

## Via Federal Express Overnight Service

State of New Mexico
Energy, Minerals and Natural Resources
OIL CONSERVATION DIVISION
District II
1301 W. Grand Avenue
Artesia, New Mexico 88210

Attn: Mr. Tim Gum

RE: <u>BLM Completion Package – PLUG BACK</u>

Rocky Arroyo Federal #1 API No. 03-015-34095 Section 8, T22S, R22E Eddy County, New Mexico

Dear Sir:

Clayton Williams Energy, Inc. has re-entered and plugged back the above captioned gas well to the Rocky Arroyo (Morrow gas) limestone, the Wildcat Atoka (gas), and the Wildcat Strawn (gas) reservoirs. Clayton Williams Energy, Inc. filed an application for down-hole commingle which was approved by Mr. Mark Fesmire, P.E. with the New Mexico Energy, Minerals and Natural Resources Department on March 17, 2006. A copy of the administrative order DHC-3672 is included for your reference.

Please find enclosed the following completion data for **each zone** for your records:

BLM Form 3160-4 NM OCD Form C-104 (5 copies)

At your earliest convenience, please advise me of proper pool code number for these zones for the purpose of filing monthly production. Thank you for your assistance in this matter. If you have any questions or require further, please call me at (432) 688-3240.

Sincerely yours,

Betsy Luna

**Engineering Technician** 





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

# Governor Joanna Prukop Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

**ADMINISTRATIVE ORDER DHC-3672** 

Clayton Williams Energy, Inc. Six Desta Dr. #3000 Midland, TX 79705

Attention: Matt Swierc

Rocky Arroyo Federal Well No. 1 API No. 30-015-34095 Unit A, Section 8, Township 22 South, Range 22 East, NMPM, Eddy County, New Mexico Rocky Arroyo-Morrow Gas (84160), Wildcat-Atoka Gas, and

Dear Mr. Matt Swierc:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above-described well to commingle production from the subject pools in the wellbore.

Wildcat-Strawn Gas Pools

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., 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 303C.(1)(f), the production attributed to any commingled pool within the well shall not exceed the allowable applicable to that pool.

Assignment of allowable to the well and allocation of production from the well shall be done after testing of all intervals to be commingled. The applicant shall submit the allocation percentages to the Division within 60 days following completion of this well or workover.

REMARKS: The operator shall notify the Artesia District Office of the Division upon implementation of commingling operations.

Pursuant to Rule 303C(2), the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on March 17, 2006.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad



# CLAYTON WILLIAMS ENERGY, INC. March 15, 2006

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JUN 1 3 2006
OUD-ANT EOM

<u>Via Facsimile (505) 476-3462</u> (7 pages)

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

Attention: Mr. Will Jones

Re: Application for Downhole Commingling Form C-107A

Clayton Williams Energy, Inc. Rocky Arroyo Federal Lease, Well No. 1 Sect. 8, T-22-S, R-22-E API No. 30-015-34095 Eddy County, New Mexico

Mr. Jones:

Please find attached the following documentation pursuant to our application for downhole commingling:

Form 107A
Form C102
Estimated Production Rates and Supporting Data

Should you have any questions or require further, please call me at (432) 688-3251. Thank you for your help in expediting this request.

Sincerely yours,

Matt Swierc

**Production Superintendent** 

Cc: New Mexico State Land Office Commissioner of Public Lands Oil, Gas and Minerals Division Jami Bailey, Director P O Box 1148 Santa Fe NM 87504-1148

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

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rosd, 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 June 10, 2003

# Oil Conservation Division

RECEIVED Dil Conservation Division

1220 South St. Francis Dr.

Santa Fe, New Mexico 8750 CLANDER Establish Pre-Approved Pools

N FOR DOWNHOLE COMMINGLING

APPLICATION 1 1 FE

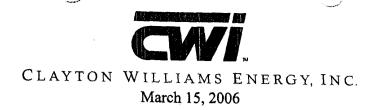
Establish Pre-Approved Pools

EXISTING WELLBORE

X Yes \_\_\_\_No

APPLICATION FOR DOWNHOLE COMMINGLING

ROCKY ARROYO FEDERAL	Well No. Unit Letter-	T22S, R22E	Eddy
	2111/20101	Section-Township-Range	County
GRID No. <u>25706</u> Property Code	e <u>34797</u> API No. <u>30-0</u>	15-34095 Lease Type: X	FederalStateFee
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
ool Name	Wildcat Strawn (gas)	Wildcat Atoka (gas)	Rocky Arroyo (Morrow Gas) (limestone)
ool Code			84160
Cop and Bottom of Pay Section Perforated or Open-Hole Interval)	8280' – 8386'	8446'-8512'; 8593'-8714'	8756' – 8868'
Method of Production Flowing or Artificial Lift) Bottomhole Pressure Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the lepth of the top perforation in the upper zone)	flowing	flowing	flowing
Oil Gravity or Gas BTU Degree API or Gas BTU)			
Producing, Shut-In or New Zone	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	Date:	Date:	Date:
estimates and supporting data.)	Rates:	Rates:	Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas
than current or past production, supporting data or explanation will be required.)	Allocation % will be submitted upon completion	Allocation % will be submitted upon completion	Allocation % will be submitted upon completion
	ADDITIO	ONAL DATA	
Are all working, royalty and overriding f not, have all working, royalty and ov	g royalty interests identical in all overriding royalty interest owners b	commingled zones? seen notified by certified mail?	Yes No Yes No
Are all produced fluids from all commi	ingled zones compatible with eac	h other?	YesX No
Will commingling decrease the value of			Yes NoX
If this well is on, or communitized with or the United States Bureau of Land M			YesX No
NMOCD Reference Case No. applicab	ole to this well:		
Attachments:  C-102 for each zone to be commin Production curve for each zone for For zones with no production histo Data to support allocation method Notification list of working, royals Any additional statements, data or	r at least one year. (If not availab ory, estimated production rates an or formula. – provided upon couty ty and overriding royalty interests	le, attach explanation.) – N/A d supporting data attached mpletion s for uncommon interest cases. – N/A	-
	PRE-APP	ROVED POOLS	
		s, the following additional information	will be required:
List of other orders approving downh List of all operators within the propos Proof that all operators within the pro Bottomhole pressure data.	sed Pre-Approved Pools		
		to the best of my knowledge and be	
1 1			
SIGNATURE Mott of	wiere fal TITLE	Production Supt D	DATE 03/15/2006





## Via Facsimile (505) 476-3462

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

Attention: Mr. Will Jones

Re: Application for Downhole Commingling Form C-107A

Clayton Williams Energy, Inc.
Rocky Arroyo Federal Lease, Well No. 1
Sect. 8, T-22-S, R-22-E
API No. 30-015-34095
Eddy County, New Mexico

Mr. Jones:

This recommendation is an attempt to establish commercial production from several tight carbonate intervals. Our plans are to incorporate a Permian Basin technique currently being used in the tight Wolfcamp formation. We plan on pumping a slick water frac with small amounts of proppant in an attempt to establish long scoured hydraulic fractures. During drilling these intervals neither kicked or drank any fluid further confirming the tight nature of the rock. Mud log shows were minimal with a little gas and no fluorescence. Open hole log analysis indicates that the zones will either be gas productive or too tight to produce, therefore we do not believe water will be a problem.

The stimulation program will be divided into four stages:

- Stage 1: 8756' 8868' is classified in the Morrow Gas Pool. This interval is a very tight limestone with average porosity in the 2% range.
- Stage 2: 8593' 8714' is classified in the Atoka Pool. This interval comprises of several tight cherty limestone benches with average porosities in the 3 to 4% range.
- Stage 3: 8446' 8512' is classified in the Atoka Pool. This interval comprises of two blocky cherty limestone benches with average porosities in the 4 to 6% range.
- Stage 4: 8280' 8386' is classified in the Strawn Pool. This interval is a very tight cherty limestone with average porosities in the 4 to 6% range.

Mr. Will Jones March 15, 2006 Page 2 of 2

In and of itself no single interval would warrant a completion attempt. However, it is possible that by stimulating all four intervals simultaneously we may be able to establish commercial production. Following stimulation, should we prove successful in establishing commercial gas production, we will run a spinner/temperature survey so as to allocate production to each pool.

Should you have any questions or require further, please call me at (432) 688-3251. Thank you for your help in expediting this request.

Sincerely yours,

Matt Swierc

**Production Superintendent** 

matt Sweeneful

DISTRICT I 1625 N. French Dr., Hobbs, NM 66240 DISTRICT II 811 South First, Artesia, NM 88210

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies
For Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

# OIL CONSERVATION DIVISION 2040 South Pacheco

2040 South Pacheco Santa Fe, New Mexico 87505

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name					
30 <b>-</b> 015- <sub>34095</sub>		Wildcat - Strawn					
Property Code	Prop	Property Name					
34797	ROCKY ARE	1					
OGRID No.		ator Name	Elevation				
25706	CLAYTON WILL	IAMS ENERGY,INC.	4473'				

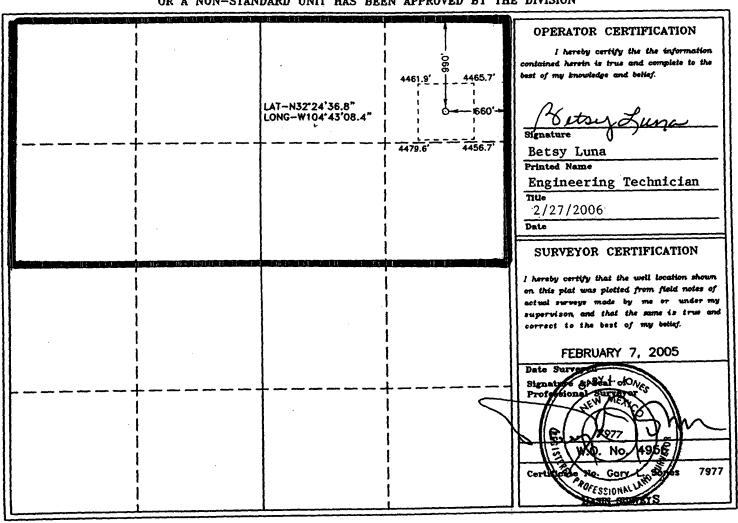
#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
	Α	8	22 S	22 E		990	NORTH	660	EAST	EDDY

#### 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	Joint o	r Infili Co	nsolidation (	Code Or	der No.				
320									

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



DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

# State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410

#### DISTRICT IV 2040 South Pecheco, Senta Fe, NM 87505

# OIL CONSERVATION DIVISION

Santa Fe, New Mexico 87505

C) AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
<b>30-015-</b> 34095	}	Wildcat - Atoka	
Property Code	Prope	Well Number	
34797	ROCKY ARRO	DYO FEDERAL	1
OGRID No.		tor Name	Elevation
25706	CLAYTON WILLI	4473'	

#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
-	Α	8	22 S	22 E		990	NORTH	660	EAST	EDDY

#### Bottom Hole Location If Different From Surface

	Total Marian Marian Marian Marian									
UL or lot No.	Section Tow	nship Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County		
Dedicated Acres	Joint or Infi	ill Consolidation	Code Or	der No.			<u> </u>	L		
320										

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

OR A	A NON-STANDARD UNIT HAS BEE	EN APPROVED BY TH	E DIVISION
	LAT-N32*24'36.8" LONG-W104*43'08.4"	4461.9' 4465.7' 	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  Betsy Luna Printed Name Engineering Technician Title 2/27/2006 Date  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 supervison and that the same is true and correct to the best of my belief.  FEBRUARY 7, 2005  Date Surveys  Signature & ASSet of National Surveys  Professional Surveys  W.O. No. 4958  Certificial No. Gory 1, 35765 7977  ROFESSIONAL STREETS

DISTRICT I 1625 M. Prench Dr., Bobbo, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Pe, NM 87505

# OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87505

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name					
<b>30-015-</b> 34095	84160	Rocky Arroyo (Morrow Gas) (li	mestone)				
Property Code	Ргор	Property Name					
34797	ROCKY ARE	ROCKY ARROYO FEDERAL					
OGRID No.		ator Name	Elevation				
25706	CLAYTON WILL	CLAYTON WILLIAMS ENERGY, INC.					

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	8	22 S	22 E		990	NORTH	660	EAST	EDDY
				·	· · · · · · · · · · · · · · · · · · ·				

#### 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 Acre	Joint o	r Infill Co	nsolidation (	Code Or	der No.			l	
320		<u>i</u>							

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

UN	R A NON-STANDARD UNIT HAS I	SEEN APPROVED BI IN	E DIVISION
	LAT-N32'24'36.8" LONG-W104'43'08.4'	4465.7' 4465.7' 4479.6' 4456.7'	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  Betsy Luna Printed Name Engineering Technician Title 2/27/2006 Date  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 supervison and that the same is true and correct to the best of my belief.  FEBRUARY 7, 2005  Date Surveys  Signature & Assart olongs Professional Surveys  EN Control of the con