

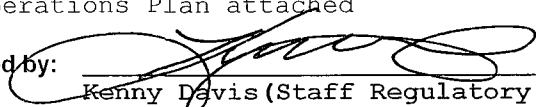
# RECEIVED

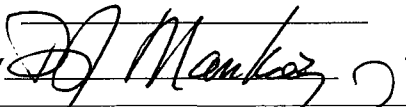
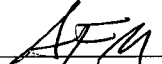
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB 26 2013

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Farmington Field Office  
Bureau of Land Management

|                                                                                                                                                                                                                                                                            |                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1a. Type of Work<br>DRILL                                                                                                                                                                                                                                                  | 5. Lease Number<br>SF-078498<br>Unit Reporting Number                                                                                                     |
| 1b. Type of Well<br>GAS                                                                                                                                                                                                                                                    | 6. If Indian, All. or Tribe                                                                                                                               |
| 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                                                                                            |                                                                                                                                                           |
| 2. Operator<br><br>ConocoPhillips<br>Company                                                                                                                                                                                                                               | 7. Unit Agreement Name<br><br>Nm NM-78413C<br>San Juan 28-7 Unit                                                                                          |
| 3. Address & Phone No. of Operator<br>PO Box 4289, Farmington, NM 87499<br><br>(505) 326-9700                                                                                                                                                                              | 8. Farm or Lease Name<br>San Juan 28-7 Unit<br>9. Well Number<br>193N                                                                                     |
| 4. Location of Well<br>Surface: Unit L (NW/SW), 1491' FSL & 1158' FWL<br>BHL : Unit K (NE/SW), 1590' FSL & 2330' FWL<br><br>Surface: Latitude: 36.629128° N (NAD83)<br>Longitude: 107.583887° W<br>Bottom Hole: Latitude: 36.629401° N (NAD83)<br>Longitude: 107.579893° W | 10. Field, Pool, Wildcat<br>Basin DK<br>11. Sec., Twn, Rge, Mer. (NMPM)<br>Surf: Sec. 28, T28N, R7W<br>BHL : Sec. 28, T28N, R7W<br><br>API # 30-039-31186 |
| 14. Distance in Miles from Nearest Town<br>34 from: Bloomfield, NM                                                                                                                                                                                                         | 12. County<br>Rio Arriba                                                                                                                                  |
|                                                                                                                                                                                                                                                                            | 13. State<br>NM                                                                                                                                           |
| 15. Distance from Proposed Location to Nearest Property or Lease Line<br>312.1                                                                                                                                                                                             |                                                                                                                                                           |
| 16. Acres in Lease<br>1,988.000                                                                                                                                                                                                                                            | 17. Acres Assigned to Well<br>W/2 320.00                                                                                                                  |
| 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease<br>91' from: San Juan 28-7 Unit 53 (MV well)                                                                                                                                |                                                                                                                                                           |
| 19. Proposed Depth<br>8455                                                                                                                                                                                                                                                 | 20. Rotary or Cable Tools<br>Rotary                                                                                                                       |
| 21. Elevations (DF, FT, GR, Etc.)<br>6674' 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 Technician)                                                                                                                        | 2/25/2013<br>Date                                                                                                                                         |

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY  TITLE  DATE 5/2/13

Archaeological Report attached  
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 or to any matter within its jurisdiction.  
Example Master Plan Type 3  
Bond Numbers ES-0048 & ES-0085  
This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4  
NMOCDA  
DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

Hold C104  
for Directional Survey  
and "As Drilled" plat

Hold C104  
for Directional Survey  
and "As Drilled" plat

PC

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

RECEIVED

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

Farmington Field Office  
Bureau of Land Management

FEB 26 2013

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                |                                                             |                                               |
|------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------|
| <sup>1</sup> API Number<br><b>30-039-31186</b> | <sup>2</sup> Pool Code<br><b>71599</b>                      | <sup>3</sup> Pool Name<br><b>BASIN DAKOTA</b> |
| <sup>4</sup> Property Code<br><b>31739</b>     | <sup>5</sup> Property Name<br><b>SAN JUAN 28-7 UNIT</b>     | <sup>6</sup> Well Number<br><b>193N</b>       |
| <sup>7</sup> OGRID No.<br><b>217817</b>        | <sup>8</sup> Operator Name<br><b>CONOCOPHILLIPS COMPANY</b> | <sup>9</sup> Elevation<br><b>6674</b>         |

<sup>10</sup> SURFACE LOCATION

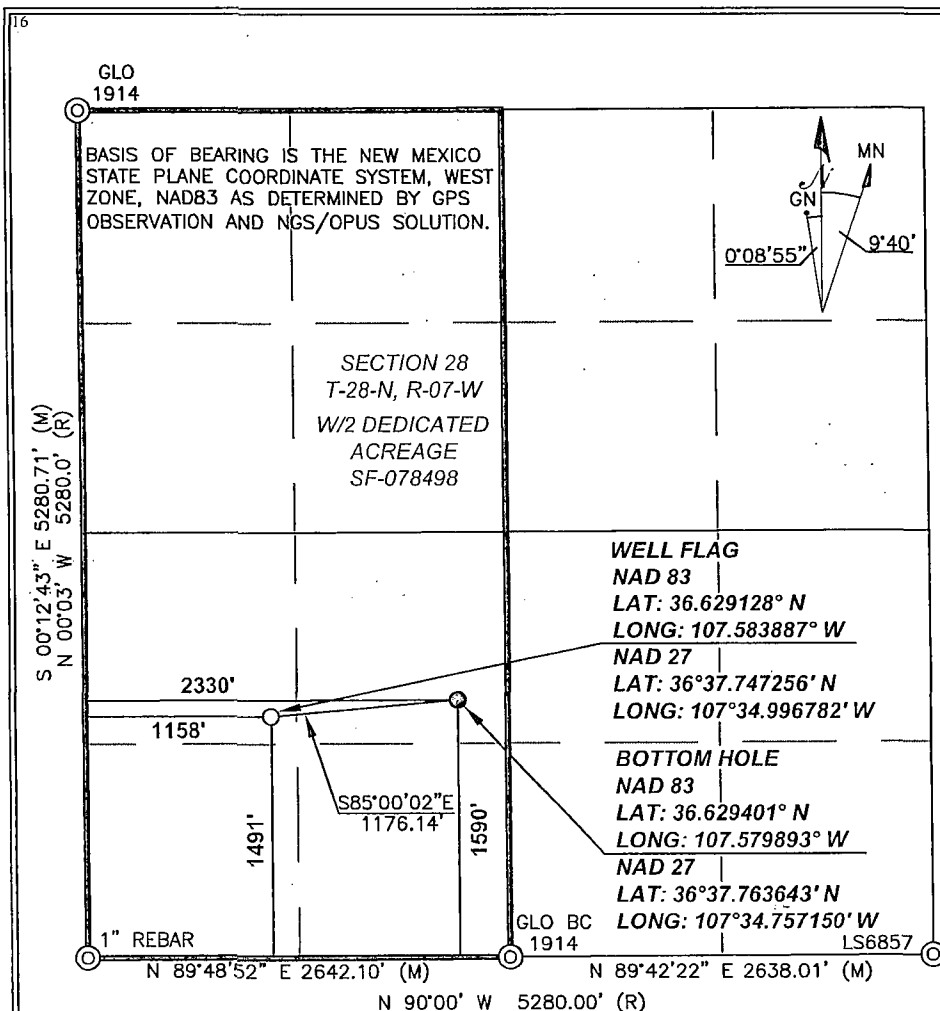
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| L             | 28      | 28-N     | 7-W   |         | 1491          | SOUTH            | 1158          | WEST           | RIO ARRIBA |

<sup>11</sup> 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     |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| K             | 28      | 28-N     | 7-W   |         | 1590          | SOUTH            | 2330          | WEST           | RIO ARRIBA |

|                                           |                               |                                  |                         |
|-------------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br>W/2(320) | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|-------------------------------------------|-------------------------------|----------------------------------|-------------------------|

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



<sup>17</sup> OPERATOR CERTIFICATION

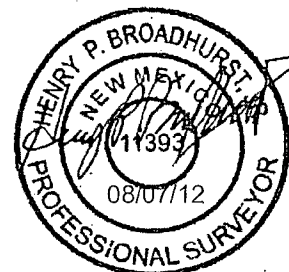
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this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

Signature *Marie E. Jaramillo* Date **11/9/12**  
Printed Name **Marie E. Jaramillo**  
Staff **REGulatory tech.**  
E-mail Address

<sup>18</sup> SURVEYOR CERTIFICATION

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

Date of Survey: **07/13/2012**



Certificate Number: NM 11393

# PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 193N

DEVELOPMENT

|                                                                    |                             |                             |         |                          |                    |                    |                                                                                                        |
|--------------------------------------------------------------------|-----------------------------|-----------------------------|---------|--------------------------|--------------------|--------------------|--------------------------------------------------------------------------------------------------------|
| Lease:                                                             |                             | AFE #: WAN.CDR.1184         |         |                          |                    | AFE \$:            |                                                                                                        |
| Field Name: SAN JUAN                                               |                             | Rig: Aztec Rig 920          |         | State: NM                | County: RIO ARRIBA |                    | API #:                                                                                                 |
| 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) |                             |         |                          |                    |                    |                                                                                                        |
| <b>Location: Surface</b> Datum Code: NAD 27 <b>Directional</b>     |                             |                             |         |                          |                    |                    |                                                                                                        |
| Latitude: 36.629120                                                | Longitude: -107.583279      | X:                          | Y:      | Section: 28              | Range: 007W        |                    |                                                                                                        |
| Footage X: 1158 FWL                                                | Footage Y: 1491 FSL         | Elevation: 6674             | (FT)    | Township: 028N           |                    |                    |                                                                                                        |
| Tolerance:                                                         |                             |                             |         |                          |                    |                    |                                                                                                        |
| <b>Location: Bottom Hole</b> Datum Code: NAD 27 <b>Directional</b> |                             |                             |         |                          |                    |                    |                                                                                                        |
| Latitude: 36.629393                                                | Longitude: -107.579285      | X:                          | Y:      | Section: 28              | Range: 007W        |                    |                                                                                                        |
| Footage X: 2330 FWL                                                | Footage Y: 1590 FSL         | Elevation:                  | (FT)    | Township: 028N           |                    |                    |                                                                                                        |
| Tolerance:                                                         |                             |                             |         |                          |                    |                    |                                                                                                        |
| Location Type: Year Round                                          |                             | Start Date (Est.): 1/1/2014 |         | Completion Date:         |                    | Date In Operation: |                                                                                                        |
| Formation Data: Assume KB = 6689 Units = FT                        |                             |                             |         |                          |                    |                    |                                                                                                        |
| Formation Call & Casing Points                                     | Depth (TVD in Ft)           | SS (Ft)                     | MD (Ft) | Depletion (Yes/No)       | BHP (PSIG)         | BHT                | Remarks                                                                                                |
| SAN JOSE                                                           | 15                          | 6674                        |         | <input type="checkbox"/> |                    |                    | Ground water 140' tvd in SJ 28-7 193F. lost circulation ( 400 ) in SJ 28-7 215F 27n7w4.                |
| Surface Casing                                                     | 200                         | 6489                        |         | <input type="checkbox"/> |                    | 46                 | 12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 94 cuft. Circulate cement to surface. |
| NACIMIENTO                                                         | 942                         | 5747                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| OJO ALAMO                                                          | 2421                        | 4268                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| KIRTLAND                                                           | 2535                        | 4154                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| FRUITLAND                                                          | 2883                        | 3806                        |         | <input type="checkbox"/> |                    |                    | Possible Gas                                                                                           |
| PICTURED CLIFFS                                                    | 3296                        | 3393                        |         | <input type="checkbox"/> | 197                | 107                |                                                                                                        |
| LEWIS                                                              | 3427                        | 3262                        |         | <input type="checkbox"/> |                    |                    | Lost circulation (200) in SJ 28-7 257F 28n7w19.                                                        |
| Intermediate Casing                                                | 3575                        | 3114                        |         | <input type="checkbox"/> |                    |                    | 8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 795 cuft. Circulate cement to surface.          |
| HUERFANITO BENTONITE                                               | 3838                        | 2851                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| CHACRA                                                             | 4223                        | 2466                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| UPPER CLIFF HOUSE                                                  | 4826                        | 1863                        |         | <input type="checkbox"/> |                    |                    | Gas                                                                                                    |
| MASSIVE CLIFF HOUSE                                                | 4914                        | 1775                        |         | <input type="checkbox"/> | 365                | 139                | Gas - Est top MV perf 4926' tvd ( ~12' below T/CLFH ).                                                 |
| MENEFEE                                                            | 5047                        | 1642                        |         | <input type="checkbox"/> |                    |                    | Gas                                                                                                    |
| POINT LOOKOUT                                                      | 5528                        | 1161                        |         | <input type="checkbox"/> |                    |                    | Gas - Est bot MV perf 5878' tvd ( ~350' below T/PNLK ).                                                |
| MANCOS                                                             | 5916                        | 773                         |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| UPPER GALLUP                                                       | 6690                        | -1                          |         | <input type="checkbox"/> |                    |                    | Quit dusting, pressure increase from 550 to 800 psi in SJ 28-7 190G                                    |
| GREENHORN                                                          | 7442                        | -753                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| GRANEROS                                                           | 7500                        | -811                        |         | <input type="checkbox"/> |                    |                    |                                                                                                        |
| TWO WELLS                                                          | 7543                        | -854                        |         | <input type="checkbox"/> | 2403               | 191                | Gas - Est top DK perf 7553' tvd ( ~10' below T/TWLS ).                                                 |

# PROJECT-PROPOSAL -- New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 193N

DEVELOPMENT

|              |      |       |                          |                                                                                                                                                        |
|--------------|------|-------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| PAGUATE      | 7568 | -879  | <input type="checkbox"/> |                                                                                                                                                        |
| UPPER CUBERO | 7661 | -972  | <input type="checkbox"/> | Gas                                                                                                                                                    |
| LOWER CUBERO | 7681 | -992  | <input type="checkbox"/> | Gas - Est bot DK perf 7737' tvd ( ~56' below T/CBRL ).                                                                                                 |
| ENCINAL      | 7740 | -1051 | <input type="checkbox"/> | Gas - from the log, lower section could be wet. Wet in SJ 29-7 106 during compl.                                                                       |
| BURRO CANYON | 7787 | -1098 | <input type="checkbox"/> | Look wet on the log.                                                                                                                                   |
| MORRISON     | 7879 | -1190 | <input type="checkbox"/> | 198 Look wet on the log.                                                                                                                               |
| Total Depth  | 8455 | -1766 | <input type="checkbox"/> | 195 6-1/4" hole, 4-1/2" 10.5/11.6 ppf, L-80, BTC/LTC casing. Cement w/ 663 cuft. Circulate cement a minimum of 100' inside the previous casing string. |

## Reference Wells:

| Reference Type | Well Name | Comments |
|----------------|-----------|----------|
|----------------|-----------|----------|

## 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 Gallup 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

|                  |                                        |                                     |                                      |
|------------------|----------------------------------------|-------------------------------------|--------------------------------------|
| <b>Database:</b> | EDM Central Planning                   | <b>Local Co-ordinate Reference:</b> | Well SJ28-7 #193N                    |
| <b>Company:</b>  | ConocoPhillips SJBU                    | <b>TVD Reference:</b>               | KB @ 6689.0usft (Original Well Elev) |
| <b>Project:</b>  | San Juan Basin - New Mexico West Wells | <b>MD Reference:</b>                | KB @ 6689.0usft (Original Well Elev) |
| <b>Site:</b>     | San Juan 28 Wells                      | <b>North Reference:</b>             | Grid                                 |
| <b>Well:</b>     | SJ 28-7 #193N                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Wellbore:</b> | Wellbore #1                            |                                     |                                      |
| <b>Design:</b>   | Design #1                              |                                     |                                      |

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

|                       |           |                   |                  |                   |                   |
|-----------------------|-----------|-------------------|------------------|-------------------|-------------------|
| Site                  |           | San Juan 28 Wells |                  |                   |                   |
| Site Position:        |           | Northing:         | 2,030,915.03usft | Latitude:         | 36° 34' 52.543 N  |
| From:                 | Lat/Long  | Easting:          | 569,619.07usft   | Longitude:        | 107° 35' 46.386 W |
| Position Uncertainty: | 15.0 usft | Slot Radius:      | 13-3/16"         | Grid Convergence: | 0.14 °            |

|                      |               |          |                     |                   |               |                   |
|----------------------|---------------|----------|---------------------|-------------------|---------------|-------------------|
| Well                 | SJ 28-7 #193N |          |                     |                   |               |                   |
| Well Position        | +N/-S         | 0.0 usft | Northing:           | 2,048,347.14 usft | Latitude:     | 36° 37' 44.835 N  |
|                      | +E/-W         | 0.0 usft | Easting:            | 573,372.64 usft   | Longitude:    | 107° 34' 59.807 W |
| Position Uncertainty |               | 2.0 usft | Wellhead Elevation: | usft              | Ground Level: | 6,674.0usft       |

|                 |             |  |  |  |
|-----------------|-------------|--|--|--|
| <b>Wellbore</b> | Wellbore #1 |  |  |  |
|-----------------|-------------|--|--|--|

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|------------|-------------|-----------------|---------------|---------------------|
|           | BGGM2012   | 2/18/2013   | 9.60            | 63.34         | 50,472              |

|               |           |  |  |  |
|---------------|-----------|--|--|--|
| <b>Design</b> | Design #1 |  |  |  |
|---------------|-----------|--|--|--|

|                     |               |           |                      |     |
|---------------------|---------------|-----------|----------------------|-----|
| <b>Audit Notes:</b> |               |           |                      |     |
| <b>Version:</b>     | <b>Phase:</b> | PROTOTYPE | <b>Tie On Depth:</b> | 0.0 |

| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
|-------------------|-------------------------|--------------|--------------|---------------|
|                   | 0.0                     | 0.0          | 0.0          | 85.00         |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |        |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|--------|
| 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    |        |
| 310.0                 | 0.00            | 0.00        | 310.0                 | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 932.9                 | 24.92           | 85.00       | 913.4                 | 11.6         | 132.8        | 4.00                    | 4.00                   | 0.00                  | 85.00   |        |
| 3,091.9               | 24.92           | 85.00       | 2,871.6               | 90.9         | 1,038.9      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 3,714.8               | 0.00            | 0.00        | 3,475.0               | 102.5        | 1,171.7      | 4.00                    | -4.00                  | 0.00                  | 180.00  |        |
| 3,814.8               | 0.00            | 0.00        | 3,575.0               | 102.5        | 1,171.7      | 0.00                    | 0.00                   | 0.00                  | 0.00    | ICP    |
| 8,694.8               | 0.00            | 0.00        | 8,455.0               | 102.5        | 1,171.7      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |

# ConocoPhillips

## Planning Report

|           |                                        |                              |                                      |
|-----------|----------------------------------------|------------------------------|--------------------------------------|
| Database: | EDM Central Planning                   | Local Co-ordinate Reference: | Well SJ 28-7 #193N                   |
| Company:  | ConocoPhillips SJBU                    | TVD Reference:               | KB @ 6689.0usft (Original Well Elev) |
| Project:  | San Juan Basin - New Mexico West Wells | MD Reference:                | KB @ 6689.0usft (Original Well Elev) |
| Site:     | San Juan 28 Wells                      | North Reference:             | Grid                                 |
| Well:     | SJ 28-7 #193N                          | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Wellbore #1                            |                              |                                      |
| Design:   | Design #1                              |                              |                                      |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/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                  |
| 310.0                 | 0.00            | 0.00        | 310.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 3.60            | 85.00       | 399.9                 | 0.2          | 2.8          | 2.8                     | 4.00                    | 4.00                   | 0.00                  |
| 500.0                 | 7.60            | 85.00       | 499.4                 | 1.1          | 12.5         | 12.6                    | 4.00                    | 4.00                   | 0.00                  |
| 600.0                 | 11.60           | 85.00       | 598.0                 | 2.5          | 29.1         | 29.3                    | 4.00                    | 4.00                   | 0.00                  |
| 700.0                 | 15.60           | 85.00       | 695.2                 | 4.6          | 52.6         | 52.8                    | 4.00                    | 4.00                   | 0.00                  |
| 800.0                 | 19.60           | 85.00       | 790.5                 | 7.2          | 82.7         | 83.0                    | 4.00                    | 4.00                   | 0.00                  |
| 900.0                 | 23.60           | 85.00       | 883.5                 | 10.4         | 119.3        | 119.8                   | 4.00                    | 4.00                   | 0.00                  |
| 932.9                 | 24.92           | 85.00       | 913.4                 | 11.6         | 132.8        | 133.3                   | 4.00                    | 4.00                   | 0.00                  |
| 1,000.0               | 24.92           | 85.00       | 974.3                 | 14.1         | 161.0        | 161.6                   | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 24.92           | 85.00       | 1,065.0               | 17.8         | 202.9        | 203.7                   | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 24.92           | 85.00       | 1,155.7               | 21.4         | 244.9        | 245.8                   | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 24.92           | 85.00       | 1,246.4               | 25.1         | 286.9        | 288.0                   | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 24.92           | 85.00       | 1,337.1               | 28.8         | 328.8        | 330.1                   | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0               | 24.92           | 85.00       | 1,427.8               | 32.4         | 370.8        | 372.2                   | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0               | 24.92           | 85.00       | 1,518.5               | 36.1         | 412.8        | 414.4                   | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0               | 24.92           | 85.00       | 1,609.2               | 39.8         | 454.8        | 456.5                   | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0               | 24.92           | 85.00       | 1,699.8               | 43.5         | 496.7        | 498.6                   | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0               | 24.92           | 85.00       | 1,790.5               | 47.1         | 538.7        | 540.7                   | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0               | 24.92           | 85.00       | 1,881.2               | 50.8         | 580.7        | 582.9                   | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0               | 24.92           | 85.00       | 1,971.9               | 54.5         | 622.6        | 625.0                   | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0               | 24.92           | 85.00       | 2,062.6               | 58.1         | 664.6        | 667.1                   | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0               | 24.92           | 85.00       | 2,153.3               | 61.8         | 706.6        | 709.3                   | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0               | 24.92           | 85.00       | 2,244.0               | 65.5         | 748.5        | 751.4                   | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0               | 24.92           | 85.00       | 2,334.7               | 69.2         | 790.5        | 793.5                   | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0               | 24.92           | 85.00       | 2,425.4               | 72.8         | 832.5        | 835.6                   | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0               | 24.92           | 85.00       | 2,516.1               | 76.5         | 874.4        | 877.8                   | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0               | 24.92           | 85.00       | 2,606.8               | 80.2         | 916.4        | 919.9                   | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0               | 24.92           | 85.00       | 2,697.5               | 83.8         | 958.4        | 962.0                   | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0               | 24.92           | 85.00       | 2,788.2               | 87.5         | 1,000.3      | 1,004.2                 | 0.00                    | 0.00                   | 0.00                  |
| 3,091.9               | 24.92           | 85.00       | 2,871.6               | 90.9         | 1,038.9      | 1,042.9                 | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0               | 24.59           | 85.00       | 2,878.9               | 91.2         | 1,042.3      | 1,046.3                 | 4.00                    | -4.00                  | 0.00                  |
| 3,200.0               | 20.59           | 85.00       | 2,971.2               | 94.5         | 1,080.6      | 1,084.7                 | 4.00                    | -4.00                  | 0.00                  |
| 3,300.0               | 16.59           | 85.00       | 3,065.9               | 97.3         | 1,112.3      | 1,116.6                 | 4.00                    | -4.00                  | 0.00                  |
| 3,400.0               | 12.59           | 85.00       | 3,162.7               | 99.5         | 1,137.4      | 1,141.8                 | 4.00                    | -4.00                  | 0.00                  |
| 3,500.0               | 8.59            | 85.00       | 3,261.0               | 101.1        | 1,155.7      | 1,160.1                 | 4.00                    | -4.00                  | 0.00                  |
| 3,600.0               | 4.59            | 85.00       | 3,360.3               | 102.1        | 1,167.2      | 1,171.6                 | 4.00                    | -4.00                  | 0.00                  |
| 3,700.0               | 0.59            | 85.00       | 3,460.2               | 102.5        | 1,171.7      | 1,176.1                 | 4.00                    | -4.00                  | 0.00                  |
| 3,714.8               | 0.00            | 0.00        | 3,475.0               | 102.5        | 1,171.7      | 1,176.2                 | 4.00                    | -4.00                  | 0.00                  |
| 3,800.0               | 0.00            | 0.00        | 3,560.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 3,814.8               | 0.00            | 0.00        | 3,575.0               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0               | 0.00            | 0.00        | 3,660.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0               | 0.00            | 0.00        | 3,760.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0               | 0.00            | 0.00        | 3,860.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 0.00            | 0.00        | 3,960.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 0.00            | 0.00        | 4,060.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 0.00            | 0.00        | 4,160.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 0.00            | 0.00        | 4,260.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 0.00            | 0.00        | 4,360.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 0.00            | 0.00        | 4,460.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 0.00            | 0.00        | 4,560.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |

# ConocoPhillips

## Planning Report

|                  |                                       |                                     |                                      |
|------------------|---------------------------------------|-------------------------------------|--------------------------------------|
| <b>Database:</b> | EDM Central Planning                  | <b>Local Co-ordinate Reference:</b> | Well SJ 28-7 #193N                   |
| <b>Company:</b>  | ConocoPhillips SJB                    | <b>TVD Reference:</b>               | KB @ 6689.0usft (Original Well Elev) |
| <b>Project:</b>  | San Juan Basin- New Mexico West Wells | <b>MD Reference:</b>                | KB @ 6689.0usft (Original Well Elev) |
| <b>Site:</b>     | San Juan 28 Wells                     | <b>North Reference:</b>             | Grid                                 |
| <b>Well:</b>     | SJ 28-7 #193N                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Wellbore:</b> | Wellbore #1                           |                                     |                                      |
| <b>Design:</b>   | Design #1                             |                                     |                                      |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,900.0               | 0.00            | 0.00        | 4,660.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 0.00            | 0.00        | 4,760.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 0.00            | 0.00        | 4,860.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 0.00            | 0.00        | 4,960.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0               | 0.00            | 0.00        | 5,060.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0               | 0.00            | 0.00        | 5,160.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0               | 0.00            | 0.00        | 5,260.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0               | 0.00            | 0.00        | 5,360.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0               | 0.00            | 0.00        | 5,460.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0               | 0.00            | 0.00        | 5,560.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0               | 0.00            | 0.00        | 5,660.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0               | 0.00            | 0.00        | 5,760.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0               | 0.00            | 0.00        | 5,860.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0               | 0.00            | 0.00        | 5,960.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0               | 0.00            | 0.00        | 6,060.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0               | 0.00            | 0.00        | 6,160.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0               | 0.00            | 0.00        | 6,260.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0               | 0.00            | 0.00        | 6,360.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0               | 0.00            | 0.00        | 6,460.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0               | 0.00            | 0.00        | 6,560.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0               | 0.00            | 0.00        | 6,660.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0               | 0.00            | 0.00        | 6,760.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0               | 0.00            | 0.00        | 6,860.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0               | 0.00            | 0.00        | 6,960.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0               | 0.00            | 0.00        | 7,060.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0               | 0.00            | 0.00        | 7,160.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0               | 0.00            | 0.00        | 7,260.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0               | 0.00            | 0.00        | 7,360.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0               | 0.00            | 0.00        | 7,460.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 0.00            | 0.00        | 7,560.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0               | 0.00            | 0.00        | 7,660.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0               | 0.00            | 0.00        | 7,760.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0               | 0.00            | 0.00        | 7,860.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0               | 0.00            | 0.00        | 7,960.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0               | 0.00            | 0.00        | 8,060.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0               | 0.00            | 0.00        | 8,160.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0               | 0.00            | 0.00        | 8,260.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0               | 0.00            | 0.00        | 8,360.2               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |
| 8,694.8               | 0.00            | 0.00        | 8,455.0               | 102.5        | 1,171.7      | 1,176.2                 | 0.00                    | 0.00                   | 0.00                  |

| Targets                   |               |              |            |              |              |                 |                |                  |                   |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| Target Name               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
| - hit/miss target         |               |              |            |              |              |                 |                |                  |                   |
| - Shape                   |               |              |            |              |              |                 |                |                  |                   |
| ICP                       | 0.00          | 0.00         | 3,575.0    | 102.5        | 1,171.7      | 2,048,449.64    | 574,544.29     | 36° 37' 45.819 N | 107° 34' 45.429 W |
| - plan hits target center |               |              |            |              |              |                 |                |                  |                   |
| - Point                   |               |              |            |              |              |                 |                |                  |                   |

# REFERENCE INFORMATION

KB @ 6689.0usft (Original Well Elev)  
Ground Elevation 6674.0  
Reference Lat: 36° 37' 44.835 N  
Reference Long: 107° 34' 59.807 W

Project: San Juan Basin - New Mexico West

Site: San Juan 28 Wells

Well: SJ 28-7 #193N

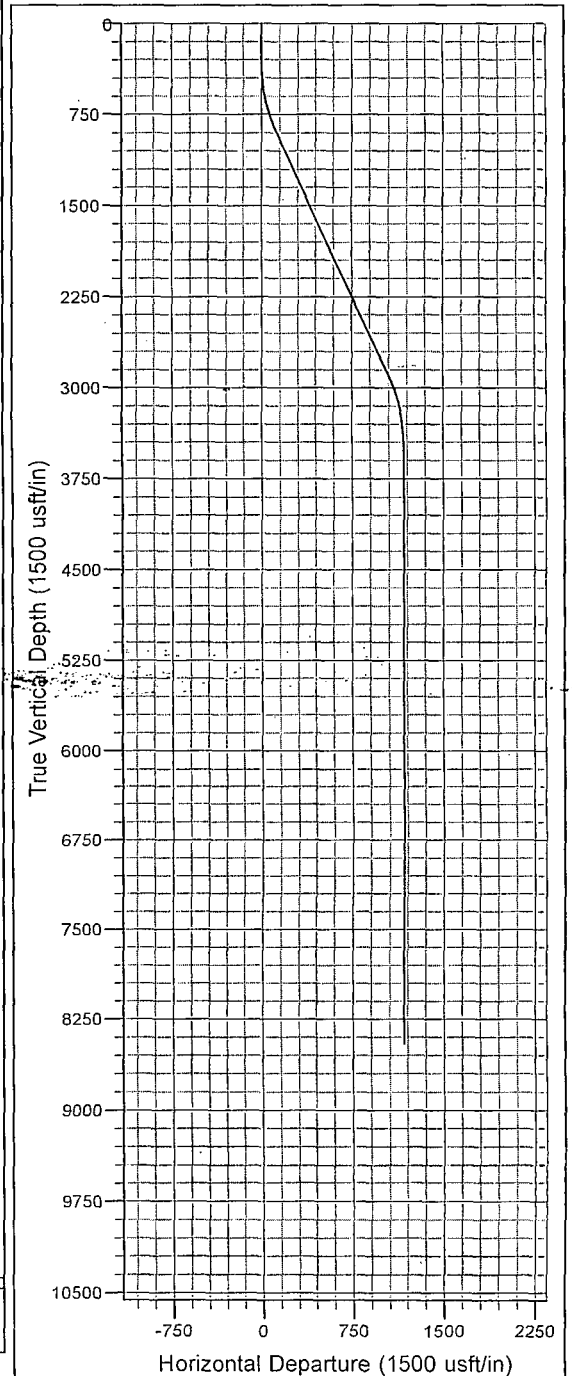
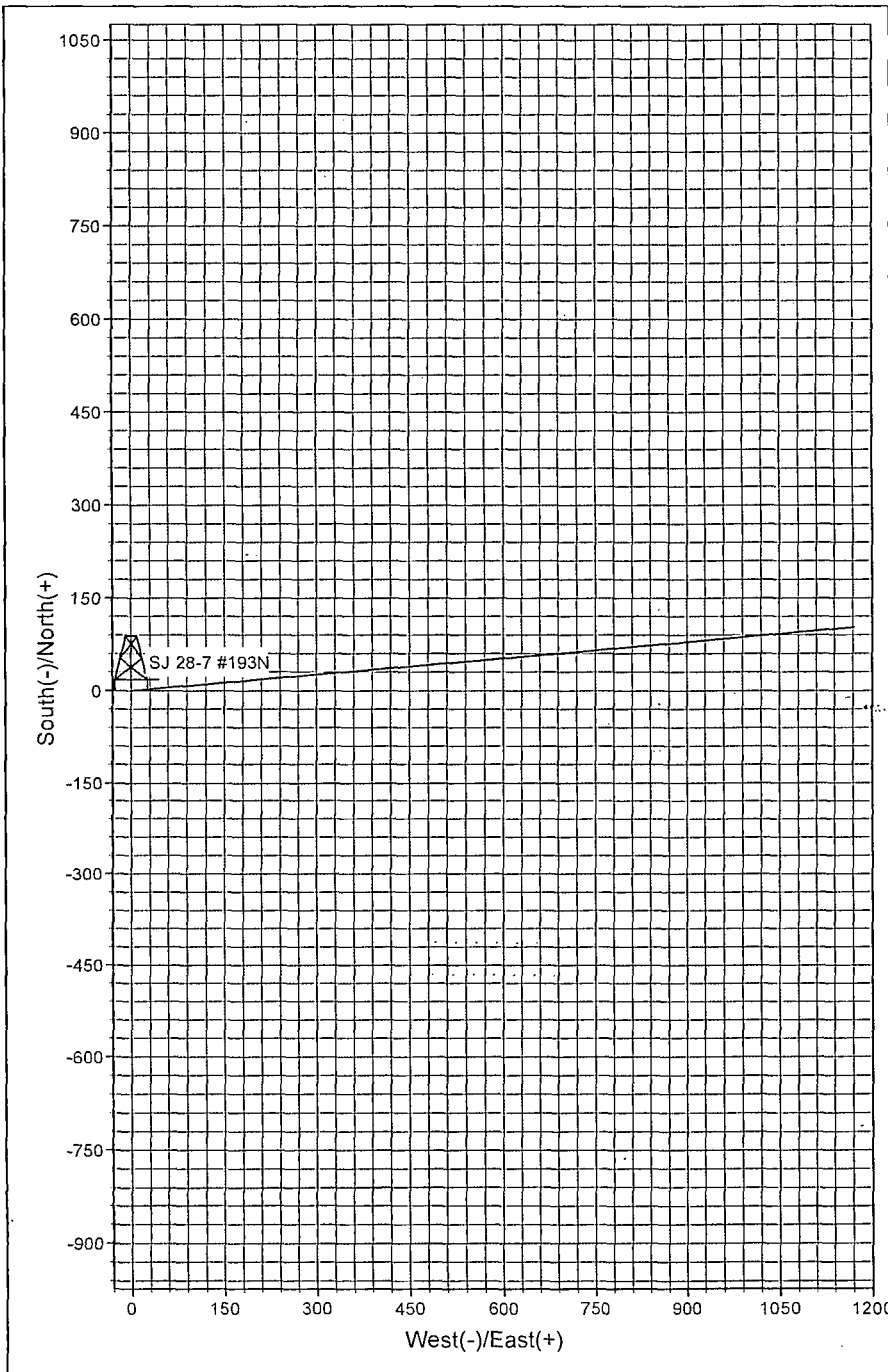
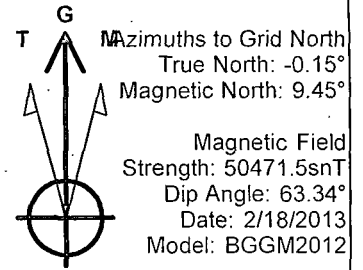
Wellbore: Wellbore #1

Design: Design #1

**ConocoPhillips**

## 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   | 310.0  | 0.00  | 0.00  | 310.0  | 0.0   | 0.0    | 0.00 | 0.00   | 0.0    |        |
| 3   | 932.9  | 24.92 | 85.00 | 913.4  | 11.6  | 132.8  | 4.00 | 85.00  | 133.3  |        |
| 4   | 3091.9 | 24.92 | 85.00 | 2871.6 | 90.9  | 1038.9 | 0.00 | 0.00   | 1042.9 |        |
| 5   | 3714.8 | 0.00  | 0.00  | 3475.0 | 102.5 | 1171.7 | 4.00 | 180.00 | 1176.2 |        |
| 6   | 3814.8 | 0.00  | 0.00  | 3575.0 | 102.5 | 1171.7 | 0.00 | 0.00   | 1176.2 | ICP    |
| 7   | 8694.8 | 0.00  | 0.00  | 8455.0 | 102.5 | 1171.7 | 0.00 | 0.00   | 1176.2 |        |





**CONOCOPHILLIPS COMPANY**

**SAN JUAN 28-7 UNIT #193N**

**1491' FSL, 1158' FWL**

**SECTION 28, T-28-N, R-7-W, N.M.P.M.,**

**RIO ARRIBA COUNTY, NEW MEXICO**

**NAD 83 LAT.: 36.629128° N LONG.: 107.583887° W**

**NAD 83 LAT.: 36°37'44.8637" N LONG.: 107°35'01.9956" W**

**ELEV.: 6674 NAVD88**

**NO NEW ACCESS**

**FROM BLOOMFIELD, NEW MEXICO AT THE INTERSECTION OF US HWY. 64  
AND US HWY 550:**

- **GO 10.6 MILES EAST ON US HWY. 64 THROUGH BLANCO, N.M.  
AND ACROSS THE SAN JUAN RIVER TO THE INTERSECTION OF US  
HWY. 64 AND C.R. 4450 (LARGO CANYON). TURN RIGHT AND  
HEAD SOUTHEAST ON C.R. 4450 ALONG THE NORTH SIDE OF  
LARGO WASH.**
- **GO 9.5 MILES SOUTHEAST TURN RIGHT TO "9 MILE BRIDGE" WASH  
CROSSING.**
- **GO 4.3 MILES SOUTHEAST FROM "9 MILE BRIDGE" ALONG THE  
SOUTH SIDE OF CARRIZO WASH. STAY RIGHT ON MAIN ROAD  
INTO "STOVE CANYON" AND BEGIN CLIMBING UP GOULD PASS.**
- **GO 3.3 MILES SOUTHERLY WINDING UP GOULD PASS AND  
TOPPING OUT ON ENCINADA MESA IN THE NORTHEAST PART OF  
SECTION 7, T-27-N, R-7-W. HEAD EASTERLY ON MAIN ROAD.**
- **GO 2.2 MILES FROM THE TOP OF GOULD PASS, TURN LEFT.**
- **GO 4.0 MILES NORTH ALONG RIDGE TOP TO NEW WELL TWINED  
HERE WITH THE SJ 28-7 #53.**