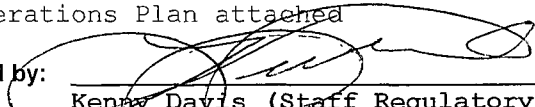


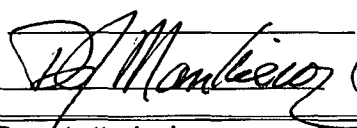
RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB 27 2013

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK Office  
Bureau of Land Management

|                                                                                                                                                                                                                                                            |                                                                                                                                                                                 |                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1a. Type of Work<br>DRILL                                                                                                                                                                                                                                  | BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS | 5. Lease Number<br>SF-080672<br>Unit Reporting Number                                                                                                                             |
| 1b. Type of Well<br>GAS                                                                                                                                                                                                                                    |                                                                                                                                                                                 | 6. If Indian, All. or Tribe                                                                                                                                                       |
| 2. Operator<br><b>BURLINGTON</b><br>RESOURCES Oil & Gas Company, LP                                                                                                                                                                                        |                                                                                                                                                                                 | 7. Unit Agreement Name<br>San Juan Unit 27-4                                                                                                                                      |
| 3. Address & Phone No. of Operator<br>PO Box 4289, Farmington, NM 87499<br>(505) 326-9700                                                                                                                                                                  |                                                                                                                                                                                 | 8. Farm or Lease Name<br>San Juan Unit 27-4<br>9. Well Number<br>156B                                                                                                             |
| 4. Location of Well<br>Surface: Unit O(SW/SE), 1039' FSL & 1859' FEL<br>BHL : Unit I(NE/SE), 1560' FSL & 730' FEL<br><br>Surface: Latitude: 36.554478° N (NAD83) Longitude: 107.200372° W<br>BHL : Latitude: 36.555946° N (NAD83) Longitude: 107.196529° W |                                                                                                                                                                                 | 10. Field, Pool, Wildcat<br>Blanco MV/Basin DK<br>11. Sec., Twn, Rge, Mer. (NMPM)<br>Surface: Sec. 24, T27N, R4W<br>Bottom Hole: Sec. 24, T27N, R4W<br>API # 30-039- <b>31187</b> |
| 14. Distance in Miles from Nearest Town<br>93 from: Bloomfield, NM                                                                                                                                                                                         | 12. County<br>Rio Arriba                                                                                                                                                        | 13. State<br>NM                                                                                                                                                                   |
| 15. Distance from Proposed Location to Nearest Property or Lease Line<br>730'                                                                                                                                                                              |                                                                                                                                                                                 |                                                                                                                                                                                   |
| 16. Acres in Lease<br>2,560.000                                                                                                                                                                                                                            | 17. Acres Assigned to Well<br>320.00 (E/2)                                                                                                                                      |                                                                                                                                                                                   |
| 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease<br>52.2' from: San Juan 27-4 Unit 156A(Blanco MV well)                                                                                                      |                                                                                                                                                                                 |                                                                                                                                                                                   |
| 19. Proposed Depth<br>8560'                                                                                                                                                                                                                                | 20. Rotary or Cable Tools<br>Rotary                                                                                                                                             |                                                                                                                                                                                   |
| 21. Elevations (DF, FT, GR, Etc.)<br>7295' GL                                                                                                                                                                                                              | 22. Approx. Date Work will Start                                                                                                                                                |                                                                                                                                                                                   |
| 23. Proposed Casing and Cementing Program<br>See Operations Plan attached                                                                                                                                                                                  |                                                                                                                                                                                 |                                                                                                                                                                                   |
| 24. Authorized by: <br>Kenny Davis (Staff Regulatory Tech)                                                                                                              | 2/26/13<br>Date                                                                                                                                                                 |                                                                                                                                                                                   |

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY  TITLE AFM DATE 5/10/13

Archaeological Report attached A gas recovery unit may or may not be used on this location.  
Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3  
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 3 Bond Numbers NMB-000015 and NMB-000089

DRILLING OPERATIONS AUTHORIZED AS  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

MAY 22 2013 ca

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.2 and appeal pursuant to 43 CFR 3165.4

Hold C104  
for Directional Survey  
and "As Drilled" plat

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

PC

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

Certificate Number: NM 11393

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-4 UNIT 156B

DEVELOPMENT

|                                                                    |                                 |                             |         |                          |                    |                     |                                                                                                         |
|--------------------------------------------------------------------|---------------------------------|-----------------------------|---------|--------------------------|--------------------|---------------------|---------------------------------------------------------------------------------------------------------|
| Lease:                                                             |                                 | AFE #: WAN.CDR.1108         |         |                          |                    | AFE \$:             |                                                                                                         |
| Field Name: SAN JUAN                                               |                                 | Rig:                        |         | State: NM                | County: RIO ARRIBA |                     | API #: 3003931187                                                                                       |
| Geologist:                                                         |                                 | Phone:                      |         | Geophysicist:            |                    | Phone:              |                                                                                                         |
| Geoscientist:                                                      |                                 | Phone:                      |         | Prod. Engineer:          |                    | Phone:              |                                                                                                         |
| Res. Engineer:                                                     |                                 | Phone:                      |         | Proj. Field Lead:        |                    | Phone:              |                                                                                                         |
| <b>Primary Objective (Zones):</b>                                  |                                 |                             |         |                          |                    |                     |                                                                                                         |
| Zone                                                               | Zone Name                       |                             |         |                          |                    |                     |                                                                                                         |
| FRR                                                                | BASIN DAKOTA (PRORATED GAS)     |                             |         |                          |                    |                     |                                                                                                         |
| RON                                                                | BLANCO MESAVERDE (PRORATED GAS) |                             |         |                          |                    |                     |                                                                                                         |
| <b>RCVD MAY 22 '13</b><br><b>OIL CONS. DIV.</b><br><b>DIST. 3</b>  |                                 |                             |         |                          |                    |                     |                                                                                                         |
| <b>Location: Surface</b> Datum Code: NAD 27 <b>Directional</b>     |                                 |                             |         |                          |                    |                     |                                                                                                         |
| Latitude: 36.554468                                                |                                 | Longitude: -107.199774      |         | X:                       | Y:                 | Section: 24         | Range: 004W                                                                                             |
| Footage X: 1859 FEL                                                |                                 | Footage Y: 1039 FSL         |         | Elevation: 7295 (FT)     |                    | Township: 027N      |                                                                                                         |
| Tolerance:                                                         |                                 |                             |         |                          |                    |                     |                                                                                                         |
| <b>Location: Bottom Hole</b> Datum Code: NAD 27 <b>Directional</b> |                                 |                             |         |                          |                    |                     |                                                                                                         |
| Latitude: 36.555935                                                |                                 | Longitude: -107.195931      |         | X:                       | Y:                 | Section: 24         | Range: 004W                                                                                             |
| Footage X: 730 FEL                                                 |                                 | Footage Y: 1560 FSL         |         | Elevation:               |                    | (FT) Township: 027N |                                                                                                         |
| Tolerance:                                                         |                                 |                             |         |                          |                    |                     |                                                                                                         |
| Location Type: Restricted                                          |                                 | Start Date (Est.): 1/1/2014 |         | Completion Date:         |                    | Date In Operation:  |                                                                                                         |
| Formation Data: Assume KB = 7310      Units = FT                   |                                 |                             |         |                          |                    |                     |                                                                                                         |
| Formation Call & Casing Points                                     | Depth (TVD in Ft)               | SS (Ft)                     | MD (Ft) | Depletion (Yes/No)       | BHP (PSIG)         | BHT                 | Remarks                                                                                                 |
| SAN JOSE                                                           | 15                              | 7295                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| Surface Casing                                                     | 320                             | 6990                        |         | <input type="checkbox"/> | 34                 |                     | 12-1/4 hole. 320' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 182 cuft. Circulate cement to surface. |
| NACIMIENTO                                                         | 2405                            | 4905                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| OJO ALAMO                                                          | 3562                            | 3748                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| KIRTLAND                                                           | 3722                            | 3588                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| FRUITLAND                                                          | 3784                            | 3526                        |         | <input type="checkbox"/> |                    |                     | Possible Gas                                                                                            |
| PICTURED CLIFFS                                                    | 4118                            | 3192                        |         | <input type="checkbox"/> | 822                |                     | Lost circulation in SJ 27-4 Unit 35C                                                                    |
| LEWIS                                                              | 4209                            | 3101                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| HUERFANITO BENTONITE                                               | 4611                            | 2699                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| CHACRA                                                             | 5085                            | 2225                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| UPPER CLIFF HOUSE                                                  | 5660                            | 1650                        |         | <input type="checkbox"/> |                    |                     | Gas - Est top MV perf 5795' tvd ( 135' below T/UCLH ).                                                  |
| MASSIVE CLIFF HOUSE                                                | 5830                            | 1480                        |         | <input type="checkbox"/> | 925                |                     | Gas                                                                                                     |
| MENEFEE                                                            | 5954                            | 1356                        |         | <input type="checkbox"/> |                    |                     | Gas                                                                                                     |
| Intermediate Casing                                                | 6100                            | 1210                        |         | <input type="checkbox"/> | 147                |                     | 8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1370 cuft. Circulate cement to surface.          |
| POINT LOOKOUT                                                      | 6229                            | 1081                        |         | <input type="checkbox"/> |                    |                     | Gas - Est bot MV perf 6449' tvd ( 220' below T/PNLK )                                                   |
| MANCOS                                                             | 6810                            | 500                         |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| UPPER GALLUP                                                       | 7449                            | -139                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| GREENHORN                                                          | 8249                            | -939                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| GRANEROS                                                           | 8307                            | -997                        |         | <input type="checkbox"/> |                    |                     |                                                                                                         |
| TWO WELLS                                                          | 8367                            | -1057                       |         | <input type="checkbox"/> | 3447               | 195                 | Gas - Wet in SJ 27-4 Unit 35M, had to trip out of the hole.                                             |
| PAGUATE                                                            | 8367                            | -1057                       |         | <input type="checkbox"/> |                    |                     | Gas                                                                                                     |

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

## SAN JUAN 27-4 UNIT 156B

## DEVELOPMENT

|              |      |       |                          |                                                                                                                                                   |
|--------------|------|-------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| UPPER CUBERO | 8459 | -1149 | <input type="checkbox"/> | Gas                                                                                                                                               |
| LOWER CUBERO | 8497 | -1187 | <input type="checkbox"/> | Gas - Offset SJ 27-4 Unit 155A, Completion results pending.                                                                                       |
| OAK CANYON   | 8527 | -1217 | <input type="checkbox"/> | Gas - Est bot DK perf 8542' tvd ( 15' below T/OKCN ). TD 33' into OKCN depending on the result of SJ 27-4 155A..                                  |
| Total Depth  | 8560 | -1250 | <input type="checkbox"/> | 198 6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC/BTC casing. Cement w/ 327 cuft. Circulate cement a minimum of 100' inside the previous casing string. |
| ENCINAL      | 8564 | -1254 | <input type="checkbox"/> | Gas                                                                                                                                               |
| BURRO CANYON | 8581 | -1271 | <input type="checkbox"/> |                                                                                                                                                   |
| MORRISON     | 8632 | -1322 | <input type="checkbox"/> |                                                                                                                                                   |

### Reference Wells:

| Reference Type | Well Name               | Comments |
|----------------|-------------------------|----------|
| Production     | SAN JUAN 27-4 UNIT 3A   |          |
| Production     | SAN JUAN 27-4 UNIT 155A |          |

### Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other

GR/CBL.

Mud log ~100' above GLLP down to TD.

Mudlogger will call TD.

Est bot DK perf 20' above TD.

### Additional Information:

| Log Type | Stage | From (Ft) | To (Ft) | Tool Type/Name | Remarks |
|----------|-------|-----------|---------|----------------|---------|
|----------|-------|-----------|---------|----------------|---------|

# ConocoPhillips

## Planning Report

Database: EDM Central Planning  
 Company: ConocoPhillips SJBU  
 Project: San Juan Basin - New Mexico West Wells  
 Site: San Juan 27 Wells  
 Well: SJ 27-4 #156B  
 Wellbore: Wellbore #1  
 Design: Design #1

Local Co-ordinate Reference: Well SJ 27-4 #156B  
 TVD Reference: WELL @ 7310.0usft (Original Well Elev)  
 MD Reference: WELL @ 7310.0usft (Original Well Elev)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature

Project: San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"  
 Map System: US State Plane 1927 (Exact solution) System Datum: Ground Level  
 Geo Datum: NAD 1927 (NADCON CONUS)  
 Map Zone: New Mexico West 3003 Using geodetic scale factor

Site: San Juan 27 Wells  
 Site Position: Northing: 2,018,443.76 usft Latitude: 36° 32' 32.152 N  
 From: Lat/Long Easting: 180,037.82 usft Longitude: 108° 55' 21.086 W  
 Position Uncertainty: 15.0 usft Slot Radius: 13-3/16" Grid Convergence: -0.65 °

Well: SJ 27-4 #156B  
 Well Position: +N/-S 0.0 usft Northing: 2,021,687.92 usft Latitude: 36° 33' 16.083 N  
 +E/-W 0.0 usft Easting: 686,083.67 usft Longitude: 107° 11' 59.189 W  
 Position Uncertainty: 0.0 usft Wellhead Elevation: usft Ground Level: 7,295.0 usft

Wellbore: Wellbore #1  
 Magnetics: Model Name Sample Date Declination (°) Dip Angle (°) Field Strength (nT)  
 BGGM2012 2/15/2013 9.44 63.34 50,474

Design: Design #1  
 Audit Notes:  
 Version: Phase: PROTOTYPE Tie On Depth: 0.0  
 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction  
 (usft) (usft) (usft) (°)  
 0.0 0.0 0.0 64.67

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target             |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|--------------------|
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 2,011.7               | 24.23           | 64.67       | 1,975.9               | 108.0        | 228.2        | 2.00                    | 2.00                   | 0.00                  | 64.67   |                    |
| 4,029.7               | 24.23           | 64.67       | 3,816.1               | 462.4        | 976.9        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 4,837.5               | 0.00            | 0.00        | 4,600.0               | 534.4        | 1,129.0      | 3.00                    | -3.00                  | 0.00                  | 180.00  | SJ 27-4 #156B VERT |
| 6,337.5               | 0.00            | 0.00        | 6,100.0               | 534.4        | 1,129.0      | 0.00                    | 0.00                   | 0.00                  | 0.00    | SJ 27-4 #156B ICP  |
| 8,797.5               | 0.00            | 0.00        | 8,560.0               | 534.4        | 1,129.0      | 0.00                    | 0.00                   | 0.00                  | 0.00    | SJ 27-4 #156B PCP  |

# ConocoPhillips

## Planning Report

Database: EDM Central Planning  
 Company: ConocoPhillips SJB  
 Project: San Juan Basin - New Mexico West Wells  
 Site: San Juan 27 Wells  
 Well: SJ 27-4 #156B  
 Wellbore: Wellbore #1  
 Design: Design #1

Local Co-ordinate Reference: Well SJ 27-4 #156B  
 TVD Reference: WELL @ 7310.0usft (Original Well Elev)  
 MD Reference: WELL @ 7310.0usft (Original Well Elev)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature

### Planned Survey

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 0.0                         | 0.00               | 0.00           | 0.0                         | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 100.0                       | 0.00               | 0.00           | 100.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 200.0                       | 0.00               | 0.00           | 200.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 300.0                       | 0.00               | 0.00           | 300.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 400.0                       | 0.00               | 0.00           | 400.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 500.0                       | 0.00               | 0.00           | 500.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 600.0                       | 0.00               | 0.00           | 600.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 700.0                       | 0.00               | 0.00           | 700.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 800.0                       | 0.00               | 0.00           | 800.0                       | 0.0             | 0.0             | 0.0                           | 0.00                          | 0.00                         | 0.00                        |
| 900.0                       | 2.00               | 64.67          | 900.0                       | 0.7             | 1.6             | 1.7                           | 2.00                          | 2.00                         | 0.00                        |
| 1,000.0                     | 4.00               | 64.67          | 999.8                       | 3.0             | 6.3             | 7.0                           | 2.00                          | 2.00                         | 0.00                        |
| 1,100.0                     | 6.00               | 64.67          | 1,099.5                     | 6.7             | 14.2            | 15.7                          | 2.00                          | 2.00                         | 0.00                        |
| 1,200.0                     | 8.00               | 64.67          | 1,198.7                     | 11.9            | 25.2            | 27.9                          | 2.00                          | 2.00                         | 0.00                        |
| 1,300.0                     | 10.00              | 64.67          | 1,297.5                     | 18.6            | 39.3            | 43.5                          | 2.00                          | 2.00                         | 0.00                        |
| 1,400.0                     | 12.00              | 64.67          | 1,395.6                     | 26.8            | 56.6            | 62.6                          | 2.00                          | 2.00                         | 0.00                        |
| 1,500.0                     | 14.00              | 64.67          | 1,493.1                     | 36.4            | 76.9            | 85.1                          | 2.00                          | 2.00                         | 0.00                        |
| 1,600.0                     | 16.00              | 64.67          | 1,589.6                     | 47.5            | 100.3           | 111.0                         | 2.00                          | 2.00                         | 0.00                        |
| 1,700.0                     | 18.00              | 64.67          | 1,685.3                     | 60.0            | 126.7           | 140.2                         | 2.00                          | 2.00                         | 0.00                        |
| 1,800.0                     | 20.00              | 64.67          | 1,779.8                     | 73.9            | 156.2           | 172.8                         | 2.00                          | 2.00                         | 0.00                        |
| 1,900.0                     | 22.00              | 64.67          | 1,873.2                     | 89.2            | 188.5           | 208.6                         | 2.00                          | 2.00                         | 0.00                        |
| 2,000.0                     | 24.00              | 64.67          | 1,965.2                     | 106.0           | 223.9           | 247.7                         | 2.00                          | 2.00                         | 0.00                        |
| 2,011.7                     | 24.23              | 64.67          | 1,975.9                     | 108.0           | 228.2           | 252.5                         | 2.00                          | 2.00                         | 0.00                        |
| 2,100.0                     | 24.23              | 64.67          | 2,056.4                     | 123.5           | 260.9           | 288.7                         | 0.00                          | 0.00                         | 0.00                        |
| 2,200.0                     | 24.23              | 64.67          | 2,147.6                     | 141.1           | 298.0           | 329.7                         | 0.00                          | 0.00                         | 0.00                        |
| 2,300.0                     | 24.23              | 64.67          | 2,238.8                     | 158.6           | 335.1           | 370.8                         | 0.00                          | 0.00                         | 0.00                        |
| 2,400.0                     | 24.23              | 64.67          | 2,330.0                     | 176.2           | 372.2           | 411.8                         | 0.00                          | 0.00                         | 0.00                        |
| 2,482.3                     | 24.23              | 64.67          | 2,405.0                     | 190.6           | 402.8           | 445.6                         | 0.00                          | 0.00                         | 0.00                        |
| <b>NACIEMENTO</b>           |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 2,500.0                     | 24.23              | 64.67          | 2,421.2                     | 193.8           | 409.3           | 452.9                         | 0.00                          | 0.00                         | 0.00                        |
| 2,600.0                     | 24.23              | 64.67          | 2,512.4                     | 211.3           | 446.4           | 493.9                         | 0.00                          | 0.00                         | 0.00                        |
| 2,700.0                     | 24.23              | 64.67          | 2,603.5                     | 228.9           | 483.5           | 535.0                         | 0.00                          | 0.00                         | 0.00                        |
| 2,800.0                     | 24.23              | 64.67          | 2,694.7                     | 246.4           | 520.6           | 576.0                         | 0.00                          | 0.00                         | 0.00                        |
| 2,900.0                     | 24.23              | 64.67          | 2,785.9                     | 264.0           | 557.7           | 617.1                         | 0.00                          | 0.00                         | 0.00                        |
| 3,000.0                     | 24.23              | 64.67          | 2,877.1                     | 281.6           | 594.8           | 658.1                         | 0.00                          | 0.00                         | 0.00                        |
| 3,100.0                     | 24.23              | 64.67          | 2,968.3                     | 299.1           | 631.9           | 699.2                         | 0.00                          | 0.00                         | 0.00                        |
| 3,200.0                     | 24.23              | 64.67          | 3,059.5                     | 316.7           | 669.0           | 740.2                         | 0.00                          | 0.00                         | 0.00                        |
| 3,300.0                     | 24.23              | 64.67          | 3,150.7                     | 334.3           | 706.1           | 781.3                         | 0.00                          | 0.00                         | 0.00                        |
| 3,400.0                     | 24.23              | 64.67          | 3,241.9                     | 351.8           | 743.2           | 822.3                         | 0.00                          | 0.00                         | 0.00                        |
| 3,500.0                     | 24.23              | 64.67          | 3,333.0                     | 369.4           | 780.3           | 863.3                         | 0.00                          | 0.00                         | 0.00                        |
| 3,600.0                     | 24.23              | 64.67          | 3,424.2                     | 386.9           | 817.4           | 904.4                         | 0.00                          | 0.00                         | 0.00                        |
| 3,700.0                     | 24.23              | 64.67          | 3,515.4                     | 404.5           | 854.5           | 945.4                         | 0.00                          | 0.00                         | 0.00                        |
| 3,751.1                     | 24.23              | 64.67          | 3,562.0                     | 413.5           | 873.5           | 966.4                         | 0.00                          | 0.00                         | 0.00                        |
| <b>OJO ALAMO</b>            |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 3,800.0                     | 24.23              | 64.67          | 3,606.6                     | 422.1           | 891.6           | 986.5                         | 0.00                          | 0.00                         | 0.00                        |
| 3,900.0                     | 24.23              | 64.67          | 3,697.8                     | 439.6           | 928.7           | 1,027.5                       | 0.00                          | 0.00                         | 0.00                        |
| 3,926.5                     | 24.23              | 64.67          | 3,722.0                     | 444.3           | 938.6           | 1,038.4                       | 0.00                          | 0.00                         | 0.00                        |
| <b>KIRTLAND</b>             |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 3,994.5                     | 24.23              | 64.67          | 3,784.0                     | 456.2           | 963.8           | 1,066.3                       | 0.00                          | 0.00                         | 0.00                        |
| <b>FRUITLAND</b>            |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 4,000.0                     | 24.23              | 64.67          | 3,789.0                     | 457.2           | 965.8           | 1,068.6                       | 0.00                          | 0.00                         | 0.00                        |
| 4,029.7                     | 24.23              | 64.67          | 3,816.1                     | 462.4           | 976.9           | 1,080.8                       | 0.00                          | 0.00                         | 0.00                        |
| 4,100.0                     | 22.13              | 64.67          | 3,880.7                     | 474.2           | 1,001.9         | 1,108.4                       | 3.00                          | -3.00                        | 0.00                        |
| 4,200.0                     | 19.13              | 64.67          | 3,974.3                     | 489.3           | 1,033.7         | 1,143.7                       | 3.00                          | -3.00                        | 0.00                        |

# ConocoPhillips

## Planning Report

Database: EDM Central Planning  
Company: ConocoPhillips SJB  
Project: San Juan Basin - New Mexico West Wells  
Site: San Juan 27 Wells  
Well: SJ 27-4 #156B  
Wellbore: Wellbore #1  
Design: Design #1

Local Co-ordinate Reference: Well SJ 27-4 #156B  
TVD Reference: WELL @ 7310.0usft (Original Well Elev)  
MD Reference: WELL @ 7310.0usft (Original Well Elev)  
North Reference: True  
Survey Calculation Method: Minimum Curvature

### Planned Survey

| Measured<br>Depth<br>(usft)   | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-------------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 4,300.0                       | 16.13              | 64.67          | 4,069.6                     | 502.3           | 1,061.1         | 1,173.9                       | 3.00                          | -3.00                        | 0.00                        |
| 4,350.2                       | 14.62              | 64.67          | 4,118.0                     | 508.0           | 1,073.1         | 1,187.2                       | 3.00                          | -3.00                        | 0.00                        |
| <b>PICTURED CLIFFS</b>        |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 4,400.0                       | 13.13              | 64.67          | 4,166.3                     | 513.1           | 1,083.9         | 1,199.2                       | 3.00                          | -3.00                        | 0.00                        |
| 4,443.7                       | 11.81              | 64.67          | 4,209.0                     | 517.1           | 1,092.4         | 1,208.6                       | 3.00                          | -3.00                        | 0.00                        |
| <b>LEWIS</b>                  |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 4,500.0                       | 10.13              | 64.67          | 4,264.2                     | 521.7           | 1,102.1         | 1,219.3                       | 3.00                          | -3.00                        | 0.00                        |
| 4,600.0                       | 7.13               | 64.67          | 4,363.1                     | 528.1           | 1,115.6         | 1,234.3                       | 3.00                          | -3.00                        | 0.00                        |
| 4,700.0                       | 4.13               | 64.67          | 4,462.6                     | 532.3           | 1,124.5         | 1,244.1                       | 3.00                          | -3.00                        | 0.00                        |
| 4,800.0                       | 1.13               | 64.67          | 4,562.5                     | 534.2           | 1,128.6         | 1,248.7                       | 3.00                          | -3.00                        | 0.00                        |
| 4,837.5                       | 0.00               | 0.00           | 4,600.0                     | 534.4           | 1,129.0         | 1,249.1                       | 3.00                          | -3.00                        | 0.00                        |
| 4,848.5                       | 0.00               | 0.00           | 4,611.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>HUERFANITO BENTONITE</b>   |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 4,900.0                       | 0.00               | 0.00           | 4,662.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,000.0                       | 0.00               | 0.00           | 4,762.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,100.0                       | 0.00               | 0.00           | 4,862.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,200.0                       | 0.00               | 0.00           | 4,962.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,300.0                       | 0.00               | 0.00           | 5,062.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,322.5                       | 0.00               | 0.00           | 5,085.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>CHACRA</b>                 |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 5,400.0                       | 0.00               | 0.00           | 5,162.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,500.0                       | 0.00               | 0.00           | 5,262.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,600.0                       | 0.00               | 0.00           | 5,362.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,700.0                       | 0.00               | 0.00           | 5,462.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,800.0                       | 0.00               | 0.00           | 5,562.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 5,897.5                       | 0.00               | 0.00           | 5,660.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>UPPER CLIFF HOUSE</b>      |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 5,900.0                       | 0.00               | 0.00           | 5,662.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,000.0                       | 0.00               | 0.00           | 5,762.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,067.5                       | 0.00               | 0.00           | 5,830.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>MASSIVE CLIFF HOUSE</b>    |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 6,100.0                       | 0.00               | 0.00           | 5,862.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,191.5                       | 0.00               | 0.00           | 5,954.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>MENEFEE</b>                |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 6,200.0                       | 0.00               | 0.00           | 5,962.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,300.0                       | 0.00               | 0.00           | 6,062.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,337.5                       | 0.00               | 0.00           | 6,100.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>7" INTERMEDIATE CASING</b> |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 6,400.0                       | 0.00               | 0.00           | 6,162.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,466.5                       | 0.00               | 0.00           | 6,229.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>POINT LOOKOUT</b>          |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 6,500.0                       | 0.00               | 0.00           | 6,262.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,600.0                       | 0.00               | 0.00           | 6,362.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,700.0                       | 0.00               | 0.00           | 6,462.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,800.0                       | 0.00               | 0.00           | 6,562.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 6,900.0                       | 0.00               | 0.00           | 6,662.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,000.0                       | 0.00               | 0.00           | 6,762.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,047.5                       | 0.00               | 0.00           | 6,810.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| <b>MANCOS</b>                 |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 7,100.0                       | 0.00               | 0.00           | 6,862.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,200.0                       | 0.00               | 0.00           | 6,962.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,300.0                       | 0.00               | 0.00           | 7,062.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |

# ConocoPhillips

## Planning Report

Database: EDM Central Planning  
 Company: ConocoPhillips SJBU  
 Project: San Juan Basin - New Mexico West Wells  
 Site: San Juan 27 Wells  
 Well: SJ 27-4 #156B  
 Wellbore: Wellbore #1  
 Design: Design #1

Local Co-ordinate Reference: Well SJ 27-4 #156B  
 TVD Reference: WELL @ 7310.0usft (Original Well Elev)  
 MD Reference: WELL @ 7310.0usft (Original Well Elev)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature

### Planned Survey

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 7,400.0                     | 0.00               | 0.00           | 7,162.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,500.0                     | 0.00               | 0.00           | 7,262.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,600.0                     | 0.00               | 0.00           | 7,362.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,686.5                     | 0.00               | 0.00           | 7,449.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| UPPER GALLUP                |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 7,700.0                     | 0.00               | 0.00           | 7,462.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,800.0                     | 0.00               | 0.00           | 7,562.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 7,900.0                     | 0.00               | 0.00           | 7,662.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,000.0                     | 0.00               | 0.00           | 7,762.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,100.0                     | 0.00               | 0.00           | 7,862.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,200.0                     | 0.00               | 0.00           | 7,962.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,300.0                     | 0.00               | 0.00           | 8,062.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,400.0                     | 0.00               | 0.00           | 8,162.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,486.5                     | 0.00               | 0.00           | 8,249.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| GREENHORN                   |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,500.0                     | 0.00               | 0.00           | 8,262.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,544.5                     | 0.00               | 0.00           | 8,307.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| GRANEROS                    |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,600.0                     | 0.00               | 0.00           | 8,362.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,604.5                     | 0.00               | 0.00           | 8,367.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| TWO WELLS - PAGUATE         |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,696.5                     | 0.00               | 0.00           | 8,459.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| UPPER CUBERO                |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,700.0                     | 0.00               | 0.00           | 8,462.5                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 8,734.5                     | 0.00               | 0.00           | 8,497.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| LOWER CUBERO                |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,764.5                     | 0.00               | 0.00           | 8,527.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| OAK CANYON                  |                    |                |                             |                 |                 |                               |                               |                              |                             |
| 8,797.5                     | 0.00               | 0.00           | 8,560.0                     | 534.4           | 1,129.0         | 1,249.1                       | 0.00                          | 0.00                         | 0.00                        |
| 4 1/2" PRODUCTION CASING    |                    |                |                             |                 |                 |                               |                               |                              |                             |

### Targets

| Target Name<br>- hit/miss target<br>- Shape                    | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude         | Longitude         |
|----------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------------|-------------------|
| SJ 27-4 #156B VERTICAL<br>- plan hits target center<br>- Point | 0.00             | 0.00            | 4,600.0       | 534.4           | 1,129.0         | 2,022,229.73       | 687,209.06        | 36° 33' 21.367 N | 107° 11' 45.352 W |
| SJ 27-4 #156B PCP<br>- plan hits target center<br>- Point      | 0.00             | 0.00            | 8,560.0       | 534.4           | 1,129.0         | 2,022,229.70       | 687,209.04        | 36° 33' 21.367 N | 107° 11' 45.352 W |
| SJ 27-4 #156B ICP<br>- plan hits target center<br>- Point      | 0.00             | 0.00            | 6,100.0       | 534.4           | 1,129.0         | 2,022,229.70       | 687,209.04        | 36° 33' 21.367 N | 107° 11' 45.352 W |

# ConocoPhillips

## Planning Report

|           |                                        |                              |                                        |
|-----------|----------------------------------------|------------------------------|----------------------------------------|
| Database: | EDM Central Planning                   | Local Co-ordinate Reference: | Well SJ 27-4 #156B                     |
| Company:  | ConocoPhillips SJB                     | TVD Reference:               | WELL @ 7310.0usft (Original Well Elev) |
| Project:  | San Juan Basin - New Mexico West Wells | MD Reference:                | WELL @ 7310.0usft (Original Well Elev) |
| Site:     | San Juan 27 Wells                      | North Reference:             | True                                   |
| Well:     | SJ 27-4 #156B                          | Survey Calculation Method:   | Minimum Curvature                      |
| Wellbore: | Wellbore #1                            |                              |                                        |
| Design:   | Design #1                              |                              |                                        |

### Casing Points

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Name                     | Casing<br>Diameter<br>(") | Hole<br>Diameter<br>(") |
|-----------------------------|-----------------------------|--------------------------|---------------------------|-------------------------|
| 6,337.5                     | 6,100.0                     | 7" INTERMEDIATE CASING   | 7                         | 8-3/4                   |
| 8,797.5                     | 8,560.0                     | 4 1/2" PRODUCTION CASING | 4-1/2                     | 6-1/4                   |

### Formations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Name                 | Lithology | Dip<br>(°) | Dip<br>Direction<br>(°) |
|-----------------------------|-----------------------------|----------------------|-----------|------------|-------------------------|
| 8,486.5                     | 8,249.0                     | GREENHORN            |           | 0.00       |                         |
| 6,067.5                     | 5,830.0                     | MASSIVE CLIFF HOUSE  |           | 0.00       |                         |
| 7,686.5                     | 7,449.0                     | UPPER GALLUP         |           | 0.00       |                         |
| 4,350.2                     | 4,118.0                     | PICTURED CLIFFS      |           | 0.00       |                         |
| 3,926.5                     | 3,722.0                     | KIRTLAND             |           | 0.00       |                         |
| 8,734.5                     | 8,497.0                     | LOWER CUBERO         |           | 0.00       |                         |
| 2,482.3                     | 2,405.0                     | NACIMIENTO           |           | 0.00       |                         |
| 7,047.5                     | 6,810.0                     | MANCOS               |           | 0.00       |                         |
| 8,544.5                     | 8,307.0                     | GRANEROS             |           | 0.00       |                         |
| 3,994.5                     | 3,784.0                     | FRUITLAND            |           | 0.00       |                         |
| 6,466.5                     | 6,229.0                     | POINT LOOKOUT        |           | 0.00       |                         |
| 8,764.5                     | 8,527.0                     | OAK CANYON           |           | 0.00       |                         |
| 5,322.5                     | 5,085.0                     | CHACRA               |           | 0.00       |                         |
| 8,696.5                     | 8,459.0                     | UPPER CUBERO         |           | 0.00       |                         |
| 4,443.7                     | 4,209.0                     | LEWIS                |           | 0.00       |                         |
| 6,191.5                     | 5,954.0                     | MENEFEE              |           | 0.00       |                         |
| 8,604.5                     | 8,367.0                     | TWO WELLS - PAGUATE  |           | 0.00       |                         |
| 5,897.5                     | 5,660.0                     | UPPER CLIFF HOUSE    |           | 0.00       |                         |
| 3,751.1                     | 3,562.0                     | OJO ALAMO            |           | 0.00       |                         |
| 4,848.5                     | 4,611.0                     | HUERFANITO BENTONITE |           | 0.00       |                         |

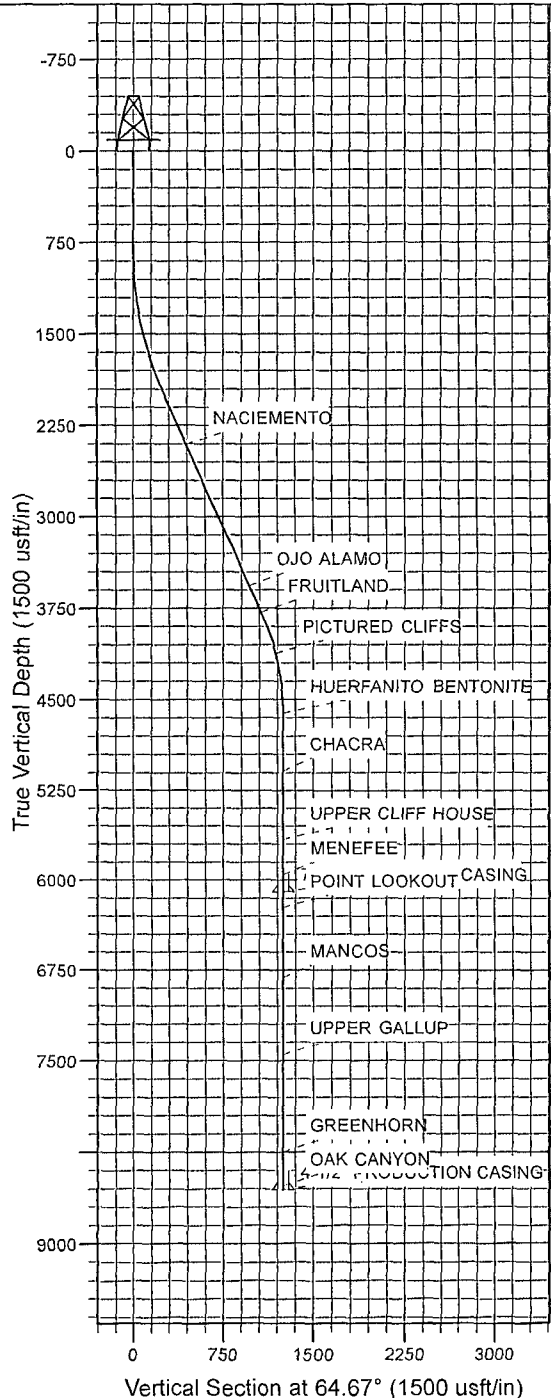
# REFERENCE INFORMATION

Project: San Juan Basin - New Mexico West V  
 Site: San Juan 27 Wells  
 Well: SJ 27-4 #156B  
 Wellbore: Wellbore #1  
 Design: Design #1

WELL @ 7310.0usft (Original Well Elev)  
 Ground Elevation 7295.0  
 Reference Lat: 36° 33' 16.083 N  
 Reference Long: 107° 11' 59.189 W

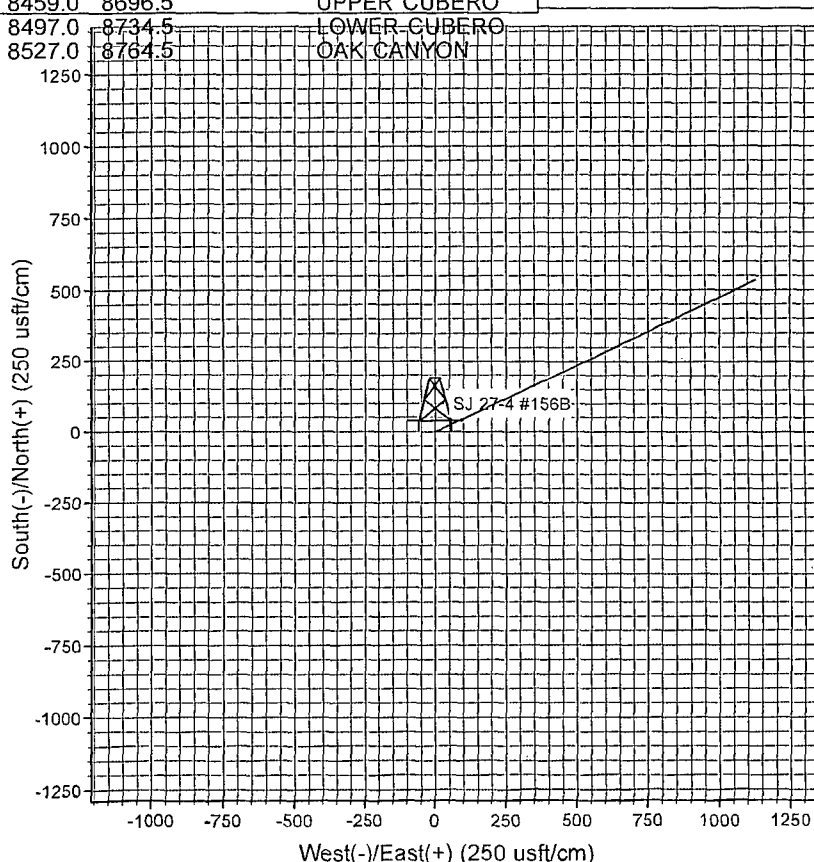
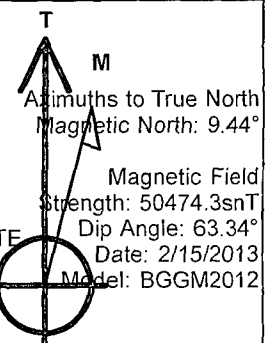
## SECTION DETAILS

| Sec | MD     | Inc   | Azi   | TVD    | +N/-S | +E/-W  | Dleg | TFace  | VSect  | Target                       |
|-----|--------|-------|-------|--------|-------|--------|------|--------|--------|------------------------------|
| 1   | 0.0    | 0.00  | 0.00  | 0.0    | 0.0   | 0.0    | 0.00 | 0.00   | 0.0    |                              |
| 2   | 800.0  | 0.00  | 0.00  | 800.0  | 0.0   | 0.0    | 0.00 | 0.00   | 0.0    |                              |
| 3   | 2011.7 | 24.23 | 64.67 | 1975.9 | 108.0 | 228.2  | 2.00 | 64.67  | 252.5  |                              |
| 4   | 4029.7 | 24.23 | 64.67 | 3816.1 | 462.4 | 976.9  | 0.00 | 0.00   | 1080.8 |                              |
| 5   | 4837.5 | 0.00  | 0.00  | 4600.0 | 534.4 | 1129.0 | 3.00 | 180.00 | 1249.1 | SJ 27-4 #156B VERTICAL POINT |
| 6   | 6337.5 | 0.00  | 0.00  | 6100.0 | 534.4 | 1129.0 | 0.00 | 0.00   | 1249.1 | SJ 27-4 #156B ICP            |
| 7   | 8797.5 | 0.00  | 0.00  | 8560.0 | 534.4 | 1129.0 | 0.00 | 0.00   | 1249.1 | SJ 27-4 #156B PCP            |



## FORMATION TOP DETAILS

| TVDPPath | MDPath | Formation            |
|----------|--------|----------------------|
| 2405.0   | 2482.3 | NACIEMENTO           |
| 3562.0   | 3751.1 | OJO ALAMO            |
| 3722.0   | 3926.5 | KIRTLAND             |
| 3784.0   | 3994.5 | FRUITLAND            |
| 4118.0   | 4350.2 | PICTURED CLIFFS      |
| 4209.0   | 4443.7 | LEWIS                |
| 4611.0   | 4848.5 | HUERFANITO BENTONITE |
| 5085.0   | 5322.5 | CHACRA               |
| 5660.0   | 5897.5 | UPPER CLIFF HOUSE    |
| 5830.0   | 6067.5 | MASSIVE CLIFF HOUSE  |
| 5954.0   | 6191.5 | MENEFEE              |
| 6229.0   | 6466.5 | POINT LOOKOUT        |
| 6810.0   | 7047.5 | MANCOS               |
| 7449.0   | 7686.5 | UPPER GALLUP         |
| 8249.0   | 8486.5 | GREENHORN            |
| 8307.0   | 8544.5 | GRANEROS             |
| 8367.0   | 8604.5 | TWO WELLS - PAGUATE  |
| 8459.0   | 8696.5 | UPPER CUBERO         |
| 8497.0   | 8734.5 | LOWER CUBERO         |
| 8527.0   | 8764.5 | OAK CANYON           |



# **BURLINGTON RESOURCES OIL & GAS COMPANY LP**

---

**SAN JUAN 27-4 UNIT #156B**

**1039' FSL, 1859' FEL**

**SECTION 24, T-27-N, R-4-W, N.M.P.M.,**

**RIO ARRIBA COUNTY, NEW MEXICO**

**NAD 83 LAT.: 36.554478028°N LONG.: 107.200372306°W**

**ELEV.: 7295 NAVD88**

**NO NEW ACCESS**

FROM THE INTERSECTION OF HWY. 550 AND HWY. 64 IN  
BLOOMFIELD, N.M.:

- GO EAST ON HWY. 64 FOR 60.4 MILES. TURN RIGHT ON STATE HWY. 537 (MILE POST 124.7) AND HEAD SOUTH.
- GO 27.0 MI. SOUTH ON HWY. 537. TURN RIGHT ONTO FOREST ROAD 314 AND HEAD NORTH INTO CEDAR CANYON.
- GO 3.4 MI. NORTH INTO FOREST, AND WESTERLY ALONG FOREST ROAD 314 INTO COTTONWOOD CANYON. TURN RIGHT AND CONTINUE NORTH ON FOREST ROAD 314.
- GO 1.4 MI. NORTHEAST ON FOREST ROAD 314. STAY STRAIGHT AND CONTINUE NORTHEAST, LEAVING FOREST ROAD 314.
- GO 0.7 MI. NORTHEAST, GOING THROUGH THE LOCKED GATE AND STAY ON MAIN ROAD ALONG RIDGE. TURN RIGHT (EAST) ONTO ACCESSROAD TO BROG SJ 27-4 156A LOCATION.
- GO 0.1 MI. EAST TO BROG SJ 27-4 156A LOCATION. NEW WELL STAKED AS TWIN EAST 50' FROM WELL HEAD.