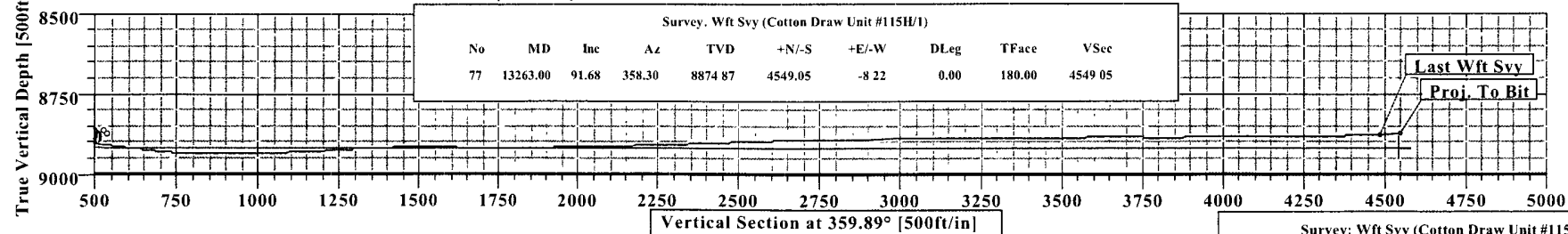
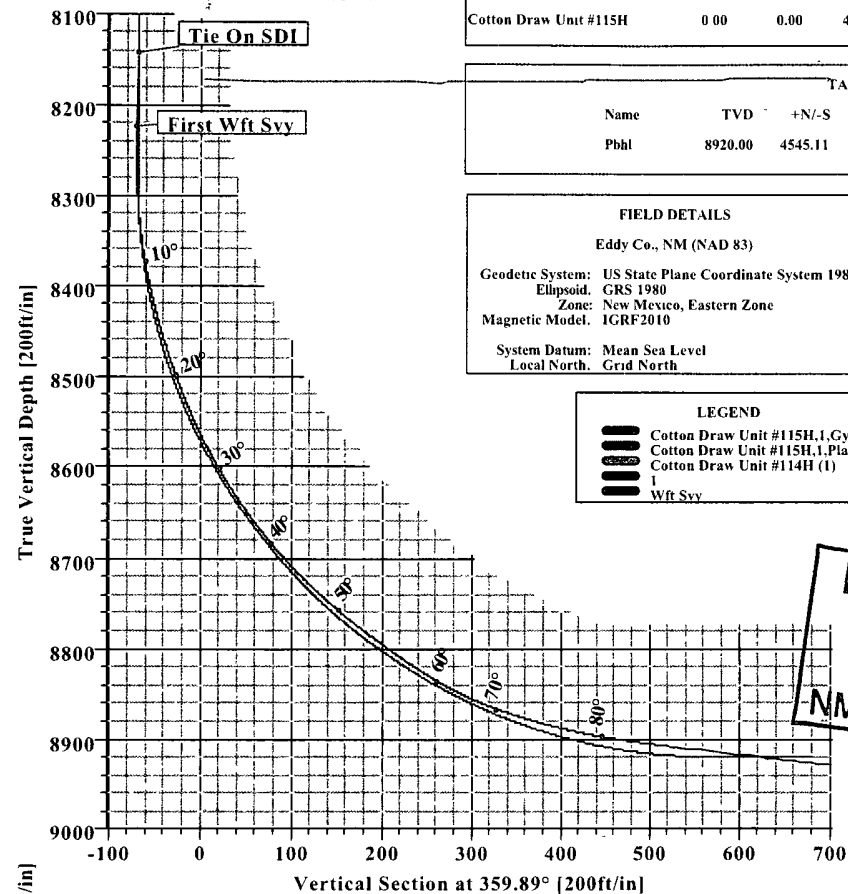


30-015-37898

devon

Cotton Draw Unit #115H  
Eddy Co., NMKB ELEV: 3472  
GL ELEV: 3447

## SECTION DETAILS

| Sec | MD       | Inc   | Az     | TVD     | +N/-S   | +E/-W | DLeg | TFace  | VSec    | Target |
|-----|----------|-------|--------|---------|---------|-------|------|--------|---------|--------|
| 1   | 8145.00  | 1.21  | 166.59 | 8143.28 | -67.96  | 81.49 | 0.00 | 0.00   | -68.12  |        |
| 2   | 8185.33  | 0.00  | 0.00   | 8183.61 | -68.37  | 81.59 | 3.00 | 180.00 | -68.53  |        |
| 3   | 8285.02  | 0.00  | 0.00   | 8283.30 | -68.37  | 81.59 | 0.00 | 0.00   | -68.53  |        |
| 4   | 9285.01  | 90.00 | 358.88 | 8919.92 | 568.11  | 69.10 | 9.00 | -1.12  | 567.97  |        |
| 5   | 13262.78 | 90.00 | 358.88 | 8920.00 | 4545.11 | -8.95 | 0.00 | 0.00   | 4545.12 | Pbhl   |

## WELL DETAILS

| Name                   | +N/-S | +E/-W | Northing  | Easting   | Latitude      | Longitude      | Slot |
|------------------------|-------|-------|-----------|-----------|---------------|----------------|------|
| Cotton Draw Unit #115H | 0.00  | 0.00  | 425200.20 | 717966.28 | 32°10'03.588N | 103°45'45.031W | N/A  |

## TARGET DETAILS

| Name | TVD     | +N/-S   | +E/-W | Northing  | Easting   | Shape |
|------|---------|---------|-------|-----------|-----------|-------|
| Pbhl | 8920.00 | 4545.11 | -8.95 | 429745.31 | 717957.34 | 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: IGRF2010System Datum: Mean Sea Level  
Local North: Grid North

## SITE DETAILS

Cotton Draw Unit #115H

Site Centre Northing: 425200.20  
Easting: 717966.28Ground Level: 3447.00  
Positional Uncertainty: 0.00  
Convergence: 0.30

## LEGEND

- Cotton Draw Unit #115H, 1, Gyro
- Cotton Draw Unit #115H, 1, Plan #3
- Cotton Draw Unit #114H (1)
- 1
- Wft Svy

G

T

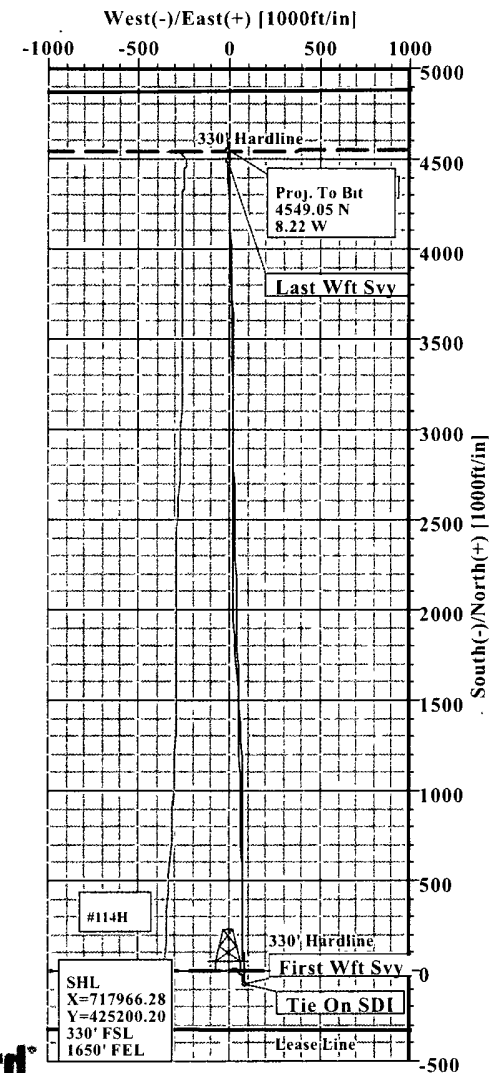
M

Azimuths to Grid North  
True North: -0.30°  
Magnetic North: 7.44°Magnetic Field  
Strength: 48649nT  
Dip Angle: 60.12°  
Date: 10/30/2010  
Model: IGRF2010

Total Correction to Grid North: 7.44°

RECEIVED  
AUG 4 2011  
NMOCD ARTESIA

Weatherford



Survey: Wft Svy (Cotton Draw Unit #115H/1)

Created By: Russell W. Joyner

Date: 11/3/2010



# Weatherford International Ltd.

## WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy Date: 11/3/2010 Time: 07:36:14 Page: 1  
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well Cotton Draw Unit #115H, Grid North  
Site: Cotton Draw Unit #115H Vertical (TVD) Reference: SITE 3472.0  
Well: Cotton Draw Unit #115H Section (VS) Reference: Well (0.00N, 0.00E, 359.89Azi)  
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 10/25/2010  
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  
Geo Datum: GRS 1980  
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone  
Coordinate System: Well Centre  
Geomagnetic Model: IGRF2010

Site: Cotton Draw Unit #115H

Site Position: Northing: 425200.20 ft Latitude: 32 10 3 588 N  
From: Map Easting: 717966.28 ft Longitude: 103 45 45 031 W  
Position Uncertainty: 0.00 ft North Reference: Grd  
Ground Level: 3447.00 ft Grid Convergence: 0.30 deg

Well: Cotton Draw Unit #115H Slot Name:  
Well Position: +N/-S 0.00 ft Northing: 425200.20 ft Latitude: 32 10 3 588 N  
+E/-W 0.00 ft Easting: 717966.28 ft Longitude: 103 45 45 031 W  
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface  
Current Datum: SITE Tie-on Depth: 0.00 ft  
Magnetic Data: 10/30/2010 Height 3472.00 ft Above System Datum: Mean Sea Level  
Field Strength: 48649 nT Declination: 7.75 deg  
Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.12 deg  
ft +E/-W Direction  
deg  
0.00 0.00 0.00 359.89

### 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        |                             |
| 8145.00 | 1.21  | 166.59 | 8143.28 | -67.96 | 81.49 | 0.00      | -68.12 | 425132.24 | 718047.77 | Tie On SDI<br>First Wft Svy |
| 8225.00 | 1.21  | 176.16 | 8223.26 | -69.62 | 81.74 | 0.25      | -69.79 | 425130.57 | 718048.02 |                             |
| 8257.00 | 0.27  | 59.59  | 8255.26 | -69.92 | 81.83 | 4.23      | -70.08 | 425130.27 | 718048.11 |                             |
| 8289.00 | 2.38  | 7.97   | 8287.25 | -69.23 | 81.99 | 6.95      | -69.39 | 425130.97 | 718048.27 |                             |
| 8320.00 | 4.82  | 3.54   | 8318.19 | -67.29 | 82.16 | 7.92      | -67.45 | 425132.91 | 718048.44 |                             |
| 8352.00 | 7.67  | 1.19   | 8349.99 | -63.81 | 82.28 | 8.94      | -63.97 | 425136.39 | 718048.57 |                             |
| 8383.00 | 10.61 | 0.58   | 8380.60 | -58.89 | 82.36 | 9.49      | -59.05 | 425141.31 | 718048.64 |                             |
| 8415.00 | 13.16 | 2.05   | 8411.91 | -52.30 | 82.52 | 8.02      | -52.46 | 425147.90 | 718048.80 |                             |
| 8447.00 | 15.69 | 2.47   | 8442.90 | -44.34 | 82.83 | 7.91      | -44.50 | 425155.86 | 718049.12 |                             |
| 8478.00 | 18.10 | 1.29   | 8472.56 | -35.33 | 83.12 | 7.85      | -35.50 | 425164.86 | 718049.40 |                             |
| 8510.00 | 20.31 | 359.10 | 8502.77 | -24.81 | 83.15 | 7.26      | -24.97 | 425175.39 | 718049.43 |                             |
| 8541.00 | 22.67 | 357.24 | 8531.62 | -13.46 | 82.77 | 7.92      | -13.62 | 425186.74 | 718049.06 |                             |
| 8573.00 | 25.57 | 355.99 | 8560.82 | -0.41  | 81.99 | 9.20      | -0.57  | 425199.79 | 718048.28 |                             |
| 8605.00 | 28.52 | 355.48 | 8589.32 | 14.10  | 80.91 | 9.25      | 13.94  | 425214.29 | 718047.19 |                             |
| 8637.00 | 31.76 | 355.82 | 8616.99 | 30.12  | 79.69 | 10.14     | 29.96  | 425230.31 | 718045.98 |                             |
| 8668.00 | 34.76 | 355.90 | 8642.91 | 47.07  | 78.47 | 9.68      | 46.92  | 425247.27 | 718044.75 |                             |
| 8700.00 | 38.03 | 356.18 | 8668.66 | 66.01  | 77.16 | 10.23     | 65.86  | 425266.21 | 718043.44 |                             |
| 8732.00 | 41.24 | 356.69 | 8693.30 | 86.38  | 75.89 | 10.08     | 86.23  | 425286.58 | 718042.17 |                             |
| 8763.00 | 44.73 | 357.03 | 8715.98 | 107.48 | 74.74 | 11.28     | 107.34 | 425307.68 | 718041.02 |                             |
| 8795.00 | 47.50 | 357.18 | 8738.16 | 130.52 | 73.57 | 8.66      | 130.37 | 425330.71 | 718039.85 |                             |
| 8826.00 | 50.18 | 357.55 | 8758.56 | 153.83 | 72.50 | 8.69      | 153.68 | 425354.02 | 718038.78 |                             |
| 8857.00 | 52.03 | 357.91 | 8778.02 | 177.93 | 71.55 | 6.04      | 177.79 | 425378.13 | 718037.83 |                             |
| 8889.00 | 54.05 | 357.85 | 8797.26 | 203.49 | 70.60 | 6.31      | 203.35 | 425403.68 | 718036.88 |                             |
| 8921.00 | 56.03 | 358.03 | 8815.60 | 229.69 | 69.66 | 6.20      | 229.56 | 425429.89 | 718035.94 |                             |



# Weatherford International Ltd.

## WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy  
Field: Eddy Co NM (NAD 83)  
Site: Cotton Draw Unit #115H  
Well: Cotton Draw Unit #115H  
Wellpath: 1

Date: 11/3/2010  
Co-ordinate(NE) Reference:  
Vertical (TVD) Reference:  
Section (VS) Reference:  
Survey Calculation Method:

Time: 07 36 14  
Well: Cotton Draw Unit #115H, Grid North  
SITE 3472.0  
Well (0.00N, 0.00E, 359 89Azi)  
Minimum Curvature  
Db: Sybase

Page: 2

**Survey**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | VS<br>ft | MapN<br>ft | MapE<br>ft | Comment      |
|----------|-------------|-------------|-----------|-----------|-----------|------------------|----------|------------|------------|--------------|
| 8953.00  | 59.05       | 358.38      | 8832.77   | 256.68    | 68.81     | 9.48             | 256.54   | 425456.87  | 718035.10  |              |
| 8984.00  | 63.42       | 359.80      | 8847.68   | 283.84    | 68.39     | 14.66            | 283.71   | 425484.04  | 718034.67  |              |
| 9016.00  | 68.04       | 1.02        | 8860.83   | 313.00    | 68.60     | 14.85            | 312.87   | 425513.20  | 718034.89  |              |
| 9047.00  | 71.73       | 2.59        | 8871.49   | 342.09    | 69.52     | 12.82            | 341.95   | 425542.29  | 718035.81  |              |
| 9079.00  | 74.28       | 1.87        | 8880.85   | 372.67    | 70.71     | 8.25             | 372.53   | 425572.87  | 718037.00  |              |
| 9110.00  | 76.79       | 1.68        | 8888.59   | 402.67    | 71.64     | 8.12             | 402.53   | 425602.87  | 718037.93  |              |
| 9142.00  | 79.09       | 1.78        | 8895.28   | 433.95    | 72.59     | 7.19             | 433.80   | 425634.14  | 718038.87  |              |
| 9173.00  | 81.33       | 0.86        | 8900.55   | 464.48    | 73.29     | 7.80             | 464.34   | 425664.68  | 718039.57  |              |
| 9207.00  | 82.75       | 0.02        | 8905.25   | 498.15    | 73.55     | 4.84             | 498.01   | 425698.35  | 718039.83  |              |
| 9239.00  | 83.55       | 0.59        | 8909.07   | 529.93    | 73.72     | 3.06             | 529.78   | 425730.12  | 718040.00  |              |
| 9334.00  | 82.97       | 0.25        | 8920.22   | 624.27    | 74.41     | 0.71             | 624.12   | 425824.46  | 718040.69  |              |
| 9428.00  | 84.30       | 0.86        | 8930.64   | 717.68    | 75.32     | 1.55             | 717.53   | 425917.88  | 718041.60  |              |
| 9523.00  | 88.48       | 0.77        | 8936.62   | 812.46    | 76.66     | 4.40             | 812.31   | 426012.66  | 718042.95  |              |
| 9618.00  | 90.77       | 0.53        | 8937.24   | 907.45    | 77.74     | 2.42             | 907.29   | 426107.64  | 718044.02  |              |
| 9712.00  | 91.57       | 358.23      | 8935.32   | 1001.41   | 76.72     | 2.59             | 1001.26  | 426201.61  | 718043.01  |              |
| 9807.00  | 92.20       | 359.16      | 8932.20   | 1096.34   | 74.56     | 1.18             | 1096.19  | 426296.53  | 718040.84  |              |
| 9901.00  | 93.12       | 357.58      | 8927.84   | 1190.19   | 71.89     | 1.94             | 1190.05  | 426390.39  | 718038.17  |              |
| 9996.00  | 93.58       | 356.23      | 8922.28   | 1284.89   | 66.77     | 1.50             | 1284.76  | 426485.09  | 718033.05  |              |
| 10090.00 | 91.97       | 357.06      | 8917.73   | 1378.61   | 61.28     | 1.93             | 1378.49  | 426578.81  | 718027.56  |              |
| 10185.00 | 90.60       | 356.78      | 8915.60   | 1473.45   | 56.17     | 1.47             | 1473.34  | 426673.65  | 718022.46  |              |
| 10279.00 | 89.29       | 355.66      | 8915.69   | 1567.24   | 49.98     | 1.83             | 1567.14  | 426767.44  | 718016.26  |              |
| 10374.00 | 87.80       | 356.03      | 8918.11   | 1661.96   | 43.10     | 1.62             | 1661.87  | 426862.16  | 718009.38  |              |
| 10468.00 | 90.14       | 354.80      | 8919.80   | 1755.64   | 35.58     | 2.81             | 1755.56  | 426955.83  | 718001.87  |              |
| 10563.00 | 91.23       | 356.35      | 8918.66   | 1850.34   | 28.26     | 1.99             | 1850.28  | 427050.54  | 717994.54  |              |
| 10657.00 | 91.91       | 358.84      | 8916.08   | 1944.22   | 24.31     | 2.74             | 1944.16  | 427144.41  | 717990.59  |              |
| 10751.00 | 91.00       | 359.76      | 8913.70   | 2038.18   | 23.16     | 1.38             | 2038.13  | 427238.37  | 717989.45  |              |
| 10846.00 | 90.83       | 359.09      | 8912.18   | 2133.16   | 22.21     | 0.73             | 2133.11  | 427333.36  | 717988.49  |              |
| 10940.00 | 91.34       | 359.30      | 8910.40   | 2227.13   | 20.89     | 0.59             | 2227.09  | 427427.33  | 717987.17  |              |
| 11034.00 | 92.65       | 359.32      | 8907.13   | 2321.07   | 19.76     | 1.39             | 2321.02  | 427521.26  | 717986.04  |              |
| 11129.00 | 92.02       | 359.06      | 8903.26   | 2415.98   | 18.42     | 0.72             | 2415.94  | 427616.17  | 717984.70  |              |
| 11223.00 | 92.83       | 359.33      | 8899.28   | 2509.88   | 17.10     | 0.91             | 2509.84  | 427710.08  | 717983.38  |              |
| 11318.00 | 91.45       | 0.76        | 8895.73   | 2604.81   | 17.17     | 2.09             | 2604.77  | 427805.01  | 717983.46  |              |
| 11412.00 | 91.00       | 1.32        | 8893.72   | 2698.77   | 18.88     | 0.76             | 2698.73  | 427898.97  | 717985.16  |              |
| 11507.00 | 90.20       | 1.59        | 8892.73   | 2793.74   | 21.29     | 0.89             | 2793.69  | 427993.93  | 717987.57  |              |
| 11601.00 | 90.88       | 0.54        | 8891.84   | 2887.72   | 23.04     | 1.33             | 2887.66  | 428087.91  | 717989.32  |              |
| 11696.00 | 90.94       | 0.15        | 8890.33   | 2982.70   | 23.61     | 0.42             | 2982.65  | 428182.90  | 717989.89  |              |
| 11790.00 | 90.60       | 359.41      | 8889.07   | 3076.69   | 23.25     | 0.87             | 3076.64  | 428276.89  | 717989.53  |              |
| 11885.00 | 89.40       | 0.38        | 8889.07   | 3171.69   | 23.08     | 1.62             | 3171.64  | 428371.89  | 717989.36  |              |
| 11979.00 | 89.91       | 0.14        | 8889.64   | 3265.69   | 23.50     | 0.60             | 3265.63  | 428465.88  | 717989.78  |              |
| 12074.00 | 90.89       | 359.67      | 8888.97   | 3360.68   | 23.34     | 1.14             | 3360.63  | 428560.88  | 717989.63  |              |
| 12168.00 | 90.65       | 359.73      | 8887.71   | 3454.67   | 22.85     | 0.26             | 3454.62  | 428654.87  | 717989.13  |              |
| 12263.00 | 91.40       | 358.28      | 8886.01   | 3549.64   | 21.20     | 1.72             | 3549.59  | 428749.84  | 717987.48  |              |
| 12357.00 | 90.20       | 357.79      | 8884.70   | 3643.57   | 17.98     | 1.38             | 3643.53  | 428843.77  | 717984.26  |              |
| 12452.00 | 89.17       | 358.88      | 8885.22   | 3738.53   | 15.22     | 1.58             | 3738.49  | 428938.73  | 717981.50  |              |
| 12546.00 | 90.20       | 357.92      | 8885.74   | 3832.49   | 12.60     | 1.50             | 3832.46  | 429032.69  | 717978.88  |              |
| 12641.00 | 90.94       | 358.32      | 8884.79   | 3927.43   | 9.48      | 0.89             | 3927.41  | 429127.63  | 717975.76  |              |
| 12735.00 | 90.37       | 357.72      | 8883.72   | 4021.37   | 6.23      | 0.88             | 4021.35  | 429221.57  | 717972.51  |              |
| 12829.00 | 90.77       | 358.19      | 8882.78   | 4115.30   | 2.88      | 0.66             | 4115.29  | 429315.50  | 717969.16  |              |
| 12924.00 | 89.80       | 358.41      | 8882.31   | 4210.26   | 0.06      | 1.05             | 4210.25  | 429410.46  | 717966.34  |              |
| 13019.00 | 90.66       | 359.17      | 8881.93   | 4305.24   | -1.95     | 1.21             | 4305.23  | 429505.43  | 717964.33  |              |
| 13113.00 | 92.15       | 358.46      | 8879.62   | 4399.18   | -3.89     | 1.76             | 4399.18  | 429599.38  | 717962.39  |              |
| 13199.00 | 91.68       | 358.30      | 8876.75   | 4485.10   | -6.32     | 0.58             | 4485.11  | 429685.30  | 717959.96  | Last Wft Svy |



# Weatherford International Ltd.

## WFT Survey Report X & Y's

**Weatherford**

|           |                        |                            |                                          |       |          |       |   |
|-----------|------------------------|----------------------------|------------------------------------------|-------|----------|-------|---|
| Company:  | Devon Energy           | Date:                      | 11/3/2010                                | Time: | 07:36 14 | Page: | 3 |
| Field:    | Eddy Co. NM (NAD 83)   | Co-ordinate(NE) Reference: | Well: Cotton Draw Unit #115H, Grid North |       |          |       |   |
| Site:     | Cotton Draw Unit #115H | Vertical (TVD) Reference:  | SITE 3472 0                              |       |          |       |   |
| Well:     | Cotton Draw Unit #115H | Section (VS) Reference:    | Well (0.00N;0.00E;359.89Azi)             |       |          |       |   |
| Wellpath: | 1                      | Survey Calculation Method: | Minimum Curvature Db: Sybase             |       |          |       |   |

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | VS<br>ft | MapN<br>ft | MapE<br>ft | Comment     |
|----------|-------------|-------------|-----------|-----------|-----------|------------------|----------|------------|------------|-------------|
| 13263.00 | 91.68       | 358.30      | 8874.87   | 4549.05   | -8.22     | 0.00             | 4549.05  | 429749.24  | 717958.06  | Proj To Bit |

### Annotation

| MD<br>ft | TVD<br>ft |               |
|----------|-----------|---------------|
| 8145.00  | 8143.28   | Tie On SDI    |
| 8225.00  | 8223.26   | First Wft Svy |
| 13199.00 | 8876.75   | Last Wft Svy  |
| 13263.00 | 8874.87   | Proj. To Bit  |



# Weatherford<sup>®</sup>

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: November 5, 2010

Attention: Wes Handley

Re: Devon Energy  
Well: Cotton Draw Unit #115H  
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<br/>Of Surveyor</u> | <u>Well<br/>Number</u> | <u>Surveyed<br/>Depths</u> | <u>Dates<br/>Performed</u> | <u>Type of<br/>Survey</u>     |
|-----------------------------------------|------------------------|----------------------------|----------------------------|-------------------------------|
| Micheal Dill<br>MWD Supervisor          | 115H                   | 8225' MD<br>13199' MD      | 10/20/2010<br>11/3/2010    | Measurement<br>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.

Luke Schnell  
Area Manager

On this, the 5<sup>th</sup> day of November, 2010, before me a notary public, the undersigned officer, personally appeared Luke Schnell, 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