



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

July 19, 2017

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

HOBBS OCD
AUG 17 2017
RECEIVED

Attention: Regulatory Department

Re: Legacy Reserves
Hamon A Federal Com 5H
Lea County, New Mexico
API # 30-025-43230
Job No. 61489

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	
Andy Askew	5H	0	5,375	7/6/17	7/6/17	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

HOBBS OCD

AUG 17 2017

30-025-43230

SURVEY CERTIFICATION FORM



PHOENIX
TECHNOLOGY SERVICES

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

Company: Legacy

Job #: 61489

Well Name: Hamon A Federal Com 5H

County/State: Lea/NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-025-43230

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 (°)
2017-07-06	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2017-07-06	5375	12.49	100.22

Projected TD Survey

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

Grid Correction
-0.4

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: 7-6-17

Print Name: Andy Askew

Signature: *Andy Askew*



Company: Legacy
 Well: Hamon A Federal Com 5H
 Location: Lea Co., NM
 Rig: McVay 4

Job Number: 61489
 Grid Corr.: -0.40
 Lat: 32.59
 Long: -103.59

Date: 07-06-17
 Calculation Method: Minimum Curvature
 Proposed Azimuth: _____
 RKB - MSL in feet: 21
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10													
FIELD COPY, NON-DEFINITIVE													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.94	172.22	100	100.00	-0.81	0.81 S	0.11 E	0.82	172.22	0.94	0.94	172.22
	200.00	0.82	172.20	100	199.98	-2.33	2.33 S	0.32 E	2.36	172.21	0.12	-0.12	-0.02
	300.00	0.80	148.43	100	299.97	-3.64	3.64 S	0.78 E	3.72	167.87	0.33	-0.02	-23.77
	400.00	0.85	145.01	100	399.96	-4.84	4.84 S	1.57 E	5.09	162.00	0.07	0.05	-3.42
	500.00	0.73	144.14	100	499.95	-5.96	5.96 S	2.37 E	6.42	158.32	0.12	-0.12	-0.87
	600.00	0.53	158.54	100	599.95	-6.91	6.91 S	2.91 E	7.50	157.14	0.25	-0.20	14.40
	700.00	0.45	182.29	100	699.94	-7.73	7.73 S	3.07 E	8.32	158.37	0.22	-0.08	23.75
	800.00	0.47	173.77	100	799.94	-8.53	8.53 S	3.10 E	9.08	160.06	0.07	0.02	-8.52
	900.00	0.32	206.42	100	899.94	-9.19	9.19 S	3.02 E	9.67	161.83	0.26	-0.15	32.65
	1000.00	0.29	247.67	100	999.94	-9.54	9.54 S	2.66 E	9.90	164.43	0.22	-0.03	41.25
	1100.00	0.32	253.08	100	1099.94	-9.72	9.72 S	2.16 E	9.95	167.49	0.04	0.03	5.41
	1200.00	0.77	277.71	100	1199.93	-9.71	9.71 S	1.22 E	9.78	172.82	0.50	0.45	24.63
	1300.00	0.94	271.70	100	1299.92	-9.59	9.59 S	0.26 W	9.60	181.57	0.19	0.17	-6.01
	1400.00	1.13	267.36	100	1399.90	-9.61	9.61 S	2.07 W	9.83	192.14	0.21	0.19	-4.34
	1500.00	1.15	268.31	100	1499.88	-9.69	9.69 S	4.06 W	10.50	202.71	0.03	0.02	0.95
	1600.00	1.33	248.08	100	1599.86	-10.15	10.15 S	6.13 W	11.86	211.15	0.47	0.18	-20.23
	1700.00	1.29	246.73	100	1699.83	-11.03	11.03 S	8.25 W	13.77	216.78	0.05	-0.04	-1.35
	1800.00	0.69	249.12	100	1799.82	-11.69	11.69 S	9.84 W	15.28	220.10	0.60	-0.60	2.39
	1900.00	0.58	239.47	100	1899.81	-12.16	12.16 S	10.84 W	16.29	221.72	0.15	-0.11	-9.65
	2000.00	0.43	268.96	100	1999.81	-12.42	12.42 S	11.65 W	17.03	223.16	0.30	-0.15	29.49
	2100.00	0.18	232.82	100	2099.81	-12.53	12.53 S	12.15 W	17.45	224.13	0.30	-0.25	-36.14
	2200.00	0.26	224.87	100	2199.81	-12.78	12.78 S	12.44 W	17.83	224.22	0.09	0.08	-7.95
	2300.00	0.11	328.48	100	2299.81	-12.86	12.86 S	12.65 W	18.04	224.52	0.31	-0.15	103.61
	2400.00	0.11	154.91	100	2399.81	-12.87	12.87 S	12.66 W	18.05	224.53	0.22	0.00	-173.57
	2500.00	0.23	181.34	100	2499.81	-13.15	13.15 S	12.62 W	18.23	223.82	0.14	0.12	26.43
	2600.00	0.17	348.43	100	2599.81	-13.21	13.21 S	12.66 W	18.29	223.78	0.40	-0.06	167.09
	2700.00	0.73	141.41	100	2699.80	-13.56	13.56 S	12.29 W	18.30	222.18	0.88	0.56	-207.02



Company: Legacy
 Well: Hamon A Federal Com 5H
 Location: Lea Co., NM
 Rig: McVay 4

Job Number: 61489
 Grid Corr.: -0.40
 Lat: 32.59
 Long: -103.59

Calculation Method: Minimum Curvature
 Proposed Azimuth: _____
 RKB - MSL in feet: 21
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	2800.00	0.34	138.66	100	2799.80	-14.28	14.28 S	11.69 W	18.46	219.31	0.39	-0.39	-2.75
	2900.00	0.53	69.72	100	2899.80	-14.34	14.34 S	11.07 W	18.12	217.65	0.52	0.19	-68.94
	3000.00	0.68	164.80	100	2999.79	-14.76	14.76 S	10.48 W	18.10	215.37	0.90	0.15	95.08
	3100.00	0.72	62.91	100	3099.79	-15.04	15.04 S	9.76 W	17.93	212.98	1.09	0.04	-101.89
	3200.00	0.46	64.07	100	3199.78	-14.58	14.58 S	8.84 W	17.05	211.23	0.26	-0.26	1.16
	3300.00	0.22	148.50	100	3299.78	-14.57	14.57 S	8.38 W	16.81	209.90	0.49	-0.24	84.43
	3400.00	3.81	242.36	100	3399.71	-16.28	16.28 S	11.22 W	19.77	214.59	3.83	3.59	93.86
	3500.00	5.12	253.54	100	3499.40	-19.08	19.08 S	18.45 W	26.54	224.03	1.57	1.31	11.18
	3600.00	5.57	251.86	100	3598.97	-21.86	21.86 S	27.34 W	35.00	231.36	0.48	0.45	-1.68
	3700.00	3.61	241.03	100	3698.65	-24.89	24.89 S	34.70 W	42.71	234.35	2.13	-1.96	-10.83
	3800.00	1.20	236.22	100	3798.55	-27.00	27.00 S	38.33 W	46.88	234.84	2.42	-2.41	-4.81
	3900.00	0.10	305.89	100	3898.54	-27.53	27.53 S	39.27 W	47.96	234.97	1.17	-1.10	69.67
	4000.00	0.26	135.41	100	3998.54	-27.64	27.64 S	39.18 W	47.95	234.80	0.36	0.16	-170.48
	4100.00	0.21	203.54	100	4098.54	-27.97	27.97 S	39.10 W	48.07	234.42	0.27	-0.05	68.13
	4200.00	0.35	162.72	100	4198.54	-28.43	28.43 S	39.08 W	48.33	233.96	0.24	0.14	-40.82
	4300.00	0.81	115.56	100	4298.54	-29.03	29.03 S	38.35 W	48.10	232.88	0.63	0.46	-47.16
	4400.00	1.41	88.99	100	4398.52	-29.31	29.31 S	36.48 W	46.80	231.22	0.78	0.60	-26.57
	4500.00	1.92	78.79	100	4498.47	-28.96	28.96 S	33.61 W	44.37	229.25	0.59	0.51	-10.20
	4600.00	2.49	74.25	100	4598.40	-28.05	28.05 S	29.87 W	40.98	226.81	0.60	0.57	-4.54
	4700.00	2.99	83.52	100	4698.29	-27.16	27.16 S	25.19 W	37.05	222.84	0.67	0.50	9.27
	4800.00	3.81	85.18	100	4798.11	-26.59	26.59 S	19.29 W	32.85	215.96	0.83	0.82	1.66
	4900.00	5.08	99.48	100	4897.81	-27.04	27.04 S	11.61 W	29.43	203.24	1.68	1.27	14.30
	5000.00	6.32	101.50	100	4997.31	-28.87	28.87 S	1.85 W	28.93	183.67	1.26	1.24	2.02
	5100.00	7.50	96.84	100	5096.59	-30.74	30.74 S	10.02 E	32.33	161.94	1.31	1.18	-4.66
	5200.00	9.17	100.41	100	5195.53	-32.96	32.96 S	24.34 E	40.97	143.55	1.75	1.67	3.57
	5300.00	11.23	100.34	100	5293.94	-36.15	36.15 S	41.76 E	55.23	130.88	2.06	2.06	-0.07
	5375.00	12.49	100.22	75	5367.34	-38.90	38.90 S	56.93 E	68.95	124.34	1.68	1.68	-0.16

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 12, 2006
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

HOBBS OGD

HOBBS OGD

MAY 09 2016

AUG 17 2007

RECEIVED

RECEIVED

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-43230	Pool Code 96637	Pool Name TEAS; Bone Springs, EAST
Property Code 302795	Property Name HAMON FED COM A	Well Number 5H
OGRID No. 240974	Operator Name LEGACY RESERVES OPERATING LP	Elevation 3610'

Surface Location

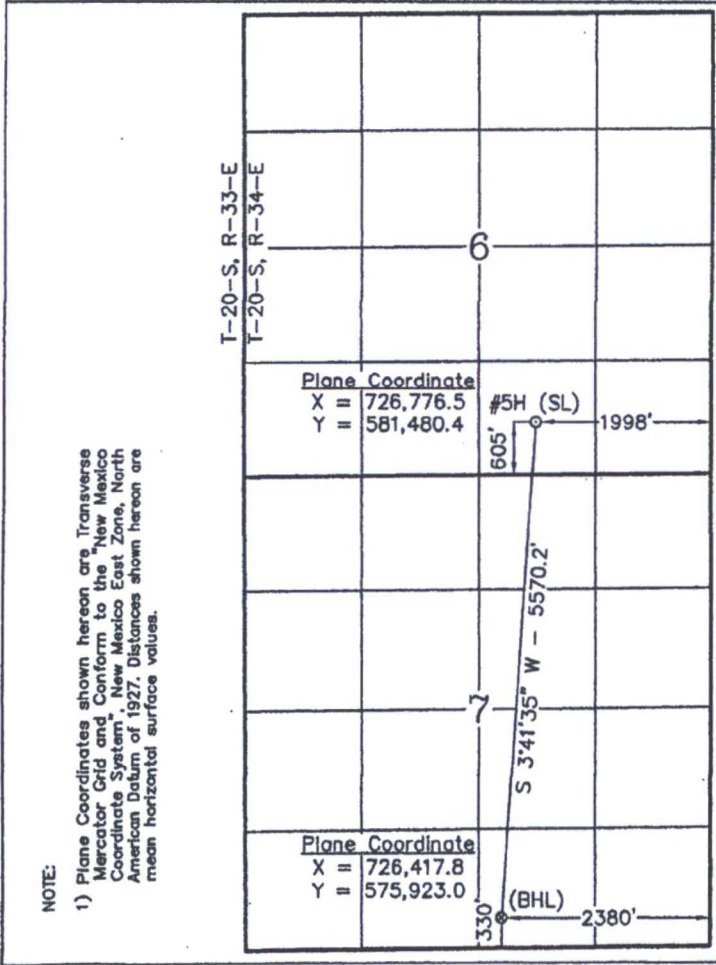
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	6	20 S	34 E		605	SOUTH	1998	EAST	LEA

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
0	7	20 S	34 E		330	SOUTH	2380	EAST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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 1927. Distances shown hereon are mean horizontal surface values.

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 interests 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.

Signature: *Barry W. Hunt* Date: 8/5/15
Printed Name: Barry W. Hunt

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.

Date of Survey: June 29, 2015
Signature & Seal of Professional Surveyor: *[Signature]*
Certificate No. 12185

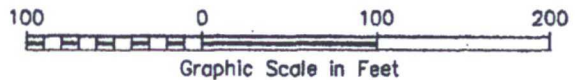
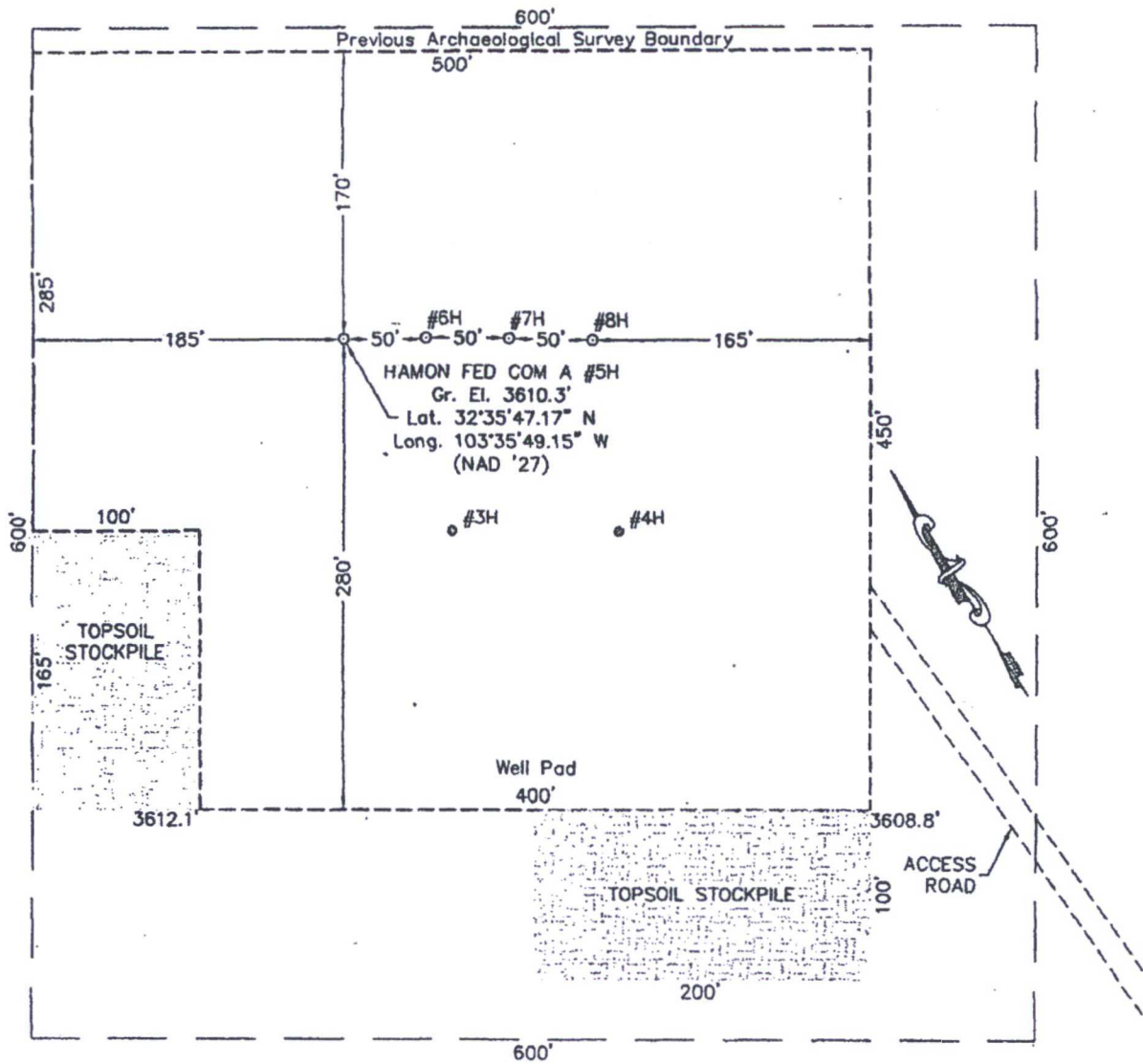
W.O. Num. 2015-0497

Certificate No. MACON McDONALD 12185

MAY 12 2016

SECTION 6, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY NEW MEXICO

L-2015-0491-A



DRIVING DIRECTIONS

FROM THE INTERSECTION OF STATE HIGHWAY 18 AND U.S. HIGHWAY 62-180 IN HOBBS, NEW MEXICO, GO WEST AND SOUTHWEST ON U.S. HIGHWAY 62-180 28.5 MILES TO LEASE ROAD ON SOUTH (LEFT) SIDE OF THE HIGHWAY, THEN GO SOUTH 0.9 MILE TO ANOTHER LEASE ROAD ON THE NORTH (LEFT) SIDE OF THE ROAD, THEN GO NORTH 0.7 MILE TO A POINT APPROXIMATELY 160 FEET EAST OF THE PROPOSED LOCATION.

LEGACY RESERVES OPERATING LP

HAMON FED COM A #5H

Located 605' FSL & 1998' FEL, Section 6
Township 20 South, Range 34 East, N.M.P.M.
Lea County, New Mexico

Drawn By: LVA / SC	Date: July 15, 2015
Scale: 1" = 100'	Field Book: 559 / 58-59
Revision Date: 8-21-2015	Quadrangle: Lea
W.O. No: 2015-0491	Dwg. No.: L-2015-0491-A



FIRM REGISTRATION NUMBER: 100682-00
110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX