DATE IN 1.27.12	SUSPENSE	ENGINEER WVJ	LOGGED IN 1.27.12	TYPE DHC	APP NO. 1202750595

PTG

ABOVE THIS LINE FOR DIVISION USE ONLY

Resaca 263848

CJU # 154

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST 30-025-21284

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]

6-25-24S-36E

[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 _____ fee-lea

[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

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

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

Cooper Jal Unit | 154 | G-25-24S-36E | DHC-4520 | Lea
Lease | Well No. | Unit Letter-Section-Township-Range | County

OGRID No. 263848 Property Code 306443 API No. 30-025-26284 Lease Type: ___Federal ___State X Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat (Gas)		Langlie Mattix (Oil)
Pool Code	33820		37240
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2976'-3399'		3408'-3655'
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		Shut In (CIBP @ 3200')
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 % (Latter)	Oil % Gas %	Oil % Gas %

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 1/3/2012

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 #154
Unit Letter G; 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 with 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 meets 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 will be submitted on both pools on the Subsequent Sundry Report. 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
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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
30-025-26284	33820/37240	Jalmat/Langlie Mattix

[4] Property Code	[5] Property Name	[6] Well Number
306443	Cooper Jal Unit	154

[7] OGRID No.	[8] Operator Name	[9] Elevation
263848	Resaca Operating Company	3296' GL

[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
G	25	24S	36E		1550	North	2400	East	Lea

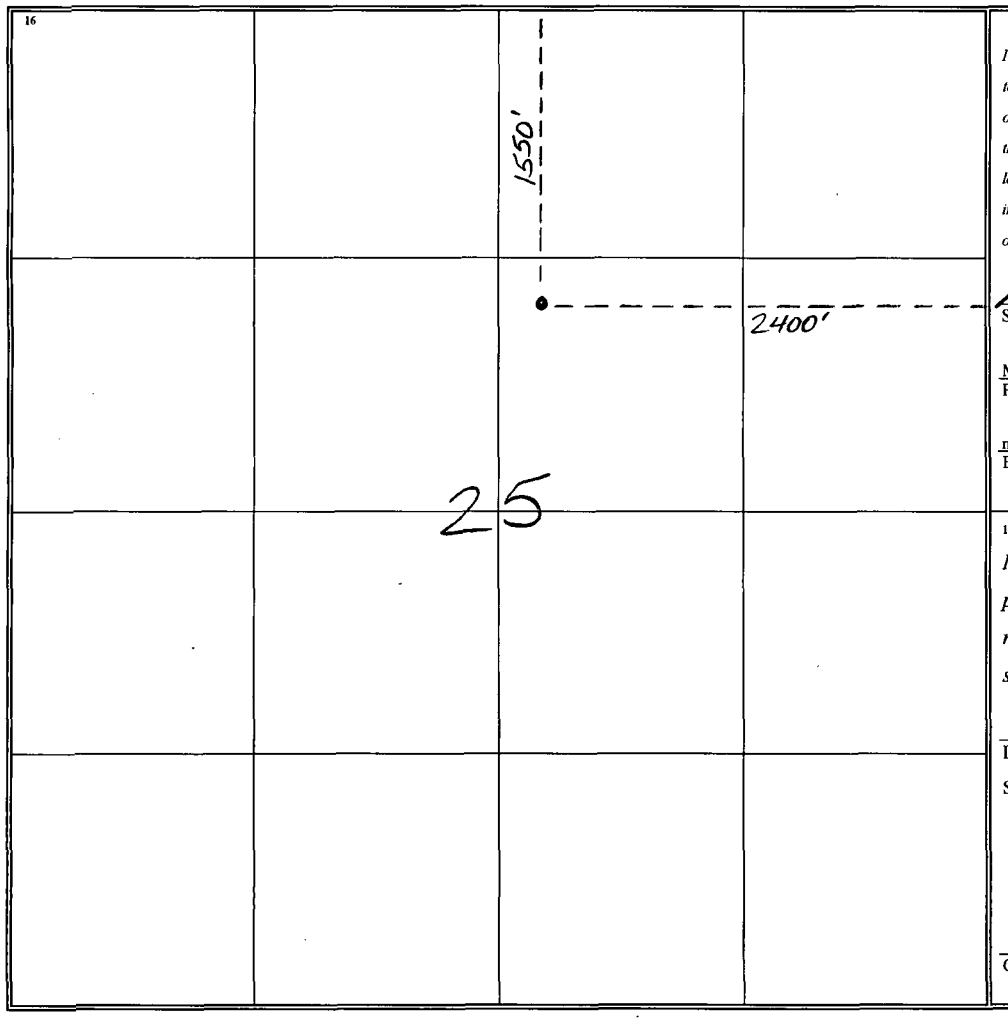
[11] Bottom Hole Location If Different From Surface

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	Proposed		WELL NO.	154
STATUS:	Active	Oil		API#	30-02526284
LOCATION:	1550 FNL & 2400 FEL, Sec 25, T - 24S, R - 36E; Lee County, New Mexico				
SPUD DATE:		TD 3655	KB 3,304'	DF	
INT. COMP. DATE:	05/11/79	PBTD 3165	GL 3,296'		

Surface Csg
Hole Size: 11 in
Csg. Size: 8 5/8 in
Set @: 365 ft
Sxs Cmt: 300
Circ: Yes
TOC @: surf
TOC by: circ

Production Csg.
Hole Size: 7 7/8 in
Csg. Size: 5 1/2 in
Set @: 3655 ft
Sxs Cmt: 600
Circ: Yes
TOC @: surface
TOC by: circ

PBTD: 3165 ft
TD: 3655 ft

Yates @ 2975'
2976'-3006'
3026'-3036'
3080'-3094'
3060'-3070'
3012'-3026'
3102'-3130'
3134'-3140'
3142'-3146'
3170'-3180'
3182'-3193'
7-R @ 3195'
CIBP @ 3200'
3246'-48'
3298'-3300'
3376'-78'
3382'-84'
3393'-99'
3408'-11'
3425'-29'
3456'-58'
3482'-86'
3568'-70'
Queen @ 3574'

GEOLOGICAL DATA

ELECTRIC LOGS:
Forxo Guard (Resistivity) Log (4-30-79 WELEX)
GR-CND (4-30-79 Welex)
GR-N (5-3-79 Welex)
GR-CCL (6-29-99) Schlumberger

CORES, DST'S or MUD LOGS:

HYROCARBON BEARING ZONE DEPTH TOPS:

Yates @ 2975' 7-Rivers @ 3195' Queen @ 3574'

CASING PROFILE

SURF.	8 5/8" - 24#, K-55 set@ 365' Cmt'd w/300 sxs - circ cmt to surface.
PROD.	5 1/2" - 15.5#, K-55 set@ 3655' Cmt'd w/600 sxs - cmt circulated to surface.
LINER	None

CURRENT PERFORATION DATA

CSG. PERFS: OPEN HOLE :

11-May-79 **Perf'd 7-Rivers** f/ 3246 - 3570' 1 spf (19 holes total)
08-Jul-99 **Perf'd Yates** f/2976 - 3006', 3026 - 46' & 3080 - 94' w/ 2 spf (116 holes total).

TUBING DETAIL 12/28/11

Length (ft)		Detail
0		KB
2928	96	2 7/8" 6.5#, J-55, 8rd EUE tbg.
3	1	5 1/2" x 2 7/8" TAC
488	16	2 7/8" 6.5#, J-55, 8rd EUE tbg.
4	1	2 7/8" Tubing Sub
1	1	2 7/8" SN
4	1	2 7/8" Tubing Sub
19	1	2 7/8" De-sander
121	4	3" Mud Anchor
3568		btm

ROD DETAIL 12/29/11

Length (ft)		Detail
18	1	26' x 1 1/4" P R w/ 7/8" Pin
14	2	8',6' x 1" pony rods
1100	44	1" steel rods
1675	67	7/8" steel rods
600	24	1 1/2" sinker bars
1	1	1' x 1" lift rod
12	1	2 1/2" x 2" X 20' RHBC rod pump w/HVR
0	1	16' x 1" GA
3420		

WELL HISTORY SUMMARY

11-May-79 IC: **3246 - 3570' (7-R/Q).** Acdz'd w 4,500 gals & Frac'd w/40,000 gals carrying 34,000#'s 20/40 sand & 15,000#'s 10/20 sand in 2 equal stages. Max sand concentration reached was 2 ppg. **IP=264 bopd, 24 bwpd, & 113 Mcfgpd (pmpg).**
18-Jun-83 Replaced 1 jt tbg.
15-Nov-86 DSI 72 hr. pressure build-up.
10-Aug-88 C/O fill from 3505 - 3614' (109'). Acdz'd w/2,500 gals 15% NEFE HCL dropping 25 ball sealers. Before WO: .7 bopd, 12.7 bwpd & 2.6 Mcfgpd. **After WO: 11.2 bopd, 52 bwpd & 10 Mcfgpd**
14-Dec-95 Cut parrafin in top 1,000' of tbg. Acdz'd perfs 3246 - 3570' w/3,000 gals 20% NEFE HCL in 3 stages w/ 2 - 1,000# rock salt blocks. AIR=3 bpm @ 650 psi. Returned well to production.
08-Jan-96 Change out rod pump.
08-Jul-99 Set **CIBP @ 3200'**. Tst csg @ 550 psi. Good tst. **Perf'd 2976'-3006', 3026'-46' & 3080'-94' w/ 2 spf - 120 degree (116 holes total)** Ran dmp bailer & dmp 35' of cmt on top of CIBP. **PBTD @ 3165'.** Acdz'd 3,000 gals 15% NEFE HCL using 2,000#'s RS in 4 stages. AIR=3 bpm @ 2,000#. ISIP=840#, P15min=460#. Frac w/16,249 gals X-link fluid carrying 52,000#'s 16/30 brady sand. AIR=30 bpm @ 1432#. ISIP=1021#, P15min=950#. C/O sand to 3195'. PWOP.
21-Sep-99 Change out rod pump.
28-Feb-02 Hydrotest in hole. Replaced 1 jt tbg.
29-Oct-02 Hydrotest in hole. Replaced 3 jt tbg. Placed well on pump.
10-Apr-03 Set a Bethlehem 228 pumping unit.
21-Jul-06 Long stroke well.
04-Dec-06 POOH w/rods, pump & tbg. Hydrotest tbg in hole to 7000# - found split 92nd & pin hole on 1st jt. PWOP.
07-Feb-11 POOH w/rods, pump & tbg. RIH w/ 4 3/4" bit, tagged at 3,130'. Clean out to CIBP at 3,200'. RIH w/ 5 1/2" PKR, tagged tight spots at 3,130'. Test casing to 500 psig. **Perf'd Yates** f/ 3170'-80', 3182'-93', 3134'-40', 3142'-46', 3102'-30', 3,012'-26' & 3,060-'70', 82', 160 holes. RIH 5 1/2" PKR on 4 1/2" work string. Set PKR at 2,875', test annulus to 500 psig. Foam Sand Frac'd w/ 100,000 # 16/30 sand. ProPetro line busted close to Frac Valve. Pumped only ist stage of job. Had oil shows on flow back. POOH w/ 4 1/2" work string & PKR. Clean out frac sand from 3,150' to CIBP @ 3,200'. Hydrotest 2 7/8" production string to 7,000 psig. RIH with pump and rods. PWOP.
12-Aug-11 Long Stroke Well.
29-Aug-11 POOH & laid down67- 3/4' rods. POOH with tubing. Hydrotest to 7000# - burst 99th & 98th joints. Ran Press Gradient. PWOP.
22-Nov-11 POOH with with plunger, rods and tubing. Hydrotest tubing to 7000# - burst 1 joint. RIH with plunger and rods. PWOP.

Drill Out CIBP @ 3200' to open Langlie Mattix below

PREPARED BY:	Larry S. Adams	Domingo Carrizales	UPDATED:	16-Jan-12