>Page:</b> 3
<b>Field:</b> Eddy Co., NM (NAD 83)	<b>Co-ordinate(N/E) Reference:</b> Well: CDU 122H, Grid North		
<b>Site:</b> Cotton Draw Unit 122H	<b>Vertical (TVD) Reference:</b> SITE 3530.0		
<b>Well:</b> CDU 122H	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,176.24Azi)		
<b>Wellpath:</b> Lat	<b>Survey Calculation Method:</b> Minimum Curvature		<b>Db:</b> Sybase

### Annotation

MD ft.	TVD ft.	
9771.61	9764.29	Tie On SDI
9879.00	9871.17	First Wft Svy
14710.00	10362.33	Last Wft Svy
14763.00	10363.10	Proj. To Bit





Cotton Draw Unit #122H  
Eddy Co., NM

KB ELEV: 3530  
GL ELEV: 3505

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	11964.00	92.59	176.04	10396.85	-1940.82	103.31	0.00	0.00	1943.42		
2	12025.97	90.76	175.70	10395.04	-2002.61	107.77	3.00	-169.37	2005.37		
3	14761.88	90.76	175.70	10358.62	-4730.56	313.03	0.00	0.00	4740.91	PBHL	

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slor
CDU 122H	0.00	0.00	429943.93	720949.11	32°10'50.372N	103°45'10.031W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	10358.62	-4730.56	313.03	425213.37	721262.14	Rectangle (2797x50)

LEGEND	
	CDU 122H Lat, Plan #4
	CDU #135H (1)
	CDU #136H (1)
	CDU #137H (1)
	CDU #151H (1)
	CDU #152H (1)
	CDU 122H (Pilot)
	Lat Wft Svy

**SITE DETAILS**  
Cotton Draw Unit 122H  
Site Centre Northing: 429943.93  
Easting: 720949.11  
Ground Level: 3505.00  
Positional Uncertainty: 0.00  
Convergence: 0.31

Survey: Wft Svy (CDU 122H/Lat)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
76	14763.00	89.16	174.15	10363.10	-4730.16	317.37	0.00	0.00	4740.79	

