

DATE IN <i>6-16-11</i>	SUSPENSE	ENGINEER <i>DB</i>	LOGGED IN	TYPE <i>NSL</i>	APP NO. <i>1116733128</i>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505


Devon 6137
Thistle V#284

ADMINISTRATIVE APPLICATION CHECKLIST

30-025-40136

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]

[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]

[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]

[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]

[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]

[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

30884

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication

☒ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

*A-21-235-33E**Lea/Fed*[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply[A] ☒ Working, Royalty or Overriding Royalty Interest Owners[B] ☒ Offset Operators, Leaseholders or Surface Owner[C] ☐ Application is One Which Requires Published Legal Notice[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office[E] ☐ For all of the above, Proof of Notification or Publication is Attached; and/or,[F] ☐ Waivers are Attached
 201 JUN 16 A 8:36
 RECEIVED OGD

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

 Katie A. McDonnell
 Print or Type Name

Katie A. McDonnell
 Signature

 Title

 6/16/2011
 Date

 Katie.Mcdonnell@dmv.com
 e-mail Address



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

405 235 3611 Phone
www.devonenergy.com

June 16, 2011

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Attn: David Brooks

RE: Thistle Unit #25H
Section 21-T23S-R33E
Lea County, New Mexico

Gentlemen:

Devon Energy Production Company, L.P. ("Devon"), as Operator, intends to drill the referenced horizontal Delaware well to a total vertical depth of 9,048' with a total measured depth of 13,832'. As reflected on the attached C-102, the well has been permitted at a surface location of 150' FNL and 1,170' FEL with a permitted bottom hole location of 150' FSL and 150' FEL of Section 21. We will penetrate to top of the Delaware formation at an unorthodox location of 150' FNL and 1,170' FEL (surface hole location), although the highest and deepest perforations in the well will not be closer than 330' to the outer boundary of the project area.

The surface hole location and bottom hole location will be non-standard in order to maximize the length of the horizontal portion of the wellbore within the target Delaware interval. By spotting the surface hole location 150' from the section line, this allows room to build the curve and land horizontally at a standard location within the target Delaware interval. By spotting the bottom hole location 150' from the section line, this allows room to drill sufficient rathole for casing shoe joints. Perforations in the horizontal wellbore in the target Delaware interval will be at least 330' from the section lines. If the surface hole location and bottom hole location were placed at standard locations (330' from the section lines), this would reduce the productive horizontal interval by at least 300 feet. With the proposed well plan, the productive interval of the horizontal wellbore within the target Delaware interval is maximized.

Inasmuch as the referenced well will penetrate the top of the Delaware formation at an unorthodox location from that permitted by the Statewide Pool Rules, Devon respectfully requests that the Commission administratively approve this application for an unorthodox location in accordance with Division Rule 104(F)(3). This unorthodox location affects the leasehold owners in Unit letters B of said section 21, as well as Unit letters O and P of section 16-T23S-R33E (SHL). At the BHL, Unit letters M of section 22-T23S-R33E, D of section 27-T23S-R33E, and A of section 28-T23S-R33E are affected leasehold owners. OGX Resources is the owner of operating rights covering all of section 16-T23S-R33E, associated with State lease VB-1812. As to Unit letters B (sec. 21), M (sec. 22), D (sec. 27), and A (sec. 28), we will be non-standard to ourselves, as well as Trainer Partners, Ltd., as Devon is the operator of that portion of the Thistle Unit comprised of the E/2 of section 21, 22, 27, and 28. In accordance with NMOCD Rules, the affected offset leasehold and working interest owners have been given notice of this application. Additionally, Devon requests Commission approval to designate a 160 acre project area consisting of four standard oil spacing units comprised of the E/2 E/2 (Unit letters A, H, I, & P) of said Section 21.

NMOCD- David Brooks

Page 2

June 16, 2011

Attached for your review you will find a land plat, copies of letters of notification to the affected parties, a structure map covering the Top Delaware formation, a State of New Mexico form C-102, and a Well Profile Planning Report prepared by Pathfinder Energy Services.

Feel free to contact the undersigned at (405)552-8040 if there are any concerns or questions regarding this application.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

A handwritten signature in cursive script that reads "Katie A. McDonnell".

Katie A. McDonnell
Landman

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-102

Revised October 15, 2009

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

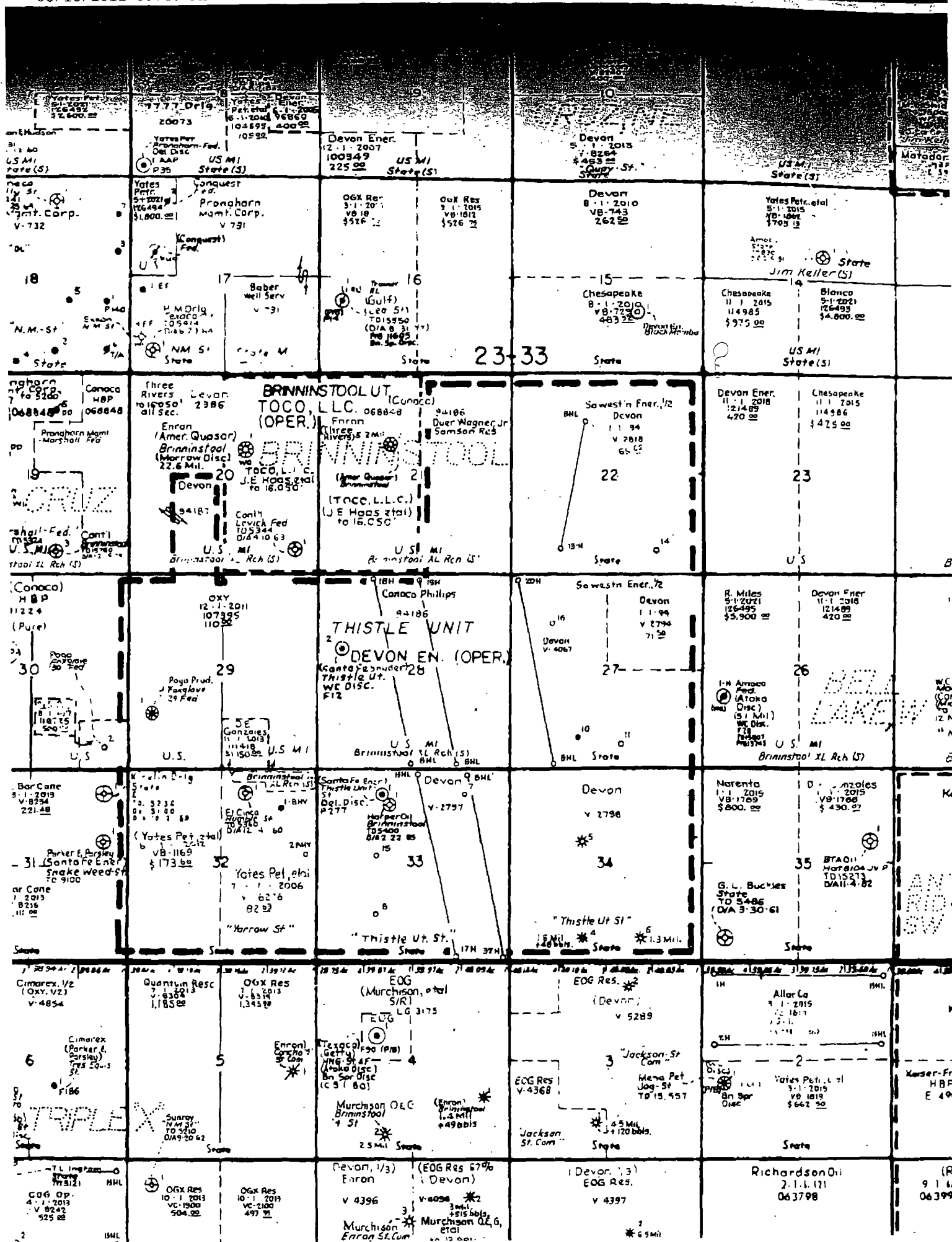
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-40136		² Pool Code 96193		³ Pool Name BRINNINSTOOL, DELAWARE	
⁴ Property Code 30884		⁵ Property Name THISTLE UNIT		⁶ Well Number 25H	
⁷ OGRID No. 6137		⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.		⁹ Elevation 3725.00	
¹⁰ Surface Location					
UL or lot no. A	Section 21	Township 23 S	Range 33 E	Lot Idn	Feet from the 150
		North/South line NORTH		Feet from the 1170	East/West line EAST
		County LEA			
¹¹ Bottom Hole Location If Different From Surface					
UL or lot no. P	Section 21	Township 23 S	Range 33 E	Lot Idn	Feet from the 150
		North/South line SOUTH		Feet from the 150	East/West line EAST
		County LEA			
¹² Dedicated Acres 160 AC		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ 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 CORNER SEC. 21 LAT. = 32°17'50.90"N LONG. = 103°35'08.99"W NMSP EAST (FT) N = 472710.16 E = 772327.19	THISTLE UNIT #25H ELEV. = 3725.0' LAT. = 32°17'49.46"N (NAD83) LONG. = 103°34'21.24"W NMSP EAST (FT) N = 472593.77 E = 776427.78	1170' SURFACE LOCATION	17 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 that well at this location pursuant to a conveyance with an owner of such a mineral or working interest, or on a voluntary pooling agreement or a compulsory pooling, under heretofore entered by the division.
		NE CORNER SEC. 21 LAT. = 32°17'50.86"N LONG. = 103°34'07.61"W NMSP EAST (FT) N = 472753.41 E = 777586.71	Signature: <i>Spence Laird</i> Date: 12/2/10
			Printed Name: SPENCE LAIRD, DEVON ENERGY
			18 SURVEYOR 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.
			Date of Survey: 12/2/10 Signature: <i>[Signature]</i> Certificate Number: 1101100011, JARAMILLO, PLS 12797 SURVEY NO. 312
SW CORNER SEC. 21 LAT. = 32°16'58.63"N LONG. = 103°35'08.98"W NMSP EAST (FT) N = 467426.94 E = 772365.23	BOTTOM OF HOLE LAT. = 32°17'00.11"N LONG. = 103°34'09.33"W NMSP EAST (FT) N = 467612.23 E = 777485.86	SE CORNER SEC. 21 LAT. = 32°16'58.63"N LONG. = 103°34'07.58"W NMSP EAST (FT) N = 467463.24 E = 777637.0	

MAY 19 2011





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

405 235 3611 Phone
www.devonenergy.com

June 16, 2011

Attn: Randall Trainer
Trainer Partners, Ltd.
P.O. Box 3778
Midland, TX 79702

Re: Thistle Unit #25H
Section 21-T23S-R33E
Lea County, NM

Gentlemen:

Attached you will find Devon Energy Production Company, L.P.'s administrative application for approval of an unorthodox well location covering the referenced well. Our records indicate that Trainer Partners, Ltd. as a working interest owner in that portion of the Thistle Unit, made up of Sections 21, 22, 27, & 28-T23S-R33E is an affected owner of an offset spacing unit and is entitled to notice of this application in accordance with Division Rule 104(f). In accordance with NMOC Rules, objections to this application must be filed with the New Mexico Oil Conservation Division within 20 days from the date the OCD receives the application. If you have no objection to this application, please so indicate by signing and returning one copy of this letter to the undersigned via facsimile to 405-552-8113.

If there are any questions or if additional information is required, feel free to call me at (405) 552-8040.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

A handwritten signature in black ink that reads "Katie A. McDonnell". The signature is written in a cursive, flowing style.

Katie A. McDonnell
Landman

Trainer Partners, Ltd. has no objection to this administrative application for unorthodox location.

By: _____

Title: _____

Date: _____



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

405 235 3611 Phone
www.devonenergy.com

June 16, 2011

OGX Resources
P.O. Box 11148
Midland, TX 79702

Re: Thistle Unit #25H
Section 21-T23S-R33E
Lea County, NM

Gentlemen:

Attached you will find Devon Energy Production Company, L.P.'s administrative application for approval of an unorthodox well location covering the referenced well. Our records indicate that OGX Resources as a leasehold owner in Section 16-T23S-R33E is an affected owner of an offset spacing unit and is entitled to notice of this application in accordance with Division Rule 104(f). In accordance with NMOCD Rules, objections to this application must be filed with the New Mexico Oil Conservation Division within 20 days from the date the OCD receives the application. If you have no objection to this application, please so indicate by signing and returning one copy of this letter to the undersigned via facsimile to 405-552-8113.

If there are any questions or if additional information is required, feel free to call me at (405) 552-8040.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

A handwritten signature in cursive script that reads "Katie A. McDonnell".

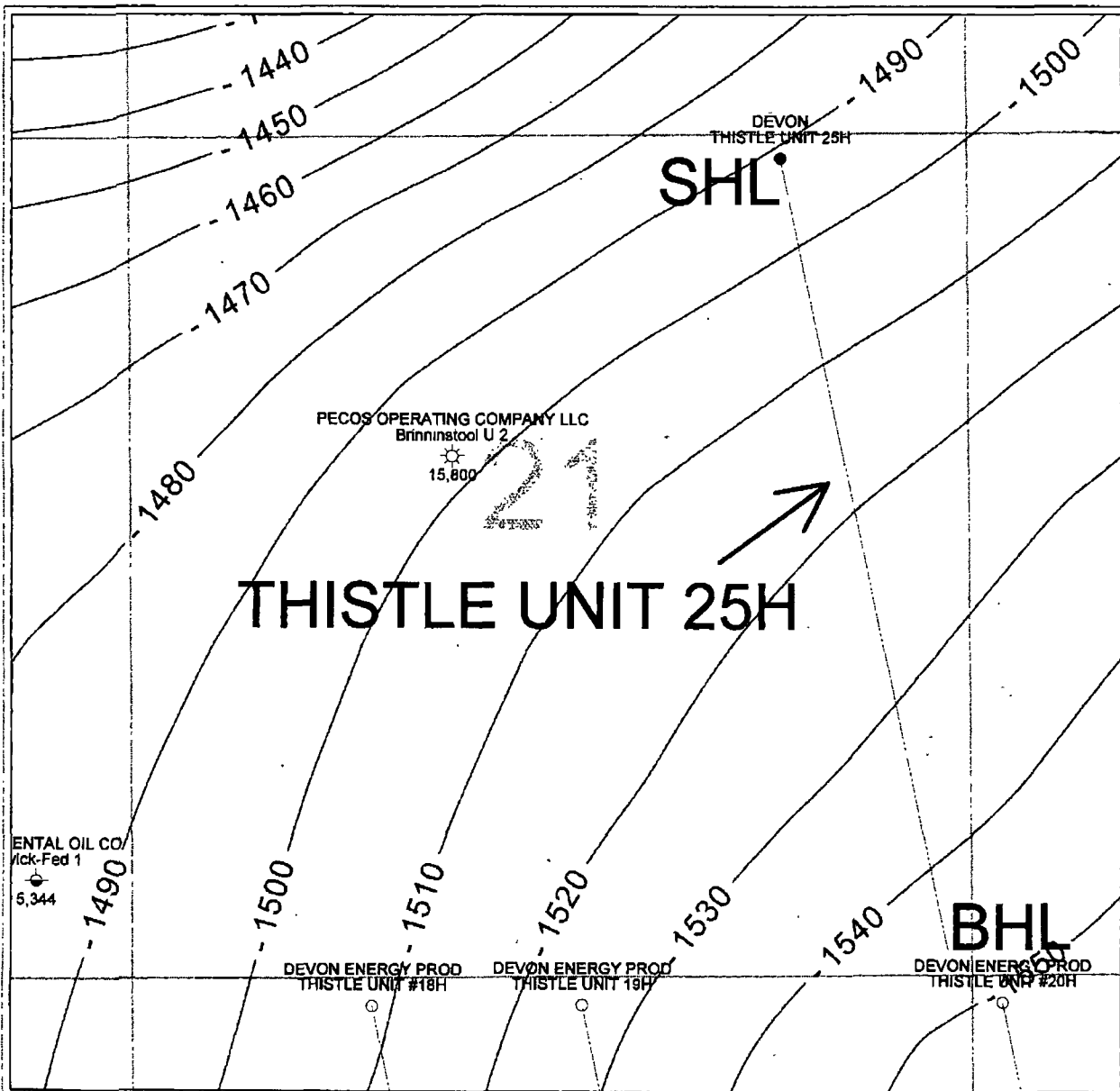
Katie A. McDonnell
Landman

OGX Resources has no objection to this administrative application for unorthodox location.

By: _____

Title: _____

Date: _____



PETRA 6/13/2011 10:29:21 AM

Devon Energy

Thistle Unit 25H

Non-Standard Location

Structure - Top Delaware



devon

Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Plan: Design #1 (#25H/OH)

PROJECT DETAILS: Lea County
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



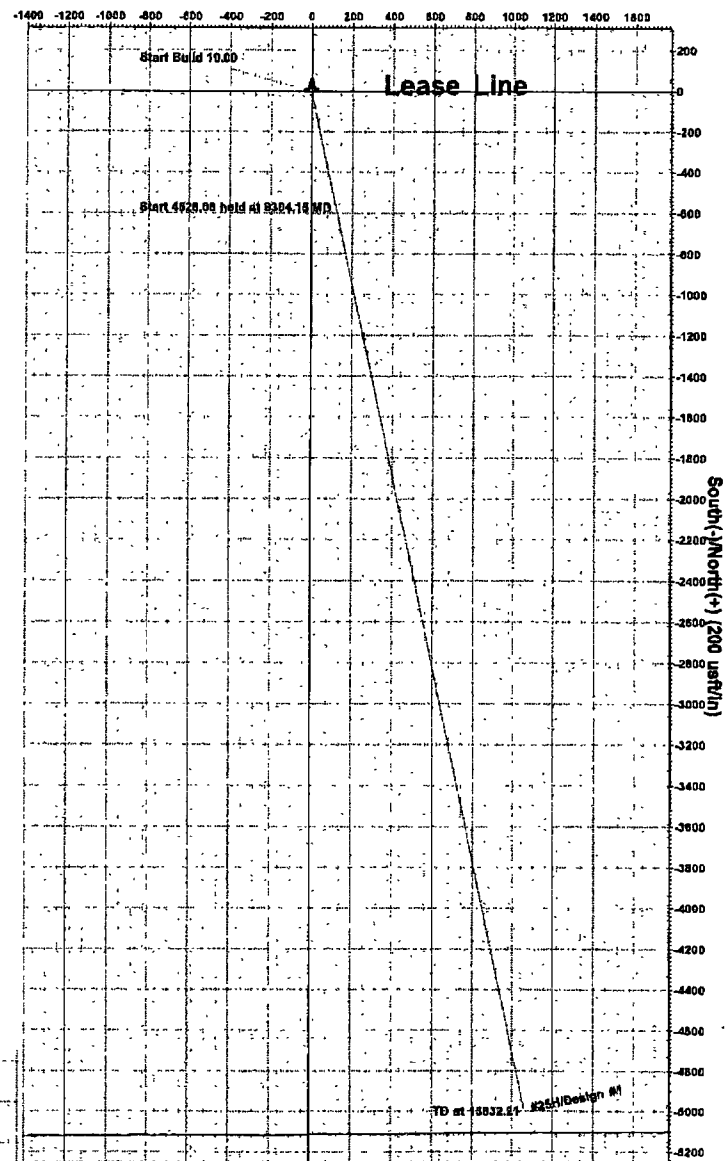
Azimuths to Grid North
True North: -0.41°
Magnetic North: 7.24°

Magnetic Field
Strength: 48745.9nT
Dip Angle: 60.28°
Date: 12/02/2010
Model: IGRF200510

PATHFINDER

A Schlumberger Company

West(-)/East(+) (200 usft/in)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dipg	TFace	VBact	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	28412.00	0.00	0.00	8412.00	0.00	0.00	0.00	0.00	0.00	
	36304.15	89.20	168.01	8985.00	-532.73	117.39	10.00	168.51	565.58	
	15832.21	89.20	168.01	9046.22	-486.57	1057.96	0.00	0.00	6092.67	PBHL(TU#25)

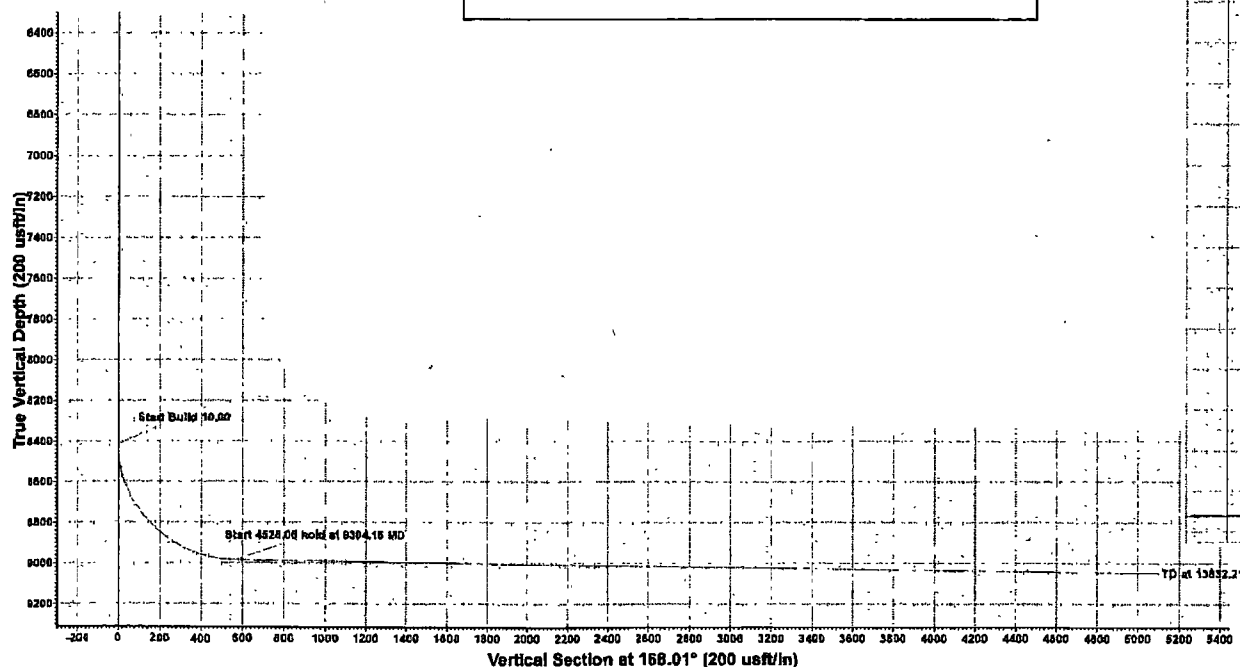
WELL DETAILS: #25H

Ground Elevation: 3729.00
RKB Elevation: WELL @ 3744.00usft (10' KB Correction)
Rig Name: 10' KB Correction

+N-S	+E-W	Northing	Easting	Latitude	Longitude	Spot
0.00	0.00	472593.770	776427.780	32° 17' 48.389 N	103° 34' 20.986 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
PBHL(TU#25)	8049.00	-4861.54	1058.08	487612.230	777485.880	Point



Plan: Design #1 (#25H/OH)

Created By: Nate Singsharn Date: 17.01, December 07 2010



Devon Energy Production Company, L.P.

Lea County

Thistle Unit

#25H

OH

Plan: Design #1

Pathfinder X & Y Planning Report

07 December, 2010

PATHFINDER
A Schlumberger Company



Pathfinder
Pathfinder X & Y Planning Report

PATHFINDER
A Schlumberger Company

Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #25H
TVD Reference: WELL @ 3744.00usft (19' KB Correction)
MD Reference: WELL @ 3744.00usft (19' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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

Site: Thistle Unit
Site Position: Northing: 467,314.060 usft Latitude: 32° 16' 56.649 N
From: Map Easting: 777,788.180 usft Longitude: 103° 34' 5.575 W
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: 0.41 °

Well: #25H
Well Position: +N-S 0.00 usft Northing: 472,593.770 usft Latitude: 32° 17' 48.988 N
+E-W 0.00 usft Easting: 776,427.780 usft Longitude: 103° 34' 20.985 W
Position Uncertainty: 0.00 usft Wellhead Elevation: usft Ground Level: 3,725.00 usft

Wellbore: OH
Magnetic: Model Name Sample Date Declination Dip Angle Field Strength
(°) (°) (nT)
IGRF200510 12/02/10 7.64 60.29 48,746

Design: Design #1
Audit Notes:
Version: Phase: PLAN Tie On Depth: 0.00
Vertical Section: Depth From (TVD) +N-S +E-W Direction
(usft) (usft) (usft) (°)
0.00 0.00 0.00 168.01

Survey Tool Program Date 12/07/10
From To
(usft) (usft) Survey (Wellbore) Tool Name Description
0.00 13,832.20 Design #1 (OH)



Pathfinder
Pathfinder X & Y Planning Report



Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #25H
WELL @ 3744.00usft (19' KB Correction)
WELL @ 3744.00usft (19' KB Correction)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (")	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	3,744.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
100.00	0.00	0.00	100.00	3,644.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
200.00	0.00	0.00	200.00	3,544.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
300.00	0.00	0.00	300.00	3,444.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
400.00	0.00	0.00	400.00	3,344.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
500.00	0.00	0.00	500.00	3,244.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
600.00	0.00	0.00	600.00	3,144.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
700.00	0.00	0.00	700.00	3,044.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
800.00	0.00	0.00	800.00	2,944.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
900.00	0.00	0.00	900.00	2,844.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,000.00	0.00	0.00	1,000.00	2,744.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,100.00	0.00	0.00	1,100.00	2,644.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,200.00	0.00	0.00	1,200.00	2,544.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,300.00	0.00	0.00	1,300.00	2,444.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,400.00	0.00	0.00	1,400.00	2,344.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,500.00	0.00	0.00	1,500.00	2,244.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,600.00	0.00	0.00	1,600.00	2,144.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,700.00	0.00	0.00	1,700.00	2,044.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,800.00	0.00	0.00	1,800.00	1,944.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
1,900.00	0.00	0.00	1,900.00	1,844.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,000.00	0.00	0.00	2,000.00	1,744.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,100.00	0.00	0.00	2,100.00	1,644.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,200.00	0.00	0.00	2,200.00	1,544.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,300.00	0.00	0.00	2,300.00	1,444.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,400.00	0.00	0.00	2,400.00	1,344.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,500.00	0.00	0.00	2,500.00	1,244.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
2,600.00	0.00	0.00	2,600.00	1,144.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	



Pathfinder
Pathfinder X & Y Planning Report

PATHFINDER
A Schlumberger Company

Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well #25H
WELL @ 3744.00usft (19' KB Correction)
WELL @ 3744.00usft (19' KB Correction)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Planned Survey												
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)		
2,700.00	0.00	0.00	2,700.00	1,044.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
2,800.00	0.00	0.00	2,800.00	944.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
2,900.00	0.00	0.00	2,900.00	844.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,000.00	0.00	0.00	3,000.00	744.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,100.00	0.00	0.00	3,100.00	644.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,200.00	0.00	0.00	3,200.00	544.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,300.00	0.00	0.00	3,300.00	444.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,400.00	0.00	0.00	3,400.00	344.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,500.00	0.00	0.00	3,500.00	244.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,600.00	0.00	0.00	3,600.00	144.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,700.00	0.00	0.00	3,700.00	44.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,800.00	0.00	0.00	3,800.00	-56.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
3,900.00	0.00	0.00	3,900.00	-156.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,000.00	0.00	0.00	4,000.00	-256.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,100.00	0.00	0.00	4,100.00	-356.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,200.00	0.00	0.00	4,200.00	-456.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,300.00	0.00	0.00	4,300.00	-556.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,400.00	0.00	0.00	4,400.00	-656.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,500.00	0.00	0.00	4,500.00	-756.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,600.00	0.00	0.00	4,600.00	-856.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,700.00	0.00	0.00	4,700.00	-956.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,800.00	0.00	0.00	4,800.00	-1,056.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
4,900.00	0.00	0.00	4,900.00	-1,156.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
5,000.00	0.00	0.00	5,000.00	-1,256.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
5,100.00	0.00	0.00	5,100.00	-1,356.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
5,200.00	0.00	0.00	5,200.00	-1,456.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		
5,300.00	0.00	0.00	5,300.00	-1,556.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78		



Pathfinder
Pathfinder X & Y Planning Report



Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well #25H
WELL @ 3744.00usft (19' KB Correction)
WELL @ 3744.00usft (19' KB Correction)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (")	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
5,400.00	0.00	0.00	5,400.00	-1,656.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
5,500.00	0.00	0.00	5,500.00	-1,756.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
5,600.00	0.00	0.00	5,600.00	-1,856.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
5,700.00	0.00	0.00	5,700.00	-1,956.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
5,800.00	0.00	0.00	5,800.00	-2,056.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
5,900.00	0.00	0.00	5,900.00	-2,156.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,000.00	0.00	0.00	6,000.00	-2,256.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,100.00	0.00	0.00	6,100.00	-2,356.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,200.00	0.00	0.00	6,200.00	-2,456.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,300.00	0.00	0.00	6,300.00	-2,556.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,400.00	0.00	0.00	6,400.00	-2,656.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,500.00	0.00	0.00	6,500.00	-2,756.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,600.00	0.00	0.00	6,600.00	-2,856.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,700.00	0.00	0.00	6,700.00	-2,956.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,800.00	0.00	0.00	6,800.00	-3,056.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
6,900.00	0.00	0.00	6,900.00	-3,156.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,000.00	0.00	0.00	7,000.00	-3,256.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,100.00	0.00	0.00	7,100.00	-3,356.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,200.00	0.00	0.00	7,200.00	-3,456.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,300.00	0.00	0.00	7,300.00	-3,556.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,400.00	0.00	0.00	7,400.00	-3,656.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,500.00	0.00	0.00	7,500.00	-3,756.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,600.00	0.00	0.00	7,600.00	-3,856.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,700.00	0.00	0.00	7,700.00	-3,956.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,800.00	0.00	0.00	7,800.00	-4,056.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
7,900.00	0.00	0.00	7,900.00	-4,156.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	
8,000.00	0.00	0.00	8,000.00	-4,256.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78	



Pathfinder
Pathfinder X & Y Planning Report

PATHFINDER
A Schlumberger Company

Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
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Survey Calculation Method:
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Well #25H
WELL @ 3744.00usft (19' KB Correction)
WELL @ 3744.00usft (19' KB Correction)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Az (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sep (usft)	DLog (°/100usft)	Northing (usft)	Easting (usft)
8,100.00	0.00	0.00	8,100.00	-4,356.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78
8,200.00	0.00	0.00	8,200.00	-4,456.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78
8,300.00	0.00	0.00	8,300.00	-4,558.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78
8,400.00	0.00	0.00	8,400.00	-4,656.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78
8,412.00	0.00	0.00	8,412.00	-4,668.00	0.00	0.00	0.00	0.00	472,593.77	776,427.78
8,450.00	3.80	168.01	8,449.97	-4,705.97	-1.23	0.26	1.26	10.00	472,592.54	776,428.04
8,500.00	8.80	168.01	8,489.65	-4,755.65	-6.60	1.40	6.74	10.00	472,587.17	776,429.18
8,550.00	13.80	168.01	8,548.67	-4,804.67	-16.18	3.44	16.54	10.00	472,577.59	776,431.22
8,600.00	18.80	168.01	8,596.65	-4,852.65	-29.90	6.35	30.56	10.00	472,563.87	776,434.13
8,650.00	23.80	168.01	8,643.22	-4,899.22	-47.65	10.12	48.72	10.00	472,546.12	776,437.90
8,700.00	28.80	168.01	8,688.03	-4,944.03	-69.31	14.72	70.86	10.00	472,524.46	776,442.50
8,750.00	33.79	168.01	8,730.74	-4,986.74	-94.71	20.11	96.82	10.00	472,499.06	776,447.88
8,800.00	38.79	168.01	8,771.03	-5,027.03	-123.65	26.26	126.41	10.00	472,470.12	776,454.04
8,850.00	43.79	168.01	8,808.58	-5,064.58	-155.92	33.11	159.40	10.00	472,437.85	776,460.89
8,900.00	48.79	168.01	8,843.12	-5,099.12	-191.26	40.62	195.53	10.00	472,402.51	776,468.40
8,950.00	53.79	168.01	8,874.38	-5,130.38	-229.41	48.72	234.53	10.00	472,364.38	776,476.50
9,000.00	58.79	168.01	8,902.12	-5,158.12	-270.09	57.36	276.11	10.00	472,323.68	776,485.14
9,050.00	63.79	168.01	8,926.13	-5,182.13	-312.97	66.47	319.95	10.00	472,280.80	776,494.25
9,100.00	68.79	168.01	8,946.23	-5,202.23	-357.74	75.97	365.71	10.00	472,236.03	776,503.75
9,150.00	73.79	168.01	8,962.27	-5,218.27	-404.05	85.81	413.06	10.00	472,189.72	776,513.59
9,200.00	78.79	168.01	8,974.12	-5,230.12	-451.55	95.90	461.62	10.00	472,142.22	776,523.68
9,250.00	83.79	168.01	8,981.69	-5,237.69	-499.88	106.16	511.02	10.00	472,093.89	776,533.94
9,304.15	89.20	168.01	8,985.00	-5,241.00	-552.73	117.39	565.05	10.00	472,041.04	776,545.17
9,400.00	89.20	168.01	8,986.34	-5,242.34	-646.47	137.29	660.89	0.00	471,947.30	776,565.07
9,500.00	89.20	168.01	8,987.73	-5,243.73	-744.28	158.07	760.88	0.00	471,849.49	776,585.85
9,600.00	89.20	168.01	8,989.13	-5,245.13	-842.09	178.84	860.87	0.00	471,751.88	776,606.62
9,700.00	89.20	168.01	8,990.53	-5,246.53	-939.90	199.61	960.86	0.00	471,653.87	776,627.39



Pathfinder
Pathfinder X & Y Planning Report



06/16/2011 09:44 FAX 552 8113

DEVON ENERGY

017/018

Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Coordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #25H
WELL @ 3744.00usft (19' KB Correction)
WELL @ 3744.00usft (19' KB Correction)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sep (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,800.00	89.20	168.01	8,991.92	-5,247.92	-1,037.71	220.38	1,060.85	0.00	471,556.06	776,848.16
9,900.00	89.20	168.01	8,993.32	-5,249.32	-1,135.52	241.15	1,160.84	0.00	471,458.25	776,688.93
10,000.00	89.20	168.01	8,994.72	-5,250.72	-1,233.33	261.93	1,260.83	0.00	471,360.44	776,689.71
10,100.00	89.20	168.01	8,996.11	-5,252.11	-1,331.14	282.70	1,360.82	0.00	471,262.63	776,710.48
10,200.00	89.20	168.01	8,997.51	-5,253.51	-1,428.95	303.47	1,460.81	0.00	471,164.82	776,731.25
10,300.00	89.20	168.01	8,998.90	-5,254.90	-1,526.75	324.24	1,560.81	0.00	471,067.02	776,752.02
10,400.00	89.20	168.01	9,000.30	-5,256.30	-1,624.56	345.02	1,660.80	0.00	470,969.21	776,772.80
10,500.00	89.20	168.01	9,001.70	-5,257.70	-1,722.37	365.79	1,760.79	0.00	470,871.40	776,793.57
10,600.00	89.20	168.01	9,003.09	-5,259.09	-1,820.18	386.56	1,860.78	0.00	470,773.59	776,814.34
10,700.00	89.20	168.01	9,004.49	-5,260.49	-1,917.99	407.33	1,960.77	0.00	470,675.78	776,835.11
10,800.00	89.20	168.01	9,005.89	-5,261.89	-2,015.80	428.10	2,060.76	0.00	470,577.97	776,855.88
10,900.00	89.20	168.01	9,007.28	-5,263.28	-2,113.61	448.88	2,160.75	0.00	470,480.16	776,876.66
11,000.00	89.20	168.01	9,008.68	-5,264.68	-2,211.42	469.65	2,260.74	0.00	470,382.35	776,897.43
11,100.00	89.20	168.01	9,010.07	-5,266.07	-2,309.23	490.42	2,360.73	0.00	470,284.54	776,918.20
11,200.00	89.20	168.01	9,011.47	-5,267.47	-2,407.03	511.19	2,460.72	0.00	470,186.74	776,938.97
11,300.00	89.20	168.01	9,012.87	-5,268.87	-2,504.84	531.96	2,560.71	0.00	470,088.93	776,959.74
11,400.00	89.20	168.01	9,014.26	-5,270.26	-2,602.65	552.74	2,660.70	0.00	469,991.12	776,980.52
11,500.00	89.20	168.01	9,015.66	-5,271.66	-2,700.46	573.51	2,760.69	0.00	469,893.31	777,001.29
11,600.00	89.20	168.01	9,017.06	-5,273.06	-2,798.27	594.28	2,860.68	0.00	469,795.50	777,022.06
11,700.00	89.20	168.01	9,018.45	-5,274.45	-2,896.08	615.05	2,960.67	0.00	469,697.69	777,042.83
11,800.00	89.20	168.01	9,019.85	-5,275.85	-2,993.89	635.82	3,060.66	0.00	469,599.88	777,063.60
11,900.00	89.20	168.01	9,021.24	-5,277.24	-3,091.70	656.60	3,160.65	0.00	469,502.07	777,084.38
12,000.00	89.20	168.01	9,022.64	-5,278.64	-3,189.50	677.37	3,260.64	0.00	469,404.27	777,105.15
12,100.00	89.20	168.01	9,024.04	-5,280.04	-3,287.31	698.14	3,360.63	0.00	469,306.46	777,125.92
12,200.00	89.20	168.01	9,025.43	-5,281.43	-3,385.12	718.91	3,460.62	0.00	469,208.65	777,146.69
12,300.00	89.20	168.01	9,026.83	-5,282.83	-3,482.93	739.68	3,560.61	0.00	469,110.84	777,167.46
12,400.00	89.20	168.01	9,028.22	-5,284.22	-3,580.74	760.46	3,660.60	0.00	469,013.03	777,188.24



Pathfinder
Pathfinder X & Y Planning Report

PATHFINDER
A Schlumberger Company

Company: Devon Energy Production Company, L.P.
Project: Lea County
Site: Thistle Unit
Well: #25H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #25H
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MD Reference: WELL @ 3744.00usft (18' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLag (1/100usft)	Northing (usft)	Easting (usft)	
12,500.00	89.20	168.01	9,029.62	-5,285.62	-3,678.55	781.23	3,760.59	0.00	468,915.22	777,209.01	
12,600.00	89.20	168.01	9,031.02	-5,287.02	-3,776.36	802.00	3,860.58	0.00	468,817.41	777,229.78	
12,700.00	89.20	168.01	9,032.41	-5,288.41	-3,874.17	822.77	3,960.57	0.00	468,719.60	777,250.55	
12,800.00	89.20	168.01	9,033.81	-5,289.81	-3,971.98	843.54	4,060.56	0.00	468,621.79	777,271.32	
12,900.00	89.20	168.01	9,035.21	-5,291.21	-4,069.78	864.32	4,160.55	0.00	468,523.99	777,292.10	
13,000.00	89.20	168.01	9,036.60	-5,292.60	-4,167.59	885.09	4,260.54	0.00	468,426.18	777,312.87	
13,100.00	89.20	168.01	9,038.00	-5,294.00	-4,265.40	905.86	4,360.53	0.00	468,328.37	777,333.64	
13,200.00	89.20	168.01	9,039.39	-5,295.39	-4,363.21	926.63	4,460.52	0.00	468,230.56	777,354.41	
13,300.00	89.20	168.01	9,040.79	-5,296.79	-4,461.02	947.41	4,560.51	0.00	468,132.75	777,375.19	
13,400.00	89.20	168.01	9,042.19	-5,298.19	-4,558.83	968.18	4,660.50	0.00	468,034.94	777,395.96	
13,500.00	89.20	168.01	9,043.58	-5,299.58	-4,656.64	988.95	4,760.49	0.00	467,937.13	777,416.73	
13,600.00	89.20	168.01	9,044.98	-5,300.98	-4,754.45	1,009.72	4,860.48	0.00	467,839.32	777,437.50	
13,700.00	89.20	168.01	9,046.38	-5,302.38	-4,852.26	1,030.49	4,960.47	0.00	467,741.51	777,458.27	
13,800.00	89.20	168.01	9,047.77	-5,303.77	-4,950.06	1,051.27	5,060.46	0.00	467,643.71	777,479.05	
13,832.20	89.20	168.01	9,048.22	-5,304.22	-4,981.56	1,057.96	5,092.67	0.00	467,612.21	777,485.74	
PBHL(TU#25)											

Checked By: _____ Approved By: _____ Date: _____



RECEIVED OCD

2011 JUN 16 A 8:35

Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260
Fax: 405-552-8113

FAX

To: David Brooks
NMOCD

From: Katie McDonnell
Office: 405-552-8040

Fax: 505-476-3462

Date: June 16, 2011

Phone: 505-476-3450

Pages: 18 (including cover page)

Re: NSL Application: Thistle Unit 25H

☐ Urgent

☐ For Review

☐ Please Comment

☐ Please Reply

☐ Please Recycle

● Comments: