

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

5. Lease Designation and Serial No.

NOO-C-14-20-3601

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Nocki #1E

9. API Well No.

3004529086

10. Field and Pool, or Exploratory Area

Basin Dakota

11. County or Parish, State

SAN JUAN NEW MEXICO

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Amoco Production Company

Attention:

Julie L. Acevedo

3. Address and Telephone No.

P.O. Box 800, Denver, Colorado 80201

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1815FNL 1080FEL Sec. 4 T 25N R 11W

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Revise APD

☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ 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.)*

Amoco Production Company requests your approval of the attached casing and cementing revisions for the application for permit to drill approved on February 9, 1994.

CONFIDENTIAL

NOV 19 1994
10:38 AM
BUREAU OF LAND MANAGEMENT
SANDIA

14. I hereby certify that the foregoing is true and correct

Signed

Julie L. Acevedo

Title

Sr. Staff Assistant

Date

12-15-1994

(This space for Federal or State office use)

Approved by

Title

Conditions of approval, if any:

APPROVED

DEC 20 1994

DISTRICT MANAGER

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.

**AMOCO PRODUCTION COMPANY
DRILLING and COMPLETION PROGRAM**

File No.: Nock1e.xlw
Date: 12/8/94

Lease: Nocki
County: San Juan County, New Mexico
Former name:
Well No. #1E
Surface Location: 1815' FNL & 1080' FEL of Section 4, T25N, R11W
Field: Basin Dakota

OBJECTIVE: Develop Dakota Gas formation.

METHOD OF DRILLING

TYPE OF TOOLS
Rotary
DEPTH OF DRILLING
Ground Level - TD

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Actual GL-----Estimated KB		6348	6361
Marker		Depth (ft.)	SS Elev. (ft.)
Ojo Alamo		381	5,980
PC		1361	5,000
Lewis Shale		1511	4,850
Cliff House		2,841	3,520
Menefee Shale		2,911	3,450
Point Lookout		3,826	2,535
Mancos		4,061	2,300
Gallup		4,861	1,500
Greenhorn		5,743	618
Dakota **		5,856	505
TOTAL DEPTH		6,156	205

LOGGING PROGRAM

TYPE
SP-GR-Cal-HRI-SDL-DSN (Triple Combo)
DEPTH
Minimum run required

REMARKS:

* Possible pay
** Probable completion
Ojo Alamo is possible usable water

SPECIAL TESTS

TYPE
None
DEPTH INTERVAL, ETC

DRILL CUTTING SAMPLES

FREQUENCY	DEPTH	FREQUENCY	DEPTH
		Geolograph	Int - TD

Remarks:

Remarks:
Mud Logging Program: None
Coring Program: None

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/g	Vis, sec/qt	W/L, cc's/30 min.
0 - 250'	Spud			
250' - 3500' (1)	Water	8.6 - 8.8	Sufficient to clean hole	N/C
3500' - TD (2) (3)	LSND	8.8 - 9.2	Sufficient to clean hole and run logs	As required

REMARKS:

- 1 - The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.
- 2 - Mud up at the top of the Mancos Shale.
- 3 - Sweep the hole as necessary.

CASING PROGRAM:

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Conductor				
Surface	250'	7"	8.75"	1
Production	6,156	2-7/8"	6.25"	1, 2

Remarks:

- 1 - Circulate cement to surface.
- 2 - Production cement to be designed by Denver drilling staff.

GENERAL REMARKS:

Business Unit Engineering staff to design completion program.

Form 46 Reviewed by:

Logging program reviewed by:

PREPARED BY:
P. Edwards/Logan/Ovitz

APPROVED:

APPROVED:

Form 46 7-84bw
12/9/94 14:30

For Production Dept

For Exploration Dept.

Well Name: **Nocki #1E**
 Location: **1815' FNL X 1080' FEL, Sec 04, T25N, R11W**
 County: **San Juan**
 State: **New Mexico**

Field: **Basin Dakota**
 API No.
 Well Flac
 Formation: **Dakota**
 KB Elev. (est.) **6361 ft.**
 GL Elev. (est.) **6348 ft.**

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Casing Weight (lb/ft.)	Casing Grade	Thread	TOC (ft.)
Surface	250	8.75	7.000	23	J-55	8R, LT&C	Surface
Production	6,156	6.25	2.875	6.5	N-80	8R, EUE	Surface

Casing Properties:

(No Safety Factor Included)

Casing String	Casing Weight (lb/ft.)	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Torque(ft. lbs.) Opt/Min/Max	Drift (in.)
Surface	23	4360	3270	313	0.0393		6.241
Production	6.4	10570	11160	144	0.00579		2.347

Mud Program:

Apx. Interval (ft.)	Mud Type	Mud Weight (lb/gal)	<u>Recommended Mud Properties Prior Cementing:</u>	
			PV	< 20
			YP	< 10
			Fluid Loss	< 15
0 - SCP	Spud	8.6-8.8		
SCP - TD	LSND	8.8-9.2		

Cementing Program:

	Surface	Production(foam)
Excess %, Bit	75	60
Excess %, Caliper	NA	15
BHST (est. deg. F)	60	160
Pipe Movement	NA	Rotate 10-20 rpm
Rate, Max. (bpm)	1 truck	6
Rate, Recommended (bpm)	8	4
Pressure, Max. (psi)	200	2000
Shoe Joint	40'	80
Batch Mix	NA	NA
Circulating prior cmtng (hr.)	0.5	2
Time Between Stages,(hr.)	NA	NA
Special Instructions	1,6,7	2,4,6,8

- 1 Do not wash pumps and lines
- 2 Wash pumps and lines.
- 3 Do not reverse out
- 4 Run Blend Test on Cement
- 5 Record Rate , Pressure, and Density on 3.5" disk
- 6 Confirm densometer with pressurized mud scales
- 7 1" cement to surface if cement is not circulated.
- 8 If cement is not circulated to the surface, run temp. survey 10-12 hr. after landing plug.

Notes:

- *** Displace top plug on the production casing job with 0.2% Clay Fix II or 2% KCl water.
- *** Do not wash up on top of plug. Wash pumps and lines. We want to do rig less completions.

CEMENTING PROGRAM

Nocki #1E

blp

Surface:

Preflush	20 bbl.	Fresh Water + dye marker	
Slurry 1 TOC@Surface	100 sk	Standard Cement + 2% CaCl ₂ + 1/4 lb/sk floccs	95 cu. ft.

Slurry Properties:	density (lb/gal)	yield (ft ³ /sk)	water (gal/sk)
slurry 1	15.60	1.18	5.20

Casing Equipment: (Halliburton) 7", 8R, ST&C

- 1 Type M Guide Shoe
- 1 Insert Float w Auto Fill
- 1 Weld A
- 3 S-4 Centralizer
- 1 Top Wooden Plug

CEMENTING PROGRAM

Nocki #1E

blp

Production: (Foam Cement)

Preflush	20 bbl. 40 bbl.	Mud Flush + dye marker + 150 scf/bbl nitrogen Fresh Water + 150 scf/bbl nitrogen	
Lead Cement Slurry 1		50/50 Std. Cmt/Poz A + Nitrogen + 2% gel (total) + 5 lb/sk gilsonite + 0.4% Halad-344 + 1/4 lb/sk flocele	966 cu. ft.
Tail Cement Slurry 2 TOC@5500		50/50 Std. Cmt/Poz A + 2% gel (total) + 5 lb/sk gilsonite + 0.4% Halad-344 + 1/4 lb/sk flocele	132 cu. ft.
Top Out Cement Slurry 3	85 sk	Standard Cement + 2% Calcium Chloride	100 cu. ft.

Slurry Properties:

	surf. density (lb/gal)	foam density (lb/gal)	surf. yield (ft ³ /sk)	foam yield (ft ³ /sk)	water (gal/sk)	nitrogen rate (scf/bbl)	depth of fill (ft)
slurry 1	13.50	10.00	1.32	1.82	5.59	150	500 - 2500
slurry 1	13.50	10.00	1.32	1.78	5.59	300	2500 - 4000
slurry 1	13.50	10.00	1.32	1.77	5.59	430	4000 - 5500
slurry 2	13.50	NA	1.32	NA	5.59	NA	5500 - TD
slurry 3	15.60	NA	1.18	NA	5.20	NA	0 - 500

Note: The job should be pumped at 6 bpm max FOAM rate. Do not exceed 6 bpm on displacement.
Slow to 2 bpm for the last 25 bbl of displacement. Displace with 2% KCl or 0.2% Clay Fix II water.
This is to be a rigless completion.

Casing Equipment: Halliburton 2 7/8", 8R, EUE, (no need to cut long pin)

- 1 Super Seal II Float Shoe
- 25 S-4 Fluidmaster Centralizer 1st 10 centralizers. everyother joint, then one every 10 joints,
1 above and below the Ojo Alamo
- 1 Lock Clamp
- 1 Weld A
- 1 Omega Latch Down Plug and Baffle