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FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APR 11 2011

HOBBSD

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No. NMNM 070928X
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		8. Lease Name and Well No. Cotton Draw Unit 154H
2. Name of Operator Devon Energy Production Co., LP		9. API Well No. 30-015-38952
3a. Address 20 North Broadway OKC, OK 73102	3b. Phone No. (include area code) (405)-228-8973	10. Field and Pool, or Exploratory COTTON DRAW; DELAWARE, SOUTH
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 200' FNL & 660' FEL (Unit A) At proposed prod. zone 330' FSL & 660' FEL, Unit P		11. Sec., T. R. M. or Blk. and Survey or Area Sec 3-25S-31E
14. Distance in miles and direction from nearest town or post office* Approximately 20' miles east of Loving, NM		12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200'		13. State NM
16. No. of acres in lease 159.38a(625) 240.0a(626)		17. Spacing Unit dedicated to this well E/2 E/2 or 160 ac
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See attached map		20. BLM/BIA Bond No. on file CO-1104
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3452' GL	22. Approximate date work will start* 06/10/2011	23. Estimated duration 45 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature <i>Spence Laird</i>	Name (Printed/Typed) Spence Laird	Date 01/24/2011
Title Regulatory Analyst		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date APR 1 2011
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.

*(Instructions on page 2)

Carlsbad Controlled Water Basin

K2 04/13/11

Approval Subject to General Requirements
& Special Stipulations Attached

OCD CONDITION OF APPROVAL of Drilling:
Intent to drill ONLY — CANNOT produce until the Non-Standard
Location has been approved by OCD Santa Fe office.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

DRILLING PROGRAM

Devon Energy Production Company, LP

Cotton Draw Unit 154H

Surface Location: 200' FNL & 660' FEL, Unit A, Sec 3 T25S R31E, Eddy, NM

Bottom Hole Location: 330' FSL & 660' FEL, Unit P, Sec 3 T25S R31E, Eddy, NM

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1. **Geologic Name of Surface Formation**

- a. Quaternary Alluvium

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

Geologic Formation	Depth (TVD)	O/G/W	Penetration Point
a. Fresh Water	300'	Water	200' FNL & 660' FEL
b. Rustler	609'	Water	200' FNL & 660' FEL
c. Salt	1085'	Barren	200' FNL & 660' FEL
d. Base Salt	4081'	Barren	200' FNL & 660' FEL
e. Delaware/Lamar	4307'	Oil	200' FNL & 660' FEL
f. Bell Canyon	4345'	Oil	200' FNL & 660' FEL
g. Cherry Canyon	5267'	Oil	200' FNL & 660' FEL
h. Brushy Canyon	6569'	Oil	200' FNL & 660' FEL
i. Horizontal Landing Depth	8219'	Oil	700' FNL & 660' FEL
j. Approx. Total Lateral Depth	8240'	Oil	330' FSL & 1980' FEL

Field name: Poker Lake East **Producing Formation:** Delaware **Primary Objective:** Hz in Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 675' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 4300' and circulating cement to surface. The pay intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

3. **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 - 675' 710'	13-3/8"	0 - 675	48#	STC	H-40
12-1/4"	675 - 4,300	9-5/8"	0 - 4,300	40#	LTC	J-55
8-3/4"	4,300 - 7,500	5-1/2"	0 - 7,500	20#	LTC	N-80
8-3/4"	7,500 - 12,725	5-1/2"	7,500 - 12,725	17#	BTC	N-80

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8"	2.44	5.48	9.94
9-5/8" 40# J-55 LTC	1.15	1.77	3.02
5-1/2" 20# N-80 LTC	1.79	2.21	1.60
5-1/2" 17# N-80 BTC	1.56	1.92	4.95

4. Cement Program: (Cement volumes based on at least 25% excess)

13-3/8" Surface

Lead: 600 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.4% Fresh Water, 13.5 ppg

Yield: 1.75 cf/sk

TOC @ surface

Tail: 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water, 14.8 ppg

Yield: 1.35 cf/sk

9-5/8" Intermediate

Lead: 1,200 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water, 12.5 ppg

Yield: 2.04 cf/sk

TOC @ surface

Tail: 300 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 64.7% Water, 13.8 ppg

Yield: 1.37 cf/sk

5-1/2" Production

1st Stage

Lead: 500 sacks (35:65) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 2% bwoc Bentonite + 0.6% bwoc Sodium Metasilicate + 0.5% bwoc FL-52A + 102.5% Fresh Water, 12.5 ppg

Yield: 2.01 cf/sk

Tail: 1,400 sacks (50:50) Poz (Fly Ash):Class H Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 58.3% Fresh Water, 14.2 ppg

Yield: 1.28 cf/sk

DV TOOL at 6,000 ft

2nd Stage

Lead: 350 sacks Class C Cement + 1% bwow Calcium Chloride + 0.125 lbs/sack Cello Flake + 157.8% Fresh Water, 11.4 ppg

Yield: 2.88 cf/sk

Tail: 100 sacks (60:40) Poz (Fly Ash):Class C Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 63.2% Fresh Water, 13.8 ppg

Yield: 1.37cf/sk

TOC @ 3,800 ft

TOC for All Strings:

Surface: 0'
Intermediate: 0'
Production: 3,800' ft

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

5. Pressure Control Equipment:

The BOP system used to drill the intermediate 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 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**.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 - 675 710	8.4 - 9.0	30 - 34	N/C	FW
675 - 4,300	9.8 - 10.0	28 - 32	N/C	Brine
4,300 - 12,725	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.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

X

8. Logging, Coring, and Testing Program: See COA

- Drill stem tests will be based on geological sample shows.
- 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.
- The open hole electrical logging program will be:

- i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
- ii. Total Depth to Surface Compensated Neutron with Gamma Ray
- iii. No coring program is planned
- iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area; therefore, no H2S is anticipated to be encountered. If H2S 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 of equipment being used to drill this well. Estimated BHP 4405 psi and Estimated BHT 145°.

10. 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.

See COA { Depending on rig availability, Devon may set the surface casing using an Ashton Oilfield Services rig. The rig plat is attached. This rig will be used only to set the surface casing and will leave the location once the surface casing has been run and cemented. Another rig will drill the remainder of the wellbore. The reasons for using the smaller rig to set surface are: rig availability and economics.

The BLM will be contacted 24 hours prior to commencing drilling operations. The surface casing will be run and cemented back to surface as per the approved APD. The well will be secured with a cap welded onto the surface casing. Another rig will be on location to drill the remainder of the wellbore within 60 days after the Ashton rig has left the location.



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Drilling Services

Proposal



devon

COTTON DRAW UNIT #154H

EDDY COUNTY, NM

WELL FILE: PLAN 1

JANUARY 12, 2011

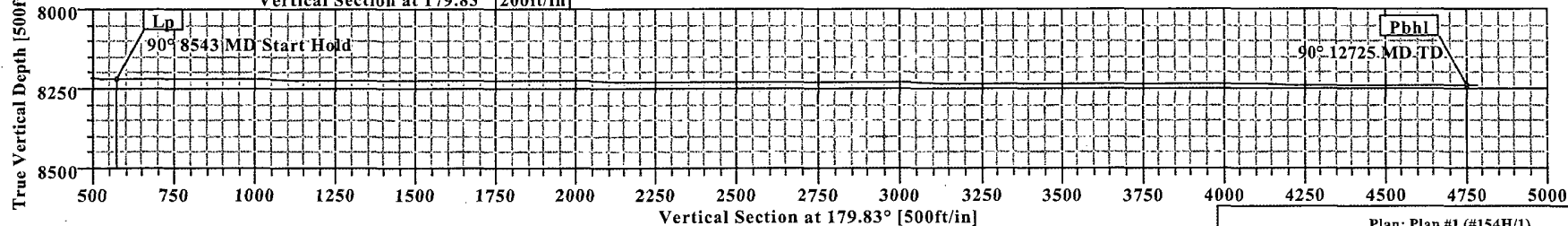
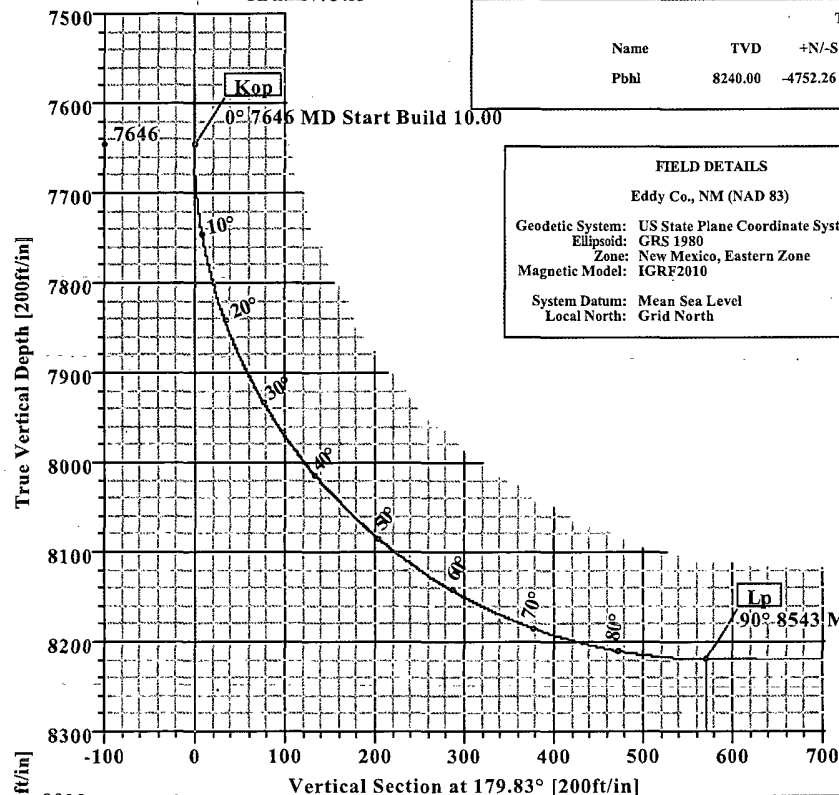
Weatherford International, Ltd.

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www.weatherford.com



Cotton Draw #154H
Eddy Co., New Mexico

KB ELEV: 3478
GL ELEV: 3453



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	179.83	0.00	0.00	0.00	0.00	0.00	0.00	
2	7646.05	0.00	179.83	7646.05	0.00	0.00	0.00	0.00	0.00	
3	8543.17	89.71	179.83	8219.00	-570.08	1.71	10.00	179.83	570.08	
4	12725.43	89.71	179.83	8240.00	-4752.26	14.29	0.00	0.00	4752.28	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#154H	0.00	0.00	424624.70	718962.78	32°09'57.841N	103°45'33.474W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8240.00	-4752.26	14.29	419872.44	718977.07	Point

FIELD DETAILS

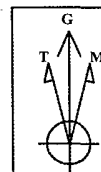
Eddy Co., NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Cotton Draw Unit #154H

Site Centre Northing: 424624.70
Easting: 718962.78
Ground Level: 3453.00
Positional Uncertainty: 0.00
Convergence: 0.31



Azimuths to Grid North
True North: -0.31°
Magnetic North: 7.33°

Magnetic Field
Strength: 48561nT
Dip Angle: 60.09°
Date: 9/15/2011
Model: IGRF2010

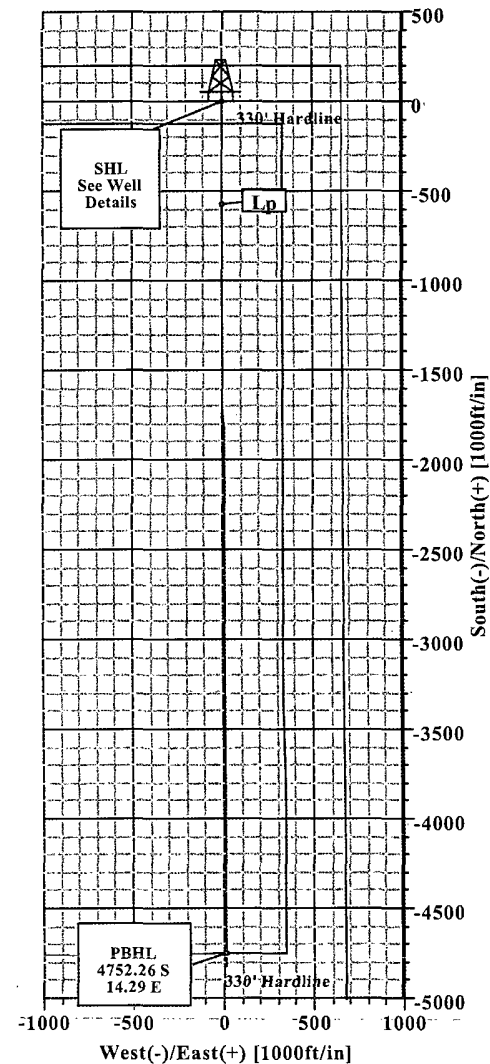
Total Correction to Grid North: 7.33°

LEGEND

Plan #1



Weatherford



Plan: Plan #1 (#154H/1)

Created By: R Joyner

Date: 1/12/2011

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

GeoDec v5.1.000

Report Date: January 12, 2011
Job Number: _____
Customer: Devon Energy
Well Name: Cotton Draw Unit #154H
API Number: _____
Rig Name: _____
Location: Eddy Co., NM
Block: _____
Engineer: RWJ

US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 424624.700 USFT	Latitude 32.1660692 DEG
East/West 718962.780 USFT	Longitude -103.7592936 DEG
Grid Convergence: 30563616°	
Total Correction: +7.3329°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.16607° N	32° 9 min 57.849 sec
Longitude =	103.75929° W	103° 45 min 33.457 sec

Magnetic Declination =	7.6390°	[True North Offset]
Local Gravity =	.9988 g	
Local Field Strength =	48557 nT	Magnetic Vector X = 23994 nT
Magnetic Dip =	60.0950°	Magnetic Vector Y = 3218 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42091 nT
Spud Date =	Sep 15, 2011	Magnetic Vector H = 24209 nT

Signed: _____

Date: _____



Weatherford International, Inc.

DIRECTIONAL PLAN REPORT

**Weatherford®**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #154H
Well: #154H
Wellpath: 1

Date: 1/12/2011
Co-ordinate(NE) Reference: Well: #154H, Grid North
Vertical (TVD) Reference: SITE 3478.0
Section (VS) Reference: Well (0.00N,0.00E,179.83Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Time: 15:00:20
Page: 1

Plan: Plan #1
Principal: Yes

Date Composed: 1/12/2011
Version: 1
Tied-to: From Surface

Field: Eddy Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

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

Site: Cotton Draw Unit #154H

Site Position: Northing: 424624.70 ft
From: Map Easting: 718962.78 ft
Position Uncertainty: 0.00 ft
Ground Level: 3453.00 ft

Latitude: 32 9 57.841 N
Longitude: 103 45 33.474 W
North Reference: Grid
Grid Convergence: 0.31 deg

Well: #154H
Slot Name:

Well Position: +N/-S 0.00 ft Northing: 424624.70 ft
+E/-W 0.00 ft Easting: 718962.78 ft
Position Uncertainty: 0.00 ft

Latitude: 32 9 57.841 N
Longitude: 103 45 33.474 W

Wellpath: 1
Current Datum: SITE
Magnetic Data: 9/15/2011
Field Strength: 48561 nT
Vertical Section: Depth From (TVD) ft

Height 3478.00 ft
+N/-S ft
+E/-W ft
Direction deg

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 7.64 deg
Mag Dip Angle: 60.09 deg

8240.00 0.00 0.00 179.83

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	179.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7646.05	0.00	179.83	7646.05	0.00	0.00	0.00	0.00	0.00	0.00	
8543.17	89.71	179.83	8219.00	-570.08	1.71	10.00	10.00	0.00	179.83	
12725.43	89.71	179.83	8240.00	-4752.26	14.29	0.00	0.00	0.00	0.00	Pbhl

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7600.00	0.00	179.83	7600.00	0.00	0.00	0.00	0.00	424624.70	718962.78	Kop
7646.05	0.00	179.83	7646.05	0.00	0.00	0.00	0.00	424624.70	718962.78	
7700.00	5.40	179.83	7699.92	-2.54	0.01	2.54	10.00	424622.16	718962.79	
7800.00	15.40	179.83	7798.15	-20.56	0.06	20.56	10.00	424604.14	718962.84	
7900.00	25.40	179.83	7891.77	-55.36	0.17	55.36	10.00	424569.34	718962.95	
8000.00	35.40	179.83	7977.91	-105.90	0.32	105.90	10.00	424518.80	718963.10	Lp
8100.00	45.40	179.83	8053.98	-170.62	0.51	170.62	10.00	424454.08	718963.29	
8200.00	55.40	179.83	8117.64	-247.57	0.74	247.57	10.00	424377.13	718963.52	
8300.00	65.40	179.83	8166.98	-334.40	1.01	334.40	10.00	424290.30	718963.79	
8400.00	75.40	179.83	8200.49	-428.48	1.29	428.49	10.00	424196.22	718964.07	
8500.00	85.40	179.83	8217.16	-526.96	1.58	526.96	10.00	424097.74	718964.36	
8543.17	89.71	179.83	8219.00	-570.08	1.71	570.08	10.00	424054.62	718964.49	
8600.00	89.71	179.83	8219.28	-626.91	1.89	626.91	0.00	423997.79	718964.67	
8700.00	89.71	179.83	8219.79	-726.90	2.19	726.91	0.00	423897.80	718964.97	
8800.00	89.71	179.83	8220.29	-826.90	2.49	826.91	0.00	423797.80	718965.27	
8900.00	89.71	179.83	8220.79	-926.90	2.79	926.90	0.00	423697.80	718965.57	Lp
9000.00	89.71	179.83	8221.29	-1026.90	3.09	1026.90	0.00	423597.80	718965.87	



Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #154H
Well: #154H
Wellpath: 1

Date: 1/12/2011 Time: 15:00:20 Page: 2
Co-ordinate(NE) Reference: Well: #154H, Grid North
Vertical(TVD) Reference: SITE 3478.0
Section (VS) Reference: Well (0.00N,0.00E,179.83Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
9100.00	89.71	179.83	8221.80	-1126.90	3.39	1126.90	0.00	423497.80	718966.17	
9200.00	89.71	179.83	8222.30	-1226.89	3.69	1226.90	0.00	423397.81	718966.47	
9300.00	89.71	179.83	8222.80	-1326.89	3.99	1326.90	0.00	423297.81	718966.77	
9400.00	89.71	179.83	8223.30	-1426.89	4.29	1426.90	0.00	423197.81	718967.07	
9500.00	89.71	179.83	8223.80	-1526.89	4.59	1526.90	0.00	423097.81	718967.37	
9600.00	89.71	179.83	8224.31	-1626.89	4.89	1626.90	0.00	422997.81	718967.67	
9700.00	89.71	179.83	8224.81	-1726.89	5.19	1726.89	0.00	422897.81	718967.97	
9800.00	89.71	179.83	8225.31	-1826.88	5.49	1826.89	0.00	422797.82	718968.27	
9900.00	89.71	179.83	8225.81	-1926.88	5.79	1926.89	0.00	422697.82	718968.57	
10000.00	89.71	179.83	8226.31	-2026.88	6.09	2026.89	0.00	422597.82	718968.87	
10100.00	89.71	179.83	8226.82	-2126.88	6.40	2126.89	0.00	422497.82	718969.18	
10200.00	89.71	179.83	8227.32	-2226.88	6.70	2226.89	0.00	422397.82	718969.48	
10300.00	89.71	179.83	8227.82	-2326.88	7.00	2326.89	0.00	422297.82	718969.78	
10400.00	89.71	179.83	8228.32	-2426.87	7.30	2426.89	0.00	422197.83	718970.08	
10500.00	89.71	179.83	8228.83	-2526.87	7.60	2526.88	0.00	422097.83	718970.38	
10600.00	89.71	179.83	8229.33	-2626.87	7.90	2626.88	0.00	421997.83	718970.68	
10700.00	89.71	179.83	8229.83	-2726.87	8.20	2726.88	0.00	421897.83	718970.98	
10800.00	89.71	179.83	8230.33	-2826.87	8.50	2826.88	0.00	421797.83	718971.28	
10900.00	89.71	179.83	8230.83	-2926.87	8.80	2926.88	0.00	421697.83	718971.58	
11000.00	89.71	179.83	8231.34	-3026.86	9.10	3026.88	0.00	421597.84	718971.88	
11100.00	89.71	179.83	8231.84	-3126.86	9.40	3126.88	0.00	421497.84	718972.18	
11200.00	89.71	179.83	8232.34	-3226.86	9.70	3226.88	0.00	421397.84	718972.48	
11300.00	89.71	179.83	8232.84	-3326.86	10.00	3326.87	0.00	421297.84	718972.78	
11400.00	89.71	179.83	8233.34	-3426.86	10.30	3426.87	0.00	421197.84	718973.08	
11500.00	89.71	179.83	8233.85	-3526.86	10.61	3526.87	0.00	421097.84	718973.39	
11600.00	89.71	179.83	8234.35	-3626.85	10.91	3626.87	0.00	420997.85	718973.69	
11700.00	89.71	179.83	8234.85	-3726.85	11.21	3726.87	0.00	420897.85	718973.99	
11800.00	89.71	179.83	8235.35	-3826.85	11.51	3826.87	0.00	420797.85	718974.29	
11900.00	89.71	179.83	8235.86	-3926.85	11.81	3926.87	0.00	420697.85	718974.59	
12000.00	89.71	179.83	8236.36	-4026.85	12.11	4026.87	0.00	420597.85	718974.89	
12100.00	89.71	179.83	8236.86	-4126.85	12.41	4126.86	0.00	420497.85	718975.19	
12200.00	89.71	179.83	8237.36	-4226.84	12.71	4226.86	0.00	420397.86	718975.49	
12300.00	89.71	179.83	8237.86	-4326.84	13.01	4326.86	0.00	420297.86	718975.79	
12400.00	89.71	179.83	8238.37	-4426.84	13.31	4426.86	0.00	420197.86	718976.09	
12500.00	89.71	179.83	8238.87	-4526.84	13.61	4526.86	0.00	420097.86	718976.39	
12600.00	89.71	179.83	8239.37	-4626.84	13.91	4626.86	0.00	419997.86	718976.69	
12700.00	89.71	179.83	8239.87	-4726.83	14.21	4726.86	0.00	419897.87	718976.99	
12725.43	89.71	179.83	8240.00	-4752.26	14.29	4752.28	0.00	419872.44	718977.07	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec	<--- Longitude ---> Deg Min Sec
Pbhl			8240.00	-4752.26	14.29	419872.44	718977.07	32 9 10.813 N	103 45 33.602 W

Casing Points

MD	TVD	Diameter	Hole Size	Name



Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #154H
Well: #154H
Wellpath: 1

Date: 1/12/2011 Time: 15:00:20 Page: 3
Co-ordinate(NE) Reference: Well: #154H, Grid North
Vertical (TVD) Reference: SITE 3478.0
Section (VS) Reference: Well (0.00N,0.00E,179.83Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

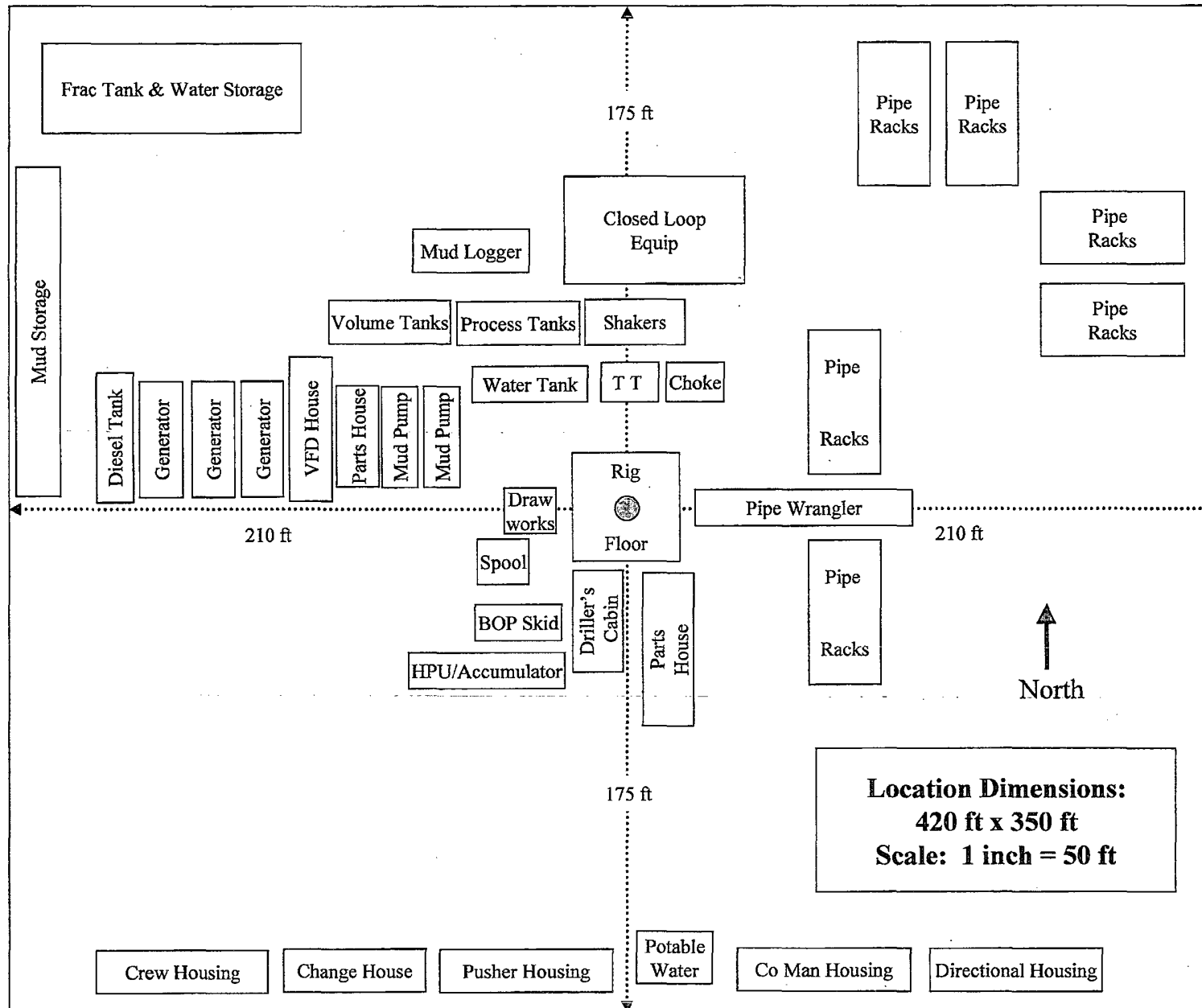
Annotation

MD ft	TVD ft	
7646.05	7646.05	Kop
8543.17	8219.00	Lp
12725.43	8240.00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

H&P Flex Rig Location Layout

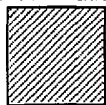




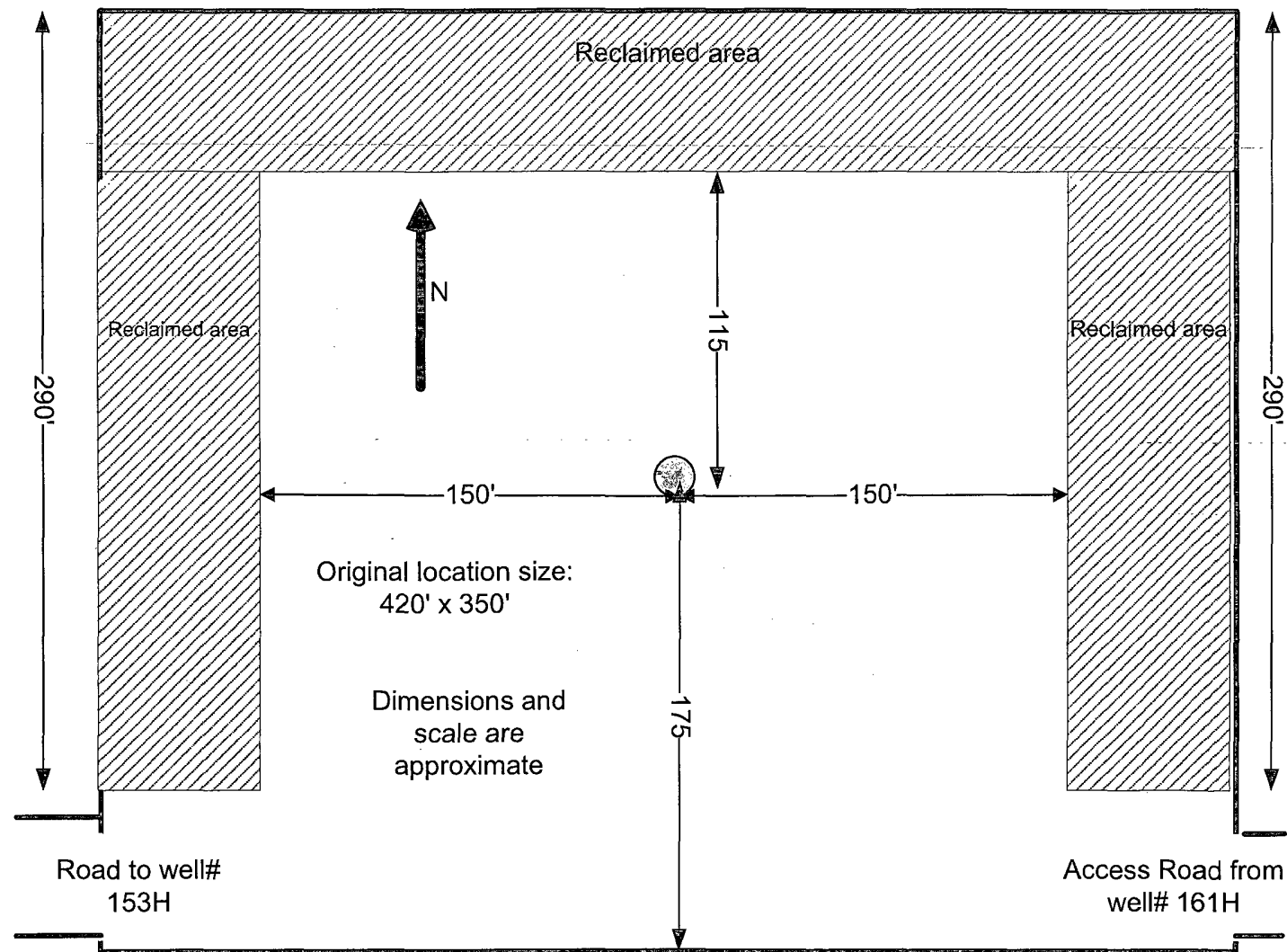
**Proposed Interim
Site Configuration**

**Devon Energy Production Co.
Cotton Draw Unit 154H
200' FNL & 660 FEL
Sec. 3 T25S R31E
Eddy County,
NM**

Proposed
Reclamation Area



1" : 60'



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS:
Devon Energy Production Company, LP

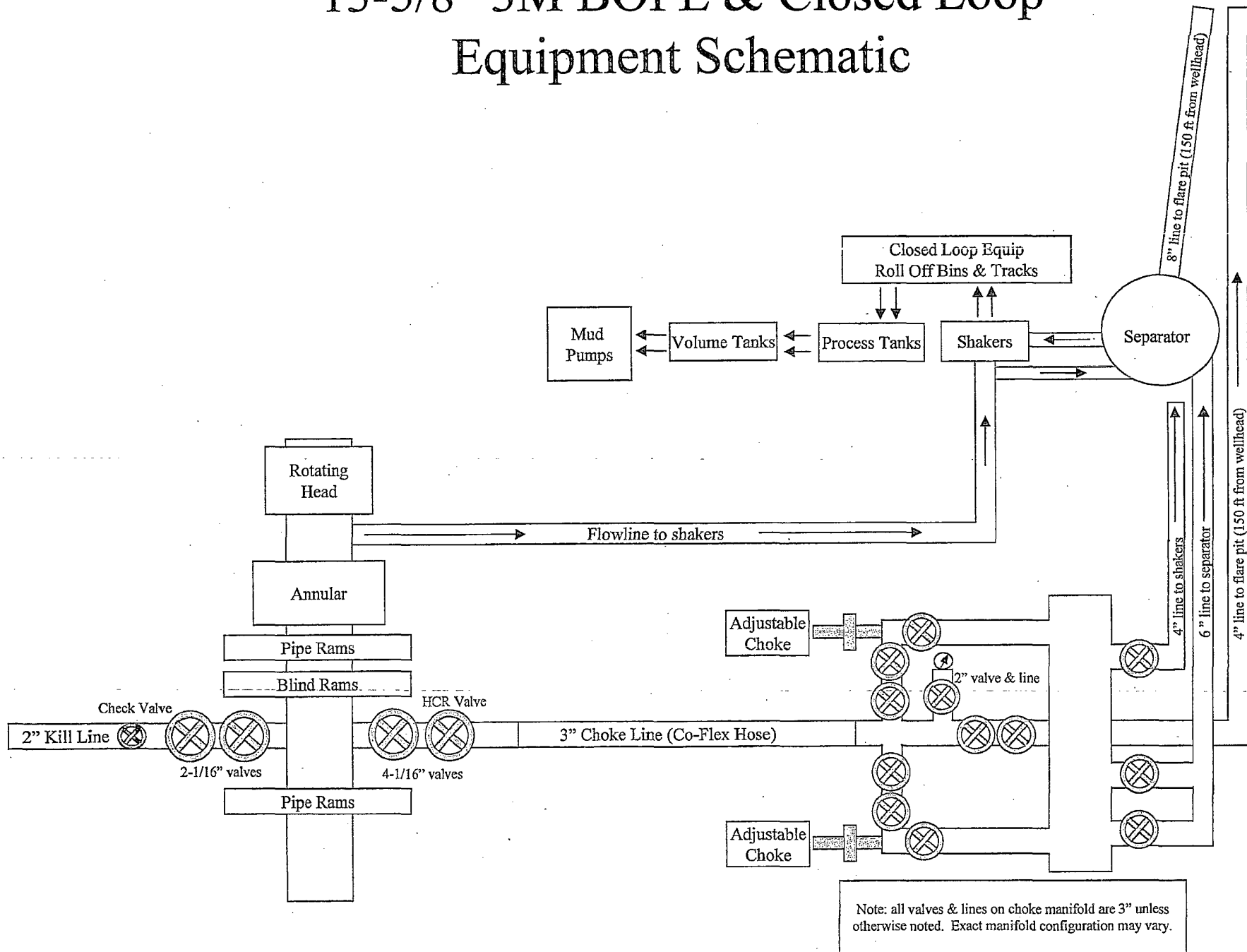
Cotton Draw Unit 154H

Surface Location: 200' FNL & 660' FEL, Unit A, Sec 3 T25S R31E, Eddy, NM

Bottom Hole Location: 330' FSL & 660' FEL, Unit P, Sec 3 T25S R31E, Eddy, NM

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





QUALITY DOCUMENT

PHOENIX RUBBER INDUSTRIAL LTD.

H-6728 Szeged, Budapesti út 10. Hungary • H-6701 Szeged, P. O. Box 152
Phone: (3662) 566-737 • Fax: (3662) 566-738

SALES & MARKETING: H-1092 Budapest, Ráday u. 42-44, Hungary • H-1440 Budapest, P. O. Box 26
Phone: (361) 456-4200 • Fax: (361) 217-2972, 456-4273 • www.laurusermerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT N° 890	
PURCHASER: Phoenix Beattie Co.			P.O. N° 1520FA-872		
PHOENIX ORDER N° 172232		HOSE TYPE: 3" ID Choke and Kill Hose			
HOSE SERIAL N° 34403		NOMINAL / ACTUAL LENGTH: 11,43 m			
W.P. 68,96 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature					
See attachment. (1 page)					
↑ 10 mm = 10 Min. → 10 mm = 16 MPa					
COUPLINGS					
Type	Serial N°		Quality	Heat N°	
3" coupling with 4 1/16" Flange end	1231/a 1228		AISI 4130	80751	
			AISI 4130	47438	
API Spec 16 C Temperature rate: "B"					
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
Date: 20. June. 2002.	Inspector		Quality Control PHOENIX RUBBER Industrial Ltd. Hose Inspection and Certification Dept.		

VERIFIED TRUE COPY
PHOENIX RUBBER O O

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

APD is for N ☒ P ☐ E ☐ A ☐ D ☐WELL TYPE: O ☒ G ☐ I ☐ S ☐ OTHER ☐Operator Devon Energy Prod Co LP OGRID # 6137Well Name & # Cotton Draw Ut # 154H Surface Type (F) (S) (P)Location: UL A, Sect 3, Township 25 s, RNG 31 e, Sub-surface Type (F) (S) (P)1: BHL @: UL B, Sect 3, Township 25 s, RNG 31 e, H ☒ DD ☐2: BHL @: UL , Sect , Township s, RNG e, H ☐ DD ☐A. Date C101 rec'd / / C101 reviewed / /

B. 1. Check mark, Information is OK on Forms:

OGRID ☒ BONDING ☒ PROP CODE ☒ WELL # ☒ SIGNATURE ☒2. Inactive Well list as of: 4/13/11 # wells 1528, # Inactive wells 4

a. District Grant APD but see number of inactive wells:

No letter required ☒; Sent Letter to Operator , to Santa Fe 3. Additional Bonding as of: 4/13/11

a. District Denial because operator needs addition bonding:

No Letter required ☒; Sent Letter to Operator , To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required ☒; Sent Letter to Operator , To Santa Fe C102 YES ☒ NO ☐ Signature ☒1. Pool COTTON DRAW; DELAWARE, SOUTH Code 13375a. Dedicated acreage 160, What Units AHIPb. SUR. Location Standard : Non-Standard Location ☒c. Well shares acres: Yes , No ☒ # of wells plus this well # 2. 2nd. Operator in same acreage, Yes , No ☒ WELL(S) SHARING:WELL(S) BY 2nd OPER: Agreement Letter , Disagreement letter 3. Intent to Directional Drill Yes ☒ No ☐Dedicated acreage 160, What Units AHIPBottomhole Location Standard ☒ Non-Standard Bottomhole 4. Downhole Commingle: Yes , No ☒a. Pool #2 , Code , Acres Pool #3 , Code , Acres Pool #4 , Code , Acres 5. POTASH Area Yes , No ☒C. Blowout Preventer Yes ☒ No ☐D. H2S Yes , No , need E. C144 Pit Registration Yes ☒ No ☐

F. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes ☒ No ☐ NSL # 2. Non-Standard Proration: Yes , No ☒ NSP # 3. Simultaneous Dedication: Yes , No ☒ SD # Number of wells Plus # 4. Injection order Yes , No ☒ PMX # or WFX # 5. SWD order Yes , NO ☒ SWD # 6. DHC from SF ; DHC-HOB ; Holding 7. OCD Approval Date 4/13/11

API #30-015-38952

8. Reviewers K2