



An Operating Unit of Smith International, Inc.

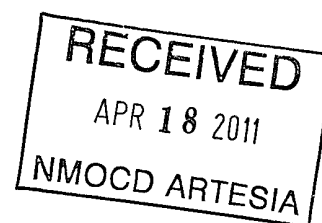
DIRECTIONAL SURVEY REPORT

30-015-38044

DEVON ENERGY

TODD 36B STATE #20H

EDDY COUNTY, NEW MEXICO



PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
(432) 681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JOHN PATTERSON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11-13-10 TO 11-27-10
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

DEVON ENERGY
TODD 36B STATE #20H
EDDY COUNTY, NM
RIG: H & P 416

9. SURVEY CERTIFIED FROM: 8402 TO 13915 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 5327.43 FEET ON A BEARING OF 157.00 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13975 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 11/17/2010
Date Completed: 11/27/2010

DEVON ENERGY CORPORATION
TODD 36B STATE #20H
EDDY COUNTY, NM
Rig:H&P 416
PathFinder Office Supervisor: F SINISTERRA
PathFinder Field Engineers:J PATTERSON
G SAKAS

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.16.5.3359 N LON:103.43.50.4615 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 727607.4300 Y: 461808.6000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.42° EAST TO GRID
Vertical Section Plane: 157.10
Survey Vert. Reference: 25.00' Rotary Table To Ground
Altitude:3516.40' Ground To MSL

Measured Depth	13975.00	(feet)
Inclination	89.16	(deg)
Azimuth	158.15	(deg)
True Vertical Depth	9024.97	(feet)
Vertical Section	5327.43	(feet)
Survey X cord	729688.73	(feet)
Survey Y cord	456904.54	(feet)
Survey Lat	32.25463660 N	(deg)
Survey Lon	103.72404039 W	(deg)
Rectangular Corr. N/S	4904.04 S	(feet)
Rectangular Corr. E/W	2081.33 E	(feet)
Closure Distance	5327.43	(feet)
Direction of Closure	157.00	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORPORATION
TODD 36B STATE #20H
EDDY COUNTY, NM
Rig:H&P 416
PathFinder Office Supervisor: F SINISTERRA
PathFinder Field Engineers: J PATTERSON
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Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.16.5.3359 N LON:103.43.50.4615 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 727607.4300 Y: 461808.6000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.42° EAST TO GRID
Vertical Section Plane: 157.10
Survey Vert. Reference: 25.00' Rotary Table To Ground
Altitude:3516.40' Ground To MSL

Survey Calculations by RX5 V6.03B using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular (ft)	Offsets (ft)	Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)
TIE IN TO SCIENTIFIC GYRO SURVEYS AT 8387' MD.										
8387.00	0.38	253.32	8384.91	0.00	103.12	75.85 S	85.44 E	114.25@	131.60	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8402.00	0.70	183.11	8399.91	15.00	103.20	75.96 S	85.39 E	114.28@	131.65	4.49
8433.00	1.49	171.97	8430.90	31.00	103.76	76.54 S	85.43 E	114.71@	131.86	2.63
8465.00	4.84	164.10	8462.85	32.00	105.50	78.25 S	85.86 E	116.17@	132.35	10.53
8496.00	9.41	161.73	8493.60	31.00	109.32	81.92 S	87.01 E	119.51@	133.27	14.77
8528.00	14.25	161.62	8524.91	32.00	115.86	88.15 S	89.08 E	125.32@	134.70	15.13
8559.00	19.52	159.70	8554.57	31.00	124.85	96.63 S	92.08 E	133.48@	136.38	17.09
8591.00	22.16	158.12	8584.47	32.00	136.22	107.25 S	96.18 E	144.06@	138.11	8.43
8622.00	23.92	158.98	8613.00	31.00	148.35	118.54 S	100.62 E	155.49@	139.67	5.78
8654.00	26.56	160.27	8641.94	32.00	161.98	131.33 S	105.36 E	168.37@	141.26	8.43
8685.00	29.11	160.61	8669.35	31.00	176.43	144.97 S	110.20 E	182.10@	142.76	8.24
8717.00	30.78	161.04	8697.08	32.00	192.37	160.06 S	115.45 E	197.35@	144.20	5.26
8748.00	32.80	160.15	8723.43	31.00	208.67	175.46 S	120.88 E	213.07@	145.44	6.69
8780.00	34.91	158.68	8750.00	32.00	226.48	192.14 S	127.15 E	230.41@	146.51	7.07
8811.00	36.76	158.25	8775.13	31.00	244.62	209.02 S	133.81 E	248.19@	147.37	6.02
8843.00	39.57	157.83	8800.29	32.00	264.39	227.36 S	141.21 E	267.64@	148.16	8.82
8874.00	43.18	156.76	8823.55	31.00	284.88	246.26 S	149.12 E	287.89@	148.80	11.87
8906.00	47.04	155.86	8846.13	32.00	307.54	267.01 S	158.24 E	310.38@	149.35	12.23
8937.00	49.95	156.18	8866.67	31.00	330.75	288.22 S	167.67 E	333.44@	149.81	9.42
8969.00	51.97	157.47	8886.82	32.00	355.60	311.07 S	177.45 E	358.12@	150.30	7.05
9000.00	53.82	158.41	8905.52	31.00	380.32	333.98 S	186.73 E	382.64@	150.79	6.44
9032.00	56.28	158.80	8923.85	32.00	406.54	358.40 S	196.30 E	408.64@	151.29	7.75
9064.00	59.71	158.65	8940.81	32.00	433.66	383.68 S	206.14 E	435.55@	151.75	10.73
9095.00	63.22	158.12	8955.62	31.00	460.88	409.00 S	216.17 E	462.61@	152.14	11.42

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORPORATION
TODD 36B STATE #20H
EDDY COUNTY, NM
RIG:H&P 416

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
9127.00	66.65	158.20	8969.17	32.00	489.86	435.90 S	226.96 E	491.45@	152.50	10.72
9158.00	70.17	158.27	8980.58	31.00	518.67	462.67 S	237.64 E	520.13@	152.81	11.36
9190.00	73.16	158.95	8990.64	32.00	549.04	490.95 S	248.72 E	550.35@	153.13	9.56
9221.00	75.97	158.82	8998.89	31.00	578.90	518.82 S	259.48 E	580.09@	153.43	9.07
9253.00	79.32	158.83	9005.74	32.00	610.14	547.96 S	270.77 E	611.21@	153.70	10.47
9284.00	81.60	158.84	9010.88	31.00	640.70	576.47 S	281.81 E	641.67@	153.95	7.36
9316.00	83.80	158.83	9014.94	32.00	672.42	606.07 S	293.27 E	673.29@	154.18	6.88
9347.00	86.17	158.35	9017.65	31.00	703.29	634.82 S	304.54 E	704.09@	154.37	7.80
9378.00	88.29	158.32	9019.15	31.00	734.24	663.59 S	315.97 E	734.98@	154.54	6.84
9410.00	89.16	158.60	9019.86	32.00	766.23	693.35 S	327.72 E	766.90@	154.70	2.86
9441.00	90.48	157.79	9019.96	31.00	797.22	722.13 S	339.23 E	797.84@	154.84	5.00
9473.00	90.92	156.71	9019.57	32.00	829.22	751.64 S	351.60 E	829.81@	154.93	3.64
9567.00	91.89	155.39	9017.26	94.00	923.17	837.52 S	389.75 E	923.76@	155.04	1.74
9662.00	92.42	155.04	9013.69	95.00	1018.05	923.70 S	429.55 E	1018.69@	155.06	0.67
9756.00	92.24	154.80	9009.87	94.00	1111.90	1008.77 S	469.36 E	1112.62@	155.05	0.32
9851.00	92.68	154.84	9005.79	95.00	1206.74	1094.66 S	509.74 E	1207.53@	155.03	0.46
9946.00	91.45	155.12	9002.37	95.00	1301.61	1180.69 S	549.89 E	1302.46@	155.03	1.33
10040.00	91.89	155.11	8999.63	94.00	1395.52	1265.93 S	589.43 E	1396.42@	155.03	0.47
10135.00	89.78	157.06	8998.24	95.00	1490.48	1352.75 S	627.93 E	1491.39@	155.10	3.02
10229.00	90.84	157.47	8997.74	94.00	1584.48	1439.45 S	664.26 E	1585.32@	155.23	1.21
10324.00	88.46	158.74	8998.32	95.00	1679.45	1527.58 S	699.68 E	1680.20@	155.39	2.84
10419.00	88.55	158.56	9000.80	95.00	1774.38	1616.04 S	734.26 E	1775.02@	155.57	0.21
10513.00	87.32	159.12	9004.18	94.00	1868.28	1703.64 S	768.16 E	1868.81@	155.73	1.44
10608.00	89.08	159.64	9007.17	95.00	1963.15	1792.50 S	801.60 E	1963.58@	155.91	1.93
10702.00	87.93	159.08	9009.62	94.00	2057.04	1880.44 S	834.73 E	2057.38@	156.06	1.36
10797.00	87.49	159.27	9013.41	95.00	2151.91	1969.16 S	868.47 E	2152.17@	156.20	0.50
10891.00	89.16	157.50	9016.16	94.00	2245.84	2056.51 S	903.08 E	2246.06@	156.29	2.59
10986.00	90.48	157.13	9016.46	95.00	2340.83	2144.16 S	939.72 E	2341.04@	156.33	1.44

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORPORATION
TODD 36B STATE #20H
EDDY COUNTY, NM
RIG:H&P 416

Page 03/04

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
11080.00	91.45	156.39	9014.88	94.00	2434.82	2230.52 S	976.80 E	2435.02@	156.35	1.30
11176.00	92.51	156.17	9011.56	96.00	2530.75	2318.35 S	1015.40 E	2530.97@	156.35	1.13
11270.00	93.12	156.47	9006.94	94.00	2624.62	2404.33 S	1053.11 E	2624.85@	156.35	0.72
11365.00	91.71	156.56	9002.94	95.00	2719.53	2491.38 S	1090.93 E	2719.76@	156.35	1.49
11459.00	91.89	156.69	8999.99	94.00	2813.48	2577.63 S	1128.20 E	2813.72@	156.36	0.24
11554.00	92.86	155.00	8996.05	95.00	2908.37	2664.23 S	1167.04 E	2908.63@	156.34	2.05
11648.00	93.83	155.32	8990.57	94.00	3002.16	2749.39 S	1206.46 E	3002.45@	156.31	1.09
11743.00	92.42	156.56	8985.39	95.00	3096.99	2836.00 S	1245.13 E	3097.30@	156.30	1.98
11837.00	91.10	157.50	8982.50	94.00	3190.95	2922.50 S	1281.80 E	3191.24@	156.32	1.72
11932.00	90.04	158.12	8981.56	95.00	3285.93	3010.46 S	1317.68 E	3286.21@	156.36	1.29
12026.00	89.60	158.20	8981.85	94.00	3379.92	3097.71 S	1352.65 E	3380.16@	156.41	0.48
12120.00	89.96	157.78	8982.21	94.00	3473.90	3184.86 S	1387.87 E	3474.12@	156.45	0.59
12215.00	92.68	158.46	8980.02	95.00	3568.85	3272.99 S	1423.26 E	3569.05@	156.50	2.95
12310.00	91.80	159.55	8976.31	95.00	3663.73	3361.61 S	1457.27 E	3663.89@	156.56	1.47
12404.00	89.52	158.35	8975.23	94.00	3757.66	3449.32 S	1491.03 E	3757.79@	156.62	2.74
12499.00	89.08	157.22	8976.39	95.00	3852.65	3537.26 S	1526.95 E	3852.77@	156.65	1.28
12593.00	88.02	156.73	8978.77	94.00	3946.62	3623.75 S	1563.70 E	3946.73@	156.66	1.24
12688.00	88.46	156.09	8981.68	95.00	4041.56	3710.77 S	1601.70 E	4041.69@	156.65	0.82
12782.00	86.97	157.90	8985.43	94.00	4135.48	3797.21 S	1638.41 E	4135.60@	156.66	2.49
12877.00	87.23	157.30	8990.24	95.00	4230.36	3884.93 S	1674.56 E	4230.47@	156.68	0.69
12972.00	86.44	158.75	8995.48	95.00	4325.20	3972.89 S	1710.06 E	4325.29@	156.71	1.74
13066.00	87.23	158.58	9000.67	94.00	4419.02	4060.32 S	1744.20 E	4419.10@	156.75	0.86
13161.00	88.29	157.50	9004.39	95.00	4513.93	4148.35 S	1779.70 E	4514.00@	156.78	1.59
13256.00	87.41	158.31	9007.95	95.00	4608.85	4236.31 S	1815.41 E	4608.91@	156.80	1.26
13350.00	89.60	158.97	9010.40	94.00	4702.78	4323.82 S	1849.63 E	4702.83@	156.84	2.43
13445.00	87.76	158.53	9012.59	95.00	4797.71	4412.34 S	1884.05 E	4797.75@	156.88	1.99
13539.00	87.23	158.11	9016.70	94.00	4891.60	4499.60 S	1918.74 E	4891.63@	156.91	0.72
13634.00	88.81	157.60	9019.98	95.00	4986.53	4587.54 S	1954.53 E	4986.55@	156.92	1.75

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORPORATION
TODD 36B STATE #20H
EDDY COUNTY, NM
RIG:H&P 416

Page 04/04

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
13727.00	88.72	158.15	9021.99	93.00	5079.50	4673.67 S	1989.55 E	5079.52@	156.94	0.60
13823.00	89.78	158.49	9023.24	96.00	5175.47	4762.87 S	2025.01 E	5175.48@	156.97	1.16
13915.00	89.16	158.15	9024.10	92.00	5267.44	4848.36 S	2059.00 E	5267.45@	156.99	0.77
STRAIGHT LINE PROJECTION TO BIT AT 13975' MD.										
13975.00	89.16	158.15	9024.97	60.00	5327.43	4904.04 S	2081.33 E	5327.43@	157.00	0.00

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

DEVON ENERGY
TODD 36B STATE #20H
EDDY COUNTY, NEW MEXICO
Rig:HP 416

Fri Nov 05 16:29:15 2010

Coordinates

Latitude: 32.268149 N (32 deg. 16 min. 5.3359 sec.)
Longitude: 103.730684 W (-103 deg. 43 min. 50.4615 sec.)
Elevation: 3531.40 feet.
Calculation Date: Nov/05/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.2155 degrees
Total Magnetic Field: 0.48686 gauss
Magnetic Declination: 7.736607 degrees
Horizontal Intensity: 0.241840 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.736607 Degs

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 727607.4300 feet
Y: 461808.6000 feet
True to Grid: (convergence) -0.321753 degrees
Magnetic to Grid: 7.414854 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.414854 Degs.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

DEVON ENERGY
TODD 36B ST #20H
EDDY CO, NM
Rig:HP 416

Sat Nov 13 21:10:02 2010

Coordinates

Latitude: 32.268149 N (32 deg. 16 min. 5.3359 sec.)
Longitude: 103.730684 W (-103 deg. 43 min. 50.4615 sec.)
Elevation: 3541.00 feet.
Calculation Date: Nov/13/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.2150 degrees
Total Magnetic Field: 0.48683 gauss
Magnetic Declination: 7.733929 degrees
Horizontal Intensity: 0.241833 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.733929 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 727607.4300 feet
Y: 461808.6000 feet
True to Grid: (convergence) -0.321753 degrees
Magnetic to Grid: 7.412176 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.412176 Degr.

December 8, 2010

Devon Energy
20 N. Broadway
Oklahoma City, OK

RE: Devon Energy
Todd 36B State #20H
API: 30-015-38044
Eddy County, NM
RIG: H & P 416
FIELD: Pierce Crossing; Bone Spring
PES FILE NO.: 700000780-WT-WT

To whom it may concern:

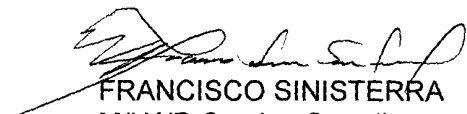
We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA

- 1 – Original survey report
- 2 – Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 687-1647

Sincerely,


FRANCISCO SINISTERRA
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh

