



# Scientific Drilling

## Side Track #2

SUR: J-34-15s-35e, 1650/S & 1650/E

BHL: J-34-15s-35e, 1462/S & 1700/E

API # 30-025-33068

## ENERGEN RESOURCES

Field: WLSU

Site: Lea County, NM

Well: WLSU #12

Wellpath: VH - Job #32K12061062

Survey: 12/29/06



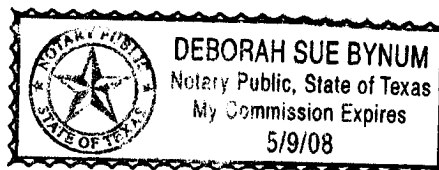
This survey is correct to the best of my knowledge  
and is supported by actual field data.

.....Richard..... Company Representative

Notorized this date 16<sup>th</sup> of January, 2007.

Deborah Sue Bynum

Notary Signature  
County of Midland  
State of Texas



ew



# Scientific Drilling International Survey Report

|                                        |                                                     |                                         |                |
|----------------------------------------|-----------------------------------------------------|-----------------------------------------|----------------|
| <b>Company:</b> ENERGEN RESOURCES      | <b>Date:</b> 01/16/2007                             | <b>Time:</b> 12:53:08                   | <b>Page:</b> 1 |
| <b>Field:</b> WLSU                     | <b>Co-ordinate(NE) Reference:</b>                   | <b>Site:</b> Lea County, NM, Grid North |                |
| <b>Site:</b> Lea County, NM            | <b>Vertical (TVD) Reference:</b>                    | <b>SITE</b> 0.0                         |                |
| <b>Well:</b> WLSU #12                  | <b>Section (VS) Reference:</b>                      | <b>Well</b> (0.00N,0.00E,106.80Azi)     |                |
| <b>Wellpath:</b> VH - Job #32K12061062 | <b>Survey Calculation Method:</b> Minimum Curvature | <b>Db:</b> Sybase                       |                |

|                                                |                                       |
|------------------------------------------------|---------------------------------------|
| <b>Survey:</b> 12/29/06                        | <b>Start Date:</b> 12/29/2006         |
| <b>Company:</b> Scientific Drilling Internatio | <b>Engineer:</b> Pena w/Schlumberger  |
| <b>Tool:</b> Keeper,Keeper Gyro                | <b>Tied-to:</b> From: Definitive Path |

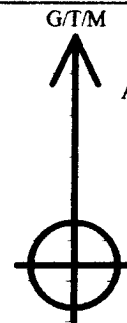
## Survey

| MD<br>ft | Incl<br>deg | Azlm<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ChD<br>ft | ChA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|-----------|------------|
| 7300.00  | 0.56        | 54.59       | 7299.70   | 15.19    | -8.41     | 13.33     | 0.00             | 15.76     | 122.26     |
| 7400.00  | 0.49        | 52.91       | 7399.70   | 15.74    | -7.87     | 14.07     | 0.07             | 16.12     | 119.22     |
| 7500.00  | 0.40        | 22.40       | 7499.70   | 16.03    | -7.29     | 14.54     | 0.25             | 16.26     | 116.62     |
| 7600.00  | 0.55        | 26.82       | 7599.69   | 16.14    | -6.54     | 14.89     | 0.15             | 16.26     | 113.70     |
| 7700.00  | 0.44        | 45.35       | 7699.69   | 16.41    | -5.84     | 15.38     | 0.19             | 16.45     | 110.79     |
| 7800.00  | 0.30        | 8.15        | 7799.69   | 16.56    | -5.31     | 15.69     | 0.27             | 16.56     | 108.70     |
| 7900.00  | 0.34        | 39.78       | 7899.69   | 16.63    | -4.82     | 15.92     | 0.18             | 16.63     | 106.86     |
| 8000.00  | 0.19        | 76.03       | 7999.69   | 16.89    | -4.56     | 16.27     | 0.22             | 16.89     | 105.64     |
| 8100.00  | 0.42        | 72.20       | 8099.68   | 17.33    | -4.40     | 16.78     | 0.23             | 17.35     | 104.71     |
| 8200.00  | 0.42        | 110.26      | 8199.68   | 18.00    | -4.42     | 17.47     | 0.27             | 18.02     | 104.19     |
| 8300.00  | 0.78        | 115.72      | 8299.68   | 19.04    | -4.84     | 18.43     | 0.36             | 19.05     | 104.72     |
| 8400.00  | 2.31        | 191.92      | 8399.64   | 19.88    | -7.11     | 18.62     | 2.25             | 19.93     | 110.89     |
| 8500.00  | 3.93        | 198.16      | 8499.49   | 19.97    | -12.34    | 17.14     | 1.65             | 21.12     | 125.74     |
| 8600.00  | 4.41        | 199.53      | 8599.23   | 19.71    | -19.22    | 14.79     | 0.49             | 24.25     | 142.42     |
| 8700.00  | 4.48        | 198.34      | 8698.93   | 19.42    | -26.55    | 12.27     | 0.12             | 29.25     | 155.19     |
| 8800.00  | 4.54        | 197.93      | 8798.62   | 19.24    | -34.02    | 9.82      | 0.07             | 35.41     | 163.89     |
| 8900.00  | 4.68        | 196.15      | 8898.29   | 19.21    | -41.70    | 7.47      | 0.20             | 42.37     | 169.84     |
| 9000.00  | 4.59        | 197.93      | 8997.97   | 19.18    | -49.43    | 5.11      | 0.17             | 49.69     | 174.10     |
| 9100.00  | 4.38        | 197.24      | 9097.66   | 19.07    | -56.88    | 2.74      | 0.22             | 56.95     | 177.24     |
| 9200.00  | 3.83        | 200.00      | 9197.40   | 18.85    | -63.67    | 0.47      | 0.58             | 63.67     | 179.58     |
| 9300.00  | 3.85        | 200.69      | 9297.18   | 18.44    | -69.95    | -1.86     | 0.05             | 69.97     | 181.52     |
| 9400.00  | 3.78        | 200.78      | 9396.96   | 17.98    | -76.17    | -4.22     | 0.07             | 76.29     | 183.17     |
| 9500.00  | 4.03        | 198.40      | 9496.73   | 17.65    | -82.59    | -6.49     | 0.30             | 82.84     | 184.50     |
| 9600.00  | 4.02        | 199.83      | 9596.48   | 17.37    | -89.22    | -8.79     | 0.10             | 89.65     | 185.63     |
| 9700.00  | 4.01        | 201.08      | 9696.23   | 16.93    | -95.78    | -11.24    | 0.09             | 96.44     | 186.69     |
| 9800.00  | 3.81        | 198.54      | 9796.00   | 16.56    | -102.19   | -13.65    | 0.28             | 103.09    | 187.56     |
| 9900.00  | 3.96        | 199.41      | 9895.77   | 16.31    | -108.60   | -16.06    | 0.16             | 109.73    | 188.26     |
| 10000.00 | 3.91        | 203.98      | 9995.53   | 15.72    | -114.97   | -18.47    | 0.32             | 116.41    | 189.04     |
| 10100.00 | 3.84        | 200.59      | 10095.31  | 15.08    | -121.22   | -20.88    | 0.34             | 123.00    | 189.76     |
| 10200.00 | 3.74        | 201.30      | 10195.09  | 14.60    | -127.39   | -23.22    | 0.11             | 129.49    | 190.33     |
| 10300.00 | 3.33        | 203.09      | 10294.90  | 14.02    | -133.10   | -25.54    | 0.42             | 135.53    | 190.86     |
| 10400.00 | 3.19        | 196.16      | 10394.74  | 13.74    | -138.45   | -27.45    | 0.42             | 141.14    | 191.22     |
| 10500.00 | 3.11        | 195.06      | 10494.58  | 13.85    | -143.74   | -28.93    | 0.10             | 146.62    | 191.38     |
| 10600.00 | 3.08        | 191.93      | 10594.44  | 14.16    | -148.99   | -30.19    | 0.17             | 152.02    | 191.46     |
| 10700.00 | 3.03        | 192.56      | 10694.30  | 14.59    | -154.19   | -31.32    | 0.06             | 157.34    | 191.48     |
| 10800.00 | 3.02        | 197.74      | 10794.16  | 14.74    | -159.28   | -32.70    | 0.27             | 162.61    | 191.60     |
| 10900.00 | 3.24        | 190.49      | 10894.01  | 15.00    | -164.57   | -34.02    | 0.45             | 168.05    | 191.68     |
| 11000.00 | 2.77        | 191.39      | 10993.87  | 15.54    | -169.72   | -35.01    | 0.47             | 173.29    | 191.66     |
| 11100.00 | 2.30        | 190.04      | 11093.77  | 16.01    | -174.06   | -35.84    | 0.47             | 177.71    | 191.63     |
| 11200.00 | 1.84        | 212.49      | 11193.71  | 15.81    | -177.39   | -37.05    | 0.92             | 181.22    | 191.80     |
| 11300.00 | 1.62        | 213.43      | 11293.66  | 14.97    | -179.93   | -38.69    | 0.22             | 184.04    | 192.14     |
| 11400.00 | 1.45        | 225.28      | 11393.63  | 13.96    | -182.00   | -40.37    | 0.36             | 186.42    | 192.51     |
| 11500.00 | 1.59        | 232.12      | 11493.59  | 12.56    | -183.74   | -42.36    | 0.23             | 188.56    | 192.98     |
| 11600.00 | 1.38        | 235.63      | 11593.56  | 11.00    | -185.27   | -44.45    | 0.23             | 190.53    | 193.49     |
| 11700.00 | 1.40        | 242.17      | 11693.53  | 9.38     | -186.52   | -46.52    | 0.16             | 192.24    | 194.01     |
| 11735.00 | 1.05        | 261.61      | 11728.52  | 8.78     | -186.77   | -47.22    | 1.54             | 192.64    | 194.19     |



Scientific  
Drilling

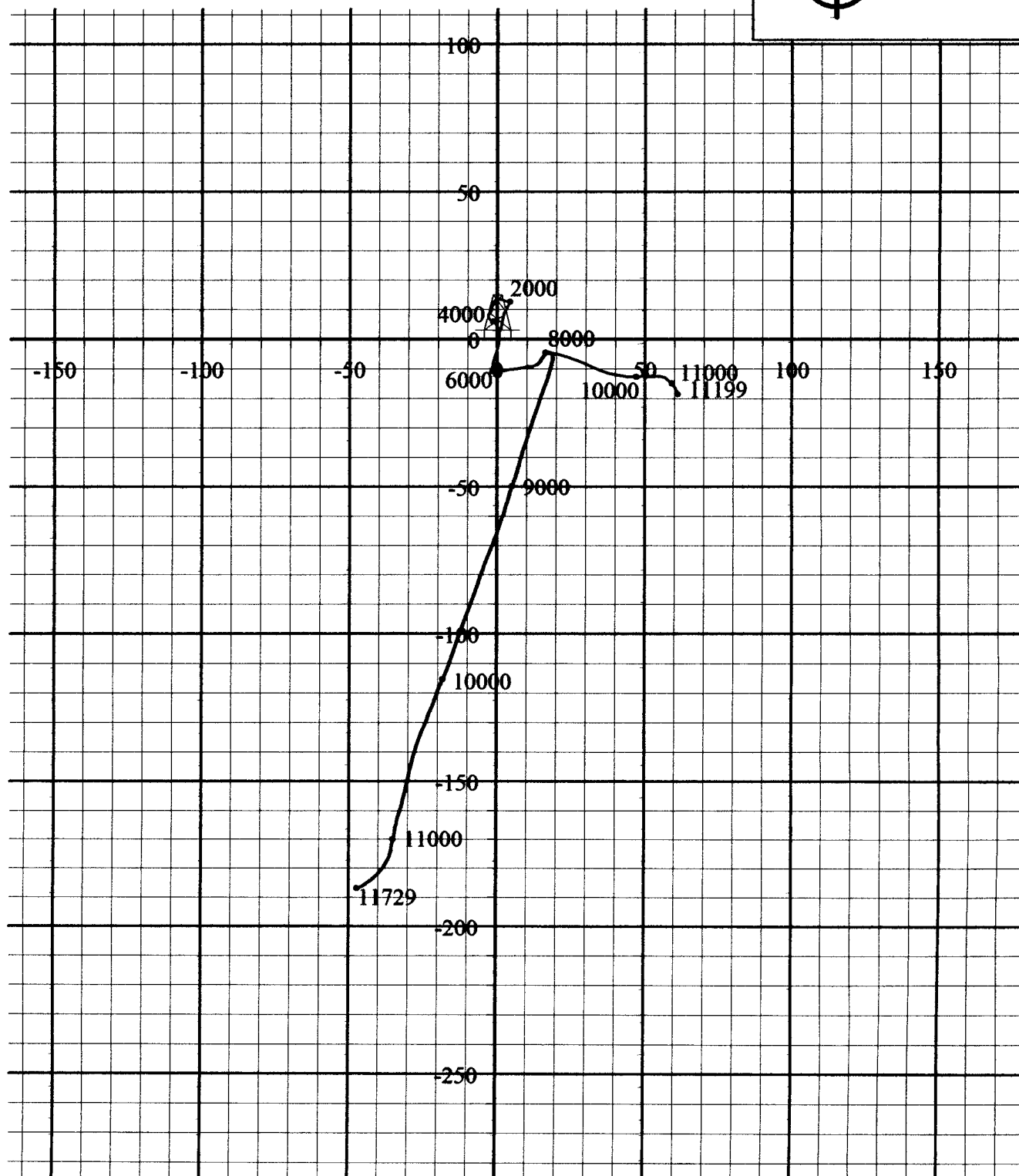
Field: WLSU  
Site: Lea County, NM  
Well: WLSU #12  
Wellpath: VH - Job #32K12061062  
Survey: 12/29/06



Azimuths to Grid North  
True North: 0.00°  
Magnetic North: 0.00°

Magnetic Field  
Strength: 0nT  
Dip Angle: 0.00°  
Date: 01/16/2007  
Model: igrf2000

South(-)/North(+) [50ft/in]



West(-)/East(+) [50ft/in]