6 1/4" Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
March 4, 2004

| | |
|---|---|
| WELL API NO. 30-039-30255 | |
| 5. Indicate Type of Lease STATE ☐ FEE ☒ | |
| 6. State Oil & Gas Lease No. | |
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) | 7. Lease Name or Unit Agreement Name: San Juan 30-5 Unit |
| 1. Type of Well: Oil Well ☐ Gas Well X☐ Other | 8. Well Number #78N |
| 2. Name of Operator **ConocoPhillips Company** | 9. OGRID Number 217817 |
| 3. Address of Operator **P.O. Box 4289, Farmington, NM 87499-4289** | 10. Pool name or Wildcat Blanco Mesa Verde/Basin Dakota |
| 4. Well Location: Unit Letter O : 675 feet from the South line and 2075 feet from the East line; Section 7 Township 30N Range R5W NMPM Rio Arriba County | |
| 11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6244' GL | |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|---|---|---|---|
| PERFORM REMEDIAL WORK ☐ | PLUG AND ABANDON ☐ | REMEDIAL WORK ☐ | ALTERING CASING ☐ |
| TEMPORARILY ABANDON ☐ | CHANGE PLANS ☒ | COMMENCE DRILLING OPNS. ☐ | PLUG AND ABANDONMENT ☐ |
| PULL OR ALTER CASING ☐ | MULTIPLE COMPLETION ☐ | CASING TEST AND CEMENT JOB ☐ | RCVD OCT 4 '07 OIL CONS. DIV. DIST. 3 |
| OTHER ☐ | | OTHER: | ☐ |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**ConocoPhillips is requesting the following change on the well design:**

The intermediate hole was to be drilled with an 8 ¾" bit, we are requesting to drill with a bi-center bit which will increase the hole diameter to 9 7/8".

The APD was approved for TD to be at 7755' we are asking that the new TD be @ 7781'. Cement volumes will be adjusted accordingly: please see attached.

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

SIGNATURE Tracey N Monroe TITLE Regulatory Technician DATE 10/307

Type or print name Tracey N. Monroe E-mail address: Tracey.N.Monroe@conocophillips.com Telephone No. 505-326-9752

(This space for State use)

APPPROVED BY H. Villanueva TITLE Deputy Oil & Gas Inspector, District #3 DATE OCT 04 2007

Conditions of approval, if any:

# CONOCOPHILLIPS

# San Juan Division - Drilling Program

| | | | | | |
|---|---|---|---|---|---|
| **Well Name:** | SJ 30-5 78N | | | **Safety:** | |
| **Formation:** | MV/DK New Drill | | | AFE# | WAN CNV 7142 |
| **Location:** | T - 30 N | R - 5 W | Sec.: 7 | Network # | 10171757 |
| **Footage:** | 675' FSL & | 2075' FEL | | | |
| **County:** | Rio Arriba | State: | New Mexico | | |
| **Rig:** | H&P 282 | API #: | 30-039-30255 | | |
| **APD/BLM** | 04/25/07 | Lease # OCD | | AFE | $650,744 |
| **GL:** | 6,244' | OCD Phone #: 334-6178 | | Est Cost/ft. | $82.50 |
| **KB:** | 6,260' | BLM Phone #: 599-8908 | | Like Kind Cost | $641,933 |
| **TD:** | 7,781' | EST DAYS: 9 | | | |

**In case of Major Emergency Call 911**

**Give the following information to Operator:**

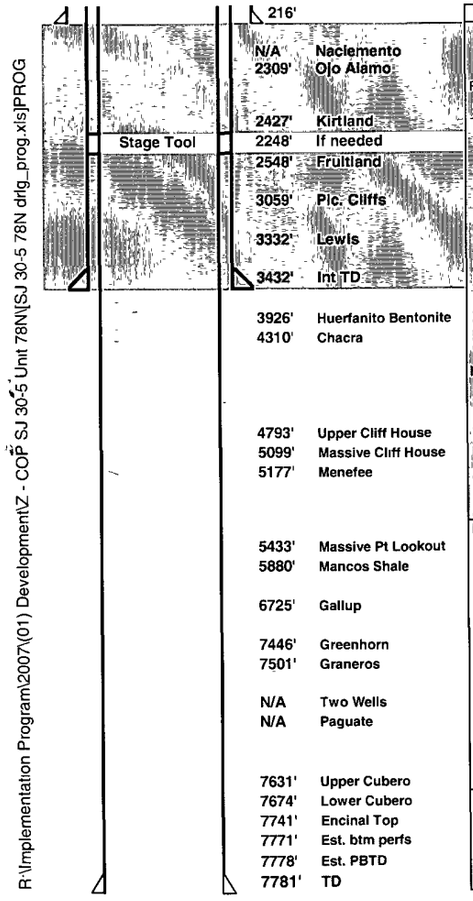
**Well Name:** SJ 30-5 78N **County:** Rio Arriba **State:** New Mexico

**Latitude (NAD83):** 36.82174 degrees **Latitude (NAD27):** 36 degrees, 49.3040 minutes

**Longitude (NAD83):** 107.39680 degrees **Longitude (NAD27):** 107 degrees, 23.7718 minutes

**From the intersection of HWY 550 and HWY 64 in Bloomfield NM travel East on NM state HWY 64 for 38.2 miles. Turn left (North-easterly) on NM State HWY 527 (Simms Hwy) and travel for 7.9 miles Turn right (Northerly) on Rosa Road and travel for 6.5 miles to fork in road. Go right (northeasterly) exiting Rosa Road up LaFragua Canyon for 1.0 miles to fork in road. Go right (southeasterly), across LaFragua Canyon for 1.4 miles to new San Juan 30-5 Unit #88G access on left-hand side of existing roadway which continues for 1000' to new San Juan 30-5 Unit #78G access on right-hand side which continues for an additional 1600' to staked location.**

**Geology**




| | | |
|---|---|---|
| 216' | | |
| N/A | Nacimiento | |
| 2309' | Ojo Alamo | |
| 2427' | Kirtland | |
| 2248' | If needed | |
| 2548' | Fruitland | |
| 3059' | Pic. Cliffs | |
| 3332' | Lewis | |
| 3432' | Int TD | |
| 3926' | Huerfanito Bentonite | |
| 4310' | Chacra | |
| 4793' | Upper Cliff House | |
| 5099' | Massive Cliff House | |
| 5177' | Menefee | |
| 5433' | Massive Pt Lookout | |
| 5880' | Mancos Shale | |
| 6725' | Gallup | |
| 7446' | Greenhorn | |
| 7501' | Graneros | |
| N/A | Two Wells | |
| N/A | Paguate | |
| 7631' | Upper Cubero | |
| 7674' | Lower Cubero | |
| 7741' | Encinal Top | |
| 7771' | Est. btm perfs | |
| 7778' | Est. PBTD | |
| 7781' | TD | |

**Hydraulics**

12 1/4

**Reed-Hycalog** 8-3/4" x 9-7/8" Reed bi-center bit Four-14/32's jets on pilot bit Two-13/32's jets on reamer section

8-25K max WOB

Spin-Top Drive 50-80 RPM

**Run Teledrift and Motor.**

**Run an unstabilized Hunting 6-3/4" 7:8 lobe, 5.0 stg, 0.24 rev/gpm motor**

New 6-1/4" Marquis CV462 & Halco Hammer

2 - 4K WOB

30-40 RPM

Slow ROP before drilling into the top of Greenhorn

Reduce WOB to 2,000 & RPM to 25

**If hole gets wet** Mist drill to top of Mancos w/ hammer Mud up, drill to TD w/ 506ZX **Must run Dev Surveys**

**Drlg Fluids**

**Spud**

Drill out from under surface w/ water and gel system. Sweep w/ gel and fiber as needed Pretreat w/ 30# LCM by 2550' and close in system.

500 - GPM above coal

350-400 - GPM LR Expected

**Nitrogen/Air:**

**400-500 psi**

**1800-2200 SCFM**

**Use N2 membrane unit from Gallup down to TD.**

**Cement**

Type III cement with 2% CaCl2 and 1/8 pps Cello-Flake

| | |
|---|---|
| 217 sks | 1 18 cu ft/sk |
| 256 cu ft | 5 24 gal/sk |
| 15 6 ppg | Excess 125% |

**Excess Cement: 135%**

PF 20 bbls mudflush,

**Top of tail is planned at: 2745.6**

Lead: Premium Plus / Type III cement + 3.0% Bentonite + 30 pps San Juan Poz + 5.0 pps Phenoseal

717 sks

1865 cu. ft.

Density 11.5 ppg

Yield 2.60 cu.ft/sk

Mix Water 14.61 gal/sk

Tail: 50/50 Poz Premium + 6 lbm/sx Pheno Seal + 2% Bentonite

137 sks

182 cu. ft.

Density 13.5 ppg

Yield 1.33 cu.ft/sk

Mix Water 5.51 gal/sk

137.0 bbls displacement

**Perform 2-stage int. cmt job if losses incurred**

**Excess Cement: 40%**

PF 10 bbls Chemwash, 2 bbls freshwater

**Tail:**

50/50 Poz/Standard 3 5 pps Pheno Seal (LCM) 0 2% CFR-3 Dispersant + 0 8% Halad R-9 + 0 1 FL % HR-5 retarder + 3% Bentonite

447 sks

648 cu ft

Density 13 1 ppg

Yield 1 45 cu ft/sk

Mix Water 6 39 gal/sk

123 7 bbls, displace

**Add 25lb. bag of sugar to 1st bbl of displacement**

**If mud drilled,** use 50% excess factor

**Analysis**

**Mo-Te has Preset Surface**

**Mud Logs:**

**100' above Greenhorn to TD Softrock 320-8275**

**Open-Hole Logs:**

**None**

**Notify Phoenix Service to acquire deviation survey at rig down: Phone # 325-1125**

**Materials**

1 Wood Group wellhead

1 Wellhead trash cap

216 feet 9-5/8" 32 3# H-40 STC

1 9-5/8" sawtooth guide shoe

3 Bow Type Centralizers

1 Wooden Plug for Displacement if Mo-Te sets

1 7" float shoe flapper type (Gemoco)

42 feet Shoe Joint 7" 20 0#, J-55 ST&C

1 7" float collar flapper type (Gemoco)

3390 feet 7" 20 0#, J-55 ST&C to surface

**Centralizers:**

6 7" x 8-3/4" bow type every other jt. off bottom

2 7" x 8-3/4" turbo centralizers at base of the Ojo Alamo

1 7" x 8-3/4" bow type in bottom of surface csg

**Casing total: 3582 feet 7", 20.0#, J-55 ST&C w/ 150' extra**

1 4-1/2" Float Shoe (Gemoco)

1 4-1/2" Float collar w/ 3/4" insert choke & **Latch In Wiper Plug**

**7781 feet 4-1/2", 11.6#, N-80 LT&C** (per verbal communication with Sam Rodgers in completions)

**Centralizers:** 7 total 4-1/2" x 6-1/4" bow spring One every other joint for first 12 joints then 1 in the 7" shoe

**Marker Joints:** 1 10' marker joint 150' above Graneros & 1 10' marker joint @ Huerfanito Bentonite

**Casing total:**

**7931 feet 4-1/2", 11.6#, N-80 LT&C w/ 150' extra**

**If mud drilling** is necessary, deepen TD by ~100', run 40' shoe jt and 4-1/2" x 6-1/4" centralizers as shown above to the base of the 7" casing

## Environmental, Health & Safety

"A minute of thought is worth more than an hour of talk " - Author Unknown

| | TRIR* | LTA | Restrict'd Duty | OSHA Rec | 1st Aid |
|---|---|---|---|---|---|
| Goal | 0 | 0 | 0 | 0 | 0 |
| Actual (9/11/07) | 2 95 | 5 | 9 | 22 | 95 |

* TRIR - Total Recordable Incident Rate per 200,000 man-hours.

**Environmental Goals:**

- Zero Spills on Location
- Remove Trash from Roads and Locations

**San Juan 30-5 Unit #47G (MV/DK, 2007, 1.0 mi. SE):** Mote drilled surface to 237' Ran 9-5/8" casing to 232' and cemented with 30% excess, circ 4 bbls to surface Drilled f/237'-3,582' w/ 8-3/4" HC 506ZX, avg ROP= 94 fph, max dev=1 0 deg. No lost circ. problems Ran open hole logs Ran 7", 20#, J-55 ST&C to 3,572' Pumped 186 bbls cmt, returned 48 bbls to surf, 100% excess Plug did not bump, 85 feet of cmt on top of FC Drilled f/3,582' to 7,869' w/ 6-1/4" CV-462, avg ROP=161.8 fph Ran 4-1/2" csg to 7,868', with 125' 11 6# LT&C on btm, 6650' 10 5# in middle and 1098' of 11.6# LT&C on top Pumped 122 bbls cmt, 50% excess, TOC @ 2,550', 40' fill on top of FC

**San Juan 30-5 Unit #37G (MV/DK, 2006, 0.75 mi. NE):** Drilled 242' of 12-1/4" surface hole Ran 9-5/8" casing and cemented with 150% Excess, circ 11 bbls to surface. Drill cement and float equipement Drilled 5', then bit torqued up and large bits of metal shavings showed up in pit PU bit and drilled two cores using reverse circulating basket and milled 70' new hole Drilled to 3597' with new PDC Ran casing and cemented with 150% Exccess Lost circulation 75 bbls into displacement Regained circ and circ 5 bbls to surface Began air hole, plugged bit with cement, POOH and TIH with new air hammer Hit TD of 7853', ran production casing and cemented with 50% Exccess (1117' Overlap)

**San Juan 30-5 Unit #38M (MV/DK, 2006, 1 mi. SE):** Rig drilled 13-1/2" surface hole to 254'. Ran 9-5/8", 32.3#, H-40 ST&C to 244' Pumped 46 5 bbls cmt, circ. 19 5 bbl cmt to surf Drilled f/254'-3710' w/ 8-3/4" Hughes 606Z, avg ROP= 119 fph, max dev=1 0 deg, 350-380 gpm Started losing fluid at 2,100' at 40 bbl per hour, raised LCM from 0 to 40% Gained full returns at 3,157' with LCM @ 40% Had tight spots while TOOH at 3,700'-3,400' (10-15K over), 3,400'-3,000' (10-50K over), 2,700'-2,600' (10-25K over), 2,500'-2,000' (10-50K over), lost 100 bbls mud on trip out Washed and reamed f/3,100'-3,217' Ran 7", 20# J-55 ST&C to 3,703', hit bridge at 3,462', wash f/3,100'-3,703', hole started to pack off, had 60% returns, worked pipe and got full returns Pumped 242 bbls cmt in single stg, circ 40 bbl to surf, 150% excess Drilled from 3,710'-7,978' w/ 6-1/4" hammer bit, avg ROP=133 fph. Ran 4-1/2", 11 6#, N-80 LT&C to 7,971' Pumped 124 bbls cmt, TOC @ 2,500', 55% excess

**San Juan 30-5 Unit #78M (MV/DK, 2004, 1/4 mi. NE):** Rig drilled surface ro 239', ran 9-5/8", 32.3#, H-40, ST&C to 239'. Pumped 36.5 bbls cmt, returned 10 bbls to surf Drilled f/240'-3,400' w/ 8-3/4" Hughes HX-09CJ, ROP=94 fph, max dev =1.0 deg. Pumped 222 bbls cmt, circ 56 bbls to surf, 150% excess Drilled f/3,400'-7,807' w/ 6-1/4" Marquis CV-462, ROP=125 fph Ran 4-1/2", 11 6#, N-80, LT&C to 7,805' Pumped 126.5 bbls cmt, TOC @ 1,900', 50% excess.

**Operations Notes:**

- Drill Intermediate hole w/ Clean Faze w/ sweeps as needed Disperse mud for Lewis Transfer mud to next location--notify Regulatory
- Install rotating rubber after drill collars are buried
- Rig up blooie line before penetrating Kirtland formation
- Fill out all Check Sheets (MIRU, Pre-spud) and take pictures of location.

- **Watch deviation very closely while drilling with PDC. Lost Returns Expected**
- Surface pits MUST be lined according to the APD
- Disperse mud & spin bit to remove bit ball while drilling the Lewis during connections and short trip
- Circulate 7" casing down every 15-20 joints and wash the last 5 joints to TD
- **Ensure that tools above bi-center bit had OD less than 6-3/4"**
- Use Weatherford/Gemoco float equipment for all holes this well Production hole float includes a .75" ID insert choke in the float collar and **will use latch in wiper plug** Cement w/ Halliburton on all cement jobs
- Call all appropriate regulatory agencies 24 hours in advance of spud, cementing, or running casing Leave message if after hours

**Prepared:** 10/2/2007

**Prepared by:** _____

**Russell Perkins - Drilling Engineer**

**Approved by:** _____

**Tom Bealessio - Drilling Superintendent**