

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

FEB 01 '88

C. C. D.
ARTESIA OFFICE

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-11593	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		7. Unit Agreement Name
2. Name of Operator ARCO Oil and Gas Company		8. Farm or Lease Name Empire Abo Unit "E"
3. Address of Operator P.O. Box 1610, Midland, Texas 79702		9. Well No. 373
4. Location of Well UNIT LETTER <u>D</u> <u>150</u> FEET FROM THE <u>North</u> LINE AND <u>15</u> FEET FROM THE <u>West</u> LINE, SECTION <u>35</u> TOWNSHIP <u>17S</u> RANGE <u>28E</u> N.M.P.M.		10. Field and Pool, or Wildcat Empire Abo
15. Elevation (Show whether DF, RT, GR, etc.) 3670.4 GR		12. County Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input checked="" type="checkbox"/> Recomplete same zone

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Propose to set CIBP, come up hole and recomplete Empire Abo.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Ken W. Gosnell TITLE Engr. Tech. 915-688-5672 DATE 1-27-88

APPROVED BY Mike Williams TITLE Oil & Gas Inspector DATE FEB 4 1988
CONDITIONS OF APPROVAL, IF ANY:

FEB 01 '88

WORKOVER PROCEDURE

O. C. D.

ARTESIA, OFFICE

DATE 10/3/87WELL NO. & TYPE OF JOB: Empire Abo Unit #E-373 ARCO WI: 34.1406%JOB TITLE: Plug Back to Upper Abo IntervalDRILLED & COMPLETED: 3/78 LAST WO: 4/86FIELD: Empire Abo COUNTY: Eddy County, NM PREPARED BY: M.B. SmithTD: 6275' PBD: 6245' DATUM: RKB DIST RKB TO GL: NATUBINGHEAD: MAKE NA SIZE 7-1/16 PRESSURE RATING 3000 psi

CASING INFORMATION:	SIZE	WEIGHT	GRADE	SET @	SX	CMT	TOC
SURFACE:	<u>8-5/8"</u>	<u>24</u>	<u>K-55</u>	<u>800'</u>	<u>480</u>		<u>Surface</u>
				<u>DV @ 3001'</u>	<u>850</u>		<u>Surface</u>

PRODUCTION:	5-1/2"	15.5	K-55	6275'	450	3700' (CBL)

PRESENT PERFORATIONS Empire Abo 6216-6228TUBING SIZE: 2-3/8" WT: 4.7# GRD: J-55 THD: EUE 8R NO JTS: 197 @ 6135'

PACKER & MISC.: Baker R-3 DG packer set at 6135' with 15000 lbs comprsn.
Fluid-Pac cavity above packer. SI since 3/31/87. Last production test
3/28/87 was 1 BOPD, 259 BWPD and 0 MCFG. Fish below production packer
is a Baker Lok-set packer with a pump cavity on top. Tong die fell on
packer and there is a standing valve stuck inside the pump cavity.

PROCEDURE

1. Test anchors. MIRU PU. Check well for pressure and bleed off. Kill well w/produced water as necessary. ND wellhead and NU BOP. TOH with 2-3/8" tubing and packer. Visually inspect the tubing. If tubing condition is questionable, hydrotest to 3500 psi above the slips on next TIH.
2. TIH with an overshot sized to cath the pump cavity above the Lok-set packer, 6 to 8 3-1/2" DC's, jars and a bumper sub on a 2-7/8" L-80 WS and latch onto the fish. Attempt to release the packer. If unable to release the packer attempt to dislodge the packer and retrieve it or drive it to bottom (DO NOT JAR FISH TO ABOVE 6000'). POH LD fishing tools. *WORK PKR DOWN TO 16200' BEFORE TRYING TO PULL*

If attempts to remove the packer are successful, continue with step number 3.

If attempts to remove the packer are unsuccessful continue with step number 8.
3. WL set a 5-1/2" CIBP at 6200'. Load the hole with produced water and pressure test to 500 psi.

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Empire Abo Unit #E-373

Workover Procedure

4. Perforate the Empire Abo from 6150' to 6160' with 2 JSPF. Correlate to Schlumberger Density/Neutron log dated 4/10/78. Note movement of fluid level after perforating. If well goes on a vacuum proceed with swabbing operation prior to performing the acid job.
5. TIH with treating packer and 2-7/8" SN on 2-7/8" tubing to 6160'. Spot 100 gal acid across perforations and pull packer up hole to $\pm 6060'$. Reverse 5 bbls water up tubing and set packer.
6. Pressure annulus to 500 psi and acidize the Empire Abo perforations with 1200 gal 70/30 15% NEFE HCL acid and xylene at 1-3 BPM. Flush to the bottom perforation with produced water. Maximum treating pressure 1000 psi.
7. SWI for 30 minutes and swab test.

If the well is productive continue with step 10.

If the well is not productive continue with step 8.
8. WL set a CIBP at 6130' and perforate the Empire Abo from 6082 - 6088 w/2 JSPF. Spot acid and acidize as necessary with 750 gal of 15% NEFE HCL acid at 1-3 BPM with a 1000 psi maximum wellhead treating pressure. SI for 30 minutes and swab test.

If the well is productive continue with step 10.

If the well is not productive continue with step 9.
9. WL set a CIBP at 6070' and perforate the Empire Abo from 6036 - 6046 w/2 JSPF. Spot acid and acidize as necessary with 1000 gal of 15% NEFE HCL acid at 1-3 BPM with a 1000 psi maximum wellhead treating pressure. SI for 30 minutes and swab test.
10. POH LD 2-7/8" WS and packer. TIH with completion assembly as per production department specifications. TOTPS.

ABS
EDK
D

Empire Abo Unit #E-373
Current Wellbore Configuration

October 3, 1987
ARCO WI 34.1406%

Location: 150' FNL & 15' FWL, Sec 35-T17S-R28E, Eddy County, New Mexico
TD: 6275' PBD: 6245' GL Elev: 3670' RKB: NA Spud: 3/29/78

External Casing Packer at +450'
with a DV tool 1 jt up at +405'

8-5/8", 24#, K-55 casing set
at 800' in an 11" hole and
cemented to surface w/480 sx.

DV tool at 3001'

Estimate TOC 3700' CBL

197 joints 2-3/8", 4.7#, J-55
EUE 8R tubing w/Baker R-3 DG
packer set at 6135'. Fluid -
Pac cavity above packer.

Baker Lok-set packer and
fluid-pak cavity with tong
die on top of packer and
standing valve inside
the cavity (backed off
of cavity). Left in the
hole 4/86.

Empire Abo Perfs: 6216 - 6228

5-1/2", 15.5#, K-55 casing set
at 6275' in a 7-7/8" hole w/DV
tool at 3001' cmt'd as follows:
1st Stage: 450 sx. TOC @ 3700
2nd Stage: 850 sx. Cmt Circ

