Office	State of New Mexico	Form <i>C-</i> 303 07
District I – (575) 393-6161	Energy, Minerals and Natural Resources	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240		WELL API NO.
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION	30-045-25284
<u>District III</u> – (505) 334-6178	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE X FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV – (505) 476-3460	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM	,	
87505	AND DEPONTS ON WELLS	SF-078416-A
	AND REPORTS ON WELLS O DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLICATION		Wilch A
PROPOSALS.)	V. II	0 W-11 N
1. Type of Well: Oil Well Gas V	Vell x Other	9. OGRID Number
2. Name of Operator		9. OGRID Number 329736
3. Address of Operator		10. Pool name or Wildcat
1199 Main Avenue, Ste 101, Durango	CO 81301	Blanco Mesaverde/Basin Dakota
4. Well Location	, CO 81301	Bianco Mesaverde/Basin Dakota
Unit Letter I : 1770	feet from the SOUTH line and	900 feet from the EAST line
Section 23	Township 29N Range 08W Elevation (Show whether DR, RKB, RT, GR, etc.)	NMPM County AZTEC
11.	Elevation (Snow whether DR, RRB, R1, GR, etc.	;.)
12 Check Appro	opriate Box to Indicate Nature of Notice	Report or Other Data
12. Check rippie	prince Box to indicate return of recirc	, report of other Butt
NOTICE OF INTEN	TION TO: SUI	BSEQUENT REPORT OF:
PERFORM REMEDIAL WORK PLU	JG AND ABANDON ☐ REMEDIAL WO	RK ALTERING CASING
TEMPORARILY ABANDON	ANGE PLANS 🔲 COMMENCE DE	RILLING OPNS. P AND A
PULL OR ALTER CASING MU	LTIPLE COMPL	NT JOB
DOWNHOLE COMMINGLE		
CLOSED-LOOP SYSTEM		_
OTHER:	OTHER:	
		nd give pertinent dates, including estimated date
proposed completion or recomple	SEE RULE 19.15.7.14 NMAC. For Multiple Co	ompletions: Attach wellbore diagram of
proposed completion of recomple	tion.	
It is intended to recomplete the subject we	ell in the Blanco Mesaverde (pool 72319) and downhole con	nmingle the existing Basin Dakota (pool 71599) with the
Mesaverde. The production will be comm	ingled per Oil Conservation Division Order Number 11363	. Commingling will not reduce the value of the
	V – 4811'- 5375' These perforations are in MD. SIMCOE rule base formation is the Dakota and the added formation to	
_	ection forecast to the base formation(s) using historic production	· ·
percentage split between the Dakota and I	Mesaverde, which will be updated on a quarterly basis. All	production from this well exceeding the forecast will be
	l, percentage-based allocation will be submitted after the for oduction will be allocated based on average formation yield	
base formation production forecast. On pr	oduction will be anocated based on average formation yield	as from offset wells. DK- 1BD/6, MV- 1BD/6
Ownership is identical in both pools. No	notice is required.	
The BLM was notified in writing.		
Spud Date:	Rig Release Date:	
Spud Bute.	Tag release Bate.	
I hereby certify that the information above	is true and complete to the best of my knowled	ge and helief
Thereby certify that the information above	is true and complete to the best of my knowled	ge and benef.
SIGNATURE Gina Doerner	TITLE Regulatory Analyst	DATE 8/17/2022
Type or print name Gina Doerner	E-mail address: _gina.doerner@	ikavenergy.com PHONE: 970-852-0082
For State Use Only		
APPROVED BY: Dean R M	When TITLE Petroleum Enginee	r _{DATE} 10/18/2022
Conditions of Approval (if any):	111Lb	DATE

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 #003E

I-23-29N-08W 1770 FSL & 900 FEL

API: 30-045-25284

MESAVERDE RECOMPLETION PROCEDURE

Procedure

- 1. Rig up slickline unit and pull plunger equipment. If unable to pull everything, set a 3 slip above junk in the tubing.
- 2. MIRU service rig and equipment
- 3. NU BOPs. POOH w/ production tubing.
- 4. Make a casing scraper run.
- 5. Set a CIBP 100' above top DK perf.
- 6. Swap out existing wellhead components for 5k rated wellhead (WSI).
- 7. Load the casing and pressure test casing to 4000 psi.
- 8. Run CBL (entire well) and porosity log (4500-5500').
- 9. If necessary, perforate liner and pump Class G cement behind the liner to get good cement bond across MV interval.
- 10. ND BOPs. NU frac stack and test to 4000 psi.
- 11. RDMO service rig. MIRU frac spread.
- 12. Perforate and frac the MV from 4658' 5375'. RDMO frac spread.
- 13. MIRU service rig.
- 14. NU BOPs. RIH and clean out to DK CIBP.
- 15. When water and sand rates are acceptable, flow test the MV.
- 16. Drill out DK CIBP. POOH w/ tubing.
- 17. RIH and land production tubing. Obtain a commingled flow rate.
- 18. ND BOPs, NUWH.
- 19. 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 3E, API: 3004525284

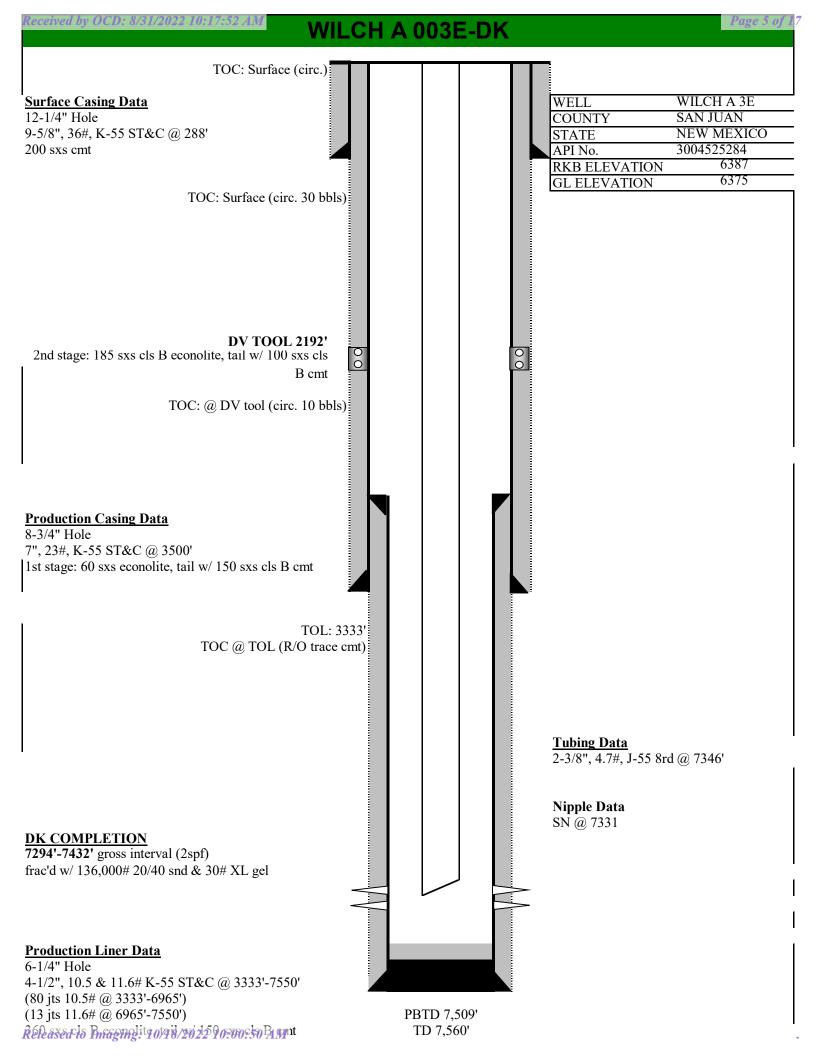
Location: NESE Section 23, Township 29N, Range 08W, San Juan County, NM

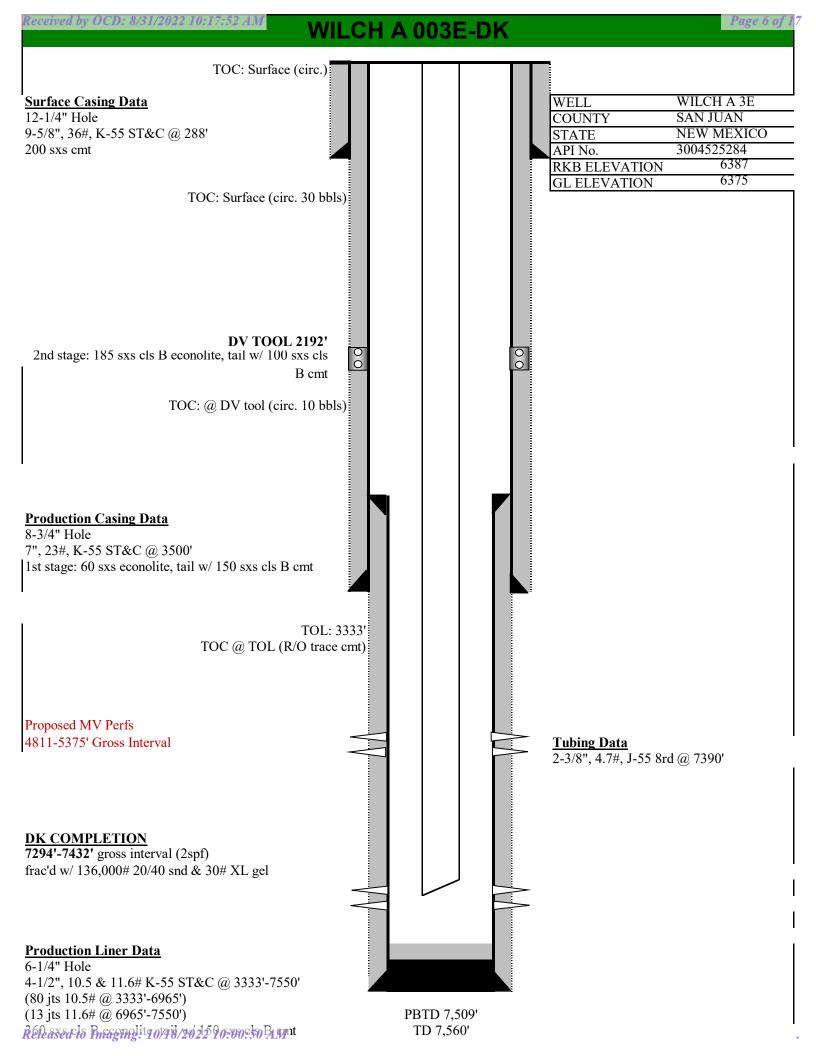
On behalf of SIMCOE LLC ("SIMCOE"), Operator of the subject well, I have reviewed SIMCOE's Title Records (including Lease records) and Division Order records for the subject well. I have determined that ownership is identical in both the currently producing Dakota pool and the targeted Mesaverde pool.

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.

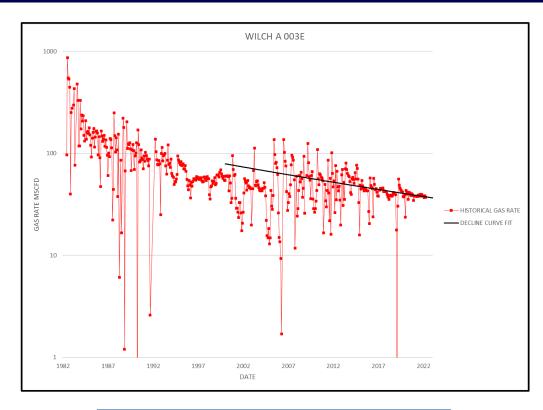
Michelle Blankenship Landman, RPL





WILCH A 003E





DECLINE CURVE FIT PARAMETERS					
START DATE	1/1/2000				
INITIAL RATE, MSCFD	79				
INITIAL DECLINE RATE, %/YR	3.55%				
b Exponent	0.2				

	GROSS WELLHEAD GAS
MONTH	VOLUME
	MSCF
8/1/2022	1149.9
9/1/2022	1109.8
10/1/2022	1143.9
11/1/2022	1104.1
12/1/2022	1138.0
1/1/2023	1135.0
2/1/2023	1022.5
3/1/2023	1129.3
4/1/2023	1090.1
5/1/2023	1123.5
6/1/2023	1084.4
7/1/2023	1117.7
8/1/2023	1114.8
9/1/2023	1076.0
10/1/2023	1109.1
11/1/2023	1070.5
12/1/2023	1103.4
1/1/2024	1100.5
2/1/2024	1026.8
3/1/2024	1095.0
4/1/2024	1056.9
5/1/2024	1089.3
6/1/2024	1051.5
7/1/2024	1083.8
8/1/2024	1081.0
9/1/2024	1043.4
10/1/2024	1075.4
11/1/2024	1038.0
12/1/2024	1069.9
1/1/2025	1067.2
2/1/2025	961.4
3/1/2025	1061.9
4/1/2025	1025.0
5/1/2025	1056.5
6/1/2025	1019.8
7/1/2025	1051.1
8/1/2025	1048.4
9/1/2025	1012.0
10/1/2025	1043.1
11/1/2025	1006.8
12/1/2025	1037.8
1/1/2026	1035.1
2/1/2026	932.5
3/1/2026	1030.0
4/1/2026	994.2
5/1/2026	1024.8
6/1/2026	989.2
7/1/2026	1019.6



MV-DK Production Allocation Method

October 2022









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



Dakota Production Forecast WILCH A 003E START DATE 1/1/2000 Q(i) 79 MSCFD D(i) / YR 3.55% 0.2 B exponent

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

Estimated Allocation Factors



- 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%

From: <u>Gina Doerner</u>

To: McClure, Dean, EMNRD

Subject: RE: [EXTERNAL] DHC applications, Wilch A 003 E Date: Tuesday, October 18, 2022 9:34:40 AM

Attachments: <u>image001.png</u>

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

Gina.Doerner@ikavenergy.com

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 <gina.doerner@ikavenergy.com> **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 < Dean.McClure@emnrd.nm.gov >

Sent: Monday, October 17, 2022 3:56 PM

To: Gina Doerner <gina.doerner@ikavenergy.com>

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

Gina.Doerner@ikavenergy.com

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 confidentialty 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 < Dean.McClure@emnrd.nm.gov >

Sent: Monday, October 17, 2022 2:41 PM

To: Gina Doerner < gina.doerner@ikavenergy.com >

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 < Dean.McClure@emnrd.nm.gov>

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

Gina.Doerner@ikavenergy.com

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 confidentialty 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.

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.

Form C-102 August 1, 2011

Permit 315432

WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

WELL LOOKING MONEROL DEDIGNITION EX						
1. API Number 30-045-25284	2. Pool Code 72319	3. Pool Name BLANCO-MESAVERDE (PRORATED GAS)				
4. Property Code 327793	5. Property Name Wilch A	6. Well No. 003				
7. OGRID No. 329736	8. Operator Name SIMCOE LLC	9. Elevation 6375				

10. Surface Location

_										
	UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
	1	23	29N	W80		1770	S	900	E	Aztec

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 A 320	cres .00 E/2	<u> </u>	13. Joint or Infill		14. Consolidation	n Code	<u> </u>	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

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 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: 5/4/2022

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: 8/14/1980

Certificate 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

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

Action 139794

CONDITIONS

Operator:	OGRID:
SIMCOE LLC	329736
1199 Main Ave., Suite 101	Action Number:
Durango, CO 81301	139794
	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