		NM OIL CONS (OMMISSION CLST			
10111101000	UNITED STATES MENT OF THE INTERIOR	Artesia, Madger DD FORM APPROVED Artesia, Madger Buger No. 1004-0135 Expires: March 31, 1993			
BUREAU	5. Lease Designation and Serial No.				
SUNDRY NOTICE	LC-062412 NN 055737				
	o drill or to deepen or reentry to a different reservo	6. If Indian, Allottee or Tribe Name			
Use "APPLICATION	FOR PERMIT - " for such proposals				
	BMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation			
1. Type of Well Gas Well Well Other		8. Well Name and No.			
2. Name of Operator	EMPIRE ABO UNIT"K" # 17				
ARCO Permian 3. Address and Telephone No.		9. API Well No. 30-015-00703			
P.O.BOX 1610, MIDLAND, TX	79702 915 688-5672	10. Field and Pool, or exploratory Area			
4. Location of Well (Footage, Sec., T., R., M., or Su	urvey Description)	EMPIRE ABO			
1980 FSL & 660 FWL(UNIT	LETTER L)	11. County or Parish, State			
1–18S–27E		EDDY NM			
12. CHECK APPROPRIATE E	BOX(s) TO INDICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA			
X Notice of Intent	Abandonment	Change of Plans			
	Recompletion	New Construction			
Subsequent Report	Plugging Back	Non-Loutine Fracturing			
	Casing Repair	Water Shut-Off			
Final Abandonment Notice	Altering Casing				
	Other ADD HORIZONIA	LEX Dispose Water (Note: Report results of multiple completion on Well Completion yr Recompletion Report and Log form.)			
13. Describe Proposed or Completed Operations (Clear)	ly state all pertinent details, and give pertinent dates, including estimated du i true vertical depths for all markers and zones pertinent to this work.)*				
PROPOSE TO ADD HORIZONTAL E 1.POH W/PROD CA. 2.SET RETRIEVABLE WHIPST 3.SIDETRACK & DRILL 250 4.DRILL 1000' HORIZONTAL 5.RETRIEVE WHIPSTOCK. 6.RIH W/PROD CA.	TOCK.	Mr 0 1 7095 9 N.M			
14. I hereby certify that the foregoing is true and cor- Signed <u>Xen W Holmel</u> (This space for Federal or State office use) Approved by ORME. SED.) JOE Conditions of approval, if any:	Title AGENT	$\frac{Date}{Date} = \frac{05-03-95}{5/5/95}$			
Title 18 U.S.C. Section 1001, makes it a crime for an or representations as to any matter within its jurisdict.	ny person knowingly and willfully to make to any department or agency of ion.	f the United States any false fictitious or fraudulent statements			

HORIZONTAL SIDETRACK PROCEDURE

DATE: May 1, 1995

WELL: Empire Abo #K-17 DRILLED: 1959 FIELD:			D: Empire Abo	COUNTY:	Eddy, NM	
BY: P.N. Drennon	TI): 6.137'	PBD: 6,101'	DATUM: 12' KB		КВ
CASING: SURFACE: PROD:	<u>SIZE</u> 8 5/8" 5 1/2"	<u>WEIGHT</u> 24# 14#	<u>GRADE</u> J-55 J-55	<u>SET @</u> 1,470' 6,137'	<u>SX CMT</u> 750 1,000	TOC surf-circ surf-circ

PERFORATIONS: Open perfs: Abo 6.040'-6.080'

HISTORY AND BACKGROUND: Drilled in 1959, completed as a flowing oil well from the Abo.

SCOPE OF WORK: Set retrievable whipstock, sidetrack and drill 250' radius build curve, 1,000' horizontal lateral, retrieve whipstock, complete as flowing/pumping well from existing Abo perfs and new horizontal lateral.

TARGET INFORMATION:	Whipstock Depth: Kickoff Point:	5,810' Same as above
	Azimuth: Target Depth:	E (90°) 6,060'
	Planned Displacement: Surface Lacation:	Total 1,250' 1,980' FSL, 660' FWL, Sec. 1, T-18-S, R-27-E, Eddy Co., N.M.

PROCEDURE

- 1. MIRU PU, pump, swivel, pits. Install H₂S safety equipment. Pull rods and pump, warehouse same. ND tree, NU BOPE. Pull tubing, LD and warehouse.
- 2. PU 4 3/4" bit and scraper, 10 3-½" DC, 2 7/8" AOH DP, TIH to PBTD 6,101, circulate (1) TD if necessary. RU & run gyro multi-shot survey via DP. RD survey equipment, TOOH, LD bit and scraper.
- 3. GIH w/ packer and set in vicinity of 5,800'.
- 4. Test casing and stack to 750 psig.
- 5. PU anchor, whipstock assembly w/ starter mill, BHA, TIH, hydraulically set anchor @ 5,810'.

Note: Oriented assembly, azimuth E (compass 90²) per O/A Engineer (Gary Smallwood).

- 6. Shear off whipstock assembly w/ starter mill. Mill out casing and shear bolt assembly tc start window, use Abo produced water for circulation. Use polymer additions for additional lift if necessary.
- 7. TOOH, LD starter mill, PU window mill, 1 jt S-135 AOH DP, BHA, TIH.
- 8. Finish cutting window, drill out into open hole, circulate clean.
- 9. TOOH, LD window mill and inspect for proper wear. PU window mill, watermelon mill, BHA.

Note: Air/foam package to be on location at this point.

10. TIH, clean and dress window, drill 8-10' formation, circulate clean.

- 11. TOOH, LD window and watermelon mills, check for proper wear. PU 4 ³/₄" drag bit, bent housing motor, bent sub, non-mag DC, 2 7/8" 8.7# PH-6 tbg DC's (minimum 2 DC's in casing @ TD of build curve), TIH.
- 12. Displace hole w/ stiff foam (expect 700-800 SCF/min w/ 1.75 BPM water w/ 8-10 gal/1000 foamer).
- 13. RU wet connect, steering tool, land same, drill build curve, plan to drill 23°/100' build rate (radius 250') to max angle of 87°- 90°- from vertical.
- 14. RD steering tool/wet connect, TOOH, LD build motor, PU packer on DP, TIH, set packer @ ±5,700'.
- 15. Open by-pass, jet via DP to kick-off and test production from build curve. If necessary, polymer squeeze build curve to shut off excess gas production.
- 16. TOOH, LD packer, PU 4 ³/₄" bit, hold motor, Monel DC, 2 7/8" tbg. DC's (minimum 9 DC's in casing @ TD), DP, TIH, RU wet connect, steering tool, land same drill lateral ±1,000' due East. All drilling done w/ stiff foam.
- 17. TOOH, LD BHA, PU tbg to go to end of lateral, DP, TIH.
- 18, Stage in and blow hole w/ air to unload foam, @ EOC blow hole dry, load to kill w/ prcduced water, TOOH.
- 19. PU CA and production tubing, TIH.
- 20. Swab to KO well, test.
- 21. Kill well w/ produced water, TOOH w/ CA.
- 22. PU die collar, 4 3 1/2" DC, tubing, TIH, latch and release packer stock, TOOH, LD packer stock, die collar, DC's.
- 23. TIH w/ CA and production tubing.
- 24. Swab to KO well, test.
- 25. If recommended, TIH to EOL w/ 1 1/4" coil tubing, spot 15% HCl w/ adds throughout lateral, POOH w/ coil tubing.
- 26. Swab to KO well, test.
- 27. **TOPS**

P. N. Drennon

