

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

5. Lease Serial No.
NMNM06531A
Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

Alameda Field Office
OCD Hobbs
HOBBBS OCD

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

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
LEA UNIT 100H

2. Name of Operator
LEGACY RESERVES OPERATING LP
Contact: SHERRY MORROW
E-Mail: smorrow@legacylp.com

9. API Well No.
30-025-45211-00-X1

3a. Address
303 W WALL SUITE 1600
MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 432-221-6339

10. Field and Pool or Exploratory Area
LEA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 11 T20S R34E NWNE 140FNL 1790FEL
32.594501 N Lat, 103.528145 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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.

Legacy Reserves is proposing a revised Bottom Hole Location (BHL). The revised BHL is located 2538' FNL of Section 14. See attached Form C-102 for details. Also attached the updated Directional Plan with Anti-Collision Report to reflect new BHL.

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

**Electronic Submission #436412 verified by the BLM Well Information System
For LEGACY RESERVES OPERATING LP, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 09/26/2018 (18PP1957SE)**

Name (Printed/Typed) MATT DICKSON	Title DRILLING ENGINEER
Signature (Electronic Submission)	Date 09/21/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>Mustafa Hague</u>	Title	Date 10-31-2018
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	

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.

DISTRICT I
 1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
 1000 Rio Brazos Rd., Artec, NM 87410
 Phone: (505) 334-8178 Fax: (505) 334-6170

DISTRICT IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 478-3460 Fax: (505) 478-3462

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-102
 Revised August 1, 2011
 Submit one copy to appropriate
 District Office

OIL CONSERVATION DIVISION
 1220 South St. Frances Dr.
 Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name LEA UNIT	Well Number 100H
OGRID No.	Operator Name LEGACY RESERVES OPERATING LP	Elevation 3665'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	20 S	34 E		140	NORTH	1790	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	14	20 S	34 E		2538	NORTH	2210	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION
 (NAD83)
 Plane Coordinate
 X = 789,317.0
 Y = 580,948.9
 Geodetic (D.D.)
 32.59450115° N
 103.52814107° W

FIRST TAKE POINT
 (NAD83)
 Plane Coordinate
 X = 788,898.5
 Y = 580,757.4
 Geodetic (D.D.)
 32.59398343° N
 103.52950471° W

BOTTOM HOLE LOCATION & LAST TAKE POINT
 (NAD83)
 Plane Coordinate
 X = 788,956.9
 Y = 573,269.9
 Geodetic (D.D.)
 32.57340297° N
 103.52949873° W

OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sherry Morrow 9/19/2018
 Signature Date

Sherry Morrow
 Printed Name

smorrow@legacyp.com
 E-mail Address

SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 20, 2017

Date of Survey SC

Signature & Seal of Professional Surveyor
Lindsay Gygar
 08-21-18

NEW MEXICO
 23263
 PROFESSIONAL SURVEYOR

W.O. Num. 201701024

Certificate No. Lindsay Gygar 23263

NOTE:
 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1983. Distances shown hereon are mean horizontal surface values.

Scale
 1" = 2000'

Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #100H

Original Wellbore

Plan 1

Anticollision Summary Report

17 September, 2018



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #100H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3683.00ft
Reference Site:	Lea	MD Reference:	RKB @ 3683.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Lea Unit #100H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at:	2.00 sigma
Reference Wellbore:	Original Wellbore	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan 1	Offset TVD Reference:	Reference Datum

Reference:	Plan 1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 30.00ft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 10,000.00ft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program	Date			
	9/17/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	18,671.03	Plan 1 (Original Wellbore)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Lea						
Lea Unit #101H - Original Wellbore - Plan 1	1,000.00	1,009.00	100.00	93.24	14.787	CC
Lea Unit #101H - Original Wellbore - Plan 1	1,020.00	1,029.00	100.05	93.15	14.492	ES
Lea Unit #101H - Original Wellbore - Plan 1	18,671.03	18,776.10	590.05	323.27	2.212	SF
Lea Unit #102H - Original Wellbore - Plan 1	1,000.00	1,010.00	574.90	568.14	84.968	CC
Lea Unit #102H - Original Wellbore - Plan 1	1,020.00	1,030.00	574.95	568.05	83.240	ES
Lea Unit #102H - Original Wellbore - Plan 1	18,671.03	18,785.14	1,190.02	922.86	4.454	SF
Lea Unit #103H - Original Wellbore - Plan 1	965.00	975.00	724.91	718.39	111.263	CC
Lea Unit #103H - Original Wellbore - Plan 1	1,000.00	1,008.46	724.92	718.16	107.241	ES
Lea Unit #103H - Original Wellbore - Plan 1	18,671.03	18,617.94	1,780.03	1,513.15	6.670	SF
Lea Unit #200H - Original Wellbore - Plan 1	1,000.00	1,009.00	50.00	43.24	7.394	CC
Lea Unit #200H - Original Wellbore - Plan 1	1,020.00	1,029.00	50.05	43.15	7.250	ES
Lea Unit #200H - Original Wellbore - Plan 1	10,860.77	10,857.57	141.61	63.83	1.821	SF
Lea Unit #201H - Original Wellbore - Plan 1	990.00	999.00	150.10	143.41	22.434	CC
Lea Unit #201H - Original Wellbore - Plan 1	1,020.00	1,028.77	150.17	143.27	21.756	ES
Lea Unit #201H - Original Wellbore - Plan 1	18,671.03	19,372.28	767.55	544.84	3.446	SF
Lea Unit #202H - Original Wellbore - Plan 1	990.00	1,000.00	624.91	618.21	93.346	CC
Lea Unit #202H - Original Wellbore - Plan 1	1,020.00	1,026.42	625.04	618.15	90.674	ES
Lea Unit #202H - Original Wellbore - Plan 1	18,671.03	19,373.91	1,286.90	1,033.99	5.088	SF
Lea Unit #203H - Original Wellbore - Plan 1	1,000.00	1,010.00	675.01	668.24	99.762	CC
Lea Unit #203H - Original Wellbore - Plan 1	1,020.00	1,030.00	675.06	668.15	97.732	ES
Lea Unit #203H - Original Wellbore - Plan 1	18,671.03	19,308.87	1,846.21	1,586.16	7.099	SF
Lea Unit #54H - Original Wellbore - Original Wellbore	385.54	381.56	56.94	54.63	24.652	CC
Lea Unit #54H - Original Wellbore - Original Wellbore	1,050.00	1,046.04	58.16	51.15	8.300	ES
Lea Unit #54H - Original Wellbore - Original Wellbore	18,450.04	17,971.04	612.71	402.98	2.921	SF
Lea Unit #55H - Original Wellbore - Original Wellbore	1,037.23	1,035.02	100.35	95.01	18.795	CC
Lea Unit #55H - Original Wellbore - Original Wellbore	1,050.00	1,047.81	100.37	94.96	18.565	ES
Lea Unit #55H - Original Wellbore - Original Wellbore	18,480.04	17,601.70	937.80	798.03	6.709	SF
Lea Unit #56H - Original Wellbore - Original Wellbore	1,020.83	1,018.55	151.40	144.76	22.782	CC
Lea Unit #56H - Original Wellbore - Original Wellbore	1,050.00	1,047.79	151.49	144.64	22.116	ES
Lea Unit #56H - Original Wellbore - Original Wellbore	9,420.02	9,424.54	533.69	468.11	8.138	SF
Lea Unit #57H - Original Wellbore - Original Wellbore	334.93	332.97	624.38	622.40	316.779	CC
Lea Unit #57H - Original Wellbore - Original Wellbore	510.00	503.48	625.04	621.83	194.711	ES
Lea Unit #57H - Original Wellbore - Original Wellbore	18,570.04	17,641.04	1,800.20	1,564.09	7.624	SF
Lea Unit #58H - Original Wellbore - Original Wellbore	0.00	0.00	675.73			
Lea Unit #58H - Original Wellbore - Original Wellbore	870.00	863.00	677.51	672.02	123.337	ES
Lea Unit #58H - Original Wellbore - Original Wellbore	18,671.03	16,685.03	2,464.42	2,256.60	11.858	SF

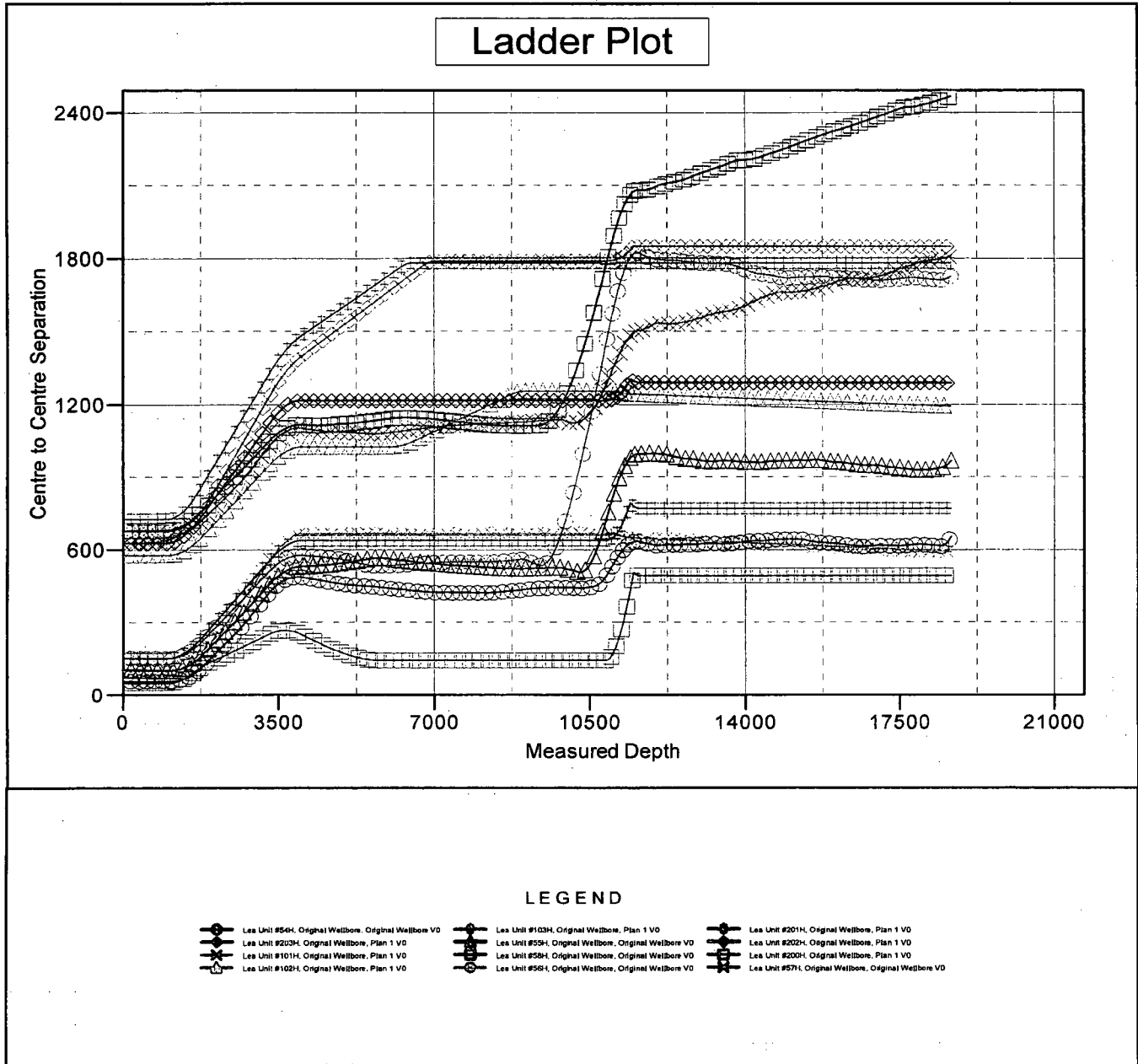
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Reference Site: Lea
Site Error: 0.00 ft
Reference Well: Lea Unit #100H
Well Error: 0.00 ft
Reference Wellbore: Original Wellbore
Reference Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #100H
TVD Reference: RKB @ 3683.00ft
MD Reference: RKB @ 3683.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Reference Depths are relative to RKB @ 3683.00ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Lea Unit #100H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.43°



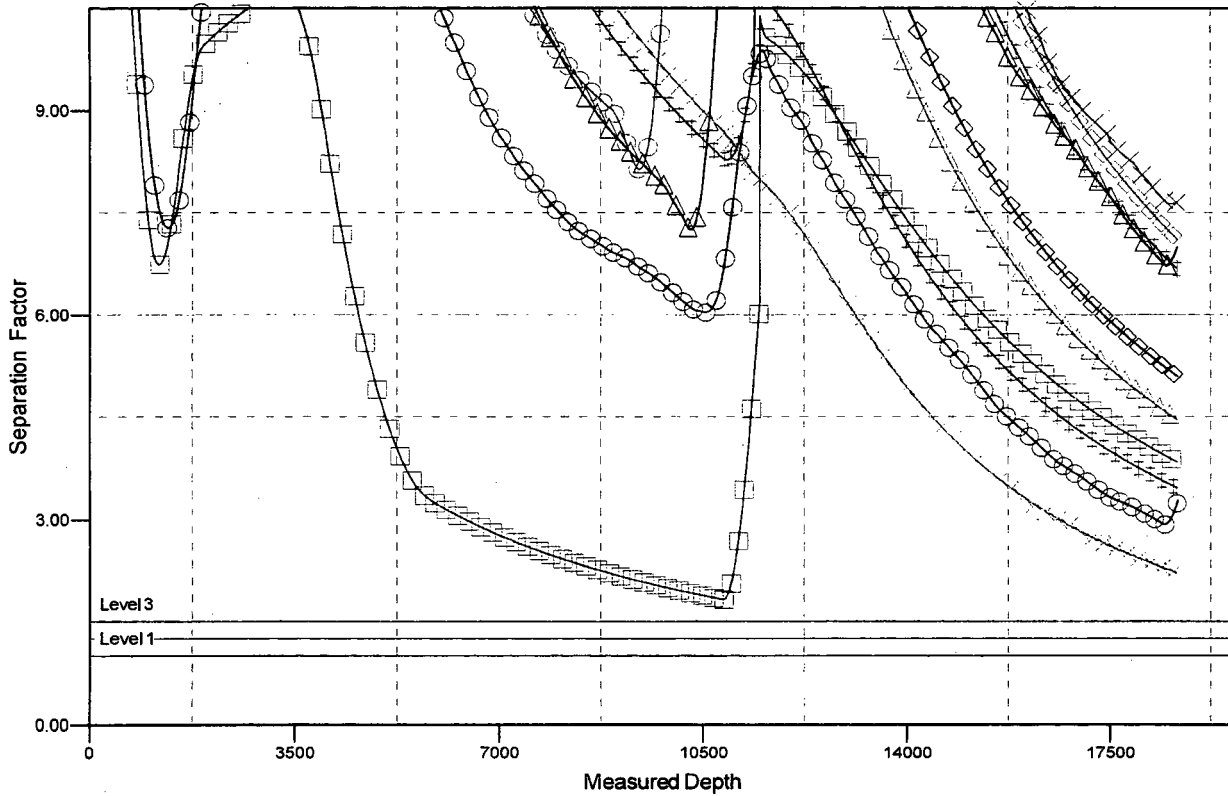
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #100H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3683.00ft
Reference Site:	Lea	MD Reference:	RKB @ 3683.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Lea Unit #100H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Wellbore	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan 1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB @ 3683.00ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Lea Unit #100H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.43°

Separation Factor Plot



LEGEND

- | | | |
|--|--|--|
| Lea Unit #54H, Original Wellbore, Original Wellbore VO | Lea Unit #103H, Original Wellbore, Plan 1 VO | Lea Unit #201H, Original Wellbore, Plan 1 VO |
| Lea Unit #203H, Original Wellbore, Plan 1 VO | Lea Unit #55H, Original Wellbore, Original Wellbore VO | Lea Unit #202H, Original Wellbore, Plan 1 VO |
| Lea Unit #101H, Original Wellbore, Plan 1 VO | Lea Unit #56H, Original Wellbore, Original Wellbore VO | Lea Unit #200H, Original Wellbore, Plan 1 VO |
| Lea Unit #102H, Original Wellbore, Plan 1 VO | Lea Unit #57H, Original Wellbore, Original Wellbore VO | |

Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #100H

Original Wellbore

Plan: Plan 1

Standard Planning Report

17 September, 2018



Database: EDM 5000.1 Single User Db
 Company: Legacy Reserves
 Project: Lea County, NM (NAD83)
 Site: Lea
 Well: Lea Unit #100H
 Wellbore: Original Wellbore
 Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #100H
 TVD Reference: RKB @ 3683.00ft
 MD Reference: RKB @ 3683.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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

Site	Lea		
Site Position:	Northing:	567,587.000 usft	Latitude: 32.557609°N
From: Map	Easting:	797,256.100 usft	Longitude: -103.502704
Position Uncertainty:	0.00 ft	Slot Radius: 13-3/16"	Grid Convergence: 0.45 °

Well	Lea Unit #100H		
Well Position	+N-S	13,361.91 ft	Northing: 580,948.886 usft
	+E-W	-7,939.12 ft	Easting: 789,317.000 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	3,683.00 ft
		Ground Level:	3,665.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2000	2/27/2018	(°) 6.73	(°) 60.60	(nT) 48,250.50000000

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	182.68

Plan Survey Tool Program	Date	9/17/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	18,671.03 Plan 1 (Original Wellbore)	MWD	
			MWD - Standard	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,737.21	11.06	251.32	1,732.64	-22.72	-67.18	1.50	1.50	0.00	251.32	
3,300.97	11.06	251.32	3,267.37	-118.78	-351.32	0.00	0.00	0.00	0.00	
4,038.18	0.00	0.00	4,000.01	-141.50	-418.50	1.50	-1.50	0.00	180.00	
10,860.77	0.00	0.00	10,822.60	-141.50	-418.50	0.00	0.00	0.00	0.00	
11,610.77	90.00	179.56	11,300.07	-618.95	-414.83	12.00	12.00	0.00	179.56	
18,671.03	90.00	179.55	11,300.02	-7,679.00	-360.10	0.00	0.00	0.00	-85.20	BHL-100H

Database: EDM 5000.1 Single User Db
 Company: Legacy Reserves
 Project: Lea County, NM (NAD83)
 Site: Lea
 Well: Lea Unit #100H
 Wellbore: Original Wellbore
 Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #100H
 TVD Reference: RKB @ 3683.00ft
 MD Reference: RKB @ 3683.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	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
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	1.50	251.32	1,099.99	-0.42	-1.24	0.48	1.50	1.50	0.00
1,200.00	3.00	251.32	1,199.91	-1.68	-4.96	1.91	1.50	1.50	0.00
1,300.00	4.50	251.32	1,299.69	-3.77	-11.15	4.29	1.50	1.50	0.00
1,400.00	6.00	251.32	1,399.27	-6.70	-19.82	7.62	1.50	1.50	0.00
1,500.00	7.50	251.32	1,498.57	-10.47	-30.96	11.91	1.50	1.50	0.00
1,600.00	9.00	251.32	1,597.54	-15.06	-44.55	17.13	1.50	1.50	0.00
1,700.00	10.50	251.32	1,696.09	-20.49	-60.59	23.30	1.50	1.50	0.00
1,737.21	11.06	251.32	1,732.64	-22.72	-67.18	25.84	1.50	1.50	0.00
1,800.00	11.06	251.32	1,794.27	-26.57	-78.59	30.23	0.00	0.00	0.00
1,900.00	11.06	251.32	1,892.41	-32.72	-96.76	37.21	0.00	0.00	0.00
2,000.00	11.06	251.32	1,990.55	-38.86	-114.93	44.20	0.00	0.00	0.00
2,100.00	11.06	251.32	2,088.70	-45.00	-133.10	51.19	0.00	0.00	0.00
2,200.00	11.06	251.32	2,186.84	-51.15	-151.27	58.18	0.00	0.00	0.00
2,300.00	11.06	251.32	2,284.98	-57.29	-169.44	65.16	0.00	0.00	0.00
2,400.00	11.06	251.32	2,383.13	-63.43	-187.61	72.15	0.00	0.00	0.00
2,500.00	11.06	251.32	2,481.27	-69.58	-205.78	79.14	0.00	0.00	0.00
2,600.00	11.06	251.32	2,579.41	-75.72	-223.95	86.13	0.00	0.00	0.00
2,700.00	11.06	251.32	2,677.56	-81.86	-242.12	93.12	0.00	0.00	0.00
2,800.00	11.06	251.32	2,775.70	-88.01	-260.29	100.10	0.00	0.00	0.00
2,900.00	11.06	251.32	2,873.84	-94.15	-278.46	107.09	0.00	0.00	0.00
3,000.00	11.06	251.32	2,971.99	-100.29	-296.63	114.08	0.00	0.00	0.00
3,100.00	11.06	251.32	3,070.13	-106.44	-314.80	121.07	0.00	0.00	0.00
3,200.00	11.06	251.32	3,168.27	-112.58	-332.97	128.06	0.00	0.00	0.00
3,300.97	11.06	251.32	3,267.37	-118.78	-351.32	135.11	0.00	0.00	0.00
3,400.00	9.57	251.32	3,364.79	-124.46	-368.12	141.57	1.50	-1.50	0.00
3,500.00	8.07	251.32	3,463.61	-129.38	-382.64	147.16	1.50	-1.50	0.00
3,600.00	6.57	251.32	3,562.79	-133.46	-394.72	151.80	1.50	-1.50	0.00
3,700.00	5.07	251.32	3,662.27	-136.71	-404.33	155.50	1.50	-1.50	0.00
3,800.00	3.57	251.32	3,761.98	-139.12	-411.47	158.24	1.50	-1.50	0.00
3,900.00	2.07	251.32	3,861.86	-140.70	-416.13	160.04	1.50	-1.50	0.00
4,000.00	0.57	251.32	3,961.83	-141.44	-418.32	160.88	1.50	-1.50	0.00
4,038.18	0.00	0.00	4,000.01	-141.50	-418.50	160.95	1.50	-1.50	0.00
4,100.00	0.00	0.00	4,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,200.00	0.00	0.00	4,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,300.00	0.00	0.00	4,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,400.00	0.00	0.00	4,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,500.00	0.00	0.00	4,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,600.00	0.00	0.00	4,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,700.00	0.00	0.00	4,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,800.00	0.00	0.00	4,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
4,900.00	0.00	0.00	4,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,000.00	0.00	0.00	4,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,100.00	0.00	0.00	5,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
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 Site: Lea
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 Wellbore: Original Wellbore
 Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #100H
 TVD Reference: RKB @ 3683.00ft
 MD Reference: RKB @ 3683.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey:

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.00	0.00	0.00	5,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,300.00	0.00	0.00	5,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,400.00	0.00	0.00	5,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,500.00	0.00	0.00	5,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,600.00	0.00	0.00	5,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,700.00	0.00	0.00	5,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,800.00	0.00	0.00	5,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
5,900.00	0.00	0.00	5,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,000.00	0.00	0.00	5,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,100.00	0.00	0.00	6,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,200.00	0.00	0.00	6,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,300.00	0.00	0.00	6,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,400.00	0.00	0.00	6,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,500.00	0.00	0.00	6,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,600.00	0.00	0.00	6,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,700.00	0.00	0.00	6,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,800.00	0.00	0.00	6,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,100.00	0.00	0.00	7,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,200.00	0.00	0.00	7,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,300.00	0.00	0.00	7,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,700.00	0.00	0.00	7,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,800.00	0.00	0.00	7,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
7,900.00	0.00	0.00	7,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,000.00	0.00	0.00	7,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,100.00	0.00	0.00	8,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,200.00	0.00	0.00	8,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,300.00	0.00	0.00	8,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,400.00	0.00	0.00	8,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,500.00	0.00	0.00	8,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,600.00	0.00	0.00	8,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,700.00	0.00	0.00	8,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,800.00	0.00	0.00	8,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
8,900.00	0.00	0.00	8,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,000.00	0.00	0.00	8,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,100.00	0.00	0.00	9,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,200.00	0.00	0.00	9,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,300.00	0.00	0.00	9,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,400.00	0.00	0.00	9,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,500.00	0.00	0.00	9,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,600.00	0.00	0.00	9,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,700.00	0.00	0.00	9,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,800.00	0.00	0.00	9,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00
9,900.00	0.00	0.00	9,861.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,000.00	0.00	0.00	9,961.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,100.00	0.00	0.00	10,061.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,200.00	0.00	0.00	10,161.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,300.00	0.00	0.00	10,261.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,400.00	0.00	0.00	10,361.83	-141.50	-418.50	160.95	0.00	0.00	0.00
10,500.00	0.00	0.00	10,461.83	-141.50	-418.50	160.95	0.00	0.00	0.00

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Local Co-ordinate Reference:
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 North Reference:
 Survey Calculation Method:

Well Lea Unit #100H
 RKB @ 3683.00ft
 RKB @ 3683.00ft
 Grid
 Minimum Curvature

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,600.00	0.00	0.00	10,561.83	-141.50	-418.50	160.95	0.00	0.00	0.00	
10,700.00	0.00	0.00	10,661.83	-141.50	-418.50	160.95	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,761.83	-141.50	-418.50	160.95	0.00	0.00	0.00	
10,860.77	0.00	0.00	10,822.60	-141.50	-418.50	160.95	0.00	0.00	0.00	
10,875.00	1.71	179.56	10,836.83	-141.71	-418.50	161.16	12.00	12.00	0.00	
10,900.00	4.71	179.56	10,861.79	-143.11	-418.49	162.56	12.00	12.00	0.00	
10,925.00	7.71	179.56	10,886.64	-145.81	-418.47	165.26	12.00	12.00	0.00	
10,950.00	10.71	179.56	10,911.31	-149.81	-418.44	169.25	12.00	12.00	0.00	
10,975.00	13.71	179.56	10,935.74	-155.10	-418.40	174.53	12.00	12.00	0.00	
11,000.00	16.71	179.56	10,959.87	-161.66	-418.35	181.08	12.00	12.00	0.00	
11,025.00	19.71	179.56	10,983.61	-169.47	-418.29	188.87	12.00	12.00	0.00	
11,050.00	22.71	179.56	11,006.92	-178.51	-418.22	197.90	12.00	12.00	0.00	
11,075.00	25.71	179.56	11,029.71	-188.76	-418.14	208.14	12.00	12.00	0.00	
11,100.00	28.71	179.56	11,051.95	-200.19	-418.05	219.55	12.00	12.00	0.00	
11,125.00	31.71	179.56	11,073.55	-212.76	-417.95	232.11	12.00	12.00	0.00	
11,150.00	34.71	179.56	11,094.46	-226.45	-417.85	245.78	12.00	12.00	0.00	
11,175.00	37.71	179.56	11,114.63	-241.22	-417.74	260.52	12.00	12.00	0.00	
11,200.00	40.71	179.56	11,134.00	-257.02	-417.61	276.30	12.00	12.00	0.00	
11,225.00	43.71	179.56	11,152.52	-273.81	-417.48	293.07	12.00	12.00	0.00	
11,250.00	46.71	179.56	11,170.13	-291.55	-417.35	310.78	12.00	12.00	0.00	
11,275.00	49.71	179.56	11,186.79	-310.19	-417.21	329.39	12.00	12.00	0.00	
11,300.00	52.71	179.56	11,202.45	-329.67	-417.06	348.85	12.00	12.00	0.00	
11,325.00	55.71	179.56	11,217.07	-349.95	-416.90	369.09	12.00	12.00	0.00	
11,350.00	58.71	179.56	11,230.61	-370.96	-416.74	390.07	12.00	12.00	0.00	
11,375.00	61.71	179.56	11,243.03	-392.65	-416.57	411.73	12.00	12.00	0.00	
11,400.00	64.71	179.56	11,254.30	-414.97	-416.40	434.02	12.00	12.00	0.00	
11,425.00	67.71	179.56	11,264.38	-437.84	-416.23	456.85	12.00	12.00	0.00	
11,450.00	70.71	179.56	11,273.25	-461.21	-416.05	480.19	12.00	12.00	0.00	
11,475.00	73.71	179.56	11,280.89	-485.01	-415.86	503.95	12.00	12.00	0.00	
11,500.00	76.71	179.56	11,287.27	-509.17	-415.68	528.09	12.00	12.00	0.00	
11,525.00	79.71	179.56	11,292.38	-533.64	-415.49	552.52	12.00	12.00	0.00	
11,550.00	82.71	179.56	11,296.20	-558.35	-415.30	577.19	12.00	12.00	0.00	
11,575.00	85.71	179.56	11,298.73	-583.21	-415.11	602.02	12.00	12.00	0.00	
11,600.00	88.71	179.56	11,299.94	-608.18	-414.92	626.95	12.00	12.00	0.00	
11,610.77	90.00	179.56	11,300.07	-618.95	-414.83	637.70	12.00	12.00	0.00	
11,700.00	90.00	179.56	11,300.07	-708.18	-414.15	726.80	0.00	0.00	0.00	
11,800.00	90.00	179.56	11,300.07	-808.17	-413.38	826.65	0.00	0.00	0.00	
11,900.00	90.00	179.56	11,300.07	-908.17	-412.61	926.50	0.00	0.00	0.00	
12,000.00	90.00	179.56	11,300.07	-1,008.17	-411.84	1,026.35	0.00	0.00	0.00	
12,100.00	90.00	179.56	11,300.07	-1,108.17	-411.07	1,126.21	0.00	0.00	0.00	
12,200.00	90.00	179.56	11,300.07	-1,208.16	-410.31	1,226.06	0.00	0.00	0.00	
12,300.00	90.00	179.56	11,300.07	-1,308.16	-409.54	1,325.91	0.00	0.00	0.00	
12,400.00	90.00	179.56	11,300.07	-1,408.16	-408.77	1,425.76	0.00	0.00	0.00	
12,500.00	90.00	179.56	11,300.07	-1,508.15	-408.00	1,525.61	0.00	0.00	0.00	
12,600.00	90.00	179.56	11,300.07	-1,608.15	-407.23	1,625.46	0.00	0.00	0.00	
12,700.00	90.00	179.56	11,300.07	-1,708.15	-406.46	1,725.31	0.00	0.00	0.00	
12,800.00	90.00	179.56	11,300.06	-1,808.15	-405.69	1,825.16	0.00	0.00	0.00	
12,900.00	90.00	179.56	11,300.06	-1,908.14	-404.92	1,925.01	0.00	0.00	0.00	
13,000.00	90.00	179.56	11,300.06	-2,008.14	-404.15	2,024.87	0.00	0.00	0.00	
13,100.00	90.00	179.56	11,300.06	-2,108.14	-403.37	2,124.72	0.00	0.00	0.00	
13,200.00	90.00	179.56	11,300.06	-2,208.13	-402.60	2,224.57	0.00	0.00	0.00	
13,300.00	90.00	179.56	11,300.06	-2,308.13	-401.83	2,324.42	0.00	0.00	0.00	
13,400.00	90.00	179.56	11,300.06	-2,408.13	-401.06	2,424.27	0.00	0.00	0.00	
13,500.00	90.00	179.56	11,300.06	-2,508.12	-400.29	2,524.12	0.00	0.00	0.00	

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Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,600.00	90.00	179.56	11,300.06	-2,608.12	-399.52	2,623.97	0.00	0.00	0.00	
13,700.00	90.00	179.56	11,300.06	-2,708.12	-398.75	2,723.82	0.00	0.00	0.00	
13,800.00	90.00	179.56	11,300.06	-2,808.12	-397.97	2,823.67	0.00	0.00	0.00	
13,900.00	90.00	179.56	11,300.06	-2,908.11	-397.20	2,923.53	0.00	0.00	0.00	
14,000.00	90.00	179.56	11,300.06	-3,008.11	-396.43	3,023.38	0.00	0.00	0.00	
14,100.00	90.00	179.56	11,300.06	-3,108.11	-395.65	3,123.23	0.00	0.00	0.00	
14,200.00	90.00	179.56	11,300.06	-3,208.10	-394.88	3,223.08	0.00	0.00	0.00	
14,300.00	90.00	179.56	11,300.06	-3,308.10	-394.11	3,322.93	0.00	0.00	0.00	
14,400.00	90.00	179.56	11,300.06	-3,408.10	-393.33	3,422.78	0.00	0.00	0.00	
14,500.00	90.00	179.56	11,300.06	-3,508.09	-392.56	3,522.63	0.00	0.00	0.00	
14,600.00	90.00	179.56	11,300.06	-3,608.09	-391.79	3,622.48	0.00	0.00	0.00	
14,700.00	90.00	179.56	11,300.06	-3,708.09	-391.01	3,722.33	0.00	0.00	0.00	
14,800.00	90.00	179.56	11,300.06	-3,808.09	-390.24	3,822.19	0.00	0.00	0.00	
14,900.00	90.00	179.56	11,300.06	-3,908.08	-389.46	3,922.04	0.00	0.00	0.00	
15,000.00	90.00	179.56	11,300.06	-4,008.08	-388.69	4,021.89	0.00	0.00	0.00	
15,100.00	90.00	179.56	11,300.06	-4,108.08	-387.91	4,121.74	0.00	0.00	0.00	
15,200.00	90.00	179.56	11,300.05	-4,208.07	-387.14	4,221.59	0.00	0.00	0.00	
15,300.00	90.00	179.56	11,300.05	-4,308.07	-386.36	4,321.44	0.00	0.00	0.00	
15,400.00	90.00	179.56	11,300.05	-4,408.07	-385.59	4,421.29	0.00	0.00	0.00	
15,500.00	90.00	179.56	11,300.05	-4,508.06	-384.81	4,521.14	0.00	0.00	0.00	
15,600.00	90.00	179.56	11,300.05	-4,608.06	-384.03	4,620.99	0.00	0.00	0.00	
15,700.00	90.00	179.56	11,300.05	-4,708.06	-383.26	4,720.84	0.00	0.00	0.00	
15,800.00	90.00	179.56	11,300.05	-4,808.06	-382.48	4,820.69	0.00	0.00	0.00	
15,900.00	90.00	179.55	11,300.05	-4,908.05	-381.71	4,920.54	0.00	0.00	0.00	
16,000.00	90.00	179.55	11,300.05	-5,008.05	-380.93	5,020.40	0.00	0.00	0.00	
16,100.00	90.00	179.55	11,300.05	-5,108.05	-380.15	5,120.25	0.00	0.00	0.00	
16,200.00	90.00	179.55	11,300.05	-5,208.04	-379.37	5,220.10	0.00	0.00	0.00	
16,300.00	90.00	179.55	11,300.05	-5,308.04	-378.60	5,319.95	0.00	0.00	0.00	
16,400.00	90.00	179.55	11,300.05	-5,408.04	-377.82	5,419.80	0.00	0.00	0.00	
16,500.00	90.00	179.55	11,300.05	-5,508.03	-377.04	5,519.65	0.00	0.00	0.00	
16,600.00	90.00	179.55	11,300.04	-5,608.03	-376.26	5,619.50	0.00	0.00	0.00	
16,700.00	90.00	179.55	11,300.04	-5,708.03	-375.48	5,719.35	0.00	0.00	0.00	
16,800.00	90.00	179.55	11,300.04	-5,808.03	-374.71	5,819.20	0.00	0.00	0.00	
16,900.00	90.00	179.55	11,300.04	-5,908.02	-373.93	5,919.05	0.00	0.00	0.00	
17,000.00	90.00	179.55	11,300.04	-6,008.02	-373.15	6,018.90	0.00	0.00	0.00	
17,100.00	90.00	179.55	11,300.04	-6,108.02	-372.37	6,118.75	0.00	0.00	0.00	
17,200.00	90.00	179.55	11,300.04	-6,208.01	-371.59	6,218.60	0.00	0.00	0.00	
17,300.00	90.00	179.55	11,300.04	-6,308.01	-370.81	6,318.46	0.00	0.00	0.00	
17,400.00	90.00	179.55	11,300.04	-6,408.01	-370.03	6,418.31	0.00	0.00	0.00	
17,500.00	90.00	179.55	11,300.04	-6,508.00	-369.25	6,518.16	0.00	0.00	0.00	
17,600.00	90.00	179.55	11,300.03	-6,608.00	-368.47	6,618.01	0.00	0.00	0.00	
17,700.00	90.00	179.55	11,300.03	-6,708.00	-367.69	6,717.86	0.00	0.00	0.00	
17,800.00	90.00	179.55	11,300.03	-6,807.99	-366.91	6,817.71	0.00	0.00	0.00	
17,900.00	90.00	179.55	11,300.03	-6,907.99	-366.13	6,917.56	0.00	0.00	0.00	
18,000.00	90.00	179.55	11,300.03	-7,007.99	-365.35	7,017.41	0.00	0.00	0.00	
18,100.00	90.00	179.55	11,300.03	-7,107.99	-364.57	7,117.26	0.00	0.00	0.00	
18,200.00	90.00	179.55	11,300.03	-7,207.98	-363.78	7,217.11	0.00	0.00	0.00	
18,300.00	90.00	179.55	11,300.03	-7,307.98	-363.00	7,316.96	0.00	0.00	0.00	
18,400.00	90.00	179.55	11,300.03	-7,407.98	-362.22	7,416.81	0.00	0.00	0.00	
18,500.00	90.00	179.55	11,300.02	-7,507.97	-361.44	7,516.66	0.00	0.00	0.00	
18,600.00	90.00	179.55	11,300.02	-7,607.97	-360.66	7,616.51	0.00	0.00	0.00	
18,671.03	90.00	179.55	11,300.02	-7,679.00	-360.10	7,687.44	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #100H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3683.00ft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3683.00ft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 1		

Design Targets										
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
Shape		(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
FTP-100H		0.00	0.00	11,035.02	-191.49	-418.50	580,757.400	788,898.500	32.593984°N	-103.529505
	- plan misses target center by 0.40ft at 11080.97ft MD (11035.07 TVD, -191.38 N, -418.12 E)									
	- Point									
BHL-100H		0.00	0.00	11,300.02	-7,679.00	-360.10	573,269.900	788,956.900	32.573403°N	-103.529499
	- plan hits target center									
	- Point									

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Legacy Reserves
Lea Unit #100H - Plan 1

Lea County, NM (NAD83)
Lea
Your Ref:

Measured Depth (ft)	Incl.	Azim.	Depth (ft)	Vertical Northings (ft)	Eastings (ft)	Vertical Section Rate (dega/100ft)	Dogleg	
0.00		0.000	0.000	0.00	0.00	0.00	0.00	0.00
100.00		0.000	0.000	100.00	0.00	0.00	0.00	0.00
200.00		0.000	0.000	200.00	0.00	0.00	0.00	0.00
300.00		0.000	0.000	300.00	0.00	0.00	0.00	0.00
400.00		0.000	0.000	400.00	0.00	0.00	0.00	0.00
500.00		0.000	0.000	500.00	0.00	0.00	0.00	0.00
600.00		0.000	0.000	600.00	0.00	0.00	0.00	0.00
700.00		0.000	0.000	700.00	0.00	0.00	0.00	0.00
800.00		0.000	0.000	800.00	0.00	0.00	0.00	0.00
900.00		0.000	0.000	900.00	0.00	0.00	0.00	0.00
1000.00		0.000	0.000	1000.00	0.00	0.00	0.00	0.00
1100.00		1.500	251.319	1099.99	-0.42	-1.24	0.48	1.50
1200.00		3.000	251.319	1199.91	-1.68	-4.96	1.91	1.50
1300.00		4.500	251.319	1299.69	-3.77	-11.15	4.29	1.50
1400.00		6.000	251.319	1399.27	-6.70	-19.82	7.62	1.50
1500.00		7.500	251.319	1498.57	-10.47	-30.96	11.91	1.50
1600.00		9.000	251.319	1597.54	-15.06	-44.55	17.13	1.50
1700.00		10.500	251.319	1696.09	-20.49	-60.59	23.30	1.50
1737.21		11.058	251.319	1732.64	-22.72	-67.18	25.84	1.50
1800.00		11.058	251.319	1794.27	-26.57	-78.59	30.23	0.00
1900.00		11.058	251.319	1892.41	-32.72	-96.76	37.21	0.00
2000.00		11.058	251.319	1990.55	-38.86	-114.93	44.20	0.00
2100.00		11.058	251.319	2088.70	-45.00	-133.10	51.19	0.00
2200.00		11.058	251.319	2186.84	-51.15	-151.27	58.18	0.00
2300.00		11.058	251.319	2284.98	-57.29	-169.44	65.16	0.00
2400.00		11.058	251.319	2383.13	-63.43	-187.61	72.15	0.00
2500.00		11.058	251.319	2481.27	-69.58	-205.78	79.14	0.00
2600.00		11.058	251.319	2579.41	-75.72	-223.95	86.13	0.00
2700.00		11.058	251.319	2677.56	-81.86	-242.12	93.12	0.00
2800.00		11.058	251.319	2775.70	-88.01	-260.29	100.10	0.00
2900.00		11.058	251.319	2873.84	-94.15	-278.46	107.09	0.00
3000.00		11.058	251.319	2971.99	-100.29	-296.63	114.08	0.00
3100.00		11.058	251.319	3070.13	-106.44	-314.80	121.07	0.00
3200.00		11.058	251.319	3168.27	-112.58	-332.97	128.06	0.00
3300.97		11.058	251.319	3267.37	-118.78	-351.32	135.11	0.00
3400.00		9.573	251.319	3364.79	-124.46	-368.12	141.57	1.50
3500.00		8.073	251.319	3463.61	-129.38	-382.64	147.16	1.50
3600.00		6.573	251.319	3562.79	-133.46	-394.72	151.80	1.50
3700.00		5.073	251.319	3662.27	-136.71	-404.33	155.50	1.50
3800.00		3.573	251.319	3761.98	-139.12	-411.47	158.24	1.50
3900.00		2.073	251.319	3861.86	-140.70	-416.13	160.04	1.50
4000.00		0.573	251.319	3961.83	-141.44	-418.32	160.88	1.50
4038.18		0.000	0.000	4000.01	-141.50	-418.50	160.95	1.50
4100.00		0.000	0.000	4061.83	-141.50	-418.50	160.95	0.00
4200.00		0.000	0.000	4161.83	-141.50	-418.50	160.95	0.00
4300.00		0.000	0.000	4261.83	-141.50	-418.50	160.95	0.00
4400.00		0.000	0.000	4361.83	-141.50	-418.50	160.95	0.00
4500.00		0.000	0.000	4461.83	-141.50	-418.50	160.95	0.00
4600.00		0.000	0.000	4561.83	-141.50	-418.50	160.95	0.00
4700.00		0.000	0.000	4661.83	-141.50	-418.50	160.95	0.00
4800.00		0.000	0.000	4761.83	-141.50	-418.50	160.95	0.00
4900.00		0.000	0.000	4861.83	-141.50	-418.50	160.95	0.00
5000.00		0.000	0.000	4961.83	-141.50	-418.50	160.95	0.00
5100.00		0.000	0.000	5061.83	-141.50	-418.50	160.95	0.00
5200.00		0.000	0.000	5161.83	-141.50	-418.50	160.95	0.00
5300.00		0.000	0.000	5261.83	-141.50	-418.50	160.95	0.00
5400.00		0.000	0.000	5361.83	-141.50	-418.50	160.95	0.00

5500.00	0.000	0.000	5461.83	-141.50	-418.50	160.95	0.00
5600.00	0.000	0.000	5561.83	-141.50	-418.50	160.95	0.00
5700.00	0.000	0.000	5661.83	-141.50	-418.50	160.95	0.00
5800.00	0.000	0.000	5761.83	-141.50	-418.50	160.95	0.00
5900.00	0.000	0.000	5861.83	-141.50	-418.50	160.95	0.00
6000.00	0.000	0.000	5961.83	-141.50	-418.50	160.95	0.00
6100.00	0.000	0.000	6061.83	-141.50	-418.50	160.95	0.00
6200.00	0.000	0.000	6161.83	-141.50	-418.50	160.95	0.00
6300.00	0.000	0.000	6261.83	-141.50	-418.50	160.95	0.00
6400.00	0.000	0.000	6361.83	-141.50	-418.50	160.95	0.00
6500.00	0.000	0.000	6461.83	-141.50	-418.50	160.95	0.00
6600.00	0.000	0.000	6561.83	-141.50	-418.50	160.95	0.00
6700.00	0.000	0.000	6661.83	-141.50	-418.50	160.95	0.00
6800.00	0.000	0.000	6761.83	-141.50	-418.50	160.95	0.00
6900.00	0.000	0.000	6861.83	-141.50	-418.50	160.95	0.00
7000.00	0.000	0.000	6961.83	-141.50	-418.50	160.95	0.00
7100.00	0.000	0.000	7061.83	-141.50	-418.50	160.95	0.00
7200.00	0.000	0.000	7161.83	-141.50	-418.50	160.95	0.00
7300.00	0.000	0.000	7261.83	-141.50	-418.50	160.95	0.00
7400.00	0.000	0.000	7361.83	-141.50	-418.50	160.95	0.00
7500.00	0.000	0.000	7461.83	-141.50	-418.50	160.95	0.00
7600.00	0.000	0.000	7561.83	-141.50	-418.50	160.95	0.00
7700.00	0.000	0.000	7661.83	-141.50	-418.50	160.95	0.00
7800.00	0.000	0.000	7761.83	-141.50	-418.50	160.95	0.00
7900.00	0.000	0.000	7861.83	-141.50	-418.50	160.95	0.00
8000.00	0.000	0.000	7961.83	-141.50	-418.50	160.95	0.00
8100.00	0.000	0.000	8061.83	-141.50	-418.50	160.95	0.00
8200.00	0.000	0.000	8161.83	-141.50	-418.50	160.95	0.00
8300.00	0.000	0.000	8261.83	-141.50	-418.50	160.95	0.00
8400.00	0.000	0.000	8361.83	-141.50	-418.50	160.95	0.00
8500.00	0.000	0.000	8461.83	-141.50	-418.50	160.95	0.00
8600.00	0.000	0.000	8561.83	-141.50	-418.50	160.95	0.00
8700.00	0.000	0.000	8661.83	-141.50	-418.50	160.95	0.00
8800.00	0.000	0.000	8761.83	-141.50	-418.50	160.95	0.00
8900.00	0.000	0.000	8861.83	-141.50	-418.50	160.95	0.00
9000.00	0.000	0.000	8961.83	-141.50	-418.50	160.95	0.00
9100.00	0.000	0.000	9061.83	-141.50	-418.50	160.95	0.00
9200.00	0.000	0.000	9161.83	-141.50	-418.50	160.95	0.00
9300.00	0.000	0.000	9261.83	-141.50	-418.50	160.95	0.00
9400.00	0.000	0.000	9361.83	-141.50	-418.50	160.95	0.00
9500.00	0.000	0.000	9461.83	-141.50	-418.50	160.95	0.00
9600.00	0.000	0.000	9561.83	-141.50	-418.50	160.95	0.00
9700.00	0.000	0.000	9661.83	-141.50	-418.50	160.95	0.00
9800.00	0.000	0.000	9761.83	-141.50	-418.50	160.95	0.00
9900.00	0.000	0.000	9861.83	-141.50	-418.50	160.95	0.00
10000.00	0.000	0.000	9961.83	-141.50	-418.50	160.95	0.00
10100.00	0.000	0.000	10061.83	-141.50	-418.50	160.95	0.00
10200.00	0.000	0.000	10161.83	-141.50	-418.50	160.95	0.00
10300.00	0.000	0.000	10261.83	-141.50	-418.50	160.95	0.00
10400.00	0.000	0.000	10361.83	-141.50	-418.50	160.95	0.00
10500.00	0.000	0.000	10461.83	-141.50	-418.50	160.95	0.00
10600.00	0.000	0.000	10561.83	-141.50	-418.50	160.95	0.00
10700.00	0.000	0.000	10661.83	-141.50	-418.50	160.95	0.00
10800.00	0.000	0.000	10761.83	-141.50	-418.50	160.95	0.00
10860.77	0.000	0.000	10822.60	-141.50	-418.50	160.95	0.00
10875.00	1.708	179.560	10836.83	-141.71	-418.50	161.16	12.00
10900.00	4.708	179.560	10861.79	-143.11	-418.49	162.56	12.00
10925.00	7.708	179.560	10886.64	-145.81	-418.47	165.26	12.00
10950.00	10.708	179.560	10911.31	-149.81	-418.44	169.25	12.00
10975.00	13.708	179.560	10935.74	-155.10	-418.40	174.53	12.00
11000.00	16.708	179.560	10959.86	-161.66	-418.35	181.08	12.00
11025.00	19.708	179.560	10983.61	-169.47	-418.29	188.87	12.00
11050.00	22.708	179.560	11006.91	-178.51	-418.22	197.90	12.00
11075.00	25.708	179.560	11029.71	-188.76	-418.14	208.14	12.00
11100.00	28.708	179.560	11051.95	-200.19	-418.05	219.55	12.00
11125.00	31.708	179.560	11073.55	-212.76	-417.95	232.11	12.00
11150.00	34.708	179.560	11094.46	-226.45	-417.85	245.78	12.00
11175.00	37.707	179.560	11114.63	-241.22	-417.74	260.52	12.00
11200.00	40.707	179.560	11134.00	-257.02	-417.61	276.30	12.00
11225.00	43.707	179.560	11152.52	-273.81	-417.48	293.07	12.00
11250.00	46.707	179.560	11170.13	-291.55	-417.35	310.78	12.00
11275.00	49.707	179.560	11186.79	-310.19	-417.21	329.39	12.00
11300.00	52.707	179.560	11202.45	-329.67	-417.06	348.85	12.00
11325.00	55.707	179.560	11217.07	-349.95	-416.90	369.09	12.00

11350.00	58.707	179.560	11230.61	-370.96	-416.74	390.07	12.00
11375.00	61.707	179.560	11243.03	-392.65	-416.57	411.73	12.00
11400.00	64.707	179.560	11254.29	-414.97	-416.40	434.02	12.00
11425.00	67.707	179.560	11264.38	-437.84	-416.23	456.85	12.00
11450.00	70.707	179.560	11273.25	-461.21	-416.05	480.19	12.00
11475.00	73.707	179.560	11280.89	-485.01	-415.86	503.95	12.00
11500.00	76.707	179.560	11287.27	-509.17	-415.68	528.09	12.00
11525.00	79.707	179.560	11292.38	-533.64	-415.49	552.52	12.00
11550.00	82.707	179.560	11296.20	-558.35	-415.30	577.19	12.00
11575.00	85.707	179.560	11298.73	-583.21	-415.11	602.02	12.00
11600.00	88.707	179.560	11299.94	-608.18	-414.92	626.95	12.00
11610.77	90.000	179.560	11300.07	-618.95	-414.83	637.70	12.00
11700.00	90.000	179.560	11300.07	-708.18	-414.15	726.80	0.00
11800.00	90.000	179.560	11300.07	-808.17	-413.38	826.65	0.00
11900.00	90.000	179.560	11300.07	-908.17	-412.61	926.50	0.00
12000.00	90.000	179.560	11300.07	-1008.17	-411.84	1026.35	0.00
12100.00	90.000	179.559	11300.07	-1108.17	-411.07	1126.21	0.00
12200.00	90.000	179.559	11300.07	-1208.16	-410.31	1226.06	0.00
12300.00	90.000	179.559	11300.07	-1308.16	-409.54	1325.91	0.00
12400.00	90.000	179.559	11300.07	-1408.16	-408.77	1425.76	0.00
12500.00	90.000	179.559	11300.07	-1508.15	-408.00	1525.61	0.00
12600.00	90.000	179.559	11300.06	-1608.15	-407.23	1625.46	0.00
12700.00	90.000	179.559	11300.06	-1708.15	-406.46	1725.31	0.00
12800.00	90.000	179.559	11300.06	-1808.15	-405.69	1825.16	0.00
12900.00	90.000	179.558	11300.06	-1908.14	-404.92	1925.01	0.00
13000.00	90.000	179.558	11300.06	-2008.14	-404.15	2024.87	0.00
13100.00	90.000	179.558	11300.06	-2108.14	-403.37	2124.72	0.00
13200.00	90.000	179.558	11300.06	-2208.13	-402.60	2224.57	0.00
13300.00	90.000	179.558	11300.06	-2308.13	-401.83	2324.42	0.00
13400.00	90.000	179.558	11300.06	-2408.13	-401.06	2424.27	0.00
13500.00	90.000	179.558	11300.06	-2508.12	-400.29	2524.12	0.00
13600.00	90.000	179.558	11300.06	-2608.12	-399.52	2623.97	0.00
13700.00	90.000	179.558	11300.06	-2708.12	-398.75	2723.82	0.00
13800.00	90.000	179.557	11300.06	-2808.12	-397.97	2823.67	0.00
13900.00	90.000	179.557	11300.06	-2908.11	-397.20	2923.53	0.00
14000.00	90.000	179.557	11300.06	-3008.11	-396.43	3023.38	0.00
14100.00	90.000	179.557	11300.06	-3108.11	-395.65	3123.23	0.00
14200.00	90.000	179.557	11300.06	-3208.10	-394.88	3223.08	0.00
14300.00	90.000	179.557	11300.06	-3308.10	-394.11	3322.93	0.00
14400.00	90.000	179.557	11300.06	-3408.10	-393.33	3422.78	0.00
14500.00	90.000	179.557	11300.06	-3508.09	-392.56	3522.63	0.00
14600.00	90.000	179.556	11300.06	-3608.09	-391.79	3622.48	0.00
14700.00	90.000	179.556	11300.06	-3708.09	-391.01	3722.33	0.00
14800.00	90.000	179.556	11300.06	-3808.09	-390.24	3822.18	0.00
14900.00	90.000	179.556	11300.06	-3908.08	-389.46	3922.04	0.00
15000.00	90.000	179.556	11300.06	-4008.08	-388.69	4021.89	0.00
15100.00	90.000	179.556	11300.06	-4108.08	-387.91	4121.74	0.00
15200.00	90.000	179.556	11300.05	-4208.07	-387.14	4221.59	0.00
15300.00	90.000	179.556	11300.05	-4308.07	-386.36	4321.44	0.00
15400.00	90.000	179.556	11300.05	-4408.07	-385.59	4421.29	0.00
15500.00	90.000	179.555	11300.05	-4508.06	-384.81	4521.14	0.00
15600.00	90.000	179.555	11300.05	-4608.06	-384.03	4620.99	0.00
15700.00	90.000	179.555	11300.05	-4708.06	-383.26	4720.84	0.00
15800.00	90.000	179.555	11300.05	-4808.06	-382.48	4820.69	0.00
15900.00	90.000	179.555	11300.05	-4908.05	-381.71	4920.54	0.00
16000.00	90.000	179.555	11300.05	-5008.05	-380.93	5020.40	0.00
16100.00	90.000	179.555	11300.05	-5108.05	-380.15	5120.25	0.00
16200.00	90.000	179.555	11300.05	-5208.04	-379.37	5220.10	0.00
16300.00	90.000	179.554	11300.05	-5308.04	-378.60	5319.95	0.00
16400.00	90.000	179.554	11300.05	-5408.04	-377.82	5419.80	0.00
16500.00	90.000	179.554	11300.05	-5508.03	-377.04	5519.65	0.00
16600.00	90.000	179.554	11300.04	-5608.03	-376.26	5619.50	0.00
16700.00	90.001	179.554	11300.04	-5708.03	-375.48	5719.35	0.00
16800.00	90.001	179.554	11300.04	-5808.03	-374.71	5819.20	0.00
16900.00	90.001	179.554	11300.04	-5908.02	-373.93	5919.05	0.00
17000.00	90.001	179.554	11300.04	-6008.02	-373.15	6018.90	0.00
17100.00	90.001	179.554	11300.04	-6108.02	-372.37	6118.75	0.00
17200.00	90.001	179.553	11300.04	-6208.01	-371.59	6218.60	0.00
17300.00	90.001	179.553	11300.04	-6308.01	-370.81	6318.46	0.00
17400.00	90.001	179.553	11300.04	-6408.01	-370.03	6418.31	0.00
17500.00	90.001	179.553	11300.04	-6508.00	-369.25	6518.16	0.00
17600.00	90.001	179.553	11300.03	-6608.00	-368.47	6618.01	0.00
17700.00	90.001	179.553	11300.03	-6708.00	-367.69	6717.86	0.00
17800.00	90.001	179.553	11300.03	-6807.99	-366.91	6817.71	0.00

17900.00	90.001	179.553	11300.03	-6907.99	-366.13	6917.56	0.00
18000.00	90.001	179.552	11300.03	-7007.99	-365.35	7017.41	0.00
18100.00	90.001	179.552	11300.03	-7107.99	-364.57	7117.26	0.00
18200.00	90.001	179.552	11300.03	-7207.98	-363.78	7217.11	0.00
18300.00	90.001	179.552	11300.03	-7307.98	-363.00	7316.96	0.00
18400.00	90.001	179.552	11300.03	-7407.98	-362.22	7416.81	0.00
18500.00	90.001	179.552	11300.02	-7507.97	-361.44	7516.66	0.00
18600.00	90.001	179.552	11300.02	-7607.97	-360.66	7616.51	0.00
18671.03	90.001	179.552	11300.02	-7679.00	-360.10	7687.44	0.00

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North. Vertical depths are relative to RKB. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 182.685° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.434°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 18671.03ft., the Bottom Hole Displacement is 7687.44ft., in the Direction of 182.685° (Grid).