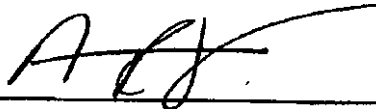


Apache Corporation  
303 Veterans Airpark Lane, #3000  
Midland, TX 79705

Hummingbird Federal Com #007H  
Eddy County, New Mexico

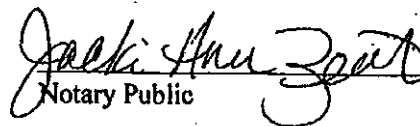
API #30-015-43050  
E-sec 1, 17S, R31E  
2310' FNL + 100' FWL  
Eddy Co, NMex.

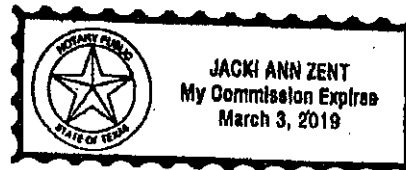
|      |      |      |      |      |       |
|------|------|------|------|------|-------|
| 223  | 2.23 | 0.50 | 0.88 | 1.95 | 1.95  |
| 485  | 2.62 | 1.00 | 1.75 | 4.59 | 6.54  |
| 777  | 2.92 | 0.40 | 0.70 | 2.04 | 8.58  |
| 989  | 2.12 | 0.50 | 0.88 | 1.86 | 10.44 |
| 1245 | 2.56 | 0.10 | 0.18 | 0.45 | 10.88 |
| 1501 | 2.56 | 0.30 | 0.53 | 1.34 | 12.23 |
| 1714 | 2.13 | 1.30 | 2.28 | 4.85 | 17.07 |
| 1925 | 2.11 | 1.50 | 2.83 | 5.64 | 22.61 |
| 2226 | 3.01 | 0.60 | 1.05 | 3.16 | 25.77 |
| 2482 | 2.56 | 0.70 | 1.23 | 3.14 | 28.91 |
| 2738 | 2.56 | 0.10 | 0.18 | 0.45 | 29.36 |
| 2994 | 2.56 | 0.20 | 0.35 | 0.90 | 30.25 |
| 3208 | 2.14 | 0.50 | 0.88 | 1.87 | 32.12 |
| 3506 | 2.98 | 0.50 | 0.88 | 2.61 | 34.73 |
| 3677 | 1.71 | 0.70 | 1.23 | 2.09 | 36.83 |
| 3783 | 1.06 | 0.50 | 0.88 | 0.93 | 37.75 |
| 4039 | 2.56 | 0.30 | 0.53 | 1.34 | 39.10 |
| 4297 | 2.58 | 0.50 | 0.88 | 2.26 | 41.36 |
| 4553 | 2.56 | 0.10 | 0.18 | 0.45 | 41.80 |
| 4851 | 2.98 | 0.20 | 0.35 | 1.04 | 42.85 |
| 4912 | 0.61 | 0.20 | 0.35 | 0.21 | 43.08 |



Archie Brown - General Manager

The attached instrument was acknowledged before me on the 9th day of October, 2015 by  
Archie Brown - General Manager, CapStar Drilling, Inc.

  
Notary Public





## **Apache Corporation**

**Eddy County, NM (NAD27 NME)**

**Hummingbird Federal Com**

**#7H**

**OH / Job #1514235**

**Design: Surveys (Capstar 114)**

## **Standard Survey Report**

**28 September, 2015**





# Phoenix Technology Services LP Survey Report



|           |                             |                             |                                |
|-----------|-----------------------------|-----------------------------|--------------------------------|
| Company:  | Apache Corporation          | Local Coordinate Reference: | Well #7H                       |
| Project:  | Eddy County, NM (NAD27 NME) | TVD Reference:              | KB @ 4029.00usft (Capstar 114) |
| Site:     | Hummingbird Federal Com     | MD Reference:               | KB @ 4029.00usft (Capstar 114) |
| Well:     | #7H                         | North Reference:            | Grid                           |
| Wellbore: | OH / Job #1514235           | Survey Calculation Method:  | Minimum Curvature              |
| Design:   | Surveys (Capstar 114)       | Database:                   | Compass 5000 GCR               |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project:    | Eddy County, NM (NAD27 NME)          |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |                         |                        |                                |
|-----------------------|-------------------------|------------------------|--------------------------------|
| Site:                 | Hummingbird Federal Com |                        |                                |
| Site Position:        | Northings:              | 677,262.80 usft        | Latitude: 32° 51' 39.07482 N   |
| From: Map             | Easting:                | 655,481.80 usft        | Longitude: 103° 49' 37.14798 W |
| Position Uncertainty: | 0.00 usft               | Slot Radius: 13-3/16 " | Grid Convergence: 0.27 °       |

|                      |           |                     |                             |
|----------------------|-----------|---------------------|-----------------------------|
| Well:                | #7H       |                     |                             |
| Well Position        | +N/-S     | 0.00 usft           | Northings: 678,572.30 usft  |
|                      | +E/-W     | 0.00 usft           | Easting: 654,274.80 usft    |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | usft                        |
|                      |           |                     | Ground Level: 4,018.00 usft |

|           |                   |             |                       |
|-----------|-------------------|-------------|-----------------------|
| Wellbore: | OH / Job #1514235 |             |                       |
| Magnetics | Model Name        | Sample Date | Declination           |
|           | HDGM              | 8/22/2015   | 7.50                  |
|           |                   |             | Dip Angle 80.85       |
|           |                   |             | Field Strength 48,807 |

|                   |                       |               |        |
|-------------------|-----------------------|---------------|--------|
| Design:           | Surveys (Capstar 114) |               |        |
| Audit Notes:      |                       |               |        |
| Version:          | 1.0                   | Phase:        | ACTUAL |
|                   |                       | Tie On Depth: | 0.00   |
| Vertical Section: | Depth from (TVD)      | +N/-S         | +E/-W  |
|                   | (usft)                | (usft)        | (usft) |
|                   | 0.00                  | 0.00          | 0.00   |
|                   |                       |               | 89.57  |

|                |                 |                                         |                                   |
|----------------|-----------------|-----------------------------------------|-----------------------------------|
| Survey Program | Date: 8/23/2015 |                                         |                                   |
| From           | To              | Survey (Wellbore)                       | Tool Name                         |
| (usft)         | (usft)          |                                         |                                   |
| 100.00         | 4,857.00        | Phoenix Gyro Survey (OH / Job #1514235) | PHX_SPT_GTD                       |
| 4,857.00       | 10,033.00       | Phoenix MWD Survey (OH / Job #1514235)  | PHX+MWD+HDGM                      |
|                |                 |                                         | PHX Continuous north-seeking gyro |
|                |                 |                                         | PHX+MWD+HDGM                      |

|        |          |             |         |          |        |        |          |             |             |             |
|--------|----------|-------------|---------|----------|--------|--------|----------|-------------|-------------|-------------|
| Survey | Measured | Inclination | Azimuth | Vertical | +N/-S  | +E/-W  | Vertical | Dogleg      | Build       | Turn        |
|        | Depth    | (°)         | (°)     | Depth    | (usft) | (usft) | Section  | Rate        | Rate        | Rate        |
|        | (usft)   |             |         | (usft)   |        |        | (usft)   | (°/100usft) | (°/100usft) | (°/100usft) |
|        | 0.00     | 0.00        | 0.00    | 0.00     | 0.00   | 0.00   | 0.00     | 0.00        | 0.00        | 0.00        |
|        | 100.00   | 0.23        | 214.18  | 100.00   | -0.17  | -0.11  | -0.11    | 0.23        | 0.23        | 0.00        |
|        | 200.00   | 0.26        | 74.60   | 200.00   | -0.27  | -0.01  | -0.01    | 0.46        | 0.03        | -139.58     |
|        | 300.00   | 0.23        | 294.41  | 300.00   | -0.13  | 0.03   | 0.03     | 0.46        | -0.03       | -140.19     |
|        | 400.00   | 0.22        | 290.80  | 400.00   | 0.02   | -0.33  | -0.33    | 0.02        | -0.01       | -3.61       |
|        | 500.00   | 0.19        | 239.93  | 500.00   | 0.01   | -0.86  | -0.86    | 0.18        | -0.03       | -50.87      |
|        | 600.00   | 0.35        | 302.60  | 600.00   | 0.09   | -1.06  | -1.06    | 0.31        | 0.16        | 62.87       |
|        | 700.00   | 0.33        | 2.02    | 700.00   | 0.54   | -1.30  | -1.30    | 0.34        | -0.02       | 59.42       |
|        | 800.00   | 0.19        | 131.96  | 799.99   | 0.72   | -1.17  | -1.17    | 0.47        | -0.14       | 129.94      |
|        | 900.00   | 0.20        | 306.26  | 899.99   | 0.71   | -1.19  | -1.18    | 0.39        | 0.01        | 174.30      |



# Phoenix Technology Services LP

## Survey Report



|           |                             |                             |                                |
|-----------|-----------------------------|-----------------------------|--------------------------------|
| Company:  | Apache Corporation          | Local Coordinate Reference: | Well #7H                       |
| Project:  | Eddy County, NM (NAD27 NME) | IVD Reference:              | KB @ 4029.00usft (Capstar 114) |
| Client:   | Hummingbird Federal Corp    | MD Reference:               | KB @ 4029.00usft (Capstar 114) |
| Well:     | #7H                         | North Reference:            | Grid                           |
| Wellbore: | OH / Job #1514235           | Survey Calculation Method:  | Minimum Curvature              |
| Design:   | Surveys (Capstar 114)       | Database:                   | Compass 5000 GCR               |

| Measured Depth (usft)         | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | N-S (usft) | E-W (usft) | Vertical Section (usft) | Dogleg Rate (/100usft) | Buid Rate (/100usft) | Turn Rate (/100usft) |
|-------------------------------|-----------------|-------------|-----------------------|------------|------------|-------------------------|------------------------|----------------------|----------------------|
| 1,000.00                      | 0.10            | 126.47      | 999.99                | 0.76       | -1.26      | -1.25                   | 0.30                   | -0.10                | -179.79              |
| 1,100.00                      | 0.11            | 90.08       | 1,099.99              | 0.71       | -1.09      | -1.09                   | 0.07                   | 0.01                 | -36.39               |
| 1,200.00                      | 0.27            | 254.08      | 1,199.99              | 0.65       | -1.22      | -1.22                   | 0.38                   | 0.16                 | 164.00               |
| 1,300.00                      | 0.25            | 258.67      | 1,299.99              | 0.54       | -1.66      | -1.68                   | 0.03                   | -0.02                | 4.59                 |
| 1,400.00                      | 0.13            | 217.71      | 1,399.99              | 0.41       | -1.85      | -1.94                   | 0.17                   | -0.12                | -40.98               |
| 1,500.00                      | 0.63            | 93.91       | 1,499.99              | 0.28       | -1.47      | -1.47                   | 0.71                   | 0.50                 | -123.80              |
| 1,600.00                      | 0.82            | 81.00       | 1,599.98              | 0.35       | -0.21      | -0.21                   | 0.25                   | 0.19                 | -12.91               |
| 1,700.00                      | 0.88            | 72.78       | 1,699.97              | 0.69       | 1.23       | 1.23                    | 0.14                   | 0.06                 | -8.22                |
| 1,800.00                      | 1.43            | 61.08       | 1,799.95              | 1.52       | 3.05       | 3.06                    | 0.60                   | 0.55                 | -11.70               |
| 1,900.00                      | 1.56            | 59.29       | 1,899.92              | 2.82       | 5.32       | 5.34                    | 0.14                   | 0.13                 | -1.79                |
| 2,000.00                      | 1.53            | 59.33       | 1,999.88              | 4.20       | 7.63       | 7.67                    | 0.03                   | -0.03                | 0.04                 |
| 2,100.00                      | 1.31            | 61.85       | 2,099.85              | 5.42       | 9.79       | 9.83                    | 0.23                   | -0.22                | 2.52                 |
| 2,200.00                      | 0.90            | 60.70       | 2,199.83              | 6.34       | 11.48      | 11.53                   | 0.41                   | -0.41                | -1.15                |
| 2,300.00                      | 0.65            | 79.33       | 2,299.82              | 6.83       | 12.73      | 12.78                   | 0.35                   | -0.25                | 18.83                |
| 2,400.00                      | 0.62            | 58.31       | 2,399.82              | 7.22       | 13.74      | 13.80                   | 0.23                   | -0.03                | -21.02               |
| 2,500.00                      | 0.53            | 50.52       | 2,499.81              | 7.60       | 14.58      | 14.62                   | 0.12                   | -0.09                | -7.78                |
| 2,600.00                      | 0.20            | 321.87      | 2,599.81              | 8.23       | 14.81      | 14.87                   | 0.56                   | -0.33                | -98.65               |
| 2,700.00                      | 0.03            | 351.79      | 2,699.81              | 8.39       | 14.70      | 14.76                   | 0.17                   | -0.17                | 29.92                |
| 2,800.00                      | 0.16            | 139.02      | 2,799.81              | 8.31       | 14.79      | 14.85                   | 0.19                   | 0.13                 | 147.23               |
| 2,900.00                      | 0.19            | 298.56      | 2,899.81              | 8.29       | 14.73      | 14.79                   | 0.34                   | 0.03                 | 159.54               |
| 3,000.00                      | 0.24            | 343.85      | 2,999.81              | 8.57       | 14.53      | 14.59                   | 0.17                   | 0.05                 | 45.29                |
| 3,100.00                      | 0.37            | 175.30      | 3,099.81              | 8.45       | 14.50      | 14.56                   | 0.61                   | 0.13                 | -168.55              |
| 3,200.00                      | 0.48            | 240.46      | 3,199.81              | 7.92       | 14.16      | 14.22                   | 0.47                   | 0.11                 | 65.16                |
| 3,300.00                      | 0.65            | 253.43      | 3,299.80              | 7.57       | 13.33      | 13.38                   | 0.14                   | 0.07                 | 12.97                |
| 3,400.00                      | 0.51            | 219.37      | 3,399.80              | 7.09       | 12.59      | 12.64                   | 0.31                   | -0.04                | -34.06               |
| 3,500.00                      | 0.54            | 250.38      | 3,499.79              | 6.59       | 11.87      | 11.91                   | 0.28                   | 0.03                 | 31.01                |
| 3,600.00                      | 0.46            | 255.31      | 3,599.79              | 6.33       | 11.03      | 11.08                   | 0.09                   | -0.08                | 4.93                 |
| 3,700.00                      | 0.51            | 268.53      | 3,699.79              | 6.22       | 10.20      | 10.25                   | 0.12                   | 0.05                 | 13.22                |
| 3,800.00                      | 0.38            | 220.32      | 3,799.78              | 5.95       | 9.54       | 9.59                    | 0.39                   | -0.13                | -48.21               |
| 3,900.00                      | 0.29            | 359.32      | 3,899.78              | 5.95       | 9.32       | 9.37                    | 0.63                   | -0.09                | 139.00               |
| 4,000.00                      | 0.38            | 210.88      | 3,999.78              | 5.92       | 9.15       | 9.19                    | 0.65                   | 0.09                 | -148.44              |
| 4,100.00                      | 0.43            | 295.59      | 4,099.78              | 5.80       | 8.64       | 8.68                    | 0.55                   | 0.05                 | 84.71                |
| 4,200.00                      | 0.42            | 321.89      | 4,199.78              | 6.25       | 8.08       | 8.12                    | 0.19                   | -0.01                | 26.30                |
| 4,300.00                      | 0.30            | 175.55      | 4,299.78              | 6.28       | 7.87       | 7.92                    | 0.69                   | -0.12                | -146.34              |
| 4,400.00                      | 0.22            | 262.18      | 4,399.78              | 5.89       | 7.70       | 7.75                    | 0.36                   | -0.08                | 86.63                |
| 4,500.00                      | 0.18            | 150.13      | 4,499.78              | 5.83       | 7.59       | 7.63                    | 0.33                   | -0.04                | -112.05              |
| 4,600.00                      | 0.05            | 118.81      | 4,599.78              | 5.67       | 7.71       | 7.75                    | 0.14                   | -0.13                | -31.32               |
| 4,700.00                      | 0.08            | 99.78       | 4,699.78              | 5.64       | 7.81       | 7.85                    | 0.04                   | 0.03                 | -19.03               |
| 4,800.00                      | 0.13            | 196.36      | 4,799.78              | 5.52       | 7.85       | 7.89                    | 0.16                   | 0.05                 | 96.58                |
| 4,857.00                      | 0.15            | 188.52      | 4,856.77              | 5.38       | 7.82       | 7.86                    | 0.05                   | 0.04                 | -13.75               |
| Tie-on to Phoenix Gyro Survey |                 |             |                       |            |            |                         |                        |                      |                      |
| 4,940.00                      | 3.40            | 90.90       | 4,939.73              | 5.24       | 10.27      | 10.30                   | 4.12                   | 3.92                 | -117.61              |
| First Phoenix MWD Survey      |                 |             |                       |            |            |                         |                        |                      |                      |



# Phoenix Technology Services LP Survey Report



|            |                             |                             |                                |
|------------|-----------------------------|-----------------------------|--------------------------------|
| Company:   | Apache Corporation          | Local Coordinate Reference: | Well #7H                       |
| Project:   | Eddy County, NM (NAD27 NME) | TVD Reference:              | KB @ 4029.00usft (Capstar 114) |
| Site:      | Hummingbird Federal Com     | MD Reference:               | KB @ 4029.00usft (Capstar 114) |
| Well:      | #7H                         | North Reference:            | Grid                           |
| Wellbore:  | OH/ Job #1514235            | Survey Calculation Method:  | Minimum Curvature              |
| Operation: | Surveys (Capstar 114)       | Degrees:                    | Compass 5000 GCR               |

| Measured Depth (usft) | Inclination (°) | Axisimuth (°) | Vertical Depth (usft) | N/S (usft) | E/W (usft) | Vertical Section (usft) | Dogleg Rate (1/100usft) | Build Rate (1/100usft) | Turn Rate (1/100usft) |
|-----------------------|-----------------|---------------|-----------------------|------------|------------|-------------------------|-------------------------|------------------------|-----------------------|
| 4,983.00              | 8.30            | 80.30         | 4,982.49              | 5.20       | 14.65      | 14.69                   | 11.40                   | 11.40                  | -1.40                 |
| 5,025.00              | 13.30           | 86.70         | 5,023.73              | 5.46       | 22.51      | 22.55                   | 12.01                   | 11.90                  | -8.57                 |
| 5,068.00              | 18.60           | 84.80         | 5,065.06              | 6.37       | 34.28      | 34.33                   | 12.38                   | 12.33                  | -4.42                 |
| 5,111.00              | 23.90           | 88.70         | 5,105.13              | 7.19       | 48.83      | 48.88                   | 12.75                   | 12.33                  | 9.07                  |
| 5,153.00              | 29.30           | 82.30         | 5,142.67              | 6.97       | 68.62      | 68.67                   | 13.41                   | 12.86                  | 8.57                  |
| 5,196.00              | 35.40           | 82.90         | 5,178.98              | 5.92       | 81.60      | 81.64                   | 14.21                   | 14.19                  | 1.40                  |
| 5,238.00              | 39.30           | 82.10         | 5,212.36              | 4.81       | 117.05     | 117.08                  | 9.36                    | 9.29                   | -1.90                 |
| 5,281.00              | 44.10           | 91.70         | 5,244.48              | 3.87       | 145.63     | 145.65                  | 11.18                   | 11.16                  | -0.93                 |
| 5,324.00              | 50.20           | 89.90         | 5,273.69              | 3.45       | 177.13     | 177.15                  | 14.51                   | 14.19                  | -4.19                 |
| 5,366.00              | 55.20           | 89.20         | 5,299.13              | 3.72       | 210.53     | 210.55                  | 11.98                   | 11.90                  | -1.67                 |
| 5,409.00              | 59.20           | 89.90         | 5,322.42              | 4.00       | 246.67     | 246.69                  | 9.40                    | 9.30                   | 1.83                  |
| 5,452.00              | 62.40           | 90.60         | 5,343.40              | 3.83       | 284.20     | 284.22                  | 7.58                    | 7.44                   | 1.63                  |
| 5,494.00              | 65.30           | 90.70         | 5,361.90              | 3.41       | 321.89     | 321.91                  | 6.91                    | 6.90                   | 0.24                  |
| 5,537.00              | 68.30           | 90.70         | 5,378.84              | 2.92       | 361.41     | 361.42                  | 6.98                    | 6.98                   | 0.00                  |
| 5,580.00              | 72.50           | 90.30         | 5,393.26              | 2.57       | 401.90     | 401.91                  | 9.81                    | 9.77                   | -0.93                 |
| 5,622.00              | 75.90           | 89.80         | 5,404.70              | 2.54       | 442.31     | 442.32                  | 8.18                    | 8.10                   | -1.19                 |
| 5,665.00              | 78.60           | 89.40         | 5,414.22              | 2.83       | 484.24     | 484.24                  | 6.11                    | 6.05                   | -0.93                 |
| 5,708.00              | 82.00           | 89.10         | 5,421.50              | 3.39       | 526.61     | 526.62                  | 8.17                    | 8.14                   | -0.70                 |
| 5,751.00              | 86.30           | 89.10         | 5,425.89              | 4.08       | 569.37     | 569.38                  | 10.00                   | 10.00                  | 0.00                  |
| 5,794.00              | 89.30           | 89.10         | 5,427.54              | 4.73       | 612.32     | 612.34                  | 8.98                    | 6.98                   | 0.00                  |
| 5,836.00              | 90.30           | 89.40         | 5,427.68              | 5.28       | 654.32     | 654.34                  | 2.48                    | 2.38                   | 0.71                  |
| 5,864.00              | 90.00           | 89.80         | 5,427.35              | 6.18       | 782.32     | 782.34                  | 0.39                    | -0.23                  | 0.31                  |
| 6,092.00              | 89.40           | 88.60         | 5,428.02              | 7.96       | 910.30     | 910.33                  | 1.05                    | -0.47                  | -0.94                 |
| 6,220.00              | 90.50           | 88.50         | 5,428.13              | 11.20      | 1,038.26   | 1,038.31                | 0.86                    | 0.86                   | -0.08                 |
| 6,347.00              | 89.70           | 89.10         | 5,427.91              | 13.86      | 1,165.23   | 1,165.30                | 0.79                    | -0.63                  | 0.47                  |
| 6,476.00              | 88.50           | 88.30         | 5,428.81              | 16.79      | 1,294.19   | 1,294.28                | 0.84                    | -0.16                  | -0.62                 |
| 6,604.00              | 89.00           | 89.20         | 5,430.48              | 18.58      | 1,422.15   | 1,422.25                | 0.80                    | -0.39                  | 0.70                  |
| 6,732.00              | 88.90           | 89.00         | 5,431.71              | 21.59      | 1,550.12   | 1,550.24                | 0.72                    | 0.70                   | -0.16                 |
| 6,860.00              | 90.00           | 90.30         | 5,431.82              | 22.37      | 1,678.12   | 1,678.24                | 1.02                    | 0.08                   | 1.02                  |
| 6,988.00              | 88.80           | 91.30         | 5,433.16              | 20.59      | 1,806.09   | 1,806.20                | 1.22                    | -0.94                  | 0.78                  |
| 7,119.00              | 89.40           | 91.00         | 5,435.22              | 17.96      | 1,937.05   | 1,937.13                | 0.51                    | 0.46                   | -0.23                 |
| 7,247.00              | 90.40           | 90.70         | 5,435.45              | 16.06      | 2,065.03   | 2,065.10                | 0.82                    | 0.78                   | -0.23                 |
| 7,375.00              | 90.90           | 90.90         | 5,433.99              | 14.27      | 2,193.01   | 2,193.06                | 0.42                    | 0.39                   | 0.16                  |
| 7,503.00              | 89.80           | 89.40         | 5,433.44              | 13.94      | 2,321.01   | 2,321.04                | 1.55                    | -1.02                  | -1.17                 |
| 7,631.00              | 91.30           | 89.60         | 5,432.43              | 15.05      | 2,448.89   | 2,449.04                | 1.34                    | 1.33                   | 0.16                  |
| 7,759.00              | 87.10           | 89.50         | 5,434.22              | 16.06      | 2,576.95   | 2,576.99                | 3.28                    | -3.28                  | -0.08                 |
| 7,887.00              | 88.50           | 89.90         | 5,439.13              | 16.73      | 2,704.85   | 2,704.90                | 1.14                    | 1.09                   | 0.31                  |
| 8,016.00              | 89.80           | 90.60         | 5,441.04              | 16.17      | 2,833.83   | 2,833.87                | 1.14                    | 1.01                   | 0.54                  |
| 8,143.00              | 90.20           | 90.40         | 5,441.04              | 15.06      | 2,960.82   | 2,960.85                | 0.35                    | 0.31                   | -0.16                 |
| 8,271.00              | 87.90           | 89.10         | 5,443.17              | 15.61      | 3,088.79   | 3,088.82                | 2.06                    | -1.80                  | -1.02                 |
| 8,400.00              | 89.40           | 89.60         | 5,446.21              | 17.08      | 3,217.74   | 3,217.78                | 1.23                    | 1.18                   | 0.39                  |
| 8,528.00              | 90.10           | 89.00         | 5,446.78              | 18.64      | 3,345.73   | 3,345.78                | 0.72                    | 0.56                   | -0.47                 |
| 8,656.00              | 90.40           | 88.50         | 5,448.21              | 21.43      | 3,473.70   | 3,473.78                | 0.46                    | 0.23                   | -0.39                 |
| 8,784.00              | 89.90           | 88.80         | 5,445.87              | 24.45      | 3,601.66   | 3,601.75                | 0.46                    | -0.39                  | 0.23                  |



Phoenix Technology Services LP  
Survey Report



|           |                             |                              |                                |
|-----------|-----------------------------|------------------------------|--------------------------------|
| Company:  | Apache Corporation          | Local Co-ordinate Reference: | Well #7H                       |
| Project:  | Eddy County, NM (NAD27 NME) | VD Reference:                | KB @ 4029.00usft (Capstar 114) |
| Site:     | Hummingbird Federal Com     | MD Reference:                | KB @ 4029.00usft (Capstar 114) |
| Well:     | #7H                         | North Reference:             | Grid                           |
| Wellbore: | OHI / Job #1514235          | Survey Calculation Method:   | Minimum Curvature              |
| Design:   | Surveys (Capstar 114)       | Database:                    | Compass 5000 GCR               |

| Measured Depth (usft)   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | N/S (usft) | E/W (usft) | Section (usft) | Dogleg Rate (°/100usft) | Bulldog Rate (°/100usft) | Turn Rate (°/100usft) |
|-------------------------|-----------------|-------------|-----------------------|------------|------------|----------------|-------------------------|--------------------------|-----------------------|
| 8,912.00                | 89.80           | 89.10       | 5,446.21              | 26.79      | 3,729.64   | 3,729.74       | 0.25                    | -0.08                    | 0.23                  |
| 9,040.00                | 88.70           | 89.80       | 5,447.88              | 28.02      | 3,857.62   | 3,857.72       | 1.02                    | -0.88                    | 0.55                  |
| 9,168.00                | 88.70           | 89.40       | 5,450.78              | 28.92      | 3,985.59   | 3,985.69       | 0.31                    | 0.00                     | -0.31                 |
| 9,296.00                | 90.10           | 89.70       | 5,452.12              | 29.92      | 4,113.57   | 4,113.68       | 1.12                    | 1.09                     | 0.23                  |
| 9,424.00                | 89.70           | 88.90       | 5,452.35              | 31.49      | 4,241.56   | 4,241.68       | 0.70                    | -0.31                    | -0.63                 |
| 9,552.00                | 88.90           | 90.50       | 5,453.91              | 32.16      | 4,369.54   | 4,369.66       | 1.40                    | -0.63                    | 1.25                  |
| 9,681.00                | 88.10           | 90.40       | 5,457.29              | 31.14      | 4,498.49   | 4,498.60       | 0.82                    | -0.62                    | -0.08                 |
| 9,809.00                | 89.80           | 91.30       | 5,459.63              | 29.24      | 4,626.45   | 4,626.54       | 1.50                    | 1.33                     | 0.70                  |
| 9,937.00                | 89.90           | 89.80       | 5,459.97              | 28.02      | 4,754.44   | 4,754.52       | 1.17                    | 0.08                     | -1.17                 |
| 9,968.00                | 90.40           | 89.90       | 5,459.89              | 28.10      | 4,785.44   | 4,785.52       | 1.64                    | 1.61                     | 0.32                  |
| Last Phoenix MWD Survey |                 |             |                       |            |            |                |                         |                          |                       |
| 10,033.00               | 90.40           | 89.90       | 5,459.43              | 28.21      | 4,850.44   | 4,850.52       | 0.00                    | 0.00                     | 0.00                  |
| Projection to TD        |                 |             |                       |            |            |                |                         |                          |                       |

| Design Annotations    |                       |                   |            |                               |
|-----------------------|-----------------------|-------------------|------------|-------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |            | Comments                      |
|                       |                       | N/S (usft)        | E/W (usft) |                               |
| 4,857.00              | 4,856.77              | 5.38              | 7.82       | Tie-on to Phoenix Gyro Survey |
| 4,940.00              | 4,939.73              | 5.24              | 10.27      | First Phoenix MWD Survey      |
| 9,968.00              | 5,459.89              | 28.10             | 4,785.44   | Last Phoenix MWD Survey       |
| 10,033.00             | 5,459.43              | 28.21             | 4,850.44   | Projection to TD              |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



# SURVEY CERTIFICATION FORM

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



**PHOENIX**  
TECHNOLOGY SERVICES

Company: Apache

Job #: 1514353

Well Name: Hummingbird Fed 7H

County/State: Eddy Co, New Mexico

Survey Instrument Type: North Seek Rate Gyro ✓

API # 30-015-43050

## TIE-IN DATA

|                       |                        |                    |             |                    |                    |             |
|-----------------------|------------------------|--------------------|-------------|--------------------|--------------------|-------------|
| MEASURE<br>Depth (ft) | Vertical<br>Depth (ft) | Inclination<br>(°) | Azimuth (°) | N's<br>Coordinates | E/W<br>Coordinates | Data Source |
| 0                     | 0                      | 0                  | 0           | 0                  | 0                  | Surface     |

## First Survey

|         |            |                    |             |
|---------|------------|--------------------|-------------|
| Date    | Depth (ft) | Inclination<br>(°) | Azimuth (°) |
| 9-22-15 | 0          | 0                  | 0           |

## Last Survey

|         |            |                    |             |
|---------|------------|--------------------|-------------|
| Date    | Depth (ft) | Inclination<br>(°) | Azimuth (°) |
| 9-22-15 | 4857       | 0.15               | 188.52      |

## Projected TD Survey

|      |            |                    |             |
|------|------------|--------------------|-------------|
| Date | Depth (ft) | Inclination<br>(°) | Azimuth (°) |
| 0    | 0          | 0                  | 0           |

|                    |
|--------------------|
| Grid<br>Correction |
| -0.27              |

Gyro Operator: Leon Laskowski

Gyro Supervisor: [Signature]

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

Date: 2015-09-22

Print Name: Leon Laskowski

Signature: [Signature]



# PHOENIX

TECHNOLOGY SERVICES USA INC.

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

*Celebrating 20 Years of Focused Solutions*

September 23, 2015

Apache Corporation  
Attention: Regulatory Department  
303 Veterans Airpark Lane, Suite 3000,  
Midland, TX 79705

Re: Apache Corporation  
Hummingbird Federal Com #7H  
Eddy County, NM  
API #30-015-43050  
Job No. 1514353

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced well with the State of New Mexico Oil Conservation Division – District 2 via certified mail. A copy of the filing is attached for your records.

| Name of Surveyor | Drain Hole Number | Surveyed Depths |       | Dates Performed |          | Type of Survey |
|------------------|-------------------|-----------------|-------|-----------------|----------|----------------|
|                  |                   | From            | To    | Start           | End      |                |
| Leon Laskowski   | 7H                | 0               | 4,857 | 09/22/15        | 09/22/15 | Gyro ✓         |

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Alicia Marquez  
Operations Administrator

**PHOENIX****TECHNOLOGY SERVICES USA INC.**

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

*Celebrating 20 Years of Focused Solutions*

September 23, 2015

Oil Conservation Division  
State of New Mexico  
811 S. First St.  
Artesia, New Mexico 88210

Dear District 2 - Artesia

Attention: Regulatory Department

Re: Apache Corporation  
Hummingbird Federal Com #7H  
Eddy County, NM  
API #30-015-43050  
Job No. 1514353

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      |                |
| Leon Laskowski           | 7H                | 0               | 4,857 | 09/22/15        | 09/22/15 | 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,

Alicia Marquez  
Operations Administrator



Company: Apache  
Well: Hummingbird Fed 7H  
Location: Eddy Co, New Mexico  
Rig: Capstar 114

Job Number: 1514353  
Grid Corr.: -0.27  
Lat: 32.86  
Long: -103.83

Date: 9-22-15  
Calculation Method: Minimum Curvature  
Proposed Azimuth: 11'  
RKB - MSL in feet: Surface  
Tie Into:

| 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) |                          |                     |                    |
| FIELD COPY, NON-DEFINITIVE     |                   |                   |               |                    |                          |                       |             |          |               |             |                          |                     |                    |
| Enter Tie-In Survey on Line 10 |                   |                   |               |                    |                          |                       |             |          |               |             |                          |                     |                    |
| TIE IN                         | 0                 |                   |               | 0                  | 0                        | 0                     | 0           | 0        |               |             |                          |                     |                    |
| Gyro                           | 100.00            | 0.23              | 214.18        | 100                | 100.00                   | -0.17                 | 0.17 S      | 0.11 W   | 0.20          | 214.18      | 0.23                     | 0.23                | 214.18             |
|                                | 200.00            | 0.26              | 74.60         | 100                | 200.00                   | -0.27                 | 0.27 S      | 0.01 W   | 0.27          | 181.43      | 0.46                     | 0.03                | -139.58            |
|                                | 300.00            | 0.23              | 294.41        | 100                | 300.00                   | -0.13                 | 0.13 S      | 0.03 E   | 0.13          | 167.21      | 0.46                     | -0.03               | 219.81             |
|                                | 400.00            | 0.22              | 290.80        | 100                | 400.00                   | 0.02                  | 0.02 N      | 0.33 W   | 0.33          | 273.86      | 0.02                     | -0.01               | -3.61              |
|                                | 500.00            | 0.19              | 239.93        | 100                | 500.00                   | 0.01                  | 0.01 N      | 0.66 W   | 0.66          | 270.66      | 0.18                     | -0.03               | -50.87             |
|                                | 600.00            | 0.35              | 302.60        | 100                | 600.00                   | 0.09                  | 0.09 N      | 1.06 W   | 1.06          | 274.82      | 0.31                     | 0.16                | 62.67              |
|                                | 700.00            | 0.33              | 2.02          | 100                | 699.99                   | 0.54                  | 0.54 N      | 1.30 W   | 1.41          | 292.55      | 0.34                     | -0.02               | -300.58            |
|                                | 800.00            | 0.19              | 131.96        | 100                | 799.99                   | 0.72                  | 0.72 N      | 1.17 W   | 1.37          | 301.54      | 0.47                     | -0.14               | 129.94             |
|                                | 900.00            | 0.20              | 306.26        | 100                | 899.99                   | 0.71                  | 0.71 N      | 1.19 W   | 1.38          | 300.89      | 0.39                     | 0.01                | 174.30             |
|                                | 1000.00           | 0.10              | 126.47        | 100                | 999.99                   | 0.76                  | 0.76 N      | 1.26 W   | 1.47          | 301.20      | 0.30                     | -0.10               | -179.79            |
|                                | 1100.00           | 0.11              | 90.08         | 100                | 1099.99                  | 0.71                  | 0.71 N      | 1.09 W   | 1.30          | 303.03      | 0.07                     | 0.01                | -36.39             |
|                                | 1200.00           | 0.27              | 254.08        | 100                | 1199.99                  | 0.65                  | 0.65 N      | 1.22 W   | 1.38          | 297.82      | 0.38                     | 0.16                | 164.00             |
|                                | 1300.00           | 0.25              | 258.67        | 100                | 1299.99                  | 0.54                  | 0.54 N      | 1.66 W   | 1.75          | 287.92      | 0.03                     | -0.02               | 4.59               |
|                                | 1400.00           | 0.13              | 217.71        | 100                | 1399.99                  | 0.41                  | 0.41 N      | 1.95 W   | 1.99          | 281.76      | 0.17                     | -0.12               | -40.96             |
|                                | 1500.00           | 0.63              | 93.91         | 100                | 1499.99                  | 0.28                  | 0.28 N      | 1.47 W   | 1.49          | 280.72      | 0.71                     | 0.50                | -123.80            |
|                                | 1600.00           | 0.82              | 81.00         | 100                | 1599.98                  | 0.35                  | 0.35 N      | 0.21 W   | 0.41          | 328.92      | 0.25                     | 0.19                | -12.91             |
|                                | 1700.00           | 0.88              | 72.78         | 100                | 1699.97                  | 0.69                  | 0.69 N      | 1.23 E   | 1.41          | 60.61       | 0.14                     | 0.06                | -8.22              |
|                                | 1800.00           | 1.43              | 61.08         | 100                | 1799.95                  | 1.52                  | 1.52 N      | 3.05 E   | 3.41          | 63.50       | 0.60                     | 0.55                | -11.70             |
|                                | 1900.00           | 1.56              | 59.29         | 100                | 1899.92                  | 2.82                  | 2.82 N      | 5.32 E   | 6.02          | 62.05       | 0.14                     | 0.13                | -1.79              |
|                                | 2000.00           | 1.53              | 59.33         | 100                | 1999.88                  | 4.20                  | 4.20 N      | 7.63 E   | 8.71          | 61.20       | 0.03                     | -0.03               | 0.04               |
|                                | 2100.00           | 1.31              | 61.85         | 100                | 2099.85                  | 5.42                  | 5.42 N      | 9.79 E   | 11.19         | 61.04       | 0.23                     | -0.22               | 2.52               |
|                                | 2200.00           | 0.90              | 60.70         | 100                | 2199.83                  | 6.34                  | 6.34 N      | 11.48 E  | 13.12         | -61.09      | 0.41                     | -0.41               | -1.15              |
|                                | 2300.00           | 0.65              | 79.33         | 100                | 2299.82                  | 6.83                  | 6.83 N      | 12.73 E  | 14.44         | 61.78       | 0.35                     | -0.25               | 18.63              |
|                                | 2400.00           | 0.62              | 58.31         | 100                | 2399.82                  | 7.22                  | 7.22 N      | 13.74 E  | 15.52         | 62.29       | 0.23                     | -0.03               | -21.02             |
|                                | 2500.00           | 0.53              | 50.52         | 100                | 2499.81                  | 7.80                  | 7.80 N      | 14.56 E  | 16.52         | 61.83       | 0.12                     | -0.09               | -7.79              |
|                                | 2600.00           | 0.20              | 321.87        | 100                | 2599.81                  | 8.23                  | 8.23 N      | 14.81 E  | 16.94         | 60.94       | 0.56                     | -0.33               | 271.35             |
|                                | 2700.00           | 0.03              | 351.79        | 100                | 2699.81                  | 8.39                  | 8.39 N      | 14.70 E  | 16.93         | 60.27       | 0.17                     | -0.17               | 29.92              |
|                                | 2800.00           | 0.16              | 139.02        | 100                | 2799.81                  | 8.31                  | 8.31 N      | 14.79 E  | 16.96         | 60.66       | 0.19                     | 0.13                | -212.77            |
|                                | 2900.00           | 0.19              | 298.56        | 100                | 2899.81                  | 8.29                  | 8.29 N      | 14.73 E  | 16.90         | 60.64       | 0.34                     | 0.03                | 159.54             |
|                                | 3000.00           | 0.24              | 343.85        | 100                | 2999.81                  | 8.57                  | 8.57 N      | 14.53 E  | 16.87         | 59.47       | 0.17                     | 0.05                | 45.29              |



Company:

Well: Hummingbird Fed 7H  
 Location: Eddy Co, New Mexico  
 Rig: Capstar 114

Apache

Job Number: 1514353

Grid Corr.: -0.27  
 Lat: 32.86  
 Long: -103.83

Calculation Method: Minimum Curvature

Proposed Azimuth: 11'  
 RKB - MSL in feet: Surface

| Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates N/S (ft) | E/W (ft) | Closure Distance (ft) | Angle (deg) | Dogleg Severity (d/100') | Build Rate (d/100') | Walk Rate (d/100') |
|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|----------------------|----------|-----------------------|-------------|--------------------------|---------------------|--------------------|
|                  | 3100.00           | 0.37              | 175.30        | 100                | 3099.81                  | 8.45                  | 8.45 N               | 14.50 E  | 16.78                 | 59.77       | 0.61                     | 0.13                | -168.55            |
|                  | 3200.00           | 0.48              | 240.46        | 100                | 3199.80                  | 7.92                  | 7.92 N               | 14.16 E  | 16.22                 | 60.78       | 0.47                     | 0.11                | 65.16              |
|                  | 3300.00           | 0.55              | 253.43        | 100                | 3299.80                  | 7.57                  | 7.57 N               | 13.33 E  | 15.34                 | 60.40       | 0.14                     | 0.07                | 12.97              |
|                  | 3400.00           | 0.51              | 219.37        | 100                | 3399.80                  | 7.09                  | 7.09 N               | 12.59 E  | 14.45                 | 60.60       | 0.31                     | -0.04               | -34.06             |
|                  | 3500.00           | 0.54              | 250.38        | 100                | 3499.79                  | 6.59                  | 6.59 N               | 11.87 E  | 13.57                 | 60.95       | 0.28                     | 0.03                | 31.01              |
|                  | 3600.00           | 0.46              | 255.31        | 100                | 3599.79                  | 6.33                  | 6.33 N               | 11.03 E  | 12.72                 | 60.15       | 0.09                     | -0.08               | 4.93               |
|                  | 3700.00           | 0.51              | 268.53        | 100                | 3699.78                  | 6.22                  | 6.22 N               | 10.20 E  | 11.95                 | 58.63       | 0.12                     | 0.05                | 13.22              |
|                  | 3800.00           | 0.38              | 220.32        | 100                | 3799.78                  | 5.95                  | 5.95 N               | 9.54 E   | 11.25                 | 58.03       | 0.38                     | -0.13               | -48.21             |
|                  | 3900.00           | 0.29              | 359.32        | 100                | 3899.78                  | 5.95                  | 5.95 N               | 9.32 E   | 11.06                 | 57.44       | 0.63                     | -0.09               | 139.00             |
|                  | 4000.00           | 0.38              | 210.88        | 100                | 3999.78                  | 5.92                  | 5.92 N               | 9.15 E   | 10.90                 | 57.08       | 0.65                     | 0.09                | -148.44            |
|                  | 4100.00           | 0.43              | 295.59        | 100                | 4099.78                  | 5.80                  | 5.80 N               | 8.64 E   | 10.41                 | 56.13       | 0.55                     | 0.05                | 84.71              |
|                  | 4200.00           | 0.42              | 321.89        | 100                | 4199.78                  | 6.25                  | 6.25 N               | 8.08 E   | 10.21                 | 52.26       | 0.19                     | -0.01               | 26.30              |
|                  | 4300.00           | 0.30              | 175.55        | 100                | 4299.78                  | 6.28                  | 6.28 N               | 7.87 E   | 10.07                 | 51.42       | 0.69                     | -0.12               | -146.34            |
|                  | 4400.00           | 0.22              | 262.18        | 100                | 4399.77                  | 5.99                  | 5.99 N               | 7.70 E   | 9.76                  | 52.12       | 0.36                     | -0.08               | 86.63              |
|                  | 4500.00           | 0.18              | 150.13        | 100                | 4499.77                  | 5.83                  | 5.83 N               | 7.59 E   | 9.57                  | 52.47       | 0.33                     | -0.04               | -112.05            |
|                  | 4600.00           | 0.05              | 118.81        | 100                | 4599.77                  | 5.67                  | 5.67 N               | 7.71 E   | 9.57                  | 53.65       | 0.14                     | -0.13               | -31.32             |
|                  | 4700.00           | 0.08              | 99.78         | 100                | 4699.77                  | 5.64                  | 5.64 N               | 7.81 E   | 9.63                  | 54.18       | 0.04                     | 0.03                | -19.03             |
|                  | 4800.00           | 0.13              | 196.36        | 100                | 4799.77                  | 5.52                  | 5.52 N               | 7.85 E   | 9.59                  | 54.89       | 0.16                     | 0.05                | 96.58              |
|                  | 4857.00           | 0.15              | 188.52        | 57                 | 4856.77                  | 5.38                  | 5.38 N               | 7.82 E   | 9.49                  | 55.46       | 0.05                     | 0.04                | -13.75             |

WELL NAME: HUMMINGBIRD FEDERAL 7H  
 APR: 30-015-43050  
 SPUD DATE: 9/17/2015  
 PRODUCING FORMATION: PADDOCK  
 FIELD: CEDAR LAKE (BP)  
 COUNTY: EDDY  
 STATE: NEW MEXICO  
 WORKING INTEREST: 100.00%

SURFACE LOC: 2310' FNL & 100' FWL  
 SECTION: 1  
 TOWNSHIP: 17 S  
 RANGE: 31 E  
 SURVEY: JOHN WEST SURVEYING CO  
 BOTTOM HOLE LOC: 2318' FNL & 332' FEL  
 SECTION: 1  
 TOWNSHIP: 17 S  
 RANGE: 31 E  
 SURVEY: JOHN WEST SURVEYING CO  
 RIG RELEASE: 10/1/2015

KB (ft): 4,029.00  
 GL (ft): 4,078.00  
 KB/GI DIFF (ft): 11.00  
 TMD (ft): 10,033.00  
 TD OF PILOT HOLE (ft): N/A  
 FC DEPTH (ft): 10,009.00  
 PBMD (ft): 10,033.00  
 RDV DEPTH (ft): N/A  
 ORO VALVE (ft): N/A  
 DEEPEST TVD (ft): 5,480.00

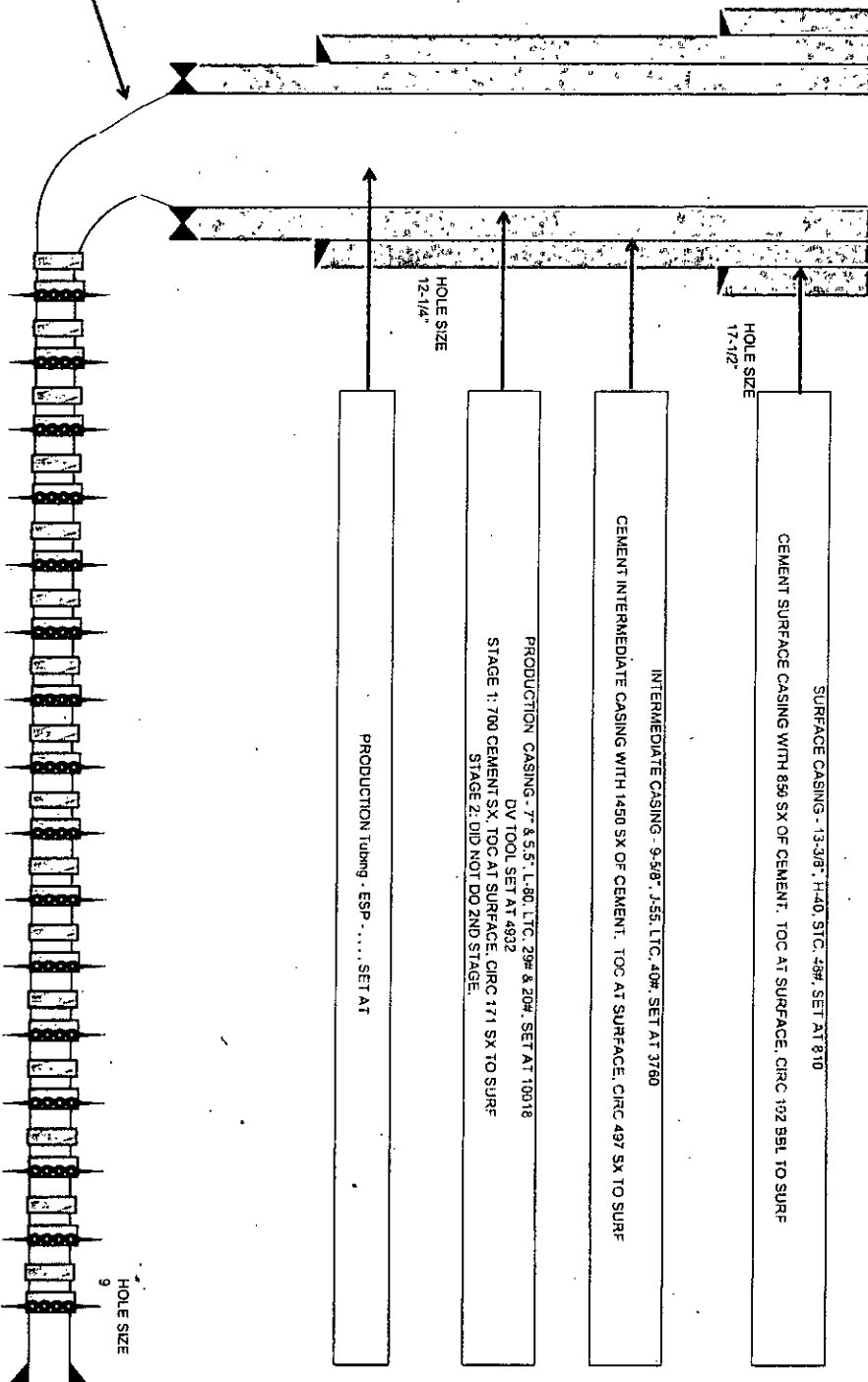
TAPERED CASING STRING:

7" 28# L-80 TO X-OVER @ 4,935'  
 TAPERING TO 5.5" 20# L-80 SET @ 10,018'

KOP (ft):  
 LATERAL LENGTH (ft):  
 TD OF PILOT HOLE (ft): N/A

LAST UPDATED BY: HILLARI GOULD  
 LAST UPDATED: 3/23/2016

COMPLETION:  
 STIMULATION:  
 STATUS:  
 COMMENTS:



PACKERS & SLEEVES  
 TOP PERF (MD):  
 BOTTOM PERF (MD):

5.837  
 10.009

TMD (ft): 10,033  
 FC DEPTH (ft): 10,009  
 PBMD (ft): 10,033  
 RDV DEPTH (ft): N/A  
 ORO VALVE (ft): N/A

| PACKERS & SLEEVES - 16 STAGES |                 |                     |                   |                       |
|-------------------------------|-----------------|---------------------|-------------------|-----------------------|
| TOTAL ACID (bbl)              | TOTAL LTR (bbl) | TOTAL PROPANT (lbs) | MAX WH RATE (bpm) | MAX WH PRESSURE (psi) |
| 2.881                         | 65.462          | 3,011.930           | 94.00             | 6,102                 |
| PRODUCTION METHOD             | LIFT TYPE       | SETTING DEPTH       |                   |                       |
| Pumping                       | ESP             | 0                   |                   |                       |
| CROSSOVER SUB @ 4,935'        |                 |                     |                   |                       |