



HB 11 Federal #8H
Eddy Co., NM

30-015-37900

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8143.00	89.23	181.86	7745.52	-763.37	83.89	0.00	0.00	763.71	
2	8155.97	90.50	180.96	7745.55	-776.34	83.57	12.00	324.67	776.67	
3	8210.97	90.50	180.96	7745.07	-831.33	82.65	0.00	0.00	831.66	
4	8227.64	90.00	180.96	7745.00	-848.00	82.37	3.00	180.00	848.32	
5	9911.01	90.00	180.96	7745.00	-2531.13	54.17	0.00	0.00	2531.33	
6	10244.34	80.00	180.96	7774.02	-2862.73	48.61	3.00	180.00	2862.90	
7	10657.72	90.00	180.96	7810.00	-3273.95	41.73	2.42	-0.01	3274.10	
8	12032.35	90.00	180.96	7810.00	-4648.39	18.75	0.00	0.00	4648.43	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HB 11 Federal #8H	0.00	0.00	450719.00	659253.60	32°14'18.688N	103°57'07.053W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	7810.00	-4648.39	18.75	446070.61	659272.35	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

HB 11 Federal #8H

Site Centre Northing: 450719.00
Easting: 659253.60

Ground Level: 3092.00
Positional Uncertainty: 0.00
Convergence: 0.20

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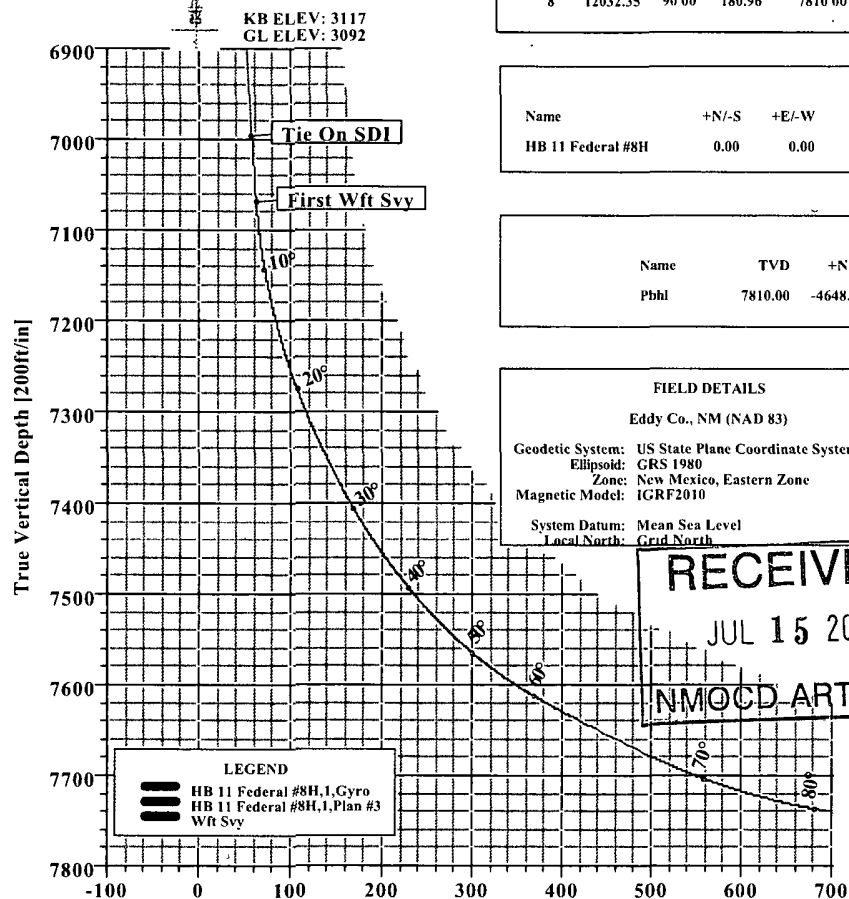
Azimuths to Grid North
True North: -0.20°
Magnetic North: 7.60°

Magnetic Field
Strength: 48642nT
Dip Angle: 60.14°
Date: 2/10/2011
Model: IGRF2010

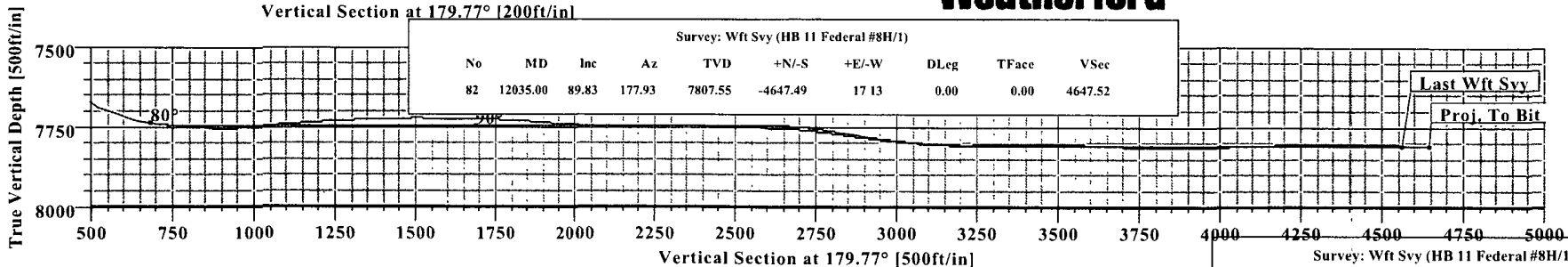
Total Correction to Grid North: 7.60°



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Vertical Section at 179.77° [200ft/in]



Survey: Wft Svy (HB 11 Federal #8H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
82	12035.00	89.83	177.93	7807.55	-4647.49	17.13	0.00	0.00	4647.52

Survey: Wft Svy (HB 11 Federal #8H/1)

Created By: Russell W. Joyner

Date: 4/4/2011



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WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy	Date: 4/4/2011	Time: 06:42:40	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: HB 11 Federal #8H, Grid North		
Site: HB 11 Federal #8H	Vertical (TVD) Reference: SITE 3117.0		
Well: HB 11 Federal #8H	Section (VS) Reference: Well (0.00N,0.00E,179.77Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 3/23/2011
Company: Weatherford International Ltd	Engineer: Russell W. Joyner
Tool: MWD,MWD - Standard	Tied-to: User Defined

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: HB 11 Federal #8H		
Site Position:	Northing: 450719 00 ft	Latitude: 32 14 18 688 N
From: Map	Easting: 659253 60 ft	Longitude: 103 57 7 053 W
Position Uncertainty: 0 00 ft		North Reference: Grd
Ground Level: 3092 00 ft		Grid Convergence: 0.20 deg

Well: HB 11 Federal #8H	Slot Name:
Well Position: +N/-S 0 00 ft	Latitude: 32 14 18 688 N
+E/-W 0 00 ft	Longitude: 103 57 7 053 W
Position Uncertainty: 0 00 ft	

Wellpath: 1	Drilled From: Surface		
Current Datum: SITE	Tie-on Depth: 0 00 ft		
Magnetic Data: 2/10/2011	Above System Datum: Mean Sea Level		
Field Strength: 48642 nT	Declination: 7 80 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60 14 deg		
ft	+N/-S	+E/-W	Direction
	ft	ft	deg
0 00	0 00	0.00	179 77

Survey										
MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	
3272.00	1.67	138 34	3269 81	64.17	42.50	0.00	-63 99	450783 17	659296.10	Csg
7000.00	3 19	173 12	6995 21	-56.84	94.11	0 06	57 22	450662.16	659347 71	Tie On SDI
7074.00	4 57	172 85	7069 04	-61.81	94.72	1 87	62 19	450657.19	659348 32	First Wft Svy
7137.00	8 90	174.64	7131 59	-69 15	95.49	6.88	69 54	450649.85	659349.09	
7169.00	11 93	173 24	7163 06	-74 90	96.11	9.50	75.29	450644.10	659349.71	
7200.00	14 29	173.62	7193 25	-81.89	96.91	7 62	82 28	450637.11	659350.51	
7232.00	16 46	174 74	7224.10	-90 33	97.77	6 84	90.72	450628 67	659351.37	
7263 00	18.26	176 42	7253.69	-99.55	98 47	6.03	99.95	450619 45	659352.07	
7295 00	20.65	176.49	7283 86	-110.19	99.13	7.47	110.59	450608 81	659352.73	
7326.00	23.28	176 52	7312 61	-121.76	99 84	8.48	122.16	450597 24	659353.44	
7358 00	25 13	176 99	7341.79	-134 86	100 58	5.81	135.26	450584.14	659354 18	
7389.00	26 93	178 69	7369.65	-148 45	101 08	6 28	148 86	450570.55	659354.68	
7421.00	29 26	180 13	7397.88	-163 52	101 23	7 58	163.93	450555.48	659354.83	
7452 00	31.60	181 58	7424 60	-179 22	100.99	7 91	179 62	450539.78	659354.59	
7484 00	34.44	181 97	7451.43	-196.64	100.45	8 90	197 05	450522 36	659354.05	
7516.00	38.02	182 61	7477.24	-215.54	99.69	11 25	215 94	450503 46	659353 29	
7547 00	40 88	182.50	7501 18	-235 21	98.81	9 23	235 61	450483.79	659352 41	
7579.00	43 53	182.14	7524.88	-256 69	97 94	8 32	257 08	450462.31	659351.54	
7610.00	46 97	182.44	7546.70	-278.69	97.06	11.12	279 07	450440 31	659350 66	
7642.00	50 49	182.31	7567 80	-302.71	96.06	11 00	303 10	450416.29	659349.66	
7673.00	54.25	181 98	7586 73	-327.24	95.15	12 16	327.62	450391.76	659348.75	
7705 00	58.48	182.31	7604.45	-353.86	94 15	13.25	354.24	450365 14	659347 75	
7736.00	61.20	182.17	7620.02	-380 64	93 10	8.78	381 01	450338 36	659346 70	
7768 00	62 88	182.12	7635 02	-408.88	92.04	5.25	409 25	450310.12	659345 64	



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WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy Date: 4/4/2011 Time: 06:42:40 Page: 2
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well, HB 11, Federal #8H, Grid North
Site: HB 11, Federal #8H Vertical (TVD) Reference: SITE 3117 0
Well: HB 11, Federal #8H Section (VS) Reference: Well (0.00N, 0.00E, 179.77Azi)
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
7799.00	64.06	182.02	7648.87	-436.60	91.04	3.82	436.96	450282.40	659344.64	
7831.00	64.35	181.97	7662.80	-465.40	90.04	0.92	465.75	450253.60	659343.64	
7862.00	64.18	181.68	7676.26	-493.31	89.15	1.01	493.66	450225.69	659342.75	
7894.00	66.05	181.01	7689.72	-522.33	88.47	6.14	522.68	450196.67	659342.07	
7925.00	69.28	181.21	7701.50	-550.99	87.91	10.44	551.34	450168.01	659341.51	
7957.00	72.12	180.83	7712.08	-581.18	87.38	8.95	581.53	450137.82	659340.98	
7988.00	74.07	180.94	7721.09	-610.84	86.92	6.30	611.19	450108.16	659340.52	
8020.00	76.10	180.76	7729.33	-641.76	86.46	6.37	642.10	450077.24	659340.06	
8051.00	78.91	180.83	7736.03	-672.02	86.04	9.07	672.36	450046.98	659339.64	
8083.00	82.50	181.19	7741.20	-703.59	85.48	11.27	703.93	450015.41	659339.08	
8166.00	86.19	181.88	7749.38	-786.14	83.27	4.52	786.47	449932.86	659336.87	
8197.00	85.98	181.80	7751.49	-817.05	82.28	0.72	817.37	449901.95	659335.88	
8229.00	85.48	181.90	7753.88	-848.94	81.25	1.59	849.26	449870.06	659334.85	
8261.00	87.87	182.18	7755.73	-880.87	80.11	7.52	881.18	449838.13	659333.71	
8355.00	94.87	183.34	7753.49	-974.67	75.59	7.55	974.97	449744.33	659329.19	
8450.00	94.87	183.33	7745.42	-1069.17	70.08	0.01	1069.44	449649.83	659323.68	
8544.00	94.45	182.30	7737.78	-1162.74	65.48	1.18	1163.00	449556.26	659319.08	
8639.00	92.95	174.68	7731.65	-1257.44	67.98	8.16	1257.70	449461.56	659321.58	
8734.00	92.13	180.33	7727.43	-1352.22	72.11	6.00	1352.50	449366.78	659325.71	
8828.00	91.36	179.43	7724.57	-1446.17	72.31	1.26	1446.45	449272.83	659325.91	
8923.00	89.12	179.07	7724.17	-1541.16	73.55	2.39	1541.44	449177.84	659327.15	
9018.00	88.84	178.89	7725.86	-1636.13	75.24	0.35	1636.42	449082.87	659328.84	
9112.00	88.36	178.93	7728.16	-1730.08	77.03	0.51	1730.38	448988.92	659330.63	
9207.00	86.82	178.33	7732.15	-1824.97	79.30	1.74	1825.27	448894.03	659332.90	
9238.00	85.62	178.57	7734.20	-1855.89	80.14	3.95	1856.19	448863.11	659333.74	
9333.00	86.19	179.38	7740.98	-1950.63	81.83	1.04	1950.94	448768.37	659335.43	
9427.00	87.45	180.85	7746.20	-2044.48	81.64	2.06	2044.79	448674.52	659335.24	
9522.00	88.98	183.10	7749.16	-2139.37	78.37	2.86	2139.67	448579.63	659331.97	
9617.00	90.39	183.11	7749.68	-2234.22	73.22	1.48	2234.50	448484.78	659326.82	
9680.00	90.25	183.20	7749.33	-2297.13	69.76	0.26	2297.39	448421.87	659323.36	
9774.00	89.13	182.71	7749.83	-2391.00	64.91	1.30	2391.24	448328.00	659318.51	
9837.00	88.91	182.92	7750.91	-2453.91	61.82	0.48	2454.14	448265.09	659315.42	
9869.00	89.13	182.90	7751.46	-2485.87	60.19	0.69	2486.09	448233.13	659313.79	
9900.00	88.43	183.14	7752.12	-2516.82	58.56	2.39	2517.03	448202.18	659312.16	
9932.00	88.29	182.73	7753.04	-2548.76	56.92	1.35	2548.97	448170.24	659310.52	
9964.00	87.72	182.55	7754.15	-2580.71	55.45	1.87	2580.91	448138.29	659309.05	
9995.00	87.86	182.36	7755.34	-2611.66	54.12	0.76	2611.85	448107.34	659307.72	
10027.00	87.02	181.90	7756.77	-2643.60	52.93	2.99	2643.79	448075.40	659306.53	
10153.00	83.52	179.93	7767.16	-2769.13	50.92	3.18	2769.31	447949.87	659304.52	
10248.00	81.26	179.44	7779.74	-2863.29	51.44	2.43	2863.47	447855.71	659305.04	
10342.00	83.37	180.07	7792.31	-2956.44	51.84	2.34	2956.62	447762.56	659305.44	
10437.00	86.32	180.91	7800.85	-3051.04	51.03	3.23	3051.22	447667.96	659304.63	
10532.00	87.59	181.50	7805.89	-3145.88	49.03	1.47	3146.05	447573.12	659302.63	
10626.00	90.73	182.29	7807.27	-3239.81	45.92	3.44	3239.96	447479.19	659299.52	
10721.00	91.43	182.07	7805.48	-3334.72	42.31	0.77	3334.86	447384.28	659295.91	
10816.00	90.73	181.27	7803.69	-3429.66	39.54	1.12	3429.79	447289.34	659293.14	
10910.00	87.80	180.99	7804.90	-3523.62	37.69	3.13	3523.75	447195.38	659291.29	
11005.00	86.96	180.71	7809.24	-3618.51	36.28	0.93	3618.63	447100.49	659289.88	
11099.00	88.50	181.28	7812.96	-3712.42	34.65	1.75	3712.53	447006.58	659288.25	
11194.00	90.17	181.50	7814.07	-3807.38	32.34	1.77	3807.48	446911.62	659285.94	
11288.00	89.55	182.28	7814.29	-3901.33	29.24	1.06	3901.42	446817.67	659282.84	
11383.00	91.43	182.81	7813.48	-3996.23	25.03	2.06	3996.30	446722.77	659278.63	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy Date: 4/4/2011 Time: 06:42.40 Page: 3
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: HB 11 Federal #8H, Grid North
Site: HB 11 Federal #8H Vertical (TVD) Reference: SITE 3117.0
Well: HB 11 Federal #8H Section (VS) Reference: Well (0.00N,0.00E,179.77Azi)
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
11478.00	92.70	184.01	7810.06	-4091.00	19.38	1.84	4091.04	446628.00	659272.98	
11572.00	91.08	182.70	7806.96	-4184.78	13.88	2.22	4184.80	446534.22	659267.48	
11667.00	90.94	182.49	7805.28	-4279.67	9.58	0.27	4279.67	446439.33	659263.18	
11762.00	89.05	178.75	7805.29	-4374.64	8.55	4.41	4374.64	446344.36	659262.15	
11856.00	89.34	178.30	7806.61	-4468.60	10.97	0.57	4468.61	446250.40	659264.57	
11951.00	89.83	177.93	7807.30	-4563.55	14.10	0.65	4563.57	446155.45	659267.70	Last Wft Svy
12035.00	89.83	177.93	7807.55	-4647.49	17.13	0.00	4647.52	446071.51	659270.73	Proj To Bit

Annotation

MD ft	TVD ft	
7000.00	6995.21	Tie On SDI
7074.00	7069.04	First Wft Svy
11951.00	7807.30	Last Wft Svy
12035.00	7807.55	Proj. To Bit



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
20 North Broadway
Oklahoma City, OK, 73102

Date: April 5, 2011

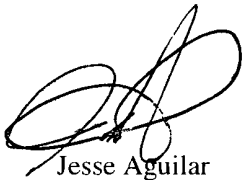
Attention: Johnathan Ashcraft

Re: Devon Energy
Well: HB 11 Federal #8H
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 & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Ward MWD Supervisor	8H	7074' MD 11951' MD	3/20/2011 4/4/2011	Measurement While Drilling

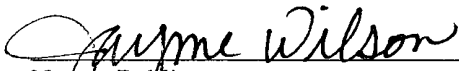
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.



Jesse Aguilar
MWD Ops. Coordinator

On this, the 5th day of April, 2011, 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

