

Submit a Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

DHC-5233 Form C-103
 Revised July 18, 2013

WELL API NO. 30-045-24971	
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. SF 078415	
7. Lease Name or Unit Agreement Name Roelofs	
8. Well Number 001E	
9. OGRID Number 329736	
10. Pool name or Wildcat Blanco Mesaverde/Basin Dakota	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> 2. Name of Operator SIMCOE LLC 3. Address of Operator 1199 Main Avenue, Ste. 101, Durango, CO 81301 4. Well Location Unit Letter <u>M</u> : <u>660</u> feet from the <u>SOUTH</u> line and <u>1240</u> feet from the <u>WEST</u> line Section <u>15</u> Township <u>29N</u> Range <u>08W</u> NMPM County <u>SAN JUAN</u> 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6730' GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input checked="" type="checkbox"/>	P AND A <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

It is intended to recomplete the subject well in the Blanco Mesaverde (pool 72319) and downhole commingle the existing Basin Dakota (pool 71599) with the Mesaverde. The production will be commingled per Oil Conservation Division Order Number 11363. Allocation and methodology will be provided after the well is completed. Commingling will not reduce the value of the production. Proposed perforations are: MV – 5001'-5715' These perforations are in MD.

Ownership is identical in both pools. No notice is required.

The BLM was notified in writing.

Allocation shall be done per the attached supplemental documents

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Gina Doerner TITLE Regulatory Analyst DATE 5/23/2022

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 McClure TITLE Petroleum Engineer DATE 11/01/2022

Conditions of Approval (if any):

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.

Roelofs #001E

M-15-29N-08W 660 FSL & 1240 FWL

API: 30-045-24971

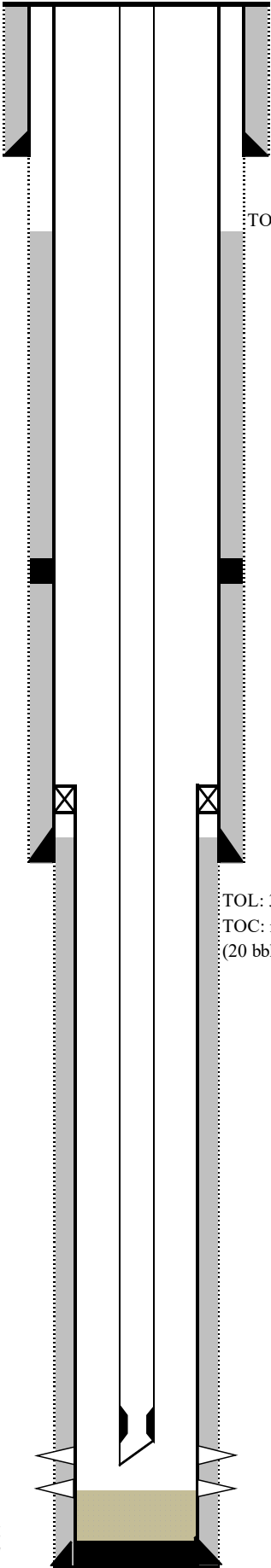
MESAVERDE RECOMPLETION PROCEDURE

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' – 5715'. 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.

GL: 6730'
KB: 6742'

ROELOFS 001E
Dakota
API # 300452497100
SEC 15, T29N, R8W
NEW MEXICO



TOC: Surface (circ.)

Surface Casing Data

12-1/4" Hole
9-5/8", 36#, K-55 @ 291'
250 sxs cls B cmt

TOC: 1200' (temp survey 1/2/82)

DV tool @ 2491'
2nd stage: 200 sxs econolite cmt

Production Casing Data

8-3/4" Hole
7", 23#, K-55 @ 4045'
1st stage: 230 sxs cls B cmt

TOL: 3885'
TOC: near TOL (circ. 20 bbls CW-100 to surface, no
(20 bbl CW pre-flush pumped ahead of cmt)

Tubing Details

2-3/8", 4.7#, J-55 @ 7763'

Nipple Data

Stop @ 7720'wlm 10/7/13
1.78" ID SN @ 7726'wlm

End of Tubing
7763'

DK COMPLETION

7642'-7664' (1spf), 7778'-7785' (2spf), 7805'-781
frac'd w/ 1000 gal 15% HCl, 142,000# 20/40 s

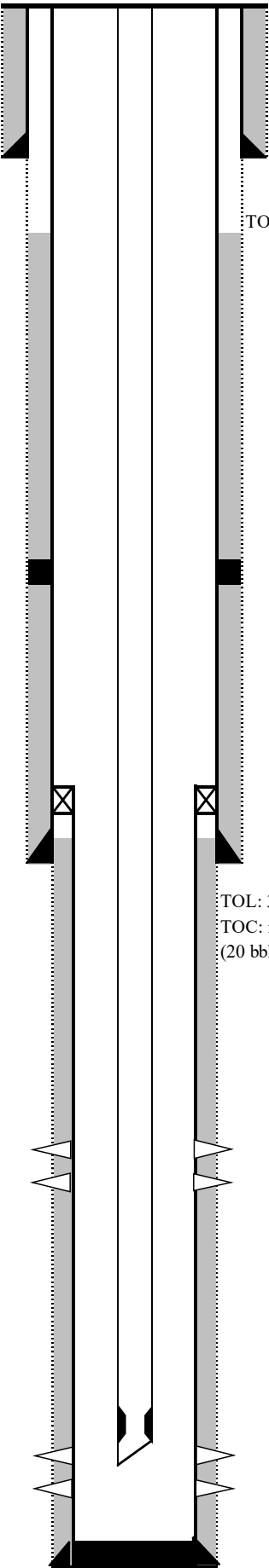
Production Liner Data

6-1/4" Hole
4-1/2", 10.5 & 11.6#, K55 ST&C @ 3885'-79:
72 jts 10.5# @ 3885'-6914', 24 jts 11.6# @ 69
225 sxs econolite, tail w/ 150 sxs cls B cmt

PBTD: 7886'
Total Depth: 7930'

GL: 6730'
KB: 6742'

ROELOFS 001E
Dakota
API # 300452497100
SEC 15, T29N, R8W
NEW MEXICO



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(20 bbl CW pre-flush pumped ahead of cmt)

Tubing Details

2-3/8", 4.7#, J-55 @ 7763'

Proposed MV Perfs
5001-5715'

Nipple Data

Stop @ 7720'wlm 10/7/13
1.78" ID SN @ 7726'wlm

End of Tubing
7,780

DK COMPLETION

7642'-7664' (1spf), 7778'-7785' (2spf), 7805'-781
frac'd w/ 1000 gal 15% HCl, 142,000# 20/40 s

Production Liner Data

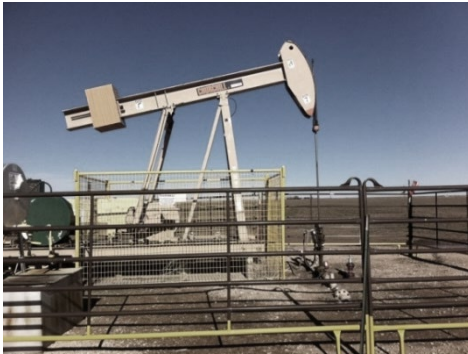
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225 sxs econolite, tail w/ 150 sxs cls B cmt

PBTD: 7886'
Total Depth: 7930'



MV-DK Production Allocation Method

October 2022





Gas 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 Allocation Method

- Condensate production will be allocated based on the average condensate yields for other wells in the same Section and reservoir.
 - Condensate yield (CGR, BBLS/MMSCF) is based on current yield and is assumed to be constant in future.
 - Condensate production will depend on the allocation of gas production and therefore the condensate allocation will change over time.
 - Condensate allocation will be calculated on a quarterly basis and will be updated each quarter.
 - The formulas for allocating condensate production are:

$$\text{MV Condensate \%} = \frac{(\text{Allocated MV Gas Volume} * \text{MV CGR})}{(\text{Allocated MV Gas Volume} * \text{MV CGR}) + (\text{Allocated DK Gas Volume} * \text{DK CGR})}$$

$$\text{DK Condensate \%} = \frac{(\text{Allocated DK Gas Volume} * \text{MV CGR})}{(\text{Allocated MV Gas Volume} * \text{MV CGR}) + (\text{Allocated DK Gas Volume} * \text{DK CGR})}$$



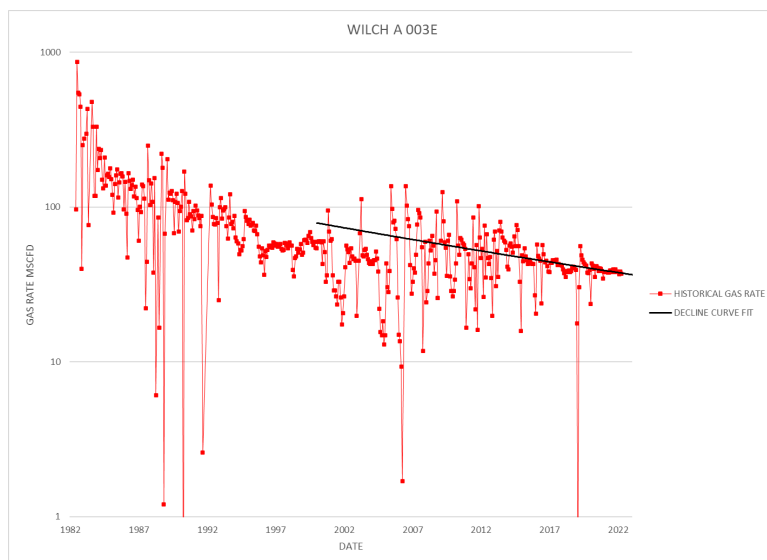
Condensate Yield Factors by Section

API10	RECOMPLETED WELL NAME	TOWNSHIP	RANGE	SECTION	MV CGR, BBLS/MMSCF	DK CGR, BBLS/MMSCF
3004523559	JAQUEZ GAS COM A 003E	29N	09W	05	2.082	0.500
3004524951	DAY 003E	29N	08W	17	3.077	3.790
3004525189	ROELOFS 004E	29N	08W	22	3.341	2.432
3004523490	ROELOFS 004	29N	08W	22	3.341	2.432
3004525847	VANDEWART B 002E	29N	08W	24	3.326	3.987
3004523340	VANDEWART B 001	29N	08W	14	4.065	0.974
3004524687	WILCH A 005E	29N	08W	23	4.348	1.470
3004525284	WILCH A 003E	29N	08W	23	4.348	1.470
3004524971	ROELOFS 001E	29N	08W	15	2.316	1.499



Example: Wilch 003E Gas and Condensate Allocation

Dakota Production Forecast



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



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%



IKAV Energy Inc./SIMCOE LLC

1199 Main Avenue, Ste. 101
Durango, Colorado 81301

Land Letter

Date: October 21, 2022

To: Gina Doerner, Regulatory Analyst

From: Michelle Blankenship, Landman RPL

Re: Application to DHC, NMAC 19.15.12.11 (A)

Well: Roelofs #1E, API: 3004524971

Location: SWSW Section 15, 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% Overriding Royalty Interest.

SIMCOE LLC
IKAV Energy Inc.

A handwritten signature in black ink, appearing to read 'Michelle Blankenship', is written over a light blue horizontal line.

Michelle Blankenship
Landman, RPL

District I

1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 109623

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 109623
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclosure	Allocation shall be done per the attached supplemental documents	11/1/2022
dmcclosure	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.	11/1/2022
dmcclosure	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.	11/1/2022
dmcclosure	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.	11/1/2022
dmcclosure	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.	11/1/2022