DATE IN 1.27.12	SUSPENSE	ENGINEER WVJ	LOGGED IN 1.27.12	TYPE DHC	APP NO. 1202750041

PTGW

4519

ABOVE THIS LINE FOR DIVISION USE ONLY

263848

Resaca

CJA #134

30-025-09661

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-25-24S-36E

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

RECEIVED OCD 2012 JAN 26 P 2:44

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

Fee/Lea

[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	[signature]	Engineer Assistant	1/24/12
Print or Type Name	Signature	Title	Date

melanie.reyes@resacaexploitation.com
e-mail Address

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

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

Form C-107A
Revised August 1, 2011

APPLICATION TYPE
X Single Well
___ Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes ___ No

APPLICATION FOR DOWNHOLE COMMINGLING

DHC-4519

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

Cooper Jal Unit | 139 | B-25-24S-36E | Lea
Lease | Well No. | Unit Letter-Section-Township-Range | County

OGRID No. 263848 Property Code 306443 API No. 30-025-09661 Lease Type: ___Federal ___State X 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)	3014'-3222'		3465'-3545'
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	Producing		Producing
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: 11/10/2011 Rates: 7 BOPD, 7 MCFPD 216 BWPD	Date: Rates:	Date: 1/1/12 Rates: 3 BOPD, 3 MCFPD 56 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 70 % Gas 70 %	Oil % Gas %	Oil 30 % Gas 30 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X 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 X No ___

Will commingling decrease the value of production? Yes ___ No X

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 X

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 1/3/12

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

E-MAIL ADDRESS melanie.reyes@resacaexploitation.com

RESACA
OPERATING COMPANY

January 24, 2012

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

Re: Application to Downhole Commingle
Jalmat/Langlie Mattix Pools
Cooper Jal Unit #139
Unit Letter B; Sec. 25, T24S, R36E
Lea County, New Mexico

Resaca Operating Company respectfully requests administrative approval to downhole commingle the Jalmat and the Langlie Mattix Pools within the subject wellbore. 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 well 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.

If you have any questions, please contact Domingo Carrizales at (432) 580-8500.

Sincerely,

Domingo Carrizales
District Engineer

cc: NMOCD/Hobbs

2509 Maurice Road Odessa, Texas 79763
main: 432.580.8500 fax: 432.580.8501
www.resacaexploitation.com

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	[2] Pool Code	[3] Pool Name
30-025-09661	33820/37240	Jalmat/Langlie Mattix

[4] Property Code	[5] Property Name	[6] Well Number
306443	Cooper Jal Unit	139

[7] OGRID No.	[8] Operator Name	[9] Elevation
263848	Resaca Operating Company	3314' KB

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	25	24S	36E		330	North	2310	East	Lea

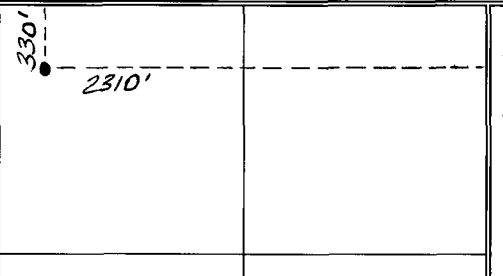
[11] Bottom Hole Location If Different From Surface

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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40			

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]



[17] 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.

1/3/2012
Signature Date

Melanie Reyes
Printed Name

melanie.reyes@resacaexploitation.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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.

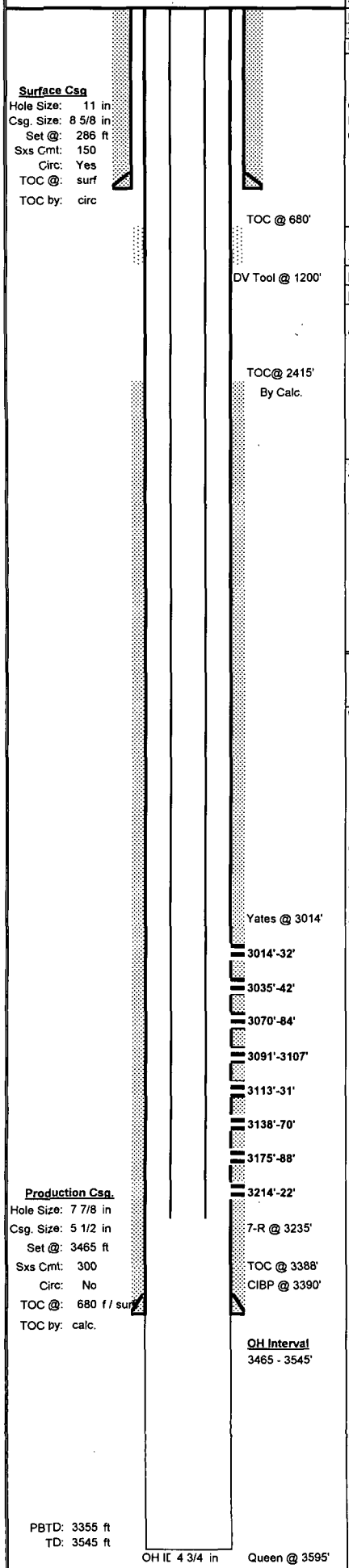
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC



LEASE NAME	Cooper Jal Unit				WELL NO. 139
STATUS:	Active	Oil			API# 30-025-09661
LOCATION:	330 FNL & 2310 FEL, Sec 25, T - 24S, R - 36E; Lee County, New Mexico				
SPUD DATE:		TD	3545	KB 3,314'	DF
INT. COMP. DATE:	05/26/54	PBTD	3355	GL	

GEOLOGICAL DATA

ELECTRIC LOGS:

GR-N from 0 - 3544' (5-20-54 Schlumberger)
Injectivity Profile (6-5-73 WACO)
GR-CCL (9-13-93 Halliburton)

CORES, DST'S or MUD LOGS:

HYROCARBON BEARING ZONE DEPTH TOPS:

Yates @ 3014' 7-Rivers @ 3235' Queen @ 3595'

CASING PROFILE

SURF.	8 5/8" - 24#, H-40 set@ 286' Cmt'd w/150 sxs - circ cmt to surf.
PROD.	5 1/2" - 14#, H-40 set@ 3465' Cmt'd w/200 sxs - TOC @ 2415' from surf. DV tool @1200' - pmp 100 sxs -
LINER	None 5 1/2" - TOC@ 680' f/ surf by calc.

CURRENT PERFORATION DATA

CSG. PERFS: OPEN HOLE : 3465 - 3545'

11-Sep-93 **Perf'd Jalmat** w/ 2 spf 3014'-32', 3035'-42', 3070'-84', 3091'-3107', 3113'-31', 3138'-70', 3175'-88', & 3214'-22' (252 holes total - 0.56" dia.)

TUBING DETAIL 11/25/2011

Length (ft)		Detail
2550	81	2-7/8" J-55 6.5# EUE 8rd
4	1	2 7/8" x 4' Tbg Sub
295	9	2-7/8" J-55 6.5# EUE 8rd
31	1	2 7/8" x 31' Blast Jt
1	1	2 7/8" x 1.10 Seat Nipple
19	1	2 7/8" v 19' De-sander
131	4	2-7/8" J-55 6.5# EUE 8rd
3031		2-7/8" J-55 6.5 EUE 8rd

ROD DETAIL 11/25/2011

Length (ft)		
18	1	1-1/4" X 26' Polished Rod w/7/8" Pin
0	5	1-1/4" X 1-1/2" X 16' Liner
4	1	4' - 7/8" Pony Rod
900	36	7/8" Steel Rods
1375	55	3/4" SteelRods
600	24	1-1/2" K-Bars
3	1	2 1/4" X 2" X 20 RWBC w/1.25 X 1' SN
2900		

WELL HISTORY SUMMARY

26-May-54	Initial completion interval: **3465 - 3545' (Queen OH).** Frac'd w/4,000 gals Dowell Stratofrac w/ 6,000#'s sand. AIR= 12.6 bpm at 1200 psig. **IP= 157 bopd**
28-Jul-54	**48 bopd, 0 bwpd, & GOR=1,072 (flowing on 15/64" choke)**
22-May-57	Frac'd OH w/17,000 gals, 25,000#'s 20/40 sand, 5,000#'s 10/20 sand. AIR=29 bpm @ 2700 psi. Before WO: **7 bopd, 7 bwpd & GOR= 8320. After WO: 31 bopd, 0.2 bwpd, & GOR=2947**
18-May-71	**CONVERTED TO INJECTION:** Tag btm @ 3539'. Did not C/O. Ran injection equipment & initiated injection.
05-Jun-73	Ran injection profile. Tag TD @ 3538'
23-Mar-79	Attempted TD check w/ 1 1/4" sinker bar - couldn't get below 2888'.
28-Mar-79	Ran 1" sinker bar - tagged TD @ 3482' (56' of fill)
12-Aug-88	C/O, Side jet and acdz'd OH w/2,000 gals
29-Mar-93	C/O, Side jet and acdz'd OH w/4,000 gals
11-Sep-93	**Set CIBP @ 3390' & dmp 35' cmt on top. PBTD = 3355'. Perf'd (Yates/7RVRS)** using 4" csg gun, 120 deg phasing w/ 2 spf 3014'-32', 3035'-42', 3070'-84', 3091'-3107', 3113'-31', 3138'-70', 3175'-88', & 3214'-22' (252 holes - 0.56" dia.) Frac'd perfs (3014 - 3222) w/48,600 gals, 134,000#'s 12/20 sand. AIR=35 bpm @ 2300 psig. ISIP= 78 psig. C/O sand to 3330'. Ran production equipment. **After WO: 57 bopd, 330 bwpd, & 25 Mcfgpd.**
16-Nov-93	Hydrotest tbg. Found & replaced 2 bad jts. Returned well to production.
03-Mar-95	Replaced 1 bad jt tbg. Returned well to production.
13-Apr-95	Replaced rod pmp. Returned well to production.
02-Dec-97	Replaced all 3/4" rods & 7/8" rod boxes. Hydrotested tbg - no bad jts. Returned well to production.
18-Dec-00	Tag btm @ 3355'. Replaced pmp. Returned well to production.
27-Feb-02	Long stroke pump.
09-Sep-02	Tally out of hole with tubing string - found a split jt. Hydrotest tubing in hole. Well would not pump - found scale and sand on MAJ. Placed well on production.
18-Jul-03	POOH with rods and pump. Found top joint with 2 foot split. Reset TAC, RIH with pump and rods. PWOP.
24-Jun-04	POOH with rods and pump. RIH with larger pump and rods. PWOP.
18-Feb-05	POOH with rods and pump. Scanolog tubing: 72 - Blue, 20 - Green, & 4 - Red. RIH with production string - didn't hold pressure. Hydrotest tubing to 6000# - found 1 split #29 joint. PWOP.
25-Mar-11	POOH with production string.RIH with 4 3/4" bit, rig up AIR UNIT. Tagged at 3,280', **cleaned ot to 3,388'.** Test casing to 500#. Found hole between 353' to 416'. While backing of CSG, parted 2' from service. Could not back of casing, Cement squeezed with 150 sxs Class C. Circ'd cmt to surf. Frac'd down 4 1/2" work string w/ 105,000# 16/30 brown sand & 41,250# resin coated sand plus 1.267 MMCF N2. ISIP= 2280#. Flowed well back for two days. Laid down 4 1/2" work string. C/O frac sand from 3149' to 3278'. PWOP.
15-Apr-11	Pulled out w/pump, nipple down wellhead, unset TAC, pulled out w/tbg, (pump was stuck w/sand, recovered 10' of sand in M.A.). RIH with tbg, set TAC, pulled 16,000# tension nipple up wellhead, ran in w/pump, hung well on, rigged up Rapid Transport, pumped 5 bbls load and test, checked pump action, good, put well on production. Checked pump action, good.
21-Nov-11	POOH with production string. RIH with 4 3/4" bit, tagged @ 3208'. Drilled CIBP @ 3390' and Drilled out to TD @ 3,545'. Hydrotest tubing to 7000# - okay. RIH with plunger and rods.

PREPARED BY:	Larry S. Adams	D. Carrizales	UPDATED:	13-Dec-11