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State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                         |                                                                     |                                                    |
|-----------------------------------------|---------------------------------------------------------------------|----------------------------------------------------|
| <sup>1</sup> API Number<br>30-015-38453 | <sup>2</sup> Pool Code<br>96641                                     | <sup>3</sup> Pool Name<br>Paduca; Bone Spring, (6) |
| <sup>4</sup> Property Code<br>300635    | <sup>5</sup> Property Name<br>COTTON DRAW                           | <sup>6</sup> Well Number<br>122                    |
| <sup>7</sup> OGRID No.<br>6137          | <sup>8</sup> Operator Name<br>DEVON ENERGY PRODUCTION COMPANY, L.P. | <sup>9</sup> Elevation<br>3504.6                   |

| 10 Surface Location |         |          |       |         |               |                  |               |                |        |
|---------------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot no.       | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| C                   | 35      | 24 S     | 31 E  |         | 160           | NORTH            | 1345          | WEST           | EDDY   |

| 11 Bottom Hole Location If Different From Surface |                               |                                  |       |         |               |                  |               |                |                         |
|---------------------------------------------------|-------------------------------|----------------------------------|-------|---------|---------------|------------------|---------------|----------------|-------------------------|
| UL or lot no.                                     | Section                       | Township                         | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County                  |
| N                                                 | 35                            | 24 S                             | 31 E  |         | 330           | SOUTH            | 1650          | WEST           | EDDY                    |
| <sup>12</sup> Dedicated Acres<br>160              | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code |       |         |               |                  |               |                | <sup>15</sup> Order No. |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

|                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>1345'</p> <p>NW CORNER SEC. 35<br/>LAT. = 32.1810982°N<br/>LONG. = 103.7571267°W<br/>NMSP EAST (FT)<br/>N = 430095.63<br/>E = 719604.02</p> <p>SURFACE LOCATION</p> <p>NE CORNER SEC. 35<br/>LAT. = 32.1811105°N<br/>LONG. = 103.7400502°W<br/>NMSP EAST (FT)<br/>N = 430128.84<br/>E = 724887.21</p> |  | <p><b>17 OPERATOR CERTIFICATION</b><br/>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Melanie Crawford</i> 1/4/13<br/>Signature Date</p> <p>Melanie Crawford<br/>Printed Name</p> <p>melanie.crawford@dmn.com<br/>E-mail Address</p> |  |
| <p>W O CORNER SEC. 35<br/>LAT. = 32.1738329°N<br/>LONG. = 103.7571535°W<br/>NMSP EAST (FT)<br/>N = 427452.57<br/>E = 719609.87</p> <p>COTTON DRAW UNIT #122<br/>ELEV. = 3504.6'<br/>LAT. = 32.1806613°N (NAD83)<br/>LONG. = 103.7527818°W<br/>NMSP EAST (FT)<br/>N = 429943.93<br/>E = 720949.11</p>     |  | <p>E O CORNER SEC. 35<br/>LAT. = 32.1738515°N<br/>LONG. = 103.7400723°W<br/>NMSP EAST (FT)<br/>N = 427488.08<br/>E = 724894.92</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <p>SW CORNER SEC. 35<br/>LAT. = 32.1667738°N<br/>LONG. = 103.7571883°W<br/>NMSP EAST (FT)<br/>N = 424884.54<br/>E = 719612.88</p> <p>BOTTOM OF HOLE<br/>LAT. = 32.1676534°N<br/>LONG. = 103.7518527°W<br/>NMSP EAST (FT)<br/>N = 425213.37<br/>E = 721262.14</p>                                         |  | <p><b>18 SURVEYOR CERTIFICATION</b><br/>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JULY 29, 2010<br/>Date of Survey</p> <p><i>Frank J. Ramirez</i><br/>Signature and Seal of Professional Surveyor</p> <p>Certificate Number: DIVISION 1518110. PLS 12797<br/>SURVEY NO. 159R</p>                                                                                                                                                                                                                                              |  |
| <p>1650'</p> <p>330'</p> <p>S O CORNER SEC. 35<br/>LAT. = 32.1667298°N<br/>LONG. = 103.7486367°W<br/>NMSP EAST (FT)<br/>N = 424882.79<br/>E = 722259.11</p> <p>SE CORNER SEC. 35<br/>LAT. = 32.1666866°N<br/>LONG. = 103.7400972°W<br/>NMSP EAST (FT)<br/>N = 424881.54<br/>E = 721901.59</p>            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |

Cotton Draw Unit 122H – APD DRILLING PLAN  
JSL 12.07.12

Casing Program

| <u>Hole Size</u> | <u>Hole Interval</u> | <u>OD Csg</u> | <u>Casing Interval</u> | <u>Weight</u> | <u>Collar</u> | <u>Grade</u> |
|------------------|----------------------|---------------|------------------------|---------------|---------------|--------------|
| 17-1/2"          | 0 – 755              | 13-3/8"       | 0 – 755                | 48#           | STC           | H-40         |
| 12-1/4"          | 575 – 4,200          | 9-5/8"        | 0 – 4,200              | 40#           | LTC           | J-55         |
| 8-3/4"           | 4,225 – 9,600        | 5-1/2"        | 0 – 9,600              | 17#           | LTC           | HCP-110      |
| 8-3/4"           | 9,600 – 14,863       | 5-1/2"        | 9,600 – 14,863         | 17#           | BTC           | HCP-110      |

An 8-3/4" pilot hole will be drilled to 10,700 ft and plugged back to KOP. Plugged back with 300 sks Class H, 15.6 ppg, 1.18 yield.

Design Factors

| <u>Casing Size</u>     | <u>Collapse Design Factor</u> | <u>Burst Design Factor</u> | <u>Tension Design Factor</u> |
|------------------------|-------------------------------|----------------------------|------------------------------|
| 13-3/8"                | 1.96                          | 4.41                       | 8.89                         |
| 9-5/8" 40# J-55 LTC    | 1.18                          | 1.81                       | 3.10                         |
| 5-1/2" 17# HCP-110 LTC | 1.91                          | 2.37                       | 2.73                         |
| 5-1/2" 17# HCP-110 BTC | 1.54                          | 2.19                       | 2.25                         |

Mud Program

| <u>Depth</u>   | <u>Mud Wt.</u> | <u>Visc.</u> | <u>Fluid Loss</u> | <u>Type System</u> |
|----------------|----------------|--------------|-------------------|--------------------|
| 0 – 755        | 8.4 – 8.6      | 28 – 32      | N/C               | FW                 |
| 755 – 4,200    | 9.9 – 10.1     | 28 – 29      | N/C               | Brine              |
| 4,200 – 14,863 | 8.7 – 9.4      | 28 – 29      | N/C               | FW                 |

Pressure Control Equipment:

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Tipple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **3M system** prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **3M system** prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at **3,000 psi WP**.

## Cementing Program

### 13-3/8" Surface

**Lead:** 380 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

**Yield:** 1.75 cf/sk

**TOC @ surface**

**Tail:** 310 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg

**Yield:** 1.35 cf/sk

### 9-5/8" Intermediate

**Lead:** 820 sacks (65:35) Class C Cement:Poz (Fly Ash) + 5% bwoc Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg

**Yield:** 1.85 cf/sk

**TOC @ surface**

**Tail:** 360 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

**Yield:** 1.33 cf/sk

### 5-1/2" Production

**1<sup>st</sup> Lead:** 400 sacks (50:50) Class H Cement:Poz (Fly Ash) + 10% bwoc Bentonite + 8 lb/sk Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 0.3% bwoc HR-601 + 0.3% bwoc Econolite + 77.2% Fresh Water, 11.8 ppg

**Yield:** 2.52 cf/sk

**2<sup>nd</sup> Lead:** 325 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.125 lbs/sack Poly-E-Flake + 0.1% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg

**Yield:** 1.95 cf/sk

**Tail:** 1600 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg

**Yield:** 1.22 cf/sk

### TOC for All Strings:

|               |         |
|---------------|---------|
| Surface:      | 0       |
| Intermediate: | 0       |
| Production:   | 3700 ft |

**ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.**



**Weatherford®**

**Drilling Services**

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**Proposal**

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**devon**

**COTTON DRAW UNIT 122H**

**EDDY COUNTY, NM**

**WELL FILE: PLAN 1**

**DECEMBER 6, 2012**

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**Weatherford International, Ltd.**

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# devon

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   | 0.00     | 0.00  | 176.21 | 0.00     | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |        |
| 2   | 9795.05  | 0.00  | 176.21 | 9795.05  | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |        |
| 3   | 10692.44 | 89.74 | 176.21 | 10368.00 | -569.10  | 37.66  | 10.00 | 176.21 | 570.35  |        |
| 4   | 14863.04 | 89.74 | 176.21 | 10387.00 | -4730.56 | 313.03 | 0.00  | 0.00   | 4740.91 | PBHL   |

## WELL DETAILS

| Name     | +N/-S | +E/-W | Northing  | Easting   | Latitude      | Longitude      | Slot |
|----------|-------|-------|-----------|-----------|---------------|----------------|------|
| 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 | 10387.00 | -4730.56 | 313.03 | 425213.37 | 721262.14 | Rectangle (4170x50) |

## 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

Cotton Draw Unit 122H

Site Centre Northing: 429943.93  
Easting: 720949.11

Ground Level: 3505.00  
Positional Uncertainty: 0.00  
Convergence: 0.31

## LEGEND

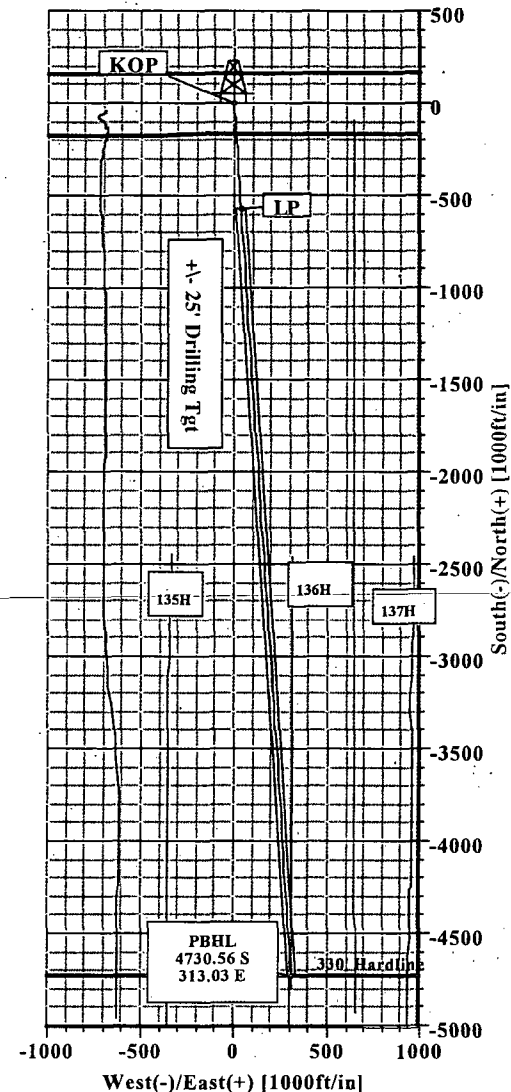
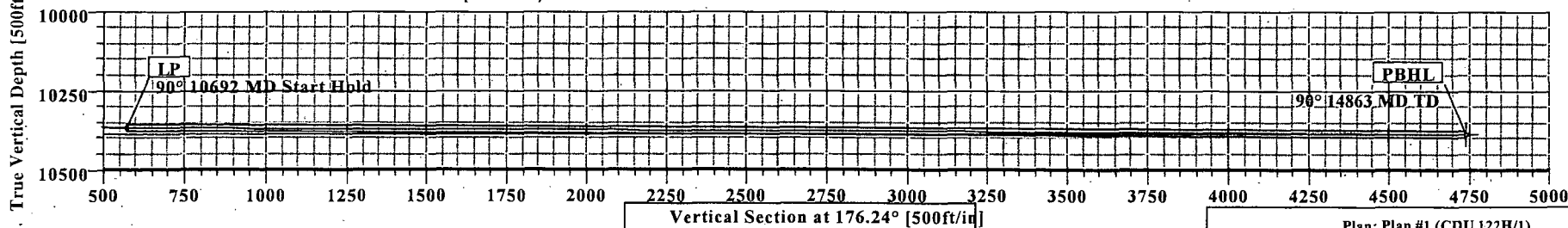
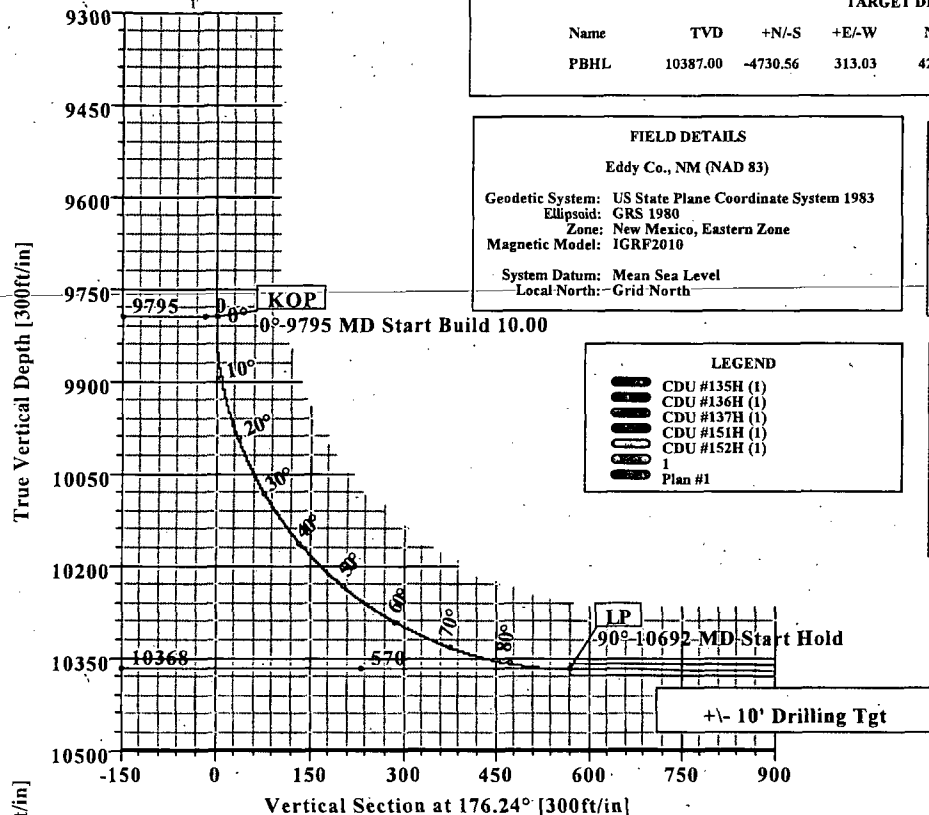
- CDU #135H (1)
- CDU #136H (1)
- CDU #137H (1)
- CDU #151H (1)
- CDU #152H (1)
- Plan #1



Azimuths to Grid North  
True North: -0.31°  
Magnetic North: 7.05°

Magnetic Field  
Strength: 48346nT  
Dip Angle: 60.05°  
Date: 12/15/2013  
Model: IGRF2010

Total Correction to Grid North: 7.05°



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Plan: Plan #1 (CDU 122H/1)  
Created By: Russell W. Joyner  
Date: 12/6/2012



# Weatherford

## WFT Plan Report - X & Y's

**Weatherford**

|                              |                                                        |                |         |
|------------------------------|--------------------------------------------------------|----------------|---------|
| Company: Devon Energy        | Date: 12/6/2012                                        | Time: 07:30:47 | Page: 1 |
| Field: Eddy Co., NM (NAD 83) | Co-ordinate(NE) Reference: Well: CDU 122H, Grid North  |                |         |
| Site: Cotton Draw Unit 122H  | Vertical (TVD) Reference: SITE 3530.0                  |                |         |
| Well: CDU 122H               | Section (VS) Reference: Well (0.00N, 0.00E, 176.24Azi) |                |         |
| Wellpath: 1                  | Survey Calculation Method: Minimum Curvature           | Db: Sybase     |         |

|                |                          |
|----------------|--------------------------|
| Plan: Plan #1  | Date Composed: 12/4/2012 |
| Principal: Yes | Version: 1               |
|                | Tied-to: From Surface    |

|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| 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: Cotton Draw Unit 122H   |                                                  |
| Site Position:                | Northing: 429943.93 ft Latitude: 32 10 50.372 N  |
| From: Map                     | Easting: 720949.11 ft Longitude: 103 45 10.031 W |
| Position Uncertainty: 0.00 ft | North Reference: Grid                            |
| Ground Level: 3505.00 ft      | Grid Convergence: 0.31 deg                       |

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

|                                    |                                    |
|------------------------------------|------------------------------------|
| Wellpath: 1                        | Drilled From: Surface              |
| Current Datum: *SITE               | Tie-on Depth: 0.00 ft              |
| Magnetic Data: 12/15/2013          | Above System Datum: Mean Sea Level |
| Field Strength: 48346 nT           | Declination: 7.36 deg              |
| Vertical Section: Depth From (TVD) | Mag Dip Angle: 60.05 deg           |
| ft                                 | +N/-S Direction                    |
| ft                                 | deg                                |
| 0.00                               | 0.00                               |
| 0.00                               | 176.24                             |

### Plan Section Information

| MD       | Incl  | Azim   | TVD      | +N/-S    | +E/-W  | DLS       | Build     | Turn      | TFO    | Target |
|----------|-------|--------|----------|----------|--------|-----------|-----------|-----------|--------|--------|
| ft       | deg   | deg    | ft       | ft       | ft     | deg/100ft | deg/100ft | deg/100ft | deg    |        |
| 0.00     | 0.00  | 176.21 | 0.00     | 0.00     | 0.00   | 0.00      | 0.00      | 0.00      | 0.00   |        |
| 9795.05  | 0.00  | 176.21 | 9795.05  | 0.00     | 0.00   | 0.00      | 0.00      | 0.00      | 0.00   |        |
| 10692.44 | 89.74 | 176.21 | 10368.00 | -569.10  | 37.66  | 10.00     | 10.00     | 0.00      | 176.21 |        |
| 14863.04 | 89.74 | 176.21 | 10387.00 | -4730.56 | 313.03 | 0.00      | 0.00      | 0.00      | 0.00   | PBHL   |

### Survey

| MD       | Incl  | Azim   | TVD      | N/S     | E/W   | VS     | DLS       | MapN      | MapE      | Comment |
|----------|-------|--------|----------|---------|-------|--------|-----------|-----------|-----------|---------|
| ft       | deg   | deg    | ft       | ft      | ft    | ft     | deg/100ft | ft        | ft        |         |
| 9700.00  | 0.00  | 176.21 | 9700.00  | 0.00    | 0.00  | 0.00   | 0.00      | 429943.93 | 720949.11 |         |
| 9795.05  | 0.00  | 176.21 | 9795.05  | 0.00    | 0.00  | 0.00   | 0.00      | 429943.93 | 720949.11 | KOP     |
| 9800.00  | 0.50  | 176.21 | 9800.00  | -0.02   | 0.00  | 0.02   | 10.00     | 429943.91 | 720949.11 |         |
| 9850.00  | 5.50  | 176.21 | 9849.92  | -2.63   | 0.17  | 2.63   | 10.00     | 429941.30 | 720949.28 |         |
| 9900.00  | 10.50 | 176.21 | 9899.41  | -9.56   | 0.63  | 9.59   | 10.00     | 429934.37 | 720949.74 |         |
| 9950.00  | 15.50 | 176.21 | 9948.12  | -20.78  | 1.38  | 20.82  | 10.00     | 429923.15 | 720950.49 |         |
| 10000.00 | 20.50 | 176.21 | 9995.66  | -36.19  | 2.39  | 36.27  | 10.00     | 429907.74 | 720951.50 |         |
| 10050.00 | 25.50 | 176.21 | 10041.67 | -55.67  | 3.68  | 55.79  | 10.00     | 429888.26 | 720952.79 |         |
| 10100.00 | 30.50 | 176.21 | 10085.80 | -79.08  | 5.23  | 79.26  | 10.00     | 429864.85 | 720954.34 |         |
| 10150.00 | 35.50 | 176.21 | 10127.73 | -106.24 | 7.03  | 106.47 | 10.00     | 429837.69 | 720956.14 |         |
| 10200.00 | 40.50 | 176.21 | 10167.12 | -136.95 | 9.06  | 137.24 | 10.00     | 429806.98 | 720958.17 |         |
| 10250.00 | 45.50 | 176.21 | 10203.68 | -170.96 | 11.31 | 171.33 | 10.00     | 429772.97 | 720960.42 |         |
| 10300.00 | 50.50 | 176.21 | 10237.13 | -208.02 | 13.76 | 208.47 | 10.00     | 429735.91 | 720962.87 |         |
| 10350.00 | 55.50 | 176.21 | 10267.21 | -247.85 | 16.40 | 248.39 | 10.00     | 429696.08 | 720965.51 |         |
| 10400.00 | 60.50 | 176.21 | 10293.70 | -290.14 | 19.20 | 290.78 | 10.00     | 429653.79 | 720968.31 |         |
| 10450.00 | 65.50 | 176.21 | 10316.40 | -334.58 | 22.14 | 335.31 | 10.00     | 429609.35 | 720971.25 |         |
| 10500.00 | 70.50 | 176.21 | 10335.13 | -380.82 | 25.20 | 381.65 | 10.00     | 429563.11 | 720974.31 |         |



# Weatherford

## WFT Plan Report - X & Y's

**Weatherford**

|                             |                                                       |                |         |
|-----------------------------|-------------------------------------------------------|----------------|---------|
| Company: Devon Energy       | Date: 12/6/2012                                       | Time: 07:30:47 | Page: 2 |
| Field: Eddy Co. NM (NAD 83) | Co-ordinate(NE) Reference: Well: CDU 122H, Grid North |                |         |
| Site: Cotton Draw Unit 122H | Vertical (TVD) Reference: SITE 3530.0                 |                |         |
| Well: CDU 122H              | Section (VS) Reference: Well (0.00N 0.00E 176.24Azi)  |                |         |
| 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 | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comment |
|----------|--------------|--------------|-----------|-----------|-----------|----------|------------------|------------|------------|---------|
| 10550.00 | 75.50        | 176.21       | 10349.75  | -428.52   | 28.36     | 429.45   | 10.00            | 429515.41  | 720977.47  |         |
| 10600.00 | 80.50        | 176.21       | 10360.14  | -477.30   | 31.58     | 478.34   | 10.00            | 429466.63  | 720980.69  |         |
| 10650.00 | 85.50        | 176.21       | 10366.24  | -526.80   | 34.86     | 527.95   | 10.00            | 429417.13  | 720983.97  |         |
| 10692.44 | 89.74        | 176.21       | 10368.00  | -569.10   | 37.66     | 570.35   | 10.00            | 429374.83  | 720986.77  | LP      |
| 10700.00 | 89.74        | 176.21       | 10368.04  | -576.65   | 38.16     | 577.91   | 0.00             | 429367.28  | 720987.27  |         |
| 10800.00 | 89.74        | 176.21       | 10368.49  | -676.43   | 44.76     | 677.91   | 0.00             | 429267.50  | 720993.87  |         |
| 10900.00 | 89.74        | 176.21       | 10368.95  | -776.21   | 51.36     | 777.91   | 0.00             | 429167.72  | 721000.47  |         |
| 11000.00 | 89.74        | 176.21       | 10369.40  | -875.99   | 57.97     | 877.90   | 0.00             | 429067.94  | 721007.08  |         |
| 11100.00 | 89.74        | 176.21       | 10369.86  | -975.77   | 64.57     | 977.90   | 0.00             | 428968.16  | 721013.68  |         |
| 11200.00 | 89.74        | 176.21       | 10370.31  | -1075.55  | 71.17     | 1077.90  | 0.00             | 428868.38  | 721020.28  |         |
| 11300.00 | 89.74        | 176.21       | 10370.77  | -1175.33  | 77.77     | 1177.90  | 0.00             | 428768.60  | 721026.88  |         |
| 11400.00 | 89.74        | 176.21       | 10371.22  | -1275.11  | 84.38     | 1277.90  | 0.00             | 428668.82  | 721033.49  |         |
| 11500.00 | 89.74        | 176.21       | 10371.68  | -1374.89  | 90.98     | 1377.90  | 0.00             | 428569.04  | 721040.09  |         |
| 11600.00 | 89.74        | 176.21       | 10372.14  | -1474.67  | 97.58     | 1477.90  | 0.00             | 428469.26  | 721046.69  |         |
| 11700.00 | 89.74        | 176.21       | 10372.59  | -1574.45  | 104.18    | 1577.90  | 0.00             | 428369.48  | 721053.29  |         |
| 11800.00 | 89.74        | 176.21       | 10373.05  | -1674.23  | 110.79    | 1677.90  | 0.00             | 428269.70  | 721059.90  |         |
| 11900.00 | 89.74        | 176.21       | 10373.50  | -1774.02  | 117.39    | 1777.90  | 0.00             | 428169.91  | 721066.50  |         |
| 12000.00 | 89.74        | 176.21       | 10373.96  | -1873.80  | 123.99    | 1877.89  | 0.00             | 428070.13  | 721073.10  |         |
| 12100.00 | 89.74        | 176.21       | 10374.41  | -1973.58  | 130.60    | 1977.89  | 0.00             | 427970.35  | 721079.71  |         |
| 12200.00 | 89.74        | 176.21       | 10374.87  | -2073.36  | 137.20    | 2077.89  | 0.00             | 427870.57  | 721086.31  |         |
| 12300.00 | 89.74        | 176.21       | 10375.32  | -2173.14  | 143.80    | 2177.89  | 0.00             | 427770.79  | 721092.91  |         |
| 12400.00 | 89.74        | 176.21       | 10375.78  | -2272.92  | 150.40    | 2277.89  | 0.00             | 427671.01  | 721099.51  |         |
| 12500.00 | 89.74        | 176.21       | 10376.24  | -2372.70  | 157.01    | 2377.89  | 0.00             | 427571.23  | 721106.12  |         |
| 12600.00 | 89.74        | 176.21       | 10376.69  | -2472.48  | 163.61    | 2477.89  | 0.00             | 427471.45  | 721112.72  |         |
| 12700.00 | 89.74        | 176.21       | 10377.15  | -2572.26  | 170.21    | 2577.89  | 0.00             | 427371.67  | 721119.32  |         |
| 12800.00 | 89.74        | 176.21       | 10377.60  | -2672.04  | 176.81    | 2677.89  | 0.00             | 427271.89  | 721125.92  |         |
| 12900.00 | 89.74        | 176.21       | 10378.06  | -2771.82  | 183.42    | 2777.88  | 0.00             | 427172.11  | 721132.53  |         |
| 13000.00 | 89.74        | 176.21       | 10378.51  | -2871.60  | 190.02    | 2877.88  | 0.00             | 427072.33  | 721139.13  |         |
| 13100.00 | 89.74        | 176.21       | 10378.97  | -2971.38  | 196.62    | 2977.88  | 0.00             | 426972.55  | 721145.73  |         |
| 13200.00 | 89.74        | 176.21       | 10379.42  | -3071.17  | 203.22    | 3077.88  | 0.00             | 426872.76  | 721152.33  |         |
| 13300.00 | 89.74        | 176.21       | 10379.88  | -3170.95  | 209.83    | 3177.88  | 0.00             | 426772.98  | 721158.94  |         |
| 13400.00 | 89.74        | 176.21       | 10380.34  | -3270.73  | 216.43    | 3277.88  | 0.00             | 426673.20  | 721165.54  |         |
| 13500.00 | 89.74        | 176.21       | 10380.79  | -3370.51  | 223.03    | 3377.88  | 0.00             | 426573.42  | 721172.14  |         |
| 13600.00 | 89.74        | 176.21       | 10381.25  | -3470.29  | 229.64    | 3477.88  | 0.00             | 426473.64  | 721178.75  |         |
| 13700.00 | 89.74        | 176.21       | 10381.70  | -3570.07  | 236.24    | 3577.88  | 0.00             | 426373.86  | 721185.35  |         |
| 13800.00 | 89.74        | 176.21       | 10382.16  | -3669.85  | 242.84    | 3677.88  | 0.00             | 426274.08  | 721191.95  |         |
| 13900.00 | 89.74        | 176.21       | 10382.61  | -3769.63  | 249.44    | 3777.87  | 0.00             | 426174.30  | 721198.55  |         |
| 14000.00 | 89.74        | 176.21       | 10383.07  | -3869.41  | 256.05    | 3877.87  | 0.00             | 426074.52  | 721205.16  |         |
| 14100.00 | 89.74        | 176.21       | 10383.52  | -3969.19  | 262.65    | 3977.87  | 0.00             | 425974.74  | 721211.76  |         |
| 14200.00 | 89.74        | 176.21       | 10383.98  | -4068.97  | 269.25    | 4077.87  | 0.00             | 425874.96  | 721218.36  |         |
| 14300.00 | 89.74        | 176.21       | 10384.44  | -4168.75  | 275.85    | 4177.87  | 0.00             | 425775.18  | 721224.96  |         |
| 14400.00 | 89.74        | 176.21       | 10384.89  | -4268.53  | 282.46    | 4277.87  | 0.00             | 425675.40  | 721231.57  |         |
| 14500.00 | 89.74        | 176.21       | 10385.35  | -4368.31  | 289.06    | 4377.87  | 0.00             | 425575.62  | 721238.17  |         |
| 14600.00 | 89.74        | 176.21       | 10385.80  | -4468.10  | 295.66    | 4477.87  | 0.00             | 425475.83  | 721244.77  |         |
| 14700.00 | 89.74        | 176.21       | 10386.26  | -4567.88  | 302.26    | 4577.87  | 0.00             | 425376.05  | 721251.37  |         |
| 14800.00 | 89.74        | 176.21       | 10386.71  | -4667.66  | 308.87    | 4677.86  | 0.00             | 425276.27  | 721257.98  |         |
| 14863.04 | 89.74        | 176.21       | 10387.00  | -4730.56  | 313.03    | 4740.91  | 0.00             | 425213.37  | 721262.14  | PBHL    |



# Weatherford

## WFT Plan Report - X & Y's



|                             |                                                       |                |         |
|-----------------------------|-------------------------------------------------------|----------------|---------|
| Company: Devon Energy       | Date: 12/6/2012                                       | Time: 07:30:47 | Page: 3 |
| Field: Eddy Co. NM (NAD83)  | Co-ordinate(NE) Reference: Well: CDU 122H; Grid North |                |         |
| Site: Cotton Draw Unit 122H | Vertical (TVD) Reference: SITE 3530.0                 |                |         |
| Well: CDU 122H              | Section (VS) Reference: Well (0.00N:0.00E:176.24Azi)  |                |         |
| Wellpath: 1                 | Survey Calculation Method: Minimum Curvature          | Db: Sybase     |         |

### Targets

| Name                 | Description | TVD    | +N/S     | +E/W     | Map      | Map       | Latitude    | Longitude                     |
|----------------------|-------------|--------|----------|----------|----------|-----------|-------------|-------------------------------|
| Dip                  | Dir         | ft     | ft       | ft       | Northing | Easting   | Deg Min Sec | Deg Min Sec                   |
|                      |             |        |          |          | ft       | ft        |             |                               |
| PBHL                 | 0.26        | 176.21 | 10387.00 | -4730.56 | 313.03   | 425213.37 | 721262.14   | 32 10. 3.544 N 103 45 6.687 W |
| -Rectangle (4170x50) |             |        |          |          |          |           |             |                               |

### Casing Points

| MD | TVD | Diameter | Hole Size | Name |
|----|-----|----------|-----------|------|
| ft | ft  |          |           |      |
|    |     |          |           |      |

### Annotation

| MD       | TVD      |      |
|----------|----------|------|
| ft       | ft       |      |
| 9795.05  | 9795.05  | KOP  |
| 10692.44 | 10368.00 | LP   |
| 14863.04 | 10387.00 | PBHL |

### Formations

| MD | TVD | Formations | Lithology | Dip Angle/Dip Direction |
|----|-----|------------|-----------|-------------------------|
| ft | ft  |            |           |                         |
|    |     |            |           |                         |

**Weatherford****Weatherford Drilling Services**

GeoDec v5.03

Report Date: December 06, 2012

Job Number: \_\_\_\_\_

Customer: Devon Energy

Well Name: Cotton Draw Unit 122H

API Number: \_\_\_\_\_

Rig Name: \_\_\_\_\_

Location: Eddy Co., NM (NAD 83)

Block: \_\_\_\_\_

Engineer: RWJ

US State Plane 1983

System: New Mexico Eastern Zone

Projection: Transverse Mercator/Gauss Kruger

Datum: North American Datum 1983

Ellipsoid: GRS 1980

North/South 429943.930 USFT

East/West 720949.110 USFT

Grid Convergence: 31°

Total Correction: +7.05°

Geodetic Latitude / Longitude

System: Latitude / Longitude

Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Latitude 32.1806613 DEG

Longitude -103.7527818 DEG

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 32.18066° N 32° 10 min 50.381 sec

Longitude = 103.75278° W 103° 45 min 10.015 sec

Magnetic Declination =

7.36°

[True North Offset]

Local Gravity =

.9988 g

Checksum =

6518

Local Field Strength =

48342 nT

Magnetic Vector X =

23933 nT

Magnetic Dip =

60.05°

Magnetic Vector Y =

3092 nT

Magnetic Model =

IGRF-2010g11

Magnetic Vector Z =

41888 nT

Spud Date =

Dec 15, 2013

Magnetic Vector H =

24132 nT

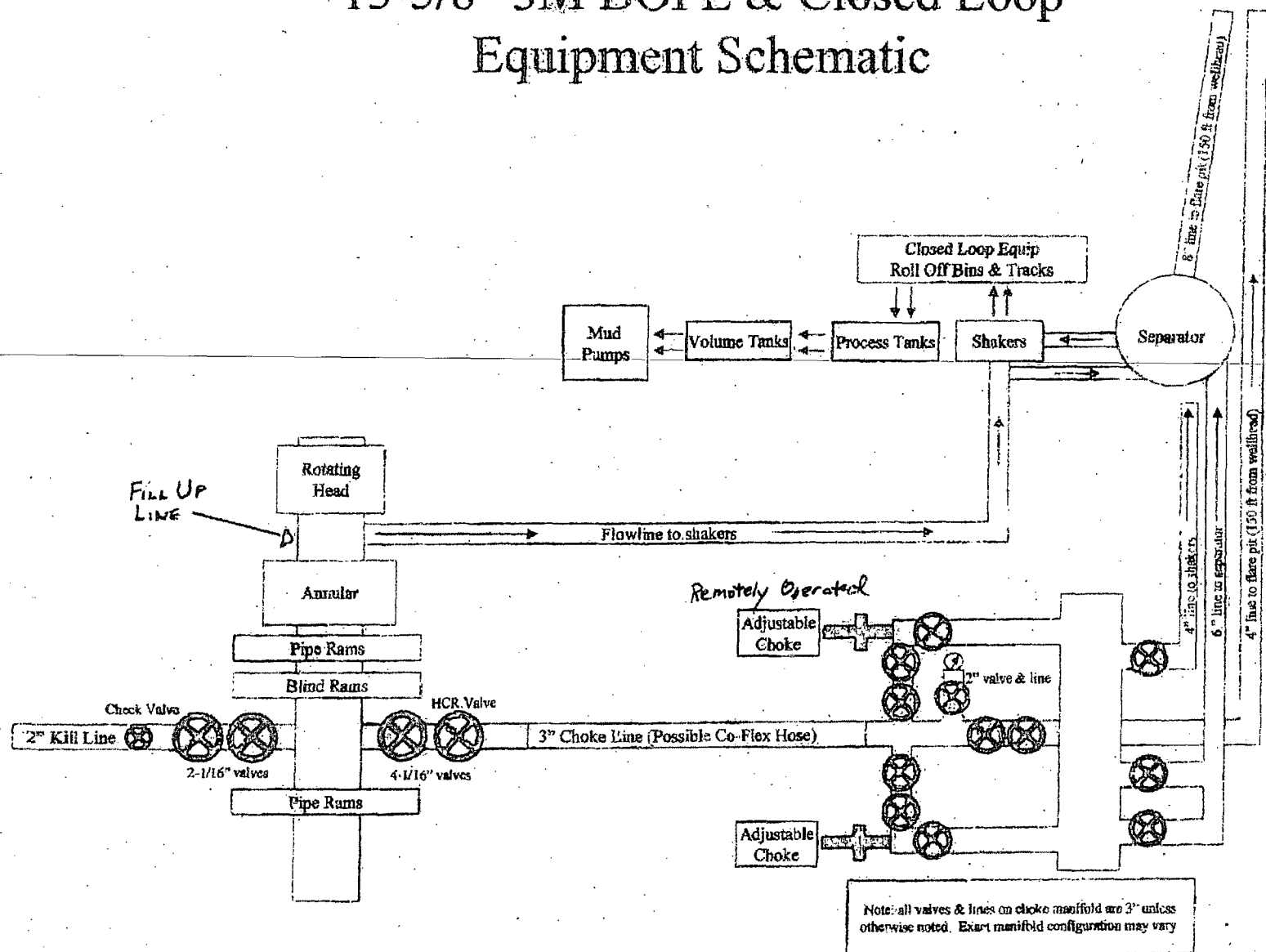
Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, LP  
**Cotton Draw Unit 122H**

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

# 13-5/8" 3M BOPE & Closed Loop Equipment Schematic



## PECOS DISTRICT CONDITIONS OF APPROVAL

|                       |                                     |
|-----------------------|-------------------------------------|
| OPERATOR'S NAME:      | Devon Energy Prod Co                |
| LEASE NO.:            | NM036379                            |
| WELL NAME & NO.:      | 122H Cotton Draw Unit               |
| SURFACE HOLE FOOTAGE: | 160' FNL & 1345' FWL                |
| BOTTOM HOLE FOOTAGE:  | 330' FSL & 1650' FWL                |
| LOCATION:             | Section 35, T. 24S., R. 31 E., NMPM |
| COUNTY:               | Eddy County, New Mexico             |

### I. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

1. **Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

## **B. CASING**

**Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

### **Secretary's Potash**

**Possible water and brine flows in the Salado, Castile, Delaware, and Bone Spring.  
Possible lost circulation in the Delaware and Bone Spring.**

1. **The 13 3/8 inch surface casing shall be set at approximately 755 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. Fresh water mud to be used to setting depth.**
  - a. **If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.**

- b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Set casing within the Castile Anhydrite below the salt at approximately 4200 feet. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

**Pilot Hole: Approved as proposed.**

**Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

## **C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi.**
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests:
  - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer.** The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.
  - c. The results of the test shall be reported to the appropriate BLM office.
  - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
  - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

**D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

**E. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**JAM 121912**