PHOENIX
TECHNOLOGY SERVICES USA INC.
Celebrating 20 Years of Focused Solutions
3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

March 6, 2018

Oil Conservation Division
State of New Mexico
1625 N. French Drive
District 1 - Hobbs
Hobbs, New Mexico 88240

Attention: Regulatory Department

Re: Legacy Reserves
Lea Unit # 50H
Lea County, New Mexico
API # 30-025-44411
Job No. 62489

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Noe Garza	50H	0	5,500	3/8/18	3/8/18	Gyro

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964

PHOENIX TECHNOLOGY SERVICES

Company: Legacy

Job #: 62489

Well Name: Lea Unit # 50H

County/State: Lea Co., New Mexico

Survey Instrument Type: North Seek Rate Gyro

API # 30-025-44411

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-03-08	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-03-08	5500	0.94	335.33

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
-0.43

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

To the best of my knowledge I certify this survey data to be correct and true

Date: 03-06-18

Print Name: Noe Garza

Signature:

PHOENIX TECHNOLOGY SERVICES

Company: Legacy
Well: Lea Unit # 50H
Location: Lea Co., New Mexico
Rig: McVay 4

Job Number: 62489
Grid Corr.: -0.43
Lat: 32.60
Long: -103.51

Date: 03-08-18
Calculation Method: Minimum Curvature
Proposed Azimuth:
RKB - MSL in feet:
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
Enter Tie-In Survey on Line 10						**FIELD COPY, NON-DEFINITIVE**							
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.40	122.88	100	100.00	-0.19	0.19 S	0.29 E	0.35	122.88	0.40	0.40	122.88
	200.00	0.18	67.62	100	200.00	-0.32	0.32 S	0.73 E	0.80	113.57	0.33	-0.22	-55.26
	300.00	0.39	83.02	100	300.00	-0.22	0.22 S	1.21 E	1.23	100.18	0.22	0.21	15.40
	400.00	0.37	70.53	100	399.99	-0.07	0.07 S	1.86 E	1.86	92.13	0.09	-0.02	-12.49
	500.00	0.35	359.19	100	499.99	0.34	0.34 N	2.16 E	2.18	80.94	0.42	-0.02	288.66
	600.00	0.36	154.20	100	599.99	0.37	0.37 N	2.29 E	2.32	80.90	0.69	0.01	-204.99
	700.00	0.40	179.19	100	699.99	-0.27	0.27 S	2.43 E	2.45	96.23	0.17	0.04	24.99
	800.00	0.58	223.70	100	799.99	-0.98	0.98 S	2.09 E	2.31	115.17	0.41	0.18	44.51
	900.00	0.39	240.79	100	899.98	-1.51	1.51 S	1.44 E	2.09	136.41	0.24	-0.19	17.09
	1000.00	0.10	290.06	100	999.98	-1.65	1.65 S	1.06 E	1.96	147.25	0.33	-0.29	49.27
	1100.00	0.44	104.55	100	1099.98	-1.71	1.71 S	1.35 E	2.18	141.79	0.54	0.34	-185.51
	1200.00	0.54	152.64	100	1199.98	-2.23	2.23 S	1.94 E	2.95	139.00	0.41	0.10	48.09
	1300.00	0.29	192.49	100	1299.98	-2.90	2.90 S	2.10 E	3.58	144.05	0.37	-0.25	39.85
	1400.00	0.26	148.71	100	1399.97	-3.34	3.34 S	2.16 E	3.98	147.04	0.21	-0.03	-43.78
	1500.00	0.63	190.88	100	1499.97	-4.07	4.07 S	2.18 E	4.62	151.86	0.47	0.37	42.17
	1600.00	0.49	306.14	100	1599.97	-4.36	4.36 S	1.73 E	4.69	158.37	0.95	-0.14	115.26
	1700.00	0.21	273.91	100	1699.97	-4.09	4.09 S	1.20 E	4.27	163.66	0.33	-0.28	-32.23
	1800.00	0.41	170.95	100	1799.97	-4.43	4.43 S	1.07 E	4.56	166.39	0.50	0.20	-102.96
	1900.00	0.90	152.62	100	1899.96	-5.48	5.48 S	1.49 E	5.68	164.79	0.53	0.49	-18.33
	2000.00	0.96	174.06	100	1999.95	-7.02	7.02 S	1.94 E	7.28	164.55	0.35	0.06	21.44
	2100.00	0.73	146.55	100	2099.94	-8.38	8.38 S	2.38 E	8.71	164.17	0.46	-0.23	-27.51
	2200.00	0.48	161.57	100	2199.93	-9.31	9.31 S	2.86 E	9.74	162.92	0.29	-0.25	15.02
	2300.00	0.62	169.20	100	2299.93	-10.24	10.24 S	3.09 E	10.70	163.18	0.16	0.14	7.63
	2400.00	0.80	172.98	100	2399.92	-11.46	11.46 S	3.28 E	11.92	164.03	0.19	0.18	3.78
	2500.00	1.08	137.61	100	2499.90	-12.85	12.85 S	4.00 E	13.46	162.70	0.63	0.28	-35.37
	2600.00	1.25	134.54	100	2599.88	-14.31	14.31 S	5.41 E	15.30	159.28	0.18	0.17	-3.07
	2700.00	1.10	121.89	100	2699.86	-15.58	15.58 S	7.01 E	17.09	155.79	0.30	-0.15	-12.65

PHOENIX
TECHNOLOGY SERVICES

Company:	Legacy	Job Number:	62489	Calculation Method:	Minimum Curvature
Well:	Lea Unit # 50H	Grid Corr.:	-0.43	Proposed Azimuth:	
Location:	Lea Co., New Mexico	Lat:	32.60	RKB - MSL in feet:	
Rig:	McVay 4	Long:	-103.51	Tie Into:	Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	2800.00	1.13	128.08	100	2799.84	-16.70	16.70 S	8.60 E	18.78	152.76	0.12	0.03	6.19
	2900.00	1.72	123.61	100	2899.81	-18.14	18.14 S	10.62 E	21.02	149.64	0.60	0.59	-4.47
	3000.00	2.76	113.34	100	2999.74	-19.92	19.92 S	14.08 E	24.40	144.74	1.11	1.04	-10.27
	3100.00	2.52	103.85	100	3099.63	-21.40	21.40 S	18.43 E	28.24	139.27	0.50	-0.24	-9.49
	3200.00	2.05	82.54	100	3199.55	-21.70	21.70 S	22.34 E	31.14	134.17	0.96	-0.47	-21.31
	3300.00	1.45	74.05	100	3299.50	-21.12	21.12 S	25.33 E	32.98	129.82	0.65	-0.60	-8.49
	3400.00	1.43	76.24	100	3399.47	-20.47	20.47 S	27.76 E	34.49	126.41	0.06	-0.02	2.19
	3500.00	1.37	63.54	100	3499.44	-19.64	19.64 S	30.04 E	35.89	123.18	0.32	-0.06	-12.70
	3600.00	1.14	338.11	100	3599.43	-18.19	18.19 S	30.74 E	35.72	120.61	1.71	-0.23	274.57
	3700.00	1.53	300.11	100	3699.40	-16.60	16.60 S	29.21 E	33.60	119.60	0.94	0.39	-38.00
	3800.00	1.21	305.08	100	3799.37	-15.32	15.32 S	27.19 E	31.21	119.39	0.34	-0.32	4.97
	3900.00	1.82	297.25	100	3899.34	-13.98	13.98 S	24.92 E	28.57	119.30	0.64	0.61	-7.83
	4000.00	2.23	278.03	100	3999.28	-12.99	12.99 S	21.58 E	25.18	121.04	0.79	0.41	-19.22
	4100.00	2.10	273.88	100	4099.20	-12.59	12.59 S	17.82 E	21.82	125.23	0.20	-0.13	-4.15
	4200.00	1.99	277.33	100	4199.14	-12.24	12.24 S	14.27 E	18.81	130.62	0.17	-0.11	3.45
	4300.00	2.31	286.64	100	4299.07	-11.45	11.45 S	10.62 E	15.61	137.14	0.47	0.32	9.31
	4400.00	2.14	289.58	100	4398.99	-10.24	10.24 S	6.93 E	12.37	145.91	0.20	-0.17	2.94
	4500.00	1.51	286.83	100	4498.94	-9.24	9.24 S	3.91 E	10.03	157.05	0.64	-0.63	-2.75
	4600.00	0.98	317.69	100	4598.92	-8.22	8.22 S	2.07 E	8.48	165.84	0.84	-0.53	30.86
	4700.00	0.60	317.30	100	4698.91	-7.20	7.20 S	1.14 E	7.29	170.98	0.38	-0.38	-0.39
	4800.00	0.59	326.12	100	4798.91	-6.39	6.39 S	0.50 E	6.41	175.51	0.09	-0.01	8.82
	4900.00	0.66	327.88	100	4898.90	-5.48	5.48 S	0.09 W	5.48	180.96	0.07	0.07	1.76
	5000.00	0.47	357.42	100	4998.90	-4.58	4.58 S	0.42 W	4.60	185.20	0.34	-0.19	29.54
	5100.00	0.60	342.24	100	5098.89	-3.67	3.67 S	0.59 W	3.72	189.20	0.19	0.13	-15.18
	5200.00	0.78	1.70	100	5198.88	-2.49	2.49 S	0.73 W	2.60	196.41	0.29	0.18	-340.54
	5300.00	0.49	318.47	100	5298.88	-1.49	1.49 S	1.00 W	1.79	213.76	0.54	-0.29	316.77
	5400.00	0.81	9.60	100	5398.87	-0.47	0.47 S	1.16 W	1.26	247.79	0.63	0.32	-308.87
	5500.00	0.94	335.33	100	5498.86	0.97	0.97 N	1.39 W	1.69	304.89	0.53	0.13	325.73

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

HOBBS OCD
MAR 19 2018
RECEIVED

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SEP 12 2017

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-44011	2209	Antelope Ridge West; Bone Spring

4 Property Code	5 Property Name	6 Well Number
319574	PRONGHORN 15 B3CN FED COM	1H

7 OGRID NO.	8 Operator Name	9 Elevation
14744	MEWBOURNE OIL COMPANY	3397'

10 Surface Location

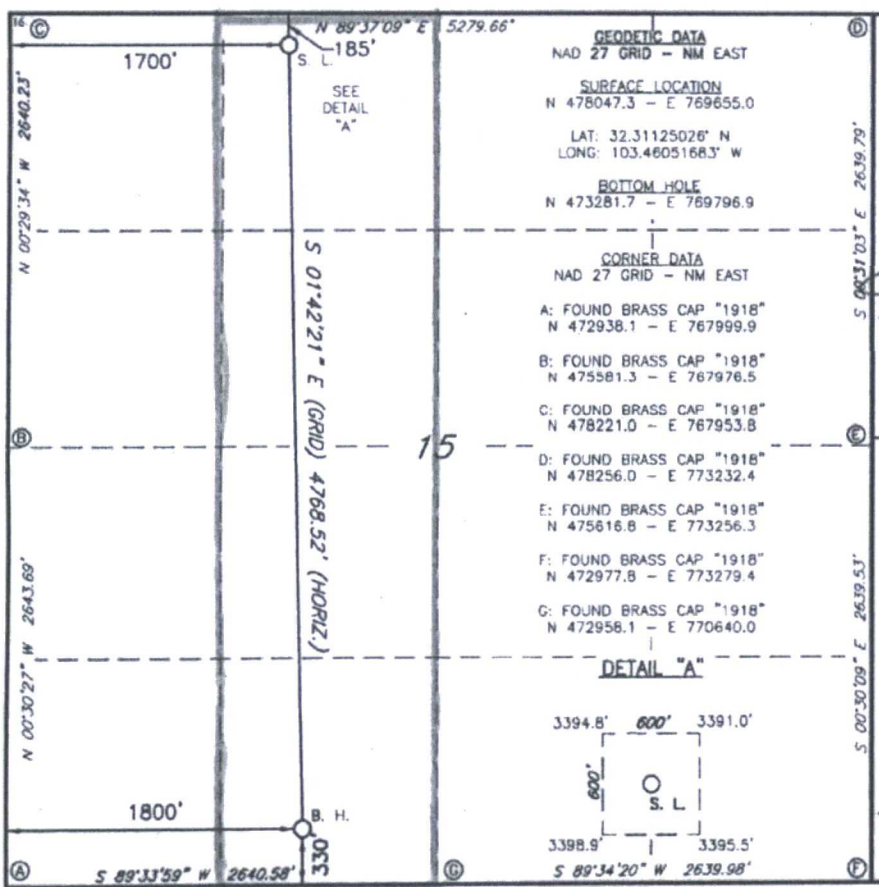
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
C	15	23S	34E		185	NORTH	1700	WEST	LEA

11 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
N	15	23S	34E		330	SOUTH	1800	WEST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
160			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

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

Jackie Lathan 9/12/17
Signature Date

Jackie Lathan
Printed Name

E-mail Address

18 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.

4-29-15
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT
NEW MEXICO
19680
PROFESSIONAL SURVEYOR

Robert M. Howett

19680
Certificate Number

RRC - Firm No.: TX 10193838 NM 4655451 - Job No.: LS1504151

PHOENIX
TECHNOLOGY SERVICES USA INC.
Celebrating 20 Years of Focused Solutions
3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

March 8, 2018

Oil Conservation Division
State of New Mexico
1625 N. French Drive
Hobbs, New Mexico 88240

HOBBS OCD
MAR 19 2018
RECEIVED

Dear District 1 - Hobbs

Attention: Regulatory Department

Re: Mewbourne Oil
Pronghorn 15 B3CN Fed Com # 1H
Lea County, New Mexico
API #30-025-44011
Job No. 62470

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Noe Garza	1H	0	1,646	3/4/18	3/4/18	Gyro

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964

PHOENIX TECHNOLOGY SERVICES

Company: Mewbourne

Job #: 62470

Well Name: Pronghorn 15 B3CN Fed Com # 1H

County/State: Lea Co., New Mexico

Survey Instrument Type: North Seek Rate Gyro

API # 30-025-44011

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-03-04	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-03-04	1646	5.75	207.2

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
-0.47

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

To the best of my knowledge I certify this survey data to be correct and true

Date: 03-04-18

Print Name: Noe Garza

Signature:

PHOENIX TECHNOLOGY SERVICES

Company:	Mewbourne	Job Number:	62470	Date:	03-04-18
Well:	Pronghorn 15 B3CN Fed Com # 1H	Grid Corr.:	-0.47	Calculation Method:	Minimum Curvature
Location:	Lea Co., New Mexico	Lat:	32.31	Proposed Azimuth:	
Rig:	Patterson 217	Long:	-103.46	RKB - MSL in feet:	28.5
				Tie Into:	Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
Enter Tie-In Survey on Line 10						**FIELD COPY, NON-DEFINITIVE**							
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.66	63.89	100	100.00	0.25	0.25 N	0.52 E	0.58	63.89	0.66	0.66	63.89
	200.00	0.39	20.31	100	199.99	0.83	0.83 N	1.15 E	1.42	54.37	0.46	-0.27	-43.58
	300.00	0.47	104.58	100	299.99	1.04	1.04 N	1.67 E	1.97	58.00	0.58	0.08	84.27
	400.00	0.35	30.23	100	399.99	1.20	1.20 N	2.22 E	2.52	61.53	0.50	-0.12	-74.35
	500.00	0.87	58.19	100	499.98	1.87	1.87 N	3.02 E	3.55	58.25	0.58	0.52	27.96
	600.00	0.46	57.01	100	599.98	2.49	2.49 N	4.00 E	4.71	58.14	0.41	-0.41	-1.18
	700.00	0.83	92.27	100	699.97	2.68	2.68 N	5.06 E	5.72	62.13	0.53	0.37	35.26
	800.00	0.69	145.65	100	799.96	2.15	2.15 N	6.12 E	6.49	70.66	0.69	-0.14	53.38
	900.00	1.45	183.47	100	899.95	0.39	0.39 N	6.39 E	6.40	86.51	1.00	0.76	37.82
	1000.00	3.73	200.46	100	999.84	-3.92	3.92 S	5.17 E	6.49	127.17	2.38	2.28	16.99
	1100.00	5.77	218.57	100	1099.50	-10.90	10.90 S	0.90 E	10.94	175.28	2.51	2.04	18.11
	1200.00	6.78	216.14	100	1198.90	-19.60	19.60 S	5.71 W	20.41	196.26	1.04	1.01	-2.43
	1300.00	7.31	209.23	100	1298.14	-29.92	29.92 S	12.30 W	32.35	202.35	1.00	0.53	-6.91
	1400.00	6.79	206.95	100	1397.39	-40.74	40.74 S	18.09 W	44.57	203.94	0.59	-0.52	-2.28
	1500.00	5.73	206.71	100	1496.79	-50.47	50.47 S	23.01 W	55.47	204.51	1.06	-1.06	-0.24
	1600.00	5.72	208.02	100	1596.29	-59.33	59.33 S	27.60 W	65.43	204.95	0.13	-0.01	1.31
	1646.00	5.75	207.20	46	1642.06	-63.40	63.40 S	29.73 W	70.02	205.12	0.19	0.07	-1.78