

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.5 Lease Serial No
LC- 032715

6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1 Type of Well

☐ Oil Well☐ Gas Well☒ Other Injector

2 Name of Operator

Resaca Operating Company

3a Address

1331 Lamar Street, Suite 1450

Houston, TX 77010

3b. Phone No (include area code)

(432) 580-8500

7. If Unit of CA/Agreement, Name and/or No
Cooper Jal Unit- NM 070926X8 Well Name and No
Cooper Jal Unit #1339 API Well No
30-025-1116110 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 & 1916' FWL, Sec 19, T-24S, R-37E, Unit Letter K

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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Run & Cement</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>3 1/2" Liner, Run MIT.</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>*Amended Report*</u>

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 recompleat 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 recompleat 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: Run & Cement 3 1/2" Liner, Perform MIT

- 1) MIRU PU & Above Steel Pit.
- 2) Set Composite Plug @ 50' above top perf, approximately 2932' (Top Perf @ 2982'); test plug.
- 3) RIH w/ 3 1/2" x 9.30# API J-55 R-2 Ultra FJ to approximately 2930'.
- 4) Pump 250 sacks Class C + 0.4% C-35 + 0.25% R-38 (Density: 14.80 #/gal, Yield: 1.33 cubic ft/sack, Mixing Water: 6.31 gal/sack, Total Water to Mix: 37.59 bbls, Slurry Volume: 59.23 bbls.), circulate cement to surface.
- 5) RIH w/ Bit & drill float collar, float shoe & composite plug, tag. Notify BLM/OCD of pending MIT.
- 6) RIH w/ Packer on 2 3/8" IPC, ND BOP, circulate packer fluid. Set Packer within 100' of top perf (Top Perf @ 2982').
- 7) Run MIT, pressure test to approximately 520 psig on chart recorder for 30 minutes; pull chart for BLM.
- 8) RDMO Pulling Unit, clean location, clean & dispose of pit fluids.

* Amended Line 3 & 4

HOBBS OCD

OCT 10 2012

RECEIVED

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 06/13/2012

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

OCT 4 2012

Date

WESLEY W. INGRAM
PETROLEUM ENGINEER

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.

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)

OCT 11 2012

McNeal One

1-Jun-05

FLUSHMAX Dimension

Pipe Body					Pin	Box		
Outside Diameter in	Nominal Weight lbs/ft	Wall Thickness in	Inside Diameter in	Drift Diameter in	Thread length in	OD in	Joint Efficiency %	Length in
2 3/8	4.43	0.190	1.995	1.901	1.750	2 3/8	40	1.750
2 7/8	6.16	0.217	2.441	2.347	1.750	2 7/8	42	1.750
3 1/2	8.81	0.254	2.992	2.867	1.750	3 1/2	46	1.750
4 1/2	11.35	0.250	4.000	3.875	2.500	4 1/2	46	2.518
4 1/2	12.24	0.271	3.958	3.833	2.500	4 1/2	50	2.518
4 1/2	13.04	0.290	3.920	3.795	2.500	4 1/2	53	2.518
5	14.87	0.296	4.408	4.283	2.500	5	43	2.526
5	17.93	0.362	4.276	4.151	2.500	5	53	2.526
5 1/2	16.87	0.304	4.892	4.767	2.500	5 1/2	43	2.527

FLUSHMAX Performance Properties

Outside Diameter in	Nominal Weight lbs/ft	Wall Thickness in	J55			N80 / L80		
			Tensile kips	Burst psi	Collapse psi	Tensile kips	Burst psi	Collapse psi
2 3/8	4.43	0.190	28.7	6,160	8,100	41.7	8,960	11,780
2 7/8	6.16	0.217	41.8	5,812	7,680	60.9	8,454	11,170
3 1/2	8.81	0.254	65.5	5,588	7,400	95.3	8,128	10,540
4 1/2	11.35	0.250	84.4	4,278	4,960	122.8	6,222	6,360
4 1/2	12.24	0.271	99.0	4,637	5,730	143.9	6,745	7,500
4 1/2	13.04	0.290	111.8	4,962	5,860	162.5	7,218	8,540
5	14.87	0.296	103.4	4,558	5,560	150.4	6,630	7,250
5	17.93	0.362	153.7	5,575	7,390	223.5	8,109	10,500
5 1/2	16.87	0.304	117.3	4,256	4,910	170.6	6,191	6,290

FLUSHMAX Make-up Torque

Outside Diameter in	Nominal Weight lbs/ft	Grade	Torque (ft-lbs)			Bolt Tong Pressure	
			Min.	Max.	Aim	Gear	Pressure psi
2 3/8	4.43	J55	1,000	1,400	1,200	High	2,000
		N/L80	1,100	1,500	1,300	Low	550
2 7/8	6.16	J55	1,500	2,000	1,750	Low	750
		N/L80	1,700	2,100	1,900	Low	810
3 1/2	8.81	J55	2,000	2,800	2,400	Low	1,000
		N/L80	2,200	3,000	2,600	Low	1,100
4 1/2	11.4	J55	2,400	3,200	2,800	Low	1,210
		N/L80	2,600	3,400	3,000	Low	1,260
4 1/2	12.2	J55	2,500	3,300	2,900	Low	1,250
		N/L80	2,700	3,500	3,100	Low	1,300
4 1/2	13.0	J55	2,600	3,400	3,000	Low	1,260
		N/L80	2,800	3,600	3,200	Low	1,340
5	14.9	J55	2,600	3,400	3,000	Low	1,260
		N/L80	2,800	3,600	3,200	Low	1,340
5	17.9	J55	2,700	3,500	3,100	Low	1,300
		N/L80	2,900	3,700	3,300	Low	1,400
5 1/2	17.0	J55	2,700	3,500	3,100	Low	1,300
		N/L80	2,900	3,700	3,300	Low	1,400

This is Tong pressure to be set to dump

Conditions of Approval

Resaca Operating Company

Cooper Jal Unit – 133

API 30-025-11161

T24S-R37E, Sec 19

October 4, 2012

Operator should include before and after diagrams for these requests.

1. Surface disturbance beyond the existing pad shall have prior approval.
2. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
3. Functional H₂S monitoring equipment shall be on location.
4. A 2000 (2M) BOPE to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 (attachment 1, 2M diagrams of choke manifold equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
5. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
6. Workover approval is good for 90 days (completion to be within 90 days of approval). A detailed justification is necessary for extension of that date.
7. Submit Subsequent Report sundry within 30 days of doing work with details by date of work completed.

PRS/WWI 100412

Well with a Packer – Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) At least 24 hours before the test: Andy Cortez acortez@blm.gov, (phone 575-393-3612 or 575-631-5801). If no answer, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact notification method, time, & date in your subsequent report.
- 5) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- 7) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
- 8) 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. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of the annular fluid level at any time.

- 11) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 14) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in-line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.