Form 3 160-5 (June 1990)

### UNITED STATES DEPARTMENT OF THE INTERIOR RUREALL OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 3 1,1993

Expires: March 3 1,1993 BUREAU OF LAND MANAGEMENT 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 7 If Unit or CA, Agreement Designation SUBMIT IN TRIPLICA TE Type of Well Oil Well 8 Well Name and No 2 Name of Operator Fogelson 35 #1 CONOCO INC 9. API Well No 3. Address and Telephone No. 30-045-08940 10 DESTA DR. STE. 100W, MIDLAND, TX. 79705-4500 (915) 686-5424 10 Field and Pool, or Exploratory Area 4 Location of Well (Footage, Sec., T. R. M. or Survey Description) Basin Dakota (71599) Section 35, T-30-N, R-11-W, O 11. County or Parish, State 1180' FSL & 2400' FEL San Juan County, NM 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 Recompletion New Construction Non-Routine Fracrunng Plugging Back Water Shut-Off Casing Repair Final Abandonment Notice Conversion to Injection Altering Casing Dispose Water INote: Reponresuitsof multiplecompitiononWdI 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 given 9:30 AM May 27, 1998 by BLM - Frank Chavez

14 I hereby certify that the foregoing is true and correct Signed	Kay Maddox	24 4000
	Title Regulatory Agent	Date May 27, 1998
(This space for Federal or State office use) Approved by	Title ( et 3 m, encer	Date JUN 1 1 1998
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.

### SLIM HOLE COMPLETION

# Fogelson 35-1 Pull Rods & Tubing and Run Packer Water Block Removal Treatment February 10, 1998

**MER # 2141** 

LOCATION: 1180' FNL, 2400' FWL, Section 35, T 30 N, R 11 W, San Juan County

Funds in the amount of \$78,305 are requested to remove rods, rod pump, and production tubing string from the Fogelson 35-1 well and run 2-7/8" slim hole string with full bore packer packer set 200' above top perforation and cement from packer to surface. This well was severely damaged when it developed a leak in an upper interval allowing water to enter the wellbore. We attempted removing the water that invaded the producing interval by pumping only to find that a water block condition exists. We have made multiple attempts to repair this well with cement squeezes unsuccessfully. It is now our intent to repair this well with a cemented slim hole completion, pump a water block removal treatment, and plunger lift the 2-7/8" tubing/casing to recover this well. The water block removal treatment consists of pumping a large volume of liquid CO2 mixed with methanol and a surfactant surface tension reducer into the well and letting it soak, then begin flow back recovery. This technique has been used successfully on our Martin 34-2 well and is recommended for this well. This project should result in production recovery and improvement from this well.

#### Wellbore Specs (See attached Wellview information)

EL: KB: 5783'; Grd: 5771'; TD: 6825'; PBTD: 6797' (New PBTD=6750' Model "D" Pkr debris)

Fill tagged @ 6690' previously, covering perfs @ 6,714' - 6,730'.

Completion: Single String DK, rods & pump, no packer;

Production String (DK) 2.375", 4.7#, J-55, 8rd EUE, 211jts. w/SN @ 6,649'; 8' - 2.375", 4.7# pup sub 6650' -58' w/notched collar on bottom. Drilled 1961, last completed in 1997.

Rod String: 0.75", sucker rods, 262 @ 6583' (1 ea 4' x .75" rod pup, 1 ea 16' x 1.25" Polish rod, & 1 ea 2' x .75" rod pup on top of Polish rod), 1.25" K-Bars, 50' @ 6583' -6633', 2.0" pump 16', @ 6633' (2" x 1.25" x 16' RHBC, C/W 6" strainer)

CASING: 4.5". 10.5#, J-55, thread 8rd ST&C, from 0' - 6.750', (DV @ 2288')

Surface Casing 9.63", 32.3#, H-40 set @ 237', (cmt circ)

FORMATION TOPS: (refer to Wellview)

**EXISTING PERFS:** 

DK: (6514' -24'); (6,567' - 6,674'), (6,714' - 30'), 2 SPF.

# Fogelson 35 1 Pull Rods & Tubing and Run Packer Water Block Removal Treatment February 10, 1998

#### 1. Pre Work

- A. Locate and test deadman anchors. Spot flowback 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 and meeting place in case of an emergency.

#### 2. Pull Rods and Rod Pump, Clean Out Fill, POOH Tubing

- A. RU. Blow well down and kill with minimum amount of 1% KCI. NU BOP's
- B. POOH with rod string: 0.75", sucker rods, 262 @ 6583' (1 ea 4' x .75" rod pup, 1 ea 16' x 1.25" Polish rod, & 1 ea 2' x .75" rod pup on top of Polish rod), 1.25" K-Bars, 50' @ 6583' -6633', 2.0" pump 16', @ 6633' (2" x 1.25" x 16' RHBC, C/W 6" strainer)
- C. RIH tbg., tag fill, clean out to 6710' (top of milled Model D debris)
- D. POOH with 211 joints + pup, 2.375" tbg. w/SN & 8' pup w/notched collar, @ 6,658', standing back.

#### 3. RIH, Scrape Casing, Tag Fill, & Clean Out

- A. RIH with work string, casing scraper, tag fill, clean out to bottom with 3-7/8" bit (PBTD 6710") circulating with nitrogen. (4.5",10.5#, csg. has drift of 4.045)
- B. POOH work string laying down.

#### 4. SLIM HOLE

- A. TIH, run three 2-7/8" pup joints on bottom, pick up Watson-440 packer at 200',
- B. Run Omega plug in packer with short ported nipple above packer. TIH to set EOT @ 6,567', top perforation is at 6,514'
- C. Set packer 200' above top perforation with end of tubing at or just above 6,314'. **NOTE:** Check set load and cement load to prevent packer shear release.
- D. Pump one displacement volume dyed water ahead of cement, when dyed water reaches surface drop Omega displacement plug. Wait for cement to set up.

#### 4. RIH with small drill string and bit and drill out both Omega plugs and cement.

- A. Pick up 1-1/4" slim hole string, TIH and drill out Omega plugs and cement @ 6314'.
- B. Clean out to PBTD @ 6710' using nitrogen.
- C. POOH laying down

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#### 4. Rig Up and Pump Water Block Removal Treatment.

- A. MIRU pump truck and two CO2 transports.
- B. Stake lines and check valves and relief valves.
- C. Line up methanol/surfactant pump(s).
- E. Pump a 2 barrel slug of methanol begin CO2 pumping very slowly loading the hole and increasing to comfortable rate, advise BJ to pump below pressure limitations of surface valves and equipment at rate of 1 3 barrels per minute. If formation appears to break or pressure drops, pause (stop pumping) and begin again slowly. BJ may adjust as per their procedure or well conditions.

#### 5. When finished pumping CO2/Methanol/Surfactant Shut-in and Rig Down

- A. When finished pumping water block treatment shut-in well and rig down pumping equipment and move off location.
- B. Leave well shut-in and rig up flow back line to vent or lay down tank.
- C. Begin flow-back/clean-up as soon as lines are connected and pumping equipment is off location.
- D. Notify operator to Install plunger lift, to aid in water removal as soon as possible.

#### 6. Put back on sales as soon as CO2 content is acceptable for sales.

When CO2 content is down to acceptable level for sales put back on production. Adjust plunger lift and optimize as much as possible. Record water rates and production and report to engineering. The well may require swabbing if water rate gets to high.

West Area O Team (DRW)(915) 686-6184