

Well Name: LEA UNIT	Well Location: T20S / R35E / SEC 19 / NWSW / 32.5574156 / -103.502948	County or Parish/State: LEA / NM
Well Number: 702H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMLC0065375A, NMLC065375A	Unit or CA Name: LEA UNIT	Unit or CA Number: NMNM70976X
US Well Number: 3002545901	Well Status: Approved Application for Permit to Drill	Operator: LEGACY RESERVES OPERATING LP

Notice of Intent

Sundry ID: 2631448

Type of Submission: Notice of Intent

Type of Action: Drilling Operations

Date Sundry Submitted: 08/30/2021

Time Sundry Submitted: 03:20

Date proposed operation will begin: 10/14/2021

Procedure Description: Legacy Reserves respectfully requests approval to change the well number and the drilling plans for the Lea Unit #121H well. New well name: Lea Unit #702H Drilling Plan Change Summary: TD: MD: 19345 TVD: 11215 Casing & Cement Design – Change to a 3 string casing design. Please see attached drill plan. Drill Plan & Dir plan attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Lea_Unit_702H_Drill_Plan_20210901150214.pdf

Lea_Unit_702H_AC_Report_Plan_1_20210830151959.pdf

Lea_Unit_702H_dir_plan_20210830151948.pdf

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NWSW / 32.5574156 / -103.502948County or Parish/State: LEA /
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US Well Number: 3002545901

Well Status: Approved Application for
Permit to DrillOperator: LEGACY RESERVES
OPERATING LP**Conditions of Approval****Specialist Review**

Lea_Unit_702H_COA_20210902164229.pdf

Operator Certification

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: TERRI STATHEM

Signed on: SEP 01, 2021 03:02 PM

Name: LEGACY RESERVES OPERATING LP

Title: Mngr Regulatory Compliance

Street Address: 15 SMITH ROAD, SUITE 300

City: MIDLAND

State: TX

Phone: (432) 221-6332

Email address: TSTATHEM@LEGACYRESERVES.COM

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: ZOTA M STEVENS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345998

BLM POC Email Address: ZSTEVENS@BLM.GOV

Disposition: Approved

Disposition Date: 09/02/2021

Signature: Zota Stevens

Lea Unit 702H Legacy Reserves

1. Geological Formations

TVD of target: 11,215 MD at TD: 19,345

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Ruslter	1,627	N/A	
Yates	3,430	N/A	
Seven Rivers	3,809	N/A	
Capitan	3,820	N/A	Severe Losses, See COAs
Bell Canyon	5,582	N/A	
Cherry Canyon	6,471	N/A	
Brushy Canyon	7,107	Hydrocarbons	
Bone Spring	8,192	Hydrocarbons	
Avalon Shale	8,782	Hydrocarbons	
1st Bone Spring	9,507	Hydrocarbons	
2nd Bone Spring	10,041	Hydrocarbons	
3rd Bone Spring	10,698	Hydrocarbons	
Wolfcamp	11,009	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1785	1785	13-3/8"	54.50	H-40/J-55	BTC	1.42	3.86	4.3
12 1/4	0	5600	5600	9-5/8"	40.00	J-55	BTC	1.25	1.27	1.94
8 3/4	0	19,345	11,215	5-1/2"	20.00	P-110	BTC	2.27	1.28	1.76
TVD was used on all calculations.					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

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

Lea Unit 702H Legacy Reserves

3. Cementing Program

Casing	Wt. lb/gal	Yld ft3/sack	Vol cuft.	sxs	Excess	Slurry Description
Surface	13.5	1.72	2250	1308	100%	Lead: Class C + Bentonite
	14.8	1.32	265	201	60%	Tail: Class C "Neat"
Intermediate Option 1: (No DVT)	12.6	1.94	3300	1701	180%	Lead: 35:65 (Poz:C)
	15.6	1.18	415	352	140%	Tail: Class H "Neat"
Intermediate Option 2: (1 DVT)	12.6	1.94	3300	1701	180%	Stage 1 Lead: 35:65 (Poz:C)
	15.6	1.18	415	352	140%	Stage 1 Tail: Class H "Neat"
	12.6	1.94	2330	1201	200%	Stage 2 Lead: 35:65 (Poz:C)
	15.6	1.18	235	199	100%	Stage 2 Tail: Class H "Neat"
Intermediate Option 3: (2 DVT)	12.6	1.94	3300	1701	180%	Stage 1 Lead: 35:65 (Poz:C)
	15.6	1.18	415	352	140%	Stage 1 Tail: Class H "Neat"
	12.6	1.94	2330	1201	200%	Stage 2 Lead: 35:65 (Poz:C)
	15.6	1.18	235	199	100%	Stage 2 Tail: Class H "Neat"
	14.8	1.32	925	701	30%	Stage 3 Tail: Class C "Neat"
Production	11.9	1.62	3250	2006	80% OH	Lead: 50:50 (Poz:Class H)
	14.20	1.34	2330	1739	30%	Tail: 50:50 (Poz:Class H)
* Cement volumes are based on bringing cement to surface on all strings. **Operator reserves the right to change cement designs as hole conditions may warrant.						

Lea Unit 702H Legacy Reserves

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	5M	Annular	X	50% of working pressure
			Blind Ram	X	5M
			Pipe Ram	X	
			Double Ram		
			Other		
8 3/4	13 5/8	5M	Annular	X	100% of working pressure
			Blind Ram	X	5M
			Pipe Ram	X	
			Double Ram		
			Other		

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

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

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1785'	Fresh Water Spud Mud	8.4 – 8.6	28	N/C
1785' to 5600'	Brine Water	9.8 – 10.3	30-32	N/C
5600' to 19,345'	Cut Brine	8.8 – 9.3	28-32	N/C
Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.				
What will be used to monitor the loss or gain of fluid?		PVT/Pason/Visual Monitoring		

6. Logging and Testing Procedures

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

Additional Logs Planned	Interval
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Lea Unit 702H Legacy Reserves

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4890 psi
Abnormal Temperature	No
Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
	H2S is present
	H2S plan is attached

8. Other Facets of Operation

Hydraulic fracturing will occur through the production casing. The burst design calculation assumes TOC at surface and therefore, the backside of the production casing is not evacuated. The maximum pumping pressure is 9,500 psi with a maximum proppant fluid weight of 9.5 ppg. The design safety factor for burst is 1.28. Upon request, operator will provide proof of cement bonding by bond log. Operator is responsible for log interpretation and certification prior to frac treatment. Upon request, operator will provide estimated fracture lengths, flowback storage, volumes of fluids and amount of sand to be used, and number of stages of frac procedure. Furthermore, a report of the annulus pressures before and after each stage of treatment may be requested by the BLM. The report may include chemical additives (other than proprietary), dissolved solids in frac fluid, and depth of perforations.

9. Wellhead

A conventional wellhead system will be utilized, see attached schematic.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi test. Annular will be tested to 50% of working pressure. The pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

The wellhead will be installed by a third-party welder while being monitored by the wellhead vendor representative.

A solid steel body pack-off will be utilized after running and cementing the production casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

All casing strings will be tested as per Onshore Order No.2 to atleast 0.22 psi/ft or 1,500 whichever is greater and not to exceed 70% of casing burst.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.



WELL DETAILS: Lea Unit #702H

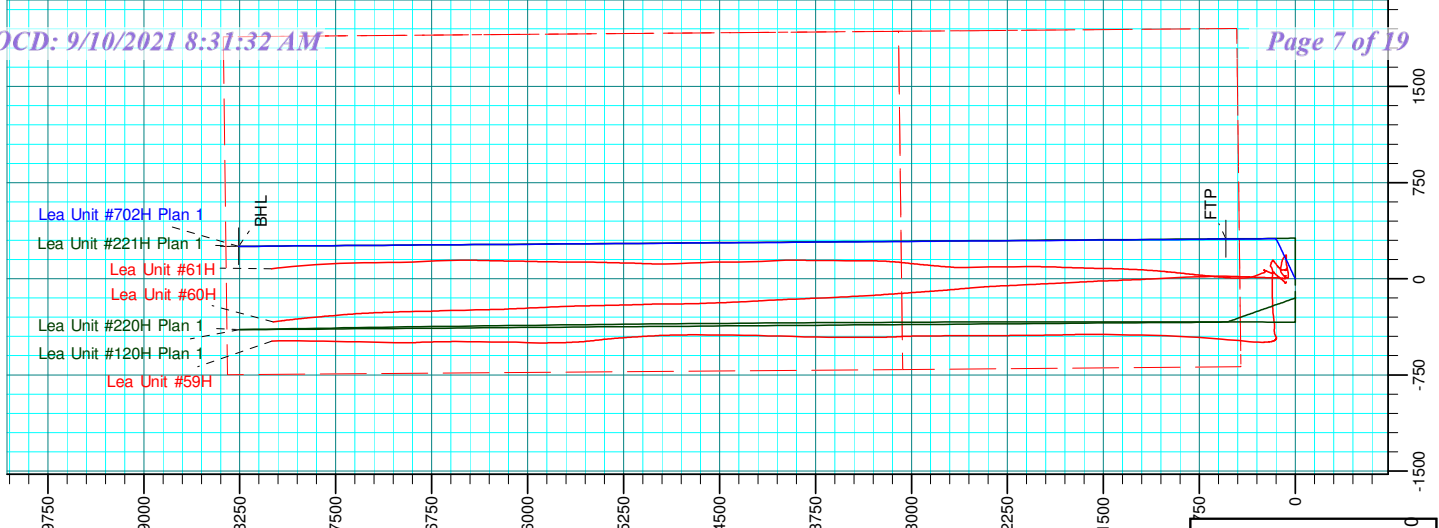
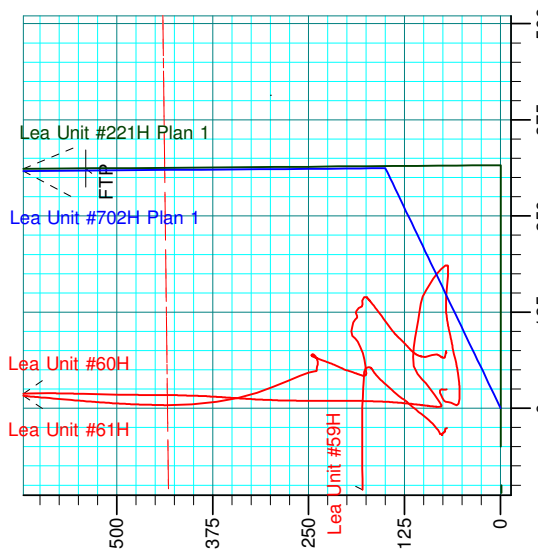
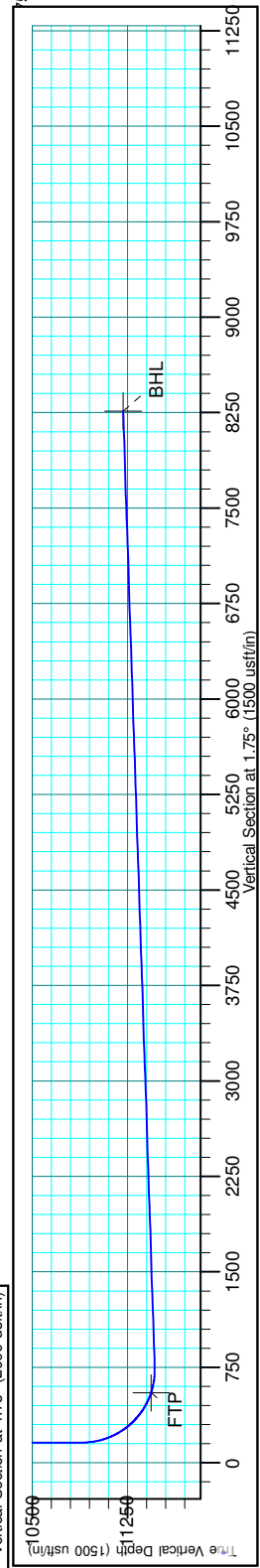
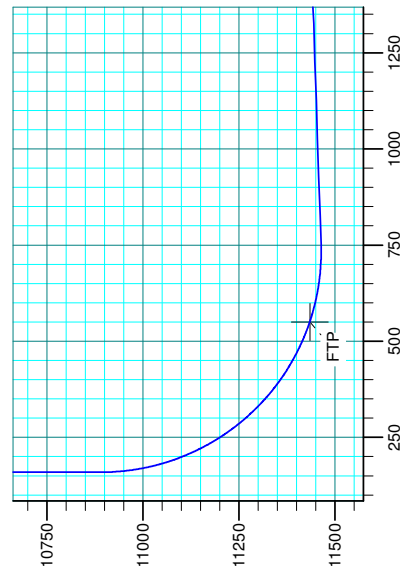
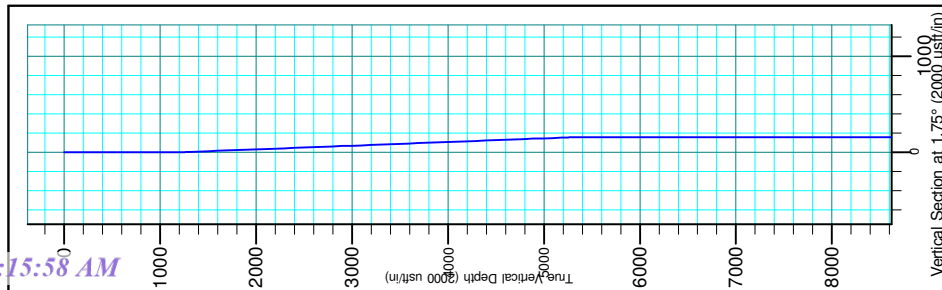
RKB @ 3696.0usft Ground Level: 3678.0
 +N/-S +E/-W Northing Easting Longitude
 0.0 0.0 567516.20 797181.40 32° 33' 26.696 N 103° 30' 10.613 W

Project: Lea County, NM (NAD83)
 Site: Lea
 Well: Lea Unit #702H
 Geodetic Datum: North American Datum 1983
 Design: Plan 1

Azimuths to Grid North
 True North: -0.45°
 Magnetic North: 6.36°
 Magnetic Field
 Strength: 48005.1nT
 Dip Angle: 60.36°
 Date: 10/11/2018
 Model: IGRF2015

DESIGN TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Northing Easting
BHL	11215.0	8257.9	252.8	575774.10 797434.20
FTP	11435.0	540.7	311.7	568056.90 797493.10

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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0
3	1315.3	4.73	64.32	1314.9	5.6	11.7	1.50	64.32	6.0
4	5198.7	4.73	64.32	5185.1	144.4	300.3	0.00	0.00	153.5
5	5513.9	0.00	0.00	5500.0	150.0	312.0	1.50	180.00	159.5
6	10905.3	0.00	0.00	10891.4	150.0	307.7	0.00	0.00	159.5
7	11824.2	91.89	359.58	11464.0	741.8	307.7	10.00	359.58	750.9
8	19344.6	91.91	359.58	11215.0	8257.9	252.8	0.00	12.99	8261.8 BHL-Lea Unit #702H





Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #702H

Original Wellbore

Plan: Plan 1

Standard Planning Report

04 May, 2021





Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 1		

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:	567,587.00 usft	Latitude:	32° 33' 27.391 N	
From:	Map	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 #702H					
Well Position	+N/-S	-70.8 usft	Northing:	567,516.20 usft	Latitude:	32° 33' 26.696 N
	+E/-W	-74.7 usft	Easting:	797,181.40 usft	Longitude:	103° 30' 10.613 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,696.0 usft	Ground Level:	3,678.0 usft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/11/2018	6.80	60.36	48,005.14389122

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.75

Plan Survey Tool Program	Date	5/4/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,344.6	Plan 1 (Original Wellbore)	MWD
			MWD - Standard	

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,315.3	4.73	64.32	1,314.9	5.6	11.7	1.50	1.50	0.00	64.32	
5,198.7	4.73	64.32	5,185.1	144.4	300.3	0.00	0.00	0.00	0.00	
5,513.9	0.00	0.00	5,500.0	150.0	312.0	1.50	-1.50	0.00	180.00	
10,905.3	0.00	0.00	10,891.4	150.0	312.0	0.00	0.00	0.00	0.00	
11,824.2	91.89	359.58	11,464.0	741.8	307.7	10.00	10.00	0.00	359.58	
19,344.6	91.91	359.58	11,215.0	8,257.9	252.8	0.00	0.00	0.00	12.99	BHL-Lea Unit #702H



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	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)
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	1.50	64.32	1,100.0	0.6	1.2	0.6	1.50	1.50	0.00
1,200.0	3.00	64.32	1,199.9	2.3	4.7	2.4	1.50	1.50	0.00
1,300.0	4.50	64.32	1,299.7	5.1	10.6	5.4	1.50	1.50	0.00
1,315.3	4.73	64.32	1,314.9	5.6	11.7	6.0	1.50	1.50	0.00
1,400.0	4.73	64.32	1,399.4	8.7	18.0	9.2	0.00	0.00	0.00
1,500.0	4.73	64.32	1,499.0	12.2	25.4	13.0	0.00	0.00	0.00
1,600.0	4.73	64.32	1,598.7	15.8	32.9	16.8	0.00	0.00	0.00
1,700.0	4.73	64.32	1,698.3	19.4	40.3	20.6	0.00	0.00	0.00
1,800.0	4.73	64.32	1,798.0	23.0	47.7	24.4	0.00	0.00	0.00
1,900.0	4.73	64.32	1,897.7	26.5	55.2	28.2	0.00	0.00	0.00
2,000.0	4.73	64.32	1,997.3	30.1	62.6	32.0	0.00	0.00	0.00
2,100.0	4.73	64.32	2,097.0	33.7	70.0	35.8	0.00	0.00	0.00
2,200.0	4.73	64.32	2,196.6	37.2	77.5	39.6	0.00	0.00	0.00
2,300.0	4.73	64.32	2,296.3	40.8	84.9	43.4	0.00	0.00	0.00
2,400.0	4.73	64.32	2,395.9	44.4	92.3	47.2	0.00	0.00	0.00
2,500.0	4.73	64.32	2,495.6	48.0	99.8	51.0	0.00	0.00	0.00
2,600.0	4.73	64.32	2,595.3	51.5	107.2	54.8	0.00	0.00	0.00
2,700.0	4.73	64.32	2,694.9	55.1	114.6	58.6	0.00	0.00	0.00
2,800.0	4.73	64.32	2,794.6	58.7	122.0	62.4	0.00	0.00	0.00
2,900.0	4.73	64.32	2,894.2	62.2	129.5	66.2	0.00	0.00	0.00
3,000.0	4.73	64.32	2,993.9	65.8	136.9	70.0	0.00	0.00	0.00
3,100.0	4.73	64.32	3,093.6	69.4	144.3	73.8	0.00	0.00	0.00
3,200.0	4.73	64.32	3,193.2	73.0	151.8	77.6	0.00	0.00	0.00
3,300.0	4.73	64.32	3,292.9	76.5	159.2	81.4	0.00	0.00	0.00
3,400.0	4.73	64.32	3,392.5	80.1	166.6	85.2	0.00	0.00	0.00
3,500.0	4.73	64.32	3,492.2	83.7	174.1	89.0	0.00	0.00	0.00
3,600.0	4.73	64.32	3,591.9	87.3	181.5	92.8	0.00	0.00	0.00
3,700.0	4.73	64.32	3,691.5	90.8	188.9	96.6	0.00	0.00	0.00
3,800.0	4.73	64.32	3,791.2	94.4	196.4	100.4	0.00	0.00	0.00
3,900.0	4.73	64.32	3,890.8	98.0	203.8	104.2	0.00	0.00	0.00
4,000.0	4.73	64.32	3,990.5	101.5	211.2	108.0	0.00	0.00	0.00
4,100.0	4.73	64.32	4,090.2	105.1	218.6	111.8	0.00	0.00	0.00
4,200.0	4.73	64.32	4,189.8	108.7	226.1	115.6	0.00	0.00	0.00
4,300.0	4.73	64.32	4,289.5	112.3	233.5	119.4	0.00	0.00	0.00
4,400.0	4.73	64.32	4,389.1	115.8	240.9	123.2	0.00	0.00	0.00
4,500.0	4.73	64.32	4,488.8	119.4	248.4	127.0	0.00	0.00	0.00
4,600.0	4.73	64.32	4,588.5	123.0	255.8	130.7	0.00	0.00	0.00
4,700.0	4.73	64.32	4,688.1	126.6	263.2	134.5	0.00	0.00	0.00
4,800.0	4.73	64.32	4,787.8	130.1	270.7	138.3	0.00	0.00	0.00
4,900.0	4.73	64.32	4,887.4	133.7	278.1	142.1	0.00	0.00	0.00
5,000.0	4.73	64.32	4,987.1	137.3	285.5	145.9	0.00	0.00	0.00
5,100.0	4.73	64.32	5,086.8	140.8	292.9	149.7	0.00	0.00	0.00
5,198.7	4.73	64.32	5,185.1	144.4	300.3	153.5	0.00	0.00	0.00



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	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)
5,200.0	4.71	64.32	5,186.4	144.4	300.4	153.5	1.50	-1.50	0.00
5,300.0	3.21	64.32	5,286.2	147.4	306.6	156.7	1.50	-1.50	0.00
5,400.0	1.71	64.32	5,386.1	149.3	310.5	158.7	1.50	-1.50	0.00
5,500.0	0.21	64.32	5,486.1	150.0	312.0	159.5	1.50	-1.50	0.00
5,513.9	0.00	0.00	5,500.0	150.0	312.0	159.5	1.50	-1.50	0.00
5,600.0	0.00	0.00	5,586.1	150.0	312.0	159.5	0.00	0.00	0.00
5,700.0	0.00	0.00	5,686.1	150.0	312.0	159.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,786.1	150.0	312.0	159.5	0.00	0.00	0.00
5,900.0	0.00	0.00	5,886.1	150.0	312.0	159.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,986.1	150.0	312.0	159.5	0.00	0.00	0.00
6,100.0	0.00	0.00	6,086.1	150.0	312.0	159.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,186.1	150.0	312.0	159.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,286.1	150.0	312.0	159.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,386.1	150.0	312.0	159.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,486.1	150.0	312.0	159.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,586.1	150.0	312.0	159.5	0.00	0.00	0.00
6,700.0	0.00	0.00	6,686.1	150.0	312.0	159.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,786.1	150.0	312.0	159.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,886.1	150.0	312.0	159.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,986.1	150.0	312.0	159.5	0.00	0.00	0.00
7,100.0	0.00	0.00	7,086.1	150.0	312.0	159.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,186.1	150.0	312.0	159.5	0.00	0.00	0.00
7,300.0	0.00	0.00	7,286.1	150.0	312.0	159.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,386.1	150.0	312.0	159.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,486.1	150.0	312.0	159.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,586.1	150.0	312.0	159.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,686.1	150.0	312.0	159.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,786.1	150.0	312.0	159.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,886.1	150.0	312.0	159.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,986.1	150.0	312.0	159.5	0.00	0.00	0.00
8,100.0	0.00	0.00	8,086.1	150.0	312.0	159.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,186.1	150.0	312.0	159.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,286.1	150.0	312.0	159.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,386.1	150.0	312.0	159.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,486.1	150.0	312.0	159.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,586.1	150.0	312.0	159.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,686.1	150.0	312.0	159.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,786.1	150.0	312.0	159.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,886.1	150.0	312.0	159.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,986.1	150.0	312.0	159.5	0.00	0.00	0.00
9,100.0	0.00	0.00	9,086.1	150.0	312.0	159.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,186.1	150.0	312.0	159.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,286.1	150.0	312.0	159.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,386.1	150.0	312.0	159.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,486.1	150.0	312.0	159.5	0.00	0.00	0.00
9,600.0	0.00	0.00	9,586.1	150.0	312.0	159.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,686.1	150.0	312.0	159.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,786.1	150.0	312.0	159.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,886.1	150.0	312.0	159.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,986.1	150.0	312.0	159.5	0.00	0.00	0.00
10,100.0	0.00	0.00	10,086.1	150.0	312.0	159.5	0.00	0.00	0.00
10,200.0	0.00	0.00	10,186.1	150.0	312.0	159.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,286.1	150.0	312.0	159.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,386.1	150.0	312.0	159.5	0.00	0.00	0.00



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	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)
10,500.0	0.00	0.00	10,486.1	150.0	312.0	159.5	0.00	0.00	0.00
10,600.0	0.00	0.00	10,586.1	150.0	312.0	159.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,686.1	150.0	312.0	159.5	0.00	0.00	0.00
10,800.0	0.00	0.00	10,786.1	150.0	312.0	159.5	0.00	0.00	0.00
10,905.3	0.00	0.00	10,891.4	150.0	312.0	159.5	0.00	0.00	0.00
10,950.0	4.47	359.58	10,936.0	151.7	312.0	161.2	10.00	10.00	0.00
11,000.0	9.47	359.58	10,985.6	157.8	311.9	167.3	10.00	10.00	0.00
11,050.0	14.47	359.58	11,034.5	168.2	311.9	177.6	10.00	10.00	0.00
11,100.0	19.47	359.58	11,082.3	182.8	311.8	192.2	10.00	10.00	0.00
11,150.0	24.47	359.58	11,128.7	201.4	311.6	210.9	10.00	10.00	0.00
11,200.0	29.47	359.58	11,173.2	224.1	311.5	233.5	10.00	10.00	0.00
11,250.0	34.47	359.58	11,215.6	250.6	311.3	260.0	10.00	10.00	0.00
11,300.0	39.47	359.58	11,255.6	280.6	311.0	290.0	10.00	10.00	0.00
11,350.0	44.47	359.58	11,292.8	314.1	310.8	323.4	10.00	10.00	0.00
11,400.0	49.47	359.58	11,326.9	350.6	310.5	359.9	10.00	10.00	0.00
11,450.0	54.47	359.58	11,357.7	390.0	310.2	399.3	10.00	10.00	0.00
11,500.0	59.47	359.58	11,384.9	431.9	309.9	441.1	10.00	10.00	0.00
11,550.0	64.47	359.58	11,408.4	476.0	309.6	485.2	10.00	10.00	0.00
11,600.0	69.47	359.58	11,428.0	522.0	309.3	531.2	10.00	10.00	0.00
11,650.0	74.47	359.58	11,443.4	569.5	308.9	578.7	10.00	10.00	0.00
11,700.0	79.47	359.58	11,454.7	618.2	308.6	627.4	10.00	10.00	0.00
11,750.0	84.47	359.58	11,461.7	667.7	308.2	676.8	10.00	10.00	0.00
11,800.0	89.47	359.58	11,464.3	717.6	307.8	726.7	10.00	10.00	0.00
11,824.2	91.89	359.58	11,464.0	741.8	307.7	750.9	10.00	10.00	0.00
11,900.0	91.89	359.58	11,461.5	817.6	307.1	826.6	0.00	0.00	0.00
12,000.0	91.89	359.58	11,458.2	917.5	306.4	926.4	0.00	0.00	0.00
12,100.0	91.89	359.58	11,454.9	1,017.4	305.6	1,026.3	0.00	0.00	0.00
12,200.0	91.89	359.58	11,451.7	1,117.4	304.9	1,126.2	0.00	0.00	0.00
12,300.0	91.89	359.58	11,448.4	1,217.3	304.2	1,226.1	0.00	0.00	0.00
12,400.0	91.89	359.58	11,445.1	1,317.3	303.4	1,325.9	0.00	0.00	0.00
12,500.0	91.89	359.58	11,441.8	1,417.2	302.7	1,425.8	0.00	0.00	0.00
12,600.0	91.89	359.58	11,438.4	1,517.2	302.0	1,525.7	0.00	0.00	0.00
12,700.0	91.89	359.58	11,435.1	1,617.1	301.2	1,625.6	0.00	0.00	0.00
12,800.0	91.89	359.58	11,431.8	1,717.0	300.5	1,725.4	0.00	0.00	0.00
12,900.0	91.89	359.58	11,428.5	1,817.0	299.8	1,825.3	0.00	0.00	0.00
13,000.0	91.89	359.58	11,425.2	1,916.9	299.1	1,925.2	0.00	0.00	0.00
13,100.0	91.89	359.58	11,421.9	2,016.9	298.3	2,025.1	0.00	0.00	0.00
13,200.0	91.89	359.58	11,418.6	2,116.8	297.6	2,124.9	0.00	0.00	0.00
13,300.0	91.89	359.58	11,415.3	2,216.8	296.9	2,224.8	0.00	0.00	0.00
13,400.0	91.89	359.58	11,412.0	2,316.7	296.1	2,324.7	0.00	0.00	0.00
13,500.0	91.89	359.58	11,408.7	2,416.6	295.4	2,424.6	0.00	0.00	0.00
13,600.0	91.89	359.58	11,405.4	2,516.6	294.7	2,524.4	0.00	0.00	0.00
13,700.0	91.89	359.58	11,402.1	2,616.5	293.9	2,624.3	0.00	0.00	0.00
13,800.0	91.89	359.58	11,398.8	2,716.5	293.2	2,724.2	0.00	0.00	0.00
13,900.0	91.89	359.58	11,395.5	2,816.4	292.5	2,824.0	0.00	0.00	0.00
14,000.0	91.89	359.58	11,392.2	2,916.4	291.7	2,923.9	0.00	0.00	0.00
14,100.0	91.89	359.58	11,388.9	3,016.3	291.0	3,023.8	0.00	0.00	0.00
14,200.0	91.89	359.58	11,385.6	3,116.2	290.3	3,123.7	0.00	0.00	0.00
14,300.0	91.90	359.58	11,382.3	3,216.2	289.5	3,223.5	0.00	0.00	0.00
14,400.0	91.90	359.58	11,379.0	3,316.1	288.8	3,323.4	0.00	0.00	0.00
14,500.0	91.90	359.58	11,375.7	3,416.1	288.1	3,423.3	0.00	0.00	0.00
14,600.0	91.90	359.58	11,372.4	3,516.0	287.4	3,523.2	0.00	0.00	0.00
14,700.0	91.90	359.58	11,369.1	3,616.0	286.6	3,623.0	0.00	0.00	0.00
14,800.0	91.90	359.58	11,365.7	3,715.9	285.9	3,722.9	0.00	0.00	0.00



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	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)	
14,900.0	91.90	359.58	11,362.4	3,815.8	285.2	3,822.8	0.00	0.00	0.00	
15,000.0	91.90	359.58	11,359.1	3,915.8	284.4	3,922.7	0.00	0.00	0.00	
15,100.0	91.90	359.58	11,355.8	4,015.7	283.7	4,022.5	0.00	0.00	0.00	
15,200.0	91.90	359.58	11,352.5	4,115.7	283.0	4,122.4	0.00	0.00	0.00	
15,300.0	91.90	359.58	11,349.2	4,215.6	282.2	4,222.3	0.00	0.00	0.00	
15,400.0	91.90	359.58	11,345.9	4,315.6	281.5	4,322.1	0.00	0.00	0.00	
15,500.0	91.90	359.58	11,342.6	4,415.5	280.8	4,422.0	0.00	0.00	0.00	
15,600.0	91.90	359.58	11,339.3	4,515.4	280.1	4,521.9	0.00	0.00	0.00	
15,700.0	91.90	359.58	11,335.9	4,615.4	279.3	4,621.8	0.00	0.00	0.00	
15,800.0	91.90	359.58	11,332.6	4,715.3	278.6	4,721.6	0.00	0.00	0.00	
15,900.0	91.90	359.58	11,329.3	4,815.3	277.9	4,821.5	0.00	0.00	0.00	
16,000.0	91.90	359.58	11,326.0	4,915.2	277.1	4,921.4	0.00	0.00	0.00	
16,100.0	91.90	359.58	11,322.7	5,015.1	276.4	5,021.3	0.00	0.00	0.00	
16,200.0	91.90	359.58	11,319.4	5,115.1	275.7	5,121.1	0.00	0.00	0.00	
16,300.0	91.90	359.58	11,316.1	5,215.0	275.0	5,221.0	0.00	0.00	0.00	
16,400.0	91.90	359.58	11,312.8	5,315.0	274.2	5,320.9	0.00	0.00	0.00	
16,500.0	91.90	359.58	11,309.4	5,414.9	273.5	5,420.8	0.00	0.00	0.00	
16,600.0	91.90	359.58	11,306.1	5,514.9	272.8	5,520.6	0.00	0.00	0.00	
16,700.0	91.90	359.58	11,302.8	5,614.8	272.0	5,620.5	0.00	0.00	0.00	
16,800.0	91.90	359.58	11,299.5	5,714.7	271.3	5,720.4	0.00	0.00	0.00	
16,900.0	91.90	359.58	11,296.2	5,814.7	270.6	5,820.2	0.00	0.00	0.00	
17,000.0	91.90	359.58	11,292.9	5,914.6	269.9	5,920.1	0.00	0.00	0.00	
17,100.0	91.90	359.58	11,289.5	6,014.6	269.1	6,020.0	0.00	0.00	0.00	
17,200.0	91.90	359.58	11,286.2	6,114.5	268.4	6,119.9	0.00	0.00	0.00	
17,300.0	91.90	359.58	11,282.9	6,214.5	267.7	6,219.7	0.00	0.00	0.00	
17,400.0	91.90	359.58	11,279.6	6,314.4	266.9	6,319.6	0.00	0.00	0.00	
17,500.0	91.90	359.58	11,276.3	6,414.3	266.2	6,419.5	0.00	0.00	0.00	
17,600.0	91.90	359.58	11,273.0	6,514.3	265.5	6,519.4	0.00	0.00	0.00	
17,700.0	91.90	359.58	11,269.6	6,614.2	264.8	6,619.2	0.00	0.00	0.00	
17,800.0	91.90	359.58	11,266.3	6,714.2	264.0	6,719.1	0.00	0.00	0.00	
17,900.0	91.90	359.58	11,263.0	6,814.1	263.3	6,819.0	0.00	0.00	0.00	
18,000.0	91.90	359.58	11,259.7	6,914.1	262.6	6,918.9	0.00	0.00	0.00	
18,100.0	91.90	359.58	11,256.4	7,014.0	261.8	7,018.7	0.00	0.00	0.00	
18,200.0	91.90	359.58	11,253.0	7,113.9	261.1	7,118.6	0.00	0.00	0.00	
18,300.0	91.90	359.58	11,249.7	7,213.9	260.4	7,218.5	0.00	0.00	0.00	
18,400.0	91.90	359.58	11,246.4	7,313.8	259.7	7,318.3	0.00	0.00	0.00	
18,500.0	91.90	359.58	11,243.1	7,413.8	258.9	7,418.2	0.00	0.00	0.00	
18,600.0	91.90	359.58	11,239.7	7,513.7	258.2	7,518.1	0.00	0.00	0.00	
18,700.0	91.90	359.58	11,236.4	7,613.6	257.5	7,618.0	0.00	0.00	0.00	
18,800.0	91.90	359.58	11,233.1	7,713.6	256.8	7,717.8	0.00	0.00	0.00	
18,900.0	91.90	359.58	11,229.8	7,813.5	256.0	7,817.7	0.00	0.00	0.00	
19,000.0	91.90	359.58	11,226.5	7,913.5	255.3	7,917.6	0.00	0.00	0.00	
19,100.0	91.91	359.58	11,223.1	8,013.4	254.6	8,017.5	0.00	0.00	0.00	
19,200.0	91.91	359.58	11,219.8	8,113.4	253.9	8,117.3	0.00	0.00	0.00	
19,300.0	91.91	359.58	11,216.5	8,213.3	253.1	8,217.2	0.00	0.00	0.00	
19,344.6	91.91	359.58	11,215.0	8,257.9	252.8	8,261.8	0.00	0.00	0.00	



Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #702H

Original Wellbore

Plan 1

Anticollision Summary Report

04 May, 2021





Anticollision Summary Report



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #702H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3696.0usft
Reference Site:	Lea	MD Reference:	RKB @ 3696.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Lea Unit #702H	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:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 30,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	5/4/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	19,344.6	Plan 1 (Original Wellbore)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offet Well - Wellbore - Design						
Lea						
Lea Unit #120H - Original Wellbore - Plan 1	916.7	916.7	150.0	143.9	24.395	CC
Lea Unit #120H - Original Wellbore - Plan 1	1,000.0	1,000.0	150.0	143.3	22.235	ES
Lea Unit #120H - Original Wellbore - Plan 1	19,344.6	18,803.9	655.5	372.4	2.315	SF
Lea Unit #220H - Original Wellbore - Plan 1	916.7	916.7	100.0	93.9	16.264	CC
Lea Unit #220H - Original Wellbore - Plan 1	1,000.0	1,000.0	100.0	93.3	14.823	ES
Lea Unit #220H - Original Wellbore - Plan 1	19,344.6	19,807.3	874.4	643.1	3.780	SF
Lea Unit #221H - Original Wellbore - Plan 1	1,311.0	1,314.7	49.0	40.1	5.498	CC
Lea Unit #221H - Original Wellbore - Plan 1	1,500.0	1,503.7	49.7	39.4	4.849	ES
Lea Unit #221H - Original Wellbore - Plan 1	10,905.3	10,905.3	150.5	72.7	1.934	SF
Lea Unit #59H - Original Wellbore - Original Wellbore	0.0	0.0	74.1			
Lea Unit #59H - Original Wellbore - Original Wellbore	1,100.0	1,097.3	79.2	72.0	10.929	ES
Lea Unit #59H - Original Wellbore - Original Wellbore	19,100.0	18,798.4	766.2	497.3	2.850	SF
Lea Unit #60H - Original Wellbore - Original Wellbore	1,745.4	1,741.8	62.3	50.6	5.293	CC
Lea Unit #60H - Original Wellbore - Original Wellbore	1,800.0	1,795.9	62.7	50.5	5.150	ES
Lea Unit #60H - Original Wellbore - Original Wellbore	6,700.0	6,687.9	156.2	109.6	3.351	SF
Lea Unit #61H - Original Wellbore - Original Wellbore	2,096.2	2,091.1	40.9	26.4	2.823	CC
Lea Unit #61H - Original Wellbore - Original Wellbore	2,100.0	2,094.9	40.9	26.4	2.818	ES
Lea Unit #61H - Original Wellbore - Original Wellbore	2,200.0	2,194.2	42.1	26.9	2.765	SF

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



Anticollision Summary Report



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #702H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3696.0usft
Reference Site:	Lea	MD Reference:	RKB @ 3696.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Lea Unit #702H	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 Depths are relative to RKB @ 3696.0usft

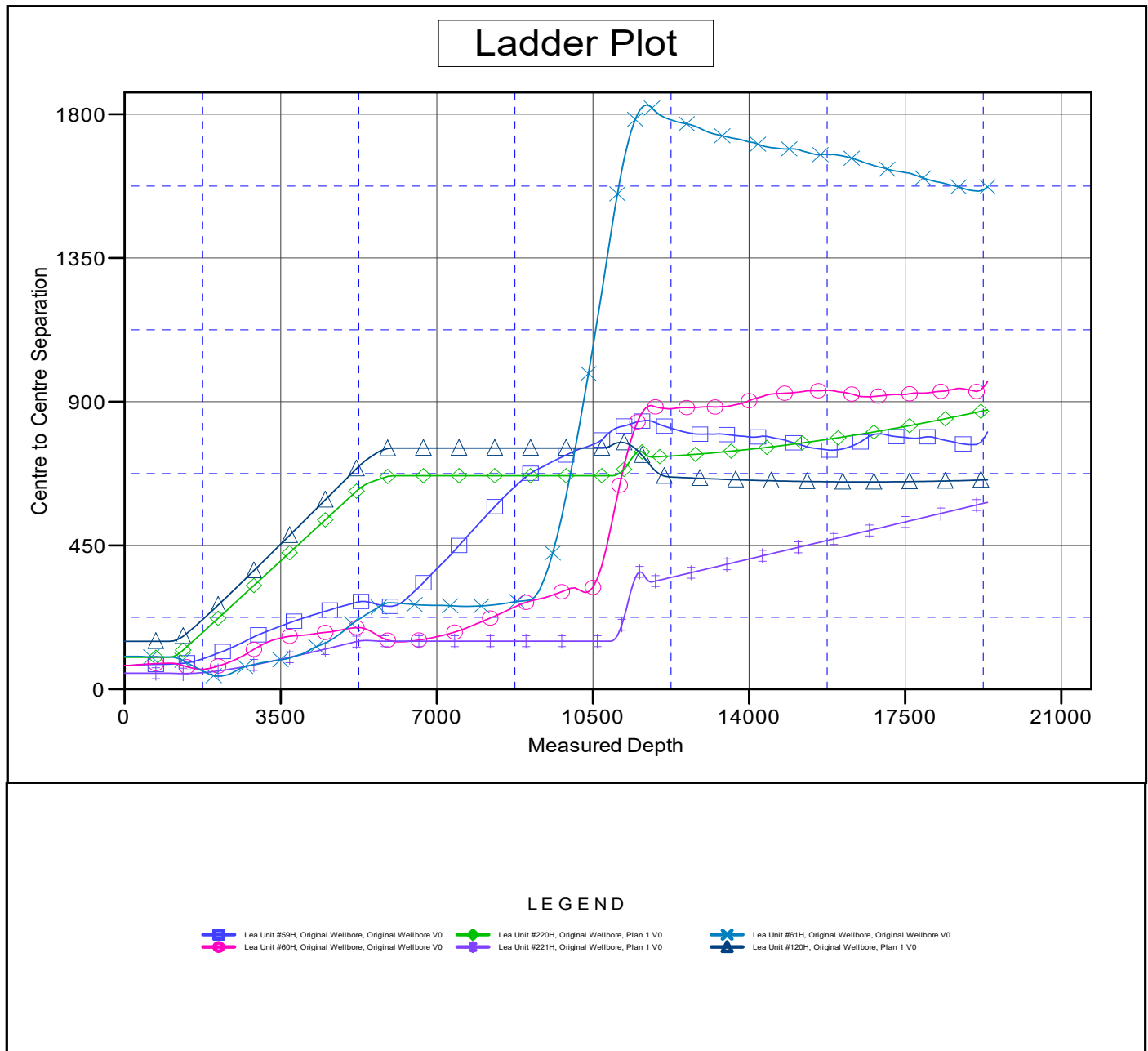
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Lea Unit #702H

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

Grid Convergence at Surface is: 0.45°



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



Anticollision Summary Report



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #702H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3696.0usft
Reference Site:	Lea	MD Reference:	RKB @ 3696.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Lea Unit #702H	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 Depths are relative to RKB @ 3696.0usft

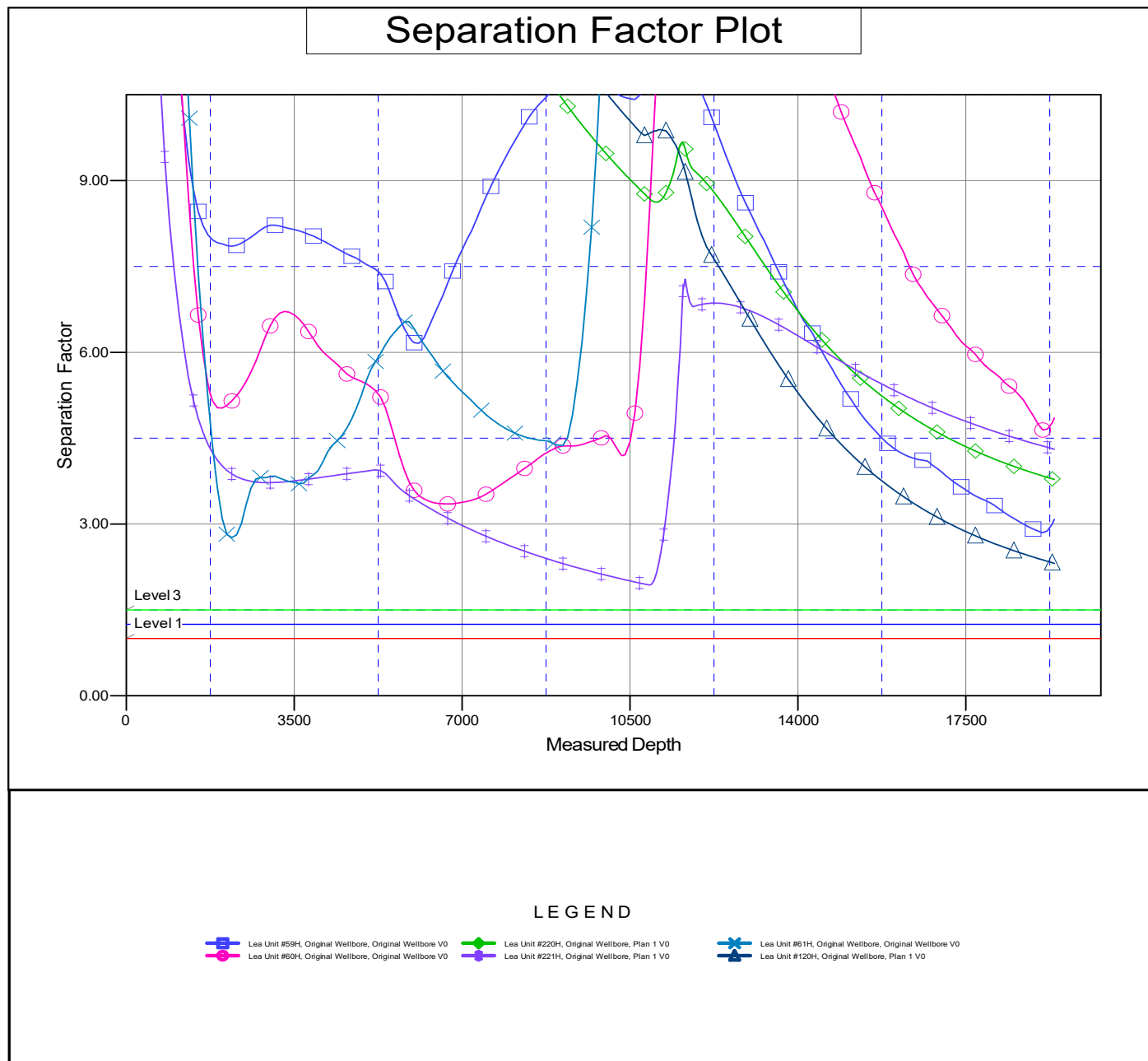
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Lea Unit #702H

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

Grid Convergence at Surface is: 0.45°



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



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lea Unit #702H
Company:	Legacy Reserves	TVD Reference:	RKB @ 3696.0usft
Project:	Lea County, NM (NAD83)	MD Reference:	RKB @ 3696.0usft
Site:	Lea	North Reference:	Grid
Well:	Lea Unit #702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
BHL-Lea Unit #702H	0.00	0.00	11,215.0	8,257.9	252.8	575,774.10	797,434.20	32° 34' 48.384 N	103° 30' 6.905 W
- plan hits target center									
- Point									
FTP-Lea Unit #702H	0.00	0.00	11,435.0	540.7	311.7	568,056.90	797,493.10	32° 33' 32.022 N	103° 30' 6.922 W
- plan misses target center by 2.6usft at 11620.0usft MD (11434.6 TVD, 540.8 N, 309.1 E)									
- Point									

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1625 N. French Dr., Hobbs, NM 88240
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District III
1000 Rio Brazos Rd., Aztec, NM 87410
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District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 47604

CONDITIONS

Operator: LEGACY RESERVES OPERATING, LP 15 Smith Road Midland, TX 79705	OGRID: 240974
	Action Number: 47604
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	9/13/2021