

DATE 1/24/11	SUSPENSE	ENGINEER WJ	LOGGED IN 1/24/11	TYPE DHC	PPNO. 1206744832
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☒ Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Melanie Reyes		Engineer Assistant	1/24/12
Print or Type Name	Signature	Title	Date
		<u>melanie.reyes@resacaexploitation.com</u>	
		e-mail Address	



January 24, 2012

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
Attention: Engineering Department

Re: Application to Downhole Commingle
Jalmat/Langlie Mattix Pools
Cooper Jal Unit #123,129,147
Unit Letter D, F, E; Sec. 19; T24S, R37E
Lea County, New Mexico

Resaca Operating Company respectfully requests administrative approval to downhole commingle the Jalmat and the Langlie Mattix Pools within the subject wellbores. Currently, the wells have been approved for Re-Entry. Notification of offset operators is not an issue given the fact that Resaca offsets all of the wells.

Downhole Commingling these wells will provide a more economical and efficient means of production. It will allow complete development of the productive capacity on the subject lease by allowing both pools to be artificially lifted simultaneously. This will extend the life of both completions, thereby preventing waste.

The subject wells meet all of the requirements of Rule 303 (C). All produced fluids from other downhole commingled wells have entered a common production facility with no fluid compatibility problems.

Resaca also requests the allocation of production for each pool be deferred until a stabilized production rate is established. Production will then be allocated to the Jalmat and Langlie Mattix Pools. Tests for both pools will be reported on the Subsequent Sundry Reports. If you have any questions, please contact Domingo Carrizales at (432) 580-8500.

Sincerely,

Domingo Carrizales
District Engineer

cc: NMOCD/Hobbs; BLM/ Carlsbad

District I
1625 N. French Drive, Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Resaca Operating Company 1331 Lamar Street, Suite 1450 Houston, TX 77010

Operator Address
Cooper Jal Unit 147 E-19-24S-37E Lea

Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 263848 Property Code 306443 API No. 30-025-11166 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat		Langlie Mattix
Pool Code	33820		37240
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Not Completed Yet		Not Completed Yet
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	37.7 Degree API		37.7 Degree API
Producing, Shut-In or New Zone	New Zone		New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☐ No ☒

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Engineer Assistant DATE 1/12/2012

TYPE OR PRINT NAME Melanie Reyes TELEPHONE NO. (432) 580-8500

E-MAIL ADDRESS melanie.reyes@resacaexploitation.com

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

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 70926X

8. Well Name and No.
Cooper Jal Unit #147

9. API Well No.
30-025-11166

10. Field and Pool or Exploratory Area

Jalmat/ Langlie Mattix

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Unit Letter E, Section 19, T-24S, R-37E, 2313' FNL & 326' FWL

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>Downhole</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Commingle</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>Jalmat/Langlie Mattix</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.)

Purpose: This well has currently been approved for Permit to Re-Enter. Resaca intends to Re-Enter well, Drill out all cement plugs & CIBP @ 2950'. Clean out well to current TD @ 3572'. Drill new hole to new TD @ 3730'. Downhole commingle Jalmat and Langlie Mattix Pools; Perfs 3006'-3468' (OH 3485'-3730'). Put well on production.

- 1.) Remove dry hole marker; MIRU Pulling Unit & Reverse Unit; Closed Loop System will be used.
- 2.) NU & test 2M BOP System.
- 3.) PU 6 1/4" Bit on 2 3/8" production tubing & drill out cement plugs @ surface-300', 995'-1200'.
- 4.) Tag top of liner @ 2916'; circulate well clean; POOH & LD 6 1/4" Bit.
- 5.) PU 3 7/8" bit on 2 3/8" production tubing, drill out cement plug @ 2545'-2950'; CIBP @ 2950'.
- 6.) Clean out well to 3572' (current TD); drill new hole to 3730'; circulate well clean; POOH & LD 3 7/8" Bit.
- 7.) PU 4 1/2" Tension Packer & RIH to 2950'. Set Packer @ 2950' & test casing to 500 psi. POOH & LD Packer.
- 8.) Frac well & flow back.
- 9.) PU 4 1/2" TAC & RIH w/ 2 3/8" production tubing. Space out & set TAC. Land tubing.
- 10.) ND BOPs & NU Pumping Tee.
- 11.) NU rod stripper. PU & RIH w/ downhole pump & rods. Seat pump. Hang off rods. ND rod stripper & pack off rods.
- 12.) RDMO Pulling Unit & other equipment.

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

Melanie Reyes

Title Engineer Assistant

Signature

Date 01/24/2012

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.

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.

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies
DEC 12 2011
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-11166	Pool Code 33820	JALMAT;TAN-YATES-7 RVRS (OIL)
Property Code	Property Name COOPER JAL UNIT	Well Number 147
OGRID No 263848	Operator Name RESACA OPERATING CO.	Elevation 3294.4'

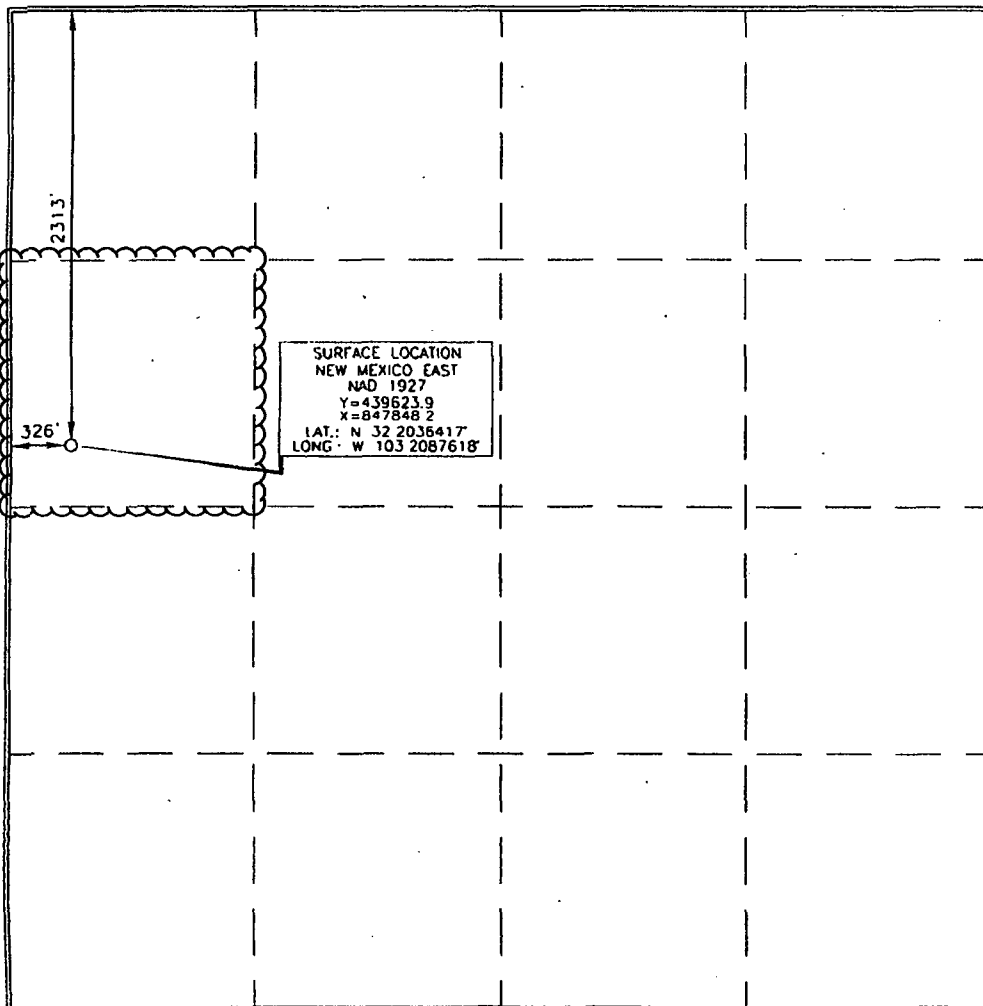
Surface Location

UL or lot no. E2	Section 19	Township 24 SOUTH	Range 37 EAST, N.M.P.M.	Lot Idn	Feet from the 2313'	North/South line NORTH	Feet from the 326'	East/West line WEST	County LEA
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Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 38.10		Joint or Infill	Consolidation Code	Order No.					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brian Wood
Signature Date **7-25-11**

BRIAN WOOD

Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes or actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

15079
APRIL 11, 2011
Date of Survey
Signature and Seal of Professional Surveyor
Terry J. Wood **4/25/2011**
Certificate Number **15079**

WOF 110411WL-g (KA)

DEC 13 2011

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-11166	² Pool Code 37240	³ Pool Name Langlie Mattix
⁴ Property Code 306443	⁵ Property Name Cooper Jal Unit	⁶ Well Number 147
⁷ OGRID No. 263848	⁸ Operator Name Resaca Operating Company	⁹ Elevation 3294.4'

¹⁰ Surface Location

UL or lot no. E	Section 19	Township 24S	Range 37E	Lot Idn	Feet from the 2313	North/South line North	Feet from the 326	East/West line West	County Lea
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¹¹ Bottom Hole Location If Different From Surface

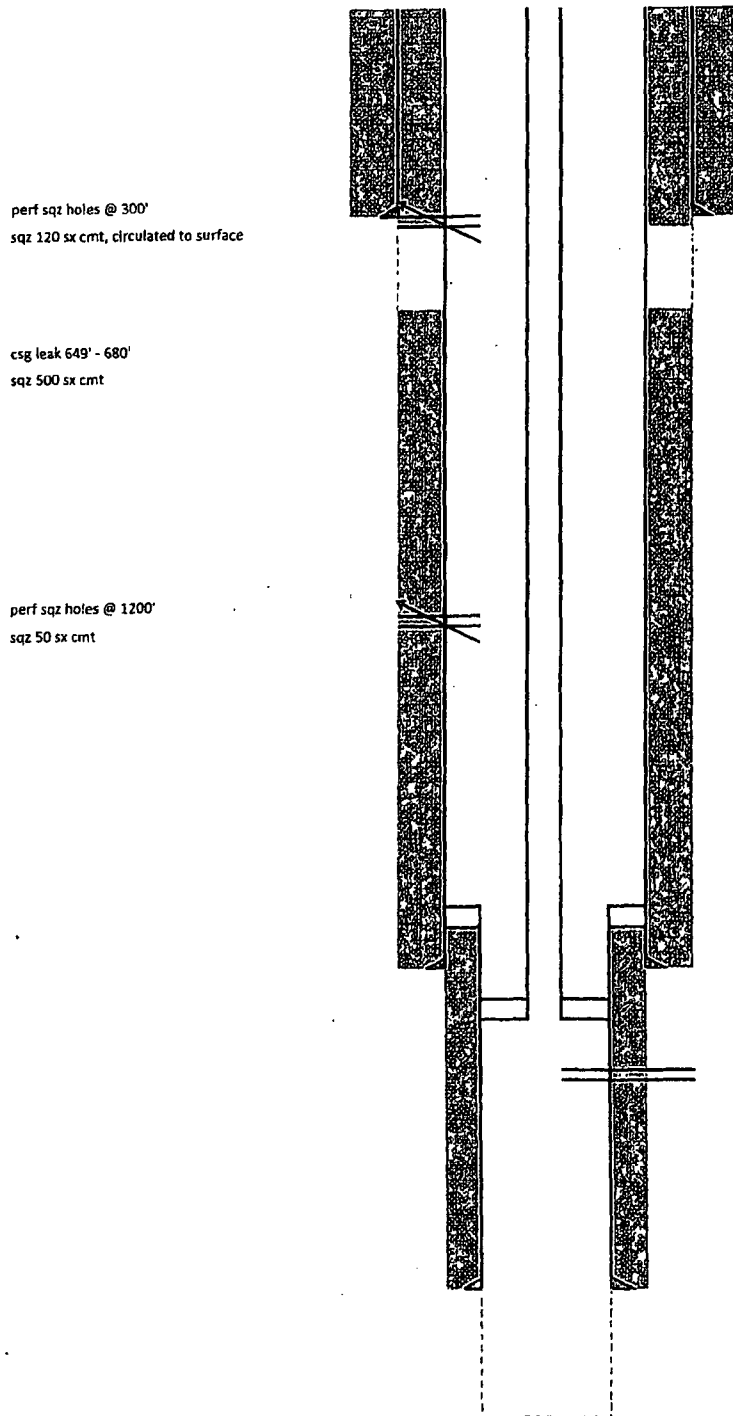
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 38.10	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 				<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p> Signature</p> <p>1/12/2012 Date</p> <p>Melanie Reyes Printed Name</p> <p>melanie.reyes@resacaexploitation.com E-mail Address</p>
				<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>

PROPOSED WELLBORE SCHEMATIC

Operator: Resaca Operating Co
 Well Name: Cooper Jal #147
 Well Location: 2310' FNL, 330' FWL
 Calls: E
 Unit: 19
 Section: 24S
 Township: 37E



Surface Casing

Hole Size (in): 10 3/4
 Casing Size (in): 9 5/8
 Casing Weight (ppf): 32
 Setting Depth (ft): 267
 Amount Cement (sx): 75
 Top of Cement (ft): 0
 TOC Method: Calculated

Production Tubing

Tubing Size (in): 2 3/8
 Tubing Weight (ppf): 4.7
 TAC Depth (ft): 3000
 Setting Depth (ft): 3000

Production Casing

Hole Size (in): 8 3/4
 Casing Size (in): 7
 Casing Weight (ppf): 20
 Setting Depth (ft): 2975
 Amount Cement (sx): 400
 Top of Cement (ft): 463
 TOC Method: Calculated

Perforations

Top (ft): 3006
 Bottom (ft): 3468

Liner

Casing Size (in): 4 1/2
 Casing Weight (ppf): 9.5
 Liner Top (ft): 2916
 Liner Bottom (ft): 3485
 Amount Cement (sx): 280
 Top of Cement (ft): 2916
 TOC Method: Circulated

Open Hole

Hole Size (in): 3 7/8
 Top (ft): 3485
 Bottom (ft): 3730

Total Depth (ft): 3730