



# PHOENIX

TECHNOLOGY SERVICES USA INC.

3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

30-025-41305

Celebrating 20 Years of Focused Solutions

September 21, 2017

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

Attention: Regulatory Department

Re: Legacy Reserves ✓  
Hamon A Fed Com 3H ✓  
Lea County, New Mexico  
API # 30-025-41305  
Job No. 61389

**HOBBS OCD**  
**SEP 28 2017**  
**RECEIVED**

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               | 3H                | 0               | 10,000 | 6/22/17         | 6/22/17 | 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

# SURVEY CERTIFICATION FORM

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



Company: Legacy

Job #: 61389

Well Name: Hamon A Fed Com 3H

County/State: Lea/ NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-025-41305

## 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 (°) |
|------------|------------|-----------------|-------------|
| 2017-06-22 | 0          | 0               | 0           |

## Last Survey

| Date       | Depth (ft) | Inclination (°) | Azimuth (°) |
|------------|------------|-----------------|-------------|
| 2017-06-22 | 10000      | 1.27            | 196.8       |

## 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: 6-23-17

Print Name: Andy Askew

Signature:



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

Date: 06-22-17  
 Calculation Method: Minimum Curvature  
 Proposed Azimuth:   
 RKB - MSL in feet: Ground  
 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            | 0.65              | 39.70         | 100                | 100.00                     | 0.44                  | 0.44 N      | 0.36 E   | 0.57          | 39.70       | 0.65                     | 0.65                | 39.70              |
|                                | 125.00            | 0.73              | 50.46         | 25                 | 125.00                     | 0.65                  | 0.65 N      | 0.58 E   | 0.87          | 41.67       | 0.61                     | 0.32                | 43.04              |
|                                | 150.00            | 0.58              | 50.45         | 25                 | 149.99                     | 0.83                  | 0.83 N      | 0.80 E   | 1.15          | 43.84       | 0.60                     | -0.60               | -0.04              |
|                                | 175.00            | 0.72              | 39.77         | 25                 | 174.99                     | 1.03                  | 1.03 N      | 0.99 E   | 1.43          | 43.98       | 0.74                     | 0.56                | -42.72             |
|                                | 200.00            | 0.62              | 71.27         | 25                 | 199.99                     | 1.19                  | 1.19 N      | 1.22 E   | 1.71          | 45.67       | 1.50                     | -0.40               | 126.00             |
|                                | 225.00            | 0.78              | 58.18         | 25                 | 224.99                     | 1.33                  | 1.33 N      | 1.50 E   | 2.00          | 48.40       | 0.90                     | 0.64                | -52.36             |
|                                | 250.00            | 0.65              | 43.48         | 25                 | 249.99                     | 1.52                  | 1.52 N      | 1.74 E   | 2.31          | 48.82       | 0.90                     | -0.52               | -58.80             |
|                                | 275.00            | 0.70              | 71.85         | 25                 | 274.99                     | 1.67                  | 1.67 N      | 1.98 E   | 2.59          | 49.85       | 1.34                     | 0.20                | 113.48             |
|                                | 300.00            | 0.86              | 72.03         | 25                 | 299.98                     | 1.78                  | 1.78 N      | 2.30 E   | 2.91          | 52.37       | 0.64                     | 0.64                | 0.72               |
|                                | 325.00            | 1.01              | 59.82         | 25                 | 324.98                     | 1.94                  | 1.94 N      | 2.67 E   | 3.31          | 53.96       | 0.99                     | 0.60                | -48.84             |
|                                | 350.00            | 1.07              | 55.90         | 25                 | 349.98                     | 2.19                  | 2.19 N      | 3.06 E   | 3.76          | 54.42       | 0.37                     | 0.24                | -15.68             |
|                                | 375.00            | 1.20              | 59.05         | 25                 | 374.97                     | 2.45                  | 2.45 N      | 3.47 E   | 4.25          | 54.79       | 0.58                     | 0.52                | 12.60              |
|                                | 400.00            | 1.05              | 71.83         | 25                 | 399.97                     | 2.66                  | 2.66 N      | 3.92 E   | 4.73          | 55.84       | 1.17                     | -0.60               | 51.12              |
|                                | 425.00            | 1.28              | 59.11         | 25                 | 424.96                     | 2.87                  | 2.87 N      | 4.37 E   | 5.23          | 56.70       | 1.38                     | 0.92                | -50.88             |
|                                | 450.00            | 1.53              | 61.35         | 25                 | 449.95                     | 3.18                  | 3.18 N      | 4.91 E   | 5.84          | 57.08       | 1.02                     | 1.00                | 8.96               |
|                                | 475.00            | 1.55              | 49.46         | 25                 | 474.94                     | 3.56                  | 3.56 N      | 5.46 E   | 6.51          | 56.91       | 1.28                     | 0.08                | -47.56             |
|                                | 500.00            | 1.81              | 61.33         | 25                 | 499.93                     | 3.97                  | 3.97 N      | 6.06 E   | 7.24          | 56.80       | 1.73                     | 1.04                | 47.48              |
|                                | 525.00            | 1.87              | 61.07         | 25                 | 524.92                     | 4.35                  | 4.35 N      | 6.76 E   | 8.04          | 57.24       | 0.24                     | 0.24                | -1.04              |
|                                | 550.00            | 1.94              | 51.94         | 25                 | 549.91                     | 4.81                  | 4.81 N      | 7.45 E   | 8.87          | 57.16       | 1.24                     | 0.28                | -36.52             |
|                                | 575.00            | 2.25              | 58.51         | 25                 | 574.89                     | 5.33                  | 5.33 N      | 8.20 E   | 9.78          | 57.01       | 1.57                     | 1.24                | 26.28              |
|                                | 600.00            | 2.08              | 69.34         | 25                 | 599.87                     | 5.74                  | 5.74 N      | 9.05 E   | 10.72         | 57.59       | 1.77                     | -0.68               | 43.32              |
|                                | 625.00            | 2.28              | 67.82         | 25                 | 624.85                     | 6.09                  | 6.09 N      | 9.93 E   | 11.65         | 58.48       | 0.83                     | 0.80                | -6.08              |
|                                | 650.00            | 2.36              | 63.17         | 25                 | 649.83                     | 6.51                  | 6.51 N      | 10.85 E  | 12.66         | 59.04       | 0.82                     | 0.32                | -18.60             |
|                                | 675.00            | 2.43              | 66.70         | 25                 | 674.81                     | 6.95                  | 6.95 N      | 11.80 E  | 13.70         | 59.49       | 0.65                     | 0.28                | 14.12              |
|                                | 700.00            | 2.44              | 63.50         | 25                 | 699.79                     | 7.40                  | 7.40 N      | 12.76 E  | 14.75         | 59.89       | 0.55                     | 0.04                | -12.80             |
|                                | 725.00            | 2.55              | 59.09         | 25                 | 724.77                     | 7.92                  | 7.92 N      | 13.72 E  | 15.84         | 59.98       | 0.88                     | 0.44                | -17.64             |
|                                | 750.00            | 2.40              | 64.01         | 25                 | 749.74                     | 8.44                  | 8.44 N      | 14.66 E  | 16.92         | 60.08       | 1.04                     | -0.60               | 19.68              |

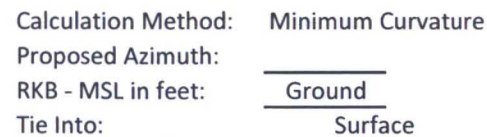


Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

Calculation Method: Minimum Curvature  
 Proposed Azimuth: Ground  
 RKB - MSL in feet: Ground  
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| 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) |                          |                     |                    |
|                  | 775.00            | 2.71              | 59.43         | 25                 | 774.72                   | 8.97                  | 8.97 N      | 15.64 E  | 18.03         | 60.17       | 1.48                     | 1.24                | -18.32             |
|                  | 800.00            | 2.41              | 57.45         | 25                 | 799.69                   | 9.55                  | 9.55 N      | 16.59 E  | 19.15         | 60.07       | 1.25                     | -1.20               | -7.92              |
|                  | 825.00            | 2.35              | 41.48         | 25                 | 824.67                   | 10.22                 | 10.22 N     | 17.38 E  | 20.16         | 59.54       | 2.65                     | -0.24               | -63.88             |
|                  | 850.00            | 2.17              | 49.75         | 25                 | 849.65                   | 10.91                 | 10.91 N     | 18.08 E  | 21.11         | 58.89       | 1.49                     | -0.72               | 33.08              |
|                  | 875.00            | 2.23              | 65.33         | 25                 | 874.63                   | 11.42                 | 11.42 N     | 18.88 E  | 22.06         | 58.84       | 2.40                     | 0.24                | 62.32              |
|                  | 900.00            | 2.35              | 57.96         | 25                 | 899.61                   | 11.89                 | 11.89 N     | 19.76 E  | 23.06         | 58.95       | 1.27                     | 0.48                | -29.48             |
|                  | 925.00            | 2.56              | 61.51         | 25                 | 924.59                   | 12.43                 | 12.43 N     | 20.68 E  | 24.13         | 58.99       | 1.04                     | 0.84                | 14.20              |
|                  | 950.00            | 2.44              | 61.24         | 25                 | 949.57                   | 12.95                 | 12.95 N     | 21.64 E  | 25.22         | 59.10       | 0.48                     | -0.48               | -1.08              |
|                  | 975.00            | 2.35              | 60.61         | 25                 | 974.55                   | 13.46                 | 13.46 N     | 22.55 E  | 26.26         | 59.17       | 0.38                     | -0.36               | -2.52              |
|                  | 1000.00           | 2.23              | 62.95         | 25                 | 999.53                   | 13.93                 | 13.93 N     | 23.43 E  | 27.26         | 59.26       | 0.61                     | -0.48               | 9.36               |
|                  | 1025.00           | 2.39              | 61.48         | 25                 | 1024.51                  | 14.40                 | 14.40 N     | 24.32 E  | 28.27         | 59.37       | 0.68                     | 0.64                | -5.88              |
|                  | 1050.00           | 2.22              | 61.69         | 25                 | 1049.48                  | 14.88                 | 14.88 N     | 25.21 E  | 29.27         | 59.44       | 0.68                     | -0.68               | 0.84               |
|                  | 1075.00           | 1.97              | 55.94         | 25                 | 1074.47                  | 15.35                 | 15.35 N     | 25.99 E  | 30.19         | 59.43       | 1.31                     | -1.00               | -23.00             |
|                  | 1100.00           | 1.80              | 57.05         | 25                 | 1099.45                  | 15.81                 | 15.81 N     | 26.68 E  | 31.01         | 59.35       | 0.70                     | -0.68               | 4.44               |
|                  | 1125.00           | 1.59              | 47.32         | 25                 | 1124.44                  | 16.26                 | 16.26 N     | 27.26 E  | 31.74         | 59.19       | 1.42                     | -0.84               | -38.92             |
|                  | 1150.00           | 1.51              | 50.64         | 25                 | 1149.43                  | 16.70                 | 16.70 N     | 27.77 E  | 32.40         | 58.98       | 0.48                     | -0.32               | 13.28              |
|                  | 1175.00           | 1.63              | 341.60        | 25                 | 1174.43                  | 17.25                 | 17.25 N     | 27.91 E  | 32.81         | 58.29       | 7.13                     | 0.48                | 1163.84            |
|                  | 1200.00           | 0.98              | 56.87         | 25                 | 1199.42                  | 17.70                 | 17.70 N     | 27.98 E  | 33.11         | 57.68       | 6.70                     | -2.60               | -1138.92           |
|                  | 1225.00           | 0.70              | 329.71        | 25                 | 1224.42                  | 17.95                 | 17.95 N     | 28.08 E  | 33.33         | 57.41       | 4.70                     | -1.12               | 1091.36            |
|                  | 1250.00           | 0.81              | 128.26        | 25                 | 1249.42                  | 17.97                 | 17.97 N     | 28.14 E  | 33.39         | 57.44       | 5.94                     | 0.44                | -805.80            |
|                  | 1275.00           | 0.67              | 337.77        | 25                 | 1274.42                  | 18.00                 | 18.00 N     | 28.23 E  | 33.48         | 57.48       | 5.73                     | -0.56               | 838.04             |
|                  | 1300.00           | 0.78              | 26.82         | 25                 | 1299.42                  | 18.28                 | 18.28 N     | 28.25 E  | 33.65         | 57.09       | 2.44                     | 0.44                | -1243.80           |
|                  | 1325.00           | 0.66              | 39.50         | 25                 | 1324.41                  | 18.55                 | 18.55 N     | 28.42 E  | 33.93         | 56.87       | 0.80                     | -0.48               | 50.72              |
|                  | 1350.00           | 0.42              | 48.61         | 25                 | 1349.41                  | 18.72                 | 18.72 N     | 28.58 E  | 34.16         | 56.77       | 1.02                     | -0.96               | 36.44              |
|                  | 1375.00           | 0.82              | 233.00        | 25                 | 1374.41                  | 18.67                 | 18.67 N     | 28.50 E  | 34.07         | 56.77       | 4.96                     | 1.60                | 737.56             |
|                  | 1400.00           | 0.63              | 9.49          | 25                 | 1399.41                  | 18.70                 | 18.70 N     | 28.38 E  | 33.99         | 56.62       | 5.39                     | -0.76               | -894.04            |
|                  | 1425.00           | 0.45              | 160.58        | 25                 | 1424.41                  | 18.74                 | 18.74 N     | 28.44 E  | 34.06         | 56.61       | 4.19                     | -0.72               | 604.36             |
|                  | 1450.00           | 0.24              | 33.89         | 25                 | 1449.41                  | 18.69                 | 18.69 N     | 28.50 E  | 34.08         | 56.74       | 2.50                     | -0.84               | -506.76            |
|                  | 1475.00           | 0.23              | 94.80         | 25                 | 1474.41                  | 18.73                 | 18.73 N     | 28.58 E  | 34.17         | 56.76       | 0.95                     | -0.04               | 243.64             |
|                  | 1500.00           | 0.24              | 229.29        | 25                 | 1499.41                  | 18.69                 | 18.69 N     | 28.59 E  | 34.16         | 56.82       | 1.73                     | 0.04                | 537.96             |



| 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) |                          |                     |                    |
|                  | 1525.00           | 0.30              | 323.80        | 25                 | 1524.41                  | 18.71                 | 18.71 N     | 28.51 E  | 34.10         | 56.72       | 1.59                     | 0.24                | 378.04             |
|                  | 1550.00           | 0.38              | 320.24        | 25                 | 1549.41                  | 18.83                 | 18.83 N     | 28.42 E  | 34.09         | 56.47       | 0.33                     | 0.32                | -14.24             |
|                  | 1575.00           | 0.26              | 41.70         | 25                 | 1574.41                  | 18.94                 | 18.94 N     | 28.40 E  | 34.14         | 56.31       | 1.71                     | -0.48               | -1114.16           |
|                  | 1600.00           | 0.41              | 344.42        | 25                 | 1599.41                  | 19.06                 | 19.06 N     | 28.42 E  | 34.22         | 56.14       | 1.39                     | 0.60                | 1210.88            |
|                  | 1625.00           | 0.46              | 321.64        | 25                 | 1624.41                  | 19.23                 | 19.23 N     | 28.33 E  | 34.24         | 55.83       | 0.71                     | 0.20                | -91.12             |
|                  | 1650.00           | 0.35              | 213.33        | 25                 | 1649.41                  | 19.24                 | 19.24 N     | 28.23 E  | 34.16         | 55.72       | 2.64                     | -0.44               | -433.24            |
|                  | 1675.00           | 0.74              | 7.03          | 25                 | 1674.41                  | 19.34                 | 19.34 N     | 28.20 E  | 34.20         | 55.56       | 4.26                     | 1.56                | -825.20            |
|                  | 1700.00           | 0.33              | 348.54        | 25                 | 1699.41                  | 19.57                 | 19.57 N     | 28.21 E  | 34.33         | 55.25       | 1.76                     | -1.64               | 1366.04            |
|                  | 1725.00           | 0.42              | 15.74         | 25                 | 1724.41                  | 19.73                 | 19.73 N     | 28.22 E  | 34.43         | 55.04       | 0.79                     | 0.36                | -1331.20           |
|                  | 1750.00           | 0.53              | 11.16         | 25                 | 1749.41                  | 19.93                 | 19.93 N     | 28.27 E  | 34.59         | 54.81       | 0.47                     | 0.44                | -18.32             |
|                  | 1775.00           | 0.51              | 307.55        | 25                 | 1774.40                  | 20.11                 | 20.11 N     | 28.20 E  | 34.64         | 54.50       | 2.19                     | -0.08               | 1185.56            |
|                  | 1800.00           | 0.38              | 325.94        | 25                 | 1799.40                  | 20.25                 | 20.25 N     | 28.07 E  | 34.61         | 54.19       | 0.77                     | -0.52               | 73.56              |
|                  | 1825.00           | 0.46              | 327.96        | 25                 | 1824.40                  | 20.40                 | 20.40 N     | 27.97 E  | 34.62         | 53.89       | 0.33                     | 0.32                | 8.08               |
|                  | 1850.00           | 0.52              | 132.29        | 25                 | 1849.40                  | 20.41                 | 20.41 N     | 28.00 E  | 34.65         | 53.91       | 3.88                     | 0.24                | -782.68            |
|                  | 1875.00           | 0.39              | 267.22        | 25                 | 1874.40                  | 20.33                 | 20.33 N     | 28.00 E  | 34.60         | 54.01       | 3.37                     | -0.52               | 539.72             |
|                  | 1900.00           | 0.59              | 357.06        | 25                 | 1899.40                  | 20.46                 | 20.46 N     | 27.91 E  | 34.60         | 53.76       | 2.83                     | 0.80                | 359.36             |
|                  | 1925.00           | 0.31              | 351.34        | 25                 | 1924.40                  | 20.65                 | 20.65 N     | 27.89 E  | 34.70         | 53.48       | 1.13                     | -1.12               | -22.88             |
|                  | 1950.00           | 0.46              | 300.34        | 25                 | 1949.40                  | 20.77                 | 20.77 N     | 27.79 E  | 34.69         | 53.23       | 1.43                     | 0.60                | -204.00            |
|                  | 1975.00           | 0.28              | 60.36         | 25                 | 1974.40                  | 20.85                 | 20.85 N     | 27.76 E  | 34.72         | 53.09       | 2.59                     | -0.72               | -959.92            |
|                  | 2000.00           | 0.42              | 63.52         | 25                 | 1999.40                  | 20.92                 | 20.92 N     | 27.89 E  | 34.87         | 53.13       | 0.57                     | 0.56                | 12.64              |
|                  | 2025.00           | 0.33              | 325.83        | 25                 | 2024.40                  | 21.02                 | 21.02 N     | 27.93 E  | 34.96         | 53.04       | 2.27                     | -0.36               | 1049.24            |
|                  | 2050.00           | 0.53              | 327.39        | 25                 | 2049.40                  | 21.18                 | 21.18 N     | 27.83 E  | 34.97         | 52.73       | 0.80                     | 0.80                | 6.24               |
|                  | 2075.00           | 0.57              | 330.91        | 25                 | 2074.40                  | 21.38                 | 21.38 N     | 27.71 E  | 35.00         | 52.34       | 0.21                     | 0.16                | 14.08              |
|                  | 2100.00           | 0.28              | 353.77        | 25                 | 2099.40                  | 21.55                 | 21.55 N     | 27.64 E  | 35.05         | 52.06       | 1.32                     | -1.16               | 91.44              |
|                  | 2125.00           | 0.29              | 198.27        | 25                 | 2124.40                  | 21.55                 | 21.55 N     | 27.62 E  | 35.03         | 52.03       | 2.23                     | 0.04                | -622.00            |
|                  | 2150.00           | 0.21              | 72.31         | 25                 | 2149.40                  | 21.51                 | 21.51 N     | 27.64 E  | 35.02         | 52.11       | 1.79                     | -0.32               | -503.84            |
|                  | 2175.00           | 0.33              | 1.75          | 25                 | 2174.40                  | 21.59                 | 21.59 N     | 27.69 E  | 35.11         | 52.05       | 1.31                     | 0.48                | -282.24            |
|                  | 2200.00           | 0.32              | 223.27        | 25                 | 2199.40                  | 21.61                 | 21.61 N     | 27.64 E  | 35.09         | 51.97       | 2.43                     | -0.04               | 886.08             |



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 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
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 Lat: 32.59  
 Long: -103.59

Calculation Method: Minimum Curvature  
 Proposed Azimuth: Ground  
 RKB - MSL in feet: Ground  
 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) |                          |                     |                    |
|                  | 2275.00           | 0.19              | 163.36        | 25                 | 2274.40                  | 21.69                 | 21.69 N     | 27.36 E  | 34.92         | 51.60       | 2.04                     | -0.52               | -692.80            |
|                  | 2300.00           | 0.18              | 195.66        | 25                 | 2299.40                  | 21.61                 | 21.61 N     | 27.37 E  | 34.87         | 51.70       | 0.41                     | -0.04               | 129.20             |
|                  | 2325.00           | 0.13              | 296.53        | 25                 | 2324.40                  | 21.59                 | 21.59 N     | 27.33 E  | 34.83         | 51.70       | 0.96                     | -0.20               | 403.48             |
|                  | 2350.00           | 0.26              | 69.11         | 25                 | 2349.40                  | 21.62                 | 21.62 N     | 27.36 E  | 34.87         | 51.68       | 1.44                     | 0.52                | -909.68            |
|                  | 2375.00           | 0.39              | 44.29         | 25                 | 2374.39                  | 21.70                 | 21.70 N     | 27.47 E  | 35.01         | 51.69       | 0.76                     | 0.52                | -99.28             |
|                  | 2400.00           | 0.13              | 144.04        | 25                 | 2399.39                  | 21.74                 | 21.74 N     | 27.55 E  | 35.09         | 51.72       | 1.73                     | -1.04               | 399.00             |
|                  | 2425.00           | 0.24              | 23.74         | 25                 | 2424.39                  | 21.76                 | 21.76 N     | 27.58 E  | 35.13         | 51.73       | 1.30                     | 0.44                | -481.20            |
|                  | 2450.00           | 0.26              | 303.92        | 25                 | 2449.39                  | 21.84                 | 21.84 N     | 27.56 E  | 35.16         | 51.60       | 1.28                     | 0.08                | 1120.72            |
|                  | 2475.00           | 0.32              | 24.23         | 25                 | 2474.39                  | 21.94                 | 21.94 N     | 27.54 E  | 35.21         | 51.46       | 1.51                     | 0.24                | -1118.76           |
|                  | 2500.00           | 0.47              | 298.51        | 25                 | 2499.39                  | 22.05                 | 22.05 N     | 27.48 E  | 35.23         | 51.25       | 2.19                     | 0.60                | 1097.12            |
|                  | 2525.00           | 0.66              | 54.32         | 25                 | 2524.39                  | 22.18                 | 22.18 N     | 27.50 E  | 35.33         | 51.11       | 3.85                     | 0.76                | -976.76            |
|                  | 2550.00           | 0.79              | 60.46         | 25                 | 2549.39                  | 22.35                 | 22.35 N     | 27.77 E  | 35.65         | 51.17       | 0.61                     | 0.52                | 24.56              |
|                  | 2575.00           | 0.61              | 173.38        | 25                 | 2574.39                  | 22.30                 | 22.30 N     | 27.94 E  | 35.75         | 51.40       | 4.68                     | -0.72               | 451.68             |
|                  | 2600.00           | 1.15              | 66.81         | 25                 | 2599.39                  | 22.27                 | 22.27 N     | 28.18 E  | 35.92         | 51.68       | 5.79                     | 2.16                | -426.28            |
|                  | 2625.00           | 1.38              | 63.96         | 25                 | 2624.38                  | 22.50                 | 22.50 N     | 28.68 E  | 36.46         | 51.89       | 0.95                     | 0.92                | -11.40             |
|                  | 2650.00           | 1.41              | 75.33         | 25                 | 2649.37                  | 22.71                 | 22.71 N     | 29.25 E  | 37.03         | 52.17       | 1.11                     | 0.12                | 45.48              |
|                  | 2675.00           | 1.54              | 99.42         | 25                 | 2674.37                  | 22.73                 | 22.73 N     | 29.88 E  | 37.55         | 52.73       | 2.51                     | 0.52                | 96.36              |
|                  | 2700.00           | 1.73              | 93.98         | 25                 | 2699.36                  | 22.65                 | 22.65 N     | 30.59 E  | 38.06         | 53.48       | 0.98                     | 0.76                | -21.76             |
|                  | 2725.00           | 1.90              | 78.56         | 25                 | 2724.34                  | 22.71                 | 22.71 N     | 31.37 E  | 38.73         | 54.10       | 2.06                     | 0.68                | -61.68             |
|                  | 2750.00           | 1.81              | 87.58         | 25                 | 2749.33                  | 22.81                 | 22.81 N     | 32.17 E  | 39.44         | 54.66       | 1.22                     | -0.36               | 36.08              |
|                  | 2775.00           | 1.73              | 78.83         | 25                 | 2774.32                  | 22.90                 | 22.90 N     | 32.94 E  | 40.11         | 55.19       | 1.13                     | -0.32               | -35.00             |
|                  | 2800.00           | 1.61              | 74.57         | 25                 | 2799.31                  | 23.06                 | 23.06 N     | 33.65 E  | 40.79         | 55.57       | 0.69                     | -0.48               | -17.04             |
|                  | 2825.00           | 1.80              | 78.96         | 25                 | 2824.30                  | 23.23                 | 23.23 N     | 34.37 E  | 41.49         | 55.94       | 0.92                     | 0.76                | 17.56              |
|                  | 2850.00           | 1.98              | 71.49         | 25                 | 2849.28                  | 23.45                 | 23.45 N     | 35.16 E  | 42.26         | 56.31       | 1.22                     | 0.72                | -29.88             |
|                  | 2875.00           | 1.67              | 69.81         | 25                 | 2874.27                  | 23.71                 | 23.71 N     | 35.92 E  | 43.04         | 56.57       | 1.26                     | -1.24               | -6.72              |
|                  | 2900.00           | 1.86              | 81.38         | 25                 | 2899.26                  | 23.90                 | 23.90 N     | 36.66 E  | 43.76         | 56.90       | 1.61                     | 0.76                | 46.28              |
|                  | 2925.00           | 2.10              | 64.77         | 25                 | 2924.24                  | 24.15                 | 24.15 N     | 37.47 E  | 44.58         | 57.20       | 2.48                     | 0.96                | -66.44             |
|                  | 2950.00           | 1.69              | 35.06         | 25                 | 2949.23                  | 24.65                 | 24.65 N     | 38.10 E  | 45.38         | 57.10       | 4.20                     | -1.64               | -118.84            |
|                  | 2975.00           | 2.14              | 73.11         | 25                 | 2974.22                  | 25.09                 | 25.09 N     | 38.76 E  | 46.17         | 57.09       | 5.28                     | 1.80                | 152.20             |
|                  | 3000.00           | 2.16              | 75.38         | 25                 | 2999.20                  | 25.34                 | 25.34 N     | 39.66 E  | 47.07         | 57.42       | 0.35                     | 0.08                | 9.08               |



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

Calculation Method: Minimum Curvature  
 Proposed Azimuth: Ground  
 RKB - MSL in feet: Ground  
 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) |                          |                     |                    |
|                  | 3025.00           | 2.04              | 68.30         | 25                 | 3024.18                  | 25.62                 | 25.62 N     | 40.53 E  | 47.95         | 57.70       | 1.14                     | -0.48               | -28.32             |
|                  | 3050.00           | 2.07              | 54.56         | 25                 | 3049.17                  | 26.05                 | 26.05 N     | 41.31 E  | 48.84         | 57.77       | 1.97                     | 0.12                | -54.96             |
|                  | 3075.00           | 1.71              | 66.38         | 25                 | 3074.15                  | 26.46                 | 26.46 N     | 42.02 E  | 49.66         | 57.80       | 2.12                     | -1.44               | 47.28              |
|                  | 3100.00           | 1.97              | 63.40         | 25                 | 3099.14                  | 26.80                 | 26.80 N     | 42.75 E  | 50.46         | 57.91       | 1.11                     | 1.04                | -11.92             |
|                  | 3125.00           | 2.07              | 89.71         | 25                 | 3124.13                  | 27.00                 | 27.00 N     | 43.58 E  | 51.27         | 58.22       | 3.70                     | 0.40                | 105.24             |
|                  | 3150.00           | 1.54              | 65.82         | 25                 | 3149.11                  | 27.14                 | 27.14 N     | 44.34 E  | 51.99         | 58.53       | 3.64                     | -2.12               | -95.56             |
|                  | 3175.00           | 1.13              | 314.69        | 25                 | 3174.11                  | 27.45                 | 27.45 N     | 44.47 E  | 52.26         | 58.32       | 8.86                     | -1.64               | 995.48             |
|                  | 3200.00           | 1.16              | 37.13         | 25                 | 3199.11                  | 27.82                 | 27.82 N     | 44.45 E  | 52.44         | 57.96       | 6.04                     | 0.12                | -1110.24           |
|                  | 3225.00           | 0.94              | 317.90        | 25                 | 3224.10                  | 28.18                 | 28.18 N     | 44.46 E  | 52.64         | 57.64       | 5.40                     | -0.88               | 1123.08            |
|                  | 3250.00           | 1.15              | 38.83         | 25                 | 3249.10                  | 28.53                 | 28.53 N     | 44.48 E  | 52.84         | 57.33       | 5.46                     | 0.84                | -1116.28           |
|                  | 3275.00           | 1.45              | 50.71         | 25                 | 3274.09                  | 28.92                 | 28.92 N     | 44.89 E  | 53.40         | 57.21       | 1.61                     | 1.20                | 47.52              |
|                  | 3300.00           | 0.91              | 53.24         | 25                 | 3299.09                  | 29.24                 | 29.24 N     | 45.29 E  | 53.91         | 57.15       | 2.17                     | -2.16               | 10.12              |
|                  | 3325.00           | 1.10              | 77.13         | 25                 | 3324.09                  | 29.41                 | 29.41 N     | 45.68 E  | 54.33         | 57.23       | 1.82                     | 0.76                | 95.56              |
|                  | 3350.00           | 1.21              | 66.38         | 25                 | 3349.08                  | 29.57                 | 29.57 N     | 46.16 E  | 54.82         | 57.35       | 0.97                     | 0.44                | -43.00             |
|                  | 3375.00           | 1.01              | 52.55         | 25                 | 3374.08                  | 29.81                 | 29.81 N     | 46.58 E  | 55.30         | 57.38       | 1.33                     | -0.80               | -55.32             |
|                  | 3400.00           | 1.13              | 94.30         | 25                 | 3399.07                  | 29.93                 | 29.93 N     | 47.00 E  | 55.72         | 57.51       | 3.08                     | 0.48                | 167.00             |
|                  | 3425.00           | 1.03              | 84.19         | 25                 | 3424.07                  | 29.93                 | 29.93 N     | 47.47 E  | 56.12         | 57.77       | 0.86                     | -0.40               | -40.44             |
|                  | 3450.00           | 1.00              | 99.42         | 25                 | 3449.06                  | 29.92                 | 29.92 N     | 47.91 E  | 56.48         | 58.01       | 1.08                     | -0.12               | 60.92              |
|                  | 3475.00           | 1.04              | 105.32        | 25                 | 3474.06                  | 29.82                 | 29.82 N     | 48.34 E  | 56.80         | 58.33       | 0.45                     | 0.16                | 23.60              |
|                  | 3500.00           | 1.02              | 110.25        | 25                 | 3499.06                  | 29.69                 | 29.69 N     | 48.77 E  | 57.09         | 58.67       | 0.36                     | -0.08               | 19.72              |
|                  | 3525.00           | 0.78              | 123.51        | 25                 | 3524.05                  | 29.51                 | 29.51 N     | 49.12 E  | 57.30         | 59.00       | 1.27                     | -0.96               | 53.04              |
|                  | 3550.00           | 1.02              | 94.86         | 25                 | 3549.05                  | 29.40                 | 29.40 N     | 49.48 E  | 57.56         | 59.28       | 2.01                     | 0.96                | -114.60            |
|                  | 3575.00           | 1.03              | 100.63        | 25                 | 3574.05                  | 29.34                 | 29.34 N     | 49.92 E  | 57.91         | 59.56       | 0.41                     | 0.04                | 23.08              |
|                  | 3600.00           | 1.05              | 120.55        | 25                 | 3599.04                  | 29.18                 | 29.18 N     | 50.34 E  | 58.19         | 59.90       | 1.44                     | 0.08                | 79.68              |
|                  | 3625.00           | 0.70              | 253.43        | 25                 | 3624.04                  | 29.02                 | 29.02 N     | 50.39 E  | 58.15         | 60.06       | 6.44                     | -1.40               | 531.52             |
|                  | 3650.00           | 1.12              | 120.97        | 25                 | 3649.04                  | 28.85                 | 28.85 N     | 50.46 E  | 58.12         | 60.24       | 6.70                     | 1.68                | -529.84            |
|                  | 3675.00           | 0.84              | 129.85        | 25                 | 3674.03                  | 28.61                 | 28.61 N     | 50.81 E  | 58.31         | 60.61       | 1.27                     | -1.12               | 35.52              |
|                  | 3700.00           | 0.77              | 112.36        | 25                 | 3699.03                  | 28.43                 | 28.43 N     | 51.10 E  | 58.48         | 60.91       | 1.02                     | -0.28               | -69.96             |
|                  | 3725.00           | 1.03              | 121.66        | 25                 | 3724.03                  | 28.25                 | 28.25 N     | 51.45 E  | 58.69         | 61.23       | 1.19                     | 1.04                | 37.20              |
|                  | 3750.00           | 0.88              | 114.25        | 25                 | 3749.03                  | 28.05                 | 28.05 N     | 51.81 E  | 58.92         | 61.57       | 0.78                     | -0.60               | -29.64             |



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
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Calculation Method: Minimum Curvature  
 Proposed Azimuth:   
 RKB - MSL in feet: Ground  
 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) |                          |                     |                    |
|                  | 3775.00           | 0.71              | 266.41        | 25                 | 3774.02                  | 27.96                 | 27.96 N     | 51.84 E  | 58.90         | 61.66       | 6.18                     | -0.68               | 608.64             |
|                  | 3800.00           | 0.80              | 109.07        | 25                 | 3799.02                  | 27.90                 | 27.90 N     | 51.85 E  | 58.87         | 61.72       | 5.92                     | 0.36                | -629.36            |
|                  | 3825.00           | 0.67              | 90.46         | 25                 | 3824.02                  | 27.84                 | 27.84 N     | 52.16 E  | 59.12         | 61.91       | 1.08                     | -0.52               | -74.44             |
|                  | 3850.00           | 0.50              | 147.89        | 25                 | 3849.02                  | 27.74                 | 27.74 N     | 52.36 E  | 59.26         | 62.08       | 2.33                     | -0.68               | 229.72             |
|                  | 3875.00           | 0.52              | 140.69        | 25                 | 3874.02                  | 27.56                 | 27.56 N     | 52.49 E  | 59.29         | 62.30       | 0.27                     | 0.08                | -28.80             |
|                  | 3900.00           | 0.90              | 275.13        | 25                 | 3899.02                  | 27.49                 | 27.49 N     | 52.37 E  | 59.15         | 62.30       | 5.27                     | 1.52                | 537.76             |
|                  | 3925.00           | 0.68              | 11.74         | 25                 | 3924.02                  | 27.66                 | 27.66 N     | 52.20 E  | 59.08         | 62.09       | 4.76                     | -0.88               | -1053.56           |
|                  | 3950.00           | 0.63              | 85.56         | 25                 | 3949.02                  | 27.81                 | 27.81 N     | 52.37 E  | 59.30         | 62.03       | 3.15                     | -0.20               | 295.28             |
|                  | 3975.00           | 0.55              | 62.41         | 25                 | 3974.01                  | 27.88                 | 27.88 N     | 52.61 E  | 59.54         | 62.08       | 1.00                     | -0.32               | -92.60             |
|                  | 4000.00           | 0.73              | 40.29         | 25                 | 3999.01                  | 28.06                 | 28.06 N     | 52.82 E  | 59.81         | 62.03       | 1.21                     | 0.72                | -88.48             |
|                  | 4025.00           | 0.73              | 110.68        | 25                 | 4024.01                  | 28.12                 | 28.12 N     | 53.07 E  | 60.06         | 62.08       | 3.37                     | 0.00                | 281.56             |
|                  | 4050.00           | 0.48              | 9.78          | 25                 | 4049.01                  | 28.17                 | 28.17 N     | 53.24 E  | 60.23         | 62.12       | 3.79                     | -1.00               | -403.60            |
|                  | 4075.00           | 0.78              | 39.89         | 25                 | 4074.01                  | 28.40                 | 28.40 N     | 53.37 E  | 60.45         | 61.98       | 1.75                     | 1.20                | 120.44             |
|                  | 4100.00           | 0.52              | 31.41         | 25                 | 4099.01                  | 28.63                 | 28.63 N     | 53.54 E  | 60.71         | 61.86       | 1.11                     | -1.04               | -33.92             |
|                  | 4125.00           | 0.43              | 24.97         | 25                 | 4124.01                  | 28.81                 | 28.81 N     | 53.63 E  | 60.88         | 61.76       | 0.42                     | -0.36               | -25.76             |
|                  | 4150.00           | 0.29              | 290.42        | 25                 | 4149.01                  | 28.92                 | 28.92 N     | 53.61 E  | 60.92         | 61.66       | 2.15                     | -0.56               | 1061.80            |
|                  | 4175.00           | 0.21              | 352.10        | 25                 | 4174.01                  | 28.99                 | 28.99 N     | 53.55 E  | 60.89         | 61.57       | 1.06                     | -0.32               | 246.72             |
|                  | 4200.00           | 0.35              | 298.10        | 25                 | 4199.01                  | 29.07                 | 29.07 N     | 53.48 E  | 60.86         | 61.47       | 1.13                     | 0.56                | -216.00            |
|                  | 4225.00           | 0.11              | 7.97          | 25                 | 4224.01                  | 29.13                 | 29.13 N     | 53.41 E  | 60.84         | 61.40       | 1.32                     | -0.96               | -1160.52           |
|                  | 4250.00           | 0.09              | 248.84        | 25                 | 4249.01                  | 29.14                 | 29.14 N     | 53.40 E  | 60.83         | 61.37       | 0.69                     | -0.08               | 963.48             |
|                  | 4275.00           | 0.38              | 115.63        | 25                 | 4274.01                  | 29.10                 | 29.10 N     | 53.45 E  | 60.86         | 61.44       | 1.79                     | 1.16                | -532.84            |
|                  | 4300.00           | 0.31              | 109.96        | 25                 | 4299.00                  | 29.04                 | 29.04 N     | 53.59 E  | 60.95         | 61.55       | 0.31                     | -0.28               | -22.68             |
|                  | 4325.00           | 0.16              | 239.25        | 25                 | 4324.00                  | 29.00                 | 29.00 N     | 53.62 E  | 60.96         | 61.60       | 1.72                     | -0.60               | 517.16             |
|                  | 4350.00           | 0.22              | 300.33        | 25                 | 4349.00                  | 29.01                 | 29.01 N     | 53.55 E  | 60.90         | 61.56       | 0.80                     | 0.24                | 244.32             |
|                  | 4375.00           | 0.21              | 192.67        | 25                 | 4374.00                  | 28.99                 | 28.99 N     | 53.50 E  | 60.85         | 61.55       | 1.39                     | -0.04               | -430.64            |
|                  | 4400.00           | 0.14              | 16.83         | 25                 | 4399.00                  | 28.97                 | 28.97 N     | 53.50 E  | 60.84         | 61.56       | 1.40                     | -0.28               | -703.36            |
|                  | 4425.00           | 0.19              | 38.59         | 25                 | 4424.00                  | 29.03                 | 29.03 N     | 53.54 E  | 60.90         | 61.53       | 0.32                     | 0.20                | 87.04              |
|                  | 4450.00           | 0.45              | 75.81         | 25                 | 4449.00                  | 29.09                 | 29.09 N     | 53.66 E  | 61.03         | 61.54       | 1.28                     | 1.04                | 148.88             |
|                  | 4475.00           | 0.36              | 329.92        | 25                 | 4474.00                  | 29.18                 | 29.18 N     | 53.71 E  | 61.13         | 61.49       | 2.59                     | -0.36               | 1016.44            |
|                  | 4500.00           | 0.32              | 335.96        | 25                 | 4499.00                  | 29.31                 | 29.31 N     | 53.64 E  | 61.13         | 61.35       | 0.21                     | -0.16               | 24.16              |



Company: Legacy  
Well: Hamon A Fed Com 3H  
Location: Lea Co., NM  
Rig: Pulling Unit

Job Number: 61389  
Grid Corr.: -0.40  
Lat: 32.59  
Long: -103.59

Calculation Method: Minimum Curvature  
Proposed Azimuth:   
RKB - MSL in feet: Ground  
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) |                          |                     |                    |
|                  | 4525.00           | 0.43              | 17.95         | 25                 | 4524.00                  | 29.47                 | 29.47 N     | 53.64 E  | 61.20         | 61.22       | 1.15                     | 0.44                | -1272.04           |
|                  | 4550.00           | 0.40              | 206.76        | 25                 | 4549.00                  | 29.48                 | 29.48 N     | 53.63 E  | 61.20         | 61.21       | 3.31                     | -0.12               | 755.24             |
|                  | 4575.00           | 0.35              | 57.36         | 25                 | 4574.00                  | 29.44                 | 29.44 N     | 53.66 E  | 61.21         | 61.25       | 2.89                     | -0.20               | -597.60            |
|                  | 4600.00           | 0.52              | 91.98         | 25                 | 4599.00                  | 29.48                 | 29.48 N     | 53.84 E  | 61.38         | 61.30       | 1.22                     | 0.68                | 138.48             |
|                  | 4625.00           | 0.38              | 68.79         | 25                 | 4624.00                  | 29.50                 | 29.50 N     | 54.03 E  | 61.56         | 61.36       | 0.91                     | -0.56               | -92.76             |
|                  | 4650.00           | 0.56              | 124.69        | 25                 | 4649.00                  | 29.46                 | 29.46 N     | 54.21 E  | 61.70         | 61.47       | 1.87                     | 0.72                | 223.60             |
|                  | 4675.00           | 0.58              | 93.19         | 25                 | 4674.00                  | 29.39                 | 29.39 N     | 54.43 E  | 61.86         | 61.64       | 1.24                     | 0.08                | -126.00            |
|                  | 4700.00           | 0.63              | 153.93        | 25                 | 4699.00                  | 29.26                 | 29.26 N     | 54.62 E  | 61.96         | 61.82       | 2.45                     | 0.20                | 242.96             |
|                  | 4725.00           | 0.28              | 315.43        | 25                 | 4724.00                  | 29.18                 | 29.18 N     | 54.64 E  | 61.94         | 61.90       | 3.60                     | -1.40               | 646.00             |
|                  | 4750.00           | 0.47              | 9.28          | 25                 | 4749.00                  | 29.32                 | 29.32 N     | 54.61 E  | 61.98         | 61.77       | 1.52                     | 0.76                | -1224.60           |
|                  | 4775.00           | 0.37              | 48.81         | 25                 | 4774.00                  | 29.48                 | 29.48 N     | 54.69 E  | 62.13         | 61.68       | 1.20                     | -0.40               | 158.12             |
|                  | 4800.00           | 0.22              | 31.70         | 25                 | 4799.00                  | 29.57                 | 29.57 N     | 54.77 E  | 62.25         | 61.64       | 0.69                     | -0.60               | -68.44             |
|                  | 4825.00           | 0.58              | 114.08        | 25                 | 4824.00                  | 29.56                 | 29.56 N     | 54.91 E  | 62.36         | 61.71       | 2.37                     | 1.44                | 329.52             |
|                  | 4850.00           | 0.25              | 193.32        | 25                 | 4848.99                  | 29.45                 | 29.45 N     | 55.02 E  | 62.41         | 61.84       | 2.35                     | -1.32               | 316.96             |
|                  | 4875.00           | 0.21              | 296.58        | 25                 | 4873.99                  | 29.42                 | 29.42 N     | 54.96 E  | 62.34         | 61.84       | 1.45                     | -0.16               | 413.04             |
|                  | 4900.00           | 0.42              | 63.29         | 25                 | 4898.99                  | 29.48                 | 29.48 N     | 55.00 E  | 62.41         | 61.81       | 2.28                     | 0.84                | -933.16            |
|                  | 4925.00           | 0.58              | 56.73         | 25                 | 4923.99                  | 29.59                 | 29.59 N     | 55.19 E  | 62.63         | 61.80       | 0.68                     | 0.64                | -26.24             |
|                  | 4950.00           | 0.29              | 122.39        | 25                 | 4948.99                  | 29.63                 | 29.63 N     | 55.35 E  | 62.78         | 61.84       | 2.12                     | -1.16               | 262.64             |
|                  | 4975.00           | 0.52              | 76.08         | 25                 | 4973.99                  | 29.62                 | 29.62 N     | 55.51 E  | 62.92         | 61.92       | 1.53                     | 0.92                | -185.24            |
|                  | 5000.00           | 0.42              | 70.83         | 25                 | 4998.99                  | 29.68                 | 29.68 N     | 55.71 E  | 63.12         | 61.95       | 0.44                     | -0.40               | -21.00             |
|                  | 5025.00           | 0.47              | 17.07         | 25                 | 5023.99                  | 29.81                 | 29.81 N     | 55.83 E  | 63.29         | 61.90       | 1.62                     | 0.20                | -215.04            |
|                  | 5050.00           | 0.30              | 333.26        | 25                 | 5048.99                  | 29.97                 | 29.97 N     | 55.83 E  | 63.36         | 61.78       | 1.31                     | -0.68               | 1264.76            |
|                  | 5075.00           | 0.32              | 161.96        | 25                 | 5073.99                  | 29.96                 | 29.96 N     | 55.82 E  | 63.35         | 61.78       | 2.47                     | 0.08                | -685.20            |
|                  | 5100.00           | 0.18              | 286.99        | 25                 | 5098.99                  | 29.90                 | 29.90 N     | 55.81 E  | 63.31         | 61.82       | 1.79                     | -0.56               | 500.12             |
|                  | 5125.00           | 0.25              | 91.86         | 25                 | 5123.99                  | 29.91                 | 29.91 N     | 55.82 E  | 63.33         | 61.82       | 1.71                     | 0.28                | -780.52            |
|                  | 5150.00           | 0.23              | 30.91         | 25                 | 5148.99                  | 29.95                 | 29.95 N     | 55.90 E  | 63.42         | 61.82       | 0.98                     | -0.08               | -243.80            |
|                  | 5175.00           | 0.16              | 309.20        | 25                 | 5173.99                  | 30.02                 | 30.02 N     | 55.90 E  | 63.45         | 61.76       | 1.04                     | -0.28               | 1113.16            |
|                  | 5200.00           | 0.32              | 305.28        | 25                 | 5198.99                  | 30.08                 | 30.08 N     | 55.82 E  | 63.41         | 61.68       | 0.64                     | 0.64                | -15.68             |
|                  | 5225.00           | 0.10              | 244.92        | 25                 | 5223.99                  | 30.11                 | 30.11 N     | 55.74 E  | 63.35         | 61.62       | 1.14                     | -0.88               | -241.44            |
|                  | 5250.00           | 0.20              | 295.01        | 25                 | 5248.99                  | 30.12                 | 30.12 N     | 55.68 E  | 63.31         | 61.59       | 0.62                     | 0.40                | 200.36             |



**PHOENIX**  
TECHNOLOGY SERVICES

Company: Legacy  
Well: Hamon A Fed Com 3H  
Location: Lea Co., NM  
Rig: Pulling Unit

Job Number: 61389  
Grid Corr.: -0.40  
Lat: 32.59  
Long: -103.59

Calculation Method: Minimum Curvature  
Proposed Azimuth:   
RKB - MSL in feet: Ground  
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) |                          |                     |                    |
|                  | 5275.00           | 0.22              | 267.16        | 25                 | 5273.99                  | 30.14                 | 30.14 N     | 55.59 E  | 63.24         | 61.54       | 0.41                     | 0.08                | -111.40            |
|                  | 5300.00           | 0.19              | 87.34         | 25                 | 5298.99                  | 30.14                 | 30.14 N     | 55.59 E  | 63.23         | 61.54       | 1.64                     | -0.12               | -719.28            |
|                  | 5325.00           | 0.10              | 144.41        | 25                 | 5323.99                  | 30.12                 | 30.12 N     | 55.64 E  | 63.27         | 61.57       | 0.64                     | -0.36               | 228.28             |
|                  | 5350.00           | 0.19              | 295.47        | 25                 | 5348.99                  | 30.12                 | 30.12 N     | 55.62 E  | 63.25         | 61.56       | 1.13                     | 0.36                | 604.24             |
|                  | 5375.00           | 0.17              | 146.29        | 25                 | 5373.99                  | 30.11                 | 30.11 N     | 55.60 E  | 63.23         | 61.56       | 1.39                     | -0.08               | -596.72            |
|                  | 5400.00           | 0.16              | 259.06        | 25                 | 5398.99                  | 30.07                 | 30.07 N     | 55.59 E  | 63.20         | 61.59       | 1.10                     | -0.04               | 451.08             |
|                  | 5425.00           | 0.18              | 315.98        | 25                 | 5423.99                  | 30.09                 | 30.09 N     | 55.52 E  | 63.15         | 61.54       | 0.65                     | 0.08                | 227.68             |
|                  | 5450.00           | 0.10              | 129.82        | 25                 | 5448.99                  | 30.11                 | 30.11 N     | 55.51 E  | 63.15         | 61.53       | 1.12                     | -0.32               | -744.64            |
|                  | 5475.00           | 0.09              | 339.39        | 25                 | 5473.99                  | 30.11                 | 30.11 N     | 55.52 E  | 63.16         | 61.53       | 0.73                     | -0.04               | 838.28             |
|                  | 5500.00           | 0.27              | 99.33         | 25                 | 5498.99                  | 30.12                 | 30.12 N     | 55.57 E  | 63.21         | 61.54       | 1.30                     | 0.72                | -960.24            |
|                  | 5525.00           | 0.22              | 125.30        | 25                 | 5523.99                  | 30.08                 | 30.08 N     | 55.67 E  | 63.28         | 61.62       | 0.48                     | -0.20               | 103.88             |
|                  | 5550.00           | 0.25              | 226.68        | 25                 | 5548.99                  | 30.02                 | 30.02 N     | 55.67 E  | 63.25         | 61.67       | 1.46                     | 0.12                | 405.52             |
|                  | 5575.00           | 0.09              | 135.17        | 25                 | 5573.99                  | 29.97                 | 29.97 N     | 55.65 E  | 63.20         | 61.70       | 1.07                     | -0.64               | -366.04            |
|                  | 5600.00           | 0.08              | 265.71        | 25                 | 5598.99                  | 29.95                 | 29.95 N     | 55.64 E  | 63.19         | 61.71       | 0.62                     | -0.04               | 522.16             |
|                  | 5625.00           | 0.16              | 152.45        | 25                 | 5623.99                  | 29.92                 | 29.92 N     | 55.64 E  | 63.17         | 61.73       | 0.82                     | 0.32                | -453.04            |
|                  | 5650.00           | 0.10              | 221.22        | 25                 | 5648.99                  | 29.87                 | 29.87 N     | 55.64 E  | 63.15         | 61.77       | 0.62                     | -0.24               | 275.08             |
|                  | 5675.00           | 0.47              | 99.24         | 25                 | 5673.99                  | 29.84                 | 29.84 N     | 55.73 E  | 63.21         | 61.83       | 2.12                     | 1.48                | -487.92            |
|                  | 5700.00           | 0.33              | 336.79        | 25                 | 5698.99                  | 29.89                 | 29.89 N     | 55.80 E  | 63.30         | 61.83       | 2.82                     | -0.56               | 950.20             |
|                  | 5725.00           | 0.40              | 10.59         | 25                 | 5723.99                  | 30.04                 | 30.04 N     | 55.79 E  | 63.36         | 61.70       | 0.89                     | 0.28                | -1304.80           |
|                  | 5750.00           | 0.29              | 353.91        | 25                 | 5748.99                  | 30.19                 | 30.19 N     | 55.80 E  | 63.44         | 61.59       | 0.59                     | -0.44               | 1373.28            |
|                  | 5775.00           | 0.50              | 236.81        | 25                 | 5773.99                  | 30.19                 | 30.19 N     | 55.70 E  | 63.36         | 61.54       | 2.73                     | 0.84                | -468.40            |
|                  | 5800.00           | 0.51              | 9.99          | 25                 | 5798.99                  | 30.24                 | 30.24 N     | 55.63 E  | 63.32         | 61.47       | 3.71                     | 0.04                | -907.28            |
|                  | 5825.00           | 0.44              | 250.12        | 25                 | 5823.99                  | 30.32                 | 30.32 N     | 55.56 E  | 63.29         | 61.38       | 3.29                     | -0.28               | 960.52             |
|                  | 5850.00           | 0.76              | 348.76        | 25                 | 5848.98                  | 30.45                 | 30.45 N     | 55.44 E  | 63.25         | 61.22       | 3.73                     | 1.28                | 394.56             |
|                  | 5875.00           | 0.61              | 325.63        | 25                 | 5873.98                  | 30.72                 | 30.72 N     | 55.33 E  | 63.29         | 60.96       | 1.25                     | -0.60               | -92.52             |
|                  | 5900.00           | 0.53              | 312.56        | 25                 | 5898.98                  | 30.91                 | 30.91 N     | 55.17 E  | 63.24         | 60.74       | 0.61                     | -0.32               | -52.28             |
|                  | 5925.00           | 0.97              | 329.30        | 25                 | 5923.98                  | 31.17                 | 31.17 N     | 54.97 E  | 63.20         | 60.45       | 1.95                     | 1.76                | 66.96              |
|                  | 5950.00           | 0.85              | 339.20        | 25                 | 5948.98                  | 31.52                 | 31.52 N     | 54.80 E  | 63.22         | 60.09       | 0.79                     | -0.48               | 39.60              |
|                  | 5975.00           | 0.75              | 10.40         | 25                 | 5973.97                  | 31.86                 | 31.86 N     | 54.76 E  | 63.36         | 59.81       | 1.76                     | -0.40               | -1315.20           |
|                  | 6000.00           | 0.88              | 336.93        | 25                 | 5998.97                  | 32.20                 | 32.20 N     | 54.72 E  | 63.49         | 59.53       | 1.94                     | 0.52                | 1306.12            |



Company: Legacy  
Well: Hamon A Fed Com 3H  
Location: Lea Co., NM  
Rig: Pulling Unit

Job Number: 61389  
Grid Corr.: -0.40  
Lat: 32.59  
Long: -103.59

Calculation Method: Minimum Curvature  
Proposed Azimuth:             
RKB - MSL in feet: Ground  
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) |                          |                     |                    |
|                  | 6025.00           | 0.78              | 288.58        | 25                 | 6023.97                  | 32.43                 | 32.43 N     | 54.48 E  | 63.40         | 59.24       | 2.74                     | -0.40               | -193.40            |
|                  | 6050.00           | 0.52              | 272.06        | 25                 | 6048.97                  | 32.49                 | 32.49 N     | 54.21 E  | 63.20         | 59.07       | 1.27                     | -1.04               | -66.08             |
|                  | 6075.00           | 0.79              | 318.29        | 25                 | 6073.97                  | 32.62                 | 32.62 N     | 53.98 E  | 63.07         | 58.86       | 2.28                     | 1.08                | 184.92             |
|                  | 6100.00           | 0.86              | 329.33        | 25                 | 6098.96                  | 32.91                 | 32.91 N     | 53.77 E  | 63.04         | 58.53       | 0.69                     | 0.28                | 44.16              |
|                  | 6125.00           | 0.67              | 321.52        | 25                 | 6123.96                  | 33.18                 | 33.18 N     | 53.58 E  | 63.03         | 58.23       | 0.87                     | -0.76               | -31.24             |
|                  | 6150.00           | 0.75              | 335.62        | 25                 | 6148.96                  | 33.45                 | 33.45 N     | 53.42 E  | 63.03         | 57.95       | 0.77                     | 0.32                | 56.40              |
|                  | 6175.00           | 0.82              | 356.60        | 25                 | 6173.96                  | 33.78                 | 33.78 N     | 53.35 E  | 63.14         | 57.66       | 1.18                     | 0.28                | 83.92              |
|                  | 6200.00           | 0.63              | 0.92          | 25                 | 6198.95                  | 34.09                 | 34.09 N     | 53.34 E  | 63.30         | 57.42       | 0.79                     | -0.76               | -1422.72           |
|                  | 6225.00           | 0.75              | 359.13        | 25                 | 6223.95                  | 34.39                 | 34.39 N     | 53.34 E  | 63.46         | 57.19       | 0.49                     | 0.48                | 1432.84            |
|                  | 6250.00           | 0.58              | 352.21        | 25                 | 6248.95                  | 34.68                 | 34.68 N     | 53.32 E  | 63.60         | 56.96       | 0.75                     | -0.68               | -27.68             |
|                  | 6275.00           | 0.71              | 348.41        | 25                 | 6273.95                  | 34.96                 | 34.96 N     | 53.27 E  | 63.72         | 56.73       | 0.55                     | 0.52                | -15.20             |
|                  | 6300.00           | 0.51              | 59.92         | 25                 | 6298.95                  | 35.17                 | 35.17 N     | 53.33 E  | 63.88         | 56.60       | 2.92                     | -0.80               | -1153.96           |
|                  | 6325.00           | 0.64              | 357.17        | 25                 | 6323.95                  | 35.36                 | 35.36 N     | 53.42 E  | 64.07         | 56.50       | 2.44                     | 0.52                | 1189.00            |
|                  | 6350.00           | 0.87              | 338.56        | 25                 | 6348.95                  | 35.68                 | 35.68 N     | 53.35 E  | 64.18         | 56.23       | 1.33                     | 0.92                | -74.44             |
|                  | 6375.00           | 0.53              | 292.86        | 25                 | 6373.94                  | 35.90                 | 35.90 N     | 53.17 E  | 64.16         | 55.98       | 2.51                     | -1.36               | -182.80            |
|                  | 6400.00           | 0.54              | 159.58        | 25                 | 6398.94                  | 35.83                 | 35.83 N     | 53.11 E  | 64.06         | 55.99       | 3.93                     | 0.04                | -533.12            |
|                  | 6425.00           | 0.77              | 345.45        | 25                 | 6423.94                  | 35.89                 | 35.89 N     | 53.11 E  | 64.09         | 55.95       | 5.23                     | 0.92                | 743.48             |
|                  | 6450.00           | 0.43              | 337.70        | 25                 | 6448.94                  | 36.13                 | 36.13 N     | 53.03 E  | 64.17         | 55.73       | 1.40                     | -1.36               | -31.00             |
|                  | 6475.00           | 0.42              | 10.56         | 25                 | 6473.94                  | 36.31                 | 36.31 N     | 53.01 E  | 64.25         | 55.59       | 0.96                     | -0.04               | -1308.56           |
|                  | 6500.00           | 0.40              | 47.63         | 25                 | 6498.94                  | 36.46                 | 36.46 N     | 53.09 E  | 64.40         | 55.52       | 1.05                     | -0.08               | 148.28             |
|                  | 6525.00           | 0.58              | 277.38        | 25                 | 6523.94                  | 36.54                 | 36.54 N     | 53.03 E  | 64.40         | 55.43       | 3.57                     | 0.72                | 919.00             |
|                  | 6550.00           | 0.58              | 343.60        | 25                 | 6548.94                  | 36.67                 | 36.67 N     | 52.87 E  | 64.34         | 55.25       | 2.53                     | 0.00                | 264.88             |
|                  | 6575.00           | 0.64              | 333.37        | 25                 | 6573.94                  | 36.92                 | 36.92 N     | 52.77 E  | 64.40         | 55.02       | 0.50                     | 0.24                | -40.92             |
|                  | 6600.00           | 0.35              | 325.25        | 25                 | 6598.94                  | 37.11                 | 37.11 N     | 52.66 E  | 64.42         | 54.83       | 1.19                     | -1.16               | -32.48             |
|                  | 6625.00           | 0.40              | 355.96        | 25                 | 6623.94                  | 37.26                 | 37.26 N     | 52.61 E  | 64.47         | 54.70       | 0.82                     | 0.20                | 122.84             |
|                  | 6650.00           | 0.32              | 288.13        | 25                 | 6648.93                  | 37.37                 | 37.37 N     | 52.54 E  | 64.47         | 54.58       | 1.63                     | -0.32               | -271.32            |
|                  | 6675.00           | 0.39              | 266.15        | 25                 | 6673.93                  | 37.38                 | 37.38 N     | 52.39 E  | 64.36         | 54.49       | 0.61                     | 0.28                | -87.92             |
|                  | 6700.00           | 0.44              | 199.36        | 25                 | 6698.93                  | 37.29                 | 37.29 N     | 52.27 E  | 64.21         | 54.50       | 1.83                     | 0.20                | -267.16            |
|                  | 6725.00           | 0.36              | 242.83        | 25                 | 6723.93                  | 37.16                 | 37.16 N     | 52.17 E  | 64.05         | 54.54       | 1.22                     | -0.32               | 173.88             |
|                  | 6750.00           | 0.15              | 313.27        | 25                 | 6748.93                  | 37.15                 | 37.15 N     | 52.08 E  | 63.97         | 54.50       | 1.36                     | -0.84               | 281.76             |



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

Calculation Method: Minimum Curvature  
 Proposed Azimuth:   
 RKB - MSL in feet: Ground  
 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) |                          |                     |                    |
|                  | 6775.00           | 0.37              | 230.76        | 25                 | 6773.93                  | 37.12                 | 37.12 N     | 51.99 E  | 63.88         | 54.48       | 1.52                     | 0.88                | -330.04            |
|                  | 6800.00           | 0.45              | 276.60        | 25                 | 6798.93                  | 37.08                 | 37.08 N     | 51.83 E  | 63.73         | 54.42       | 1.31                     | 0.32                | 183.36             |
|                  | 6825.00           | 0.44              | 237.68        | 25                 | 6823.93                  | 37.04                 | 37.04 N     | 51.65 E  | 63.56         | 54.36       | 1.19                     | -0.04               | -155.68            |
|                  | 6850.00           | 0.56              | 325.27        | 25                 | 6848.93                  | 37.09                 | 37.09 N     | 51.50 E  | 63.47         | 54.24       | 2.79                     | 0.48                | 350.36             |
|                  | 6875.00           | 0.64              | 229.99        | 25                 | 6873.93                  | 37.10                 | 37.10 N     | 51.33 E  | 63.33         | 54.14       | 3.55                     | 0.32                | -381.12            |
|                  | 6900.00           | 0.50              | 295.11        | 25                 | 6898.93                  | 37.05                 | 37.05 N     | 51.12 E  | 63.14         | 54.06       | 2.50                     | -0.56               | 260.48             |
|                  | 6925.00           | 0.56              | 277.02        | 25                 | 6923.93                  | 37.11                 | 37.11 N     | 50.90 E  | 62.99         | 53.90       | 0.71                     | 0.24                | -72.36             |
|                  | 6950.00           | 0.52              | 219.64        | 25                 | 6948.93                  | 37.04                 | 37.04 N     | 50.71 E  | 62.79         | 53.85       | 2.08                     | -0.16               | -229.52            |
|                  | 6975.00           | 0.33              | 287.84        | 25                 | 6973.93                  | 36.98                 | 36.98 N     | 50.57 E  | 62.64         | 53.82       | 2.01                     | -0.76               | 272.80             |
|                  | 7000.00           | 0.30              | 205.10        | 25                 | 6998.93                  | 36.94                 | 36.94 N     | 50.47 E  | 62.54         | 53.80       | 1.67                     | -0.12               | -330.96            |
|                  | 7025.00           | 0.57              | 123.23        | 25                 | 7023.93                  | 36.81                 | 36.81 N     | 50.55 E  | 62.53         | 53.93       | 2.42                     | 1.08                | -327.48            |
|                  | 7050.00           | 0.52              | 213.84        | 25                 | 7048.92                  | 36.65                 | 36.65 N     | 50.59 E  | 62.47         | 54.08       | 3.10                     | -0.20               | 362.44             |
|                  | 7075.00           | 0.81              | 242.17        | 25                 | 7073.92                  | 36.47                 | 36.47 N     | 50.37 E  | 62.19         | 54.09       | 1.72                     | 1.16                | 113.32             |
|                  | 7100.00           | 0.76              | 215.55        | 25                 | 7098.92                  | 36.26                 | 36.26 N     | 50.11 E  | 61.85         | 54.12       | 1.46                     | -0.20               | -106.48            |
|                  | 7125.00           | 0.42              | 281.82        | 25                 | 7123.92                  | 36.14                 | 36.14 N     | 49.93 E  | 61.63         | 54.10       | 2.82                     | -1.36               | 265.08             |
|                  | 7150.00           | 0.59              | 141.41        | 25                 | 7148.92                  | 36.06                 | 36.06 N     | 49.92 E  | 61.58         | 54.16       | 3.81                     | 0.68                | -561.64            |
|                  | 7175.00           | 0.62              | 262.04        | 25                 | 7173.92                  | 35.94                 | 35.94 N     | 49.86 E  | 61.47         | 54.22       | 4.21                     | 0.12                | 482.52             |
|                  | 7200.00           | 0.54              | 251.57        | 25                 | 7198.92                  | 35.88                 | 35.88 N     | 49.62 E  | 61.23         | 54.13       | 0.53                     | -0.32               | -41.88             |
|                  | 7225.00           | 0.66              | 281.19        | 25                 | 7223.92                  | 35.87                 | 35.87 N     | 49.37 E  | 61.02         | 54.00       | 1.31                     | 0.48                | 118.48             |
|                  | 7250.00           | 0.28              | 311.82        | 25                 | 7248.92                  | 35.94                 | 35.94 N     | 49.18 E  | 60.91         | 53.84       | 1.77                     | -1.52               | 122.52             |
|                  | 7275.00           | 0.56              | 276.74        | 25                 | 7273.91                  | 36.00                 | 36.00 N     | 49.01 E  | 60.81         | 53.70       | 1.47                     | 1.12                | -140.32            |
|                  | 7300.00           | 0.57              | 249.52        | 25                 | 7298.91                  | 35.97                 | 35.97 N     | 48.77 E  | 60.60         | 53.59       | 1.06                     | 0.04                | -108.88            |
|                  | 7325.00           | 0.38              | 219.89        | 25                 | 7323.91                  | 35.86                 | 35.86 N     | 48.60 E  | 60.40         | 53.58       | 1.22                     | -0.76               | -118.52            |
|                  | 7350.00           | 0.49              | 272.20        | 25                 | 7348.91                  | 35.80                 | 35.80 N     | 48.44 E  | 60.24         | 53.54       | 1.58                     | 0.44                | 209.24             |
|                  | 7375.00           | 0.53              | 228.52        | 25                 | 7373.91                  | 35.73                 | 35.73 N     | 48.25 E  | 60.04         | 53.48       | 1.53                     | 0.16                | -174.72            |
|                  | 7400.00           | 0.78              | 254.91        | 25                 | 7398.91                  | 35.61                 | 35.61 N     | 48.00 E  | 59.77         | 53.43       | 1.54                     | 1.00                | 105.56             |
|                  | 7425.00           | 0.51              | 259.59        | 25                 | 7423.91                  | 35.54                 | 35.54 N     | 47.73 E  | 59.51         | 53.32       | 1.10                     | -1.08               | 18.72              |
|                  | 7450.00           | 0.46              | 181.09        | 25                 | 7448.91                  | 35.42                 | 35.42 N     | 47.62 E  | 59.35         | 53.35       | 2.46                     | -0.20               | -314.00            |
|                  | 7475.00           | 0.52              | 198.57        | 25                 | 7473.91                  | 35.21                 | 35.21 N     | 47.58 E  | 59.19         | 53.49       | 0.64                     | 0.24                | 69.92              |
|                  | 7500.00           | 0.44              | 138.54        | 25                 | 7498.91                  | 35.04                 | 35.04 N     | 47.60 E  | 59.11         | 53.65       | 1.94                     | -0.32               | -240.12            |

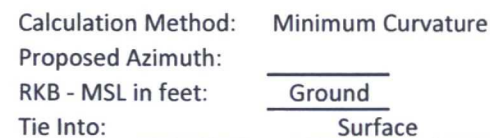


Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

Calculation Method: Minimum Curvature  
 Proposed Azimuth: Ground  
 RKB - MSL in feet: Ground  
 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) |                          |                     |                    |
|                  | 7525.00           | 0.50              | 302.79        | 25                 | 7523.91                  | 35.02                 | 35.02 N     | 47.58 E  | 59.08         | 53.64       | 3.72                     | 0.24                | 657.00             |
|                  | 7550.00           | 0.41              | 203.64        | 25                 | 7548.90                  | 35.00                 | 35.00 N     | 47.45 E  | 58.96         | 53.59       | 2.78                     | -0.36               | -396.60            |
|                  | 7575.00           | 0.48              | 253.30        | 25                 | 7573.90                  | 34.89                 | 34.89 N     | 47.31 E  | 58.78         | 53.60       | 1.52                     | 0.28                | 198.64             |
|                  | 7600.00           | 0.49              | 214.50        | 25                 | 7598.90                  | 34.77                 | 34.77 N     | 47.15 E  | 58.59         | 53.60       | 1.29                     | 0.04                | -155.20            |
|                  | 7625.00           | 0.31              | 192.01        | 25                 | 7623.90                  | 34.62                 | 34.62 N     | 47.08 E  | 58.43         | 53.67       | 0.94                     | -0.72               | -89.96             |
|                  | 7650.00           | 0.48              | 221.42        | 25                 | 7648.90                  | 34.47                 | 34.47 N     | 46.99 E  | 58.28         | 53.74       | 1.04                     | 0.68                | 117.64             |
|                  | 7675.00           | 0.34              | 216.55        | 25                 | 7673.90                  | 34.33                 | 34.33 N     | 46.88 E  | 58.11         | 53.78       | 0.58                     | -0.56               | -19.48             |
|                  | 7700.00           | 0.44              | 198.65        | 25                 | 7698.90                  | 34.18                 | 34.18 N     | 46.81 E  | 57.96         | 53.86       | 0.63                     | 0.40                | -71.60             |
|                  | 7725.00           | 0.37              | 336.33        | 25                 | 7723.90                  | 34.16                 | 34.16 N     | 46.74 E  | 57.90         | 53.84       | 3.02                     | -0.28               | 550.72             |
|                  | 7750.00           | 0.66              | 227.91        | 25                 | 7748.90                  | 34.14                 | 34.14 N     | 46.60 E  | 57.77         | 53.77       | 3.41                     | 1.16                | -433.68            |
|                  | 7775.00           | 0.41              | 247.74        | 25                 | 7773.90                  | 34.01                 | 34.01 N     | 46.41 E  | 57.54         | 53.77       | 1.23                     | -1.00               | 79.32              |
|                  | 7800.00           | 0.42              | 244.30        | 25                 | 7798.90                  | 33.94                 | 33.94 N     | 46.25 E  | 57.36         | 53.73       | 0.11                     | 0.04                | -13.76             |
|                  | 7825.00           | 0.52              | 165.82        | 25                 | 7823.90                  | 33.79                 | 33.79 N     | 46.19 E  | 57.23         | 53.82       | 2.40                     | 0.40                | -313.92            |
|                  | 7850.00           | 0.46              | 213.63        | 25                 | 7848.90                  | 33.59                 | 33.59 N     | 46.17 E  | 57.10         | 53.96       | 1.60                     | -0.24               | 191.24             |
|                  | 7875.00           | 0.52              | 237.43        | 25                 | 7873.90                  | 33.45                 | 33.45 N     | 46.01 E  | 56.89         | 53.98       | 0.84                     | 0.24                | 95.20              |
|                  | 7900.00           | 0.46              | 345.45        | 25                 | 7898.90                  | 33.49                 | 33.49 N     | 45.89 E  | 56.81         | 53.88       | 3.17                     | -0.24               | 432.08             |
|                  | 7925.00           | 0.54              | 238.01        | 25                 | 7923.89                  | 33.52                 | 33.52 N     | 45.77 E  | 56.73         | 53.78       | 3.23                     | 0.32                | -429.76            |
|                  | 7950.00           | 0.37              | 285.80        | 25                 | 7948.89                  | 33.48                 | 33.48 N     | 45.59 E  | 56.56         | 53.71       | 1.60                     | -0.68               | 191.16             |
|                  | 7975.00           | 0.30              | 289.77        | 25                 | 7973.89                  | 33.52                 | 33.52 N     | 45.45 E  | 56.48         | 53.59       | 0.29                     | -0.28               | 15.88              |
|                  | 8000.00           | 0.57              | 282.56        | 25                 | 7998.89                  | 33.57                 | 33.57 N     | 45.27 E  | 56.36         | 53.44       | 1.10                     | 1.08                | -28.84             |
|                  | 8025.00           | 0.61              | 168.22        | 25                 | 8023.89                  | 33.47                 | 33.47 N     | 45.17 E  | 56.22         | 53.46       | 3.97                     | 0.16                | -457.36            |
|                  | 8050.00           | 0.49              | 203.18        | 25                 | 8048.89                  | 33.24                 | 33.24 N     | 45.16 E  | 56.08         | 53.64       | 1.40                     | -0.48               | 139.84             |
|                  | 8075.00           | 0.59              | 222.55        | 25                 | 8073.89                  | 33.05                 | 33.05 N     | 45.03 E  | 55.86         | 53.72       | 0.83                     | 0.40                | 77.48              |
|                  | 8100.00           | 0.43              | 227.92        | 25                 | 8098.89                  | 32.89                 | 32.89 N     | 44.87 E  | 55.64         | 53.76       | 0.67                     | -0.64               | 21.48              |
|                  | 8125.00           | 0.66              | 232.92        | 25                 | 8123.89                  | 32.74                 | 32.74 N     | 44.69 E  | 55.40         | 53.77       | 0.94                     | 0.92                | 20.00              |
|                  | 8150.00           | 0.46              | 201.41        | 25                 | 8148.89                  | 32.56                 | 32.56 N     | 44.54 E  | 55.17         | 53.83       | 1.44                     | -0.80               | -126.04            |
|                  | 8175.00           | 0.57              | 246.27        | 25                 | 8173.89                  | 32.42                 | 32.42 N     | 44.39 E  | 54.97         | 53.86       | 1.62                     | 0.44                | 179.44             |
|                  | 8200.00           | 0.63              | 197.61        | 25                 | 8198.88                  | 32.24                 | 32.24 N     | 44.23 E  | 54.73         | 53.92       | 1.99                     | 0.24                | -194.64            |
|                  | 8225.00           | 0.55              | 215.47        | 25                 | 8223.88                  | 32.01                 | 32.01 N     | 44.12 E  | 54.51         | 54.04       | 0.80                     | -0.32               | 71.44              |
|                  | 8250.00           | 0.68              | 207.63        | 25                 | 8248.88                  | 31.78                 | 31.78 N     | 43.98 E  | 54.26         | 54.15       | 0.62                     | 0.52                | -31.36             |



| 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) |                          |                     |                    |
|                  | 8275.00           | 0.70              | 183.74        | 25                 | 8273.88                  | 31.50                 | 31.50 N     | 43.90 E  | 54.03         | 54.35       | 1.15                     | 0.08                | -95.56             |
|                  | 8300.00           | 0.60              | 301.39        | 25                 | 8298.88                  | 31.41                 | 31.41 N     | 43.78 E  | 53.88         | 54.34       | 4.45                     | -0.40               | 470.60             |
|                  | 8325.00           | 0.65              | 200.70        | 25                 | 8323.88                  | 31.35                 | 31.35 N     | 43.62 E  | 53.72         | 54.30       | 3.85                     | 0.20                | -402.76            |
|                  | 8350.00           | 0.68              | 210.19        | 25                 | 8348.88                  | 31.09                 | 31.09 N     | 43.50 E  | 53.46         | 54.45       | 0.46                     | 0.12                | 37.96              |
|                  | 8375.00           | 0.52              | 175.73        | 25                 | 8373.88                  | 30.84                 | 30.84 N     | 43.43 E  | 53.27         | 54.62       | 1.55                     | -0.64               | -137.84            |
|                  | 8400.00           | 0.87              | 207.08        | 25                 | 8398.87                  | 30.56                 | 30.56 N     | 43.35 E  | 53.04         | 54.82       | 2.02                     | 1.40                | 125.40             |
|                  | 8425.00           | 0.66              | 200.23        | 25                 | 8423.87                  | 30.26                 | 30.26 N     | 43.22 E  | 52.76         | 55.00       | 0.91                     | -0.84               | -27.40             |
|                  | 8450.00           | 0.66              | 204.74        | 25                 | 8448.87                  | 29.99                 | 29.99 N     | 43.11 E  | 52.51         | 55.17       | 0.21                     | 0.00                | 18.04              |
|                  | 8475.00           | 0.75              | 178.08        | 25                 | 8473.87                  | 29.70                 | 29.70 N     | 43.05 E  | 52.30         | 55.40       | 1.35                     | 0.36                | -106.64            |
|                  | 8500.00           | 0.96              | 161.72        | 25                 | 8498.86                  | 29.34                 | 29.34 N     | 43.12 E  | 52.15         | 55.77       | 1.28                     | 0.84                | -65.44             |
|                  | 8525.00           | 0.72              | 146.40        | 25                 | 8523.86                  | 29.01                 | 29.01 N     | 43.27 E  | 52.10         | 56.17       | 1.31                     | -0.96               | -61.28             |
|                  | 8550.00           | 0.97              | 165.62        | 25                 | 8548.86                  | 28.67                 | 28.67 N     | 43.41 E  | 52.03         | 56.56       | 1.50                     | 1.00                | 76.88              |
|                  | 8575.00           | 1.19              | 166.74        | 25                 | 8573.86                  | 28.21                 | 28.21 N     | 43.53 E  | 51.87         | 57.05       | 0.88                     | 0.88                | 4.48               |
|                  | 8600.00           | 0.89              | 155.80        | 25                 | 8598.85                  | 27.78                 | 27.78 N     | 43.66 E  | 51.75         | 57.53       | 1.43                     | -1.20               | -43.76             |
|                  | 8625.00           | 1.09              | 155.41        | 25                 | 8623.85                  | 27.39                 | 27.39 N     | 43.84 E  | 51.70         | 58.01       | 0.80                     | 0.80                | -1.56              |
|                  | 8650.00           | 1.03              | 167.97        | 25                 | 8648.84                  | 26.95                 | 26.95 N     | 43.99 E  | 51.59         | 58.50       | 0.96                     | -0.24               | 50.24              |
|                  | 8675.00           | 0.82              | 131.21        | 25                 | 8673.84                  | 26.62                 | 26.62 N     | 44.17 E  | 51.57         | 58.93       | 2.47                     | -0.84               | -147.04            |
|                  | 8700.00           | 0.89              | 140.80        | 25                 | 8698.84                  | 26.35                 | 26.35 N     | 44.43 E  | 51.65         | 59.33       | 0.64                     | 0.28                | 38.36              |
|                  | 8725.00           | 1.17              | 154.56        | 25                 | 8723.83                  | 25.97                 | 25.97 N     | 44.66 E  | 51.66         | 59.83       | 1.49                     | 1.12                | 55.04              |
|                  | 8750.00           | 1.08              | 11.61         | 25                 | 8748.83                  | 25.97                 | 25.97 N     | 44.82 E  | 51.80         | 59.91       | 8.53                     | -0.36               | -571.80            |
|                  | 8775.00           | 1.30              | 142.84        | 25                 | 8773.83                  | 25.97                 | 25.97 N     | 45.04 E  | 51.99         | 60.03       | 8.68                     | 0.88                | 524.92             |
|                  | 8800.00           | 1.36              | 125.91        | 25                 | 8798.82                  | 25.57                 | 25.57 N     | 45.45 E  | 52.15         | 60.64       | 1.58                     | 0.24                | -67.72             |
|                  | 8825.00           | 1.16              | 135.42        | 25                 | 8823.82                  | 25.22                 | 25.22 N     | 45.87 E  | 52.34         | 61.20       | 1.15                     | -0.80               | 38.04              |
|                  | 8850.00           | 1.23              | 123.61        | 25                 | 8848.81                  | 24.89                 | 24.89 N     | 46.27 E  | 52.54         | 61.72       | 1.02                     | 0.28                | -47.24             |
|                  | 8875.00           | 1.21              | 116.40        | 25                 | 8873.80                  | 24.62                 | 24.62 N     | 46.73 E  | 52.82         | 62.21       | 0.62                     | -0.08               | -28.84             |
|                  | 8900.00           | 1.44              | 138.85        | 25                 | 8898.80                  | 24.27                 | 24.27 N     | 47.17 E  | 53.05         | 62.77       | 2.25                     | 0.92                | 89.80              |
|                  | 8925.00           | 1.34              | 132.73        | 25                 | 8923.79                  | 23.83                 | 23.83 N     | 47.59 E  | 53.23         | 63.40       | 0.72                     | -0.40               | -24.48             |
|                  | 8950.00           | 1.32              | 131.39        | 25                 | 8948.78                  | 23.44                 | 23.44 N     | 48.02 E  | 53.44         | 63.98       | 0.15                     | -0.08               | -5.36              |
|                  | 8975.00           | 1.48              | 132.81        | 25                 | 8973.78                  | 23.04                 | 23.04 N     | 48.47 E  | 53.67         | 64.58       | 0.65                     | 0.64                | 5.68               |
|                  | 9000.00           | 1.10              | 123.59        | 25                 | 8998.77                  | 22.68                 | 22.68 N     | 48.91 E  | 53.92         | 65.12       | 1.73                     | -1.52               | -36.88             |



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

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

| Survey<br>Tool<br>Type | Survey<br>Depth<br>(ft) | Inclina-<br>tion<br>(deg) | Azimuth<br>(deg) | Course<br>Length<br>(ft) | True Vertical<br>Depth<br>(ft) | Vertical<br>Section<br>(ft) | Coordinates |             | Closure          |                | Dogleg<br>Severity<br>(d/100') | Build<br>Rate<br>(d/100') | Walk<br>Rate<br>(d/100') |
|------------------------|-------------------------|---------------------------|------------------|--------------------------|--------------------------------|-----------------------------|-------------|-------------|------------------|----------------|--------------------------------|---------------------------|--------------------------|
|                        |                         |                           |                  |                          |                                |                             | N/S<br>(ft) | E/W<br>(ft) | Distance<br>(ft) | Angle<br>(deg) |                                |                           |                          |
|                        | 9025.00                 | 1.42                      | 135.80           | 25                       | 9023.76                        | 22.33                       | 22.33 N     | 49.33 E     | 54.15            | 65.65          | 1.66                           | 1.28                      | 48.84                    |
|                        | 9050.00                 | 1.44                      | 127.08           | 25                       | 9048.76                        | 21.92                       | 21.92 N     | 49.79 E     | 54.40            | 66.24          | 0.87                           | 0.08                      | -34.88                   |
|                        | 9075.00                 | 1.36                      | 132.78           | 25                       | 9073.75                        | 21.53                       | 21.53 N     | 50.26 E     | 54.68            | 66.82          | 0.64                           | -0.32                     | 22.80                    |
|                        | 9100.00                 | 1.39                      | 134.92           | 25                       | 9098.74                        | 21.11                       | 21.11 N     | 50.69 E     | 54.91            | 67.39          | 0.24                           | 0.12                      | 8.56                     |
|                        | 9125.00                 | 1.41                      | 139.09           | 25                       | 9123.73                        | 20.66                       | 20.66 N     | 51.11 E     | 55.13            | 67.99          | 0.42                           | 0.08                      | 16.68                    |
|                        | 9150.00                 | 1.17                      | 144.42           | 25                       | 9148.73                        | 20.22                       | 20.22 N     | 51.46 E     | 55.29            | 68.55          | 1.07                           | -0.96                     | 21.32                    |
|                        | 9175.00                 | 1.44                      | 152.31           | 25                       | 9173.72                        | 19.74                       | 19.74 N     | 51.76 E     | 55.39            | 69.12          | 1.29                           | 1.08                      | 31.56                    |
|                        | 9200.00                 | 1.31                      | 165.12           | 25                       | 9198.71                        | 19.18                       | 19.18 N     | 51.97 E     | 55.40            | 69.74          | 1.33                           | -0.52                     | 51.24                    |
|                        | 9225.00                 | 1.49                      | 172.74           | 25                       | 9223.71                        | 18.58                       | 18.58 N     | 52.09 E     | 55.31            | 70.36          | 1.03                           | 0.72                      | 30.48                    |
|                        | 9250.00                 | 1.30                      | 183.72           | 25                       | 9248.70                        | 17.98                       | 17.98 N     | 52.11 E     | 55.13            | 70.96          | 1.31                           | -0.76                     | 43.92                    |
|                        | 9275.00                 | 1.18                      | 191.60           | 25                       | 9273.69                        | 17.44                       | 17.44 N     | 52.04 E     | 54.89            | 71.47          | 0.83                           | -0.48                     | 31.52                    |
|                        | 9300.00                 | 1.36                      | 211.09           | 25                       | 9298.69                        | 16.94                       | 16.94 N     | 51.84 E     | 54.53            | 71.90          | 1.86                           | 0.72                      | 77.96                    |
|                        | 9325.00                 | 1.40                      | 209.01           | 25                       | 9323.68                        | 16.42                       | 16.42 N     | 51.54 E     | 54.09            | 72.33          | 0.26                           | 0.16                      | -8.32                    |
|                        | 9350.00                 | 1.69                      | 219.63           | 25                       | 9348.67                        | 15.87                       | 15.87 N     | 51.15 E     | 53.56            | 72.77          | 1.63                           | 1.16                      | 42.48                    |
|                        | 9375.00                 | 1.63                      | 219.81           | 25                       | 9373.66                        | 15.31                       | 15.31 N     | 50.69 E     | 52.95            | 73.19          | 0.24                           | -0.24                     | 0.72                     |
|                        | 9400.00                 | 1.50                      | 225.07           | 25                       | 9398.65                        | 14.80                       | 14.80 N     | 50.23 E     | 52.37            | 73.58          | 0.77                           | -0.52                     | 21.04                    |
|                        | 9425.00                 | 1.82                      | 223.21           | 25                       | 9423.64                        | 14.28                       | 14.28 N     | 49.73 E     | 51.74            | 73.97          | 1.30                           | 1.28                      | -7.44                    |
|                        | 9450.00                 | 1.71                      | 209.34           | 25                       | 9448.63                        | 13.67                       | 13.67 N     | 49.27 E     | 51.13            | 74.49          | 1.76                           | -0.44                     | -55.48                   |
|                        | 9475.00                 | 1.61                      | 227.69           | 25                       | 9473.62                        | 13.11                       | 13.11 N     | 48.83 E     | 50.56            | 74.97          | 2.15                           | -0.40                     | 73.40                    |
|                        | 9500.00                 | 2.03                      | 223.14           | 25                       | 9498.61                        | 12.55                       | 12.55 N     | 48.27 E     | 49.87            | 75.43          | 1.78                           | 1.68                      | -18.20                   |
|                        | 9525.00                 | 1.86                      | 217.59           | 25                       | 9523.59                        | 11.90                       | 11.90 N     | 47.72 E     | 49.18            | 75.99          | 1.01                           | -0.68                     | -22.20                   |
|                        | 9550.00                 | 1.33                      | 213.73           | 25                       | 9548.58                        | 11.34                       | 11.34 N     | 47.31 E     | 48.65            | 76.52          | 2.16                           | -2.12                     | -15.44                   |
|                        | 9575.00                 | 1.69                      | 223.77           | 25                       | 9573.57                        | 10.83                       | 10.83 N     | 46.89 E     | 48.13            | 76.99          | 1.78                           | 1.44                      | 40.16                    |
|                        | 9600.00                 | 1.52                      | 206.80           | 25                       | 9598.56                        | 10.27                       | 10.27 N     | 46.49 E     | 47.61            | 77.54          | 2.01                           | -0.68                     | -67.88                   |
|                        | 9625.00                 | 1.49                      | 206.92           | 25                       | 9623.56                        | 9.69                        | 9.69 N      | 46.19 E     | 47.20            | 78.16          | 0.12                           | -0.12                     | 0.48                     |
|                        | 9650.00                 | 1.60                      | 207.83           | 25                       | 9648.55                        | 9.09                        | 9.09 N      | 45.88 E     | 46.77            | 78.80          | 0.45                           | 0.44                      | 3.64                     |
|                        | 9675.00                 | 1.65                      | 207.15           | 25                       | 9673.54                        | 8.46                        | 8.46 N      | 45.55 E     | 46.33            | 79.48          | 0.21                           | 0.20                      | -2.72                    |
|                        | 9700.00                 | 1.30                      | 217.59           | 25                       | 9698.53                        | 7.91                        | 7.91 N      | 45.22 E     | 45.90            | 80.07          | 1.76                           | -1.40                     | 41.76                    |
|                        | 9725.00                 | 1.38                      | 213.19           | 25                       | 9723.52                        | 7.44                        | 7.44 N      | 44.88 E     | 45.49            | 80.59          | 0.52                           | 0.32                      | -17.60                   |
|                        | 9750.00                 | 1.63                      | 207.03           | 25                       | 9748.51                        | 6.87                        | 6.87 N      | 44.55 E     | 45.08            | 81.24          | 1.19                           | 1.00                      | -24.64                   |



Company: Legacy  
 Well: Hamon A Fed Com 3H  
 Location: Lea Co., NM  
 Rig: Pulling Unit

Job Number: 61389  
 Grid Corr.: -0.40  
 Lat: 32.59  
 Long: -103.59

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

| Survey<br>Tool<br>Type | Survey<br>Depth<br>(ft) | Inclina-<br>tion<br>(deg) | Azimuth<br>(deg) | Course<br>Length<br>(ft) | True Vertical<br>Depth<br>(ft) | Vertical<br>Section<br>(ft) | Coordinates |             | Closure          |                | Dogleg<br>Severity<br>(d/100') | Build<br>Rate<br>(d/100') | Walk<br>Rate<br>(d/100') |
|------------------------|-------------------------|---------------------------|------------------|--------------------------|--------------------------------|-----------------------------|-------------|-------------|------------------|----------------|--------------------------------|---------------------------|--------------------------|
|                        |                         |                           |                  |                          |                                |                             | N/S<br>(ft) | E/W<br>(ft) | Distance<br>(ft) | Angle<br>(deg) |                                |                           |                          |
|                        | 9775.00                 | 1.77                      | 208.16           | 25                       | 9773.50                        | 6.21                        | 6.21 N      | 44.21 E     | 44.64            | 82.00          | 0.58                           | 0.56                      | 4.52                     |
|                        | 9800.00                 | 1.74                      | 210.54           | 25                       | 9798.49                        | 5.54                        | 5.54 N      | 43.83 E     | 44.18            | 82.79          | 0.32                           | -0.12                     | 9.52                     |
|                        | 9825.00                 | 1.69                      | 211.08           | 25                       | 9823.48                        | 4.90                        | 4.90 N      | 43.45 E     | 43.73            | 83.56          | 0.21                           | -0.20                     | 2.16                     |
|                        | 9850.00                 | 1.61                      | 198.62           | 25                       | 9848.47                        | 4.25                        | 4.25 N      | 43.15 E     | 43.36            | 84.37          | 1.47                           | -0.32                     | -49.84                   |
|                        | 9875.00                 | 1.32                      | 203.04           | 25                       | 9873.46                        | 3.65                        | 3.65 N      | 42.92 E     | 43.08            | 85.13          | 1.24                           | -1.16                     | 17.68                    |
|                        | 9900.00                 | 1.36                      | 205.22           | 25                       | 9898.45                        | 3.12                        | 3.12 N      | 42.68 E     | 42.80            | 85.82          | 0.26                           | 0.16                      | 8.72                     |
|                        | 9925.00                 | 1.33                      | 207.07           | 25                       | 9923.45                        | 2.59                        | 2.59 N      | 42.43 E     | 42.50            | 86.50          | 0.21                           | -0.12                     | 7.40                     |
|                        | 9950.00                 | 1.16                      | 191.49           | 25                       | 9948.44                        | 2.09                        | 2.09 N      | 42.24 E     | 42.29            | 87.17          | 1.51                           | -0.68                     | -62.32                   |
|                        | 9975.00                 | 1.28                      | 197.53           | 25                       | 9973.43                        | 1.57                        | 1.57 N      | 42.11 E     | 42.14            | 87.86          | 0.70                           | 0.48                      | 24.16                    |
|                        | 10000.00                | 1.27                      | 196.80           | 25                       | 9998.43                        | 1.04                        | 1.04 N      | 41.94 E     | 41.96            | 88.58          | 0.08                           | -0.04                     | -2.92                    |