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

District II

1301 W. Grand Aven

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 June 10, 2003

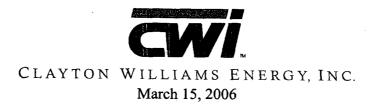
APPLICATION TYPE

X Single Well

# APPLICATION FOR DOWNHOLE COMMINGLING

Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes \_\_\_No

ROCKY ARROYO FEDERAL ase		, T22S, R22E	Eddy
		Section-Township-Range	County
GRID No. 25706 Property Co	ie <u>34797</u> API No. <u>30-0</u>	115-34095 Lease Type: X	FederalStateFee
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool 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)	flowing	flowing	flowing
Bottomhole Pressure Note: Pressure data will not be required if the bottom		RECEIVE!	
erforation in the lower zone is within 150% of the epth of the top perforation in the upper zone)		MAR 1 7 2006	
Dil Gravity or Gas BTU		- GOD-NITE	<b>SIA</b>
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.	1		
Note: For new zones with no production history,	Date:	Date:	Date:
pplicant shall be required to attach production stimates and supporting data.)	Rates:	Rates:	Rates:
Fixed Allocation Percentage Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas
han 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
	ADDITIC	NAL DATA	
re all working, royalty and overriding not, have all working, royalty and ov			Yes X No Yes No
re all produced fluids from all commi	ingled zones compatible with each	other?	Yes X No
vill commingling decrease the value of	of production?		Yes NoX
this well is on, or communitized with the United States Bureau of Land M			YesX No
MOCD Reference Case No. applicab	le to this well:		
ttachments:  C-102 for each zone to be comming Production curve for each zone for For zones with no production histor Data to support allocation method Notification list of working, royalt Any additional statements, data or	at least one year. (If not available ory, estimated production rates and or formula. – provided upon com y and overriding royalty interests t	e, attach explanation.) – N/A supporting data attached upletion for uncommon interest cases. – N/A	
	PRE-APPR	OVED POOLS	
	e to establish Dra_Anneared Dools	the following additional information w	rill be required:
If application is	s to establish Fie-Apploved Fools,		
ist of other orders approving downholist of all operators within the propose roof that all operators within the prop	ole commingling within the proposed Pre-Approved Pools		
ist of other orders approving downhoust of all operators within the propose troof that all operators within the propose sottomhole pressure data.  hereby certify that the information	ole commingling within the proposed Pre-Approved Pools bosed Pre-Approved Pools were proposed Pre-Approved Pools were proposed	o the best of my knowledge and bel	ief.
ist of other orders approving downhouse of all operators within the propose roof that all operators within the propose totomhole pressure data.	ole commingling within the proposed Pre-Approved Pools bosed Pre-Approved Pools were proposed Pre-Approved Pools were proposed	o the best of my knowledge and bel	ief. ATE <u>03/15/2006</u>



### 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 Sweene/ul

DISTRICT I 1625 N. French Dr., Hobbs, NM 68240 DISTRICT II

# State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Revised March 17, 1999

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

811 South Pirst, Artesia, NM 88210

DISTRICT IV 2040 South Pacheco, Santa Fe, 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		Wildcat - Strawn					
Property Code	Ргор	Well Number					
34797	ROCKY ARE	ROCKY ARROYO FEDERAL					
OGRID No.		Operator Name					
25706	CLAYTON WILL	CLAYTON WILLIAMS ENERGY, INC.					

#### Surface Location

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

OR A NON-STAN	IDARD UNIT HAS BEEN APPROVED BY T	1E DIVISION
	LAT-N32°24'36.8" 4465.7' LONG-W104'43'08.4" 660'+ 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 bettef.  FEBRUARY 7, 2005  Date Surveys  Signature & Pagal Olong  Professional Surveys  W.O. No. 4958  Certificate No. Gary Soyes 7977

DISTRICT I 1625 N. French Dr., Robbs, NM 86240 DISTRICT II 811 South First, Artesia, NM 86210

1000 Rio Brazos Rd., Aztec, NM 87410

2040 South Pecheco, Santa Fe, NM 87505

DISTRICT III

DISTRICT IV

# 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

# 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		Wildcat - Atoka			
Property Code	Prop	Well Number			
34797	ROCKY ARE	1			
OGRID No.		Operator Name			
25706	CLAYTON WILL	IAMS ENERGY,INC.	4473'		

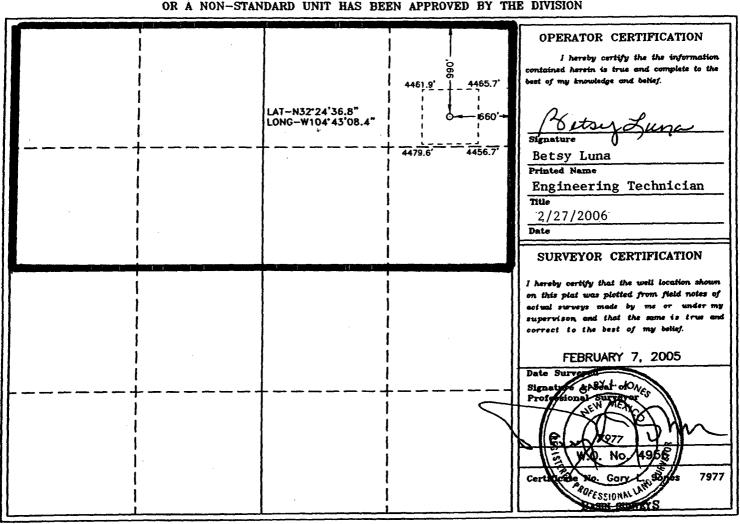
#### Surface Location

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	Peet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (	Code Or	der No.			<u></u>	
320									

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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

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### 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	84160 Rocky Arroyo (Morrow Gas) (lime					
Property Code	Prop	Property Name					
34797	ROCKY ARE	ROCKY ARROYO FEDERAL					
OGRID No.		Operator Name E					
25706	CLAYTON WILL	CLAYTON WILLIAMS ENERGY, INC. 4					

#### Surface Location

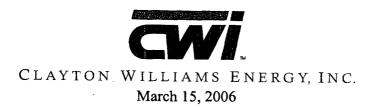
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	22 S	22 E		990	NORTH	660	EAST	EDDY
			D - 44	77-1- 7	At an IC Dicc	1 M O	£		

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Pest from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint of	Infill Co	aoitabilosa	Code Or	der No.				
320	<u> </u>								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

UR	A NON-STANDARD UNIT HAS B	EEN 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 Paral of Ones Professional Surveys Professiona



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

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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