Form 3160-5 (April 2004)

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

6. If Indian, Allottee or Tribe Name

Date

NM-LC-065478-B

5. Lease Serial No. SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

abandoned well. Use Form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other instructions on reverse side 7. If Unit or CA/Agreement, Name and/or No. NM-NM-70945X 1. Type of Well 8910138010 JUL 1 0 2006 8. Well Name and No. X Oil Well Gas Well Other EMPIRE ABO UNIT N 2. Name of Operator **#11** BP AMERICA PRODUCTION COMPANY 9. API Well No. 3b. Phone No. (include area code) 3a. Address 30-015-00856 P.O.BOX 3092, RM 6.115, HOUSTON, TX 77253 281-366-2052 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) EMPIRE ABO UL G, SECTION 10-T18S-R27E 11. County or Parish, State 1650' FNL & 2310' FEL CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12 TYPE OF ACTION TYPE OF SUBMISSION Acidize Production (Start/Resume) X Notice of Intent Deenen Water Shut-Off Alter Casing Fracture Treat Reclamation Well Integrity Subsequent Report Casing Repair New Construction Other WORKOVER-Recomplete Change Plans Plug and Abandon Temporarily Abandon ON EXPIRED TA WELL Final Abandonment Notice Convert to Injection Plug Back Water Disposal 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) REFER TO NOTICE OF WRITTEN ORDER #06-IN-02 DATED 03/29/06 & SUNDRY NOTICE DATED 04/25/06 GIVING EXTENSION TO DATE OF 06/29/06 BY ALEXIS SWOBODA DRILL OUT CIEP 7, ADD PERFS TO EXISTING PERMITTED FORMATION, & RETURN TO PRODUCTION VIA ROD PUMP: (SEE ATTACHED PROCEDURE & WELLBORE SCHEMATIC) 1) DRILL OUT CIBP @ 5882' APPROVED 2) PUMP 30 BBLS. OF XYLENE TREATMENT (OR NALCO PARAFFIN CHEMICAL) 3)ADD 3 PERF INTERVALS: 5882-90', 5896-5904', & 5910-16' W/2 JSPF 4) ISOLATE NEW PERFS WITH RBP & TREATING PACKER 5) ACIDIZE NEW PERFS WITH 3000 GALS. 15% HCL JUL - 5 2006 6) RELEASE RBP & PACKER (OPIG. SCD.) ALEXIS C. SWOBODA 7) RIH WITH TBG & TAC @ APPROX. 5800' ALEXIS C. SWOBODA 8) SET SN @ APPROX. 5950' Accepted for record PETROLEUM ENGINEER 9) RIH WITH PUMP & RODS 10) RD, PU & CLEAN LOCATION NMOCD 11) MONITOR WELL FOR RESULTS I hereby certify that the foregoing is true and correct Title Name (Printed/Typed) SUE SELLERS REGULATORY STAFF ASSISTANT Quis Date 06/27/06 THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, 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.

Title





EAU N-11

WORKOVER PROCEDURE EAU N-11: DO CIBP, Perforate Upper Abo, Run Prod. Equipment, Convert to Pump

DATE: 6/7/06

PAY KEY #:

WELL: EAU N-11

DRILLED: 3/3/60

FIELD: EAU

COUNTY: Eddy, NM

BY: Kyle Golson

TD: 6172

PBTD: 5958 (CR w/ cmt underneath)

DATUM: 11' KB

CASING: SURFACE: INTERMEDIATE: PRODUCTION:

SIZE

WEIGHT

GRADE J-55

SET@ 1505

SX CMT

TOC

LINER:

8 5/8" 4.5" None

24# 9.5#

J-55 6189

270

Circ.

TUBING: 1 @ 25 2 3/8 4.7# EUE 8RD J-55;

MUD ANCHOR:

SEATING NIPPLE:

PACKER:

PERFORATIONS: 5925-29', 5933-36', 5940-44' (Closed w/ CIBP @ 5899); CR @ 5958' w/ cmt beneath

HISTORY AND BACKGROUND: TA'd 5/14/92

SCOPE OF WORK: Drill out CIBP treat, perforate abo interval, convert to rod pump.

PROCEDURE

MIRU, POOH with W/O Rig:

- 1. COMPLETE SAFETY MEETING AND JSAS PRIOR TO RU PU.
- 2. SPOT TRUCK AND BLOWDOWN PIT & SHUT IN UNIT. HOOK UP TO BLOWDOWN PIT & BLEED WELL DOWN.

Hazard	Effect	Mitigation	Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		· · · ·	5
Gas, H2S, or fluid release	Possible injury or death to personnel, damage to equipment & environment		Pre job inspection of ho Check all connections &				

Hazard	Effect	Mitigation
High pressure	Possible injury or	➤ Line of fire practices
pumping	death to	➤ Pressure test lines
equipment	personnel,	
	damage to	
	equipment	

3. MIRU PU

Hazard	C44nak	Relational Control of the Control of
nazaro	Effect	Mitigation

H2S	Possible injury or death to personnel, or other people damage to equipment or wellbore or environment	 Monitor H2S levels continuously Pre job inspection of H2S equipment and Breathing equipment Available phone contacts in case gas escapes into evriornment All employees H2S trained.
High pressure pumping equipment	Possible injury or death to personnel, damage to equipment	 Line of fire practices Pressure test lines
Pulling Unit Equipment Failure Objects falling from derrick	Possible injury or death to personnel, damage to equipment or wellbore	 Inspection of derrick Pre job inspection of rig after RU.

- 4. INSTALL BOP
- 5. POH WITH TBG AND LAY DOWN (1 JT.)
- 6. PICK UP 2 3/8" WORKSTRING AND RIH W/ DRILL COLLARS AND DRILL BIT TO CIBP @ 5882'

Drill Out CIBP @ 5882':

- 7. MIRU FOAM AIR UNIT
- 8. BEGIN DRILLING ON PLUG. KNOCK OUT PLUG AND CHASE TO BOTTOM.
- 9. RDMO REVERSE UNIT, POOH W/ WORKSTRING, DRILL COLLARS & BIT.

Xylene Treatment (or Nalco Paraffin Chemical)

1. PUMP 30 BBL XYLENE OR NALCO PARAFFIN CHEMICAL (HAND) DOWN THE CASING.

Hazard	Effect	Mitigation
High pressure pumping equipment	Possible injury or death to personnel, damage to equipment	 Line of fire practices Pressure test lines
Dropped pipe in hole	Possible damage to well	 Pipe handling practices – slips, clamps, tongs, complete MU/BO before lifting as appropriate
Drop pipe in derrick	Possible injury or death to personnel, damage to equipment	 ➤ Line of fire practices ➤ Inspection of lifting equipment
Loss of well control	Possible injury to personnel, damage to wellbore, damage to environment	 Install pressure control – BOP's (change pipe rams) Have TIW valve on floor – capable of stabbing in 4 ½" LTC & full opening Frequent BOP drills
Falling from height	Possible injury or death to personnel	> Use work platform > 100% tie-off

Perforate 3 intervals 5882-90', 5896-5904', & 5910-16' w/ 2 jspf.

- 1. PU 2 3/8" TBG, CSG SCRAPER & BIT.
- 2. RIH W/ SCRAPER & BIT, TAG PB @ 5958. (PB DEPTH DEPENDS ON CIBP ON BOTTOM) POOH.

Hazard	Effect	Mitigation
High pressure pumping equipment	Possible injury or death to personnel, damage to equipment	 ➤ Line of fire practices ➤ Pressure test lines
Dropped pipe in hole	Possible damage to well	 Pipe handling practices – slips, clamps, tongs, complete MU/BO before lifting as appropriate
Drop pipe in derrick	Possible injury or death to personnel, damage to equipment	 Line of fire practices Inspection of lifting equipment
Loss of well control	Possible injury to personnel, damage to wellbore, damage to environment	 Install pressure control – BOP's (change pipe rams) Have TIW valve on floor – capable of stabbing in 4 ½" LTC & full opening Frequent BOP drills
Falling from height	Possible injury or death to personnel	> Use work platform > 100% tie-off

- 3. RU E-LINE & LUBRICATOR. USING EXISTING GR-CCL LOG, IF AVAILABLE, PERFORATE 5882-90', 5896-5904', & 5910-16' @ 2 JSPF(3 1/8" SLICK GUNS, .42" ENTRY HOLE & 36.7" PENETRATION ON 4 WL RUNS) USING GREY WL.
- 4. RD E-LINE & LUBRICATOR. PU TREATING PKR (FROM HUDSON PKR) & RIH W/ 2 3/8" TBG & TOOL.
- 5. ISOLATE NEW ZONE'S (5882-5916) WITH RBP & TREATING PACKER.
- 6. ACIDIZE ZONE WITH 3000 GAL 15% HCL (SEE ATTACHED HALLIBURTON ACID JOB.)
 - a. FLUSH WITH 250 GAL HCL.
 - b. PUMP 2500 GAL HCL.
 - C. FLUSH WITH 250 GAL HCL.
 - d. Flush with full load of water (Tubing Load + Casing between PKR & RBP) APPROX 24 BARRELS OF 2% KCL WATER.
- 8. RELEASE RBP & PKR, POOH W/ TOOLS & TBG.

Run Pump & Production Equipment:

- 1. RIH WITH TBG & SET TAC @ ~5800'
- 2. SET SN @ ~5950'(AS DEEP AS POSSIBLE, DEPENDING ON PB) WITH 2 3/8 4' PERFORATED/SLOTTED SUB W/ BP.
- 3. RIH WITH PUMP AND RODS. SEE ATTACHED ROD STAR SUMMARY FOR ROD DESIGN.
- 4. HANG WELL ON. LOAD AND TEST.
- 5. TURN PUMP ON.
- 6. RDMO PU AND CLEAN LOC.
- 7. MONITOR WELL FOR RESULTS

Prepared by: _	Kyle Golson
REVIEWED BY:	
APPROVED BY:	

EAU N-11 Page 4

Project: EAU N-11 Artificial Lift Revision

New Rod Design:

Grade/Material	Size (Inches)	Footage	Number of Rods
С	7/8"	2500	100
С	3/4	2600	104
С	7/8"	850	34

Comments:		

Pump Requirements: Pump: 2x1.25x18'

Pumping Unit Requirements: American C-320-256-144 Stroke Length @ 107.7" (3rd hole).

Speed @ 7 spm

Empire Abo Unit 'N' 11

