Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS OCD
MAY 15 2012
RECEIVED

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

5. Lease Serial No
NM 12642 LC063965

6 If Indian, Allottee or Tribe Name

## 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.***

7 If Unit of CA/Agreement, Name and/or No.
Cooper Jal Unit- NM 070926X

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

8 Well Name and No
Cooper Jal Unit #213

2 Name of Operator
Resaca Operating Company

9. API Well No.
30-025-09623

3a Address
1331 Lamar Street, Suite 1450 Houston, TX 77010

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

10 Field and Pool or Exploratory Area
Jalmat; T-Y-7R/ Langlie Mattix; 7R-Q-G

4 Location of Well *(Footage, Sec , T ,R.,M., or Survey Description)*
1980' FSL & 662' FEL, Sec 24, T-24S, R-36E, Unit Letter I

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 Re-Enter P&A well, Run MIT & Put well on DHC Injection WFX-888 |
| | ☐ 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: Re-Enter P&A'd well, drill out cement plugs & CIBP; Put back on injection, injecting into OH 3003'-3600' into Jalmat & Langlie Mattix Pools.

1.) MIRU PU, NU BOP, MI Reverse Unit & Above Ground Steel Pit (12/29/11);
2.) RIH w/ 4 3/4" Bit & drilled out surf. cement plug to 800 feet in 12 days.
3.) RIH w/ new 4 3/4" Bit & drilled 2nd cement plug f/ 1027'-1365' in 2 days.
4.) Drilled 3rd plug f/ 2205'-2450' & 4th plug f/ 2924' to top of CIBP @ 2960'.
5.) Drilled on CIBP and pushed to 3242'; Drilled CIBP & 5' of new formation.
6.) Drilled formation w/ 4 3/4" Button Bit f/ 3247'-3433'.
7.) RIH w/ 4 3/4" Milled Tooth Bit f/ 3438' to new TD @ 3600'; Logged well w/ GR-CCL & Csg Inpection Log.
8.) Set Composite Plug @ 2958' & tested to 800 psig, tested good; RIH w/ 4 1/2" 14# J-55 Liner to 2957', pumped 50 sacks, waited on cement.
9.) Pumped 100 sacks Class C cement; Circulated 29 sacks, 7 barrels cement to pit.
10.) RIH w/ 3 7/8" Bit & drilled float collar, float shoe & composite plug; tagged @ 3600'.
11.) RIH w/ 4 1/2" Arrow Set Packer on 2 3/8" IPC, ND BOP, circulated packer fluid, & set Packer @ 2932' (Top OH- 3003').
12.) Ran MIT, pressure tested to 540 psig on chart recorder for 30 min., test good (witnessed & signed by Mark Whitaker NMOCD) 2/14/12
13.) RU Service Company & acidized OH f/ 3003'-3600' w/ 18,000 gals 15% Star Acid (90% acid, 10% Xylene) & 20,000# coarse rock salt.
14.) RDMO Pulling Unit, cleaned location, cleaned & disposed of pit fluids. Put well on DHC Injection into Jalmat & Langlie Mattix Pools. 2/14/12

See Attached For Conditions of Acceptance

SUBJECT TO LIKE APPROVAL BY STATE

ACCEPTED FOR RECORD
MAY 11 2012
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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

Title Engineer Assistant

Signature

Date 03/09/2012

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

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 5-17-2012

Office

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)

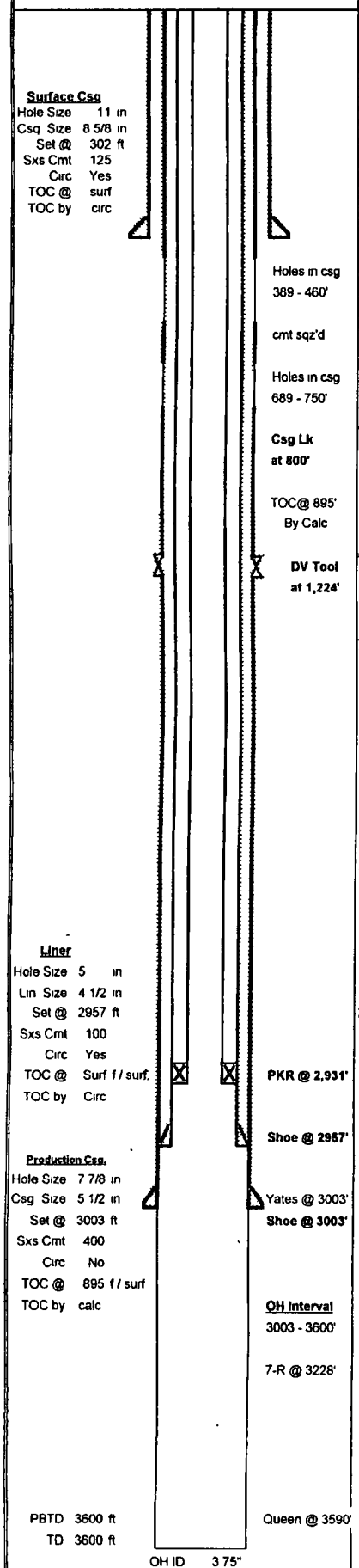
WFX-888

SUBJECT TO LIKE APPROVAL BY STATE

MAY 21 2012

# WELLBORE SCHEMATIC AND HISTORY

**CURRENT COMPLETION SCHEMATIC**




| | | | |
|---|---|---|---|
| LEASE NAME | Cooper Jal Unit | | WELL NO 213 WIW |
| STATUS | P&A'd (4-20-95) Water Injector | | API# 30-025-09623 |
| LOCATION | 1980 FSL & 660 FEL, Sec 24, T - 24S, R - 36E, Lee County, New Mexico | | |
| SPUD DATE | TD 3600 | KB 3,311' | DF |
| INT COMP DATE | 03/16/50 PBTD 3600 | GL 3,306' | |

**GEOLOGICAL DATA**

ELECTRIC LOGS

GR-N (3-13-50 Lane Wells)
Casing Inspection Log (10-7-94 Halliburton)

CORES, DST'S or MUD LOGS

HYROCARBON BEARING ZONE DEPTH TOPS

Yates @ 3003' 7-Rivers @ 3228' Queen @ 3590'

**CASING PROFILE**

| | |
|---|---|
| SURF | 8 5/8" - 29 75#, J-55 set@ 302' Cmt'd w/125 sxs - circ cmt to surface |
| PROD | 5 1/2" - 14#, J-55 set@ 3003' Cmt'd w/400 sxs - TOC @ 895' from surface by calculation |
| LINER | 4 1/2" - 14# J-55 set at 2,957' Cmt'd with 100 sx - TOC at Surf by circulation |

**CURRENT PERFORATION DATA**

CSG PERFS

OPEN HOLE
3003 - 3600'

**Liner DETAIL**

| | | | |
|---|---|---|---|
| 2922 | 87 | 4 1/2" 11 6# SJ Thread | |
| 2 | 1 | 4 1/2" Float Collar | |
| 31 | 1 | 4 1/2" 11 6# SJ Thread | |
| 2 | 1 | 4 1/2" Float Shoe | |
| 2957 | | | |

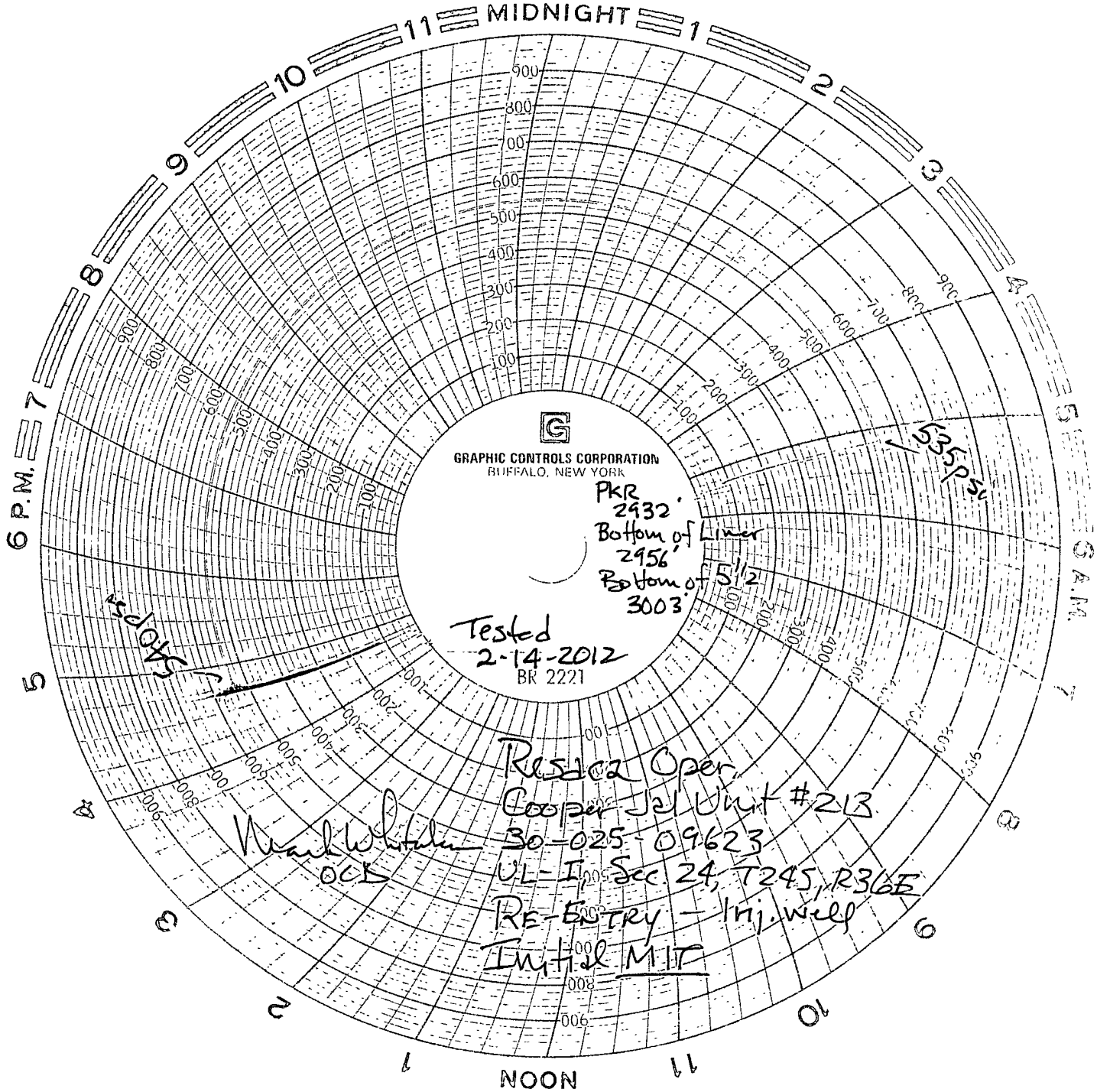
**Tubing DETAIL** 2/10/2012

| | | | |
|---|---|---|---|
| 6 | 1 | 2 3/8" J-55 4 7# EUE 8rd IPC Sub | |
| 2930 | 92 | 2 3/8" J-55 4 7# EUE 8rd IPC Tubing | |
| 3 | 1 | 4 1/2" x 2 3/8" Arrow Set Nickle Platted | |
| 2939 | | w/ On-Off Tool & w/ 1 78 F Profile | |

**WELL HISTORY SUMMARY**

| | |
|---|---|
| 16-Mar-50 | Initial completion 3003 - 3220' (Yates OH) No stimulation **IP=66 bopd, 0 bwpd, & 76 Mcfgpd. (flowing)** |
| 11-Nov-54 | C/O fill to 3220' |
| 14-Aug-56 | C/O fill to 3220' |
| 17-Jul-66 | C/O fill to 3220' |
| 07-May-71 | CONVERTED TO INJECTOR C/O various bridges from 3096 - 3220' |
| 17-Jul-87 | C/O various bridges f/ 3096 - 3195' & fill (FeSO4, CACO3 & Formation) f/ 3205 - 3220' Returned to injection **at 850 bwpd with TP=880 psi.** |
| 14-Jan-89 | Replaced tubing with new cement lined tubing string Returned to injection |
| 26-Sep-94 | Isolated 5 1/2" csg leak f/389'-421'. Cmt sqz'd csg leak w/ 150 sxs circulating cmt out 5 1/2" x 8 5/8" annulus D/O & casing Bad tst Spot 50 sxs cmt across 389'-421' & sqz to 800 psi WOC D/O & tst csg Bad tst Ran Casing inspection log which showed holes in casing f/ 400 - 446', 492 - 498', & possible csg part 1225'-1230' Attempt to cmt SQZ'd casing w/ 60 sxs cmt D/O & tst csg Bad test Set CIBP @ 2,960' on WL Dumped 50' cmt on top of CIBP. WOC **Tag TOC @ 2912'. TA'd well.** |
| 18-Apr-95 | Circ well w/ gelled brine Spot 25 sxs cmt from 2400 - 2200' WOC. Tagged TOC @ 2160' Spot 35 sxs cmt from 1350'-1013'. Spot 90 sxs cmt from 800' to surface Cut off wellhead & cap casing Installed Dry hole marker & cleaned location. NMOCD notified - **well P&A'd 4-20-1995.** |
| 29-Dec-11 | Drilled surface cement plug with 4 3/4" bit to 800 feet in 12 days. Press test Csg - failed Drilled 2nd plug from 1,027' to 1,365' in 2 days Drilled 3rd plug from 2,205' to 2,450'. Drilled 4th plug from 2,924' to top CIBP @ 2,960' Drilled on CIBP and pushed to 3242' Drilled CIBP and 5' of new formation Drilled formation w/ 4 3/4" button bit from 3,247' to 3,433 in 5 days Drilled w/ new 4 3/4" Milled Tooth bit f/ 3,438' **to new TD 3,600'** in 6 days Logged well w/ GR-CCL & Csg Inspection Log. **Set Composite** Plug @ 2,958'. Test plug to 800 psig - good RIH with **4 1/2" Liner to 2,957'.** Pumped 50 sx - stop to mixer Waited on cement Pumped 100 sx Class C. Circulated 29 sxs, 7 bbls cmt to reverse pit RIH with 3 7/8" bit Drilled Floar Collar, float shoe and Comp. Plug - tagged at 3,600' RIH with 4 1/2" Arrow Set on 2 3/8" IPC at **2,931'.** Performed MIT to 500# - okay Acidized open hole with 18,000 gals 15% Star Acid (90% acid, 10% xylene) AIR= 5 8 bpm ISIP= 1020# Pmax= 2,921# |

| | | | | |
|---|---|---|---|---|
| PREPARED BY | Larry S. Adams | Domingo Camzales | UPDATED | 15-Feb-12 |


MIDNIGHT
NOON
6 P.M.
6 A.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
PKR
2932'
Bottom of Liner
2956'
Bottom of 5 1/2
3003'
Tested
2-14-2012
BR 2221
1535 PSI
5 DAYS
Resicz Oper
Cooper Jal Unit #213
30-025-09623
UL-I Sec. 24, T24S, R36E
RE-ENTRY - Inj. Well
Initial MIT
Mark Whitaker
OCD

## Conditions of Acceptance

**Cooper Jal Unit 213**
**30-025-09623**
**Resaca Operating Company**
**May 11, 2012**

**COMPLETION OPERATIONS REQUIREMENTS**

1. Note to Operator: **Operator did not follow approved Condition Of Approval to Re-Enter this well.**
    a. **The required witness of the conducted mechanical integrity test by the BLM was not done.**
    b. **A required NOI sundry to repair casing was not submitted to the BLM to get prior approval**
    c. **An unapproved substandard liner was run and cemented to repair production casing – Per Onshore Oil and Gas Order #2(b) – Casing collars shall have a minimum clearance of 0.422 inches on all sides in the hole/casing annulus**

2. **Operator to comply to Written Order to be submitted under separate letterhead**

3. Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
    a. Approved injection pressure compliance is required.
    b. If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
    c. When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum and submit a subsequent report.

4. **The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity**.

5. The annulus is to be maintained full of packer fluid. A BLM inspector may request verification of this fluid level at any time.

EGF 05112012