

EA-12-1311

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

R-111-POTASH

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
BHL-NM-89052 *5th NM 91509 TES*

6. If Indian, Allottee or Tribe Name
2/14/2013

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

8. Lease Name and Well No.
APACHE 25 FED 17H *< 3/9/17 >*

9. API Well No.
30-015-41116

10. Field and Pool, or Exploratory
LOS MEDANOS; BONE SPRING *< 40295 >*

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 25, T. 22 S., R. 30 E.

12. County or Parish
EDDY

13. State
NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, L. P. *< 6137 >*

3a. Address 333 W. SHERIDAN
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
405-552-4524

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

At surface 1450 FSL & 730 FEL

At proposed prod. zone 660 FSL & 330 FWL

14. Distance in miles and direction from nearest town or post office*
17 MILES NORTHEAST OF LOVING, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 130 FT.

16. No. of acres in lease
560

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 650 FT.

19. Proposed Depth
TVD: 10940 MD: 15051

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3341.1' GL

22. Approximate date work will start*

23. Estimated duration
30 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 *Barry W. Hunt*

Name (Printed/Typed)
BARRY W. HUNT

Date
7/18/12

Title
PERMIT AGENT FOR DEVON ENERGY PRODUCTION, L.P.

Approved by (Signature)
/s/ Aden L. Seidlitz

Name (Printed/Typed)

FEB - 7 2013

Title
STATE DIRECTOR

Office
NM STATE OFFICE

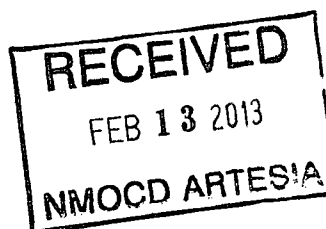
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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)

Carlsbad Controlled Water Basin



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

DISTRICT I
1623 N French Dr., Hobbs, NM 88240
Phone: (575) 393-4141 Fax: (575) 393-4720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1300 Fax: (575) 748-9720

DISTRICT III
1000 Rio Grande Blvd., Artesia, NM 88210
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. R. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-1460 Fax: (505) 476-3462

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-41116	Pool Code 40295	Pool Name LOS MEDANOS; BONE SPRING
Property Code 31920	Property Name APACHE 25 FED	Well Number 17H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, LP.	Elevation 3341.1'

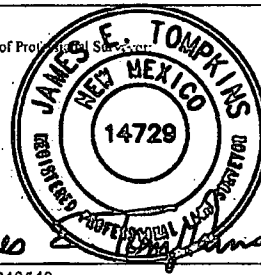
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	25	22 S	30 E		1450	SOUTH	730	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	22 S	30 E		660	SOUTH	330	WEST	EDDY
Dedicated Acres 160	Joint or Infill	Consolidated Code	Order No.						

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

NW COR SEC 25 NMSP-E (NAD 83) Y = 498814.3' N X = 692729.4' E LAT. = N32° 22' 13.28" LONG. = W103° 50' 34.71"		NE COR SEC 25 NMSP-E (NAD 83) Y = 498830.1' N X = 698095.1' E LAT. = N32° 22' 13.18" LONG. = W103° 49' 32.14"	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Barry W. Hunt</i> 7/18/12 Signature Date Barry W. Hunt Print Name E-mail Address
APACHE 25 FED 17H BHL NMSP-E (NAD 83) Y = 494197.6' N X = 693097.7' E LAT. = N32° 21' 27.58" LONG. = W103° 50' 30.66"		APACHE 25 FED 17H SHL NMSP-E (NAD 83) Y = 495000.2' N X = 697379.5' E LAT. = N32° 21' 35.33" LONG. = W103° 49' 40.70"	SURVEYORS CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JUNE 7, 2012 Date of Survey Signature and Seal of Professional Surveyor  <i>James E. Tompkins</i> Job No.: WTC48540 JAMES E. TOMPKINS 14729 Certificate Number

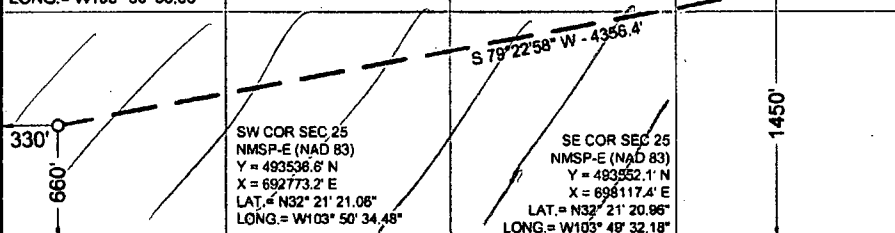
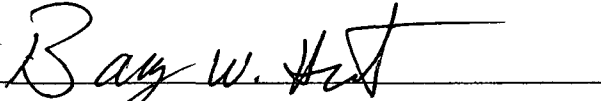


Diagram details: A well location diagram showing a well path from the surface to the bottom hole. The surface location is at the intersection of Section 25, Township 22 S, Range 30 E, Lot 1. The bottom hole location is at the intersection of Section 25, Township 22 S, Range 30 E, Lot M. The well path is shown as a dashed line with a bearing of S 79° 22' 58" W and a distance of 4355.4'. The well depth is 730' from the surface and 1450' from the bottom hole. The diagram also shows the coordinates for the corners of the sections and the well location.

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, 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. Executed this 17th day of July 2012.

Signed: 

Printed Name: Barry Hunt

Position: Agent for Devon Energy Production, LLC.

Address: 1403 Springs Farm Place, Carlsbad, NM 88220

Telephone: (575) 361-4078

E-mail: specialtpermitting@gmail.com

Field Representative: Don Mayberry

Address: P. O. Box 250, Artesia, NM 88211-0250

Telephone: Office: (575) 748-0164, Cell: (575) 748-5235



Devon Energy Corporation
20 North Broadway
Oklahoma City, OK 73102-8260

405 235 3611 Phone
www.devonenergy.com

June 5, 2012

To Whom It May Concern:

Mr. Barry Hunt is contracted by Devon Energy, L.P. to sign as their agent for APDs and Right of Ways in the state of New Mexico.

If you have any questions, please contact me at my office at (405) 228-8379.

Sincerely,


Victoria Sanchez

Supervisor, Regulatory Compliance
Mid-Continent Division
Devon Energy, L.P.

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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	22 S	30 E		660	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidated Code	Order No.
160			

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

NW COR SEC 25 NMSP-E (NAD 83) Y = 498814.3' N X = 692729.4' E LAT. = N32° 22' 13.28" LONG. = W103° 50' 34.71"		NE COR SEC 25 NMSP-E (NAD 83) Y = 498830.1' N X = 698095.1' E LAT. = N32° 22' 13.19" LONG. = W103° 49' 32.14"	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Barry W. Hunt</i> 7/18/12 Signature Date <i>Barry W. Hunt</i> Print Name E-mail Address
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SW COR SEC 25 NMSP-E (NAD 83) Y = 493536.6' N X = 692773.2' E LAT. = N32° 21' 21.08" LONG. = W103° 50' 34.48"	SE COR SEC 25 NMSP-E (NAD 83) Y = 493562.1' N X = 698117.4' E LAT. = N32° 21' 20.96" LONG. = W103° 49' 32.18"	SURVEYORS CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JUNE 7, 2012 Date of Survey Signature and Seal of Professional Surveyor <i>James E. Tompkins</i> Job No. WTC48540 JAMES E. TOMPKINS 14729 Certificate Number	

DEVON ENERGY PRODUCTION, L. P.
DRILLING PLAN

APACHE 25 FEDERAL 17H

SHL: 1450 FSL & 730 FEL

BHL: 660 FSL & 330 FWL

Section 25-22S-30E

Eddy County, NM

The elevation of the unprepared ground is 3341.1' feet above sea level.

The geologic name of the surface formation is Quaternary - Alluvium.

A rotary rig will be utilized to drill the well.

Proposed total depth is: MD: 13921'. TVD: 10940'.

Estimated tops of important geologic markers:

Quaternary – Alluvium	Surface*
Rustler	355'
Top of Salt/Salado	640'
Base Salt	3610'
Delaware	3875'
Bell Canyon Sand	3918'
Cherry Canyon Sand	4812'
Brushy Canyon Sand	6073'
Bone Spring	7730'
Fist Bone Spring	8755'
Second Bone Spring	9565'
Third Bone Spring	10545'
TVD	10940' (145 degree F)

*Water anticipated at 200 feet.

Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Delaware	Oil (1705 psi)
Bell Canyon	Oil (1724 psi)
Cherry Canyon	Oil (2117 psi)
Brushy Canyon	Oil (2672 psi)
Bone Spring	Oil (3401 psi)
TVD	Oil BHP (4814 psi)

APACHE 25 FED 17H- APD DRILLING PLAN
SKS 6.28.12

Casing Program (All new casing)

See Log

<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 - 630 440	13-3/8"	0 - 630	48#	STC	H-40
12-1/4"	630 - 3860	9-5/8"	0 - 3860	40#	LTC	J-55
8-3/4"	3860 - 10267	5-1/2"	0 - 10267	17#	LTC	P-110
8-3/4"	10267 - 15051	5-1/2"	10267 - 15051	17#	BTC	P-110

MAX TVD: 10,940 FT

Design Factors

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8"	2.6	5.9	17.9
9-5/8" 40# J-55 LTC	1.3	2.0	4.1
5-1/2" 17# P-110 LTC	1.79	2.21	1.74
5-1/2" 17# P-110 BTC	1.68	2.08	5.47

NOTE REGARDING COLLAPSE DESIGN FACTOR FOR INTERMEDIATE CASING: The maximum possible collapse load that the intermediate casing will experience will result from evacuated casing with the pore pressure exerting a collapse load at TD. The pore pressure is estimated to be 9.0 ppg for this calculation. This results in a collapse design factor of 1.2 for the 9-5/8" 40# J-55 LTC casing at a depth of 3,860 ft. While running the intermediate casing, the casing string will never be completely evacuated. There is no potential for the intermediate casing to be used as a production string.

Mud Program

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 - 630 440	8.4 - 9.0	30 - 34	N/C	FW
630 - 3860	9.8 - 10.0	28 - 32	N/C	Brine
3860 - 15051	8.6 - 9.0	28 - 32	N/C	FW

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 as per Onshore Order No 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**.

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.

Cementing Program (cement volumes based on at least 25% excess)

13-3/8" Surface

Lead: 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

Yield: 1.75 cf/sk

TOC @ surface

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

Yield: 1.35 cf/sk

9-5/8" Intermediate

Lead: 970 sacks (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg

Yield: 1.85 cf/sk

TOC @ surface

Tail: 355 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

Yield: 1.33 cf/sk

5-1/2" Production

1st Stage

Lead: 810 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg

Yield: 1.95 cf/sk

Tail: 1300 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg

Yield: 1.22 cf/sk

DV TOOL at 5500 ft

2nd Stage

Lead: 600 sacks Class C Cement + 3% bwoc Econolite + 0.125 lbs/sack Poly-E-Flake + 82.4% Fresh Water, 11.4 ppg

Yield: 2.87 cf/sk

Tail: 300 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg

Yield: 1.33cf/sk

TOC @ Surface ft

TOC for All Strings:

Surface:	0
Intermediate:	0
Production:	0 ft

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

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.
- c. 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.

LOGGING, CORING, AND TESTING PROGRAM:

- 502
LDA
- 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:
 1. Total depth to intermediate casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron - Z Density log with Gamma Ray and Caliper.
 2. Total Depth to Surface Compensated Neutron with Gamma Ray.
 3. No coring program is planned.
 4. 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.

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. 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 4814 and estimated BHT 145.**

ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

- a. Road and location construction will begin after BLM has approved the APD. Anticipated spud date will be soon after BLM approval and as soon as a rig is 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 flowlines in order to place well on production.



Weatherford®

Drilling Services

Proposal



devon

APACHE 25 FED #17H

EDDY COUNTY, NM

WELL FILE: **PLAN 2**

NOVEMBER 28, 2012

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX 79711 USA

+1.432.561.8892 Main

+1.432.561.8895 Fax

www.weatherford.com



Apache 25 Fed #17H
Eddy Co., New Mexico

KB ELEV: 3366
GL ELEV: 3341

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	10165.48	0.00	0.00	10165.48	0.00	0.00	0.00	0.00	0.00	
3	10773.02	60.75	180.41	10665.40	-293.02	-2.09	10.00	180.41	56.06	
4	11669.87	90.39	269.83	10939.96	-791.85	-575.45	10.00	89.38	711.53	
5	15376.32	90.39	269.83	10915.00	-802.60	-4281.80	0.00	0.00	4356.37	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
25 Fed #17H	0.00	0.00	495000.20	697379.50	32°21'35.318N	103°49'40.715W	N/A

TARGET DETAILS

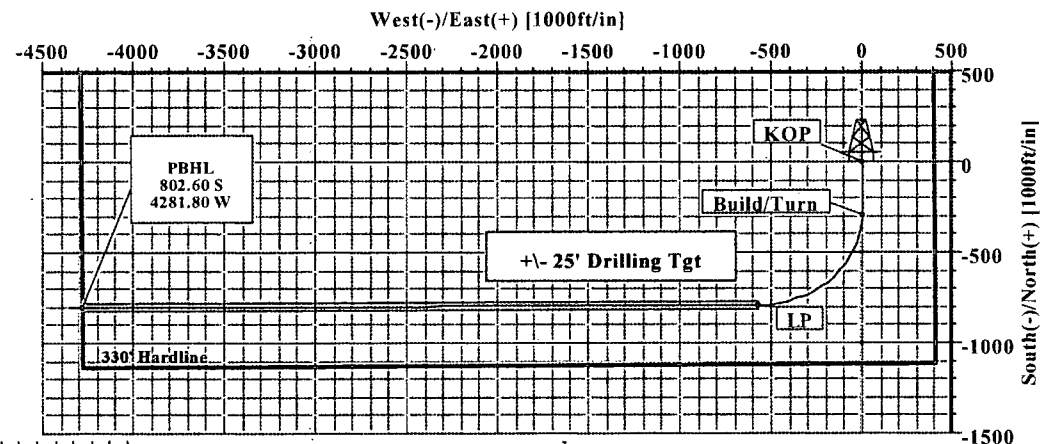
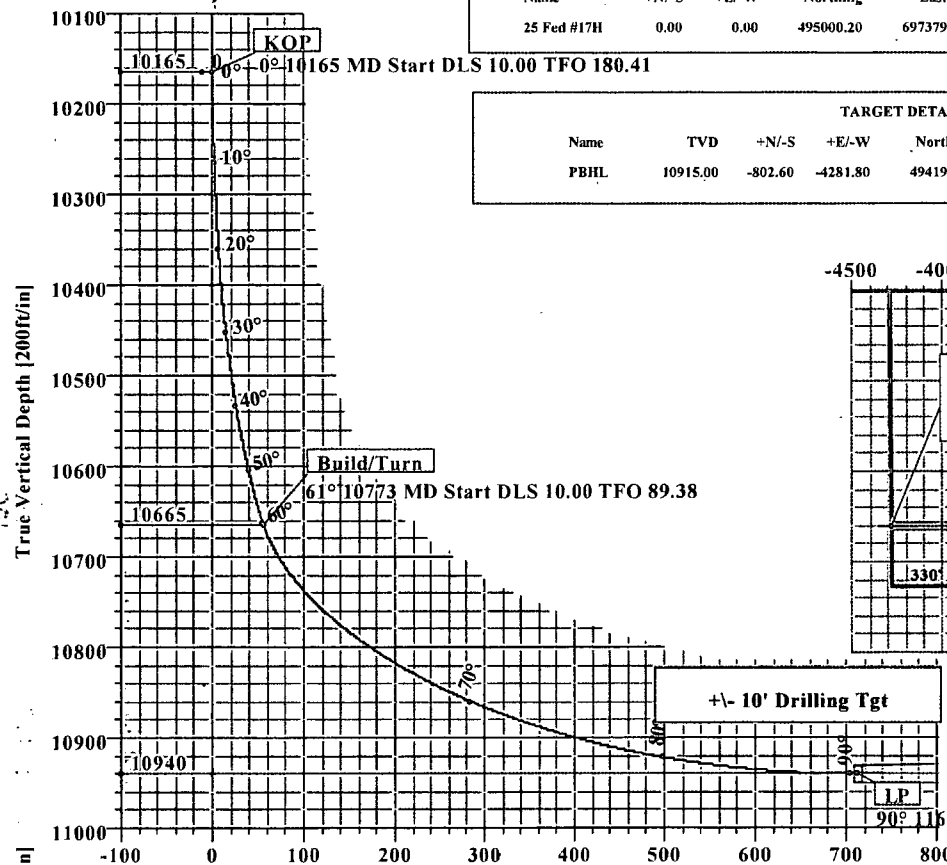
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	10915.00	-802.60	-4281.80	494197.60	693097.70	Rectangle (3706x50)

SITE DETAILS

Apache 25 Fed #17H
Site Centre Northing: 495000.20
Easting: 697379.50
Ground Level: 3341.00
Positional Uncertainty: 0.00
Convergence: 0.27

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

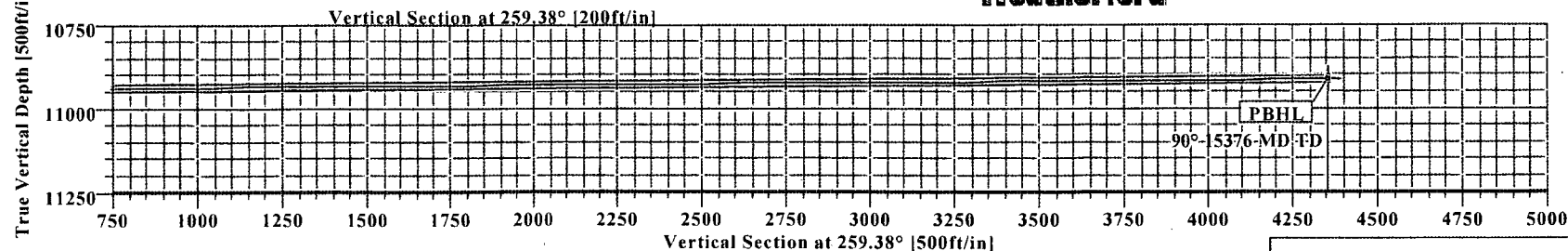
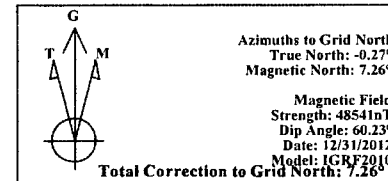


LEGEND

1
Plan #2



Weatherford



Plan: Plan #2 (25 Fed #17H/1)

Created By: Russell W. Joyner

Date: 11/28/2012



Weatherford

WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy Date: 11/28/2012 Time: 13:37:06 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: 25 Fed #17H Grid: North
Site: Apache 25 Fed #17H Vertical (TVD) Reference: SITE 3366.0
Well: 25 Fed #17H Section (VS) Reference: Well (0.00N, 0.00E, 259.38Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #2 Date Composed: 11/28/2012
Principal: Yes 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: Apache 25 Fed #17H

Site Position: Northing: 495000.20 ft Latitude: 32 21 35.318 N
From: Map Easting: 697379.50 ft Longitude: 103 49 40.715 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3341.00 ft Grid Convergence: 0.27 deg

Well: 25 Fed #17H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 495000.20 ft Latitude: 32 21 35.318 N
+E/-W 0.00 ft Easting: 697379.50 ft Longitude: 103 49 40.715 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height: 3366.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 12/31/2012 Above System Datum: Mean Sea Level
Field Strength: 48541 nT Declination: 7.53 deg
Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.23 deg
ft ft +E/-W Direction
deg
0.00 0.00 0.00 259.38

Plan Section Information

MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build	Turn	TFO	Target
ft	deg	deg	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10165.48	0.00	0.00	10165.48	0.00	0.00	0.00	0.00	0.00	0.00	
10773.02	60.75	180.41	10665.40	-293.02	-2.09	10.00	10.00	0.00	180.41	
11669.87	90.39	269.83	10939.96	-791.85	-575.45	10.00	3.30	9.97	89.38	
15376.32	90.39	269.83	10915.00	-802.60	-4281.80	0.00	0.00	0.00	0.00	PBHL

Survey

MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	ft	
10100.00	0.00	0.00	10100.00	0.00	0.00	0.00	0.00	495000.20	697379.50	
10165.48	0.00	0.00	10165.48	0.00	0.00	0.00	0.00	495000.20	697379.50	KOP
10200.00	3.45	180.41	10199.98	-1.04	-0.01	0.20	10.00	494999.16	697379.49	
10250.00	8.45	180.41	10249.69	-6.22	-0.04	1.19	10.00	494993.98	697379.46	
10300.00	13.45	180.41	10298.77	-15.72	-0.11	3.01	10.00	494984.48	697379.39	
10350.00	18.45	180.41	10346.83	-29.46	-0.21	5.64	10.00	494970.74	697379.29	
10400.00	23.45	180.41	10393.51	-47.33	-0.34	9.05	10.00	494952.87	697379.16	
10450.00	28.45	180.41	10438.45	-69.20	-0.49	13.24	10.00	494931.00	697379.01	
10500.00	33.45	180.41	10481.32	-94.91	-0.68	18.16	10.00	494905.29	697378.82	
10550.00	38.45	180.41	10521.78	-124.26	-0.89	23.77	10.00	494875.94	697378.61	
10600.00	43.45	180.41	10559.53	-157.02	-1.12	30.04	10.00	494843.18	697378.38	
10650.00	48.45	180.41	10594.28	-192.94	-1.38	36.91	10.00	494807.26	697378.12	
10700.00	53.45	180.41	10625.77	-231.76	-1.65	44.34	10.00	494768.44	697377.85	
10750.00	58.45	180.41	10653.76	-273.17	-1.95	52.26	10.00	494727.03	697377.55	
10773.02	60.75	180.41	10665.40	-293.02	-2.09	56.06	10.00	494707.18	697377.41	Build/Turn
10800.00	60.82	183.50	10678.57	-316.56	-2.90	61.19	10.00	494683.64	697376.60	



Weatherford

WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy Date: 11/28/2012 Time: 13:37:06 Page: 2
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: 25 Fed #17H, Grid North
Site: Apache 25 Fed #17H Vertical (TVD) Reference: SITE 3366.0
Well: 25 Fed #17H Section (VS) Reference: Well (0.00N,0.00E,259.38Azi)
Wellpath: 1 Survey/Calculation Method: Minimum Curvature Db: Sybase

Survey

MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	MapN	MapE	Comments
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	ft	
10850.00	61.12	189.21	10702.85	-359.98	-7.73	73.94	10.00	494640.22	697371.77	
10900.00	61.67	194.87	10726.80	-402.89	-16.89	90.85	10.00	494597.31	697362.61	
10950.00	62.45	200.46	10750.24	-444.95	-30.29	111.78	10.00	494555.25	697349.21	
11000.00	63.44	205.96	10773.00	-485.85	-47.84	136.56	10.00	494514.35	697331.66	
11050.00	64.65	211.36	10794.90	-525.27	-69.41	165.02	10.00	494474.93	697310.09	
11100.00	66.04	216.65	10815.77	-562.91	-94.82	196.93	10.00	494437.29	697284.68	
11150.00	67.62	221.81	10835.45	-598.50	-123.88	232.06	10.00	494401.70	697255.62	
11200.00	69.35	226.85	10853.80	-631.75	-156.38	270.13	10.00	494368.45	697223.12	
11250.00	71.22	231.77	10870.67	-662.41	-192.06	310.85	10.00	494337.79	697187.44	
11300.00	73.23	236.59	10885.95	-690.25	-230.66	353.92	10.00	494309.95	697148.84	
11350.00	75.34	241.30	10899.50	-715.07	-271.88	399.01	10.00	494285.13	697107.62	
11400.00	77.54	245.91	10911.23	-736.66	-315.41	445.77	10.00	494263.54	697064.09	
11450.00	79.82	250.45	10921.04	-754.87	-360.91	493.85	10.00	494245.33	697018.59	
11500.00	82.17	254.92	10928.87	-769.55	-408.05	542.88	10.00	494230.65	696971.45	
11550.00	84.55	259.35	10934.66	-780.60	-456.45	592.49	10.00	494219.60	696923.05	
11600.00	86.98	263.73	10938.35	-787.94	-505.75	642.30	10.00	494212.26	696873.75	
11650.00	89.42	268.10	10939.92	-791.49	-555.59	691.94	10.00	494208.71	696823.91	
11669.87	90.39	269.83	10939.96	-791.85	-575.45	711.53	10.00	494208.35	696804.05	LP
11700.00	90.39	269.83	10939.76	-791.94	-605.58	741.16	0.00	494208.26	696773.92	
11800.00	90.39	269.83	10939.08	-792.23	-705.58	839.50	0.00	494207.97	696673.92	
11900.00	90.39	269.83	10938.41	-792.52	-805.58	937.83	0.00	494207.68	696573.92	
12000.00	90.39	269.83	10937.74	-792.81	-905.57	1036.17	0.00	494207.39	696473.93	
12100.00	90.39	269.83	10937.06	-793.10	-1005.57	1134.51	0.00	494207.10	696373.93	
12200.00	90.39	269.83	10936.39	-793.39	-1105.57	1232.85	0.00	494206.81	696273.93	
12300.00	90.39	269.83	10935.72	-793.68	-1205.57	1331.19	0.00	494206.52	696173.93	
12400.00	90.39	269.83	10935.04	-793.97	-1305.56	1429.52	0.00	494206.23	696073.94	
12500.00	90.39	269.83	10934.37	-794.26	-1405.56	1527.86	0.00	494205.94	695973.94	
12600.00	90.39	269.83	10933.70	-794.55	-1505.56	1626.20	0.00	494205.65	695873.94	
12700.00	90.39	269.83	10933.02	-794.84	-1605.55	1724.54	0.00	494205.36	695773.95	
12800.00	90.39	269.83	10932.35	-795.13	-1705.55	1822.88	0.00	494205.07	695673.95	
12900.00	90.39	269.83	10931.68	-795.42	-1805.55	1921.21	0.00	494204.78	695573.95	
13000.00	90.39	269.83	10931.00	-795.71	-1905.55	2019.55	0.00	494204.49	695473.95	
13100.00	90.39	269.83	10930.33	-796.00	-2005.54	2117.89	0.00	494204.20	695373.96	
13200.00	90.39	269.83	10929.66	-796.29	-2105.54	2216.23	0.00	494203.91	695273.96	
13300.00	90.39	269.83	10928.98	-796.58	-2205.54	2314.57	0.00	494203.62	695173.96	
13400.00	90.39	269.83	10928.31	-796.87	-2305.54	2412.90	0.00	494203.33	695073.96	
13500.00	90.39	269.83	10927.64	-797.16	-2405.53	2511.24	0.00	494203.04	694973.97	
13600.00	90.39	269.83	10926.96	-797.45	-2505.53	2609.58	0.00	494202.75	694873.97	
13700.00	90.39	269.83	10926.29	-797.74	-2605.53	2707.92	0.00	494202.46	694773.97	
13800.00	90.39	269.83	10925.62	-798.03	-2705.53	2806.25	0.00	494202.17	694673.97	
13900.00	90.39	269.83	10924.94	-798.32	-2805.52	2904.59	0.00	494201.88	694573.98	
14000.00	90.39	269.83	10924.27	-798.61	-2905.52	3002.93	0.00	494201.59	694473.98	
14100.00	90.39	269.83	10923.60	-798.90	-3005.52	3101.27	0.00	494201.30	694373.98	
14200.00	90.39	269.83	10922.92	-799.19	-3105.51	3199.61	0.00	494201.01	694273.99	
14300.00	90.39	269.83	10922.25	-799.48	-3205.51	3297.94	0.00	494200.72	694173.99	
14400.00	90.39	269.83	10921.58	-799.77	-3305.51	3396.28	0.00	494200.43	694073.99	
14500.00	90.39	269.83	10920.90	-800.06	-3405.51	3494.62	0.00	494200.14	693973.99	
14600.00	90.39	269.83	10920.23	-800.35	-3505.50	3592.96	0.00	494199.85	693874.00	
14700.00	90.39	269.83	10919.56	-800.64	-3605.50	3691.30	0.00	494199.56	693774.00	
14800.00	90.39	269.83	10918.88	-800.93	-3705.50	3789.63	0.00	494199.27	693674.00	
14900.00	90.39	269.83	10918.21	-801.22	-3805.50	3887.97	0.00	494198.98	693574.00	
15000.00	90.39	269.83	10917.54	-801.51	-3905.49	3986.31	0.00	494198.69	693474.01	
15100.00	90.39	269.83	10916.86	-801.80	-4005.49	4084.65	0.00	494198.40	693374.01	



Weatherford

WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy Date: 11/28/2012 Time: 13:37:06 Page: 3
Field: Eddy Co. NM (NAD:83) Co-ordinate(NE) Reference: Well: 25 Fed #17H, Gnd North
Site: Apache 25 Fed #17H Vertical (TVD) Reference: SITE 3366.0
Well: 25 Fed #17H Section (VS) Reference: Well (0.00N,0.00E,259.38Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	ft	
15200.00	90.39	269.83	10916.19	-802.09	-4105.49	4182.99	0.00	494198.11	693274.01	
15300.00	90.39	269.83	10915.52	-802.38	-4205.48	4281.32	0.00	494197.82	693174.02	
15376.32	90.39	269.83	10915.00	-802.60	-4281.80	4356.37	0.00	494197.60	693097.70	PBHL

Targets

Name	Description	TVD	+N/-S	+E/-W	Map Northing	Map Easting	Latitude	Longitude
	Dip Dir.	ft	ft	ft	ft	ft	Deg Min Sec	Deg Min Sec
PBHL		10915.00	-802.60	-4281.80	494197.60	693097.70	32 21 27.574 N	103 50 30.678 W
-Rectangle (3706x50)								

Casing Points

MD	TVD	Diameter	Hole Size	Name
ft	ft			

Annotation

MD	TVD	
ft	ft	
10165.48	10165.48	KOP
10773.02	10665.40	Build/Turn
11669.87	10939.96	LP
15376.31	10915.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction
ft	ft				

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

GeoDec v5.03

Report Date: November 28, 2012
Job Number: _____
Customer: Devon Energy
Well Name: Apache 25 Fed #17H
API Number: _____
Rig Name: _____
Location: Eddy Co., NM (NAD 83)
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 495000.200 USFT	Latitude 32.3598134 DEG
East/West 697379.500 USFT	Longitude -103.8279720 DEG
Grid Convergence: .27°	
Total Correction: +7.26°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.35981° N	32° 21 min 35.328 sec
Longitude =	103.82797° W	103° 49 min 40.699 sec

Magnetic Declination =	7.53°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6571
Local Field Strength =	48537 nT	Magnetic Vector X = 23891 nT
Magnetic Dip =	60.23°	Magnetic Vector Y = 3156 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42132 nT
Spud Date =	Dec 31, 2012	Magnetic Vector H = 24099 nT

Signed: _____

Date: _____

NOV 29 2012

GeoDec

Weatherford
WFT Plan Report - X & Y's

Company: Devon Energy
Time: 13:37:40 Page: 1
Field: Eddy Co., NM (NAD 83)
Reference: well: 25 Fed #17H, Grid North
Site: Apache 25 Fed #17H
Reference: SITE 3366.0
Well: 25 Fed #17H
Reference: well (0.00N,0.00E,259.38Azi)
Wellpath: 1
Method: Minimum Curvature Db: Sybase

Date: 11/28/2012
Co-ordinate(NE)
Vertical (TVD)
Section (VS)
Survey Calculation

Plan: Plan #2
11/28/2012

Date Composed:

1
Principal: Yes
From Surface

Version:

Tied-to:

Field: Eddy Co., NM (NAD 83)

Map System:US State Plane Coordinate System 1983
New Mexico, Eastern Zone
Geo Datum: GRS 1980
Well Centre
Sys Datum: Mean Sea Level
IGRF2010

Map Zone:
Coordinate System:
Geomagnetic Model:

Site: Apache 25 Fed #17H

Site Position:
32 21 35.318 N
From: Map
103 49 40.715 W
Position Uncertainty: 0.00 ft
Grid
Ground Level: 3341.00 ft
0.27 deg

Northing: 495000.20 ft Latitude:
Easting: 697379.50 ft Longitude:
North Reference:
Grid Convergence:

well: 25 Fed #17H

Slot Name:

Well Position: +N/-S 0.00 ft
32 21 35.318 N
+E/-W 0.00 ft
103 49 40.715 W
Position Uncertainty: 0.00 ft

Northing: 495000.20 ft Latitude:
Easting : 697379.50 ft Longitude:

wellpath: 1
Surface

Drilled From:

Tie-on Depth:

0.00 ft
Current Datum: SITE
Datum: Mean Sea Level
Magnetic Data: 12/31/2012

Height 3366.00 ft

Above System

Declination:

DVN APACHE 25 FED _17H P2 SVY

7.53 deg

Field Strength: 48541 nT

Mag Dip Angle:

60.23 deg

Vertical Section: Depth From (TVD)

+N/-S

+E/-W

Direction

ft

ft

ft

deg

0.00

0.00

0.00

259.38

Plan Section Information

MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build
Turn	TFO	Target					
ft	deg	deg	ft	ft	ft		
deg/100ft	deg/100ft	deg/100ft	deg				

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
10165.48	0.00	0.00	10165.48	0.00	0.00	0.00	0.00
0.00	0.00						
10773.02	60.75	180.41	10665.40	-293.02	-2.09	10.00	10.00
0.00	180.41						
11669.87	90.39	269.83	10939.96	-791.85	-575.45	10.00	3.30
9.97	89.38						
15376.32	90.39	269.83	10915.00	-802.60	-4281.80	0.00	0.00
0.00	0.00	PBHL					

Survey

MD	Incl	Azim	TVD	N/S	E/W	VS	DLS
MapN	deg	MapE	ft	ft	ft	ft	deg/100ft
ft	deg	ft					
10100.00	0.00	0.00	10100.00	0.00	0.00	0.00	0.00
495000.20		697379.50					
10165.48	0.00	0.00	10165.48	0.00	0.00	0.00	0.00
495000.20		697379.50	KOP				
10200.00	3.45	180.41	10199.98	-1.04	-0.01	0.20	10.00
494999.16		697379.49					
10250.00	8.45	180.41	10249.69	-6.22	-0.04	1.19	10.00
494993.98		697379.46					
10300.00	13.45	180.41	10298.77	-15.72	-0.11	3.01	10.00
494984.48		697379.39					
10350.00	18.45	180.41	10346.83	-29.46	-0.21	5.64	10.00
494970.74		697379.29					
10400.00	23.45	180.41	10393.51	-47.33	-0.34	9.05	10.00
494952.87		697379.16					
10450.00	28.45	180.41	10438.45	-69.20	-0.49	13.24	10.00
494931.00		697379.01					
10500.00	33.45	180.41	10481.32	-94.91	-0.68	18.16	10.00
494905.29		697378.82					
10550.00	38.45	180.41	10521.78	-124.26	-0.89	23.77	10.00
494875.94		697378.61					
10600.00	43.45	180.41	10559.53	-157.02	-1.12	30.04	10.00
494843.18		697378.38					
10650.00	48.45	180.41	10594.28	-192.94	-1.38	36.91	10.00
494807.26		697378.12					
10700.00	53.45	180.41	10625.77	-231.76	-1.65	44.34	10.00
494768.44		697377.85					
10750.00	58.45	180.41	10653.76	-273.17	-1.95	52.26	10.00
494727.03		697377.55					

	DVN	APACHE 25	FED _17H P2	SVY		
10773.02	60.75 180.41	10665.40	-293.02	-2.09	56.06	10.00
494707.18	697377.41	Build/Turn				
10800.00	60.82 183.50	10678.57	-316.56	-2.90	61.19	10.00
494683.64	697376.60					
10850.00	61.12 189.21	10702.85	-359.98	-7.73	73.94	10.00
494640.22	697371.77					
10900.00	61.67 194.87	10726.80	-402.89	-16.89	90.85	10.00
494597.31	697362.61					
10950.00	62.45 200.46	10750.24	-444.95	-30.29	111.78	10.00
494555.25	697349.21					
11000.00	63.44 205.96	10773.00	-485.85	-47.84	136.56	10.00
494514.35	697331.66					
11050.00	64.65 211.36	10794.90	-525.27	-69.41	165.02	10.00
494474.93	697310.09					
11100.00	66.04 216.65	10815.77	-562.91	-94.82	196.93	10.00
494437.29	697284.68					
11150.00	67.62 221.81	10835.45	-598.50	-123.88	232.06	10.00
494401.70	697255.62					
11200.00	69.35 226.85	10853.80	-631.75	-156.38	270.13	10.00
494368.45	697223.12					
11250.00	71.22 231.77	10870.67	-662.41	-192.06	310.85	10.00
494337.79	697187.44					
11300.00	73.23 236.59	10885.95	-690.25	-230.66	353.92	10.00
494309.95	697148.84					
11350.00	75.34 241.30	10899.50	-715.07	-271.88	399.01	10.00
494285.13	697107.62					
11400.00	77.54 245.91	10911.23	-736.66	-315.41	445.77	10.00
494263.54	697064.09					
11450.00	79.82 250.45	10921.04	-754.87	-360.91	493.85	10.00
494245.33	697018.59					
11500.00	82.17 254.92	10928.87	-769.55	-408.05	542.88	10.00
494230.65	696971.45					
11550.00	84.55 259.35	10934.66	-780.60	-456.45	592.49	10.00
494219.60	696923.05					
11600.00	86.98 263.73	10938.35	-787.94	-505.75	642.30	10.00
494212.26	696873.75					
11650.00	89.42 268.10	10939.92	-791.49	-555.59	691.94	10.00
494208.71	696823.91					
11669.87	90.39 269.83	10939.96	-791.85	-575.45	711.53	10.00
494208.35	696804.05	LP				
11700.00	90.39 269.83	10939.76	-791.94	-605.58	741.16	0.00
494208.26	696773.92					
11800.00	90.39 269.83	10939.08	-792.23	-705.58	839.50	0.00
494207.97	696673.92					
11900.00	90.39 269.83	10938.41	-792.52	-805.58	937.83	0.00
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DVN APACHE 25 FED _17H P2 SVY

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DVN APACHE 25 FED _17H P2 SVY
 15376.32 90.39 269.83 10915.00 -802.60 -4281.80 4356.37 0.00
 494197.60 693097.70 PBHL

Targets

Map	Name	Latitude	Longitude	Map					
Easting	Deg	Min	Sec	Deg	Min	Sec	+N/-S	+E/-W	North
ft	Dip.	Dir.	ft	ft	ft	ft	ft	ft	
PBHL	32	21	27.574 N	103	50	30.678 W	-802.60	-4281.80	494197.60
693097.70	-Rectangle (3706x50)								

Casing Points

MD	TVD	Diameter	Hole Size	Name
----	-----	----------	-----------	------

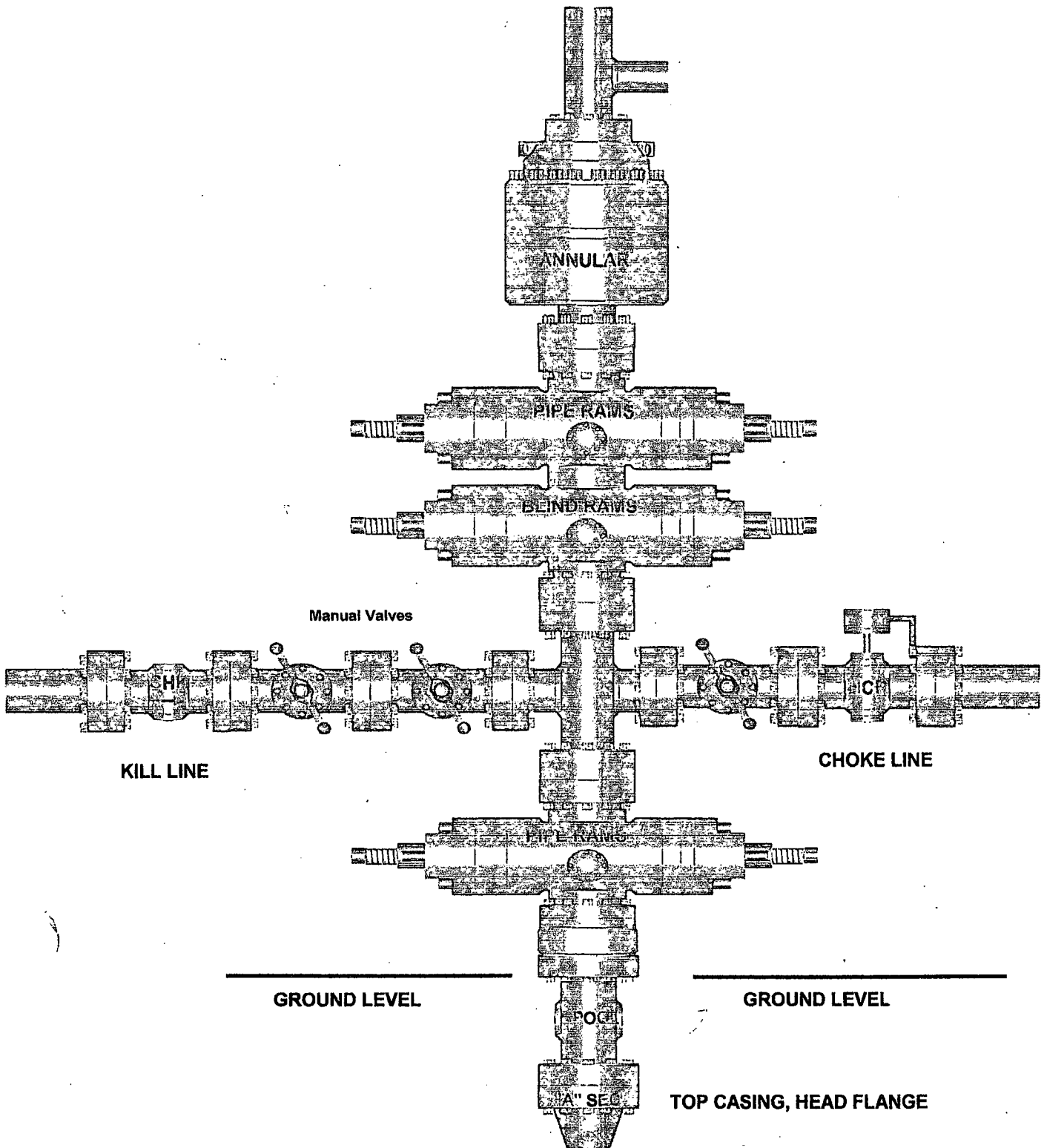
Annotation

MD	TVD	
ft	ft	
10165.48	10165.48	KOP
10773.02	10665.40	Build/Turn
11669.87	10939.96	LP
15376.31	10915.00	PBHL

Formations

MD	TVD	Formations	Lithology
	Dip Angle	Dip Direction	

13-5/8" x 3,000 psi BOP Stack



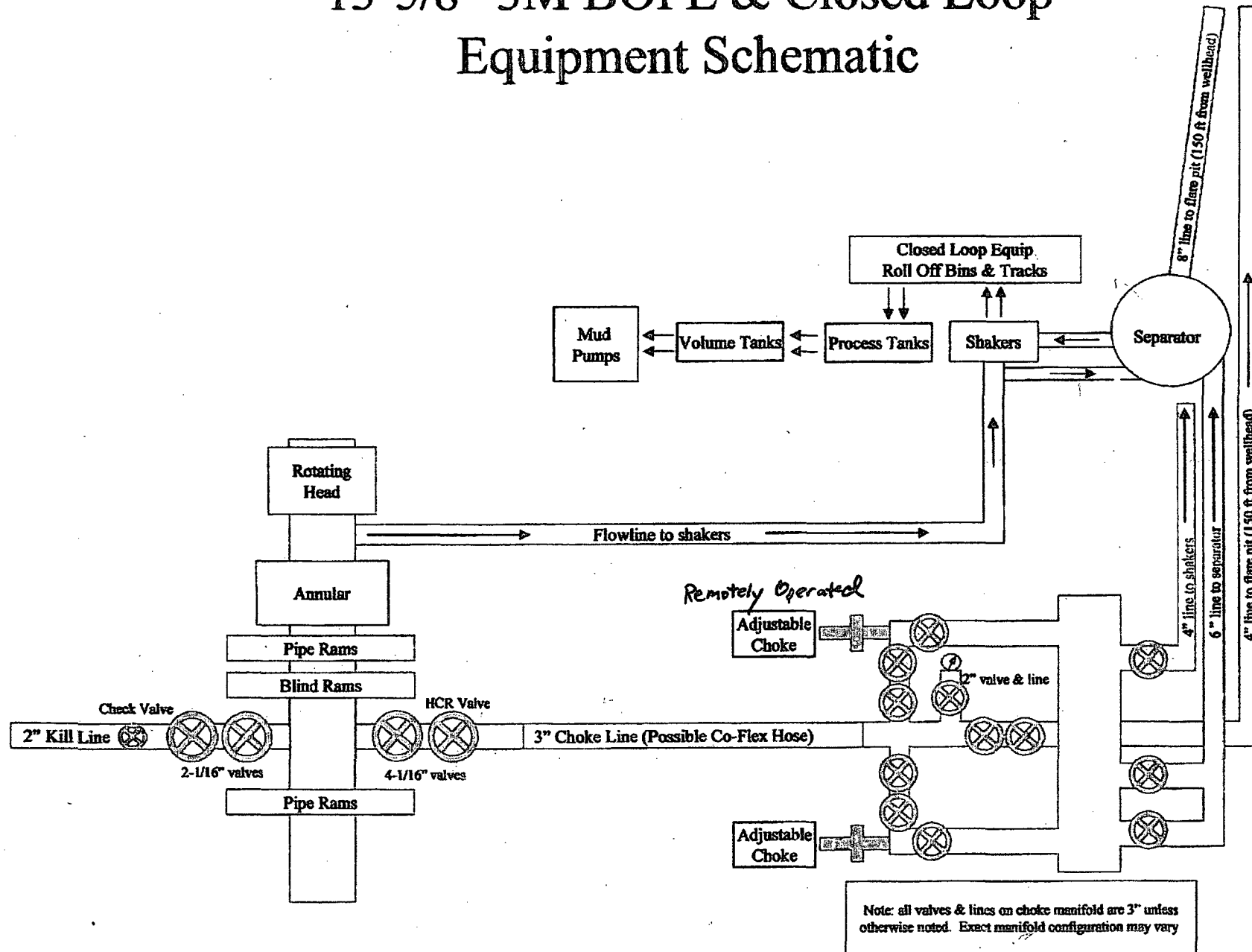
Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP

Apache 25 Fed 17H

Surface Location: 1450' FSL & 730' FEL, Unit I, Sec 25 T22S R30E, Eddy, NM
Bottom Hole Location: 660' FNL & 330' FWL, Unit M, Sec 25 T22S R30E, 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 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 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



Hydrostatic Test Certificate



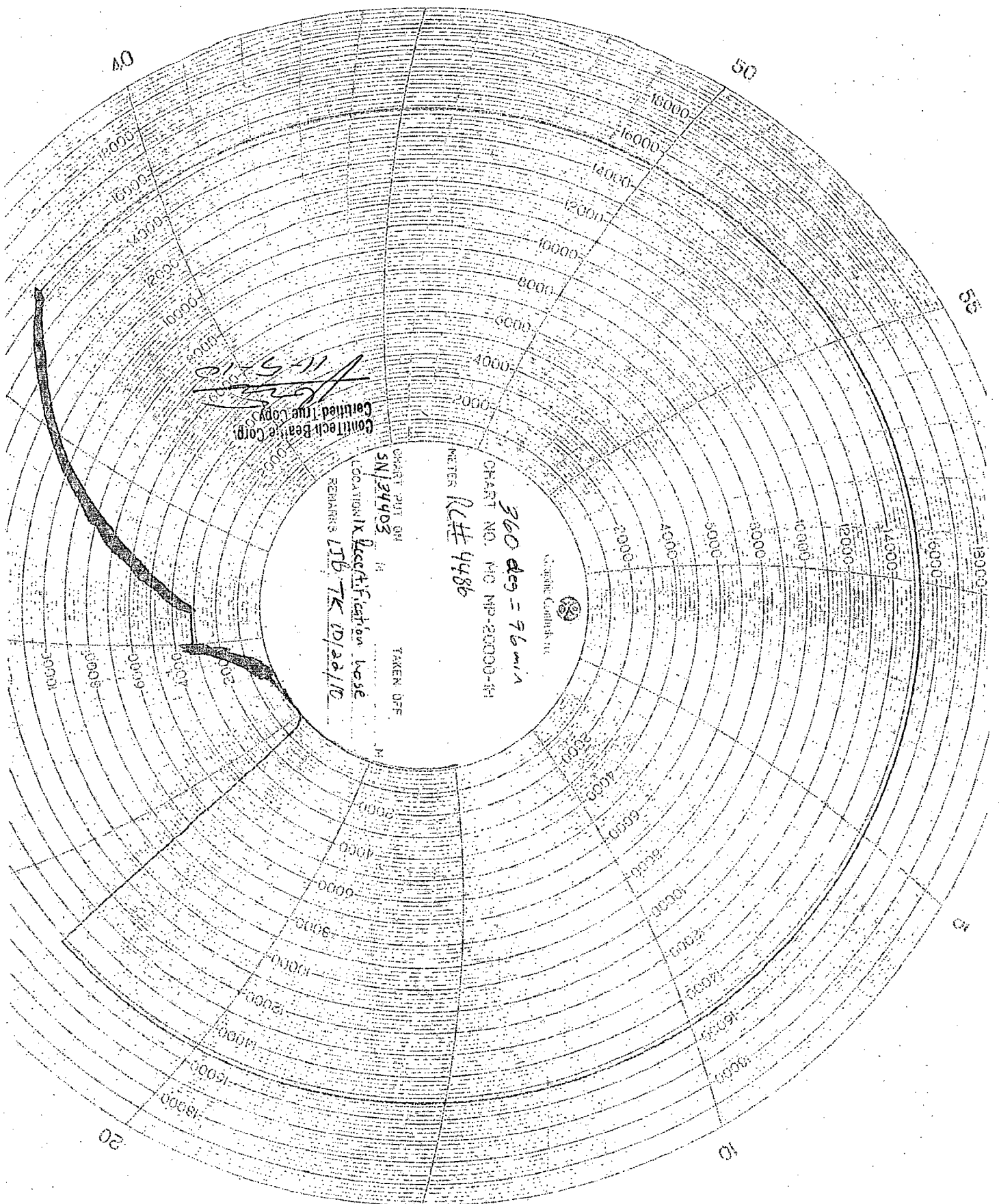
Certificate Number: 4520	PBC No: 10321	Customer Name & Address	
Customer Purchase Order No: RIG 300	Project:	HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119	
Test Centre Address	Accepted by ContiTech Beattie Inspection	Accepted by Client Inspection	
ContiTech Beattie Corp. 11535 Brittmoore Park Drive Houston, TX 77041 USA	Signed: Josh Sims Date: 10/27/10		

We certify that the goods detailed hereon have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant Industrial standards within the requirements of the purchase order as issued to ContiTech Beattie Corporation.

These goods were made in the United States of America.

Item	Part No.	Description	Qty	Serial Number	As-Built Length (m)	Work Press.	Test Press.	Test Time (minutes)
------	----------	-------------	-----	---------------	---------------------	-------------	-------------	---------------------

1	3" ID 10K Choke & Kill Hose x 35ft OAL End A: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange End B: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange Working Pressure: 10,000psi Test Pressure: 15,000psi Serial#: 49106	1	49106	10 kpsi	15 kpsi	60
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Devon Energy Corporation
333 West Sheridan
Oklahoma City, Oklahoma 73102-5010

Hydrogen Sulfide (H_2S) Contingency Plan

For

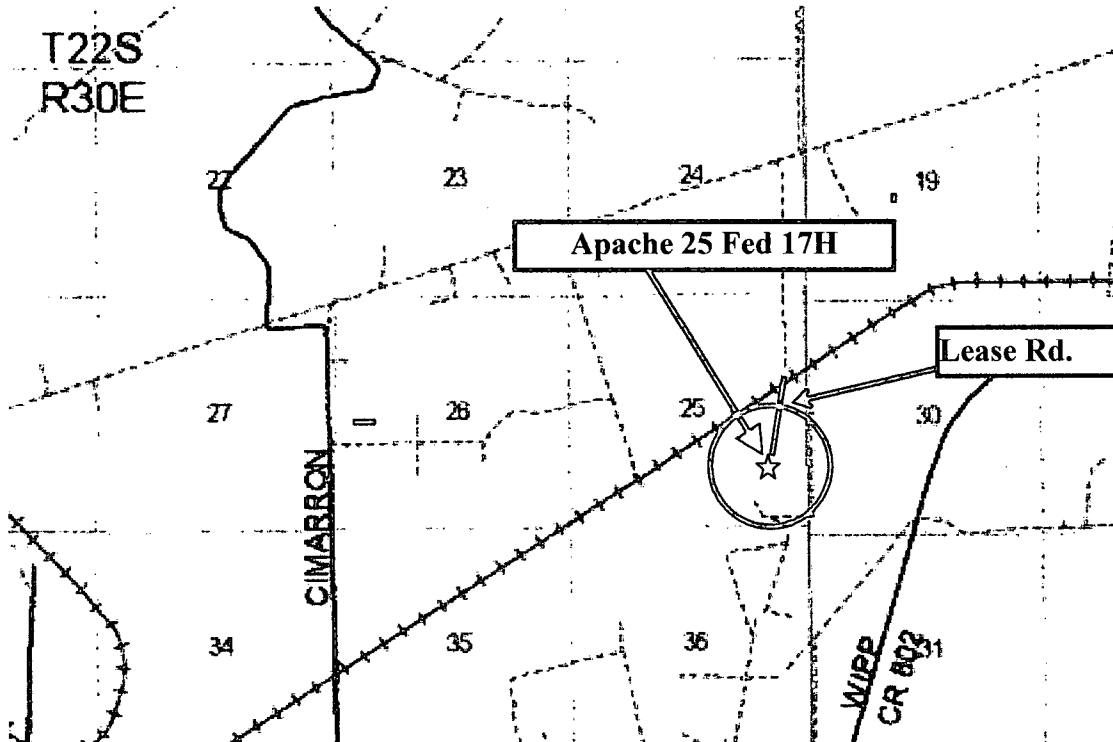
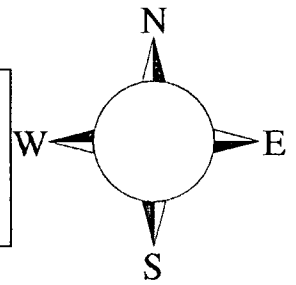
Apache 25 Fed 17H

Sec-25, T-22S R-30E
1450' FSL & 730' FEL,
LAT. = 32.213533°N (NAD83)
LONG = 103.494070°W

Eddy County NM

Apache 25 fed 17H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000' (100 ppm H₂S concentration shall trigger activation of this plan.)

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance North on lease road. Crews should then block the road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE. The WIPP site is North approximately 1.9 miles. Efforts should be made to communicate the hazards to their personnel, in the case of an emergency release.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H₂S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

12-16-22

DEVON
ENERGY

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H₂S.

1. Well Control Equipment

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

2. Protective equipment for essential personnel:

- A. 30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. H₂S detection and monitoring equipment:

- A. Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 PPM are reached. These units are usually capable of detecting SO₂, which is a byproduct of burning H₂S.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate..

5. Mud program:

- A. The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

01/13/11
11:11 AM

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephones and 2-way radio
- B. Land line (telephone) communications at Office

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

09/10/2012 11:19:22

09/10/2012 11:19:22

Devon Energy Corp. Company Call List

<u>Artesia (575)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell	748-7448	748-0178	746-2991
Asst. Foreman –Tommy Polly.....	748-5290	748-0165	748-2846
Don Mayberry	748-5235	748-0164	746-4945
Montral Walker	390-5182	748-0193	936-414-6246
Engineer – Marcos Ortiz.....	(405) 317-0666.....	(405) 552-8152.....	(405) 381-4350

Agency Call List

<u>Lea</u>	<u>Hobbs</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	NMOCD
	US Bureau of Land Management

<u>Eddy</u>	<u>Carlsbad</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	US Bureau of Land Management
	New Mexico Emergency Response Commission (Santa Fe) ...
	24 HR
	National Emergency Response Center (Washington, DC) ..

Emergency Services

	Boots & Coots IWC
	Cudd Pressure Control.....
	Halliburton
	B. J. Services.....
<i>Give</i>	Flight For Life - Lubbock, TX
<i>GPS</i>	Aerocare - Lubbock, TX
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM
	Lifeguard Air Med Svc. Albuquerque, NM

Prepared in conjunction with
Wade Rohloff



East Southeast



Devon Energy - Well Pad Rig Location Layout Safety Equipment Location

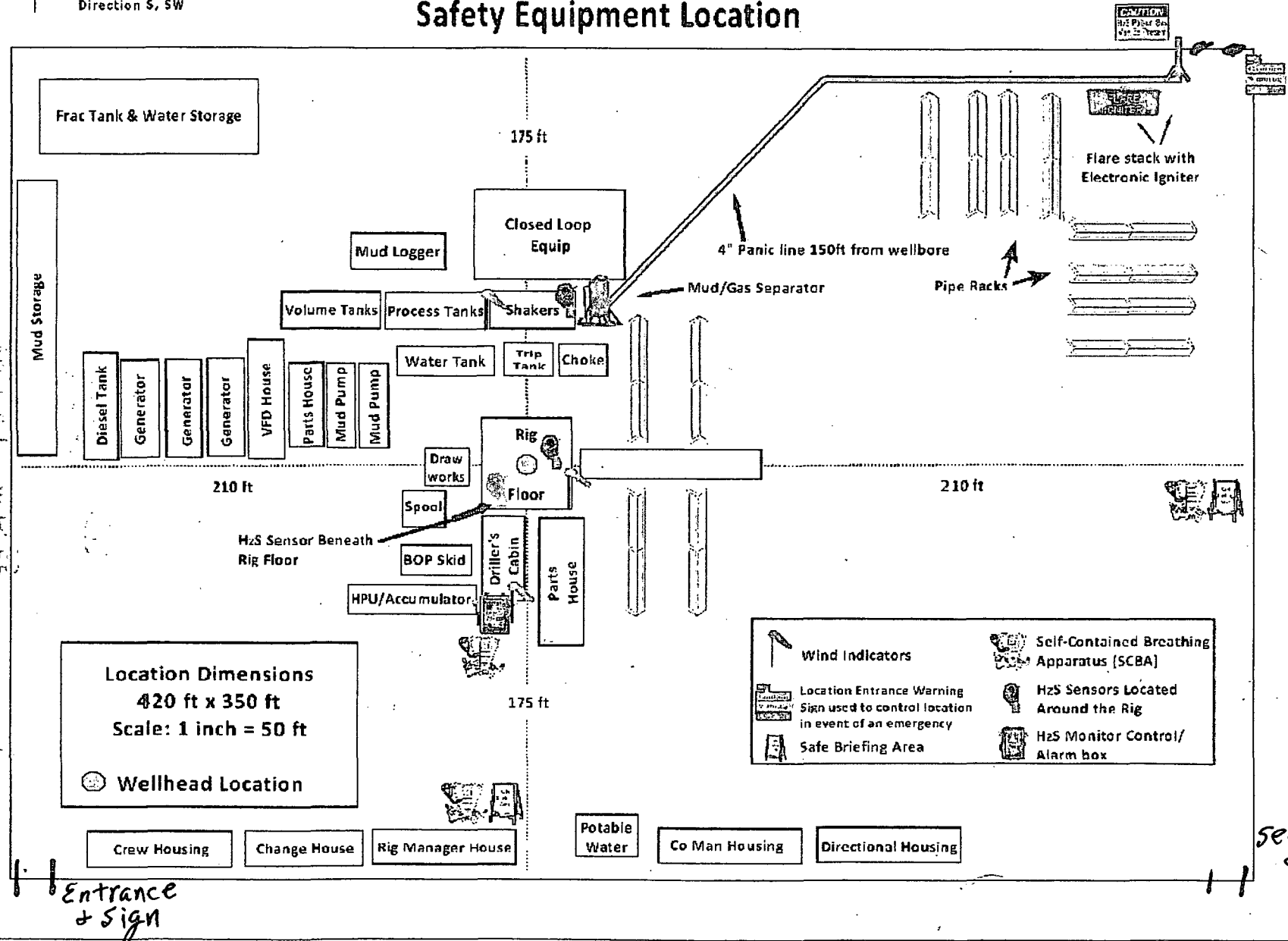
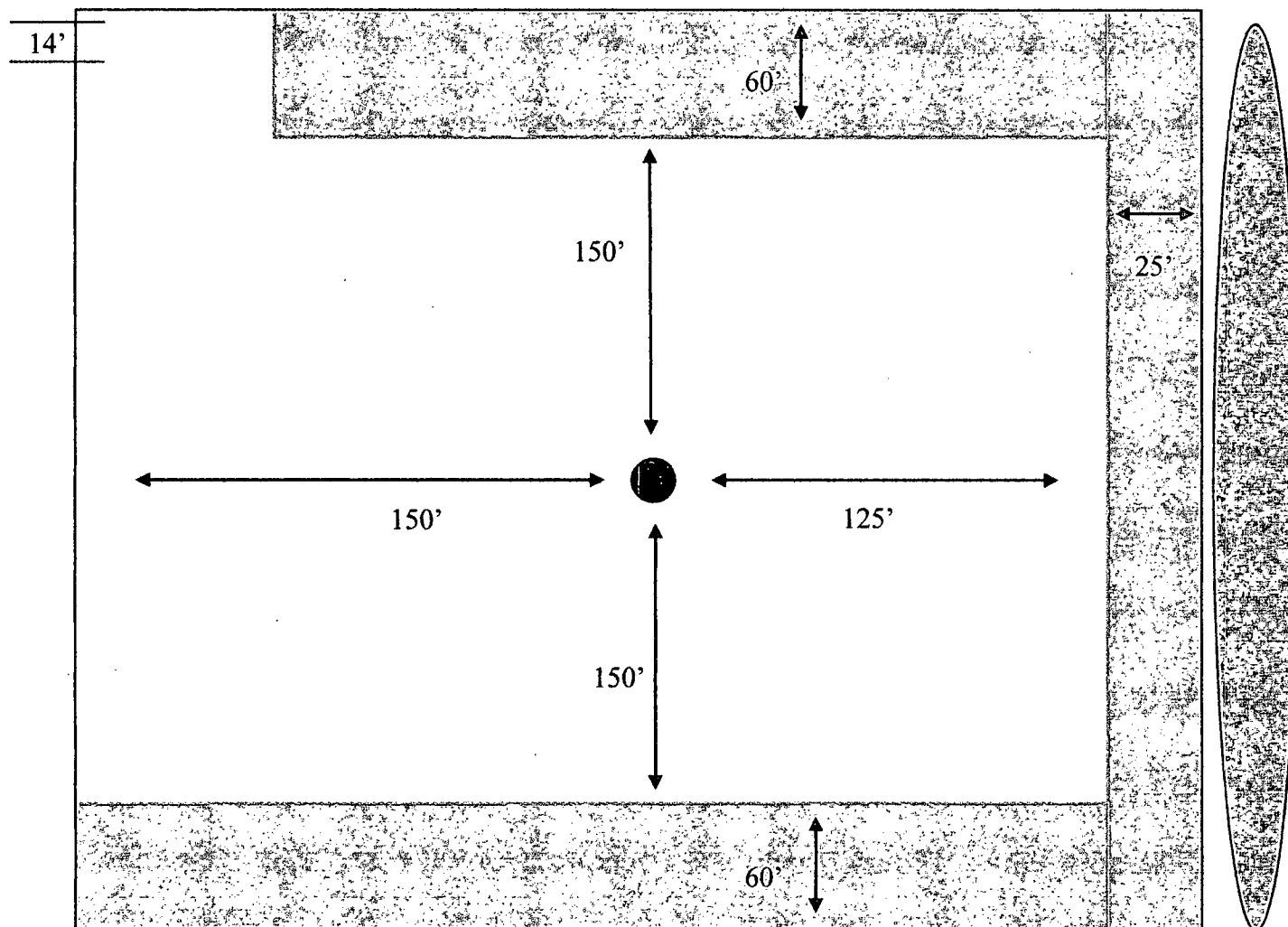


EXHIBIT C

**Interim Reclamation & Production Facilities
APACHE 25 FED #17
V-DOOR SOUTH SOUTHWEST**



LEGEND



Well Bore



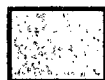
Topsoil



Interim Reclamation



Production Facilities



**NORTH
NORTHEAST**



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY
LEASE NO.:	NM89052
WELL NAME & NO.:	17H-APACHE 25 FED
SURFACE HOLE FOOTAGE:	1450'/S. & 730'/E.
BOTTOM HOLE FOOTAGE	660'/S. & 330'/W
LOCATION:	Section 25, T. 22 S., R. 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
 - Cave/Karst
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Logging Requirements
 - High Cave/Karst
 - R-111-P Potash
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines – not requested
 - Electric Lines – not requested
- ☐ **Interim Reclamation**
- ☒ **Final Abandonment & Reclamation**