

**LEGEND**  
NATURAL GAS

50-015-40862

## Legend Natural Gas

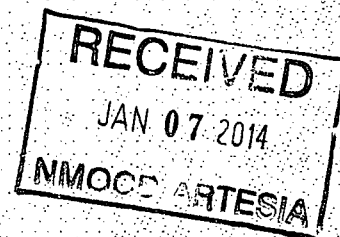
Eddy County, New Mexico

Colt State Com

Colt State Com 2H

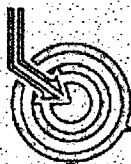
Original Wellpath

Design: Original Wellpath



## Standard Survey Report

29 October, 2013

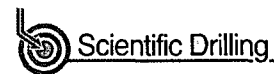


**Scientific Drilling**

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# Scientific Drilling Survey Report



|           |                         |                              |                         |
|-----------|-------------------------|------------------------------|-------------------------|
| Company:  | Legend Natural Gas      | Local Co-ordinate Reference: | Well: Colt State Com 2H |
| Project:  | Eddy County, New Mexico | TVD Reference:               | KB @ 3062.0usft         |
| Site:     | Colt State Com          | MD Reference:                | KB @ 3062.0usft         |
| Well:     | Colt State Com 2H       | North Reference:             | Grid                    |
| Wellbore: | Original Wellpath       | Survey Calculation Method:   | Minimum Curvature       |
| Design:   | Original Wellpath       | Database:                    | CompassC                |

|             |                           |               |                |
|-------------|---------------------------|---------------|----------------|
| Project:    | Eddy County, New Mexico   |               |                |
| Map System: | US State Plane 1983       | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983 |               |                |
| Map Zone:   | New Mexico Eastern Zone   |               |                |

|                       |          |                |                 |                   |                  |
|-----------------------|----------|----------------|-----------------|-------------------|------------------|
| Site                  |          | Colt State Com |                 |                   |                  |
| Site Position:        |          | Northing:      | 424,181.70 usft | Latitude:         | 32° 9' 57.475 N  |
| From:                 | Map      | Easting:       | 608,898.70 usft | Longitude:        | 104° 6' 53.970 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:   | 13-3/16 "       | Grid Convergence: | 0.12 °           |

|                      |                   |          |                     |                 |               |                  |
|----------------------|-------------------|----------|---------------------|-----------------|---------------|------------------|
| Well:                | Colt State Com 2H |          |                     |                 |               |                  |
| Well Position        | +N/-S             | 0.0 usft | Northing:           | 424,181.70 usft | Latitude:     | 32° 9' 57.475 N  |
|                      | +E/-W             | 0.0 usft | Easting:            | 608,898.70 usft | Longitude:    | 104° 6' 53.970 W |
| Position Uncertainty |                   | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,037.0 usft     |

|           |                   |             |                    |                  |                        |
|-----------|-------------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | Original Wellpath |             |                    |                  |                        |
| Magnetics | Model Name        | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF2010          | 10/15/2013  | 7.54               | 59.98            | 48,291                 |

|                   |                            |                 |                 |                  |     |
|-------------------|----------------------------|-----------------|-----------------|------------------|-----|
| Design            | Original Wellpath          |                 |                 |                  |     |
| Audit Notes:      |                            |                 |                 |                  |     |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth:    | 0.0 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |     |
|                   | 0.0                        | 0.0             | 0.0             | 187.79           |     |

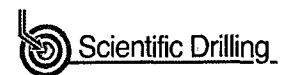
|                |           |                              |             |                                |
|----------------|-----------|------------------------------|-------------|--------------------------------|
| Survey Program |           | Date 10/29/2013              |             |                                |
| From (usft)    | To (usft) | Survey (Wellbore)            | Tool Name   | Description                    |
| 100.0          | 2,450.0   | VES Gyro (Original Wellpath) | SRG-GYRO-MS | surface readout gyro multishot |
| 2,551.0        | 12,613.0  | SDI MWD (Original Wellpath)  | MWD         | MWD - Standard                 |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.43            | 320.67      | 100.0                 | 0.3          | -0.2         | -0.3                    | 0.43                    | 0.43                   | 0.00                  |
| 200.0                 | 0.91            | 338.88      | 200.0                 | 1.3          | -0.8         | -1.2                    | 0.52                    | 0.48                   | 18.21                 |
| 300.0                 | 1.92            | 323.41      | 300.0                 | 3.4          | -2.0         | -3.1                    | 1.07                    | 1.01                   | -15.47                |
| 400.0                 | 1.64            | 326.09      | 399.9                 | 5.9          | -3.8         | -5.4                    | 0.29                    | -0.28                  | 2.68                  |
| 500.0                 | 1.30            | 330.34      | 499.9                 | 8.1          | -5.2         | -7.3                    | 0.36                    | -0.34                  | 4.25                  |
| 600.0                 | 0.92            | 337.00      | 599.9                 | 9.8          | -6.1         | -8.9                    | 0.40                    | -0.38                  | 6.66                  |
| 700.0                 | 0.56            | 331.49      | 699.9                 | 11.0         | -6.6         | -10.0                   | 0.37                    | -0.36                  | -5.51                 |
| 800.0                 | 0.24            | 334.49      | 799.8                 | 11.6         | -6.9         | -10.6                   | 0.32                    | -0.32                  | 3.00                  |
| 900.0                 | 0.45            | 319.14      | 899.8                 | 12.1         | -7.3         | -11.0                   | 0.23                    | 0.21                   | -15.35                |



# Scientific Drilling

## Survey Report



|           |                         |                              |                         |
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| Project:  | Eddy County, New Mexico | TVD Reference:               | KB @ 3062.0usft         |
| Site:     | Colt State Com          | MD Reference:                | KB @ 3062.0usft         |
| Well:     | Colt State Com 2H       | North Reference:             | Grid                    |
| Wellbore: | Original Wellpath       | Survey Calculation Method:   | Minimum Curvature       |
| Design:   | Original Wellpath       | Database:                    | CompassC                |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 1,000.0               | 0.13            | 324.54      | 999.8                 | 12.5         | -7.6         | -11.4                   | 0.32                    | -0.32                  | 5.40                  |
| 1,100.0               | 0.14            | 55.56       | 1,099.8               | 12.7         | -7.6         | -11.5                   | 0.19                    | 0.01                   | 91.02                 |
| 1,200.0               | 0.78            | 19.68       | 1,199.8               | 13.4         | -7.3         | -12.3                   | 0.67                    | 0.64                   | -35.88                |
| 1,300.0               | 1.39            | 9.29        | 1,299.8               | 15.2         | -6.8         | -14.1                   | 0.64                    | 0.61                   | -10.39                |
| 1,400.0               | 1.85            | 9.99        | 1,399.8               | 18.0         | -6.4         | -17.0                   | 0.46                    | 0.46                   | 0.70                  |
| 1,500.0               | 1.75            | 8.46        | 1,499.7               | 21.1         | -5.8         | -20.1                   | 0.11                    | -0.10                  | -1.53                 |
| 1,600.0               | 2.08            | 14.32       | 1,599.7               | 24.4         | -5.2         | -23.4                   | 0.38                    | 0.33                   | 5.86                  |
| 1,700.0               | 2.69            | 55.53       | 1,699.6               | 27.5         | -2.8         | -26.8                   | 1.77                    | 0.61                   | 41.21                 |
| 1,800.0               | 5.68            | 70.25       | 1,799.3               | 30.5         | 3.8          | -30.7                   | 3.15                    | 2.99                   | 14.72                 |
| 1,900.0               | 8.26            | 73.50       | 1,898.6               | 34.2         | 15.3         | -35.9                   | 2.61                    | 2.58                   | 3.25                  |
| 2,000.0               | 10.91           | 72.00       | 1,997.2               | 39.1         | 31.2         | -43.0                   | 2.66                    | 2.65                   | -1.50                 |
| 2,100.0               | 12.03           | 74.17       | 2,095.2               | 44.9         | 50.3         | -51.3                   | 1.20                    | 1.12                   | 2.17                  |
| 2,150.0               | 11.70           | 75.01       | 2,144.1               | 47.6         | 60.2         | -55.3                   | 0.74                    | -0.66                  | 1.68                  |
| 2,200.0               | 11.71           | 72.76       | 2,193.1               | 50.4         | 69.9         | -59.5                   | 0.91                    | 0.02                   | -4.50                 |
| 2,300.0               | 10.79           | 71.10       | 2,291.1               | 56.5         | 88.5         | -68.0                   | 0.98                    | -0.92                  | -1.66                 |
| 2,400.0               | 8.34            | 69.67       | 2,389.7               | 62.0         | 104.1        | -75.6                   | 2.46                    | -2.45                  | -1.43                 |
| 2,450.0               | 7.95            | 75.39       | 2,439.2               | 64.2         | 110.9        | -78.6                   | 1.80                    | -0.78                  | 11.44                 |
| 2,551.0               | 5.46            | 71.59       | 2,539.5               | 67.5         | 122.2        | -83.4                   | 2.50                    | -2.47                  | -3.76                 |
| 2,676.0               | 4.22            | 72.90       | 2,664.1               | 70.7         | 132.2        | -88.0                   | 1.00                    | -0.99                  | 1.05                  |
| 2,769.0               | 3.34            | 67.89       | 2,756.9               | 72.7         | 138.0        | -90.7                   | 1.01                    | -0.95                  | -5.39                 |
| 2,863.0               | 0.79            | 18.15       | 2,850.8               | 74.4         | 140.8        | -92.7                   | 3.08                    | -2.71                  | -52.91                |
| 2,957.0               | 1.76            | 290.34      | 2,944.8               | 75.5         | 139.6        | -93.7                   | 2.02                    | 1.03                   | -93.41                |
| 3,051.0               | 3.61            | 278.48      | 3,038.7               | 76.4         | 135.3        | -94.0                   | 2.04                    | 1.97                   | -12.62                |
| 3,145.0               | 6.16            | 271.45      | 3,132.4               | 77.0         | 127.3        | -93.5                   | 2.78                    | 2.71                   | -7.48                 |
| 3,238.0               | 5.36            | 271.01      | 3,224.9               | 77.2         | 118.0        | -92.5                   | 0.86                    | -0.86                  | -0.47                 |
| 3,332.0               | 6.86            | 256.33      | 3,318.4               | 75.9         | 108.2        | -89.9                   | 2.29                    | 1.60                   | -15.62                |
| 3,425.0               | 8.44            | 256.33      | 3,410.5               | 73.0         | 96.1         | -85.4                   | 1.70                    | 1.70                   | 0.00                  |
| 3,519.0               | 9.94            | 263.19      | 3,503.3               | 70.4         | 81.4         | -80.8                   | 1.97                    | 1.60                   | 7.30                  |
| 3,613.0               | 10.99           | 263.89      | 3,595.8               | 68.5         | 64.4         | -76.6                   | 1.13                    | 1.12                   | 0.74                  |
| 3,707.0               | 10.29           | 263.45      | 3,688.1               | 66.6         | 47.2         | -72.4                   | 0.75                    | -0.74                  | -0.47                 |
| 3,800.0               | 11.26           | 263.36      | 3,779.5               | 64.6         | 29.9         | -68.0                   | 1.04                    | 1.04                   | -0.10                 |
| 3,894.0               | 11.87           | 264.06      | 3,871.6               | 62.5         | 11.2         | -63.5                   | 0.67                    | 0.65                   | 0.74                  |
| 3,987.0               | 11.34           | 265.47      | 3,962.7               | 60.8         | -7.5         | -59.2                   | 0.65                    | -0.57                  | 1.52                  |
| 4,081.0               | 11.43           | 264.24      | 4,054.8               | 59.1         | -25.9        | -55.1                   | 0.28                    | 0.10                   | -1.31                 |
| 4,175.0               | 10.64           | 266.00      | 4,147.1               | 57.6         | -43.9        | -51.1                   | 0.91                    | -0.84                  | 1.87                  |
| 4,268.0               | 11.52           | 267.67      | 4,238.4               | 56.6         | -61.7        | -47.7                   | 1.01                    | 0.95                   | 1.80                  |
| 4,362.0               | 11.26           | 266.35      | 4,330.5               | 55.7         | -80.2        | -44.3                   | 0.39                    | -0.28                  | -1.40                 |
| 4,457.0               | 10.90           | 265.03      | 4,423.7               | 54.3         | -98.5        | -40.4                   | 0.46                    | -0.38                  | -1.39                 |
| 4,551.0               | 11.17           | 266.26      | 4,516.0               | 52.9         | -116.4       | -36.7                   | 0.38                    | 0.29                   | 1.31                  |
| 4,645.0               | 10.90           | 265.47      | 4,608.3               | 51.6         | -134.3       | -33.0                   | 0.33                    | -0.29                  | -0.84                 |
| 4,740.0               | 10.38           | 265.82      | 4,701.6               | 50.3         | -151.8       | -29.3                   | 0.55                    | -0.55                  | 0.37                  |
| 4,834.0               | 10.02           | 260.81      | 4,794.1               | 48.4         | -168.3       | -25.1                   | 1.02                    | -0.38                  | -5.33                 |
| 4,929.0               | 10.46           | 261.60      | 4,887.6               | 45.8         | -185.0       | -20.3                   | 0.49                    | 0.46                   | 0.83                  |



# Scientific Drilling Survey Report



|           |                         |                              |                         |
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| Project:  | Eddy County, New Mexico | TVD Reference:               | KB @ 3062.0usft         |
| Site:     | Colt State Com          | MD Reference:                | KB @ 3062.0usft         |
| Well:     | Colt State Com 2H       | North Reference:             | Grid                    |
| Wellbore: | Original Wellpath       | Survey Calculation Method:   | Minimum Curvature       |
| Design:   | Original Wellpath       | Database:                    | CompassC                |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (%/100usft) | Build Rate (%/100usft) | Turn Rate (%/100usft) |
| 5,023.0               | 11.96           | 269.87      | 4,979.8               | 44.5         | -203.2       | -16.6                   | 2.34                    | 1.60                   | 8.80                  |
| 5,117.0               | 11.96           | 270.66      | 5,071.8               | 44.6         | -222.7       | -14.0                   | 0.17                    | 0.00                   | 0.84                  |
| 5,212.0               | 10.90           | 268.02      | 5,164.9               | 44.4         | -241.5       | -11.3                   | 1.24                    | -1.12                  | -2.78                 |
| 5,307.0               | 11.34           | 269.43      | 5,258.1               | 44.0         | -259.8       | -8.4                    | 0.54                    | 0.46                   | 1.48                  |
| 5,400.0               | 11.78           | 266.53      | 5,349.2               | 43.4         | -278.5       | -5.2                    | 0.78                    | 0.47                   | -3.12                 |
| 5,494.0               | 12.49           | 266.44      | 5,441.1               | 42.1         | -298.2       | -1.3                    | 0.76                    | 0.76                   | -0.10                 |
| 5,587.0               | 11.96           | 263.27      | 5,532.0               | 40.4         | -317.8       | 3.1                     | 0.92                    | -0.57                  | -3.41                 |
| 5,681.0               | 11.08           | 264.42      | 5,624.1               | 38.4         | -336.4       | 7.6                     | 0.97                    | -0.94                  | 1.22                  |
| 5,774.0               | 11.34           | 259.67      | 5,715.4               | 35.9         | -354.3       | 12.5                    | 1.03                    | 0.28                   | -5.11                 |
| 5,868.0               | 11.26           | 257.56      | 5,807.6               | 32.2         | -372.4       | 18.5                    | 0.45                    | -0.09                  | -2.24                 |
| 5,962.0               | 11.26           | 257.82      | 5,899.7               | 28.3         | -390.3       | 24.9                    | 0.05                    | 0.00                   | 0.28                  |
| 6,056.0               | 12.22           | 258.62      | 5,991.8               | 24.4         | -409.0       | 31.3                    | 1.04                    | 1.02                   | 0.85                  |
| 6,149.0               | 11.43           | 256.42      | 6,082.8               | 20.3         | -427.7       | 37.8                    | 0.98                    | -0.85                  | -2.37                 |
| 6,243.0               | 10.90           | 251.67      | 6,175.0               | 15.3         | -445.1       | 45.1                    | 1.13                    | -0.56                  | -5.05                 |
| 6,325.0               | 10.01           | 252.56      | 6,255.7               | 10.8         | -459.3       | 51.6                    | 1.10                    | -1.09                  | 1.09                  |
| 6,420.0               | 8.71            | 248.42      | 6,349.4               | 5.6          | -473.9       | 58.6                    | 1.54                    | -1.37                  | -4.36                 |
| 6,514.0               | 8.88            | 246.31      | 6,442.3               | 0.1          | -487.1       | 65.9                    | 0.39                    | 0.18                   | -2.24                 |
| 6,609.0               | 10.11           | 241.92      | 6,536.0               | -6.8         | -501.2       | 74.6                    | 1.50                    | 1.29                   | -4.62                 |
| 6,703.0               | 10.11           | 245.70      | 6,628.5               | -14.1        | -516.0       | 83.9                    | 0.71                    | 0.00                   | 4.02                  |
| 6,797.0               | 7.91            | 249.91      | 6,721.4               | -19.7        | -529.6       | 91.3                    | 2.44                    | -2.34                  | 4.48                  |
| 6,892.0               | 7.03            | 258.00      | 6,815.6               | -23.1        | -541.4       | 96.3                    | 1.44                    | -0.93                  | 8.52                  |
| 6,986.0               | 6.60            | 275.67      | 6,908.9               | -23.8        | -552.4       | 98.4                    | 2.27                    | -0.46                  | 18.80                 |
| 7,080.0               | 5.45            | 289.20      | 7,002.4               | -21.8        | -562.0       | 97.8                    | 1.94                    | -1.22                  | 14.39                 |
| 7,175.0               | 4.92            | 284.19      | 7,097.0               | -19.3        | -570.2       | 96.4                    | 0.73                    | -0.56                  | -5.27                 |
| 7,269.0               | 3.96            | 272.33      | 7,190.7               | -18.2        | -577.4       | 96.3                    | 1.41                    | -1.02                  | -12.62                |
| 7,363.0               | 2.46            | 259.85      | 7,284.6               | -18.4        | -582.6       | 97.2                    | 1.75                    | -1.60                  | -13.28                |
| 7,379.1               | 2.15            | 260.71      | 7,300.7               | -18.5        | -583.2       | 97.4                    | 1.93                    | -1.92                  | 5.32                  |
| CSC 2H VTGT           |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,456.0               | 0.70            | 275.23      | 7,377.5               | -18.7        | -585.1       | 97.8                    | 1.93                    | -1.89                  | 18.89                 |
| 7,534.0               | 1.21            | 211.75      | 7,455.5               | -19.4        | -586.0       | 98.6                    | 1.40                    | 0.65                   | -81.38                |
| 7,565.0               | 5.19            | 203.86      | 7,486.5               | -20.9        | -586.8       | 100.3                   | 12.89                   | 12.84                  | -25.45                |
| 7,596.0               | 9.76            | 205.35      | 7,517.2               | -24.6        | -588.5       | 104.1                   | 14.75                   | 14.74                  | 4.81                  |
| 7,627.0               | 13.10           | 201.66      | 7,547.6               | -30.2        | -590.9       | 110.0                   | 11.02                   | 10.77                  | -11.90                |
| 7,659.0               | 14.86           | 202.10      | 7,578.6               | -37.4        | -593.8       | 117.5                   | 5.51                    | 5.50                   | 1.38                  |
| 7,690.0               | 17.94           | 201.93      | 7,608.4               | -45.5        | -597.1       | 126.0                   | 9.94                    | 9.94                   | -0.55                 |
| 7,721.0               | 21.25           | 197.09      | 7,637.6               | -55.3        | -600.5       | 136.2                   | 11.88                   | 10.68                  | -15.61                |
| 7,752.0               | 24.20           | 193.61      | 7,666.2               | -66.9        | -603.6       | 148.1                   | 10.45                   | 9.52                   | -11.23                |
| 7,783.0               | 26.78           | 190.02      | 7,694.1               | -79.9        | -606.4       | 161.4                   | 9.70                    | 8.32                   | -11.58                |
| 7,814.0               | 30.19           | 185.45      | 7,721.4               | -94.6        | -608.3       | 176.1                   | 13.05                   | 11.00                  | -14.74                |
| 7,845.0               | 34.12           | 184.88      | 7,747.6               | -111.0       | -609.8       | 192.6                   | 12.72                   | 12.68                  | -1.84                 |
| 7,877.0               | 37.46           | 184.44      | 7,773.6               | -129.6       | -611.3       | 211.3                   | 10.47                   | 10.44                  | -1.38                 |
| 7,908.0               | 40.63           | 183.38      | 7,797.7               | -149.1       | -612.6       | 230.8                   | 10.45                   | 10.23                  | -3.42                 |
| 7,939.0               | 43.70           | 180.83      | 7,820.6               | -169.9       | -613.4       | 251.5                   | 11.34                   | 9.90                   | -8.23                 |



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|           |                         |                              |                         |
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| Wellbore: | Original Wellpath       | Survey Calculation Method:   | Minimum Curvature       |
| Design:   | Original Wellpath       | Database:                    | CompassC                |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 7,970.0               | 47.75           | 178.81      | 7,842.3               | -192.1       | -613.3       | 273.4                   | 13.87                   | 13.06                  | -6.52                 |
| 8,001.0               | 51.70           | 179.34      | 7,862.3               | -215.7       | -612.9       | 296.8                   | 12.81                   | 12.74                  | 1.71                  |
| 8,032.0               | 53.64           | 180.13      | 7,881.1               | -240.4       | -612.8       | 321.2                   | 6.58                    | 6.26                   | 2.55                  |
| 8,063.0               | 56.19           | 180.92      | 7,898.9               | -265.8       | -613.0       | 346.4                   | 8.49                    | 8.23                   | 2.55                  |
| 8,095.0               | 60.41           | 180.83      | 7,915.7               | -293.0       | -613.5       | 373.4                   | 13.19                   | 13.19                  | -0.28                 |
| 8,127.0               | 65.25           | 181.36      | 7,930.3               | -321.4       | -614.0       | 401.7                   | 15.20                   | 15.13                  | 1.66                  |
| 8,158.0               | 70.00           | 182.15      | 7,942.1               | -350.1       | -614.9       | 430.2                   | 15.50                   | 15.32                  | 2.55                  |
| 8,190.0               | 73.78           | 182.77      | 7,952.1               | -380.4       | -616.2       | 460.5                   | 11.96                   | 11.81                  | 1.94                  |
| 8,221.0               | 77.47           | 182.33      | 7,959.8               | -410.4       | -617.5       | 490.4                   | 11.98                   | 11.90                  | -1.42                 |
| 8,253.0               | 82.17           | 183.60      | 7,965.4               | -441.9       | -619.2       | 521.7                   | 15.20                   | 14.69                  | 3.97                  |
| 8,284.0               | 86.70           | 183.21      | 7,968.4               | -472.7       | -621.0       | 552.5                   | 14.67                   | 14.61                  | -1.26                 |
| 8,316.0               | 88.02           | 182.15      | 7,969.9               | -504.6       | -622.5       | 584.3                   | 5.29                    | 4.13                   | -3.31                 |
| 8,410.0               | 88.37           | 182.85      | 7,972.9               | -598.5       | -626.6       | 677.9                   | 0.83                    | 0.37                   | 0.74                  |
| 8,505.0               | 89.08           | 181.97      | 7,975.0               | -693.4       | -630.6       | 772.4                   | 1.19                    | 0.75                   | -0.93                 |
| 8,599.0               | 89.78           | 182.59      | 7,975.9               | -787.3       | -634.3       | 866.0                   | 0.99                    | 0.74                   | 0.66                  |
| 8,693.0               | 89.25           | 181.80      | 7,976.7               | -881.2       | -637.9       | 959.5                   | 1.01                    | -0.56                  | -0.84                 |
| 8,788.0               | 88.90           | 180.66      | 7,978.2               | -976.2       | -640.0       | 1,053.9                 | 1.26                    | -0.37                  | -1.20                 |
| 8,882.0               | 89.25           | 181.36      | 7,979.8               | -1,070.1     | -641.6       | 1,147.2                 | 0.83                    | 0.37                   | 0.74                  |
| 8,977.0               | 89.60           | 179.95      | 7,980.7               | -1,165.1     | -642.7       | 1,241.5                 | 1.53                    | 0.37                   | -1.48                 |
| 9,071.0               | 90.48           | 179.87      | 7,980.7               | -1,259.1     | -642.6       | 1,334.6                 | 0.94                    | 0.94                   | -0.09                 |
| 9,165.0               | 90.22           | 179.07      | 7,980.1               | -1,353.1     | -641.7       | 1,427.6                 | 0.89                    | -0.28                  | -0.85                 |
| 9,259.0               | 89.25           | 178.46      | 7,980.5               | -1,447.1     | -639.7       | 1,520.4                 | 1.22                    | -1.03                  | -0.65                 |
| 9,353.0               | 89.52           | 178.46      | 7,981.5               | -1,541.1     | -637.1       | 1,613.2                 | 0.29                    | 0.29                   | 0.00                  |
| 9,447.0               | 89.96           | 178.81      | 7,982.0               | -1,635.0     | -634.9       | 1,706.0                 | 0.60                    | 0.47                   | 0.37                  |
| 9,542.0               | 90.92           | 179.07      | 7,981.2               | -1,730.0     | -633.1       | 1,799.9                 | 1.05                    | 1.01                   | 0.27                  |
| 9,636.0               | 90.13           | 179.87      | 7,980.4               | -1,824.0     | -632.3       | 1,892.9                 | 1.20                    | -0.84                  | 0.85                  |
| 9,730.0               | 89.34           | 179.07      | 7,980.8               | -1,918.0     | -631.4       | 1,985.9                 | 1.20                    | -0.84                  | -0.85                 |
| 9,824.0               | 90.04           | 178.72      | 7,981.3               | -2,012.0     | -629.6       | 2,078.7                 | 0.83                    | 0.74                   | -0.37                 |
| 9,918.0               | 88.72           | 178.11      | 7,982.3               | -2,105.9     | -627.0       | 2,171.5                 | 1.55                    | -1.40                  | -0.65                 |
| 10,013.0              | 89.78           | 178.46      | 7,983.6               | -2,200.9     | -624.1       | 2,265.2                 | 1.18                    | 1.12                   | 0.37                  |
| 10,108.0              | 90.48           | 178.02      | 7,983.3               | -2,295.8     | -621.2       | 2,358.8                 | 0.87                    | 0.74                   | -0.46                 |
| 10,202.0              | 89.60           | 179.07      | 7,983.3               | -2,389.8     | -618.8       | 2,451.6                 | 1.46                    | -0.94                  | 1.12                  |
| 10,297.0              | 89.52           | 180.13      | 7,984.0               | -2,484.8     | -618.2       | 2,545.7                 | 1.12                    | -0.08                  | 1.12                  |
| 10,312.4              | 89.65           | 180.32      | 7,984.1               | -2,500.2     | -618.2       | 2,560.9                 | 1.48                    | 0.84                   | 1.21                  |
| CSC 2H IP             |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,391.0              | 90.31           | 181.27      | 7,984.2               | -2,578.8     | -619.3       | 2,638.9                 | 1.48                    | 0.84                   | 1.21                  |
| 10,485.0              | 89.87           | 181.97      | 7,984.0               | -2,672.7     | -622.0       | 2,732.4                 | 0.88                    | -0.47                  | 0.74                  |
| 10,580.0              | 90.66           | 182.50      | 7,983.6               | -2,767.7     | -625.7       | 2,826.9                 | 1.00                    | 0.83                   | 0.56                  |
| 10,675.0              | 91.10           | 182.41      | 7,982.1               | -2,862.6     | -629.8       | 2,921.5                 | 0.47                    | 0.46                   | -0.09                 |
| 10,769.0              | 90.13           | 181.27      | 7,981.1               | -2,956.5     | -632.8       | 3,015.0                 | 1.59                    | -1.03                  | -1.21                 |
| 10,862.0              | 89.78           | 181.89      | 7,981.2               | -3,049.5     | -635.3       | 3,107.5                 | 0.77                    | -0.38                  | 0.67                  |
| 10,956.0              | 90.04           | 181.54      | 7,981.3               | -3,143.4     | -638.2       | 3,200.9                 | 0.46                    | 0.28                   | -0.37                 |
| 11,050.0              | 90.22           | 180.39      | 7,981.1               | -3,237.4     | -639.7       | 3,294.3                 | 1.24                    | 0.19                   | -1.22                 |
| 11,145.0              | 90.92           | 180.30      | 7,980.2               | -3,332.4     | -640.3       | 3,388.5                 | 0.74                    | 0.74                   | -0.09                 |



# Scientific Drilling

## Survey Report



|           |                         |                              |                        |
|-----------|-------------------------|------------------------------|------------------------|
| Company:  | Legend Natural Gas      | Local Co-ordinate Reference: | Well Colt State Com 2H |
| Project:  | Eddy County, New Mexico | TVD Reference:               | KB @ 3062.0usft        |
| Site:     | Colt State Com          | MD Reference:                | KB @ 3062.0usft        |
| Well:     | Colt State Com 2H       | North Reference:             | Grid                   |
| Wellbore: | Original Wellpath       | Survey Calculation Method:   | Minimum Curvature      |
| Design:   | Original Wellpath       | Database:                    | CompassC               |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (%/100usft) | Build Rate (%/100usft) | Turn Rate (%/100usft) |
| 11,239.0              | 90.31           | 179.60      | 7,979.1               | -3,426.4     | -640.2       | 3,481.6                 | 0.99                    | -0.65                  | -0.74                 |
| 11,334.0              | 89.52           | 180.57      | 7,979.3               | -3,521.4     | -640.4       | 3,575.7                 | 1.32                    | -0.83                  | 1.02                  |
| 11,428.0              | 90.22           | 180.83      | 7,979.5               | -3,615.4     | -641.5       | 3,669.0                 | 0.79                    | 0.74                   | 0.28                  |
| 11,522.0              | 91.19           | 180.48      | 7,978.3               | -3,709.4     | -642.6       | 3,762.3                 | 1.10                    | 1.03                   | -0.37                 |
| 11,617.0              | 90.22           | 180.74      | 7,977.2               | -3,804.4     | -643.6       | 3,856.5                 | 1.06                    | -1.02                  | 0.27                  |
| 11,712.0              | 91.19           | 181.89      | 7,976.0               | -3,899.3     | -645.8       | 3,950.9                 | 1.58                    | 1.02                   | 1.21                  |
| 11,806.0              | 90.66           | 181.36      | 7,974.5               | -3,993.3     | -648.4       | 4,044.3                 | 0.80                    | -0.56                  | -0.56                 |
| 11,900.0              | 90.92           | 182.24      | 7,973.2               | -4,087.2     | -651.4       | 4,137.8                 | 0.98                    | 0.28                   | 0.94                  |
| 11,995.0              | 90.04           | 182.41      | 7,972.4               | -4,182.1     | -655.3       | 4,232.4                 | 0.94                    | -0.93                  | 0.18                  |
| 12,089.0              | 90.13           | 182.68      | 7,972.3               | -4,276.1     | -659.4       | 4,326.0                 | 0.30                    | 0.10                   | 0.29                  |
| 12,183.0              | 90.84           | 182.68      | 7,971.5               | -4,369.9     | -663.8       | 4,419.6                 | 0.76                    | 0.76                   | 0.00                  |
| 12,277.0              | 91.19           | 182.85      | 7,969.8               | -4,463.8     | -668.4       | 4,513.2                 | 0.41                    | 0.37                   | 0.18                  |
| 12,337.0              | 91.19           | 182.85      | 7,968.6               | -4,523.7     | -671.3       | 4,573.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,372.0              | 90.13           | 182.68      | 7,968.2               | -4,558.7     | -673.0       | 4,607.8                 | 3.07                    | -3.03                  | -0.49                 |
| 12,466.0              | 90.22           | 182.59      | 7,967.9               | -4,652.6     | -677.3       | 4,701.5                 | 0.14                    | 0.10                   | -0.10                 |
| 12,553.0              | 90.40           | 182.24      | 7,967.4               | -4,739.5     | -681.0       | 4,788.1                 | 0.45                    | 0.21                   | -0.40                 |
| 12,613.0              | 90.40           | 182.24      | 7,967.0               | -4,799.5     | -683.4       | 4,847.8                 | 0.00                    | 0.00                   | 0.00                  |
| CSC 2H BHL            |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets                                                                                         |               |             |            |              |              |                 |                |                |                 |
|--------------------------------------------------------------------------------------------------------|---------------|-------------|------------|--------------|--------------|-----------------|----------------|----------------|-----------------|
| Target Name                                                                                            | Dip Angle (°) | Dip Dir (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude       | Longitude       |
| hit/miss target                                                                                        |               |             |            |              |              |                 |                |                |                 |
| Shape                                                                                                  |               |             |            |              |              |                 |                |                |                 |
| CSC 2H BHL                                                                                             | 0.00          | 0.00        | 7,975.0    | -4,804.1     | -657.2       | 419,377.60      | 608,241.50     | 32° 9' 9.946 N | 104° 7' 1.728 W |
| - actual wellpath misses target center by 27.7usft at 12613.0usft MD (7967.0 TVD, -4799.5 N, -683.4 E) |               |             |            |              |              |                 |                |                |                 |
| - Point                                                                                                |               |             |            |              |              |                 |                |                |                 |

| Design Annotations    |                       |                   |              |                          |  |
|-----------------------|-----------------------|-------------------|--------------|--------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                          |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                  |  |
| 7,884.1               | 7,779.2               | -134.0            | -611.6       | 330' HL Entry 7884.1' MD |  |
| 12,553.0              | 7,967.4               | -4,739.5          | -681.0       | SDI MWD                  |  |
| 12,613.0              | 7,967.0               | -4,799.5          | -683.4       | Bit Projection           |  |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|