

Legacy Reserves

Lea County, NM (NAD83)

Lea

Lea Unit #66H

Original Wellbore

HOBBS OCD
JAN 29 2019
RECEIVED

Design: Original Wellbore

Daily Survey Report

23 September, 2018



Company:	Legacy Reserves	Local Co-ordinate Reference:	Well Lea Unit #66H
Project:	Lea County, NM (NAD83)	TVD Reference:	RKB @ 3694.01ft
Site:	Lea	MD Reference:	RKB @ 3694.01ft
Well:	Lea Unit #66H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

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 #66H					
Well Position	+N/-S	0.00 ft	Northing:	567,568.100 usft	Latitude:	32.557602°N
	+E/-W	0.00 ft	Easting:	795,116.100 usft	Longitude:	-103.509649
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,694.01 ft	Ground Level:	3,676.01 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	3/5/2018	6.75	60.53	48,250.60000000

Design	Original Wellbore				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	358.45	

Survey Program	Date 9/23/2018				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	19,447.00	As Drilled (Original Wellbore)	MWD+HDGM	OWSG MWD + HDGM	

Survey								
MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.71	323.29	100.00	0.51	0.50	-0.37	0.71	
125.00	0.79	308.67	125.00	0.74	0.73	-0.60	0.83	
150.00	0.77	314.17	149.99	0.98	0.95	-0.85	0.31	
175.00	0.85	312.83	174.99	1.23	1.20	-1.11	0.33	
200.00	0.83	317.79	199.99	1.49	1.46	-1.37	0.30	
225.00	0.89	322.31	224.99	1.79	1.74	-1.61	0.36	
250.00	0.90	317.29	249.98	2.09	2.04	-1.86	0.32	
275.00	0.87	316.51	274.98	2.38	2.32	-2.12	0.13	
300.00	0.89	322.07	299.98	2.68	2.62	-2.37	0.35	
325.00	0.94	321.70	324.97	3.00	2.93	-2.62	0.20	
350.00	0.96	316.33	349.97	3.32	3.24	-2.89	0.36	

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #66H
Wellbore: Original Wellbore
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Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Lea Unit #66H
 RKB @ 3694.01ft
 RKB @ 3694.01ft
 Grid
 Minimum Curvature
 EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
375.00	0.94	316.41	374.97	3.63	3.54	-3.18	0.08
400.00	0.93	315.32	399.96	3.93	3.83	-3.46	0.08
425.00	1.01	321.22	424.96	4.25	4.15	-3.74	0.51
450.00	0.94	321.82	449.96	4.59	4.48	-4.01	0.28
475.00	0.92	321.62	474.95	4.92	4.80	-4.26	0.08
500.00	1.00	327.96	499.95	5.26	5.14	-4.50	0.53
525.00	0.98	325.09	524.94	5.63	5.50	-4.74	0.21
550.00	0.91	320.09	549.94	5.96	5.83	-4.99	0.43
575.00	0.82	326.98	574.94	6.27	6.13	-5.21	0.55
600.00	0.77	327.89	599.94	6.57	6.43	-5.40	0.21
625.00	0.80	323.89	624.93	6.86	6.71	-5.59	0.25
650.00	0.72	328.98	649.93	7.14	6.99	-5.77	0.42
675.00	0.71	327.70	674.93	7.41	7.25	-5.94	0.08
700.00	0.73	329.66	699.93	7.68	7.52	-6.10	0.13
725.00	0.68	329.56	724.93	7.95	7.78	-6.26	0.20
750.00	0.86	328.49	749.92	8.24	8.07	-6.43	0.72
775.00	0.83	332.74	774.92	8.57	8.39	-6.61	0.28
800.00	0.81	334.39	799.92	8.89	8.71	-6.77	0.12
825.00	0.69	342.72	824.92	9.20	9.02	-6.89	0.65
850.00	0.69	347.67	849.91	9.49	9.31	-6.97	0.24
875.00	0.50	359.73	874.91	9.75	9.56	-7.00	0.91
900.00	0.61	18.94	899.91	9.98	9.80	-6.96	0.86
925.00	0.55	14.92	924.91	10.22	10.04	-6.88	0.29
950.00	0.60	13.61	949.91	10.46	10.28	-6.82	0.21
975.00	0.60	15.05	974.91	10.72	10.54	-6.76	0.06
1,000.00	0.62	13.43	999.91	10.97	10.80	-6.69	0.11
1,025.00	0.68	19.37	1,024.90	11.24	11.07	-6.61	0.36
1,050.00	0.58	14.32	1,049.90	11.50	11.33	-6.53	0.46
1,075.00	0.60	24.02	1,074.90	11.74	11.57	-6.45	0.41
1,100.00	0.74	31.21	1,099.90	12.00	11.83	-6.31	0.65
1,125.00	0.79	19.77	1,124.90	12.29	12.13	-6.17	0.64
1,150.00	0.78	15.32	1,149.90	12.62	12.46	-6.06	0.25
1,175.00	0.86	11.95	1,174.89	12.96	12.80	-5.98	0.37
1,200.00	0.94	11.88	1,199.89	13.34	13.19	-5.90	0.32
1,225.00	0.93	11.62	1,224.89	13.74	13.59	-5.82	0.04
1,250.00	0.99	11.78	1,249.88	14.15	14.00	-5.73	0.24
1,275.00	1.06	1.95	1,274.88	14.59	14.44	-5.68	0.76
1,300.00	0.98	356.61	1,299.88	15.03	14.88	-5.68	0.50
1,325.00	1.05	350.05	1,324.87	15.47	15.32	-5.74	0.54
1,350.00	1.21	342.93	1,349.87	15.95	15.80	-5.85	0.85
1,375.00	1.14	342.48	1,374.86	16.45	16.29	-6.01	0.28
1,400.00	1.18	341.03	1,399.86	16.93	16.77	-6.16	0.20
1,425.00	1.20	337.09	1,424.85	17.42	17.26	-6.35	0.34
1,450.00	1.26	333.27	1,449.85	17.91	17.74	-6.57	0.41

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Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #66H
Wellbore: Original Wellbore
Design: Original Wellbore

Local Co-ordinate Reference: Well Lea Unit #66H
TVD Reference: RKB @ 3694.01ft
MD Reference: RKB @ 3694.01ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
1,475.00	1.31	331.34	1,474.84	18.42	18.24	-6.84	0.26
1,500.00	1.48	321.45	1,499.83	18.93	18.74	-7.17	1.18
1,525.00	1.57	315.14	1,524.82	19.44	19.24	-7.62	0.76
1,550.00	1.58	315.90	1,549.81	19.94	19.73	-8.10	0.09
1,575.00	1.64	314.22	1,574.80	20.45	20.22	-8.59	0.31
1,600.00	1.69	309.97	1,599.79	20.95	20.71	-9.13	0.53
1,625.00	1.75	309.64	1,624.78	21.45	21.19	-9.71	0.24
1,650.00	1.83	309.59	1,649.77	21.96	21.69	-10.31	0.32
1,675.00	1.84	305.81	1,674.76	22.47	22.18	-10.94	0.49
1,700.00	1.85	304.90	1,699.74	22.95	22.64	-11.60	0.12
1,725.00	1.88	304.15	1,724.73	23.43	23.11	-12.27	0.15
1,750.00	1.90	303.95	1,749.72	23.91	23.57	-12.95	0.08
1,775.00	1.83	306.25	1,774.70	24.39	24.03	-13.62	0.41
1,800.00	1.91	303.17	1,799.69	24.88	24.50	-14.29	0.51
1,825.00	1.76	302.53	1,824.68	25.33	24.93	-14.96	0.61
1,850.00	1.74	304.90	1,849.67	25.77	25.36	-15.60	0.30
1,875.00	1.72	299.78	1,874.65	26.19	25.76	-16.23	0.62
1,900.00	1.78	302.49	1,899.64	26.60	26.15	-16.89	0.41
1,925.00	1.56	304.97	1,924.63	27.02	26.56	-17.49	0.93
1,950.00	1.48	307.66	1,949.62	27.43	26.95	-18.03	0.43
1,975.00	1.33	311.60	1,974.62	27.83	27.34	-18.50	0.71
2,000.00	1.30	315.33	1,999.61	28.24	27.73	-18.92	0.36
2,025.00	1.29	316.51	2,024.60	28.65	28.14	-19.31	0.11
2,050.00	1.20	317.39	2,049.60	29.06	28.54	-19.68	0.37
2,075.00	1.18	320.17	2,074.59	29.46	28.93	-20.02	0.24
2,100.00	1.16	321.96	2,099.59	29.86	29.32	-20.34	0.17
2,125.00	1.24	326.42	2,124.58	30.30	29.75	-20.65	0.49
2,150.00	1.10	321.41	2,149.58	30.72	30.16	-20.95	0.69
2,175.00	1.07	325.72	2,174.57	31.11	30.54	-21.23	0.35
2,200.00	1.10	328.10	2,199.57	31.51	30.94	-21.49	0.22
2,225.00	0.95	337.45	2,224.56	31.91	31.33	-21.70	0.90
2,250.00	0.87	350.62	2,249.56	32.29	31.71	-21.81	0.89
2,275.00	0.89	0.25	2,274.56	32.67	32.09	-21.84	0.60
2,300.00	0.94	14.63	2,299.55	33.06	32.49	-21.78	0.94
2,325.00	0.95	29.62	2,324.55	33.44	32.87	-21.63	0.99
2,350.00	0.99	35.44	2,349.55	33.79	33.22	-21.40	0.43
2,375.00	1.24	49.11	2,374.54	34.13	33.57	-21.07	1.45
2,400.00	1.35	51.80	2,399.54	34.48	33.93	-20.64	0.50
2,425.00	1.71	58.94	2,424.53	34.84	34.31	-20.08	1.63
2,450.00	1.90	63.30	2,449.51	35.20	34.69	-19.39	0.94
2,475.00	1.84	64.02	2,474.50	35.54	35.05	-18.66	0.26
2,500.00	2.23	70.01	2,499.48	35.86	35.39	-17.85	1.77
2,525.00	2.66	75.41	2,524.46	36.15	35.70	-16.83	1.95
2,550.00	3.24	81.44	2,549.43	36.36	35.96	-15.57	2.63

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Well Lea Unit #66H
 RKB @ 3694.01ft
 RKB @ 3694.01ft
 Grid
 Minimum Curvature
 EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
2,575.00	3.41	85.42	2,574.39	36.49	36.12	-14.13	1.15
2,600.00	3.82	84.72	2,599.34	36.58	36.26	-12.56	1.65
2,625.00	4.31	88.60	2,624.27	36.63	36.36	-10.79	2.25
2,650.00	4.65	90.66	2,649.20	36.59	36.37	-8.84	1.50
2,675.00	4.77	91.73	2,674.11	36.49	36.32	-6.78	0.59
2,700.00	4.75	90.96	2,699.03	36.39	36.27	-4.71	0.27
2,725.00	4.85	90.37	2,723.94	36.31	36.25	-2.62	0.45
2,750.00	4.81	90.81	2,748.85	36.23	36.23	-0.51	0.22
2,775.00	4.77	91.98	2,773.76	36.12	36.18	1.57	0.42
2,800.00	5.00	90.34	2,798.67	36.02	36.14	3.70	1.08
2,825.00	4.96	91.16	2,823.58	35.94	36.11	5.87	0.33
2,850.00	4.94	91.30	2,848.48	35.83	36.06	8.03	0.09
2,875.00	5.00	91.15	2,873.39	35.73	36.01	10.19	0.25
2,900.00	5.08	92.33	2,898.29	35.60	35.95	12.39	0.52
2,925.00	5.42	93.41	2,923.19	35.42	35.83	14.67	1.42
2,950.00	5.57	94.55	2,948.07	35.19	35.67	17.06	0.74
2,975.00	5.65	95.12	2,972.95	34.92	35.46	19.50	0.39
3,000.00	5.73	98.52	2,997.83	34.56	35.17	21.96	1.39
3,025.00	5.96	101.75	3,022.70	34.04	34.72	24.46	1.61
3,050.00	5.99	103.22	3,047.57	33.41	34.15	27.00	0.62
3,075.00	6.08	103.09	3,072.43	32.74	33.56	29.56	0.36
3,100.00	6.06	101.93	3,097.29	32.10	32.98	32.14	0.50
3,125.00	5.99	96.67	3,122.15	31.61	32.56	34.73	2.23
3,150.00	5.91	94.38	3,147.01	31.29	32.31	37.31	1.00
3,175.00	5.84	92.88	3,171.88	31.06	32.15	39.86	0.67
3,200.00	5.52	90.69	3,196.76	30.91	32.07	42.33	1.55
3,225.00	4.82	90.29	3,221.66	30.83	32.05	44.59	2.80
3,250.00	4.57	90.28	3,246.57	30.77	32.04	46.63	1.00
3,275.00	4.30	90.31	3,271.50	30.70	32.03	48.57	1.08
3,300.00	3.79	91.75	3,296.44	30.63	32.00	50.33	2.08
3,325.00	3.35	93.85	3,321.39	30.51	31.92	51.88	1.84
3,350.00	2.69	98.16	3,346.35	30.34	31.79	53.19	2.79
3,375.00	2.37	102.69	3,371.33	30.12	31.59	54.28	1.51
3,400.00	1.89	108.28	3,396.31	29.85	31.35	55.17	2.09
3,425.00	1.64	115.76	3,421.30	29.55	31.07	55.89	1.36
3,450.00	1.36	121.53	3,446.29	29.22	30.76	56.46	1.27
3,475.00	0.89	137.61	3,471.29	28.91	30.46	56.85	2.25
3,500.00	0.55	174.89	3,496.29	28.64	30.19	56.99	2.25
3,525.00	0.63	205.02	3,521.28	28.40	29.95	56.94	1.27
3,550.00	0.51	211.60	3,546.28	28.19	29.73	56.82	0.55
3,575.00	0.60	215.10	3,571.28	27.99	29.53	56.69	0.38
3,600.00	0.62	227.34	3,596.28	27.79	29.33	56.52	0.53
3,625.00	0.45	226.37	3,621.28	27.64	29.17	56.35	0.68
3,650.00	0.57	233.30	3,646.28	27.50	29.03	56.17	0.54
3,675.00	0.37	231.22	3,671.28	27.38	28.90	56.01	0.80

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3,700.00	0.41	231.19	3,696.28	27.28	28.80	55.88	0.16
3,725.00	0.44	229.64	3,721.28	27.16	28.68	55.74	0.13
3,750.00	0.33	239.91	3,746.28	27.07	28.58	55.60	0.52
3,775.00	0.13	233.55	3,771.28	27.02	28.53	55.52	0.81
3,800.00	0.56	250.61	3,796.27	26.96	28.47	55.38	1.75
3,825.00	0.43	242.28	3,821.27	26.89	28.39	55.18	0.59
3,850.00	0.48	243.66	3,846.27	26.80	28.30	55.00	0.20
3,875.00	0.37	247.35	3,871.27	26.73	28.22	54.83	0.45
3,900.00	0.38	245.10	3,896.27	26.67	28.15	54.68	0.07
3,925.00	0.40	258.66	3,921.27	26.62	28.10	54.52	0.38
3,950.00	0.33	254.34	3,946.27	26.59	28.06	54.37	0.30
3,975.00	0.32	259.26	3,971.27	26.56	28.03	54.23	0.12
4,000.00	0.41	258.50	3,996.27	26.53	28.00	54.08	0.36
4,025.00	0.35	268.55	4,021.27	26.51	27.98	53.91	0.36
4,050.00	0.37	262.91	4,046.27	26.51	27.97	53.75	0.16
4,075.00	0.25	264.93	4,071.27	26.50	27.95	53.62	0.48
4,100.00	0.35	289.58	4,096.27	26.52	27.98	53.49	0.64
4,125.00	0.37	294.97	4,121.27	26.58	28.04	53.35	0.16
4,150.00	0.45	295.57	4,146.27	26.66	28.11	53.19	0.32
4,175.00	0.39	297.71	4,171.27	26.75	28.19	53.02	0.25
4,200.00	0.41	311.43	4,196.27	26.85	28.29	52.88	0.39
4,225.00	0.45	308.88	4,221.26	26.98	28.41	52.74	0.18
4,250.00	0.36	313.16	4,246.26	27.10	28.53	52.60	0.38
4,275.00	0.47	311.93	4,271.26	27.22	28.65	52.47	0.44
4,300.00	0.50	313.77	4,296.26	27.37	28.79	52.32	0.14
4,325.00	0.58	313.93	4,321.26	27.54	28.96	52.15	0.32
4,350.00	0.48	321.87	4,346.26	27.71	29.13	51.99	0.50
4,375.00	0.70	307.10	4,371.26	27.89	29.30	51.80	1.06
4,400.00	0.58	314.09	4,396.26	28.08	29.48	51.59	0.57
4,425.00	0.52	313.84	4,421.26	28.25	29.65	51.42	0.24
4,450.00	0.64	304.81	4,446.26	28.41	29.81	51.22	0.60
4,475.00	0.64	307.59	4,471.25	28.58	29.97	51.00	0.12
4,500.00	0.61	311.41	4,496.25	28.76	30.15	50.79	0.21
4,525.00	0.66	304.45	4,521.25	28.94	30.32	50.57	0.37
4,550.00	0.64	304.69	4,546.25	29.11	30.48	50.33	0.08
4,575.00	0.60	301.53	4,571.25	29.26	30.62	50.11	0.21
4,600.00	0.55	319.12	4,596.25	29.42	30.78	49.92	0.73
4,625.00	0.69	313.66	4,621.24	29.62	30.98	49.73	0.61
4,650.00	0.81	311.47	4,646.24	29.85	31.20	49.49	0.49
4,675.00	0.75	305.46	4,671.24	30.07	31.41	49.22	0.41
4,700.00	0.70	304.00	4,696.24	30.26	31.59	48.96	0.21
4,725.00	0.67	313.12	4,721.24	30.45	31.78	48.73	0.45
4,750.00	0.73	318.35	4,746.23	30.67	32.00	48.52	0.35
4,775.00	0.79	317.67	4,771.23	30.93	32.24	48.29	0.24

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #86H
Wellbore: Original Wellbore
Design: Original Wellbore

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

Well Lea Unit #86H
RKB @ 3694.01ft
RKB @ 3694.01ft
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
4,800.00	0.78	307.35	4,796.23	31.16	32.47	48.04	0.57
4,825.00	0.72	305.30	4,821.23	31.36	32.67	47.78	0.26
4,850.00	0.68	324.79	4,846.23	31.58	32.88	47.57	0.96
4,875.00	0.60	326.13	4,871.22	31.82	33.11	47.41	0.33
4,900.00	0.57	339.14	4,896.22	32.04	33.33	47.29	0.54
4,925.00	0.45	346.45	4,921.22	32.26	33.54	47.22	0.55
4,950.00	0.58	348.84	4,946.22	32.48	33.76	47.18	0.53
4,975.00	0.58	358.47	4,971.22	32.73	34.02	47.15	0.39
5,000.00	0.68	337.26	4,996.22	32.99	34.28	47.09	1.01
5,025.00	0.52	355.90	5,021.22	33.25	34.53	47.02	1.00
5,050.00	0.57	3.80	5,046.22	33.48	34.77	47.02	0.36
5,075.00	0.61	12.84	5,071.21	33.74	35.02	47.06	0.40
5,100.00	0.81	31.79	5,096.21	34.01	35.30	47.18	1.22
5,125.00	0.47	356.01	5,121.21	34.26	35.55	47.27	2.04
5,150.00	0.61	13.71	5,146.21	34.49	35.78	47.29	0.86
5,175.00	0.53	347.71	5,171.21	34.73	36.03	47.30	1.07
5,200.00	0.61	358.65	5,196.21	34.98	36.27	47.27	0.54
5,225.00	0.52	4.56	5,221.21	35.23	36.52	47.28	0.43
5,250.00	0.51	15.89	5,246.21	35.45	36.74	47.32	0.41
5,275.00	0.50	0.49	5,271.20	35.66	36.95	47.35	0.54
5,300.00	0.55	3.86	5,296.20	35.89	37.18	47.36	0.23
5,325.00	0.54	7.36	5,321.20	36.13	37.42	47.38	0.14
5,350.00	0.53	15.47	5,346.20	36.35	37.65	47.43	0.31
5,375.00	0.56	12.11	5,371.20	36.58	37.88	47.48	0.18
5,400.00	0.60	28.03	5,396.20	36.81	38.11	47.57	0.66
5,425.00	0.76	26.27	5,421.20	37.07	38.38	47.71	0.65
5,450.00	0.42	341.20	5,446.20	37.31	38.61	47.75	2.20
5,475.00	0.50	33.12	5,471.20	37.49	38.79	47.78	1.64
5,500.00	0.54	48.03	5,496.19	37.65	38.96	47.93	0.56
5,525.00	0.59	32.65	5,521.19	37.84	39.15	48.08	0.64
5,550.00	0.61	28.18	5,546.19	38.06	39.37	48.22	0.20
5,561.00	0.52	23.27	5,557.19	38.15	39.47	48.26	0.93
5,593.00	0.50	22.70	5,589.19	38.41	39.73	48.37	0.06
5,688.00	0.60	356.30	5,684.19	39.29	40.61	48.50	0.28
5,782.00	0.70	11.90	5,778.18	40.34	41.67	48.59	0.22
5,876.00	0.60	39.90	5,872.17	41.27	42.61	49.02	0.35
5,970.00	0.80	117.20	5,966.17	41.32	42.68	49.92	0.94
6,064.00	0.80	153.80	6,060.16	40.41	41.79	50.80	0.53
6,158.00	0.90	168.60	6,154.15	39.08	40.48	51.23	0.26
6,253.00	0.90	157.50	6,249.14	37.65	39.06	51.66	0.18
6,347.00	0.70	162.10	6,343.13	36.41	37.83	52.12	0.22
6,441.00	0.70	164.50	6,437.12	35.30	36.73	52.45	0.03
6,535.00	0.50	145.70	6,531.12	34.40	35.84	52.84	0.30
6,629.00	0.50	178.20	6,625.11	33.64	35.09	53.08	0.30

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #66H
Wellbore: Original Wellbore
Design: Original Wellbore

Local Co-ordinate Reference: Well Lea Unit #66H
TVD Reference: RKB @ 3694.01ft
MD Reference: RKB @ 3694.01ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
6,723.00	0.50	197.40	6,719.11	32.85	34.29	52.97	0.18
6,817.00	0.60	204.60	6,813.11	32.02	33.45	52.64	0.13
6,911.00	1.00	221.10	6,907.10	30.97	32.39	51.90	0.49
7,005.00	0.90	217.60	7,001.08	29.80	31.18	50.91	0.12
7,100.00	1.10	217.20	7,096.07	28.51	29.87	49.90	0.21
7,194.00	1.40	216.50	7,190.05	26.90	28.22	48.68	0.32
7,288.00	1.20	175.60	7,284.02	25.01	26.32	48.07	0.99
7,382.00	1.30	165.40	7,378.00	22.99	24.31	48.41	0.26
7,476.00	1.20	172.40	7,471.98	20.97	22.30	48.81	0.19
7,570.00	1.30	168.20	7,565.96	18.94	20.28	49.16	0.14
7,664.00	1.30	173.00	7,659.93	16.83	18.18	49.51	0.12
7,759.00	1.20	170.80	7,754.91	14.77	16.13	49.80	0.12
7,853.00	1.40	179.10	7,848.89	12.65	14.01	49.97	0.29
7,947.00	1.60	183.10	7,942.85	10.19	11.55	49.92	0.24
8,041.00	0.80	184.20	8,036.83	8.23	9.58	49.80	0.85
8,135.00	1.10	191.90	8,130.82	6.70	8.04	49.57	0.35
8,229.00	0.50	174.40	8,224.81	5.42	6.75	49.42	0.68
8,323.00	0.40	201.60	8,318.81	4.70	6.04	49.34	0.25
8,417.00	0.30	274.90	8,412.81	4.43	5.76	48.97	0.45
8,511.00	0.80	288.80	8,506.80	4.69	5.99	48.11	0.55
8,605.00	0.90	288.80	8,600.79	5.17	6.44	46.79	0.11
8,699.00	0.30	79.30	8,694.79	5.47	6.72	46.33	1.25
8,793.00	0.30	126.00	8,788.79	5.36	6.62	46.77	0.25
8,887.00	0.50	159.60	8,882.78	4.82	6.09	47.11	0.32
8,981.00	0.70	193.70	8,976.78	3.88	5.15	47.12	0.43
9,076.00	1.10	223.40	9,071.77	2.67	3.93	46.36	0.63
9,170.00	0.90	222.50	9,165.75	1.50	2.73	45.24	0.21
9,264.00	0.80	187.00	9,259.74	0.32	1.53	44.66	0.56
9,358.00	0.50	178.40	9,353.74	-0.74	0.47	44.59	0.33
9,452.00	1.10	186.70	9,447.73	-2.04	-0.84	44.50	0.65
9,546.00	0.40	41.30	9,541.72	-2.69	-1.49	44.61	1.54
9,640.00	0.30	20.00	9,635.72	-2.22	-1.01	44.91	0.17
9,734.00	0.30	279.10	9,729.72	-1.95	-0.74	44.75	0.49
9,828.00	0.60	259.60	9,823.72	-1.98	-0.79	44.02	0.35
9,922.00	1.00	248.50	9,917.71	-2.33	-1.18	42.78	0.45
10,016.00	0.40	293.20	10,011.70	-2.48	-1.35	41.71	0.82
10,110.00	0.40	195.60	10,105.70	-2.65	-1.54	41.32	0.64
10,204.00	0.90	213.40	10,199.69	-3.57	-2.47	40.83	0.57
10,299.00	0.40	214.30	10,294.69	-4.45	-3.37	40.23	0.53
10,392.00	0.80	246.40	10,387.68	-4.96	-3.89	39.45	0.55
10,486.00	1.10	295.10	10,481.67	-4.80	-3.77	38.03	0.88
10,572.00	6.00	357.70	10,567.50	0.07	1.07	37.10	6.49
10,619.00	12.70	352.20	10,613.85	7.67	8.65	36.30	14.37
10,666.00	17.50	354.20	10,659.21	19.86	20.81	34.89	10.27

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #66H
Wellbore: Original Wellbore
Design: Original Wellbore

Local Co-ordinate Reference: Well Lea Unit #66H
TVD Reference: RKB @ 3694.01ft
MD Reference: RKB @ 3694.01ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
10,713.00	22.20	349.40	10,703.41	35.68	36.58	32.54	10.58
10,760.00	28.10	347.30	10,745.93	55.33	56.12	28.47	12.69
10,807.00	32.40	347.90	10,786.53	78.58	79.24	23.39	9.17
10,854.00	35.90	348.60	10,825.42	104.54	105.07	18.03	7.49
10,901.00	41.20	352.40	10,862.16	133.54	133.95	13.25	12.35
10,948.00	45.90	356.60	10,896.23	165.82	166.16	10.20	11.74
10,995.00	48.50	357.90	10,928.16	200.30	200.60	8.56	5.89
11,043.00	53.40	358.20	10,958.39	237.56	237.84	7.29	10.22
11,090.00	57.50	357.90	10,985.04	276.26	276.52	5.97	8.74
11,137.00	62.60	357.00	11,008.50	316.97	317.19	4.15	10.98
11,184.00	68.90	355.90	11,027.79	359.77	359.94	1.49	13.57
11,232.00	73.70	355.90	11,043.17	405.18	405.28	-1.76	10.00
11,279.00	77.60	356.10	11,054.82	450.66	450.69	-4.93	8.31
11,326.00	79.30	356.50	11,064.23	496.67	496.64	-7.91	3.71
11,373.00	81.00	355.90	11,072.27	542.94	542.85	-10.97	3.83
11,420.00	85.40	356.10	11,077.83	589.56	589.39	-14.23	9.37
11,467.00	87.40	356.10	11,080.79	636.42	636.19	-17.42	4.26
11,514.00	88.50	356.50	11,082.47	683.36	683.06	-20.45	2.49
11,528.05	88.38	356.53	11,082.85	697.39	697.07	-21.30	0.88
FTP-66H							
11,561.00	88.10	356.60	11,083.86	730.31	729.95	-23.28	0.88
11,608.00	88.20	357.00	11,085.38	777.27	776.85	-25.90	0.88
11,649.00	89.60	357.30	11,086.17	818.25	817.79	-27.94	3.49
11,743.00	91.70	356.80	11,085.10	912.21	911.66	-32.77	2.30
11,838.00	91.60	357.00	11,082.36	1,007.14	1,006.48	-37.91	0.24
11,931.00	91.70	357.00	11,079.69	1,100.07	1,099.31	-42.78	0.11
12,026.00	92.20	358.00	11,076.45	1,195.00	1,194.17	-46.92	1.18
12,120.00	91.80	0.20	11,073.17	1,288.93	1,288.09	-48.39	2.38
12,213.00	91.70	0.50	11,070.33	1,381.83	1,381.05	-47.82	0.34
12,306.00	90.80	0.30	11,068.30	1,474.76	1,474.02	-47.17	0.99
12,400.00	90.70	0.30	11,067.07	1,568.70	1,568.01	-46.68	0.11
12,495.00	90.80	0.30	11,065.83	1,663.64	1,663.00	-46.19	0.11
12,588.00	90.80	0.20	11,064.53	1,756.59	1,755.99	-45.78	0.11
12,681.00	90.90	0.30	11,063.15	1,849.53	1,848.98	-45.37	0.15
12,775.00	90.80	358.90	11,061.76	1,943.50	1,942.97	-46.03	1.49
12,869.00	91.90	358.00	11,059.54	2,037.47	2,036.90	-48.57	1.51
12,962.00	91.70	357.70	11,056.62	2,130.42	2,129.79	-52.06	0.39
13,055.00	90.70	358.20	11,054.67	2,223.40	2,222.71	-55.38	1.20
13,149.00	90.80	358.20	11,053.44	2,317.39	2,316.66	-58.34	0.11
13,243.00	90.80	358.00	11,052.13	2,411.38	2,410.60	-61.45	0.21
13,336.00	90.70	357.90	11,050.91	2,504.36	2,503.53	-64.78	0.15
13,429.00	90.90	357.90	11,049.61	2,597.35	2,596.46	-68.19	0.22
13,521.00	90.80	357.70	11,048.25	2,689.33	2,688.38	-71.72	0.24
13,614.00	90.80	357.90	11,046.95	2,782.32	2,781.30	-75.29	0.22

Company: Legacy Reserves
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Local Co-ordinate Reference:
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Well Lea Unit #66H
RKB @ 3694.01ft
RKB @ 3694.01ft
Grid
Minimum Curvature
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Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
13,708.00	90.90	357.70	11,045.56	2,876.30	2,875.22	-78.90	0.24
13,801.00	91.10	357.70	11,043.93	2,969.28	2,968.13	-82.63	0.22
13,893.00	91.00	357.30	11,042.25	3,061.25	3,060.03	-86.64	0.45
13,986.00	91.30	357.90	11,040.38	3,154.22	3,152.93	-90.53	0.72
14,079.00	91.00	357.30	11,038.52	3,247.19	3,245.83	-94.43	0.72
14,173.00	90.90	357.30	11,036.96	3,341.16	3,339.71	-98.86	0.11
14,266.00	90.70	358.40	11,035.66	3,434.15	3,432.63	-102.34	1.20
14,359.00	90.90	359.50	11,034.36	3,527.13	3,525.61	-104.05	1.20
14,453.00	90.80	359.10	11,032.97	3,621.11	3,619.59	-105.20	0.44
14,546.00	90.80	359.10	11,031.67	3,714.10	3,712.57	-106.66	0.00
14,639.00	90.90	359.10	11,030.29	3,807.08	3,805.55	-108.12	0.11
14,732.00	90.90	359.50	11,028.83	3,900.06	3,898.53	-109.25	0.43
14,825.00	90.90	359.30	11,027.37	3,993.03	3,991.51	-110.23	0.22
14,917.00	90.90	359.10	11,025.92	4,085.01	4,083.49	-111.51	0.22
15,010.00	91.10	359.10	11,024.30	4,177.99	4,176.47	-112.97	0.22
15,103.00	91.10	358.90	11,022.51	4,270.97	4,269.44	-114.60	0.22
15,196.00	91.00	358.90	11,020.81	4,363.95	4,362.40	-116.38	0.11
15,290.00	90.90	359.10	11,019.25	4,457.94	4,456.38	-118.02	0.24
15,383.00	90.80	358.90	11,017.87	4,550.92	4,549.35	-119.64	0.24
15,476.00	90.80	358.40	11,016.57	4,643.91	4,642.32	-121.83	0.54
15,569.00	90.80	358.00	11,015.27	4,736.90	4,735.26	-124.76	0.43
15,663.00	90.90	358.20	11,013.88	4,830.89	4,829.20	-127.87	0.24
15,756.00	90.80	358.40	11,012.50	4,923.88	4,922.15	-130.63	0.24
15,850.00	90.70	358.40	11,011.27	5,017.87	5,016.10	-133.25	0.11
15,943.00	90.70	358.20	11,010.13	5,110.86	5,109.05	-136.01	0.22
16,036.00	90.80	358.20	11,008.91	5,203.86	5,202.00	-138.93	0.11
16,130.00	90.70	358.00	11,007.68	5,297.85	5,295.94	-142.05	0.24
16,224.00	90.70	358.00	11,006.54	5,391.84	5,389.88	-145.33	0.00
16,317.00	90.80	357.90	11,005.32	5,484.82	5,482.81	-148.66	0.15
16,410.00	90.70	357.70	11,004.10	5,577.81	5,575.73	-152.23	0.24
16,480.66	90.78	357.70	11,003.19	5,648.46	5,646.33	-155.06	0.11
IP-66H							
16,504.00	90.80	357.70	11,002.87	5,671.79	5,669.65	-156.00	0.11
16,597.00	90.70	357.70	11,001.65	5,764.78	5,762.57	-159.73	0.11
16,691.00	90.80	357.90	11,000.42	5,858.76	5,856.49	-163.34	0.24
16,785.00	90.60	358.00	10,999.27	5,952.75	5,950.42	-166.70	0.24
16,878.00	90.70	357.70	10,998.22	6,045.74	6,043.35	-170.19	0.34
16,972.00	90.60	357.70	10,997.15	6,139.73	6,137.27	-173.96	0.11
17,065.00	90.70	357.30	10,996.10	6,232.71	6,230.17	-178.02	0.44
17,158.00	90.70	357.00	10,994.96	6,325.68	6,323.05	-182.64	0.32
17,252.00	90.70	357.20	10,993.81	6,419.64	6,416.92	-187.40	0.21
17,345.00	91.80	358.20	10,991.78	6,512.61	6,509.82	-191.13	1.60
17,439.00	91.70	359.60	10,988.91	6,606.56	6,603.76	-192.93	1.49
17,532.00	91.80	1.60	10,986.07	6,699.45	6,696.71	-191.96	2.15
17,625.00	91.70	1.40	10,983.23	6,792.27	6,789.63	-189.53	0.24

Company: Legacy Reserves
Project: Lea County, NM (NAD83)
Site: Lea
Well: Lea Unit #66H
Wellbore: Original Wellbore
Design: Original Wellbore

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

Well Lea Unit #66H
 RKB @ 3694.01ft
 RKB @ 3694.01ft
 Grid
 Minimum Curvature
 EDM 5000.1 Single User Db

Survey

MD (ft)	Inc (°)	Azi (azimuth) (°)	TVD (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100usft)
17,719.00	91.50	1.20	10,980.61	6,886.12	6,883.57	-187.39	0.30
17,813.00	91.50	1.00	10,978.15	6,979.99	6,977.52	-185.59	0.21
17,906.00	91.50	0.90	10,975.71	7,072.87	7,070.48	-184.05	0.11
18,000.00	91.70	0.50	10,973.09	7,166.76	7,164.43	-182.90	0.48
18,093.00	91.60	0.50	10,970.41	7,259.66	7,257.39	-182.09	0.11
18,186.00	91.60	359.30	10,967.81	7,352.59	7,350.35	-182.25	1.29
18,279.00	91.40	357.00	10,965.38	7,445.55	7,443.27	-185.25	2.48
18,373.00	90.70	357.20	10,963.66	7,539.51	7,537.13	-190.01	0.77
18,466.00	90.50	359.10	10,962.68	7,632.50	7,630.07	-193.01	2.05
18,559.00	90.30	358.20	10,962.03	7,725.50	7,723.04	-195.20	0.99
18,653.00	90.40	357.20	10,961.46	7,819.49	7,816.96	-198.97	1.07
18,746.00	90.40	356.30	10,960.81	7,912.44	7,909.81	-204.25	0.97
18,839.00	91.10	356.30	10,959.59	8,005.37	8,002.61	-210.25	0.75
18,933.00	91.50	357.70	10,957.46	8,099.31	8,096.45	-215.16	1.55
19,026.00	91.70	358.20	10,954.86	8,192.27	8,189.36	-218.49	0.58
19,119.00	91.60	358.20	10,952.19	8,285.23	8,282.27	-221.41	0.11
19,213.00	91.60	358.20	10,949.56	8,379.19	8,376.19	-224.36	0.00
19,306.00	91.60	358.00	10,946.96	8,472.16	8,469.10	-227.44	0.21
19,399.00	91.50	357.70	10,944.45	8,565.12	8,562.00	-230.93	0.34
19,419.00	91.50	357.90	10,943.93	8,585.11	8,581.98	-231.70	1.00
19,447.00	91.50	357.90	10,943.19	8,613.10	8,609.95	-232.72	0.00

BHL/LTP-66H

Checked By: _____ Approved By: _____ Date: _____