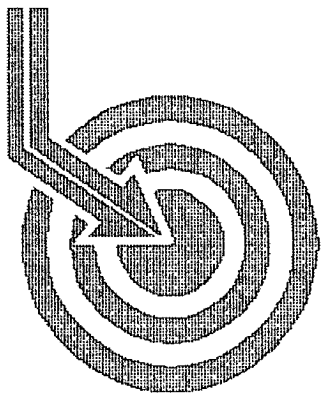


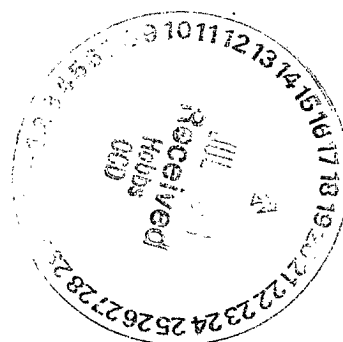


# Scientific Drilling

SUR @ I-16-22s-37e, 2086/S & 554/E  
BHL @ P-16-22s-37e 340/S & 341/E  
API # 30-025-10318

## CHEVRON

Field: Grayburg San Andres  
Site: Lea County, NM  
Well: Cole A #5H  
Wellpath: DH - Job #32D0506350  
Survey: 05/03/06-05/10/06

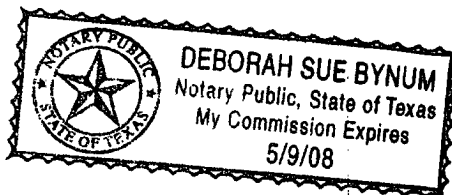


This survey is correct to the best of my knowledge  
and is supported by actual field data.

.....*R. Shantz*..... Company Representative

Notorized this date 20<sup>th</sup> of June, 2006.

*Deborah Sue Bynum*  
Notary Signature  
County of Midland  
State of Texas





# Scientific Drilling International Survey Report

|                                       |                                                     |                                         |                |
|---------------------------------------|-----------------------------------------------------|-----------------------------------------|----------------|
| <b>Company:</b> CHEVRON               | <b>Date:</b> 06/20/2006                             | <b>Time:</b> 18:52:14                   | <b>Page:</b> 1 |
| <b>Field:</b> Grayburg San Andres     | <b>Co-ordinate(NE) Reference:</b>                   | <b>Site:</b> Lea County, NM, True North |                |
| <b>Site:</b> Lea County, NM           | <b>Vertical (TVD) Reference:</b>                    | <b>SITE</b> 0.0                         |                |
| <b>Well:</b> Cole A #5H               | <b>Section (VS) Reference:</b>                      | <b>Well</b> (0.00N,0.00E,173.01Azi)     |                |
| <b>Wellpath:</b> VH - Job #32K0506358 | <b>Survey Calculation Method:</b> Minimum Curvature | <b>Db:</b> Sybase                       |                |

|                                                |                                 |
|------------------------------------------------|---------------------------------|
| <b>Survey:</b> 05/04/06<br>KSRG 0'-3585'       | <b>Start Date:</b> 05/04/2006   |
| <b>Company:</b> Scientific Drilling Internatio | <b>Engineer:</b> Madrid/Rehders |
| <b>Tool:</b> Keeper;Keeper Gyro                | <b>Tied-to:</b> From Surface    |

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 0.00     | 0.00        | 359.37      | 0.00      | 0.00     | 0.00      | 0.00      | 0.00             | 0.00       | 0.00        |
| 100.00   | 0.40        | 211.62      | 100.00    | 0.27     | -0.30     | -0.18     | 0.40             | 0.35       | 211.62      |
| 200.00   | 0.32        | 200.42      | 200.00    | 0.79     | -0.85     | -0.46     | 0.10             | 0.97       | 208.41      |
| 300.00   | 0.17        | 245.67      | 300.00    | 1.08     | -1.18     | -0.69     | 0.23             | 1.37       | 210.55      |
| 400.00   | 0.20        | 334.11      | 400.00    | 0.96     | -1.08     | -0.91     | 0.26             | 1.41       | 219.95      |
| 500.00   | 0.32        | 326.30      | 499.99    | 0.55     | -0.69     | -1.14     | 0.12             | 1.33       | 238.60      |
| 600.00   | 0.22        | 347.10      | 599.99    | 0.11     | -0.27     | -1.33     | 0.14             | 1.36       | 258.37      |
| 700.00   | 0.11        | 165.63      | 699.99    | 0.01     | -0.18     | -1.35     | 0.33             | 1.36       | 262.51      |
| 800.00   | 0.11        | 212.59      | 799.99    | 0.18     | -0.35     | -1.38     | 0.09             | 1.42       | 255.80      |
| 900.00   | 0.13        | 233.10      | 899.99    | 0.31     | -0.50     | -1.52     | 0.05             | 1.60       | 251.89      |
| 1000.00  | 0.17        | 245.77      | 999.99    | 0.41     | -0.63     | -1.75     | 0.05             | 1.86       | 250.28      |
| 1100.00  | 0.14        | 255.03      | 1099.99   | 0.47     | -0.72     | -2.00     | 0.04             | 2.13       | 250.24      |
| 1200.00  | 0.20        | 329.60      | 1199.99   | 0.33     | -0.60     | -2.21     | 0.21             | 2.29       | 254.77      |
| 1300.00  | 0.24        | 59.55       | 1299.99   | 0.09     | -0.35     | -2.12     | 0.31             | 2.14       | 260.71      |
| 1400.00  | 0.45        | 87.67       | 1399.99   | 0.03     | -0.22     | -1.54     | 0.26             | 1.56       | 261.74      |
| 1500.00  | 0.27        | 104.78      | 1499.99   | 0.15     | -0.27     | -0.93     | 0.21             | 0.96       | 253.82      |
| 1600.00  | 0.41        | 56.92       | 1599.99   | 0.08     | -0.13     | -0.40     | 0.30             | 0.42       | 251.45      |
| 1700.00  | 0.61        | 68.93       | 1699.98   | -0.20    | 0.25      | 0.40      | 0.23             | 0.47       | 57.58       |
| 1800.00  | 0.56        | 66.14       | 1799.98   | -0.47    | 0.64      | 1.34      | 0.06             | 1.49       | 64.43       |
| 1900.00  | 0.82        | 54.02       | 1899.97   | -0.96    | 1.26      | 2.37      | 0.30             | 2.68       | 61.99       |
| 2000.00  | 1.27        | 51.43       | 1999.95   | -1.89    | 2.37      | 3.81      | 0.45             | 4.49       | 58.13       |
| 2100.00  | 1.44        | 57.25       | 2099.93   | -3.01    | 3.74      | 5.73      | 0.22             | 6.84       | 56.89       |
| 2200.00  | 1.55        | 63.43       | 2199.89   | -4.01    | 5.02      | 8.00      | 0.20             | 9.44       | 57.87       |
| 2300.00  | 1.78        | 72.30       | 2299.85   | -4.75    | 6.10      | 10.68     | 0.34             | 12.30      | 60.28       |
| 2400.00  | 1.84        | 65.16       | 2399.80   | -5.53    | 7.24      | 13.61     | 0.23             | 15.42      | 61.99       |
| 2500.00  | 1.83        | 55.40       | 2499.75   | -6.76    | 8.82      | 16.39     | 0.31             | 18.61      | 61.70       |
| 2600.00  | 1.73        | 51.95       | 2599.70   | -8.28    | 10.66     | 18.89     | 0.15             | 21.69      | 60.56       |
| 2700.00  | 1.79        | 59.92       | 2699.65   | -9.67    | 12.37     | 21.43     | 0.25             | 24.74      | 59.99       |
| 2800.00  | 1.78        | 67.27       | 2799.60   | -10.71   | 13.76     | 24.21     | 0.23             | 27.85      | 60.40       |
| 2900.00  | 1.27        | 65.77       | 2899.57   | -11.46   | 14.81     | 26.65     | 0.51             | 30.49      | 60.94       |
| 3000.00  | 1.16        | 50.57       | 2999.55   | -12.33   | 15.91     | 28.44     | 0.34             | 32.59      | 60.78       |
| 3100.00  | 1.28        | 44.51       | 3099.52   | -13.57   | 17.35     | 30.01     | 0.17             | 34.66      | 59.97       |
| 3200.00  | 1.27        | 44.83       | 3199.50   | -14.95   | 18.93     | 31.57     | 0.01             | 36.81      | 59.05       |
| 3300.00  | 1.25        | 54.08       | 3299.48   | -16.16   | 20.35     | 33.24     | 0.20             | 38.97      | 58.52       |
| 3400.00  | 1.39        | 29.95       | 3399.45   | -17.65   | 22.04     | 34.72     | 0.57             | 41.13      | 57.59       |
| 3500.00  | 1.21        | 37.88       | 3499.42   | -19.37   | 23.93     | 35.98     | 0.25             | 43.21      | 56.37       |
| 3585.00  | 1.35        | 36.08       | 3584.40   | -20.74   | 25.45     | 37.12     | 0.17             | 45.00      | 55.57       |



# Scientific Drilling International Survey Report

|                                       |                                                     |                                         |                |
|---------------------------------------|-----------------------------------------------------|-----------------------------------------|----------------|
| <b>Company:</b> CHEVRON               | <b>Date:</b> 06/20/2006                             | <b>Time:</b> 18:56:50                   | <b>Page:</b> 1 |
| <b>Field:</b> Grayburg San Andres     | <b>Co-ordinate(NE) Reference:</b>                   | <b>Site:</b> Lea County, NM, True North |                |
| <b>Site:</b> Lea County, NM           | <b>Vertical (TVD) Reference:</b>                    | <b>SITE</b> 0.0                         |                |
| <b>Well:</b> Cole A #5H               | <b>Section (VS) Reference:</b>                      | <b>Well</b> (0.00N,0.00E,173.01Azi)     |                |
| <b>Wellpath:</b> DH - Job #32D0506350 | <b>Survey Calculation Method:</b> Minimum Curvature | <b>Db:</b> Sybase                       |                |

|                                                     |                                       |
|-----------------------------------------------------|---------------------------------------|
| <b>Survey:</b> 05/03/06-05/10/06<br>MWD 3613'-5521' | <b>Start Date:</b> 05/03/2006         |
| <b>Company:</b> Scientific Drilling Internatio      | <b>Engineer:</b> Lamb/Melendez/Stahl  |
| <b>Tool:</b> MWD;MWD                                | <b>Tied-to:</b> From: Definitive Path |

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 3585.00  | 1.35        | 36.08       | 3584.40   | -20.74   | 25.45     | 37.12     | 0.00             | 45.00      | 55.57       |
| 3613.00  | 1.35        | 36.08       | 3612.40   | -21.22   | 25.98     | 37.51     | 0.00             | 45.63      | 55.29       |
| 3688.00  | 20.77       | 188.54      | 3685.85   | -8.90    | 13.39     | 36.03     | 29.30            | 38.44      | 69.62       |
| 3719.00  | 29.58       | 191.87      | 3713.88   | 3.66     | 0.44      | 33.64     | 28.77            | 33.64      | 89.25       |
| 3751.00  | 38.51       | 191.66      | 3740.37   | 20.61    | -17.08    | 29.99     | 27.91            | 34.52      | 119.66      |
| 3782.00  | 47.61       | 191.83      | 3762.99   | 40.63    | -37.78    | 25.69     | 29.36            | 45.69      | 145.79      |
| 3814.00  | 56.67       | 191.11      | 3782.61   | 64.57    | -62.52    | 20.68     | 28.37            | 65.85      | 161.70      |
| 3846.00  | 65.78       | 190.00      | 3798.00   | 91.29    | -90.07    | 15.56     | 28.63            | 91.40      | 170.20      |
| 3877.00  | 74.90       | 188.77      | 3808.42   | 119.27   | -118.84   | 10.81     | 29.65            | 119.33     | 174.80      |
| 3909.00  | 83.91       | 187.70      | 3814.30   | 149.59   | -149.94   | 6.31      | 28.35            | 150.07     | 177.59      |
| 3938.00  | 89.16       | 183.81      | 3816.05   | 177.81   | -178.72   | 3.42      | 22.51            | 178.75     | 178.90      |
| 3970.00  | 89.60       | 177.47      | 3816.40   | 209.51   | -210.70   | 3.06      | 19.86            | 210.72     | 179.17      |
| 4001.00  | 90.03       | 173.63      | 3816.50   | 240.47   | -241.60   | 5.46      | 12.46            | 241.66     | 178.70      |
| 4033.00  | 90.40       | 173.25      | 3816.38   | 272.47   | -273.39   | 9.12      | 1.66             | 273.54     | 178.09      |
| 4065.00  | 90.07       | 170.43      | 3816.25   | 304.46   | -305.07   | 13.66     | 8.87             | 305.37     | 177.44      |
| 4096.00  | 90.44       | 170.44      | 3816.11   | 335.43   | -335.63   | 18.81     | 1.19             | 336.16     | 176.79      |
| 4128.00  | 90.67       | 170.25      | 3815.80   | 367.39   | -367.18   | 24.18     | 0.93             | 367.97     | 176.23      |
| 4160.00  | 90.67       | 170.07      | 3815.42   | 399.35   | -398.71   | 29.65     | 0.56             | 399.81     | 175.75      |
| 4190.00  | 90.67       | 169.55      | 3815.07   | 429.30   | -428.23   | 34.95     | 1.73             | 429.66     | 175.33      |
| 4221.00  | 91.18       | 172.71      | 3814.57   | 460.28   | -458.85   | 39.73     | 10.32            | 460.57     | 175.05      |
| 4253.00  | 89.66       | 171.89      | 3814.34   | 492.27   | -490.56   | 44.02     | 5.40             | 492.53     | 174.87      |
| 4285.00  | 89.80       | 171.86      | 3814.49   | 524.27   | -522.24   | 48.54     | 0.45             | 524.49     | 174.69      |
| 4316.00  | 89.63       | 172.12      | 3814.64   | 555.26   | -552.94   | 52.86     | 1.00             | 555.46     | 174.54      |
| 4348.00  | 89.14       | 171.05      | 3814.99   | 587.25   | -584.59   | 57.55     | 3.68             | 587.42     | 174.38      |
| 4379.00  | 89.06       | 172.40      | 3815.47   | 618.24   | -615.26   | 62.01     | 4.36             | 618.38     | 174.25      |
| 4411.00  | 89.26       | 173.39      | 3815.94   | 650.23   | -647.01   | 65.96     | 3.16             | 650.37     | 174.18      |
| 4442.00  | 90.13       | 172.20      | 3816.11   | 681.23   | -677.77   | 69.85     | 4.76             | 681.36     | 174.12      |
| 4474.00  | 90.34       | 172.55      | 3815.98   | 713.23   | -709.48   | 74.10     | 1.28             | 713.34     | 174.04      |
| 4506.00  | 90.67       | 172.80      | 3815.69   | 745.23   | -741.22   | 78.18     | 1.29             | 745.33     | 173.98      |
| 4537.00  | 90.20       | 171.82      | 3815.46   | 776.22   | -771.94   | 82.33     | 3.51             | 776.32     | 173.91      |
| 4569.00  | 89.50       | 170.44      | 3815.54   | 808.20   | -803.56   | 87.26     | 4.84             | 808.28     | 173.80      |
| 4601.00  | 89.66       | 170.45      | 3815.78   | 840.17   | -835.11   | 92.57     | 0.50             | 840.23     | 173.67      |
| 4632.00  | 89.87       | 170.15      | 3815.90   | 871.14   | -865.67   | 97.79     | 1.18             | 871.18     | 173.55      |
| 4664.00  | 90.00       | 169.81      | 3815.94   | 903.09   | -897.18   | 103.36    | 1.14             | 903.12     | 173.43      |
| 4695.00  | 88.55       | 170.45      | 3816.33   | 934.05   | -927.72   | 108.68    | 5.11             | 934.06     | 173.32      |
| 4727.00  | 88.66       | 170.46      | 3817.11   | 966.01   | -959.27   | 113.98    | 0.35             | 966.01     | 173.22      |
| 4759.00  | 88.35       | 169.93      | 3817.95   | 997.96   | -990.79   | 119.43    | 1.92             | 997.96     | 173.13      |
| 4791.00  | 88.25       | 169.83      | 3818.90   | 1029.90  | -1022.28  | 125.05    | 0.44             | 1029.90    | 173.03      |
| 4822.00  | 88.28       | 170.13      | 3819.83   | 1060.84  | -1052.79  | 130.44    | 0.97             | 1060.84    | 172.94      |
| 4854.00  | 88.59       | 170.49      | 3820.71   | 1092.79  | -1084.32  | 135.82    | 1.48             | 1092.79    | 172.86      |
| 4886.00  | 88.02       | 170.24      | 3821.66   | 1124.74  | -1115.86  | 141.18    | 1.94             | 1124.75    | 172.79      |
| 4917.00  | 87.34       | 169.39      | 3822.91   | 1155.67  | -1146.34  | 146.65    | 3.51             | 1155.68    | 172.71      |
| 4949.00  | 87.11       | 169.04      | 3824.46   | 1187.56  | -1177.74  | 152.63    | 1.31             | 1187.59    | 172.62      |
| 4980.00  | 88.89       | 169.81      | 3825.54   | 1218.48  | -1208.19  | 158.32    | 6.26             | 1218.52    | 172.53      |
| 5012.00  | 88.76       | 169.94      | 3826.20   | 1250.43  | -1239.69  | 163.94    | 0.57             | 1250.48    | 172.47      |
| 5044.00  | 89.97       | 173.05      | 3826.55   | 1282.41  | -1271.33  | 168.68    | 10.43            | 1282.47    | 172.44      |
| 5075.00  | 90.37       | 173.99      | 3826.46   | 1313.41  | -1302.13  | 172.17    | 3.30             | 1313.46    | 172.47      |
| 5107.00  | 90.10       | 173.84      | 3826.33   | 1345.40  | -1333.95  | 175.57    | 0.97             | 1345.45    | 172.50      |
| 5138.00  | 90.07       | 173.54      | 3826.28   | 1376.40  | -1364.76  | 178.97    | 0.97             | 1376.45    | 172.53      |



# Scientific Drilling International Survey Report

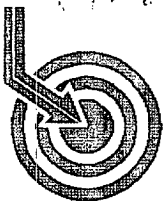
Company: CHEVRON  
Field: Grayburg San Andres  
Site: Lea County, NM  
Well: Cole A #5H  
Wellpath: DH - Job #32D0506350

Date: 06/20/2006 Time: 18:56:50 Page: 2  
Co-ordinate(NE) Reference: Site: Lea County, NM, True North  
Vertical (TVD) Reference: SITE 0.0  
Section (VS) Reference: Well (0.00N,0.00E,173.01Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 5170.00  | 90.30       | 174.01      | 3826.18   | 1408.40  | -1396.57  | 182.44    | 1.64             | 1408.44    | 172.56      |
| 5201.00  | 89.70       | 175.58      | 3826.18   | 1439.38  | -1427.45  | 185.26    | 5.42             | 1439.42    | 172.61      |
| 5233.00  | 89.48       | 175.79      | 3826.41   | 1471.34  | -1459.35  | 187.66    | 0.95             | 1471.37    | 172.67      |
| 5264.00  | 89.29       | 176.08      | 3826.74   | 1502.30  | -1490.27  | 189.86    | 1.12             | 1502.32    | 172.74      |
| 5296.00  | 89.93       | 176.02      | 3826.96   | 1534.26  | -1522.20  | 192.07    | 2.01             | 1534.27    | 172.81      |
| 5328.00  | 90.03       | 175.06      | 3826.97   | 1566.22  | -1554.10  | 194.55    | 3.02             | 1566.23    | 172.86      |
| 5359.00  | 89.66       | 174.51      | 3827.05   | 1597.21  | -1584.97  | 197.37    | 2.14             | 1597.21    | 172.90      |
| 5391.00  | 89.63       | 174.75      | 3827.25   | 1629.20  | -1616.83  | 200.37    | 0.76             | 1629.20    | 172.94      |
| 5422.00  | 89.19       | 174.42      | 3827.57   | 1660.18  | -1647.69  | 203.29    | 1.77             | 1660.18    | 172.97      |
| 5454.00  | 88.72       | 174.55      | 3828.16   | 1692.17  | -1679.54  | 206.37    | 1.52             | 1692.17    | 173.00      |
| 5481.00  | 88.96       | 174.31      | 3828.70   | 1719.15  | -1706.40  | 208.99    | 1.26             | 1719.15    | 173.02      |
| 5521.00  | 88.96       | 174.31      | 3829.43   | 1759.14  | -1746.20  | 212.95    | 0.00             | 1759.14    | 173.05      |

340' 341'



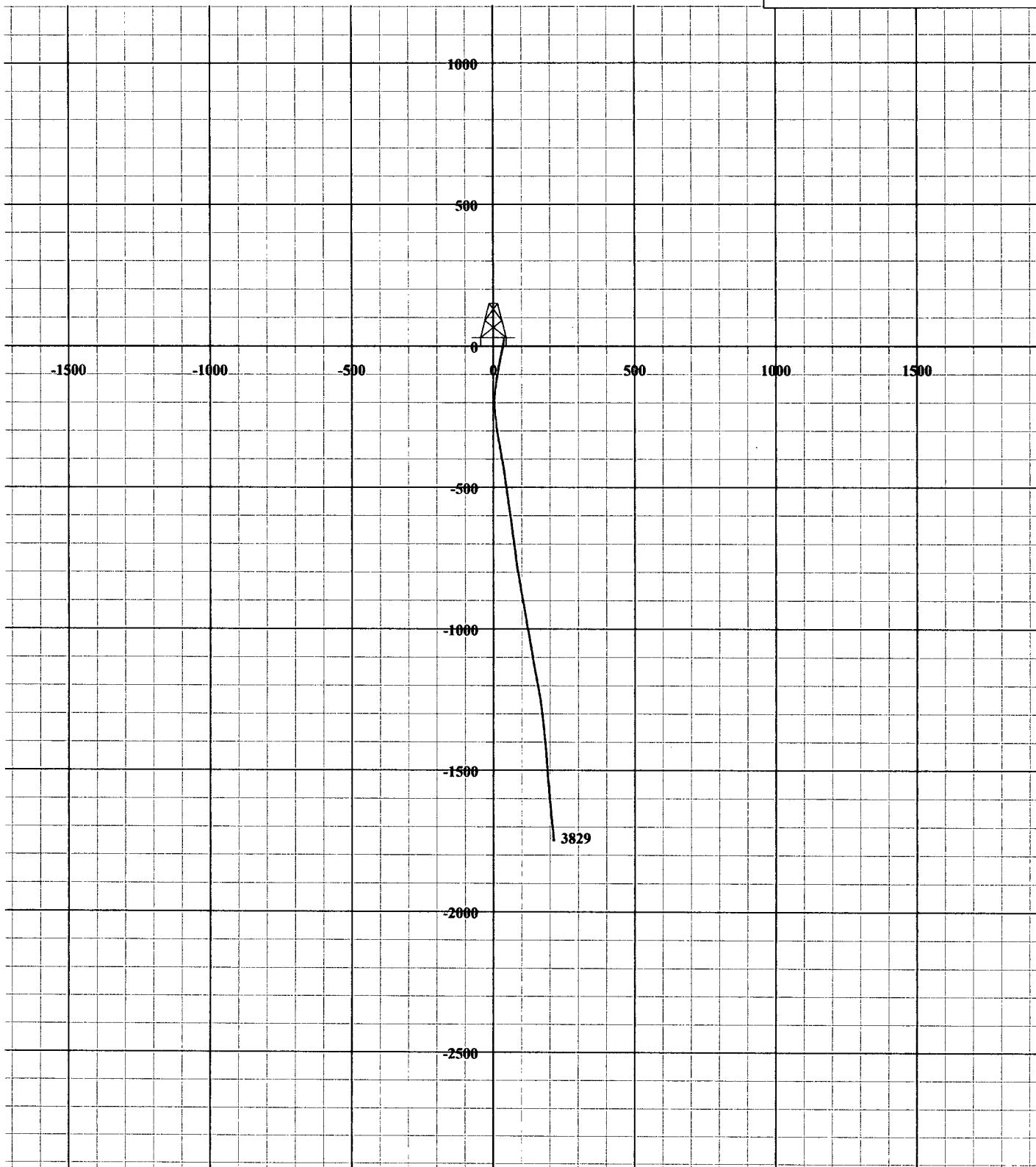
**Scientific  
Drilling**

**Field: Grayburg San Andres**  
**Site: Lea County, NM**  
**Well: Cole A #5H**  
**Wellpath: DH - Job #32D0506350**  
**Survey: 05/03/06-05/10/06**



Azimuths to True North  
Magnetic North: 0.00°  
Magnetic Field  
Strength: 0nT  
Dip Angle: 0.00°  
Date: 06/20/2006  
Model: Wmm\_95

South(-)/North(+) [200ft/in]



West(-)/East(+) [200ft/in]