(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

HOBBS OCD
DEC 11 2017
RECEIVED

5. Lease Serial No.
NMNM114988

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SEAWOLF 1-12 FED 86H

2. Name of Operator
DEVON ENERGY PRODUCTION COMPAN

Contact: REBECCA DEAL
EMail: Rebecca.Deal@dvn.com

9. API Well No.
30-025-43767-00-X1

3a. Address
333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-228-8429

10. Field and Pool or Exploratory Area
WC025G09S253336D-UPPER WC

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*

Sec 1 T26S R33E NENE 200FNL 750FEL
32.079185 N Lat, 103.519951 W Lon

11. County or Parish, State

LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Devon Energy respectfully requests an annular variance and the following changes to the original APD:

Target TVD from 12,679'to 12,610'
Production Hole Size Change from 8 3/4" to 6 3/4"
Production Casing Connect Change

Please see attached revised Drilling Plan, BOPE schematic, Production Hole Document and Annular Preventer Document.

Variance approved to use 5M annular. The annular must be tested to full working pressure (5000psi).

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #392250 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPAN, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/08/2017 (18PP0226SE)

Name *(Printed/Typed)* REBECCA DEAL — Title REGULATORY COMPLIANCE PROFESSI

Signature (Electronic Submission) — Date 10/17/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER — Title PETROLEUM ENGINEER — Date 12/04/2017

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Hobbs

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

1. Geologic Formations

TVD of target	12,610'	Pilot hole depth	N/A
MD at TD:	22,586'	Deepest expected fresh water:	746'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	746		
Top of Salt	1094		
Base of Salt	4817		
Delaware	5059		
Lower Brushy Canyon	9112		
1st BSPG Lime	9292		
1st BSPG Sand	10230		
2nd BSPG Lime	10505		
2nd BSPG Sand	10778		
3rd BSPG Lime	11272		
3rd BSPG Sand	11856		
Wolfcamp	12342		
Wolfcamp X	12369		
Wolfcamp Y	12465		
Wolfcamp 100	12526		
Wolfcamp 110	12598		
Wolfcamp 120	12675		
Wolfcamp 130	12742		

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
6.75"	0	12,747'	5.5"	20	P110	Vam Top HT	1.125	1.25	1.6
6.75"	12,747'	22,586'	5.5"	20	P110	Vam SG	1.125	1.25	1.6

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed.

A variance is requested to wave the centralizer requirement for 5-1/2" SF/Flush casing in the 6-3/4" hole.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	H_2O gal/sk	Yld ft3/ sack	Slurry Description
5-1/2" Production	750	14.8	6.32	1.33	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
5-1/2" Production Casing	12,747'	25%

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
6-3/4"	13-5/8"	10M	Annular (5M)	X	70% of rated working pressure
			Blind Ram	X	10M
			Pipe Ram	X	
			Double Ram	X	
			Other *		
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other *		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

<table>
<tr><td>Y</td><td>Formation integrity test will be performed per Onshore Order #2.
On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.</td></tr>
<tr><td rowspan="2">Y</td><td>A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.</td></tr>
<tr><td>Y | Are anchors required by manufacturer?</td></tr>
<tr><td>Y</td><td>A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.
• Wellhead will be installed by wellhead representatives.
• If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
• Wellhead representative will install the test plug for the initial BOP test.
• Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time.
• If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted.
• Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.
• Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2.</td></tr>
</table>

	After running the 10-3/4" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 5,000 psi high pressure test. The 5,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2. 13-5/8" BOP/BOPE system will have been tested to 10M rating prior to drilling out 7 5/8" casing. 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's proposed wellhead manufactures will be FMC Technologies, Cactus Wellhead, or Cameron. 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. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
12,947'	22,586'	Oil Based Mud	9.5-12	45-65	N/C - 6

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
x	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7200 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

Attachments
_x_ Directional Plan
___ Other, describe

1. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the 10M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

6-3/4" Production hole section, 10M requirement

Component	OD	Preventer	RWP
Drillpipe	4.5"	Fixed lower 4.5" Upper 3.5-5.5" VBR	10M
HWDP	4.5"	Fixed lower 4.5" Upper 3.5-5.5" VBR	10M
Drill collars and MWD tools	4.75"	Upper 3.5-5.5" VBR	10M
Mud Motor	4.75"	Upper 3.5-5.5" VBR	10M
Production casing	5.5"	Upper 3.5-5.5" VBR	10M
ALL	0-13-5/8"	Annular	5M
Open-hole	-	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.

2. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. The pressure at which control is swapped from the annular to another compatible ram is variable, but the operator will document in the submission their operating pressure limit. The operator may chose an operating pressure less than or equal to RWP, but in no case will it exceed the RWP of the annular preventer.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram.

General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (HCR and choke will already be in the closed position.)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

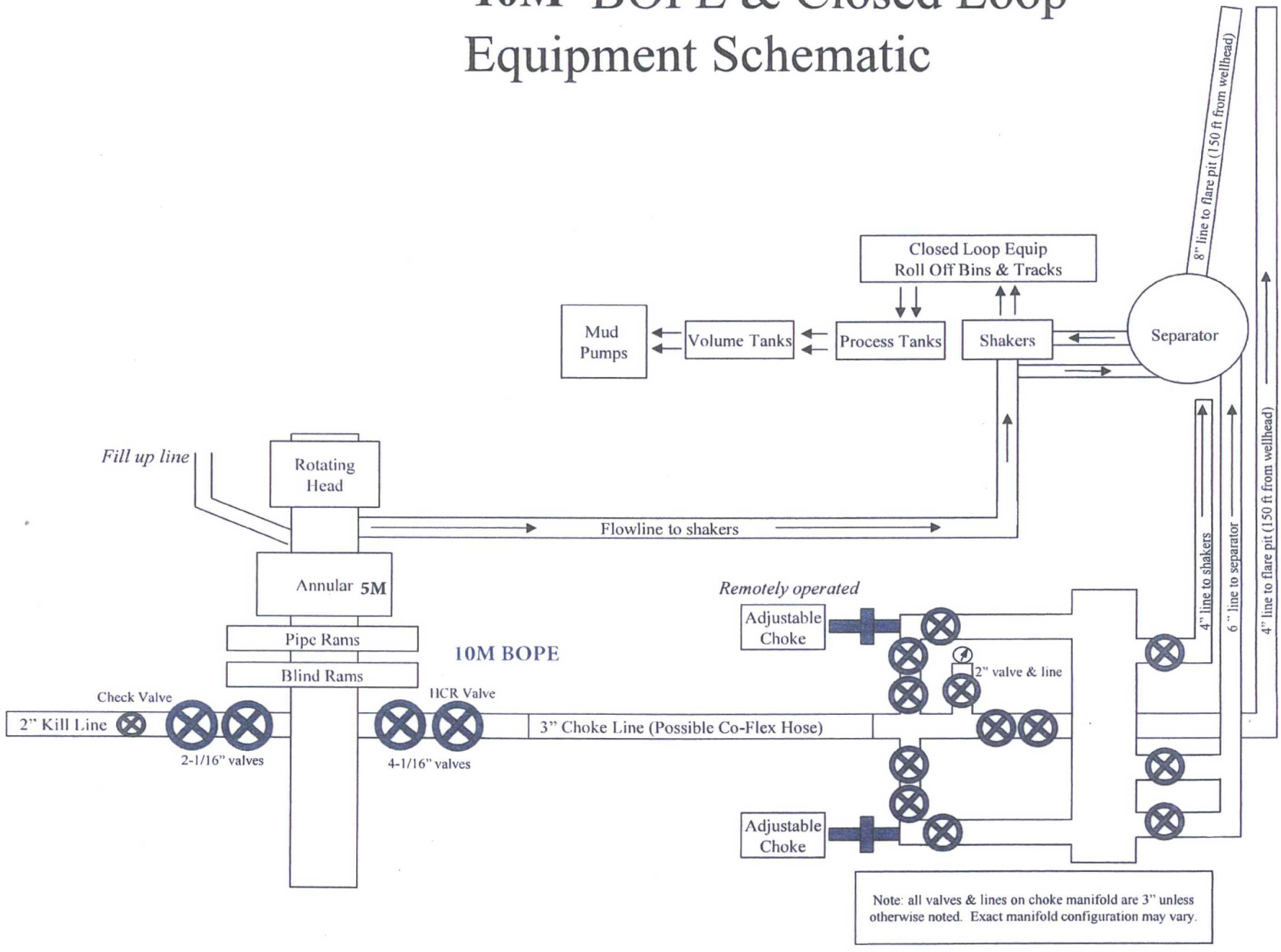
General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drillpipe thru the stack.
    a. Perform flowcheck, if flowing:
    b. Sound alarm (alert crew)
    c. Stab full opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper pipe ram.
    e. Shut-in using upper pipe ram. (HCR and choke will already be in the closed position.)
    f. Confirm shut-in
    g. Notify toolpusher/company representative
    h. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    i. Regroup and identify forward plan

2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. Stab crossover and full opening safety valve and close
    c. Space out drill string with upset just beneath the compatible pipe ram.
    d. Shut-in using compatible pipe ram. (HCR and choke will already be in the closed position.)
    e. Confirm shut-in
    f. Notify toolpusher/company representative
    g. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    h. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario.
    c. If impossible to pick up high enough to pull the string clear of the stack:
    d. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
    e. Space out drill string with tooljoint just beneath the upper pipe ram.
    f. Shut-in using upper pipe ram. (HCR and choke will already be in the closed position.)
    g. Confirm shut-in
    h. Notify toolpusher/company representative
    i. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    j. Regroup and identify forward plan

10M BOPE & Closed Loop Equipment Schematic



Devon Energy

Project: Lea County, NM (NAD-83)
Site: Seawolf 1-12 Fed
Well: 86H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.38°

Magnetic Field
Strength: 47949.1snT
Dip Angle: 59.80°
Date: 7/5/2017
Model: HDGM

PROJECT DETAILS: Lea County, NM (NAD-83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

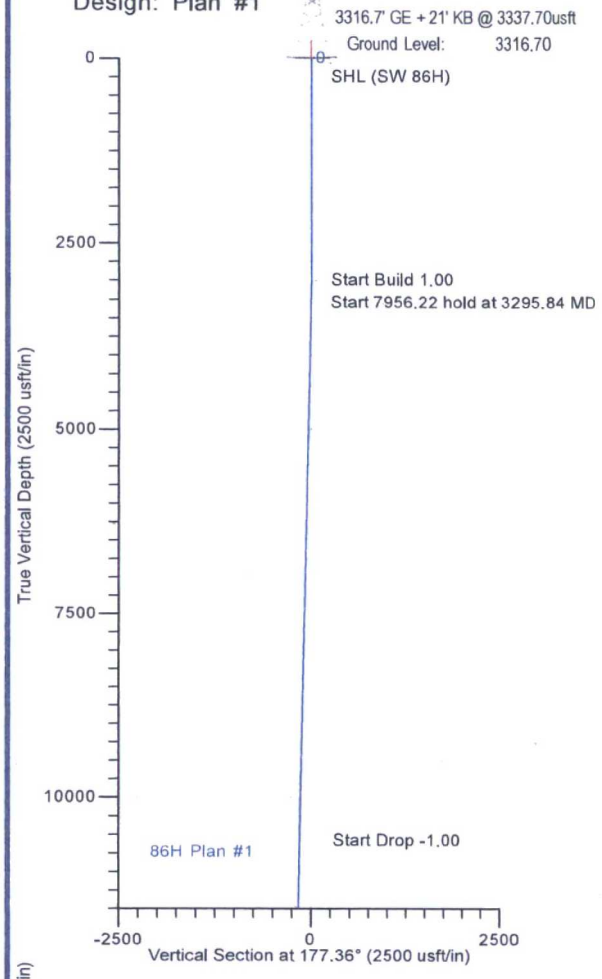
devon

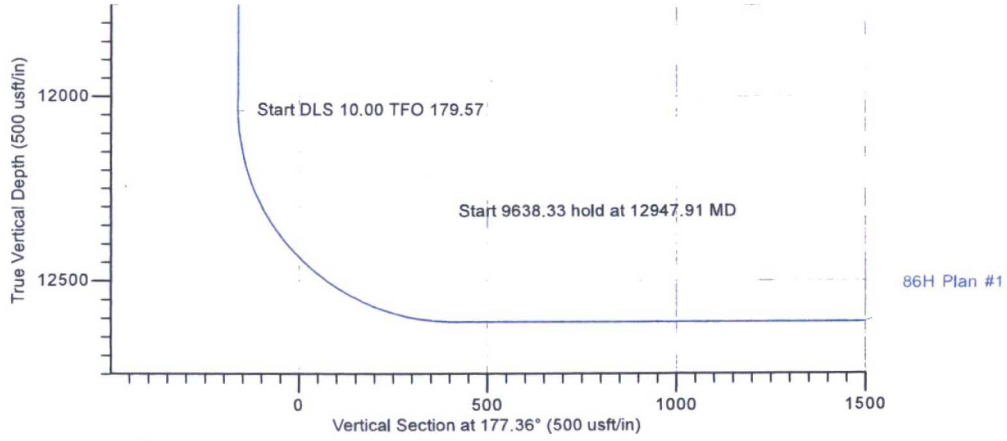
SECTION DETAILS

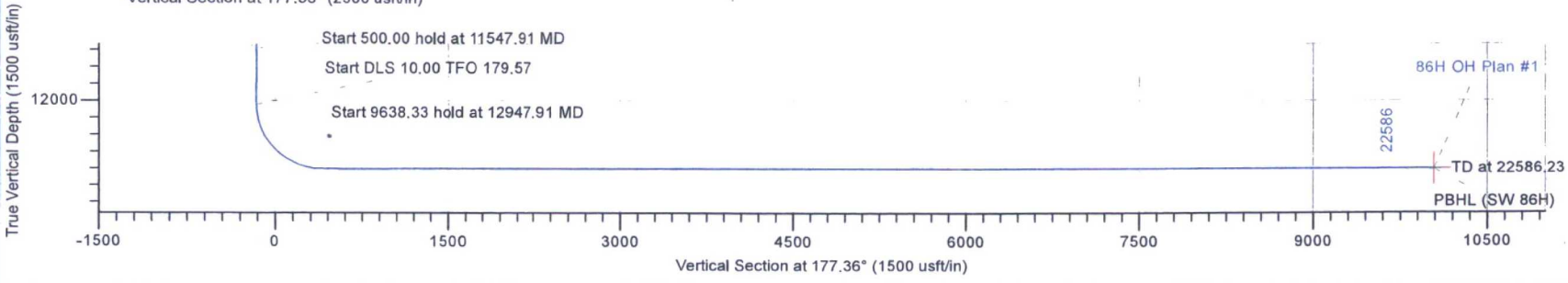
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.00
3295.84	2.96	65.00	3295.71	3.23	6.92	1.00	65.00	-2.91	Start 7956.22 hold at 3295.84 MD
11252.06	2.96	65.00	11241.33	176.77	379.08	0.00	0.00	-159.14	Start Drop -1.00
11547.91	0.00	0.00	11537.04	180.00	386.00	1.00	180.00	-162.05	Start 500.00 hold at 11547.91 MD
12047.91	0.00	0.00	12037.04	180.00	386.00	0.00	0.00	-162.05	Start DLS 10.00 TFO 179.57
12947.91	90.00	179.57	12610.00	-392.94	390.26	10.00	179.57	410.48	Start 9638.33 hold at 12947.91 MD
22586.23	90.00	179.57	12610.00	-10031.00	462.00	0.00	0.00	10041.63	TD at 22586.23

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PBHL (SW 86H)	12610.00	-10031.00	462.00	32° 3' 5.765 N	103° 31' 7.336 W
SHL (SW 86H)	0.00	0.00	0.00	32° 4' 45.059 N	103° 31' 11.825 W







LEAM Drilling Services

LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (86H/OH)
Seawolf 1-12 Fed
Created By: Brady Deaver Date: 12:01, July 05
Date: _____
Approved: _____ Date: _____

Devon Energy

Project: Lea County, NM (NAD-83)
Site: Seawolf 1-12 Fed
Well: 86H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.38°

Magnetic Field
Strength: 47949.1snT
Dip Angle: 59.80°
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devon

PROJECT DETAILS: Lea County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL (SW 86H)	12610.00	-10031.00	462.00	383462.75	793724.97	32° 3' 5.765 N	103° 31' 7.336 W
SHL (SW 86H)	0.00	0.00	0.00	393493.75	793262.97	32° 4' 45.059 N	103° 31' 11.825 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.00
3295.84	2.96	65.00	3295.71	3.23	6.92	1.00	65.00	-2.91	Start 7956.22 hold at 3295.84 MD
11252.06	2.96	65.00	11241.33	176.77	379.08	0.00	0.00	-159.14	Start Drop -1.00
11547.91	0.00	0.00	11537.04	180.00	386.00	1.00	180.00	-162.05	Start 500.00 hold at 11547.91 MD
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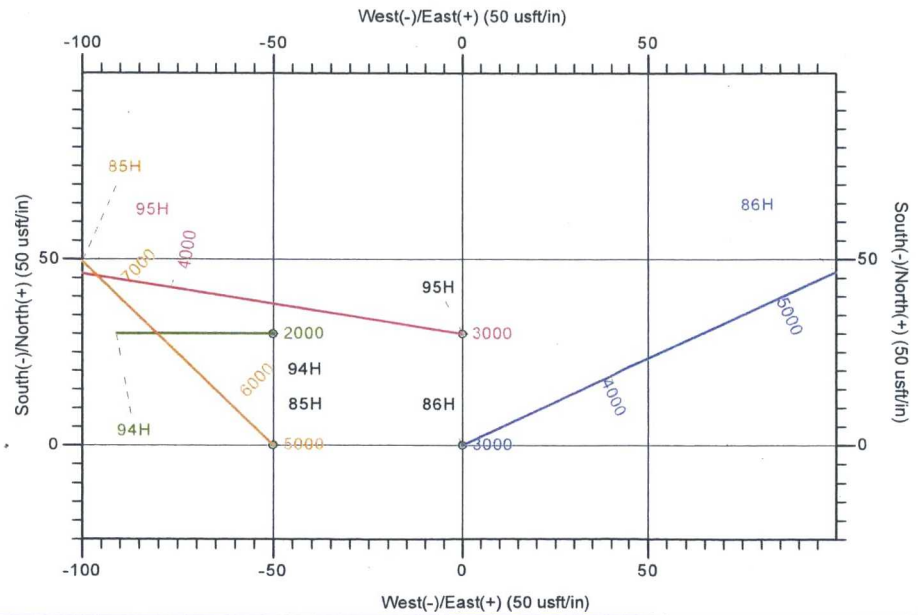
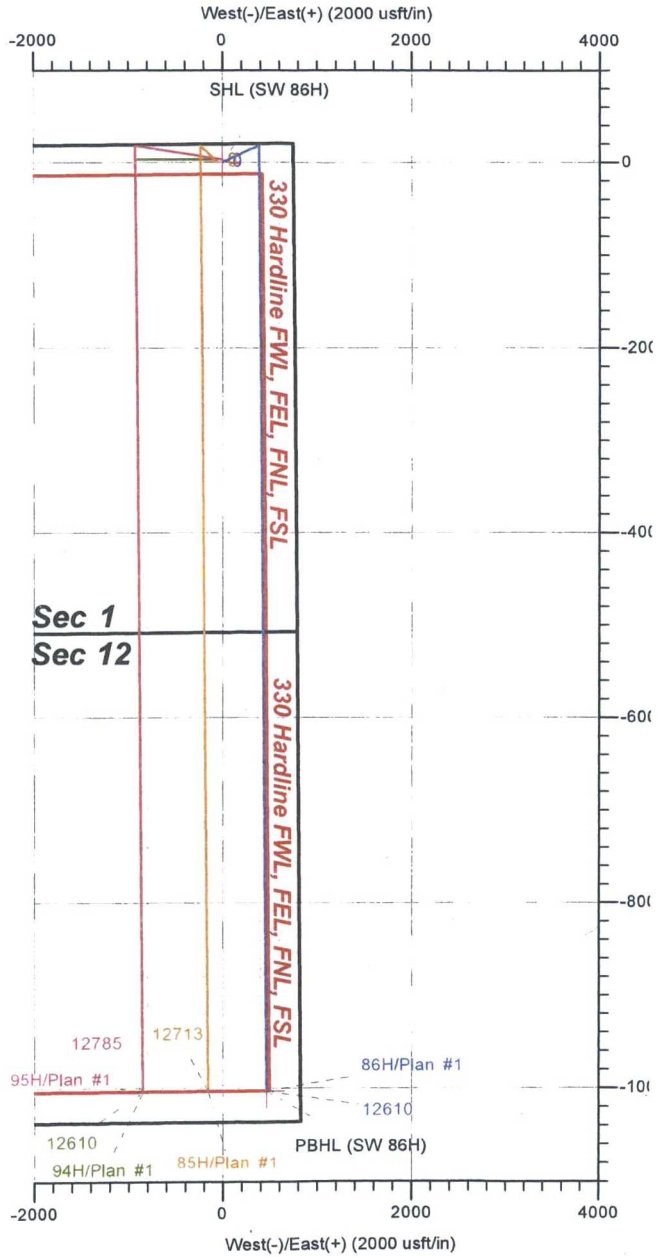
12947.91	90.00	179.57	12610.00	-392.94	390.26	10.00	179.57	410.48	Start 9638.33 hold at 12947.91 MD
22586.23	90.00	179.57	12610.00	-10031.00	462.00	0.00	0.00	10041.63	TD at 22586.23





LEAM Drilling Services

LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (86H/OH)
Seawolf 1-12 Fed
Created By: Dustin Ault Date: 12:03, July 05 2
Date: _____
Approved: _____ Date: _____

Devon Energy

Lea County, NM (NAD-83)
Seawolf 1-12 Fed
86H

OH

Plan: Plan #1

Standard Planning Report

05 July, 2017

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Seawolf 1-12 Fed				
Site Position:		**Northing:**	393,463.69 usft	**Latitude:**	32° 4' 45.071 N
From:	Map	**Easting:**	789,088.21 usft	**Longitude:**	103° 32' 0.348 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.42 °

Well	86H					
Well Position	**+N/-S**	30.06 usft	**Northing:**	393,493.75 usft	**Latitude:**	32° 4' 45.059 N
	+E/-W	4,174.76 usft	**Easting:**	793,262.97 usft	**Longitude:**	103° 31' 11.825 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,316.70 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	7/5/2017	6.82	59.80	47,949

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	177.36	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,295.84	2.96	65.00	3,295.71	3.23	6.92	1.00	1.00	0.00	65.00	
11,252.06	2.96	65.00	11,241.33	176.77	379.08	0.00	0.00	0.00	0.00	
11,547.91	0.00	0.00	11,537.04	180.00	386.00	1.00	-1.00	0.00	180.00	
12,047.91	0.00	0.00	12,037.04	180.00	386.00	0.00	0.00	0.00	0.00	
12,947.91	90.00	179.57	12,610.00	-392.94	390.26	10.00	10.00	19.95	179.57	
22,586.23	90.00	179.57	12,610.00	-10,031.00	462.00	0.00	0.00	0.00	0.00	PBHL (SW 86H)

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (SW 86H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.00									
3,100.00	1.00	65.00	3,099.99	0.37	0.79	-0.33	1.00	1.00	0.00
3,200.00	2.00	65.00	3,199.96	1.48	3.16	-1.33	1.00	1.00	0.00
3,295.84	2.96	65.00	3,295.71	3.23	6.92	-2.91	1.00	1.00	0.00
Start 7956.22 hold at 3295.84 MD									
3,300.00	2.96	65.00	3,299.86	3.32	7.12	-2.99	0.00	0.00	0.00
3,400.00	2.96	65.00	3,399.73	5.50	11.79	-4.95	0.00	0.00	0.00
3,500.00	2.96	65.00	3,499.60	7.68	16.47	-6.91	0.00	0.00	0.00
3,600.00	2.96	65.00	3,599.46	9.86	21.15	-8.88	0.00	0.00	0.00
3,700.00	2.96	65.00	3,699.33	12.04	25.83	-10.84	0.00	0.00	0.00
3,800.00	2.96	65.00	3,799.20	14.22	30.50	-12.81	0.00	0.00	0.00
3,900.00	2.96	65.00	3,899.06	16.41	35.18	-14.77	0.00	0.00	0.00
4,000.00	2.96	65.00	3,998.93	18.59	39.86	-16.73	0.00	0.00	0.00
4,100.00	2.96	65.00	4,098.80	20.77	44.54	-18.70	0.00	0.00	0.00
4,200.00	2.96	65.00	4,198.66	22.95	49.21	-20.66	0.00	0.00	0.00
4,300.00	2.96	65.00	4,298.53	25.13	53.89	-22.62	0.00	0.00	0.00
4,400.00	2.96	65.00	4,398.40	27.31	58.57	-24.59	0.00	0.00	0.00
4,500.00	2.96	65.00	4,498.26	29.49	63.25	-26.55	0.00	0.00	0.00
4,600.00	2.96	65.00	4,598.13	31.67	67.92	-28.52	0.00	0.00	0.00
4,700.00	2.96	65.00	4,698.00	33.86	72.60	-30.48	0.00	0.00	0.00
4,800.00	2.96	65.00	4,797.86	36.04	77.28	-32.44	0.00	0.00	0.00

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	2.96	65.00	4,897.73	38.22	81.96	-34.41	0.00	0.00	0.00
5,000.00	2.96	65.00	4,997.60	40.40	86.63	-36.37	0.00	0.00	0.00
5,100.00	2.96	65.00	5,097.46	42.58	91.31	-38.33	0.00	0.00	0.00
5,200.00	2.96	65.00	5,197.33	44.76	95.99	-40.30	0.00	0.00	0.00
5,300.00	2.96	65.00	5,297.20	46.94	100.67	-42.26	0.00	0.00	0.00
5,400.00	2.96	65.00	5,397.06	49.12	105.34	-44.23	0.00	0.00	0.00
5,500.00	2.96	65.00	5,496.93	51.31	110.02	-46.19	0.00	0.00	0.00
5,600.00	2.96	65.00	5,596.80	53.49	114.70	-48.15	0.00	0.00	0.00
5,700.00	2.96	65.00	5,696.66	55.67	119.38	-50.12	0.00	0.00	0.00
5,800.00	2.96	65.00	5,796.53	57.85	124.05	-52.08	0.00	0.00	0.00
5,900.00	2.96	65.00	5,896.40	60.03	128.73	-54.04	0.00	0.00	0.00
6,000.00	2.96	65.00	5,996.26	62.21	133.41	-56.01	0.00	0.00	0.00
6,100.00	2.96	65.00	6,096.13	64.39	138.09	-57.97	0.00	0.00	0.00
6,200.00	2.96	65.00	6,196.00	66.57	142.76	-59.94	0.00	0.00	0.00
6,300.00	2.96	65.00	6,295.86	68.76	147.44	-61.90	0.00	0.00	0.00
6,400.00	2.96	65.00	6,395.73	70.94	152.12	-63.86	0.00	0.00	0.00
6,500.00	2.96	65.00	6,495.60	73.12	156.80	-65.83	0.00	0.00	0.00
6,600.00	2.96	65.00	6,595.47	75.30	161.48	-67.79	0.00	0.00	0.00
6,700.00	2.96	65.00	6,695.33	77.48	166.15	-69.75	0.00	0.00	0.00
6,800.00	2.96	65.00	6,795.20	79.66	170.83	-71.72	0.00	0.00	0.00
6,900.00	2.96	65.00	6,895.07	81.84	175.51	-73.68	0.00	0.00	0.00
7,000.00	2.96	65.00	6,994.93	84.02	180.19	-75.65	0.00	0.00	0.00
7,100.00	2.96	65.00	7,094.80	86.21	184.86	-77.61	0.00	0.00	0.00
7,200.00	2.96	65.00	7,194.67	88.39	189.54	-79.57	0.00	0.00	0.00
7,300.00	2.96	65.00	7,294.53	90.57	194.22	-81.54	0.00	0.00	0.00
7,400.00	2.96	65.00	7,394.40	92.75	198.90	-83.50	0.00	0.00	0.00
7,500.00	2.96	65.00	7,494.27	94.93	203.57	-85.46	0.00	0.00	0.00
7,600.00	2.96	65.00	7,594.13	97.11	208.25	-87.43	0.00	0.00	0.00
7,700.00	2.96	65.00	7,694.00	99.29	212.93	-89.39	0.00	0.00	0.00
7,800.00	2.96	65.00	7,793.87	101.47	217.61	-91.36	0.00	0.00	0.00
7,900.00	2.96	65.00	7,893.73	103.66	222.28	-93.32	0.00	0.00	0.00
8,000.00	2.96	65.00	7,993.60	105.84	226.96	-95.28	0.00	0.00	0.00
8,100.00	2.96	65.00	8,093.47	108.02	231.64	-97.25	0.00	0.00	0.00
8,200.00	2.96	65.00	8,193.33	110.20	236.32	-99.21	0.00	0.00	0.00
8,300.00	2.96	65.00	8,293.20	112.38	240.99	-101.17	0.00	0.00	0.00
8,400.00	2.96	65.00	8,393.07	114.56	245.67	-103.14	0.00	0.00	0.00
8,500.00	2.96	65.00	8,492.93	116.74	250.35	-105.10	0.00	0.00	0.00
8,600.00	2.96	65.00	8,592.80	118.92	255.03	-107.07	0.00	0.00	0.00
8,700.00	2.96	65.00	8,692.67	121.11	259.70	-109.03	0.00	0.00	0.00
8,800.00	2.96	65.00	8,792.53	123.29	264.38	-110.99	0.00	0.00	0.00
8,900.00	2.96	65.00	8,892.40	125.47	269.06	-112.96	0.00	0.00	0.00
9,000.00	2.96	65.00	8,992.27	127.65	273.74	-114.92	0.00	0.00	0.00
9,100.00	2.96	65.00	9,092.13	129.83	278.41	-116.88	0.00	0.00	0.00
9,200.00	2.96	65.00	9,192.00	132.01	283.09	-118.85	0.00	0.00	0.00
9,300.00	2.96	65.00	9,291.87	134.19	287.77	-120.81	0.00	0.00	0.00
9,400.00	2.96	65.00	9,391.73	136.37	292.45	-122.78	0.00	0.00	0.00
9,500.00	2.96	65.00	9,491.60	138.56	297.13	-124.74	0.00	0.00	0.00
9,600.00	2.96	65.00	9,591.47	140.74	301.80	-126.70	0.00	0.00	0.00
9,700.00	2.96	65.00	9,691.33	142.92	306.48	-128.67	0.00	0.00	0.00
9,800.00	2.96	65.00	9,791.20	145.10	311.16	-130.63	0.00	0.00	0.00
9,900.00	2.96	65.00	9,891.07	147.28	315.84	-132.59	0.00	0.00	0.00
10,000.00	2.96	65.00	9,990.93	149.46	320.51	-134.56	0.00	0.00	0.00
10,100.00	2.96	65.00	10,090.80	151.64	325.19	-136.52	0.00	0.00	0.00
10,200.00	2.96	65.00	10,190.67	153.82	329.87	-138.48	0.00	0.00	0.00

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Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.00	2.96	65.00	10,290.53	156.01	334.55	-140.45	0.00	0.00	0.00
10,400.00	2.96	65.00	10,390.40	158.19	339.22	-142.41	0.00	0.00	0.00
10,500.00	2.96	65.00	10,490.27	160.37	343.90	-144.38	0.00	0.00	0.00
10,600.00	2.96	65.00	10,590.13	162.55	348.58	-146.34	0.00	0.00	0.00
10,700.00	2.96	65.00	10,690.00	164.73	353.26	-148.30	0.00	0.00	0.00
10,800.00	2.96	65.00	10,789.87	166.91	357.93	-150.27	0.00	0.00	0.00
10,900.00	2.96	65.00	10,889.73	169.09	362.61	-152.23	0.00	0.00	0.00
11,000.00	2.96	65.00	10,989.60	171.27	367.29	-154.19	0.00	0.00	0.00
11,100.00	2.96	65.00	11,089.47	173.46	371.97	-156.16	0.00	0.00	0.00
11,200.00	2.96	65.00	11,189.33	175.64	376.64	-158.12	0.00	0.00	0.00
11,252.06	2.96	65.00	11,241.33	176.77	379.08	-159.14	0.00	0.00	0.00
Start Drop -1.00									
11,300.00	2.48	65.00	11,289.21	177.73	381.14	-160.01	1.00	-1.00	0.00
11,400.00	1.48	65.00	11,389.15	179.19	384.27	-161.32	1.00	-1.00	0.00
11,500.00	0.48	65.00	11,489.13	179.92	385.82	-161.97	1.00	-1.00	0.00
11,547.91	0.00	0.00	11,537.04	180.00	386.00	-162.05	1.00	-1.00	0.00
Start 500.00 hold at 11547.91 MD									
11,600.00	0.00	0.00	11,589.13	180.00	386.00	-162.05	0.00	0.00	0.00
11,700.00	0.00	0.00	11,689.13	180.00	386.00	-162.05	0.00	0.00	0.00
11,800.00	0.00	0.00	11,789.13	180.00	386.00	-162.05	0.00	0.00	0.00
11,900.00	0.00	0.00	11,889.13	180.00	386.00	-162.05	0.00	0.00	0.00
12,000.00	0.00	0.00	11,989.13	180.00	386.00	-162.05	0.00	0.00	0.00
12,047.91	0.00	0.00	12,037.04	180.00	386.00	-162.05	0.00	0.00	0.00
Start DLS 10.00 TFO 179.57									
12,050.00	0.21	179.57	12,039.13	180.00	386.00	-162.05	10.00	10.00	0.00
12,100.00	5.21	179.57	12,089.06	177.63	386.02	-159.69	10.00	10.00	0.00
12,150.00	10.21	179.57	12,138.59	170.93	386.07	-152.99	10.00	10.00	0.00
12,200.00	15.21	179.57	12,187.35	159.93	386.15	-142.00	10.00	10.00	0.00
12,250.00	20.21	179.57	12,234.97	144.73	386.26	-126.80	10.00	10.00	0.00
12,300.00	25.21	179.57	12,281.08	125.43	386.41	-107.52	10.00	10.00	0.00
12,350.00	30.21	179.57	12,325.33	102.19	386.58	-84.30	10.00	10.00	0.00
12,400.00	35.21	179.57	12,367.39	75.18	386.78	-57.31	10.00	10.00	0.00
12,450.00	40.21	179.57	12,406.93	44.61	387.01	-26.76	10.00	10.00	0.00
12,500.00	45.21	179.57	12,443.66	10.71	387.26	7.12	10.00	10.00	0.00
12,550.00	50.21	179.57	12,477.29	-26.27	387.54	44.07	10.00	10.00	0.00
12,600.00	55.21	179.57	12,507.58	-66.03	387.83	83.81	10.00	10.00	0.00
12,650.00	60.21	179.57	12,534.28	-108.29	388.15	126.03	10.00	10.00	0.00
12,700.00	65.21	179.57	12,557.20	-152.70	388.48	170.42	10.00	10.00	0.00
12,750.00	70.21	179.57	12,576.16	-198.95	388.82	216.63	10.00	10.00	0.00
12,800.00	75.21	179.57	12,591.01	-246.68	389.18	264.32	10.00	10.00	0.00
12,850.00	80.21	179.57	12,601.65	-295.51	389.54	313.12	10.00	10.00	0.00
12,900.00	85.21	179.57	12,608.00	-345.09	389.91	362.67	10.00	10.00	0.00
12,947.91	90.00	179.57	12,610.00	-392.94	390.26	410.48	10.00	10.00	0.00
Start 9638.33 hold at 12947.91 MD									
13,000.00	90.00	179.57	12,610.00	-445.03	390.65	462.54	0.00	0.00	0.00
13,100.00	90.00	179.57	12,610.00	-545.03	391.40	562.46	0.00	0.00	0.00
13,200.00	90.00	179.57	12,610.00	-645.03	392.14	662.39	0.00	0.00	0.00
13,300.00	90.00	179.57	12,610.00	-745.03	392.88	762.31	0.00	0.00	0.00
13,400.00	90.00	179.57	12,610.00	-845.02	393.63	862.24	0.00	0.00	0.00
13,500.00	90.00	179.57	12,610.00	-945.02	394.37	962.16	0.00	0.00	0.00
13,600.00	90.00	179.57	12,610.00	-1,045.02	395.12	1,062.09	0.00	0.00	0.00
13,700.00	90.00	179.57	12,610.00	-1,145.01	395.86	1,162.01	0.00	0.00	0.00
13,800.00	90.00	179.57	12,610.00	-1,245.01	396.61	1,261.94	0.00	0.00	0.00

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,900.00	90.00	179.57	12,610.00	-1,345.01	397.35	1,361.87	0.00	0.00	0.00
14,000.00	90.00	179.57	12,610.00	-1,445.01	398.09	1,461.79	0.00	0.00	0.00
14,100.00	90.00	179.57	12,610.00	-1,545.00	398.84	1,561.72	0.00	0.00	0.00
14,200.00	90.00	179.57	12,610.00	-1,645.00	399.58	1,661.64	0.00	0.00	0.00
14,300.00	90.00	179.57	12,610.00	-1,745.00	400.33	1,761.57	0.00	0.00	0.00
14,400.00	90.00	179.57	12,610.00	-1,845.00	401.07	1,861.49	0.00	0.00	0.00
14,500.00	90.00	179.57	12,610.00	-1,944.99	401.82	1,961.42	0.00	0.00	0.00
14,600.00	90.00	179.57	12,610.00	-2,044.99	402.56	2,061.35	0.00	0.00	0.00
14,700.00	90.00	179.57	12,610.00	-2,144.99	403.30	2,161.27	0.00	0.00	0.00
14,800.00	90.00	179.57	12,610.00	-2,244.98	404.05	2,261.20	0.00	0.00	0.00
14,900.00	90.00	179.57	12,610.00	-2,344.98	404.79	2,361.12	0.00	0.00	0.00
15,000.00	90.00	179.57	12,610.00	-2,444.98	405.54	2,461.05	0.00	0.00	0.00
15,100.00	90.00	179.57	12,610.00	-2,544.98	406.28	2,560.97	0.00	0.00	0.00
15,200.00	90.00	179.57	12,610.00	-2,644.97	407.03	2,660.90	0.00	0.00	0.00
15,300.00	90.00	179.57	12,610.00	-2,744.97	407.77	2,760.82	0.00	0.00	0.00
15,400.00	90.00	179.57	12,610.00	-2,844.97	408.51	2,860.75	0.00	0.00	0.00
15,500.00	90.00	179.57	12,610.00	-2,944.96	409.26	2,960.68	0.00	0.00	0.00
15,600.00	90.00	179.57	12,610.00	-3,044.96	410.00	3,060.60	0.00	0.00	0.00
15,700.00	90.00	179.57	12,610.00	-3,144.96	410.75	3,160.53	0.00	0.00	0.00
15,800.00	90.00	179.57	12,610.00	-3,244.96	411.49	3,260.45	0.00	0.00	0.00
15,900.00	90.00	179.57	12,610.00	-3,344.95	412.24	3,360.38	0.00	0.00	0.00
16,000.00	90.00	179.57	12,610.00	-3,444.95	412.98	3,460.30	0.00	0.00	0.00
16,100.00	90.00	179.57	12,610.00	-3,544.95	413.72	3,560.23	0.00	0.00	0.00
16,200.00	90.00	179.57	12,610.00	-3,644.95	414.47	3,660.15	0.00	0.00	0.00
16,300.00	90.00	179.57	12,610.00	-3,744.94	415.21	3,760.08	0.00	0.00	0.00
16,400.00	90.00	179.57	12,610.00	-3,844.94	415.96	3,860.01	0.00	0.00	0.00
16,500.00	90.00	179.57	12,610.00	-3,944.94	416.70	3,959.93	0.00	0.00	0.00
16,600.00	90.00	179.57	12,610.00	-4,044.93	417.45	4,059.86	0.00	0.00	0.00
16,700.00	90.00	179.57	12,610.00	-4,144.93	418.19	4,159.78	0.00	0.00	0.00
16,800.00	90.00	179.57	12,610.00	-4,244.93	418.93	4,259.71	0.00	0.00	0.00
16,900.00	90.00	179.57	12,610.00	-4,344.93	419.68	4,359.63	0.00	0.00	0.00
17,000.00	90.00	179.57	12,610.00	-4,444.92	420.42	4,459.56	0.00	0.00	0.00
17,100.00	90.00	179.57	12,610.00	-4,544.92	421.17	4,559.48	0.00	0.00	0.00
17,200.00	90.00	179.57	12,610.00	-4,644.92	421.91	4,659.41	0.00	0.00	0.00
17,300.00	90.00	179.57	12,610.00	-4,744.91	422.66	4,759.34	0.00	0.00	0.00
17,400.00	90.00	179.57	12,610.00	-4,844.91	423.40	4,859.26	0.00	0.00	0.00
17,500.00	90.00	179.57	12,610.00	-4,944.91	424.14	4,959.19	0.00	0.00	0.00
17,600.00	90.00	179.57	12,610.00	-5,044.91	424.89	5,059.11	0.00	0.00	0.00
17,700.00	90.00	179.57	12,610.00	-5,144.90	425.63	5,159.04	0.00	0.00	0.00
17,800.00	90.00	179.57	12,610.00	-5,244.90	426.38	5,258.96	0.00	0.00	0.00
17,900.00	90.00	179.57	12,610.00	-5,344.90	427.12	5,358.89	0.00	0.00	0.00
18,000.00	90.00	179.57	12,610.00	-5,444.90	427.87	5,458.81	0.00	0.00	0.00
18,100.00	90.00	179.57	12,610.00	-5,544.89	428.61	5,558.74	0.00	0.00	0.00
18,200.00	90.00	179.57	12,610.00	-5,644.89	429.35	5,658.67	0.00	0.00	0.00
18,300.00	90.00	179.57	12,610.00	-5,744.89	430.10	5,758.59	0.00	0.00	0.00
18,400.00	90.00	179.57	12,610.00	-5,844.88	430.84	5,858.52	0.00	0.00	0.00
18,500.00	90.00	179.57	12,610.00	-5,944.88	431.59	5,958.44	0.00	0.00	0.00
18,600.00	90.00	179.57	12,610.00	-6,044.88	432.33	6,058.37	0.00	0.00	0.00
18,700.00	90.00	179.57	12,610.00	-6,144.88	433.08	6,158.29	0.00	0.00	0.00
18,800.00	90.00	179.57	12,610.00	-6,244.87	433.82	6,258.22	0.00	0.00	0.00
18,900.00	90.00	179.57	12,610.00	-6,344.87	434.56	6,358.15	0.00	0.00	0.00
19,000.00	90.00	179.57	12,610.00	-6,444.87	435.31	6,458.07	0.00	0.00	0.00
19,100.00	90.00	179.57	12,610.00	-6,544.86	436.05	6,558.00	0.00	0.00	0.00
19,200.00	90.00	179.57	12,610.00	-6,644.86	436.80	6,657.92	0.00	0.00	0.00

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,300.00	90.00	179.57	12,610.00	-6,744.86	437.54	6,757.85	0.00	0.00	0.00
19,400.00	90.00	179.57	12,610.00	-6,844.86	438.29	6,857.77	0.00	0.00	0.00
19,500.00	90.00	179.57	12,610.00	-6,944.85	439.03	6,957.70	0.00	0.00	0.00
19,600.00	90.00	179.57	12,610.00	-7,044.85	439.77	7,057.62	0.00	0.00	0.00
19,700.00	90.00	179.57	12,610.00	-7,144.85	440.52	7,157.55	0.00	0.00	0.00
19,800.00	90.00	179.57	12,610.00	-7,244.85	441.26	7,257.48	0.00	0.00	0.00
19,900.00	90.00	179.57	12,610.00	-7,344.84	442.01	7,357.40	0.00	0.00	0.00
20,000.00	90.00	179.57	12,610.00	-7,444.84	442.75	7,457.33	0.00	0.00	0.00
20,100.00	90.00	179.57	12,610.00	-7,544.84	443.50	7,557.25	0.00	0.00	0.00
20,200.00	90.00	179.57	12,610.00	-7,644.83	444.24	7,657.18	0.00	0.00	0.00
20,300.00	90.00	179.57	12,610.00	-7,744.83	444.98	7,757.10	0.00	0.00	0.00
20,400.00	90.00	179.57	12,610.00	-7,844.83	445.73	7,857.03	0.00	0.00	0.00
20,500.00	90.00	179.57	12,610.00	-7,944.83	446.47	7,956.95	0.00	0.00	0.00
20,600.00	90.00	179.57	12,610.00	-8,044.82	447.22	8,056.88	0.00	0.00	0.00
20,700.00	90.00	179.57	12,610.00	-8,144.82	447.96	8,156.81	0.00	0.00	0.00
20,800.00	90.00	179.57	12,610.00	-8,244.82	448.71	8,256.73	0.00	0.00	0.00
20,900.00	90.00	179.57	12,610.00	-8,344.82	449.45	8,356.66	0.00	0.00	0.00
21,000.00	90.00	179.57	12,610.00	-8,444.81	450.19	8,456.58	0.00	0.00	0.00
21,100.00	90.00	179.57	12,610.00	-8,544.81	450.94	8,556.51	0.00	0.00	0.00
21,200.00	90.00	179.57	12,610.00	-8,644.81	451.68	8,656.43	0.00	0.00	0.00
21,300.00	90.00	179.57	12,610.00	-8,744.80	452.43	8,756.36	0.00	0.00	0.00
21,400.00	90.00	179.57	12,610.00	-8,844.80	453.17	8,856.28	0.00	0.00	0.00
21,500.00	90.00	179.57	12,610.00	-8,944.80	453.92	8,956.21	0.00	0.00	0.00
21,600.00	90.00	179.57	12,610.00	-9,044.80	454.66	9,056.14	0.00	0.00	0.00
21,700.00	90.00	179.57	12,610.00	-9,144.79	455.40	9,156.06	0.00	0.00	0.00
21,800.00	90.00	179.57	12,610.00	-9,244.79	456.15	9,255.99	0.00	0.00	0.00
21,900.00	90.00	179.57	12,610.00	-9,344.79	456.89	9,355.91	0.00	0.00	0.00
22,000.00	90.00	179.57	12,610.00	-9,444.78	457.64	9,455.84	0.00	0.00	0.00
22,100.00	90.00	179.57	12,610.00	-9,544.78	458.38	9,555.76	0.00	0.00	0.00
22,200.00	90.00	179.57	12,610.00	-9,644.78	459.13	9,655.69	0.00	0.00	0.00
22,300.00	90.00	179.57	12,610.00	-9,744.78	459.87	9,755.62	0.00	0.00	0.00
22,400.00	90.00	179.57	12,610.00	-9,844.77	460.61	9,855.54	0.00	0.00	0.00
22,500.00	90.00	179.57	12,610.00	-9,944.77	461.36	9,955.47	0.00	0.00	0.00
22,586.23	90.00	179.57	12,610.00	-10,031.00	462.00	10,041.63	0.00	0.00	0.00
TD at 22586.23 - PBHL (SW 86H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (SW 86H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	393,493.75	793,262.97	32° 4' 45.059 N	103° 31' 11.825 W
PBHL (SW 86H) - plan hits target center - Point	0.00	0.00	12,610.00	-10,031.00	462.00	383,462.75	793,724.97	32° 3' 5.765 N	103° 31' 7.336 W

Database:	EDM 5000.1 Multi User Db	**Local Co-ordinate Reference:**	Well 86H
Company:	Devon Energy	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site:	Seawolf 1-12 Fed	**North Reference:**	Grid
Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
3,000.00	3,000.00	0.00	0.00	Start Build 1.00
3,295.84	3,295.71	3.23	6.92	Start 7956.22 hold at 3295.84 MD
11,252.06	11,241.33	176.77	379.08	Start Drop -1.00
11,547.91	11,537.04	180.00	386.00	Start 500.00 hold at 11547.91 MD
12,047.91	12,037.04	180.00	386.00	Start DLS 10.00 TFO 179.57
12,947.91	12,610.00	-392.94	390.26	Start 9638.33 hold at 12947.91 MD
22,586.23	12,610.00	-10,031.00	462.00	TD at 22586.23

Devon Energy

Lea County, NM (NAD-83)
Seawolf 1-12 Fed
86H

OH
Plan #1

Anticollision Report

05 July, 2017

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi 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:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 7/5/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	22,586.23	Plan #1 (OH)	LEAM MWD+HDGM	MWD+HDGM

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Seawolf 1-12 Fed						
85H - OH - Plan #1	3,000.00	3,000.00	50.00	36.79	3.784	CC, ES
85H - OH - Plan #1	22,586.23	22,688.44	626.54	296.76	1.900	SF
94H - OH - Plan #1	2,000.00	2,000.00	58.31	49.59	6.688	CC, ES
94H - OH - Plan #1	22,586.23	22,473.80	1,308.02	974.52	3.922	SF
95H - OH - Plan #1	3,157.34	3,157.10	29.72	15.84	2.141	CC
95H - OH - Plan #1	3,200.00	3,199.61	29.82	15.77	2.122	ES, SF

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-50.00	50.00				
100.00	100.00	100.00	100.00	0.09	0.09	-90.00	0.00	-50.00	50.00	49.82	0.18	281.586	
200.00	200.00	200.00	200.00	0.31	0.31	-90.00	0.00	-50.00	50.00	49.37	0.63	79.732	
300.00	300.00	300.00	300.00	0.54	0.54	-90.00	0.00	-50.00	50.00	48.92	1.08	46.441	
400.00	400.00	400.00	400.00	0.76	0.76	-90.00	0.00	-50.00	50.00	48.47	1.53	32.762	
500.00	500.00	500.00	500.00	0.99	0.99	-90.00	0.00	-50.00	50.00	48.02	1.98	25.308	
600.00	600.00	600.00	600.00	1.21	1.21	-90.00	0.00	-50.00	50.00	47.57	2.43	20.617	
700.00	700.00	700.00	700.00	1.44	1.44	-90.00	0.00	-50.00	50.00	47.13	2.87	17.393	
800.00	800.00	800.00	800.00	1.66	1.66	-90.00	0.00	-50.00	50.00	46.68	3.32	15.041	
900.00	900.00	900.00	900.00	1.89	1.89	-90.00	0.00	-50.00	50.00	46.23	3.77	13.249	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	-90.00	0.00	-50.00	50.00	45.78	4.22	11.839	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-90.00	0.00	-50.00	50.00	45.33	4.67	10.700	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-90.00	0.00	-50.00	50.00	44.88	5.12	9.761	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-90.00	0.00	-50.00	50.00	44.43	5.57	8.974	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-90.00	0.00	-50.00	50.00	43.98	6.02	8.304	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	-90.00	0.00	-50.00	50.00	43.53	6.47	7.727	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-90.00	0.00	-50.00	50.00	43.08	6.92	7.225	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	-90.00	0.00	-50.00	50.00	42.63	7.37	6.784	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-90.00	0.00	-50.00	50.00	42.18	7.82	6.394	
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	-90.00	0.00	-50.00	50.00	41.73	8.27	6.047	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	-90.00	0.00	-50.00	50.00	41.28	8.72	5.735	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,100.00	2,100.00	2,100.00	2,100.00	4.58	4.58	-90.00	0.00	-50.00	50.00	40.83	9.17	5.454	
2,200.00	2,200.00	2,200.00	2,200.00	4.81	4.81	-90.00	0.00	-50.00	50.00	40.38	9.62	5.199	
2,300.00	2,300.00	2,300.00	2,300.00	5.03	5.03	-90.00	0.00	-50.00	50.00	39.93	10.07	4.967	
2,400.00	2,400.00	2,400.00	2,400.00	5.26	5.26	-90.00	0.00	-50.00	50.00	39.48	10.52	4.754	
2,500.00	2,500.00	2,500.00	2,500.00	5.48	5.48	-90.00	0.00	-50.00	50.00	39.03	10.97	4.559	
2,600.00	2,600.00	2,600.00	2,600.00	5.71	5.71	-90.00	0.00	-50.00	50.00	38.58	11.42	4.380	
2,700.00	2,700.00	2,700.00	2,700.00	5.93	5.93	-90.00	0.00	-50.00	50.00	38.13	11.87	4.214	
2,800.00	2,800.00	2,800.00	2,800.00	6.16	6.16	-90.00	0.00	-50.00	50.00	37.69	12.31	4.060	
2,900.00	2,900.00	2,900.00	2,900.00	6.38	6.38	-90.00	0.00	-50.00	50.00	37.24	12.76	3.917	
3,000.00	3,000.00	3,000.00	3,000.00	6.61	6.61	-90.00	0.00	-50.00	50.00	36.79	13.21	3.784	CC, ES
3,100.00	3,099.99	3,099.99	3,099.99	6.82	6.83	-155.41	0.00	-50.00	50.79	37.14	13.66	3.720	
3,200.00	3,199.96	3,199.96	3,199.96	7.03	7.06	-156.58	0.00	-50.00	53.18	39.10	14.09	3.775	
3,295.84	3,295.71	3,295.71	3,295.71	7.24	7.27	-158.22	0.00	-50.00	57.01	42.51	14.50	3.931	
3,300.00	3,299.86	3,299.86	3,299.86	7.25	7.28	-158.30	0.00	-50.00	57.21	42.69	14.52	3.939	
3,400.00	3,399.73	3,399.73	3,399.73	7.46	7.51	-160.06	0.00	-50.00	62.04	47.08	14.96	4.148	
3,500.00	3,499.60	3,499.60	3,499.60	7.67	7.73	-161.57	0.00	-50.00	66.91	51.52	15.39	4.347	
3,600.00	3,599.46	3,599.46	3,599.46	7.89	7.95	-162.87	0.00	-50.00	71.83	56.00	15.83	4.538	
3,700.00	3,699.33	3,699.33	3,699.33	8.11	8.18	-164.00	0.00	-50.00	76.78	60.51	16.27	4.720	
3,800.00	3,799.20	3,799.20	3,799.20	8.33	8.40	-165.00	0.00	-50.00	81.75	65.05	16.70	4.894	
3,900.00	3,899.06	3,899.06	3,899.06	8.55	8.63	-165.88	0.00	-50.00	86.75	69.60	17.14	5.060	
4,000.00	3,998.93	3,998.93	3,998.93	8.77	8.85	-166.67	0.00	-50.00	91.76	74.18	17.58	5.219	
4,100.00	4,098.80	4,098.80	4,098.80	8.99	9.08	-167.37	0.00	-50.00	96.79	78.77	18.02	5.370	
4,200.00	4,198.66	4,198.66	4,198.66	9.21	9.30	-168.01	0.00	-50.00	101.83	83.37	18.46	5.515	
4,300.00	4,298.53	4,298.53	4,298.53	9.43	9.53	-168.58	0.00	-50.00	106.89	87.98	18.91	5.654	
4,400.00	4,398.40	4,398.40	4,398.40	9.66	9.75	-169.11	0.00	-50.00	111.95	92.60	19.35	5.787	
4,500.00	4,498.26	4,498.26	4,498.26	9.88	9.97	-169.58	0.00	-50.00	117.02	97.23	19.79	5.914	
4,600.00	4,598.13	4,598.13	4,598.13	10.11	10.20	-170.02	0.00	-50.00	122.10	101.87	20.23	6.035	
4,700.00	4,698.00	4,698.00	4,698.00	10.33	10.42	-170.42	0.00	-50.00	127.19	106.52	20.67	6.152	
4,800.00	4,797.86	4,797.86	4,797.86	10.56	10.65	-170.80	0.00	-50.00	132.28	111.16	21.12	6.264	
4,900.00	4,897.73	4,897.73	4,897.73	10.79	10.87	-171.14	0.00	-50.00	137.38	115.82	21.56	6.371	
5,000.00	4,997.60	4,997.60	4,997.60	11.01	11.10	-171.46	0.00	-50.00	142.48	120.48	22.01	6.475	
5,100.00	5,097.46	5,097.46	5,097.46	11.24	11.32	-171.76	0.00	-50.00	147.59	125.14	22.45	6.574	
5,200.00	5,197.33	5,197.33	5,197.33	11.47	11.55	-172.03	0.00	-50.00	152.70	129.80	22.90	6.669	
5,300.00	5,297.20	5,297.20	5,297.20	11.70	11.77	-172.29	0.00	-50.00	157.81	134.47	23.34	6.761	
5,400.00	5,397.06	5,397.06	5,397.06	11.93	11.99	-172.54	0.00	-50.00	162.93	139.14	23.79	6.850	
5,500.00	5,496.93	5,496.93	5,496.93	12.16	12.22	-172.77	0.00	-50.00	168.05	143.81	24.23	6.935	
5,600.00	5,596.80	5,595.46	5,595.46	12.39	12.44	-172.75	0.56	-50.57	173.54	148.87	24.67	7.035	
5,700.00	5,696.66	5,693.84	5,693.80	12.62	12.65	-172.25	2.31	-52.33	179.83	154.73	25.10	7.165	
5,800.00	5,796.53	5,792.72	5,792.60	12.85	12.87	-171.37	5.14	-55.20	186.88	161.35	25.53	7.320	
5,900.00	5,896.40	5,892.42	5,892.20	13.08	13.08	-170.47	8.18	-58.27	194.11	168.14	25.97	7.475	
6,000.00	5,996.26	5,992.11	5,991.81	13.31	13.30	-169.64	11.23	-61.35	201.37	174.97	26.40	7.627	
6,100.00	6,096.13	6,091.81	6,091.41	13.54	13.52	-168.87	14.27	-64.43	208.68	181.84	26.84	7.774	
6,200.00	6,196.00	6,191.50	6,191.01	13.77	13.74	-168.16	17.31	-67.50	216.02	188.74	27.28	7.918	
6,300.00	6,295.86	6,291.20	6,290.61	14.01	13.96	-167.48	20.35	-70.58	223.39	195.67	27.72	8.059	
6,400.00	6,395.73	6,390.89	6,390.21	14.24	14.18	-166.86	23.40	-73.66	230.79	202.63	28.16	8.195	
6,500.00	6,495.60	6,490.59	6,489.81	14.47	14.40	-166.27	26.44	-76.73	238.22	209.62	28.60	8.329	
6,600.00	6,595.47	6,590.28	6,589.41	14.70	14.62	-165.71	29.48	-79.81	245.67	216.63	29.04	8.459	
6,700.00	6,695.33	6,689.98	6,689.01	14.93	14.84	-165.19	32.53	-82.89	253.15	223.66	29.49	8.585	
6,800.00	6,795.20	6,789.67	6,788.61	15.17	15.06	-164.70	35.57	-85.97	260.64	230.71	29.93	8.708	
6,900.00	6,895.07	6,889.37	6,888.21	15.40	15.28	-164.24	38.61	-89.04	268.15	237.77	30.37	8.829	
7,000.00	6,994.93	6,989.06	6,987.81	15.63	15.51	-163.80	41.66	-92.12	275.67	244.86	30.82	8.946	
7,100.00	7,094.80	7,088.76	7,087.41	15.87	15.73	-163.39	44.70	-95.20	283.22	251.96	31.26	9.060	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.00	7,194.67	7,188.45	7,187.02	16.10	15.95	-162.99	47.74	-98.27	290.77	259.07	31.70	9.171	
7,300.00	7,294.53	7,288.15	7,286.62	16.33	16.17	-162.62	50.79	-101.35	298.34	266.19	32.15	9.280	
7,400.00	7,394.40	7,387.84	7,386.22	16.57	16.40	-162.26	53.83	-104.43	305.92	273.33	32.59	9.386	
7,500.00	7,494.27	7,487.54	7,485.82	16.80	16.62	-161.93	56.87	-107.51	313.51	280.47	33.04	9.489	
7,600.00	7,594.13	7,587.23	7,585.42	17.03	16.84	-161.61	59.92	-110.58	321.11	287.63	33.49	9.589	
7,700.00	7,694.00	7,686.92	7,685.02	17.27	17.07	-161.30	62.96	-113.66	328.73	294.79	33.93	9.688	
7,800.00	7,793.87	7,786.62	7,784.62	17.50	17.29	-161.01	66.00	-116.74	336.35	301.97	34.38	9.783	
7,900.00	7,893.73	7,886.31	7,884.22	17.74	17.52	-160.73	69.05	-119.81	343.97	309.15	34.83	9.877	
8,000.00	7,993.60	7,986.01	7,983.82	17.97	17.74	-160.46	72.09	-122.89	351.61	316.34	35.27	9.968	
8,100.00	8,093.47	8,085.70	8,083.42	18.21	17.97	-160.20	75.13	-125.97	359.26	323.53	35.72	10.057	
8,200.00	8,193.33	8,185.40	8,183.02	18.44	18.19	-159.96	78.18	-129.04	366.91	330.74	36.17	10.144	
8,300.00	8,293.20	8,285.09	8,282.62	18.68	18.42	-159.72	81.22	-132.12	374.56	337.95	36.62	10.229	
8,400.00	8,393.07	8,384.79	8,382.23	18.91	18.64	-159.49	84.26	-135.20	382.23	345.16	37.07	10.312	
8,500.00	8,492.93	8,484.48	8,481.83	19.15	18.87	-159.28	87.31	-138.28	389.90	352.38	37.51	10.393	
8,600.00	8,592.80	8,584.18	8,581.43	19.38	19.10	-159.07	90.35	-141.35	397.57	359.61	37.96	10.473	
8,700.00	8,692.67	8,683.87	8,681.03	19.62	19.32	-158.87	93.39	-144.43	405.25	366.84	38.41	10.550	
8,800.00	8,792.53	8,783.57	8,780.63	19.85	19.55	-158.67	96.43	-147.51	412.93	374.07	38.86	10.626	
8,900.00	8,892.40	8,883.26	8,880.23	20.09	19.77	-158.49	99.48	-150.58	420.62	381.31	39.31	10.700	
9,000.00	8,992.27	8,982.96	8,979.83	20.32	20.00	-158.31	102.52	-153.66	428.32	388.56	39.76	10.772	
9,100.00	9,092.13	9,082.65	9,079.43	20.56	20.23	-158.13	105.56	-156.74	436.01	395.80	40.21	10.843	
9,200.00	9,192.00	9,182.35	9,179.03	20.79	20.45	-157.97	108.61	-159.81	443.71	403.05	40.66	10.913	
9,300.00	9,291.87	9,282.04	9,278.63	21.03	20.68	-157.80	111.65	-162.89	451.42	410.31	41.11	10.981	
9,400.00	9,391.73	9,381.74	9,378.23	21.26	20.91	-157.65	114.69	-165.97	459.13	417.57	41.56	11.047	
9,500.00	9,491.60	9,481.43	9,477.83	21.50	21.14	-157.50	117.74	-169.05	466.84	424.83	42.01	11.112	
9,600.00	9,591.47	9,581.13	9,577.44	21.74	21.36	-157.35	120.78	-172.12	474.55	432.09	42.46	11.176	
9,700.00	9,691.33	9,680.82	9,677.04	21.97	21.59	-157.21	123.82	-175.20	482.27	439.36	42.91	11.238	
9,800.00	9,791.20	9,780.52	9,776.64	22.21	21.82	-157.07	126.87	-178.28	489.99	446.63	43.36	11.299	
9,900.00	9,891.07	9,880.21	9,876.24	22.44	22.05	-156.94	129.91	-181.35	497.71	453.90	43.82	11.359	
10,000.00	9,990.93	9,979.91	9,975.84	22.68	22.28	-156.81	132.95	-184.43	505.44	461.17	44.27	11.418	
10,100.00	10,090.80	10,079.60	10,075.44	22.92	22.50	-156.68	136.00	-187.51	513.17	468.45	44.72	11.475	
10,200.00	10,190.67	10,179.29	10,175.04	23.15	22.73	-156.56	139.04	-190.58	520.90	475.73	45.17	11.532	
10,300.00	10,290.53	10,278.99	10,274.64	23.39	22.96	-156.45	142.08	-193.66	528.63	483.01	45.62	11.587	
10,400.00	10,390.40	10,378.68	10,374.24	23.62	23.19	-156.33	145.13	-196.74	536.36	490.29	46.07	11.641	
10,500.00	10,490.27	10,478.38	10,473.84	23.86	23.42	-156.22	148.17	-199.82	544.10	497.57	46.53	11.694	
10,600.00	10,590.13	10,578.07	10,573.44	24.10	23.65	-156.11	151.21	-202.89	551.84	504.86	46.98	11.746	
10,700.00	10,690.00	10,677.77	10,673.04	24.33	23.87	-156.01	154.26	-205.97	559.58	512.15	47.43	11.798	
10,800.00	10,789.87	10,777.46	10,772.65	24.57	24.10	-155.91	157.30	-209.05	567.32	519.44	47.88	11.848	
10,900.00	10,889.73	10,877.16	10,872.25	24.81	24.33	-155.81	160.34	-212.12	575.07	526.73	48.34	11.897	
11,000.00	10,989.60	10,976.85	10,971.85	25.04	24.56	-155.71	163.39	-215.20	582.81	534.02	48.79	11.945	
11,100.00	11,089.47	11,076.55	11,071.45	25.28	24.79	-155.62	166.43	-218.28	590.56	541.32	49.24	11.993	
11,200.00	11,189.33	11,176.24	11,171.05	25.51	25.02	-155.52	169.47	-221.35	598.31	548.61	49.70	12.039	
11,252.06	11,241.33	11,228.15	11,222.90	25.64	25.14	-155.48	171.06	-222.96	602.35	552.41	49.93	12.063	
11,300.00	11,289.21	11,275.95	11,270.66	25.74	25.25	-155.44	172.52	-224.43	605.88	555.74	50.14	12.084	
11,400.00	11,389.15	11,375.74	11,370.36	25.92	25.48	-155.31	175.56	-227.51	612.08	561.54	50.54	12.111	
11,500.00	11,489.13	11,482.13	11,476.67	26.09	25.68	-155.14	178.36	-230.34	616.29	565.36	50.93	12.101	
11,547.91	11,537.04	11,533.98	11,528.51	26.17	25.77	-90.07	179.24	-231.23	617.29	566.18	51.11	12.078	
11,600.00	11,589.13	11,590.39	11,584.91	26.27	25.87	-90.02	179.81	-231.81	617.83	566.51	51.31	12.040	
11,700.00	11,689.13	11,694.61	11,689.13	26.48	26.06	-90.00	180.00	-232.00	618.00	566.28	51.72	11.949	
11,800.00	11,789.13	11,794.61	11,789.13	26.69	26.28	-90.00	180.00	-232.00	618.00	565.85	52.15	11.849	
11,900.00	11,889.13	11,894.61	11,889.13	26.90	26.50	-90.00	180.00	-232.00	618.00	565.41	52.59	11.751	
12,000.00	11,989.13	11,994.61	11,989.13	27.12	26.72	-90.00	180.00	-232.00	618.00	564.98	53.02	11.655	
12,047.91	12,037.04	12,042.52	12,037.04	27.22	26.82	-90.00	180.00	-232.00	618.00	564.77	53.23	11.609	

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,050.00	12,039.13	12,044.61	12,039.13	27.22	26.83	90.43	180.00	-232.00	618.00	564.76	53.24	11.608	
12,100.00	12,089.06	12,094.54	12,089.06	27.31	26.94	90.64	180.00	-232.00	618.02	564.58	53.44	11.565	
12,150.00	12,138.59	12,144.07	12,138.59	27.39	27.05	91.25	180.00	-232.00	618.13	564.51	53.63	11.526	
12,200.00	12,187.35	12,194.84	12,189.30	27.46	27.13	92.06	177.88	-231.98	618.40	564.61	53.79	11.497	
12,250.00	12,234.97	12,246.49	12,240.49	27.53	27.21	92.87	171.13	-231.93	618.78	564.85	53.93	11.473	
12,300.00	12,281.08	12,299.02	12,291.71	27.60	27.29	93.66	159.56	-231.85	619.29	565.22	54.06	11.455	
12,350.00	12,325.33	12,352.45	12,342.50	27.66	27.36	94.43	143.04	-231.73	619.89	565.71	54.18	11.441	
12,400.00	12,367.39	12,406.78	12,392.34	27.71	27.43	95.17	121.46	-231.56	620.58	566.29	54.29	11.431	
12,450.00	12,406.93	12,462.03	12,440.69	27.77	27.49	95.88	94.78	-231.37	621.32	566.94	54.39	11.424	
12,500.00	12,443.66	12,518.17	12,486.97	27.82	27.55	96.54	63.03	-231.13	622.11	567.63	54.48	11.418	
12,550.00	12,477.29	12,575.18	12,530.55	27.88	27.61	97.15	26.31	-230.86	622.90	568.32	54.58	11.412	
12,600.00	12,507.58	12,633.02	12,570.81	27.94	27.66	97.70	-15.18	-230.55	623.68	568.99	54.69	11.403	
12,650.00	12,534.28	12,691.62	12,607.13	28.01	27.72	98.19	-61.13	-230.21	624.41	569.59	54.82	11.389	
12,700.00	12,557.20	12,750.91	12,638.91	28.10	27.78	98.61	-111.15	-229.83	625.07	570.08	54.99	11.368	
12,750.00	12,576.16	12,810.78	12,665.58	28.19	27.87	98.95	-164.72	-229.44	625.63	570.44	55.19	11.336	
12,800.00	12,591.01	12,871.12	12,686.66	28.31	28.00	99.21	-221.23	-229.02	626.06	570.63	55.44	11.293	
12,850.00	12,601.65	12,931.81	12,701.75	28.45	28.16	99.38	-279.98	-228.58	626.36	570.62	55.74	11.238	
12,900.00	12,608.00	12,992.71	12,710.57	28.62	28.35	99.46	-340.21	-228.13	626.51	570.42	56.09	11.169	
12,947.89	12,610.00	13,050.11	12,713.00	28.79	28.56	99.46	-397.53	-227.70	626.51	570.03	56.48	11.092	
12,947.91	12,610.00	13,050.12	12,713.00	28.79	28.56	99.46	-397.54	-227.70	626.51	570.03	56.48	11.092	
13,000.00	12,610.00	13,102.21	12,713.00	29.00	28.76	99.46	-449.63	-227.32	626.51	569.61	56.90	11.011	
13,100.00	12,610.00	13,202.21	12,713.00	29.46	29.23	99.46	-549.63	-226.57	626.51	568.69	57.82	10.835	
13,200.00	12,610.00	13,302.21	12,713.00	30.01	29.77	99.46	-649.63	-225.83	626.51	567.60	58.91	10.635	
13,300.00	12,610.00	13,402.21	12,713.00	30.64	30.40	99.46	-749.62	-225.08	626.51	566.36	60.16	10.415	
13,400.00	12,610.00	13,502.21	12,713.00	31.34	31.09	99.46	-849.62	-224.34	626.51	564.97	61.54	10.180	
13,500.00	12,610.00	13,602.21	12,713.00	32.10	31.86	99.46	-949.62	-223.60	626.51	563.44	63.07	9.934	
13,600.00	12,610.00	13,702.21	12,713.00	32.93	32.69	99.46	-1,049.61	-222.85	626.51	561.79	64.72	9.680	
13,700.00	12,610.00	13,802.21	12,713.00	33.82	33.58	99.46	-1,149.61	-222.11	626.51	560.02	66.49	9.423	
13,800.00	12,610.00	13,902.21	12,713.00	34.76	34.52	99.46	-1,249.61	-221.36	626.51	558.15	68.37	9.164	
13,900.00	12,610.00	14,002.21	12,713.00	35.76	35.51	99.46	-1,349.61	-220.62	626.51	556.17	70.34	8.907	
14,000.00	12,610.00	14,102.21	12,713.00	36.80	36.55	99.46	-1,449.60	-219.88	626.51	554.11	72.41	8.653	
14,100.00	12,610.00	14,202.21	12,713.00	37.88	37.64	99.46	-1,549.60	-219.13	626.51	551.96	74.56	8.403	
14,200.00	12,610.00	14,302.21	12,713.00	39.00	38.76	99.46	-1,649.60	-218.39	626.51	549.73	76.78	8.160	
14,300.00	12,610.00	14,402.21	12,713.00	40.15	39.92	99.46	-1,749.60	-217.65	626.51	547.44	79.08	7.923	
14,400.00	12,610.00	14,502.21	12,713.00	41.34	41.10	99.46	-1,849.59	-216.90	626.51	545.08	81.44	7.693	
14,500.00	12,610.00	14,602.21	12,713.00	42.56	42.32	99.46	-1,949.59	-216.16	626.52	542.66	83.86	7.471	
14,600.00	12,610.00	14,702.21	12,713.00	43.80	43.57	99.46	-2,049.59	-215.41	626.52	540.19	86.33	7.257	
14,700.00	12,610.00	14,802.21	12,713.00	45.07	44.84	99.46	-2,149.58	-214.67	626.52	537.67	88.85	7.051	
14,800.00	12,610.00	14,902.21	12,713.00	46.37	46.14	99.46	-2,249.58	-213.93	626.52	535.10	91.42	6.853	
14,900.00	12,610.00	15,002.21	12,713.00	47.68	47.45	99.46	-2,349.58	-213.18	626.52	532.49	94.02	6.663	
15,000.00	12,610.00	15,102.21	12,713.00	49.01	48.79	99.46	-2,449.58	-212.44	626.52	529.85	96.67	6.481	
15,100.00	12,610.00	15,202.21	12,713.00	50.37	50.14	99.46	-2,549.57	-211.69	626.52	527.17	99.35	6.306	
15,200.00	12,610.00	15,302.21	12,713.00	51.73	51.51	99.46	-2,649.57	-210.95	626.52	524.45	102.06	6.138	
15,300.00	12,610.00	15,402.21	12,713.00	53.12	52.89	99.46	-2,749.57	-210.21	626.52	521.71	104.81	5.978	
15,400.00	12,610.00	15,502.21	12,713.00	54.51	54.29	99.46	-2,849.56	-209.46	626.52	518.94	107.58	5.824	
15,500.00	12,610.00	15,602.21	12,713.00	55.92	55.71	99.46	-2,949.56	-208.72	626.52	516.14	110.38	5.676	
15,600.00	12,610.00	15,702.21	12,713.00	57.35	57.13	99.46	-3,049.56	-207.97	626.52	513.32	113.19	5.535	
15,700.00	12,610.00	15,802.21	12,713.00	58.78	58.56	99.46	-3,149.56	-207.23	626.52	510.48	116.04	5.399	
15,800.00	12,610.00	15,902.21	12,713.00	60.22	60.01	99.46	-3,249.55	-206.49	626.52	507.62	118.90	5.269	
15,900.00	12,610.00	16,002.21	12,713.00	61.68	61.46	99.46	-3,349.55	-205.74	626.52	504.74	121.78	5.145	
16,000.00	12,610.00	16,102.21	12,713.00	63.14	62.93	99.46	-3,449.55	-205.00	626.52	501.84	124.68	5.025	
16,100.00	12,610.00	16,202.21	12,713.00	64.61	64.40	99.46	-3,549.55	-204.25	626.52	498.93	127.59	4.910	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — Offset Site Error: 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,200.00	12,610.00	16,302.21	12,713.00	66.09	65.88	99.46	-3,649.54	-203.51	626.52	496.00	130.52	4.800	
16,300.00	12,610.00	16,402.21	12,713.00	67.57	67.37	99.46	-3,749.54	-202.77	626.52	493.06	133.47	4.694	
16,400.00	12,610.00	16,502.21	12,713.00	69.07	68.86	99.46	-3,849.54	-202.02	626.52	490.10	136.42	4.592	
16,500.00	12,610.00	16,602.21	12,713.00	70.56	70.36	99.46	-3,949.53	-201.28	626.52	487.13	139.39	4.495	
16,600.00	12,610.00	16,702.21	12,713.00	72.07	71.87	99.46	-4,049.53	-200.54	626.52	484.15	142.37	4.401	
16,700.00	12,610.00	16,802.21	12,713.00	73.58	73.38	99.46	-4,149.53	-199.79	626.52	481.16	145.37	4.310	
16,800.00	12,610.00	16,902.21	12,713.00	75.10	74.89	99.46	-4,249.53	-199.05	626.52	478.15	148.37	4.223	
16,900.00	12,610.00	17,002.21	12,713.00	76.62	76.42	99.46	-4,349.52	-198.30	626.52	475.14	151.38	4.139	
17,000.00	12,610.00	17,102.21	12,713.00	78.14	77.94	99.46	-4,449.52	-197.56	626.52	472.12	154.40	4.058	
17,100.00	12,610.00	17,202.21	12,713.00	79.67	79.47	99.46	-4,549.52	-196.82	626.52	469.09	157.43	3.980	
17,200.00	12,610.00	17,302.21	12,713.00	81.21	81.01	99.46	-4,649.51	-196.07	626.53	466.05	160.47	3.904	
17,300.00	12,610.00	17,402.21	12,713.00	82.74	82.55	99.46	-4,749.51	-195.33	626.53	463.01	163.52	3.832	
17,400.00	12,610.00	17,502.21	12,713.00	84.28	84.09	99.46	-4,849.51	-194.58	626.53	459.95	166.57	3.761	
17,500.00	12,610.00	17,602.21	12,713.00	85.83	85.64	99.46	-4,949.51	-193.84	626.53	456.89	169.63	3.693	
17,600.00	12,610.00	17,702.21	12,713.00	87.38	87.19	99.46	-5,049.50	-193.10	626.53	453.83	172.70	3.628	
17,700.00	12,610.00	17,802.21	12,713.00	88.93	88.74	99.46	-5,149.50	-192.35	626.53	450.76	175.77	3.564	
17,800.00	12,610.00	17,902.21	12,713.00	90.48	90.29	99.46	-5,249.50	-191.61	626.53	447.68	178.85	3.503	
17,900.00	12,610.00	18,002.21	12,713.00	92.04	91.85	99.46	-5,349.50	-190.86	626.53	444.59	181.93	3.444	
18,000.00	12,610.00	18,102.21	12,713.00	93.60	93.41	99.46	-5,449.49	-190.12	626.53	441.50	185.02	3.386	
18,100.00	12,610.00	18,202.21	12,713.00	95.17	94.98	99.46	-5,549.49	-189.38	626.53	438.41	188.12	3.331	
18,200.00	12,610.00	18,302.21	12,713.00	96.73	96.54	99.46	-5,649.49	-188.63	626.53	435.31	191.22	3.277	
18,300.00	12,610.00	18,402.21	12,713.00	98.30	98.11	99.46	-5,749.48	-187.89	626.53	432.21	194.32	3.224	
18,400.00	12,610.00	18,502.21	12,713.00	99.87	99.68	99.46	-5,849.48	-187.14	626.53	429.10	197.43	3.173	
18,500.00	12,610.00	18,602.21	12,713.00	101.44	101.25	99.46	-5,949.48	-186.40	626.53	425.99	200.54	3.124	
18,600.00	12,610.00	18,702.21	12,713.00	103.01	102.83	99.46	-6,049.48	-185.66	626.53	422.87	203.66	3.076	
18,700.00	12,610.00	18,802.21	12,713.00	104.59	104.40	99.46	-6,149.47	-184.91	626.53	419.75	206.78	3.030	
18,800.00	12,610.00	18,902.21	12,713.00	106.17	105.98	99.46	-6,249.47	-184.17	626.53	416.63	209.90	2.985	
18,900.00	12,610.00	19,002.21	12,713.00	107.75	107.56	99.46	-6,349.47	-183.43	626.53	413.51	213.03	2.941	
19,000.00	12,610.00	19,102.21	12,713.00	109.33	109.14	99.46	-6,449.47	-182.68	626.53	410.38	216.16	2.899	
19,100.00	12,610.00	19,202.21	12,713.00	110.91	110.73	99.46	-6,549.46	-181.94	626.53	407.24	219.29	2.857	
19,200.00	12,610.00	19,302.21	12,713.00	112.49	112.31	99.46	-6,649.46	-181.19	626.53	404.11	222.43	2.817	
19,300.00	12,610.00	19,402.21	12,713.00	114.08	113.90	99.46	-6,749.46	-180.45	626.53	400.97	225.56	2.778	
19,400.00	12,610.00	19,502.21	12,713.00	115.67	115.49	99.46	-6,849.45	-179.71	626.53	397.83	228.71	2.739	
19,500.00	12,610.00	19,602.21	12,713.00	117.26	117.08	99.46	-6,949.45	-178.96	626.53	394.68	231.85	2.702	
19,600.00	12,610.00	19,702.21	12,713.00	118.85	118.67	99.46	-7,049.45	-178.22	626.53	391.54	235.00	2.666	
19,700.00	12,610.00	19,802.21	12,713.00	120.44	120.26	99.46	-7,149.45	-177.47	626.53	388.39	238.15	2.631	
19,800.00	12,610.00	19,902.21	12,713.00	122.03	121.85	99.46	-7,249.44	-176.73	626.53	385.24	241.30	2.597	
19,900.00	12,610.00	20,002.21	12,713.00	123.62	123.44	99.46	-7,349.44	-175.99	626.53	382.08	244.45	2.563	
20,000.00	12,610.00	20,102.21	12,713.00	125.22	125.04	99.46	-7,449.44	-175.24	626.54	378.93	247.61	2.530	
20,100.00	12,610.00	20,202.21	12,713.00	126.81	126.64	99.46	-7,549.43	-174.50	626.54	375.77	250.77	2.498	
20,200.00	12,610.00	20,302.21	12,713.00	128.41	128.23	99.46	-7,649.43	-173.75	626.54	372.61	253.93	2.467	
20,300.00	12,610.00	20,402.21	12,713.00	130.01	129.83	99.46	-7,749.43	-173.01	626.54	369.45	257.09	2.437	
20,400.00	12,610.00	20,502.21	12,713.00	131.60	131.43	99.46	-7,849.43	-172.27	626.54	366.28	260.25	2.407	
20,500.00	12,610.00	20,602.21	12,713.00	133.20	133.03	99.46	-7,949.42	-171.52	626.54	363.12	263.42	2.378	
20,600.00	12,610.00	20,702.21	12,713.00	134.80	134.63	99.46	-8,049.42	-170.78	626.54	359.95	266.59	2.350	
20,700.00	12,610.00	20,802.21	12,713.00	136.41	136.23	99.46	-8,149.42	-170.03	626.54	356.78	269.76	2.323	
20,800.00	12,610.00	20,902.21	12,713.00	138.01	137.83	99.46	-8,249.42	-169.29	626.54	353.61	272.93	2.296	
20,900.00	12,610.00	21,002.21	12,713.00	139.61	139.44	99.46	-8,349.41	-168.55	626.54	350.44	276.10	2.269	
21,000.00	12,610.00	21,102.21	12,713.00	141.21	141.04	99.46	-8,449.41	-167.80	626.54	347.27	279.27	2.243	
21,100.00	12,610.00	21,202.21	12,713.00	142.82	142.65	99.46	-8,549.41	-167.06	626.54	344.09	282.45	2.218	
21,200.00	12,610.00	21,302.21	12,713.00	144.42	144.25	99.46	-8,649.40	-166.32	626.54	340.91	285.63	2.194	
21,300.00	12,610.00	21,402.21	12,713.00	146.03	145.86	99.46	-8,749.40	-165.57	626.54	337.74	288.80	2.169	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 85H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
21,400.00	12,610.00	21,502.21	12,713.00	147.64	147.47	99.46	-8,849.40	-164.83	626.54	334.56	291.98	2.146	
21,500.00	12,610.00	21,602.21	12,713.00	149.24	149.07	99.46	-8,949.40	-164.08	626.54	331.38	295.16	2.123	
21,600.00	12,610.00	21,702.21	12,713.00	150.85	150.68	99.46	-9,049.39	-163.34	626.54	328.20	298.35	2.100	
21,700.00	12,610.00	21,802.21	12,713.00	152.46	152.29	99.46	-9,149.39	-162.60	626.54	325.01	301.53	2.078	
21,800.00	12,610.00	21,902.21	12,713.00	154.07	153.90	99.46	-9,249.39	-161.85	626.54	321.83	304.71	2.056	
21,900.00	12,610.00	22,002.21	12,713.00	155.68	155.51	99.46	-9,349.38	-161.11	626.54	318.64	307.90	2.035	
22,000.00	12,610.00	22,102.21	12,713.00	157.29	157.12	99.46	-9,449.38	-160.36	626.54	315.46	311.08	2.014	
22,100.00	12,610.00	22,202.21	12,713.00	158.90	158.73	99.46	-9,549.38	-159.62	626.54	312.27	314.27	1.994	
22,200.00	12,610.00	22,302.21	12,713.00	160.51	160.34	99.46	-9,649.38	-158.88	626.54	309.08	317.46	1.974	
22,300.00	12,610.00	22,402.21	12,713.00	162.12	161.95	99.46	-9,749.37	-158.13	626.54	305.89	320.65	1.954	
22,400.00	12,610.00	22,502.21	12,713.00	163.73	163.57	99.46	-9,849.37	-157.39	626.54	302.70	323.84	1.935	
22,500.00	12,610.00	22,602.21	12,713.00	165.35	165.18	99.46	-9,949.37	-156.64	626.54	299.51	327.03	1.916	
22,586.23	12,610.00	22,688.44	12,713.00	166.74	166.57	99.46	-10,035.60	-156.00	626.54	296.76	329.79	1.900	SF

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 94H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-59.04	30.00	-50.00	58.31				
100.00	100.00	100.00	100.00	0.09	0.09	-59.04	30.00	-50.00	58.31	58.13	0.18	328.383	
200.00	200.00	200.00	200.00	0.31	0.31	-59.04	30.00	-50.00	58.31	57.68	0.63	92.983	
300.00	300.00	300.00	300.00	0.54	0.54	-59.04	30.00	-50.00	58.31	57.23	1.08	54.159	
400.00	400.00	400.00	400.00	0.76	0.76	-59.04	30.00	-50.00	58.31	56.78	1.53	38.207	
500.00	500.00	500.00	500.00	0.99	0.99	-59.04	30.00	-50.00	58.31	56.33	1.98	29.513	
600.00	600.00	600.00	600.00	1.21	1.21	-59.04	30.00	-50.00	58.31	55.88	2.43	24.043	
700.00	700.00	700.00	700.00	1.44	1.44	-59.04	30.00	-50.00	58.31	55.43	2.87	20.283	
800.00	800.00	800.00	800.00	1.66	1.66	-59.04	30.00	-50.00	58.31	54.99	3.32	17.540	
900.00	900.00	900.00	900.00	1.89	1.89	-59.04	30.00	-50.00	58.31	54.54	3.77	15.451	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	-59.04	30.00	-50.00	58.31	54.09	4.22	13.806	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-59.04	30.00	-50.00	58.31	53.64	4.67	12.478	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-59.04	30.00	-50.00	58.31	53.19	5.12	11.383	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-59.04	30.00	-50.00	58.31	52.74	5.57	10.465	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-59.04	30.00	-50.00	58.31	52.29	6.02	9.684	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	-59.04	30.00	-50.00	58.31	51.84	6.47	9.011	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-59.04	30.00	-50.00	58.31	51.39	6.92	8.426	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	-59.04	30.00	-50.00	58.31	50.94	7.37	7.912	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-59.04	30.00	-50.00	58.31	50.49	7.82	7.457	
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	-59.04	30.00	-50.00	58.31	50.04	8.27	7.051	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	-59.04	30.00	-50.00	58.31	49.59	8.72	6.688	CC, ES
2,100.00	2,100.00	2,099.13	2,099.12	4.58	4.57	-59.46	30.00	-50.86	59.05	49.90	9.15	6.453	
2,200.00	2,200.00	2,198.19	2,198.15	4.81	4.77	-60.69	30.00	-53.43	61.30	51.73	9.57	6.406	
2,300.00	2,300.00	2,297.14	2,297.00	5.03	4.97	-62.53	30.00	-57.70	65.10	55.12	9.99	6.518	
2,400.00	2,400.00	2,395.91	2,395.59	5.26	5.17	-64.77	30.00	-63.67	70.52	60.12	10.41	6.777	
2,500.00	2,500.00	2,494.44	2,493.83	5.48	5.38	-67.19	30.00	-71.32	77.62	66.80	10.82	7.172	
2,600.00	2,600.00	2,593.20	2,592.15	5.71	5.60	-69.58	30.00	-80.56	86.32	75.08	11.24	7.678	
2,700.00	2,700.00	2,692.73	2,691.21	5.93	5.82	-71.61	30.00	-90.21	95.47	83.80	11.67	8.178	
2,800.00	2,800.00	2,792.26	2,790.27	6.16	6.05	-73.28	30.00	-99.86	104.72	92.61	12.11	8.649	
2,900.00	2,900.00	2,891.79	2,889.34	6.38	6.28	-74.68	30.00	-109.50	114.04	101.50	12.54	9.091	
3,000.00	3,000.00	2,991.32	2,988.40	6.61	6.51	-75.87	30.00	-119.15	123.42	110.44	12.98	9.508	
3,100.00	3,099.99	3,090.77	3,087.37	6.82	6.75	-142.06	30.00	-128.79	133.53	120.11	13.41	9.957	
3,200.00	3,199.96	3,190.03	3,186.17	7.03	6.99	-143.48	30.00	-138.41	145.08	131.25	13.83	10.487	
3,295.84	3,295.71	3,284.97	3,280.66	7.24	7.22	-144.97	30.00	-147.62	157.56	143.32	14.24	11.065	
3,300.00	3,299.86	3,289.08	3,284.75	7.25	7.23	-145.04	30.00	-148.02	158.13	143.87	14.26	11.091	
3,400.00	3,399.73	3,388.02	3,383.23	7.46	7.47	-146.58	30.00	-157.61	171.95	157.27	14.68	11.712	
3,500.00	3,499.60	3,486.97	3,481.71	7.67	7.72	-147.88	30.00	-167.20	185.88	170.77	15.11	12.304	
3,600.00	3,599.46	3,585.91	3,580.19	7.89	7.96	-149.01	30.00	-176.79	199.89	184.35	15.54	12.867	
3,700.00	3,699.33	3,684.85	3,678.66	8.11	8.21	-149.99	30.00	-186.38	213.96	198.00	15.96	13.402	
3,800.00	3,799.20	3,783.79	3,777.14	8.33	8.46	-150.84	30.00	-195.97	228.09	211.69	16.40	13.911	
3,900.00	3,899.06	3,882.74	3,875.62	8.55	8.71	-151.60	30.00	-205.56	242.26	225.43	16.83	14.396	
4,000.00	3,998.93	3,981.68	3,974.09	8.77	8.97	-152.27	30.00	-215.15	256.47	239.21	17.26	14.857	
4,100.00	4,098.80	4,080.62	4,072.57	8.99	9.22	-152.87	30.00	-224.74	270.71	253.01	17.70	15.296	
4,200.00	4,198.66	4,179.57	4,171.05	9.21	9.47	-153.42	30.00	-234.33	284.97	266.84	18.14	15.714	
4,300.00	4,298.53	4,278.51	4,269.53	9.43	9.73	-153.91	30.00	-243.92	299.26	280.69	18.57	16.113	
4,400.00	4,398.40	4,377.45	4,368.00	9.66	9.98	-154.35	30.00	-253.51	313.57	294.56	19.01	16.494	
4,500.00	4,498.26	4,476.40	4,466.48	9.88	10.24	-154.76	30.00	-263.11	327.90	308.44	19.45	16.857	
4,600.00	4,598.13	4,575.34	4,564.96	10.11	10.50	-155.13	30.00	-272.70	342.24	322.34	19.89	17.205	
4,700.00	4,698.00	4,674.28	4,663.43	10.33	10.76	-155.47	30.00	-282.29	356.59	336.25	20.33	17.537	
4,800.00	4,797.86	4,773.22	4,761.91	10.56	11.02	-155.79	30.00	-291.88	370.95	350.18	20.78	17.855	
4,900.00	4,897.73	4,872.17	4,860.39	10.79	11.28	-156.08	30.00	-301.47	385.33	364.11	21.22	18.159	
5,000.00	4,997.60	4,971.11	4,958.87	11.01	11.54	-156.35	30.00	-311.06	399.71	378.05	21.66	18.451	

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

Anticollision Report

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 94H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,097.46	5,070.05	5,057.34	11.24	11.80	-156.61	30.00	-320.65	414.10	391.99	22.11	18.732	
5,200.00	5,197.33	5,169.00	5,155.82	11.47	12.06	-156.84	30.00	-330.24	428.50	405.95	22.55	19.000	
5,300.00	5,297.20	5,267.94	5,254.30	11.70	12.32	-157.06	30.00	-339.83	442.91	419.91	23.00	19.259	
5,400.00	5,397.06	5,366.88	5,352.77	11.93	12.58	-157.27	30.00	-349.42	457.32	433.87	23.44	19.507	
5,500.00	5,496.93	5,465.83	5,451.25	12.16	12.84	-157.46	30.00	-359.01	471.74	447.85	23.89	19.746	
5,600.00	5,596.80	5,564.77	5,549.73	12.39	13.11	-157.65	30.00	-368.60	486.16	461.82	24.34	19.975	
5,700.00	5,696.66	5,663.71	5,648.21	12.62	13.37	-157.82	30.00	-378.19	500.58	475.80	24.79	20.197	
5,800.00	5,796.53	5,762.65	5,746.68	12.85	13.63	-157.98	30.00	-387.79	515.02	489.78	25.23	20.410	
5,900.00	5,896.40	5,861.60	5,845.16	13.08	13.90	-158.13	30.00	-397.38	529.45	503.77	25.68	20.616	
6,000.00	5,996.26	5,960.54	5,943.64	13.31	14.16	-158.28	30.00	-406.97	543.89	517.76	26.13	20.814	
6,100.00	6,096.13	6,059.48	6,042.11	13.54	14.43	-158.42	30.00	-416.56	558.33	531.75	26.58	21.005	
6,200.00	6,196.00	6,158.43	6,140.59	13.77	14.69	-158.55	30.00	-426.15	572.77	545.74	27.03	21.190	
6,300.00	6,295.86	6,257.37	6,239.07	14.01	14.95	-158.67	30.00	-435.74	587.22	559.74	27.48	21.369	
6,400.00	6,395.73	6,356.31	6,337.55	14.24	15.22	-158.79	30.00	-445.33	601.67	573.74	27.93	21.542	
6,500.00	6,495.60	6,455.26	6,436.02	14.47	15.49	-158.90	30.00	-454.92	616.12	587.74	28.38	21.709	
6,600.00	6,595.47	6,554.20	6,534.50	14.70	15.75	-159.01	30.00	-464.51	630.58	601.75	28.83	21.871	
6,700.00	6,695.33	6,653.14	6,632.98	14.93	16.02	-159.11	30.00	-474.10	645.03	615.75	29.28	22.027	
6,800.00	6,795.20	6,752.09	6,731.45	15.17	16.28	-159.21	30.00	-483.69	659.49	629.76	29.74	22.179	
6,900.00	6,895.07	6,851.03	6,829.93	15.40	16.55	-159.31	30.00	-493.28	673.95	643.77	30.19	22.326	
7,000.00	6,994.93	6,949.97	6,928.41	15.63	16.82	-159.40	30.00	-502.88	688.42	657.78	30.64	22.469	
7,100.00	7,094.80	7,048.91	7,026.88	15.87	17.08	-159.48	30.00	-512.47	702.88	671.79	31.09	22.607	
7,200.00	7,194.67	7,147.86	7,125.36	16.10	17.35	-159.56	30.00	-522.06	717.34	685.80	31.54	22.741	
7,300.00	7,294.53	7,246.80	7,223.84	16.33	17.62	-159.64	30.00	-531.65	731.81	699.81	32.00	22.871	
7,400.00	7,394.40	7,345.74	7,322.32	16.57	17.88	-159.72	30.00	-541.24	746.28	713.83	32.45	22.998	
7,500.00	7,494.27	7,444.69	7,420.79	16.80	18.15	-159.79	30.00	-550.83	760.75	727.84	32.90	23.121	
7,600.00	7,594.13	7,543.63	7,519.27	17.03	18.42	-159.87	30.00	-560.42	775.22	741.86	33.36	23.240	
7,700.00	7,694.00	7,642.57	7,617.75	17.27	18.68	-159.93	30.00	-570.01	789.69	755.88	33.81	23.356	
7,800.00	7,793.87	7,741.52	7,716.22	17.50	18.95	-160.00	30.00	-579.60	804.16	769.90	34.26	23.469	
7,900.00	7,893.73	7,840.46	7,814.70	17.74	19.22	-160.06	30.00	-589.19	818.64	783.92	34.72	23.579	
8,000.00	7,993.60	7,939.40	7,913.18	17.97	19.49	-160.12	30.00	-598.78	833.11	797.94	35.17	23.686	
8,100.00	8,093.47	8,038.34	8,011.66	18.21	19.75	-160.18	30.00	-608.37	847.59	811.96	35.63	23.790	
8,200.00	8,193.33	8,137.29	8,110.13	18.44	20.02	-160.24	30.00	-617.97	862.06	825.98	36.08	23.891	
8,300.00	8,293.20	8,236.23	8,208.61	18.68	20.29	-160.30	30.00	-627.56	876.54	840.00	36.54	23.990	
8,400.00	8,393.07	8,335.17	8,307.09	18.91	20.56	-160.35	30.00	-637.15	891.02	854.02	36.99	24.087	
8,500.00	8,492.93	8,434.12	8,405.56	19.15	20.83	-160.40	30.00	-646.74	905.50	868.05	37.45	24.180	
8,600.00	8,592.80	8,533.06	8,504.04	19.38	21.10	-160.45	30.00	-656.33	919.97	882.07	37.90	24.272	
8,700.00	8,692.67	8,632.00	8,602.52	19.62	21.36	-160.50	30.00	-665.92	934.45	896.10	38.36	24.361	
8,800.00	8,792.53	8,730.95	8,701.00	19.85	21.63	-160.55	30.00	-675.51	948.94	910.12	38.81	24.448	
8,900.00	8,892.40	8,829.89	8,799.47	20.09	21.90	-160.59	30.00	-685.10	963.42	924.15	39.27	24.533	
9,000.00	8,992.27	8,928.83	8,897.95	20.32	22.17	-160.64	30.00	-694.69	977.90	938.17	39.73	24.616	
9,100.00	9,092.13	9,027.78	8,996.43	20.56	22.44	-160.68	30.00	-704.28	992.38	952.20	40.18	24.697	
9,200.00	9,192.00	9,126.72	9,094.90	20.79	22.71	-160.72	30.00	-713.87	1,006.86	966.23	40.64	24.776	
9,300.00	9,291.87	9,225.66	9,193.38	21.03	22.98	-160.76	30.00	-723.46	1,021.35	980.25	41.10	24.853	
9,400.00	9,391.73	9,324.60	9,291.86	21.26	23.25	-160.80	30.00	-733.05	1,035.83	994.28	41.55	24.929	
9,500.00	9,491.60	9,423.55	9,390.34	21.50	23.51	-160.84	30.00	-742.65	1,050.32	1,008.31	42.01	25.002	
9,600.00	9,591.47	9,522.49	9,488.81	21.74	23.78	-160.88	30.00	-752.24	1,064.80	1,022.33	42.47	25.075	
9,700.00	9,691.33	9,621.43	9,587.29	21.97	24.05	-160.92	30.00	-761.83	1,079.29	1,036.36	42.92	25.145	
9,800.00	9,791.20	9,720.38	9,685.77	22.21	24.32	-160.95	30.00	-771.42	1,093.77	1,050.39	43.38	25.214	
9,900.00	9,891.07	9,819.32	9,784.24	22.44	24.59	-160.99	30.00	-781.01	1,108.26	1,064.42	43.84	25.282	
10,000.00	9,990.93	9,918.26	9,882.72	22.68	24.86	-161.02	30.00	-790.60	1,122.74	1,078.45	44.29	25.348	
10,100.00	10,090.80	10,017.21	9,981.20	22.92	25.13	-161.05	30.00	-800.19	1,137.23	1,092.48	44.75	25.412	
10,200.00	10,190.67	10,116.15	10,079.68	23.15	25.40	-161.08	30.00	-809.78	1,151.72	1,106.51	45.21	25.475	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 94H - OH - Plan #1 — Offset Site Error: 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	10,290.53	10,215.09	10,178.15	23.39	25.67	-161.12	30.00	-819.37	1,166.20	1,120.54	45.67	25.537	
10,400.00	10,390.40	10,314.03	10,276.63	23.62	25.94	-161.15	30.00	-828.96	1,180.69	1,134.57	46.12	25.598	
10,500.00	10,490.27	10,412.98	10,375.11	23.86	26.21	-161.18	30.00	-838.55	1,195.18	1,148.60	46.58	25.657	
10,600.00	10,590.13	10,511.92	10,473.58	24.10	26.48	-161.20	30.00	-848.14	1,209.67	1,162.63	47.04	25.715	
10,700.00	10,690.00	10,610.86	10,572.06	24.33	26.75	-161.23	30.00	-857.74	1,224.16	1,176.66	47.50	25.772	
10,800.00	10,789.87	10,709.81	10,670.54	24.57	27.02	-161.26	30.00	-867.33	1,238.65	1,190.69	47.96	25.828	
10,900.00	10,889.73	10,808.75	10,769.01	24.81	27.29	-161.29	30.00	-876.92	1,253.14	1,204.72	48.42	25.883	
11,000.00	10,989.60	10,907.69	10,867.49	25.04	27.56	-161.31	30.00	-886.51	1,267.63	1,218.75	48.87	25.936	
11,100.00	11,089.47	11,012.77	10,972.08	25.28	27.83	-161.34	30.00	-896.63	1,282.06	1,232.72	49.35	25.980	
11,200.00	11,189.33	11,140.47	11,099.36	25.51	28.08	-161.38	30.00	-906.98	1,294.98	1,245.13	49.85	25.977	
11,252.06	11,241.33	11,207.22	11,165.97	25.64	28.21	-161.41	30.00	-911.26	1,300.84	1,250.73	50.11	25.962	
11,300.00	11,289.21	11,268.86	11,227.52	25.74	28.32	-161.45	30.00	-914.52	1,305.51	1,255.19	50.33	25.942	
11,400.00	11,389.15	11,397.92	11,356.49	25.92	28.54	-161.51	30.00	-919.20	1,312.39	1,261.65	50.74	25.863	
11,500.00	11,489.13	11,527.36	11,485.92	26.09	28.75	-161.54	30.00	-920.98	1,315.38	1,264.23	51.14	25.719	
11,547.91	11,537.04	11,578.48	11,537.04	26.17	28.84	-96.55	30.00	-921.00	1,315.58	1,264.25	51.33	25.632	
11,600.00	11,589.13	11,630.57	11,589.13	26.27	28.93	-96.55	30.00	-921.00	1,315.58	1,264.05	51.53	25.530	
11,700.00	11,689.13	11,730.57	11,689.13	26.48	29.12	-96.55	30.00	-921.00	1,315.58	1,263.63	51.94	25.327	
11,800.00	11,789.13	11,830.57	11,789.13	26.69	29.30	-96.55	30.00	-921.00	1,315.58	1,263.22	52.36	25.126	
11,900.00	11,889.13	11,930.57	11,889.13	26.90	29.48	-96.55	30.00	-921.00	1,315.58	1,262.81	52.77	24.929	
12,000.00	11,989.13	12,030.57	11,989.13	27.12	29.67	-96.55	30.00	-921.00	1,315.58	1,262.39	53.19	24.735	
12,047.91	12,037.04	12,078.48	12,037.04	27.22	29.76	-96.55	30.00	-921.00	1,315.58	1,262.19	53.39	24.642	
12,050.00	12,039.13	12,078.48	12,037.04	27.22	29.76	83.88	30.00	-921.00	1,315.58	1,262.19	53.39	24.640	
12,100.00	12,089.06	12,120.34	12,078.86	27.31	29.83	83.90	28.47	-920.99	1,315.53	1,261.97	53.56	24.562	
12,150.00	12,138.59	12,160.55	12,118.83	27.39	29.90	83.96	24.13	-920.96	1,315.39	1,261.67	53.72	24.488	
12,200.00	12,187.35	12,200.00	12,157.65	27.46	29.97	84.06	17.16	-920.90	1,315.16	1,261.30	53.86	24.419	
12,250.00	12,234.97	12,241.23	12,197.61	27.53	30.04	84.20	7.04	-920.83	1,314.85	1,260.86	54.00	24.350	
12,300.00	12,281.08	12,281.78	12,236.10	27.60	30.11	84.37	-5.69	-920.73	1,314.47	1,260.34	54.13	24.284	
12,350.00	12,325.33	12,322.52	12,273.77	27.66	30.18	84.58	-21.19	-920.62	1,314.02	1,259.76	54.26	24.217	
12,400.00	12,367.39	12,363.49	12,310.44	27.71	30.25	84.82	-39.44	-920.48	1,313.51	1,259.12	54.39	24.150	
12,450.00	12,406.93	12,404.73	12,345.95	27.77	30.32	85.10	-60.40	-920.33	1,312.96	1,258.44	54.53	24.080	
12,500.00	12,443.66	12,450.00	12,383.07	27.82	30.40	85.43	-86.29	-920.13	1,312.39	1,257.71	54.68	24.002	
12,550.00	12,477.29	12,488.21	12,412.73	27.88	30.47	85.75	-110.36	-919.95	1,311.78	1,256.95	54.83	23.924	
12,600.00	12,507.58	12,530.53	12,443.63	27.94	30.55	86.12	-139.26	-919.74	1,311.18	1,256.17	55.01	23.835	
12,650.00	12,534.28	12,573.32	12,472.62	28.01	30.64	86.51	-170.72	-919.50	1,310.59	1,255.38	55.21	23.738	
12,700.00	12,557.20	12,616.62	12,499.48	28.10	30.73	86.93	-204.67	-919.25	1,310.03	1,254.60	55.44	23.631	
12,750.00	12,576.16	12,660.49	12,524.00	28.19	30.83	87.37	-241.03	-918.98	1,309.52	1,253.83	55.69	23.514	
12,800.00	12,591.01	12,704.99	12,545.95	28.31	30.94	87.83	-279.73	-918.69	1,309.06	1,253.09	55.98	23.386	
12,850.00	12,601.65	12,750.00	12,565.04	28.45	31.06	88.31	-320.48	-918.39	1,308.68	1,252.39	56.29	23.248	
12,900.00	12,608.00	12,796.13	12,581.22	28.62	31.20	88.80	-363.66	-918.07	1,308.38	1,251.74	56.64	23.099	
12,947.91	12,610.00	12,840.92	12,593.57	28.79	31.35	89.28	-406.71	-917.75	1,308.19	1,251.18	57.01	22.949	
13,000.00	12,610.00	12,891.00	12,603.33	29.00	31.53	89.71	-455.80	-917.38	1,308.09	1,250.66	57.44	22.774	
13,100.00	12,610.00	12,990.31	12,610.00	29.46	31.95	90.00	-554.78	-916.64	1,308.08	1,249.69	58.39	22.403	
13,111.65	12,610.00	13,001.96	12,610.00	29.53	32.01	90.00	-566.43	-916.56	1,308.08	1,249.56	58.51	22.355	
13,200.00	12,610.00	13,090.31	12,610.00	30.01	32.45	90.00	-654.77	-915.90	1,308.08	1,248.57	59.50	21.983	
13,300.00	12,610.00	13,190.31	12,610.00	30.64	33.03	90.00	-754.77	-915.15	1,308.08	1,247.30	60.77	21.524	
13,400.00	12,610.00	13,290.31	12,610.00	31.34	33.68	90.00	-854.77	-914.41	1,308.07	1,245.89	62.19	21.035	
13,500.00	12,610.00	13,390.31	12,610.00	32.10	34.40	90.00	-954.76	-913.66	1,308.07	1,244.34	63.74	20.523	
13,600.00	12,610.00	13,490.31	12,610.00	32.93	35.17	90.00	-1,054.76	-912.92	1,308.07	1,242.66	65.42	19.996	
13,700.00	12,610.00	13,590.31	12,610.00	33.82	36.01	90.00	-1,154.76	-912.17	1,308.07	1,240.86	67.21	19.462	
13,800.00	12,610.00	13,690.31	12,610.00	34.76	36.90	90.00	-1,254.76	-911.43	1,308.07	1,238.95	69.12	18.925	
13,900.00	12,610.00	13,790.31	12,610.00	35.76	37.84	90.00	-1,354.75	-910.68	1,308.07	1,236.95	71.12	18.392	
14,000.00	12,610.00	13,890.31	12,610.00	36.80	38.83	90.00	-1,454.75	-909.94	1,308.07	1,234.85	73.22	17.865	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 94H - OH - Plan #1 — Offset Site Error: 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	12,610.00	13,990.31	12,610.00	37.88	39.87	90.00	-1,554.75	-909.19	1,308.07	1,232.67	75.40	17.349	
14,200.00	12,610.00	14,090.31	12,610.00	39.00	40.94	90.00	-1,654.74	-908.45	1,308.07	1,230.42	77.65	16.845	
14,300.00	12,610.00	14,190.31	12,610.00	40.15	42.04	90.00	-1,754.74	-907.70	1,308.07	1,228.09	79.98	16.355	
14,400.00	12,610.00	14,290.31	12,610.00	41.34	43.19	90.00	-1,854.74	-906.96	1,308.07	1,225.70	82.37	15.880	
14,500.00	12,610.00	14,390.31	12,610.00	42.56	44.36	90.00	-1,954.74	-906.22	1,308.07	1,223.24	84.82	15.421	
14,600.00	12,610.00	14,490.31	12,610.00	43.80	45.56	90.00	-2,054.73	-905.47	1,308.07	1,220.74	87.33	14.979	
14,700.00	12,610.00	14,590.31	12,610.00	45.07	46.79	90.00	-2,154.73	-904.73	1,308.07	1,218.19	89.88	14.553	
14,800.00	12,610.00	14,690.31	12,610.00	46.37	48.04	90.00	-2,254.73	-903.98	1,308.07	1,215.59	92.48	14.144	
14,900.00	12,610.00	14,790.31	12,610.00	47.68	49.32	90.00	-2,354.73	-903.24	1,308.07	1,212.94	95.12	13.752	
15,000.00	12,610.00	14,890.31	12,610.00	49.01	50.61	90.00	-2,454.72	-902.49	1,308.06	1,210.27	97.80	13.375	
15,100.00	12,610.00	14,990.31	12,610.00	50.37	51.93	90.00	-2,554.72	-901.75	1,308.06	1,207.55	100.51	13.014	
15,200.00	12,610.00	15,090.31	12,610.00	51.73	53.26	90.00	-2,654.72	-901.00	1,308.06	1,204.80	103.26	12.668	
15,300.00	12,610.00	15,190.31	12,610.00	53.12	54.61	90.00	-2,754.71	-900.26	1,308.06	1,202.03	106.04	12.336	
15,400.00	12,610.00	15,290.31	12,610.00	54.51	55.97	90.00	-2,854.71	-899.51	1,308.06	1,199.22	108.84	12.018	
15,500.00	12,610.00	15,390.31	12,610.00	55.92	57.35	90.00	-2,954.71	-898.77	1,308.06	1,196.39	111.67	11.714	
15,600.00	12,610.00	15,490.31	12,610.00	57.35	58.74	90.00	-3,054.71	-898.02	1,308.06	1,193.54	114.52	11.422	
15,700.00	12,610.00	15,590.31	12,610.00	58.78	60.15	90.00	-3,154.70	-897.28	1,308.06	1,190.66	117.40	11.142	
15,800.00	12,610.00	15,690.31	12,610.00	60.22	61.56	90.00	-3,254.70	-896.53	1,308.06	1,187.77	120.29	10.874	
15,900.00	12,610.00	15,790.31	12,610.00	61.68	62.99	90.00	-3,354.70	-895.79	1,308.06	1,184.85	123.21	10.617	
16,000.00	12,610.00	15,890.31	12,610.00	63.14	64.43	90.00	-3,454.69	-895.04	1,308.06	1,181.92	126.14	10.370	
16,100.00	12,610.00	15,990.31	12,610.00	64.61	65.87	90.00	-3,554.69	-894.30	1,308.06	1,178.97	129.09	10.133	
16,200.00	12,610.00	16,090.31	12,610.00	66.09	67.33	90.00	-3,654.69	-893.55	1,308.06	1,176.01	132.05	9.906	
16,300.00	12,610.00	16,190.31	12,610.00	67.57	68.79	90.00	-3,754.69	-892.81	1,308.06	1,173.03	135.03	9.687	
16,400.00	12,610.00	16,290.31	12,610.00	69.07	70.26	90.00	-3,854.68	-892.06	1,308.06	1,170.03	138.02	9.477	
16,500.00	12,610.00	16,390.31	12,610.00	70.56	71.74	90.00	-3,954.68	-891.32	1,308.05	1,167.03	141.02	9.275	
16,600.00	12,610.00	16,490.31	12,610.00	72.07	73.22	90.00	-4,054.68	-890.57	1,308.05	1,164.01	144.04	9.081	
16,700.00	12,610.00	16,590.31	12,610.00	73.58	74.72	90.00	-4,154.68	-889.83	1,308.05	1,160.99	147.07	8.894	
16,800.00	12,610.00	16,690.31	12,610.00	75.10	76.21	90.00	-4,254.67	-889.08	1,308.05	1,157.95	150.10	8.714	
16,900.00	12,610.00	16,790.31	12,610.00	76.62	77.71	90.00	-4,354.67	-888.34	1,308.05	1,154.90	153.15	8.541	
17,000.00	12,610.00	16,890.31	12,610.00	78.14	79.22	90.00	-4,454.67	-887.59	1,308.05	1,151.84	156.21	8.374	
17,100.00	12,610.00	16,990.31	12,610.00	79.67	80.74	90.00	-4,554.66	-886.85	1,308.05	1,148.78	159.27	8.213	
17,200.00	12,610.00	17,090.31	12,610.00	81.21	82.25	90.00	-4,654.66	-886.10	1,308.05	1,145.71	162.34	8.057	
17,300.00	12,610.00	17,190.31	12,610.00	82.74	83.77	90.00	-4,754.66	-885.36	1,308.05	1,142.63	165.42	7.907	
17,400.00	12,610.00	17,290.31	12,610.00	84.28	85.30	90.00	-4,854.66	-884.61	1,308.05	1,139.54	168.51	7.762	
17,500.00	12,610.00	17,390.31	12,610.00	85.83	86.83	90.00	-4,954.65	-883.87	1,308.05	1,136.44	171.61	7.622	
17,600.00	12,610.00	17,490.31	12,610.00	87.38	88.37	90.00	-5,054.65	-883.12	1,308.05	1,133.34	174.71	7.487	
17,700.00	12,610.00	17,590.31	12,610.00	88.93	89.90	90.00	-5,154.65	-882.38	1,308.05	1,130.23	177.81	7.356	
17,800.00	12,610.00	17,690.31	12,610.00	90.48	91.44	90.00	-5,254.64	-881.63	1,308.05	1,127.12	180.93	7.230	
17,900.00	12,610.00	17,790.31	12,610.00	92.04	92.99	90.00	-5,354.64	-880.89	1,308.05	1,124.00	184.05	7.107	
18,000.00	12,610.00	17,890.31	12,610.00	93.60	94.54	90.00	-5,454.64	-880.14	1,308.05	1,120.88	187.17	6.989	
18,100.00	12,610.00	17,990.31	12,610.00	95.17	96.09	90.00	-5,554.64	-879.40	1,308.04	1,117.75	190.30	6.874	
18,200.00	12,610.00	18,090.31	12,610.00	96.73	97.64	90.00	-5,654.63	-878.65	1,308.04	1,114.61	193.43	6.762	
18,300.00	12,610.00	18,190.31	12,610.00	98.30	99.20	90.00	-5,754.63	-877.91	1,308.04	1,111.47	196.57	6.654	
18,400.00	12,610.00	18,290.31	12,610.00	99.87	100.75	90.00	-5,854.63	-877.16	1,308.04	1,108.33	199.71	6.550	
18,500.00	12,610.00	18,390.31	12,610.00	101.44	102.32	90.00	-5,954.63	-876.42	1,308.04	1,105.18	202.86	6.448	
18,600.00	12,610.00	18,490.31	12,610.00	103.01	103.88	90.00	-6,054.62	-875.67	1,308.04	1,102.03	206.01	6.349	
18,700.00	12,610.00	18,590.31	12,610.00	104.59	105.44	90.00	-6,154.62	-874.93	1,308.04	1,098.88	209.17	6.254	
18,800.00	12,610.00	18,690.31	12,610.00	106.17	107.01	90.00	-6,254.62	-874.18	1,308.04	1,095.72	212.32	6.161	
18,900.00	12,610.00	18,790.31	12,610.00	107.75	108.58	90.00	-6,354.61	-873.44	1,308.04	1,092.55	215.48	6.070	
19,000.00	12,610.00	18,890.31	12,610.00	109.33	110.15	90.00	-6,454.61	-872.69	1,308.04	1,089.39	218.65	5.982	
19,100.00	12,610.00	18,990.31	12,610.00	110.91	111.73	90.00	-6,554.61	-871.95	1,308.04	1,086.22	221.82	5.897	
19,200.00	12,610.00	19,090.31	12,610.00	112.49	113.30	90.00	-6,654.61	-871.20	1,308.04	1,083.05	224.99	5.814	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 94H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.00	12,610.00	19,190.31	12,610.00	114.08	114.88	90.00	-6,754.60	-870.46	1,308.04	1,079.87	228.16	5.733	
19,400.00	12,610.00	19,290.31	12,610.00	115.67	116.46	90.00	-6,854.60	-869.71	1,308.04	1,076.70	231.34	5.654	
19,500.00	12,610.00	19,390.31	12,610.00	117.26	118.04	90.00	-6,954.60	-868.97	1,308.04	1,073.52	234.52	5.578	
19,600.00	12,610.00	19,490.31	12,610.00	118.85	119.62	90.00	-7,054.59	-868.22	1,308.03	1,070.34	237.70	5.503	
19,700.00	12,610.00	19,590.31	12,610.00	120.44	121.20	90.00	-7,154.59	-867.48	1,308.03	1,067.15	240.88	5.430	
19,800.00	12,610.00	19,690.31	12,610.00	122.03	122.79	90.00	-7,254.59	-866.73	1,308.03	1,063.96	244.07	5.359	
19,900.00	12,610.00	19,790.31	12,610.00	123.62	124.37	90.00	-7,354.59	-865.99	1,308.03	1,060.77	247.26	5.290	
20,000.00	12,610.00	19,890.31	12,610.00	125.22	125.96	90.00	-7,454.58	-865.24	1,308.03	1,057.58	250.45	5.223	
20,100.00	12,610.00	19,990.31	12,610.00	126.81	127.55	90.00	-7,554.58	-864.50	1,308.03	1,054.39	253.64	5.157	
20,200.00	12,610.00	20,090.31	12,610.00	128.41	129.14	90.00	-7,654.58	-863.75	1,308.03	1,051.19	256.84	5.093	
20,300.00	12,610.00	20,190.31	12,610.00	130.01	130.73	90.00	-7,754.58	-863.01	1,308.03	1,048.00	260.04	5.030	
20,400.00	12,610.00	20,290.31	12,610.00	131.60	132.32	90.00	-7,854.57	-862.27	1,308.03	1,044.80	263.23	4.969	
20,500.00	12,610.00	20,390.31	12,610.00	133.20	133.91	90.00	-7,954.57	-861.52	1,308.03	1,041.59	266.43	4.909	
20,600.00	12,610.00	20,490.31	12,610.00	134.80	135.51	90.00	-8,054.57	-860.78	1,308.03	1,038.39	269.64	4.851	
20,700.00	12,610.00	20,590.31	12,610.00	136.41	137.10	90.00	-8,154.56	-860.03	1,308.03	1,035.19	272.84	4.794	
20,800.00	12,610.00	20,690.31	12,610.00	138.01	138.70	90.00	-8,254.56	-859.29	1,308.03	1,031.98	276.05	4.738	
20,900.00	12,610.00	20,790.31	12,610.00	139.61	140.30	90.00	-8,354.56	-858.54	1,308.03	1,028.77	279.25	4.684	
21,000.00	12,610.00	20,890.31	12,610.00	141.21	141.89	90.00	-8,454.56	-857.80	1,308.03	1,025.56	282.46	4.631	
21,100.00	12,610.00	20,990.31	12,610.00	142.82	143.49	90.00	-8,554.55	-857.05	1,308.03	1,022.35	285.67	4.579	
21,200.00	12,610.00	21,090.31	12,610.00	144.42	145.09	90.00	-8,654.55	-856.31	1,308.02	1,019.14	288.89	4.528	
21,300.00	12,610.00	21,190.31	12,610.00	146.03	146.69	90.00	-8,754.55	-855.56	1,308.02	1,015.93	292.10	4.478	
21,400.00	12,610.00	21,290.31	12,610.00	147.64	148.29	90.00	-8,854.54	-854.82	1,308.02	1,012.71	295.31	4.429	
21,500.00	12,610.00	21,390.31	12,610.00	149.24	149.89	90.00	-8,954.54	-854.07	1,308.02	1,009.49	298.53	4.382	
21,600.00	12,610.00	21,490.31	12,610.00	150.85	151.50	90.00	-9,054.54	-853.33	1,308.02	1,006.28	301.75	4.335	
21,700.00	12,610.00	21,590.31	12,610.00	152.46	153.10	90.00	-9,154.54	-852.58	1,308.02	1,003.06	304.96	4.289	
21,800.00	12,610.00	21,690.31	12,610.00	154.07	154.71	90.00	-9,254.53	-851.84	1,308.02	999.84	308.18	4.244	
21,900.00	12,610.00	21,790.31	12,610.00	155.68	156.31	90.00	-9,354.53	-851.09	1,308.02	996.62	311.40	4.200	
22,000.00	12,610.00	21,890.31	12,610.00	157.29	157.92	90.00	-9,454.53	-850.35	1,308.02	993.39	314.62	4.157	
22,100.00	12,610.00	21,990.31	12,610.00	158.90	159.52	90.00	-9,554.53	-849.60	1,308.02	990.17	317.85	4.115	
22,200.00	12,610.00	22,090.31	12,610.00	160.51	161.13	90.00	-9,654.52	-848.86	1,308.02	986.95	321.07	4.074	
22,300.00	12,610.00	22,190.31	12,610.00	162.12	162.74	90.00	-9,754.52	-848.11	1,308.02	983.72	324.30	4.033	
22,400.00	12,610.00	22,290.31	12,610.00	163.73	164.34	90.00	-9,854.52	-847.37	1,308.02	980.50	327.52	3.994	
22,500.00	12,610.00	22,390.31	12,610.00	165.35	165.95	90.00	-9,954.51	-846.62	1,308.02	977.27	330.75	3.955	
22,582.98	12,610.00	22,473.29	12,610.00	166.69	167.29	90.00	-10,037.49	-846.00	1,308.02	974.59	333.43	3.923	
22,586.23	12,610.00	22,473.80	12,610.00	166.74	167.29	90.00	-10,038.00	-846.00	1,308.02	974.52	333.50	3.922	SF

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 95H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	30.00				
100.00	100.00	100.00	100.00	0.09	0.09	0.00	30.00	0.00	30.00	29.82	0.18	168.952	
200.00	200.00	200.00	200.00	0.31	0.31	0.00	30.00	0.00	30.00	29.37	0.63	47.839	
300.00	300.00	300.00	300.00	0.54	0.54	0.00	30.00	0.00	30.00	28.92	1.08	27.865	
400.00	400.00	400.00	400.00	0.76	0.76	0.00	30.00	0.00	30.00	28.47	1.53	19.657	
500.00	500.00	500.00	500.00	0.99	0.99	0.00	30.00	0.00	30.00	28.02	1.98	15.185	
600.00	600.00	600.00	600.00	1.21	1.21	0.00	30.00	0.00	30.00	27.57	2.43	12.370	
700.00	700.00	700.00	700.00	1.44	1.44	0.00	30.00	0.00	30.00	27.13	2.87	10.436	
800.00	800.00	800.00	800.00	1.66	1.66	0.00	30.00	0.00	30.00	26.68	3.32	9.024	
900.00	900.00	900.00	900.00	1.89	1.89	0.00	30.00	0.00	30.00	26.23	3.77	7.950	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	0.00	30.00	0.00	30.00	25.78	4.22	7.103	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	0.00	30.00	0.00	30.00	25.33	4.67	6.420	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	0.00	30.00	0.00	30.00	24.88	5.12	5.857	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	0.00	30.00	0.00	30.00	24.43	5.57	5.384	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	0.00	30.00	0.00	30.00	23.98	6.02	4.982	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	0.00	30.00	0.00	30.00	23.53	6.47	4.636	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	0.00	30.00	0.00	30.00	23.08	6.92	4.335	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	0.00	30.00	0.00	30.00	22.63	7.37	4.071	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	0.00	30.00	0.00	30.00	22.18	7.82	3.837	
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	0.00	30.00	0.00	30.00	21.73	8.27	3.628	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	0.00	30.00	0.00	30.00	21.28	8.72	3.441	
2,100.00	2,100.00	2,100.00	2,100.00	4.58	4.58	0.00	30.00	0.00	30.00	20.83	9.17	3.272	
2,200.00	2,200.00	2,200.00	2,200.00	4.81	4.81	0.00	30.00	0.00	30.00	20.38	9.62	3.119	
2,300.00	2,300.00	2,300.00	2,300.00	5.03	5.03	0.00	30.00	0.00	30.00	19.93	10.07	2.980	
2,400.00	2,400.00	2,400.00	2,400.00	5.26	5.26	0.00	30.00	0.00	30.00	19.48	10.52	2.853	
2,500.00	2,500.00	2,500.00	2,500.00	5.48	5.48	0.00	30.00	0.00	30.00	19.03	10.97	2.736	
2,600.00	2,600.00	2,600.00	2,600.00	5.71	5.71	0.00	30.00	0.00	30.00	18.58	11.42	2.628	
2,700.00	2,700.00	2,700.00	2,700.00	5.93	5.93	0.00	30.00	0.00	30.00	18.13	11.87	2.528	
2,800.00	2,800.00	2,800.00	2,800.00	6.16	6.16	0.00	30.00	0.00	30.00	17.69	12.31	2.436	
2,900.00	2,900.00	2,900.00	2,900.00	6.38	6.38	0.00	30.00	0.00	30.00	17.24	12.76	2.350	
3,000.00	3,000.00	3,000.00	3,000.00	6.61	6.61	0.00	30.00	0.00	30.00	16.79	13.21	2.270	
3,100.00	3,099.99	3,099.89	3,099.88	6.82	6.82	-68.17	30.14	-0.86	29.82	16.17	13.64	2.185	
3,157.34	3,157.32	3,157.10	3,157.08	6.94	6.94	-72.89	30.35	-2.13	29.72	15.84	13.88	2.141	CC
3,200.00	3,199.96	3,199.61	3,199.57	7.03	7.02	-77.76	30.56	-3.43	29.82	15.77	14.05	2.122	ES, SF
3,295.84	3,295.71	3,294.88	3,294.75	7.24	7.22	-92.15	31.22	-7.49	31.50	17.05	14.45	2.180	
3,300.00	3,299.86	3,299.00	3,298.87	7.25	7.23	-92.84	31.25	-7.70	31.63	17.17	14.46	2.187	
3,400.00	3,399.73	3,398.01	3,397.69	7.46	7.43	-108.41	32.22	-13.64	36.94	22.08	14.86	2.486	
3,500.00	3,499.60	3,496.63	3,496.00	7.67	7.64	-120.41	33.45	-21.23	45.81	30.55	15.26	3.003	
3,600.00	3,599.46	3,594.81	3,593.74	7.89	7.86	-128.80	34.95	-30.45	57.66	42.01	15.64	3.686	
3,700.00	3,699.33	3,692.85	3,691.17	8.11	8.07	-134.53	36.70	-41.23	71.91	55.87	16.03	4.484	
3,800.00	3,799.20	3,791.55	3,789.21	8.33	8.30	-138.41	38.53	-52.49	87.05	70.60	16.45	5.292	
3,900.00	3,899.06	3,890.25	3,887.25	8.55	8.53	-141.14	40.36	-63.75	102.47	85.60	16.87	6.074	
4,000.00	3,998.93	3,988.96	3,985.30	8.77	8.76	-143.14	42.19	-75.01	118.06	100.77	17.29	6.827	
4,100.00	4,098.80	4,087.66	4,083.34	8.99	9.00	-144.68	44.02	-86.27	133.76	116.04	17.72	7.550	
4,200.00	4,198.66	4,186.37	4,181.38	9.21	9.23	-145.90	45.85	-97.53	149.53	131.38	18.14	8.241	
4,300.00	4,298.53	4,285.07	4,279.42	9.43	9.48	-146.88	47.68	-108.80	165.35	146.78	18.57	8.903	
4,400.00	4,398.40	4,383.77	4,377.46	9.66	9.72	-147.70	49.51	-120.06	181.21	162.21	19.00	9.536	
4,500.00	4,498.26	4,482.48	4,475.51	9.88	9.97	-148.38	51.34	-131.32	197.11	177.67	19.43	10.142	
4,600.00	4,598.13	4,581.18	4,573.55	10.11	10.21	-148.96	53.17	-142.58	213.02	193.15	19.87	10.722	
4,700.00	4,698.00	4,679.89	4,671.59	10.33	10.47	-149.46	55.00	-153.84	228.96	208.65	20.30	11.277	
4,800.00	4,797.86	4,778.59	4,769.63	10.56	10.72	-149.89	56.83	-165.10	244.91	224.17	20.74	11.809	
4,900.00	4,897.73	4,877.30	4,867.68	10.79	10.97	-150.27	58.66	-176.37	260.87	239.69	21.18	12.319	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 95H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,997.60	4,976.00	4,965.72	11.01	11.23	-150.61	60.49	-187.63	276.84	255.22	21.61	12.808	
5,100.00	5,097.46	5,074.70	5,063.76	11.24	11.49	-150.91	62.32	-198.89	292.82	270.76	22.05	13.277	
5,200.00	5,197.33	5,173.41	5,161.80	11.47	11.74	-151.18	64.15	-210.15	308.80	286.31	22.49	13.728	
5,300.00	5,297.20	5,272.11	5,259.85	11.70	12.00	-151.42	65.98	-221.41	324.80	301.86	22.94	14.161	
5,400.00	5,397.06	5,370.82	5,357.89	11.93	12.27	-151.64	67.81	-232.67	340.79	317.42	23.38	14.577	
5,500.00	5,496.93	5,469.52	5,455.93	12.16	12.53	-151.84	69.64	-243.94	356.80	332.97	23.82	14.978	
5,600.00	5,596.80	5,568.22	5,553.97	12.39	12.79	-152.02	71.47	-255.20	372.80	348.54	24.27	15.363	
5,700.00	5,696.66	5,666.93	5,652.02	12.62	13.06	-152.19	73.30	-266.46	388.81	364.10	24.71	15.734	
5,800.00	5,796.53	5,765.63	5,750.06	12.85	13.32	-152.35	75.13	-277.72	404.82	379.67	25.16	16.092	
5,900.00	5,896.40	5,864.34	5,848.10	13.08	13.59	-152.49	76.96	-288.98	420.84	395.24	25.60	16.437	
6,000.00	5,996.26	5,963.04	5,946.14	13.31	13.86	-152.62	78.79	-300.25	436.86	410.81	26.05	16.770	
6,100.00	6,096.13	6,061.74	6,044.19	13.54	14.13	-152.74	80.62	-311.51	452.88	426.38	26.50	17.092	
6,200.00	6,196.00	6,160.45	6,142.23	13.77	14.40	-152.86	82.45	-322.77	468.90	441.95	26.95	17.402	
6,300.00	6,295.86	6,259.15	6,240.27	14.01	14.67	-152.97	84.28	-334.03	484.92	457.53	27.39	17.702	
6,400.00	6,395.73	6,357.86	6,338.31	14.24	14.94	-153.07	86.11	-345.29	500.95	473.10	27.84	17.992	
6,500.00	6,495.60	6,456.56	6,436.36	14.47	15.21	-153.16	87.94	-356.55	516.97	488.68	28.29	18.272	
6,600.00	6,595.47	6,555.26	6,534.40	14.70	15.48	-153.25	89.77	-367.82	533.00	504.26	28.74	18.543	
6,700.00	6,695.33	6,653.97	6,632.44	14.93	15.75	-153.33	91.61	-379.08	549.03	519.83	29.19	18.806	
6,800.00	6,795.20	6,752.67	6,730.48	15.17	16.03	-153.41	93.44	-390.34	565.06	535.41	29.65	19.061	
6,900.00	6,895.07	6,851.38	6,828.52	15.40	16.30	-153.48	95.27	-401.60	581.09	550.99	30.10	19.307	
7,000.00	6,994.93	6,950.08	6,926.57	15.63	16.58	-153.55	97.10	-412.86	597.12	566.57	30.55	19.546	
7,100.00	7,094.80	7,048.78	7,024.61	15.87	16.85	-153.62	98.93	-424.12	613.15	582.15	31.00	19.778	
7,200.00	7,194.67	7,147.49	7,122.65	16.10	17.13	-153.68	100.76	-435.39	629.18	597.73	31.45	20.003	
7,300.00	7,294.53	7,246.19	7,220.69	16.33	17.40	-153.74	102.59	-446.65	645.22	613.31	31.91	20.222	
7,400.00	7,394.40	7,344.90	7,318.74	16.57	17.68	-153.80	104.42	-457.91	661.25	628.89	32.36	20.434	
7,500.00	7,494.27	7,443.60	7,416.78	16.80	17.95	-153.86	106.25	-469.17	677.29	644.47	32.81	20.640	
7,600.00	7,594.13	7,542.30	7,514.82	17.03	18.23	-153.91	108.08	-480.43	693.32	660.05	33.27	20.840	
7,700.00	7,694.00	7,641.01	7,612.86	17.27	18.51	-153.96	109.91	-491.69	709.36	675.63	33.72	21.034	
7,800.00	7,793.87	7,739.71	7,710.91	17.50	18.79	-154.00	111.74	-502.96	725.39	691.22	34.18	21.224	
7,900.00	7,893.73	7,838.42	7,808.95	17.74	19.06	-154.05	113.57	-514.22	741.43	706.80	34.63	21.408	
8,000.00	7,993.60	7,937.12	7,906.99	17.97	19.34	-154.09	115.40	-525.48	757.47	722.38	35.09	21.587	
8,100.00	8,093.47	8,035.82	8,005.03	18.21	19.62	-154.13	117.23	-536.74	773.51	737.96	35.55	21.761	
8,200.00	8,193.33	8,134.53	8,103.08	18.44	19.90	-154.17	119.06	-548.00	789.54	753.54	36.00	21.931	
8,300.00	8,293.20	8,233.23	8,201.12	18.68	20.18	-154.21	120.89	-559.26	805.58	769.13	36.46	22.096	
8,400.00	8,393.07	8,331.94	8,299.16	18.91	20.46	-154.25	122.72	-570.53	821.62	784.71	36.91	22.257	
8,500.00	8,492.93	8,430.64	8,397.20	19.15	20.74	-154.28	124.55	-581.79	837.66	800.29	37.37	22.414	
8,600.00	8,592.80	8,529.34	8,495.25	19.38	21.02	-154.32	126.38	-593.05	853.70	815.87	37.83	22.568	
8,700.00	8,692.67	8,628.05	8,593.29	19.62	21.30	-154.35	128.21	-604.31	869.74	831.45	38.29	22.717	
8,800.00	8,792.53	8,726.75	8,691.33	19.85	21.58	-154.38	130.04	-615.57	885.78	847.04	38.74	22.863	
8,900.00	8,892.40	8,825.46	8,789.37	20.09	21.86	-154.41	131.87	-626.83	901.82	862.62	39.20	23.005	
9,000.00	8,992.27	8,924.16	8,887.42	20.32	22.14	-154.44	133.70	-638.10	917.86	878.20	39.66	23.143	
9,100.00	9,092.13	9,022.86	8,985.46	20.56	22.42	-154.47	135.53	-649.36	933.90	893.78	40.12	23.279	
9,200.00	9,192.00	9,121.57	9,083.50	20.79	22.70	-154.50	137.36	-660.62	949.94	909.37	40.58	23.411	
9,300.00	9,291.87	9,220.27	9,181.54	21.03	22.98	-154.53	139.19	-671.88	965.98	924.95	41.04	23.540	
9,400.00	9,391.73	9,318.98	9,279.58	21.26	23.26	-154.55	141.02	-683.14	982.03	940.53	41.49	23.667	
9,500.00	9,491.60	9,417.68	9,377.63	21.50	23.55	-154.58	142.85	-694.40	998.07	956.11	41.95	23.790	
9,600.00	9,591.47	9,516.39	9,475.67	21.74	23.83	-154.60	144.68	-705.67	1,014.11	971.70	42.41	23.910	
9,700.00	9,691.33	9,615.09	9,573.71	21.97	24.11	-154.62	146.51	-716.93	1,030.15	987.28	42.87	24.028	
9,800.00	9,791.20	9,713.79	9,671.75	22.21	24.39	-154.65	148.34	-728.19	1,046.19	1,002.86	43.33	24.144	
9,900.00	9,891.07	9,812.50	9,769.80	22.44	24.67	-154.67	150.17	-739.45	1,062.24	1,018.44	43.79	24.256	
10,000.00	9,990.93	9,911.20	9,867.84	22.68	24.96	-154.69	152.00	-750.71	1,078.28	1,034.03	44.25	24.367	
10,100.00	10,090.80	10,009.91	9,965.88	22.92	25.24	-154.71	153.83	-761.97	1,094.32	1,049.61	44.71	24.475	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 95H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	10,190.67	10,108.61	10,063.92	23.15	25.52	-154.73	155.66	-773.24	1,110.36	1,065.19	45.17	24.580	
10,300.00	10,290.53	10,207.31	10,161.97	23.39	25.80	-154.75	157.49	-784.50	1,126.41	1,080.77	45.63	24.684	
10,400.00	10,390.40	10,306.02	10,260.01	23.62	26.09	-154.77	159.32	-795.76	1,142.45	1,096.35	46.09	24.785	
10,500.00	10,490.27	10,404.72	10,358.05	23.86	26.37	-154.79	161.15	-807.02	1,158.49	1,111.94	46.56	24.884	
10,600.00	10,590.13	10,503.43	10,456.09	24.10	26.65	-154.80	162.98	-818.28	1,174.54	1,127.52	47.02	24.981	
10,700.00	10,690.00	10,602.13	10,554.14	24.33	26.94	-154.82	164.81	-829.55	1,190.58	1,143.10	47.48	25.076	
10,800.00	10,789.87	10,700.83	10,652.18	24.57	27.22	-154.84	166.64	-840.81	1,206.62	1,158.68	47.94	25.170	
10,900.00	10,889.73	10,799.54	10,750.22	24.81	27.50	-154.85	168.47	-852.07	1,222.67	1,174.26	48.40	25.261	
11,000.00	10,989.60	10,898.24	10,848.26	25.04	27.79	-154.87	170.30	-863.33	1,238.71	1,189.85	48.86	25.350	
11,100.00	11,089.47	10,996.95	10,946.31	25.28	28.07	-154.89	172.13	-874.59	1,254.75	1,205.43	49.33	25.438	
11,200.00	11,189.33	11,097.52	11,046.21	25.51	28.36	-154.90	174.00	-886.06	1,270.79	1,221.00	49.79	25.521	
11,252.06	11,241.33	11,163.45	11,111.74	25.64	28.50	-154.92	175.14	-893.11	1,278.78	1,228.71	50.07	25.540	
11,300.00	11,289.21	11,224.38	11,172.38	25.74	28.63	-154.96	176.09	-898.97	1,285.43	1,235.12	50.31	25.552	
11,400.00	11,389.15	11,352.18	11,299.76	25.92	28.88	-155.01	177.75	-909.19	1,296.54	1,245.78	50.76	25.540	
11,500.00	11,489.13	11,480.69	11,428.05	26.09	29.13	-155.03	178.96	-916.63	1,303.88	1,252.67	51.20	25.465	
11,547.91	11,537.04	11,542.43	11,489.73	26.17	29.24	-90.03	179.38	-919.19	1,306.05	1,254.64	51.41	25.406	
11,600.00	11,589.13	11,609.62	11,556.90	26.27	29.35	-90.01	179.71	-921.24	1,307.63	1,256.00	51.63	25.325	
11,700.00	11,689.13	11,738.71	11,685.97	26.48	29.56	-90.00	180.00	-922.98	1,308.99	1,256.91	52.07	25.137	
11,800.00	11,789.13	11,841.87	11,789.13	26.69	29.75	-90.00	180.00	-923.00	1,309.00	1,256.51	52.49	24.939	
11,900.00	11,889.13	11,941.87	11,889.13	26.90	29.93	-90.00	180.00	-923.00	1,309.00	1,256.09	52.91	24.742	
12,000.00	11,989.13	12,041.87	11,989.13	27.12	30.12	-90.00	180.00	-923.00	1,309.00	1,255.67	53.33	24.548	
12,047.91	12,037.04	12,089.78	12,037.04	27.22	30.21	-90.00	180.00	-923.00	1,309.00	1,255.47	53.53	24.455	
12,050.00	12,039.13	12,091.87	12,039.13	27.22	30.21	90.43	180.00	-923.00	1,309.00	1,255.47	53.53	24.452	
12,100.00	12,089.06	12,141.80	12,089.06	27.31	30.30	90.53	180.00	-923.00	1,309.02	1,255.30	53.72	24.366	
12,150.00	12,138.59	12,191.33	12,138.59	27.39	30.40	90.81	180.00	-923.00	1,309.10	1,255.20	53.90	24.287	
12,200.00	12,187.35	12,240.09	12,187.35	27.46	30.49	91.26	180.00	-923.00	1,309.30	1,255.23	54.07	24.215	
12,250.00	12,234.97	12,289.65	12,236.91	27.53	30.58	91.86	179.46	-923.00	1,309.72	1,255.49	54.23	24.152	
12,300.00	12,281.08	12,342.09	12,289.12	27.60	30.66	92.49	174.79	-922.96	1,310.32	1,255.95	54.37	24.098	
12,350.00	12,325.33	12,396.19	12,342.30	27.66	30.74	93.12	165.00	-922.89	1,311.08	1,256.57	54.51	24.052	
12,400.00	12,367.39	12,452.04	12,395.98	27.71	30.81	93.73	149.67	-922.77	1,311.98	1,257.34	54.64	24.011	
12,450.00	12,406.93	12,509.76	12,449.62	27.77	30.89	94.33	128.42	-922.61	1,312.99	1,258.23	54.77	23.975	
12,500.00	12,443.66	12,569.41	12,502.52	27.82	30.95	94.90	100.91	-922.40	1,314.09	1,259.19	54.89	23.939	
12,550.00	12,477.29	12,631.05	12,553.86	27.88	31.02	95.44	66.87	-922.15	1,315.22	1,260.20	55.02	23.903	
12,600.00	12,507.58	12,694.66	12,602.71	27.94	31.09	95.94	26.16	-921.84	1,316.36	1,261.19	55.16	23.863	
12,650.00	12,534.28	12,760.21	12,648.00	28.01	31.16	96.40	-21.17	-921.48	1,317.44	1,262.12	55.32	23.813	
12,700.00	12,557.20	12,827.56	12,688.59	28.10	31.23	96.80	-74.87	-921.08	1,318.43	1,262.92	55.51	23.750	
12,750.00	12,576.16	12,896.53	12,723.34	28.19	31.32	97.13	-134.39	-920.63	1,319.28	1,263.54	55.73	23.671	
12,800.00	12,591.01	12,966.83	12,751.14	28.31	31.43	97.38	-198.91	-920.14	1,319.94	1,263.94	56.00	23.570	
12,850.00	12,601.65	13,038.11	12,771.05	28.45	31.57	97.55	-267.30	-919.63	1,320.38	1,264.07	56.32	23.445	
12,900.00	12,608.00	13,109.98	12,782.38	28.62	31.74	97.62	-338.23	-919.09	1,320.59	1,263.90	56.69	23.296	
12,947.91	12,610.00	13,174.64	12,785.00	28.79	31.93	97.62	-402.81	-918.61	1,320.56	1,263.48	57.08	23.135	
13,000.00	12,610.00	13,226.74	12,785.00	29.00	32.11	97.62	-454.90	-918.22	1,320.55	1,263.04	57.51	22.963	
13,100.00	12,610.00	13,326.74	12,785.00	29.46	32.52	97.62	-554.89	-917.46	1,320.54	1,262.10	58.45	22.594	
13,200.00	12,610.00	13,426.74	12,785.00	30.01	33.01	97.62	-654.89	-916.71	1,320.53	1,260.99	59.55	22.177	
13,300.00	12,610.00	13,526.74	12,785.00	30.64	33.57	97.62	-754.89	-915.95	1,320.52	1,259.72	60.80	21.719	
13,400.00	12,610.00	13,626.74	12,785.00	31.34	34.22	97.62	-854.89	-915.20	1,320.51	1,258.32	62.20	21.230	
13,500.00	12,610.00	13,726.74	12,785.00	32.10	34.92	97.62	-954.88	-914.45	1,320.51	1,256.77	63.73	20.719	
13,600.00	12,610.00	13,826.74	12,785.00	32.93	35.70	97.62	-1,054.88	-913.69	1,320.50	1,255.10	65.39	20.193	
13,700.00	12,610.00	13,926.74	12,785.00	33.82	36.53	97.62	-1,154.88	-912.94	1,320.49	1,253.32	67.17	19.659	
13,800.00	12,610.00	14,026.74	12,785.00	34.76	37.42	97.62	-1,254.87	-912.19	1,320.48	1,251.43	69.05	19.123	
13,900.00	12,610.00	14,126.74	12,785.00	35.76	38.36	97.62	-1,354.87	-911.43	1,320.47	1,249.43	71.04	18.589	
14,000.00	12,610.00	14,226.74	12,785.00	36.80	39.34	97.62	-1,454.87	-910.68	1,320.46	1,247.35	73.11	18.062	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 95H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	12,610.00	14,326.74	12,785.00	37.88	40.37	97.62	-1,554.87	-909.93	1,320.45	1,245.19	75.27	17.544	
14,200.00	12,610.00	14,426.74	12,785.00	39.00	41.44	97.62	-1,654.86	-909.17	1,320.44	1,242.94	77.50	17.038	
14,300.00	12,610.00	14,526.74	12,785.00	40.15	42.55	97.62	-1,754.86	-908.42	1,320.43	1,240.63	79.80	16.547	
14,400.00	12,610.00	14,626.74	12,785.00	41.34	43.69	97.62	-1,854.86	-907.67	1,320.42	1,238.25	82.17	16.070	
14,500.00	12,610.00	14,726.74	12,785.00	42.56	44.86	97.62	-1,954.85	-906.91	1,320.41	1,235.82	84.59	15.609	
14,600.00	12,610.00	14,826.74	12,785.00	43.80	46.05	97.62	-2,054.85	-906.16	1,320.40	1,233.33	87.07	15.164	
14,700.00	12,610.00	14,926.74	12,785.00	45.07	47.28	97.62	-2,154.85	-905.41	1,320.40	1,230.79	89.60	14.736	
14,800.00	12,610.00	15,026.74	12,785.00	46.37	48.53	97.62	-2,254.85	-904.65	1,320.39	1,228.21	92.18	14.325	
14,900.00	12,610.00	15,126.74	12,785.00	47.68	49.80	97.62	-2,354.84	-903.90	1,320.38	1,225.59	94.79	13.929	
15,000.00	12,610.00	15,226.74	12,785.00	49.01	51.09	97.62	-2,454.84	-903.14	1,320.37	1,222.92	97.45	13.550	
15,100.00	12,610.00	15,326.74	12,785.00	50.37	52.41	97.62	-2,554.84	-902.39	1,320.36	1,220.22	100.13	13.186	
15,200.00	12,610.00	15,426.74	12,785.00	51.73	53.74	97.62	-2,654.83	-901.64	1,320.35	1,217.49	102.86	12.837	
15,300.00	12,610.00	15,526.74	12,785.00	53.12	55.08	97.62	-2,754.83	-900.88	1,320.34	1,214.73	105.61	12.502	
15,400.00	12,610.00	15,626.74	12,785.00	54.51	56.45	97.62	-2,854.83	-900.13	1,320.33	1,211.94	108.39	12.182	
15,500.00	12,610.00	15,726.74	12,785.00	55.92	57.82	97.62	-2,954.83	-899.38	1,320.32	1,209.13	111.19	11.874	
15,600.00	12,610.00	15,826.74	12,785.00	57.35	59.21	97.62	-3,054.82	-898.62	1,320.31	1,206.29	114.02	11.580	
15,700.00	12,610.00	15,926.74	12,785.00	58.78	60.61	97.62	-3,154.82	-897.87	1,320.30	1,203.43	116.87	11.297	
15,800.00	12,610.00	16,026.74	12,785.00	60.22	62.03	97.62	-3,254.82	-897.12	1,320.29	1,200.55	119.74	11.026	
15,900.00	12,610.00	16,126.74	12,785.00	61.68	63.45	97.62	-3,354.81	-896.36	1,320.29	1,197.66	122.63	10.766	
16,000.00	12,610.00	16,226.74	12,785.00	63.14	64.89	97.62	-3,454.81	-895.61	1,320.28	1,194.74	125.54	10.517	
16,100.00	12,610.00	16,326.74	12,785.00	64.61	66.33	97.62	-3,554.81	-894.86	1,320.27	1,191.81	128.46	10.278	
16,200.00	12,610.00	16,426.74	12,785.00	66.09	67.78	97.62	-3,654.81	-894.10	1,320.26	1,188.86	131.40	10.048	
16,300.00	12,610.00	16,526.74	12,785.00	67.57	69.24	97.62	-3,754.80	-893.35	1,320.25	1,185.90	134.35	9.827	
16,400.00	12,610.00	16,626.74	12,785.00	69.07	70.71	97.62	-3,854.80	-892.59	1,320.24	1,182.92	137.32	9.614	
16,500.00	12,610.00	16,726.74	12,785.00	70.56	72.19	97.62	-3,954.80	-891.84	1,320.23	1,179.93	140.30	9.410	
16,600.00	12,610.00	16,826.74	12,785.00	72.07	73.67	97.62	-4,054.79	-891.09	1,320.22	1,176.93	143.29	9.214	
16,700.00	12,610.00	16,926.74	12,785.00	73.58	75.16	97.62	-4,154.79	-890.33	1,320.21	1,173.92	146.29	9.025	
16,800.00	12,610.00	17,026.74	12,785.00	75.10	76.65	97.62	-4,254.79	-889.58	1,320.20	1,170.90	149.30	8.842	
16,900.00	12,610.00	17,126.74	12,785.00	76.62	78.15	97.62	-4,354.79	-888.83	1,320.19	1,167.87	152.33	8.667	
17,000.00	12,610.00	17,226.74	12,785.00	78.14	79.66	97.62	-4,454.78	-888.07	1,320.18	1,164.83	155.36	8.498	
17,100.00	12,610.00	17,326.74	12,785.00	79.67	81.17	97.62	-4,554.78	-887.32	1,320.17	1,161.78	158.40	8.335	
17,200.00	12,610.00	17,426.74	12,785.00	81.21	82.68	97.62	-4,654.78	-886.57	1,320.17	1,158.72	161.45	8.177	
17,300.00	12,610.00	17,526.74	12,785.00	82.74	84.21	97.62	-4,754.77	-885.81	1,320.16	1,155.65	164.50	8.025	
17,400.00	12,610.00	17,626.74	12,785.00	84.28	85.73	97.62	-4,854.77	-885.06	1,320.15	1,152.58	167.57	7.878	
17,500.00	12,610.00	17,726.74	12,785.00	85.83	87.26	97.62	-4,954.77	-884.31	1,320.14	1,149.50	170.64	7.737	
17,600.00	12,610.00	17,826.74	12,785.00	87.38	88.79	97.62	-5,054.77	-883.55	1,320.13	1,146.42	173.71	7.599	
17,700.00	12,610.00	17,926.74	12,785.00	88.93	90.33	97.62	-5,154.76	-882.80	1,320.12	1,143.32	176.80	7.467	
17,800.00	12,610.00	18,026.74	12,785.00	90.48	91.87	97.62	-5,254.76	-882.05	1,320.11	1,140.22	179.89	7.339	
17,900.00	12,610.00	18,126.74	12,785.00	92.04	93.41	97.62	-5,354.76	-881.29	1,320.10	1,137.12	182.98	7.214	
18,000.00	12,610.00	18,226.74	12,785.00	93.60	94.95	97.62	-5,454.76	-880.54	1,320.09	1,134.01	186.08	7.094	
18,100.00	12,610.00	18,326.74	12,785.00	95.17	96.50	97.62	-5,554.75	-879.78	1,320.08	1,130.90	189.19	6.978	
18,200.00	12,610.00	18,426.74	12,785.00	96.73	98.06	97.62	-5,654.75	-879.03	1,320.07	1,127.78	192.30	6.865	
18,300.00	12,610.00	18,526.74	12,785.00	98.30	99.61	97.62	-5,754.75	-878.28	1,320.06	1,124.65	195.41	6.755	
18,400.00	12,610.00	18,626.74	12,785.00	99.87	101.17	97.62	-5,854.74	-877.52	1,320.06	1,121.53	198.53	6.649	
18,500.00	12,610.00	18,726.74	12,785.00	101.44	102.73	97.62	-5,954.74	-876.77	1,320.05	1,118.39	201.65	6.546	
18,600.00	12,610.00	18,826.74	12,785.00	103.01	104.29	97.62	-6,054.74	-876.02	1,320.04	1,115.26	204.78	6.446	
18,700.00	12,610.00	18,926.74	12,785.00	104.59	105.85	97.62	-6,154.74	-875.26	1,320.03	1,112.12	207.91	6.349	
18,800.00	12,610.00	19,026.74	12,785.00	106.17	107.42	97.62	-6,254.73	-874.51	1,320.02	1,108.98	211.04	6.255	
18,900.00	12,610.00	19,126.74	12,785.00	107.75	108.99	97.62	-6,354.73	-873.76	1,320.01	1,105.83	214.18	6.163	
19,000.00	12,610.00	19,226.74	12,785.00	109.33	110.56	97.62	-6,454.73	-873.00	1,320.00	1,102.68	217.32	6.074	
19,100.00	12,610.00	19,326.74	12,785.00	110.91	112.13	97.62	-6,554.72	-872.25	1,319.99	1,099.53	220.47	5.987	
19,200.00	12,610.00	19,426.74	12,785.00	112.49	113.70	97.62	-6,654.72	-871.50	1,319.98	1,096.37	223.61	5.903	

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

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Seawolf 1-12 Fed - 95H - OH - Plan #1

Offset Site Error: 0.00 usft

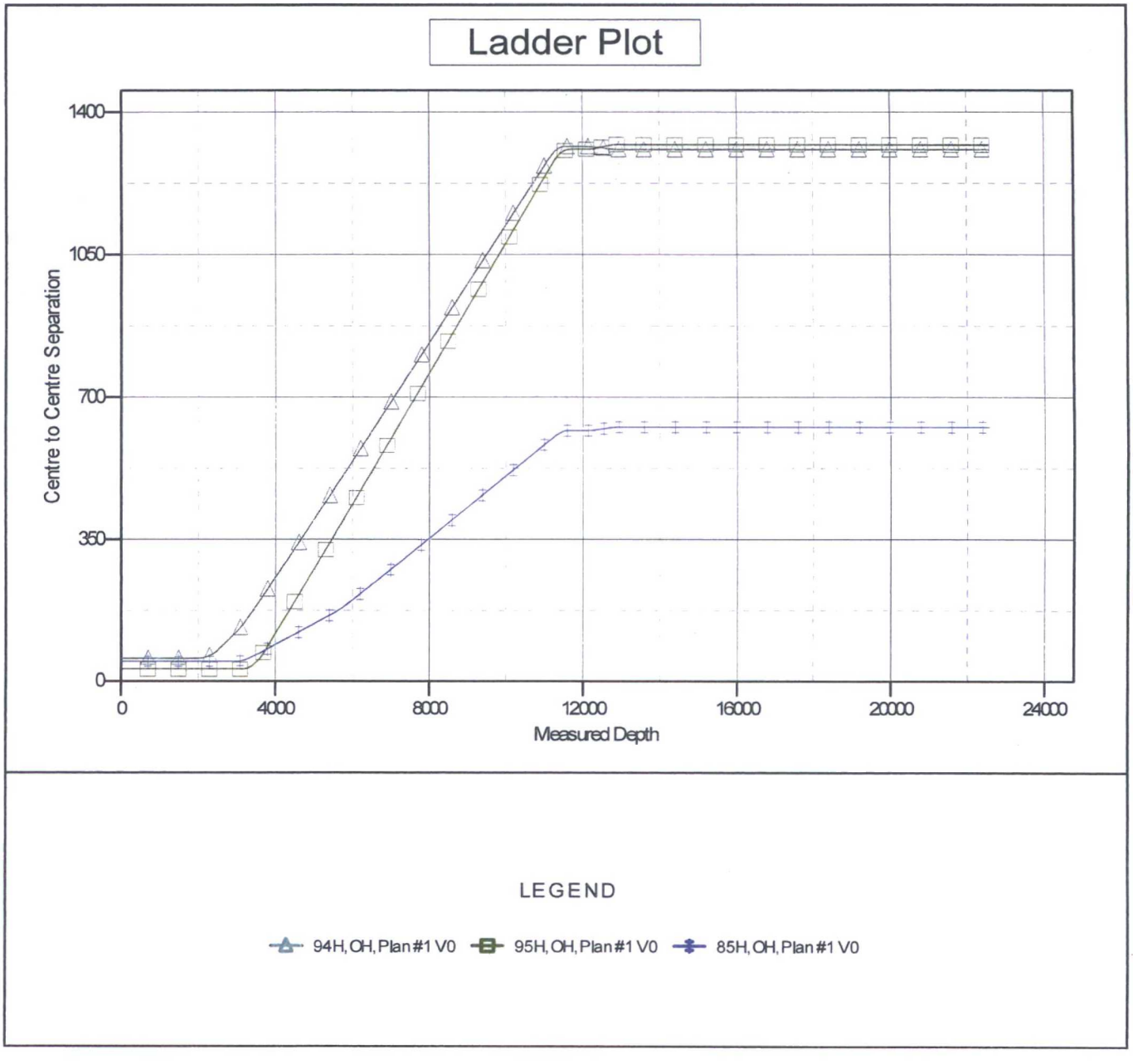
Survey Program: 0-LEAM MWD+HDGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.00	12,610.00	19,526.74	12,785.00	114.08	115.28	97.62	-6,754.72	-870.74	1,319.97	1,093.21	226.76	5.821	
19,400.00	12,610.00	19,626.74	12,785.00	115.67	116.86	97.62	-6,854.72	-869.99	1,319.96	1,090.05	229.92	5.741	
19,500.00	12,610.00	19,726.74	12,785.00	117.26	118.44	97.62	-6,954.71	-869.23	1,319.95	1,086.88	233.07	5.663	
19,600.00	12,610.00	19,826.74	12,785.00	118.85	120.02	97.62	-7,054.71	-868.48	1,319.94	1,083.72	236.23	5.588	
19,700.00	12,610.00	19,926.74	12,785.00	120.44	121.60	97.62	-7,154.71	-867.73	1,319.94	1,080.55	239.39	5.514	
19,800.00	12,610.00	20,026.74	12,785.00	122.03	123.18	97.62	-7,254.70	-866.97	1,319.93	1,077.37	242.55	5.442	
19,900.00	12,610.00	20,126.74	12,785.00	123.62	124.77	97.62	-7,354.70	-866.22	1,319.92	1,074.20	245.72	5.372	
20,000.00	12,610.00	20,226.74	12,785.00	125.22	126.35	97.62	-7,454.70	-865.47	1,319.91	1,071.02	248.89	5.303	
20,100.00	12,610.00	20,326.74	12,785.00	126.81	127.94	97.62	-7,554.70	-864.71	1,319.90	1,067.84	252.06	5.237	
20,200.00	12,610.00	20,426.74	12,785.00	128.41	129.53	97.62	-7,654.69	-863.96	1,319.89	1,064.66	255.23	5.171	
20,300.00	12,610.00	20,526.74	12,785.00	130.01	131.12	97.62	-7,754.69	-863.21	1,319.88	1,061.48	258.40	5.108	
20,400.00	12,610.00	20,626.74	12,785.00	131.60	132.71	97.62	-7,854.69	-862.45	1,319.87	1,058.29	261.58	5.046	
20,500.00	12,610.00	20,726.74	12,785.00	133.20	134.30	97.62	-7,954.68	-861.70	1,319.86	1,055.11	264.75	4.985	
20,600.00	12,610.00	20,826.74	12,785.00	134.80	135.90	97.62	-8,054.68	-860.95	1,319.85	1,051.92	267.93	4.926	
20,700.00	12,610.00	20,926.74	12,785.00	136.41	137.49	97.62	-8,154.68	-860.19	1,319.84	1,048.73	271.11	4.868	
20,800.00	12,610.00	21,026.74	12,785.00	138.01	139.09	97.62	-8,254.68	-859.44	1,319.83	1,045.54	274.30	4.812	
20,900.00	12,610.00	21,126.74	12,785.00	139.61	140.68	97.62	-8,354.67	-858.69	1,319.83	1,042.35	277.48	4.756	
21,000.00	12,610.00	21,226.74	12,785.00	141.21	142.28	97.62	-8,454.67	-857.93	1,319.82	1,039.15	280.67	4.702	
21,100.00	12,610.00	21,326.74	12,785.00	142.82	143.88	97.62	-8,554.67	-857.18	1,319.81	1,035.95	283.85	4.650	
21,200.00	12,610.00	21,426.74	12,785.00	144.42	145.48	97.62	-8,654.66	-856.42	1,319.80	1,032.76	287.04	4.598	
21,300.00	12,610.00	21,526.74	12,785.00	146.03	147.08	97.62	-8,754.66	-855.67	1,319.79	1,029.56	290.23	4.547	
21,400.00	12,610.00	21,626.74	12,785.00	147.64	148.68	97.62	-8,854.66	-854.92	1,319.78	1,026.36	293.42	4.498	
21,500.00	12,610.00	21,726.74	12,785.00	149.24	150.28	97.62	-8,954.66	-854.16	1,319.77	1,023.16	296.61	4.449	
21,600.00	12,610.00	21,826.74	12,785.00	150.85	151.88	97.62	-9,054.65	-853.41	1,319.76	1,019.95	299.81	4.402	
21,700.00	12,610.00	21,926.74	12,785.00	152.46	153.48	97.62	-9,154.65	-852.66	1,319.75	1,016.75	303.00	4.356	
21,800.00	12,610.00	22,026.74	12,785.00	154.07	155.09	97.62	-9,254.65	-851.90	1,319.74	1,013.54	306.20	4.310	
21,900.00	12,610.00	22,126.74	12,785.00	155.68	156.69	97.62	-9,354.64	-851.15	1,319.73	1,010.34	309.39	4.266	
22,000.00	12,610.00	22,226.74	12,785.00	157.29	158.29	97.62	-9,454.64	-850.40	1,319.72	1,007.13	312.59	4.222	
22,100.00	12,610.00	22,326.74	12,785.00	158.90	159.90	97.62	-9,554.64	-849.64	1,319.72	1,003.92	315.79	4.179	
22,200.00	12,610.00	22,426.74	12,785.00	160.51	161.51	97.62	-9,654.64	-848.89	1,319.71	1,000.71	318.99	4.137	
22,300.00	12,610.00	22,526.74	12,785.00	162.12	163.11	97.62	-9,754.63	-848.14	1,319.70	997.50	322.19	4.096	
22,400.00	12,610.00	22,626.74	12,785.00	163.73	164.72	97.62	-9,854.63	-847.38	1,319.69	994.29	325.40	4.056	
22,500.00	12,610.00	22,726.74	12,785.00	165.35	166.33	97.62	-9,954.63	-846.63	1,319.68	991.08	328.60	4.016	
22,583.76	12,610.00	22,810.11	12,785.00	166.70	167.65	97.62	-10,038.00	-846.00	1,319.67	988.43	331.24	3.984	
22,586.23	12,610.00	22,810.11	12,785.00	166.74	167.65	97.62	-10,038.00	-846.00	1,319.67	988.38	331.29	3.983	

Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 3316.7' GE + 21' KB @ 3337.70usft	Coordinates are relative to: 86H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.43°



Company:	Devon Energy	**Local Co-ordinate Reference:**	Well 86H
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Reference Site:	Seawolf 1-12 Fed	**MD Reference:**	3316.7' GE + 21' KB @ 3337.70usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	86H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 3316.7' GE + 21' KB @ 3337.70usft	Coordinates are relative to: 86H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.43°