RECEIVED:	REVIEWER:	TYPE:	APP NO:	
		ABOVE THIS TABLE FOR OCD DIVI	SION USE ONLY	
	<b>NEW MEXIC</b> - Geologi 1220 South St. Fr	<b>CO OIL CONSERVA</b> cal & Engineering rancis Drive, Santa	<b>TION DIVISION</b> Bureau – Fe, NM 87505	- THE REPORT
THIS CHE	ADMINISTI CKLIST IS MANDATORY FOR A REGULATIONS WHICH RI	RATIVE APPLICATIC LL ADMINISTRATIVE APPLICAT EQUIRE PROCESSING AT THE E	ON CHECKLIST IONS FOR EXCEPTIONS TO E IVISION LEVEL IN SANTA FE	Division Rules and
Applicant: Well Name: Pool:			OGRID API: Pool Co	Number:
SUBMIT ACCURATI	e and complete in	Formation Requir Indicated Belov	ED TO PROCESS TH	E TYPE OF APPLICATION
<ol> <li>TYPE OF APPLICA</li> <li>A. Location - S</li> <li>□NSI</li> <li>B. Check one</li> <li>[1] Commi</li> <li>□D</li> <li>[1] Injectic</li> <li>W</li> </ol>	ATION: Check those Spacing Unit – Simul Only for [1] or [11] ngling – Storage – N HC □CTB □P on – Disposal – Pressu /FX □PMX □S	which apply for [A] taneous Dedication roject area) NSP leasurement LC PC OL ure Increase – Enhai WD 1PI EC	P(proration unit) SE S OLM nced Oil Recovery R PPR	)
2) NOTIFICATION R A. Offset op B. Royalty, C. Applica D. Notificat E. Notificat F. Surface G. For all of H. No notic	EQUIRED TO: Check berators or lease ho overriding royalty o tion requires publish tion and/or concurr owner the above, proof c the required	those which apply. Iders wners, revenue owr ed notice ent approval by SLC ent approval by BLN f notification or pub	ners ) /I Plication is attache	FOR OCD ONLY Notice Complete Application Content Complete d, and/or,
3) <b>CERTIFICATION:</b> I administrative a understand that notifications are	hereby certify that oproval is <b>accurate</b> <b>no action</b> will be ta submitted to the Div Statement must be comple	the information sub and <b>complete</b> to th ken on this applicat vision. eted by an individual with r	mitted with this ap e best of my know ion until the require nanagerial and/or superv	plication for ledge. I also ed information and <b>risory capacity</b> .

Print or Type Name

and -

Signature

Date

Phone Number

e-mail Address

.



Adam G. Rankin Phone (505) 954-7294 Fax (505) 819-5579 AGRankin@hollandhart.com

March 4, 2022

# VIA ONLINE FILING

Adrienne Sandoval Director, Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 1220 South Saint Francis Drive Santa Fe, New Mexico 87505

Re: Application of Tap Rock Operating, LLC to amend Administrative Order PLC-527-A to add additional wells and to authorize additional pool and lease commingling at the Zeus Facility Central Tank Battery located in the SE/4SE/4 (Unit P) of Section 9, Township 24 South, Range 33 East, Lea County, New Mexico.

Dear Ms. Sandoval:

Tap Rock Operating, LLC (OGRID No. 372043) seeks to amend Administrative Order PLC-527-A ("Order PLC-527-A"), attached as **Exhibit 1**. Order PLC-527-A authorizes pool and lease surface commingling pursuant to 19.15.12.10 NMAC, at the **Zeus Facility Central Tank Battery** of production from *the pools, leases, and wells described therein and future wells that will produce from a pool and lease identified in the order*. The following spacing units are covered by Order PLC-527-A:

(a) The 320-acre spacing unit comprised of the E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: Zeus State #106H well (30-025-45843), Zeus State #186H well (30-025-45845), Zeus State #173H well (30-025-45844), Zeus State #144H well (30-025-46623), Zeus State #153H well (30-025-49424), Zeus State #184H well (30-025-45617), Zeus State #104H well (30-025-45615);

(b) The 160-acre spacing unit comprised of the E/2E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: Zeus State #188H well (30-025-44524), Zeus State #108H well (30-025-44523);

(c) The 160-acre spacing unit comprised of the W/2E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: **Zeus State #176H well** (30-025-45616); and

(d) The 160-acre spacing unit comprised of the E/2E/2 of Section 9 in the WC-025 G-09 S243310P; Upper Wolfcamp; [98135]. The following wells are currently dedicated

to this spacing unit: Zeus State #204H well (30-025-44473), Zeus State #228H well (30-025-44525).

Pursuant to 19.15.12.10 NMAC, Tap Rock seeks to amend the terms of Order PLC-527-A to include production from all existing and future infill wells drilled in the following spacing units:

(a) The 160-acre spacing unit comprised of the W/2E/2 of Section 9 in the WC-025 G-09 S243310P; Upper Wolfcamp; [98135]. The following wells are currently dedicated to this spacing unit: Zeus State #216H well (30-025-45813), Zeus State #203H well (30-025-45757);

(b) Pursuant to 19.15.12.10.C(4)(g), future Triple X; Bone Spring, West; [96674] spacing units within the E/2 of Section 9 connected to the Zeus Facility Central Tank Battery with notice provided only to the owners of interests to be added; and

(c) Pursuant to 19.15.12.10.C(4)(g), *future WC-025 G-09 S243310P; Upper Wolfcamp; [98135] spacing units within the E/2 of Section 9 connected to the Zeus Facility Central Tank Battery* with notice provided only to the owners of interests to be added.

(d) Notably, Tap Rock has submitted a separate C-103 sundry notice for the **Zeus** State #153H well (30-025-49424), pursuant to the terms of Order PLC-527-A – the approval status of which is currently pending. For avoidance of doubt and to the extent the C-103 submittal has not been approved at the time of entry the amended order requested herein, Tap Rock hereby requests that the amended order specifically approve commingling of production at the Zeus Facility Central Tank Battery with respect to production from said Zeus State #153H well.

Oil and gas production from these spacing units will be commingled and sold at the *Zeus Facility Central Tank Battery located in the SE/4SE/4 (Unit P) of Section 9.* Production will be separately metered at each wellhead with a Coriolis flow meter for oil and orifice meter for gas manufactured to AGA specifications.

**Exhibit 2** hereto is a completed Application for Surface Commingling (Diverse Ownership) Form C-107B, that includes a statement from Jeff Trlica, Regulatory Analyst with Tap Rock, identifying the facilities and the measurement devices to be utilized, a detailed schematic of the surface facilities, and relevant gas samples.

**Exhibit 3** is a list of wells and corresponding plat identifying leases, wellbore locations, and unit boundaries.

Ownership is diverse between the above-described spacing units. **Exhibit 4** is a list of the interest owners (including any owners of royalty or overriding royalty interests) affected by this application, an example of the letters sent by certified mail advising the interest owners that any objections must be filed in writing with the Division within 20 days from the date the Division receives this application, and proof of mailing.

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Thank you for your attention to this matter, and please feel free to call if you have any questions or require additional information.

Sincerely,

Adam G. Rankin ATTORNEY FOR TAP ROCK OPERATING, LLC

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

# APPLICATION FOR SURFACE COMMINGLINGSUBMITTED BY TAP ROCK OPERATING, LLCORDER NO. PLC-527-A

# <u>ORDER</u>

The Director of the New Mexico Oil Conservation Division ("OCD"), having considered the application and the recommendation of the OCD Engineering Bureau, issues the following Order.

# FINDINGS OF FACT

- 1. Tap Rock Operating, LLC ("Applicant") submitted a complete application to surface commingle and off-lease measure the oil and gas production ("Application") from the pools, leases, and wells identified in Exhibit A.
- 2. Applicant proposed a method to allocate the oil and gas production to the pools, leases, and wells to be commingled.
- 3. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that the ownership in the pools, leases, and wells to be commingled is identical as defined in 19.15.12.7(B) NMAC.
- 4. To the extent that ownership is diverse, Applicant provided notice of the Application to all persons owning an interest in the oil and gas production to be commingled, including the owners of royalty and overriding royalty interests, regardless of whether they have a right or option to take their interests in kind, and those persons either submitted a written waiver or did not file an objection to the Application.
- 5. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.
- 6. Applicant certified the commingling of oil and gas production from the pools, leases, and wells will not in reasonable probability reduce the value of the oil and gas production to less than if it had remained segregated.
- 7. Applicant in the notice for the Application stated that it sought authorization to add additional pools, leases, and wells and identified the parameters to make such additions.
- 8. Applicant stated that it sought authorization to surface commingle and off-lease measure, as applicable, oil and gas production from wells which have not yet been approved to be drilled, but will produce from a pool and lease identified in Exhibit A.

# **EXHIBIT 1**

# **CONCLUSIONS OF LAW**

- 9. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, §§ 70-2-6, 70-2-11, 70-2-12, 70-2-16, and 70-2-17, and 19.15.12 NMAC.
- 10. Applicant satisfied the notice requirements for the Application in accordance with 19.15.12.10(A)(2), (C)(4)(c), and (C)(4)(e) NMAC, as applicable.
- 11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.10(B)(1) or (C)(1) NMAC, as applicable.
- 12. Commingling of oil and gas production from state, federal, or tribal leases shall not commence until approved by the BLM or NMSLO, as applicable, in accordance with 19.15.12.10(B)(3) and (C)(4)(h) NMAC.
- 13. Applicant satisfied the notice requirements for the subsequent addition of pools, leases, and wells in the notice for the Application, in accordance with 19.15.12.10(C)(4)(g) NMAC. Subsequent additions of pools, leases, and wells within Applicant's defined parameters, as modified herein, will not, in reasonable probability, reduce the commingled production's value or otherwise adversely affect the interest owners in the production to be added.
- 14. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

# <u>ORDER</u>

1. Applicant is authorized to surface commingle and off-lease measure oil and gas production from the pools, leases, and wells identified in Exhibit A.

Applicant is authorized to surface commingle and off-lease measure, as applicable, oil and gas production from wells not included in Exhibit A but that produce from a pool and lease identified in Exhibit A.

- 2. This Order supersedes Order PLC-527.
- 3. The allocation of oil and gas production to wells not included in Exhibit A but that produce from a pool and lease identified in Exhibit A shall be determined in the same manner as to wells identified in Exhibit A that produce from that pool and lease, provided that if more than one allocation method is being used or if there are no wells identified in Exhibit A that produce from the pool and lease, then allocation of oil and gas production to each well not included in Exhibit A shall be determined by OCD prior to commingling production from it with the production from another well.
- 4. The oil and gas production for each well identified in Exhibit A shall be separated and metered prior to commingling.
- 5. Applicant shall measure the commingled oil at a central tank battery described in Exhibit A in accordance with 19.15.18.15 NMAC or 19.15.23.8 NMAC.

Order No. PLC-527-A

- 6. Applicant shall measure the commingled gas at a central delivery point or central tank battery described in Exhibit A in accordance with 19.15.19.9 NMAC, provided however that if the gas is flared, and regardless of whether OCD has granted an exception pursuant to 19.15.18.12(B) NMAC, Applicant shall report the gas in accordance with 19.15.18.12(F) NMAC.
- 7. Applicant shall calibrate the meters used to measure or allocate oil and gas production in accordance with 19.15.12.10(C)(2) NMAC.
- 8. If the commingling of oil and gas production from any pool, lease, or well reduces the value of the commingled 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 Applicant shall submit a new surface commingling application to OCD to amend this Order to remove the pool, lease, or well whose oil and gas production caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
- 9. Applicant may submit an application to amend this Order to add pools, leases, and subsequently drilled wells with spacing units adjacent to or within the tracts commingled by this Order by submitting a Form C-107-B via the OCD Fee Portal in accordance with 19.15.12.10(C)(4)(g) NMAC.
- 10. If a well is not included in Exhibit A but produces from a pool or lease identified in Exhibit A, then Applicant shall submit Forms C-102 and C-103 to the OCD Engineering Bureau after the well has been approved to be drilled and prior to off-lease measuring or commingling oil or gas production from it with the production from another well. The Form C-103 shall reference this Order and identify the well and proposed method to determine the allocation of oil and gas production to it.
- 11. Applicant shall not commence commingling oil or gas production from state, federal, or tribal leases until approved by the BLM or NMSLO, as applicable.
- 12. OCD retains jurisdiction and reserves the right to modify or revoke this Order as it deems necessary to prevent waste or protect correlative rights, public health, or the environment.

# STATE OF NEW MEXICO OIL CONSERVATION DIVISION

ADRIENNE SANDOVAL DIRECTOR AS/dm **DATE:** 4/27/2021

State of New Mexico Energy, Minerals and Natural Resources Department

# **Exhibit A**

Order: PLC-527-A

**Operator:** Tap Rock Operating, LLC (372043)

Central Tank Battery: Zeus Facility Central Tank Battery

Central Tank Battery Location (NMPM): Unit P, Section 9, Township 24 South, Range 33 East

Gas Custody Transfer Meter Location (NMPM): Unit P, Section 9, Township 24 South, Range 33 East

Pools
-------

Pool Name	Pool Code	
WC-025 G-09 S243310P; UPPER WOLFCAMP	98135	
TRIPLE X; BONE SPRING, WEST	96674	

Leases as d	efined in 19.15.12.7(C) NM	AC
Lease	Location (N	MPM)
VO 40962 (WC)	E/2 E/2	Sec 9-T24S-R33E
VO 40962 (BS)	E/2	Sec 9-T24S-R33E

	Wells			
Well API	Well Name	Location (NMPM)	Pool Code	Train
30-025-44525	Zeus 24S330909 State #228H	P-09-24S-33E	98135	
30-025-44473	Zeus 24S330909 State #204H	P-09-24S-33E	98135	
30-025-44523	Zeus 24S330909 State #108H	P-09-24S-33E	96674	
30-025-44524	Zeus 24S330909 State #188H	P-09-24S-33E	96674	
30-025-45843	Zeus State #106H	O-09-24S-33E	96674	
30-025-46623	Zeus State #144H	P-09-24S-33E	96674	
30-025-45844	Zeus State #173H	O-09-24S-33E	96674	
30-025-45845	Zeus State #186H	O-09-24S-33E	96674	

District I 1625 N. French Drive, Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 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 S. St Francis Drive Santa Fe, New Mexico 87505 Form C-107-B Revised August 1, 2011

Submit the original application to the Santa Fe office with one copy to the appropriate District Office.

### APPLICATION FOR SURFACE COMMINGLING (DIVERSE OWNERSHIP)

OPERATOR NAME: Tap Rock	Operating				
OPERATOR ADDRESS: 523 Park	OPERATOR ADDRESS:     523 Park Point Dr. Suite 200. Golden, CO 80401				
APPLICATION TYPE:	APPLICATION TYPE:				
Pool Commingling Lease Commingling	g Pool and Lease Co	mmingling Off-Lease	Storage and Measur	ement (Only if not Surface	e Commingled)
LEASE TYPE: 🗌 Fee 🛛	State 🗌 Fede	ral			
Is this an Amendment to existing Order	? ⊠Yes □No If	"Yes", please include t	he appropriate C	order No. <u>PLC</u> -	527-A
Have the Bureau of Land Management $\square N_{-}$	(BLM) and State Land	d office (SLO) been not	tified in writing o	of the proposed comm	ingling
	(1) 800		C		
	(A) POC Please attach sheet	DL COMMINGLIN is with the following in	G 1formation		
(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes
See Attached					
		1			
<ul> <li>(2) Are any wells producing at top allowa</li> <li>(3) Has all interest owners been notified b</li> <li>(4) Measurement type: Metering [</li> <li>(5) Will commingling decrease the value of th</li></ul>	bles? ☐Yes ⊠No y certified mail of the pro ☐ Other (Specify) of production? ☐Yes	oposed commingling? ⊠No If "yes", descri	⊠Yes □No. be why commingli	ng should be approved	
	(B) LEAS	SE COMMINGLIN	G		
	Please attach sheet	s with the following in	nformation		
<ol> <li>Pool Name and Code.</li> <li>Is all production from same source of a</li> <li>Has all interest owners been notified by</li> <li>Measurement type: Metering </li> </ol>	supply?  Yes  N certified mail of the prop Other (Specify)	o posed commingling?	□Yes □N	0	
	(C) POOL and Please attach sheet	LEASE COMMIN is with the following in	GLING		
(1) Complete Sections A and E.	i lease attach sheet	s with the following h	normation		
()					
1)	D) OFF-LEASE ST Please attached shee	ORAGE and MEA ets with the following	SUREMENT information		
(1) Is all production from same source of	supply? □Yes □N	ю			
(2) Include proof of notice to all interest of	wners.				
(E) AI	DITIONAL INFO	RMATION (for all	application ty	vpes)	
(1) A schematic diagram of facility. include	ling legal location.	.5 with the following fi	1101 111411011		
<ul> <li>(1) A plat with lease boundaries showing</li> <li>(2) A plat with lease boundaries showing</li> <li>(3) Lease Names, Lease and Well Number</li> </ul>	all well and facility locations, and API Numbers.	ions. Include lease numbe	ers if Federal or Sta	te lands are involved.	
I hereby certify that the information above is	true and complete to the	best of my knowledge an	d belief.		
SIGNATURE:	T	ITLE: <u>Regulatory Anal</u>	l <u>yst</u> D	DATE: <u>2/22/2022</u>	_
TYPE OR PRINT NAMEJeff Trlica       TELEPHONE NO.:720-772-5910					
E-MAIL ADDRESS: jtrlica@taprk.com	<u> </u>	EXHIB	BIT 2		

TAP ROCK RESOURCES, LLC

February 22, 2022



Page 10 of 41

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Application of Tap Rock Operating, LLC for administrative approval to amend surface commingle (pool commingle) oil and gas production from the spacing units comprised of Section 9, Township 24S, Range 33E Lea County, New Mexico (the "Lands")

To Whom This May Concern,

Tap Rock Operating, LLC ("Tap Rock"), OGRID No. 372043, requests amendment to Order PLC-527-A to commingle current oil and gas production from fourteen (14) distinct wells located on the Lands and future production from the Lands as described herein. The wells will be metered through individual liquid coriolis flow meters for oil and orifice meters for gas. The gas commingling will occur after individual measurement at each well. Gas exiting each well test flows into one gathering line, as depicted on **Exhibit A**, the gas gathering line. Each well on the Lands will have its own test separator with a coriolis flow meter for oil and orifice meter for gas manufactured and assembled in accordance with the American Gas Association (AGA) specifications. All primary and secondary Electronic Flow Measurement (EFM) equipment is tested and calibrated by a reputable third-party measurement company in accordance with industry specifications.

Gas samples are obtained at the time of the meter testing and calibration and the composition and heating value are determined by a laboratory in accordance with the American Petroleum Institute (API) specifications to ensure accurate volume and energy (MMBTU) determinations. We have attached a sample gas analysis from the one producing well on the Lands at **Exhibit B**. (If available)

The flow stream from each wellhead is demonstrated in the Process Flow Diagram (PFD) attached as **Exhibit A** hereto. The PFD shows that the water, oil and gas leave the wellbore and flow into a wellhead test separator which separates each stream. The oil is measured via the coriolis flow meter on each individual well and is calibrated periodically by a third-party measurement company for accuracy. After the oil is individually metered by coriolis flow meters at each well it can be comingled into a heater treater then into the stock tanks or, each well can be isolated into its own individual tank for testing purposes. The gas is measured on a volume and MMBTU basis by an orifice meter on each individual well and supporting EFM equipment in accordance with API Chapter 21.1. The gas is then sent into a gathering line where it is commingled with each of the other well's metered gas. The gathering line is then metered by another orifice meter at the tank battery check meter to show the total volume of gas leaving the tank battery. The tank battery meter is tested and calibrated in accordance with industry specifications and

volume and energy and determined on an hourly, daily and monthly basis. Once the gas exits the final tank battery sales check it travels directly into a third-party sales connect meter. The third-party gas gatherer has its own meter that measures the gas for custody transfer and that meter is also calibrated periodically to ensure measurement accuracy.

In conclusion, all the oil and gas produced on the Lands is and will be metered separately at each wellhead and allocated using accurate measurement equipment according to API specifications.

Regards,

TAP ROCK OPERATING, LLC

Jeff Trlica Regulatory Analyst

Received by OCD: 3/4/2022 1:56:18 PM





November 29, 2018

#### FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

For: Tap Rock Operating LLC 602 Park Point Drive, Suite 200 Golden, Colorado 80401

Sample: Zeus 228H First Stage Separator Spot Gas Sample @ 123 psig & 89 °F

Date Sampled: 11/14/2018

Job Number: 84288.011

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	MOL%	GPM
Hydrogen Sulfide*	< 0.001	
Nitrogen	0.955	
Carbon Dioxide	0.105	
Methane	77.043	
Ethane	11.508	3.152
Propane	5.355	1.511
Isobutane	0.779	0.261
n-Butane	1.875	0.605
2-2 Dimethylpropane	0.008	0.003
Isopentane	0.460	0.172
n-Pentane	0.536	0.199
Hexanes	0.453	0.191
Heptanes Plus	<u>0.923</u>	<u>0.414</u>
Totals	100.000	6.508

#### **Computed Real Characteristics Of Heptanes Plus:**

Specific Gravity	3.596	(Air=1)
Molecular Weight	103.71	
Gross Heating Value	5543	BTU/CF

#### Computed Real Characteristics Of Total Sample:

Specific Gravity	0.767	(Air=1)
Compressibility (Z)	0.9958	
Molecular Weight	22.11	
Gross Heating Value		
Dry Basis	1350	BTU/CF
Saturated Basis	1327	BTU/CF

\*Hydrogen Sulfide tested on location by: Stain Tube Method (GPA 2377) Results: 0.032 Gr/100 CF, 0.5 PPMV or <0.0001 Mol%

Base Conditions: 15.025 PSI & 60 Deg F

Sampled By: (16) GRJ Analyst: MR Processor: NG Cylinder ID: T-4200 Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

Page 1 of 3

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## FESCO, Ltd.

Job Number: 84288.011

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286 TOTAL REPORT

COMPONENT	MOL %	GPM		WT %
Hydrogen Sulfide*	< 0.001			< 0.001
Nitrogen	0.955			1.210
Carbon Dioxide	0.105			0.209
Methane	77.043			55.903
Ethane	11.508	3.152		15.651
Propane	5.355	1.511		10.680
Isobutane	0.779	0.261		2.048
n-Butane	1.875	0.605		4.929
2,2 Dimethylpropane	0.008	0.003		0.026
Isopentane	0.460	0.172		1.501
n-Pentane	0.536	0.199		1.749
2,2 Dimethylbutane	0.006	0.003		0.023
Cyclopentane	0.000	0.000		0.000
2,3 Dimethylbutane	0.040	0.017		0.156
2 Methylpentane	0.139	0.059		0.542
3 Methylpentane	0.076	0.032		0.296
n-Hexane	0.192	0.081		0.748
Methylcyclopentane	0.082	0.029		0.312
Benzene	0.014	0.004		0.049
Cyclohexane	0.084	0.029		0.320
2-Methylhexane	0.033	0.016		0.150
3-Methylhexane	0.037	0.017		0.168
2,2,4 Trimethylpentane	0.000	0.000		0.000
Other C7's	0.103	0.046		0.462
n-Heptane	0.085	0.040		0.385
Methylcyclohexane	0.102	0.042		0.453
Toluene	0.026	0.009		0.108
Other C8's	0.140	0.067		0.698
n-Octane	0.048	0.025		0.248
Ethylbenzene	0.004	0.002		0.019
M & P Xylenes	0.019	0.007		0.091
O-Xylene	0.004	0.002		0.019
Other C9's	0.078	0.041		0.445
n-Nonane	0.017	0.010		0.099
Other C10's	0.032	0.019		0.204
n-Decane	0.006	0.004		0.039
Undecanes (11)	<u>0.009</u>	<u>0.006</u>		<u>0.060</u>
Totals	100.000	6.508		100.000
Computed Real Charac	teristics of Total Sample			
Specific Gravity		0.767	(Air=1)	
Compressibility (Z)		0.9958		
Molecular Weight		22.11		
Gross Heating Value				
Dry Basis		1350	BTU/CF	
Saturated Basis -		1327	BTU/CF	

Page 2 of 3

November 29, 2018

#### FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

Sample: Zeus 228H

First Stage Separator Spot Gas Sample @ 123 psig & 89 °F

Date Sampled: 11/14/2018

Job Number: 84288.011

GLYCALC FORMAT				
COMPONENT	MOL%	GPM	Wt %	
Carbon Dioxide	0.105		0.209	
Hydrogen Sulfide	< 0.001		< 0.001	
Nitrogen	0.955		1.210	
Methane	77.043		55.903	
Ethane	11.508	3.152	15.651	
Propane	5.355	1.511	10.680	
Isobutane	0.779	0.261	2.048	
n-Butane	1.883	0.608	4.955	
Isopentane	0.460	0.172	1.501	
n-Pentane	0.536	0.199	1.749	
Cyclopentane	0.000	0.000	0.000	
n-Hexane	0.192	0.081	0.748	
Cyclohexane	0.084	0.029	0.320	
Other C6's	0.261	0.110	1.017	
Heptanes	0.340	0.148	1.477	
Methylcyclohexane	0.102	0.042	0.453	
2,2,4 Trimethylpentane	0.000	0.000	0.000	
Benzene	0.014	0.004	0.049	
Toluene	0.026	0.009	0.108	
Ethylbenzene	0.004	0.002	0.019	
Xylenes	0.023	0.009	0.110	
Octanes Plus	<u>0.330</u>	<u>0.171</u>	<u>1.793</u>	
Totals	100.000	6.508	100.000	

#### Real Characteristics Of Octanes Plus:

Specific Gravity	4.165	(Air=1)
Molecular Weight	120.12	
Gross Heating Value	6382	BTU/CF

#### Real Characteristics Of Total Sample:

Specific Gravity	0.767	(Air=1)
Compressibility (Z)	0.9958	
Molecular Weight	22.11	
Gross Heating Value		
Dry Basis	1350	BTU/CF
Saturated Basis	1327	BTU/CF

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December 14, 2018

#### FESCO, Ltd. 1100 FESCO Avenue - Alice, Texas 78332

For: Tap Rock Operating LLC 602 Park Point Drive, Suite 200 Golden, Colorado 80401

Sample: Zeus 228H

First Stage Separator Hydrocarbon Liquid Sampled @ 123 psig & 89 °F

Date Sampled: 11/14/18

Job Number: 84288.022

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2186-M

COMPONENT	MOL %	LIQ VOL %	WT %
Nitrogen	0.027	0.005	0.005
Carbon Dioxide	0.018	0.005	0.005
Methane	3.314	0.940	0.366
Ethane	2.824	1.264	0.584
Propane	4.222	1.947	1.280
Isobutane	1.358	0.744	0.543
n-Butane	4.588	2.421	1.834
2,2 Dimethylpropane	0.100	0.064	0.050
Isopentane	2.606	1.595	1.293
n-Pentane	3.864	2.344	1.917
2,2 Dimethylbutane	0.048	0.033	0.028
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.229	0.157	0.136
2 Methylpentane	1.549	1.076	0.918
3 Methylpentane	0.901	0.616	0.534
n-Hexane	2.645	1.820	1.567
Heptanes Plus	<u>71.707</u>	<u>84.969</u>	<u>88.941</u>
Totals:	100.000	100.000	100.000

Specific Gravity	0.8073	(Water=1)
°API Gravity	43.77	@ 60°F
Molecular Weight	180.4	
Vapor Volume	13.85	CF/Gal
Weight	6.73	Lbs/Gal

#### **Characteristics of Total Sample:**

0.7713	(Water=1)
51.97	@ 60°F
145.4	
16.41	CF/Gal
6.43	Lbs/Gal
	0.7713 51.97 145.4 16.41 6.43

Base Conditions: 15.025 PSI & 60 °F

Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

Sampled By: EJ Garza Analyst: XG Processor: XGdjv Cylinder ID: W-2928

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#### FESCO, Ltd.

#### Job Number: 84288.022

#### TANKS DATA INPUT REPORT - GPA 2186-M

COMPONENT	Mol %	LiqVol %	Wt %
Carbon Dioxide	0.018	0.005	0.005
Nitrogen	0.027	0.005	0.005
Methane	3.314	0.940	0.366
Ethane	2.824	1.264	0.584
Propane	4.222	1.947	1.280
Isobutane	1.358	0.744	0.543
n-Butane	4.688	2.485	1.883
Isopentane	2.606	1.595	1.293
n-Pentane	3.864	2.344	1.917
Other C-6's	2.727	1.882	1.616
Heptanes	10.508	7.387	6.837
Octanes	12.389	9.631	9.156
Nonanes	6.621	6.029	5.769
Decanes Plus	38.868	59.917	64.908
Benzene	0.287	0.134	0.154
Toluene	1.027	0.575	0.651
E-Benzene	0.256	0.165	0.187
Xylenes	1.753	1.130	1.280
n-Hexane	2.645	1.820	1.567
2,2,4 Trimethylpentane	0.000	0.000	0.000
Totals:	100.000	100.000	100.000

#### Characteristics of Total Sample:

Specific Gravity	0.7713	(Water=1)
°API Gravity	51.97	@ 60°F
Molecular Weight	145.4	
Vapor Volume	16.41	CF/Gal
Weight	6.43	Lbs/Gal

#### Characteristics of Decanes (C10) Plus:

Specific Gravity	0.8355	(Water=1)
Molecular Weight	242.9	

#### Characteristics of Atmospheric Sample:

°API Gravity	48.52	@ 60°F
Reid Vapor Pressure Equivalent (D-6377)	8.68	psi

QUALITY CONTROL CHECK			
	Sampling		
	Conditions	Test S	Samples
Cylinder Number		W-2928*	
Pressure, PSIG	123	128	
Temperature, °F	89	89	

\* Sample used for analysis

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# FESCO, Ltd. TOTAL EXTENDED REPORT - GPA 2186-M

#### Job Number: 84288.022

COMPONENT	Mol %	LiqVol %	Wt %
Nitrogen	0.027	0.005	0.005
Carbon Dioxide	0.018	0.005	0.005
Methane	3.314	0.940	0.366
Ethane	2.824	1.264	0.584
Propane	4.222	1.947	1.280
Isobutane	1.358	0.744	0.543
n-Butane	4.588	2.421	1.834
2,2 Dimethylpropane	0.100	0.064	0.050
Isopentane	2.606	1.595	1.293
n-Pentane	3.864	2.344	1.917
2,2 Dimethylbutane	0.048	0.033	0.028
	0.000	0.000	0.000
2,5 Dimensional	1 5/0	1.076	0.130
3 Methylpentane	0.901	0.616	0.918
n-Hexane	2 645	1 820	1 567
Methylcyclopentane	1.599	0.947	0.926
Benzene	0.287	0.134	0.154
Cvclohexane	1.913	1.090	1.107
2-Methylhexane	1.036	0.806	0.714
3-Methylhexane	1.012	0.778	0.698
2,2,4 Trimethylpentane	0.000	0.000	0.000
Other C-7's	2.358	1.767	1.608
n-Heptane	2.589	1.999	1.784
Methylcyclohexane	3.564	2.398	2.406
Toluene	1.027	0.575	0.651
Other C-8's	6.608	5.332	5.008
n-Octane	2.217	1.901	1.742
E-Benzene	0.256	0.165	0.187
M & P Xylenes	1.100	0.714	0.803
O-Xylene	0.653	0.415	0.477
Other C-9's	5.081	4.579	4.411
n-Nonane	1.540	1.450	1.358
Other C-10's	4.981	4.933	4.839
n-decane	1.113	1.143	1.089
Dedecanes(12)	4.700	4.704	4.759
Tridecanes(12)	3 308	3.930	3.904 4.089
Tetradecanes(14)	2 7/8	3.464	3 590
Pentadecanes(15)	2 251	3 039	3 188
Hexadecanes(16)	1.612	2.326	2.461
Heptadecanes(17)	1.381	2.107	2.250
Octadecanes(18)	1.095	1.760	1.890
Nonadecanes(19)	1.175	1.967	2.125
Eicosanes(20)	0.876	1.524	1.656
Heneicosanes(21)	0.736	1.348	1.473
Docosanes(22)	0.633	1.208	1.329
Tricosanes(23)	0.579	1.144	1.265
Tetracosanes(24)	0.485	0.994	1.104
Pentacosanes(25)	0.377	0.801	0.894
Hexacosanes(26)	0.281	0.619	0.694
Heptacosanes(27)	0.317	0.724	0.815
Octacosanes(28)	0.298	0.703	0.794
Nonacosanes(29)	0.198	0.484	0.549
Triacontanes(30)	0.157	0.394	0.448
Hentriacontanes Plus(31+)	<u>5.889</u>	<u>16.520</u>	<u>19.642</u>
Total	100.000	100.000	100.000

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August 19, 2020

#### FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

For: Tap Rock Operating LLC 523 Park Point Drive, Suite 200 Golden, Colorado 80401

Sample: Zeus No. 144H First Stage Separator Gas Spot Sample @ 132 psig & 109 °F

Date Sampled: 08/13/2020

Job Number: 202318.001

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	MOL%	GPM
Hydrogen Sulfide*	< 0.001	
Nitrogen	1.811	
Carbon Dioxide	1.356	
Methane	72.460	
Ethane	13.112	3.591
Propane	6.761	1.908
Isobutane	0.810	0.271
n-Butane	2.011	0.649
2-2 Dimethylpropane	0.003	0.001
Isopentane	0.435	0.163
n-Pentane	0.454	0.169
Hexanes	0.300	0.127
Heptanes Plus	<u>0.487</u>	<u>0.198</u>
Totals	100.000	7.077

#### **Computed Real Characteristics Of Heptanes Plus:**

Specific Gravity	3.350	(Air=1)
Molecular Weight	96.61	
Gross Heating Value	5066	BTU/CF

#### Computed Real Characteristics Of Total Sample:

Specific Gravity	0.786	(Air=1)
Compressibility (Z)	0.9958	
Molecular Weight	22.66	
Gross Heating Value		
Dry Basis	1335	BTU/CF
Saturated Basis	1312	BTU/CF

\*Hydrogen Sulfide tested on location by: Stain Tube Method (GPA 2377) Results: <0.013 Gr/100 CF, <0.2 PPMV or <0.001 Mol %

Base Conditions: 15.025 PSI & 60 Deg F

Sampled By: (24) Dennis Field Analyst: HB Processor: RG Cylinder ID: T-4404 Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

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## FESCO, Ltd.

Job Number: 202318.001

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286 TOTAL REPORT

COMPONENT	MOL %	GPM		WT %
Hydrogen Sulfide*	< 0.001			< 0.001
Nitrogen	1.811			2.238
Carbon Dioxide	1.356			2.633
Methane	72.460			51.290
Ethane	13.112	3.591		17.396
Propane	6.761	1.908		13.154
Isobutane	0.810	0.271		2.077
n-Butane	2.011	0.649		5.157
2,2 Dimethylpropane	0.003	0.001		0.010
Isopentane	0.435	0.163		1.385
n-Pentane	0.454	0.169		1.445
2,2 Dimethylbutane	0.004	0.002		0.015
Cyclopentane	0.000	0.000		0.000
2,3 Dimethylbutane	0.038	0.016		0.144
2 Methylpentane	0.094	0.040		0.357
3 Methylpentane	0.051	0.021		0.194
n-Hexane	0.113	0.048		0.430
Methylcyclopentane	0.058	0.020		0.215
Benzene	0.055	0.016		0.190
Cyclohexane	0.069	0.024		0.256
2-Methylhexane	0.013	0.006		0.057
3-Methylhexane	0.017	0.008		0.075
2,2,4 Trimethylpentane	0.000	0.000		0.000
Other C7's	0.045	0.020		0.197
n-Heptane	0.032	0.015		0.141
Methylcyclohexane	0.050	0.021		0.217
Toluene	0.038	0.013		0.154
Other C8's	0.044	0.021		0.214
n-Octane	0.013	0.007		0.066
Ethylbenzene	0.004	0.002		0.019
M & P Xylenes	0.008	0.003		0.037
O-Xylene	0.002	0.001		0.009
Other C9's	0.022	0.011		0.123
n-Nonane	0.004	0.002		0.023
Other C10's	0.009	0.005		0.056
n-Decane	0.001	0.001		0.006
Undecanes (11)	0.003	0.002		0.020
Totals	100.000	7.077		100.000
Computed Real Charact	eristics of Total Sample			
Specific Gravity	·	0.786	(Air=1)	
Compressibility (Z)		0.9958		
Molecular Weight		22.66		
Gross Heating Value				
Dry Basis		1335	BTU/CF	
Saturated Basis		1312	BTU/CF	

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August 19, 2020

#### FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

**GLYCALC FORMAT** 

Sample: Zeus No. 144H

First Stage Separator Gas Spot Sample @ 132 psig & 109 °F

Date Sampled: 08/13/2020

Job Number: 202318.001

COMPONENT	MOL%	GPM	Wt %
Carbon Dioxide	1.356		2.633
Hydrogen Sulfide	< 0.001		< 0.001
Nitrogen	1.811		2.238
Methane	72.460		51.290
Ethane	13.112	3.591	17.396
Propane	6.761	1.908	13.154
Isobutane	0.810	0.271	2.077
n-Butane	2.014	0.650	5.167
Isopentane	0.435	0.163	1.385
n-Pentane	0.454	0.169	1.445
Cyclopentane	0.000	0.000	0.000
n-Hexane	0.113	0.048	0.430
Cyclohexane	0.069	0.024	0.256
Other C6's	0.187	0.079	0.710
Heptanes	0.165	0.070	0.685
Methylcyclohexane	0.050	0.021	0.217
2,2,4 Trimethylpentane	0.000	0.000	0.000
Benzene	0.055	0.016	0.190
Toluene	0.038	0.013	0.154
Ethylbenzene	0.004	0.002	0.019
Xylenes	0.010	0.004	0.046
Octanes Plus	<u>0.096</u>	<u>0.049</u>	<u>0.508</u>
Totals	100.000	7.077	100.000

#### Real Characteristics Of Octanes Plus:

Specific Gravity	4.151	(Air=1)
Molecular Weight	119.73	
Gross Heating Value	6336	BTU/CF

#### Real Characteristics Of Total Sample:

Specific Gravity	0.786	(Air=1)
Compressibility (Z)	0.9958	
Molecular Weight	22.66	
Gross Heating Value		
Dry Basis	1335	BTU/CF
Saturated Basis	1312	BTU/CF

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September 1, 2020

#### FESCO, Ltd. 1100 FESCO Avenue - Alice, Texas 78332

For: Tap Rock Operating LLC 523 Park Point Drive, Suite 200 Golden, Colorado 80401

Sample: Zeus No. 144H

First Stage Separator Hydrocarbon Liquid Sampled @ 132 psig & 109 °F

Date Sampled: 08/13/2020

Job Number: 202318.002

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2186-M

COMPONENT	MOL %	LIQ VOL %	WT %
Nitrogen	0.039	0.007	0.007
Carbon Dioxide	0.101	0.028	0.029
Methane	2.902	0.797	0.300
Ethane	3.108	1.347	0.602
Propane	5.264	2.350	1.495
Isobutane	1.386	0.735	0.519
n-Butane	5.005	2.557	1.874
2,2 Dimethylpropane	0.074	0.046	0.034
Isopentane	2.504	1.484	1.164
n-Pentane	3.541	2.080	1.645
2,2 Dimethylbutane	0.022	0.015	0.012
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.345	0.229	0.191
2 Methylpentane	1.230	0.828	0.683
3 Methylpentane	0.747	0.494	0.415
n-Hexane	2.011	1.340	1.116
Heptanes Plus	<u>71.720</u>	85.662	<u>89.914</u>
Totals:	100.000	100.000	100.000

Characteristics of H	leptanes Plus:
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Specific Gravity	0.8369	(Water=1)
°API Gravity	37.57	@ 60°F
Molecular Weight	194.7	
Vapor Volume	13.31	CF/Gal
Weight	6.97	Lbs/Gal

#### Characteristics of Total Sample:

0.7973	(Water=1)
45.96	@ 60°F
155.3	
15.89	CF/Gal
6.64	Lbs/Gal
	0.7973 45.96 155.3 15.89 6.64

Base Conditions: 15.025 PSI & 60 °F

Certified: FESCO, Ltd. - Alice, Texas

Sampled By: (24) D. Field Analyst: ANB Processor: ANBdjv Cylinder ID: W-2690

David Dannhaus 361-661-7015

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#### FESCO, Ltd.

#### Job Number: 202318.002

#### TANKS DATA INPUT REPORT - GPA 2186-M

COMPONENT	Mol %	LiqVol %	Wt %
Carbon Dioxide	0.101	0.028	0.029
Nitrogen	0.039	0.007	0.007
Methane	2.902	0.797	0.300
Ethane	3.108	1.347	0.602
Propane	5.264	2.350	1.495
Isobutane	1.386	0.735	0.519
n-Butane	5.079	2.603	1.908
Isopentane	2.504	1.484	1.164
n-Pentane	3.541	2.080	1.645
Other C-6's	2.345	1.566	1.301
Heptanes	7.972	5.231	4.759
Octanes	9.270	6.805	6.373
Nonanes	5.207	4.498	4.251
Decanes Plus	42.213	65.038	70.153
Benzene	1.304	0.592	0.656
Toluene	2.674	1.451	1.587
E-Benzene	0.849	0.531	0.581
Xylenes	1.673	1.045	1.144
n-Hexane	2.011	1.340	1.116
2,2,4 Trimethylpentane	0.559	0.471	<u>0.411</u>
Totals:	100.000	100.000	100.000

#### Characteristics of Total Sample:

Specific Gravity	0.7973	(Water=1)
°API Gravity	45.96	@ 60°F
Molecular Weight	155.3	
Vapor Volume	15.89	CF/Gal
Weight	6.64	Lbs/Gal

#### Characteristics of Decanes (C10) Plus:

Specific Gravity	0.8601	(Water=1)
Molecular Weight	258.0	

#### Characteristics of Atmospheric Sample:

°API Gravity	42.83	@ 60°F
Reid Vapor Pressure Equivalent (D-6377)	8.47	psi

QUALITY CONTROL CHECK						
	Sampling					
	Conditions	Test Samples				
Cylinder Number		W-2690				
Pressure, PSIG	132	128				
Temperature, °F	109	109				

\* Sample used for analysis

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#### FESCO, Ltd.

#### TOTAL EXTENDED REPORT - GPA 2186-M

Job Number: 202318.002

COMPONENT	Mol %	LiqVol %	Wt %
Nitrogen	0.039	0.007	0.007
Carbon Dioxide	0.101	0.028	0.029
Methane	2.902	0.797	0.300
Ethane	3.108	1.347	0.602
Propane	5.264	2.350	1.495
Isobutane	1.386	0.735	0.519
n-Butane	5.005	2.557	1.874
2.2 Dimethylpropane	0.074	0.046	0.034
Isopentane	2.504	1.484	1.164
n-Pentane	3.541	2.080	1.645
2,2 Dimethylbutane	0.022	0.015	0.012
Cyclopentane	0.000	0.000	0.000
2.3 Dimethylbutane	0.345	0.229	0.191
2 Methylpentane	1.230	0.828	0.683
3 Methylpentane	0.747	0.494	0.415
n-Hexane	2.011	1.340	1.116
Methylcyclopentane	1.453	0.833	0.788
Benzene	1.304	0.592	0.656
Cyclohexane	2.223	1.227	1.205
2-Methylhexane	0.792	0.596	0.511
3-Methylhexane	0.730	0.543	0.471
2.2.4 Trimethylpentane	0.559	0.471	0.411
Other C-7's	0.988	0.696	0.631
n-Heptane	1.786	1.335	1.153
Methylcyclohexane	3.210	2.091	2.030
Toluene	2.674	1.451	1.587
Other C-8's	4,463	3.387	3.168
n-Octane	1.597	1.326	1.175
E-Benzene	0.849	0.531	0.581
M & P Xvlenes	1.175	0.739	0.803
O-Xvlene	0.498	0.307	0.340
Other C-9's	3.893	3.300	3.165
n-Nonane	1.314	1.198	1.085
Other C-10's	4.668	4.349	4.247
n-decane	0.977	0.972	0.895
Undecanes(11)	4.712	4.504	4,461
Dodecanes(12)	3.347	3.456	3.471
Tridecanes(13)	3.476	3.849	3.918
Tetradecanes(14)	2.904	3.444	3.554
Pentadecanes(15)	2.503	3.180	3.321
Hexadecanes(16)	1.962	2.664	2.805
Heptadecanes(17)	1.717	2.465	2.621
Octadecanes(18)	1.690	2.554	2.732
Nonadecanes(19)	1.528	2.406	2.589
Eicosanes(20)	1.135	1.857	2.010
Heneicosanes(21)	1.036	1.784	1.942
Docosanes(22)	0.910	1 634	1 788
Tricosanes(23)	0.815	1.515	1.668
Tetracosanes(24)	0 719	1 385	1 532
Pentacosanes(25)	0.647	1 295	1 438
Hexacosanes(26)	0.599	1 242	1.386
Hentacosanes(27)	0.577	1 230	1 380
Octacosanes(28)	0.501	1 112	1 251
Nonacosanes(29)	0.485	1 113	1 256
Triacontanes(30)	0.416	0 083	1 11/
Hentriacontanes Plus(31+)	1 888	16 037	18 763
Total	100.000	100.000	100.000

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September 1, 2020

#### FESCO, Ltd. 1100 Fesco Avenue - Alice, Texas 78332

For: Tap Rock Operating LLC 523 Park Point Drive, Suite 200 Golden, Colorado 80401

Date Sampled: 08/13/20

Sample: Zeus No. 144 H

Date Analyzed: 08/25/20 Job Number: J202318

FLASH LIBERATION OF HYDROCARBON LIQUID							
Separator HC Liquid Stock Tank							
Pressure, psig	132	0					
Temperature, °F	109	70					
Gas Oil Ratio (1)		72.7					
Gas Specific Gravity (2)		1.320					
Separator Volume Factor (3)	1.0642	1.000					

STOCK TANK FLUID PROPERTIES	
Shrinkage Recovery Factor (4)	0.9397
Oil API Gravity at 60 °F	42.83
Reid Vapor Pressure Equivalent (D-6377), psi (5)	8.47

Quality Control Check					
Sampling Conditions Test Samples					
Cylinder No.		W-2690			
Pressure, psig	132	128			
Temperature, °F	109	109			

(1) - Scf of flashed vapor per barrel of stock tank oil

(2) - Air = 1.000

(3) - Separator volume / Stock tank volume

(4) - Fraction of first stage separator liquid

(5) - Absolute pressure at 100 deg F

Analyst: E.T. III \* Sample used for flash study Base Conditions: 15.025 PSI & 60 °F

Certified: FESCO, Ltd. -Alice, Texas

David Dannhaus 361-661-7015

August 19, 2020

#### FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

For: Tap Rock Operating LLC 523 Park Point Drive, Suite 200 Golden, Colorado 80401

Sample: Zeus No. 144H Gas Evolved from Hydrocarbon Liquid from 132 psig & 109 °F to 0 psig & 70 °F

Date Sampled: 08/13/2020

Job Number: 202318.011

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	MOL%	GPM
Hydrogen Sulfide*	< 0.001	
Nitrogen	0.312	
Carbon Dioxide	0.912	
Methane	27.293	
Ethane	23.798	6.579
Propane	25.690	7.316
Isobutane	3.971	1.343
n-Butane	10.426	3.398
2-2 Dimethylpropane	0.026	0.010
Isopentane	2.289	0.865
n-Pentane	2.393	0.897
Hexanes	1.298	0.553
Heptanes Plus	<u>1.592</u>	<u>0.630</u>
Totals	100.000	21.591

#### **Computed Real Characteristics Of Heptanes Plus:**

Specific Gravity	3.254	(Air=1)
Molecular Weight	92.97	
Gross Heating Value	4859	BTU/CF

#### Computed Real Characteristics Of Total Sample:

Specific Gravity	1.320	(Air=1)	
Compressibility (Z)	0.9865		
Molecular Weight	37.71		
Gross Heating Value			
Dry Basis	2216	BTU/CF	
Saturated Basis	2178	BTU/CF	

\*Hydrogen Sulfide tested in laboratory by: Stain Tube Method (GPA 2377) Results: <0.013 Gr/100 CF, <0.2 PPMV or <0.001 Mol %

Base Conditions: 15.025 PSI & 60 Deg F

Certified: FESCO, Ltd. - Alice, Texas

Sampled By: (16) Edward Trujillo Analyst: RG Processor: CRP Cylinder ID: F-19s

David Dannhaus 361-661-7015

Page 1 of 2

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## FESCO, Ltd.

Job Number: 202318.011

#### CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286 TOTAL REPORT

Hydrogen Sulfide*       < 0.001       < 0.001         Nitrogen       0.312       0.232         Carbon Dioxide       0.912       1.064         Methane       27.293       11.607         Ethane       23.798       6.579       18.974         Propane       25.690       7.316       30.037         Isobutane       3.971       1.343       6.120         n-Butane       10.426       3.398       16.068         2,2 Dimethylpropane       0.026       0.010       0.050         Isopentane       2.289       0.865       4.379         n-Pentane       2.393       0.897       4.578         2,2 Dimethylbutane       0.013       0.006       0.030         Cyclopentane       0.000       0.000       2.303         2,3 Dimethylbutane       0.173       0.073       0.395         2 Methylpentane       0.414       0.178       0.946         3 Methylpentane       0.225       0.095       0.514         n-Hexane       0.473       0.201       1.081         Methylcyclopentane       0.246       0.088       0.549         Benzene       0.218       0.063       0.452
Nitrogen         0.312         0.232           Carbon Dioxide         0.912         1.064           Methane         27.293         11.607           Ethane         23.798         6.579         18.974           Propane         25.690         7.316         30.037           Isobutane         3.971         1.343         6.120           n-Butane         10.426         3.398         16.068           2,2 Dimethylpropane         0.026         0.010         0.050           Isopentane         2.289         0.865         4.379           n-Pentane         2.393         0.897         4.578           2,2 Dimethylbutane         0.013         0.006         0.030           Cyclopentane         0.000         0.000         2.303           2,3 Dimethylbutane         0.173         0.073         0.395           2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452
Carbon Dioxide         0.912         1.064           Methane         27.293         11.607           Ethane         23.798         6.579         18.974           Propane         25.690         7.316         30.037           Isobutane         3.971         1.343         6.120           n-Butane         10.426         3.398         16.068           2,2 Dimethylpropane         0.026         0.010         0.050           Isopentane         2.289         0.865         4.379           n-Pentane         2.393         0.897         4.578           2,2 Dimethylbutane         0.013         0.006         0.030           Cyclopentane         0.000         0.000         0.000           2,3 Dimethylbutane         0.173         0.073         0.395           2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096 </td
Methane         27.293         11.607           Ethane         23.798         6.579         18.974           Propane         25.690         7.316         30.037           Isobutane         3.971         1.343         6.120           n-Butane         10.426         3.398         16.068           2,2 Dimethylpropane         0.026         0.010         0.050           Isopentane         2.289         0.865         4.379           n-Pentane         2.393         0.897         4.578           2,2 Dimethylbutane         0.013         0.006         0.030           Cyclopentane         0.000         0.000         0.000           2,3 Dimethylbutane         0.173         0.073         0.395           2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049 </td
Ethane23.7986.57918.974Propane25.6907.31630.037Isobutane3.9711.3436.120n-Butane10.4263.39816.0682,2 Dimethylpropane0.0260.0100.050Isopentane2.2890.8654.379n-Pentane2.3930.8974.5782,2 Dimethylbutane0.0130.0060.030Cyclopentane0.0000.0000.0002,3 Dimethylbutane0.1730.0730.3952 Methylpentane0.4140.1780.9463 Methylpentane0.2250.0950.514n-Hexane0.4730.2011.081Methylcyclopentane0.2460.0880.549Benzene0.2180.0630.452Cyclohexane0.2740.0960.6112-Methylhexane0.0490.0240.130
Propane         25.690         7.316         30.037           Isobutane         3.971         1.343         6.120           n-Butane         10.426         3.398         16.068           2,2 Dimethylpropane         0.026         0.010         0.050           Isopentane         2.289         0.865         4.379           n-Pentane         2.393         0.897         4.578           2,2 Dimethylbutane         0.013         0.006         0.030           Cyclopentane         0.000         0.000         0.000           2,3 Dimethylbutane         0.173         0.073         0.395           2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611
Isobutane         3.971         1.343         6.120           n-Butane         10.426         3.398         16.068           2,2 Dimethylpropane         0.026         0.010         0.050           Isopentane         2.289         0.865         4.379           n-Pentane         2.393         0.897         4.578           2,2 Dimethylbutane         0.013         0.006         0.030           Cyclopentane         0.000         0.000         0.000           2,3 Dimethylbutane         0.173         0.073         0.395           2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
n-Butane10.4263.39816.0682,2 Dimethylpropane0.0260.0100.050Isopentane2.2890.8654.379n-Pentane2.3930.8974.5782,2 Dimethylbutane0.0130.0060.030Cyclopentane0.0000.0000.0002,3 Dimethylbutane0.1730.0730.3952 Methylpentane0.4140.1780.9463 Methylpentane0.2250.0950.514n-Hexane0.4730.2011.081Methylcyclopentane0.2460.0880.549Benzene0.2180.0630.452Cyclohexane0.2740.0960.6112-Methylhexane0.0490.0240.130
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2 Methylpentane         0.414         0.178         0.946           3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
3 Methylpentane         0.225         0.095         0.514           n-Hexane         0.473         0.201         1.081           Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
n-Hexane0.4730.2011.081Methylcyclopentane0.2460.0880.549Benzene0.2180.0630.452Cyclohexane0.2740.0960.6112-Methylhexane0.0490.0240.130
Methylcyclopentane         0.246         0.088         0.549           Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
Benzene         0.218         0.063         0.452           Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
Cyclohexane         0.274         0.096         0.611           2-Methylhexane         0.049         0.024         0.130
2-Methylhexane 0.049 0.024 0.130
3-Methylhexane 0.060 0.028 0.159
2,2,4 Trimethylpentane 0.000 0.000 0.000
Other C7's         0.170         0.076         0.447
n-Heptane 0.103 0.049 0.274
Methylcyclohexane 0.163 0.068 0.424
Toluene         0.099         0.034         0.242
Other C8's         0.117         0.056         0.342
n-Octane 0.026 0.014 0.079
Ethylbenzene         0.007         0.003         0.020
M & P Xylenes 0.011 0.004 0.031
O-Xylene 0.003 0.001 0.008
Other C9's 0.036 0.019 0.121
n-Nonane 0.004 0.002 0.014
Other C10's         0.006         0.004         0.022
n-Decane 0.000 0.000 0.000
Undecanes (11)         0.000         0.000         0.000
Totals 100.000 21.591 100.000
Computed Real Characteristics Of Total Sample
Specific Gravity 1.320 (Air=1)
Compressibility (Z) 0.9865
Molecular Weight 37.71
Gross Heating Value
Dry Basis 2216 BTU/CF
Saturated Basis 2178 BTU/CF

Page 2 of 2

# APPLICATION TO POOL COMMINGLE, STORAGE AND SALES FOR OIL AND GAS PRODUCTION AT ZEUS CTB

#### CUBRENT WELLSTATUS SPUD DATL OCD Unit Lett RODUCHIGO NU WILL 2016-03-14 P RODUCHIGO NU WILL 2016-04-02 P RODUCHIGO NU WILL 2016-04-02 P RODUCHIGO NU WILL 2016-01-12 P RODUCHIGO NU WILL 2016-01-12 P RODUCHIGO NU WILL 2019-10-70 O ROUCHIGO NU WILL 2019-10-70 O ROUCHIGO NU WILL 2019-10-70 O RUIRE 2019-10-70 O Commingling Orde API CURRENT WELL NAME 🖃 Pool Code Pool Code Description Section 🛛 Township Range 🗠 SPACING LEGAL T24S R33E SEC 9: E2E2 Date Online Oil (MBOD) GAS (MCFD) Gravity BTU/cf 2018-09-05 65 100 50 30-025-44473 ZEUS STATE #204 WC-025 G-09 S243310P; UPPER WOLFCAM PRODUCING OIL WELL 1350 30-025-44473 ZEUS STATE #ZX8H 30-025-44524 ZEUS STATE #Z28H 30-025-44524 ZEUS STATE #I28H 30-025-44524 ZEUS STATE #I28H 30-025-44523 ZEUS STATE #I108H 30-025-45843 ZEUS STATE #I108H 30-025-45843 ZEUS STATE #I106H 30-025-45845 ZEUS STATE #I106H 30-025-45845 ZEUS STATE #I106H 1350 1350 1200 1100 1200 1200 1140 1330 PRODUCING OIL WEL PRODUCING OIL WEL PRODUCING OIL WEL 2018-09-28 2018-09-28 2018-09-28 2018-09-28 2020-03-07 2020-03-07 PLC527A PLC527A WC-025 G-09 S243310P; UPPER WOLFCAME TRIPLE X; BONE SPRING, WEST T245 R33E SEC 9: E2E2 T245 R33E SEC 9: E2E2 T245 R33E SEC 9: E2E2 PLC527A PLC527A PLC527A PLC527A TRIPLE X; BONE SPRING, WES' T245 R33E SEC 9: E28 T245 R33E SEC 9: E2 PRODUCING OIL WEL 96674 245 30-025-45845 30-025-45844 30-025-46623 ZEUS STATE #173H ZEUS STATE #144H 2020-03-08 PLC 527A (C-103 submitted) PLC 527A (C-103 approved) PLC 527A (C-103 approved) 25-49424 EUS STATE #153 021-10-16 T24S R33E SEC 9: 8 2-06-0 30-025-45616 ZEUS STATE #176H 30-025-45617 ZEUS STATE #184H 96674 TRIPLE X;BONE SPRING, WEST TRIPLE X;BONE SPRING, WEST PRODUCING OIL WELL PRODUCING OIL WELL 2019-05-29 P 2019-06-14 P T245 R33E SEC 9: W2E2 T245 R33E SEC 9: E2 1140 1200 PLC 527A (C-103 approved) 30-025-45615 ZEUS STATE #104H 96674 TRIPLE X; BONE SPRING, WEST PRODUCING OIL WELL 2019-06-28 T24S R33E SEC 9: E2 2019-08-10 180 1100 Need amendment to add W2E2 Wolfcamp Need amendment to add W2E2 Wolfcamp 30-025-45813 ZEUS STATE #216H 30-025-45757 ZEUS STATE #203H 98135 WC-025 G-09 S243310P;UPPER WOLFCAMP 98135 WC-025 G-09 S243310P;UPPER WOLFCAMP PRODUCING OIL WELL PRODUCING OIL WELL 2019-04-18 0 2019-04-29 0 9 24S 33E 33E T24S R33E SEC 9: W2E2 2019-07-13 T24S R33E SEC 9: W2E2 2019-07-17 60 106 240 240 50

# **EXHIBIT 3**

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Zeeus Commingling





OWNER NUMBER	OWNER NAME	OWNER NAME 2	ADDRESS	ADDRESS2	CITY	STATE_ID	ZIP	OWNER PHONE #	OWNER ACH EMAIL
1883	MURCHISON OIL AND GAS LLC		7250 DALLAS PARKWAY, SUITE 1400		PLANO	ТΧ	75024	972-931-0700	
353	TAP ROCK RESOURCES LLC		523 PARK POINT DRIVE	SUITE 200	GOLDEN	CO	80401		
355	TAP ROCK MINERALS LP		523 PARK POINT DR STE 200		GOLDEN	CO	80401		
1164	COMMISSIONER OF PUBLIC LANDS		PO BOX 1148		SANTA FE	NM	87504-1148		
1166	DEVON ENERGY PRODUCTION CO LP		333 WEST SHERIDAN AVENUE		OKLAHOMA CITY	OK	73102-5015	405-235-3611	cashacctrevenue@dvn.com
1458	MEC PETROLEUM CORPORATION		PO BOX 11265		MIDLAND	ТХ	79702	432-686-1059	mecause@sbcglobal.net
1962	DELAWARE BARLEY LLC	CO BENEFIT STREET PARTNERS LLC	9 WEST 57TH STREET	SUITE 4920	NEW YORK	NY	10019		
2039	J D MURCHISON INTERESTS INC		7250 DALLAS PKWY STE 1400		PLANO	ТХ	75024	972-931-0700	
	New Mexico State Land Office		P.O. Box 1148		Santa Fe	NM	87504		

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# **EXHIBIT 4**



**Adam G. Rankin Phone** (505) 954-7294 **Fax** (505) 819-5579 AGRankin@hollandhart.com

March 2, 2022

# <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

## TO: ALL AFFECTED PARTIES

Re: Application of Tap Rock Operating, LLC to amend Administrative Order PLC-527-A to add additional wells and to authorize additional pool and lease commingling at the Zeus Facility Central Tank Battery located in the SE/4SE/4 (Unit P) of Section 9, Township 24 South, Range 33 East, Lea County, New Mexico.

Ladies and Gentlemen:

Enclosed is a copy of the above-referenced application, which was filed with the New Mexico Oil Conservation Division on this date. Any objection to this application must be filed in writing within twenty days from this date at the Division's Santa Fe office located at 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505. If no objection is received within this twenty-day period, this application may be approved administratively by the Division.

If you have any questions about this application, please contact the following:

Jeff Trlica Regulatory Analyst Tap Rock Operating, LLC (720) 772-5910

Sincerely,

Adam G. Rankin ATTORNEY FOR TAP ROCK OPERATING, LLC

Parent	Mail	Company	ToName	DeliveryAddress	City	ST	Zip	Mail Class	TrackingNo	Well
ID	Date	1	1					1	1	
31309	03/02/		Murchison Oil And	7250 Dallas Pkwy Ste	Plano	ТХ	75024-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Gas LLC	1400			5002	Return Receipt	65840537987	C107B - notice list - 1
								(Signature)		
31309	03/02/		Tap Rock Resources	523 Park Point Dr Ste	Golden	CO	80401-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		LLC	200			9387	Return Receipt	65840537932	C107B - notice list - 2
								(Signature)		
31309	03/02/		Tap Rock Minerals	523 Park Point Dr Ste	Golden	CO	80401-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		LP	200			9387	Return Receipt	65840537970	C107B - notice list - 3
								(Signature)		
31309	03/02/		Commissioner of	PO Box 1148	Santa Fe	NM	87504-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Public Lands				1148	Return Receipt	65840537611	C107B - notice list - 4
								(Signature)		
31309	03/02/		Devon Energy	333 W Sheridan Ave	Oklahoma	ОК	73102-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Production Co LP		City		5010	Return Receipt	65840537659	C107B - notice list - 5
								(Signature)		
31309	03/02/		MEC Petroleum	PO Box 11265	Midland	ТΧ	79702-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Corporation				8265	Return Receipt	65840537628	C107B - notice list - 6
								(Signature)		
31309	03/02/	Delaware	Co Benefit Street	9 W 57th St Rm 4920	New York	NY	10019-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022	Barley LLC	Partners LLC,				2705	Return Receipt	65840537604	C107B - notice list - 7
								(Signature)		
31309	03/02/		J D Murchison	7250 Dallas Pkwy Ste	Plano	ΤX	75024-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Interests Inc	1400			5002	Return Receipt	65840537697	C107B - notice list - 8
								(Signature)		
31309	03/02/		New Mexico State	PO Box 1148	Santa Fe	NM	87504-	Certified with	94148118987	71941 - Tap Rock - Zeus PLC
	2022		Land Office				1148	Return Receipt	65840537642	C107B - notice list - 9
								(Signature)		

Received by OCD: 3/4/2022 1:56:18 PM

# Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated March 08, 2022 and ending with the issue dated March 08, 2022.

ussell

Publisher

Sworn and subscribed to before me this 8th day of March 2022.

2 Char

**Business Manager** 

My commission expires January 29, 2023 (Seal) GUSSIE BLACK Notary Public - State of New Mexico Commission # 1087526 My Comm. Expires Jan 29, 2023

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said LEGAL NOTICE March 8, 2022

## Page 34 of 41

#### Legal Notice (Publication)

To: All affected parties, including: Murchison Oil and Gas LLC; Tap Rock Resources; Tap Rock Minerals LP; Commissioner of Public Lands; Devon Energy Production Co LP; MEC Petroleum Corporation; Delaware Barley LLC Co Benefit Street Partners LLC; J D Murchison Interests Inc; and New Mexico State Land Office.

Application of Tap Rock Operating, LLC to amend Administrative Order PLC-527-A to add additional wells and to authorize additional pool and lease commingling at the Zeus Facility Central Tank Battery located in the SE/4SE/4 (Unit P) of Section 9, Township 24 South, Range 33 East, Lea County, New Mexico.

Tap Rock Operating, LLC (OGRID No. 372043) seeks to amend Administrative Order PLC-527-A ("Order PLC-527-A"). Order PLC-527-A authorizes pool and lease surface commingling pursuant to 19.15.12.10 NMAC, at the Zeus Facility Central Tank Battery of production from the pools, leases, and wells described therein and future wells that will produce from a pool and lease identified in the order. The following spacing units are covered by Order PLC-527-A:

(a) The 320-acre spacing unit comprised of the E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: Zeus State #106H well (30-025-45843), Zeus State #186H well (30-025-45845), Zeus State #173H well (30-025-45844), Zeus State #144H well (30-025-46623), Zeus State #153H well (30-025-49424), Zeus State #184H well (30-025-45617), Zeus State #104H well (30-025-45615);

<sup>500</sup> (b) The 160-acre spacing unit comprised of the E/2E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: Zeus State #188H well (30-025-44524), Zeus State #108H well (30-025-44523);

(c) The 160-acre spacing unit comprised of the W/2E/2 of Section 9 in the Triple X; Bone Spring, West; [96674]. The following wells are currently dedicated to this spacing unit: Zeus State #176H well (30-025-45616); and

 (d) The 160-acre spacing unit comprised of the E/2E/2 of Section 9 in the WC-025 G-09 S243310P; Upper Wolfcamp; [98135]. The following wells are currently dedicated to this spacing unit: Zeus State #204H well (30-025-44473), Zeus State #228H well (30-025-44525).

Pursuant to 19.15.12.10 NMAC, Tap Rock seeks to amend the terms of Order PLC-527-A to include production from all existing and future infill wells drilled in the following spacing units:

(a) The 160-acre spacing unit comprised of the W/2E/2 of Section 9 in the WC-025 G-09 S243310P; Upper Wolfcamp; [98135]. The following wells are currently dedicated to this spacing unit: Zeus State #216H well (30-025-45813), Zeus State #203H well (30-025-45757);

(b) Pursuant to 19.15.12.10.C(4)(g), future Triple X; Bone Spring, West; [96674] spacing units within the E/2 of Section 9 connected to the Zeus Facility Central Tank Battery with notice provided only to the owners of interests to be added; and

(c) Pursuant to 19.15.12.10.C(4)(g), future WC-025 G-09 S243310P; Upper Wolfcamp; [98135] spacing units within the E/2 of Section 9 connected to the Zeus Facility Central Tank Battery with notice provided only to the owners of interests to be added.

(d) Notably, Tap Rock has submitted a separate C-103 sundry notice for the Zeus State #153H well (30-025-49424), pursuant to the terms of Order PLC-527-A – the approval status of which is currently pending. For avoidance of doubt and to the extent the C-103 submittal has not been approved at the time of entry the amended order requested herein, Tap Rock hereby requests that the amended order specifically approve commingling of production at the Zeus Facility Central Tank Battery with respect to production from said Zeus State #153H well.

Any objection to this application must be filed in writing within twenty days from date of publication with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505. If no objection is received within this twenty-day period, this application may be approved administratively by the Division. If you have any questions about this application, please contact Jeff Triica, Tap Rock Operating, LLC, (720) 772-5910.

#### 67100754

00264399

HOLLAND & HART LLC PO BOX 2208 SANTA FE, NM 87504-2208

From:	Engineer, OCD, EMNRD
To:	Adam Rankin; Paula M. Vance
Cc:	McClure, Dean, EMNRD; Kautz, Paul, EMNRD; Wrinkle, Justin, EMNRD; Powell, Brandon, EMNRD; lisa@rwbyram.com; Dawson, Scott
Subject:	Approved Administrative Order PLC-527-B
Date:	Monday, August 29, 2022 1:00:41 PM
Attachments:	PLC527B Order.pdf

NMOCD has issued Administrative Order PLC-527-B which authorizes Tap Rock Operating, LLC (372043) to surface commingle or off-lease measure, as applicable, the following wells:

Well API	Well Name	UL or Q/Q	S-T-R	Pool
30-025-45843	Zeus State #106H	<b>E/2</b>	9-24S-33E	96674
30-025-45845	Zeus State #186H	W/2 E/2	9-24S-33E	96674
30-025-45844	Zeus State #173H	W/2 E/2	9-24S-33E	96674
30-025-46623	Zeus State #144H	E/2	9-24S-33E	96674
30-025-49424	Zeus State #153H	E/2	9-24S-33E	96674
30-025-45617	Zeus State #184H	E/2 E/2	9-24S-33E	96674
30-025-45615	Zeus State #104H	E/2 E/2	9-24S-33E	96674
30-025-44524	Zeus State #188H	E/2 E/2	9-24S-33E	96674
30-025-44523	Zeus State #108H	E/2 E/2	9-24S-33E	96674
30-025-45616	Zeus State #176H	W/2 E/2	9-24S-33E	96674
30-025-44473	Zeus State #204H	E/2 E/2	9-24S-33E	98135
30-025-44525	Zeus State #228H	E/2 E/2	9-24S-33E	98135
30-025-45813	Zeus State #216H	W/2 E/2	9-24S-33E	98135
30-025-45757	Zeus State #203H	W/2 E/2	9-24S-33E	98135

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

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

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

# APPLICATION FOR SURFACE COMMINGLINGSUBMITTED BY TAP ROCK OPERATING, LLCORDER NO. PLC-527-B

# <u>ORDER</u>

The Director of the New Mexico Oil Conservation Division ("OCD"), having considered the application and the recommendation of the OCD Engineering Bureau, issues the following Order.

# FINDINGS OF FACT

- 1. Tap Rock Operating, LLC ("Applicant") submitted a complete application to surface commingle the oil and gas production from the pools, leases, and wells identified in Exhibit A ("Application").
- 2. Applicant proposed a method to allocate the oil and gas production to the pools, leases, and wells to be commingled.
- 3. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that the ownership in the pools, leases, and wells to be commingled is identical as defined in 19.15.12.7.B. NMAC.
- 4. To the extent that ownership is diverse, Applicant provided notice of the Application to all persons owning an interest in the oil and gas production to be commingled, including the owners of royalty and overriding royalty interests, regardless of whether they have a right or option to take their interests in kind, and those persons either submitted a written waiver or did not file an objection to the Application.
- 5. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.
- 6. Applicant certified the commingling of oil and gas production from the pools, leases, and wells will not in reasonable probability reduce the value of the oil and gas production to less than if it had remained segregated.
- 7. Applicant in the notice for the Application stated that it sought authorization to prospectively include additional pools, leases, and wells in accordance with 19.15.12.10.C.(4)(g) NMAC.
- 8. Applicant stated that it sought authorization to surface commingle and off-lease measure, as applicable, oil and gas production from wells which have not yet been approved to be drilled, but will produce from a pool and lease identified in Exhibit A.

Order No. PLC-527-B

# **CONCLUSIONS OF LAW**

- 9. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, §§ 70-2-6, 70-2-11, 70-2-12, 70-2-16, and 70-2-17, 19.15.12. NMAC, and 19.15.23. NMAC.
- 10. Applicant satisfied the notice requirements for the Application in accordance with 19.15.12.10.A.(2) NMAC, 19.15.12.10.C.(4)(c) NMAC, and 19.15.12.10.C.(4)(e) NMAC, as applicable.
- 11. Applicant satisfied the notice requirements for the Application in accordance with 19.15.23.9.A.(5) NMAC and 19.15.23.9.A.(6) NMAC, as applicable.
- 12. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.10.B.(1) NMAC or 19.15.12.10.C.(1) NMAC, as applicable.
- 13. Commingling of oil and gas production from state, federal, or tribal leases shall not commence until approved by the BLM or NMSLO, as applicable, in accordance with 19.15.12.10.B.(3) NMAC and 19.15.12.10.C.(4)(h) NMAC.
- 14. Applicant satisfied the notice requirements for the subsequent addition of pools, leases, and wells in the notice for the Application, in accordance with 19.15.12.10.C.(4)(g) NMAC. Subsequent additions of pools, leases, and wells within Applicant's defined parameters, as modified herein, will not, in reasonable probability, reduce the commingled production's value or otherwise adversely affect the interest owners in the production to be added.
- 15. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

## <u>ORDER</u>

1. Applicant is authorized to surface commingle oil and gas production from the pools, leases, and wells identified in Exhibit A.

Applicant is authorized to store and measure oil and gas production off-lease from the pools, leases, and wells identified in Exhibit A at a central tank battery described in Exhibit A.

Applicant is authorized to surface commingle oil and gas production from wells not included in Exhibit A but that produce from a pool and lease identified in Exhibit A.

Applicant is authorized to store and measure oil and gas production off-lease from wells not included in Exhibit A but that produce from a pool and lease identified in Exhibit A at a central tank battery described in Exhibit A.

- 2. This Order supersedes Order PLC-527-A.
- 3. The allocation of oil and gas production to wells not included in Exhibit A but that produce from a pool and lease identified in Exhibit A shall be determined in the same manner as to wells identified in Exhibit A that produce from that pool and lease, provided that if more than one allocation method is being used or if there are no wells identified in Exhibit A that produce from the pool and lease, then allocation of oil and gas production to each well not

included in Exhibit A shall be determined by OCD prior to commingling production from it with the production from another well.

- 4. The oil and gas production for each well identified in Exhibit A shall be separated and metered prior to commingling.
- 5. Applicant shall measure and market the commingled oil at a central tank battery described in Exhibit A in accordance with this Order and 19.15.18.15. NMAC or 19.15.23.8. NMAC.
- 6. Applicant shall measure and market the commingled gas at a well pad, central delivery point, central tank battery, or gas title transfer meter described in Exhibit A in accordance with this Order and 19.15.19.9. NMAC, provided however that if the gas is vented or flared, and regardless of the reason or authorization pursuant to 19.15.28.8.B. NMAC for such venting or flaring, Applicant shall measure or estimate the gas in accordance with 19.15.28.8.E. NMAC.
- 7. Applicant shall calibrate the meters used to measure or allocate oil and gas production in accordance with 19.15.12.10.C.(2) NMAC.
- 8. If the commingling of oil and gas production from any pool, lease, or well reduces the value of the commingled 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 Applicant shall submit a new surface commingling application to OCD to amend this Order to remove the pool, lease, or well whose oil and gas production caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
- 9. Applicant may submit an application to amend this Order to add pools, leases, and subsequently drilled wells with spacing units adjacent to or within the tracts commingled by this Order by submitting a Form C-107-B in accordance with 19.15.12.10.C.(4)(g) NMAC, provided the pools, leases, and subsequently drilled wells are within the identified parameters included in the Application.
- 10. If a well is not included in Exhibit A but produces from a pool or lease identified in Exhibit A, then Applicant shall submit Forms C-102 and C-103 to the OCD Engineering Bureau after the well has been approved to be drilled and prior to off-lease measuring or commingling oil or gas production from it with the production from another well. The Form C-103 shall reference this Order and identify the well, proposed method to determine the allocation of oil and gas production to it, and the location(s) that commingling of its production will occur.
- 11. Applicant shall not commence commingling oil or gas production from state, federal, or tribal leases until approved by the BLM or NMSLO, as applicable.
- 12. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).

Order No. PLC-527-B

13. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION



DATE: <u>8/29/2022</u>

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## State of New Mexico Energy, Minerals and Natural Resources Department

# **Exhibit** A

# Order: PLC-527-B Operator: Tap Rock Operating, LLC (372043) Central Tank Battery: Zeus Facility Central Tank Battery Central Tank Battery Location: UL P, Section 9, Township 24 South, Range 33 East Gas Title Transfer Meter Location: UL P, Section 9, Township 24 South, Range 33 East

## **Pools**

Pool Name	Pool Code
<b>TRIPLE X; BONE SPRING, WEST</b>	96674
WC-025 G-09 S243310P; UPPER WOLFCAMP	98135

# Leases as defined in 19.15.12.7(C) NMAC

I	Jease	UL or Q/Q	S-T-R
VO 40960002 (	Bone Spring)	<b>E/2</b>	9-24S-33E
<b>VO 40960002</b> (	Bone Spring)	E/2 E/2	9-24S-33E
<b>VO 40960002</b> (	Bone Spring)	W/2 E/2	9-24S-33E
VO 40960002	(Wolfcamp)	E/2 E/2	9-24S-33E
VO 40960002	(Wolfcamp)	W/2 E/2	9-24S-33E

## Wells

Well API	Well Name	UL or Q/Q	S-T-R	Pool
30-025-45843	Zeus State #106H	E/2	9-24S-33E	96674
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30-025-45757	Zeus State #203H	W/2 E/2	9-24S-33E	98135

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:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	87249
	Action Type:
	[C-107] Surface Commingle or Off-Lease (C-107B)

CONDITIONS					
Created By	Condition	Condition Date			
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	8/29/2022			

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