

HOBBBS OCD

AT3-12-1096

Form 3160-3
(March 2012)

JUL 17 2013

SECRETARY'S POTASH

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. BHL: NM-34850 SHL: 84810	
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, L.P.		7. If Unit or CA Agreement, Name and No.	
3a. Address 333 W. SHERIDAN OKLAHOMA CITY, OK. 73102		8. Lease Name and Well No. <40034> SYLVITE 22 FED COM 2H	
3b. Phone No. (include area code) <6137> (405) 552-4524		9. API Well No. 30-025-41274	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1100 FNL & 330 FEL At proposed prod. zone 1980 FNL & 330 FWL		10. Field and Pool, or Exploratory SEMI <27260> UNDESIGNATED DELAWARE, East	
14. Distance in miles and direction from nearest town or post office* 15.25 MILES SOUTHEAST OF MALJAMAR, NM		11. Sec., T. R. M. or Blk. and Survey or Area SECTION 22, T. 19 S., R. 33 E.	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of acres in lease 160 680	17. Spacing Unit dedicated to this well 160	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1435' (BHL) 50' (SHL)	19. Proposed Depth MD: 12364' TVD: 7890'	20. BLM/BIA Bond No. on file NMB-000801 CO-1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3645.9' 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature Barry W. Hunt	Name (Printed/Typed) BARRY W. HUNT	Date 8/9/12
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Title
PERMIT AGENT FOR DEVON ENERGY PRODUCTION COMPANY, L.P.

Approved by (Signature) /s/ Jesse J. Juen	Name (Printed/Typed)	Date
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Title
STATE DIRECTOR

Office

NM STATE OFFICE

JUL 11 2013

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)

*(Instructions on page 2)

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

JUL 21 2013

DEVON ENERGY PRODUCTION, L. P.
DRILLING PLAN

SYLVITE 22 FED COM 2H
SHL: 1100 FNL & 330 FEL
BHL: 1980 FNL & 330 FWL
Section 22-19S-33E
LEA County, NM

The elevation of the unprepared ground is 3645.9' 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: 12364'. TVD: 7890'.

Estimated tops of important geologic markers:

Quaternary – Alluvium	Surface*
Rustler	1423'
Top of Salt	1749'
Salado	1807'
Base of Salt	3096'
Yates	3302'
Seven Rivers	3720'
Queen	4303'
Cherry Canyon	5200'
Brushy Canyon	6269'
TVD	7890' (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:

Yates	Oil (1453 psi)
Seven Rivers	Oil (1637 psi)
Queen	Oil (1893 psi)
Cherry Canyon	Oil (2288 psi)
Brushy Canyon	Oil (2758 psi)
TVD	Oil BHP 3472 psi

Sylvite 22 Fed Com 2H Drilling Plan

1. Pressure Control Equipment

BOP DESIGN: The BOP system used to drill the intermediate and production holes will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the prior casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

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

5th
COA

2. Casing and Cementing Plan Summary

The surface fresh water sands will be protected by setting 13-3/8" casing at 1,500' and circulating cement back to surface. The fresh water sands will be protected by setting 9-5/8" casing at 3,150' and circulating cement to surface. The Delaware intervals will be isolated by setting 5-1/2" casing to total depth of 12,364' and circulating cement to surface. All casing is new and API approved.

3. Casing Program: (All New Casing)

<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 – 1,500	13-3/8"	0 – 1,500	54.5#	BTC	J-55
12-1/4"	1,500 – 3,150	9-5/8"	0 – 3,150	40#	LTC	J-55
8-3/4"	3,150 – 7,200	5-1/2"	0 – 7,200	17#	LTC	HCP-110
8-3/4"	7,200 – 12,364	5-1/2"	7,200– 12,364	17#	BTC	HCP-110

Maximum TVD in the lateral 7,395'

4. Design Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8"	1.61	3.89	11.12
9-5/8" 40# J-55 LTC	1.57	2.41	4.13
5-1/2" 17# HCP-110 LTC	2.16	3.07	2.12
5-1/2" 17# HCP-110 BTC	2.55	3.13	6.47

Drilling Program / Surface Use Plan
Discipline-Specific Input Form

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. There is no potential for the intermediate casing to be used as a production string. Note: only new casing will be utilized

5. **Cement Program:**

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

13-3/8" Surface 1000 ft **Lead:** 800 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

500 ft Tail: 515 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 2150 ft. **Lead:** 600 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

1000 ft Tail: 360 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 1200 ft **1st Stage**

Lead: 200 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

5570 ft Tail: 1445 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

See COA **DV TOOL at 6000 ft**

2nd Stage 5000 ft

Lead: 550 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

1000 ft. Tail: 250 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg

Yield: 1.33cf/sk

Drilling Program / Surface Use Plan
Discipline-Specific Input Form

TOC @ surface

TOC for All Strings:

Surface: 0'
Intermediate: 0'
Production: 2,650'

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

6. Proposed Mud Circulation System:

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 – 1,500	8.4 – 9.0	30 – 34	N/C	FW
1,500 – 3,150	9.8 – 10.0	28 – 32	N/C	Brine
3,150 – 12,364	8.6 – 9.0	28 – 32	N/C-12	FW

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

See COA - mud monitoring system

7. LOGGING, CORING, AND TESTING PROGRAM:

- Drill stem tests will be based on geological sample shows.
- If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- The open hole electrical logging program will be:
 - Total depth to intermediate casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - Total Depth to Surface Compensated Neutron with Gamma Ray.
 - No coring program is planned.
 - Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

8. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 13.375" casing shoe until the 5.5" casing is cemented. Breathing equipment will be on location upon drilling the 13.375" shoe until total depth is reached.

9. Potential Hazards:

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. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP of 3472 psi and estimated BHT 145°. No H₂S is anticipated to be encountered.

See COA

Drilling Program / Surface Use Plan
Discipline-Specific Input Form

10. Anticipated Starting Date and Duration of Operations:

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. 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 the well and construct surface facilities and/or lay flow lines in order to place well on production.

Drilling Program / Surface Use Plan
Discipline-Specific Input Form

- iii. I & W Inc, Loco Hill NM
- iv. Jims Water Service of Co Inc, Denver CO

12. 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:
 - 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 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.



Azimuths to Grid North
True North: -0.37°
Magnetic North: 7.15°

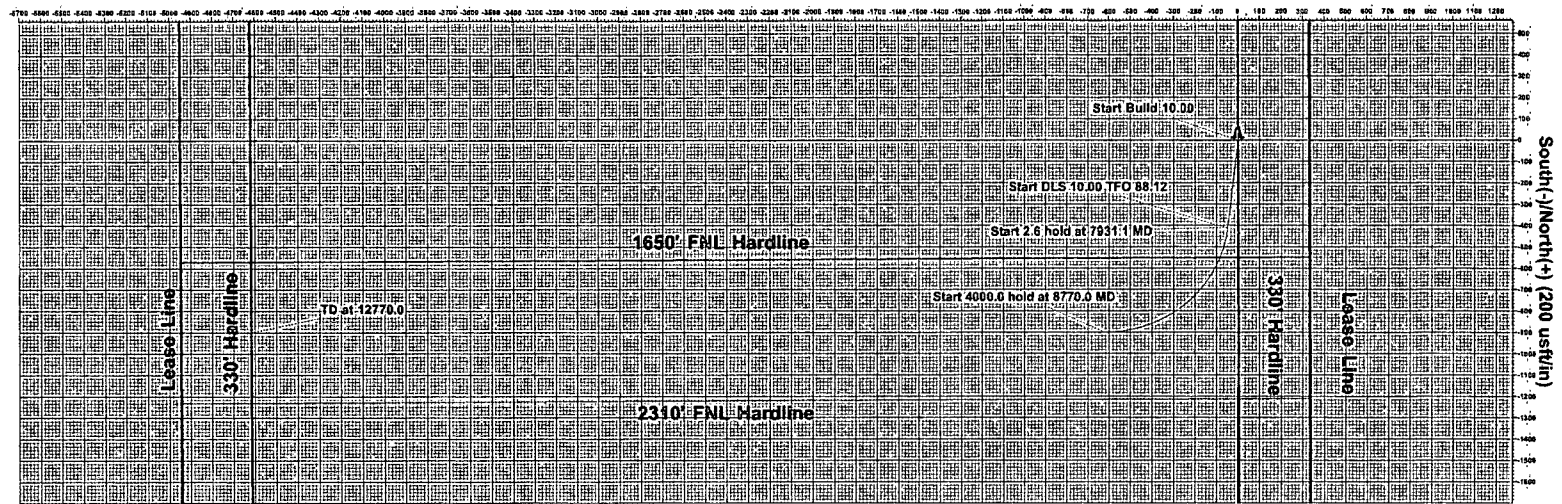
Magnetic Field
Strength: 48758.7snT
Dip Angle: 60.54°
Date: 7/2/2012
Model: IGRF2010

PROJECT DETAILS: Lea 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

PATHFINDER®
A Schlumberger Company

Project: Lea County (NAD83)
Site: Sylvite 22 Fed
Well: #2H
Wellbore: OH
Plan: Plan #3 (#2H/OH)

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



WELL DETAILS: #2H

Ground Elevation: 3545.9
RKB Elevation: KB = 19 @ 3564.9usft (McVay 8)
Rig Name: McVay 8

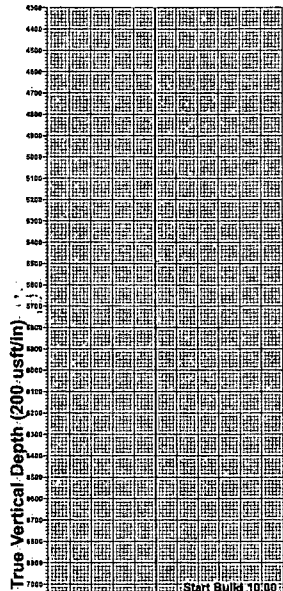
+N/-S	+E/-W	Northing	Easting	Lat/Ltude	Long/Ltude	Slot
0.0	0.0	800872.000	753677.500	32.649949	-103.643435	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(Sylvite 22 Fed #2H)	7890.0	-899.4	-4617.3	599972.600	749060.100	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	7195.0	0.00	0.00	7195.0	0.0	0.0	0.00	0.00	0.0	
3	7931.1	73.61	186.65	7744.7	-406.8	-47.8	10.00	166.65	124.8	
4	7933.7	73.61	186.65	7745.4	-411.0	-47.9	9.00	0.00	125.6	
5	8770.0	90.00	270.00	7890.0	-899.4	-4617.3	10.00	88.12	777.9	
6	12770.0	90.00	270.00	7890.0	-899.4	-4617.3	0.00	0.00	4704.1	PBHL(Sylvite 22 Fed #2H)



Vertical Section at 258.98° (200 usft/in)

Plan: Plan #3 (#2H/OH)

Created By: Michael Trout Date: 16:32, January 28 2013

Checked: _____ Date: _____

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Devon Energy, Inc.

Lea County (NAD83)

Sylvite 22 Fed

#2H

OH

Plan: Plan #3

Pathfinder X&Y Report

28 January, 2013

The word "devon" in a lowercase, sans-serif font. Above the letters "n" and "o" are three horizontal bars of increasing length, stacked vertically.

devon



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Pathfinder

Pathfinder X&Y Report



Company: Devon Energy, Inc.
Project: Lea County (NAD83)
Site: Sylvite 22 Fed
Well: #2H
Wellbore: OH
Design: Plan #3

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 19 @ 3664.9usft (McVay 8)
MD Reference: KB = 19 @ 3664.9usft (McVay 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project Lea County (NAD83)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site Sylvite 22 Fed

Site Position:	Northing:	600,922.000 usft	Latitude:	32.650086
From: Map	Easting:	753,677.200 usft	Longitude:	-103.643435
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:
				0.37 °

Well #2H

Well Position	+N/-S	0.0 usft	Northing:	600,872.000 usft	Latitude:	32.649949
	+E/-W	0.0 usft	Easting:	753,677.500 usft	Longitude:	-103.643435
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,645.9 usft	

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/2/2012	7.52	60.54	48,759

Design Plan #3

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	258.98

Survey Tool Program Date 10/9/2012

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	12,770.0	Plan #3 (OH)	MWD	MWD - Standard



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Pathfinder

Pathfinder X&Y Report



Company: Devon Energy, Inc.
Project: Lea County (NAD83)
Site: Sylville 22 Fed
Well: #2H
Wellbore: OH
Design: Plan #3

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 19 @ 3664.9usft (McVay 8)
MD Reference: KB = 19 @ 3664.9usft (McVay 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	-3,664.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
100.0	0.00	0.00	100.0	-3,564.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
200.0	0.00	0.00	200.0	-3,464.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
300.0	0.00	0.00	300.0	-3,364.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
400.0	0.00	0.00	400.0	-3,264.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
500.0	0.00	0.00	500.0	-3,164.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
600.0	0.00	0.00	600.0	-3,064.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
700.0	0.00	0.00	700.0	-2,964.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
800.0	0.00	0.00	800.0	-2,864.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
900.0	0.00	0.00	900.0	-2,764.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,000.0	0.00	0.00	1,000.0	-2,664.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,100.0	0.00	0.00	1,100.0	-2,564.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,200.0	0.00	0.00	1,200.0	-2,464.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,300.0	0.00	0.00	1,300.0	-2,364.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,400.0	0.00	0.00	1,400.0	-2,264.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,423.0	0.00	0.00	1,423.0	-2,241.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Rustler										
1,500.0	0.00	0.00	1,500.0	-2,164.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,600.0	0.00	0.00	1,600.0	-2,064.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,700.0	0.00	0.00	1,700.0	-1,964.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,800.0	0.00	0.00	1,800.0	-1,864.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
1,807.0	0.00	0.00	1,807.0	-1,857.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Salado										
1,900.0	0.00	0.00	1,900.0	-1,764.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,000.0	0.00	0.00	2,000.0	-1,664.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,100.0	0.00	0.00	2,100.0	-1,564.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,200.0	0.00	0.00	2,200.0	-1,464.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50



A Schlumberger Company

Pathfinder

Pathfinder X&Y Report



Company: Devon Energy, Inc.
Project: Lea County (NAD83)
Site: Sylville 22 Fed
Well: #2H
Wellbore: OH
Design: Plan #3

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 19 @ 3664.9usft (McVay 8)
MD Reference: KB = 19 @ 3664.9usft (McVay 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	-1,364.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,400.0	0.00	0.00	2,400.0	-1,264.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,500.0	0.00	0.00	2,500.0	-1,164.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,600.0	0.00	0.00	2,600.0	-1,064.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,700.0	0.00	0.00	2,700.0	-964.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,800.0	0.00	0.00	2,800.0	-864.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
2,900.0	0.00	0.00	2,900.0	-764.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,000.0	0.00	0.00	3,000.0	-664.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,100.0	0.00	0.00	3,100.0	-564.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,200.0	0.00	0.00	3,200.0	-464.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,300.0	0.00	0.00	3,300.0	-364.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,302.0	0.00	0.00	3,302.0	-362.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Yates										
3,400.0	0.00	0.00	3,400.0	-264.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,500.0	0.00	0.00	3,500.0	-164.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,600.0	0.00	0.00	3,600.0	-64.9	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,700.0	0.00	0.00	3,700.0	35.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,720.0	0.00	0.00	3,720.0	55.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Seven Rivers										
3,800.0	0.00	0.00	3,800.0	135.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
3,900.0	0.00	0.00	3,900.0	235.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,000.0	0.00	0.00	4,000.0	335.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,100.0	0.00	0.00	4,100.0	435.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,200.0	0.00	0.00	4,200.0	535.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,300.0	0.00	0.00	4,300.0	635.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,303.0	0.00	0.00	4,303.0	638.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Queen										
4,400.0	0.00	0.00	4,400.0	735.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50



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Pathfinder
Pathfinder X&Y Report



Company: Devon Energy, Inc.
Project: Lea County (NAD83)
Site: Sylville 22 Fed
Well: #2H
Wellbore: OH
Design: Plan #3

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 19 @ 3664.9usft (McVay 8)
MD Reference: KB = 19 @ 3664.9usft (McVay 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
4,500.0	0.00	0.00	4,500.0	835.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,600.0	0.00	0.00	4,600.0	935.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,700.0	0.00	0.00	4,700.0	1,035.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,800.0	0.00	0.00	4,800.0	1,135.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
4,900.0	0.00	0.00	4,900.0	1,235.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,000.0	0.00	0.00	5,000.0	1,335.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,100.0	0.00	0.00	5,100.0	1,435.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,200.0	0.00	0.00	5,200.0	1,535.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Cherry Canyon										
5,300.0	0.00	0.00	5,300.0	1,635.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,400.0	0.00	0.00	5,400.0	1,735.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,500.0	0.00	0.00	5,500.0	1,835.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,600.0	0.00	0.00	5,600.0	1,935.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,700.0	0.00	0.00	5,700.0	2,035.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,800.0	0.00	0.00	5,800.0	2,135.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
5,900.0	0.00	0.00	5,900.0	2,235.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,000.0	0.00	0.00	6,000.0	2,335.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,100.0	0.00	0.00	6,100.0	2,435.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,200.0	0.00	0.00	6,200.0	2,535.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,269.0	0.00	0.00	6,269.0	2,604.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
Brushy Canyon										
6,300.0	0.00	0.00	6,300.0	2,635.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,400.0	0.00	0.00	6,400.0	2,735.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,500.0	0.00	0.00	6,500.0	2,835.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,600.0	0.00	0.00	6,600.0	2,935.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,700.0	0.00	0.00	6,700.0	3,035.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50
6,800.0	0.00	0.00	6,800.0	3,135.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50



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Pathfinder

Pathfinder X&Y Report



Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #3	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)	
6,900.0	0.00	0.00	6,900.0	3,235.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50	
7,000.0	0.00	0.00	7,000.0	3,335.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50	
7,100.0	0.00	0.00	7,100.0	3,435.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50	
7,195.0	0.00	0.00	7,195.0	3,530.1	0.0	0.0	0.0	0.00	600,872.00	753,677.50	
7,200.0	0.50	186.65	7,200.0	3,535.1	0.0	0.0	0.0	10.00	600,871.98	753,677.50	
7,250.0	5.50	186.65	7,249.9	3,585.0	-2.6	-0.3	0.8	10.00	600,869.38	753,677.19	
7,300.0	10.50	186.65	7,299.4	3,634.5	-9.5	-1.1	2.9	10.00	600,862.47	753,676.39	
7,350.0	15.50	186.65	7,348.1	3,683.2	-20.7	-2.4	6.3	10.00	600,851.30	753,675.09	
7,400.0	20.50	186.65	7,395.7	3,730.8	-36.0	-4.2	11.0	10.00	600,835.96	753,673.30	
7,450.0	25.50	186.65	7,441.7	3,776.8	-55.4	-6.5	16.9	10.00	600,816.56	753,671.04	
7,500.0	30.50	186.65	7,485.8	3,820.9	-78.7	-9.2	24.1	10.00	600,793.25	753,668.33	
7,550.0	35.50	186.65	7,527.7	3,862.8	-105.8	-12.3	32.3	10.00	600,766.21	753,665.18	
7,600.0	40.50	186.65	7,567.1	3,902.2	-136.4	-15.9	41.7	10.00	600,735.65	753,661.61	
7,650.0	45.50	186.65	7,603.7	3,938.8	-170.2	-19.8	52.0	10.00	600,701.78	753,657.67	
7,700.0	50.50	186.65	7,637.1	3,972.2	-207.1	-24.1	63.3	10.00	600,664.89	753,653.37	
7,750.0	55.50	186.65	7,667.2	4,002.3	-246.8	-28.7	75.4	10.00	600,625.24	753,648.75	
7,800.0	60.50	186.65	7,693.7	4,028.8	-288.9	-33.7	88.3	10.00	600,583.13	753,643.85	
7,850.0	65.50	186.65	7,716.4	4,051.5	-333.1	-38.8	101.8	10.00	600,538.90	753,638.69	
7,900.0	70.50	186.65	7,735.1	4,070.2	-379.1	-44.2	115.8	10.00	600,492.86	753,633.33	
7,931.1	73.61	186.65	7,744.7	4,079.8	-408.6	-47.6	124.8	10.00	600,463.45	753,629.90	
7,933.7	73.61	186.65	7,745.4	4,080.5	-411.0	-47.9	125.6	0.00	600,460.99	753,629.62	
7,950.0	73.67	188.34	7,750.0	4,085.1	-426.5	-49.9	130.5	10.00	600,445.50	753,627.58	
8,000.0	73.94	193.54	7,764.0	4,099.1	-473.6	-59.0	148.5	10.00	600,398.37	753,618.46	
8,050.0	74.34	198.72	7,777.6	4,112.7	-519.8	-72.4	170.4	10.00	600,352.19	753,605.10	
8,100.0	74.85	203.88	7,790.9	4,126.0	-564.7	-89.9	196.2	10.00	600,307.29	753,587.60	
8,150.0	75.48	209.01	7,803.7	4,138.8	-608.0	-111.4	225.6	10.00	600,264.04	753,566.08	
8,200.0	76.23	214.11	7,815.9	4,151.0	-649.3	-136.8	258.4	10.00	600,222.74	753,540.70	



A Schlumberger Company

Pathfinder

Pathfinder X&Y Report



Company: Devon Energy, Inc.
Project: Lea County (NAD83)
Site: Sylvite 22 Fed
Well: #2H
Wellbore: OH
Design: Plan #3

Local Co-ordinate Reference: Well #2H
TVD Reference: KB = 19 @ 3664.9usft (McVay 8)
MD Reference: KB = 19 @ 3664.9usft (McVay 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
8,250.0	77.07	219.18	7,827.5	4,162.6	-688.3	-165.8	294.4	10.00	600,183.73	753,511.68
8,300.0	78.02	224.21	7,838.3	4,173.4	-724.7	-198.3	333.2	10.00	600,147.28	753,479.21
8,350.0	79.05	229.20	7,848.2	4,183.3	-758.3	-233.9	374.6	10.00	600,113.69	753,443.56
8,400.0	80.16	234.15	7,857.3	4,192.4	-788.8	-272.5	418.3	10.00	600,083.21	753,404.99
8,450.0	81.35	239.07	7,865.3	4,200.4	-815.9	-313.7	463.9	10.00	600,056.06	753,363.79
8,500.0	82.60	243.96	7,872.3	4,207.4	-839.5	-357.2	511.1	10.00	600,032.46	753,320.29
8,550.0	83.90	248.83	7,878.2	4,213.3	-859.4	-402.7	559.6	10.00	600,012.59	753,274.80
8,600.0	85.24	253.66	7,882.9	4,218.0	-875.4	-449.8	608.9	10.00	599,996.60	753,227.68
8,650.0	86.62	258.48	7,886.4	4,221.5	-887.4	-498.2	658.7	10.00	599,984.60	753,179.29
8,700.0	88.02	263.29	7,888.8	4,223.9	-895.3	-547.5	708.6	10.00	599,976.69	753,129.99
8,750.0	89.43	268.09	7,889.9	4,225.0	-899.1	-597.3	758.2	10.00	599,972.93	753,080.16
8,770.0	90.00	270.00	7,890.0	4,225.1	-899.4	-617.3	777.9	10.00	599,972.60	753,060.20
8,800.0	90.00	270.00	7,890.0	4,225.1	-899.4	-647.3	807.4	0.00	599,972.60	753,030.17
8,900.0	90.00	270.00	7,890.0	4,225.1	-899.4	-747.3	905.5	0.00	599,972.60	752,930.17
9,000.0	90.00	270.00	7,890.0	4,225.1	-899.4	-847.3	1,003.7	0.00	599,972.60	752,830.17
9,100.0	90.00	270.00	7,890.0	4,225.1	-899.4	-947.3	1,101.8	0.00	599,972.60	752,730.17
9,200.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,047.3	1,200.0	0.00	599,972.60	752,630.17
9,300.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,147.3	1,298.1	0.00	599,972.60	752,530.17
9,400.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,247.3	1,396.3	0.00	599,972.60	752,430.17
9,500.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,347.3	1,494.4	0.00	599,972.60	752,330.17
9,600.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,447.3	1,592.6	0.00	599,972.60	752,230.17
9,700.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,547.3	1,690.7	0.00	599,972.60	752,130.17
9,800.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,647.3	1,788.9	0.00	599,972.60	752,030.17
9,900.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,747.3	1,887.1	0.00	599,972.60	751,930.17
10,000.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,847.3	1,985.2	0.00	599,972.60	751,830.17
10,100.0	90.00	270.00	7,890.0	4,225.1	-899.4	-1,947.3	2,083.4	0.00	599,972.60	751,730.17
10,200.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,047.3	2,181.5	0.00	599,972.60	751,630.17



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Pathfinder Pathfinder X&Y Report



Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #3	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)	
10,300.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,147.3	2,279.7	0.00	599,972.60	751,530.17	
10,400.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,247.3	2,377.8	0.00	599,972.60	751,430.17	
10,500.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,347.3	2,476.0	0.00	599,972.60	751,330.17	
10,600.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,447.3	2,574.1	0.00	599,972.60	751,230.17	
10,700.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,547.3	2,672.3	0.00	599,972.60	751,130.17	
10,800.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,647.3	2,770.5	0.00	599,972.60	751,030.17	
10,900.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,747.3	2,868.6	0.00	599,972.60	750,930.17	
11,000.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,847.3	2,966.8	0.00	599,972.60	750,830.17	
11,100.0	90.00	270.00	7,890.0	4,225.1	-899.4	-2,947.3	3,064.9	0.00	599,972.60	750,730.17	
11,200.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,047.3	3,163.1	0.00	599,972.60	750,630.17	
11,300.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,147.3	3,261.2	0.00	599,972.60	750,530.17	
11,400.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,247.3	3,359.4	0.00	599,972.60	750,430.17	
11,500.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,347.3	3,457.5	0.00	599,972.60	750,330.17	
11,600.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,447.3	3,555.7	0.00	599,972.60	750,230.17	
11,700.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,547.3	3,653.9	0.00	599,972.60	750,130.17	
11,800.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,647.3	3,752.0	0.00	599,972.60	750,030.17	
11,900.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,747.3	3,850.2	0.00	599,972.60	749,930.17	
12,000.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,847.3	3,948.3	0.00	599,972.60	749,830.17	
12,100.0	90.00	270.00	7,890.0	4,225.1	-899.4	-3,947.3	4,046.5	0.00	599,972.60	749,730.17	
12,200.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,047.3	4,144.6	0.00	599,972.60	749,630.17	
12,300.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,147.3	4,242.8	0.00	599,972.60	749,530.17	
12,400.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,247.3	4,340.9	0.00	599,972.60	749,430.17	
12,500.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,347.3	4,439.1	0.00	599,972.60	749,330.17	
12,600.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,447.3	4,537.3	0.00	599,972.60	749,230.17	
12,700.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,547.3	4,635.4	0.00	599,972.60	749,130.17	
12,770.0	90.00	270.00	7,890.0	4,225.1	-899.4	-4,617.3	4,704.1	0.00	599,972.60	749,060.20	
PBHL(Syvite 22 Fed #2H)											



A Schlumberger Company

Pathfinder
Pathfinder X&Y Report



Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #3	Database:	EDM 5000.1 Single User Db

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,807.0	1,807.0	Salado				
6,269.0	6,269.0	Brushy Canyon				
4,303.0	4,303.0	Queen				
3,302.0	3,302.0	Yates				
1,423.0	1,423.0	Rustler				
3,720.0	3,720.0	Seven Rivers				
5,200.0	5,200.0	Cherry Canyon				

Checked By: _____	Approved By: _____	Date: _____
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Devon - sylvite 22 Fed _2H - Plan _3 - TXT

HEADER INFORMATION

COMPANY : Devon Energy, Inc.
 FIELD : Lea County (NAD83)
 SITE : Sylvite 22 Fed
 WELL : #2H
 WELLPATH: OH
 DEPTHUNT: usft

WELL INFORMATION

WELL EW MAP : 753677.50
 WELL NS MAP : 600872.00
 DATUM ELEV : 3664.90
 VSECT ANGLE : 258.98
 VSECT NORTH : 0.00
 VSECT EAST : 0.00

SURVEY TYPE INFORMATION

H 0.00 - 12769.97 PLAN #3 : MWD

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 - Sylvite 22	Fed _2H -	Plan _3 -	TXT
4200.00	0.00	0.00	4200.00	0.00	0.00
4300.00	0.00	0.00	4300.00	0.00	0.00
4400.00	0.00	0.00	4400.00	0.00	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00
4600.00	0.00	0.00	4600.00	0.00	0.00
4700.00	0.00	0.00	4700.00	0.00	0.00
4800.00	0.00	0.00	4800.00	0.00	0.00
4900.00	0.00	0.00	4900.00	0.00	0.00
5000.00	0.00	0.00	5000.00	0.00	0.00
5100.00	0.00	0.00	5100.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00	0.00
5300.00	0.00	0.00	5300.00	0.00	0.00
5400.00	0.00	0.00	5400.00	0.00	0.00
5500.00	0.00	0.00	5500.00	0.00	0.00
5600.00	0.00	0.00	5600.00	0.00	0.00
5700.00	0.00	0.00	5700.00	0.00	0.00
5800.00	0.00	0.00	5800.00	0.00	0.00
5900.00	0.00	0.00	5900.00	0.00	0.00
6000.00	0.00	0.00	6000.00	0.00	0.00
6100.00	0.00	0.00	6100.00	0.00	0.00
6200.00	0.00	0.00	6200.00	0.00	0.00
6300.00	0.00	0.00	6300.00	0.00	0.00
6400.00	0.00	0.00	6400.00	0.00	0.00
6500.00	0.00	0.00	6500.00	0.00	0.00
6600.00	0.00	0.00	6600.00	0.00	0.00
6700.00	0.00	0.00	6700.00	0.00	0.00
6800.00	0.00	0.00	6800.00	0.00	0.00
6900.00	0.00	0.00	6900.00	0.00	0.00
7000.00	0.00	0.00	7000.00	0.00	0.00
7100.00	0.00	0.00	7100.00	0.00	0.00
7195.00	0.00	0.00	7195.00	0.00	0.00
7200.00	0.50	186.65	7200.00	0.01	-0.02
7250.00	5.50	186.65	7249.92	0.80	-2.62
7300.00	10.50	186.65	7299.41	2.91	-9.53
7350.00	15.50	186.65	7348.12	6.32	-20.70
7400.00	20.50	186.65	7395.65	11.01	-36.04
7450.00	25.50	186.65	7441.66	16.94	-55.44
7500.00	30.50	186.65	7485.80	24.06	-78.75
7550.00	35.50	186.65	7527.72	32.32	-105.79
7600.00	40.50	186.65	7567.11	41.66	-136.35
7650.00	45.50	186.65	7603.66	52.01	-170.22
7700.00	50.50	186.65	7637.11	63.28	-207.11
7750.00	55.50	186.65	7667.19	75.40	-246.76
7800.00	60.50	186.65	7693.68	88.26	-288.87
7850.00	65.50	186.65	7716.37	101.78	-333.10
7900.00	70.50	186.65	7735.09	115.85	-379.14
7931.13	73.61	186.65	7744.68	124.83	-408.55
7933.71	73.61	186.65	7745.41	125.58	-411.01
7950.00	73.67	188.34	7750.00	130.55	-426.50
8000.00	73.94	193.54	7763.95	148.50	-473.63
8050.00	74.34	198.72	7777.62	170.45	-519.81
8100.00	74.85	203.88	7790.91	196.21	-564.71
8150.00	75.48	209.01	7803.72	225.61	-607.96
8200.00	76.23	214.11	7815.95	258.41	-649.26
8250.00	77.07	219.18	7827.50	294.36	-688.27
8300.00	78.02	224.21	7838.29	333.19	-724.72
8350.00	79.05	229.20	7848.23	374.61	-758.31
8400.00	80.16	234.15	7857.25	418.30	-788.79
8450.00	81.35	239.07	7865.29	463.92	-815.94
8500.00	82.60	243.96	7872.28	511.14	-839.54
8550.00	83.90	248.83	7878.16	559.58	-859.41
8600.00	85.24	253.66	7882.90	608.89	-875.40
8650.00	86.62	258.48	7886.45	658.68	-887.40

		Devon	- Sylvite 22	Fed _2H	- Plan _3	- TXT
8700.00	88.02	263.29	7888.79	708.59	-895.31	-547.51
8750.00	89.43	268.09	7889.90	758.22	-899.07	-597.34
8769.97	90.00	270.00	7890.00	777.87	-899.40	-617.30
8800.00	90.00	270.00	7890.00	807.35	-899.40	-647.33
8900.00	90.00	270.00	7890.00	905.51	-899.40	-747.33
9000.00	90.00	270.00	7890.00	1003.66	-899.40	-847.33
9100.00	90.00	270.00	7890.00	1101.82	-899.40	-947.33
9200.00	90.00	270.00	7890.00	1199.97	-899.40	-1047.33
9300.00	90.00	270.00	7890.00	1298.13	-899.40	-1147.33
9400.00	90.00	270.00	7890.00	1396.28	-899.40	-1247.33
9500.00	90.00	270.00	7890.00	1494.44	-899.40	-1347.33
9600.00	90.00	270.00	7890.00	1592.59	-899.40	-1447.33
9700.00	90.00	270.00	7890.00	1690.75	-899.40	-1547.33
9800.00	90.00	270.00	7890.00	1788.91	-899.40	-1647.33
9900.00	90.00	270.00	7890.00	1887.06	-899.40	-1747.33
10000.00	90.00	270.00	7890.00	1985.22	-899.40	-1847.33
10100.00	90.00	270.00	7890.00	2083.37	-899.40	-1947.33
10200.00	90.00	270.00	7890.00	2181.53	-899.40	-2047.33
10300.00	90.00	270.00	7890.00	2279.68	-899.40	-2147.33
10400.00	90.00	270.00	7890.00	2377.84	-899.40	-2247.33
10500.00	90.00	270.00	7890.00	2475.99	-899.40	-2347.33
10600.00	90.00	270.00	7890.00	2574.15	-899.40	-2447.33
10700.00	90.00	270.00	7890.00	2672.30	-899.40	-2547.33
10800.00	90.00	270.00	7890.00	2770.46	-899.40	-2647.33
10900.00	90.00	270.00	7890.00	2868.61	-899.40	-2747.33
11000.00	90.00	270.00	7890.00	2966.77	-899.40	-2847.33
11100.00	90.00	270.00	7890.00	3064.92	-899.40	-2947.33
11200.00	90.00	270.00	7890.00	3163.08	-899.40	-3047.33
11300.00	90.00	270.00	7890.00	3261.23	-899.40	-3147.33
11400.00	90.00	270.00	7890.00	3359.39	-899.40	-3247.33
11500.00	90.00	270.00	7890.00	3457.54	-899.40	-3347.33
11600.00	90.00	270.00	7890.00	3555.70	-899.40	-3447.33
11700.00	90.00	270.00	7890.00	3653.85	-899.40	-3547.33
11800.00	90.00	270.00	7890.00	3752.01	-899.40	-3647.33
11900.00	90.00	270.00	7890.00	3850.16	-899.40	-3747.33
12000.00	90.00	270.00	7890.00	3948.32	-899.40	-3847.33
12100.00	90.00	270.00	7890.00	4046.47	-899.40	-3947.33
12200.00	90.00	270.00	7890.00	4144.63	-899.40	-4047.33
12300.00	90.00	270.00	7890.00	4242.78	-899.40	-4147.33
12400.00	90.00	270.00	7890.00	4340.94	-899.40	-4247.33
12500.00	90.00	270.00	7890.00	4439.10	-899.40	-4347.33
12600.00	90.00	270.00	7890.00	4537.25	-899.40	-4447.33
12700.00	90.00	270.00	7890.00	4635.41	-899.40	-4547.33
12769.97	90.00	270.00	7890.00	4704.08	-899.40	-4617.30



Devon Energy, Inc.

Lea County (NAD83)

Sylvite 22 Fed

#2H

OH

Plan #1

Anticollision Summary Report

02 July, 2012



A Schlumberger Company



Pathfinder
Anticollision Summary Report

PATHFINDER
A Schlumberger Company

Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Reference Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
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 #1	Offset TVD Reference:	Offset Datum

Reference		Plan #1	
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum separation factor of 1.50	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date 7/2/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	12,364.2	Plan #1 (OH)	Pathfinder	Pathfinder MWD

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Green Wave 20 Federal						
#1H - OH - OH						Out of range
Ichabod "7" Fed						
#1H - OH - OH						Out of range
#4H - OH - OH						Out of range
Red Bull 31 State						
#4H - OH - OH						Out of range
Thistle Unit						
#17H - OH - OH						Out of range



Pathfinder
Anticollision Summary Report

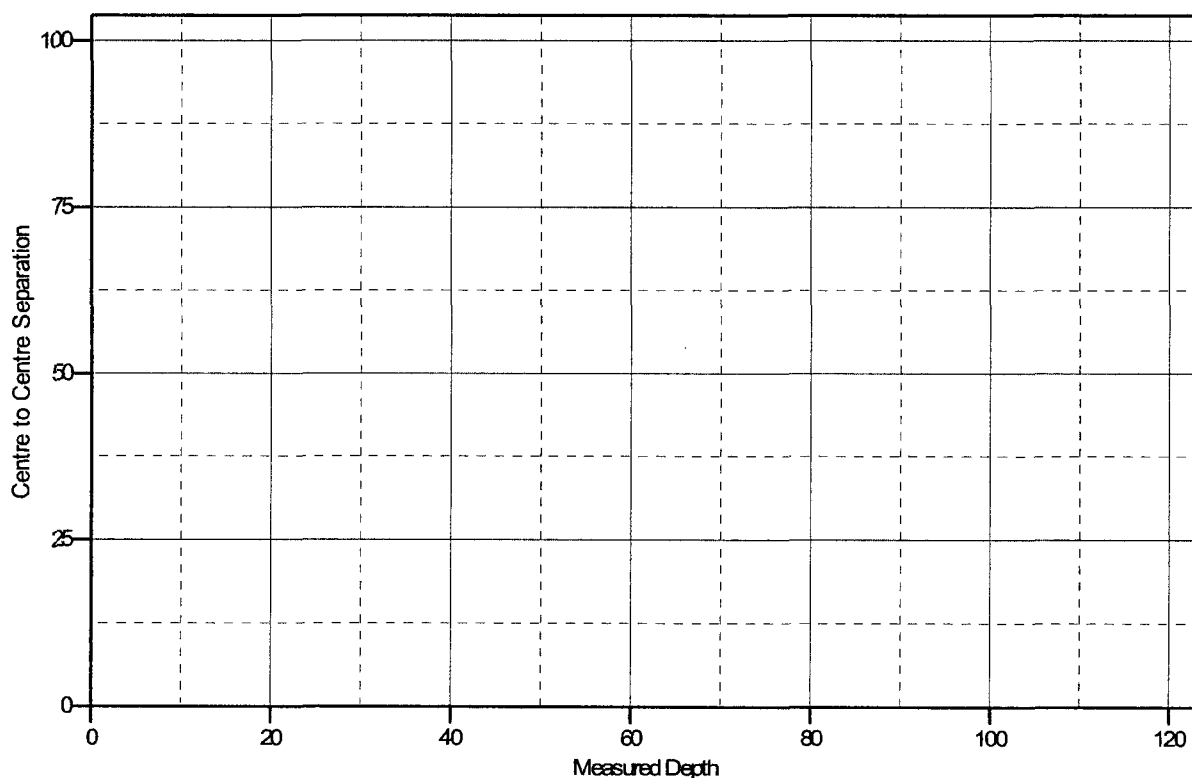
PATHFINDER
A Schlumberger Company

Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Reference Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
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 #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB = 19 @ 3664.9usft (McVay 8)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #2H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.37°

Ladder Plot



LEGEND

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:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3664.9usft (McVay 8)
Reference Site:	Sylvite 22 Fed	MD Reference:	KB = 19 @ 3664.9usft (McVay 8)
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 #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB = 19 @ 3664.9usft (McVay 8)

Offset Depths are relative to Offset Datum

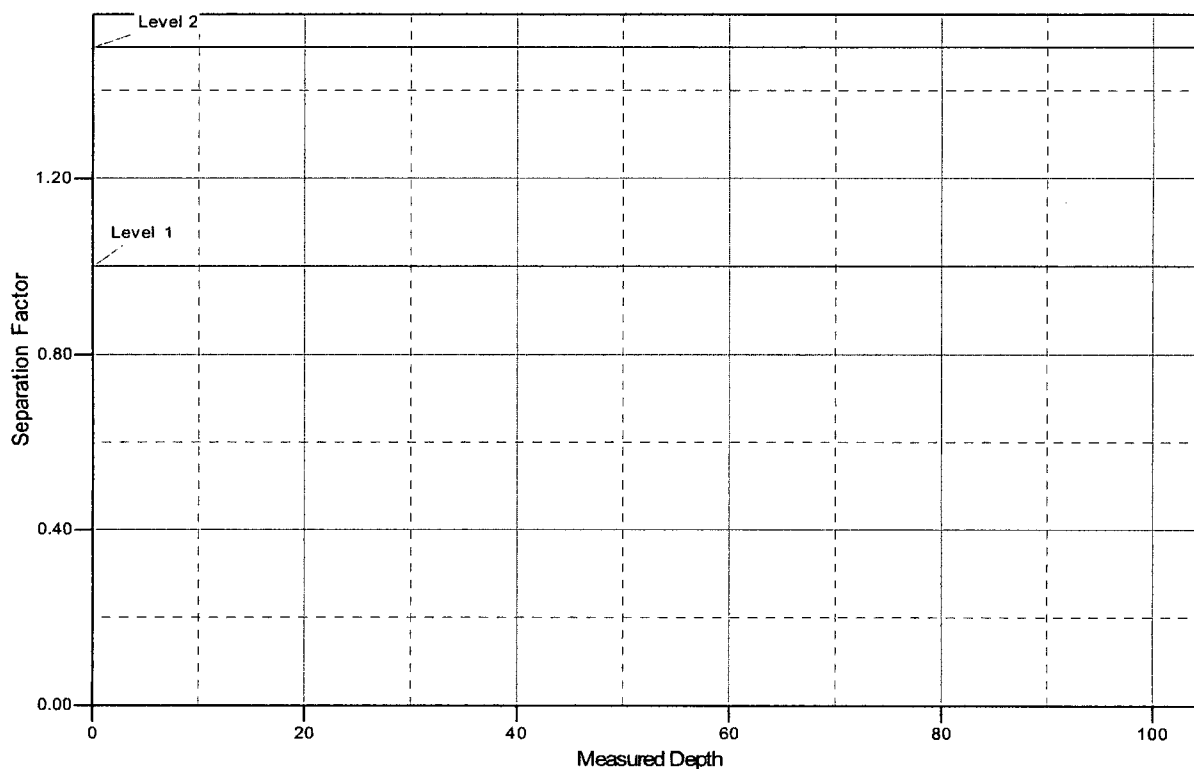
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #2H

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

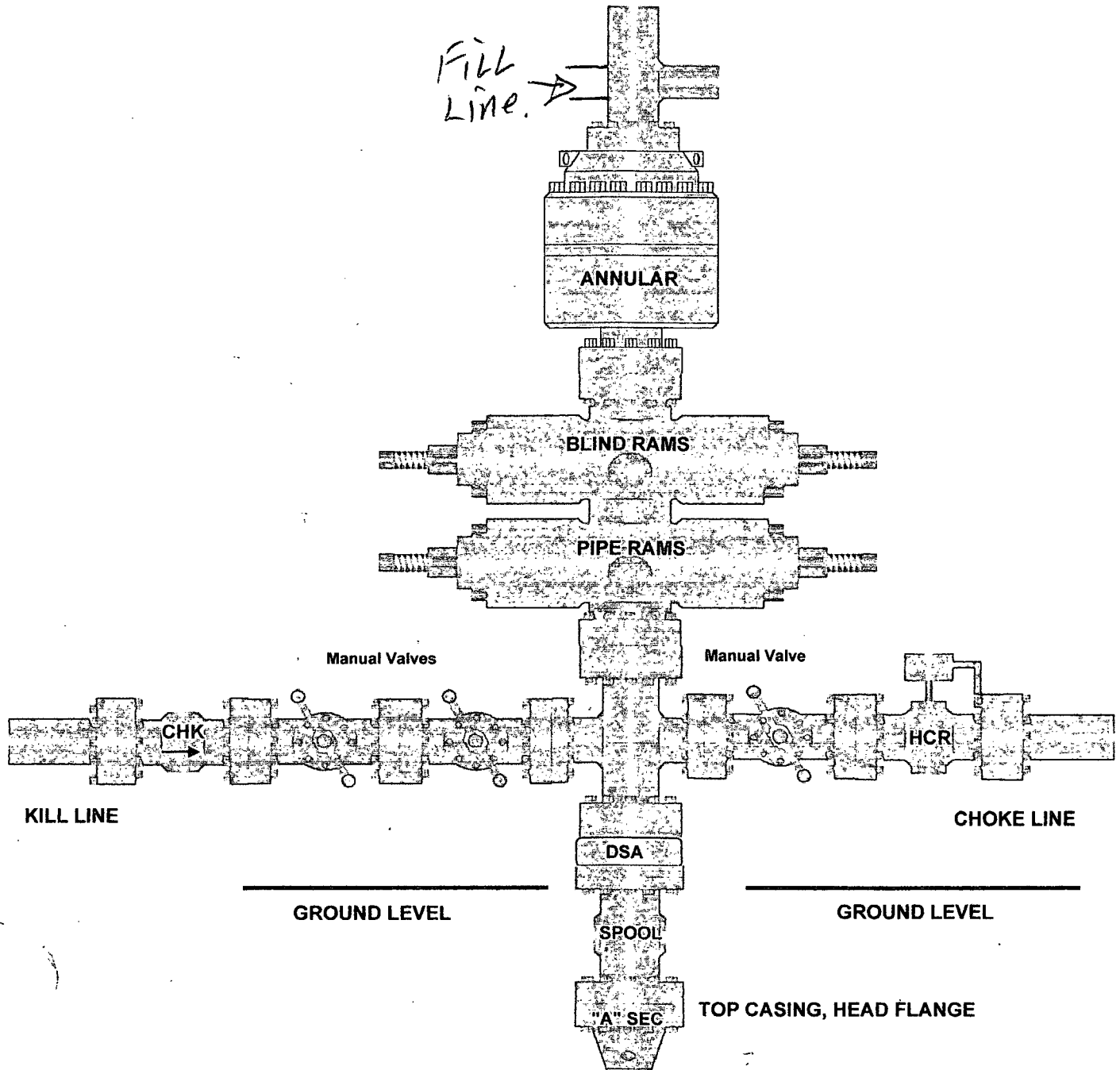
Grid Convergence at Surface is: 0.37°

Separation Factor Plot

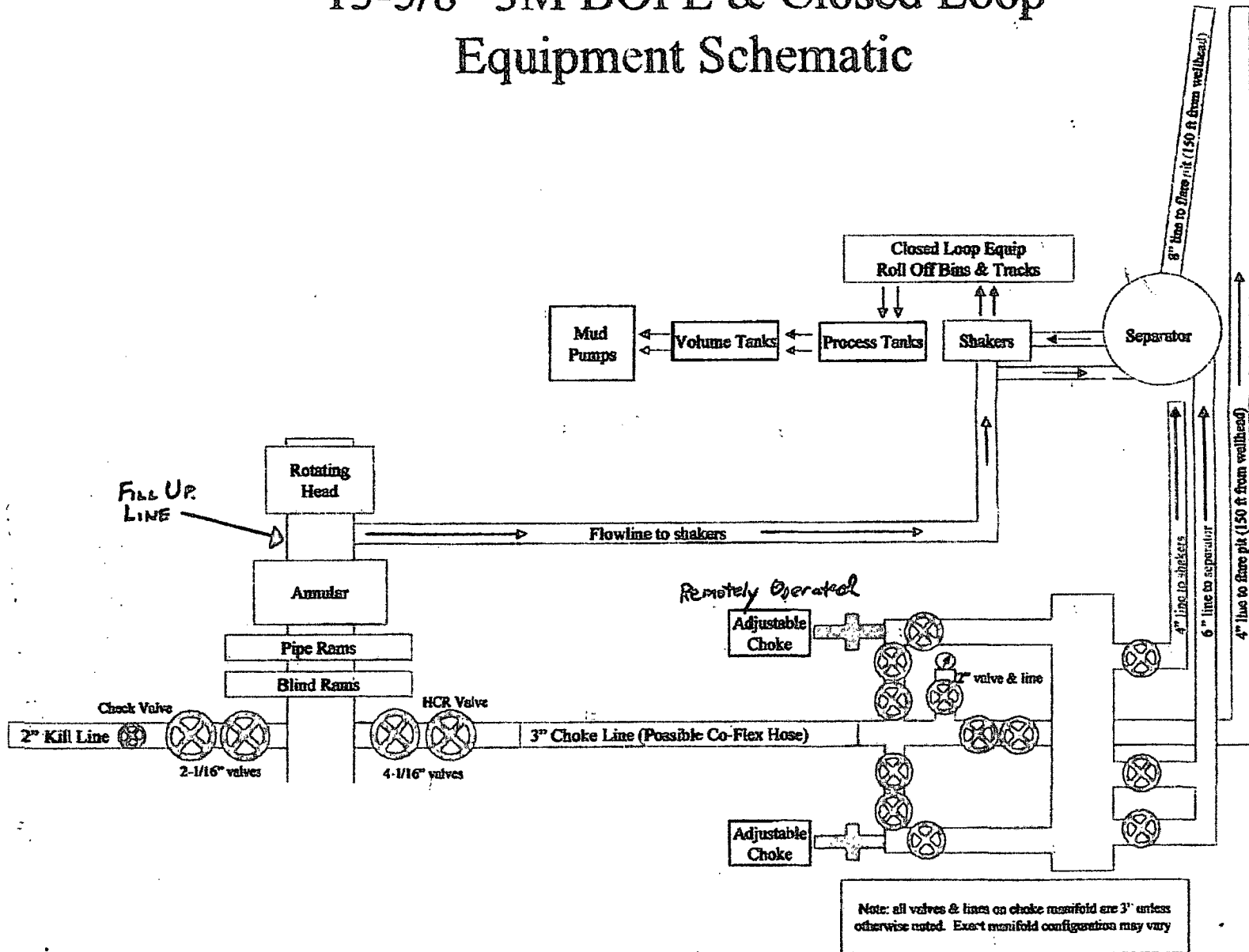


LEGEND

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



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



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

Sylvite 22 ~~22~~ Fed Com 2H

Surface Location: 1100' FNL and 330' FEL, UL A, Section 22, 19S, 33E, Lea, NM
Bottom Hole Location: 1980' FNL and 330' FWL, UL E, Section 22, 19S, 33E, Lea, 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.

CONTITECH BEATTIE CORP.
11535 BRITTMORE PARK DRIVE
HOUSTON, TX 77041

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 Brittmoores 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

