

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM06531

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
891006455X8. Well Name and No.
LEA UNIT 102H

9. API Well No.

10. Field and Pool or Exploratory Area
LEA11. County or Parish, State
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

LEGACY RESERVES OPERATING LP

Contact: SHERRY MORROW

E-Mail: smorrow@legacylp.com

3a. Address

303 W WALL SUITE 1600
MIDLAND, TX 79702

3b. Phone No. (include area code)

Ph: 432-221-6339

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

Sec 11 T20S R34E NENE 140FNL 1215FEL
32.594494 N Lat, 103.526276 W Lon**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

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

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 recompletable 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 recompletable 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 First Take Point (FTP) and Bottom Hole Location (BHL). The revised FTP is located 330' FNL / 1000' FEL of Section 11 and revised BHL is located 2536' FNL / 1000' FEL of Section 14. Please see attached revised Form C-102 for details and updated Directional Plan with Anti-Collision Report to reflect new FTP and BHL.

Carlsbad Field Office
OCD HobbsCarlsbad Field Office
& GFO
OCD Hobbs

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

Electronic Submission #454360 verified by the BLM Well Information System
For LEGACY RESERVES OPERATING LP, sent to the Hobbs
Committed to AFMS for processing by PRISCILLA PEREZ on 02/14/2019 (19PP1028SE)

Name (Printed/Typed) MATT DICKSON

Title DRILLING ENGINEER

Signature (Electronic Submission)

Date 02/12/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By LONG VO

Title PETROLEUM ENGINEER

Date 02/15/2019

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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

KZ

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) 748-1263 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45574	Pool Code 98247	Pool Name WC-025 G-08 5203435D; WC
Property Code 302802	Property Name LEA UNIT	Well Number 102H
OGRID No. 240974	Operator Name LEGACY RESERVES OPERATING LP	Elevation 3666'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	20 S	34 E		140	NORTH	1215	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
H	14	20 S	34 E		2536	NORTH	1000	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

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.

140'
#102H (SL)
Gr. El.: 3666'
S 48°51'04" E
288'
First Take Point

11

The LEA UNIT #102H Path follows the LEA UNIT #202H SH Path at a different depth

S 00°26'49" E - 7486'

1215'
1000'

330'

2536'

1000'

14

Last Take Point/
Bottom Hole Location

Scale
1" = 2000'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill 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 3/12/2019
Signature Date

Sherry Morrow
Printed Name

smorrow@legacyreserves.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

Signature & Seal
11-05-18
23263
PROFESSIONAL SURVEYOR
NEW MEXICO

W.O. Num. 2017-0929 F

Certificate No. Lindsay Gyga 23263

Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #102H

Original Wellbore

Plan 1

Anticollision Summary Report

24 October, 2018



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #102H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3693.0usft
Reference Site:	Lea	MD Reference:	RKB @ 3693.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Lea Unit #102H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	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 100.0usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 30,000.0usft
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** 10/24/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,784.7	Plan 1 (Original Wellbore)	MWD	MWD - Standard

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Lea						
Lea Unit #100H - Original Wellbore - Original Wellbore	0.0	0.0	575.0			
Lea Unit #100H - Original Wellbore - Original Wellbore	400.0	385.7	576.5	574.1	238.986	ES
Lea Unit #100H - Original Wellbore - Original Wellbore	11,500.0	11,241.0	1,190.7	1,111.6	15.043	SF
Lea Unit #100H - Original Wellbore - Plan 1	1,000.0	990.0	574.9	568.2	85.878	CC, ES
Lea Unit #100H - Original Wellbore - Plan 1	18,784.7	18,670.8	1,216.8	950.6	4.571	SF
Lea Unit #101H - Original Wellbore - Plan 1	5,000.0	5,001.7	358.2	322.9	10.167	CC, ES
Lea Unit #101H - Original Wellbore - Plan 1	18,784.7	18,770.3	620.0	352.7	2.320	SF
Lea Unit #103H - Original Wellbore - Plan 1	916.7	916.7	150.0	143.9	24.523	CC
Lea Unit #103H - Original Wellbore - Plan 1	1,000.0	1,000.0	150.0	143.3	22.341	ES
Lea Unit #103H - Original Wellbore - Plan 1	18,784.7	18,631.2	650.0	382.6	2.431	SF
Lea Unit #200H - Original Wellbore - Plan 1	1,500.0	1,499.0	524.9	514.6	50.985	CC, ES
Lea Unit #200H - Original Wellbore - Plan 1	18,784.7	19,300.4	1,309.6	1,059.9	5.244	SF
Lea Unit #201H - Original Wellbore - Plan 1	5,000.0	4,998.7	404.8	369.3	11.418	CC, ES
Lea Unit #201H - Original Wellbore - Plan 1	18,784.7	19,373.6	797.1	582.8	3.719	SF
Lea Unit #202H - Original Wellbore - Plan 1	1,000.0	1,000.0	50.0	43.3	7.447	CC
Lea Unit #202H - Original Wellbore - Plan 1	10,837.2	10,829.4	100.1	23.4	1.304	Level 3, ES, SF
Lea Unit #203H - Original Wellbore - Plan 1	1,416.7	1,416.7	100.1	90.4	10.318	CC
Lea Unit #203H - Original Wellbore - Plan 1	1,500.0	1,500.0	100.1	89.8	9.720	ES
Lea Unit #203H - Original Wellbore - Plan 1	18,784.7	19,322.2	820.1	605.8	3.827	SF
Lea Unit #54H - Original Wellbore - Original Wellbore	3,400.5	3,390.6	524.2	500.5	22.142	CC
Lea Unit #54H - Original Wellbore - Original Wellbore	3,500.0	3,483.5	524.8	500.5	21.542	ES
Lea Unit #54H - Original Wellbore - Original Wellbore	18,553.0	17,970.3	846.6	616.1	3.674	SF
Lea Unit #55H - Original Wellbore - Original Wellbore	100.0	86.6	475.9	475.6	1,673.726	CC
Lea Unit #55H - Original Wellbore - Original Wellbore	5,200.0	5,196.7	486.3	452.2	14.230	ES
Lea Unit #55H - Original Wellbore - Original Wellbore	18,600.0	17,602.0	1,266.7	1,069.6	6.426	SF
Lea Unit #56H - Original Wellbore - Original Wellbore	223.1	210.1	425.6	424.6	445.395	CC
Lea Unit #56H - Original Wellbore - Original Wellbore	3,100.0	3,086.2	435.2	413.9	20.390	ES
Lea Unit #56H - Original Wellbore - Original Wellbore	9,200.0	9,152.0	669.5	605.7	10.498	SF
Lea Unit #57H - Original Wellbore - Original Wellbore	563.6	551.8	53.8	50.3	15.130	CC
Lea Unit #57H - Original Wellbore - Original Wellbore	9,841.9	9,818.6	82.9	14.2	1.207	Level 3, ES, SF
Lea Unit #58H - Original Wellbore - Original Wellbore	100.0	87.7	104.7	104.4	379.363	CC
Lea Unit #58H - Original Wellbore - Original Wellbore	7,078.0	7,052.7	121.2	71.9	2.460	ES
Lea Unit #58H - Original Wellbore - Original Wellbore	9,000.0	8,974.6	144.0	81.3	2.298	SF

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

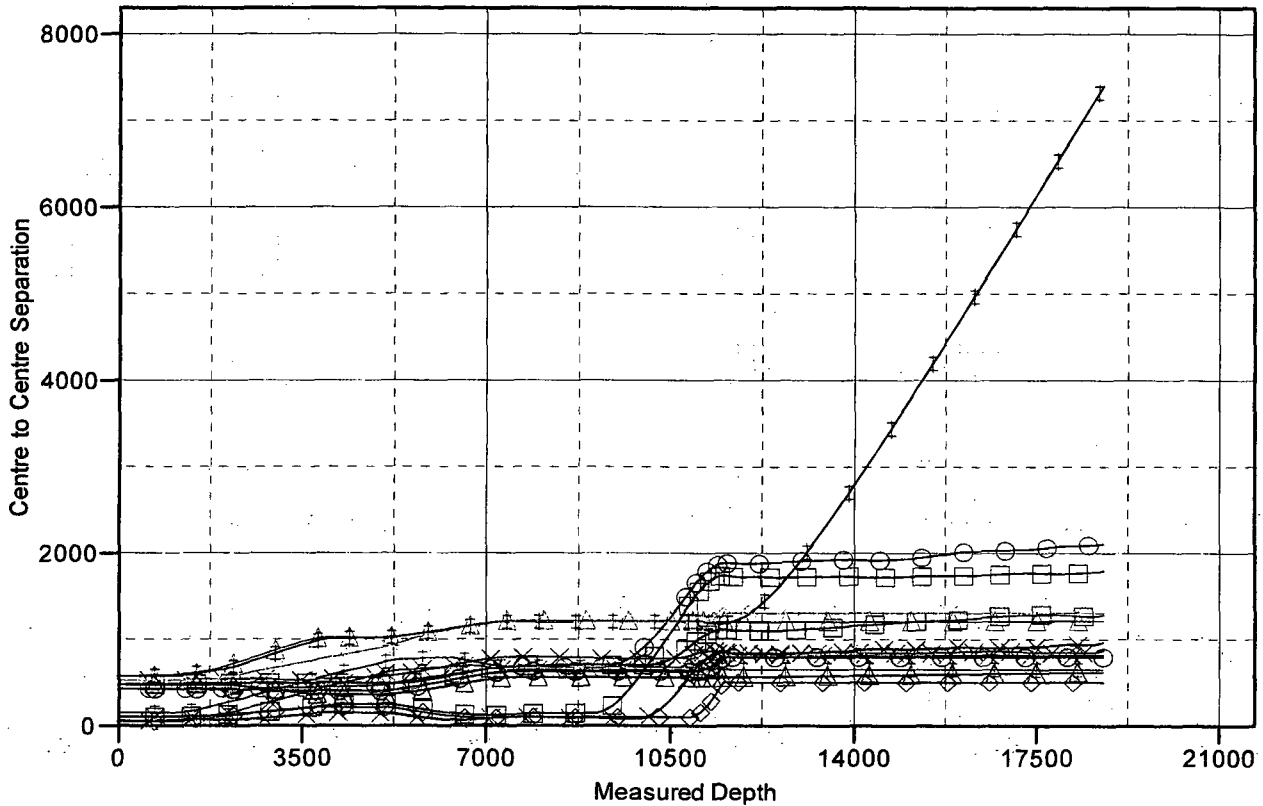
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Reference Site: Lea
Site Error: 0.0 usft
Reference Well: Lea Unit #102H
Well Error: 0.0 usft
Reference Wellbore: Original Wellbore
Reference Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
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 @ 3693.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Lea Unit #102H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.43°

Ladder Plot



LEGEND

Lea Unit #54H, Original Wellbore, Original Wellbore VO	Lea Unit #100H, Original Wellbore, Original Wellbore VO	Lea Unit #202H, Original Wellbore, Plan 1 VO
Lea Unit #203H, Original Wellbore, Plan 1 VO	Lea Unit #55H, Original Wellbore, Original Wellbore VO	Lea Unit #200H, Original Wellbore, Plan 1 VO
Lea Unit #101H, Original Wellbore, Plan 1 VO	Lea Unit #56H, Original Wellbore, Original Wellbore VO	Lea Unit #57H, Original Wellbore, Original Wellbore VO
Lea Unit #103H, Original Wellbore, Plan 1 VO	Lea Unit #58H, Original Wellbore, Original Wellbore VO	
Lea Unit #100H, Original Wellbore, Plan 1 VO	Lea Unit #201H, Original Wellbore, Plan 1 VO	

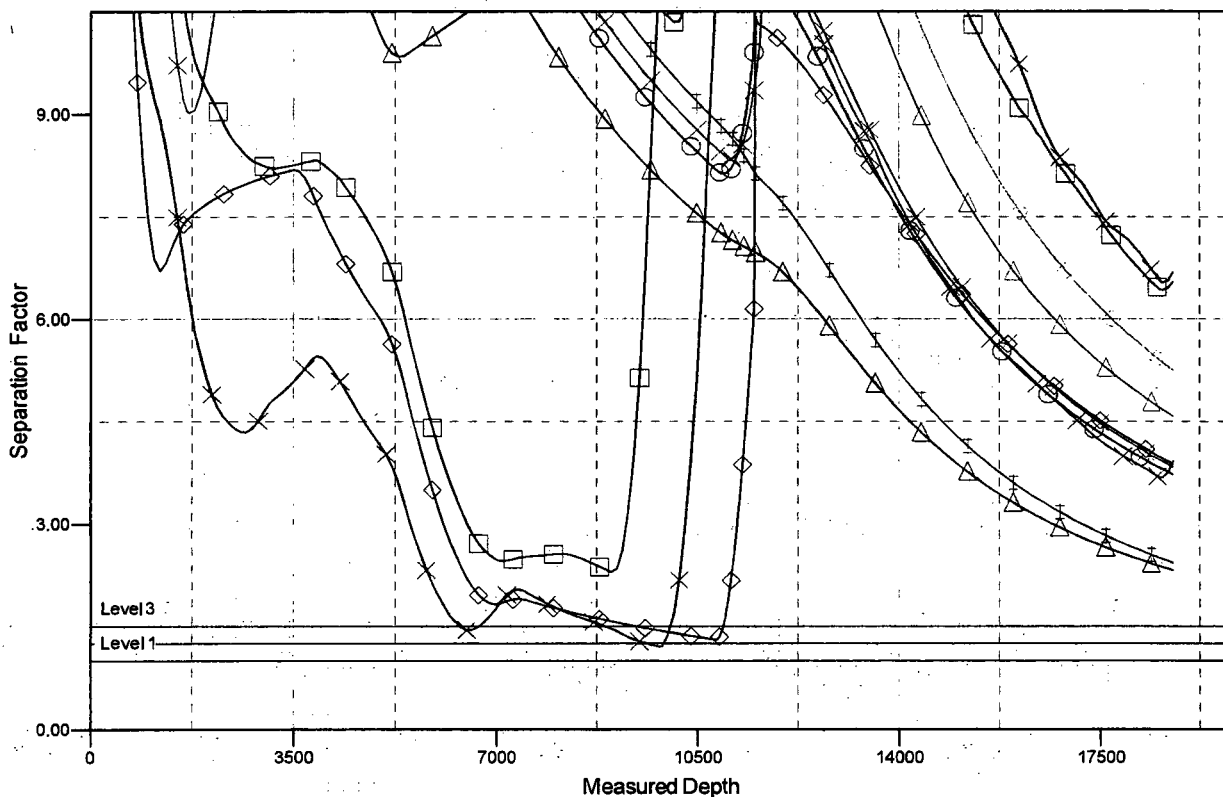
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Reference Site: Lea
Site Error: 0.0 usft
Reference Well: Lea Unit #102H
Well Error: 0.0 usft
Reference Wellbore: Original Wellbore
Reference Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
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 @ 3693.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Lea Unit #102H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.43°

Separation Factor Plot



LEGEND

Lea Unit #54K, Original Wellbore, Original Wellbore V0	Lea Unit #100H, Original Wellbore, Original Wellbore V0	Lea Unit #202H, Original Wellbore, Plan 1 V0
Lea Unit #203H, Original Wellbore, Plan 1 V0	Lea Unit #55H, Original Wellbore, Original Wellbore V0	Lea Unit #200H, Original Wellbore, Plan 1 V0
Lea Unit #101H, Original Wellbore, Plan 1 V0	Lea Unit #56H, Original Wellbore, Original Wellbore V0	Lea Unit #57H, Original Wellbore, Original Wellbore V0
Lea Unit #103H, Original Wellbore, Plan 1 V0	Lea Unit #55H, Original Wellbore, Original Wellbore V0	
Lea Unit #100H, Original Wellbore, Plan 1 V0	Lea Unit #201H, Original Wellbore, Plan 1 V0	

Legacy Reserves
 Area Unit #102H - Plan 1

Lea County, NM (NAD83)

Lea
 Our Ref:

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Vertical Eastings (ft)	Dogleg Section Rate (deg/100ft)		
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		0.000	0.000	1100.00	0.00	0.00	0.00	0.00
1200.00		0.000	0.000	1200.00	0.00	0.00	0.00	0.00
1300.00		0.000	0.000	1300.00	0.00	0.00	0.00	0.00
1400.00		0.000	0.000	1400.00	0.00	0.00	0.00	0.00
1500.00		0.000	0.000	1500.00	0.00	0.00	0.00	0.00
1600.00		1.500	0.000	1599.99	1.31	0.00	-1.31	1.50
1663.37		2.451	0.000	1663.32	3.49	0.00	-3.49	1.50
1700.00		2.451	0.000	1699.92	5.06	0.00	-5.06	0.00
1800.00		2.451	0.000	1799.83	9.34	0.00	-9.33	0.00
1900.00		2.451	0.000	1899.73	13.61	0.00	-13.60	0.00
2000.00		2.451	0.000	1999.64	17.89	0.00	-17.88	0.00
2100.00		2.451	0.000	2099.55	22.16	0.00	-22.15	0.00
2200.00		2.451	0.000	2199.46	26.44	0.00	-26.42	0.00
2300.00		2.451	0.000	2299.37	30.71	0.00	-30.69	0.00
2400.00		2.451	0.000	2399.28	34.99	0.00	-34.97	0.00
2500.00		2.451	0.000	2499.19	39.27	0.00	-39.24	0.00
2600.00		2.451	0.000	2599.09	43.54	0.00	-43.51	0.00
2700.00		2.451	0.000	2699.00	47.82	0.00	-47.79	0.00
2800.00		2.451	0.000	2798.91	52.09	0.00	-52.06	0.00
2900.00		2.451	0.000	2898.82	56.37	0.00	-56.33	0.00
3000.00		2.451	0.000	2998.73	60.64	0.00	-60.61	0.00
3100.00		2.451	0.000	3098.64	64.92	0.00	-64.88	0.00
3200.00		2.451	0.000	3198.54	69.20	0.00	-69.15	0.00
3300.00		2.451	0.000	3298.45	73.47	0.00	-73.43	0.00
3400.00		2.451	0.000	3398.36	77.75	0.00	-77.70	0.00
3500.00		2.451	0.000	3498.27	82.02	0.00	-81.97	0.00
3600.00		2.451	0.000	3598.18	86.30	0.00	-86.24	0.00
3700.00		2.451	0.000	3698.09	90.58	0.00	-90.52	0.00
3800.00		2.451	0.000	3798.00	94.85	0.00	-94.79	0.00
3838.72		2.451	0.000	3836.68	96.51	0.00	-96.44	0.00
3900.00		1.531	0.000	3897.92	98.64	0.00	-98.57	1.50
4002.09		0.000	0.000	4000.00	100.00	0.00	-99.94	1.50
4100.00		0.000	0.000	4097.91	100.00	0.00	-99.94	0.00
4200.00		0.000	0.000	4197.91	100.00	0.00	-99.94	0.00
4300.00		0.000	0.000	4297.91	100.00	0.00	-99.94	0.00
4400.00		0.000	0.000	4397.91	100.00	0.00	-99.94	0.00
4500.00		0.000	0.000	4497.91	100.00	0.00	-99.94	0.00
4600.00		0.000	0.000	4597.91	100.00	0.00	-99.94	0.00
4700.00		0.000	0.000	4697.91	100.00	0.00	-99.94	0.00
4800.00		0.000	0.000	4797.91	100.00	0.00	-99.94	0.00
4900.00		0.000	0.000	4897.91	100.00	0.00	-99.94	0.00
5000.00		0.000	0.000	4997.91	100.00	0.00	-99.94	0.00
5100.00		1.500	114.944	5097.90	99.45	1.19	-99.34	1.50
5200.00		3.000	114.944	5197.82	97.79	4.75	-97.56	1.50
5300.00		4.500	114.944	5297.60	95.03	10.68	-94.59	1.50
5400.00		6.000	114.944	5397.18	91.18	18.97	-90.44	1.50
5436.72		6.551	114.944	5433.68	89.48	22.61	-88.62	1.50

5500.00	6.551	114.944	5496.55	86.44	29.16	-85.34	0.00
5600.00	6.551	114.944	5595.89	81.63	39.50	-80.16	0.00
5700.00	6.551	114.944	5695.24	76.82	49.85	-74.98	0.00
5800.00	6.551	114.944	5794.59	72.00	60.19	-69.80	0.00
5900.00	6.551	114.944	5893.94	67.19	70.53	-64.62	0.00
6000.00	6.551	114.944	5993.28	62.38	80.88	-59.45	0.00
6100.00	6.551	114.944	6092.63	57.57	91.22	-54.27	0.00
6200.00	6.551	114.944	6191.98	52.76	101.57	-49.09	0.00
6300.00	6.551	114.944	6291.32	47.95	111.91	-43.91	0.00
6400.00	6.551	114.944	6390.67	43.14	122.26	-38.73	0.00
6500.00	6.551	114.944	6490.02	38.33	132.60	-33.55	0.00
6600.00	6.551	114.944	6589.37	33.51	142.94	-28.37	0.00
6700.00	6.551	114.944	6688.71	28.70	153.29	-23.20	0.00
6800.00	6.551	114.944	6788.06	23.89	163.63	-18.02	0.00
6900.00	6.551	114.944	6887.41	19.08	173.98	-12.84	0.00
7000.00	6.551	114.944	6986.75	14.27	184.32	-7.66	0.00
7077.99	6.551	114.944	7064.23	10.52	192.39	-3.62	0.00
7100.00	6.221	114.944	7086.11	9.48	194.61	-2.51	1.50
7200.00	4.721	114.944	7185.65	5.46	203.25	1.82	1.50
7300.00	3.221	114.944	7285.41	2.54	209.53	4.96	1.50
7400.00	1.721	114.944	7385.31	0.73	213.44	6.92	1.50
7500.00	0.221	114.944	7485.29	0.01	214.97	7.69	1.50
7514.71	0.000	0.000	7500.00	0.00	215.00	7.70	1.50
7600.00	0.000	0.000	7585.29	0.00	215.00	7.70	0.00
7700.00	0.000	0.000	7685.29	0.00	215.00	7.70	0.00
7800.00	0.000	0.000	7785.29	0.00	215.00	7.70	0.00
7900.00	0.000	0.000	7885.29	0.00	215.00	7.70	0.00
8000.00	0.000	0.000	7985.29	0.00	215.00	7.70	0.00
8100.00	0.000	0.000	8085.29	0.00	215.00	7.70	0.00
8200.00	0.000	0.000	8185.29	0.00	215.00	7.70	0.00
8300.00	0.000	0.000	8285.29	0.00	215.00	7.70	0.00
8400.00	0.000	0.000	8385.29	0.00	215.00	7.70	0.00
8500.00	0.000	0.000	8485.29	0.00	215.00	7.70	0.00
8600.00	0.000	0.000	8585.29	0.00	215.00	7.70	0.00
8700.00	0.000	0.000	8685.29	0.00	215.00	7.70	0.00
8800.00	0.000	0.000	8785.29	0.00	215.00	7.70	0.00
8900.00	0.000	0.000	8885.29	0.00	215.00	7.70	0.00
9000.00	0.000	0.000	8985.29	0.00	215.00	7.70	0.00
9100.00	0.000	0.000	9085.29	0.00	215.00	7.70	0.00
9200.00	0.000	0.000	9185.29	0.00	215.00	7.70	0.00
9300.00	0.000	0.000	9285.29	0.00	215.00	7.70	0.00
9400.00	0.000	0.000	9385.29	0.00	215.00	7.70	0.00
9500.00	0.000	0.000	9485.29	0.00	215.00	7.70	0.00
9600.00	0.000	0.000	9585.29	0.00	215.00	7.70	0.00
9700.00	0.000	0.000	9685.29	0.00	215.00	7.70	0.00
9800.00	0.000	0.000	9785.29	0.00	215.00	7.70	0.00
9900.00	0.000	0.000	9885.29	0.00	215.00	7.70	0.00
10000.00	0.000	0.000	9985.29	0.00	215.00	7.70	0.00
10100.00	0.000	0.000	10085.29	0.00	215.00	7.70	0.00
10200.00	0.000	0.000	10185.29	0.00	215.00	7.70	0.00
10300.00	0.000	0.000	10285.29	0.00	215.00	7.70	0.00
10400.00	0.000	0.000	10385.29	0.00	215.00	7.70	0.00
10500.00	0.000	0.000	10485.29	0.00	215.00	7.70	0.00
10600.00	0.000	0.000	10585.29	0.00	215.00	7.70	0.00
10700.00	0.000	0.000	10685.29	0.00	215.00	7.70	0.00
10800.00	0.000	0.000	10785.29	0.00	215.00	7.70	0.00
10837.21	0.000	0.000	10822.50	0.00	215.00	7.70	0.00
10850.00	1.535	179.550	10835.29	-0.17	215.00	7.87	12.00
10875.00	4.535	179.550	10860.25	-1.49	215.01	9.19	12.00
10900.00	7.535	179.550	10885.11	-4.12	215.03	11.82	12.00
10925.00	10.535	179.550	10909.80	-8.05	215.06	15.74	12.00
10950.00	13.535	179.550	10934.25	-13.26	215.10	20.95	12.00
10975.00	16.535	179.550	10958.39	-19.75	215.16	27.44	12.00
11000.00	19.535	179.550	10982.16	-27.48	215.22	35.17	12.00
11025.00	22.535	179.550	11005.49	-36.46	215.29	44.14	12.00
11050.00	25.535	179.550	11028.32	-46.64	215.37	54.32	12.00
11075.00	28.535	179.550	11050.58	-58.00	215.46	65.68	12.00
11100.00	31.535	179.550	11072.23	-70.51	215.55	78.18	12.00
11125.00	34.535	179.550	11093.18	-84.14	215.66	91.81	12.00
11150.00	37.535	179.550	11113.40	-98.84	215.78	106.51	12.00
11175.00	40.535	179.550	11132.81	-114.59	215.90	122.24	12.00
11200.00	43.535	179.550	11151.38	-131.32	216.03	138.97	12.00
11225.00	46.535	179.550	11169.04	-149.01	216.17	156.65	12.00

11250.00	49.535	179.550	11185.76	-167.59	216.32	175.23	12.00
11275.00	52.535	179.550	11201.48	-187.03	216.47	194.66	12.00
11300.00	55.535	179.550	11216.16	-207.26	216.63	214.89	12.00
11325.00	58.535	179.550	11229.76	-228.23	216.79	235.85	12.00
11350.00	61.535	179.550	11242.24	-249.89	216.96	257.50	12.00
11375.00	64.535	179.550	11253.58	-272.17	217.14	279.77	12.00
11400.00	67.535	179.550	11263.73	-295.01	217.32	302.60	12.00
11425.00	70.535	179.550	11272.68	-318.35	217.50	325.93	12.00
11450.00	73.535	179.550	11280.39	-342.13	217.69	349.70	12.00
11475.00	76.535	179.550	11286.84	-366.28	217.88	373.84	12.00
11500.00	79.535	179.550	11292.02	-390.73	218.07	398.29	12.00
11525.00	82.535	179.550	11295.92	-415.42	218.26	422.97	12.00
11550.00	85.535	179.550	11298.52	-440.28	218.46	447.82	12.00
11575.00	88.535	179.550	11299.81	-465.25	218.65	472.78	12.00
11587.21	90.000	179.550	11299.96	-477.45	218.75	484.98	12.00
11600.00	90.000	179.550	11299.96	-490.24	218.85	497.77	0.00
11700.00	90.000	179.550	11299.96	-590.24	219.64	597.73	0.00
11800.00	90.000	179.550	11299.96	-690.24	220.42	697.69	0.00
11900.00	90.000	179.550	11299.96	-790.23	221.21	797.65	0.00
12000.00	90.000	179.550	11299.96	-890.23	221.99	897.61	0.00
12100.00	90.000	179.550	11299.96	-990.23	222.78	997.57	0.00
12200.00	90.000	179.550	11299.96	-1090.22	223.56	1097.53	0.00
12300.00	90.000	179.550	11299.96	-1190.22	224.35	1197.49	0.00
12400.00	90.000	179.550	11299.96	-1290.22	225.13	1297.45	0.00
12500.00	90.000	179.550	11299.96	-1390.22	225.92	1397.41	0.00
12600.00	90.000	179.550	11299.96	-1490.21	226.70	1497.37	0.00
12700.00	90.000	179.550	11299.96	-1590.21	227.49	1597.34	0.00
12800.00	90.000	179.550	11299.96	-1690.21	228.28	1697.30	0.00
12900.00	90.000	179.550	11299.96	-1790.20	229.06	1797.26	0.00
13000.00	90.000	179.550	11299.96	-1890.20	229.85	1897.22	0.00
13100.00	90.000	179.550	11299.96	-1990.20	230.63	1997.18	0.00
13200.00	90.000	179.550	11299.96	-2090.19	231.42	2097.14	0.00
13300.00	90.000	179.550	11299.96	-2190.19	232.20	2197.10	0.00
13400.00	90.000	179.550	11299.96	-2290.19	232.99	2297.06	0.00
13500.00	90.000	179.550	11299.96	-2390.18	233.77	2397.02	0.00
13600.00	90.000	179.550	11299.96	-2490.18	234.56	2496.98	0.00
13700.00	90.000	179.550	11299.96	-2590.18	235.34	2596.94	0.00
13800.00	90.000	179.550	11299.96	-2690.18	236.13	2696.91	0.00
13900.00	90.000	179.550	11299.96	-2790.17	236.91	2796.87	0.00
14000.00	90.000	179.550	11299.96	-2890.17	237.70	2896.83	0.00
14100.00	90.000	179.550	11299.96	-2990.17	238.49	2996.79	0.00
14200.00	90.000	179.550	11299.96	-3090.16	239.27	3096.75	0.00
14300.00	90.000	179.550	11299.96	-3190.16	240.06	3196.71	0.00
14400.00	90.000	179.550	11299.96	-3290.16	240.84	3296.67	0.00
14500.00	90.000	179.550	11299.96	-3390.15	241.63	3396.63	0.00
14600.00	90.000	179.550	11299.96	-3490.15	242.41	3496.59	0.00
14700.00	90.000	179.550	11299.96	-3590.15	243.20	3596.55	0.00
14800.00	90.000	179.550	11299.96	-3690.14	243.98	3696.51	0.00
14900.00	90.000	179.550	11299.96	-3790.14	244.77	3796.48	0.00
15000.00	90.000	179.550	11299.96	-3890.14	245.55	3896.44	0.00
15100.00	90.000	179.550	11299.96	-3990.14	246.34	3996.40	0.00
15200.00	90.000	179.550	11299.96	-4090.13	247.12	4096.36	0.00
15300.00	90.000	179.550	11299.96	-4190.13	247.91	4196.32	0.00
15400.00	90.000	179.550	11299.96	-4290.13	248.70	4296.28	0.00
15500.00	90.000	179.550	11299.96	-4390.12	249.48	4396.24	0.00
15600.00	90.000	179.550	11299.96	-4490.12	250.27	4496.20	0.00
15700.00	90.000	179.550	11299.96	-4590.12	251.05	4596.16	0.00
15800.00	90.000	179.550	11299.96	-4690.11	251.84	4696.12	0.00
15900.00	90.000	179.550	11299.96	-4790.11	252.62	4796.08	0.00
16000.00	90.000	179.550	11299.96	-4890.11	253.41	4896.05	0.00
16100.00	90.000	179.550	11299.96	-4990.10	254.19	4996.01	0.00
16200.00	90.000	179.550	11299.96	-5090.10	254.98	5095.97	0.00
16300.00	90.000	179.550	11299.96	-5190.10	255.76	5195.93	0.00
16400.00	90.000	179.550	11299.96	-5290.10	256.55	5295.89	0.00
16500.00	90.000	179.550	11299.96	-5390.09	257.33	5395.85	0.00
16600.00	90.000	179.550	11299.96	-5490.09	258.12	5495.81	0.00
16700.00	90.000	179.550	11299.96	-5590.09	258.91	5595.77	0.00
16800.00	90.000	179.550	11299.96	-5690.08	259.69	5695.73	0.00
16900.00	90.000	179.550	11299.96	-5790.08	260.48	5795.69	0.00
17000.00	90.000	179.550	11299.96	-5890.08	261.26	5895.65	0.00
17100.00	90.000	179.550	11299.96	-5990.07	262.05	5995.62	0.00
17200.00	90.000	179.550	11299.96	-6090.07	262.83	6095.58	0.00
17300.00	90.000	179.550	11299.96	-6190.07	263.62	6195.54	0.00

17400.00	90.000	179.550	11299.96	-6290.06	264.40	6295.50	0.
17500.00	90.000	179.550	11299.96	-6390.06	265.19	6395.46	0.
17600.00	90.000	179.550	11299.96	-6490.06	265.97	6495.42	0.
17700.00	90.000	179.550	11299.96	-6590.06	266.76	6595.38	0.
17800.00	90.000	179.550	11299.96	-6690.05	267.54	6695.34	0.
17900.00	90.000	179.550	11299.96	-6790.05	268.33	6795.30	0.
18000.00	90.000	179.550	11299.96	-6890.05	269.12	6895.26	0.
18100.00	90.000	179.550	11299.96	-6990.04	269.90	6995.22	0.
18200.00	90.000	179.550	11299.96	-7090.04	270.69	7095.19	0.
18300.00	90.000	179.550	11299.96	-7190.04	271.47	7195.15	0.
18400.00	90.000	179.550	11299.96	-7290.03	272.26	7295.11	0.
18500.00	90.000	179.550	11299.96	-7390.03	273.04	7395.07	0.
18600.00	90.000	179.550	11299.96	-7490.03	273.83	7495.03	0.
18700.00	90.000	179.550	11299.96	-7590.02	274.61	7594.99	0.
18784.67	90.000	179.550	11299.98	-7674.69	274.98	7679.61	0.

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 177.948° (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 0.435°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 18784.67ft., the Bottom Hole Displacement is 7679.61ft., in the Direction of 177.948° (Grid).

Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #102H

Original Wellbore

Plan: Plan 1

Standard Planning Report

24 October, 2018



Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
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: **Map** **Northing:** 567,587.00 usft **Latitude:** 32° 33' 27.391 N
From: **Easting:** 797,256.10 usft **Longitude:** 103° 30' 9.733 W
Position Uncertainty: 0.0 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 0.45 °

Well Lea Unit #102H
Well Position **+N/-S** 13,364.0 usft **Northing:** 580,951.00 usft **Latitude:** 32° 35' 40.182 N
+E/-W -7,364.2 usft **Easting:** 789,891.90 usft **Longitude:** 103° 31' 34.588 W
Position Uncertainty 0.0 usft **Wellhead Elevation:** 3,693.0 usft **Ground Level:** 3,666.0 usft

Wellbore Original Wellbore
Magnetics **Model Name** **Sample Date** **Declination** **Dip Angle** **Field Strength**
 (°) (°) (nT)
 IGRF2000 2/27/2018 6.73 60.58 48,249.80000000

Design Plan 1
Audit Notes:
Version: **Phase:** PROTOTYPE **Tie On Depth:** 0.0
Vertical Section: **Depth From (TVD)** **+N/-S** **+E/-W** **Direction**
 (usft) (usft) (usft) (°)
 0.0 0.0 0.0 177.95

Plan Survey Tool Program **Date** 10/24/2018

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,784.7 Plan 1 (Original Wellbore)	MWD	
			MWD - Standard	

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,663.4	2.45	0.00	1,663.3	3.5	0.0	1.50	1.50	0.00	0.00	
3,838.7	2.45	0.00	3,836.7	96.5	0.0	0.00	0.00	0.00	0.00	
4,002.1	0.00	0.00	4,000.0	100.0	0.0	1.50	-1.50	0.00	180.00	
5,000.0	0.00	0.00	4,997.9	100.0	0.0	0.00	0.00	0.00	0.00	
5,436.7	6.55	114.94	5,433.7	89.5	22.6	1.50	1.50	0.00	114.94	
7,078.0	6.55	114.94	7,064.2	10.5	192.4	0.00	0.00	0.00	0.00	
7,514.7	0.00	0.00	7,500.0	0.0	215.0	1.50	-1.50	0.00	180.00	
10,837.2	0.00	0.00	10,822.5	0.0	215.0	0.00	0.00	0.00	0.00	
11,587.2	90.00	179.55	11,300.0	-477.5	218.7	12.00	12.00	0.00	179.55	
18,784.7	90.00	179.55	11,300.0	-7,674.7	275.0	0.00	0.00	0.00	0.00	BHL-102H

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

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

Well Lea Unit #102H
RKB @ 3693.0usft
RKB @ 3693.0usft
Grid
Minimum Curvature

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	1.50	0.00	1,600.0	1.3	0.0	-1.3	1.50	1.50	0.00
1,663.4	2.45	0.00	1,663.3	3.5	0.0	-3.5	1.50	1.50	0.00
1,700.0	2.45	0.00	1,699.9	5.1	0.0	-5.1	0.00	0.00	0.00
1,800.0	2.45	0.00	1,799.8	9.3	0.0	-9.3	0.00	0.00	0.00
1,900.0	2.45	0.00	1,899.7	13.6	0.0	-13.6	0.00	0.00	0.00
2,000.0	2.45	0.00	1,999.6	17.9	0.0	-17.9	0.00	0.00	0.00
2,100.0	2.45	0.00	2,099.6	22.2	0.0	-22.1	0.00	0.00	0.00
2,200.0	2.45	0.00	2,199.5	26.4	0.0	-26.4	0.00	0.00	0.00
2,300.0	2.45	0.00	2,299.4	30.7	0.0	-30.7	0.00	0.00	0.00
2,400.0	2.45	0.00	2,399.3	35.0	0.0	-35.0	0.00	0.00	0.00
2,500.0	2.45	0.00	2,499.2	39.3	0.0	-39.2	0.00	0.00	0.00
2,600.0	2.45	0.00	2,599.1	43.5	0.0	-43.5	0.00	0.00	0.00
2,700.0	2.45	0.00	2,699.0	47.8	0.0	-47.8	0.00	0.00	0.00
2,800.0	2.45	0.00	2,798.9	52.1	0.0	-52.1	0.00	0.00	0.00
2,900.0	2.45	0.00	2,898.8	56.4	0.0	-56.3	0.00	0.00	0.00
3,000.0	2.45	0.00	2,998.7	60.6	0.0	-60.6	0.00	0.00	0.00
3,100.0	2.45	0.00	3,098.6	64.9	0.0	-64.9	0.00	0.00	0.00
3,200.0	2.45	0.00	3,198.5	69.2	0.0	-69.2	0.00	0.00	0.00
3,300.0	2.45	0.00	3,298.5	73.5	0.0	-73.4	0.00	0.00	0.00
3,400.0	2.45	0.00	3,398.4	77.7	0.0	-77.7	0.00	0.00	0.00
3,500.0	2.45	0.00	3,498.3	82.0	0.0	-82.0	0.00	0.00	0.00
3,600.0	2.45	0.00	3,598.2	86.3	0.0	-86.2	0.00	0.00	0.00
3,700.0	2.45	0.00	3,698.1	90.6	0.0	-90.5	0.00	0.00	0.00
3,800.0	2.45	0.00	3,798.0	94.9	0.0	-94.8	0.00	0.00	0.00
3,838.7	2.45	0.00	3,836.7	96.5	0.0	-96.4	0.00	0.00	0.00
3,900.0	1.53	0.00	3,897.9	98.6	0.0	-98.6	1.50	-1.50	0.00
4,002.1	0.00	0.00	4,000.0	100.0	0.0	-99.9	1.50	-1.50	0.00
4,100.0	0.00	0.00	4,097.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,197.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,297.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,397.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,500.0	0.00	0.00	4,497.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,597.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,700.0	0.00	0.00	4,697.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,797.9	100.0	0.0	-99.9	0.00	0.00	0.00
4,900.0	0.00	0.00	4,897.9	100.0	0.0	-99.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,997.9	100.0	0.0	-99.9	0.00	0.00	0.00
5,100.0	1.50	114.94	5,097.9	99.4	1.2	-99.3	1.50	1.50	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
5,200.0	3.00	114.94	5,197.8	97.8	4.7	-97.6	1.50	1.50	0.00
5,300.0	4.50	114.94	5,297.6	95.0	10.7	-94.6	1.50	1.50	0.00
5,400.0	6.00	114.94	5,397.2	91.2	19.0	-90.4	1.50	1.50	0.00
5,436.7	6.55	114.94	5,433.7	89.5	22.6	-88.6	1.50	1.50	0.00
5,500.0	6.55	114.94	5,496.5	86.4	29.2	-85.3	0.00	0.00	0.00
5,600.0	6.55	114.94	5,595.9	81.6	39.5	-80.2	0.00	0.00	0.00
5,700.0	6.55	114.94	5,695.2	76.8	49.8	-75.0	0.00	0.00	0.00
5,800.0	6.55	114.94	5,794.6	72.0	60.2	-69.8	0.00	0.00	0.00
5,900.0	6.55	114.94	5,893.9	67.2	70.5	-64.6	0.00	0.00	0.00
6,000.0	6.55	114.94	5,993.3	62.4	80.9	-59.4	0.00	0.00	0.00
6,100.0	6.55	114.94	6,092.6	57.6	91.2	-54.3	0.00	0.00	0.00
6,200.0	6.55	114.94	6,192.0	52.8	101.6	-49.1	0.00	0.00	0.00
6,300.0	6.55	114.94	6,291.3	47.9	111.9	-43.9	0.00	0.00	0.00
6,400.0	6.55	114.94	6,390.7	43.1	122.3	-38.7	0.00	0.00	0.00
6,500.0	6.55	114.94	6,490.0	38.3	132.6	-33.6	0.00	0.00	0.00
6,600.0	6.55	114.94	6,589.4	33.5	142.9	-28.4	0.00	0.00	0.00
6,700.0	6.55	114.94	6,688.7	28.7	153.3	-23.2	0.00	0.00	0.00
6,800.0	6.55	114.94	6,788.1	23.9	163.6	-18.0	0.00	0.00	0.00
6,900.0	6.55	114.94	6,887.4	19.1	174.0	-12.8	0.00	0.00	0.00
7,000.0	6.55	114.94	6,986.8	14.3	184.3	-7.7	0.00	0.00	0.00
7,078.0	6.55	114.94	7,064.2	10.5	192.4	-3.6	0.00	0.00	0.00
7,100.0	6.22	114.94	7,086.1	9.5	194.6	-2.5	1.50	-1.50	0.00
7,200.0	4.72	114.94	7,185.6	5.5	203.3	1.8	1.50	-1.50	0.00
7,300.0	3.22	114.94	7,285.4	2.5	209.5	5.0	1.50	-1.50	0.00
7,400.0	1.72	114.94	7,385.3	0.7	213.4	6.9	1.50	-1.50	0.00
7,500.0	0.22	114.94	7,485.3	0.0	215.0	7.7	1.50	-1.50	0.00
7,514.7	0.00	0.00	7,500.0	0.0	215.0	7.7	1.50	-1.50	0.00
7,600.0	0.00	0.00	7,585.3	0.0	215.0	7.7	0.00	0.00	0.00
7,700.0	0.00	0.00	7,685.3	0.0	215.0	7.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,785.3	0.0	215.0	7.7	0.00	0.00	0.00
7,900.0	0.00	0.00	7,885.3	0.0	215.0	7.7	0.00	0.00	0.00
8,000.0	0.00	0.00	7,985.3	0.0	215.0	7.7	0.00	0.00	0.00
8,100.0	0.00	0.00	8,085.3	0.0	215.0	7.7	0.00	0.00	0.00
8,200.0	0.00	0.00	8,185.3	0.0	215.0	7.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,285.3	0.0	215.0	7.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,385.3	0.0	215.0	7.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,485.3	0.0	215.0	7.7	0.00	0.00	0.00
8,600.0	0.00	0.00	8,585.3	0.0	215.0	7.7	0.00	0.00	0.00
8,700.0	0.00	0.00	8,685.3	0.0	215.0	7.7	0.00	0.00	0.00
8,800.0	0.00	0.00	8,785.3	0.0	215.0	7.7	0.00	0.00	0.00
8,900.0	0.00	0.00	8,885.3	0.0	215.0	7.7	0.00	0.00	0.00
9,000.0	0.00	0.00	8,985.3	0.0	215.0	7.7	0.00	0.00	0.00
9,100.0	0.00	0.00	9,085.3	0.0	215.0	7.7	0.00	0.00	0.00
9,200.0	0.00	0.00	9,185.3	0.0	215.0	7.7	0.00	0.00	0.00
9,300.0	0.00	0.00	9,285.3	0.0	215.0	7.7	0.00	0.00	0.00
9,400.0	0.00	0.00	9,385.3	0.0	215.0	7.7	0.00	0.00	0.00
9,500.0	0.00	0.00	9,485.3	0.0	215.0	7.7	0.00	0.00	0.00
9,600.0	0.00	0.00	9,585.3	0.0	215.0	7.7	0.00	0.00	0.00
9,700.0	0.00	0.00	9,685.3	0.0	215.0	7.7	0.00	0.00	0.00
9,800.0	0.00	0.00	9,785.3	0.0	215.0	7.7	0.00	0.00	0.00
9,900.0	0.00	0.00	9,885.3	0.0	215.0	7.7	0.00	0.00	0.00
10,000.0	0.00	0.00	9,985.3	0.0	215.0	7.7	0.00	0.00	0.00
10,100.0	0.00	0.00	10,085.3	0.0	215.0	7.7	0.00	0.00	0.00
10,200.0	0.00	0.00	10,185.3	0.0	215.0	7.7	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

Local Co-ordinate Reference: Well Lea Unit #102H
TVD Reference: RKB @ 3693.0usft
MD Reference: RKB @ 3693.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	0.00	0.00	10,285.3	0.0	215.0	7.7	0.00	0.00	0.00
10,400.0	0.00	0.00	10,385.3	0.0	215.0	7.7	0.00	0.00	0.00
10,500.0	0.00	0.00	10,485.3	0.0	215.0	7.7	0.00	0.00	0.00
10,600.0	0.00	0.00	10,585.3	0.0	215.0	7.7	0.00	0.00	0.00
10,700.0	0.00	0.00	10,685.3	0.0	215.0	7.7	0.00	0.00	0.00
10,800.0	0.00	0.00	10,785.3	0.0	215.0	7.7	0.00	0.00	0.00
10,837.2	0.00	0.00	10,822.5	0.0	215.0	7.7	0.00	0.00	0.00
10,850.0	1.54	179.55	10,835.3	-0.2	215.0	7.9	12.00	12.00	0.00
10,875.0	4.54	179.55	10,860.3	-1.5	215.0	9.2	12.00	12.00	0.00
10,900.0	7.54	179.55	10,885.1	-4.1	215.0	11.8	12.00	12.00	0.00
10,925.0	10.54	179.55	10,909.8	-8.0	215.1	15.7	12.00	12.00	0.00
10,950.0	13.54	179.55	10,934.2	-13.3	215.1	21.0	12.00	12.00	0.00
10,975.0	16.54	179.55	10,958.4	-19.7	215.2	27.4	12.00	12.00	0.00
11,000.0	19.54	179.55	10,982.2	-27.5	215.2	35.2	12.00	12.00	0.00
11,025.0	22.54	179.55	11,005.5	-36.5	215.3	44.1	12.00	12.00	0.00
11,050.0	25.54	179.55	11,028.3	-46.6	215.4	54.3	12.00	12.00	0.00
11,075.0	28.54	179.55	11,050.6	-58.0	215.5	65.7	12.00	12.00	0.00
11,100.0	31.54	179.55	11,072.2	-70.5	215.6	78.2	12.00	12.00	0.00
11,125.0	34.54	179.55	11,093.2	-84.1	215.7	91.8	12.00	12.00	0.00
11,150.0	37.54	179.55	11,113.4	-98.8	215.8	106.5	12.00	12.00	0.00
11,175.0	40.54	179.55	11,132.8	-114.6	215.9	122.2	12.00	12.00	0.00
11,200.0	43.54	179.55	11,151.4	-131.3	216.0	139.0	12.00	12.00	0.00
11,225.0	46.54	179.55	11,169.0	-149.0	216.2	156.7	12.00	12.00	0.00
11,250.0	49.54	179.55	11,185.8	-167.6	216.3	175.2	12.00	12.00	0.00
11,275.0	52.54	179.55	11,201.5	-187.0	216.5	194.7	12.00	12.00	0.00
11,300.0	55.54	179.55	11,216.2	-207.3	216.6	214.9	12.00	12.00	0.00
11,325.0	58.54	179.55	11,229.8	-228.2	216.8	235.8	12.00	12.00	0.00
11,350.0	61.54	179.55	11,242.2	-249.9	217.0	257.5	12.00	12.00	0.00
11,375.0	64.54	179.55	11,253.6	-272.2	217.1	279.8	12.00	12.00	0.00
11,400.0	67.54	179.55	11,263.7	-295.0	217.3	302.6	12.00	12.00	0.00
11,425.0	70.54	179.55	11,272.7	-318.4	217.5	325.9	12.00	12.00	0.00
11,450.0	73.54	179.55	11,280.4	-342.1	217.7	349.7	12.00	12.00	0.00
11,475.0	76.54	179.55	11,286.8	-366.3	217.9	373.8	12.00	12.00	0.00
11,500.0	79.54	179.55	11,292.0	-390.7	218.1	398.3	12.00	12.00	0.00
11,525.0	82.54	179.55	11,295.9	-415.4	218.3	423.0	12.00	12.00	0.00
11,550.0	85.54	179.55	11,298.5	-440.3	218.5	447.8	12.00	12.00	0.00
11,575.0	88.54	179.55	11,299.8	-465.2	218.7	472.8	12.00	12.00	0.00
11,587.2	90.00	179.55	11,300.0	-477.5	218.7	485.0	12.00	12.00	0.00
11,600.0	90.00	179.55	11,300.0	-490.2	218.9	497.8	0.00	0.00	0.00
11,700.0	90.00	179.55	11,300.0	-590.2	219.6	597.7	0.00	0.00	0.00
11,800.0	90.00	179.55	11,300.0	-690.2	220.4	697.7	0.00	0.00	0.00
11,900.0	90.00	179.55	11,300.0	-790.2	221.2	797.6	0.00	0.00	0.00
12,000.0	90.00	179.55	11,300.0	-890.2	222.0	897.6	0.00	0.00	0.00
12,100.0	90.00	179.55	11,300.0	-990.2	222.8	997.6	0.00	0.00	0.00
12,200.0	90.00	179.55	11,300.0	-1,090.2	223.6	1,097.5	0.00	0.00	0.00
12,300.0	90.00	179.55	11,300.0	-1,190.2	224.3	1,197.5	0.00	0.00	0.00
12,400.0	90.00	179.55	11,300.0	-1,290.2	225.1	1,297.5	0.00	0.00	0.00
12,500.0	90.00	179.55	11,300.0	-1,390.2	225.9	1,397.4	0.00	0.00	0.00
12,600.0	90.00	179.55	11,300.0	-1,490.2	226.7	1,497.4	0.00	0.00	0.00
12,700.0	90.00	179.55	11,300.0	-1,590.2	227.5	1,597.3	0.00	0.00	0.00
12,800.0	90.00	179.55	11,300.0	-1,690.2	228.3	1,697.3	0.00	0.00	0.00
12,900.0	90.00	179.55	11,300.0	-1,790.2	229.1	1,797.3	0.00	0.00	0.00
13,000.0	90.00	179.55	11,300.0	-1,890.2	229.8	1,897.2	0.00	0.00	0.00
13,100.0	90.00	179.55	11,300.0	-1,990.2	230.6	1,997.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #102H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3693.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3693.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
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)
13,200.0	90.00	179.55	11,300.0	-2,090.2	231.4	2,097.1	0.00	0.00	0.00
13,300.0	90.00	179.55	11,300.0	-2,190.2	232.2	2,197.1	0.00	0.00	0.00
13,400.0	90.00	179.55	11,300.0	-2,290.2	233.0	2,297.1	0.00	0.00	0.00
13,500.0	90.00	179.55	11,300.0	-2,390.2	233.8	2,397.0	0.00	0.00	0.00
13,600.0	90.00	179.55	11,300.0	-2,490.2	234.6	2,497.0	0.00	0.00	0.00
13,700.0	90.00	179.55	11,300.0	-2,590.2	235.3	2,596.9	0.00	0.00	0.00
13,800.0	90.00	179.55	11,300.0	-2,690.2	236.1	2,696.9	0.00	0.00	0.00
13,900.0	90.00	179.55	11,300.0	-2,790.2	236.9	2,796.9	0.00	0.00	0.00
14,000.0	90.00	179.55	11,300.0	-2,890.2	237.7	2,896.8	0.00	0.00	0.00
14,100.0	90.00	179.55	11,300.0	-2,990.2	238.5	2,996.8	0.00	0.00	0.00
14,200.0	90.00	179.55	11,300.0	-3,090.2	239.3	3,096.7	0.00	0.00	0.00
14,300.0	90.00	179.55	11,300.0	-3,190.2	240.1	3,196.7	0.00	0.00	0.00
14,400.0	90.00	179.55	11,300.0	-3,290.2	240.8	3,296.7	0.00	0.00	0.00
14,500.0	90.00	179.55	11,300.0	-3,390.2	241.6	3,396.6	0.00	0.00	0.00
14,600.0	90.00	179.55	11,300.0	-3,490.2	242.4	3,496.6	0.00	0.00	0.00
14,700.0	90.00	179.55	11,300.0	-3,590.1	243.2	3,596.6	0.00	0.00	0.00
14,800.0	90.00	179.55	11,300.0	-3,690.1	244.0	3,696.5	0.00	0.00	0.00
14,900.0	90.00	179.55	11,300.0	-3,790.1	244.8	3,796.5	0.00	0.00	0.00
15,000.0	90.00	179.55	11,300.0	-3,890.1	245.6	3,896.4	0.00	0.00	0.00
15,100.0	90.00	179.55	11,300.0	-3,990.1	246.3	3,996.4	0.00	0.00	0.00
15,200.0	90.00	179.55	11,300.0	-4,090.1	247.1	4,096.4	0.00	0.00	0.00
15,300.0	90.00	179.55	11,300.0	-4,190.1	247.9	4,196.3	0.00	0.00	0.00
15,400.0	90.00	179.55	11,300.0	-4,290.1	248.7	4,296.3	0.00	0.00	0.00
15,500.0	90.00	179.55	11,300.0	-4,390.1	249.5	4,396.2	0.00	0.00	0.00
15,600.0	90.00	179.55	11,300.0	-4,490.1	250.3	4,496.2	0.00	0.00	0.00
15,700.0	90.00	179.55	11,300.0	-4,590.1	251.1	4,596.2	0.00	0.00	0.00
15,800.0	90.00	179.55	11,300.0	-4,690.1	251.8	4,696.1	0.00	0.00	0.00
15,900.0	90.00	179.55	11,300.0	-4,790.1	252.6	4,796.1	0.00	0.00	0.00
16,000.0	90.00	179.55	11,300.0	-4,890.1	253.4	4,896.0	0.00	0.00	0.00
16,100.0	90.00	179.55	11,300.0	-4,990.1	254.2	4,996.0	0.00	0.00	0.00
16,200.0	90.00	179.55	11,300.0	-5,090.1	255.0	5,096.0	0.00	0.00	0.00
16,300.0	90.00	179.55	11,300.0	-5,190.1	255.8	5,195.9	0.00	0.00	0.00
16,400.0	90.00	179.55	11,300.0	-5,290.1	256.5	5,295.9	0.00	0.00	0.00
16,500.0	90.00	179.55	11,300.0	-5,390.1	257.3	5,395.9	0.00	0.00	0.00
16,600.0	90.00	179.55	11,300.0	-5,490.1	258.1	5,495.8	0.00	0.00	0.00
16,700.0	90.00	179.55	11,300.0	-5,590.1	258.9	5,595.8	0.00	0.00	0.00
16,800.0	90.00	179.55	11,300.0	-5,690.1	259.7	5,695.7	0.00	0.00	0.00
16,900.0	90.00	179.55	11,300.0	-5,790.1	260.5	5,795.7	0.00	0.00	0.00
17,000.0	90.00	179.55	11,300.0	-5,890.1	261.3	5,895.7	0.00	0.00	0.00
17,100.0	90.00	179.55	11,300.0	-5,990.1	262.0	5,995.6	0.00	0.00	0.00
17,200.0	90.00	179.55	11,300.0	-6,090.1	262.8	6,095.6	0.00	0.00	0.00
17,300.0	90.00	179.55	11,300.0	-6,190.1	263.6	6,195.5	0.00	0.00	0.00
17,400.0	90.00	179.55	11,300.0	-6,290.1	264.4	6,295.5	0.00	0.00	0.00
17,500.0	90.00	179.55	11,300.0	-6,390.1	265.2	6,395.5	0.00	0.00	0.00
17,600.0	90.00	179.55	11,300.0	-6,490.1	266.0	6,495.4	0.00	0.00	0.00
17,700.0	90.00	179.55	11,300.0	-6,590.1	266.8	6,595.4	0.00	0.00	0.00
17,800.0	90.00	179.55	11,300.0	-6,690.1	267.5	6,695.3	0.00	0.00	0.00
17,900.0	90.00	179.55	11,300.0	-6,790.0	268.3	6,795.3	0.00	0.00	0.00
18,000.0	90.00	179.55	11,300.0	-6,890.0	269.1	6,895.3	0.00	0.00	0.00
18,100.0	90.00	179.55	11,300.0	-6,990.0	269.9	6,995.2	0.00	0.00	0.00
18,200.0	90.00	179.55	11,300.0	-7,090.0	270.7	7,095.2	0.00	0.00	0.00
18,300.0	90.00	179.55	11,300.0	-7,190.0	271.5	7,195.1	0.00	0.00	0.00
18,400.0	90.00	179.55	11,300.0	-7,290.0	272.3	7,295.1	0.00	0.00	0.00
18,500.0	90.00	179.55	11,300.0	-7,390.0	273.0	7,395.1	0.00	0.00	0.00

Database: EDM 5000.1 Single User Db
Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #102H
Wellbore: Original Wellbore
Design: Plan 1

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

Well Lea Unit #102H:
RKB @ 3693.0usft
RKB @ 3693.0usft
Grid
Minimum Curvature

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)
18,600.0	90.00	179.55	11,300.0	-7,490.0	273.8	7,495.0	0.00	0.00	0.00
18,700.0	90.00	179.55	11,300.0	-7,590.0	274.6	7,595.0	0.00	0.00	0.00
18,784.7	90.00	179.55	11,300.0	-7,674.7	275.0	7,679.6	0.00	0.00	0.00

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
FTP-102H - plan misses target center by 1.5usft at 11278.9usft MD (11203.8 TVD, -190.1 N, 216.5 E) - Point	0.00	0.00	11,205.0	-189.2	216.6	580,761.77	790,108.46	32° 35' 38.293 N	103° 31' 32.074 W
BHL-102H - plan hits target center - Point	0.00	0.00	11,300.0	-7,674.7	275.0	573,276.31	790,166.88	32° 34' 24.224 N	103° 31' 32.055 W



WELL DETAILS: Lea Unit #102H

+N/-S +E/-W RKB @ 3693.0usft Ground Level @ 3665.0 usft
Northing Easting Latitude Longitude
0.0 0.0 580951.00 789891.90 32° 35' 40.182 N 103° 31' 34.588 W

MOTIVE
DRILLING TECHNOLOGIES

Project: Lea County, NM
Site: Lea
Well: Lea Unit #102H
Geodetic Datum: NAD 1983
Design: Plan 1



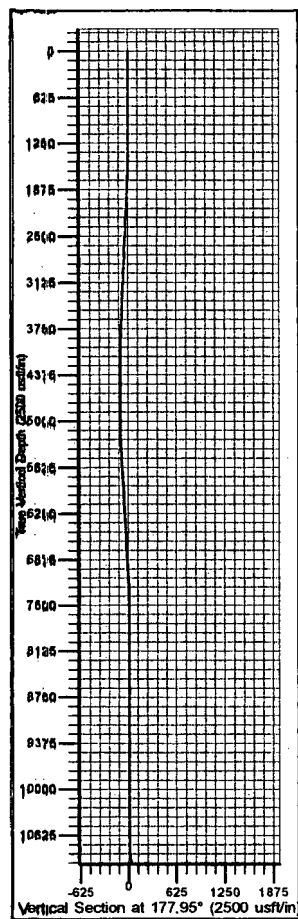
Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.30°
Magnetic Field
Strength: 48249.8nT
Dip Angle: 60.58°
Date: 2/27/2018
Model: IGRF2000

DESIGN TARGET DETAILS

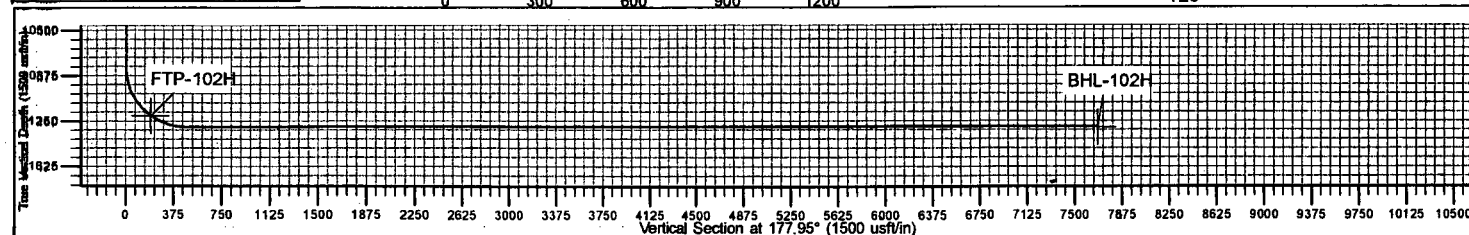
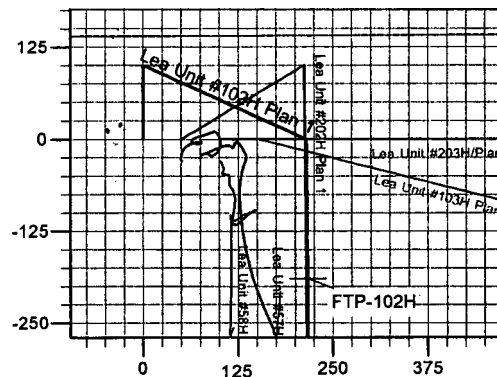
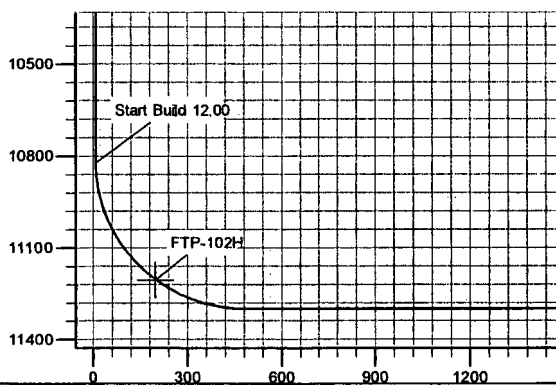
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP-102H	11205.0	-189.2	216.6	580761.77	790108.46
BHL-102H	11300.0	-7674.7	275.0	573276.31	790166.88

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1663.4	2.45	0.00	1663.3	3.5	0.0	1.50	0.00	-3.5	
4	3838.7	2.45	0.00	3836.7	96.5	0.0	0.00	0.00	-96.4	
5	4002.1	0.00	0.00	4000.0	100.0	0.0	1.50	180.00	-99.9	
6	5000.0	0.00	0.00	4997.9	100.0	0.0	0.00	0.00	-99.9	
7	5436.7	6.55	114.94	5433.7	89.5	22.6	1.50	114.94	-88.6	
8	7078.0	6.55	114.94	7064.2	10.5	192.4	0.00	0.00	-3.6	
9	7514.7	0.00	0.00	7500.0	0.0	215.0	1.50	180.00	7.7	
10	10837.2	0.00	0.00	10822.5	0.0	215.0	0.00	0.00	7.7	
11	11587.2	90.00	179.55	11300.0	-477.5	218.7	12.00	179.55	485.0	
12	18784.7	90.00	179.55	11300.0	-7674.7	275.0	0.00	0.00	7679.6	BHL-102H



Vertical Section at 177.95° (2500 usf/in)



Vertical Section at 177.95° (1500 usf/in)

