NON-STANDARD LOCATION

14-159

OCD Hobbs
HOBBS OCD
JUL 28 2014
RECEIVED

Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL:NMLC061936A BHL:NMLC061936

6. If Indian, Allotee 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 Zone

8. Lease Name and Well No. (300635)
Cotton Draw Unit 237H

2. Name of Operator Devon Energy Production Company, L.P. (6137)

9. API Well No.
30-025-41986

3a. Address 333 W. Sheridan Ave.
Oklahoma City, OK 73102

3b. Phone No. *(include area code)*
405-228-4248

10. Field and Pool, or Exploratory (96715)
WC-025 G-05 S253209L; BS

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 200' FSL & 950' FWL, Sec 10, T25S-R32E, Unit M PP: 200' FSL & 950' FWL
At proposed prod. zone 330' FNL & 660' FWL, Sec 10, T25S-R32E, Unit D

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 10, T25S-R32E

14. Distance in miles and direction from nearest town or post office*
Approximately 24 miles southeast of Malaga, NM

12. County or Parish
Lea

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200'

16. No. of acres in lease
NMLC 061936A - 420
NNLC 061936 - 440

17. Spacing Unit dedicated to this well
W/2 W/2 Sec 10 25S-32E = 160 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. see attached 1 mile radius plat

19. Proposed Depth
MD: 15237' TVD: 10737'
PH: 10900'

20. BLM/BIA Bond No. on file
CO-1104 & NMB-000801

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3445.5' GL

22. Approximate date work will start*
02/01/2014

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.
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)*	Date
Patti Riechers	Patti Riechers	12/17/2013

Title
Regulatory Specialist

Approved by *(Signature)*	Name *(Printed Typed)*	Date
		7-21-14

Title	Office
FIELD MANAGER	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.

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)

CARLSBAD CONTROLLED WATER BASIN

KZ 07/25/14

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

JUL 29 2014

14-159

Form 3160-3
(March 2012)

OCD Hobbs
HOBBS OCD

JUL 28 2014

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Cotton Draw Unit 237H

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Oklahoma City, OK 73102

3b. Phone No. *(include area code)*
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Paduca; Bone Spring

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

25. Signature Patti Riechers

Name *(Printed/Typed)*
Patti Riechers

Date
12/17/2013

Title
Regulatory Specialist

Approved by *(Signature)*

Name *(Printed/Typed)*

Date

Title

Office

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(Continued on page 2)

*(Instructions on page 2)

Certification

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 __November, 2013.
Printed Name: Patti Riechers
Signed Name: Patti Riechers
Position Title: Regulatory Specialist
Address: 333 W. Sheridan, OKC OK 73102
Telephone: (405)-552-6559

DRILLING PROGRAM

Devon Energy Production Company, L.P.
Cotton Draw Unit 237H

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

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

a.	Fresh Water	300'	
b.	Rustler	599'	Barren
c.	Top of Salt	994	Barren
d.	Salado	835'	Barren
e.	Castile	2800'	Barren
f.	Base of Salt/Lamar	4640'	Barren
g.	Bell Canyon	4685'	Oil & Gas
h.	Cherry Canyon	5296'	Oil & Gas
i.	Brushy Canyon	6621'	Oil & Gas
j.	1st Bone Spring Lime	8203'	Oil & Gas
k.	1st Bone Spring Sand	9334'	Oil & Gas
l.	2nd Bone Spring Lime	9711'	Oil & Gas
m.	2nd Bone Spring Sand	9890'	Oil & Gas
	Total Depth	10737' TVD	15237' MD
	Pilot Hole Depth:	10900' TVD	

3. **Pressure Control Equipment:**

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 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 Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 as a **3M system** prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked as per Onshore Order 2. 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**.

See COA 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.

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:** All casing is new and API approved.

See COA

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 - 775' 875' 4600'	13-3/8"	0 - 775' 875' 4600'	48	STC	H-40	2.30	5.17	8.66
12-1/4"	775-4675' 4600'	9-5/8"	0-4675' 4600'	40	BTC	HCK-55	1.74	1.62	4.95
8-3/4"	4675-15237'	5-1/2"	0-15237'	17	BTC	P-110	1.51	1.87	2.19

*An 8-3/4" pilot hole will be drilled to 10900' and plugged back to KOP (for volumes and TOC see cement table)

5. **Proposed mud Circulations System:**

See COA

Depth 875' 4600'	Mud Weight	Viscosity	Fluid Loss	Type System
0-775'	8.4-9.0	30-34	N/C	FW
775-4675'	9.8-10.0	28-32	N/C	Brine
4675-15237'	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
Surface	840	14.8	6.32	1.33	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
Intermediate	1020	12.9	9.81	1.85	1st Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	430	14.8	6.32	1.33	1st Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
Production	670	12.5	10.86	1.96	1st Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	1340	14.5	5.38	1.22	1st Tail	(50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water
	DVT @ 6000'					
	180	11.9	13.30	2.29	2nd Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water
	120	14.8	6.34	1.33	2nd Tail	Class C Cement + 0.2% bwoc HR-800+ 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
PH Plug	420	15.6	5.39	1.19	Lead	Class H Cement + 0.2% BWOC Halad-9 + 0.2% BWOC HR-601 + 60.5% Fresh Water

TOC for all Strings:

Surface	@	0'
Intermediate	@	0'
Pilot Hole	@	9814'
Production	@	4175'

Notes:

- Cement volumes Surface 100%, Intermediate 75%, Pilot hole plug 10% excess and Production is 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data

7. Logging, Coring, and Testing Program:

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. The open hole electrical logging program will be:
    i. Total Depth to Intermediate:
        - Dual Laterolog
        - Micro Laterolog with SP & Gamma Ray
        - Compensated Neutron
        - Z-Density Log with Gamma Ray and Caliper
        - Di-pole Sonic
    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 5-1/2" 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 knows presence of H2S in this area, and none 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 being used to drill this well. Estimated BHP: 4700 psi, and estimated BHT: 170 degrees.

See COA

b. 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.

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

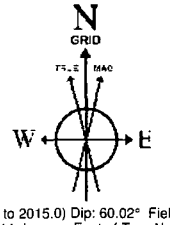
Location:	Lea County, NM	Slot:	No.237H SHL
Field:	(Cotton Draw) Sec 10, T25S, R32E	Well:	No.237H
Facility:	Cotton Draw Unit No.237H	Wellbore:	No.237H PWB

BAKER HUGHES

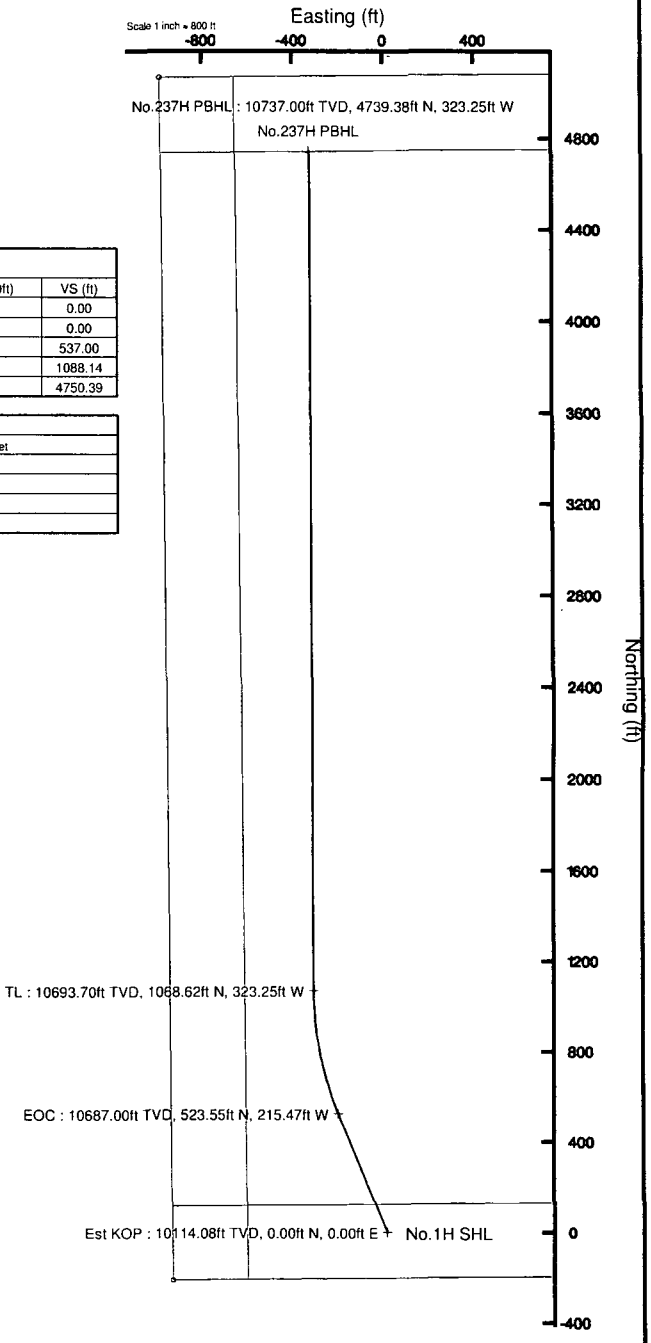
Well Profile Data

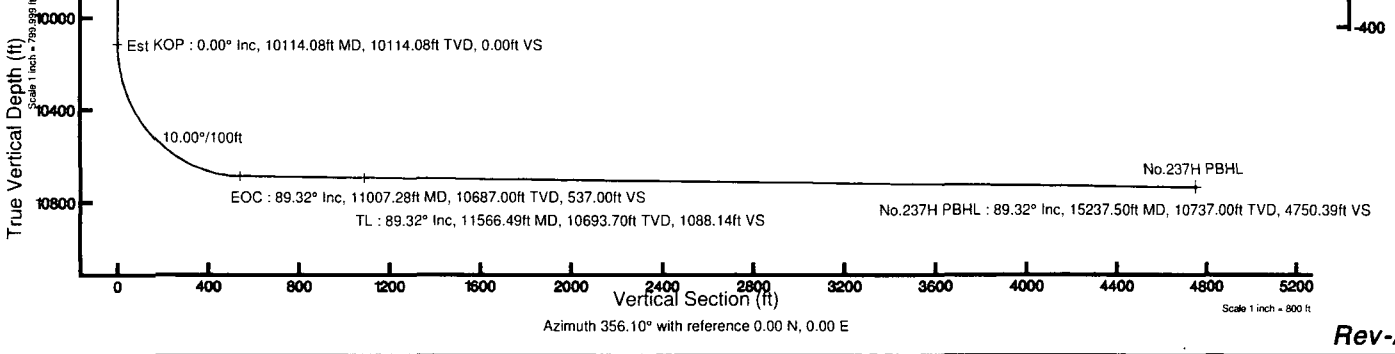
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	28.00	0.000	337.630	28.00	0.00	0.00	0.00	0.00
Est KOP	10114.08	0.000	337.630	10114.08	0.00	0.00	0.00	0.00
EOC	11007.28	89.320	337.630	10687.00	523.55	-215.47	10.00	537.00
TL	11566.49	89.324	360.000	10693.70	1068.62	-323.25	4.00	1088.14
No.237H PBHL	15237.50	89.324	360.000	10737.00	4739.38	-323.25	0.00	4750.39

Plot reference wellpath is Rev-A.0	
True vertical depths are referenced to Rig on No.237H SHL (KB)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.237H SHL (KB)	North Reference: Grid north
Rig on No.237H SHL (KB) to Mean Sea Level: 3473.5 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.237H SHL): -3445.5 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentbry on 10/24/2013



BGGM (1945.0 to 2015.0) Dip: 60.02° Field: 48303.2 nT
Magnetic North is 7.44 degrees East of True North (at 10/24/2013)
Grid North is 0.35 degrees East of True North
To correct azimuth from True to Grid subtract 0.35 degrees
To correct azimuth from Magnetic to Grid add 7.09 degrees





Azimuth 356.10° with reference 0.00 N, 0.00 E

Rev-A.0

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.237H SHL**
Area	**Lea County, NM**	Well	**No.237H**
Field	**(Cotton Draw) Sec 10, T25S, R32E**	Wellbore	**No.237H PWB**
Facility	**Cotton Draw Unit No.237H**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 4.0.1**
North Reference	**Grid**	User	**Gentbry**
Scale	**0.999958**	Report Generated	**12/13/2013** at **9:22:45 AM**
Convergence at slot	**0.35° East**	Database/Source file	**MidlandDB/No.237H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W
Facility Reference Pt			**747161.64**	**414682.15**	32°08'17.856"N	103°40'06.116"W
Field Reference Pt			**747161.64**	**414682.15**	32°08'17.856"N	103°40'06.116"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No.1H SHL (KB) to Facility Vertical Datum	**28.00ft**
Horizontal Reference Pt	**Slot**	Rig on No.1H SHL (KB) to Mean Sea Level	**3473.50ft**
Vertical Reference Pt	**Rig on No.1H SHL (KB)**	Rig on No.1H SHL (KB) to Mud Line at Slot (No.237H SHL)	**28.00ft**
MD Reference Pt	**Rig on No.1H SHL (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**356.10°**

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Facility	**Cotton Draw Unit No.237H**		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	337.630	0.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
28.00	0.000	337.630	28.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Tie On
128.00†	0.000	337.630	128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
228.00†	0.000	337.630	228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
328.00†	0.000	337.630	328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
428.00†	0.000	337.630	428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
528.00†	0.000	337.630	528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
599.00†	0.000	337.630	599.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Rustler
628.00†	0.000	337.630	628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
728.00†	0.000	337.630	728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
828.00†	0.000	337.630	828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
928.00†	0.000	337.630	928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
994.00†	0.000	337.630	994.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Top Salt
1028.00†	0.000	337.630	1028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1128.00†	0.000	337.630	1128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1228.00†	0.000	337.630	1228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1328.00†	0.000	337.630	1328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1428.00†	0.000	337.630	1428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1528.00†	0.000	337.630	1528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1628.00†	0.000	337.630	1628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1728.00†	0.000	337.630	1728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1828.00†	0.000	337.630	1828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
1928.00†	0.000	337.630	1928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2028.00†	0.000	337.630	2028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2128.00†	0.000	337.630	2128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2228.00†	0.000	337.630	2228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2328.00†	0.000	337.630	2328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2428.00†	0.000	337.630	2428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2528.00†	0.000	337.630	2528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2628.00†	0.000	337.630	2628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2728.00†	0.000	337.630	2728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2800.00†	0.000	337.630	2800.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Castile
2828.00†	0.000	337.630	2828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
2928.00†	0.000	337.630	2928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3028.00†	0.000	337.630	3028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3128.00†	0.000	337.630	3128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3228.00†	0.000	337.630	3228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3328.00†	0.000	337.630	3328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3428.00†	0.000	337.630	3428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3528.00†	0.000	337.630	3528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3628.00†	0.000	337.630	3628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3728.00†	0.000	337.630	3728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3828.00†	0.000	337.630	3828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
3928.00†	0.000	337.630	3928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4028.00†	0.000	337.630	4028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.237H SHL**
Area	**Lea County, NM**	Well	**No.237H**
Field	**(Cotton Draw) Sec 10, T25S, R32E**	Wellbore	**No.237H PWB**
Facility	**Cotton Draw Unit No.237H**		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4128.00†	0.000	337.630	4128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4228.00†	0.000	337.630	4228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4328.00†	0.000	337.630	4328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4407.00†	0.000	337.630	4407.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Bell Canyon
4428.00†	0.000	337.630	4428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4528.00†	0.000	337.630	4528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4628.00†	0.000	337.630	4628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4728.00†	0.000	337.630	4728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4828.00†	0.000	337.630	4828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
4928.00†	0.000	337.630	4928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5028.00†	0.000	337.630	5028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5128.00†	0.000	337.630	5128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5228.00†	0.000	337.630	5228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5296.00†	0.000	337.630	5296.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Cherry Canyon
5328.00†	0.000	337.630	5328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5428.00†	0.000	337.630	5428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5528.00†	0.000	337.630	5528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5628.00†	0.000	337.630	5628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5728.00†	0.000	337.630	5728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5828.00†	0.000	337.630	5828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
5928.00†	0.000	337.630	5928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6028.00†	0.000	337.630	6028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6128.00†	0.000	337.630	6128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6228.00†	0.000	337.630	6228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6328.00†	0.000	337.630	6328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6428.00†	0.000	337.630	6428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6528.00†	0.000	337.630	6528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6621.00†	0.000	337.630	6621.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Brushy Canyon
6628.00†	0.000	337.630	6628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6728.00†	0.000	337.630	6728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6828.00†	0.000	337.630	6828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
6928.00†	0.000	337.630	6928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7028.00†	0.000	337.630	7028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7128.00†	0.000	337.630	7128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7228.00†	0.000	337.630	7228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7328.00†	0.000	337.630	7328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7428.00†	0.000	337.630	7428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7528.00†	0.000	337.630	7528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7628.00†	0.000	337.630	7628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7728.00†	0.000	337.630	7728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7828.00†	0.000	337.630	7828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
7928.00†	0.000	337.630	7928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8028.00†	0.000	337.630	8028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8128.00†	0.000	337.630	8128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8203.00†	0.000	337.630	8203.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	1st Bone Spring Lime

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.237H SHL**
Area	**Lea County, NM**	Well	**No.237H**
Field	**(Cotton Draw) Sec 10, T25S, R32E**	Wellbore	**No.237H PWB**
Facility	**Cotton Draw Unit No.237H**		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8228.00†	0.000	337.630	8228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8328.00†	0.000	337.630	8328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8428.00†	0.000	337.630	8428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8528.00†	0.000	337.630	8528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8628.00†	0.000	337.630	8628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8728.00†	0.000	337.630	8728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8828.00†	0.000	337.630	8828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
8928.00†	0.000	337.630	8928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9028.00†	0.000	337.630	9028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9128.00†	0.000	337.630	9128.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9228.00†	0.000	337.630	9228.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9328.00†	0.000	337.630	9328.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9334.00†	0.000	337.630	9334.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	1st Bone Spring Sand
9428.00†	0.000	337.630	9428.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9528.00†	0.000	337.630	9528.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9628.00†	0.000	337.630	9628.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9711.00†	0.000	337.630	9711.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	2nd Bone Spring Lime
9728.00†	0.000	337.630	9728.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9828.00†	0.000	337.630	9828.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
9890.00†	0.000	337.630	9890.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	2nd Bone Spring Sand
9928.00†	0.000	337.630	9928.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
10028.00†	0.000	337.630	10028.00	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	
10114.08	0.000	337.630	10114.08	0.00	0.00	0.00	747161.64	414682.15	32°08'17.856"N	103°40'06.116"W	0.00	Est KOP
10128.00†	1.392	337.630	10128.00	0.16	0.16	-0.06	747161.58	414682.31	32°08'17.857"N	103°40'06.116"W	10.00	
10228.00†	11.392	337.630	10227.25	10.71	10.44	-4.30	747157.34	414692.59	32°08'17.959"N	103°40'06.165"W	10.00	
10328.00†	21.392	337.630	10323.06	37.44	36.50	-15.02	747146.62	414718.65	32°08'18.218"N	103°40'06.288"W	10.00	
10428.00†	31.392	337.630	10412.53	79.55	77.55	-31.92	747129.72	414759.70	32°08'18.625"N	103°40'06.481"W	10.00	
10528.00†	41.392	337.630	10492.92	135.75	132.35	-54.47	747107.17	414814.49	32°08'19.169"N	103°40'06.740"W	10.00	
10628.00†	51.392	337.630	10561.81	204.34	199.22	-81.99	747079.65	414881.37	32°08'19.832"N	103°40'07.055"W	10.00	
10728.00†	61.392	337.630	10617.09	283.24	276.14	-113.65	747048.00	414958.28	32°08'20.595"N	103°40'07.417"W	10.00	
10828.00†	71.392	337.630	10657.09	370.04	360.77	-148.48	747013.17	415042.90	32°08'21.435"N	103°40'07.816"W	10.00	
10928.00†	81.392	337.630	10680.59	462.11	450.53	-185.42	746976.23	415132.66	32°08'22.325"N	103°40'08.240"W	10.00	
11007.28	89.320	337.630	10687.00	537.00	523.55	-215.47	746946.18	415205.68	32°08'23.050"N	103°40'08.584"W	10.00	EOC
11028.00†	89.318	338.459	10687.25	556.70	542.77	-223.22	746938.43	415224.89	32°08'23.240"N	103°40'08.673"W	4.00	
11128.00†	89.312	342.459	10688.44	652.97	636.98	-256.66	746904.99	415319.10	32°08'24.174"N	103°40'09.055"W	4.00	
11228.00†	89.309	346.459	10689.65	750.88	733.30	-283.44	746878.21	415415.41	32°08'25.129"N	103°40'09.359"W	4.00	
11328.00†	89.310	350.460	10690.85	849.97	831.25	-303.44	746858.21	415513.36	32°08'26.100"N	103°40'09.585"W	4.00	
11428.00†	89.313	354.460	10692.05	949.74	930.36	-316.56	746845.09	415612.47	32°08'27.081"N	103°40'09.730"W	4.00	
11528.00†	89.321	358.460	10693.25	1049.71	1030.14	-322.73	746838.92	415712.24	32°08'28.069"N	103°40'09.795"W	4.00	
11566.49	89.324	360.000	10693.70	1088.14	1068.62	-323.25	746838.40	415750.72	32°08'28.450"N	103°40'09.798"W	4.00	TL
11628.00†	89.324	360.000	10694.43	1149.50	1130.13	-323.25	746838.40	415812.23	32°08'29.058"N	103°40'09.794"W	0.00	
11728.00†	89.324	360.000	10695.61	1249.26	1230.12	-323.25	746838.40	415912.22	32°08'30.048"N	103°40'09.787"W	0.00	
11828.00†	89.324	360.000	10696.79	1349.03	1330.11	-323.25	746838.40	416012.20	32°08'31.037"N	103°40'09.779"W	0.00	
11928.00†	89.324	360.000	10697.97	1448.79	1430.11	-323.25	746838.40	416112.19	32°08'32.027"N	103°40'09.772"W	0.00	
12028.00†	89.324	360.000	10699.14	1548.55	1530.10	-323.25	746838.40	416212.18	32°08'33.016"N	103°40'09.765"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.237H SHL**
Area	**Lea County, NM**	Well	**No.237H**
Field	**(Cotton Draw) Sec 10, T25S, R32E**	Wellbore	**No.237H PWB**
Facility	**Cotton Draw Unit No.237H**		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12128.00†	89.324	360.000	10700.32	1648.31	1630.09	-323.25	746838.40	416312.17	32°08'34.005"N	103°40'09.758"W	0.00	
12228.00†	89.324	360.000	10701.50	1748.07	1730.08	-323.25	746838.40	416412.16	32°08'34.995"N	103°40'09.751"W	0.00	
12328.00†	89.324	360.000	10702.68	1847.83	1830.08	-323.25	746838.40	416512.15	32°08'35.984"N	103°40'09.744"W	0.00	
12428.00†	89.324	360.000	10703.86	1947.59	1930.07	-323.25	746838.40	416612.14	32°08'36.974"N	103°40'09.736"W	0.00	
12528.00†	89.324	360.000	10705.04	2047.36	2030.06	-323.25	746838.40	416712.12	32°08'37.963"N	103°40'09.729"W	0.00	
12628.00†	89.324	360.000	10706.22	2147.12	2130.06	-323.25	746838.40	416812.11	32°08'38.953"N	103°40'09.722"W	0.00	
12728.00†	89.324	360.000	10707.40	2246.88	2230.05	-323.25	746838.40	416912.10	32°08'39.942"N	103°40'09.715"W	0.00	
12828.00†	89.324	360.000	10708.58	2346.64	2330.04	-323.25	746838.40	417012.09	32°08'40.932"N	103°40'09.708"W	0.00	
12928.00†	89.324	360.000	10709.76	2446.40	2430.04	-323.25	746838.40	417112.08	32°08'41.921"N	103°40'09.701"W	0.00	
13028.00†	89.324	360.000	10710.94	2546.16	2530.03	-323.25	746838.40	417212.07	32°08'42.910"N	103°40'09.693"W	0.00	
13128.00†	89.324	360.000	10712.12	2645.92	2630.02	-323.25	746838.40	417312.06	32°08'43.900"N	103°40'09.686"W	0.00	
13228.00†	89.324	360.000	10713.30	2745.68	2730.02	-323.25	746838.40	417412.04	32°08'44.889"N	103°40'09.679"W	0.00	
13328.00†	89.324	360.000	10714.48	2845.45	2830.01	-323.25	746838.40	417512.03	32°08'45.879"N	103°40'09.672"W	0.00	
13428.00†	89.324	360.000	10715.66	2945.21	2930.00	-323.25	746838.40	417612.02	32°08'46.868"N	103°40'09.665"W	0.00	
13528.00†	89.324	360.000	10716.84	3044.97	3029.99	-323.25	746838.40	417712.01	32°08'47.858"N	103°40'09.658"W	0.00	
13628.00†	89.324	360.000	10718.02	3144.73	3129.99	-323.25	746838.40	417812.00	32°08'48.847"N	103°40'09.650"W	0.00	
13728.00†	89.324	360.000	10719.20	3244.49	3229.98	-323.25	746838.40	417911.99	32°08'49.836"N	103°40'09.643"W	0.00	
13828.00†	89.324	360.000	10720.38	3344.25	3329.97	-323.25	746838.40	418011.98	32°08'50.826"N	103°40'09.636"W	0.00	
13928.00†	89.324	360.000	10721.55	3444.01	3429.97	-323.25	746838.40	418111.96	32°08'51.815"N	103°40'09.629"W	0.00	
14028.00†	89.324	360.000	10722.73	3543.77	3529.96	-323.25	746838.40	418211.95	32°08'52.805"N	103°40'09.622"W	0.00	
14128.00†	89.324	360.000	10723.91	3643.54	3629.95	-323.25	746838.40	418311.94	32°08'53.794"N	103°40'09.615"W	0.00	
14228.00†	89.324	360.000	10725.09	3743.30	3729.95	-323.25	746838.40	418411.93	32°08'54.784"N	103°40'09.607"W	0.00	
14328.00†	89.324	360.000	10726.27	3843.06	3829.94	-323.25	746838.40	418511.92	32°08'55.773"N	103°40'09.600"W	0.00	
14428.00†	89.324	360.000	10727.45	3942.82	3929.93	-323.25	746838.40	418611.91	32°08'56.763"N	103°40'09.593"W	0.00	
14528.00†	89.324	360.000	10728.63	4042.58	4029.92	-323.25	746838.40	418711.90	32°08'57.752"N	103°40'09.586"W	0.00	
14628.00†	89.324	360.000	10729.81	4142.34	4129.92	-323.25	746838.40	418811.88	32°08'58.741"N	103°40'09.579"W	0.00	
14728.00†	89.324	360.000	10730.99	4242.10	4229.91	-323.25	746838.40	418911.87	32°08'59.731"N	103°40'09.572"W	0.00	
14828.00†	89.324	360.000	10732.17	4341.86	4329.90	-323.25	746838.40	419011.86	32°09'00.720"N	103°40'09.564"W	0.00	
14928.00†	89.324	360.000	10733.35	4441.63	4429.90	-323.25	746838.40	419111.85	32°09'01.710"N	103°40'09.557"W	0.00	
15028.00†	89.324	360.000	10734.53	4541.39	4529.89	-323.25	746838.40	419211.84	32°09'02.699"N	103°40'09.550"W	0.00	
15128.00†	89.324	360.000	10735.71	4641.15	4629.88	-323.25	746838.40	419311.83	32°09'03.689"N	103°40'09.543"W	0.00	
15228.00†	89.324	360.000	10736.89	4740.91	4729.88	-323.25	746838.40	419411.82	32°09'04.678"N	103°40'09.536"W	0.00	
15237.50	89.324	360.000	10737.00†	4750.39	4739.38	-323.25	746838.40	419421.32	32°09'04.772"N	103°40'09.535"W	0.00	No.237H PBHL

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.237H SHL**
Area	**Lea County, NM**	Well	**No.237H**
Field	**(Cotton Draw) Sec 10, T25S, R32E**	Wellbore	**No.237H PWB**
Facility	**Cotton Draw Unit No.237H**		

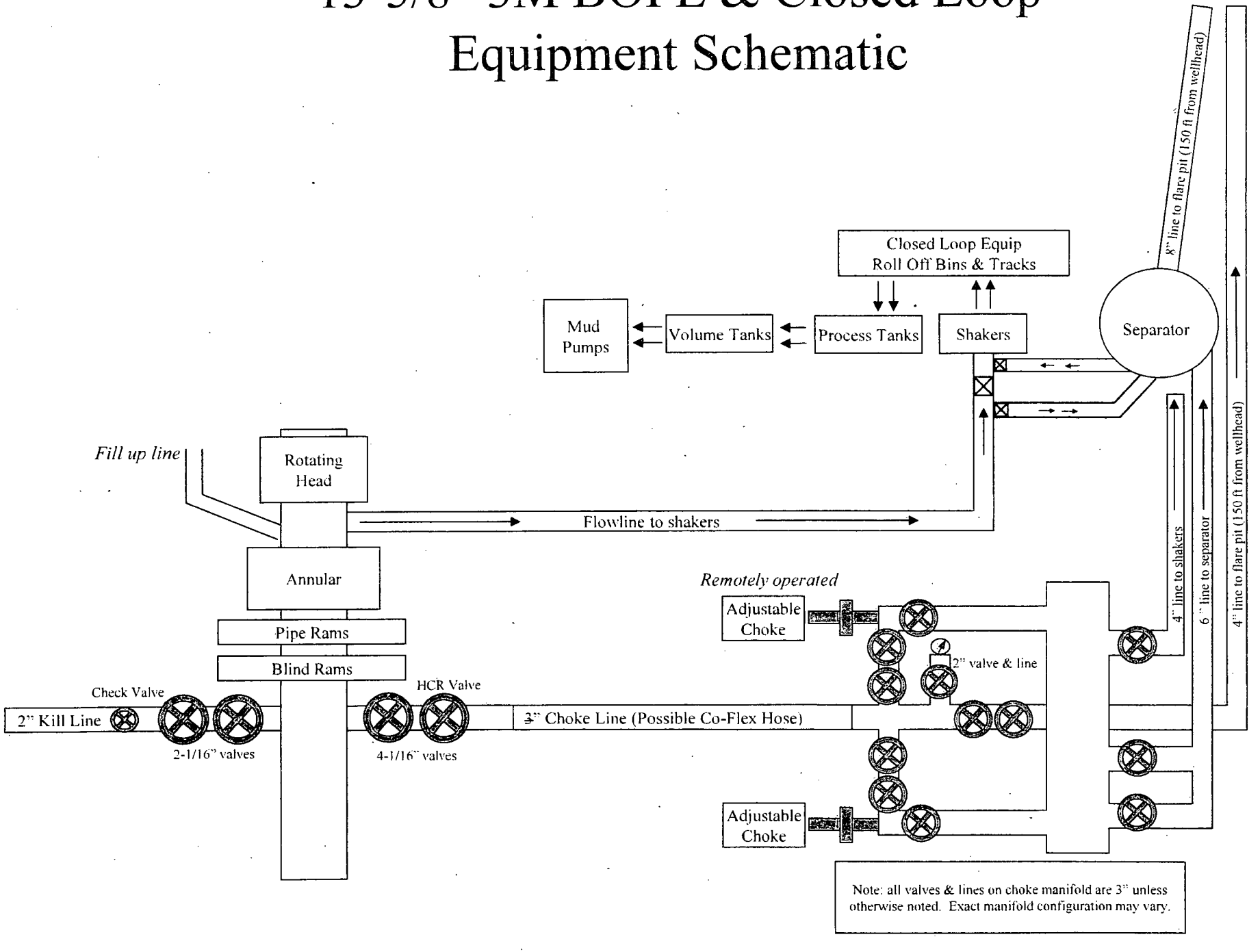
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.237H PBHL	15237.50	10737.00	4739.38	-323.25	**746838.40**	**419421.32**	32°09'04.772"N	103°40'09.535"W	point

SURVEY PROGRAM - Ref Wellbore: No.237H PWB Ref Wellpath: Rev-A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
28.00	15237.50	NaviTrak (Standard)		No.237H PWB

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



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, L.P.
Chincoteague 10 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 3000 psi working pressure.

4. All fittings will be flanged.

5. A fill bore safety valve tested to a minimum of 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.

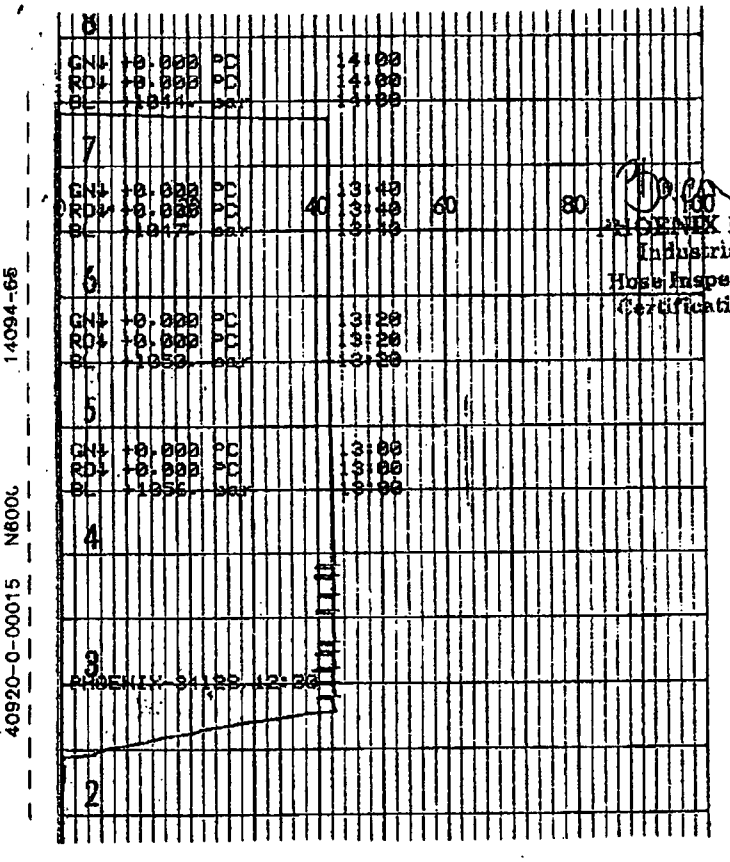
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

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.



VERIFIED TRUE CO:
PHOENIX RUBBER G.C.

Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly It is good practice to use lifting & safety equipment but not mandatory

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.contitechbeattie.com

RIG 212

PHOENIX

QUALITY DOCUMENT

PHOENIX RUBBER INDUSTRIAL LTD.

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.taurusemerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 552	
PURCHASER: Phoenix Beattie Co.				P.O. N°: 1519FA-871	
PHOENIX RUBBER order N°: 170466		HOSE TYPE: 3" ID		Choke and Kill Hose	
HOSE SERIAL N°: 34128		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 = 25 MPa

COUPLINGS

Type	Serial N°	Quality	Heat N°
3" coupling with	720 719	AISI 4130	C7626
4 1/16" Flange end		AISI 4130	47357

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

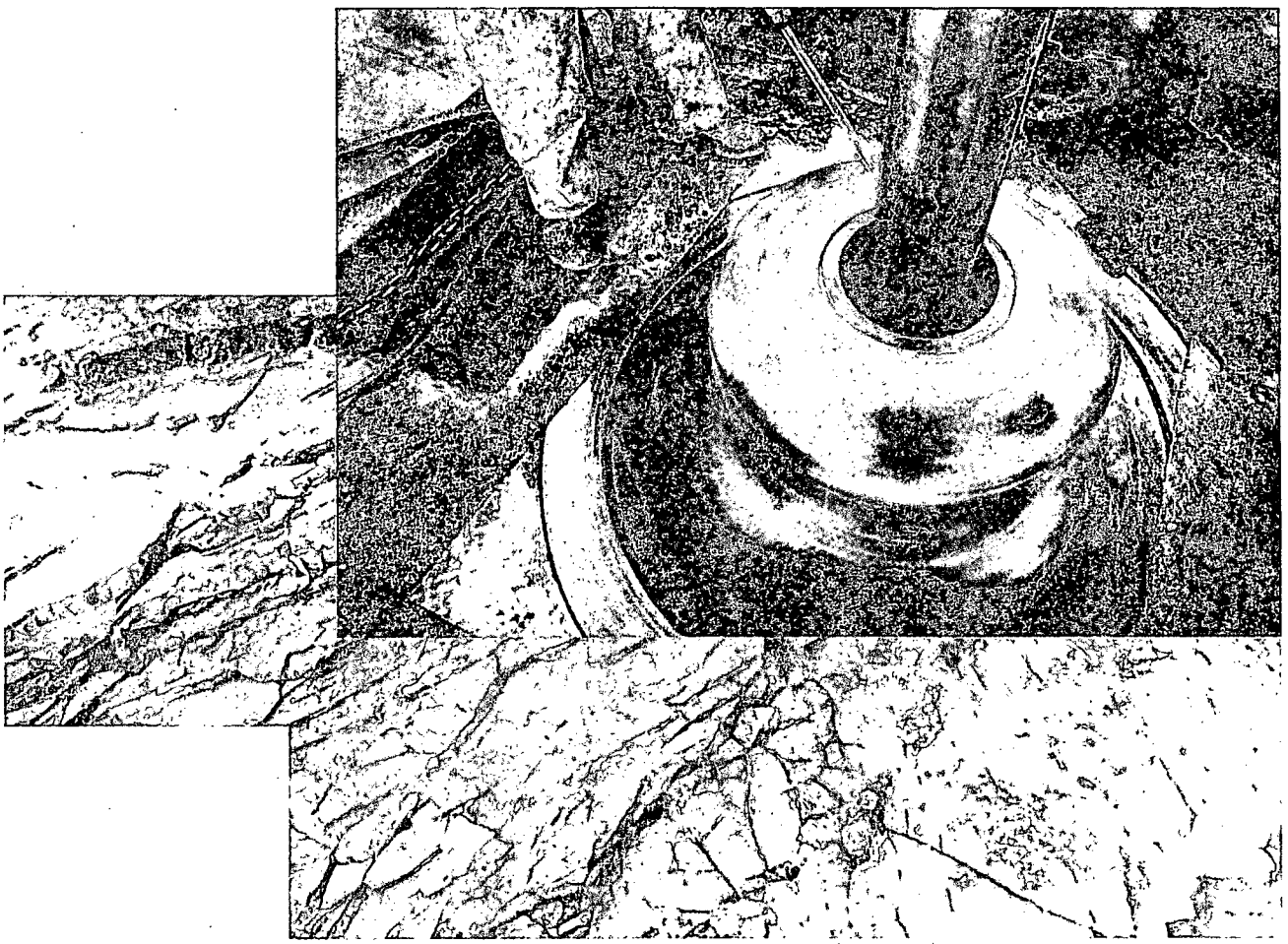
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

Date:	Inspector	Quality Control
29. April. 2002.		PHOENIX RUBBER Industrial Ltd. Hose Inspection and Certification Dept.

VERIFIED TRUE COPY
PHOENIX RUBBER q.c.

devon

Commitment Runs Deep



Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
June 2010

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

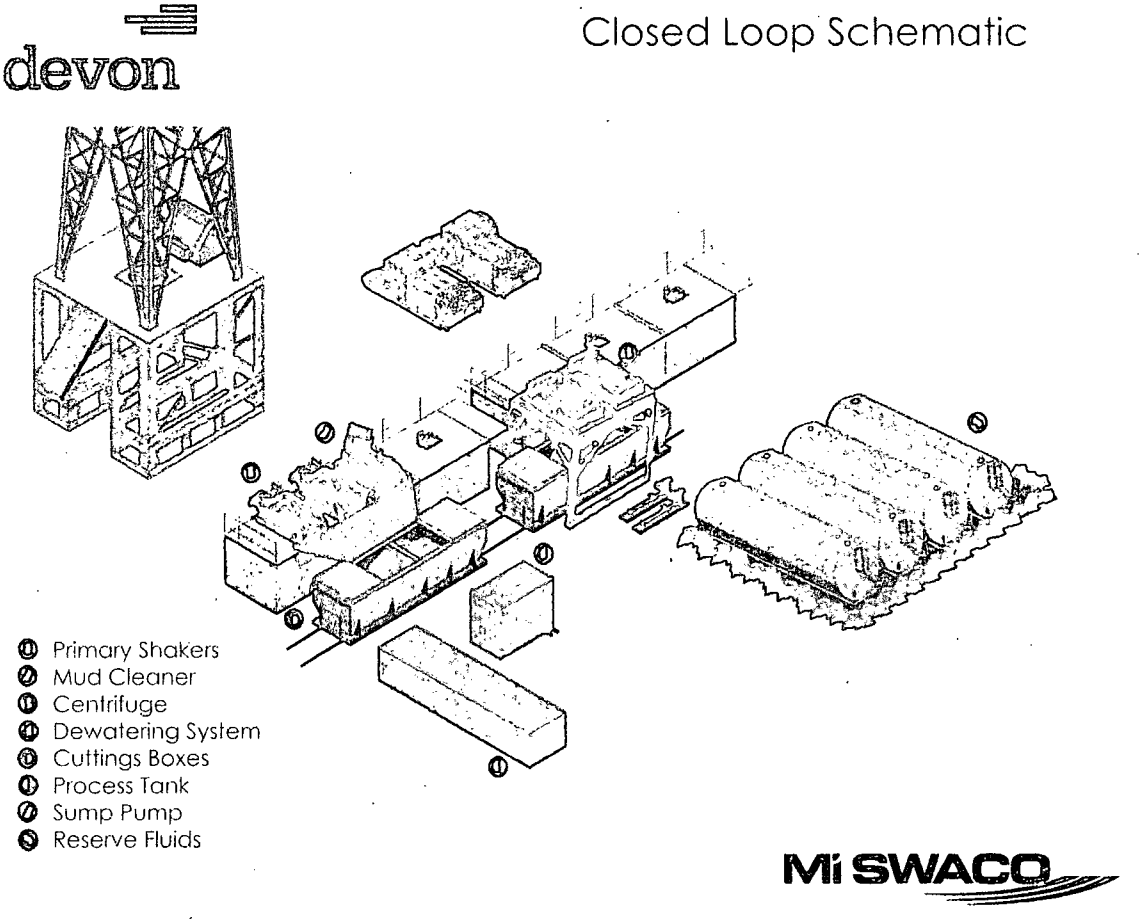
Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

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.

H&P Flex Rig Location Layout