

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" For such proposals

RECEIVED
BLM

070 SEP 13 1999

SUBMIT IN TRIPLICATE

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other	5. Lease Designation and Serial No. SF 078497-A
2. Name of Operator CONOCO INC.	6. If Indian, Allottee or Tribe Name
3. Address and Telephone 10 DESTA DRIVE, SUITE 649W, MIDLAND, TEXAS 79705-4500	7. If unit or CA, Agreement Designation San Juan 28-7
4. Location of Well (Footage, Sec., T. R. M. or Survey Description) 1480' FSL & 790' FWL Sec. 20, T28N, R7W	8. Well Name and No. 219M
	9. API Well No. 30-039-26172
	10. Field and Pool, or Exploratory Area Mesaverde/Basin Dakota
	11. County or Parish, State Rio Arriba, New Mexico

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☒ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other <u>change in casing</u>	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.

Conoco Inc. proposes to make changes in casing as reflected in the attached revised well plan outline.

RECEIVED
SEP 20 1999
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct Signed <u>Jo Ann Johnson</u> Title <u>Jo Ann Johnson - Sr. Property Analyst</u> Date <u>September 8, 1999</u>	15. (This space for Federal or State office use) Approved by <u>WAYNE TOWNSEND</u> Conditions of approval if any: Title <u>A. T. L.</u> Date <u>SEP 10 1999</u>
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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 representations as to any matter within its jurisdiction.

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NMOC D
FSM

SJ 28-7 UNIT No. 219M

LOCATION:

SEC 20, T-28N, R-7W, RIO ARRIBA CO., NM

EST. GL = 6226

EST. KB = 6241

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE AND DEPTH	FRAC GRAD. psi/ft	FORMATION PRESSURE PSI	MUD WT & TYPE	DAY
					12-1/4"			NORMAL	SPUD MUD 8.4 - 8.8#	
					12-1/4"	9-5/8" 32.3# H-40 STC @ 500'				1
1					8-3/4"				GEL/WATER: 8.4 - 8.8#	
2		OJAM @ 1899' KRLD @ 2044' FRLD @ 2385'	POSSIBLE WATERFLOW POSSIBLE GAS FLOW POSSIBLE LOST RETURNS			POSSIBLE DV TOOL 2300		432 PSI	MAINTAIN MW AS LOW AS POSSIBLE	
3		PCCF @ 2828' LEWS @ 2983'	POSSIBLE DIFFERENTIAL STICKING					360 PSI		
4		CHRA @ 3758'						400 PSI		
5		CLFH/MV @ 4451' MENF @ 4586'	PROBABLE LOST RETURNS IF FLUID IN HOLE				0.5	457 PSI		
6		PTLK @ 5033' MNCS @ 5472'	PROBABLE LOST RETURNS PROBABLE LOST RETURNS			POSSIBLE DV TOOL 5472				
7		GLLP @ 6251'	PROBABLE LOST RETURNS	FORMATION COMPENSATED DENSITY OR LITHODENSITY W/ GAMMA RAY & CALIPER						
8		GRIN @ 6983' GRRS @ 7051' PAGU @ 7224'	POSSIBLE WATERFLOW POSSIBLE OVERPRESSURE IN DEEP DAKOTA	COMPENSATED NEUTRON LOG INDUCTION RESISTIVITY W/ GAMMA RAY & SP	4-1/2" 10.5# J-55 STC @ 7344' CEMENT TO SURFACE (POSSIBLE 2 OR 3 STAGE)		0.5	713 PSI		
9		T.D. @ 7444'			8-3/4"			BHT = 175 deg F		16
		NOTE: PERMIT TO 7744'								

DATE 08/17/99

PREPARED:

Ricky Joyce/Brett Thompson
DRILLING ENGINEER

APPROVALS: *M. Shannon*

RES. ENGINEER

PROD. ENGINEER

TJG
GEOLOGIST

DRILLING MGR.

2:25 PM

PRIMARY CEMENTING PROPOSAL**SURFACE & 3 STAGE LONGSTRING**

Conoco***San Juan 28-7 Unit #219M***

Well Location

Field : San Juan Unit
County : Rio Arriba
State : Nm
Country : USA

Prepared for : Brett Thompson
Ricky Joyce
Date Prepared : 8/20/99

Service Point : FARMINGTON, NM
Business Phone : 505-325-5096
FAX No. : 505-327-0317

Prepared by : Duane Gonzalez
Phone : (281) 293-4538
FAX : (281) 293-4424
E-Mail address : dgonzalez@houston.dowell.slb.com

Disclaimer Notice:

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Schlumberger

Dowell

Well Data: 9 5/8 in. Surface

< Surface

Depth	500 ft.
Casing Size	9 5/8 in., 32.3 lbs./ft.
Open Hole Diameter	12 1/4 in.
BHST	100 °F
BHCT	80.0 °F
Total Excess	100 %
Tail Excess	100 %

Mud Wt./Type: 8.4 ppg Fresh Wtr. Based

Calculations:

Volume Factors:

Casing x Open Hole	0.3132 cu.ft./ft
Casing (Internal)	0.4411 cu.ft./ft

Top of Cement

Surface

Cement System:

Open Hole Fill	$(500 \times 0.3132 \times 2.) / 1.19 = 262 \text{ sks.}$
Casing Shoe Cement	$(40 \times 0.4411) / 1.19 = 15 \text{ sks.}$
	Total Tail Cement = 277 sks.

< T.D. - 500 ft.

Cementing Systems

Spacer System: 20 bbls .

Fresh Water

Cement System: 275 sks.

Class B + 2% S1 + 0.25 pps D29

Mix Weight	:	15.6 PPG
Yield	:	1.19 cu.ft./sk.
Mix Water	:	5.19 gal./sk.
Fluid Loss	:	800 cc/30 minutes
Thickening Time	:	0.125 hours:minutes
Comp. Strength	:	1,000 psi in 12 hrs.

Notice:

Performance parameters for cement systems recommended are typically taken from existing laboratory data. In some cases, data exist which duplicate the recommended systems and job environment, but when those data do not exist, extrapolations are made from data which most closely match the anticipated conditions. Sufficient lead-time should always be allowed so that pilot samples/field blends can be run to verify system performance parameters, before actually pumping the job.

Well Data: 4 1/2 in. Production - Stage 1

< Surface < Previous Csg. 500 ft. < Top of Cmt./DV Tool 5,472 ft. Top of Lead 6,944 ft. < T.D. - 7,444 ft.	Depth Casing Size Open Hole Diameter Previous Csg. Depth Previous Csg. Size BHST BHCT Total Excess Lead Excess (calculated O.H.) Tail Excess Stage Collar Depth	7,444 ft. 4 1/2 in., 11.6 lbs./ft. 8 3/4 in. 500 ft. 9 5/8 in., 32.3 lbs./ft. 175 °F 129.1 °F 35 % 35.0 % 35 % 5,472 ft.
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Mud Wt./Type: 8.6 ppg Fresh Wtr. Based

Calculations:

Volume Factors:

Casing x Open Hole	0.3071 cu.ft./ft
Casing x Previous Casing	0.3307 cu.ft./ft
Casing (Internal)	0.0874 cu.ft./ft

Top of Lead	5,472 ft.
Top of Tail	6,944 ft.

Lead System:

Total Lead Fill $(1,472 \times 0.3071 \times 1.35) / 2.86 = 213 \text{ sks.}$

Tail System:

Top of Lead 6,944 ft.	Open Hole Fill Casing Shoe Cement	$(500 \times 0.3071 \times 1.35) / 1.45 = 143 \text{ sks.}$ $(80 \times 0.0874) / 1.45 = 5 \text{ sks.}$ Total Tail Cement = 148 sks.
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Cementing Systems

Spacer System: 20 bbls .

CW-100 Chemical Wash

Lead System: 215 sks.

Class B + 3% D79 + 0.1% D46 + 0.25 pps D29

Mix Weight	:	11.4	PPG
Yield	:	2.86	cu.ft./sk.
Mix Water	:	17.64	gal./sk.
Fluid Loss	:	700	cc/30 minutes
Thickening Time	:	5:00	hours:minutes
Comp. Strength	:	600	psi in 24 hrs.

Tail System: 150 sks.

**50:50 Poz:Class B + 2% D20 + 0.5% D60 + 0.2% D65 + 0.1% D46
+ 0.25 pps D29**

Mix Weight	:	12.8	PPG
Yield	:	1.45	cu.ft./sk.
Mix Water	:	7.15	gal./sk.
Fluid Loss	:	350	cc/30 minutes
Thickening Time	:	4:30	hours:minutes
Comp. Strength	:	500	psi in 24 hrs.

Notice:

Performance parameters for cement systems recommended are typically taken from existing laboratory data. In some cases, data exist which duplicate the recommended systems and job environment, but when those data do not exist, extrapolations are made from data which most closely match the anticipated conditions. Sufficient lead-time should always be allowed, so that pilot samples/field blends can be run to verify system performance parameters, before actually pumping the job.

Well Data: 4 1/2 in. Production - Stage 2

< Surface < Previous Csg. 500 ft. < Top of Cmt. 2,300 ft. < T.D. - 7,444 ft.	Depth 7,444 ft. Casing Size 4 1/2 in., 11.6 lbs./ft. Open Hole Diameter 8 3/4 in. Previous Csg. Depth 500 ft. Previous Csg. Size 9 5/8 in., 32.3 lbs./ft. BHST 175 °F BHCT 116.4 °F Total Excess 35 % Tail Excess 35 % Stage Collar Depth 5,472 ft.
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Mud Wt./Type: 8.6 ppg Fresh Wtr. Based

Calculations:

Volume Factors:

Casing x Open Hole	0.3071 cu.ft./ft
Casing x Previous Casing	0.3307 cu.ft./ft
Casing (Internal)	0.0874 cu.ft./ft

Top of Cement 2,300 ft.

Cement System:

Open Hole Fill	$(3,172 \times 0.3071 \times 1.35) / 1.45 = 907 \text{ sks.}$
Casing Shoe Cement	$(40 \times 0.0874) / 1.45 = 2 \text{ sks.}$
Total Tail Cement	$= 909 \text{ sks.}$

< Stage Collar (DV)
 5,472 ft.

Cementing Systems

Spacer System: 20 bbls .

CW-100 Chemical Wash

Cement System: 910 sks.

**50:50 Poz:Class B + 2% D20 + 0.5% D60 + 0.2% D65 + 0.1% D46
+ 0.25 pps D29**

Mix Weight	:	12.8 PPG
Yield	:	1.45 cu.ft./sk.
Mix Water	:	7.15 gal./sk.
Fluid Loss	:	350 cc/30 minutes
Thickening Time	:	4:30 hours:minutes
Comp. Strength	:	500 psi in 24 hrs.

Notice:

Performance parameters for cement systems recommended are typically taken from existing laboratory data. In some cases, data exist which duplicate the recommended systems and job environment, but when those data do not exist, extrapolations are made from data which most closely match the anticipated conditions. Sufficient lead-time should always be allowed, so that pilot samples/field blends can be run to verify system performance parameters, before actually pumping the job.

Well Data: 4 1/2 in. Production - Stage 3

< Surface	Depth	7,444 ft.
	Casing Size	4 1/2 in., 11.6 lbs./ft.
	Open Hole Diameter	8 3/4 in.
	Previous Csg. Depth	500 ft.
	Previous Csg. Size	9 5/8 in., 32.3 lbs./ft.
	BHST	128 °F
	BHCT	93.5 °F
	Total Excess	35 %
	Lead Excess (calculated O.H.)	35.0 %
	Tail Excess	35 %
	Stage Collar Depth	2,300 ft.

< Previous Csg.
500 ft.

Mud Wt./Type: 8.6 ppg Fresh Wtr. Based

Calculations:

Volume Factors:

< Top of Tail 1,300 ft.	Casing x Open Hole	0.3071 cu.ft./ft
	Casing x Previous Casing	0.3307 cu.ft./ft
	Casing (Internal)	0.0874 cu.ft./ft

Top of Lead	Surface
Top of Tail	1,300 ft.

Lead System:

< Stage Collar (DV-2) 2,300 ft.	Open Hole Fill	$(800 \times 0.3071 \times 1.35) / 2.86 = 116 \text{ sks.}$
	Previous Casing Fill	$(500 \times 0.3307) / 2.86 = 58 \text{ sks.}$
	Total Lead Cement	= 174 sks.

< Stage Collar (DV-1)
5,472 ft.

Tail System:

Open Hole Fill	$(1,000 \times 0.3071 \times 1.35) / 1.45 = 286 \text{ sks.}$
Casing Shoe Cement	$(40 \times 0.0874) / 1.45 = 2 \text{ sks.}$
Total Tail Cement	= 288 sks.

< T.D. - 7,444 ft.

Cementing Systems

Spacer System: 20 bbls .

CW-100 Chemical Wash

Lead System: 175 sks.

Class B + 3% D79 + 0.1% D46 + 0.25 pps D29

Mix Weight	:	11.4	PPG
Yield	:	2.86	cu.ft./sk.
Mix Water	:	17.64	gal./sk.
Fluid Loss	:	700	cc/30 minutes
Thickening Time	:	5:00	hours:minutes
Comp. Strength	:	600	psi in 24 hrs.

Tail System: 290 sks.

**50:50 Poz:Class B + 2% D20 + 0.5% D60 + 0.2% D65 + 0.1% D46
+ 0.25 pps D29**

Mix Weight	:	12.8	PPG
Yield	:	1.45	cu.ft./sk.
Mix Water	:	7.15	gal./sk.
Fluid Loss	:	350	cc/30 minutes
Thickening Time	:	4:30	hours:minutes
Comp. Strength	:	500	psi in 24 hrs.

Notice:

Performance parameters for cement systems recommended are typically taken from existing laboratory data. In some cases, data exist which duplicate the recommended systems and job environment, but when those data do not exist, extrapolations are made from data which most closely match the anticipated conditions. Sufficient lead-time should always be allowed, so that pilot samples/field blends can be run to verify system performance parameters, before actually pumping the job.