HOBBS OCD

OCD Hobbs

Form 3160-5
(August 2007)

APR 20 2012

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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.

5. Lease Serial No
LC-~~055546~~ 032511 E

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

7 If Unit of CA/Agreement, Name and/or No.
Langlie Jal Unit- NM 70970A

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

8 Well Name and No
Langlie Jal Unit #85

2 Name of Operator
Resaca Operating Company

9. API Well No.
30-025-11493

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
Langlie Mattix; 7Rivers-Queen-Grayburg

4. Location of Well *(Footage, Sec., T,R.,M., or Survey Description)*
660 FSL & 660 FEL, Sec 8, T-25S, R-37E, Unit Letter P

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 Test casing & repair if necessary, Run MIT
	☐ 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: This injector is currently injecting into the Langlie Mattix Pool. We intend to test casing, make repairs if necessary, run MIT & pull chart.

1.) MIRU Pulling Unit & Above Ground Steel Pit.
2.) Pressure Test casing to see if any casing leaks are found.
3.) If casing leak is found, locate & cement squeeze with appropriate sacks of cement.
4.) Drill out cement & circulate well clean.
5.) Pressure test casing to make sure casing repair was successful.
6.) Run Mechanical Integrity Test (Notify BLM & NMOCD prior to test). Pull chart for BLM (copy to NMOCD).
7.) RDMO Pulling Unit, clean location, clean & dispose of pit fluids.

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 02/27/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
APR 16 2012
Date
WESLEY W. INGRAM
PETROLEUM ENGINEER

Approved by

Title

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

Office

4-23-2012

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)

APR 24 2012

WELLBORE SCHEMATIC AND HISTORY

LANGLIE JAL UNIT

		RESERVOIRS	PERFORATIONS		CASING				SPUD DATE:
LEASE:	LJU	ANHYDRITE	TOP	BTM	SIZE	WT	GRD	CSA	COMP DATE: 3/8/1996
WELL	85	SALT							ELEVATIONS
API #:	30-025-11493	YATES				see below			KB: 3172
FIELD:	Langlie Mattix	SEVEN RIVERS	see below						GL: 3171
LOCATION:	8 25S 37E	QUEEN							DF: 3162
	LEA COUNTY, NM				TUBING				UPDATED:
Directions to Location :		TOP OF PAY				see below			BY: KAS
660 S 660 E									

SURFACE CASING

SIZE:	**10**
WT/GRD.	40#
WT/GRD:	
CSA/Depth	**708**
SX·	none
CIRC:	
TOC:	
HOLE SIZE:	

INTERMEDIATE CASING

SIZE:	**8 1/4**
WT/GRD:	**32#**
WT/GRD:	
CSA/Depth	**1200**
SX:	
CIRC:	**66**
TOC:	
HOLE SIZE.	

PRODUCTION CASING

SIZE:	**5 1/2**
WT/GRD:	**17#**
WT/GRD:	
CSA/Depth	**3194**
SX:	**300**
CIRC.	
TOC:	
HOLE SIZE.	

only @ 60' interval exposed

TUBING INSTALLATION

2 3/8

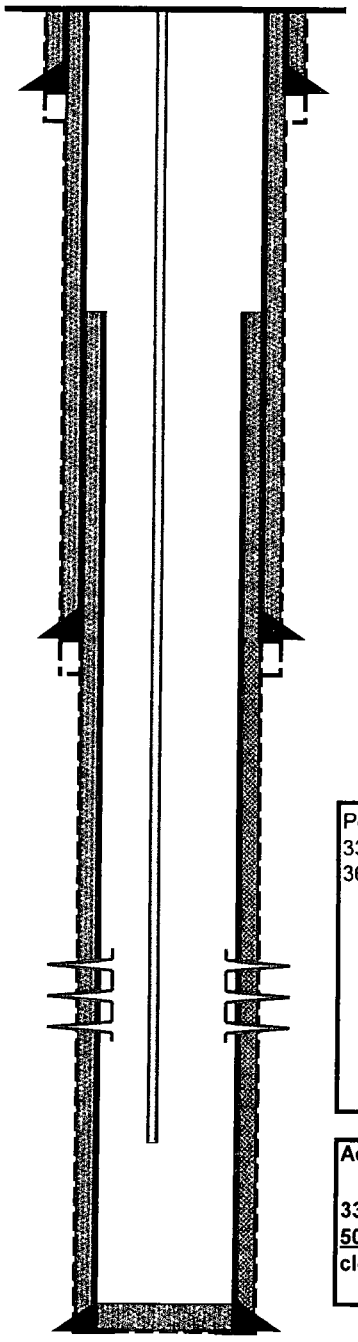
3131 depth

3131 packer

101 jts 2 3/8 " EUE, 8rd 4.7 # J-55 IPC

Guiberson Uni Packer I, set at 3110' 15,000 tension

ROD & PUMP INSTALLATION



PBTD: 3468

TD: 3686

Perforations
3330-
3625'

18 '	3SPF	54 holes
13	3 SPF	39 holes
30	3 SPF	90 holes
1'	3 SPF	15 holes

Acidized

3330' 3635'

5000 gallons 7 1/2 HCL

cleaned out to 3260" on 5/90

LANGLIE JAL UNIT # 85
WELL HISTORY

6/12/1990	Shut in injection well, MIRUSU, RU reverse unit, flow well back to reverse pit, No well head, NU BOP, Release Guiberson Uni-Packer I set at 3100' (15,000) tension , POH with packer and 2 3/8" IPC 4 7# J-55 production tubing P U 4 3/4 " bit collars, and 2 7/8 " J-55 6.5# EUE workstring tubing. RIH and tag fill at 3260' Clean hold out to 3468' Note Junk in hole at 3468'. Do not turn on junk. POH and LD workstring, collars and bit. RIH with injection equipment Load backside with packer fluid. Set Guiberson Uni-Packer I at 3110' Return well to injection, RDMOSU
	Injection well improvement Currently injecting 244 BWPD at 440 psig LJU #85 WIW was in the LJU injection cleanout package. The coiled tubing failed to clean out the majority of the open hole section. Only 60 feet of the open hole section is exposed to injection fluids. This is the only interval open since the well has no perforations in the cased section. This well offsets five low volume wells with good to moderate oil cuts. Injection has always been poor in the south-end of the field. This well needs to be property cleaned out. Tubulars will have to be pulled, and cleaned out with a bit and a reverse unit.
5/20/1990	Tagged fill at 3184 and washed out 3184 to 3260 Circ and clean return to injection
10/1/1991	new operator effective 10/1/1991
12/19/1992 through 12/17/1992	MIRU, ND WH, NU BOP, Unable to rls pkr. POOH LD pkr. PU bit and workstring, SDFD Finish RIH w/tbg. Tag fill in open hole. Drill and wash to 3485 ' Circ clean and POOH PU jet sub. RIH to csg shoe SDFD TIH with jet sub. Tag bridge @3305' jet and wash to 3485' circ hole, clean POOH, LD work string and DC, RU tbj testers. PU pkr RIH and tested tbg circ pkr fluids, Set pkr 3128' ND BOP NU WH RDMO
12/15/1992	MIRU, rls pkr, PUH, set at 3098' test pkr, good test, RDMO
12/16/1992	MIRU, ND WH NU BOP, POOH tbg & pkr ND BOP Cut off WH weld on ball nipple, Install new WH NU BOP SDFN
12/17/1992	PU RIH with pkr circ hole with pkr fluid, set pkr @ 3,095' ND BOP NU WH Run H-5. Good Test RDMO
12/4/1992	Notify NMOCD prior to starting work. Flow back well for several days prior to work until well is dead, MIRU PU, ND wellhead NU BPO, Release packer and POOH with tubing and packer, Send packer into be redressed. Deliver 2 7/8 " workstring to location PU workstring and RIH with 3/4" bit, 6 drill collars, and workstring.
	RU reverse unit and power swivel. Clean out fill from 3256' to 3468'. POOH laying down workstring. RIH with packer and IPC tubing to 3131' Load backside with packer fluid and set packer ND BOP, wellhead, Perform packer leakage test for state and RDMO PU. Return well to injection.
	Wait until well stabalizes and run injection survey.
9/3/1993	Leaking line clamp claused discharge of 25 barrels of produced water. Spill was limited to facility pad then picked up 12 bbls with vaccum truck, replaced flowline section with new flowline.
12/19/1992	MIRU, RIH with 1.75 down blast nozzle, tage soft fill 3300+-, Bridge 3581' Hard fill 3669-3695, circ clean recover iron sulfide RIH with 1.75 side blast nozzle work from 3220'-3695' Rotate tool 90 degree intervals, washing intervals. RDMO
11/27/1992	RU to test csg pump hole in csg dug out cellar, intermediate csg has hole, RIRU, ND WH, NU BOP, pulled it of tbg & pkr MI workstring SIH/pkr MI workstring SIH/pkr and RBP SDFN
11/28/1992	Set RBP @ 3218' Pull prk to 3052.' Moved RBP to 3052' Pull pkr 2987. Pulled pkr to 2455' WBIH POOH w tbg. Replaced pkr RIH, RBP to 3205' POOH, POOH with tbg and pkr SDOW
12/1/1992	Dmp 2 sx snd on RBP @ 3218' RU cmt sqz hole in 7" csg. 169-189' w/100 sxs Class "C" cmt, w 2% CaCL SION
12/2/1992	PU and Bit DC, RIH tbj, tag cmt, @135' cmt, grn, POOH, SDFD
12/3/1192	RIH hard cmt 166' to 205' circ clean, test csg circ sand from RBP. POOH with stds of pipe SDFN.
12/4/1992	POOH with tbg and RBP, Put scraper ran tbg, COOH with tbg, PU pkr test tbg Pump pkr fluid, Set pkr, SDFN
12/5/1992	RUD cleaned location, Covered pit, hooked up well.
12/20/1992	MIRU RIH with 1 75 OD down blast nozzle wash 3330-3691' soft fill bridge 3691' wash 3691-3780' Hard fill. Tag up 3780' Circ clean recover iron sulfide. RIH with 1.75 OD side blast nozzle, Rotate too 90' degree intervals RDMO.
12/17/1992	MIRU NDWH, NU BOP Rls Pkr, POOH, LD pkr PU bit, DC&tbg, RIH, Tag fill @3451' clean out, Bit plugged, POOH Unplug bit, RIH to 3200 SDFD
12/18/1992	PU Pkr TIH test tbg, ND Bop, NU WH circ pkr fluid, set pkr at 3148' Ran H-5 Good Test, RDMO
12/19-12/17 1992	MIRU, ND WH, NU BOP, Unable to rls pkr POOH LD pkr PU bit and workstring SDFD Finish RIH with tbg Tag fill in open hole Dirll and wash to 3485' Circ clean POOH, PU jet sub, RIH to csg shoe SDFD TIH with jet sub tag bridge at 3305' jet and wash to 3485' circ hole clean POOH, LD work string and DC, RU tbg testers PU pkr RIH and tested tbg circ pkr fluids, set pkr 3128' ND BOP NU WH RDMO MIRU, rls pkr PUH set at 2098' test pkr good test RDMO MIRU, ND WH, NU BOP, POOH tbj and pkr, ND BOP cut off WH weld on ball nipple. Install new WH NU BOP SDFN PU RIH with pkr circ hole with pkr fluid Set pkr at 3095' ND BOP NU WH Run H-5 Good test, RDMO
9/3/1993	Leaking line clamp caused discharge of 25 barrels of produced water. Spill was limited to facilty pad then picked up 12 bbls with vacuum truck. Replaced flow line section with new flow line.
2/14/1996	Clean out open hole from 3194' to 3483'

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to 3/8/1996	Wash out bridge from 3430-3585'
	Drill new 4 3/4 hole from 3430-3686.
	Run 600' of 4" liner. Circ liner with foam. Cmt liner
	Run squeeze pkr Set above liner@ 3061' 5 1/2" casing heald at 500 psi
	Pump 200 sx cmt tbg Drill cmt from 2810' to top of 4" liner, Press test to 500 psi
	Drill out liner top, Drill out 5' cmt in liner btm to 3680' Circ Clean
	Perf depths given, see report for more information,
	Acidize Ream out liner to TD
	Test 4" J lock opkr and 2 3/8 " inj string set at 3130' inside 4" liner, Circ pkr fluid, set pkr Would not test
	Squeeze top of 4" liner with 100 sx cmt to 2000 psi, Reverse out, Reset prk, Leave 1000 psi on squeeze
	Release squeeze pkr. Drill out 150' med soft cmt.
	Drill out 1" cmt in top of liner. Circ sand off BP
	Drill out 1" cmt in top of liner Circ sand off BP
	Set 4" J lock pkr at 3275'+- in 10000# tension, Press test backside and pkr to 500 psi, Press held
	Put on injection.
10/26/2001	MI and RU April 2002 TOH with downhole equipment, Repair if necessary
	Restore well to injection
4/2/2002	MI and RU Rapid Transport, Pressure tested back side to 450# held and charted okay, Reactive well. Witnessed by OCD representative.
3/22/2006	Pressure tested well as per attached chart, packer @ 3275' This well will be activated and put back into injector status.

Conditions of Approval

Resaca Operating Company
Langlie Jal Unit - 85
API 3002511493
April 16, 2012

1. **Operator shall obtain BLM approval prior to any casing repair beyond squeezing the casing leaks. Failure to obtain approval will result in a Major Incidence of Non-Compliance and may result in a Unit shut-in order.**
2. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 3050' or below to top of cement. Less than 500' between the proposed top perforation and top of cement or lack of a 500' overlap above next casing shoe may require correction. The CFO BLM on call engineer may be reached at 575-706-2779.**
3. Surface disturbance beyond the existing pad shall have prior approval.
4. 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.
5. Operational H_2S monitoring equipment to be utilized on location.
6. 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.
7. 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.
8. **Operator shall submit a subsequent report sundry with original signature along with three copies within 30 days of completing the work. The work shall be detailed by date performed.**
9. **Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.**

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 differential 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: In Lea County email Andy Cortez acortez@blm.gov, (phone 575-393-3612 or 575-631-5801). 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 0psia. 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. Operator shall list (by date) descriptions of daily activity of any previously unreported wellbore workover.

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

Use of Form 3160-5 "Sundry Notices and Reports on Wells"

§ 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.