Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

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 page 2.*

5. Lease Serial No.: LC- 063965

6. If Indian, Allottee or Tribe Name:

7. If Unit of CA/Agreement, Name and/or No.: NM 70926X

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other Injector

8. Well Name and No.: Cooper Jal Unit #116

2. Name of Operator: Resaca Operating Company

9. API Well No.: 30-025-11141

3a. Address: 2509 Maurice Road Odessa, TX 79763

3b. Phone No. *(include area code)*: (432)- 580-8500

10. Field and Pool or Exploratory Area: Jalmat:T-Y-7Rvrs; Langlie Mattix: 7Rvrs-Q-Grayburg

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
660 Feet from South Line, 660 Feet from West Line, Section 18, Township-24S, Range-37E,

11. Country or Parish, State: Lea County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☑ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☑ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Clean out Injector w/ Bit
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

OBJECTIVE: Clean out Injector with Bit

1.) MIRU Pulling Unit and Above Ground Steel Pit.
2.) POOH w/ 2 3/8" tubing and 5 ½" x 2 3/8" Baker Model AD-1 Tension Packer.
3.) RIH w/ 4 ¾" Bit & 6- 3 ½" Drill Collars on 2 7/8" work string.
4.) RU Swivel and clean out well to 3641'.
5.) Acidize perfs 2980'-3392' and OH 3410'-3641' w/ approximately 10,000 gallons 90/10 Mixture of NEFE 15% Acid/ Xylene.
6.) POOH w/ 2 7/8" work string.
7.) RIH w/ 5 ½" x 2 3/8" Baker Model AD-1 Tension Packer; circulate annulus with inhibited packer fluid
8.) Set Packer within 100' of top perf @ 2980'; test annulus to 500 psig for 30 minutes; Pull chart for BLM/NMOCD.
9.) RDMO Pulling Unit, clean location, clean & dispose of pit fluids.
10.) Place well on Injection at approximately 400 bwpd; Maximum permitted injection pressure is 596 psig.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*: Melanie Reyes

Title: Engineer Assistant

Signature:

Date: 02/22/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by: /s/ JD Whitlock Jr

Title: LPET

Date: 3/3/11

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. 03-8-2011

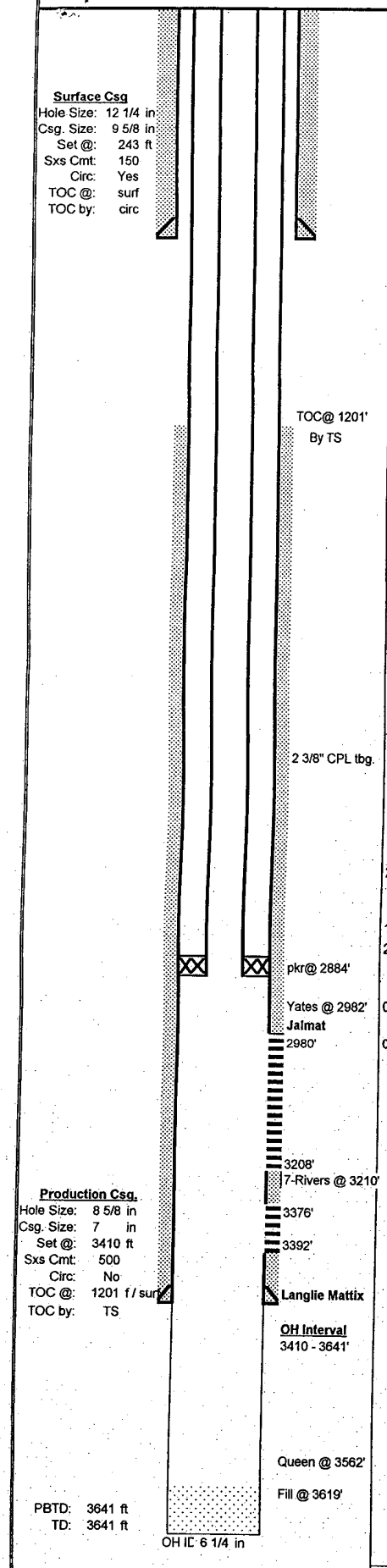
Office: CFO

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

(Instructions on page 2)

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC



LEASE NAME	Cooper Jal Unit	(Formerly No. 235)		WELL NO.	116 WIW
STATUS:	Active	Water Injector		API#	30-025-11141
LOCATION:	660 FSL & 660 FWL, Sec 18, T - 24S, R - 37E; Lee County, New Mexico				
SPUD DATE:	TD 3641	KB	3,317'	DF	
INT. COMP. DATE: 03/09/50	PBTD 3641	GL	3,307'		

GEOLOGICAL DATA

ELECTRIC LOGS:

GR-N from 2700 -3631' (2-11-50 Lane Wells)
GR - N - CCL from 2100 - 3630' (8-31-71 Dresser Atlas)
Injection Profile Log (4-25-95 Houston Inc.)

CORES, DST'S or MUD LOGS:

HYROCARBON BEARING ZONE DEPTH TOPS:

Queen @ 3562' Seven Rivers @ 3210' Yates @ 2982'

CASING PROFILE

SURF.	9 5/8" - 40#, J-55 set@ 243' Cmt'd w/150 sxs - circ cmt to surf.
PROD.	7" - 20#, J-55 set@ 3410' Cmt'd w/500 sxs - TOC @ 1201' from surf by Temp Survey
LINER	None

CURRENT PERFORATION DATA

CSG. PERFS:

2980 - 88' (9 holes)	3114 - 20' (7 holes)
2996 -3002' (7 holes)	3125 - 40' (16 holes)
3024 - 42' (19 holes)	3187 - 91' (5 holes)
3052 - 58' (7 holes)	3197 - 3208' (12 holes)
3067 - 77' (11 holes)	3376 - 78' (3 holes)
3081 - 86' (7 holes)	3384 - 86' (3 holes)
3103 - 10' (8holes)	3392 - 96' (8 holes)

OPEN HOLE :
3410 - 3641'

TUBING DETAIL 3/8/1994

Length (ft)	Detail
10.00	KB
2870.02	88 jts - 2 3/8" 4.7#, CPL, J-55, 8rd EUE tbg.
2.90	1- 5 1/2" x 2 3/8" Baker Model AD-1 packer
2882.92	btm

ROD DETAIL

WELL HISTORY SUMMARY

09-Mar-50	IC interval: 3410 -3641' (7 RVRS/Queen OH). Shot w/100 qts nitro. IP =15 bopd, 0 bwpd & 2 Mcfgpd (flowing)
10-Sep-71	C/O f/ 3600 - 3641' w/ 6 1/4" bit. Ran GR-N-CCL. **Perf (Yates & 7 RVRS-Queen) f/** 2980 - 3396' w/ 1 spf (118 holes - 0.5" dia.). Acdz'd perfs 3376 - 96' w/ 1,000 gals 20% HCL & 12 ballsealers, AIR=5 bpm @ 900 psi. Acdz'd perfs 2980 - 3208' w/ 4,000 gals 20% HCL & 100 ballsealers, AIR=4.4 bpm @ 1600 psi. Ran new string of 2 3/8" IPC w/ 2 Baker full open flow regulaters & two packers. Converted well to dual injector. Initiated injection.
21-Aug-87	C/O OH f/3509'-3641'. Acdz perfs 2980'-3641 & OH 3410'-3641' w/2,500 gals 15% NEFE HCL in 4 stages using 500#'s RS diversion between stages. PM=1100 - 800 psi, AIR=2.0 bpm, ISIP=400 psi, P10min=vac. Ran injection string of 2 3/8" IPC w/ 2 Baker flow regulators & two packers. Refurbish surface injection line and water filter. Placed well on injection.
1-Oct-93	**Administrative Order No. WFX-648. Approve Division Order No. R-4019 & R-4020 for Waterflood Expansion.**
29-Nov-93	C/O OH f/ 3617 - 41'. Set pkr@ 3353' & acdz'd perfs 3353-96 & OH 3410- 3641' w/ 4,200 gals 20% NEFE HCL w/ 168 gals micellular solvent & 3,000#'s RS in 4 stages. PM=847 - 315 psi, AIR=4.2 bpm, ISIP=467 psi, P5min=370 psi, P10min=300 psig. P15min=220 psi. Swab back load. RIH w/inj. Equip. Set pkr@ 2883'. Placed on injection: 624 bwpd @ 300 psi.
08-Mar-94	POOH w/injection string and pkr LD. (Plastic coating peeling out of tbg.) PU & TIH w/new CPL 2 3/8" tbg & pkr. Cound not get pkr to test @ 2915'. PU and reset pkr @ 2884'. Placed well on injection.
07-Nov-05	RIH with 1 1/4" sinker bar and **tagged at 3,619'.**

PREPARED BY: Larry S. Adams UPDATED: 09-Sep-02

Conditions of Approval

Resaca Operating Company

Cooper Jal Unit #116

March 3, 2011

1. Conduct a Mechanical Integrity Test of the tubing/casing annulus any time the packer or tubing is pulled.
    a. The test pressure should be 500 psig or at least 200 psig above the tubing (at test time) pressure but no more than 70% of burst of casing test pressure as described by Onshore Order 2.III.B.1.h. (The reservoir pressure may need to be reduced). Trap that pressure and record it on a chart for 30 minutes.
    b. Less than a 10% leakoff may not restrict injection approval. Any leak-off will be evaluated. Document the MIT on a calibrated recorder chart within 25 to 85 per cent of its full range. Notify Paul R. Swartz at 575-234-5985 and/or 575-200-7902 at least 24 hours before the test. If there is no response, notify the BLM on call drilling phone, 575-361-2822.
    c. Submit the recorded MIT chart with a subsequent Sundry Form 3160-5 relating the MIT activity. **Include the original and three copies of the recorded chart and Sundry.** (the original will be returned to the operator)

2. Submit documentation, (NMOCD permit number) of the maximum tubing injection pressure allowed by NMOCD.
    a. Approved injection pressure compliance is required.
    b. Display real time tubing pressure values onsite. A bourdon tube gauge registering 25% to 85% of its full range is acceptable.
    c. If injection pressure exceeds the maximum approved pressure you will be required to notify the BLM within 24 hours.
    d. When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
        i. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment.
    e. Other unexplained significant variations of rate or pressure will be reported within 5 days of notice.

3. The casing/tubing annulus will be required to be monitored for communication with injection fluid or loss of casing integrity.
    a. The use of automation equipment that will monitor and alarm is required when packer, tubing, or casing competence is questionable (such as pressure change during a MIT).
    b. The annulus shall be maintained full of packer fluid at atmosphere pressure.
        i. Verification of fluid level to a BLM inspector at any time is required.
    c. Any loss of packer fluid above (5bbl/mth) requires notification to the BLM authorized officer.
    d. Any gain of annular fluid requires notification to the BLM authorized officer within 5 days.
    e. Should a failure be detected, cease injection and maintain a production casing pressure of 0psig. Notify the BLMs authorized officer (Paul R. Swartz at 575-200-7902) within 24 hours. If there is no response, notify the BLM on call drilling phone, 575-361-2822.
    f. Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for approval by BLM and NMOCD a plan for correction and the anticipated date of correction.
    g. After the repairs submit a (Sundry Form 3160-5) Subsequent report, describing the repair(s) and Mechanical Integrity Test as per item 1 above.
        i. Include the date(s) of the well work, descriptions of tubing, on/off equipment, profile nipple installation, and packer setting depth.