

# Scientific Drilling

SUR: O-30-17s-35e, 660/S & 1980/E  
BHL: M-30-17s-35e, 732/S & 4902/E  
API # 30-025-08545

## CHEVRON

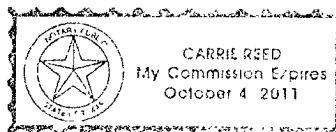
Field: Vacuum Grayburg San Andres  
Site: Lea County, NM  
Well: Central Vacuum Unit #33  
Wellpath: DH - Job #32D1109489  
Survey: 11/14/09-11/24/09

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

Mark H. Hutto Company Representative

Notorized this date 3rd of December, 2009.

Carrie Reed  
Notary Signature  
County of Midland  
State of Texas





Scientific  
Drilling

# Scientific Drilling International Survey Report

Company: CHEVRON Date: 11/23/2009 Time: 16 49 44 Page: 1  
Field: Vacuum Grayburg San Andres Co-ordinate(NE) Reference: Site. Lea County, NM, Grid North  
Site: Lea County, NM Vertical (TVD) Reference: SITE 0 0  
Well: Central Vacuum Unit #33 Section (VS) Reference: Well (0.00N,0.00E,270 83Azi)  
Wellpath: VH - Job #32K1109494 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 11/14/09 Start Date: 11/14/2009  
KSRG 0'-3982'  
Company: Scientific Drilling Internatio Engineer: Melendez/Garza  
Tool: Keeper, Keeper Gyro Tied-to: 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 55      | 0 00      | 0 00     | 0 00      | 0 00      | 0 00             | 0 00       | 0 00        |
| 100 00   | 0 49        | 253 27      | 100 00    | 0 41     | -0 12     | -0 41     | 0 49             | 0 43       | 253 27      |
| 200 00   | 0 17        | 279 64      | 200 00    | 0 96     | -0 22     | -0 97     | 0 35             | 0 99       | 257 09      |
| 300 00   | 0 05        | 284 11      | 300 00    | 1 15     | -0 19     | -1 15     | 0 12             | 1 17       | 260 85      |
| 400 00   | 0 24        | 173 94      | 400 00    | 1 17     | -0 38     | -1 17     | 0 26             | 1 24       | 251 91      |
| 500 00   | 0 19        | 197 98      | 500 00    | 1 19     | -0 75     | -1 20     | 0 10             | 1 42       | 238 08      |
| 600 00   | 0 24        | 235 15      | 600 00    | 1 41     | -1 03     | -1 43     | 0 15             | 1 76       | 234 25      |
| 700 00   | 0 28        | 192 14      | 699 99    | 1 63     | -1 39     | -1 65     | 0 19             | 2 15       | 229 97      |
| 800 00   | 0 22        | 181 50      | 799 99    | 1 68     | -1 82     | -1 71     | 0 08             | 2 49       | 223 21      |
| 900 00   | 0 49        | 189 89      | 899 99    | 1 75     | -2 43     | -1 78     | 0 27             | 3 01       | 216 30      |
| 1000 00  | 0 95        | 183 32      | 999 98    | 1 85     | -3 68     | -1 91     | 0 47             | 4 14       | 207 39      |
| 1100 00  | 0 92        | 174 70      | 1099 97   | 1 80     | -5 31     | -1 88     | 0 14             | 5 63       | 199 51      |
| 1200 00  | 0 63        | 173 91      | 1199 96   | 1 65     | -6 65     | -1 75     | 0 29             | 6 88       | 194 72      |
| 1300 00  | 0 47        | 111 51      | 1299 96   | 1 20     | -7 35     | -1 31     | 0 59             | 7 46       | 190 09      |
| 1400 00  | 1 18        | 69 72       | 1399 95   | -0 14    | -7 14     | 0 04      | 0 89             | 7 14       | 179 68      |
| 1500 00  | 1 39        | 60 66       | 1499 92   | -2 15    | -6 19     | 2 06      | 0 29             | 6 53       | 161 57      |
| 1600 00  | 1 06        | 79 17       | 1599 90   | -4 11    | -5 42     | 4 03      | 0 51             | 6 76       | 143 39      |
| 1700 00  | 0 50        | 83 69       | 1699 89   | -5 45    | -5 20     | 5 37      | 0 56             | 7 48       | 134 08      |
| 1800 00  | 0 59        | 109 08      | 1799 88   | -6 37    | -5 32     | 6 29      | 0 26             | 8 24       | 130 22      |
| 1900 00  | 0 30        | 119 84      | 1899 88   | -7 09    | -5 62     | 7 01      | 0 30             | 8 98       | 128 74      |
| 2000 00  | 0 20        | 170 23      | 1999 88   | -7 35    | -5 92     | 7 26      | 0 23             | 9 37       | 129 20      |
| 2100 00  | 0 31        | 161 06      | 2099 88   | -7 47    | -6 35     | 7 38      | 0 12             | 9 74       | 130 71      |
| 2200 00  | 0 29        | 139 48      | 2199 88   | -7 73    | -6 80     | 7 63      | 0 11             | 10 22      | 131 69      |
| 2300 00  | 0 11        | 141 16      | 2299 88   | -7 96    | -7 07     | 7 86      | 0 18             | 10 57      | 131 97      |
| 2400 00  | 0 13        | 118 71      | 2399 88   | -8 12    | -7 19     | 8 02      | 0 05             | 10 77      | 131 91      |
| 2500 00  | 0 26        | 160 34      | 2499 88   | -8 30    | -7 46     | 8 19      | 0 18             | 11 08      | 132 33      |
| 2600 00  | 0 29        | 73 45       | 2599 88   | -8 62    | -7 60     | 8 51      | 0 38             | 11 41      | 131 78      |
| 2700 00  | 0 68        | 77 32       | 2699 87   | -9 44    | -7 40     | 9 33      | 0 39             | 11 91      | 128 42      |
| 2800 00  | 0 75        | 82 52       | 2799 86   | -10 66   | -7 19     | 10 56     | 0 10             | 12 77      | 124 24      |
| 2900 00  | 0 78        | 108 94      | 2899 86   | -11 96   | -7 32     | 11 85     | 0 35             | 13 93      | 121 71      |
| 3000 00  | 0 78        | 104 05      | 2999 85   | -13 27   | -7 71     | 13 16     | 0 07             | 15 25      | 120 37      |
| 3100 00  | 0 84        | 123 26      | 3099 84   | -14 55   | -8 28     | 14 43     | 0 28             | 16 63      | 119 83      |
| 3200 00  | 0 86        | 118 52      | 3199 83   | -15 83   | -9 04     | 15 70     | 0 07             | 18 12      | 119 92      |
| 3300 00  | 0 74        | 132 55      | 3299 82   | -16 98   | -9 83     | 16 84     | 0 23             | 19 50      | 120 28      |
| 3400 00  | 0 57        | 133 69      | 3399 81   | -17 82   | -10 61    | 17 67     | 0 17             | 20 61      | 120 98      |
| 3500 00  | 0 50        | 120 67      | 3499 81   | -18 57   | -11 18    | 18 41     | 0 14             | 21 54      | 121 27      |
| 3600 00  | 0 35        | 114 78      | 3599 80   | -19 23   | -11 53    | 19 06     | 0 16             | 22 28      | 121 17      |
| 3700 00  | 0 33        | 87 17       | 3699 80   | -19 79   | -11 64    | 19 63     | 0 16             | 22 82      | 120 68      |
| 3800 00  | 0 50        | 59 75       | 3799 80   | -20 45   | -11 41    | 20 29     | 0 26             | 23 28      | 119 35      |
| 3900 00  | 0 32        | 22 92       | 3899 80   | -20 93   | -10 93    | 20 78     | 0 31             | 23 48      | 117 75      |
| 3982 00  | 0 49        | 12 95       | 3981 79   | -21 09   | -10 38    | 20 94     | 0 22             | 23 37      | 116 36      |



# Scientific Drilling International Survey Report

Company: CHEVRON Date: 12/31/2009 Time: 12:39.04 Page: 1  
Field: Vacuum Grayburg San Andres Co-ordinate(N/E) Reference: Site: Lea County, NM, Grid North  
Site: Lea County, NM Vertical (TVD) Reference: SITE 0.0  
Well: Central Vacuum Unit #33 Section (VS) Reference: Well (0 00N.0 00E.270 83Az)  
Wellpath: DH - Job #32D1109489 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 11/14/09-11/24/09 Start Date: 11/14/2009  
Company: Scientific Drilling Internatio Engineer: Melendez/Barbre/Lambert  
Tool: MWD,MWD Tied-to: From. Definitive Path

| 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 |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 3982 00  | 0 49        | 12 95       | 3981 79   | -21 09   | -10 38    | 20 94     | 0 00             | 23 37      | 116 36      |
| 3982 00  | 0 49        | 12 95       | 3981 79   | -21 09   | -10 38    | 20 94     | 0 00             | 23 37      | 116 36      |
| 4035 00  | 6 77        | 287 92      | 4034.67   | -18 15   | -9 19     | 18 02     | 12 73            | 20 23      | 117 03      |
| 4057 00  | 10 29       | 273 21      | 4056 42   | -14 95   | -8 69     | 14 82     | 18.70            | 17 18      | 120 37      |
| 4071 00  | 12 35       | 277 24      | 4070 15   | -12 21   | -8 43     | 12 09     | 15 75            | 14 73      | 124 88      |
| 4088 00  | 13 99       | 281 87      | 4086 70   | -8 38    | -7 77     | 8 27      | 11 46            | 11 35      | 133 22      |
| 4120 00  | 13 93       | 275 63      | 4117 76   | -0 75    | -6 60     | 0 65      | 4 71             | 6 63       | 174 35      |
| 4151 00  | 18 33       | 276 25      | 4147 53   | 7 83     | -5 70     | -7 91     | 14 20            | 9 75       | 234 20      |
| 4183.00  | 23 88       | 274 56      | 4177.38   | 19 31    | -4 64     | -19 38    | 17 45            | 19 93      | 256 53      |
| 4214 00  | 28 45       | 274 04      | 4205 19   | 32 95    | -3 62     | -33.01    | 14 76            | 33 20      | 263 74      |
| 4246.00  | 31 77       | 274 42      | 4232 87   | 48 97    | -2 43     | -49 01    | 10 39            | 49 07      | 267 16      |
| 4277 00  | 33 87       | 274 27      | 4258 92   | 65 74    | -1 16     | -65 76    | 6 78             | 65 78      | 268 99      |
| 4309 00  | 38 58       | 275 93      | 4284 73   | 84 59    | 0 53      | -84 59    | 15 03            | 84 59      | 270 36      |
| 4341 00  | 43 11       | 276 63      | 4308 93   | 105 42   | 2 83      | -105 39   | 14 23            | 105 43     | 271 54      |
| 4372 00  | 44 75       | 276 81      | 4331 25   | 126.81   | 5 35      | -126 75   | 5 31             | 126 86     | 272 41      |
| 4404 00  | 48 92       | 276 79      | 4353 14   | 150 02   | 8 11      | -149 92   | 13 03            | 150 14     | 273 10      |
| 4435 00  | 52 14       | 276.86      | 4372 84   | 173 82   | 10 95     | -173 68   | 10 39            | 174 02     | 273 61      |
| 4467 00  | 54 98       | 277 49      | 4391 85   | 199 40   | 14 17     | -199 22   | 9 02             | 199 72     | 274 07      |
| 4499.00  | 59 19       | 277 96      | 4409 23   | 226 06   | 17 78     | -225 83   | 13 21            | 226 53     | 274 50      |
| 4530 00  | 61 70       | 278 09      | 4424 52   | 252 81   | 21 55     | -252 53   | 8.10             | 253 45     | 274 88      |
| 4561 00  | 65 80       | 277 16      | 4438 23   | 280 42   | 25.23     | -280 08   | 13 50            | 281 21     | 275 15      |
| 4593 00  | 67 93       | 277 69      | 4450 80   | 309 65   | 29 03     | -309 26   | 6 83             | 310 62     | 275 36      |
| 4624 00  | 69 77       | 277 92      | 4461 99   | 338 34   | 32 96     | -337 90   | 5 98             | 339 50     | 275 57      |
| 4656 00  | 69 47       | 277 86      | 4473 13   | 368 11   | 37 08     | -367 61   | 0 95             | 369 48     | 275 76      |
| 4684 00  | 69 95       | 277 63      | 4482.84   | 394 18   | 40 62     | -393 64   | 1 88             | 395 73     | 275 89      |
| 4715.00  | 70 51       | 277 39      | 4493 33   | 423 16   | 44 43     | -422 56   | 1 95             | 424 89     | 276 00      |
| 4747.00  | 71 10       | 277 40      | 4503 85   | 453 18   | 48 32     | -452 53   | 1 84             | 455 10     | 276 09      |
| 4779 00  | 71 37       | 277.73      | 4514.14   | 483 27   | 52 31     | -482 56   | 1 29             | 485 39     | 276 19      |
| 4810 00  | 71.18       | 277 13      | 4524.10   | 512 43   | 56 11     | -511 68   | 1 93             | 514 74     | 276 26      |
| 4842 00  | 70 97       | 275 97      | 4534 47   | 542 55   | 59 56     | -541 75   | 3 49             | 545 01     | 276 27      |
| 4873 00  | 71 04       | 274.32      | 4544 57   | 571 78   | 62 19     | -570 94   | 5 04             | 574.32     | 276 22      |
| 4904 00  | 71 50       | 275 00      | 4554 52   | 601 07   | 64 57     | -600 20   | 2 55             | 603 87     | 276 14      |
| 4936 00  | 71 54       | 275 09      | 4564 66   | 631 34   | 67 24     | -630 43   | 0 29             | 634 01     | 276 09      |
| 4967 00  | 71 35       | 274 41      | 4574 53   | 660 66   | 69 68     | -659 72   | 2 17             | 663 39     | 276 03      |
| 4999 00  | 71 24       | 274 89      | 4584 79   | 690 90   | 72 13     | -689 93   | 1 46             | 693 69     | 275 97      |
| 5031 00  | 71 33       | 274 13      | 4595 06   | 721 15   | 74 52     | -720 15   | 2 27             | 723 99     | 275 91      |
| 5063 00  | 71 28       | 274 74      | 4605 31   | 751 40   | 76 86     | -750 37   | 1 81             | 754 29     | 275 85      |
| 5094 00  | 70 53       | 275 77      | 4615 46   | 780 61   | 79 54     | -779 54   | 3 96             | 783 58     | 275 83      |
| 5126 00  | 70 73       | 275 43      | 4626 07   | 810 69   | 82 49     | -809 58   | 1 18             | 813 77     | 275 82      |
| 5157 00  | 71 23       | 276 54      | 4636 17   | 839 88   | 85 54     | -838 73   | 3 75             | 843 08     | 275 82      |
| 5189 00  | 70 81       | 277 14      | 4646 58   | 869 97   | 89 15     | -868 77   | 2 21             | 873 33     | 275 86      |
| 5220 00  | 70 70       | 277 44      | 4656 80   | 899 05   | 92 86     | -897 80   | 0 98             | 902 59     | 275 91      |
| 5251 00  | 70 84       | 278 37      | 4667 01   | 928 10   | 96 89     | -926 80   | 2 87             | 931 85     | 275 97      |
| 5283 00  | 70 86       | 278 28      | 4677 51   | 958 07   | 101 26    | -956 71   | 0 27             | 962 05     | 276 04      |
| 5314 00  | 71 02       | 278 33      | 4687 63   | 987 12   | 105 50    | -985 70   | 0 54             | 991 33     | 276 11      |
| 5346 00  | 71 08       | 277 37      | 4698 02   | 1017 16  | 109 63    | -1015 68  | 2 84             | 1021 58    | 276 16      |
| 5377 00  | 71 15       | 276 35      | 4708 05   | 1046 33  | 113 13    | -1044 80  | 3 12             | 1050 91    | 276 18      |
| 5409 00  | 71 31       | 274 79      | 4718 35   | 1076 52  | 116 07    | -1074 96  | 4 84             | 1081 20    | 276 16      |
| 5441 00  | 72 47       | 273 30      | 4728 30   | 1108 89  | 118 22    | -1105 29  | 5 72             | 1111 60    | 276 10      |



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# Scientific Drilling International Survey Report

Company: CHEVRON Date: 12/31/2009 Time: 12 39 04 Page: 2  
Field: Vacuum Grayburg San Andres Co-ordinate(NE) Reference: Site Lea County, NM, Grid North  
Site: Lea County, NM Vertical (TVD) Reference: SITE 0 0  
Well: Central Vacuum Unit #33 Section (VS) Reference: Well (0 00N,0 00E,270 83Az)  
Wellpath: DH - Job #32D1109489 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 |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 5472 00  | 74 28       | 271 35      | 4737 17   | 1136 58  | 119 42    | -1134 97  | 8 39             | 1141 24    | 276 01      |
| 5504 00  | 76 84       | 269 70      | 4745 15   | 1167 57  | 119 70    | -1165 95  | 9 43             | 1172 08    | 275 86      |
| 5536 00  | 79 77       | 268 48      | 4751 63   | 1198 88  | 119 20    | -1197 28  | 9 89             | 1203 20    | 275 69      |
| 5567 00  | 83 37       | 269 16      | 4756 18   | 1229 52  | 118 57    | -1227 94  | 11 81            | 1233 65    | 275 52      |
| 5599 00  | 86 51       | 268 72      | 4759 00   | 1261 38  | 117 98    | -1259 80  | 9 91             | 1265 31    | 275 35      |
| 5630 00  | 88 35       | 268 91      | 4760 39   | 1292 33  | 117 34    | -1290 76  | 5 97             | 1296 08    | 275 19      |
| 5662 00  | 88 49       | 268 95      | 4761 27   | 1324 30  | 116 74    | -1322 74  | 0 45             | 1327 89    | 275 04      |
| 5693 00  | 88 49       | 268 70      | 4762 09   | 1355 27  | 116 11    | -1353 73  | 0 81             | 1358 70    | 274 90      |
| 5725 00  | 88 69       | 268 39      | 4762 88   | 1387 23  | 115 30    | -1385 71  | 1 15             | 1390 50    | 274 76      |
| 5756 00  | 89 13       | 269 11      | 4763 47   | 1418 21  | 114 62    | -1416 69  | 2 72             | 1421 32    | 274 63      |
| 5788 00  | 89 23       | 268 56      | 4763 92   | 1450 18  | 113 97    | -1448 68  | 1 75             | 1453 16    | 274 50      |
| 5820 00  | 89 43       | 269 18      | 4764 30   | 1482 16  | 113 34    | -1480 67  | 2 04             | 1485 01    | 274 38      |
| 5851 00  | 89 70       | 269 34      | 4764 53   | 1513 15  | 112 94    | -1511 67  | 1 01             | 1515 88    | 274 27      |
| 5883 00  | 89 93       | 270 28      | 4764 64   | 1545 14  | 112 83    | -1543 67  | 3 02             | 1547 79    | 274 18      |
| 5914 00  | 89 93       | 269 47      | 4764 68   | 1576 14  | 112 76    | -1574 67  | 2 61             | 1578 70    | 274 10      |
| 5946 00  | 90 27       | 268 59      | 4764 62   | 1608 12  | 112 22    | -1606 67  | 2 95             | 1610 58    | 274 00      |
| 5977 00  | 90 27       | 267 95      | 4764 47   | 1639 09  | 111 29    | -1637 65  | 2 06             | 1641 43    | 273 89      |
| 6009 00  | 90 50       | 267 93      | 4764 26   | 1671 05  | 110 14    | -1669 63  | 0 72             | 1673 26    | 273 77      |
| 6041 00  | 90 50       | 267 28      | 4763 98   | 1703 00  | 108 80    | -1701 60  | 2 03             | 1705 07    | 273 66      |
| 6072 00  | 90 67       | 267 66      | 4763 66   | 1733 94  | 107 43    | -1732 57  | 1 34             | 1735 90    | 273 55      |
| 6104 00  | 90 77       | 267 88      | 4763 26   | 1765 89  | 106 19    | -1764 54  | 0 76             | 1767 73    | 273 44      |
| 6135 00  | 90 87       | 267 93      | 4762 82   | 1796 85  | 105 05    | -1795 52  | 0 36             | 1798 59    | 273 35      |
| 6167 00  | 91 78       | 267 01      | 4762 08   | 1828 79  | 103 64    | -1827 48  | 4 04             | 1830 41    | 273 25      |
| 6199 00  | 92 72       | 266 84      | 4760 82   | 1860 69  | 101 93    | -1859 41  | 2 99             | 1862 20    | 273 14      |
| 6230 00  | 92 89       | 267 38      | 4759 30   | 1891 58  | 100 36    | -1890 33  | 1 82             | 1892 99    | 273 04      |
| 6262 00  | 92 32       | 266 78      | 4757 85   | 1923 48  | 98 74     | -1922 25  | 2 58             | 1924 79    | 272 94      |
| 6294 00  | 92 12       | 267 02      | 4756 61   | 1955 38  | 97 01     | -1954 18  | 0 98             | 1956 59    | 272 84      |
| 6325 00  | 91 38       | 266 58      | 4755 66   | 1986 29  | 95 28     | -1985 12  | 2 78             | 1987 41    | 272 75      |
| 6357 00  | 91 31       | 268 24      | 4754 91   | 2018 23  | 93 83     | -2017 08  | 5 19             | 2019 26    | 272 66      |
| 6389 00  | 92 19       | 269 01      | 4753 93   | 2050 19  | 93 06     | -2049 05  | 3 65             | 2051 17    | 272 60      |
| 6420 00  | 92 82       | 269 50      | 4752 58   | 2081 14  | 92 66     | -2080 02  | 2 57             | 2082 08    | 272 55      |
| 6452 00  | 92 93       | 270 07      | 4750 97   | 2113 10  | 92 54     | -2111 98  | 1 81             | 2114 01    | 272 51      |
| 6483 00  | 93 02       | 269 88      | 4749 37   | 2144 05  | 92 53     | -2142 94  | 0 68             | 2144 93    | 272 47      |
| 6515 00  | 93 16       | 269 36      | 4747 64   | 2176 00  | 92 32     | -2174 89  | 1 68             | 2176 85    | 272 43      |
| 6546 00  | 93 43       | 269 92      | 4745 86   | 2206 94  | 92 12     | -2205 84  | 2 00             | 2207 76    | 272 39      |
| 6577 00  | 93 47       | 269 19      | 4743 99   | 2237 88  | 91 88     | -2236 78  | 2 35             | 2238 67    | 272 35      |
| 6609 00  | 93 83       | 270 54      | 4741 96   | 2269 81  | 91 81     | -2268 72  | 4 36             | 2270 57    | 272 32      |
| 6640 00  | 93 40       | 269 61      | 4740 00   | 2300 74  | 91 85     | -2299 65  | 3 30             | 2301 49    | 272 29      |
| 6672 00  | 92 49       | 268 76      | 4738 36   | 2332 69  | 91 39     | -2331 61  | 3 89             | 2333 40    | 272 24      |
| 6703 00  | 91 85       | 269 46      | 4737 18   | 2363 65  | 90 91     | -2362 58  | 3 06             | 2364 33    | 272 20      |
| 6735 00  | 91 75       | 268 60      | 4736 18   | 2395 62  | 90 37     | -2394 56  | 2 70             | 2396 27    | 272 16      |
| 6765 00  | 91 98       | 269 75      | 4735 20   | 2425 59  | 89 94     | -2424 54  | 3 91             | 2426 21    | 272 12      |
| 6797 00  | 92 05       | 270 27      | 4734 08   | 2457 57  | 89 94     | -2456 52  | 1 64             | 2458 17    | 272 10      |
| 6828 00  | 91 55       | 267 97      | 4733 10   | 2488 53  | 89 47     | -2487 50  | 7 59             | 2489 11    | 272 06      |
| 6860 00  | 92 12       | 267 90      | 4732 08   | 2520 48  | 88 31     | -2519 46  | 1 79             | 2521 01    | 272 01      |
| 6891 00  | 92 32       | 268 00      | 4730 88   | 2551 42  | 87 21     | -2550 42  | 0 72             | 2551 91    | 271 96      |
| 6923 00  | 92 49       | 267 65      | 4729 53   | 2583 34  | 85 99     | -2582 37  | 1 22             | 2583 80    | 271 91      |
| 6955 00  | 92 76       | 269 02      | 4728 07   | 2615 28  | 85 06     | -2614 32  | 4 36             | 2615 70    | 271 86      |
| 6987 00  | 93 03       | 269 22      | 4726 45   | 2647 22  | 84 57     | -2646 28  | 1 05             | 2647 63    | 271 83      |
| 7018 00  | 92 35       | 267 74      | 4725 00   | 2678 16  | 83 75     | -2677 23  | 5 25             | 2678 54    | 271 79      |
| 7082 00  | 92 39       | 269 86      | 4722 35   | 2742 06  | 82 41     | -2741 16  | 3 31             | 2742 40    | 271 72      |
| 7114 00  | 92 49       | 267 61      | 4720 99   | 2774 01  | 81 71     | -2773 12  | 7 03             | 2774 32    | 271 69      |



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## Scientific Drilling International Survey Report

|           |                            |                            |                                  |       |          |       |            |
|-----------|----------------------------|----------------------------|----------------------------------|-------|----------|-------|------------|
| Company:  | CHEVRON                    | Date:                      | 12/31/2009                       | Time: | 12 39:04 | Page: | 3          |
| Field:    | Vacuum Grayburg San Andres | Co-ordinate(NE) Reference: | Site: Lea County, NM, Grnd North |       |          |       |            |
| Site:     | Lea County, NM             | Vertical (TVD) Reference:  | SITE 0 0                         |       |          |       |            |
| Well:     | Central Vacuum Unit #33    | Section (VS) Reference:    | Well (0.00N,0.00E,270.63Azi)     |       |          |       |            |
| Wellpath: | DH - Job #32D1109489       | Survey Calculation Method: | Minimum Curvature                |       |          |       | Db: Sybase |

### Survey

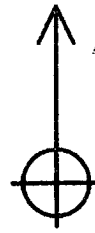
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 7146 00  | 92 66       | 266 67      | 4719 55   | 2805 91  | 80 11     | -2805 05  | 2 98             | 2806 19    | 271 64      |
| 7177 00  | 92 86       | 265 87      | 4718 06   | 2836 78  | 78 10     | -2835 94  | 2 66             | 2837 02    | 271 58      |
| 7203 00  | 92 73       | 265 73      | 4716 79   | 2862 65  | 76 20     | -2861 84  | 0 73             | 2862 86    | 271 53      |



Scientific  
Drilling

Field: Vacuum Grayburg San Andres  
Site: Lea County, NM  
Well: Central Vacuum Unit #33  
Wellpath: DH - Job #32D1109489  
Survey: 11/14/09-11/24/09

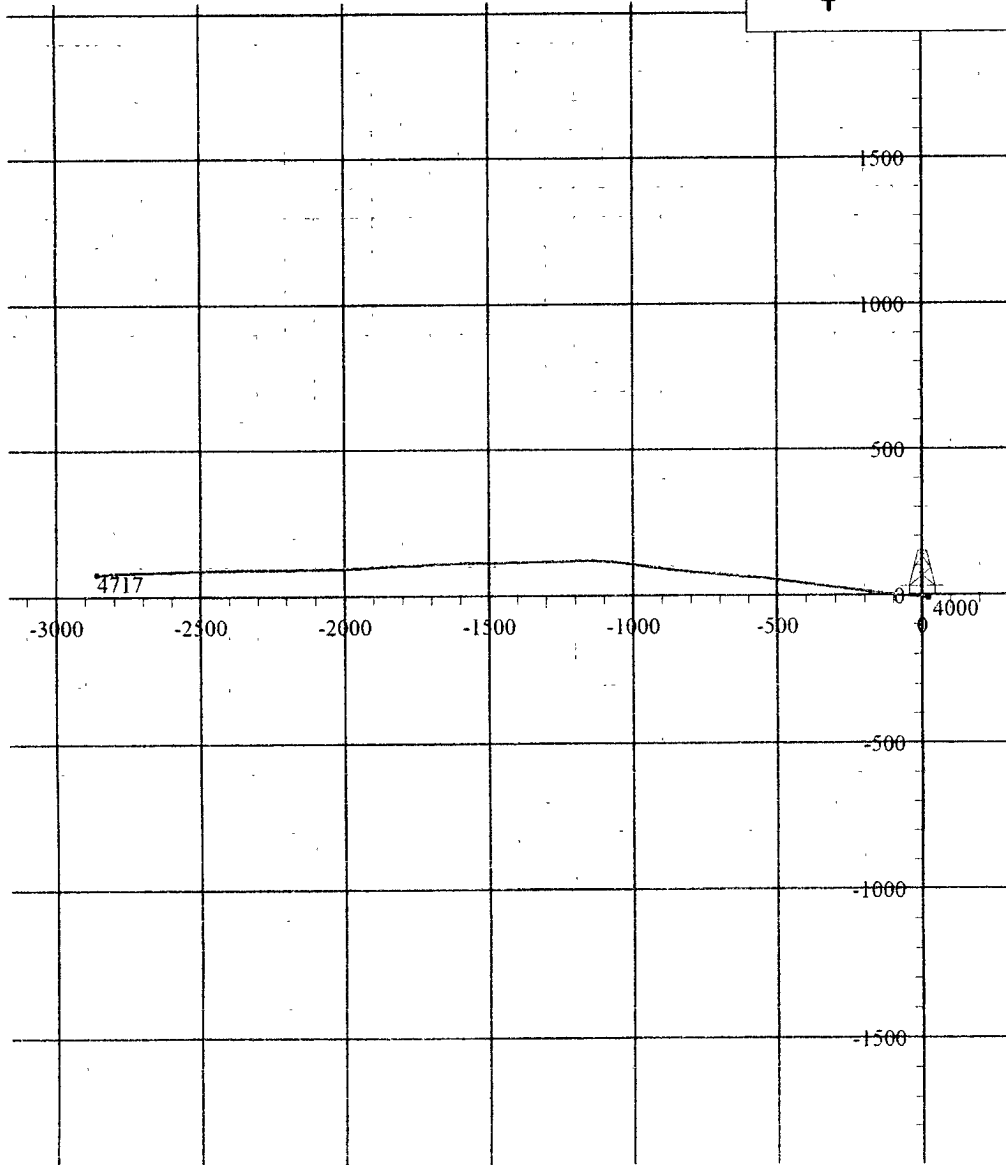
G.T.M



Azimuths to Grid North  
True North 0 00°  
Magnetic North 0 00°

Magnetic Field  
Strength: 0n.1  
Dip Angle 0 00°  
Date 12/31/2009  
Model igr12000

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



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