

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.

SF 078578 -A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

AMOCO PRODUCTION COMPANY

Attention:

Nancy I. Whitaker

3. Address and Telephone No.

P.O. BOX 800 DENVER, COLORADO 80201

303-830-5039

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

1840 FSL

1690 FWL

Sec. 20 T 30N R 8W

UNIT K

8. Well Name and No.

HOWELL

# 1

9. API Well No.

3004509326

10. Field and Pool, or Exploratory Area

BLANCO MESAVERDE

11. County or Parish, State

SAN JUAN

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  
☐ Subsequent Report  
☐ Final Abandonment Notice

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_

- ☒ 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.)\*

ATTACHED ARE REVISED PPOCEDURES FOR THE PLUG AND ABANDONMENT OF THE ABOVE WELL.

FOR TECHNICAL INFORMATION CONTACT MAR ROTHENBERG 303-830-5612

RECEIVED  
JUL - 9 1997

OIL CON. DIV.  
JUL 3

Fed CA 14080012100

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

Signed

*Nancy I. Whitaker*

Title

Staff Assistant

Date

06-23-1997

(This space for Federal or State office use)

Approved by

/s/ Duane W. Spencer

Title

Date

JUL - 7 1997

Conditions of approval, if any:

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.

\* See Instructions on Reverse Side

NMOCD



## SJOET Well Work Procedure

Wellname: Howell 1  
Version: #1  
Date: June 16, 1997  
Budget: DRA  
Workover Type: Bradenhead repair

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### Objectives:

Well failed braden head test in 1995. Due to power lines, we were not able to rig up on well until now.

1. CBL will be run to locate TOC.
  2. Bradenhead and any casing leaks will be repaired.
  3. Tubing will be landed at original depth and well returned to production.
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### Pertinent Information:

Location:	1840' FSL, 1690' FWL, K20-30N-8W	Horizon:	MV
County:	San Juan	API #:	30-045-09326
State:	New Mexico	Engr:	Mark Rothenberg
Lease:	Federal # SF-078578-A	Phone:	W--(303)830-5612
Well Flac:	978714		H--(303)841-8503
Is flac:	698129		P--(303)553-6448

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### Economic Information:

APC WI:	26%	MV Prod. Before Repair:	360 MCFD
Estimated Cost:	\$25,000	DK Anticipated Prod.:	360 MCFD
Payout:	3 months		
Max Cost -12 Mo. P.O.	\$100,000		

**\*Note:** *Economics run based upon 360 MCFD production vs 0 MCFD since work required by regulatory agencies.*

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### Formation Tops: (Estimated formation tops)

Nacimiento:		Menefee:	
Ojo Alamo:	1400	Point Lookout:	
Kirtland Shale:	1489 est.	Mancos Shale:	
Fruitland:	2150	Gallup:	
Pictured Cliffs:	2475	Greenhorn:	
Lewis Shale:	2602 est.	Graneros:	
Chacra:		Dakota:	
Cliffhouse:	4194	Morrison:	

estimates from cross sections.

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### Bradenhead Test Information:

Test Date: 4/17/96    Tubing: 240    Casing: 240    BH: 5

Time	BH	CSG	INT	CSG
5 min				
10 min				
15 min				

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Comments: Opened bradenhead, had water during test. Had about 5 psi during test, never wend down. Took sample of water. Steady flow of water throughout 30min test.

Note: The main objective of this workover is to shut off water flow coming from the 7" x 10.75" annulus. Since the 4.5" casing is cemented to surface, there is no way to determine top of cement on the 7". There is water flow but no gas flow so it is assumed that the water is coming from the Ojo Alamo. This procedure is to first check for casing leaks in the 4.5" casing and repair those. Then, perforate through both strings of casing and squeeze cement behind the 7" casing from at least 50' below the Ojo Alamo to 50' above the Ojo Alamo and the same with the Nacimiento. If possible, it would be best if circulation can be established from 50' below the Ojo Alamo to surface.

**Suggested procedure:**

1. Contact Federal or State agency prior to starting repair work.
2. Install and/or test anchors.
3. MIRUSU. Check and record tubing, casing and bradenhead pressures.
4. Blow well down, kill well if necessary with 2% KCL.
5. Nipple down well head, nipple up and pressure test BOP's.
6. Trip in the hole and tag PBTD, check for fill, trip and tally out of hole with tubing checking condition of tubing. Replace any bad joints of tubing and any perforated joints of tubing.

**Checking condition of 4.5" casing:**

7. RU wireline and run in the hole with CIBP. Set 4 1/2" CIBP at 1600 ft. Spot sand on CIBP and pressure test csg to 1000 psi. If leak is found, trip in hole with tubing and packer and isolate leak(s). Try and establish circulation, noting which annulus you can circulate through.
8. If no leak is found in the 4.5" casing, skip to step 11.

**Eliminating Leaks in the 4.5" casing (if any)**

9. If leak is found in 4.5" casing and circulation is established in the 4.5" x 7" annulus, calculate the cement volume needed and mix and pump sufficient class B or equivalent to circulate to surface. Shut valve and attempt to obtain a squeeze pressure. WOC. If circulation is not established, block squeeze 50 sx of class B cement. Trip out of hole. WOC.
10. Trip in hole with tubing and bit and drill out cement and pressure test casing. Re-squeeze leaks if casing fails pressure test.

**Isolating the Ojo Alamo behind the 7" casing:**

11. Perforate 2 squeeze hole at 1550' with jet shots designed for maximum penetration (note: the objective is to obtain a squeeze hole through the 4.5" casing and the 7" casing so cement can be placed behind the 7" string).
12. Trip in hole with tubing and packer and attempt to establish circulation through squeeze holes up the 7" x 10.75" annulus. If circulation cannot be obtained, block squeeze 100 sx of class B cement. If cement is circulated, calculate cement volume needed and mix and pump sufficient class B cement to circulate to surface. Shut valve and attempt to obtain squeeze pressure. Trip out of hole. WOC.

13. Trip in hole with tubing and bit drill out cement and pressure test casing . Re-squeeze if casing fails pressure test.

**Isolating the Nacimiento behind the 7" casing (if not accomplished while isolating Ojo):**

14. If circulation was not obtained in step 12, perforate at approximately 500' two squeeze holes with shots designed to penetrate both strings of casing.
15. Trip in hole with tubing and packer and establish circulation through squeeze holes up the 7" x 10.75" annulus and calculate cement volume needed and mix and pump sufficient class B cement to circulate to surface. Shut valve and attempt to obtain squeeze pressure. Trip out of hole. WOC.
16. Trip in hole with tubing and bit and drill out cement and pressure test casing. Re-squeeze if casing fails pressure test.

**Returning well to original downhole configuration:**

17. Drill out CIBP and clean out well to PBTD.
18. Trip in the hole with the production string (1/2 mule shoe on bottom and a seating nipple one joint off bottom), and land tubing at 4727'. Nipple down BOP's, nipple up well head.
19. Swab well in and put well on production.
20. Rig down move off service unit.

*If problems are encountered, please contact:*

**MARK ROTHENBERG**  
(W) (303) 830-5612  
(H) (303) 841-8503  
(P) (303) 553-6448

NOTE: CANNOT FIND WELLFILE,  
FROM OTHER SOURCES.

# Amoco Production Company

## ENGINEERING CHART

File \_\_\_\_\_

Appn \_\_\_\_\_

SUBJECT Howell #1 3004509326 Fed Lease SF-080247

Date 6/19/97

20K-30N-8W 1840' FSL x 1690' FWL

By MDR

Orig Comp: 7/55

Repair Csg Leaks: 3/67

Ran 4 1/2" Csg

STEADY FLOW OF WATER

10 3/4", 32.75#, H-40 @ 179'

CMT W/ 175 SX, CIRC TO SURF

1967

SEVERE CORROSION

FROM CASING INSPECTION

LOG FROM 425'-1890'

WATER FLOW FROM 750'

CSG LKS FROM 1278'-2563'

-RAN 4 1/2" CSG IN 1967.

1400'

OJO ALAMO

(KIRTLAND)

2150'

FRUITLAND

2475'

PICTURED CLIFFS

(LEWIS)

MESA VERDE

4194

(MANCOS)

Perfs  
4194-4274

Perfs  
4628-4745

TOL @ 7" @ 3525' by T.S.

4 1/2", 10.15#, J-55 @ 4063

CMT W/ 470 SX, SQZ INTO CSG LKS

TOL @ 4063' (TOP of 5" LINER)

7", 20#, J-55 @ 4175'

CMT W/ 200 SX

2 3/8", 4.7#, J-55 @ 4727

5", 18#, hydrill @ 4800'

CMT W/ 180 SX, TOP @ 4063 by T.S.

PBD - 4774

TD - 4800'