	r	
DATE IN	2-19-10 SUSPENS	ENGINEER from LOGGED IN 2-19 TYPE DITC APP NO. 10050 38826
	I	NEW MEXICO OIL CONSERVATION DIVISION
	1	- Engineering Bureau -
		1220 South St. Francis Drive, Santa Fe, NM 87505
		ADMINISTRATIVE APPLICATION CHECKLIST
т	HIS CHECKLIST IS M	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
ppli	cation Acronym	WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
	[PC-Po	nhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] ol Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] lified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
i]	TYPE OF AP	PLICATION - Check Those Which Apply for [A]
- 1	[A]	Location - Spacing Unit - Simultaneous Dedication
	Check	One Only for [B] or [C]
	[B]	
		Image - Storage - Measurement Image -
	[C]	Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery Image: Commingling - Storage - Measurement Image: Commingling - Storage - Measurement WFX PMX SWD IPI EOR PPR Other: Specify Image: Commingling - Storage - Measurement Image: Commingling - Storage - Measurement Image: Commingling - Storage - Measurement
		$\square WFX \square PMX \square SWD \square IPI \square EOR \square PPR \qquad > \qquad \bigcirc$
	[D]	Other: Specify O
2]	NOTIFICAT	من ION REQUIRED TO: - Check Those Which Apply, or 🗌 Does Not Apply
2]	[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.

Zeno Farris	Zeno Fanc,'	Mgr Operations Admin	<u>2/18/10</u>
Print or Type Name	Signature	Title	Date
		<u>zfarris@cimarex.com</u> e-mail Address	

600 N. Marienfeld St Suite 600 Midland, TX 79701 432-620-1938 (phone) 432-620-1938 (fax)

FEB 19

Cimarex Energy Co. of Colorado

February 18, 2010

New Mexico Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505 Attn: Mr. Will V. Jones

RE: Federal 13 Com No. 2 30-015-33344 C-107-A – Black River; Wolfcamp, SW & White City; Penn (Gas)

Dear Mr. Jones,

Enclosed is an original Form C-107-A (Application for Downhole Commingling) for the well mentioned above. This well is currently producing from Morrow perfs @ 11224-11576' and Atoka perfs at 10732' 40739'.

Cimarex proposes to set a CIBP above the Morrow @ 11200' w/ 35' cement and CIBP above Atoka @ 10700' with 35' of cement. Perf, acidize and frac the Cisco Canyon from 10132'-10354' in 2 stages. Perf, acidize and frac the Wolfcamp from 9232'-9760' in 3 stages. Allocation percentages for each zone will be based on production log and furnished after completion and cleanup.

It is anticipated that the reservoir pressure from these two shale zones will be compatible and the resulting volumes would not warrant a casing/tubing dual completion.

Royalty, and working interest owners are the same in each zone. The overriding royalty owner is the same but will have a different percentage in Penn and Wolfcamp formations due to the different spacing units. Attached is proof of notification.

If you have any questions or need further information, please call me at 432-620-1938.

Sincerely,

Zeno Famin

Zeno Farris Mgr Operations Administration



District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesla, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 67410 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 October 15,2009 Submit one copy to appropriate District Office

AMENDED REPORT

		٩	WELL LC	CATION	AND ACR	EAGE DEDIC	CATION PLA	T	
1 A 1			* Pool Code)		⁸ Pool Nan	10		
30-0	15-333	44		87280		١	Nhite City; Pe	enn (Gas)	
Property O	ode				Property N	lame		• 1	Vell Number
33622	2				Federal 13	8 Com			002
'OGRID N	0.				⁸ Operator 1	lame			Elevation
16268	3			Cimarex Energy Co. of Colorado					
					¹⁰ Surface I	Location			
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
к	13	255	26E		1565	South	1400	West	West
			¹¹ Bo	ttom Hol	e Location If	Different Fro	m Surface		
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
							[
² Dedicated Acres	13 Joint or	Infil	14 Consolidation	Code 18 Or	der No.				
640	1		С	:					

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	NM-4	1645		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 or garization either owns a working interest or unleased mineral interest in the land induding the proposed bottom holelocation or has a right to chill this well at this location pur super to a contract with an owner of such a mineral or working interest, or to a volumary pooling agreement or a compulsory pooling order heretofore entered by the division.
			F <u>ederal 13 Com 4</u> 1620 FNL & 1400 FEL	Zeno Farris Zeno Farris Printed Name
	<u>Federal 13 Com 2</u> 	NM	-26105	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.
	SHL 725	deral <u>13 Com 3</u> FSL & 1750 FEL FSL & 1693 FEL		Signature and Seal of Professional Surveyor:

1220 S. St. Frand	s Dr., Santa	Fe, NM 87505	5						
		WI	ELL LO	CATION	AND ACF	EAGE DEDIC	CATION PLA	T	
1,	1 API Number			² Pool Code	•		* Pool Nan	ne	
30-	015-333	344		96890		Sag	ge Draw; Wol	fcamp, East	
⁴ Property	Code				* Property	Vame		6 ا	Vell Number
33622					Federal 13	3 Com			002
⁷ OGRID	No.				[®] Operator	Name			'Elevation
1626	83			Cima	rex Energy Co	o. of Colorado			
					¹⁰ Surface	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Fest from the	East/West line	County
К	13	255	26E		1565	South	1400	West	West
			¹¹ Bot	tom Hol	e Location If	Different Fro	m 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 Acre	18 ¹³ Joint a	r Infill ¹⁴ C	onsolidation	Code 18 Or	der No.				
320			Р						
								······································	

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

District Office

Revised October 15,2009

Submit one copy to appropriate

AMENDED REPORT

<u>District i</u>

District II

District III

District IV

1625 N. French Dr., Hobbs, NM 88240

1000 Rio Brazos Rd., Aztec, NM 87410

1301 W. Grand Avenue, Arteala, NM 86210

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 NM-36508			¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and beild, and that this or garization either owns a working interest or unleased mineral interest in the land including the proposed bottom holelocation or has a right to chill this well at this location put start to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order hereforce entered by the division.
			Zeno Farris Sgnature Date Zeno Farris Printed Name
NM-41645	<u>Federal 13 Com 2</u> 		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

All (White City; Penn (Gas)) and W2 (Sage Draw; Wolfcamp, E) 13-255-26E Federal 13 Com No. 2 30-015-33344 1565 FSL & 1400 FWL Eddy County, New Mexico



RE: Application to Downhole Commingle Wolfcamp and Cisco in the Federal 13 Com No. 2

Overrides:

Chevron U.S.A. Inc.		
Ownership Division		
PO BOX 730436		
Dallas, TX 75373-0436		

Federal 13 Com #2 Ciscamp Recompletion Procedure

Well Data:	
KB	18' above GL
TD	12310'
PBTD	12225'
Casing	13-3/8" 54.5# J-55 @ 212'. Cmtd w/ 250 sx. Cmt circ.
	10-3/4" 45.5# J-55 @ 2030'. Cmtd w/ 800 sx. Cmt circ.
	7-5/8" 26&29# NS-110HC @ 10020'. Cmtd w/ 600 sx.Cmt circ.
	DV Tool @ 5455'. Cmtd w/ 800 sx. TOC N/A.
	4-1/2" 11.6# P-110 @ 12310'. Cmtd w/ 485 sx. TOC @ 9066' by CBL.
Perfs	Morrow – (11224' – 11778') Atoka (10732' – 10739')

Procedure:

- MIRU pulling unit. If necessary, kill well w/ FW. ND WH, NU BOP, TOOH & LD tbg. RU wireline and run gauge ring to 11210'. Run CIBP and set @ ± 11200' and dump 35' cmt on top of CIBP. Run second CIBP and set @ ± 10700' and dump 35' cmt on top of CIBP. RU pump truck and pressure test csg to 5000 psig w/ FW. ND BOP and RU 10K goat head frac valve and 10K tree saver. RDMO pulling unit.
- RU wireline truck and mast unit. Perforate Cisco Canyon (10239' 10246', 10258' 10265', 10274' – 10279', 10300' – 10307', 10325' – 10330', 10348' – 10354') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 111 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated September 4, 2004.
- RU stimulation company. Acidize and frac Cisco Canyon perfs (10239' 10354') down 4-1/2" csg as per recommendation. Set 10K flow thru composite plug @ 10225'.
- Perforate Cisco Canyon (10132' 10136', 10147' 10151', 10169' 10173', 10188' 10192', 10207' – 10211') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated September 4, 2004.
- 5. Acidize and frac Cisco Canyon perfs (10132' 10211') down 4-1/2" csg as per recommendation. Set 10K flow thru composite plug @ 10000'.
- Perforate Wolfcamp (9650' 9654', 9676' 9680', 9700' 9704', 9728' 9732', 9756' 9760') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated September 4, 2004.

Federal 13 Com #2 Ciscamp Recompletion Procedure Page 2

- 7. Acidize and frac Wolfcamp perfs (9650' 9760') down 4-1/2" csg as per recommendation. Set 10K flow thru composite plug @ 9625'.
- 8. Perforate Wolfcamp (9443' 9447', 9480' 9484', 9538' 9542', 9574' 9578', 9593' 9597') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated September 4, 2004.
- 9. Acidize and frac Wolfcamp perfs (9443' 9597') down 4-1/2" csg as per recommendation. Set 10K flow thru composite plug @ 9430'.
- Perforate Wolfcamp (9232' 9236', 9323' 9327', 9348' 9352', 9388' 9392', 9414' -9418') 3 JSPF at 120 degree phasing w/ 3-1/8" casing guns. Total of 60 holes. Depth reference log Halliburton Spectral Density Dual Spaced Neutron Log dated September 4, 2004. RD wireline.
- 11. Acidize and frac Wolfcamp perfs (9232' 9418') down 4-1/2" csg as per recommendation. RD Stimulation company.
- 12. RU 1-3/4" coiled tbg unit. TIH w/ 3-3/4" butterfly mill & extreme downhole motor on 1-3/4" CT and drill out sand and composite plugs @ 9430', 9625', 10000', and 10225'. Make a minimum of 2 gel sweeps while drilling out composite plugs. FIH w/ coiled tbg and CO sand to 10950'. TOOH w/ mill, motor, & CT. RD coiled tbg unit.
- 13. Flow back well until sand production cleans up, the SI well overnight.
- 14. RU wireline and full 10K lubricator. RIH w/ 3-7/8" GR to 9220'. TIH w/ 10K pkr w/ on-off tool, and a pump out plug (pinned for 7500 psi BHP) in place and set @ ± 9200'. RD wireline and full lubricator.
- 15. ND goat head and NU BOP. TIH w/ on-off tool, tbg and gas lift valves as per recommendation testing tubing below slips to 8000 psi. Tag pkr and PU 1 jt. RU PT and establish circ w/ FW. Pickle tbg w/ 500 gals 15% HCl and reverse out acid. Circ hole until good clean wtr is left in annulus (annulus volume = 93 bbls). FIH w/ tbg and latch on to pkr. ND BOP, NU WH. RD pulling unit.
- 16. RU PT & pressure up to 4000 psig to pump out plug. Put well on production.

<u>District</u>	Ţ			
1625 N. French	Drive.	Hobbs,	NM	88240





<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410

District IV

Lease

1220 S. St. Francis Dr., Santa Fe, NM 87505

Federal 13 Com

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107A Revised June 10, 2003

Oil Conservation Division

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

APPLICATION TYPE <u>X</u>Single Well Establish Pre-Approved Pools EXISTING WELLBORE X_Yes ___No

APPLICATION FOR DOWNHOLE COMMINGLING

Cimarex Energy Co. of Colorado Operator

002

Well No.

Т

600 N. Marienfeld St., Ste. 600; Midland, TX 79701 Address

K-13-25S-26E Unit Letter-Section-Township-Range DHC-4263 Eddy County

OGRID No. <u>162683</u> Property Code <u>33622</u> API No. <u>30-015-33344</u> Lease Type: <u>X</u> Federal State __ Fee

DATA ELEMENT UPPER ZONE		INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Sage Draw; Wolfcamp, E		White City; Penn (G) (Cisco)
Pool Code	96890		87280
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	9232-9760'		10132-10354'
Method of Production (Flowing or Artificial Lift)	Flowing		
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)	Within 150% of bottom perfs		
Oil Gravity or Gas BTU (Degree API or Gas BTU)	To be supplied		To be supplied
Producing, Shut-In or			
New Zone	New Zone		New Zone
Date and Oil/Gas/Water Rates of			
Last Production. (Note: For new zones with no production history,	Date: To be supplied	Date:	Date: To be supplied
applicant shall be required to attach production			
estimates and supporting data.)	Rates:	Rates:	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	Oil Gas	Oil Gas

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?	Yes No X
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	YesNo
Are all produced fluids from all commingled zones compatible with each other?	Yes <u>X</u> 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 <u>X</u> No
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. Zan Eanin

SIGNATURE_	C eno	5	unis	_TITLE	Manager Operations Administration	_DATE_	February 18, 2010	

TYPE OR PRINT NAME Zeno Farris TELEPHONE NO. (432)-680-1938

E-MAIL ADDRESS zfarris@cimarex.com

