

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

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 1, 2004

For drilling and production facilities, submit to  
appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe  
office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Cimarex Energy Co. of Colorado Telephone: 972-401-3111 e-mail address: zfarris@cimarex.com  
Address: PO Box 140907, Irving, TX 75014-0907  
Facility or well name: Saratoga 30 State Com No. 1 API #: 30-005-29019 U/L or Qtr/Qtr E Sec 30 T 15S R 31E  
County: Chaves Latitude 32.988567 N Longitude 103.866114 W NAD. 1927 ☒ 1983 ☐  
Surface Owner. Federal ☐ State ☐ Private ☒ Indian ☐

| Pit                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Below-grade tank                                                                                                                                                          |                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/><br>Workover <input type="checkbox"/> Emergency <input type="checkbox"/><br>Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/><br>Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/><br>Pit Volume _____ bbl closed system, cuttings buried | Volume: _____ bbl Type of fluid: _____<br>Construction material: _____<br>Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____ |                    |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <u>270'</u>                                                                                                                                                                                                                                                                                                                               | Less than 50 feet                                                                                                                                                         | (20 points)        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 50 feet or more, but less than 100 feet                                                                                                                                   | (10 points)        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>100 feet or more</u>                                                                                                                                                   | <u>( 0 points)</u> |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)                                                                                                                                                                                                                                                                                                                | Yes                                                                                                                                                                       | (20 points)        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>No</u>                                                                                                                                                                 | <u>( 0 points)</u> |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)                                                                                                                                                                                                                                                                                                          | Less than 200 feet                                                                                                                                                        | (20 points)        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 200 feet or more, but less than 1000 feet                                                                                                                                 | (10 points)        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>1000 feet or more</u>                                                                                                                                                  | <u>( 0 points)</u> |
| Ranking Score (Total Points)                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                           | 0                  |

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location. (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results  
(5) Attach soil sample results and a diagram of sample locations and excavations.

|                      |
|----------------------|
| Additional Comments: |
|                      |
|                      |
|                      |
|                      |

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 01.31.08

Printed Name/Title: Zeno Farris - Manager Operations Administration Signature: Zeno Farris

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title: CHRIS WILLIAMS / DIST. SUPER Signature: Chris Williams Date: 3/6/08

## DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

## DISTRICT II

1301 W. GRAND AVENUE, ALBUQUERQUE, NM 84210

## 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 and Natural Resources Department

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|                                   |                                                            |                                  |
|-----------------------------------|------------------------------------------------------------|----------------------------------|
| API Number<br><b>30-005-29019</b> | Pool Code<br><input checked="" type="checkbox"/>           | Pool Name<br><b>Abo; Wildcat</b> |
| Property Code<br><b>36968</b>     | Property Name<br><b>SARATOGA 30 STATE COM</b>              | Well Number<br><b>1</b>          |
| OGRID No.<br><b>162683</b>        | Operator Name<br><b>CIMAREX ENERGY COMPANY OF COLORADO</b> | Elevation<br><b>4450'</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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| E             | 30      | 15-S     | 31-E  |         | 1980          | NORTH            | 990           | WEST           | CHAVES |

## 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 |
|-----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| H               | 30              | 15-S               | 31-E      |         | 1980          | NORTH            | 330           | EAST           | CHAVES |
| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |         |               |                  |               |                |        |
| 159.37          |                 | P                  |           |         |               |                  |               |                |        |

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

|                                                                                                                    |                                                                                                                                                              |                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>LOT 1</p> <p>1980'</p> <p>39.32 AC</p> <p>LOT 2</p> <p>990'</p> <p>S.I.</p> <p>EO-5666-0001</p> <p>39.37 AC</p> | <p>GRID. AZ. 89°46'31"</p> <p>HORZ. DIS. 3943.2'</p> <p>EO-7412-0004</p>                                                                                     | <p>1980'</p> <p>330'</p> <p>B.H.</p> <p>EO-5666-0001</p>                | <p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Zeno Farris</i> 01-31-08<br/>Signature Date</p> <p>Zeno Farris<br/>Printed Name</p> |
| <p>LOT 3</p> <p>39.41 AC</p> <p>LOT 4</p> <p>39.46 AC</p>                                                          | <p><b>GEODETIC COORDINATES</b><br/>NAD 27 NME<br/>SURFACE LOCATION</p> <p>Y=723671.3 N<br/>X=643260.9 E</p> <p>LAT.=32.988567° N<br/>LONG.=103.866114° W</p> | <p><b>BOTTOM HOLE LOCATION</b></p> <p>Y=723686.7 N<br/>X=647203.0 E</p> | <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>JANUARY 15, 2008<br/>Date Surveyed DSS</p> <p>Signature &amp; Seal of Professional Surveyor<br/><i>Ronald J. Eidson</i> 01/22/08<br/>07.11.1934</p> <p>Certificate No. GARY C. EIDSON 12841<br/>RONALD J. EIDSON 3239</p>                                                                                                                                            |



# Planned Wellpath Report

Plan #1  
Page 1 of 3



INTEQ

30-005-29019

## REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**

Area **Chaves County, NM**

Field **(Saratoga) Sec 30 T15-S R31-E**

Facility **Saratoga 30 State COM 1**

Slot **No. 1 SHL**

Well **No. 1**

Wellbore **No. 1 PWB**

## REPORT SETUP INFORMATION

Projection System **NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet** Software System **WellArchitect™ 1.2**

North Reference **Grid**

User **Victor Hernandez**

Scale **0.999933**

Report Generated **01/30/08 at 14:38:37**

Wellbore last revised **01/30/08**

Database/Source file **WA\_Midland/No. 1 PWB.x**

## WELLPATH LOCATION

|                       | Local coordinates |             | Grid coordinates  |                    | Geographic coordinates |                       |
|-----------------------|-------------------|-------------|-------------------|--------------------|------------------------|-----------------------|
|                       | North [feet]      | East [feet] | Easting [US feet] | Northing [US feet] | Latitude [°]           | Longitude [°]         |
| Slot Location         | <b>0.00</b>       | <b>0.00</b> | <b>643260.90</b>  | <b>723671.30</b>   | <b>32 59 18.841N</b>   | <b>103 51 58.009W</b> |
| Facility Reference Pt |                   |             | <b>643260.90</b>  | <b>723671.30</b>   | <b>32 59 18.841N</b>   | <b>103 51 58.009W</b> |
| Field Reference Pt    |                   |             | <b>643260.90</b>  | <b>723671.30</b>   | <b>32 59 18.841N</b>   | <b>103 51 58.009W</b> |

## WELLPATH DATUM

|                          |                              |                                                  |                          |
|--------------------------|------------------------------|--------------------------------------------------|--------------------------|
| Calculation method       | <b>Minimum curvature</b>     | Rig on No. 1 SHL (RT) to Facility Vertical Datum | <b>18.00 feet</b>        |
| Horizontal Reference Pt  | <b>Facility Center</b>       | Rig on No. 1 SHL (RT) to GRN. ELEV.              | <b>4468.00 feet</b>      |
| Vertical Reference Pt    | <b>Rig on No. 1 SHL (RT)</b> | Facility Vertical Datum to Mud Line (Facility)   | <b>0.00 feet</b>         |
| MD Reference Pt          | <b>Rig on No. 1 SHL (RT)</b> | Section Origin                                   | <b>N 0.00, E 0.00 ft</b> |
| Field Vertical Reference | <b>GRN. ELEV.</b>            | Section Azimuth                                  | <b>89.78°</b>            |



# Planned Wellpath Report

Plan #1  
Page 2 of 3



## REFERENCE WELLPATH IDENTIFICATION

|          |                               |          |           |
|----------|-------------------------------|----------|-----------|
| Operator | Cimarex Energy Co.            | Slot     | No. 1 SHL |
| Area     | Chaves County, NM             | Well     | No. 1     |
| Field    | (Saratoga) Sec 30 T15-S R31-E | Wellbore | No. 1 PWB |
| Facility | Saratoga 30 State COM 1       |          |           |

## WELLPATH DATA (51 stations) † = interpolated/extrapolated station

| MD<br>[feet] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[feet] | Vert Sect<br>[feet] | North<br>[feet] | East<br>[feet] | DLS<br>[°/100ft] | Design<br>Comments | Path<br>Comment    |
|--------------|--------------------|----------------|---------------|---------------------|-----------------|----------------|------------------|--------------------|--------------------|
| 0.00         | 0.000              | 0.000          | 0.00          | 0.00                | 0.00            | 0.00           | 0.00             |                    |                    |
| 2312.00†     | 0.000              | 0.000          | 2312.00       | 0.00                | 0.00            | 0.00           | 0.00             |                    | YATES              |
| 3090.00†     | 0.000              | 0.000          | 3090.00       | 0.00                | 0.00            | 0.00           | 0.00             |                    | QUEEN              |
| 3940.00†     | 0.000              | 0.000          | 3940.00       | 0.00                | 0.00            | 0.00           | 0.00             |                    | SAN ANDRES         |
| 7340.00†     | 0.000              | 0.000          | 7340.00       | 0.00                | 0.00            | 0.00           | 0.00             |                    | ABO SHALE          |
| 8300.00      | 0.000              | 0.000          | 8300.00       | 0.00                | 0.00            | 0.00           | 0.00             | Tie On             |                    |
| 8385.00      | 0.000              | 89.776         | 8385.00       | 0.00                | 0.00            | 0.00           | 0.00             | KOP                |                    |
| 8400.00†     | 4.290              | 89.776         | 8399.99       | 0.56                | 0.00            | 0.56           | 28.60            |                    |                    |
| 8500.00†     | 32.890             | 89.776         | 8493.79       | 32.11               | 0.13            | 32.11          | 28.60            |                    |                    |
| 8600.00†     | 61.490             | 89.776         | 8561.04       | 104.71              | 0.41            | 104.71         | 28.60            |                    |                    |
| 8688.10†     | 86.687             | 89.776         | 8585.00       | 188.76              | 0.74            | 188.75         | 28.60            |                    | LOWER ABO DOLOMITE |
| 8698.10      | 89.546             | 89.776         | 8585.33       | 198.75              | 0.78            | 198.75         | 28.60            | EOC                |                    |
| 8700.00†     | 89.546             | 89.776         | 8585.34       | 200.65              | 0.78            | 200.65         | 0.00             |                    |                    |
| 8800.00†     | 89.546             | 89.776         | 8586.14       | 300.65              | 1.17            | 300.64         | 0.00             |                    |                    |
| 8900.00†     | 89.546             | 89.776         | 8586.93       | 400.64              | 1.57            | 400.64         | 0.00             |                    |                    |
| 9000.00†     | 89.546             | 89.776         | 8587.72       | 500.64              | 1.96            | 500.64         | 0.00             |                    |                    |
| 9100.00†     | 89.546             | 89.776         | 8588.51       | 600.64              | 2.35            | 600.63         | 0.00             |                    |                    |
| 9200.00†     | 89.546             | 89.776         | 8589.31       | 700.63              | 2.74            | 700.63         | 0.00             |                    |                    |
| 9300.00†     | 89.546             | 89.776         | 8590.10       | 800.63              | 3.13            | 800.62         | 0.00             |                    |                    |
| 9400.00†     | 89.546             | 89.776         | 8590.89       | 900.63              | 3.52            | 900.62         | 0.00             |                    |                    |
| 9500.00†     | 89.546             | 89.776         | 8591.68       | 1000.62             | 3.91            | 1000.62        | 0.00             |                    |                    |
| 9600.00†     | 89.546             | 89.776         | 8592.48       | 1100.62             | 4.30            | 1100.61        | 0.00             |                    |                    |
| 9700.00†     | 89.546             | 89.776         | 8593.27       | 1200.62             | 4.69            | 1200.61        | 0.00             |                    |                    |
| 9800.00†     | 89.546             | 89.776         | 8594.06       | 1300.61             | 5.08            | 1300.61        | 0.00             |                    |                    |
| 9900.00†     | 89.546             | 89.776         | 8594.85       | 1400.61             | 5.47            | 1400.60        | 0.00             |                    |                    |
| 10000.00†    | 89.546             | 89.776         | 8595.65       | 1500.61             | 5.86            | 1500.60        | 0.00             |                    |                    |
| 10100.00†    | 89.546             | 89.776         | 8596.44       | 1600.61             | 6.25            | 1600.59        | 0.00             |                    |                    |
| 10200.00†    | 89.546             | 89.776         | 8597.23       | 1700.60             | 6.64            | 1700.59        | 0.00             |                    |                    |
| 10300.00†    | 89.546             | 89.776         | 8598.02       | 1800.60             | 7.03            | 1800.59        | 0.00             |                    |                    |
| 10400.00†    | 89.546             | 89.776         | 8598.82       | 1900.60             | 7.42            | 1900.58        | 0.00             |                    |                    |
| 10500.00†    | 89.546             | 89.776         | 8599.61       | 2000.59             | 7.82            | 2000.58        | 0.00             |                    |                    |
| 10600.00†    | 89.546             | 89.776         | 8600.40       | 2100.59             | 8.21            | 2100.57        | 0.00             |                    |                    |
| 10700.00†    | 89.546             | 89.776         | 8601.19       | 2200.59             | 8.60            | 2200.57        | 0.00             |                    |                    |
| 10800.00†    | 89.546             | 89.776         | 8601.99       | 2300.58             | 8.99            | 2300.57        | 0.00             |                    |                    |
| 10900.00†    | 89.546             | 89.776         | 8602.78       | 2400.58             | 9.38            | 2400.56        | 0.00             |                    |                    |
| 11000.00†    | 89.546             | 89.776         | 8603.57       | 2500.58             | 9.77            | 2500.56        | 0.00             |                    |                    |
| 11100.00†    | 89.546             | 89.776         | 8604.36       | 2600.57             | 10.16           | 2600.55        | 0.00             |                    |                    |
| 11200.00†    | 89.546             | 89.776         | 8605.16       | 2700.57             | 10.55           | 2700.55        | 0.00             |                    |                    |
| 11300.00†    | 89.546             | 89.776         | 8605.95       | 2800.57             | 10.94           | 2800.55        | 0.00             |                    |                    |
| 11400.00†    | 89.546             | 89.776         | 8606.74       | 2900.56             | 11.33           | 2900.54        | 0.00             |                    |                    |



# Planned Wellpath Report

Plan #1  
Page 3 of 3



## REFERENCE WELLPATH IDENTIFICATION

|          |                               |          |           |
|----------|-------------------------------|----------|-----------|
| Operator | Cimarex Energy Co.            | Slot     | No. 1 SHL |
| Area     | Chaves County, NM             | Well     | No. 1     |
| Field    | (Saratoga) Sec 30 T15-S R31-E | Wellbore | No. 1 PWB |
| Facility | Saratoga 30 State COM 1       |          |           |

## WELLPATH DATA (51 stations) † = interpolated/extrapolated station

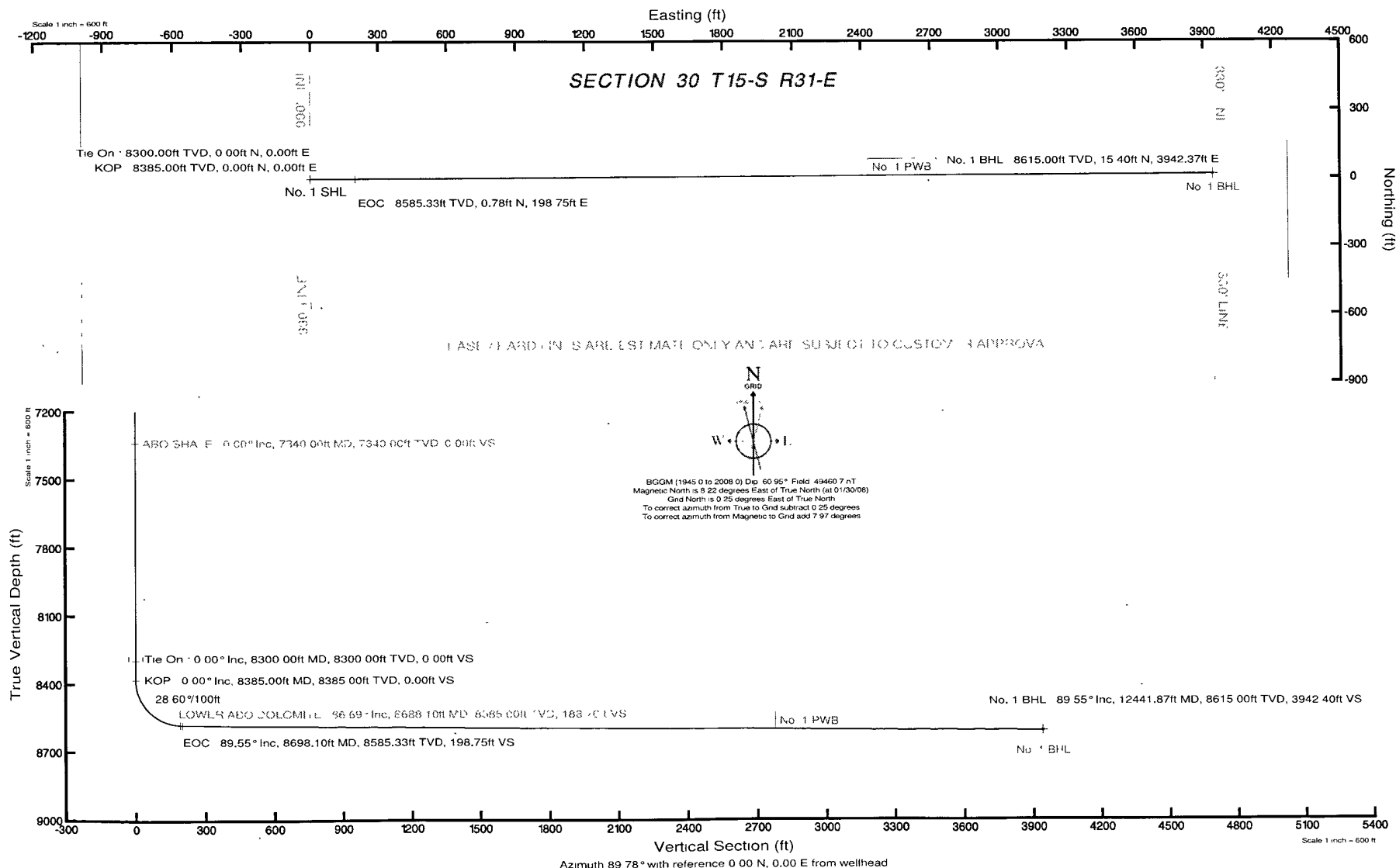
| MD<br>[feet] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[feet] | Vert Sect<br>[feet] | North<br>[feet] | East<br>[feet] | DLS<br>[°/100ft] | Design<br>Comments | Path<br>Comment |
|--------------|--------------------|----------------|---------------|---------------------|-----------------|----------------|------------------|--------------------|-----------------|
| 11500.00†    | 89.546             | 89.776         | 8607.54       | 3000.56             | 11.72           | 3000.54        | 0.00             |                    |                 |
| 11600.00†    | 89.546             | 89.776         | 8608.33       | 3100.56             | 12.11           | 3100.53        | 0.00             |                    |                 |
| 11700.00†    | 89.546             | 89.776         | 8609.12       | 3200.56             | 12.50           | 3200.53        | 0.00             |                    |                 |
| 11800.00†    | 89.546             | 89.776         | 8609.91       | 3300.55             | 12.89           | 3300.53        | 0.00             |                    |                 |
| 11900.00†    | 89.546             | 89.776         | 8610.71       | 3400.55             | 13.28           | 3400.52        | 0.00             |                    |                 |
| 12000.00†    | 89.546             | 89.776         | 8611.50       | 3500.55             | 13.67           | 3500.52        | 0.00             |                    |                 |
| 12100.00†    | 89.546             | 89.776         | 8612.29       | 3600.54             | 14.07           | 3600.52        | 0.00             |                    |                 |
| 12200.00†    | 89.546             | 89.776         | 8613.08       | 3700.54             | 14.46           | 3700.51        | 0.00             |                    |                 |
| 12300.00†    | 89.546             | 89.776         | 8613.88       | 3800.54             | 14.85           | 3800.51        | 0.00             |                    |                 |
| 12400.00†    | 89.546             | 89.776         | 8614.67       | 3900.53             | 15.24           | 3900.50        | 0.00             |                    |                 |
| 12441.87     | 89.546             | 89.776         | 8615.00†      | 3942.40             | 15.40           | 3942.37        | 0.00             | No. 1 BHL          |                 |

## HOLE & CASING SECTIONS Ref Wellbore: No. 1 PWB Ref Wellpath: Plan #1

| String/Diameter             | Start MD<br>[feet] | End MD<br>[feet] | Interval<br>[feet] | Start TVD<br>[feet] | End TVD<br>[feet] | Start N/S<br>[feet] | Start E/W<br>[feet] | End N/S<br>[feet] | End E/W<br>[feet] |
|-----------------------------|--------------------|------------------|--------------------|---------------------|-------------------|---------------------|---------------------|-------------------|-------------------|
| 17.5in Open Hole            | 0.00               | 340.00           | 340.00             | 0.00                | 340.00            | 0.00                | 0.00                | 0.00              | 0.00              |
| 13.375in Casing Surface     | 0.00               | 340.00           | 340.00             | 0.00                | 340.00            | 0.00                | 0.00                | 0.00              | 0.00              |
| 12.25in Open Hole           | 340.00             | 3950.00          | 3610.00            | 340.00              | 3950.00           | 0.00                | 0.00                | 0.00              | 0.00              |
| 9.625in Casing Intermediate | 340.00             | 3950.00          | 3610.00            | 340.00              | 3950.00           | 0.00                | 0.00                | 0.00              | 0.00              |
| 8.75in Open Hole            | 3950.00            | 8300.00          | 4350.00            | 3950.00             | 8300.00           | 0.00                | 0.00                | 0.00              | 0.00              |
| 7in Liner                   | 3950.00            | 8300.00          | 4350.00            | 3950.00             | 8300.00           | 0.00                | 0.00                | 0.00              | 0.00              |
| 6.125in Open Hole           | 8300.00            | 12441.87         | 4141.87            | 8300.00             | 8615.00           | 0.00                | 0.00                | 15.40             | 3942.37           |

## TARGETS

| Name         | MD<br>[feet] | TVD<br>[feet] | North<br>[feet] | East<br>[feet] | Grid East<br>[us survey feet] | Grid North<br>[us survey feet] | Latitude<br>[°] | Longitude<br>[°] | Shape |
|--------------|--------------|---------------|-----------------|----------------|-------------------------------|--------------------------------|-----------------|------------------|-------|
| 1) No. 1 BHL | 12441.87     | 8615.00       | 15.40           | 3942.37        | 647203.00                     | 723686.70                      | 32 59 18.818N   | 103 51 11.726W   | point |



# PROPOSED WELLPATH REPORT (CSV version)

Prepared by Baker Hughes INTEQ

Software System: WellArchitect™1.2

## REFERENCE WELLPATH IDENTIFICATION

Operator Cimarex Energy Co.  
 Area Chaves County, NM  
 Field (Saratoga) Sec 30 T15-S R31-E  
 Facility Saratoga 30 State COM 1  
 Slot No. 1 SHL  
 Well No. 1  
 Wellbore No. 1 PWB  
 Wellpath Plan #1  
 Sidetrack (none)

## REPORT SETUP INFORMATION

Projection : NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet  
 North Refe Grid  
 Scale 0.999933  
 Wellbore L 1/30/2008  
 Software S WellArchitect™  
 User Victor Hernandez  
 Report Gen 01/30/08 at 14:38:36  
 DataBase/ WA\_Midland/ev23.xml

| WELLPAT      | Local North<br>[ft] | Local East<br>[ft] | Grid East<br>[ft] | Grid North<br>[ft] | Latitude<br>[°] | Longitude<br>[°] |
|--------------|---------------------|--------------------|-------------------|--------------------|-----------------|------------------|
| Slot Locati  | 0                   | 0                  | 643260.9          | 723671.3           | 32 59 18.8      | 103 51 58.009W   |
| Facility Ref |                     |                    | 643260.9          | 723671.3           | 32 59 18.8      | 103 51 58.009W   |
| Field Refer  |                     |                    | 643260.9          | 723671.3           | 32 59 18.8      | 103 51 58.009W   |

## WELLPATH DATUM

Calculation Minimum curvature  
 Horizontal Facility Center  
 Vertical Re Rig on No. 1 SHL (RT)  
 MD Refere Rig on No. 1 SHL (RT)  
 Field Vertic GRN. ELEV.  
 Rig on No. 18.00 feet  
 Rig on No. 4468.00 feet  
 Facility Ver 0.00 feet  
 Section Ori 0.00 feet  
 Section Ori 0.00 feet  
 Section Azi 89.78°

| WELLPATH DATA Wellbore: No. 1 PWB Wellpath: Plan #1 † = interpolated/extrapolated s |            |                    |                |             |                   |               |              |                  |
|-------------------------------------------------------------------------------------|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|
|                                                                                     | MD<br>feet | Inclination<br>deg | Azimuth<br>deg | TVD<br>feet | Vert Sect<br>feet | North<br>feet | East<br>feet | DLS<br>deg/100ft |
|                                                                                     | 0          | 0                  | 0              | 0           | 0                 | 0             | 0            | 0                |
| †                                                                                   | 2312       | 0                  | 0              | 2312        | 0                 | 0             | 0            | 0                |
| †                                                                                   | 3090       | 0                  | 0              | 3090        | 0                 | 0             | 0            | 0                |
| †                                                                                   | 3940       | 0                  | 0              | 3940        | 0                 | 0             | 0            | 0                |

|   |          |        |        |         |         |       |         |      |
|---|----------|--------|--------|---------|---------|-------|---------|------|
| † | 7340     | 0      | 0      | 7340    | 0       | 0     | 0       | 0    |
|   | 8300     | 0      | 0      | 8300    | 0       | 0     | 0       | 0    |
|   | 8385     | 0      | 89.776 | 8385    | 0       | 0     | 0       | 0    |
| † | 8400     | 4.29   | 89.776 | 8399.99 | 0.56    | 0     | 0.56    | 28.6 |
| † | 8500     | 32.89  | 89.776 | 8493.79 | 32.11   | 0.13  | 32.11   | 28.6 |
| † | 8600     | 61.49  | 89.776 | 8561.04 | 104.71  | 0.41  | 104.71  | 28.6 |
| † | 8688.1   | 86.687 | 89.776 | 8585    | 188.76  | 0.74  | 188.75  | 28.6 |
|   | 8698.1   | 89.546 | 89.776 | 8585.33 | 198.75  | 0.78  | 198.75  | 28.6 |
| † | 8700     | 89.546 | 89.776 | 8585.34 | 200.65  | 0.78  | 200.65  | 0    |
| † | 8800     | 89.546 | 89.776 | 8586.14 | 300.65  | 1.17  | 300.64  | 0    |
| † | 8900     | 89.546 | 89.776 | 8586.93 | 400.64  | 1.57  | 400.64  | 0    |
| † | 9000     | 89.546 | 89.776 | 8587.72 | 500.64  | 1.96  | 500.64  | 0    |
| † | 9100     | 89.546 | 89.776 | 8588.51 | 600.64  | 2.35  | 600.63  | 0    |
| † | 9200     | 89.546 | 89.776 | 8589.31 | 700.63  | 2.74  | 700.63  | 0    |
| † | 9300     | 89.546 | 89.776 | 8590.1  | 800.63  | 3.13  | 800.62  | 0    |
| † | 9400     | 89.546 | 89.776 | 8590.89 | 900.63  | 3.52  | 900.62  | 0    |
| † | 9500     | 89.546 | 89.776 | 8591.68 | 1000.62 | 3.91  | 1000.62 | 0    |
| † | 9600     | 89.546 | 89.776 | 8592.48 | 1100.62 | 4.3   | 1100.61 | 0    |
| † | 9700     | 89.546 | 89.776 | 8593.27 | 1200.62 | 4.69  | 1200.61 | 0    |
| † | 9800     | 89.546 | 89.776 | 8594.06 | 1300.61 | 5.08  | 1300.61 | 0    |
| † | 9900     | 89.546 | 89.776 | 8594.85 | 1400.61 | 5.47  | 1400.6  | 0    |
| † | 10000    | 89.546 | 89.776 | 8595.65 | 1500.61 | 5.86  | 1500.6  | 0    |
| † | 10100    | 89.546 | 89.776 | 8596.44 | 1600.61 | 6.25  | 1600.59 | 0    |
| † | 10200    | 89.546 | 89.776 | 8597.23 | 1700.6  | 6.64  | 1700.59 | 0    |
| † | 10300    | 89.546 | 89.776 | 8598.02 | 1800.6  | 7.03  | 1800.59 | 0    |
| † | 10400    | 89.546 | 89.776 | 8598.82 | 1900.6  | 7.42  | 1900.58 | 0    |
| † | 10500    | 89.546 | 89.776 | 8599.61 | 2000.59 | 7.82  | 2000.58 | 0    |
| † | 10600    | 89.546 | 89.776 | 8600.4  | 2100.59 | 8.21  | 2100.57 | 0    |
| † | 10700    | 89.546 | 89.776 | 8601.19 | 2200.59 | 8.6   | 2200.57 | 0    |
| † | 10800    | 89.546 | 89.776 | 8601.99 | 2300.58 | 8.99  | 2300.57 | 0    |
| † | 10900    | 89.546 | 89.776 | 8602.78 | 2400.58 | 9.38  | 2400.56 | 0    |
| † | 11000    | 89.546 | 89.776 | 8603.57 | 2500.58 | 9.77  | 2500.56 | 0    |
| † | 11100    | 89.546 | 89.776 | 8604.36 | 2600.57 | 10.16 | 2600.55 | 0    |
| † | 11200    | 89.546 | 89.776 | 8605.16 | 2700.57 | 10.55 | 2700.55 | 0    |
| † | 11300    | 89.546 | 89.776 | 8605.95 | 2800.57 | 10.94 | 2800.55 | 0    |
| † | 11400    | 89.546 | 89.776 | 8606.74 | 2900.56 | 11.33 | 2900.54 | 0    |
| † | 11500    | 89.546 | 89.776 | 8607.54 | 3000.56 | 11.72 | 3000.54 | 0    |
| † | 11600    | 89.546 | 89.776 | 8608.33 | 3100.56 | 12.11 | 3100.53 | 0    |
| † | 11700    | 89.546 | 89.776 | 8609.12 | 3200.56 | 12.5  | 3200.53 | 0    |
| † | 11800    | 89.546 | 89.776 | 8609.91 | 3300.55 | 12.89 | 3300.53 | 0    |
| † | 11900    | 89.546 | 89.776 | 8610.71 | 3400.55 | 13.28 | 3400.52 | 0    |
| † | 12000    | 89.546 | 89.776 | 8611.5  | 3500.55 | 13.67 | 3500.52 | 0    |
| † | 12100    | 89.546 | 89.776 | 8612.29 | 3600.54 | 14.07 | 3600.52 | 0    |
| † | 12200    | 89.546 | 89.776 | 8613.08 | 3700.54 | 14.46 | 3700.51 | 0    |
| † | 12300    | 89.546 | 89.776 | 8613.88 | 3800.54 | 14.85 | 3800.51 | 0    |
| † | 12400    | 89.546 | 89.776 | 8614.67 | 3900.53 | 15.24 | 3900.5  | 0    |
|   | 12441.87 | 89.546 | 89.776 | 8615    | 3942.4  | 15.4  | 3942.37 | 0    |

HOLE AND CASING SECTIONS Ref Wellbore: No. 1 PWB Ref Wellpath: Plan #1

| String/Dian | Start MD | End MD | Interval | Start TVD | End TVD | Start N/S | End N/S | Start E/W |
|-------------|----------|--------|----------|-----------|---------|-----------|---------|-----------|
|             | feet     | feet   | feet     | feet      | feet    |           |         |           |
| 17.5in Ope  | 0        | 340    | 340      | 0         | 340     | 0         | 0       | 0         |



|            |      |          |         |      |      |   |   |      |
|------------|------|----------|---------|------|------|---|---|------|
| 13.375in C | 0    | 340      | 340     | 0    | 340  | 0 | 0 | 0    |
| 12.25in Op | 340  | 3950     | 3610    | 340  | 3950 | 0 | 0 | 0    |
| 9.625in Ca | 340  | 3950     | 3610    | 340  | 3950 | 0 | 0 | 0    |
| 8.75in Ope | 3950 | 8300     | 4350    | 3950 | 8300 | 0 | 0 | 0    |
| 7in Liner  | 3950 | 8300     | 4350    | 3950 | 8300 | 0 | 0 | 0    |
| 6.125in Op | 8300 | 12441.87 | 4141.87 | 8300 | 8615 | 0 | 0 | 15.4 |

# T A R G E T S

| Name        | MD<br>feet | TVD<br>feet | North<br>feet | East<br>feet | Grid East<br>us survey f | Grid North<br>us survey f | Latitude<br>DegMinSec | Longitude<br>DegMinSec |
|-------------|------------|-------------|---------------|--------------|--------------------------|---------------------------|-----------------------|------------------------|
| (1) No. 1 B | 12441.87   | 8615        | 15.4          | 3942.37      | 647203                   | 723686.7                  | 32 59 18.8            | 103 51 11.7            |