

HOBBS OCD

MAY 27 2014

OCD Hobbs

Form 3160-3  
(March 2012)

RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 20145. Lease Serial No. State of NM VA2478  
NMNM111971 State of NM VA2488

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone8. Lease Name and Well No.  
SWEETNESS 30 STATE FED COM 1H

2. Name of Operator Devon Energy Production Company, L.P.

9. API Well No.

3a. Address 333 W. Sheridan Ave.  
Oklahoma City, OK 731023b. Phone No. (include area code)  
405-552-7848

10. Field and Pool, or Exploratory

CIANTA ROJA, DELAWARE

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface 1650 FNL &amp; 1887 FEL Unit G

PP: 1650 FNL &amp; 1887 FEL

11. Sec., T. R. M. or Blk. and Survey or Area

30-23S-35E

At proposed prod. zone 330 FSL &amp; 1887 FEL Unit 0 31-23S-35E

14. Distance in miles and direction from nearest town or post office\*  
Approximately 17 miles NW of Jal, NM12. County or Parish  
Lea County13. State  
NM15. Distance from proposed\* 330'  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)16. No. of acres in lease  
NMNM111971: 358.51 acres  
State of NM VA2478: 319.16 acres  
State of NM VA2488: 319.32 acres17. Spacing Unit dedicated to this well  
280 acres18. Distance from proposed location\* See attached map  
to nearest well, drilling, completed,  
applied for, on this lease, ft.19. Proposed Depth  
TVD: 8,680' MD: 17,038'  
PH: 9,426'20. BLM/BIA Bond No. on file  
CO-1104 & NMB-00080121. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3,422.6' GL22. Approximate date work will start\*  
05/01/201423. Estimated duration  
25 days

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO must be filed with the appropriate Forest Service Office).4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the  
BLM.

25. Signature

Name (Printed/Typed)

David H. Cook

Date

02/13/2014

Title

Regulatory Specialist

Approved by (Signature)

/S/ STEPHEN J. CAFFEY

Name (Printed/Typed)

MAY 21 2014

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to  
conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United  
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

CAPITAN CONTROLLED WATER BASIN

KZ  
05/27/14Approval Subject to General Requirements  
& Special Stipulations AttachedSEE ATTACHED FOR  
CONDITIONS OF APPROVAL

MAY 27 2014

PM

HOBBS OCD

MAY 27 2014

Certification

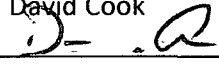
RECEIVED

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 11th day of February, 2014.

Printed Name: David Cook

Signed Name: 

Position Title: Regulatory Specialist

Address: 333 W. Sheridan, OKC OK 73102

Telephone: (405)-552-7848

## **DRILLING PROGRAM**

Devon Energy Production Company, L.P.  
Sweetness 30 State Fed Com 1H

1. **Geologic Name of Surface Formation:** Quaternary

2. **Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:**

|                   |           |                        |
|-------------------|-----------|------------------------|
| a. Fresh Water    | 160'      |                        |
| b. Rustler        | 757'      | Barren                 |
| c. Top Salt       | 1020'     | Barren                 |
| d. Castile        | 3731'     | Barren                 |
| e. Delaware/Lamar | 5268'     | Oil/Gas                |
| f. Bell Canyon    | 5342'     | Oil/Gas                |
| g. Cherry Canyon  | 6258'     | Oil/Gas                |
| h. Brushy Canyon  | 7598'     | Oil/Gas                |
| i. Bone Spring    | 8820'     | Oil/Gas                |
| Total Depth       | 8680' TVD | 17038' MD PH 9426' TVD |

**1. Pressure Control Equipment:**

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

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.

Devon requests a variance to use a co-flex hose, which has an exterior metal coating & with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns and will be secured with anchors and/or safety clamps as per the manufacturer's requirements. (See attached spec sheets & photo of hose).

**Auxiliary Well Control and Monitoring Equipment:**

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

4. Casing Program:

*Self  
Cost*

| Hole Size | Hole Interval | Casing OD | Casing Interval | Weight (lb/ft) | Collar | Grade  | Collapse Design Factor | Burst Design Factor | Tension Design Factor |
|-----------|---------------|-----------|-----------------|----------------|--------|--------|------------------------|---------------------|-----------------------|
| 17-1/2"   | 0 - 850'      | 13-3/8"   | 0 - 850'        | 48             | STC    | H-40   | 1.94                   | 4.35                | 13.26                 |
| 12-1/4"   | 850-5225'     | 9-5/8"    | 0-5225'         | 40             | BTC    | HCK-55 | 1.56                   | 1.45                | 4.43                  |
| 8-3/4"    | 5225-17038'   | 5-1/2"    | 0-17038'        | 17             | BTC    | P-110  | 1.84                   | 2.62                | 3.70                  |

Casing Notes:

- All casing is new and API approved

Maximum Lateral TVD: 8680'

PH TVD= 9,426'

5. Proposed mud Circulations System:

| Depth       | Mud Weight | Viscosity | Fluid Loss | Type System |
|-------------|------------|-----------|------------|-------------|
| 0-850' 1400 | 8.4-9.0    | 30-34     | N/C        | FW          |
| 850-5225'   | 9.8-10.0   | 28-32     | N/C        | Brine       |
| 5225-17038' | 8.6-9.0    | 28-32     | N/C        | FW          |

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

6. Cementing Table:

| String                                | Number of sx    | Weight lbs/gal | Water Volume g/sx | Yield cf/sx | Stage; Lead/Tail     | Slurry Description                                                                                                                                                                                  |
|---------------------------------------|-----------------|----------------|-------------------|-------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13-3/8" Surface                       | 225             | 13.5           | 9.14              | 1.73        | Lead                 | Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.1% Fresh Water                                                                                      |
|                                       | 300             | 14.8           | 6.35              | 1.35        | Tail                 | Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water                                                                                                          |
| 9-5/8" Intermediate Single Stage      | 1285            | 12.8           | 8.2               | 1.65        | Lead                 | (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 83.4% Fresh Water |
|                                       | 450             | 13.8           | 6.42              | 1.38        | Tail                 | Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water                          |
| 9-5/8" Intermediate 2-Stage Option    | 1054            | 12.8           | 8.2               | 1.65        | Lead                 | (60:40) Poz (Fly Ash):Class C Cement+ 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 83.4% Fresh Water  |
|                                       | 450             | 13.8           | 6.42              | 1.38        | Tail                 | (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water                  |
|                                       | DV Tool @ 950ft |                |                   |             |                      |                                                                                                                                                                                                     |
|                                       | 241             | 12.8           | 8.2               | 1.65        | Lead                 | (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 0.1% bwoc R-3 + 83.4% Fresh Water |
| 5-1/2" Production Casing Single Stage | 170             | 11.8           | 13.16             | 2.3         | 1 <sup>st</sup> Lead | (50:50) Poz (Fly Ash):Class H Cement + 0.5% bwoc FL-52 + 0.3% bwoc ASA-301 + 10% bwoc Bentonite + 0.35% bwoc R-21 + 130.7% Fresh Water                                                              |
|                                       | 265             | 12.5           | 11.01             | 2.01        | 2 <sup>nd</sup> Lead | (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 6% bwoc Bentonite + 105.5% Fresh Water          |
|                                       | 2430            | 14.2           | 5.77              | 1.28        | Tail                 | (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.4% bwoc FL-52 + 0.5% bwoc Sodium Metasilicate + 57.3% Fresh Water                            |

See COA

See COA

See COA

| String                                  | Number of sx     | Weight lbs/gal | Water Volume g/sx | Yield cf/sx | Stage; Lead/Tail | Slurry Description                                                                                                                                                                          |
|-----------------------------------------|------------------|----------------|-------------------|-------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5-1/2" Production Casing 2-Stage Option | 265              | 12.5           | 11.01             | 2.01        | Lead             | (35:65) Poz (Fly Ash): Class H Cement + 3% bwoc Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 6% bwoc Bentonite + 105.5% Fresh Water |
|                                         | 2426             | 14.2           | 5.77              | 1.28        | Tail             | (50:50) Poz (Fly Ash): Class H Cement + 5% bwoc Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.4% bwoc FL-52 + 0.5% bwoc Sodium Metasilicate + 57.3% Fresh Water                   |
|                                         | DV Tool @ 5980ft |                |                   |             |                  |                                                                                                                                                                                             |
|                                         | 84               | 11.4           | 17.69             | 2.87        | Lead             | Class C Cement + 0.3% bwoc FL-52 + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157% Fresh Water                                                              |
|                                         | 100              | 13.8           | 6.4               | 1.37        | Tail             | (60:40) Poz (Fly Ash): Class C Cement + 5% bwoc Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.1% Fresh Water                                         |
| 8-3/4" Pilot Hole (7,983'-9,426')       | 587              | 15.6           | 5.22              | 1.18        | Plug             | Class H Cement + 0.3% bwoc R-3 + 46.3% Fresh Water                                                                                                                                          |

**TOC for all Strings:**

13-3/8" Surface 0ft

9-5/8" Intermediate Single Stage 0ft

9-5/8" Intermediate 2-Stage  
Stage #1 = 950ft  
Stage #2 = 0ft

5-1/2" Production Single Stage 4725ft

5-1/2" Production 2-Stage  
Stage #1 = 5980ft  
Stage #2 = 4725ft

Pilot Plug Back 7,983ft

**Notes:**

- Cement volumes Surface 75%, Intermediate 75%, Production based on at least 30% excess
  - Actual cement volumes will be adjusted based on fluid caliper and caliper log data
  - If lost circulation is encountered while drilling the production and/or the intermediate wellbores, a DV tool will be installed a minimum of 50' below the previous casing shoe and a minimum of 200' above the current shoe. If the DV tool has to be moved, the cement volumes will be adjusted proportionately. Both single and double stage proposals are listed in the cement table.
- See COA

**7. Logging, Coring, and Testing Program:**

*See COA*

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated, a procedure, equipment to be used, and safety measures will be provided via sundry notice to the BLM.
- c. Resistivity and porosity logs are planned below the intermediate casing point. Stated logs run will be named in the Completion Report and submitted to the BLM.
- d. No coring program is planned
- e. Additional Testing will be initiated subsequent to setting the 5-1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

**8. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. There is no known presence of H<sub>2</sub>S in this area, and none is anticipated to be encountered. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation being used to drill this well. Estimated BHP: 4000 psi, and estimated BHT: 153 F degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production string is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

**9. Anticipated Starting Date and Duration of Operations:**

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



# DEVON ENERGY

Project: Lea County, NM (NAD-83)  
Site: Sweetness 30 Fed Com  
Well: 1H  
Wellbore: OH  
Design: Plan #1 Draft 1



Azimuths to Grid North  
True North: -0.50°  
Magnetic North: 6.80°  
  
Magnetic Field  
Strength: 48388.8snT  
Dip Angle: 60.19°  
Date: 01/30/2014  
Model: BGGM2013

devon

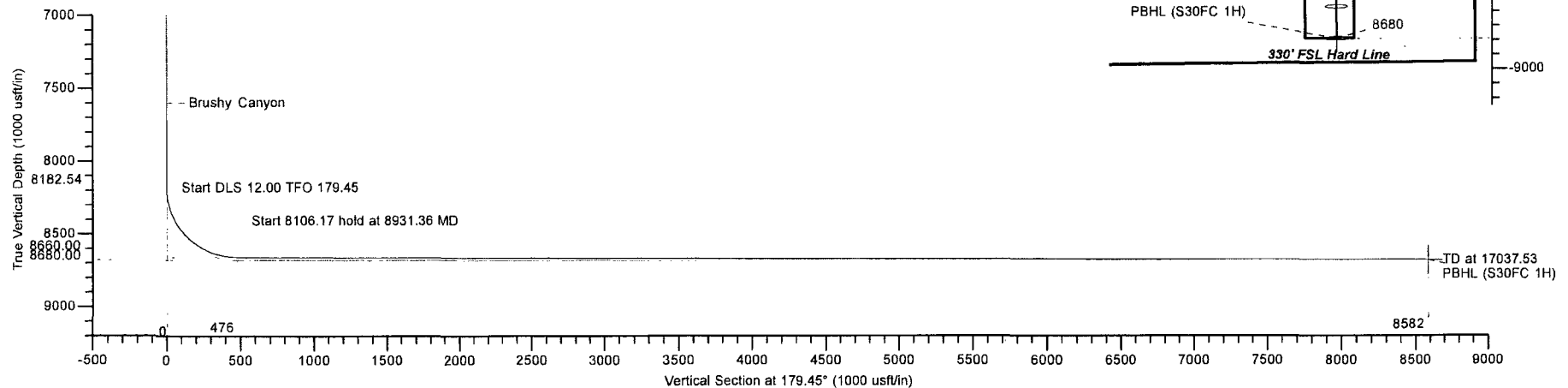
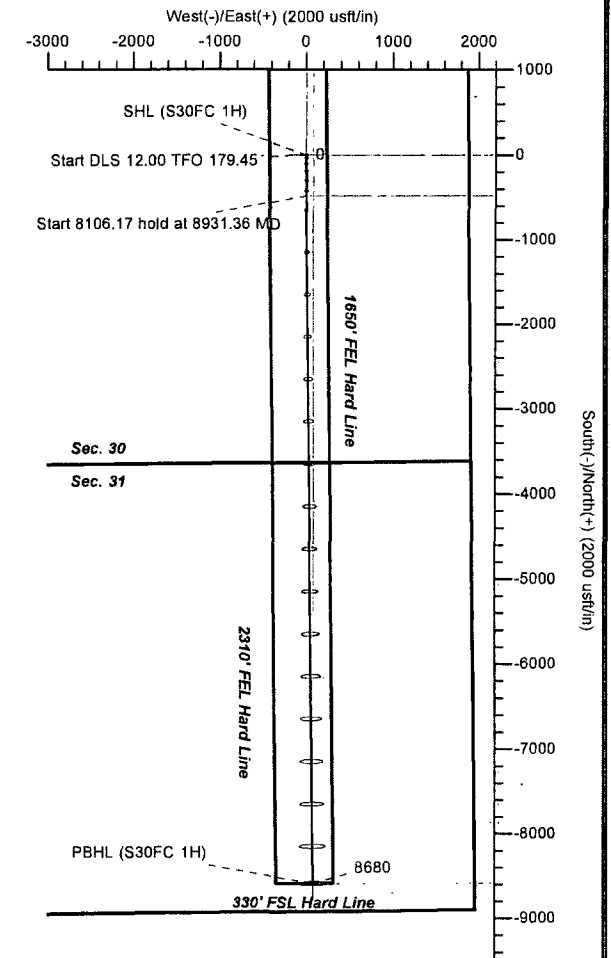
PROJECT DETAILS: Lea County, NM (NAD-83)  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

## DESIGN TARGET DETAILS

| Name            | TVD     | +N/-S    | +E/-W | Northing  | Easting   | Latitude         | Longitude         |
|-----------------|---------|----------|-------|-----------|-----------|------------------|-------------------|
| SHL (S30FC 1H)  | 0.00    | 0.00     | 0.00  | 466226.63 | 828465.05 | 32° 16' 41.929 N | 103° 24' 15.408 W |
| PBHL (S30FC 1H) | 8680.00 | -8582.03 | 83.02 | 457644.60 | 828548.07 | 32° 15' 17.006 N | 103° 24' 15.307 W |

## SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD     | +N/-S    | +E/-W | Dleg  | TFace  | VSect   | Annotation |
|-----|----------|-------|--------|---------|----------|-------|-------|--------|---------|------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00    | 0.00     | 0.00  | 0.00  | 0.00   | 0.00    |            |
| 2   | 8182.54  | 0.00  | 0.00   | 8182.54 | 0.00     | 0.00  | 0.00  | 0.00   | 0.00    |            |
| 3   | 8931.36  | 89.86 | 179.45 | 8660.00 | -476.26  | 4.61  | 12.00 | 179.45 | 476.29  |            |
| 4   | 17037.53 | 89.86 | 179.45 | 8680.00 | -8582.03 | 83.02 | 0.00  | 0.00   | 8582.43 |            |



LEAM DRILLING SYSTEMS LLC  
2010 East Davis, Conroe, Texas 77301  
Phone: 936/756-7577, Fax 936/756-7595

Plan: Plan #1 Draft 1 (1H/OH)  
Sweetness 30 Fed Com  
Created By: Heber Claros Date: 16:22, January 30 2014  
Date: \_\_\_\_\_  
Approved: \_\_\_\_\_ Date: \_\_\_\_\_

# **DEVON ENERGY**

**Lea County, NM (NAD-83)**

**Sweetness 30 Fed Com**

**1H**

**OH**

**Plan: Plan #1 Draft 1**

## **Standard Planning Report**

**30 January, 2014**

# Leam Drilling Systems LLC Planning Report

|           |                           |                              |                                              |
|-----------|---------------------------|------------------------------|----------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 1H                                      |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Project:  | Lea County, NM (NAD-83)   | MD Reference:                | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Site:     | Sweetness 30 Fed Com      | North Reference:             | Grid                                         |
| Well:     | 1H                        | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | OH                        |                              |                                              |
| Design:   | Plan #1 Draft 1           |                              |                                              |

|             |                           |               |                |
|-------------|---------------------------|---------------|----------------|
| Project:    | Lea County, NM (NAD-83)   |               |                |
| Map System: | US State Plane 1983       | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983 |               |                |
| Map Zone:   | New Mexico Eastern Zone   |               |                |

|                       |                      |                   |                   |
|-----------------------|----------------------|-------------------|-------------------|
| Site:                 | Sweetness 30 Fed Com |                   |                   |
| Site Position:        |                      | Northing:         | 466,226.63 usft   |
| From:                 | Map                  | Easting:          | 828,465.05 usft   |
| Position Uncertainty: | 0.00 usft            | Slot Radius:      | 13-3/16 "         |
|                       |                      | Latitude:         | 32° 16' 41.929 N  |
|                       |                      | Longitude:        | 103° 24' 15.408 W |
|                       |                      | Grid Convergence: | 0.50 °            |

|                      |           |                     |           |                 |               |                   |
|----------------------|-----------|---------------------|-----------|-----------------|---------------|-------------------|
| Well:                | 1H        |                     |           |                 |               |                   |
| Well Position        | +N/-S     | 0.00 usft           | Northing: | 466,226.63 usft | Latitude:     | 32° 16' 41.929 N  |
|                      | +E/-W     | 0.00 usft           | Easting:  | 828,465.05 usft | Longitude:    | 103° 24' 15.408 W |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft | Ground Level:   | 3,423.00 usft |                   |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | BGGM2013   | 01/30/14    | 7.30               | 60.19            | 48,389                 |

|                         |                            |                 |                 |                  |
|-------------------------|----------------------------|-----------------|-----------------|------------------|
| Design: Plan #1 Draft 1 |                            |                 |                 |                  |
| Audit Notes:            |                            |                 |                 |                  |
| Version:                | Phase:                     | PROTOTYPE       | Tie On Depth:   | 0.00             |
| Vertical Section:       | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |
|                         | 0.00                       | 0.00            | 0.00            | 179.45           |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                 |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|-----------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target          |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                 |
| 8,182.54              | 0.00            | 0.00        | 8,182.54              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                 |
| 8,931.36              | 89.86           | 179.45      | 8,660.00              | -476.26      | 4.61         | 12.00                   | 12.00                  | 23.96                 | 179.45  |                 |
| 17,037.53             | 89.86           | 179.45      | 8,680.00              | -8,582.03    | 83.02        | 0.00                    | 0.00                   | 0.00                  | 0.00    | PBHL (S30FC 1H) |

# Leam Drilling Systems LLC Planning Report

|           |                           |                              |                                              |
|-----------|---------------------------|------------------------------|----------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 1H                                      |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Project:  | Lea County, NM (NAD-83)   | MD Reference:                | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Site:     | Sweetness 30 Fed Com      | North Reference:             | Grid                                         |
| Well:     | 1H                        | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | OH                        |                              |                                              |
| Design:   | Plan #1 Draft 1           |                              |                                              |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,182.54              | 0.00            | 0.00        | 8,182.54              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00              | 2.10            | 179.45      | 8,200.00              | -0.32        | 0.00         | 0.32                    | 12.00                   | 12.00                  | 0.00                  |
| 8,225.00              | 5.10            | 179.45      | 8,224.94              | -1.89        | 0.02         | 1.89                    | 12.00                   | 12.00                  | 0.00                  |
| 8,250.00              | 8.10            | 179.45      | 8,249.78              | -4.76        | 0.05         | 4.76                    | 12.00                   | 12.00                  | 0.00                  |
| 8,275.00              | 11.10           | 179.45      | 8,274.42              | -8.92        | 0.09         | 8.92                    | 12.00                   | 12.00                  | 0.00                  |
| 8,300.00              | 14.10           | 179.45      | 8,298.82              | -14.37       | 0.14         | 14.38                   | 12.00                   | 12.00                  | 0.00                  |
| 8,325.00              | 17.10           | 179.45      | 8,322.90              | -21.09       | 0.20         | 21.10                   | 12.00                   | 12.00                  | 0.00                  |
| 8,350.00              | 20.10           | 179.45      | 8,346.59              | -29.07       | 0.28         | 29.07                   | 12.00                   | 12.00                  | 0.00                  |
| 8,375.00              | 23.10           | 179.45      | 8,369.83              | -38.26       | 0.37         | 38.27                   | 12.00                   | 12.00                  | 0.00                  |
| 8,400.00              | 26.10           | 179.45      | 8,392.56              | -48.67       | 0.47         | 48.67                   | 12.00                   | 12.00                  | 0.00                  |
| 8,425.00              | 29.10           | 179.45      | 8,414.71              | -60.25       | 0.58         | 60.25                   | 12.00                   | 12.00                  | 0.00                  |
| 8,450.00              | 32.10           | 179.45      | 8,436.23              | -72.97       | 0.71         | 72.97                   | 12.00                   | 12.00                  | 0.00                  |
| 8,475.00              | 35.10           | 179.45      | 8,457.05              | -86.80       | 0.84         | 86.80                   | 12.00                   | 12.00                  | 0.00                  |
| 8,500.00              | 38.10           | 179.45      | 8,477.12              | -101.70      | 0.98         | 101.71                  | 12.00                   | 12.00                  | 0.00                  |
| 8,525.00              | 41.10           | 179.45      | 8,496.38              | -117.63      | 1.14         | 117.64                  | 12.00                   | 12.00                  | 0.00                  |
| 8,550.00              | 44.10           | 179.45      | 8,514.79              | -134.55      | 1.30         | 134.56                  | 12.00                   | 12.00                  | 0.00                  |
| 8,575.00              | 47.10           | 179.45      | 8,532.28              | -152.41      | 1.47         | 152.42                  | 12.00                   | 12.00                  | 0.00                  |
| 8,600.00              | 50.10           | 179.45      | 8,548.81              | -171.16      | 1.66         | 171.16                  | 12.00                   | 12.00                  | 0.00                  |
| 8,625.00              | 53.10           | 179.45      | 8,564.34              | -190.74      | 1.85         | 190.75                  | 12.00                   | 12.00                  | 0.00                  |
| 8,650.00              | 56.10           | 179.45      | 8,578.82              | -211.12      | 2.04         | 211.13                  | 12.00                   | 12.00                  | 0.00                  |
| 8,675.00              | 59.10           | 179.45      | 8,592.22              | -232.22      | 2.25         | 232.23                  | 12.00                   | 12.00                  | 0.00                  |
| 8,700.00              | 62.10           | 179.45      | 8,604.49              | -254.00      | 2.46         | 254.01                  | 12.00                   | 12.00                  | 0.00                  |
| 8,725.00              | 65.10           | 179.45      | 8,615.60              | -276.39      | 2.67         | 276.40                  | 12.00                   | 12.00                  | 0.00                  |
| 8,750.00              | 68.10           | 179.45      | 8,625.53              | -299.33      | 2.90         | 299.34                  | 12.00                   | 12.00                  | 0.00                  |
| 8,775.00              | 71.10           | 179.45      | 8,634.25              | -322.75      | 3.12         | 322.77                  | 12.00                   | 12.00                  | 0.00                  |
| 8,800.00              | 74.10           | 179.45      | 8,641.73              | -346.60      | 3.35         | 346.62                  | 12.00                   | 12.00                  | 0.00                  |
| 8,825.00              | 77.10           | 179.45      | 8,647.95              | -370.81      | 3.59         | 370.83                  | 12.00                   | 12.00                  | 0.00                  |
| 8,850.00              | 80.10           | 179.45      | 8,652.89              | -395.32      | 3.82         | 395.34                  | 12.00                   | 12.00                  | 0.00                  |
| 8,875.00              | 83.10           | 179.45      | 8,656.54              | -420.04      | 4.06         | 420.06                  | 12.00                   | 12.00                  | 0.00                  |
| 8,900.00              | 86.10           | 179.45      | 8,658.90              | -444.93      | 4.30         | 444.95                  | 12.00                   | 12.00                  | 0.00                  |
| 8,925.00              | 89.10           | 179.45      | 8,659.95              | -469.90      | 4.55         | 469.93                  | 12.00                   | 12.00                  | 0.00                  |
| 8,931.36              | 89.86           | 179.45      | 8,660.00              | -476.26      | 4.61         | 476.29                  | 12.00                   | 12.00                  | 0.00                  |
| 9,000.00              | 89.86           | 179.45      | 8,660.17              | -544.90      | 5.27         | 544.92                  | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00              | 89.86           | 179.45      | 8,660.42              | -644.89      | 6.24         | 644.92                  | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00              | 89.86           | 179.45      | 8,660.67              | -744.89      | 7.21         | 744.92                  | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00              | 89.86           | 179.45      | 8,660.91              | -844.88      | 8.17         | 844.92                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00              | 89.86           | 179.45      | 8,661.16              | -944.88      | 9.14         | 944.92                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00              | 89.86           | 179.45      | 8,661.41              | -1,044.87    | 10.11        | 1,044.92                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00              | 89.86           | 179.45      | 8,661.65              | -1,144.87    | 11.08        | 1,144.92                | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00              | 89.86           | 179.45      | 8,661.90              | -1,244.86    | 12.04        | 1,244.92                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00              | 89.86           | 179.45      | 8,662.15              | -1,344.86    | 13.01        | 1,344.92                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00              | 89.86           | 179.45      | 8,662.39              | -1,444.85    | 13.98        | 1,444.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00             | 89.86           | 179.45      | 8,662.64              | -1,544.85    | 14.94        | 1,544.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00             | 89.86           | 179.45      | 8,662.89              | -1,644.84    | 15.91        | 1,644.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00             | 89.86           | 179.45      | 8,663.13              | -1,744.84    | 16.88        | 1,744.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00             | 89.86           | 179.45      | 8,663.38              | -1,844.83    | 17.85        | 1,844.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00             | 89.86           | 179.45      | 8,663.63              | -1,944.83    | 18.81        | 1,944.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00             | 89.86           | 179.45      | 8,663.87              | -2,044.82    | 19.78        | 2,044.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00             | 89.86           | 179.45      | 8,664.12              | -2,144.82    | 20.75        | 2,144.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00             | 89.86           | 179.45      | 8,664.37              | -2,244.81    | 21.72        | 2,244.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00             | 89.86           | 179.45      | 8,664.61              | -2,344.81    | 22.68        | 2,344.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00             | 89.86           | 179.45      | 8,664.86              | -2,444.80    | 23.65        | 2,444.92                | 0.00                    | 0.00                   | 0.00                  |

# Leam Drilling Systems LLC

## Planning Report

|           |                           |                              |                                              |
|-----------|---------------------------|------------------------------|----------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 1H                                      |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Project:  | Lea County, NM (NAD-83)   | MD Reference:                | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Site:     | Sweetness 30 Fed Com      | North Reference:             | Grid                                         |
| Well:     | 1H                        | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | OH                        |                              |                                              |
| Design:   | Plan #1 Draft 1           |                              |                                              |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 11,000.00             | 89.86           | 179.45      | 8,665.11              | -2,544.80    | 24.62        | 2,544.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.00             | 89.86           | 179.45      | 8,665.35              | -2,644.79    | 25.59        | 2,644.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.00             | 89.86           | 179.45      | 8,665.60              | -2,744.79    | 26.55        | 2,744.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.00             | 89.86           | 179.45      | 8,665.85              | -2,844.78    | 27.52        | 2,844.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.00             | 89.86           | 179.45      | 8,666.09              | -2,944.78    | 28.49        | 2,944.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.00             | 89.86           | 179.45      | 8,666.34              | -3,044.77    | 29.45        | 3,044.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.00             | 89.86           | 179.45      | 8,666.59              | -3,144.77    | 30.42        | 3,144.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.00             | 89.86           | 179.45      | 8,666.83              | -3,244.76    | 31.39        | 3,244.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.00             | 89.86           | 179.45      | 8,667.08              | -3,344.76    | 32.36        | 3,344.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.00             | 89.86           | 179.45      | 8,667.33              | -3,444.75    | 33.32        | 3,444.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.00             | 89.86           | 179.45      | 8,667.57              | -3,544.75    | 34.29        | 3,544.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.00             | 89.86           | 179.45      | 8,667.82              | -3,644.74    | 35.26        | 3,644.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.00             | 89.86           | 179.45      | 8,668.07              | -3,744.74    | 36.23        | 3,744.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.00             | 89.86           | 179.45      | 8,668.31              | -3,844.73    | 37.19        | 3,844.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.00             | 89.86           | 179.45      | 8,668.56              | -3,944.73    | 38.16        | 3,944.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.00             | 89.86           | 179.45      | 8,668.81              | -4,044.72    | 39.13        | 4,044.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.00             | 89.86           | 179.45      | 8,669.05              | -4,144.72    | 40.10        | 4,144.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.00             | 89.86           | 179.45      | 8,669.30              | -4,244.71    | 41.06        | 4,244.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.00             | 89.86           | 179.45      | 8,669.55              | -4,344.71    | 42.03        | 4,344.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,900.00             | 89.86           | 179.45      | 8,669.79              | -4,444.70    | 43.00        | 4,444.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,000.00             | 89.86           | 179.45      | 8,670.04              | -4,544.70    | 43.96        | 4,544.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,100.00             | 89.86           | 179.45      | 8,670.29              | -4,644.69    | 44.93        | 4,644.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,200.00             | 89.86           | 179.45      | 8,670.53              | -4,744.69    | 45.90        | 4,744.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,300.00             | 89.86           | 179.45      | 8,670.78              | -4,844.68    | 46.87        | 4,844.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,400.00             | 89.86           | 179.45      | 8,671.03              | -4,944.68    | 47.83        | 4,944.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,500.00             | 89.86           | 179.45      | 8,671.27              | -5,044.67    | 48.80        | 5,044.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,600.00             | 89.86           | 179.45      | 8,671.52              | -5,144.67    | 49.77        | 5,144.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,700.00             | 89.86           | 179.45      | 8,671.77              | -5,244.67    | 50.74        | 5,244.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,800.00             | 89.86           | 179.45      | 8,672.01              | -5,344.66    | 51.70        | 5,344.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,900.00             | 89.86           | 179.45      | 8,672.26              | -5,444.66    | 52.67        | 5,444.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.00             | 89.86           | 179.45      | 8,672.51              | -5,544.65    | 53.64        | 5,544.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.00             | 89.86           | 179.45      | 8,672.75              | -5,644.65    | 54.61        | 5,644.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.00             | 89.86           | 179.45      | 8,673.00              | -5,744.64    | 55.57        | 5,744.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.00             | 89.86           | 179.45      | 8,673.25              | -5,844.64    | 56.54        | 5,844.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.00             | 89.86           | 179.45      | 8,673.49              | -5,944.63    | 57.51        | 5,944.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.00             | 89.86           | 179.45      | 8,673.74              | -6,044.63    | 58.47        | 6,044.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.00             | 89.86           | 179.45      | 8,673.99              | -6,144.62    | 59.44        | 6,144.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.00             | 89.86           | 179.45      | 8,674.23              | -6,244.62    | 60.41        | 6,244.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,800.00             | 89.86           | 179.45      | 8,674.48              | -6,344.61    | 61.38        | 6,344.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,900.00             | 89.86           | 179.45      | 8,674.73              | -6,444.61    | 62.34        | 6,444.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,000.00             | 89.86           | 179.45      | 8,674.97              | -6,544.60    | 63.31        | 6,544.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.00             | 89.86           | 179.45      | 8,675.22              | -6,644.60    | 64.28        | 6,644.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,200.00             | 89.86           | 179.45      | 8,675.47              | -6,744.59    | 65.25        | 6,744.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,300.00             | 89.86           | 179.45      | 8,675.71              | -6,844.59    | 66.21        | 6,844.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,400.00             | 89.86           | 179.45      | 8,675.96              | -6,944.58    | 67.18        | 6,944.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,500.00             | 89.86           | 179.45      | 8,676.21              | -7,044.58    | 68.15        | 7,044.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,600.00             | 89.86           | 179.45      | 8,676.45              | -7,144.57    | 69.12        | 7,144.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,700.00             | 89.86           | 179.45      | 8,676.70              | -7,244.57    | 70.08        | 7,244.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,800.00             | 89.86           | 179.45      | 8,676.95              | -7,344.56    | 71.05        | 7,344.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,900.00             | 89.86           | 179.45      | 8,677.19              | -7,444.56    | 72.02        | 7,444.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,000.00             | 89.86           | 179.45      | 8,677.44              | -7,544.55    | 72.98        | 7,544.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,100.00             | 89.86           | 179.45      | 8,677.69              | -7,644.55    | 73.95        | 7,644.90                | 0.00                    | 0.00                   | 0.00                  |  |

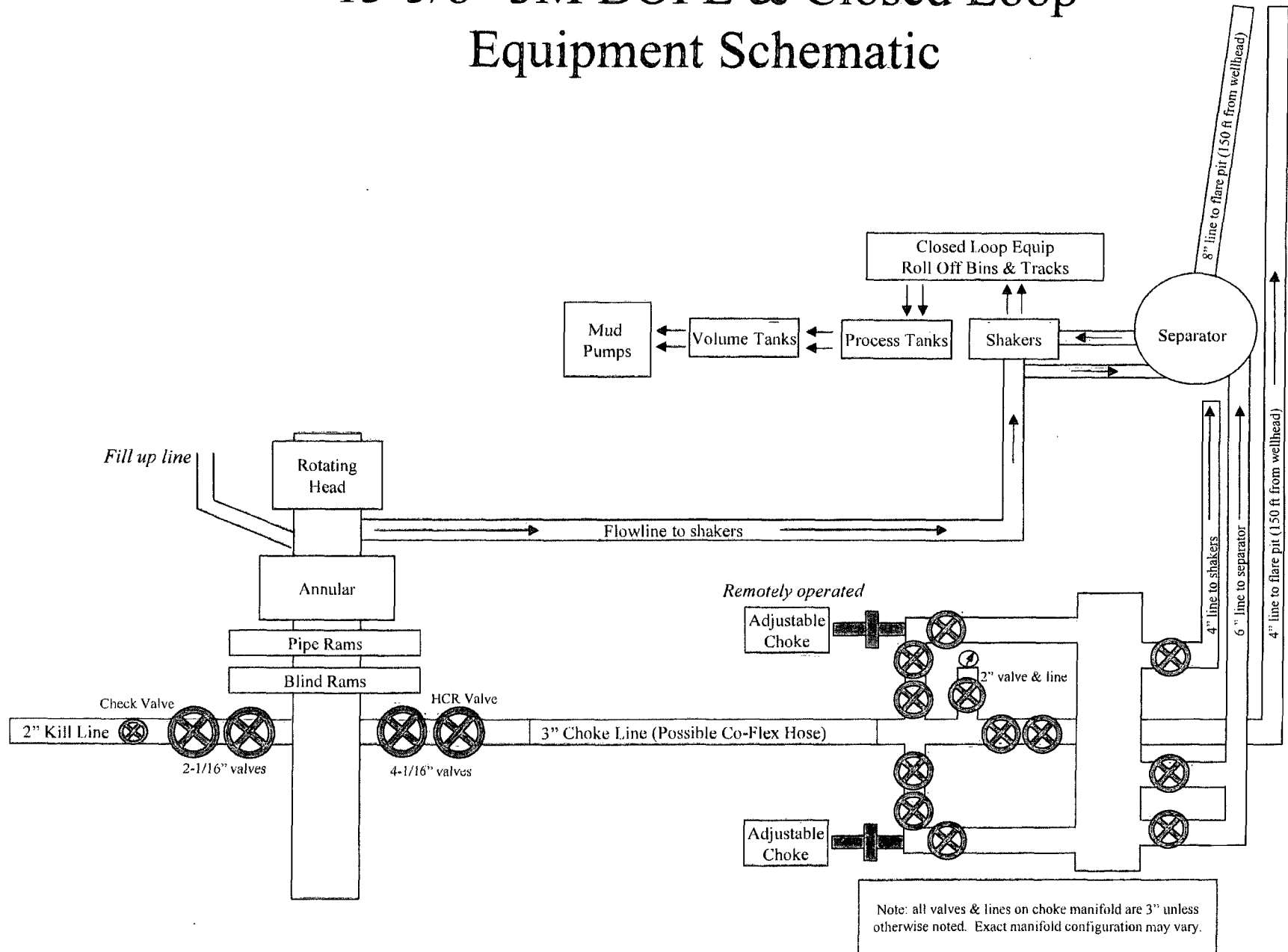
**Leam Drilling Systems LLC**  
Planning Report

|           |                           |                              |                                              |
|-----------|---------------------------|------------------------------|----------------------------------------------|
| Database: | EDM 5000.1 Single User.Db | Local Co-ordinate Reference: | Well 1H                                      |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Project:  | Lea County, NM (NAD-83)   | MD Reference:                | GE 3423' + KB 26' @ 3449.00usft (Scan Texas) |
| Site:     | Sweetness.30 Fed Com      | North Reference:             | Grid                                         |
| Well:     | 1H                        | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | OH                        |                              |                                              |
| Design:   | Plan #1 Draft 1           |                              |                                              |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 16,200.00             | 89.86           | 179.45      | 8,677.93              | -7,744.54    | 74.92        | 7,744.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,300.00             | 89.86           | 179.45      | 8,678.18              | -7,844.54    | 75.89        | 7,844.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,400.00             | 89.86           | 179.45      | 8,678.43              | -7,944.53    | 76.85        | 7,944.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,500.00             | 89.86           | 179.45      | 8,678.67              | -8,044.53    | 77.82        | 8,044.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,600.00             | 89.86           | 179.45      | 8,678.92              | -8,144.52    | 78.79        | 8,144.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,700.00             | 89.86           | 179.45      | 8,679.17              | -8,244.52    | 79.76        | 8,244.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,800.00             | 89.86           | 179.45      | 8,679.41              | -8,344.51    | 80.72        | 8,344.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 16,900.00             | 89.86           | 179.45      | 8,679.66              | -8,444.51    | 81.69        | 8,444.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.00             | 89.86           | 179.45      | 8,679.91              | -8,544.50    | 82.66        | 8,544.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,037.53             | 89.86           | 179.45      | 8,680.00              | -8,582.03    | 83.02        | 8,582.43                | 0.00                    | 0.00                   | 0.00                  |  |
| PBHL (S30FC.1H)       |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets                                                                             |               |              |            |              |              |                 |                |                  |                   |  |
|--------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|--|
| Target Name                                                                                | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |  |
| - hit/miss target                                                                          |               |              |            |              |              |                 |                |                  |                   |  |
| - Shape                                                                                    |               |              |            |              |              |                 |                |                  |                   |  |
| SHL (S30FC 1H)                                                                             | 0.00          | 0.00         | 0.00       | 0.00         | 0.00         | 466,226.63      | 828,465.05     | 32° 16' 41.929 N | 103° 24' 15.408 W |  |
| - plan misses target center by 8182.54usft at 8182.54usft MD (8182.54 TVD, 0.00 N, 0.00 E) |               |              |            |              |              |                 |                |                  |                   |  |
| - Point                                                                                    |               |              |            |              |              |                 |                |                  |                   |  |
| PBHL (S30FC 1H)                                                                            | 0.00          | 0.00         | 8,680.00   | -8,582.03    | 83.02        | 457,644.60      | 828,548.07     | 32° 15' 17.006 N | 103° 24' 15.307 W |  |
| - plan hits target center                                                                  |               |              |            |              |              |                 |                |                  |                   |  |
| - Point                                                                                    |               |              |            |              |              |                 |                |                  |                   |  |

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

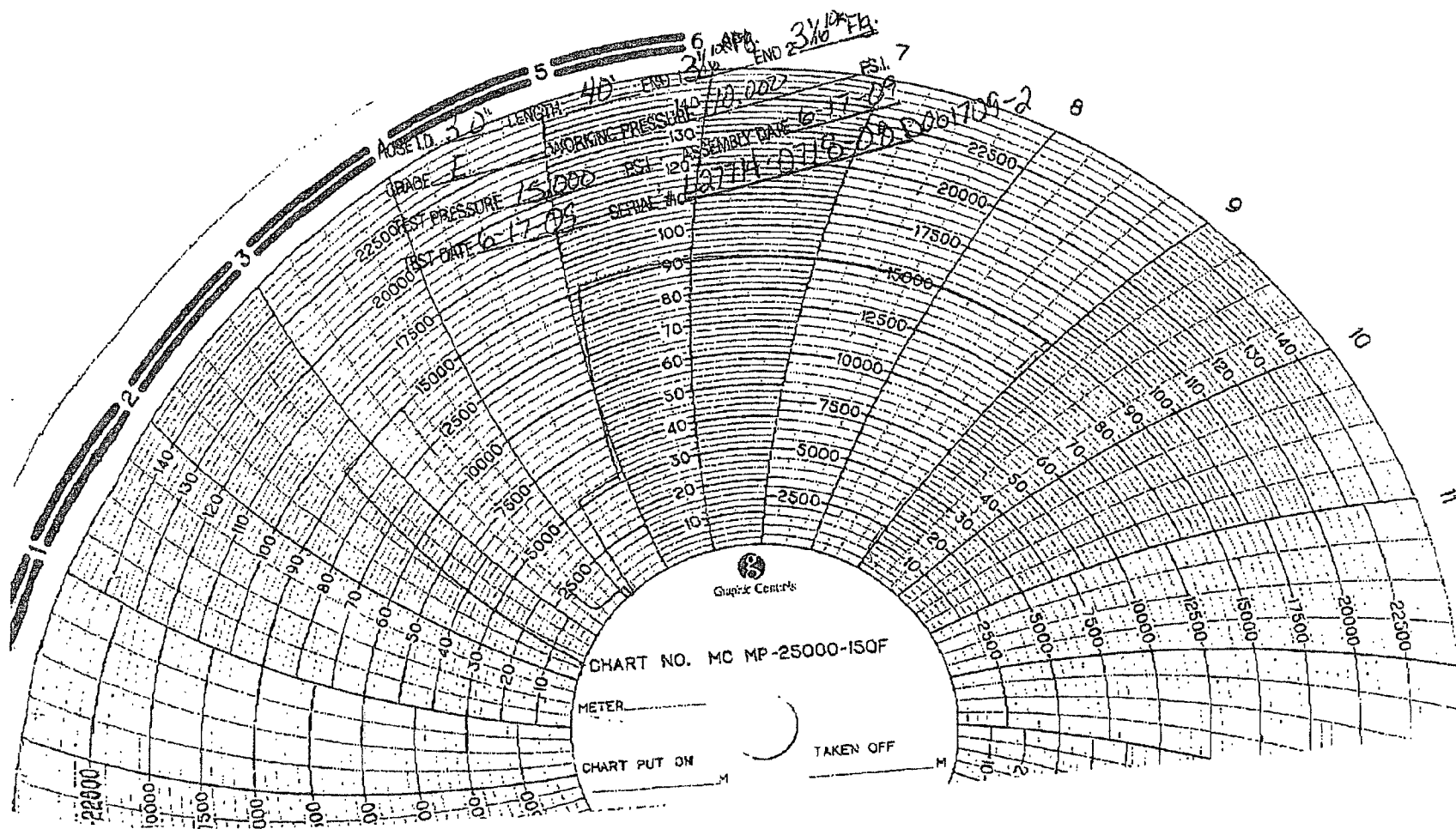


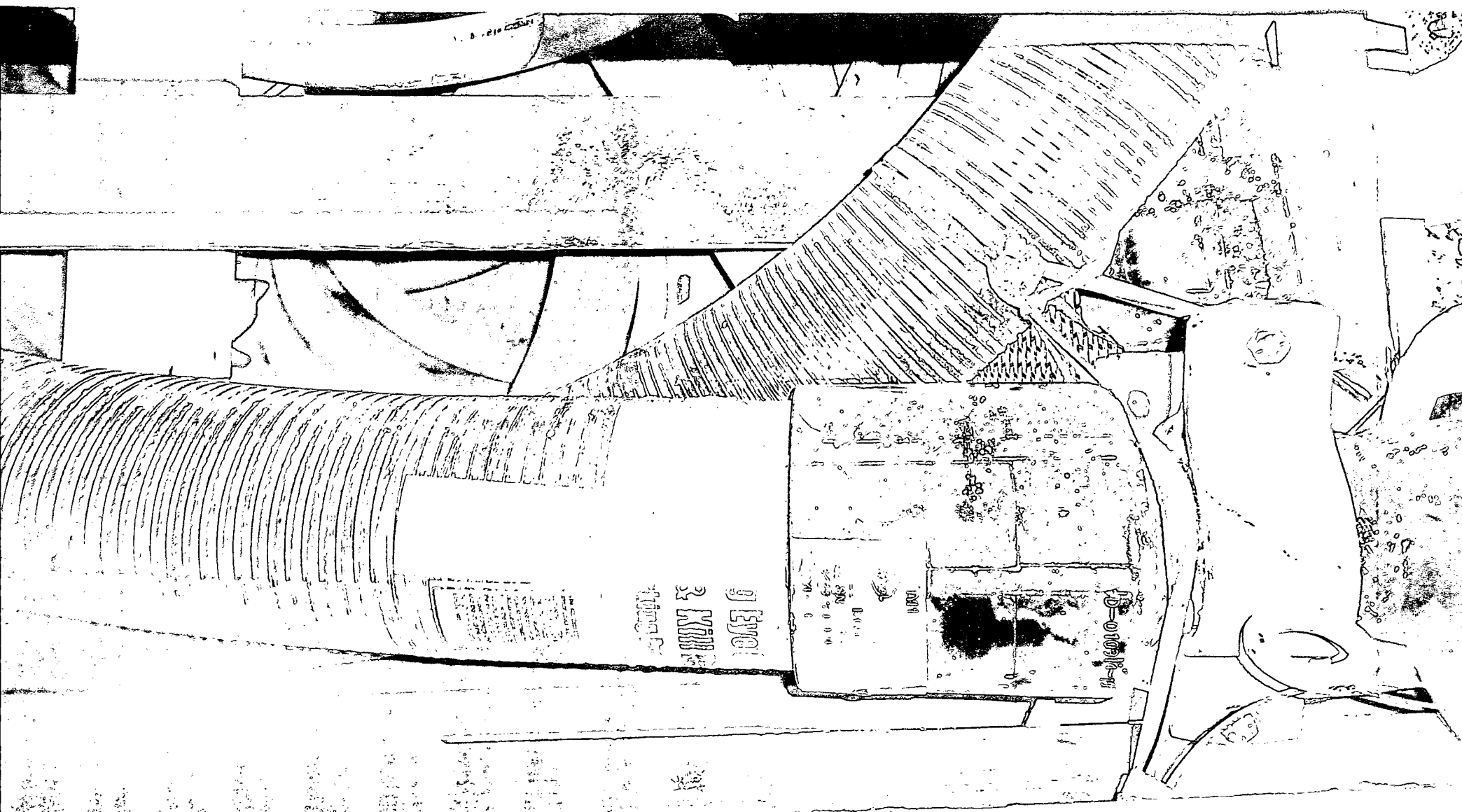
## **NOTES REGARDING BLOWOUT PREVENTERS**

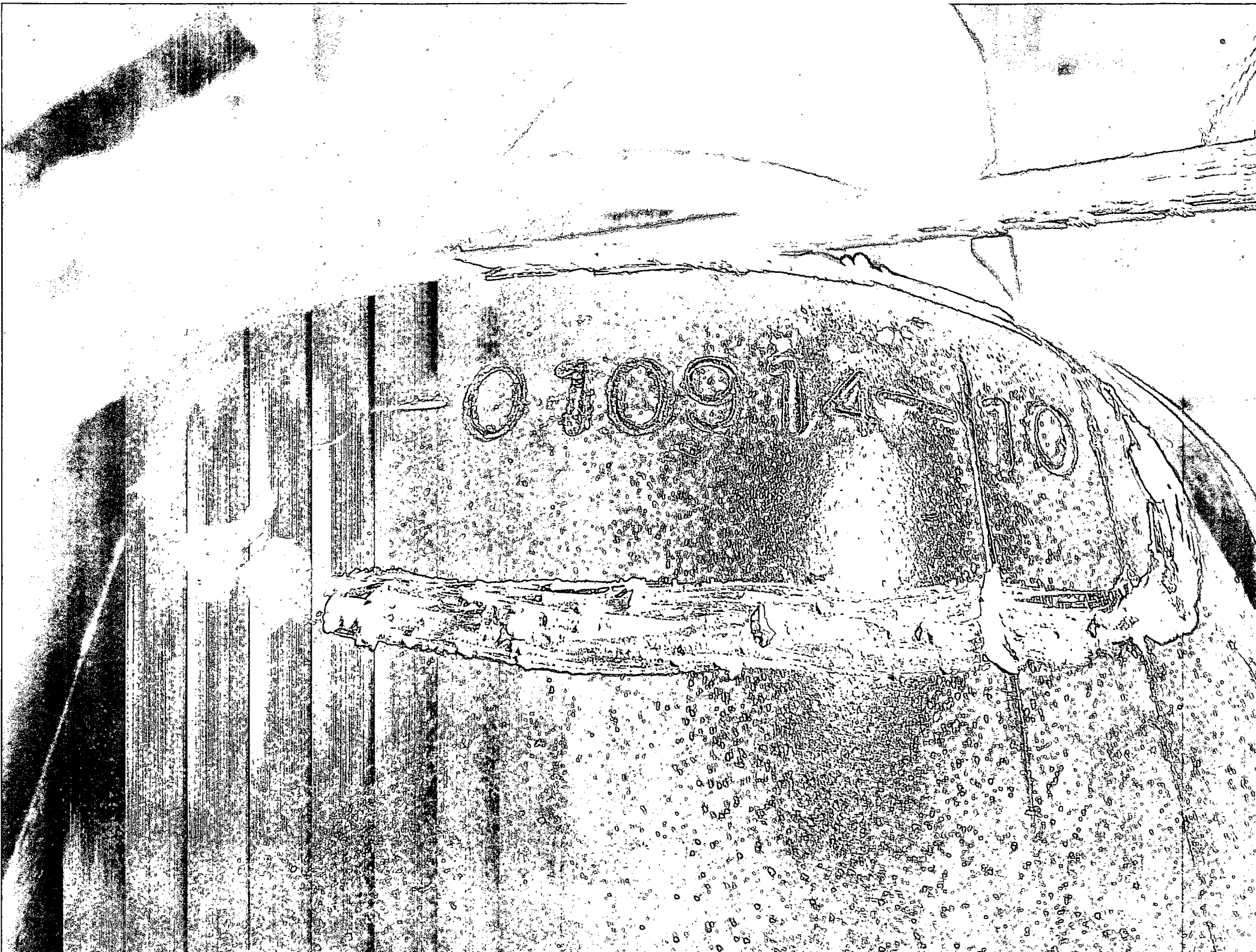
Devon Energy Production Company, L.P.  
**Sweetness 30 State Fed Com 1H**

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 filings will be in operable condition to withstand a minimum of 3000psi working pressure.
4. All fittings will be flanged.
5. A fill bore safety valve tested to a minimum of 3000psi 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.



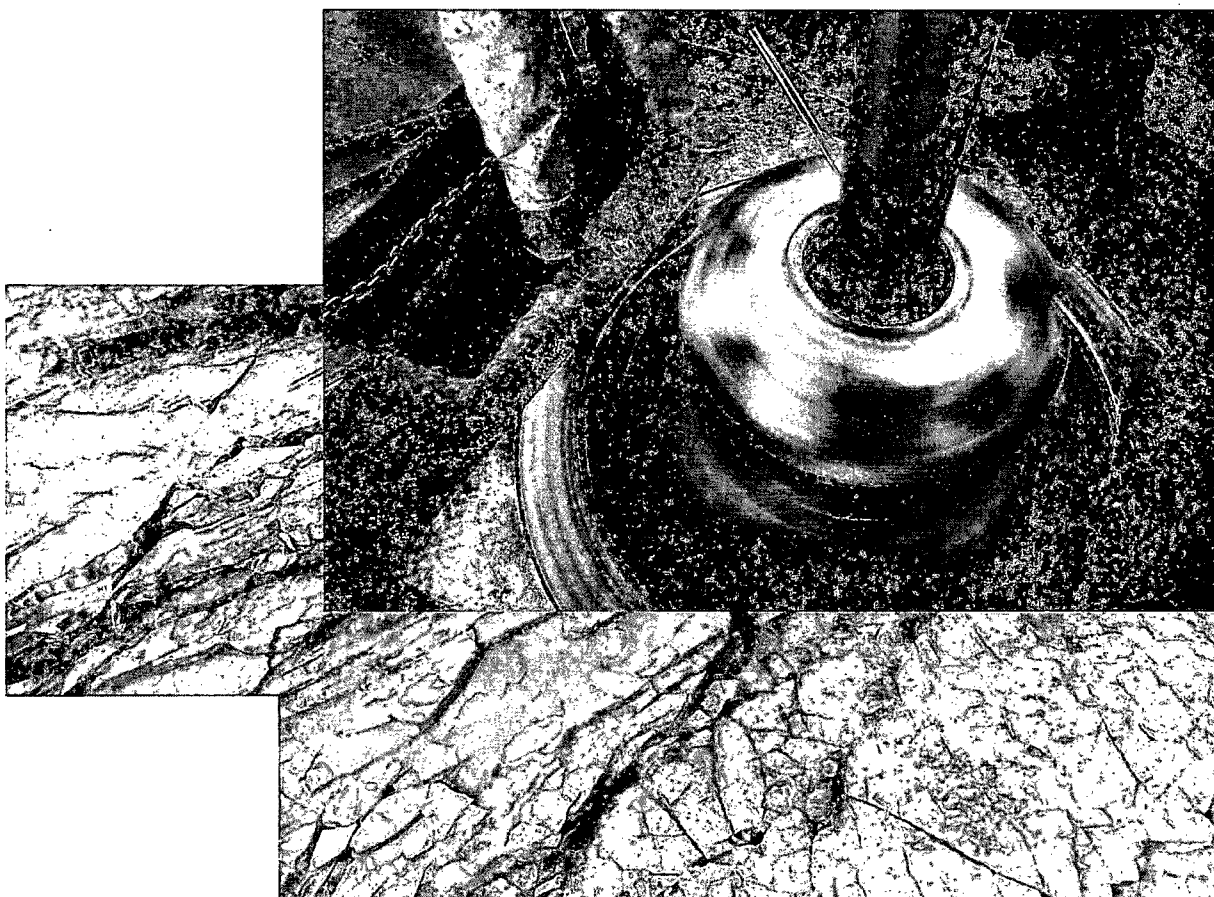








Commitment Runs Deep



Design Plan  
Operation and Maintenance Plan  
Closure Plan

SENM - Closed Loop Systems  
November 2013

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

### **III. Closure Plan**

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.

# Rig Location Layout

