Form 3 160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No 1004-0135
Expires March 3 1 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 079962

6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICA TE

7 If Unit or CA, Agreement Designation

1 Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8 Well Name and No
Davis A Federal #1

2 Name of Operator
CONOCO INC.

9 API Well No
30-045-09210

3 Address and Telephone No
10 DESTA DR. STE. 100W, MIDLAND, TX. 79705-4500 (915) 686-5424

10 Field and Pool, or Exploratory Area
Basin Dakota (71599)

4 Location of Well (Footage, Sec , T R M or Survey Description)
Section 25, T-30-N, R-11-W, D
1190' FNL & 990' FWL

11 County or Parish, State
San Juan County, NM

In CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPOR", OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Repon	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracrunng
	☒ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion o Injection
	☐ Other _____	☐ Dispose Water

(Note Reponresultsof multiplecompitiononWdl 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.)*

It is proposed to repair the casing leak in this well using the attached procedure.

Verbal approval granted by Frank Chavez

RECEIVED
JUN 15 1998
OIL CON. DIV.
DIST. 3

98 JUN 15 PM 1:05
070 FARMINGTON, NM

14 I hereby certify that the foregoing is true and correct
Signed Kay Maddox Title Regulatory Agent Date June 3, 1998

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval if any

BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FILE ROOM

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 junsdiction

*See Instruction on Reverse Side

Davis "A" Federal #1
Slim Hole/Casing Leak Repair
April 16, 1997

We request funds in the amount of $33,000 to perform a slim hole completion and liquid CO2 stimulation flush on the Davis A Federal 1. The Davis A Federal 1 well appears to be recovering from previous casing leak damage caused by fluid invasion from a wet upper zone. The well is currently producing approximately 40 mcfgd and should recover to above 200 mcfgd. The Davis A Federal 1 is currently producing under a packer on a sundry notice of test to see if the well would recover and produce. The well now needs casing repair in the form of slim hole to be in compliance with regulations pertaining to wells with casing leaks.

Notes:

Plunger in tubing.

Well is completed with 2.375" EUE production tubing with Halliburton R-4 packer.

The casing leak involves a long section across the Messa Verde interval which is wet and corrosive in this area. This leak can not be squeezed with cement.

No CBL has been run on this well, run CBL from top perforation @ 6835 to top of cement.

Locate packer 100'-200' below cement top to prevent future casing problems.

Cement 2.875" EUE tubing/casing from Packer to surface.

Tubular Specs:

OD	GRADE	WT	ID	DRIFT	BBL/FT	COLLAPSE	BURST	SF
8 5/8	J-55	24.0	8.097	7.972	0.04401	1370	2950	70%
41/2	J-55	10.5 11.6	4.052 4.000	3.927 3.875	0.0238 0.01554	4010 5350	4790 4960	70%
2 3/8	J-55	4.7	1.995	1.901	0.00387	6480	6160	80%

Davis "A" Federal #1Slim Hole ProcedureApril 16, 1997

1. **Pre Work**

   A. Locate and test deadman anchors. Spot flow back pit (20x20) and prepare. Inform operator of work to be done and time frame. Check for location size and equipment placement. Identify any hazards (power lines, H2S, tight equipment fits).

   B. Have pressure gauges on both casing and tubing when necessary (during acid, frac, testing).

   C. Hold Safety Meeting before rigging up to discuss potential hazards anc meeting place in case of an emergency.

2. **Pull Tubing**

   A. RU. Blow well down and kill with minimum amount of 1% KCl. NU BOP's.

   B. POOH with 2.375 production tubing string and R-4 Packer.

3. **RIH Tag Fill & Clean Out**

   A. RIH wireline with gauge ring check for tight spot at 6876" - 6935" and tag fill.

   B. RIH with work string and tag fill, clean out to bottom with 3-1/2" bit (PBTD 7024') circulating with nitrogen. (4.5",11.6#, csg. has drift of 3.875)

   C. POOH work string laying down.

4. **SLIM HOLE**

   A. Run Cement Bond Log from top perforation @ 6835 to top of cement.

   B. Set packer 100'-200' below top of cement, calculate 2.875" tail pipe length to go below packer from mid perf (6929').

NOTE: Be sure pipep set load and cement load has been calculated so packer will not shear release.

Davis "A" Federal #1Slim Hole ProcedureApril 16, 1997

   C. RIH 2.875" tubing with two 4' subs and one 10' sub on bottom and Watson 440 packer (ID=2.50") with aluminum blank in collar above packer and 4, 0.375" holes rilled just above upset of the joint to be screwed into that collar (holes should be 90 degree phasing and 1 - 2 inches above previous hole to avoid weakening pipe). Set tubing end at midperfs (6589'), set packer 100'-200' below top of cement and run 2.875" tubing to surface.

D. Pump cement down tubing and up back side above packer to surface, bump displacement plug on aluminum blank, shut-in with pressure on tubing, WOC.

E. Drill out displacement plug, cement, and aluminum blank, tag fill and POOH.

5. Rig up BJ and pump 60 tons (three transports) of liquid CO2 down the 2.875" tubing/casing use surface and downhole equipment pressure limitations as maximum pressure limit. Rig down BJ and clear loaction before flowing the well back to lay down tank for clean up. This should remove fluid invasion damage and restore production.

6. **Return Well to Production**

Install plunger lift on 2.875" casing/tubing and resume production. The annular volume below the packer will aid in plunger lift operation .Watch fluids production and optimize plunger lift. Monitor well for rate at least one week. Change orifice plate, if necessary double check separating/compression facilities-- notify engineering for assistance, if needed, in making equipment changes. Notify Production Specialist and Operator.

(DRW) San Juan West Team
(915) 686-6184

cc: Well File, Tommy Brooks (Farmington), Greg Vick (Farmington)

Davis "A" Federal #1
Well History
April 16, 1997

We have been studying the files and reports on this well and its production capability when it is not hampered by casing leaks and as now, packer leaks. Production history on this well indicate that when it has been able to flow isolated from upper formations it will produce 400-500 mcfgd, calculations indicate 800 mmcf reserves remain in this well, it was producing 200 mcfgd in October of 1996. With that in mind and replacement well costs, we believe that this well should not be P&A'd. We recommend as a course of action to pull the current packer and set another packer in a different spot and test for 1 -2 weeks, if the well will produce we should slim hole this well (cement a liner inside old casing), if it will not produce we should side track and cement a liner from surface down.

The original cement job and history and other area well histories, indicate a high probability of a good cement job across and above the Greneros (8835'-8837') and Dakota (6902-7022') formations isolating them externally from formations above them, this would indicate that behind pipe flow would be highly unlikely. The well was drilled in 1964 and developed a casing leak early 1972, it has 4.5", 10.5#/11.6#, J-55, casing set @ 7050' with PBTD @ 6997'. Attempts to repair casing leaks on this well were made in 1972, 1995, and 1996, each resulting in temporary production increases as described above and is currently producing from under a packer set at 6519'. The packer is now suspected of leaking as production has declined again. The casing has been found to have leaks in and near the Mesa Verde interval from 3800' to 5,000' with each attempted squeeze resulting in additional leaks. Additional casing repair by squeezing cement will probably fail as have past efforts. The well should be tested for 1- 2 weeks under a new or redressed packer to verify that it will still produce. Formation damage may have occurred during the attempt to squeeze cement into casing leaks. If the well will produce this well should be slim holed (cement a liner inside the casing). If it will not produce it should be side tracked .

Slim hole option:

2.875", EUE, 6.5#, tubing was chosen as the preferential pipe to slim hole wells with 4.5" casing due to its cost, availability, collar size will act as both centralizers and cement turbulators, production options, and its interior diameter. When run with a packer set below top of cement the annular volume below the packer provides enough gas expansion to aid in gas lifting the 2.875" tubing itself. We have found this option to offer the widest variety of production options to enhance the production and l fe of the well.