

RECEIVED

JAN 08 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NMOC D ARTESIA

OCD Artesia

EA-12-1149

ATS-12-868

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 20105. Lease Serial No.
NMLC029358; NM 0107697

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

Mimosa 24 Fed Com 2H

9. API Well No.

10. Field and Pool, or Exploratory

Lusk; Bone Spring W.

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

SEC 24 T19S R31E

12. County or Parish

Eddy

13. State

NM

1a. Type of work: ☒ DRILL☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Devon Energy Production, Company L. P.

3a. Address 333 W. Sheridan
Oklahoma City, OK 731023b. Phone No. (include area code)
405-235-3611

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

At surface D 1045 FNL & 190 FWL

At proposed prod. zone H 1045 FNL & 340 FEL

PP: 1045 FNL & 190 FWL

14. Distance in miles and direction from nearest town or post office*

14 Miles south of Maljamar, NM

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

190'

16. No. of acres in lease
NMLC029358 240 AC
NM-0107697 2321.52 AC17. Spacing Unit dedicated to this well
160 Acres18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

See attached map

19. Proposed Depth
13,852' MD 9255' TVD20. BLM/BIA Bond No. on file
CO-110421. Elevations (Show whether DF, KDB, RT, GL, etc.)
3538' GL

22. Approximate date work will start*

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.

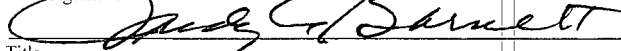
2. A Drilling Plan.

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)

Judy A. Barnett

Date

06/20/2012

Title

Regulatory Specialist

Approved by (Signature)

/s/ James A. Amos

Name (Printed/Typed)

Date

JAN 4 2013

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

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

Conditions of approval, if any, are attached.

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

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

**Approval Subject to General Requirements
& Special Stipulations Attached****SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

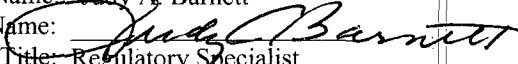
Certification

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 21st day of June, 2012.

Printed Name: Judy A. Barnett

Signed Name: 

Position Title: Regulatory Specialist

Address: 20 North Broadway, OKC OK 73102

Telephone: (405)-228-8699

Field Representative (if not above signatory):

Address (if different from above):

Telephone (if different from above):

DRILLING PROGRAM

Devon Energy Production Company, LP

Mimosa 24 Fed Com 2H

Surface Location: 1045' FNL & 190' FWL, Unit D, Sec 24 T19S R31E, Eddy, NM

Bottom Hole Location: 1980' FNL & 340' FEL, Unit H, Sec 24 T19S R31E, Eddy, NM

1. Geologic Name of Surface Formation

2. Alluvium

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

a. Fresh Water	140'	FW
b. Rustler	650'	
c. Salado	900'	
d. Tansil Dolomite	2275'	
e. Yates	2385'	
f. Seven Rivers	2600'	
g. Capitan	2715'	
h. B/Capitan	3915'	
i. Delaware	4565'	Oil
j. Bone Spring	7020'	Oil
k. 1 st Bone Spring Ss	8320'	Oil
l. 2 nd Bone Spring Lime	8630'	Oil
m. 2 nd Bone Spring Ss	9035'	Oil
n. 3 rd Bone Spring Lime	9475'	Oil
Total Depth	13,852'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 20" casing at 700' and circulating cement back to surface. The fresh water sands will be protected by setting 13-3/8" casing at 2,550' and 9-5/8" casing at 4,275' and circulating cement to surface. The Bone Spring intervals will be isolated by setting 5-1/2" casing to total depth and circulating cement above the base of the 9-5/8" casing. All casing is new and API approved.

Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
26"	0 - 700'	20"	0-700'	94#	STC	J/K-55
17 1/2"	0 -2550'	13 3/8"	0-2550'	68#	BTC	J/K-55
12 1/4"	2550-4275'	9 5/8"	0-4275'	40#	LTC	J-55
8 3/4"	4275'- 8685'	5 1/2"	0-8685'	17#	LTC	HCP-110
8 3/4"	8685 - 13852'	5 1/2"	8685 - 13852'	17#	BTC	HCP-110

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
20 "	1.59	3.45	11.91
13 3/8"	1.47	2.60	6.57
9 5/8"	1.16	1.78	2.97
5 1/2"	2.16	2.67	1.89
5 1/2"	1.98	2.46	6.22

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 **10.0 ppg** for this calculation. This results in a collapse design factor of **1.16** for **9.625" 40# J-55 LT&C** casing at a depth of **4,275'**. While running the intermediate casing, the casing will never be completely evacuated. There is no potential for the intermediate casing to be used as a production string.

Cement Program: (all cement volumes based on at least 25% excess)

4.

Surface	Lead: 1030 sx Cl C + 1% bwoc Calcium Chloride + 0.125#/sx CF + 4% bwoc Bentonite + 81.1% FW, 13.5 ppg, 1.73 cf/sx Tail: 300 sx Cl C 2% bwoc Calcium Chloride + 0.125 #/sx CF + 56.3% FW, 14.8 ppg, 1.35 cf/sx
13 3/8" Intermediate	Lead: 1780 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125E/sx CF + 3#/sx LCM-1 + 1% bwoc Sodium Metasilicate + 89.7% FW, 12.6 ppg, 1.73 cf/sx Tail: 450 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125E/sx CF + 0.5% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% FW, 13.8 ppg, 1.38 cf/sx
9 5/8" Intermediate	<u>1st Stage</u> Lead: 510 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125#/sx CF + 3E/sx LCM-1 + 1% bwoc Sodium Metasilicate + 89.7% FW, 12.6 ppg, 1.73 cf/sx Tail: 300 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125E/sx CF + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% FW, 13.8 ppg, 1.38 cf/sx <u>2ND Stage DV Tool & ECP @ 2600'</u> Lead: 500 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125#/sx CF + 3 #/sx LCM-1 + 1% bwoc Sodium Metasilicate + 89.7% FW, 12.6 ppg, 1.73 cf/sx Tail: 150 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125#/sx CF + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% FW, 13.8 ppg, 1.38 cf/sx.
5 1/2" Production	<u>1st Stage</u> Lead: 935 sx(35:65) Poz (Fly Ash):Cl H + 3% bwow Sodium Chloride + 0.125#/sx CF+ 0.7% bwoc FL-52 + 6% bwoc Bentonite + 105.4% FW, 12.5 ppg, 2.00 cf Tail: 1335 sx (50:50) Poz (Fly Ash):Cl H+ 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.45% bwoc Sodium Metasilicate + 57.2% FW, 14.2 ppg, 1.28 cf/sk: <u>2nd Stage DV Tool @ 5000'</u> Lead: 275 sx Cl C + 1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157% FW, 11.4 ppg, 2.88 cf/sx Tail: 150 sx (60:40) Poz (Fly Ash):Cl C + 5% bwow Sodium Chloride + 0.125 #/sx CF + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% FW, 13.8 ppg, 1.38 cf/sx

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

TOC for all Strings:

Surface:	0 ft.
Intermediate 1:	0 ft.
Intermediate 2:	0 ft.
Production:	2,500' (~200' above reef top)

Pressure Control Equipment:

The BOP system used to drill the **17-1/2"** hole will consist of a **20" 2M Annular preventer**. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **2M system** prior to drilling out the casing shoe.

The BOP system used to drill the **12-1/4"** and **8-3/4"** holes 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 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.

5. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 – 700'	8.4-9.6	32-34	NC	FW
700' – 2550'	9.8-10.0	28-32	NC	Brine
2550' – 4275'	8.4-8.5	28-30	NC	FW
4275' – 13852'	8.3-8.7	28-30	NC	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times.

6. 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.

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 Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. 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 3175 psi and Estimated BHT 142°. No H2S is anticipated to be encountered.

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

Devon Energy, Inc.

Eddy County (NAD83)

Mimosa 24 Federal

#2H

OH

Plan: Plan #2

PathfinderX & Y Report

05 November, 2012

PATHFINDER[®]

A Schlumberger Company

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM:5000H Single User Db

Project:		Eddy County (NAD83)	
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:		Mimosa 24 Federal			
Site Position:		Northing:		601,165.150 usft	
From: Map		Easting:		696,100.350 usft	
Position Uncertainty: 0.0 usft		Slot Radius:		13-3/16 "	
		Latitude:		32.651643	
		Longitude:		-103.830493	
		Grid Convergence:		0.27 °	

Well:		#2H				
Well Position	+N/-S	0.0 usft	Northing:	600,701.710 usft	Latitude:	32.650370
	+E/-W	0.0 usft	Easting:	696,018.530 usft	Longitude:	-103.830766
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,538.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/13/2012	7.61	60.54	48,784

Design:	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	97.47

Survey Tool Program		Date: 11/5/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,032.3	Plan #2 (OH)	Pathfinder	Pathfinder MWD

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
0.0	0.00	0.00	0.0	-3,564.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
100.0	0.00	0.00	100.0	-3,464.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
200.0	0.00	0.00	200.0	-3,364.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
300.0	0.00	0.00	300.0	-3,264.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
400.0	0.00	0.00	400.0	-3,164.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
500.0	0.00	0.00	500.0	-3,064.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
600.0	0.00	0.00	600.0	-2,964.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
650.0	0.00	0.00	650.0	-2,914.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Rustler											
700.0	0.00	0.00	700.0	-2,864.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
800.0	0.00	0.00	800.0	-2,764.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
900.0	0.00	0.00	900.0	-2,664.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Salado											
1,000.0	0.00	0.00	1,000.0	-2,564.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,100.0	0.00	0.00	1,100.0	-2,464.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,200.0	0.00	0.00	1,200.0	-2,364.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,300.0	0.00	0.00	1,300.0	-2,264.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,400.0	0.00	0.00	1,400.0	-2,164.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,500.0	0.00	0.00	1,500.0	-2,064.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,600.0	0.00	0.00	1,600.0	-1,964.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,700.0	0.00	0.00	1,700.0	-1,864.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,800.0	0.00	0.00	1,800.0	-1,764.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1,900.0	0.00	0.00	1,900.0	-1,664.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,000.0	0.00	0.00	2,000.0	-1,564.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,100.0	0.00	0.00	2,100.0	-1,464.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,200.0	0.00	0.00	2,200.0	-1,364.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,275.0	0.00	0.00	2,275.0	-1,289.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Tansil Dolomite											



Pathfinder
PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Devon Energy Inc	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB=-26' @ 3564.0usft (H&P-300)
Site:	Mimosa 24 Federal	MD Reference:	KB=-26' @ 3564.0usft (H&P-300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,300.0	0.00	0.00	2,300.0	-1,264.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,385.0	0.00	0.00	2,385.0	-1,179.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Yates											
2,400.0	0.00	0.00	2,400.0	-1,164.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,500.0	0.00	0.00	2,500.0	-1,064.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,600.0	0.00	0.00	2,600.0	-964.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Seven Rivers											
2,700.0	0.00	0.00	2,700.0	-864.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,715.0	0.00	0.00	2,715.0	-849.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Capitan											
2,800.0	0.00	0.00	2,800.0	-764.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
2,900.0	0.00	0.00	2,900.0	-664.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,000.0	0.00	0.00	3,000.0	-564.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,100.0	0.00	0.00	3,100.0	-464.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,200.0	0.00	0.00	3,200.0	-364.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,300.0	0.00	0.00	3,300.0	-264.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,400.0	0.00	0.00	3,400.0	-164.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,500.0	0.00	0.00	3,500.0	-64.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,600.0	0.00	0.00	3,600.0	36.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,700.0	0.00	0.00	3,700.0	136.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,800.0	0.00	0.00	3,800.0	236.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,900.0	0.00	0.00	3,900.0	336.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
3,915.0	0.00	0.00	3,915.0	351.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
B/Capitan											
4,000.0	0.00	0.00	4,000.0	436.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,100.0	0.00	0.00	4,100.0	536.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,200.0	0.00	0.00	4,200.0	636.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,300.0	0.00	0.00	4,300.0	736.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	



Pathfinder
PathfinderX & Y Report



A Schlumberger Company

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 126' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid:
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V/Sec (usft)	DLeg (%/100usft)	Northing (usft)	Easting (usft)	
4,400.0	0.00	0.00	4,400.0	836.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,500.0	0.00	0.00	4,500.0	936.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,565.0	0.00	0.00	4,565.0	1,001.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Delaware											
4,600.0	0.00	0.00	4,600.0	1,036.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,700.0	0.00	0.00	4,700.0	1,136.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,800.0	0.00	0.00	4,800.0	1,236.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
4,900.0	0.00	0.00	4,900.0	1,336.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,000.0	0.00	0.00	5,000.0	1,436.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,100.0	0.00	0.00	5,100.0	1,536.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,200.0	0.00	0.00	5,200.0	1,636.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,300.0	0.00	0.00	5,300.0	1,736.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,400.0	0.00	0.00	5,400.0	1,836.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,500.0	0.00	0.00	5,500.0	1,936.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,600.0	0.00	0.00	5,600.0	2,036.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,700.0	0.00	0.00	5,700.0	2,136.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,800.0	0.00	0.00	5,800.0	2,236.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
5,900.0	0.00	0.00	5,900.0	2,336.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,000.0	0.00	0.00	6,000.0	2,436.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,100.0	0.00	0.00	6,100.0	2,536.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,200.0	0.00	0.00	6,200.0	2,636.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,300.0	0.00	0.00	6,300.0	2,736.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,400.0	0.00	0.00	6,400.0	2,836.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,500.0	0.00	0.00	6,500.0	2,936.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,600.0	0.00	0.00	6,600.0	3,036.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,700.0	0.00	0.00	6,700.0	3,136.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
6,800.0	0.00	0.00	6,800.0	3,236.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	

Company:	Devon Energy Inc	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)	
6,900.0	0.00	0.00	6,900.0	3,336.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,000.0	0.00	0.00	7,000.0	3,436.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,020.0	0.00	0.00	7,020.0	3,456.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
Bone Spring											
7,100.0	0.00	0.00	7,100.0	3,536.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,200.0	0.00	0.00	7,200.0	3,636.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,300.0	0.00	0.00	7,300.0	3,736.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,400.0	0.00	0.00	7,400.0	3,836.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,500.0	0.00	0.00	7,500.0	3,936.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,600.0	0.00	0.00	7,600.0	4,036.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,700.0	0.00	0.00	7,700.0	4,136.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,800.0	0.00	0.00	7,800.0	4,236.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
7,900.0	0.00	0.00	7,900.0	4,336.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,000.0	0.00	0.00	8,000.0	4,436.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,100.0	0.00	0.00	8,100.0	4,536.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,200.0	0.00	0.00	8,200.0	4,636.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,300.0	0.00	0.00	8,300.0	4,736.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,320.0	0.00	0.00	8,320.0	4,756.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
1st Bone Spring Ss											
8,400.0	0.00	0.00	8,400.0	4,836.0	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,461.5	0.00	0.00	8,461.5	4,897.5	0.0	0.0	0.0	0.00	600,701.71	696,018.53	
8,500.0	3.85	176.82	8,500.0	4,936.0	-1.3	0.1	0.2	10.00	600,700.42	696,018.60	
8,550.0	8.85	176.82	8,549.6	4,985.6	-6.8	0.4	1.3	10.00	600,694.90	696,018.91	
8,600.0	13.85	176.82	8,598.7	5,034.7	-16.6	0.9	3.1	10.00	600,685.08	696,019.45	
8,632.5	17.10	176.82	8,630.0	5,066.0	-25.3	1.4	4.7	10.00	600,676.41	696,019.94	
2nd Bone Spring Lime											
8,650.0	18.85	176.82	8,646.6	5,082.6	-30.7	1.7	5.7	10.00	600,671.03	696,020.24	
8,700.0	23.85	176.82	8,693.2	5,129.2	-48.9	2.7	9.0	10.00	600,652.86	696,021.25	



Pathfinder
PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa-24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey												
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)		
8,750.0	28.85	176.82	8,738.0	5,174.0	-71.0	3.9	13.1	10.00	600,630.71	696,022.48		
8,800.0	33.85	176.82	8,780.6	5,216.6	-97.0	5.4	18.0	10.00	600,604.74	696,023.92		
8,850.0	38.85	176.82	8,820.9	5,256.9	-126.5	7.0	23.4	10.00	600,575.16	696,025.57		
8,900.0	43.85	176.82	8,858.4	5,294.4	-159.5	8.9	29.5	10.00	600,542.19	696,027.40		
8,950.0	48.85	176.82	8,892.9	5,328.9	-195.6	10.9	36.2	10.00	600,506.08	696,029.41		
8,980.4	51.89	176.82	8,912.3	5,348.3	-219.0	12.2	40.5	10.00	600,482.70	696,030.71		
8,984.3	51.89	176.82	8,914.7	5,350.7	-222.1	12.4	41.1	0.00	600,479.61	696,030.88		
9,000.0	51.95	174.83	8,924.4	5,360.4	-234.4	13.2	43.6	10.00	600,467.32	696,031.78		
9,050.0	52.38	168.52	8,955.1	5,391.1	-273.4	19.0	54.4	10.00	600,428.28	696,037.50		
9,100.0	53.14	162.31	8,985.4	5,421.4	-311.9	29.0	69.3	10.00	600,389.79	696,047.52		
9,150.0	54.21	156.25	9,015.0	5,451.0	-349.6	43.3	88.3	10.00	600,352.15	696,061.78		
9,184.6	55.13	152.16	9,035.0	5,471.0	-374.9	55.5	103.8	10.00	600,326.77	696,074.05		
2nd Bone Spring Ss												
9,200.0	55.58	150.37	9,043.8	5,479.8	-386.1	61.6	111.3	10.00	600,315.64	696,080.16		
9,247.3	57.13	145.00	9,070.0	5,506.0	-419.3	82.7	136.5	10.00	600,282.38	696,101.21		
2nd Bone Spring Upr Ss												
9,250.0	57.22	144.70	9,071.5	5,507.5	-421.2	84.0	138.0	10.00	600,280.53	696,102.51		
9,300.0	59.11	139.25	9,097.8	5,533.8	-454.6	110.2	168.3	10.00	600,247.11	696,128.68		
9,350.0	61.21	134.02	9,122.7	5,558.7	-486.1	139.9	201.9	10.00	600,215.61	696,158.46		
9,400.0	63.51	129.00	9,145.9	5,581.9	-515.4	173.1	238.6	10.00	600,186.28	696,191.63		
9,450.0	65.98	124.19	9,167.3	5,603.3	-542.4	209.4	278.1	10.00	600,159.35	696,227.93		
9,500.0	68.59	119.57	9,186.6	5,622.6	-566.7	248.6	320.1	10.00	600,135.01	696,267.09		
9,523.7	69.87	117.44	9,195.0	5,631.0	-577.3	268.0	340.8	10.00	600,124.43	696,286.58		
2nd Bone Spring Upr Ss Base												
9,550.0	71.32	115.11	9,203.7	5,639.7	-588.2	290.3	364.3	10.00	600,113.46	696,308.80		
9,554.0	71.55	114.76	9,205.0	5,641.0	-589.8	293.7	367.9	10.00	600,111.87	696,312.23		
2nd Bone Spring Middle Ss												
9,600.0	74.16	110.80	9,218.6	5,654.6	-606.9	334.2	410.3	10.00	600,094.86	696,352.76		



Pathfinder
PathfinderX & Y Report



A Schlumberger Company

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
9,650.0	77.08	106.61	9,231.0	5,667.0	-622.4	380.1	457.8	10.00	600,079.34	696,398.62	
9,700.0	80.06	102.51	9,240.9	5,676.9	-634.7	427.5	506.4	10.00	600,067.04	696,446.04	
9,750.0	83.09	98.49	9,248.2	5,684.2	-643.7	476.1	555.8	10.00	600,058.03	696,494.66	
9,800.0	86.16	94.53	9,252.9	5,688.9	-649.3	525.6	605.5	10.00	600,052.39	696,544.10	
9,850.0	89.24	90.59	9,254.9	5,690.9	-651.5	575.5	655.3	10.00	600,050.17	696,593.99	
9,862.3	90.00	89.62	9,255.0	5,691.0	-651.6	587.7	667.5	10.00	600,050.15	696,606.27	
9,900.0	90.00	89.62	9,255.0	5,691.0	-651.3	625.5	704.8	0.00	600,050.40	696,643.99	
10,000.0	90.00	89.62	9,255.0	5,691.0	-650.6	725.5	803.9	0.00	600,051.06	696,743.99	
10,100.0	90.00	89.62	9,255.0	5,691.0	-650.0	825.5	903.0	0.00	600,051.72	696,843.99	
10,200.0	90.00	89.62	9,255.0	5,691.0	-649.3	925.5	1,002.0	0.00	600,052.39	696,943.99	
10,300.0	90.00	89.62	9,255.0	5,691.0	-648.7	1,025.5	1,101.1	0.00	600,053.05	697,043.98	
10,400.0	90.00	89.62	9,255.0	5,691.0	-648.0	1,125.5	1,200.1	0.00	600,053.71	697,143.98	
10,500.0	90.00	89.62	9,255.0	5,691.0	-647.3	1,225.5	1,299.2	0.00	600,054.38	697,243.98	
10,600.0	90.00	89.62	9,255.0	5,691.0	-646.7	1,325.4	1,398.3	0.00	600,055.04	697,343.98	
10,700.0	90.00	89.62	9,255.0	5,691.0	-646.0	1,425.4	1,497.3	0.00	600,055.70	697,443.98	
10,800.0	90.00	89.62	9,255.0	5,691.0	-645.3	1,525.4	1,596.4	0.00	600,056.37	697,543.97	
10,900.0	90.00	89.62	9,255.0	5,691.0	-644.7	1,625.4	1,695.5	0.00	600,057.03	697,643.97	
11,000.0	90.00	89.62	9,255.0	5,691.0	-644.0	1,725.4	1,794.5	0.00	600,057.69	697,743.97	
11,100.0	90.00	89.62	9,255.0	5,691.0	-643.4	1,825.4	1,893.6	0.00	600,058.36	697,843.97	
11,200.0	90.00	89.62	9,255.0	5,691.0	-642.7	1,925.4	1,992.6	0.00	600,059.02	697,943.96	
11,300.0	90.00	89.62	9,255.0	5,691.0	-642.0	2,025.4	2,091.7	0.00	600,059.68	698,043.96	
11,400.0	90.00	89.62	9,255.0	5,691.0	-641.4	2,125.4	2,190.8	0.00	600,060.35	698,143.96	
11,500.0	90.00	89.62	9,255.0	5,691.0	-640.7	2,225.4	2,289.8	0.00	600,061.01	698,243.96	
11,600.0	90.00	89.62	9,255.0	5,691.0	-640.0	2,325.4	2,388.9	0.00	600,061.67	698,343.96	
11,700.0	90.00	89.62	9,255.0	5,691.0	-639.4	2,425.4	2,488.0	0.00	600,062.34	698,443.95	
11,800.0	90.00	89.62	9,255.0	5,691.0	-638.7	2,525.4	2,587.0	0.00	600,063.00	698,543.95	
11,900.0	90.00	89.62	9,255.0	5,691.0	-638.0	2,625.4	2,686.1	0.00	600,063.66	698,643.95	

Company:	Devon Energy Inc	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26 @ 3564' 0usft (H&P 300)
Site:	Mimosa 24 Federal	MD Reference:	KB = 26 @ 3564' 0usft (H&P 300)
Well:	#2H	North Reference:	Gnd
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
12,000.0	90.00	89.62	9,255.0	5,691.0	-637.4	2,725.4	2,785.1	0.00	600,064.32	698,743.95	
12,100.0	90.00	89.62	9,255.0	5,691.0	-636.7	2,825.4	2,884.2	0.00	600,064.99	698,843.94	
12,200.0	90.00	89.62	9,255.0	5,691.0	-636.1	2,925.4	2,983.3	0.00	600,065.65	698,943.94	
12,300.0	90.00	89.62	9,255.0	5,691.0	-635.4	3,025.4	3,082.3	0.00	600,066.31	699,043.94	
12,400.0	90.00	89.62	9,255.0	5,691.0	-634.7	3,125.4	3,181.4	0.00	600,066.98	699,143.94	
12,500.0	90.00	89.62	9,255.0	5,691.0	-634.1	3,225.4	3,280.5	0.00	600,067.64	699,243.94	
12,600.0	90.00	89.62	9,255.0	5,691.0	-633.4	3,325.4	3,379.5	0.00	600,068.30	699,343.93	
12,700.0	90.00	89.62	9,255.0	5,691.0	-632.7	3,425.4	3,478.6	0.00	600,068.97	699,443.93	
12,800.0	90.00	89.62	9,255.0	5,691.0	-632.1	3,525.4	3,577.7	0.00	600,069.63	699,543.93	
12,900.0	90.00	89.62	9,255.0	5,691.0	-631.4	3,625.4	3,676.7	0.00	600,070.29	699,643.93	
13,000.0	90.00	89.62	9,255.0	5,691.0	-630.8	3,725.4	3,775.8	0.00	600,070.96	699,743.93	
13,100.0	90.00	89.62	9,255.0	5,691.0	-630.1	3,825.4	3,874.8	0.00	600,071.62	699,843.92	
13,200.0	90.00	89.62	9,255.0	5,691.0	-629.4	3,925.4	3,973.9	0.00	600,072.28	699,943.92	
13,300.0	90.00	89.62	9,255.0	5,691.0	-628.8	4,025.4	4,073.0	0.00	600,072.95	700,043.92	
13,400.0	90.00	89.62	9,255.0	5,691.0	-628.1	4,125.4	4,172.0	0.00	600,073.61	700,143.92	
13,500.0	90.00	89.62	9,255.0	5,691.0	-627.4	4,225.4	4,271.1	0.00	600,074.27	700,243.91	
13,600.0	90.00	89.62	9,255.0	5,691.0	-626.8	4,325.4	4,370.2	0.00	600,074.94	700,343.91	
13,700.0	90.00	89.62	9,255.0	5,691.0	-626.1	4,425.4	4,469.2	0.00	600,075.60	700,443.91	
13,800.0	90.00	89.62	9,255.0	5,691.0	-625.4	4,525.4	4,568.3	0.00	600,076.26	700,543.91	
13,900.0	90.00	89.62	9,255.0	5,691.0	-624.8	4,625.4	4,667.3	0.00	600,076.93	700,643.91	
14,000.0	90.00	89.62	9,255.0	5,691.0	-624.1	4,725.4	4,766.4	0.00	600,077.59	700,743.90	
14,033.3	90.00	89.62	9,255.0	5,691.0	-623.9	4,758.7	4,799.4	0.00	600,077.81	700,777.18	

devon

Project: Eddy County (NAD83)
Site: Mimosa 24 Federal
Well: #2H
Wellbore: OH
Plan: Plan #2 (#2H/OH)



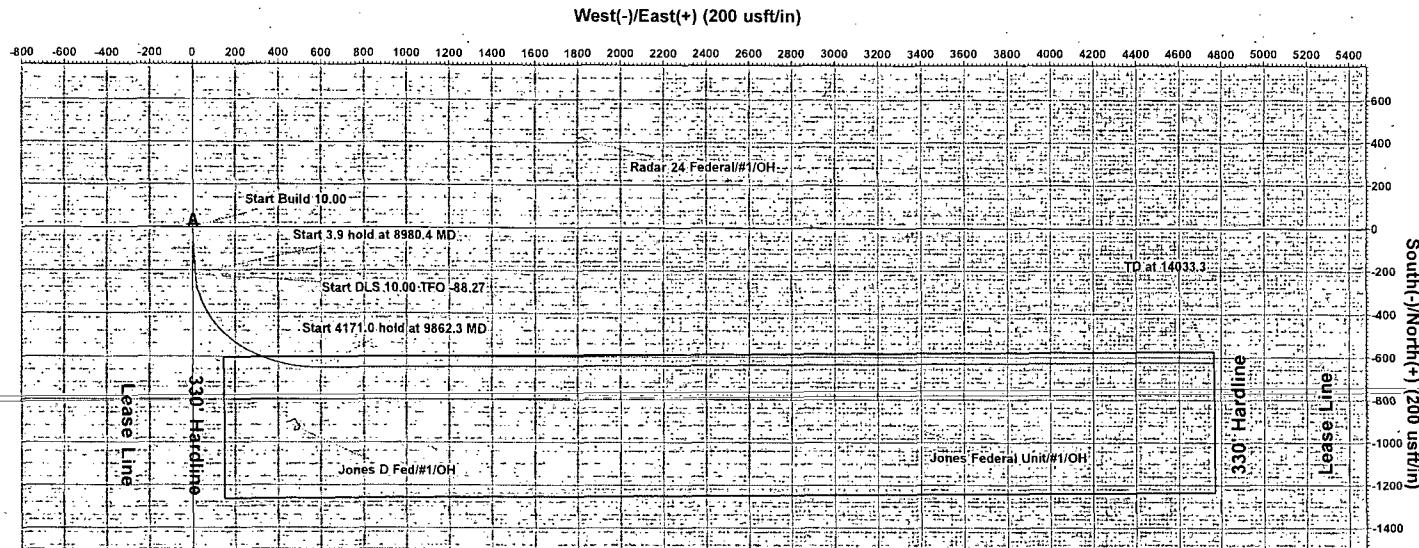
Azimuths to Grid North
True North: -0.27°
Magnetic North: 7.33°

Magnetic Field
Strength: 48783.9snT
Dip Angle: 60.54°
Date: 6/13/2012
Model: IGRF200510

PATHFINDER®

A Schlumberger Company

PROJECT DETAILS: Eddy County (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid



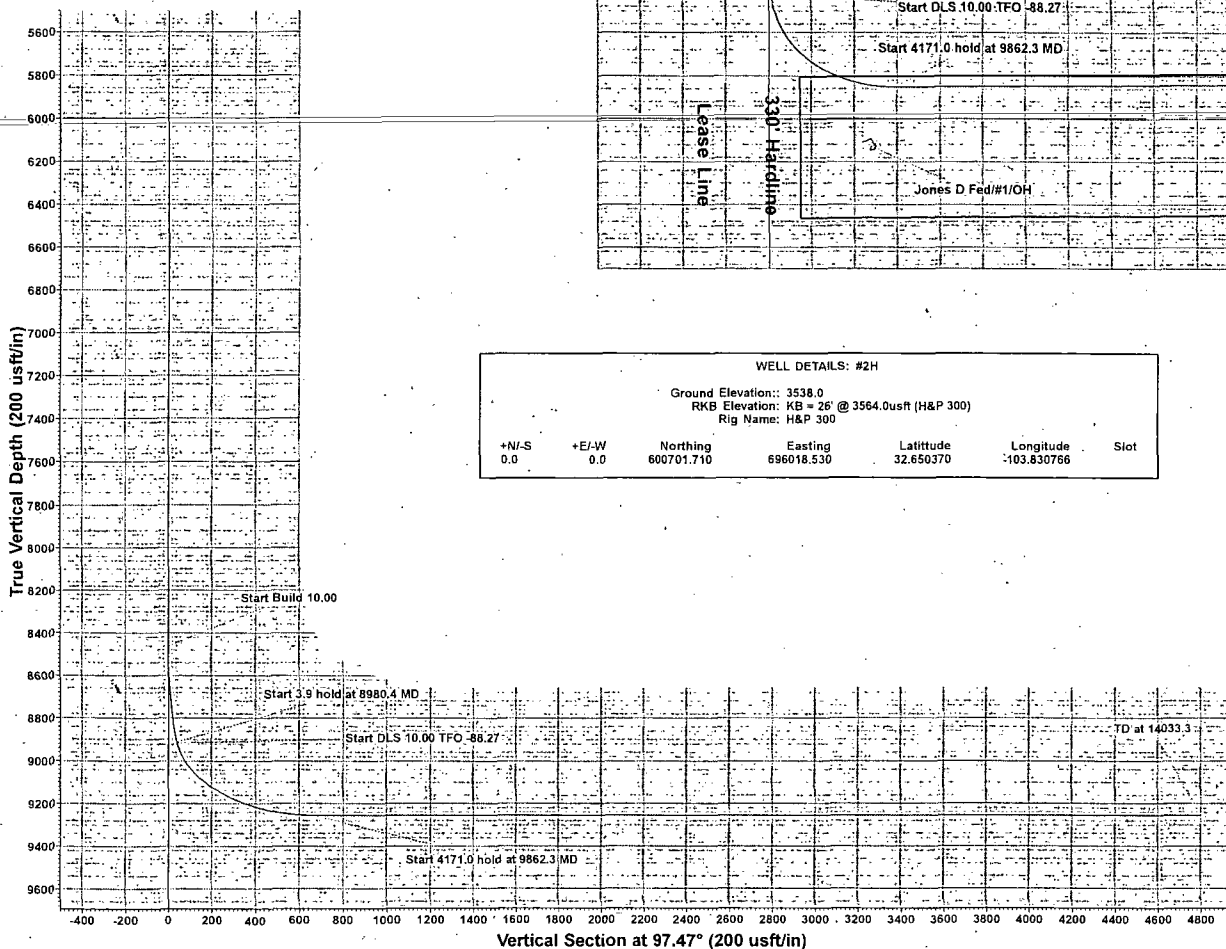
WELL DETAILS: #2H

Ground Elevation: 3538.0
RKB Elevation: KB = 26' @ 3564.0usft (H&P 300)
Rig Name: H&P 300

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	600701.710	696018.530	32.650370	-103.830766	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	8461.5	0.00	0.00	8461.5	0.0	0.0	0.00	0.00	0.0	
3	8980.4	51.89	176.82	8912.3	-219.0	12.2	10.00	176.82	40.5	
4	8984.3	51.89	176.82	8914.7	-222.1	12.4	0.00	0.00	41.1	
5	9862.3	90.00	89.62	9255.0	-651.6	587.7	10.00	-88.27	667.5	
6	14033.3	90.00	89.62	9255.0	-623.9	4758.7	0.00	0.00	4799.4	



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL (MIM 24 #2H)	9255.0	-903.9	4758.7	599797.860	700777.180	Point

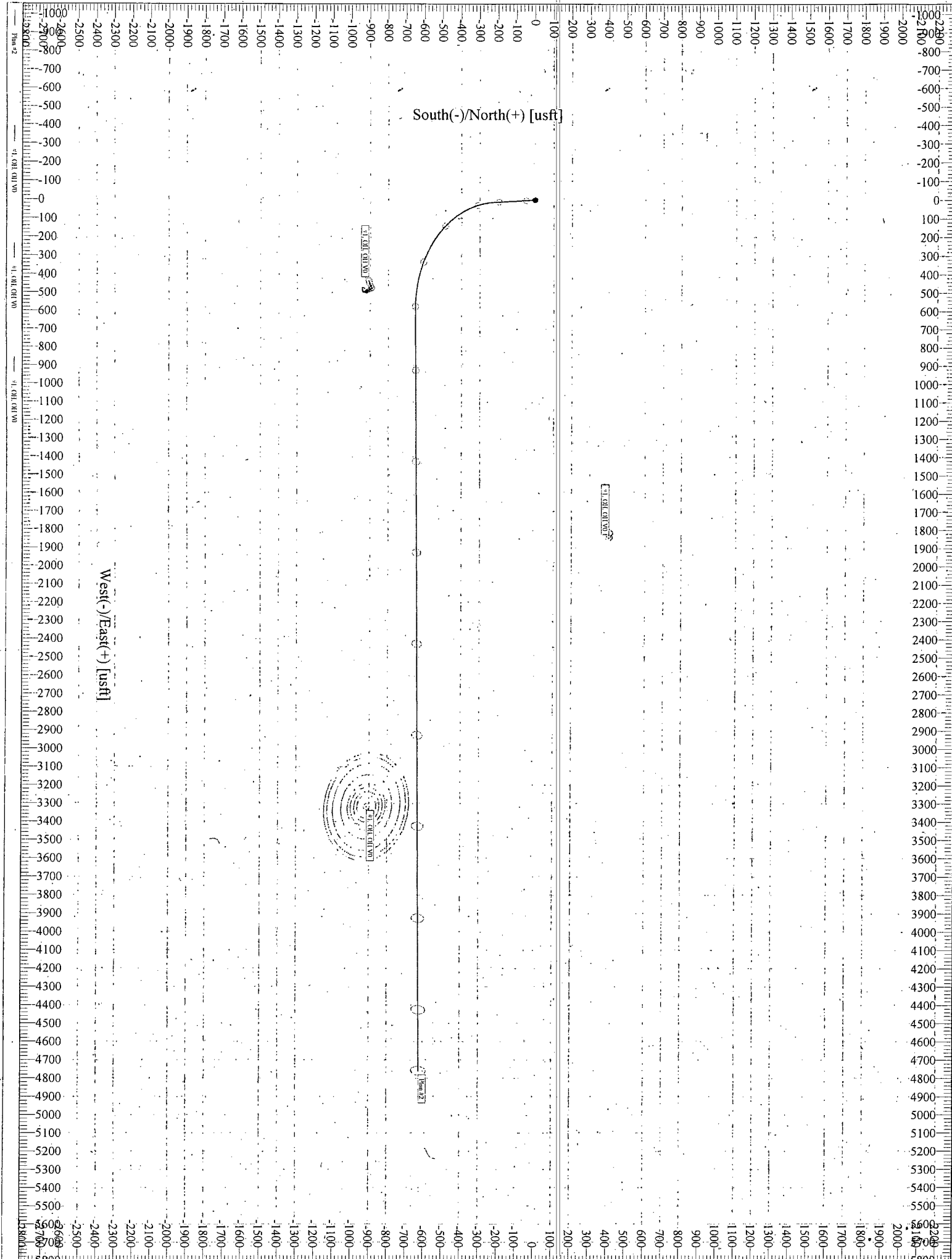
Plan: Plan #2 (#2H/OH)

Created By: Sam Bille Date: 10/08, November 05 2012
Checked: _____ Date: _____

Revised Drawing:
Eddy County (NAD83)
Wellbore: OH
Plan: Plan #2
Page 2

South(-)/North(+) [usft]

West(-)/East(+) [usft]



Devon - Mimosa 24 Federal #2H Plan #2 TXT

HEADER INFORMATION

COMPANY : Devon Energy, Inc.
 FIELD : Eddy County (NAD83)
 SITE : Mimosa 24 Federal
 WELL : #2H
 WELLPATH: OH
 DEPTHUNT: usft

WELL INFORMATION

WELL EW MAP : 696018.53
 WELL NS MAP : 600701.71
 DATUM ELEVN : 3564.00
 VSECT ANGLE : 97.47
 VSECT NORTH : 0.00
 VSECT EAST : 0.00

SURVEY TYPE INFORMATION

H 0.00 - 14032.32 PLAN #2 : PATHFINDER

SURVEY LIST

MD	INC	AZI	TVD	VSEC	N/S	E/W
0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00

Devon - Mimosa 24 Federal #2H Plan #2 TXT

4200.00	0.00	0.00	4200.00	0.00	0.00	0.00
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00
6500.00	0.00	0.00	6500.00	0.00	0.00	0.00
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00
6700.00	0.00	0.00	6700.00	0.00	0.00	0.00
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00
6900.00	0.00	0.00	6900.00	0.00	0.00	0.00
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00
7100.00	0.00	0.00	7100.00	0.00	0.00	0.00
7200.00	0.00	0.00	7200.00	0.00	0.00	0.00
7300.00	0.00	0.00	7300.00	0.00	0.00	0.00
7400.00	0.00	0.00	7400.00	0.00	0.00	0.00
7500.00	0.00	0.00	7500.00	0.00	0.00	0.00
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00
7700.00	0.00	0.00	7700.00	0.00	0.00	0.00
7800.00	0.00	0.00	7800.00	0.00	0.00	0.00
7900.00	0.00	0.00	7900.00	0.00	0.00	0.00
8000.00	0.00	0.00	8000.00	0.00	0.00	0.00
8100.00	0.00	0.00	8100.00	0.00	0.00	0.00
8200.00	0.00	0.00	8200.00	0.00	0.00	0.00
8300.00	0.00	0.00	8300.00	0.00	0.00	0.00
8400.00	0.00	0.00	8400.00	0.00	0.00	0.00
8461.50	0.00	0.00	8461.50	0.00	0.00	0.00
8500.00	3.85	176.82	8499.97	0.24	-1.29	0.07
8550.00	8.85	176.82	8549.65	1.26	-6.81	0.38
8600.00	13.85	176.82	8598.66	3.08	-16.63	0.92
8650.00	18.85	176.82	8646.62	5.68	-30.68	1.71
8700.00	23.85	176.82	8693.17	9.04	-48.85	2.72
8750.00	28.85	176.82	8737.96	13.15	-71.00	3.95
8800.00	33.85	176.82	8780.65	17.95	-96.97	5.39
8850.00	38.85	176.82	8820.91	23.43	-126.55	7.04
8900.00	43.85	176.82	8858.43	29.53	-159.52	8.87
8950.00	48.85	176.82	8892.93	36.22	-195.63	10.88
8980.41	51.89	176.82	8912.32	40.55	-219.01	12.18
8984.33	51.89	176.82	8914.75	41.12	-222.10	12.35
9000.00	51.95	174.83	8924.41	43.61	-234.39	13.25
9050.00	52.38	168.52	8955.10	54.35	-273.43	18.97
9100.00	53.14	162.31	8985.37	69.30	-311.92	28.99
9150.00	54.21	156.25	9015.01	88.32	-349.56	43.25
9200.00	55.58	150.37	9043.77	111.29	-386.07	61.63
9250.00	57.22	144.70	9071.46	138.02	-421.18	83.98
9300.00	59.11	139.25	9097.84	168.32	-454.60	110.15

		Devon	- Mimosa 24	Federal	#2H Plan #2	TXT
9350.00	61.21	134.02	9122.73	201.94	-486.10	139.93
9400.00	63.51	129.00	9145.93	238.64	-515.43	173.10
9450.00	65.98	124.19	9167.27	278.13	-542.36	209.40
9500.00	68.59	119.57	9186.59	320.12	-566.70	248.56
9550.00	71.32	115.11	9203.73	364.28	-588.25	290.27
9600.00	74.16	110.80	9218.57	410.28	-606.85	334.23
9650.00	77.08	106.61	9230.99	457.77	-622.37	380.09
9700.00	80.06	102.51	9240.90	506.39	-634.67	427.51
9750.00	83.09	98.49	9248.23	555.76	-643.68	476.13
9800.00	86.16	94.53	9252.91	605.52	-649.32	525.57
9850.00	89.24	90.59	9254.92	655.28	-651.54	575.46
9862.28	90.00	89.62	9255.00	667.46	-651.56	587.74
9900.00	90.00	89.62	9255.00	704.82	-651.31	625.46
10000.00	90.00	89.62	9255.00	803.89	-650.65	725.46
10100.00	90.00	89.62	9255.00	902.95	-649.99	825.46
10200.00	90.00	89.62	9255.00	1002.01	-649.32	925.46
10300.00	90.00	89.62	9255.00	1101.08	-648.66	1025.45
10400.00	90.00	89.62	9255.00	1200.14	-648.00	1125.45
10500.00	90.00	89.62	9255.00	1299.20	-647.33	1225.45
10600.00	90.00	89.62	9255.00	1398.27	-646.67	1325.45
10700.00	90.00	89.62	9255.00	1497.33	-646.01	1425.45
10800.00	90.00	89.62	9255.00	1596.39	-645.34	1525.44
10900.00	90.00	89.62	9255.00	1695.45	-644.68	1625.44
11000.00	90.00	89.62	9255.00	1794.52	-644.02	1725.44
11100.00	90.00	89.62	9255.00	1893.58	-643.35	1825.44
11200.00	90.00	89.62	9255.00	1992.64	-642.69	1925.43
11300.00	90.00	89.62	9255.00	2091.71	-642.03	2025.43
11400.00	90.00	89.62	9255.00	2190.77	-641.36	2125.43
11500.00	90.00	89.62	9255.00	2289.83	-640.70	2225.43
11600.00	90.00	89.62	9255.00	2388.90	-640.04	2325.43
11700.00	90.00	89.62	9255.00	2487.96	-639.37	2425.42
11800.00	90.00	89.62	9255.00	2587.02	-638.71	2525.42
11900.00	90.00	89.62	9255.00	2686.09	-638.05	2625.42
12000.00	90.00	89.62	9255.00	2785.15	-637.39	2725.42
12100.00	90.00	89.62	9255.00	2884.21	-636.72	2825.41
12200.00	90.00	89.62	9255.00	2983.27	-636.06	2925.41
12300.00	90.00	89.62	9255.00	3082.34	-635.40	3025.41
12400.00	90.00	89.62	9255.00	3181.40	-634.73	3125.41
12500.00	90.00	89.62	9255.00	3280.46	-634.07	3225.41
12600.00	90.00	89.62	9255.00	3379.53	-633.41	3325.40
12700.00	90.00	89.62	9255.00	3478.59	-632.74	3425.40
12800.00	90.00	89.62	9255.00	3577.65	-632.08	3525.40
12900.00	90.00	89.62	9255.00	3676.72	-631.42	3625.40
13000.00	90.00	89.62	9255.00	3775.78	-630.75	3725.40
13100.00	90.00	89.62	9255.00	3874.84	-630.09	3825.39
13200.00	90.00	89.62	9255.00	3973.90	-629.43	3925.39
13300.00	90.00	89.62	9255.00	4072.97	-628.76	4025.39
13400.00	90.00	89.62	9255.00	4172.03	-628.10	4125.39
13500.00	90.00	89.62	9255.00	4271.09	-627.44	4225.38
13600.00	90.00	89.62	9255.00	4370.16	-626.77	4325.38
13700.00	90.00	89.62	9255.00	4469.22	-626.11	4425.38
13800.00	90.00	89.62	9255.00	4568.28	-625.45	4525.38
13900.00	90.00	89.62	9255.00	4667.35	-624.78	4625.38
14000.00	90.00	89.62	9255.00	4766.41	-624.12	4725.37
14033.28	90.00	89.62	9255.00	4799.38	-623.90	4758.65



Devon Energy, Inc.

Eddy County (NAD83)

Mimosa 24 Federal

#2H

OH

Plan #2

Anticollision Report

05 November, 2012

PATHFINDER®

A Schlumberger Company

RECEIVED

2012 DEC -5 AM 7:12

BUREAU OF LAND MGMT
CARLSBAD FIELD OFFICE

Company:	Devon Energy Inc	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB=126' @ 3564.0usft (H&P 300)
Reference Site:	Mimosa 24 Federal	MD Reference:	KB=126' @ 3564.0usft (H&P 300)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference:	Plan #2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum separation factor of 5.00
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	Systematic Ellipse
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool/Program		Date: 11/5/2012
From (usft)	To (usft)	Survey (Wellbore)
0.0	14,032.3	Plan #2 (OH)

Tool Name	Description
Pathfinder	Pathfinder MWD

Summary	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name						
Offset Well - Wellbore - Design						
Jones D Fed						
#1 - OH - OH						Out of range
Jones Federal Unit						
#1 - OH - OH	12,591.0	9,233.3	280.4	60.8	1.277	Level 2, CC, ES, SF
#2 - OH - OH						Out of range
Radar 24 Federal						
#1 - OH - OH						Out of range

Offset Design						Jones Federal Unit - #1 - OH - OH						Offset Site Error		0.0 usft
Survey Program						100-INC-TREND						Offset Well Error		0.0 usft
Reference		Offset		Semi Major Axis		Distance		Minimum		Separation		Warning		
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Separation	Factor			
Depth	Depth	Depth	Depth	Depth	Depth	Toolface	N/S	E/W	Centres	Ellipses				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)				
11,600.0	9,255.0	9,233.4	9,230.9	25.8	243.9	89.99	-913.9	3,318.3	1,029.9	816.1	213.84	4.817		
11,700.0	9,255.0	9,233.4	9,230.9	26.3	243.9	89.99	-913.9	3,318.3	934.1	719.7	214.39	4.357		
11,800.0	9,255.0	9,233.4	9,230.9	26.9	243.9	89.98	-913.9	3,318.3	839.3	624.3	214.96	3.904		
11,900.0	9,255.0	9,233.4	9,230.9	27.5	243.9	89.98	-913.9	3,318.3	745.8	530.2	215.53	3.460		
12,000.0	9,255.0	9,233.4	9,230.9	28.0	243.9	89.98	-913.9	3,318.3	654.2	438.1	216.11	3.027		
12,100.0	9,255.0	9,233.4	9,230.9	28.6	243.9	89.97	-913.9	3,318.3	565.5	348.8	216.69	2.610		
12,200.0	9,255.0	9,233.4	9,230.9	29.2	243.9	89.97	-913.9	3,318.3	481.2	263.9	217.28	2.215		
12,300.0	9,255.0	9,233.3	9,230.8	29.8	243.9	89.97	-913.9	3,318.3	404.2	186.3	217.87	1.855 Level 3		
12,400.0	9,255.0	9,233.3	9,230.8	30.4	243.9	89.96	-913.9	3,318.3	339.3	120.8	218.47	1.553 Level 3		
12,500.0	9,255.0	9,233.3	9,230.8	31.0	243.9	89.96	-913.9	3,318.3	294.8	75.8	219.07	1.346 Level 2		
12,591.0	9,255.0	9,233.3	9,230.8	31.5	243.9	89.96	-913.9	3,318.3	280.4	60.8	219.62	1.277 Level 2, CC, ES, SF		
12,600.0	9,255.0	9,233.3	9,230.8	31.6	243.9	89.96	-913.9	3,318.3	280.6	60.9	219.68	1.277 Level 2		
12,700.0	9,255.0	9,233.3	9,230.8	32.2	243.9	89.96	-913.9	3,318.3	300.9	80.6	220.29	1.366 Level 2		
12,800.0	9,255.0	9,233.3	9,230.8	32.8	243.9	89.95	-913.9	3,318.3	349.7	128.8	220.90	1.583 Level 3		
12,900.0	9,255.0	9,233.3	9,230.8	33.4	243.9	89.95	-913.9	3,318.3	417.3	195.7	221.52	1.884 Level 3		
13,000.0	9,255.0	9,233.2	9,230.7	34.0	243.9	89.95	-913.9	3,318.3	495.9	273.7	222.14	2.232		
13,100.0	9,255.0	9,233.2	9,230.7	34.6	243.9	89.94	-913.9	3,318.3	581.1	358.3	222.77	2.609		
13,200.0	9,255.0	9,233.2	9,230.7	35.3	243.9	89.94	-913.9	3,318.3	670.4	447.0	223.39	3.001		
13,300.0	9,255.0	9,233.2	9,230.7	35.9	243.9	89.94	-913.9	3,318.3	762.4	538.4	224.02	3.403		
13,400.0	9,255.0	9,233.2	9,230.7	36.5	243.9	89.93	-913.9	3,318.3	856.2	631.5	224.66	3.811		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Pathfinder
Anticollision Report

PATHFINDER
A Schlumberger Company

Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26 @ 3564.0usft (H&P 300)
Reference Site:	Mimosa 24 Federal	IMD Reference:	KB = 26 @ 3564.0usft (H&P 300)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	200 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design:	Jones, Federal Unit #1 - OH - OH						Offset Site Error:	0.0 usft
Survey Program:	100 INC TREND						Offset Well Error:	0.0 usft
Reference:	Offset	Semi Major Axis		Distance				
Measured Vertical	Measured Vertical	Reference	Offset	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	N/S (usft)	E/W (usft)	Separation (usft)		
13,500.0	9,255.0	9,233.2	9,230.7	-913.9	3,318.3	951.2	726.0	225.29 4.222
13,600.0	9,255.0	9,233.1	9,230.6	-913.9	3,318.3	1,047.2	821.3	225.93 4.635

CC = Min centre to center distance or convergent point, SF = min separation factor, ES = min ellipse separation

Company:	Devon Energy, Inc	Local Co-ordinate Reference:	Well #2H:
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Reference Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB = 26' @ 3564.0usft (H&P 300)

Offset Depths are relative to Offset Datum

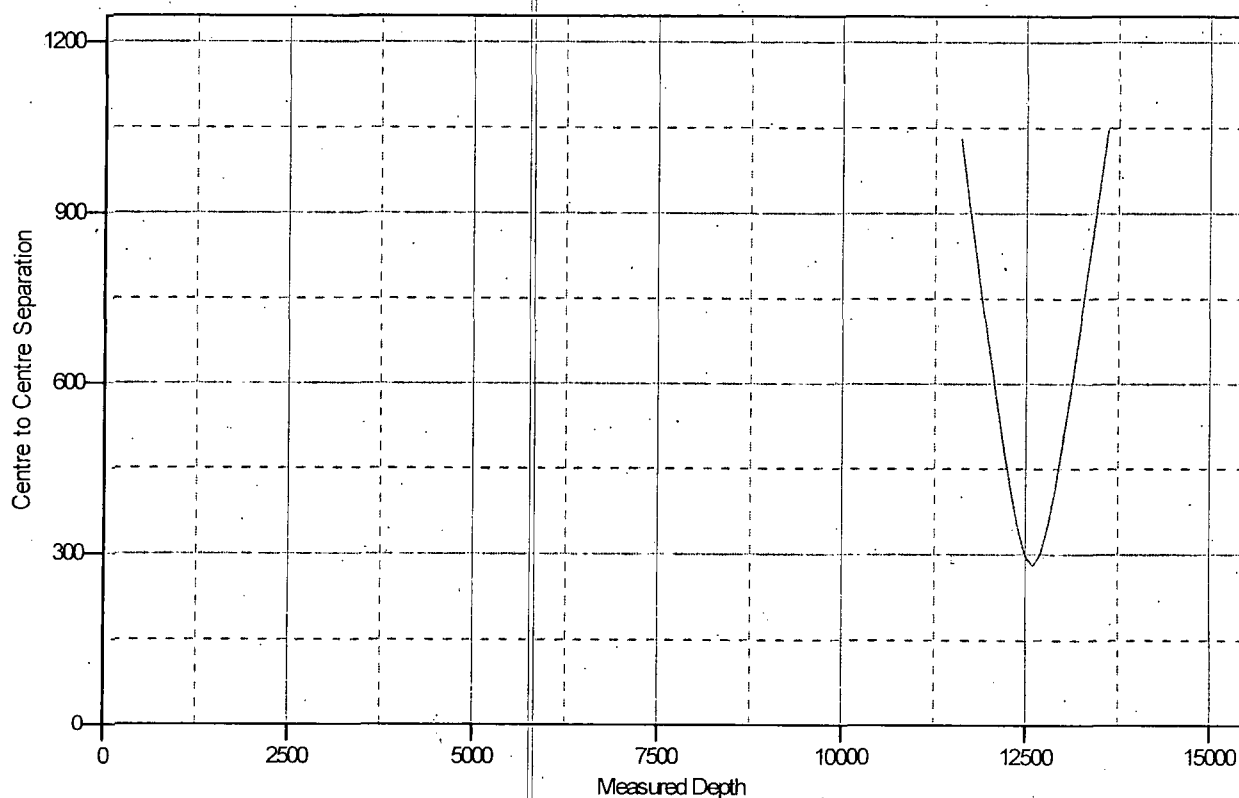
Central Meridian is -104.333334

Coordinates are relative to: #2H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.27°

Ladder Plot



LEGEND

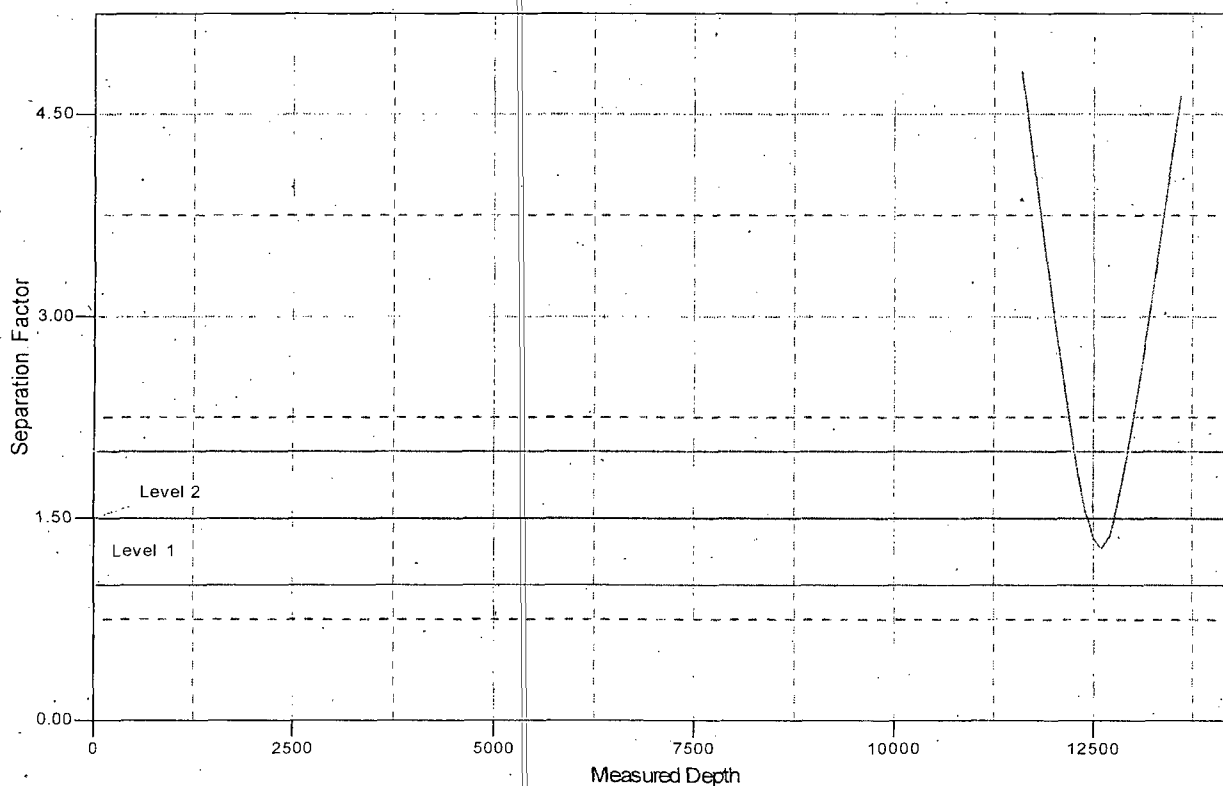
— #1, OH, OHV0

Company:	Devon Energy Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Reference Site:	Mimosa 24 Federal	MD Reference:	KB = 26' @ 3564.0usft (H&P 300)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	#2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB = 26' @ 3564.0usft (H&P 300)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: #2H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.27°

Separation Factor Plot



LEGEND

— #1, OH, OH V0

**BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(LIVE) SERIAL REGISTER PAGE**

Run Date/Time: 01/04/13 09:38 AM

Page 1 of 2

01 12-22-1987;101STAT1330;30USC181 ET SEQ

Case Type 312021: O&G LSE COMP PD -1987

Commodity 459: OIL & GAS L

Case Disposition: AUTHORIZED

Case File Juris:

Total Acres

480.000

Serial Number

NMNM-- - 117550

Serial Number: NMNM-- - 117550

Name & Address

Int Rel

%Interest

CHASE OIL CORP PO BOX 1767
CHASE RICHARD L PO BOX 359
CHASE ROBERT C PO BOX 297

ARTESIA NM 882111767 LESSEE 100.000000000
ARTESIA NM 882110359 OPERATING RIGHTS 0.000000000
ARTESIA NM 882111297 OPERATING RIGHTS 0.000000000

Serial Number: NMNM-- - 117550

MerTwp Rng Sec SType Nr Suff Subdivision

District/Resource Area

County

Mgmt Agency

23 0160S 0280E 015 ALIQ N2NE,SENE,NENW,S2;

CARLSBAD FIELD OFFICE

EDDY

BUREAU OF LAND MGMT

Serial Number: NMNM-- - 117550

Act Date Code Action

Action Remarks

Pending Office

01/05/2007 299 PROTEST FILED
01/16/2007 387 CASE ESTABLISHED
01/17/2007 143 BONUS BID PAYMENT RECD
01/17/2007 191 SALE HELD
01/17/2007 267 BID RECEIVED
01/31/2007 143 BONUS BID PAYMENT RECD
02/28/2007 237 LEASE ISSUED
02/28/2007 298 PROTEST DISMISSED
02/28/2007 974 AUTOMATED RECORD VERIF
03/01/2007 496 FUND CODE
03/01/2007 530 RLTY RATE - 12 1/2%
03/01/2007 868 EFFECTIVE DATE
03/21/2007 140 ASGN FILED
04/26/2007 139 ASGN APPROVED
04/26/2007 974 AUTOMATED RECORD VERIF
07/18/2007 140 ASGN FILED
08/15/2007 139 ASGN APPROVED
08/15/2007 974 AUTOMATED RECORD VERIF
12/31/2007 140 ASGN FILED
02/28/2008 139 ASGN APPROVED
02/28/2008 974 AUTOMATED RECORD VERIF
06/24/2008 650 HELD BY PROD - ACTUAL
08/21/2008 643 PRODUCTION DETERMINATION
08/21/2008 658 MEMO OF 1ST PROD-ACTUAL
10/02/2008 932 TRF OPER RGTS FILED
05/14/2009 933 TRF OPER RGTS APPROVED

Forest Guardians
200701017;
\$960.00;
\$1440000.00;
\$1439040.00;
LR
05;145003
GONZALES/PHILLIPS;1
EFF 04/01/07;
MV
PHILLIPS/CAZA ENER;1
EFF 08/01/07;
MV
CAZA ENER/CHASE OIL;1
EFF 01/01/08;
MV
CHASE OIL/CHASE ETA;1
EFF 11/01/08;

**NO WARRANTY IS MADE BY BLM
FOR USE OF THE DATA FOR
PURPOSES NOT INTENDED BY BLM**

BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(LIVE) SERIAL REGISTER PAGE

Run Date/Time: 01/04/13 09:38 AM

Page 2 of 2

05/14/2009	974	AUTOMATED RECORD VERIF
07/01/2010	246	LEASE COMMITTED TO CA
02/28/2017	763	EXPIRES

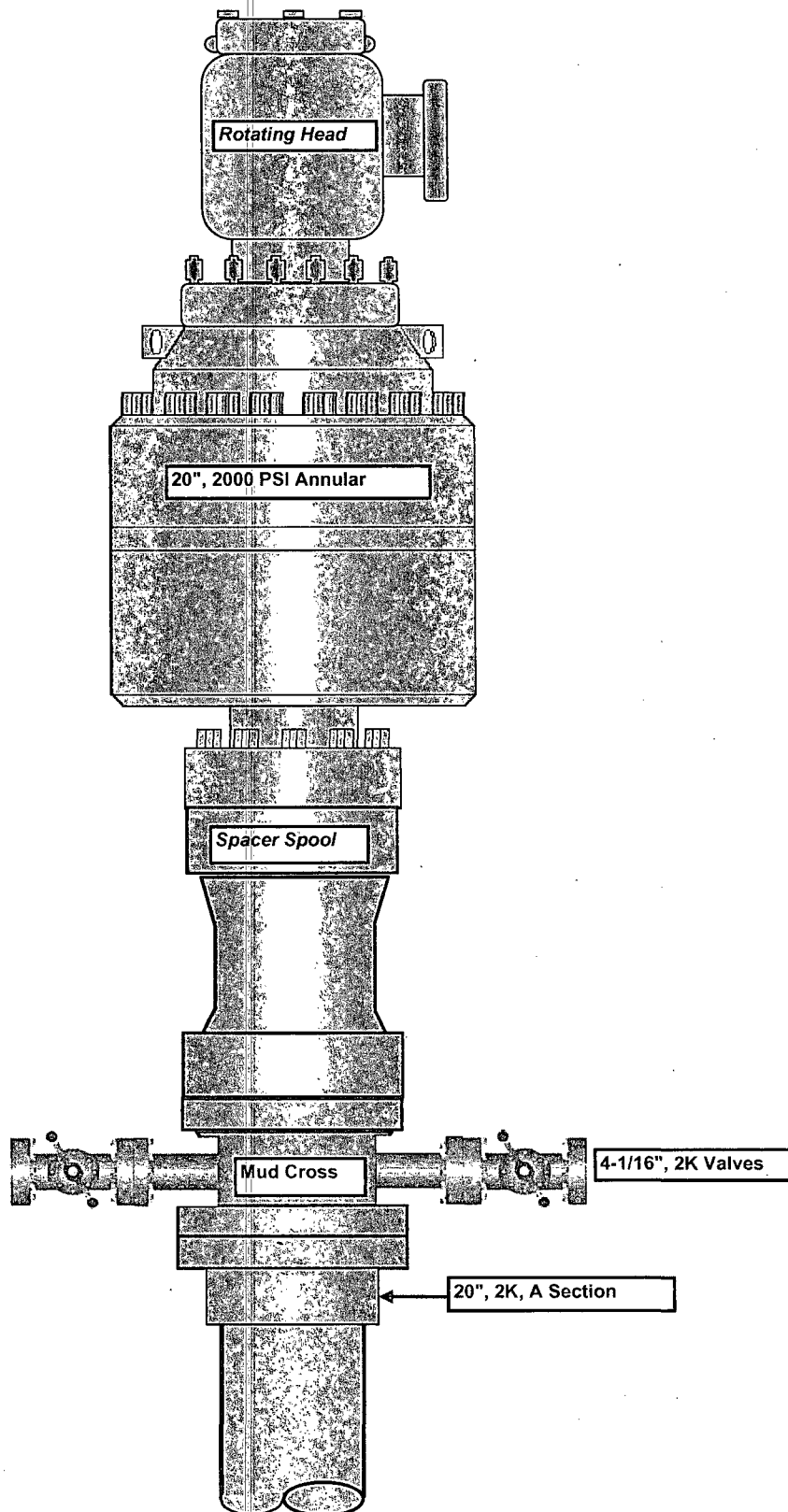
MV
CA NM-125491

Line Nr Remarks

Serial Number: NMNM-- - 117550

0002	STIPULATIONS ATTACHED TO LEASE:
0003	NM-11-LN SPECIAL CULTURAL RESOURCE
0004	SENM-LN-1 CAVE - KARST OCCURRENCE
0005	SENM-S-18 STREAMS, RIVERS, AND FLOODPLAINS
0006	SENM-S-19 PLAYAS AND ALKALI LAKES
0007	05/14/09 BONDED OPER MACK ENE CORP NMB000286/SW

20" 2K Annular



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

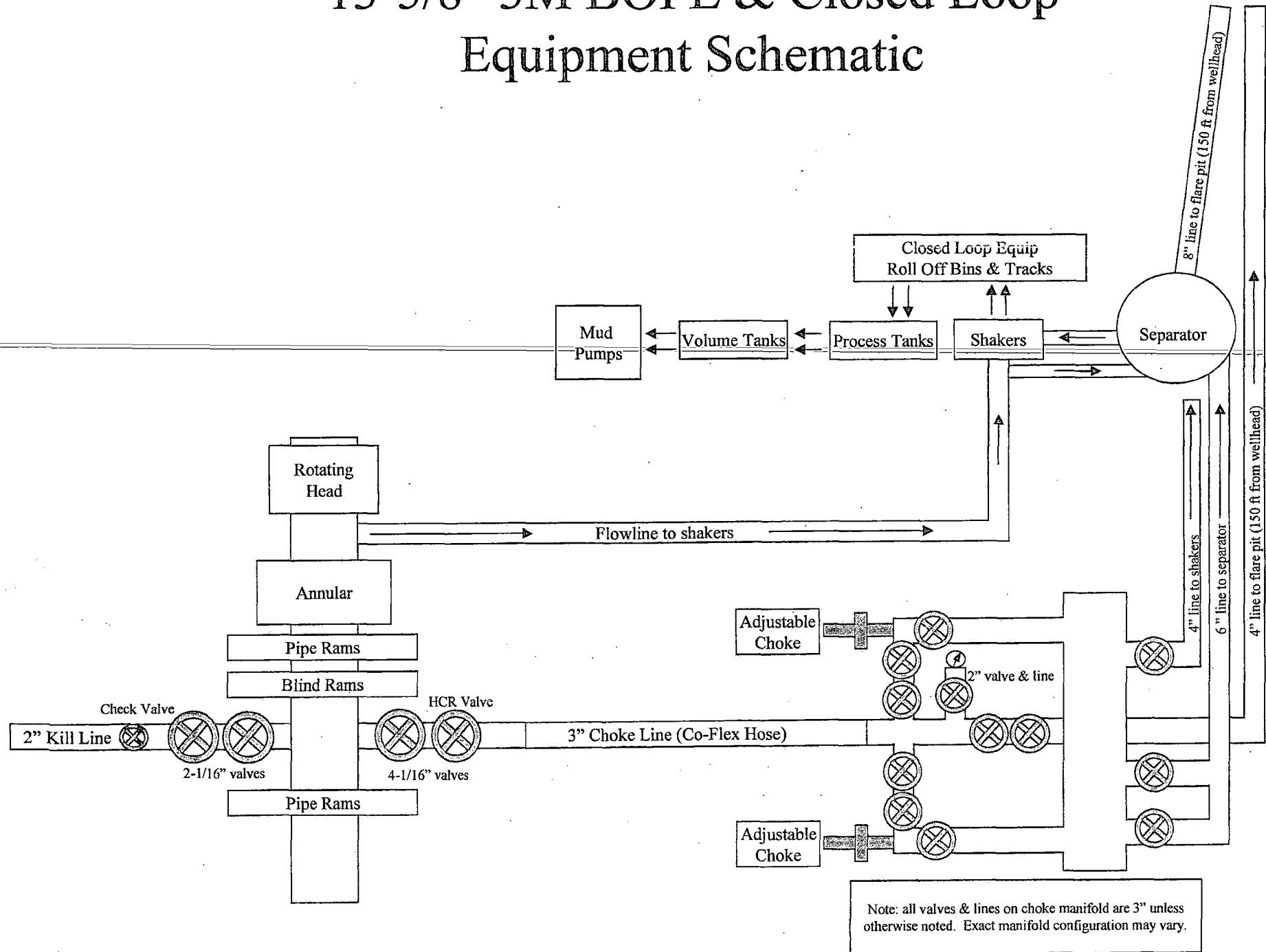
Mimosa 24 Fed Com 2H

Surface Location: 1045' FNL & 190' FWL, Unit D, Sec 24 T19S R31E, Eddy, NM

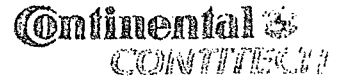
Bottom Hole Location: 1980' FNL & 340' FEL, Unit H, Sec 24 T19S R31E, Eddy, NM

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

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



Hydrostatic Test Certificate

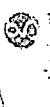
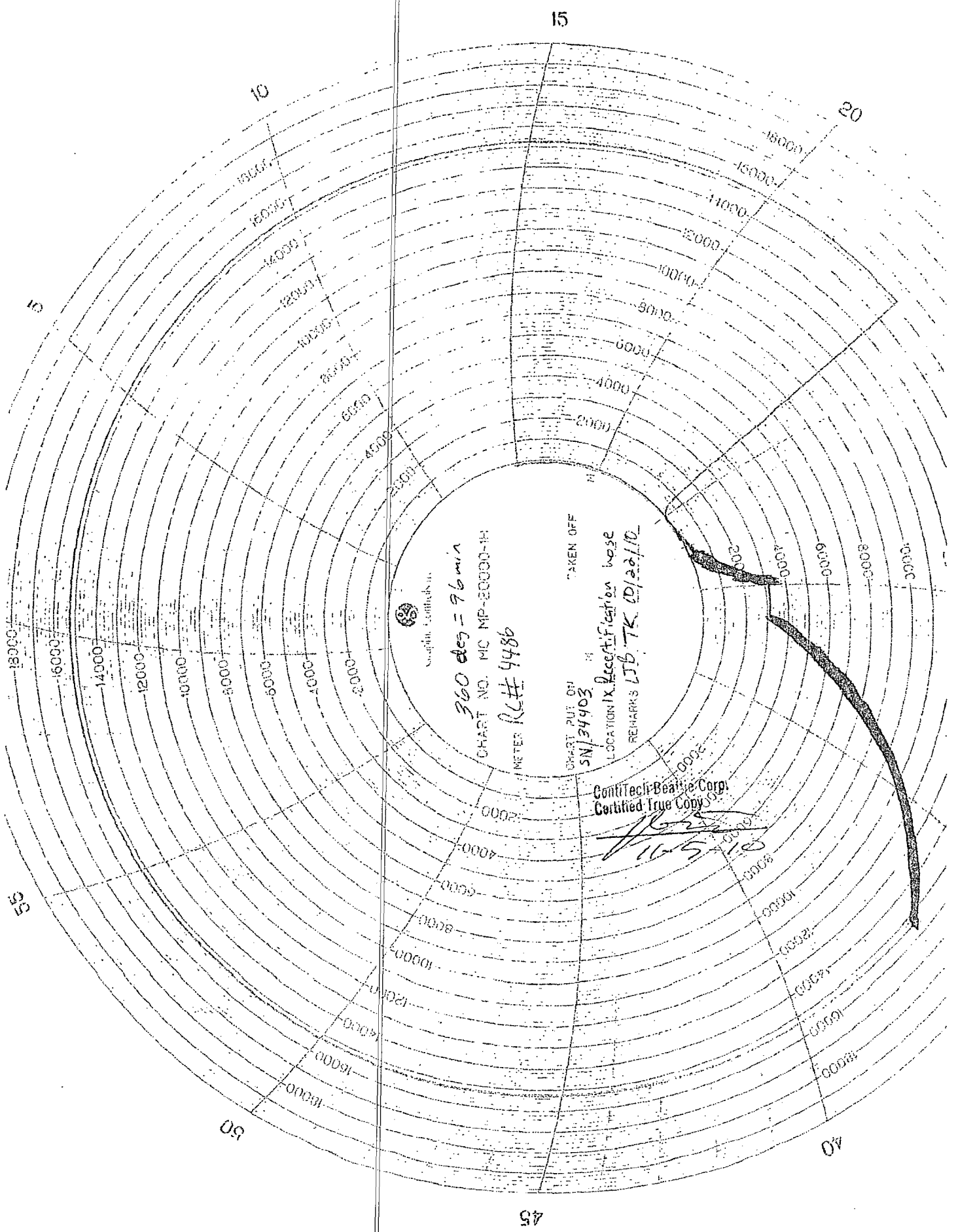


Certificate Number: 4520	PBC No: 10321	Customer Name & Address
Customer Purchase Order No: RIG 300		HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119
Project:		
Test Centre/Address	Accepted by ContiTech/Beattie Inspection	Accepted by Client Inspection
ContiTech Beattie Corp. 11535 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



360 deg = 96 min
CHART NO. MIC MP-20000-1H
METER RLT# 4486

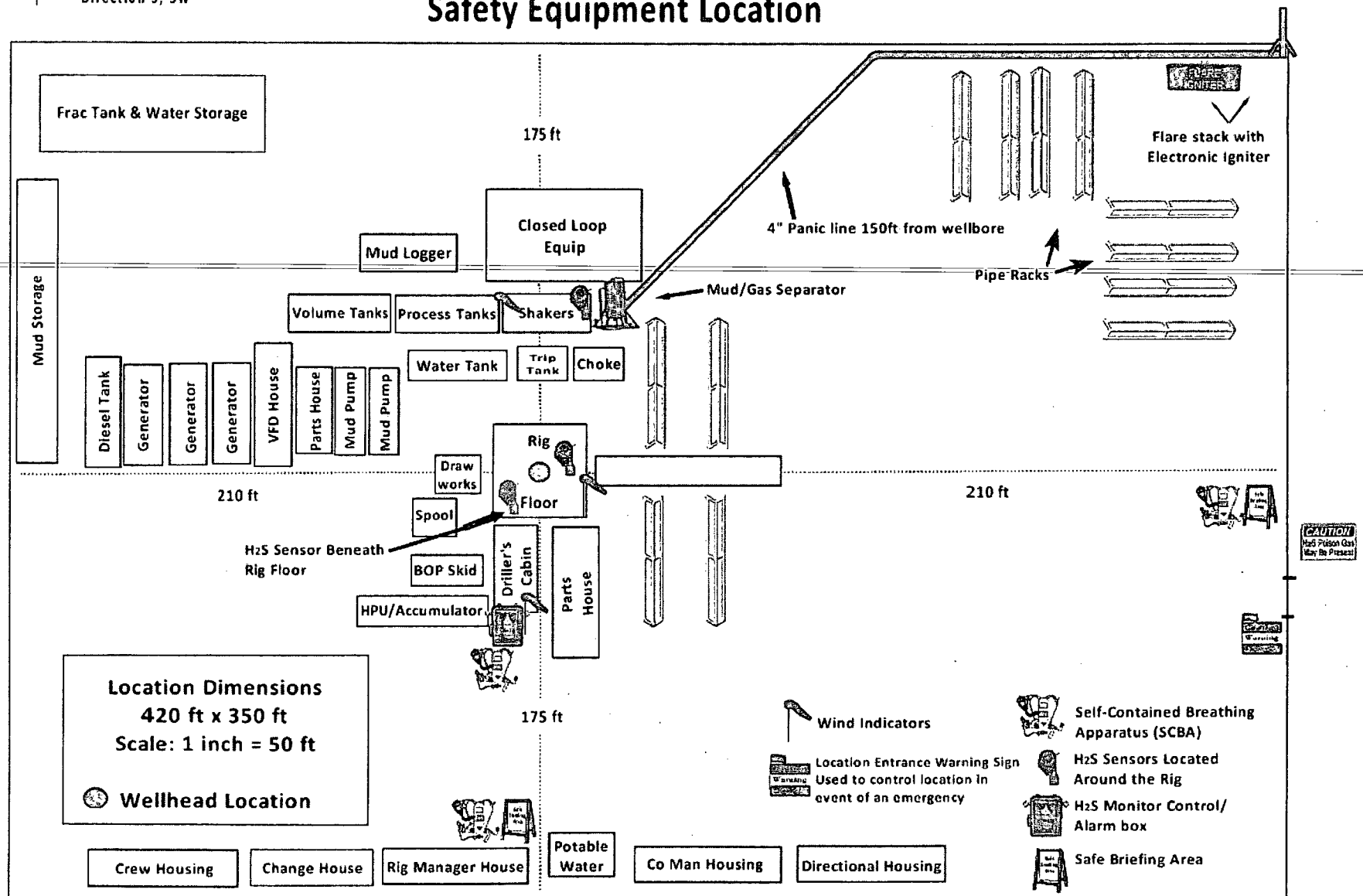
CHART PUT ON
SN 134903
LOCATION X Recertification base
REMARKS 156 TK 10/22/10

TAKEN OFF

ContiTech-Beats Corp.
Certified True Copy

[Signature]
11-5-10

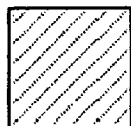
Devon Energy - Well Pad Rig Location Layout Safety Equipment Location





Proposed Interim Site Reclamation

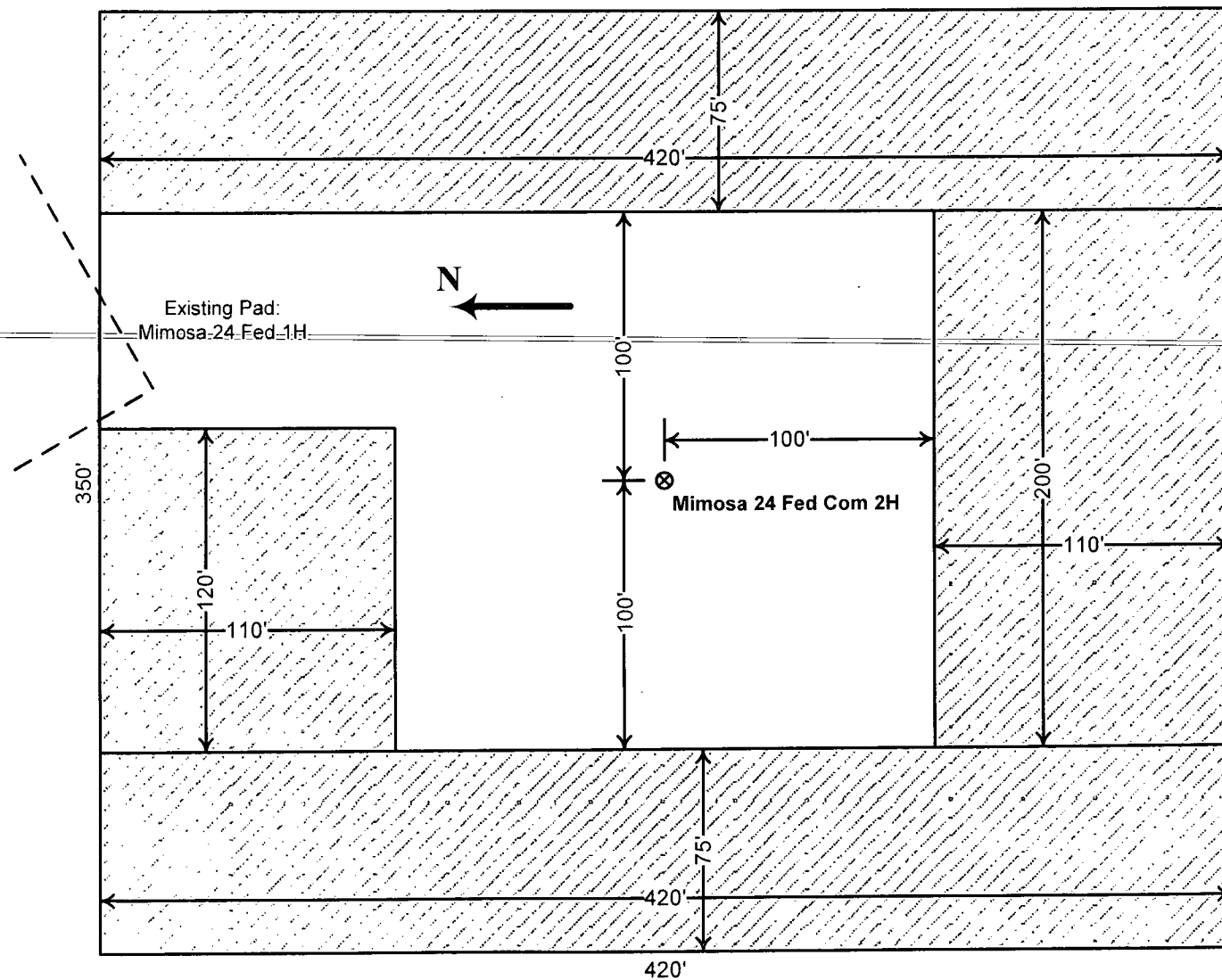
Devon Energy Production Co.
Mimosa 24 Fed Com 2H
1045' FNL & 190' FWL
Sec. 24-T19S-R31E
Eddy County, NM



Proposed
Reclamation
Area



Scale: 1in = 60ft.



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY PRODUCTION
LEASE NO.:	NMLC029358
WELL NAME & NO.:	2H-MIMOSA 24 FED COM
SURFACE HOLE FOOTAGE:	1045'/N. & 0190'/W.
BOTTOM HOLE FOOTAGE:	1980'N. & 0340'/E.
LOCATION:	Section 24, T. 19 S., R. 31 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
 - Communitization Agreement
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - H₂S – Onshore Order #6
 - Logging Requirements
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**