

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease- 4 Copies  
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                   |                                             |                                              |
|-----------------------------------|---------------------------------------------|----------------------------------------------|
| API Number<br><b>30-015-34487</b> | Pool Code<br><b>96622</b>                   | Pool Name<br><b>Eagle Creek Wolfcamp Gas</b> |
| Property Code                     | Property Name<br><b>COLUMBIA 33 FEE</b>     | Well Number<br><b>1 H</b>                    |
| OGRID No.<br><b>7377</b>          | Operator Name<br><b>EOG RESOURCES, INC.</b> | Elevation<br><b>3714'</b>                    |

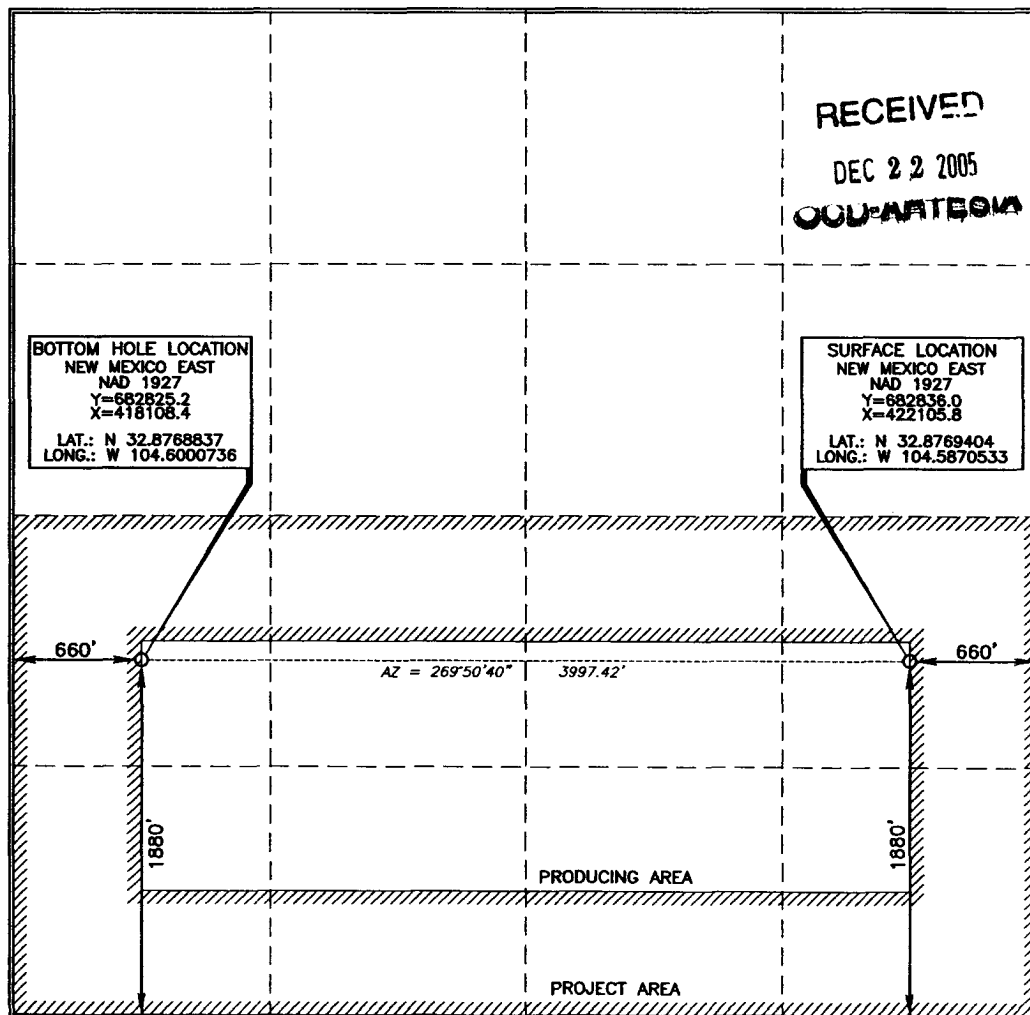
Surface Location

| UL or lot no. | Section   | Township        | Range                    | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|---------------|-----------|-----------------|--------------------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>I</b>      | <b>33</b> | <b>16 SOUTH</b> | <b>24 EAST, N.M.P.M.</b> |         | <b>1880</b>   | <b>SOUTH</b>     | <b>660</b>    | <b>EAST</b>    | <b>EDDY</b> |

Bottom Hole Location If Different From Surface

| UL or lot no.                 | Section   | Township        | Range                    | Lot Idn   | Feet from the | North/South line | Feet from the | East/West line | County      |
|-------------------------------|-----------|-----------------|--------------------------|-----------|---------------|------------------|---------------|----------------|-------------|
| <b>L</b>                      | <b>33</b> | <b>16 SOUTH</b> | <b>24 EAST, N.M.P.M.</b> |           | <b>1880</b>   | <b>SOUTH</b>     | <b>660</b>    | <b>WEST</b>    | <b>EDDY</b> |
| Dedicated Acres<br><b>320</b> |           | Joint or Infill | Consolidation Code       | Order No. |               |                  |               |                |             |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Donny G. Glanton* 12/21/2005  
Signature Date

Donny G. Glanton

Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

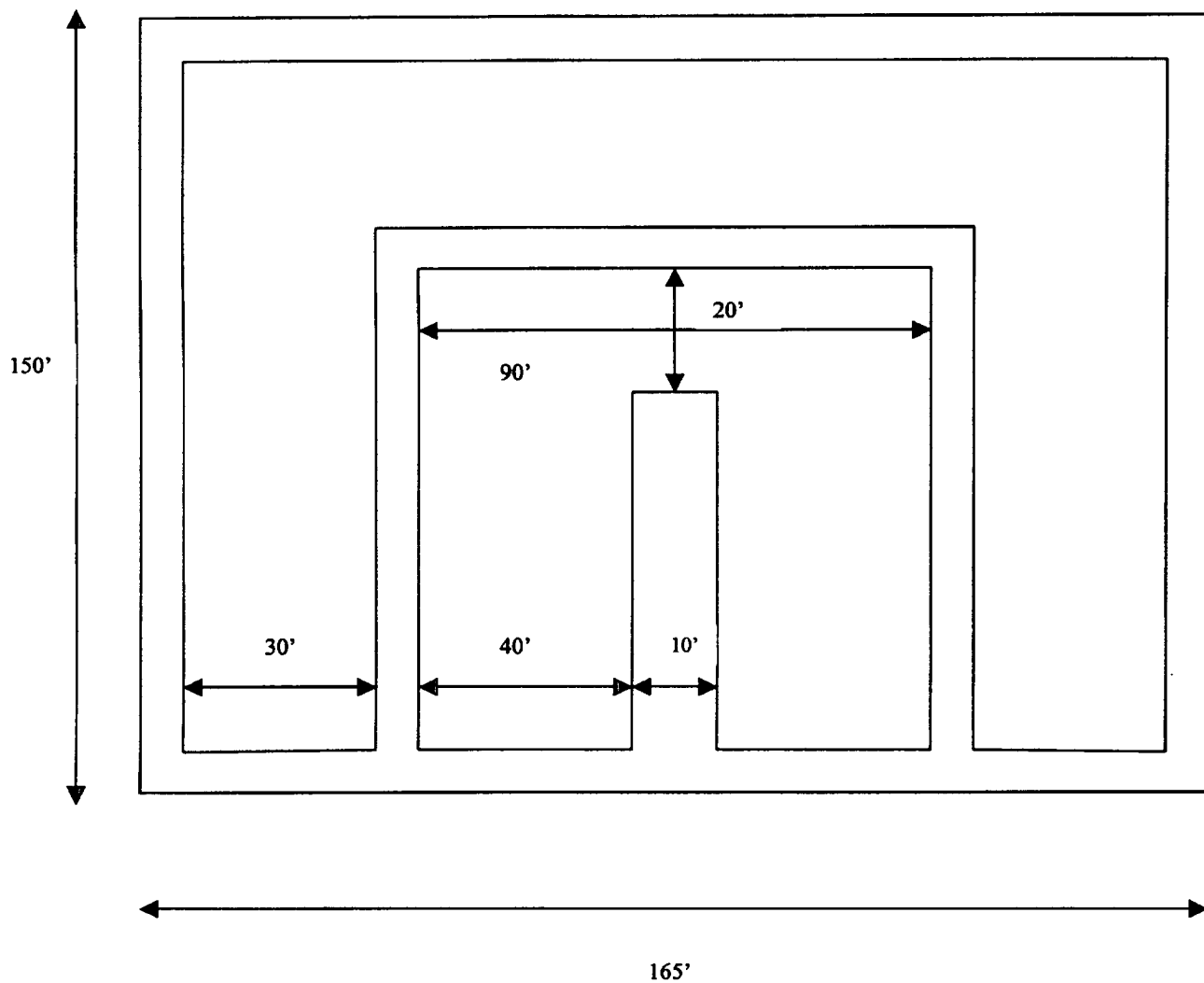
15079  
DECEMBER 17, 2005  
Date of Survey

Signature and Seal of Professional Surveyor

*Donny G. Glanton* 12/19/05  
Certificate Number 15079

WO# 051216WL-a (CDG)

# New Mexico Double Horseshoe Reserve Pit Design



Approximate Inside Reserve Volume: 4500 bbls  
Approximate Outside Reserve Volume: 5800 bbls

**Permit Information:**

Well Name: Columbia 33 Fee #1H

**Location:**

SL 1880' FSL & 660' FEL, Section 33, T-16-S, R-24-E, Eddy Co., N.M.  
BHL 1880' FSL & 660' FWL, Section 33, T-16-S, R-24-E, Eddy Co., N.M.

**Casing Program:**

| Casing     | Setting Depth | Hole Size | Casing Size | Casing Weight | Casing Grade | Desired TOC |
|------------|---------------|-----------|-------------|---------------|--------------|-------------|
| Surface    | 900'          | 12-1/4"   | 8-5/8"      | 32#           | J-55         | Surface     |
| Production | 8,834'        | 7-7/8"    | 4 1/2"      | 11.6/ 13.5 #  | P-110        | Surface     |

**Cement Program:**

| Depth  | No. Sacks | Slurries:                                                                                         |
|--------|-----------|---------------------------------------------------------------------------------------------------|
| 900'   | 150       | Lead: Premium Plus + 2% CaCl <sub>2</sub> + 3% Econolite + 1/4 pps Flocele                        |
|        | 175       | Tail: Premium Plus + 2% CaCl <sub>2</sub> + 1/4 pps Flocele                                       |
| 8,834' | 500       | Lead: Interfill C + 1/4 pps Flocele                                                               |
|        | 400       | Tail: Premium Cement + 100% Acid Soluble Additive + 0.6% Halad®-344 + 0.8% Econolite + 0.2% HR-55 |
|        |           |                                                                                                   |

**Mud Program:**

| Depth           | Type              | Weight (ppg) | Viscosity | Water Loss |
|-----------------|-------------------|--------------|-----------|------------|
| 0 – 900'        | Fresh - Gel       | 8.6-8.8      | 28-34     | N/c        |
| 900' – 4,600'   | Cut Brine         | 8.8-9.2      | 28-34     | N/c        |
| 4,600' – 5,400' | Cut Brine         | 8.8-9.2      | 28-34     | 10-15      |
| 4,400' – 8,834' | Polymer (Lateral) | 9.0-9.4      | 40-45     | 10-20      |



**EOG Resources, Inc.**  
P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

December 21, 2005

State of New Mexico Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

To Whom It May Concern:

I am writing to request a waiver for the inclusion of an H<sub>2</sub>S Contingency Plan for the Columbia 33 Fee #1H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any H<sub>2</sub>S bearing formations during drilling operations.

Sincerely,



Jason LaGrega  
Drilling Engineer

**RECEIVED**  
DEC 22 2005  
**OCU-ARTS**

## e

1

# e Planning Report

Company: eog resources  
Field: Thames  
Site: Columbia 33 Fee #1H  
Well: Columbia 33 Fee #1H  
Wellpath: Columbia 33 Fee #1H

Date: 12/21/2005 Time: 09:18:16 Page: 2  
Co-ordinate(NE) Reference: Site: Columbia 33 Fee #1H, Grid North  
Vertical (TVD) Reference: SITE 3732.0  
Section (VS) Reference: Well (0.00N,0.00E,269.85Azi)  
Plan: Plan #1

## Section 1 : Start Hold

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 1800.00  | 0.00        | 0.00        | 1800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 1900.00  | 0.00        | 0.00        | 1900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2000.00  | 0.00        | 0.00        | 2000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2100.00  | 0.00        | 0.00        | 2100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2200.00  | 0.00        | 0.00        | 2200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2300.00  | 0.00        | 0.00        | 2300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2400.00  | 0.00        | 0.00        | 2400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2500.00  | 0.00        | 0.00        | 2500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2600.00  | 0.00        | 0.00        | 2600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2700.00  | 0.00        | 0.00        | 2700.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2800.00  | 0.00        | 0.00        | 2800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 2900.00  | 0.00        | 0.00        | 2900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3000.00  | 0.00        | 0.00        | 3000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3100.00  | 0.00        | 0.00        | 3100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3200.00  | 0.00        | 0.00        | 3200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3300.00  | 0.00        | 0.00        | 3300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3400.00  | 0.00        | 0.00        | 3400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3500.00  | 0.00        | 0.00        | 3500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3600.00  | 0.00        | 0.00        | 3600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3700.00  | 0.00        | 0.00        | 3700.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3800.00  | 0.00        | 0.00        | 3800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 3900.00  | 0.00        | 0.00        | 3900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4000.00  | 0.00        | 0.00        | 4000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4100.00  | 0.00        | 0.00        | 4100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4200.00  | 0.00        | 0.00        | 4200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4300.00  | 0.00        | 0.00        | 4300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4400.00  | 0.00        | 0.00        | 4400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4500.00  | 0.00        | 0.00        | 4500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4600.00  | 0.00        | 0.00        | 4600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 4618.00  | 0.00        | 0.00        | 4618.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |

## Section 2 : Start Build 15.00

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 4625.00  | 1.05        | 269.84      | 4625.00   | 0.00        | -0.06       | 0.06     | 15.00            | 15.00              | 0.00              | 0.00       |
| 4650.00  | 4.80        | 269.84      | 4649.96   | 0.00        | -1.34       | 1.34     | 15.00            | 15.00              | 0.00              | 0.00       |
| 4675.00  | 8.55        | 269.84      | 4674.79   | -0.01       | -4.25       | 4.25     | 15.00            | 15.00              | 0.00              | 0.00       |
| 4700.00  | 12.30       | 269.84      | 4699.37   | -0.02       | -8.77       | 8.77     | 15.00            | 15.00              | 0.00              | 0.00       |
| 4725.00  | 16.05       | 269.84      | 4723.61   | -0.04       | -14.89      | 14.89    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4750.00  | 19.80       | 269.84      | 4747.39   | -0.06       | -22.58      | 22.58    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4775.00  | 23.55       | 269.84      | 4770.62   | -0.09       | -31.81      | 31.81    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4800.00  | 27.30       | 269.84      | 4793.19   | -0.12       | -42.54      | 42.55    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4825.00  | 31.05       | 269.84      | 4815.02   | -0.15       | -54.73      | 54.73    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4850.00  | 34.80       | 269.84      | 4836.00   | -0.19       | -68.32      | 68.32    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4875.00  | 38.55       | 269.84      | 4856.04   | -0.23       | -83.24      | 83.25    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4900.00  | 42.30       | 269.84      | 4875.07   | -0.28       | -99.45      | 99.45    | 15.00            | 15.00              | 0.00              | 0.00       |
| 4925.00  | 46.05       | 269.84      | 4893.00   | -0.33       | -116.87     | 116.87   | 15.00            | 15.00              | 0.00              | 0.00       |
| 4950.00  | 49.80       | 269.84      | 4909.75   | -0.38       | -135.42     | 135.43   | 15.00            | 15.00              | 0.00              | 0.00       |
| 4975.00  | 53.55       | 269.84      | 4925.25   | -0.43       | -155.03     | 155.03   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5000.00  | 57.30       | 269.84      | 4939.43   | -0.49       | -175.61     | 175.62   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5025.00  | 61.05       | 269.84      | 4952.24   | -0.55       | -197.08     | 197.08   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5050.00  | 64.80       | 269.84      | 4963.62   | -0.61       | -219.34     | 219.34   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5075.00  | 68.55       | 269.84      | 4973.52   | -0.68       | -242.29     | 242.29   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5100.00  | 72.30       | 269.84      | 4981.89   | -0.74       | -265.84     | 265.84   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5125.00  | 76.05       | 269.84      | 4988.71   | -0.81       | -289.89     | 289.89   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5150.00  | 79.80       | 269.84      | 4993.94   | -0.88       | -314.33     | 314.33   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5175.00  | 83.55       | 269.84      | 4997.55   | -0.95       | -339.06     | 339.06   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5200.00  | 87.30       | 269.84      | 4999.55   | -1.02       | -363.98     | 363.98   | 15.00            | 15.00              | 0.00              | 0.00       |
| 5218.00  | 90.00       | 269.84      | 4999.97   | -1.07       | -381.97     | 381.97   | 15.00            | 15.00              | 0.00              | 0.00       |

## e

**Date:** 12/21/2005      **Time:** 09:18:16      **Page:**  
**Co-ordinate(NE) Reference:** Site: Columbia 33 Fee #1H, Grid North  
**Vertical (TVD) Reference:** SITE 3732.0  
**Section (VS) Reference:** Well (0.00N,0.00E,269.85Azi)  
**Plan:** Plan #1

Page: 3

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N-S<br>ft | +E-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|------------|------------|----------|------------------|--------------------|-------------------|------------|
| 5242.90  | 90.75       | 269.85      | 4999.81   | -1.13      | -406.87    | 406.87   | 3.00             | 3.00               | 0.02              | 0.44       |

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 5300.00  | 90.75       | 269.85      | 4999.07   | -1.29       | -463.96     | 463.97   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5400.00  | 90.75       | 269.85      | 4997.76   | -1.56       | -563.96     | 563.96   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5500.00  | 90.75       | 269.85      | 4996.46   | -1.83       | -663.95     | 663.95   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5600.00  | 90.75       | 269.85      | 4995.15   | -2.10       | -763.94     | 763.94   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5700.00  | 90.75       | 269.85      | 4993.85   | -2.37       | -863.93     | 863.93   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5800.00  | 90.75       | 269.85      | 4992.55   | -2.63       | -963.92     | 963.92   | 0.00             | 0.00               | 0.00              | 0.00       |
| 5900.00  | 90.75       | 269.85      | 4991.24   | -2.90       | -1063.91    | 1063.92  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6000.00  | 90.75       | 269.85      | 4989.94   | -3.17       | -1163.90    | 1163.91  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6100.00  | 90.75       | 269.85      | 4988.64   | -3.44       | -1263.89    | 1263.90  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6200.00  | 90.75       | 269.85      | 4987.33   | -3.71       | -1363.88    | 1363.89  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6300.00  | 90.75       | 269.85      | 4986.03   | -3.98       | -1463.88    | 1463.88  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6400.00  | 90.75       | 269.85      | 4984.73   | -4.25       | -1563.87    | 1563.87  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6500.00  | 90.75       | 269.85      | 4983.42   | -4.52       | -1663.86    | 1663.86  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6600.00  | 90.75       | 269.85      | 4982.12   | -4.79       | -1763.85    | 1763.86  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6700.00  | 90.75       | 269.85      | 4980.82   | -5.06       | -1863.84    | 1863.85  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6800.00  | 90.75       | 269.85      | 4979.51   | -5.33       | -1963.83    | 1963.84  | 0.00             | 0.00               | 0.00              | 0.00       |
| 6900.00  | 90.75       | 269.85      | 4978.21   | -5.60       | -2063.82    | 2063.83  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7000.00  | 90.75       | 269.85      | 4976.90   | -5.86       | -2163.81    | 2163.82  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7100.00  | 90.75       | 269.85      | 4975.60   | -6.13       | -2263.81    | 2263.81  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7200.00  | 90.75       | 269.85      | 4974.30   | -6.40       | -2363.80    | 2363.80  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7300.00  | 90.75       | 269.85      | 4972.99   | -6.67       | -2463.79    | 2463.80  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7400.00  | 90.75       | 269.85      | 4971.69   | -6.94       | -2563.78    | 2563.79  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7500.00  | 90.75       | 269.85      | 4970.39   | -7.21       | -2663.77    | 2663.78  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7600.00  | 90.75       | 269.85      | 4969.08   | -7.48       | -2763.76    | 2763.77  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7700.00  | 90.75       | 269.85      | 4967.78   | -7.75       | -2863.75    | 2863.76  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7800.00  | 90.75       | 269.85      | 4966.48   | -8.02       | -2963.74    | 2963.75  | 0.00             | 0.00               | 0.00              | 0.00       |
| 7900.00  | 90.75       | 269.85      | 4965.17   | -8.29       | -3063.73    | 3063.75  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8000.00  | 90.75       | 269.85      | 4963.87   | -8.56       | -3163.73    | 3163.74  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8100.00  | 90.75       | 269.85      | 4962.56   | -8.83       | -3263.72    | 3263.73  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8200.00  | 90.75       | 269.85      | 4961.26   | -9.09       | -3363.71    | 3363.72  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8300.00  | 90.75       | 269.85      | 4959.96   | -9.36       | -3463.70    | 3463.71  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8400.00  | 90.75       | 269.85      | 4958.65   | -9.63       | -3563.69    | 3563.70  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8500.00  | 90.75       | 269.85      | 4957.35   | -9.90       | -3663.68    | 3663.69  | 0.00             | 0.00               | 0.00              | 0.00       |
| 8600.00  | 90.75       | 269.85      | 4956      |             |             |          |                  |                    |                   |            |

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 8833.75  | 90.75       | 269.85      | 4953.00   | -10.80      | -3997.40    | 3997.41  | 3.00             | 1.77               | 2.42              | 53.90      |

[illegible]

# e Planning Report

|                                                                                                                                                                       |                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Company:</b> eog resources<br><b>Field:</b> Thames<br><b>Site:</b> Columbia 33 Fee #1H<br><b>Well:</b> Columbia 33 Fee #1H<br><b>Wellpath:</b> Columbia 33 Fee #1H | <b>Date:</b> 12/21/2005<br><b>Co-ordinate(NE) Reference:</b> Site: Columbia 33 Fee #1H, Grid North<br><b>Vertical (TVD) Reference:</b> SITE 3732.0<br><b>Section (VS) Reference:</b> Well (0.00N,0.00E,269.85Azi)<br><b>Plan:</b> Plan #1 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 900.00   | 0.00        | 0.00        | 900.00    | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1000.00  | 0.00        | 0.00        | 1000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1100.00  | 0.00        | 0.00        | 1100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1200.00  | 0.00        | 0.00        | 1200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1300.00  | 0.00        | 0.00        | 1300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1400.00  | 0.00        | 0.00        | 1400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1500.00  | 0.00        | 0.00        | 1500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1600.00  | 0.00        | 0.00        | 1600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1700.00  | 0.00        | 0.00        | 1700.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1800.00  | 0.00        | 0.00        | 1800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 1900.00  | 0.00        | 0.00        | 1900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2000.00  | 0.00        | 0.00        | 2000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2100.00  | 0.00        | 0.00        | 2100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2200.00  | 0.00        | 0.00        | 2200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2300.00  | 0.00        | 0.00        | 2300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2400.00  | 0.00        | 0.00        | 2400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2500.00  | 0.00        | 0.00        | 2500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2600.00  | 0.00        | 0.00        | 2600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2700.00  | 0.00        | 0.00        | 2700.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2800.00  | 0.00        | 0.00        | 2800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 2900.00  | 0.00        | 0.00        | 2900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3000.00  | 0.00        | 0.00        | 3000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3100.00  | 0.00        | 0.00        | 3100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3200.00  | 0.00        | 0.00        | 3200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3300.00  | 0.00        | 0.00        | 3300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3400.00  | 0.00        | 0.00        | 3400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3500.00  | 0.00        | 0.00        | 3500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3600.00  | 0.00        | 0.00        | 3600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3700.00  | 0.00        | 0.00        | 3700.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3800.00  | 0.00        | 0.00        | 3800.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 3900.00  | 0.00        | 0.00        | 3900.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4000.00  | 0.00        | 0.00        | 4000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4100.00  | 0.00        | 0.00        | 4100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4200.00  | 0.00        | 0.00        | 4200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4300.00  | 0.00        | 0.00        | 4300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4400.00  | 0.00        | 0.00        | 4400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4500.00  | 0.00        | 0.00        | 4500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4600.00  | 0.00        | 0.00        | 4600.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4618.00  | 0.00        | 0.00        | 4618.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 4625.00  | 1.05        | 269.84      | 4625.00   | 0.00        | -0.06       | 0.06     | 15.00            | 15.00              | 0.00              |              |
| 4650.00  | 4.80        | 269.84      | 4649.96   | 0.00        | -1.34       | 1.34     | 15.00            | 15.00              | 0.00              |              |
| 4675.00  | 8.55        | 269.84      | 4674.79   | -0.01       | -4.25       | 4.25     | 15.00            | 15.00              | 0.00              |              |
| 4700.00  | 12.30       | 269.84      | 4699.37   | -0.02       | -8.77       | 8.77     | 15.00            | 15.00              | 0.00              |              |
| 4725.00  | 16.05       | 269.84      | 4723.61   | -0.04       | -14.89      | 14.89    | 15.00            | 15.00              | 0.00              |              |
| 4750.00  | 19.80       | 269.84      | 4747.39   | -0.06       | -22.58      | 22.58    | 15.00            | 15.00              | 0.00              |              |
| 4775.00  | 23.55       | 269.84      | 4770.62   | -0.09       | -31.81      | 31.81    | 15.00            | 15.00              | 0.00              |              |
| 4800.00  | 27.30       | 269.84      | 4793.19   | -0.12       | -42.54      | 42.55    | 15.00            | 15.00              | 0.00              |              |
| 4825.00  | 31.05       | 269.84      | 4815.02   | -0.15       | -54.73      | 54.73    | 15.00            | 15.00              | 0.00              |              |
| 4850.00  | 34.80       | 269.84      | 4836.00   | -0.19       | -68.32      | 68.32    | 15.00            | 15.00              | 0.00              |              |
| 4875.00  | 38.55       | 269.84      | 4856.04   | -0.23       | -83.24      | 83.25    | 15.00            | 15.00              | 0.00              |              |
| 4900.00  | 42.30       | 269.84      | 4875.07   | -0.28       | -99.45      | 99.45    | 15.00            | 15.00              | 0.00              |              |
| 4925.00  | 46.05       | 269.84      | 4893.00   | -0.33       | -116.87     | 116.87   | 15.00            | 15.00              | 0.00              |              |
| 4950.00  | 49.80       | 269.84      | 4909.75   | -0.38       | -135.42     | 135.43   | 15.00            | 15.00              | 0.00              |              |

# e Planning Report

Company: eog resources  
Field: Thames  
Site: Columbia 33 Fee #1H  
Well: Columbia 33 Fee #1H  
Wellpath: Columbia 33 Fee #1H

Date: 12/21/2005 Time: 09:18:16 Page: 5  
Co-ordinate(NE) Reference: Site: Columbia 33 Fee #1H, Grid North  
Vertical (TVD) Reference: SITE 3732.0  
Section (VS) Reference: Well (0.00N,0.00E,269.85Azi)  
Plan: Plan #1

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 4975.00  | 53.55       | 269.84      | 4925.25   | -0.43       | -155.03     | 155.03   | 15.00            | 15.00              | 0.00              |              |
| 5000.00  | 57.30       | 269.84      | 4939.43   | -0.49       | -175.61     | 175.62   | 15.00            | 15.00              | 0.00              |              |
| 5025.00  | 61.05       | 269.84      | 4952.24   | -0.55       | -197.08     | 197.08   | 15.00            | 15.00              | 0.00              |              |
| 5050.00  | 64.80       | 269.84      | 4963.62   | -0.61       | -219.34     | 219.34   | 15.00            | 15.00              | 0.00              |              |
| 5075.00  | 68.55       | 269.84      | 4973.52   | -0.68       | -242.29     | 242.29   | 15.00            | 15.00              | 0.00              |              |
| 5100.00  | 72.30       | 269.84      | 4981.89   | -0.74       | -265.84     | 265.84   | 15.00            | 15.00              | 0.00              |              |
| 5125.00  | 76.05       | 269.84      | 4988.71   | -0.81       | -289.89     | 289.89   | 15.00            | 15.00              | 0.00              |              |
| 5150.00  | 79.80       | 269.84      | 4993.94   | -0.88       | -314.33     | 314.33   | 15.00            | 15.00              | 0.00              |              |
| 5175.00  | 83.55       | 269.84      | 4997.55   | -0.95       | -339.06     | 339.06   | 15.00            | 15.00              | 0.00              |              |
| 5200.00  | 87.30       | 269.84      | 4999.55   | -1.02       | -363.98     | 363.98   | 15.00            | 15.00              | 0.00              |              |
| 5218.00  | 90.00       | 269.84      | 4999.97   | -1.07       | -381.97     | 381.97   | 15.00            | 15.00              | 0.00              |              |
| 5242.90  | 90.75       | 269.85      | 4999.81   | -1.13       | -406.87     | 406.87   | 3.00             | 3.00               | 0.02              |              |
| 5300.00  | 90.75       | 269.85      | 4999.07   | -1.29       | -463.96     | 463.97   | 0.00             | 0.00               | 0.00              |              |
| 5400.00  | 90.75       | 269.85      | 4997.76   | -1.56       | -563.96     | 563.96   | 0.00             | 0.00               | 0.00              |              |
| 5500.00  | 90.75       | 269.85      | 4996.46   | -1.83       | -663.95     | 663.95   | 0.00             | 0.00               | 0.00              |              |
| 5600.00  | 90.75       | 269.85      | 4995.15   | -2.10       | -763.94     | 763.94   | 0.00             | 0.00               | 0.00              |              |
| 5700.00  | 90.75       | 269.85      | 4993.85   | -2.37       | -863.93     | 863.93   | 0.00             | 0.00               | 0.00              |              |
| 5800.00  | 90.75       | 269.85      | 4992.55   | -2.63       | -963.92     | 963.92   | 0.00             | 0.00               | 0.00              |              |
| 5900.00  | 90.75       | 269.85      | 4991.24   | -2.90       | -1063.91    | 1063.92  | 0.00             | 0.00               | 0.00              |              |
| 6000.00  | 90.75       | 269.85      | 4989.94   | -3.17       | -1163.90    | 1163.91  | 0.00             | 0.00               | 0.00              |              |
| 6100.00  | 90.75       | 269.85      | 4988.64   | -3.44       | -1263.89    | 1263.90  | 0.00             | 0.00               | 0.00              |              |
| 6200.00  | 90.75       | 269.85      | 4987.33   | -3.71       | -1363.88    | 1363.89  | 0.00             | 0.00               | 0.00              |              |
| 6300.00  | 90.75       | 269.85      | 4986.03   | -3.98       | -1463.88    | 1463.88  | 0.00             | 0.00               | 0.00              |              |
| 6400.00  | 90.75       | 269.85      | 4984.73   | -4.25       | -1563.87    | 1563.87  | 0.00             | 0.00               | 0.00              |              |
| 6500.00  | 90.75       | 269.85      | 4983.42   | -4.52       | -1663.86    | 1663.86  | 0.00             | 0.00               | 0.00              |              |
| 6600.00  | 90.75       | 269.85      | 4982.12   | -4.79       | -1763.85    | 1763.86  | 0.00             | 0.00               | 0.00              |              |
| 6700.00  | 90.75       | 269.85      | 4980.82   | -5.06       | -1863.84    | 1863.85  | 0.00             | 0.00               | 0.00              |              |
| 6800.00  | 90.75       | 269.85      | 4979.51   | -5.33       | -1963.83    | 1963.84  | 0.00             | 0.00               | 0.00              |              |
| 6900.00  | 90.75       | 269.85      | 4978.21   | -5.60       | -2063.82    | 2063.83  | 0.00             | 0.00               | 0.00              |              |
| 7000.00  | 90.75       | 269.85      | 4976.90   | -5.86       | -2163.81    | 2163.82  | 0.00             | 0.00               | 0.00              |              |
| 7100.00  | 90.75       | 269.85      | 4975.60   | -6.13       | -2263.81    | 2263.81  | 0.00             | 0.00               | 0.00              |              |
| 7200.00  | 90.75       | 269.85      | 4974.30   | -6.40       | -2363.80    | 2363.80  | 0.00             | 0.00               | 0.00              |              |
| 7300.00  | 90.75       | 269.85      | 4972.99   | -6.67       | -2463.79    | 2463.80  | 0.00             | 0.00               | 0.00              |              |
| 7400.00  | 90.75       | 269.85      | 4971.69   | -6.94       | -2563.78    | 2563.79  | 0.00             | 0.00               | 0.00              |              |
| 7500.00  | 90.75       | 269.85      | 4970.39   | -7.21       | -2663.77    | 2663.78  | 0.00             | 0.00               | 0.00              |              |
| 7600.00  | 90.75       | 269.85      | 4969.08   | -7.48       | -2763.76    | 2763.77  | 0.00             | 0.00               | 0.00              |              |
| 7700.00  | 90.75       | 269.85      | 4967.78   | -7.75       | -2863.75    | 2863.76  | 0.00             | 0.00               | 0.00              |              |
| 7800.00  | 90.75       | 269.85      | 4966.48   | -8.02       | -2963.74    | 2963.75  | 0.00             | 0.00               | 0.00              |              |
| 7900.00  | 90.75       | 269.85      | 4965.17   | -8.29       | -3063.73    | 3063.75  | 0.00             | 0.00               | 0.00              |              |
| 8000.00  | 90.75       | 269.85      | 4963.87   | -8.56       | -3163.73    | 3163.74  | 0.00             | 0.00               | 0.00              |              |
| 8100.00  | 90.75       | 269.85      | 4962.56   | -8.83       | -3263.72    | 3263.73  | 0.00             | 0.00               | 0.00              |              |
| 8200.00  | 90.75       | 269.85      | 4961.26   | -9.09       | -3363.71    | 3363.72  | 0.00             | 0.00               | 0.00              |              |
| 8300.00  | 90.75       | 269.85      | 4959.96   | -9.36       | -3463.70    | 3463.71  | 0.00             | 0.00               | 0.00              |              |
| 8400.00  | 90.75       | 269.85      | 4958.65   | -9.63       | -3563.69    | 3563.70  | 0.00             | 0.00               | 0.00              |              |
| 8500.00  | 90.75       | 269.85      | 4957.35   | -9.90       | -3663.68    | 3663.69  | 0.00             | 0.00               | 0.00              |              |
| 8600.00  | 90.75       | 269.85      | 4956.05   | -10.17      | -3763.67    | 3763.69  | 0.00             | 0.00               | 0.00              |              |
| 8700.00  | 90.75       | 269.85      | 4954.74   | -10.44      | -3863.66    | 3863.68  | 0.00             | 0.00               | 0.00              |              |
| 8800.00  | 90.75       | 269.85      | 4953.44   | -10.71      | -3963.65    | 3963.67  | 0.00             | 0.00               | 0.00              |              |
| 8833.57  | 90.75       | 269.85      | 4953.00   | -10.80      | -3997.23    | 3997.24  | 0.00             | 0.00               | 0.00              |              |
| 8833.75  | 90.75       | 269.85      | 4953.00   | -10.80      | -3997.40    | 3997.41  | 3.00             | 1.77               | 2.42              |              |

# SITE DETAILS

Columbia 33 Fee #1H

Site Centre Northing: 682836.00  
Easting: 422105.80

Ground Level: 3714.00  
Positional Uncertainty: 0.00  
Convergence: -0.14

## WELLPATH DETAILS

Columbia 33 Fee #1H

|                  |              |              |                   |           |
|------------------|--------------|--------------|-------------------|-----------|
| Rig:             | SITE         |              |                   | 3732.00ft |
| Ref. Datum:      |              |              |                   |           |
| V. Section Angle | Origin +N/-S | Origin +E/-W | Starting From TVD |           |
| 269.85°          | 0.00         | 0.00         | 4953.00           |           |

