Form 3160-5
(August 2007)

OCD Hobbs

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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 reverse side.

5. Lease Serial No.
NMNM97157

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.
WHITE DOVE 17 FED COM 2H ✓

2. Name of Operator
DEVON ENERGY PRODUCTION CO.,LP ✓ Contact: DAVID H COOK
E-Mail: david.cook@dvn.com

9. API Well No.
30-025-43027 ✓

3a. Address
333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102-5010

3b. Phone No. (include area code)
Ph: 405-552-7848

10. Field and Pool, or Exploratory
ANTELOPE RIDGE, BS, WEST

HOBBS OCD

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 17 T23S R34E SESW 260FSL 1350FWL ✓

FEB 29 2016

11. County or Parish, and State
LEA COUNTY, NM

RECEIVED

12. CHECK 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	☐ Fracture Treat	☐ 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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 Production Co. L.P. respectfully requests to change the approved APD as follows:

Change bottom hole location from 330 FNL & 350 FWL, Unit D, Sec. 17, T23S, R34E to 330 FNL & 1310 FWL, Unit D, Sec. 17, T23S, R34E.

Change MD from 15,366' to 15,164'.

This well will become one of three, commonly padded wells, and will produce to an already approved central tank battery, the White Dove CTB #1, via buried flowlines.

Please see the attached revised C-102, Drill Plan, Direction Survey Plan, Flowline Plat and White Dove CTB exhibit.

Engineering Review okay. 2/24/16. C. NIMMER. NRS JB 2-24-16

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

Electronic Submission #331931 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO.,LP, sent to the Hobbs

Name *(Printed/Typed)* DAVID H COOK — Title REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 02/22/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Edward Fernandez for Stephen Caffey — Title FIELD MANAGER — Date 2/24/2016

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 CARLSBAD FIELD OFFICE

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

MAR 02 2016

KZ

1. Geologic Formations

TVD of target	10,720'	Pilot hole depth	n/a
MD at TD:	15,164'	Deepest expected fresh water:	275'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	980	Barren	
Salado	1900	Barren	
Base of Salt	4380	Barren	
Yates	4610	Oil	
Queen	4780	Oil	
Grayburg	4900	Oil	
Delaware	5020	Oil	
Brushy Canyon	7243	Oil	
1st Bone Spring	8590	Oil	
2nd Bone Spring sand	10200	Oil	

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

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1,005'	13.375"	48	H-40	STC	1.62	3.13	2.27
12.25"	0	4,300'	9.625"	40	J-55	BTC	1.15	1.79	2.33
12.25"	4,300'	5,000'	9.625"	40	HCK-55	BTC	1.47	5.07	5.09
8.75"	0	15,164'	5.5"	17	P-110	BTC	1.42	1.25	2.14
				BLM Minimum Safety Factor			1.125	1.00	1.6 Dry 1.8 Wet

Alternate 7"x5.5" Tapered design

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1,005'	13.375"	48	H-40	STC	1.62	3.13	2.27
12.25"	0	4,300'	9.625"	40	J-55	BTC	1.15	1.79	2.33
12.25"	4,300'	5,000'	9.625"	40	HCK-55	BTC	1.47	5.07	5.09
8.75"	0	10,119'	7"	29	P-110	BTC	1.71	1.32	2.59
8.75"	10,119'	15,164'	5.5"	17	P-110	BTC	1.50	1.30	3.10
				BLM Minimum Safety Factor			1.125	1.00	1.6 Dry 1.8 Wet

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

	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	500# Comp. Strength (hours)	Slurry Description
13-3/8" Surface	380	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	550	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter.	1070	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	430	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
7 x 5-1/2" Combo Prod. Option	320	10.4	16.9	3.17	16	Lead: Tuned Light ® + 0.125 lb/sk Pol-E-Flake
	1380	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
5-1/2" Prod Two Stage Option	710	11.9	12.89	2.31	n/a	1st Stage Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000
	1380	14.5	5.31	1.2	25	1st Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
	DV Tool = 5050ft					
	20	11	14.81	2.55	22	2nd Stage Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake
	30	14.8	6.32	1.33	6	2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
5-1/2" Prod Single Stage Option	460	11.9	12.89	2.31	n/a	1st Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000
	330	12.5	10.86	1.96	30	2nd Lead: (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake
	1380	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite

If a DV tool is run, DV tool 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
13-3/8" Surface	0'	100%
9-5/8" Intermediate	0'	75%
7 x 5-1/2" Production Casing	4800'	25%
5-1/2" Production Casing Two Stage Option	1St Stage = 5050ft / 2nd Stage = 4800'	25%
5-1/2" Production Casing Single Stage Option	4800'	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:
12-1/4"	13-5/8"	3M	Annular	x	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	x	
			Other*		
8-3/4"	13-5/8"	3M	Annular	x	50% testing pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	x	
			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.

Y	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.
Y	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.
	Y | Are anchors required by manufacturer?
Y	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 the option of 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 3000 (3M) psi. • Wellhead will be installed by vendor's representatives. • If the welding is performed by a third party, the vendor's representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal. • Vendor representative will install the test plug for the initial BOP test. • Vendor 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. After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 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. After running the 9-5/8' intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead.

	The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP. Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns. See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	1,005'	FW Gel	8.6-8.8	28-34	N/C
1,005'	5,000'	Saturated Brine	10.0-10.2	28-34	N/C
5,000'	15,164'	Cut Brine	8.5-9.3	28-34	N/C

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	5160 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions: 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

8. Other facets of operation

Is this a walking operation? No.
Will be pre-setting casing? No.

Attachments
_x_ Directional Plan
___ Other, describe

devon

Devon Energy
White Dove 17 Fed Com 2H
Plan #1
Lea County, NM

T G M

Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.80°

Magnetic Field
Strength: 48222.3snT
Dip Angle: 60.16°
Date: 5/18/2015
Model: BGGM2014

LEAM Drilling Systems, Inc.

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL (WD17FC 2H)	0.00	0.00	0.00	473183.47	799973.98
PBHL (WD17FC 2H)	10670.00	4688.74	-84.78	477872.21	799889.20

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10147.08	0.00	0.00	10147.08	0.00	0.00	0.00	0.00	0.00
11054.05	90.70	358.96	10720.00	579.83	-10.48	10.00	358.96	579.93
15163.93	90.70	358.96	10670.00	4688.74	-84.78	0.00	0.00	4689.51

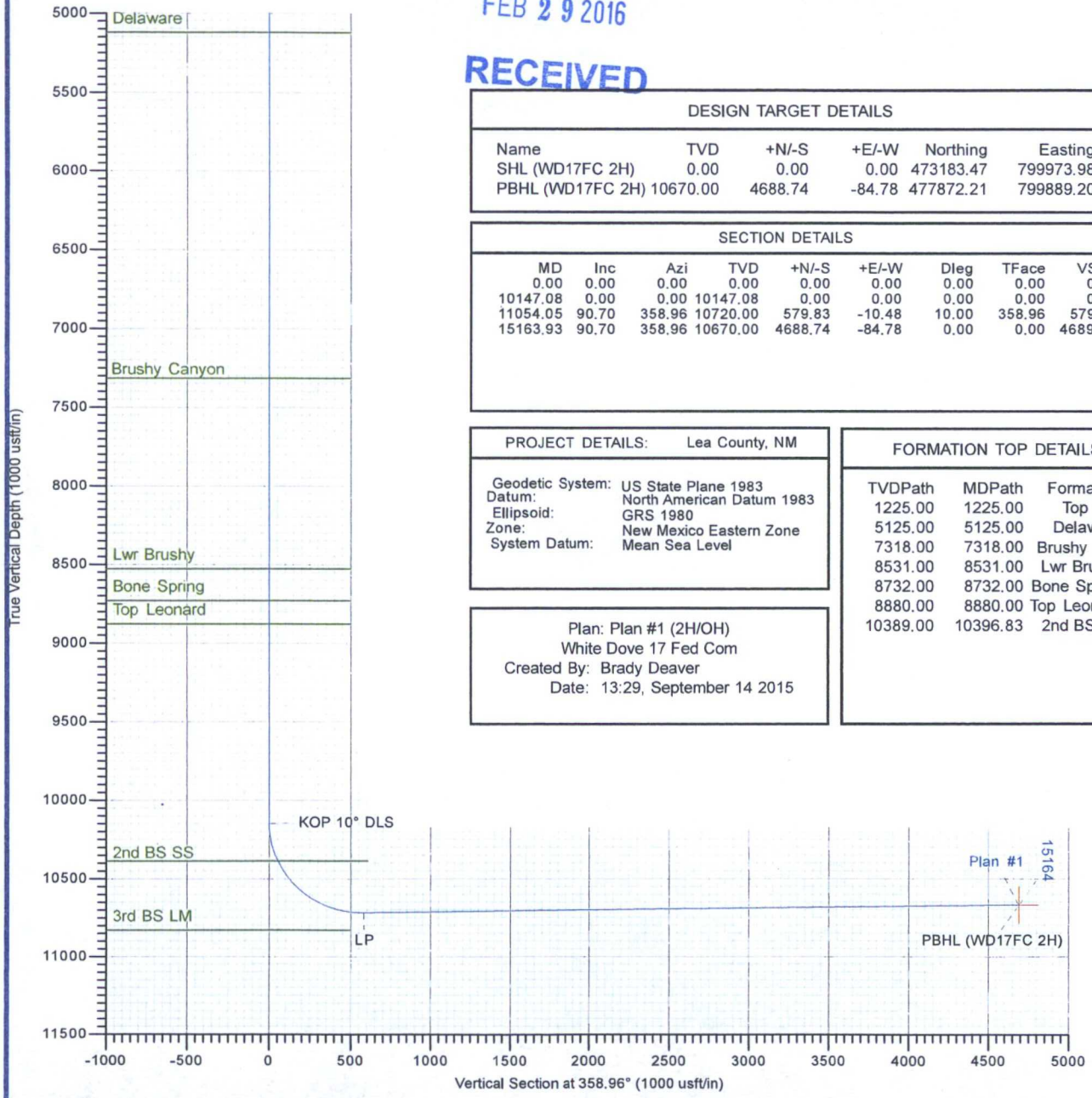
PROJECT DETAILS: Lea County, NM

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

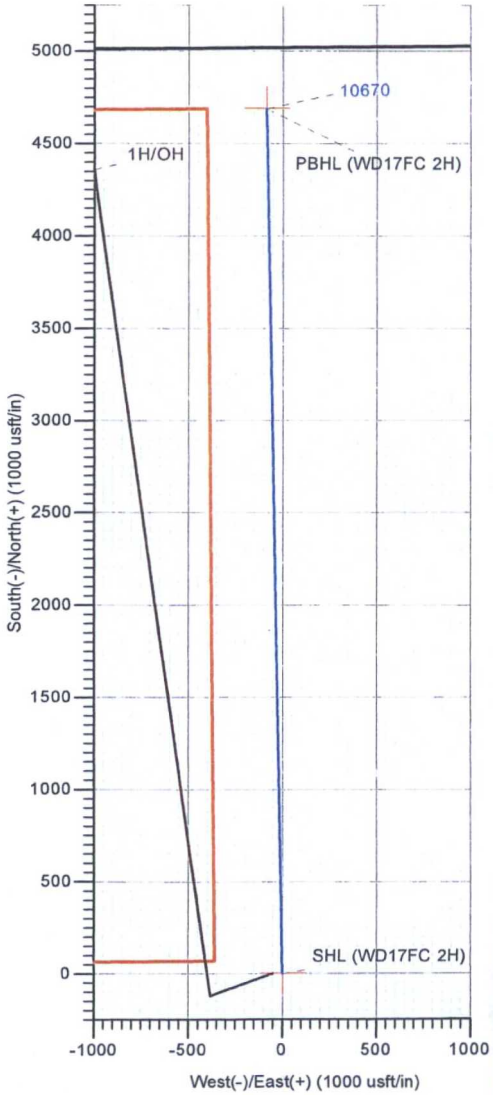
Plan: Plan #1 (2H/OH)
White Dove 17 Fed Com
Created By: Brady Deaver
Date: 13:29, September 14 2015

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1225.00	1225.00	Top Salt
5125.00	5125.00	Delaware
7318.00	7318.00	Brushy Cyn
8531.00	8531.00	Lwr Brushy
8732.00	8732.00	Bone Spring
8880.00	8880.00	Top Leonard
10389.00	10396.83	2nd BS SS



Target Line:
TL#1: 90.70° INC



DEVON ENERGY

Lea County, NM (NAD-83)
White Dove 17 Fed Com
2H

OH

Plan: Plan #1

Standard Planning Report

14 September, 2015

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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	White Dove 17 Fed Com				
Site Position:		**Northing:**	473,183.15 usft	**Latitude:**	32° 17' 53.088 N
From:	Map	**Easting:**	799,923.94 usft	**Longitude:**	103° 29' 47.204 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.45 °

Well	2H				
Well Position	**+N/-S**	0.32 usft	**Northing:**	473,183.47 usft	**Latitude:**	32° 17' 53.087 N
	+E/-W	50.04 usft	**Easting:**	799,973.98 usft	**Longitude:**	103° 29' 46.621 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	3,504.10 usft	**Ground Level:**	3,479.10 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2014	5/18/2015	7.25	60.16	48,222

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	358.96	

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	
10,147.08	0.00	0.00	10,147.08	0.00	0.00	0.00	0.00	0.00	0.00	
11,054.05	90.70	358.96	10,720.00	579.83	-10.48	10.00	10.00	-0.11	358.96	
15,163.93	90.70	358.96	10,670.00	4,688.74	-84.78	0.00	0.00	0.00	0.00	PBHL (WD17FC 2H)

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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 (WD17FC 2H)									
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
1,225.00	0.00	0.00	1,225.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
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
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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)
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,125.00	0.00	0.00	5,125.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,318.00	0.00	0.00	7,318.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,531.00	0.00	0.00	8,531.00	0.00	0.00	0.00	0.00	0.00	0.00
Lwr Brushy									
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,732.00	0.00	0.00	8,732.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring									
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,880.00	0.00	0.00	8,880.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Leonard									
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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)
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,147.08	0.00	0.00	10,147.08	0.00	0.00	0.00	0.00	0.00	0.00
KOP 10° DLS									
10,150.00	0.29	358.96	10,150.00	0.01	0.00	0.01	10.00	10.00	0.00
10,200.00	5.29	358.96	10,199.93	2.44	-0.04	2.44	10.00	10.00	0.00
10,250.00	10.29	358.96	10,249.45	9.22	-0.17	9.22	10.00	10.00	0.00
10,300.00	15.29	358.96	10,298.19	20.28	-0.37	20.29	10.00	10.00	0.00
10,350.00	20.29	358.96	10,345.78	35.55	-0.64	35.56	10.00	10.00	0.00
10,396.83	24.98	358.96	10,389.00	53.57	-0.97	53.58	10.00	10.00	0.00
2nd BS SS									
10,400.00	25.29	358.96	10,391.87	54.91	-0.99	54.92	10.00	10.00	0.00
10,450.00	30.29	358.96	10,436.08	78.21	-1.41	78.23	10.00	10.00	0.00
10,500.00	35.29	358.96	10,478.10	105.28	-1.90	105.30	10.00	10.00	0.00
10,550.00	40.29	358.96	10,517.60	135.91	-2.46	135.93	10.00	10.00	0.00
10,600.00	45.29	358.96	10,554.28	169.86	-3.07	169.88	10.00	10.00	0.00
10,650.00	50.29	358.96	10,587.86	206.87	-3.74	206.91	10.00	10.00	0.00
10,700.00	55.29	358.96	10,618.09	246.68	-4.46	246.72	10.00	10.00	0.00
10,750.00	60.29	358.96	10,644.73	288.96	-5.22	289.01	10.00	10.00	0.00
10,800.00	65.29	358.96	10,667.58	333.41	-6.03	333.46	10.00	10.00	0.00
10,850.00	70.29	358.96	10,686.48	379.68	-6.87	379.74	10.00	10.00	0.00
10,900.00	75.29	358.96	10,701.26	427.42	-7.73	427.49	10.00	10.00	0.00
10,950.00	80.29	358.96	10,711.83	476.26	-8.61	476.34	10.00	10.00	0.00
11,000.00	85.29	358.96	10,718.11	525.84	-9.51	525.93	10.00	10.00	0.00
11,054.05	90.70	358.96	10,720.00	579.83	-10.48	579.93	10.00	10.00	0.00
LP									
11,100.00	90.70	358.96	10,719.44	625.77	-11.31	625.87	0.00	0.00	0.00
11,200.00	90.70	358.96	10,718.22	725.75	-13.12	725.87	0.00	0.00	0.00
11,300.00	90.70	358.96	10,717.01	825.72	-14.93	825.86	0.00	0.00	0.00
11,400.00	90.70	358.96	10,715.79	925.70	-16.74	925.85	0.00	0.00	0.00
11,500.00	90.70	358.96	10,714.57	1,025.68	-18.55	1,025.84	0.00	0.00	0.00
11,600.00	90.70	358.96	10,713.36	1,125.65	-20.35	1,125.84	0.00	0.00	0.00
11,700.00	90.70	358.96	10,712.14	1,225.63	-22.16	1,225.83	0.00	0.00	0.00
11,800.00	90.70	358.96	10,710.92	1,325.60	-23.97	1,325.82	0.00	0.00	0.00
11,900.00	90.70	358.96	10,709.71	1,425.58	-25.78	1,425.81	0.00	0.00	0.00
12,000.00	90.70	358.96	10,708.49	1,525.56	-27.58	1,525.81	0.00	0.00	0.00
12,100.00	90.70	358.96	10,707.27	1,625.53	-29.39	1,625.80	0.00	0.00	0.00
12,200.00	90.70	358.96	10,706.06	1,725.51	-31.20	1,725.79	0.00	0.00	0.00
12,300.00	90.70	358.96	10,704.84	1,825.49	-33.01	1,825.78	0.00	0.00	0.00
12,400.00	90.70	358.96	10,703.62	1,925.46	-34.82	1,925.78	0.00	0.00	0.00
12,500.00	90.70	358.96	10,702.41	2,025.44	-36.62	2,025.77	0.00	0.00	0.00
12,600.00	90.70	358.96	10,701.19	2,125.41	-38.43	2,125.76	0.00	0.00	0.00
12,700.00	90.70	358.96	10,699.97	2,225.39	-40.24	2,225.75	0.00	0.00	0.00
12,800.00	90.70	358.96	10,698.76	2,325.37	-42.05	2,325.75	0.00	0.00	0.00
12,900.00	90.70	358.96	10,697.54	2,425.34	-43.85	2,425.74	0.00	0.00	0.00
13,000.00	90.70	358.96	10,696.32	2,525.32	-45.66	2,525.73	0.00	0.00	0.00
13,100.00	90.70	358.96	10,695.11	2,625.30	-47.47	2,625.72	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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)
13,200.00	90.70	358.96	10,693.89	2,725.27	-49.28	2,725.72	0.00	0.00	0.00
13,300.00	90.70	358.96	10,692.68	2,825.25	-51.09	2,825.71	0.00	0.00	0.00
13,400.00	90.70	358.96	10,691.46	2,925.22	-52.89	2,925.70	0.00	0.00	0.00
13,500.00	90.70	358.96	10,690.24	3,025.20	-54.70	3,025.70	0.00	0.00	0.00
13,600.00	90.70	358.96	10,689.03	3,125.18	-56.51	3,125.69	0.00	0.00	0.00
13,700.00	90.70	358.96	10,687.81	3,225.15	-58.32	3,225.68	0.00	0.00	0.00
13,800.00	90.70	358.96	10,686.59	3,325.13	-60.12	3,325.67	0.00	0.00	0.00
13,900.00	90.70	358.96	10,685.38	3,425.11	-61.93	3,425.67	0.00	0.00	0.00
14,000.00	90.70	358.96	10,684.16	3,525.08	-63.74	3,525.66	0.00	0.00	0.00
14,100.00	90.70	358.96	10,682.94	3,625.06	-65.55	3,625.65	0.00	0.00	0.00
14,200.00	90.70	358.96	10,681.73	3,725.03	-67.35	3,725.64	0.00	0.00	0.00
14,300.00	90.70	358.96	10,680.51	3,825.01	-69.16	3,825.64	0.00	0.00	0.00
14,400.00	90.70	358.96	10,679.29	3,924.99	-70.97	3,925.63	0.00	0.00	0.00
14,500.00	90.70	358.96	10,678.08	4,024.96	-72.78	4,025.62	0.00	0.00	0.00
14,600.00	90.70	358.96	10,676.86	4,124.94	-74.59	4,125.61	0.00	0.00	0.00
14,700.00	90.70	358.96	10,675.64	4,224.92	-76.39	4,225.61	0.00	0.00	0.00
14,800.00	90.70	358.96	10,674.43	4,324.89	-78.20	4,325.60	0.00	0.00	0.00
14,900.00	90.70	358.96	10,673.21	4,424.87	-80.01	4,425.59	0.00	0.00	0.00
15,000.00	90.70	358.96	10,671.99	4,524.84	-81.82	4,525.58	0.00	0.00	0.00
15,100.00	90.70	358.96	10,670.78	4,624.82	-83.62	4,625.58	0.00	0.00	0.00
15,163.93	90.70	358.96	10,670.00	4,688.74	-84.78	4,689.50	0.00	0.00	0.00
TD - PBHL (WD17FC 2H)									

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 (WD17FC 2H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	473,183.47	799,973.98	32° 17' 53.087 N	103° 29' 46.621 W
PBHL (WD17FC 2H) - plan hits target center - Point	0.00	0.00	10,670.00	4,688.74	-84.78	477,872.21	799,889.20	32° 18' 39.488 N	103° 29' 47.182 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,225.00	1,225.00	Top Salt		0.00	
5,125.00	5,125.00	Delaware		0.00	
7,318.00	7,318.00	Brushy Canyon		0.00	
8,531.00	8,531.00	Lwr Brushy		0.00	
8,732.00	8,732.00	Bone Spring		0.00	
8,880.00	8,880.00	Top Leonard		0.00	
10,396.83	10,389.00	2nd BS SS		0.00	

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 2H
Company:	DEVON ENERGY	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Project:	Lea County, NM (NAD-83)	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site:	White Dove 17 Fed Com	**North Reference:**	Grid
Well:	2H	**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
10,147.08	10,147.08	0.00	0.00	KOP 10° DLS
11,054.05	10,720.00	579.83	-10.48	LP
15,163.93	10,670.00	4,688.74	-84.78	TD

devon

DEVON ENERGY

Lea County, NM (NAD-83)
White Dove 17 Fed Com
2H

OH
Plan #1

Anticollision Report

27 October, 2015

LEAM
Drilling Systems LLC

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	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** 10/22/2015

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,163.93	Plan #1 (OH)	LEAM MWD-ADJ	MWD - Standard

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
White Dove 17 Fed Com						
1H - OH - Plan #1	3,233.33	3,233.33	50.04	35.79	3.511	CC
1H - OH - Plan #1	3,300.00	3,299.57	50.26	35.71	3.455	ES, SF
Paloma Blanco 17 Fed 1 (offset) - OH - OH	13,516.63	10,668.14	439.18	356.76	5.328	CC, ES, SF

Offset Design White Dove 17 Fed Com - 1H - OH - Plan #1 — Offset Site Error: 0.00 usft

Survey Program: 0-LEAM MWD-ADJ — 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	-90.37	0.00	0.00	50.04				
100.00	100.00	100.00	100.00	0.08	0.08	-90.37	0.00	0.00	50.04	49.87	0.17	296.848	
200.00	200.00	200.00	200.00	0.31	0.31	-90.37	0.00	0.00	50.04	49.42	0.62	80.959	
300.00	300.00	300.00	300.00	0.53	0.53	-90.37	0.00	0.00	50.04	48.97	1.07	46.871	
400.00	400.00	400.00	400.00	0.76	0.76	-90.37	0.00	0.00	50.04	48.52	1.52	32.983	
500.00	500.00	500.00	500.00	0.98	0.98	-90.37	0.00	0.00	50.04	48.07	1.97	25.444	
600.00	600.00	600.00	600.00	1.21	1.21	-90.37	0.00	0.00	50.04	47.62	2.42	20.710	
700.00	700.00	700.00	700.00	1.43	1.43	-90.37	0.00	0.00	50.04	47.18	2.87	17.462	
800.00	800.00	800.00	800.00	1.66	1.66	-90.37	0.00	0.00	50.04	46.73	3.32	15.094	
900.00	900.00	900.00	900.00	1.88	1.88	-90.37	0.00	0.00	50.04	46.28	3.76	13.292	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	-90.37	0.00	0.00	50.04	45.83	4.21	11.874	
1,100.00	1,100.00	1,100.00	1,100.00	2.33	2.33	-90.37	0.00	0.00	50.04	45.38	4.66	10.729	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-90.37	0.00	0.00	50.04	44.93	5.11	9.786	
1,300.00	1,300.00	1,300.00	1,300.00	2.78	2.78	-90.37	0.00	0.00	50.04	44.48	5.56	8.995	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-90.37	0.00	0.00	50.04	44.03	6.01	8.323	
1,500.00	1,500.00	1,500.00	1,500.00	3.23	3.23	-90.37	0.00	0.00	50.04	43.58	6.46	7.744	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-90.37	0.00	0.00	50.04	43.13	6.91	7.240	
1,700.00	1,700.00	1,700.00	1,700.00	3.68	3.68	-90.37	0.00	0.00	50.04	42.68	7.36	6.798	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-90.37	0.00	0.00	50.04	42.23	7.81	6.407	
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	-90.37	0.00	0.00	50.04	41.78	8.26	6.058	
2,000.00	2,000.00	2,000.00	2,000.00	4.35	4.35	-90.37	0.00	0.00	50.04	41.33	8.71	5.745	
2,100.00	2,100.00	2,100.00	2,100.00	4.58	4.58	-90.37	0.00	0.00	50.04	40.88	9.16	5.463	
2,200.00	2,200.00	2,200.00	2,200.00	4.80	4.80	-90.37	0.00	0.00	50.04	40.43	9.61	5.208	
2,300.00	2,300.00	2,300.00	2,300.00	5.03	5.03	-90.37	0.00	0.00	50.04	39.98	10.06	4.975	

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

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - 1H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD-ADJ — **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
2,400.00	2,400.00	2,400.00	2,400.00	5.25	5.25	-90.37	0.00	0.00	50.04	39.53	10.51	4.762	
2,500.00	2,500.00	2,500.00	2,500.00	5.48	5.48	-90.37	0.00	0.00	50.04	39.08	10.96	4.567	
2,600.00	2,600.00	2,600.00	2,600.00	5.70	5.70	-90.37	0.00	0.00	50.04	38.63	11.41	4.387	
2,700.00	2,700.00	2,700.00	2,700.00	5.93	5.93	-90.37	0.00	0.00	50.04	38.18	11.86	4.221	
2,800.00	2,800.00	2,800.00	2,800.00	6.15	6.15	-90.37	0.00	0.00	50.04	37.74	12.31	4.066	
2,900.00	2,900.00	2,900.00	2,900.00	6.38	6.38	-90.37	0.00	0.00	50.04	37.29	12.76	3.923	
3,000.00	3,000.00	3,000.00	3,000.00	6.60	6.60	-90.37	0.00	0.00	50.04	36.84	13.21	3.790	
3,100.00	3,100.00	3,100.00	3,100.00	6.83	6.83	-90.37	0.00	0.00	50.04	36.39	13.65	3.665	
3,200.00	3,200.00	3,200.00	3,200.00	7.05	7.05	-90.37	0.00	0.00	50.04	35.94	14.10	3.548	
3,233.33	3,233.33	3,233.33	3,233.33	7.13	7.13	-90.37	0.00	0.00	50.04	35.79	14.25	3.511	CC
3,300.00	3,300.00	3,299.57	3,299.57	7.28	7.27	-90.36	0.00	-0.21	50.26	35.71	14.55	3.455	ES, SF
3,400.00	3,400.00	3,398.67	3,398.65	7.50	7.46	-90.35	0.00	-1.93	51.99	37.02	14.96	3.474	
3,500.00	3,500.00	3,497.68	3,497.60	7.73	7.66	-90.33	0.00	-5.35	55.45	40.06	15.39	3.604	
3,600.00	3,600.00	3,596.55	3,596.34	7.95	7.86	-90.30	0.00	-10.48	60.63	44.82	15.81	3.835	
3,700.00	3,700.00	3,695.21	3,694.76	8.18	8.07	-90.27	0.00	-17.29	67.53	51.30	16.23	4.161	
3,800.00	3,800.00	3,793.60	3,792.79	8.40	8.28	-90.24	0.00	-25.77	76.15	59.50	16.66	4.572	
3,900.00	3,900.00	3,891.68	3,890.34	8.63	8.49	-90.21	0.00	-35.89	86.48	69.40	17.08	5.063	
4,000.00	4,000.00	3,989.37	3,987.32	8.85	8.71	-90.19	0.00	-47.64	98.50	80.99	17.51	5.627	
4,100.00	4,100.00	4,086.64	4,083.67	9.07	8.94	-90.17	0.00	-60.98	112.21	94.28	17.93	6.258	
4,200.00	4,200.00	4,183.43	4,179.30	9.30	9.18	-90.15	0.00	-75.87	127.60	109.24	18.36	6.950	
4,300.00	4,300.00	4,280.43	4,274.90	9.52	9.43	-90.13	0.00	-92.33	144.57	125.78	18.79	7.695	
4,400.00	4,400.00	4,378.91	4,371.88	9.75	9.70	-90.11	0.00	-109.43	161.93	142.71	19.22	8.425	
4,500.00	4,500.00	4,477.39	4,468.87	9.97	9.97	-90.10	0.00	-126.53	179.30	159.64	19.66	9.122	
4,600.00	4,600.00	4,575.87	4,565.85	10.20	10.25	-90.09	0.00	-143.63	196.66	176.57	20.09	9.788	
4,700.00	4,700.00	4,674.35	4,662.84	10.42	10.53	-90.09	0.00	-160.73	214.02	193.49	20.53	10.425	
4,800.00	4,800.00	4,772.83	4,759.82	10.65	10.83	-90.08	0.00	-177.83	231.39	210.42	20.97	11.034	
4,900.00	4,900.00	4,871.31	4,856.80	10.87	11.13	-90.07	0.00	-194.93	248.75	227.34	21.41	11.618	
5,000.00	5,000.00	4,969.79	4,953.79	11.10	11.43	-90.07	0.00	-212.04	266.12	244.27	21.85	12.177	
5,100.00	5,100.00	5,068.27	5,050.77	11.32	11.74	-90.07	0.00	-229.14	283.48	261.19	22.30	12.713	
5,200.00	5,200.00	5,166.76	5,147.76	11.55	12.05	-90.06	0.00	-246.24	300.85	278.10	22.74	13.228	
5,300.00	5,300.00	5,265.24	5,244.74	11.77	12.37	-90.06	0.00	-263.34	318.21	295.02	23.19	13.722	
5,400.00	5,400.00	5,363.72	5,341.73	12.00	12.69	-90.06	0.00	-280.44	335.58	311.94	23.64	14.196	
5,500.00	5,500.00	5,462.20	5,438.71	12.22	13.01	-90.05	0.00	-297.54	352.94	328.86	24.09	14.653	
5,600.00	5,600.00	5,560.68	5,535.70	12.45	13.34	-90.05	0.00	-314.64	370.31	345.77	24.54	15.091	
5,700.00	5,700.00	5,659.16	5,632.68	12.67	13.67	-90.05	0.00	-331.74	387.67	362.68	24.99	15.514	
5,800.00	5,800.00	5,757.64	5,729.67	12.90	14.00	-90.05	0.00	-348.84	405.04	379.60	25.44	15.921	
5,900.00	5,900.00	5,856.12	5,826.65	13.12	14.34	-90.04	0.00	-365.95	422.40	396.51	25.89	16.313	
6,000.00	6,000.00	5,954.60	5,923.64	13.35	14.68	-90.04	0.00	-383.05	439.77	413.42	26.35	16.691	
6,100.00	6,100.00	6,053.08	6,020.62	13.57	15.02	-90.04	0.00	-400.15	457.13	430.33	26.80	17.056	
6,200.00	6,200.00	6,151.56	6,117.60	13.80	15.36	-90.04	0.00	-417.25	474.50	447.24	27.26	17.408	
6,300.00	6,300.00	6,250.04	6,214.59	14.02	15.70	-90.04	0.00	-434.35	491.86	464.15	27.71	17.748	
6,400.00	6,400.00	6,348.52	6,311.57	14.24	16.05	-90.04	0.00	-451.45	509.23	481.06	28.17	18.077	
6,500.00	6,500.00	6,447.01	6,408.56	14.47	16.40	-90.04	0.00	-468.55	526.59	497.96	28.63	18.395	
6,600.00	6,600.00	6,545.49	6,505.54	14.69	16.75	-90.03	0.00	-485.65	543.96	514.87	29.09	18.702	
6,700.00	6,700.00	6,643.97	6,602.53	14.92	17.10	-90.03	0.00	-502.75	561.32	531.78	29.54	19.000	
6,800.00	6,800.00	6,742.45	6,699.51	15.14	17.45	-90.03	0.00	-519.85	578.69	548.68	30.00	19.288	
6,900.00	6,900.00	6,840.93	6,796.50	15.37	17.81	-90.03	0.00	-536.96	596.05	565.59	30.46	19.567	
7,000.00	7,000.00	6,939.41	6,893.48	15.59	18.16	-90.03	0.00	-554.06	613.42	582.49	30.92	19.837	
7,100.00	7,100.00	7,037.89	6,990.47	15.82	18.52	-90.03	0.00	-571.16	630.78	599.40	31.38	20.099	
7,200.00	7,200.00	7,136.37	7,087.45	16.04	18.88	-90.03	0.00	-588.26	648.15	616.30	31.84	20.353	
7,300.00	7,300.00	7,234.85	7,184.44	16.27	19.23	-90.03	0.00	-605.36	665.51	633.20	32.31	20.600	
7,400.00	7,400.00	7,333.33	7,281.42	16.49	19.59	-90.03	0.00	-622.46	682.87	650.11	32.77	20.839	

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

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - 1H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD-ADJ — **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
7,500.00	7,500.00	7,431.81	7,378.40	16.72	19.96	-90.03	0.00	-639.56	700.24	667.01	33.23	21.072	
7,600.00	7,600.00	7,530.29	7,475.39	16.94	20.32	-90.03	0.00	-656.66	717.60	683.91	33.69	21.297	
7,700.00	7,700.00	7,628.77	7,572.37	17.17	20.68	-90.03	0.00	-673.76	734.97	700.81	34.16	21.517	
7,800.00	7,800.00	7,727.26	7,669.36	17.39	21.04	-90.02	0.00	-690.86	752.33	717.71	34.62	21.730	
7,900.00	7,900.00	7,825.74	7,766.34	17.62	21.41	-90.02	0.00	-707.97	769.70	734.61	35.09	21.938	
8,000.00	8,000.00	7,924.22	7,863.33	17.84	21.77	-90.02	0.00	-725.07	787.06	751.51	35.55	22.139	
8,100.00	8,100.00	8,022.70	7,960.31	18.07	22.14	-90.02	0.00	-742.17	804.43	768.41	36.02	22.336	
8,200.00	8,200.00	8,121.18	8,057.30	18.29	22.50	-90.02	0.00	-759.27	821.79	785.31	36.48	22.527	
8,300.00	8,300.00	8,219.66	8,154.28	18.52	22.87	-90.02	0.00	-776.37	839.16	802.21	36.95	22.713	
8,400.00	8,400.00	8,318.14	8,251.27	18.74	23.24	-90.02	0.00	-793.47	856.52	819.11	37.41	22.894	
8,500.00	8,500.00	8,416.62	8,348.25	18.96	23.61	-90.02	0.00	-810.57	873.89	836.01	37.88	23.071	
8,600.00	8,600.00	8,515.10	8,445.24	19.19	23.97	-90.02	0.00	-827.67	891.25	852.91	38.34	23.243	
8,700.00	8,700.00	8,612.77	8,541.40	19.41	24.33	-89.95	1.12	-844.64	908.63	869.83	38.81	23.414	
8,800.00	8,800.00	8,706.93	8,633.02	19.64	24.66	-89.10	14.67	-860.99	926.32	887.06	39.26	23.597	
8,900.00	8,900.00	8,794.43	8,715.12	19.86	24.95	-87.50	40.76	-875.83	945.01	905.33	39.69	23.812	
9,000.00	9,000.00	8,872.42	8,784.23	20.09	25.22	-85.48	74.48	-888.49	965.86	925.77	40.09	24.091	
9,100.00	9,100.00	8,939.99	8,839.97	20.31	25.44	-83.34	111.18	-898.83	990.08	949.61	40.47	24.463	
9,200.00	9,200.00	9,000.00	8,885.59	20.54	25.65	-81.16	149.17	-907.40	1,018.68	977.84	40.83	24.947	
9,300.00	9,300.00	9,050.00	8,920.43	20.76	25.83	-79.19	184.38	-914.04	1,052.33	1,011.15	41.17	25.558	
9,400.00	9,400.00	9,087.51	8,944.51	20.99	25.96	-77.63	212.76	-918.68	1,091.34	1,049.85	41.49	26.306	
9,500.00	9,500.00	9,122.47	8,965.26	21.21	26.09	-76.13	240.60	-922.72	1,135.76	1,093.97	41.79	27.177	
9,600.00	9,600.00	9,150.00	8,980.39	21.44	26.20	-74.91	263.40	-925.71	1,185.42	1,143.34	42.07	28.175	
9,700.00	9,700.00	9,177.92	8,994.62	21.66	26.31	-73.66	287.25	-928.55	1,239.97	1,197.61	42.36	29.270	
9,800.00	9,800.00	9,200.00	9,005.05	21.89	26.40	-72.66	306.59	-930.66	1,299.05	1,256.42	42.63	30.471	
9,900.00	9,900.00	9,219.37	9,013.59	22.11	26.49	-71.77	323.90	-932.41	1,362.22	1,319.31	42.90	31.752	
10,000.00	10,000.00	9,250.00	9,025.90	22.34	26.62	-70.36	351.82	-934.97	1,429.22	1,386.03	43.19	33.095	
10,100.00	10,100.00	9,250.00	9,025.90	22.56	26.62	-70.36	351.82	-934.97	1,499.16	1,455.75	43.41	34.534	
10,147.08	10,147.08	9,250.00	9,025.90	22.67	26.62	-70.36	351.82	-934.97	1,533.25	1,489.73	43.52	35.234	
10,150.00	10,150.00	9,250.00	9,025.90	22.67	26.62	-69.03	351.82	-934.97	1,535.38	1,491.86	43.52	35.279	
10,200.00	10,199.93	9,250.00	9,025.90	22.79	26.62	-64.18	351.82	-934.97	1,571.73	1,527.97	43.76	35.918	
10,250.00	10,249.45	9,273.48	9,034.33	22.90	26.73	-58.83	373.66	-936.76	1,607.03	1,562.99	44.04	36.493	
10,300.00	10,298.19	9,282.53	9,037.34	23.01	26.77	-54.53	382.16	-937.41	1,641.58	1,597.40	44.19	37.151	
10,350.00	10,345.78	9,300.00	9,042.78	23.12	26.86	-50.50	398.72	-938.60	1,675.00	1,630.83	44.17	37.921	
10,400.00	10,391.87	9,300.00	9,042.78	23.22	26.86	-47.38	398.72	-938.60	1,706.88	1,662.94	43.94	38.844	
10,450.00	10,436.08	9,300.00	9,042.78	23.32	26.86	-44.61	398.72	-938.60	1,737.36	1,693.86	43.50	39.943	
10,500.00	10,478.10	9,325.51	9,049.83	23.44	26.98	-41.80	423.19	-940.19	1,765.67	1,722.86	42.82	41.235	
10,550.00	10,517.60	9,350.00	9,055.58	23.56	27.11	-39.42	446.95	-941.53	1,792.32	1,750.38	41.94	42.734	
10,600.00	10,554.28	9,350.00	9,055.58	23.70	27.11	-37.70	446.95	-941.53	1,816.55	1,775.62	40.93	44.380	
10,650.00	10,587.86	9,350.00	9,055.58	23.85	27.11	-36.20	446.95	-941.53	1,838.80	1,798.99	39.81	46.189	
10,700.00	10,618.09	9,376.04	9,060.58	24.02	27.25	-34.74	472.47	-942.77	1,858.36	1,819.73	38.63	48.103	
10,750.00	10,644.73	9,400.00	9,064.18	24.21	27.39	-33.56	496.14	-943.73	1,875.68	1,838.20	37.48	50.042	
10,800.00	10,667.58	9,400.00	9,064.18	24.43	27.39	-32.73	496.14	-943.73	1,890.22	1,853.81	36.41	51.915	
10,850.00	10,686.48	9,400.00	9,064.18	24.67	27.39	-32.05	496.14	-943.73	1,902.46	1,866.98	35.48	53.620	
10,900.00	10,701.26	9,430.77	9,067.35	24.94	27.56	-31.46	526.73	-944.72	1,911.46	1,876.60	34.86	54.830	
10,950.00	10,711.83	9,450.00	9,068.52	25.23	27.68	-31.08	545.92	-945.19	1,918.00	1,883.47	34.53	55.550	
11,000.00	10,718.11	9,450.00	9,068.52	25.55	27.68	-30.89	545.92	-945.19	1,921.77	1,887.31	34.46	55.767	
11,054.05	10,720.00	9,482.42	9,069.04	25.91	27.88	-30.83	578.32	-945.74	1,922.62	1,887.64	34.97	54.973	
11,100.00	10,719.44	9,499.15	9,068.85	26.25	27.99	-30.83	595.05	-945.94	1,922.23	1,886.99	35.24	54.540	
11,200.00	10,718.22	9,599.15	9,067.68	27.05	28.70	-30.81	695.04	-947.13	1,921.88	1,885.60	36.28	52.972	
11,300.00	10,717.01	9,699.15	9,066.50	27.95	29.51	-30.80	795.02	-948.32	1,921.52	1,884.10	37.42	51.347	
11,400.00	10,715.79	9,799.15	9,065.33	28.94	30.43	-30.78	895.01	-949.51	1,921.16	1,882.50	38.66	49.694	
11,500.00	10,714.57	9,899.15	9,064.16	30.01	31.43	-30.77	994.99	-950.70	1,920.81	1,880.82	39.98	48.039	

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - 1H - OH - Plan #1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-LEAM MWD-ADJ — **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
11,600.00	10,713.36	9,999.14	9,062.99	31.15	32.51	-30.75	1,094.98	-951.88	1,920.45	1,879.07	41.39	46.402	
11,700.00	10,712.14	10,099.14	9,061.82	32.35	33.66	-30.74	1,194.96	-953.07	1,920.10	1,877.24	42.86	44.798	
11,800.00	10,710.92	10,199.14	9,060.65	33.61	34.87	-30.72	1,294.94	-954.26	1,919.74	1,875.34	44.40	43.239	
11,900.00	10,709.71	10,299.14	9,059.48	34.92	36.14	-30.71	1,394.93	-955.45	1,919.39	1,873.39	45.99	41.732	
12,000.00	10,708.49	10,399.14	9,058.31	36.28	37.45	-30.69	1,494.91	-956.64	1,919.03	1,871.39	47.64	40.283	
12,100.00	10,707.27	10,499.13	9,057.14	37.68	38.81	-30.68	1,594.90	-957.83	1,918.68	1,869.34	49.33	38.894	
12,200.00	10,706.06	10,599.13	9,055.97	39.11	40.20	-30.66	1,694.88	-959.02	1,918.32	1,867.26	51.06	37.566	
12,300.00	10,704.84	10,699.13	9,054.80	40.57	41.63	-30.65	1,794.86	-960.21	1,917.97	1,865.13	52.84	36.301	
12,400.00	10,703.62	10,799.13	9,053.63	42.07	43.10	-30.63	1,894.85	-961.40	1,917.61	1,862.97	54.64	35.095	
12,500.00	10,702.41	10,899.13	9,052.46	43.59	44.59	-30.62	1,994.83	-962.59	1,917.26	1,860.78	56.47	33.949	
12,600.00	10,701.19	10,999.13	9,051.29	45.13	46.10	-30.60	2,094.82	-963.78	1,916.90	1,858.57	58.34	32.859	
12,700.00	10,699.97	11,099.12	9,050.12	46.69	47.64	-30.59	2,194.80	-964.97	1,916.55	1,856.32	60.22	31.824	
12,800.00	10,698.76	11,199.12	9,048.95	48.28	49.19	-30.57	2,294.79	-966.16	1,916.19	1,854.06	62.13	30.841	
12,900.00	10,697.54	11,299.12	9,047.78	49.88	50.77	-30.55	2,394.77	-967.35	1,915.84	1,851.78	64.06	29.907	
13,000.00	10,696.32	11,399.12	9,046.61	51.49	52.36	-30.54	2,494.75	-968.53	1,915.49	1,849.48	66.01	29.019	
13,100.00	10,695.11	11,499.12	9,045.44	53.12	53.97	-30.52	2,594.74	-969.72	1,915.13	1,847.16	67.97	28.175	
13,200.00	10,693.89	11,599.11	9,044.26	54.76	55.59	-30.51	2,694.72	-970.91	1,914.78	1,844.83	69.95	27.373	
13,300.00	10,692.68	11,699.11	9,043.09	56.42	57.22	-30.49	2,794.71	-972.10	1,914.42	1,842.48	71.94	26.610	
13,400.00	10,691.46	11,799.11	9,041.92	58.08	58.87	-30.48	2,894.69	-973.29	1,914.07	1,840.12	73.95	25.884	
13,500.00	10,690.24	11,899.11	9,040.75	59.76	60.53	-30.46	2,994.67	-974.48	1,913.72	1,837.75	75.97	25.192	
13,600.00	10,689.03	11,999.11	9,039.58	61.44	62.19	-30.45	3,094.66	-975.67	1,913.37	1,835.37	77.99	24.533	
13,700.00	10,687.81	12,099.10	9,038.41	63.13	63.87	-30.43	3,194.64	-976.86	1,913.01	1,832.98	80.03	23.904	
13,800.00	10,686.59	12,199.10	9,037.24	64.83	65.55	-30.42	3,294.63	-978.05	1,912.66	1,830.58	82.08	23.304	
13,900.00	10,685.38	12,299.10	9,036.07	66.54	67.24	-30.40	3,394.61	-979.24	1,912.31	1,828.18	84.13	22.731	
14,000.00	10,684.16	12,399.10	9,034.90	68.25	68.94	-30.39	3,494.59	-980.43	1,911.95	1,825.76	86.19	22.183	
14,100.00	10,682.94	12,499.10	9,033.73	69.97	70.65	-30.37	3,594.58	-981.62	1,911.60	1,823.34	88.26	21.659	
14,200.00	10,681.73	12,599.09	9,032.56	71.70	72.36	-30.36	3,694.56	-982.81	1,911.25	1,820.92	90.33	21.158	
14,300.00	10,680.51	12,699.09	9,031.39	73.43	74.07	-30.34	3,794.55	-984.00	1,910.90	1,818.49	92.41	20.678	
14,400.00	10,679.29	12,799.09	9,030.22	75.16	75.80	-30.33	3,894.53	-985.18	1,910.55	1,816.05	94.50	20.218	
14,500.00	10,678.08	12,899.09	9,029.05	76.90	77.52	-30.31	3,994.52	-986.37	1,910.19	1,813.61	96.59	19.777	
14,600.00	10,676.86	12,999.09	9,027.88	78.65	79.26	-30.29	4,094.50	-987.56	1,909.84	1,811.16	98.68	19.354	
14,700.00	10,675.64	13,099.08	9,026.71	80.40	80.99	-30.28	4,194.48	-988.75	1,909.49	1,808.71	100.78	18.948	
14,800.00	10,674.43	13,199.08	9,025.54	82.15	82.73	-30.26	4,294.47	-989.94	1,909.14	1,806.26	102.88	18.557	
14,900.00	10,673.21	13,299.08	9,024.37	83.90	84.48	-30.25	4,394.45	-991.13	1,908.79	1,803.80	104.98	18.182	
15,000.00	10,671.99	13,399.08	9,023.19	85.66	86.22	-30.23	4,494.44	-992.32	1,908.44	1,801.34	107.09	17.820	
15,100.00	10,670.78	13,499.08	9,022.02	87.42	87.97	-30.22	4,594.42	-993.51	1,908.08	1,798.88	109.20	17.473	
15,163.93	10,670.00	13,563.01	9,021.28	88.55	89.10	-30.21	4,658.34	-994.27	1,907.86	1,797.30	110.56	17.257	

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - Paloma Blanco 17 Fed 1 (offset) - OH - OH — **Offset Site Error:** 0.00 usft

Survey Program: 561-LEAM MWD-ADJ — **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	-13.33	3,034.33	-668.77	3,118.19				
100.00	100.00	66.38	66.38	0.08	0.08	-13.33	3,034.33	-668.70	3,117.98	3,117.82	0.16	N/A	
200.00	200.00	168.67	168.67	0.31	0.19	-13.32	3,034.33	-668.33	3,117.89	3,117.39	0.50	6,232.187	
300.00	300.00	270.95	270.95	0.53	0.31	-13.31	3,034.33	-667.63	3,117.73	3,116.89	0.84	3,707.618	
400.00	400.00	373.23	373.22	0.76	0.42	-13.29	3,034.33	-666.60	3,117.50	3,116.32	1.18	2,638.587	
500.00	500.00	475.50	475.48	0.98	0.54	-13.27	3,034.33	-665.25	3,117.20	3,115.68	1.52	2,047.957	
600.00	600.00	577.28	577.25	1.21	0.67	-13.24	3,034.33	-663.59	3,116.83	3,114.95	1.88	1,660.402	
700.00	700.00	676.60	676.55	1.43	0.87	-13.21	3,034.33	-661.92	3,116.44	3,114.14	2.31	1,351.489	
800.00	800.00	775.92	775.86	1.66	1.08	-13.18	3,034.33	-660.34	3,116.08	3,113.34	2.73	1,139.467	
900.00	900.00	875.24	875.17	1.88	1.28	-13.15	3,034.33	-658.85	3,115.74	3,112.57	3.16	984.928	
1,000.00	1,000.00	974.57	974.49	2.11	1.49	-13.13	3,034.33	-657.46	3,115.42	3,111.83	3.59	867.286	
1,100.00	1,100.00	1,074.23	1,074.14	2.33	1.69	-13.10	3,034.33	-656.15	3,115.12	3,111.10	4.02	774.265	
1,200.00	1,200.00	1,174.22	1,174.13	2.56	1.90	-13.08	3,034.33	-654.84	3,114.82	3,110.37	4.46	698.872	
1,300.00	1,300.00	1,274.21	1,274.11	2.78	2.11	-13.06	3,034.33	-653.53	3,114.53	3,109.64	4.89	636.705	
1,400.00	1,400.00	1,374.21	1,374.09	3.01	2.33	-13.03	3,034.33	-652.22	3,114.23	3,108.89	5.34	583.493	
1,500.00	1,500.00	1,474.20	1,474.08	3.23	2.55	-13.01	3,034.33	-650.91	3,113.94	3,108.15	5.78	538.483	
1,600.00	1,600.00	1,574.19	1,574.06	3.46	2.77	-12.99	3,034.33	-649.60	3,113.64	3,107.41	6.23	499.913	
1,700.00	1,700.00	1,674.18	1,674.04	3.68	2.99	-12.96	3,034.33	-648.29	3,113.35	3,106.67	6.67	466.493	
1,800.00	1,800.00	1,774.17	1,774.02	3.91	3.22	-12.94	3,034.33	-646.98	3,113.06	3,105.94	7.12	437.255	
1,900.00	1,900.00	1,874.16	1,874.01	4.13	3.44	-12.91	3,034.33	-645.67	3,112.76	3,105.19	7.57	411.325	
2,000.00	2,000.00	1,974.15	1,973.99	4.35	3.66	-12.89	3,034.33	-644.37	3,112.47	3,104.45	8.02	388.294	
2,100.00	2,100.00	2,074.15	2,073.97	4.58	3.89	-12.87	3,034.33	-643.06	3,112.18	3,103.71	8.46	367.702	
2,200.00	2,200.00	2,174.14	2,173.96	4.80	4.11	-12.84	3,034.33	-641.75	3,111.89	3,102.98	8.91	349.181	
2,300.00	2,300.00	2,274.30	2,274.11	5.03	4.33	-12.82	3,034.33	-640.43	3,111.60	3,102.23	9.36	332.406	
2,400.00	2,400.00	2,374.88	2,374.68	5.25	4.56	-12.80	3,034.33	-639.05	3,111.29	3,101.48	9.81	317.102	
2,500.00	2,500.00	2,475.47	2,475.26	5.48	4.79	-12.77	3,034.33	-637.58	3,110.97	3,100.70	10.26	303.140	
2,600.00	2,600.00	2,576.05	2,575.83	5.70	5.01	-12.74	3,034.33	-636.02	3,110.62	3,099.91	10.71	290.352	
2,700.00	2,700.00	2,676.63	2,676.39	5.93	5.24	-12.71	3,034.33	-634.37	3,110.26	3,099.10	11.16	278.596	
2,800.00	2,800.00	2,777.20	2,776.95	6.15	5.47	-12.68	3,034.33	-632.64	3,109.89	3,098.27	11.62	267.743	
2,900.00	2,900.00	2,877.78	2,877.51	6.38	5.69	-12.65	3,034.33	-630.82	3,109.49	3,097.42	12.07	257.678	
3,000.00	3,000.00	2,978.36	2,978.07	6.60	5.92	-12.61	3,034.33	-628.92	3,109.07	3,096.55	12.52	248.339	
3,100.00	3,100.00	3,078.93	3,078.62	6.83	6.15	-12.58	3,034.33	-626.92	3,108.64	3,095.67	12.97	239.649	
3,200.00	3,200.00	3,179.49	3,179.17	7.05	6.38	-12.54	3,034.33	-624.84	3,108.19	3,094.77	13.42	231.544	
3,300.00	3,300.00	3,280.46	3,280.11	7.28	6.61	-12.50	3,034.33	-622.66	3,107.72	3,093.85	13.88	223.945	
3,400.00	3,400.00	3,382.83	3,382.45	7.50	6.84	-12.46	3,034.33	-620.16	3,107.20	3,092.86	14.34	216.755	
3,500.00	3,500.00	3,485.18	3,484.76	7.73	7.07	-12.40	3,034.33	-617.30	3,106.59	3,091.80	14.79	210.006	
3,600.00	3,600.00	3,586.56	3,586.09	7.95	7.31	-12.35	3,034.33	-614.16	3,105.93	3,090.68	15.25	203.670	
3,700.00	3,700.00	3,687.65	3,687.13	8.18	7.54	-12.29	3,034.33	-610.85	3,105.23	3,089.52	15.71	197.704	
3,800.00	3,800.00	3,789.34	3,788.76	8.40	7.77	-12.23	3,034.33	-607.33	3,104.50	3,088.33	16.17	192.049	
3,900.00	3,900.00	3,892.79	3,892.13	8.63	8.01	-12.15	3,034.33	-603.30	3,103.67	3,087.04	16.63	186.634	
4,000.00	4,000.00	3,996.19	3,995.43	8.85	8.25	-12.07	3,034.33	-598.72	3,102.74	3,085.65	17.09	181.508	
4,100.00	4,100.00	4,100.51	4,099.61	9.07	8.50	-11.97	3,034.33	-593.47	3,101.69	3,084.13	17.56	176.590	
4,200.00	4,200.00	4,204.96	4,203.89	9.30	8.75	-11.87	3,034.33	-587.47	3,100.50	3,082.47	18.04	171.912	
4,300.00	4,300.00	4,309.30	4,308.01	9.52	9.00	-11.74	3,034.33	-580.73	3,099.18	3,080.67	18.51	167.422	
4,400.00	4,400.00	4,412.34	4,410.79	9.75	9.24	-11.61	3,034.33	-573.35	3,097.73	3,078.75	18.98	163.209	
4,500.00	4,500.00	4,509.50	4,507.70	9.97	9.46	-11.49	3,034.33	-566.42	3,096.30	3,076.88	19.42	159.469	
4,600.00	4,600.00	4,600.00	4,597.99	10.20	9.65	-11.37	3,034.33	-560.33	3,094.97	3,075.13	19.84	156.013	
4,700.00	4,700.00	4,701.73	4,699.54	10.42	9.85	-11.26	3,034.33	-554.09	3,093.76	3,073.50	20.26	152.723	
4,800.00	4,800.00	4,796.97	4,794.64	10.65	10.03	-11.17	3,034.33	-549.00	3,092.72	3,072.06	20.66	149.665	
4,900.00	4,900.00	4,892.29	4,889.86	10.87	10.21	-11.09	3,034.33	-544.64	3,091.84	3,070.77	21.07	146.731	
5,000.00	5,000.00	4,987.67	4,985.16	11.10	10.39	-11.02	3,034.33	-541.01	3,091.11	3,069.63	21.48	143.916	
5,100.00	5,100.00	5,083.09	5,080.55	11.32	10.57	-10.97	3,034.33	-538.10	3,090.53	3,068.64	21.89	141.212	

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - Paloma Blanco 17 Fed 1 (offset) - OH - OH — **Offset Site Error:** 0.00 usft

Survey Program: 561-LEAM MWD-ADJ — **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
5,200.00	5,200.00	5,178.56	5,175.99	11.55	10.76	-10.93	3,034.33	-535.93	3,090.09	3,067.80	22.29	138.613	
5,300.00	5,300.00	5,274.88	5,272.30	11.77	10.94	-10.90	3,034.33	-534.47	3,089.80	3,067.10	22.70	136.106	
5,400.00	5,400.00	5,373.81	5,371.22	12.00	11.13	-10.88	3,034.33	-533.30	3,089.58	3,066.47	23.11	133.668	
5,500.00	5,500.00	5,472.75	5,470.15	12.22	11.31	-10.87	3,034.33	-532.32	3,089.40	3,065.87	23.53	131.316	
5,600.00	5,600.00	5,571.69	5,569.09	12.45	11.50	-10.85	3,034.33	-531.52	3,089.24	3,065.30	23.94	129.047	
5,700.00	5,700.00	5,670.63	5,668.03	12.67	11.69	-10.84	3,034.33	-530.90	3,089.12	3,064.77	24.35	126.857	
5,800.00	5,800.00	5,770.03	5,767.43	12.90	11.88	-10.83	3,034.33	-530.44	3,089.04	3,064.27	24.77	124.703	
5,900.00	5,900.00	5,870.03	5,867.43	13.12	12.09	-10.82	3,034.33	-530.00	3,088.95	3,063.75	25.20	122.576	
6,000.00	6,000.00	5,970.03	5,967.43	13.35	12.29	-10.82	3,034.33	-529.56	3,088.87	3,063.24	25.63	120.520	
6,100.00	6,100.00	6,070.03	6,067.43	13.57	12.50	-10.81	3,034.33	-529.13	3,088.79	3,062.73	26.06	118.531	
6,200.00	6,200.00	6,170.03	6,167.43	13.80	12.70	-10.80	3,034.33	-528.69	3,088.71	3,062.22	26.49	116.608	
6,300.00	6,300.00	6,270.03	6,267.42	14.02	12.91	-10.79	3,034.33	-528.25	3,088.63	3,061.70	26.93	114.707	
6,400.00	6,400.00	6,370.03	6,367.42	14.24	13.13	-10.78	3,034.33	-527.82	3,088.55	3,061.18	27.37	112.851	
6,500.00	6,500.00	6,470.03	6,467.42	14.47	13.35	-10.78	3,034.33	-527.38	3,088.46	3,060.65	27.81	111.054	
6,600.00	6,600.00	6,570.03	6,567.42	14.69	13.57	-10.77	3,034.33	-526.95	3,088.38	3,060.13	28.25	109.314	
6,700.00	6,700.00	6,670.03	6,667.42	14.92	13.78	-10.76	3,034.33	-526.51	3,088.30	3,059.61	28.69	107.627	
6,800.00	6,800.00	6,770.38	6,767.76	15.14	14.00	-10.75	3,034.33	-526.05	3,088.22	3,059.08	29.14	105.984	
6,900.00	6,900.00	6,870.91	6,868.29	15.37	14.22	-10.74	3,034.33	-525.50	3,088.11	3,058.53	29.58	104.386	
7,000.00	7,000.00	6,971.43	6,968.82	15.59	14.44	-10.73	3,034.33	-524.87	3,088.00	3,057.97	30.03	102.835	
7,100.00	7,100.00	7,071.96	7,069.34	15.82	14.66	-10.72	3,034.33	-524.13	3,087.86	3,057.39	30.47	101.329	
7,200.00	7,200.00	7,172.49	7,169.86	16.04	14.88	-10.70	3,034.33	-523.31	3,087.71	3,056.79	30.92	99.866	
7,300.00	7,300.00	7,273.45	7,270.82	16.27	15.11	-10.68	3,034.33	-522.35	3,087.53	3,056.17	31.37	98.433	
7,400.00	7,400.00	7,374.44	7,371.81	16.49	15.33	-10.66	3,034.33	-521.22	3,087.33	3,055.51	31.82	97.039	
7,500.00	7,500.00	7,475.42	7,472.78	16.72	15.56	-10.64	3,034.33	-519.91	3,087.09	3,054.82	32.26	95.682	
7,600.00	7,600.00	7,576.41	7,573.76	16.94	15.78	-10.61	3,034.33	-518.43	3,086.81	3,054.10	32.71	94.361	
7,700.00	7,700.00	7,677.38	7,674.72	17.17	16.00	-10.58	3,034.33	-516.77	3,086.51	3,053.35	33.16	93.076	
7,800.00	7,800.00	7,777.44	7,774.76	17.39	16.23	-10.55	3,034.33	-515.02	3,086.19	3,052.58	33.61	91.825	
7,900.00	7,900.00	7,877.43	7,874.73	17.62	16.45	-10.52	3,034.33	-513.28	3,085.87	3,051.82	34.06	90.608	
8,000.00	8,000.00	7,977.41	7,974.70	17.84	16.67	-10.49	3,034.33	-511.53	3,085.55	3,051.05	34.51	89.422	
8,100.00	8,100.00	8,077.40	8,074.67	18.07	16.90	-10.45	3,034.33	-509.79	3,085.24	3,050.28	34.95	88.266	
8,200.00	8,200.00	8,177.38	8,174.64	18.29	17.12	-10.42	3,034.33	-508.04	3,084.92	3,049.52	35.40	87.140	
8,300.00	8,300.00	8,277.37	8,274.61	18.52	17.34	-10.39	3,034.33	-506.30	3,084.61	3,048.76	35.85	86.041	
8,400.00	8,400.00	8,377.35	8,374.58	18.74	17.57	-10.36	3,034.33	-504.55	3,084.29	3,047.99	36.30	84.969	
8,500.00	8,500.00	8,477.34	8,474.55	18.96	17.79	-10.33	3,034.33	-502.81	3,083.98	3,047.23	36.75	83.923	
8,600.00	8,600.00	8,577.32	8,574.52	19.19	18.02	-10.30	3,034.33	-501.06	3,083.67	3,046.47	37.20	82.903	
8,700.00	8,700.00	8,677.37	8,674.55	19.41	18.24	-10.26	3,034.33	-499.32	3,083.35	3,045.71	37.64	81.906	
8,800.00	8,800.00	8,777.84	8,775.00	19.64	18.47	-10.23	3,034.33	-497.51	3,083.03	3,044.94	38.10	80.929	
8,900.00	8,900.00	8,878.30	8,875.45	19.86	18.69	-10.20	3,034.33	-495.61	3,082.70	3,044.15	38.55	79.975	
9,000.00	9,000.00	8,978.76	8,975.89	20.09	18.92	-10.16	3,034.33	-493.62	3,082.35	3,043.35	39.00	79.042	
9,100.00	9,100.00	9,079.22	9,076.32	20.31	19.14	-10.12	3,034.33	-491.55	3,081.99	3,042.54	39.45	78.130	
9,200.00	9,200.00	9,179.84	9,176.93	20.54	19.37	-10.08	3,034.33	-489.38	3,081.61	3,041.71	39.90	77.236	
9,300.00	9,300.00	9,281.28	9,278.33	20.76	19.60	-10.04	3,034.33	-486.98	3,081.19	3,040.84	40.35	76.354	
9,400.00	9,400.00	9,382.70	9,379.72	20.99	19.83	-9.99	3,034.33	-484.31	3,080.74	3,039.93	40.81	75.491	
9,500.00	9,500.00	9,484.10	9,481.08	21.21	20.06	-9.93	3,034.33	-481.36	3,080.23	3,038.97	41.26	74.646	
9,600.00	9,600.00	9,585.49	9,582.42	21.44	20.29	-9.88	3,034.33	-478.13	3,079.69	3,037.97	41.72	73.818	
9,700.00	9,700.00	9,686.36	9,683.22	21.66	20.53	-9.81	3,034.33	-474.67	3,079.10	3,036.92	42.17	73.008	
9,800.00	9,800.00	9,786.30	9,783.10	21.89	20.76	-9.75	3,034.33	-471.18	3,078.51	3,035.88	42.63	72.216	
9,900.00	9,900.00	9,886.24	9,882.98	22.11	20.98	-9.68	3,034.33	-467.70	3,077.92	3,034.83	43.08	71.441	
10,000.00	10,000.00	9,986.17	9,982.86	22.34	21.21	-9.62	3,034.33	-464.21	3,077.33	3,033.79	43.54	70.682	
10,100.00	10,100.00	10,086.11	10,082.74	22.56	21.44	-9.56	3,034.33	-460.72	3,076.75	3,032.76	43.99	69.939	
10,147.08	10,147.08	10,133.17	10,129.76	22.67	21.55	-9.53	3,034.33	-459.08	3,076.48	3,032.27	44.21	69.595	
10,150.00	10,150.00	10,136.08	10,132.68	22.67	21.56	-8.49	3,034.33	-458.98	3,076.45	3,032.24	44.22	69.577	

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

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - Paloma Blanco 17 Fed 1 (offset) - OH - OH — **Offset Site Error:** 0.00 usft

Survey Program: 561-LEAM MWD-ADJ — **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	10,199.93	10,185.47	10,182.04	22.79	21.66	-8.50	3,034.33	-457.27	3,073.76	3,029.45	44.31	69.372	
10,250.00	10,249.45	10,234.31	10,230.85	22.90	21.77	-8.60	3,034.33	-455.65	3,066.78	3,022.60	44.18	69.415	
10,300.00	10,298.19	10,282.38	10,278.90	23.01	21.87	-8.77	3,034.33	-454.11	3,055.58	3,011.74	43.84	69.698	
10,350.00	10,345.78	10,329.32	10,325.81	23.12	21.97	-9.04	3,034.33	-452.67	3,040.23	2,996.94	43.30	70.219	
10,400.00	10,391.87	10,374.77	10,371.24	23.22	22.06	-9.41	3,034.33	-451.32	3,020.86	2,978.29	42.57	70.970	
10,450.00	10,436.08	10,418.39	10,414.84	23.32	22.15	-9.89	3,034.33	-450.09	2,997.60	2,955.93	41.67	71.944	
10,500.00	10,478.10	10,459.83	10,456.27	23.44	22.24	-10.53	3,034.33	-448.96	2,970.64	2,930.02	40.63	73.123	
10,550.00	10,517.60	10,498.79	10,495.22	23.56	22.32	-11.34	3,034.33	-447.94	2,940.18	2,900.71	39.48	74.474	
10,600.00	10,554.28	10,534.97	10,531.38	23.70	22.39	-12.39	3,034.33	-447.03	2,906.46	2,868.19	38.27	75.940	
10,650.00	10,587.86	10,568.10	10,564.50	23.85	22.46	-13.76	3,034.33	-446.23	2,869.74	2,832.67	37.07	77.416	
10,700.00	10,618.09	10,597.91	10,594.30	24.02	22.53	-15.56	3,034.33	-445.53	2,830.28	2,794.33	35.95	78.724	
10,750.00	10,644.73	10,624.19	10,620.57	24.21	22.58	-17.99	3,034.33	-444.93	2,788.41	2,753.36	35.05	79.560	
10,800.00	10,667.58	10,646.76	10,643.14	24.43	22.63	-21.38	3,034.33	-444.43	2,744.43	2,709.88	34.55	79.431	
10,850.00	10,686.48	10,665.63	10,662.01	24.67	22.67	-26.31	3,034.33	-444.02	2,698.69	2,663.90	34.79	77.576	
10,900.00	10,701.26	10,680.40	10,676.77	24.94	22.70	-33.87	3,034.33	-443.70	2,651.53	2,615.23	36.30	73.047	
10,950.00	10,711.83	10,690.94	10,687.31	25.23	22.72	-46.08	3,034.33	-443.47	2,603.32	2,563.48	39.85	65.333	
11,000.00	10,718.11	10,697.19	10,693.56	25.55	22.73	-65.91	3,034.33	-443.33	2,554.43	2,509.13	45.30	56.384	
11,054.05	10,720.00	10,699.06	10,695.43	25.91	22.74	-95.28	3,034.33	-443.29	2,501.24	2,452.98	48.26	51.826	
11,100.00	10,719.44	10,698.49	10,694.86	26.25	22.74	-95.20	3,034.33	-443.31	2,456.03	2,407.43	48.60	50.538	
11,200.00	10,718.22	10,697.23	10,693.60	27.05	22.73	-95.04	3,034.33	-443.33	2,357.71	2,308.31	49.40	47.725	
11,300.00	10,717.01	10,695.98	10,692.35	27.95	22.73	-94.88	3,034.33	-443.36	2,259.55	2,209.24	50.30	44.918	
11,400.00	10,715.79	10,694.72	10,691.09	28.94	22.73	-94.71	3,034.33	-443.39	2,161.55	2,110.25	51.29	42.140	
11,500.00	10,714.57	10,693.46	10,689.83	30.01	22.72	-94.55	3,034.33	-443.42	2,063.74	2,011.38	52.36	39.411	
11,600.00	10,713.36	10,692.21	10,688.58	31.15	22.72	-94.39	3,034.33	-443.44	1,966.16	1,912.65	53.50	36.747	
11,700.00	10,712.14	10,690.95	10,687.32	32.35	22.72	-94.22	3,034.33	-443.47	1,868.82	1,814.11	54.71	34.159	
11,800.00	10,710.92	10,689.70	10,686.07	33.61	22.72	-94.06	3,034.33	-443.50	1,771.79	1,715.82	55.97	31.655	
11,900.00	10,709.71	10,688.44	10,684.81	34.92	22.71	-93.90	3,034.33	-443.52	1,675.10	1,617.82	57.28	29.242	
12,000.00	10,708.49	10,687.19	10,683.56	36.28	22.71	-93.73	3,034.33	-443.55	1,578.82	1,520.18	58.64	26.923	
12,100.00	10,707.27	10,685.93	10,682.30	37.68	22.71	-93.57	3,034.33	-443.58	1,483.04	1,423.00	60.04	24.701	
12,200.00	10,706.06	10,684.67	10,681.05	39.11	22.71	-93.41	3,034.33	-443.61	1,387.85	1,326.37	61.47	22.576	
12,300.00	10,704.84	10,683.42	10,679.79	40.57	22.70	-93.24	3,034.33	-443.63	1,293.38	1,230.44	62.94	20.549	
12,400.00	10,703.62	10,682.16	10,678.54	42.07	22.70	-93.08	3,034.33	-443.66	1,199.81	1,135.37	64.44	18.620	
12,500.00	10,702.41	10,680.91	10,677.28	43.59	22.70	-92.91	3,034.33	-443.69	1,107.36	1,041.40	65.96	16.789	
12,600.00	10,701.19	10,679.65	10,676.03	45.13	22.70	-92.75	3,034.33	-443.72	1,016.35	948.84	67.50	15.056	
12,700.00	10,699.97	10,678.40	10,674.77	46.69	22.69	-92.59	3,034.33	-443.74	927.18	858.11	69.07	13.424	
12,800.00	10,698.76	10,677.14	10,673.52	48.28	22.69	-92.42	3,034.33	-443.77	840.45	769.80	70.65	11.895	
12,900.00	10,697.54	10,675.88	10,672.26	49.88	22.69	-92.26	3,034.33	-443.80	757.00	684.75	72.26	10.477	
13,000.00	10,696.32	10,674.63	10,671.00	51.49	22.69	-92.10	3,034.33	-443.83	678.04	604.17	73.87	9.179	
13,100.00	10,695.11	10,673.37	10,669.75	53.12	22.68	-91.93	3,034.33	-443.85	605.34	529.83	75.50	8.017	
13,200.00	10,693.89	10,672.12	10,668.49	54.76	22.68	-91.77	3,034.33	-443.88	541.40	464.26	77.15	7.018	
13,300.00	10,692.68	10,670.86	10,667.24	56.42	22.68	-91.60	3,034.33	-443.91	489.69	410.89	78.80	6.214	
13,400.00	10,691.46	10,669.61	10,665.98	58.08	22.68	-91.44	3,034.33	-443.94	454.40	373.93	80.47	5.647	
13,500.00	10,690.24	10,668.35	10,664.73	59.76	22.67	-91.28	3,034.33	-443.96	439.50	357.35	82.14	5.350	
13,516.63	10,690.04	10,668.14	10,664.52	60.04	22.67	-91.25	3,034.33	-443.97	439.18	356.76	82.42	5.328	CC, ES, SF
13,600.00	10,689.03	10,667.10	10,663.47	61.44	22.67	-91.11	3,034.33	-443.99	447.02	363.20	83.83	5.333	
13,700.00	10,687.81	10,665.84	10,662.22	63.13	22.67	-90.95	3,034.33	-444.02	475.92	390.40	85.52	5.565	
13,800.00	10,686.59	10,664.58	10,660.96	64.83	22.66	-90.79	3,034.33	-444.05	522.65	435.44	87.22	5.993	
13,900.00	10,685.38	10,663.33	10,659.71	66.54	22.66	-90.62	3,034.33	-444.07	582.95	494.03	88.92	6.556	
14,000.00	10,684.16	10,662.07	10,658.45	68.25	22.66	-90.46	3,034.33	-444.10	653.06	562.43	90.63	7.205	
14,100.00	10,682.94	10,660.82	10,657.20	69.97	22.66	-90.29	3,034.33	-444.13	730.17	637.82	92.35	7.906	
14,200.00	10,681.73	10,659.56	10,655.94	71.70	22.65	-90.13	3,034.33	-444.15	812.28	718.21	94.07	8.634	
14,300.00	10,680.51	10,658.31	10,654.68	73.43	22.65	-89.97	3,034.33	-444.18	898.03	802.22	95.80	9.374	

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

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design White Dove 17 Fed Com - Paloma Blanco 17 Fed 1 (offset) - OH - OH — **Offset Site Error:** 0.00 usft

Survey Program: 561-LEAM MWD-ADJ — **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
14,400.00	10,679.29	10,657.05	10,653.43	75.16	22.65	-89.80	3,034.33	-444.21	986.46	888.93	97.53	10.114	
14,500.00	10,678.08	10,655.79	10,652.17	76.90	22.65	-89.64	3,034.33	-444.24	1,076.91	977.65	99.27	10.849	
14,600.00	10,676.86	10,654.54	10,650.92	78.65	22.64	-89.48	3,034.33	-444.26	1,168.92	1,067.92	101.01	11.573	
14,700.00	10,675.64	10,653.28	10,649.66	80.40	22.64	-89.31	3,034.33	-444.29	1,262.15	1,159.40	102.75	12.284	
14,800.00	10,674.43	10,652.03	10,648.41	82.15	22.64	-89.15	3,034.33	-444.32	1,356.34	1,251.85	104.49	12.980	
14,900.00	10,673.21	10,650.77	10,647.15	83.90	22.64	-88.99	3,034.33	-444.35	1,451.31	1,345.07	106.24	13.660	
15,000.00	10,671.99	10,649.52	10,645.90	85.66	22.63	-88.82	3,034.33	-444.37	1,546.91	1,438.92	107.99	14.324	
15,100.00	10,670.78	10,648.26	10,644.64	87.42	22.63	-88.66	3,034.33	-444.40	1,643.03	1,533.29	109.74	14.972	
15,163.93	10,670.00	10,647.46	10,643.84	88.55	22.63	-88.55	3,034.33	-444.42	1,704.72	1,593.85	110.86	15.377	

Company:	DEVON ENERGY	**Local Co-ordinate Reference:**	Site White Dove 17 Fed Com
Project:	Lea County, NM (NAD-83)	**TVD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Reference Site:	White Dove 17 Fed Com	**MD Reference:**	3479.1' GL + 25' RKB @ 3504.10usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	2H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 3479.1' GL + 25' RKB @ 3504.10usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: White Dove 17 Fed Com
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.45°