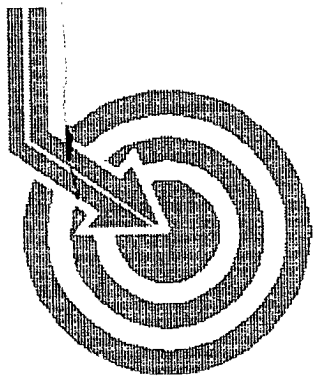


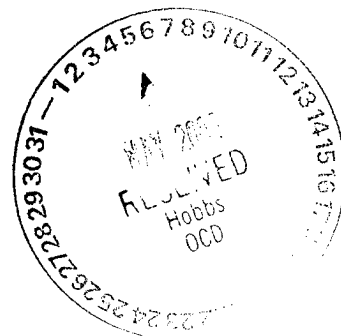


# Scientific Drilling

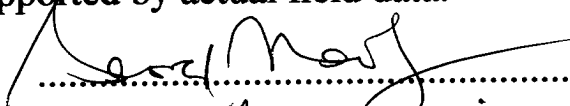
**CHEVRONTEXACO**

Field: Vacuum Glorietta West  
Site: Lea County, NM  
Well: VGWU #56H  
Wellpath: HH - Job #32D0303124  
Survey: 03/18/03-03/29/03

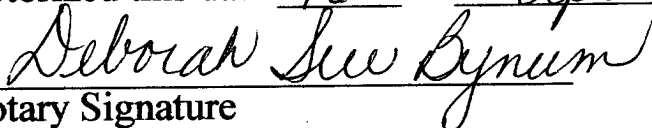
SUR: B - 35-17s-34e, 660/N & 1780/E  
BHL: D - 36-17s-34e, 802/N & 348/W  
API # 30-025-20329



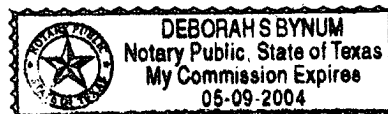
This survey is correct to the best of my knowledge  
and is supported by actual field data.

.....Company Representative

Notorized this date 16<sup>th</sup> of April, 2003.



Notary Signature  
County of Midland  
State of Texas



# Scientific Drilling International

## Survey Report

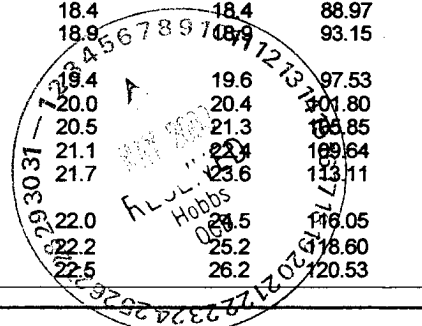
|                                |                            |                                  |         |
|--------------------------------|----------------------------|----------------------------------|---------|
| Company: CHEVRONTEXACO         | Date: 4/16/2003            | Time: 17:50:10                   | Page: 1 |
| Field: Vacuum Glorietta West   | Co-ordinate(NE) Reference: | Site: Lea County, NM, Grid North |         |
| Site: Lea County, NM           | Vertical (TVD) Reference:  | SITE 0.0 above Mean Sea Level    |         |
| Well: VGWU #56H                | Section (VS) Reference:    | Well (0.0E, 0.0N, 92.3Azi)       |         |
| Wellpath: VH - Job #32K0303128 | Survey Calculation Method: | Minimum Curvature                |         |

|                                   |                       |
|-----------------------------------|-----------------------|
| Survey: 03/19/03<br>KSRG 0'-5752' | Start Date: 4/16/2003 |
|-----------------------------------|-----------------------|

|                                                         |                       |
|---------------------------------------------------------|-----------------------|
| Company: Scientific Drilling Internatio<br>Tool: Keeper | Engineer: Jeff Cossey |
|---------------------------------------------------------|-----------------------|

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | ClbD<br>ft | ClbA<br>deg | DLS<br>deg/100ft |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------|-------------|------------------|
| 0.0      | 0.00        | 359.49      | 0.0       | 0.0      | 0.0       | 0.0       | 0.0        | 0.00        | 0.00             |
| 100.0    | 0.14        | 25.30       | 100.0     | 0.0      | 0.1       | 0.1       | 0.1        | 25.30       | 0.14             |
| 200.0    | 0.24        | 118.53      | 200.0     | 0.3      | 0.1       | 0.3       | 0.3        | 67.26       | 0.28             |
| 300.0    | 0.20        | 114.56      | 300.0     | 0.6      | -0.1      | 0.6       | 0.6        | 94.68       | 0.04             |
| 400.0    | 0.15        | 125.21      | 400.0     | 0.9      | -0.2      | 0.9       | 0.9        | 102.55      | 0.06             |
| 500.0    | 0.27        | 110.86      | 500.0     | 1.2      | -0.4      | 1.2       | 1.3        | 106.35      | 0.13             |
| 600.0    | 0.25        | 111.08      | 600.0     | 1.7      | -0.5      | 1.6       | 1.7        | 107.56      | 0.02             |
| 700.0    | 0.21        | 126.18      | 700.0     | 2.0      | -0.7      | 2.0       | 2.1        | 109.50      | 0.07             |
| 800.0    | 0.28        | 126.92      | 800.0     | 2.4      | -1.0      | 2.3       | 2.5        | 112.35      | 0.07             |
| 900.0    | 0.30        | 112.13      | 900.0     | 2.8      | -1.2      | 2.8       | 3.0        | 113.49      | 0.08             |
| 1000.0   | 0.24        | 111.80      | 1000.0    | 3.3      | -1.4      | 3.2       | 3.5        | 113.29      | 0.06             |
| 1100.0   | 0.21        | 114.77      | 1100.0    | 3.6      | -1.5      | 3.6       | 3.9        | 113.28      | 0.03             |
| 1200.0   | 0.23        | 124.37      | 1200.0    | 4.0      | -1.7      | 3.9       | 4.3        | 113.86      | 0.04             |
| 1300.0   | 0.20        | 145.50      | 1300.0    | 4.3      | -2.0      | 4.2       | 4.6        | 115.45      | 0.08             |
| 1400.0   | 0.18        | 124.30      | 1400.0    | 4.5      | -2.2      | 4.4       | 4.9        | 116.75      | 0.07             |
| 1500.0   | 0.19        | 144.93      | 1500.0    | 4.7      | -2.4      | 4.6       | 5.2        | 117.83      | 0.07             |
| 1600.0   | 0.24        | 134.06      | 1600.0    | 5.0      | -2.7      | 4.9       | 5.6        | 119.20      | 0.06             |
| 1700.0   | 0.15        | 87.71       | 1700.0    | 5.3      | -2.9      | 5.2       | 5.9        | 119.06      | 0.17             |
| 1800.0   | 0.17        | 88.31       | 1800.0    | 5.5      | -2.9      | 5.4       | 6.1        | 117.72      | 0.02             |
| 1900.0   | 0.12        | 53.89       | 1900.0    | 5.8      | -2.8      | 5.7       | 6.3        | 116.20      | 0.10             |
| 2000.0   | 0.26        | 44.22       | 2000.0    | 6.0      | -2.6      | 5.9       | 6.4        | 113.46      | 0.14             |
| 2100.0   | 0.28        | 14.55       | 2100.0    | 6.2      | -2.2      | 6.1       | 6.5        | 109.46      | 0.14             |
| 2200.0   | 0.41        | 27.42       | 2200.0    | 6.4      | -1.6      | 6.4       | 6.6        | 104.23      | 0.15             |
| 2300.0   | 0.48        | 30.30       | 2300.0    | 6.8      | -0.9      | 6.7       | 6.8        | 97.89       | 0.07             |
| 2400.0   | 0.51        | 32.95       | 2400.0    | 7.2      | -0.2      | 7.2       | 7.2        | 91.57       | 0.04             |
| 2500.0   | 0.67        | 29.34       | 2500.0    | 7.7      | 0.7       | 7.7       | 7.7        | 84.92       | 0.16             |
| 2600.0   | 1.04        | 29.11       | 2600.0    | 8.4      | 2.0       | 8.4       | 8.7        | 76.75       | 0.37             |
| 2700.0   | 1.26        | 47.98       | 2699.9    | 9.5      | 3.5       | 9.7       | 10.3       | 70.07       | 0.44             |
| 2800.0   | 0.95        | 50.61       | 2799.9    | 11.0     | 4.8       | 11.2      | 12.1       | 66.81       | 0.31             |
| 2900.0   | 0.81        | 55.54       | 2899.9    | 12.1     | 5.7       | 12.4      | 13.6       | 65.26       | 0.16             |
| 3000.0   | 0.71        | 85.37       | 2999.9    | 13.3     | 6.2       | 13.6      | 14.9       | 65.62       | 0.40             |
| 3100.0   | 0.61        | 105.64      | 3099.9    | 14.5     | 6.1       | 14.7      | 15.9       | 67.61       | 0.25             |
| 3200.0   | 0.48        | 138.62      | 3199.9    | 15.3     | 5.6       | 15.5      | 16.5       | 70.12       | 0.33             |
| 3300.0   | 0.48        | 146.81      | 3299.9    | 15.8     | 4.9       | 16.0      | 16.8       | 72.85       | 0.07             |
| 3400.0   | 0.48        | 155.86      | 3399.9    | 16.2     | 4.2       | 16.4      | 16.9       | 75.62       | 0.08             |
| 3500.0   | 0.56        | 148.34      | 3499.9    | 16.7     | 3.4       | 16.8      | 17.2       | 78.56       | 0.10             |
| 3600.0   | 0.64        | 149.53      | 3599.9    | 17.3     | 2.5       | 17.4      | 17.6       | 81.78       | 0.08             |
| 3700.0   | 0.67        | 154.93      | 3699.9    | 17.8     | 1.5       | 17.9      | 18.0       | 85.21       | 0.07             |
| 3800.0   | 0.78        | 160.18      | 3799.9    | 18.4     | 0.3       | 18.4      | 18.4       | 88.97       | 0.13             |
| 3900.0   | 0.88        | 161.29      | 3899.8    | 18.9     | -1.0      | 18.9      | 18.9       | 93.15       | 0.10             |
| 4000.0   | 0.99        | 158.28      | 3999.8    | 19.5     | -2.6      | 19.4      | 19.6       | 97.53       | 0.12             |
| 4100.0   | 0.96        | 163.84      | 4099.8    | 20.1     | -4.2      | 20.0      | 20.4       | 101.80      | 0.10             |
| 4200.0   | 1.03        | 160.29      | 4199.8    | 20.7     | -5.8      | 20.5      | 21.3       | 105.85      | 0.09             |
| 4300.0   | 1.04        | 161.58      | 4299.8    | 21.4     | -7.5      | 21.1      | 22.4       | 109.64      | 0.03             |
| 4400.0   | 1.03        | 161.88      | 4399.8    | 22.0     | -9.2      | 21.7      | 23.6       | 113.11      | 0.01             |
| 4500.0   | 0.77        | 173.40      | 4499.8    | 22.5     | -10.8     | 22.0      | 23.5       | 116.05      | 0.32             |
| 4600.0   | 0.74        | 175.30      | 4599.8    | 22.6     | -12.1     | 22.2      | 25.2       | 118.60      | 0.04             |
| 4700.0   | 0.74        | 150.67      | 4699.7    | 23.1     | -13.3     | 22.5      | 26.2       | 120.53      | 0.32             |



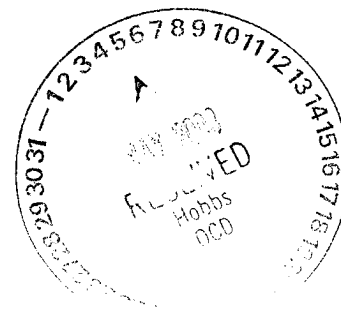
# Scientific Drilling International

## Survey Report

|                                                                                                                                                                       |                                                                                                                                                                        |                                                                                                                                                |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Company:</b> CHEVRONTEXACO<br><b>Field:</b> Vacuum Gionetta West<br><b>Site:</b> Lea County, NM<br><b>Well:</b> VGWU #56H<br><b>Wellpath:</b> VH - Job #32K0303128 | <b>Date:</b> 4/16/2003<br><b>Co-ordinate(NE) Reference:</b><br><b>Vertical (TVD) Reference:</b><br><b>Section (VS) Reference:</b><br><b>Survey Calculation Method:</b> | <b>Time:</b> 17:50:10<br><b>Site:</b> Lea County, NM, Grid North<br><b>SITE:</b> 0.0 above Mean Sea Level<br><b>Well (0.0E, 0.0N, 92.3Azi)</b> | <b>Page:</b> 2 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------|

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | ClsD<br>ft | ClsA<br>deg | DLS<br>deg/100ft |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------|-------------|------------------|
| 4800.0   | 0.80        | 129.98      | 4799.7    | 23.9     | -14.3     | 23.4      | 27.4       | 121.45      | 0.28             |
| 4900.0   | 0.93        | 124.11      | 4899.7    | 25.2     | -15.2     | 24.6      | 28.9       | 121.73      | 0.16             |
| 5000.0   | 0.97        | 122.76      | 4999.7    | 26.6     | -16.1     | 26.0      | 30.6       | 121.82      | 0.05             |
| 5100.0   | 1.03        | 121.19      | 5099.7    | 28.1     | -17.0     | 27.5      | 32.3       | 121.83      | 0.07             |
| 5200.0   | 1.02        | 121.34      | 5199.7    | 29.7     | -18.0     | 29.0      | 34.1       | 121.80      | 0.01             |
| 5300.0   | 1.07        | 126.93      | 5299.7    | 31.2     | -19.0     | 30.5      | 35.9       | 121.92      | 0.11             |
| 5400.0   | 1.05        | 144.00      | 5399.6    | 32.6     | -20.3     | 31.8      | 37.7       | 122.57      | 0.32             |
| 5500.0   | 1.28        | 145.27      | 5499.6    | 33.8     | -22.0     | 32.9      | 39.6       | 123.68      | 0.23             |
| 5600.0   | 1.00        | 146.14      | 5599.6    | 35.0     | -23.6     | 34.1      | 41.4       | 124.70      | 0.28             |
| 5700.0   | 0.98        | 126.79      | 5699.6    | 36.2     | -24.8     | 35.2      | 43.1       | 125.17      | 0.33             |
| 5752.0   | 1.13        | 133.33      | 5751.6    | 37.0     | -25.5     | 36.0      | 44.1       | 125.28      | 0.37             |



# Scientific Drilling International

## Survey Report

Company: CHEVRONTEXACO  
Field: Vacuum Gionetta West  
Site: Lea County, NM  
Well: VGWU #56H  
Wellpath: HH - Job #32D0303124

Date: 4/16/2003 Time: 17:56:54 Page: 1  
Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North  
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level  
Section (VS) Reference: Well (0.0E,0.0N,92.3Azi)  
Survey Calculation Method: Minimum Curvature

Survey: 03/18/03-03/29/03  
MWD 5755'-7959'

Start Date: 4/16/2003

Company: Scientific Drilling Internatio  
Tool: MWD

Engineer: Lamb/Hendrix

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | ClsD<br>ft | ClsA<br>deg | DLS<br>deg/100ft |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------|-------------|------------------|
| 5752.0   | 1.13        | 133.33      | 5751.6    | 37.0     | -25.5     | 36.0      | 44.1       | 125.28      | 0.00             |
| 5755.0   | 1.13        | 133.33      | 5754.6    | 37.0     | -25.5     | 36.0      | 44.1       | 125.29      | 0.00             |
| 5817.0   | 24.40       | 103.40      | 5814.6    | 50.2     | -28.9     | 49.1      | 57.0       | 120.50      | 37.79            |
| 5849.0   | 36.60       | 100.60      | 5842.2    | 66.2     | -32.2     | 65.0      | 72.5       | 116.38      | 38.37            |
| 5881.0   | 48.50       | 99.40       | 5865.7    | 87.6     | -36.0     | 86.2      | 93.4       | 112.63      | 37.27            |
| 5912.0   | 60.90       | 99.30       | 5883.6    | 112.7    | -40.1     | 111.2     | 118.2      | 109.81      | 40.00            |
| 5943.0   | 72.20       | 98.80       | 5895.9    | 140.9    | -44.5     | 139.2     | 146.1      | 107.73      | 36.48            |
| 5956.0   | 78.00       | 100.10      | 5899.2    | 153.4    | -46.6     | 151.6     | 158.6      | 107.08      | 45.65            |
| 5973.0   | 85.50       | 104.10      | 5901.7    | 169.9    | -50.1     | 168.0     | 175.3      | 106.61      | 49.88            |
| 6005.0   | 91.80       | 101.90      | 5902.4    | 201.3    | -57.3     | 199.2     | 207.3      | 106.05      | 20.85            |
| 6036.0   | 91.60       | 100.80      | 5901.5    | 231.9    | -63.4     | 229.6     | 238.1      | 105.44      | 3.61             |
| 6067.0   | 91.60       | 98.50       | 5900.6    | 262.7    | -68.6     | 260.1     | 269.0      | 104.77      | 7.42             |
| 6098.0   | 93.30       | 99.10       | 5899.3    | 293.4    | -73.3     | 290.7     | 299.8      | 104.16      | 5.81             |
| 6130.0   | 93.60       | 98.80       | 5897.4    | 325.2    | -78.3     | 322.3     | 331.6      | 103.66      | 1.32             |
| 6161.0   | 90.75       | 99.40       | 5896.2    | 355.9    | -83.2     | 352.8     | 362.5      | 103.27      | 9.39             |
| 6192.0   | 90.60       | 99.90       | 5895.8    | 386.7    | -88.4     | 383.4     | 393.5      | 102.98      | 1.68             |
| 6224.0   | 90.40       | 100.60      | 5895.6    | 418.4    | -94.1     | 414.9     | 425.4      | 102.78      | 2.27             |
| 6255.0   | 90.00       | 100.10      | 5895.5    | 449.1    | -99.7     | 445.4     | 456.4      | 102.61      | 2.07             |
| 6287.0   | 90.00       | 99.90       | 5895.5    | 480.8    | -105.2    | 476.9     | 488.4      | 102.44      | 0.62             |
| 6318.0   | 89.80       | 98.70       | 5895.5    | 511.6    | -110.2    | 507.5     | 519.3      | 102.25      | 3.92             |
| 6350.0   | 89.90       | 99.30       | 5895.6    | 543.3    | -115.2    | 539.1     | 551.3      | 102.06      | 1.90             |
| 6382.0   | 90.00       | 99.00       | 5895.6    | 575.1    | -120.3    | 570.7     | 583.2      | 101.91      | 0.99             |
| 6413.0   | 91.30       | 99.90       | 5895.3    | 605.9    | -125.4    | 601.3     | 614.2      | 101.78      | 5.10             |
| 6444.0   | 92.30       | 102.30      | 5894.3    | 636.5    | -131.4    | 631.7     | 645.2      | 101.75      | 8.38             |
| 6476.0   | 92.30       | 102.10      | 5893.0    | 668.0    | -138.1    | 662.9     | 677.2      | 101.77      | 0.62             |
| 6507.0   | 87.00       | 100.10      | 5893.2    | 698.6    | -144.1    | 693.3     | 708.1      | 101.74      | 18.27            |
| 6539.0   | 90.00       | 101.00      | 5894.0    | 730.3    | -149.9    | 724.8     | 740.1      | 101.69      | 9.79             |
| 6571.0   | 92.20       | 101.90      | 5893.4    | 761.9    | -156.3    | 756.1     | 772.1      | 101.68      | 7.43             |
| 6602.0   | 88.20       | 98.20       | 5893.3    | 792.6    | -161.7    | 786.6     | 803.1      | 101.62      | 17.58            |
| 6634.0   | 86.70       | 96.40       | 5894.7    | 824.4    | -165.8    | 818.3     | 835.0      | 101.45      | 7.32             |
| 6666.0   | 88.90       | 97.70       | 5896.0    | 856.3    | -169.7    | 850.1     | 866.9      | 101.29      | 7.98             |
| 6697.0   | 89.00       | 96.20       | 5896.5    | 887.2    | -173.4    | 880.8     | 897.8      | 101.14      | 4.85             |
| 6729.0   | 89.10       | 99.00       | 5897.1    | 919.0    | -177.7    | 912.6     | 929.7      | 101.02      | 8.75             |
| 6760.0   | 92.10       | 100.70      | 5896.7    | 949.8    | -183.0    | 943.1     | 960.7      | 100.98      | 11.12            |
| 6792.0   | 91.40       | 99.90       | 5895.8    | 981.4    | -188.7    | 974.6     | 992.7      | 100.96      | 3.32             |
| 6824.0   | 87.70       | 99.10       | 5896.0    | 1013.2   | -194.0    | 1006.1    | 1024.6     | 100.91      | 11.83            |
| 6855.0   | 88.20       | 100.30      | 5897.1    | 1043.9   | -199.2    | 1036.7    | 1055.6     | 100.88      | 4.19             |
| 6887.0   | 86.60       | 99.60       | 5898.6    | 1075.6   | -204.7    | 1068.1    | 1087.6     | 100.85      | 5.46             |
| 6918.0   | 86.40       | 99.40       | 5900.5    | 1106.3   | -209.8    | 1098.7    | 1118.5     | 100.81      | 0.91             |
| 6950.0   | 85.80       | 100.90      | 5902.7    | 1137.9   | -215.5    | 1130.1    | 1159.4     | 100.79      | 5.04             |
| 6981.0   | 89.50       | 102.20      | 5903.9    | 1168.5   | -221.7    | 1160.4    | 1181.4     | 100.81      | 12.65            |
| 7013.0   | 90.20       | 103.10      | 5904.0    | 1200.0   | -228.7    | 1191.6    | 1213.4     | 100.86      | 3.56             |
| 7044.0   | 91.70       | 103.50      | 5903.5    | 1230.4   | -235.8    | 1221.8    | 1244.4     | 100.92      | 5.01             |
| 7076.0   | 91.40       | 98.10       | 5902.6    | 1262.0   | -241.8    | 1253.2    | 1276.3     | 100.92      | 16.89            |
| 7107.0   | 91.50       | 93.50       | 5901.8    | 1292.9   | -244.9    | 1284.0    | 1307.2     | 100.80      | 14.84            |
| 7139.0   | 91.40       | 88.30       | 5901.0    | 1324.9   | -245.4    | 1316.0    | 1338.7     | 100.56      | 16.25            |
| 7170.0   | 90.40       | 83.10       | 5900.5    | 1355.7   | -243.1    | 1346.9    | 1368.7     | 100.23      | 17.08            |
| 7202.0   | 88.40       | 81.20       | 5900.9    | 1387.2   | -238.7    | 1378.6    | 1399.1     | 99.82       | 8.62             |

# Scientific Drilling International

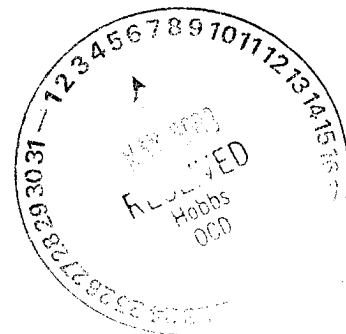
## Survey Report

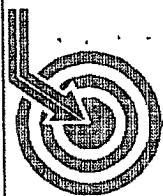
**Company:** CHEVRONTEXACO  
**Field:** Vacuum Goriotta West  
**Site:** Lea County, NM  
**Well:** VGWU #56H  
**Wellpath:** HH - Job #32D0303124

**Date:** 4/16/2003 **Time:** 17:56:54 **Page:** 2  
**Co-ordinate(NE) Reference:** Site: Lea County, NM, Grid North  
**Vertical (TVD) Reference:** SITE 0.0 above Mean Sea Level  
**Section (VS) Reference:** Well (0.0E,0.0N,92.3Azi)  
**Survey Calculation Method:** Minimum Curvature

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | ClsD<br>ft | ClsA<br>deg | DLS<br>deg/100ft |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------|-------------|------------------|
| 7232.0   | 90.00       | 81.20       | 5901.3    | 1416.6   | -234.1    | 1408.3    | 1427.6     | 99.44       | 5.33             |
| 7263.0   | 94.40       | 81.60       | 5900.1    | 1447.0   | -229.5    | 1438.9    | 1457.1     | 99.06       | 14.25            |
| 7295.0   | 93.40       | 80.40       | 5897.9    | 1478.3   | -224.5    | 1470.4    | 1487.4     | 98.68       | 4.87             |
| 7331.0   | 92.40       | 79.60       | 5896.1    | 1513.4   | -218.3    | 1505.8    | 1521.5     | 98.25       | 3.56             |
| 7358.0   | 93.40       | 79.70       | 5894.7    | 1539.7   | -213.4    | 1532.3    | 1547.1     | 97.93       | 3.72             |
| 7390.0   | 92.30       | 80.30       | 5893.2    | 1571.0   | -207.9    | 1563.8    | 1577.6     | 97.57       | 3.91             |
| 7421.0   | 92.20       | 80.20       | 5891.9    | 1601.3   | -202.6    | 1594.3    | 1607.2     | 97.24       | 0.46             |
| 7453.0   | 92.00       | 83.30       | 5890.8    | 1632.7   | -198.0    | 1626.0    | 1638.0     | 96.94       | 9.70             |
| 7484.0   | 90.00       | 81.70       | 5890.2    | 1663.2   | -194.0    | 1656.7    | 1668.0     | 96.68       | 8.26             |
| 7516.0   | 88.40       | 81.70       | 5890.7    | 1694.7   | -189.4    | 1688.4    | 1699.0     | 96.40       | 5.00             |
| 7547.0   | 88.00       | 84.30       | 5891.6    | 1725.2   | -185.6    | 1719.1    | 1729.1     | 96.16       | 8.48             |
| 7579.0   | 87.90       | 84.40       | 5892.8    | 1756.9   | -182.4    | 1750.9    | 1760.4     | 95.95       | 0.44             |
| 7611.0   | 89.30       | 84.60       | 5893.6    | 1788.6   | -179.4    | 1782.8    | 1791.8     | 95.75       | 4.42             |
| 7642.0   | 92.70       | 86.50       | 5893.0    | 1819.4   | -177.0    | 1813.7    | 1822.3     | 95.57       | 12.56            |
| 7674.0   | 92.90       | 86.00       | 5891.5    | 1851.2   | -174.9    | 1845.6    | 1853.8     | 95.41       | 1.68             |
| 7705.0   | 91.40       | 86.20       | 5890.3    | 1882.0   | -172.8    | 1876.5    | 1884.4     | 95.26       | 4.88             |
| 7736.0   | 91.00       | 86.60       | 5889.7    | 1912.8   | -170.8    | 1907.4    | 1915.1     | 95.12       | 1.82             |
| 7768.0   | 91.50       | 84.40       | 5889.0    | 1944.5   | -168.3    | 1939.3    | 1946.6     | 94.96       | 7.05             |
| 7799.0   | 91.60       | 82.70       | 5888.1    | 1975.2   | -164.8    | 1970.1    | 1977.0     | 94.78       | 5.49             |
| 7831.0   | 89.30       | 80.70       | 5887.9    | 2006.6   | -160.2    | 2001.8    | 2008.2     | 94.58       | 9.52             |
| 7863.0   | 87.80       | 80.00       | 5888.7    | 2037.9   | -154.9    | 2033.3    | 2039.2     | 94.36       | 5.17             |
| 7894.0   | 88.60       | 81.80       | 5889.6    | 2068.3   | -150.0    | 2063.9    | 2069.3     | 94.16       | 6.35             |
| 7923.0   | 91.50       | 83.10       | 5889.6    | 2096.8   | -146.2    | 2092.6    | 2097.7     | 94.00       | 10.96            |
| 7959.0   | 91.50       | 83.10       | 5888.7    | 2132.4   | -141.8    | 2128.4    | 2133.1     | 93.81       | 0.00             |



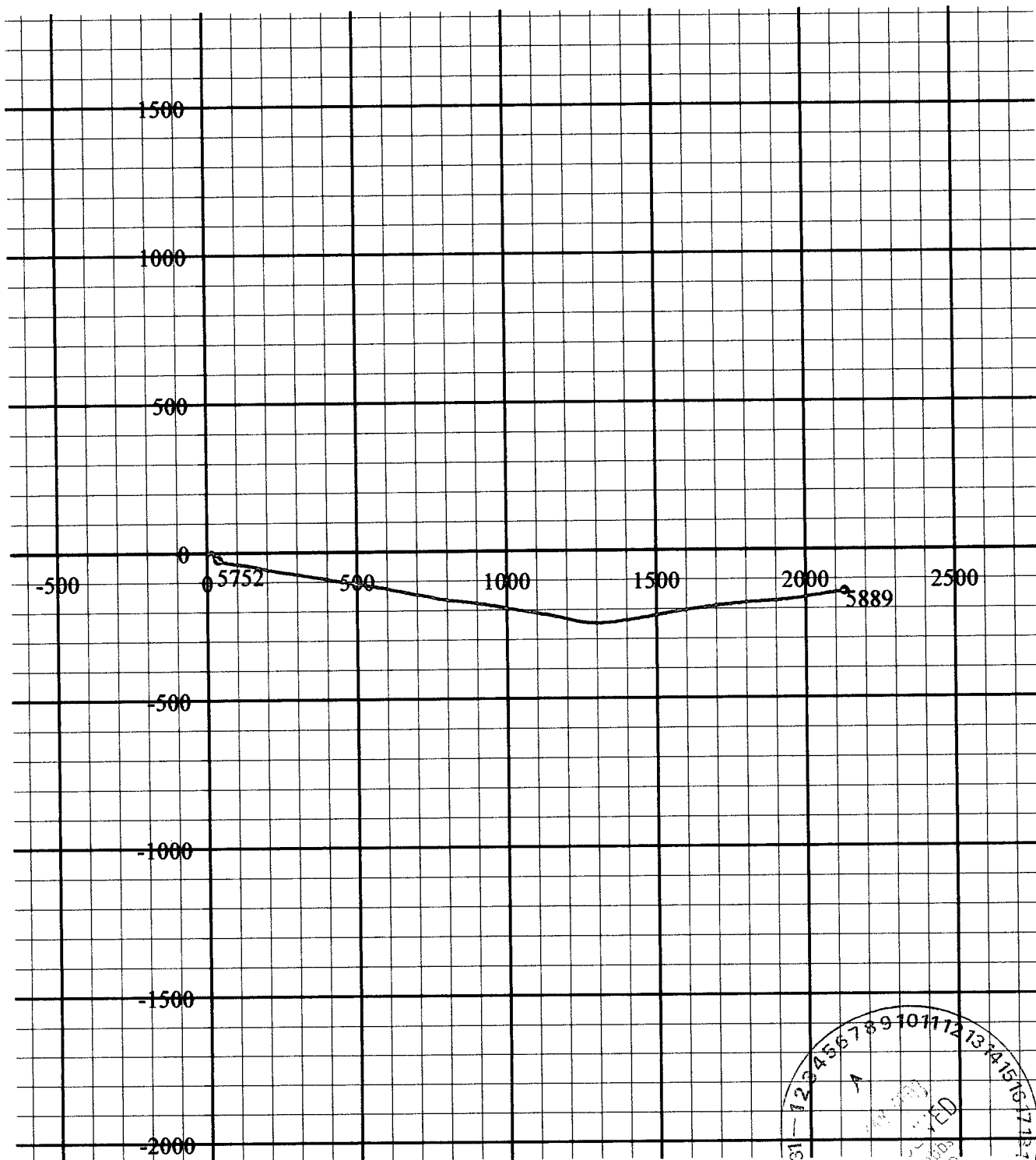


**Scientific  
Drilling**

Field: Vacuum Glorietta West  
Site: Lea County, NM  
Well: VGWU #56H  
Wellpath: HH - Job #32D0303124  
Survey: 03/18/03-03/29/03

G/T/M All Angles Relative  
To Grid North  
Grid North: 0.00  
True North: 0.00  
Magnetic North: 0.00

South(-)/North(+) [500ft/in]



West(-)/East(+) [500ft/in]

