Ceived by OCD: 8/3 Office	1/2022 10:2	7:05 AM	State of New M	exico	DHC-5		Form C-103	
<u>District I</u> – (575) 393-6 1625 N. French Dr., Ho		Energy	ural Resources	WELL API N	Kevise	ed July 18, 2013		
District II – (575) 748-1		OIL C	CONSERVATION	N DIVISION	30-045-2468			
811 S. First St., Artesia <u>District III</u> – (505) 334-	6178	1	220 South St. Fra			5. Indicate Type of Lease STATE x FEE		
1000 Rio Brazos Rd., A <u>District IV</u> – (505) 476-	3460		Santa Fe, NM 8	7505		& Gas Lease No.		
1220 S. St. Francis Dr., 87505	Santa Fe, NM				SF-07841	6-A		
(			EPORTS ON WELL		7. Lease Nar	ne or Unit Agree	ement Name	
DIFFERENT RESERV			L OR TO DEEPEN OR PI ERMIT'' (FORM C-101) F		WILCH	А		
PROPOSALS.) 1. Type of Well: (	Dil Well	Gas Well	Other		8. Well Num	iber 005E		
2. Name of Operat	or				9. OGRID N			
-	SIMCOR	ELLC			329736			
3. Address of Oper					10. Pool nan			
4. Well Location	nue, Ste 101,	Durango, CO 8	1301		Blanco Mesa	verde/Basin Dak	ota	
4. Well Location Unit Lette	r C	: 810 fe	et from the FNL	line and _1	795 fee	t from the <u>FWI</u>	line	
Section	23			ange 08W	NMPM	County S		
	25		on (Show whether DI					
		6731	'GL					
of starting a proposed co It is inter Mesaver productio allocated method v well exco productio	CASING MINGLE (STEM) oposed or con any proposed ompletion or a added to recomple de. The production. Proposed per using the subtra vill be used to de ceeding the foreca	work). SEE RU recompletion. ete the subject well ir on will be commingl forations are: MV – : action method. The be etermine a percentage st will be allocated t doucments for the ba		CASING/CEME OTHER: pertinent details, a C. For Multiple C ool 72319) and downh ivision Order Number ations are in MD. SIM a and the added forma and Mesaverde, which fixed, percentage-base	and give pertinent Completions: Atta ole commingle the ex 11363. Commingling ICOE requests that pro- tion to be commingled n will be updated on a d allocation will be su	isting Basin Dakota ( will not reduce the v oduction for the down is the Mesaverde. T quarterly basis. All p	gram of (pool 71599) with t value of the nhole commingle b 'he subtraction production from thi urth year of	
	nip is identical ir M was notified in	a both pools. No notio a writing.	ce is required.					
Spud Date:			Rig Release D	ate:				
hereby certify that	the information	on above is true	and complete to the b	best of my knowle	dge and belief.			
SIGNATURE Gina	a Doerner		TITLEReg	ulatory Analyst			2022	
Гуре or print name _	Gina Doerr	ner	E-mail addres	ss: <u>gina.doerner@</u>	kavenergy.com	PHONE: <u>970-</u>	-852-0082	
For State Use Only								
APPROVED BY: Conditions of Appro		R Male	<u>ritle</u> Petro	leum Enginee	er	_ <sub>DATE</sub> 10/18/	2022	

•

## CONDITIONS OF APPROVAL

If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Permit to become inaccurate, then no later than sixty (60) days after that event, the Operator shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Permit shall terminate on the date of such action.

If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred the Operator shall submit a new downhole commingling application to OCD to amend this Permit to remove the pool that caused the decrease in value. If the Operator fails to submit a new application, this Permit shall terminate on the following day, and if OCD denies the application, this Permit shall terminate on the date of such action.

If a completed interval of the Well is altered from what is submitted within this application, then no later than sixty (60) days after the alteration, the Operator shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.

The Operator shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the total oil and gas production that shall be allocated to each of the Pools ("fixed percentage allocation plan"). No later than ninety (90) days after the fourth year, the Operator shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If the Operator fails to do so, this Permit shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Permit shall terminate on the date of such action. If OCD approves the percentage allocation plan with or without modifications, then the approved percentage allocation plan shall be used to determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.

## WILCH A #005E

### C-23-29N-08W 810 FNL & 1795 FWL

### API: 30-045-24687

#### MESAVERDE RECOMPLETION PROCEDURE

### Procedure

- 1. MIRU service rig and equipment
- 2. NU BOPs. POOH w/ production tubing.
- 3. Set a CIBP 100' above top DK perf.
- 4. Load the casing and pressure test casing to max frac pressure.
- 5. Run CBL through lined section.
- 6. If necessary, perforate liner and pump Class G cement behind the liner to get good cement bond across MV interval.
- 7. ND BOPs. NU frac stack and test to max frac pressure.
- 8. RDMO service rig. MIRU frac spread.
- 9. Perforate and frac the MV from 5001' 5745'. RDMO frac spread.
- 10. MIRU service rig.
- 11. NU BOPs. RIH and clean out to DK CIBP.
- 12. When water and sand rates are acceptable, flow test the MV.
- 13. Drill out DK CIBP. POOH w/ tubing.
- 14. RIH and land production tubing. Obtain a commingled flow rate.
- 15. ND BOPs, NUWH.
- 16. RDMO service rig and put well on production.



Land Letter

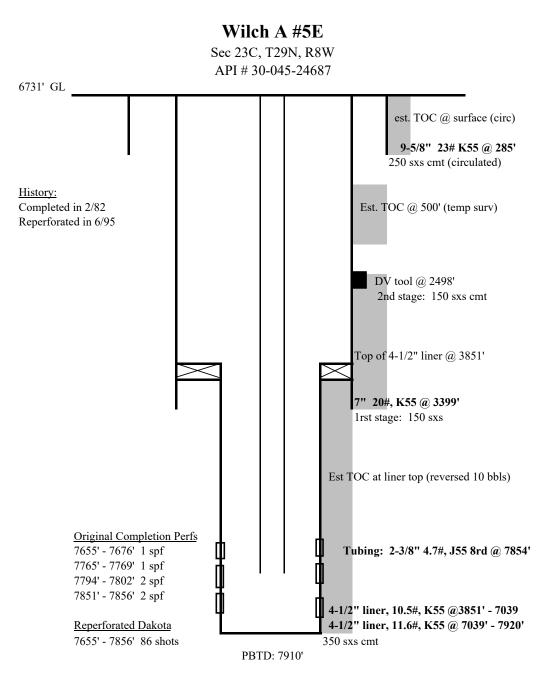
Date: October 14, 2022 To: Gina Doerner, Regulatory Analyst From: Michelle Blankenship, Landman RPL Re: Application to DHC, NMAC 19.15.12.11 (A) Well: Wilch A 5E, API: 3004524687 Location: NENW Section 23, Township 29N, Range 08W, San Juan County, NM

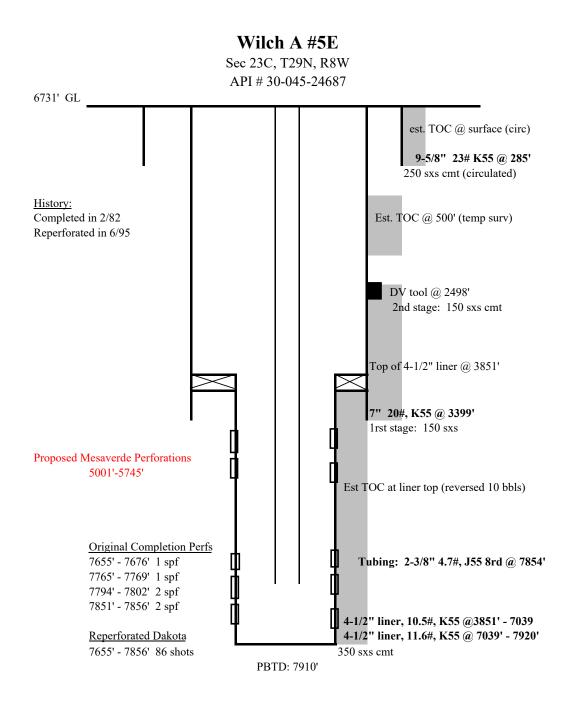
On behalf of SIMCOE LLC ("SIMCOE"), Operator of the subject well, I have reviewed SIMCOE's Title Records (including Lease records) and Division Order records for the subject well. I have determined that ownership is identical in both the currently producing Dakota pool and the targeted Mesaverde pool.

In both the Dakota and Mesaverde pools, the Working Interest is SIMCOE LLC - 50%, HILCORP SAN JUAN LP - 50%. The Royalty Interest is Federal only, and there exist a 3% ORRI.

**SIMCOE LLC** IKAV Energy Inc.

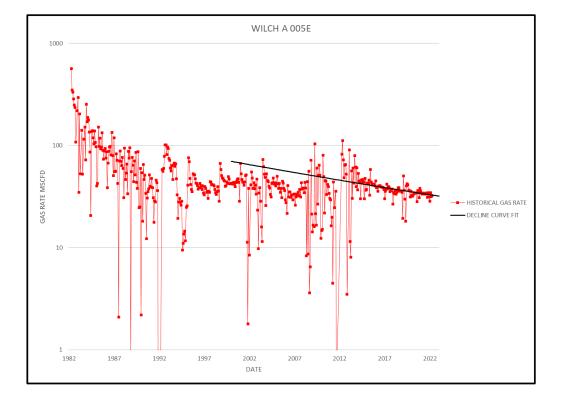
Michelle Blankenship Landman, RPL





# WILCH A 005E





DECLINE CURVE FIT PARAMETERS							
START DATE	1/1/2000						
INITIAL RATE, MSCFD	70						
INITIAL DECLINE RATE, %/YR	3.62%						
b Exponent	0.2						

MONTH	GROSS WELLHEAD GAS VOLUME MSCF
8/1/2022	1004.6
9/1/2022	969.6
10/1/2022	999.3
11/1/2022	964.5
12/1/2022	994.1
1/1/2023	991.4
2/1/2023	893.1
3/1/2023	986.4
4/1/2023	952.0
5/1/2023	981.2
6/1/2023	947.0
7/1/2023	976.1
8/1/2023	973.5
9/1/2023	939.6
10/1/2023	968.4
11/1/2023	934.7
12/1/2023	963.3
1/1/2024	960.8
2/1/2024	896.4
3/1/2024	955.9
4/1/2024	922.6
5/1/2024	950.9
6/1/2024	917.8
7/1/2024	945.9
8/1/2024	943.4
9/1/2024	910.6
10/1/2024	938.5
11/1/2024	905.8
12/1/2024	933.6
1/1/2025	931.2
2/1/2025	838.9
3/1/2025	926.5
4/1/2025	894.3
5/1/2025	921.7
6/1/2025	889.6
7/1/2025	917.0
8/1/2025	914.5
9/1/2025	882.7
10/1/2025	909.8
11/1/2025	878.2
12/1/2025	905.1
1/1/2026	902.7
2/1/2026	813.2
3/1/2026	898.3
4/1/2026	867.0
5/1/2026	893.6
6/1/2026	862.5
7/1/2026	889.0



# **MV-DK Production Allocation Method**

October 2022



 
 From:
 Gina Doerner

 To:
 McClure, Dean, EMNRD

 Subject:
 RE: [EXTERNAL] DHC applications, Wilch A 003 E

 Date:
 Tuesday, October 18, 2022 9:34:40 AM

 Attachments:
 image001.png image002.png image003.png image004.png

Good morning Dean, Yes, it does. Thanks for confirming.

Gina Doerner Regulatory Analyst

#### IKAV Energy Inc. SIMCOE LLC

1199 Main Ave., Ste 101 Durango, CO 81301 Direct: 970- 852-0082 Mobile: 970- 247-2178 <u>Gina.Doerner@ikavenergy.com</u>

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Tuesday, October 18, 2022 9:33 AM
To: Gina Doerner <gina.doerner@ikavenergy.com>
Subject: RE: [EXTERNAL] DHC applications, Wilch A 003 E

Thank you. Based off the original email in this chain, I presume this proposed allocation method applies to both the Wilch A #5E and Wilch A #3E wells, but please confirm that.

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Gina Doerner <gina.doerner@ikavenergy.com>
Sent: Monday, October 17, 2022 5:12 PM
To: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Subject: Fwd: [EXTERNAL] DHC applications, Wilch A 003 E

Dean, You are correct. Thank you, Gina From: Robert Moore <<u>robert.moore@ikavenergy.com</u>>
Sent: Monday, October 17, 2022 4:35 PM
To: Gina Doerner <<u>gina.doerner@ikavenergy.com</u>>
Subject: Re: [EXTERNAL] DHC applications, Wilch A 003 E

Gina,

Dean has the correct understanding as evidenced by the equations in his email.

Bob

From: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Sent: Monday, October 17, 2022 3:56 PM
To: Gina Doerner <<u>gina.doerner@ikavenergy.com</u>>
Subject: RE: [EXTERNAL] DHC applications, Wilch A 003 E

Gina,

Actually, sorry about that I reversed the equations from what I imagine may be being proposed here; please see the following instead:

 $\frac{allocated \ MV \ Gas * 3.67}{allocated \ MV \ Gas * 3.67 + allocated \ DK \ Gas * 1.1} = MV \ Oil \ percentage$ 

 $\frac{allocated \ DK \ Gas * 1.1}{allocated \ MV \ Gas * 3.67 + allocated \ DK \ Gas * 1.1} = DK \ Oil \ percentage$ 

I was calculating for gas percentage from oil production rather than the intended calculation of oil percentage from the gas production.

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Gina Doerner <gina.doerner@ikavenergy.com>
Sent: Monday, October 17, 2022 3:27 PM
To: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Subject: RE: [EXTERNAL] DHC applications, Wilch A 003 E

Dean, I am confirming your question with the engineer. Thanks

Gina Doerner Regulatory Analyst

#### IKAV Energy Inc. SIMCOE LLC

1199 Main Ave., Ste 101 Durango, CO 81301 Direct: 970- 852-0082 Mobile: 970- 247-2178 <u>Gina.Doerner@ikavenergy.com</u>

#### Confidentiality notice:

This e-mail communication (and any attachment/s) is confidential and is intended only for the individual(s) or entity named above and to others who have been specifically authorized to receive it. Any information in this email and attachments may be legally privileged, may be subject to professional confidentiality, other privilege, or may otherwise be protected by work product immunity or other legal rules. If you are not the intended recipient, any disclosure, copying, reading, distribution, or any action taken or omitted in reliance on it, is prohibited and may be unlawful. Any opinions or advice contained in this email are subject to confidentiality and any terms and conditions may be protected. Please notify the sender that you have received this e-mail in error by calling the phone number above or by e-mail, and then delete the e-mail (including any attachment/s). Thank you.

From: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Sent: Monday, October 17, 2022 2:41 PM
To: Gina Doerner <<u>gina.doerner@ikavenergy.com</u>>
Subject: RE: [EXTERNAL] DHC applications, Wilch A 003 E

Gina,

To confirm that we are on the same page, Simcoe no longer wish to allocate the oil based off a fixed percentage, but instead wish to use a GOR calculation based off the allocated gas to allocate oil with an equation similar to the following?

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Gina Doerner <gina.doerner@ikavenergy.com>
Sent: Monday, October 17, 2022 1:55 PM
To: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Subject: [EXTERNAL] DHC applications, Wilch A 003 E

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon Dean,

The attached document explains the gas and condensate production allocation methodology SIMCOE will apply to the MV recompletion wells. Let me know if this description of the methodology will meet the NMOCD requirements.

Thanks,

Gina Doerner Regulatory Analyst

#### IKAV Energy Inc. SIMCOE LLC

1199 Main Ave., Ste 101 Durango, CO 81301 Direct: 970- 852-0082 Mobile: 970- 247-2178 <u>Gina.Doerner@ikavenergy.com</u>

Confidentiality notice:

This e-mail communication (and any attachment/s) is confidential and is intended only for the individual(s) or entity named above and to others who have been specifically authorized to receive it. Any information in this email and attachments may be legally privileged, may be subject to professional confidentiality, other privilege, or may otherwise be protected by work product immunity or other legal rules. If you are not the intended recipient, any disclosure, copying, reading, distribution, or any action taken or omitted in reliance on it, is prohibited and may be unlawful. Any opinions or advice contained in this email are subject to confidentiality and any terms and conditions may be protected. Please notify the sender that you have received this e-mail in error by calling the phone number above or by e-mail, and then delete the e-mail (including any attachment/s). Thank you. Received by OCD: 8/31/2022 10:27:05 AM

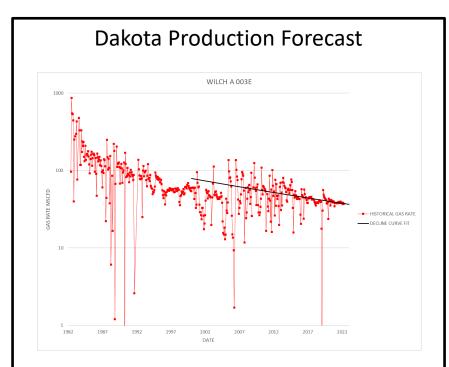
# **Production Allocation Method**



- Allocation of gas production allocation between the Mesaverde and Dakota reservoirs will initially be determined by the subtraction method.
  - Dakota production volume will be based on a forecast of gas production determined by the historical decline rate.
  - Mesaverde production volume will be equal to the difference between total gas production from the well and the forecast Dakota gas volume.
  - The allocation will be calculated on a quarterly basis and will be updated each quarter.
- Condensate production will be allocated based on the average condensate yields for other wells in the same Section and reservoir.
  - Condensate yield is based on current yield and is assumed to be constant in future.
  - Condensate production will depend on the gas production and therefore the allocation will change over time.
  - The allocation will be calculated on a quarterly basis and will be updated each quarter.

# Example: Wilch 003E Gas and Condensate Allocation





START DATE	1/1/2000
Q(i)	79 MSCFD
D(i) / YR	3.55%
B exponent	0.2

# Condensate Yield by Reservoir Bbls/MMSCF

API10	RESERVOIR	WELL NAME	CGR, Bbls/MMCF
3004507946	MESAVERDE	HARDIE LS 005	5.39
3004508054	MESAVERDE	HARDIE LS 004	4.45
3004522749	MESAVERDE	HARDIE LS 005A	3.94
3004522810	MESAVERDE	HARDIE LS 004A	6.73
3004523342	MESAVERDE	WILCH A 003	2.14
3004529714	MESAVERDE	HARDIE LS 005B	1.38
3004529715	MESAVERDE	HARDIE LS 004B	1.65
		AVERAGE	3.67

API10	RESERVOIR	WELL NAME	CGR, Bbls/MMCF
3004523342	DAKOTA	WILCH A 003	2.18
3004523343	DAKOTA	WILCH A 005	0.80
3004524687	DAKOTA	WILCH A 005E	1.08
3004525284	DAKOTA	WILCH A 003E	0.34
		AVERAGE	1.10

Released to Imaging: 10/18/2022 9:58:18 AM



- The below estimates are based on forecasted production volumes for the Mesaverde and Dakota. The allocation will likely change depending on actual well performance once commingled operations begin.
- The Wilch A 003E is currently producing only from the Mesaverde. Commingled production is expected to begin before the end of October 2022.

PERIOD	DK GASVOL MSCF	DK OILVOL BBLS	MV GASVOL MSCF	MV OILVOL BBLS	TOTAL GASVOL MSCF	TOTAL OILVOL BBLS	DK GAS%	DK OIL%	MV GAS%	MV OIL%
4Q2022	2307.25	2.538	11215.25	41.144	13522.51	43.682	17.06%	5.81%	82.94%	94.19%
1Q2023	3378.86	3.717	9351.80	34.308	12730.66	38.024	26.54%	9.77%	73.46%	90.23%
2Q2023	3386.04	3.725	5404.77	19.828	8790.81	23.552	38.52%	15.81%	61.48%	84.19%
3Q2023	3392.55	3.732	3447.73	12.648	6840.28	16.380	49.60%	22.78%	50.40%	77.22%
4Q2023	3362.02	3.698	2333.36	8.560	5695.38	12.258	59.03%	30.17%	40.97%	69.83%

Received by OCD: 8/31/2022 10:27:05 AM

District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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

Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form C-102 August 1, 2011

Page 17 of 18

Permit 314341

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-045-24687	72319	BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code	5. Property Name	6. Well No.
327793	WILCH A	005E
7. OGRID No.	8. Operator Name	9. Elevation
329736	SIMCOE LLC	6731

#### 10. Surface Location

	TO. Banado Eboarión											
UL - Lot	Section		Township		Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	
	С	23	2	9N	08W		810	N	1795	W		SAN
											JUAN	

11. Bottom Hole Location If Different From Surface									
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 13. Joint or Infill 320.00 W/2			14. Consolidation Code			15. Order No.			

## 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

<b>OPERATOR CERTIFICATION</b> 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(s) 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.
E-Signed By: Gina Doerner Title: Regulatory Analyst Date: 4/20/2022
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. Surveyed By: Fred Kerr, Jr.
Date of Survey:8/22/1980Certificate Number:3950

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
SIMCOE LLC	329736
1199 Main Ave., Suite 101	Action Number:
Durango, CO 81301	139814
	Action Type:
	[C-107] Down Hole Commingle (C-107A)

CONDITIONS		
Created By	Condition	Condition Date
dmcclure	If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Permit to become inaccurate, then no later than sixty (60) days after that event, the Operator shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Permit shall terminate on the date of such action.	10/14/2022
dmcclure	If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred the Operator shall submit a new downhole commingling application to OCD to amend this Permit to remove the pool that caused the decrease in value. If the Operator fails to submit a new application, this Permit shall terminate on the following day, and if OCD denies the application, this Permit shall terminate on the date of such action.	10/14/2022
dmcclure	If a completed interval of the Well is altered from what is submitted within this application, then no later than sixty (60) days after the alteration, the Operator shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.	10/14/2022
dmcclure	The Operator shall calculate the oil and gas production average during the fourth year after the commencement of commingling, which shall be used to establish a fixed percentage of the total oil and gas production that shall be allocated to each of the Pools ("fixed percentage allocation plan"). No later than ninety (90) days after the fourth year, the Operator shall submit a Form C-103 to the OCD Engineering Bureau that includes the fixed percentage allocation plan and all data used to determine it. If the Operator fails to do so, this Permit shall terminate on the following day. If OCD denies the fixed percentage allocation plan, this Permit shall terminate on the date of such action. If OCD approves the percentage allocation plan with or without modifications, then the approved percentage allocation plan shall be used to determine oil and gas allocation starting on the date of such action until the Well is plugged and abandoned.	10/14/2022

CONDITIONS

Page 18 of 18

.

Action 139814