

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr., Hobbs, NM 88241
District II
1301 W Grand Ave., 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 and Natural Resources

Form C-103
June 19, 2008

RECEIVED

OIL CONSERVATION DIVISION

DEC 03 2009

HOBBSDOCD

220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-29827
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mesa "AAF" State
8. Well Number 1
9. OGRID Number 143199
10. Pool name or Wildcat S Baum Wolfcamp & Lazy J Upp Penn

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>	
2. Name of Operator EnerVest Operating, L.L.C.	
3. Address of Operator 1001 Fannin, Suite 800 Houston, TX 77002	
4. Well Location Unit Letter M : 990 feet from the South line and 990 feet from the West line Section 28 Township 13S Range 33E NMPM Lea County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4246.5' = GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☒

OTHER ☐ **Approved DHC 4221 attached** ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Proposed procedure:

Clean location, test anchors. MIRU workover unit. POOH w/rods & pump; carefully inspect for any buildup or damage. LD & replace any bad rods. NDWH, NUBOP. RU scanner & scan tbg while POOH. PU bit & collars; RU foam unit & swivel. RIH w/bit collars & tbg & drill out CIBP @ 9,650' & clean out to TD. Circ hole clean, POOH & LD tbg, collars & bit. Run GR/CCL f/ 10,100'-9,900'. PU perf gun & shoot Bough D as follows (3 SPF, 120 deg phasing, 54 holes): 9,967'-74', 10,008'-18', 10,022'-30' (corr w/ Gearhart Spec Litho-Den Comp Neutron log dated 2/3/87). RD WL; PU 2-7/8" x 5-1/2" treating pkr; RIH & set pkr @ 9,930'. MIRU acid service & acidize as follows: 10,000 gals 15% NEFE w/ clay stabilizer & corrosion inhibitor. Leave well SI overnight. Open well, check press, blow to tank & RU swab equip. Attempt to swab back load. After swabbing, release pkr & POOH & LD. PU & RIH w/ 3-1/2" BPMAJ, perf sub, SN, TAC & tbg. Set TAC w/ 20 pts tension. NDBOP, NUWH. RIH w/ gas anchor, pump & rods. Space out, hang on, load & test. Ensure good pump action. RDMO.

Spud Date:

1-11-87

Rig Release Date:

2-2-87

DHC-4221


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

SIGNATURE Bridget Helfrich TITLE Regulatory Tech. DATE 12-1-09

Type or print name _____ E-mail address: bhelfrich@enervest.net PHONE: 713-495-6537
For State Use Only

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE DEC 07 2009

Conditions of Approval (if any):



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary

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Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order DHC-4221

Order Date: 11/23/2009

Application Reference Number: pTGW0930250873

ENERVEST OPERATING L.L.C.
1001 FANNIN ST, STE 800,
HOUSTON, TX 77002

Attention: Ronnie I. Young

MESA AAF STATE Well No. 001
API No: 30-025-29827
Unit M, Section 28, Township 13 South, Range 33 East, NMPM
Lea County, New Mexico

Pool:	BAUM;WOLFCAMP, SOUTH	Oil 4967
Names:	LAZY J;PENN	Oil 37430

Reference is made to your recent application for an exception to Rule 12.9A. of the Division Rules and Regulations to permit the above-described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 12.11A., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion or otherwise required separation of the zones is hereby placed in abeyance.

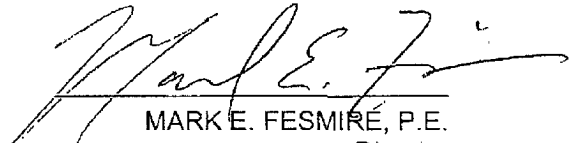
In accordance with Division 12.11A.(6), the production attributed to any commingled pool within the well shall not exceed the allowable applicable to that pool.

The production allocation percentages of oil and gas between these pools shall be supplied to the Division's Santa Fe office within 60 days following completion of this workover.

REMARKS: The operator shall notify the Division's district office upon implementation of commingling operations.



Pursuant to Rule 12.11B., the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.


MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc: Oil Conservation Division – Hobbs
State Land Office - Oil, Gas, and Minerals Division

DATE IN <u>10/29/09</u>	SUSPENSE	ENGINEER <u>Jones</u>	LOGGED IN <u>10/29/09</u>	TYPE <u>DHC</u>	APP NO <u>0930250873</u>
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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



Enervest
143199

Mesa AAF State No. 1

ADMINISTRATIVE APPLICATION CHECKLIST

30-025-29827

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.

Ronnie L. Young
Print or Type Name

Ronnie Young/bmh
Signature

Compliance Supervisor
Title

10-28-09
Date

ryoung@enervest.net
E-Mail Address

RECEIVED OGD
2009 OCT 29 A 11:29

October 28, 2009

Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RECEIVED OCD
2009 OCT 29 A 11:29

Attention: Mr. Mark E. Fesmire, Director

Re: Form C-107A
EnerVest Operating, L.L.C.
Mesa "AAF" State No. 1
API No. 30-025-29827
990' FSL & 990' FWL (Unit M)
Section 28, T-13S, R-33E, NMPM,
Lea County, New Mexico

Dear Mr. Fesmire,

Enclosed please find a Division Form C-107A for the EnerVest Operating, L.L.C. Mesa "AAF" State Well No. 1. It is proposed to downhole commingle the South Baum-Wolfcamp and Lazy J Upper-Penn Pools within the subject well. Approval of the application will allow EnerVest Operating, L.L.C. to economically produce the oil and gas reserves in the Wolfcamp and Pennsylvanian intervals, thereby preventing waste. Please note that the interest ownership between the commingled zones is common throughout. Consequently, the proposed downhole commingling will not violate correlative rights.

The Mesa "AAF" State Well No. 1 is located on a State of New Mexico lease and pursuant to Division rules, the Commissioner of Public Lands is being provided a copy of this application.

I believe that all the information necessary to approve the application is enclosed. If additional information is needed, please contact me at (713) 495-6530.

Sincerely,

Ronnie Young/bmh

Ronnie L. Young
Compliance Supervisor
EnerVest Operating, L.L.C.
1001 Fannin Street, Suite 800
Houston, Texas 77002

Xc: OCD-Hobbs

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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 June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-29827	² Pool Code 4967	³ Pool Name Baum; Wolfcamp, South
⁴ Property Code 12557	⁵ Property Name Mesa AAF State	
⁶ OGRID No. 025575	⁷ Operator Name Yates Petroleum Corporation	⁸ Well Number 1
		⁹ Elevation 4246.5' GR

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
M	28	13S	33E	M	990	South	990	West	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 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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. Signature Stormi Davis Printed Name Regulatory Compliance Technician Title and E-mail Address stormid@ypcnn.com Date 12-5-05			
	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			

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NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator YATES PETROLEUM CORPORATION			Location MESA AAF STATE		Well No. 1
Unit Letter M	Section 28	Township 13S	Range 33E	County LEA	
Actual Footage Location of Well:					
990		feet from the	South	line and	990
feet from the		West	line		
Ground Level Elev. 4246.5'	Producing Formation Bough D		Prod. LAZY J	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

	CERTIFICATION
	<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Cy Cowan</i></p>
	<p>Name Cy Cowan</p> <p>Position Regulatory Agent</p> <p>Company Yates Petroleum Corporation</p> <p>Date Dec. 16, 1986</p>
	<p>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 knowledge and belief.</p> <p>STATE OF NEW MEXICO</p> <p>Notary Public 12-16-1986</p> <p>Registered Professional Land Surveyor and Map Maker 3640</p> <p>Certificate No. 3640</p>

Attachments and/or Supporting Data
Application for Downhole Commingling
EnerVest Operating, L.L.C.
Mesa "AAF" State No. 1 (API No. 30-025-29827)
Unit M, Section 28, Township 13 South, Range 33 East, NMPM,
Lea County, New Mexico

Production Data & Proposed Allocation

The Mesa "AAF" State No. 1 was drilled in 1987 and was initially completed in the Bough "C" interval of the Pennsylvanian formation through perforations from 9,814'-9,834'. In 1992, additional pay in the Bough "B" and "C" intervals was perforated in the well from 9,708'-9,794'. The well produced from the Pennsylvanian interval until February, 2006, at which time the Pennsylvanian formation was shut-in and isolated below a CIBP set at 9,650'. At the time the Pennsylvanian formation was shut-in, this interval produced at an average rate of approximately 5.8 BOPD.

In February, 2006, the Wolfcamp interval was perforated from 8,990'-9,097'. Initial production from the Wolfcamp interval was approximately 49 BOPD and 86 BWPD. The well declined rapidly and produced only until March, 2007 at which time the Wolfcamp interval was producing at a rate of approximately 6 BOPD and 8.0 MCFGPD.

EnerVest Operating, L.L.C. now proposes to perforate additional pay in the Bough "D" interval from 9,967'-10,030', and subsequently downhole commingle the Wolfcamp and Pennsylvanian intervals within the wellbore. The Bough "B", "C" and "D" intervals are all within the vertical limits of the Lazy J Upper-Penn Pool.

EnerVest Operating, L.L.C. proposes that the production allocation be established after completion of the Bough "D" interval. At that time, the South Baum-Wolfcamp Pool will be allocated 6 BOPD and 8.0 MCFGPD (as per the March, 2007 producing rate), and the remaining production from the well will be allocated to the Lazy J Upper-Penn Pool. EnerVest Operating, L.L.C. will provide production data and proposed allocation to the Santa Fe Office of the Division upon completion of the Bough "D" interval.