# BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING JULY 11, 2019

**CASE No. 20647** 

SAN JUAN 28-6 UNIT 123R WELL

### RIO ARRIBA COUNTY, NEW MEXICO



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

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 20647

### AFFIDAVIT OF CHARLES CREEKMORE IN SUPPORT OF CASE NO. 20647

I, Charles Creekmore, being of lawful age and duly sworn, declare as follows:

1. My name is Charles Creekmore. I work for Hilcorp Energy Company ("Hilcorp") as a Landman.

2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum land matters. My credentials as a petroleum landman have been accepted by the Division and made a matter of record.

3. I am familiar with the application filed by Hilcorp in this case, and I am familiar with the status of the lands in the subject areas.

4. None of the affected parties in this case has indicated opposition, and therefore I do not expect any opposition at the hearing.

5. Hilcorp seeks an exception to the well density requirements of Rule I.B of the Special Rules and Regulations of the Blanco-Mesaverde Gas Pool to permit it to complete and simultaneously produce three Mesaverde gas wells in the same quarter section for a total of five Mesaverde gas wells within the same standard 320-acre, more or less, spacing and proration unit.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. A
Submitted by: Hilcorp Energy Company
Hearing Date: July 11, 2019

Case # 20647

- 6. The Blanco-Mesaverde Gas Pool is governed by Special Rules and Regulations which provide for 320-acre spacing and proration units on which as many as four wells may be drilled. The Special Rules therefore limit the number of wells in a spacing unit to four and the number of wells in a half section within a spacing unit to two. The Special Rules also provide that well density exceptions can be approved only after notice and hearing.
- 7. Hilcorp is the operator of a standard 320-acre, more or less, spacing and proration unit in the Blanco-Mesaverde Gas Pool comprised of the E/2 of Section 6, Township 28 North, Range 6 West, Rio Arriba County, New Mexico, in which the following five wells are currently completed and producing:
  - a. San Juan 28-6 Unit 48 Well (API No. 30-039-07441) Sec. 6, T28N, R6W (Unit B);
  - b. San Juan 28-6 Unit 48A Well (API No. 30-039-21872), Sec. 6, T28N, R6W (Unit J);
  - c. San Juan 28-6 Unit 123M Well (API No. 30-039-29575), Sec. 6, T28N, R6W (Unit P); and
  - d. San Juan 28-6 Unit 123N Well (API No. 30-039-30693), Sec. 6, T28N, R6W, with a surface location in Unit A and a bottom-hole location in Unit H.
- 8. Hilcorp now proposes to simultaneously dedicate and produce the following fifth well within the same standard spacing and proration unit, at the following location:
  - a. San Juan 28-6 Unit 123R Well (API No. 30-039-22265), Sec. 6, T28N, R6W (Unit G).
- 9. This will be the fifth well within the same spacing unit with three wells in the same quarter section, exceeding well density limits imposed by the Special Rules.

- 10. Hilcorp therefore requests that the Division enter an order granting an exception to the well density requirements of Rule 1.B of the Special Rules and Regulations of the Blanco-Mesaverde Pool to authorize Hilcorp to simultaneously dedicate and produce the San Juan 28-6 Unit 123R Well (API No. 30-039-22265) within the E/2 of Section 6, Township 28 North, Range 6 West, permitting the total number of wells dedicated and producing within this spacing and proration unit to five, with three wells in the same quarter section.
- 11. The proposed simultaneous dedication of the San Juan 28-6 Unit 123R Well, which is currently producing in the Dakota formation, within the Blanco-Mesaverde is part of Hilcorp's strategy to use existing wells completed in other zones to economically target development of incremental Mesaverde gas reserves in areas where there is not adequate gas drainage.
- 12. The Division has pre-approved downhole commingling the Dakota formation with the Blanco-Mesaverde Gas Pool.
- 13. Pursuant to the Special Rules and Division precedent, Hilcorp provided notice to all Division-designated operators in offsetting 320-acre spacing units. Where Hilcorp is the operator, Hilcorp identified all working interest owners in offsetting spacing units as affected parties requiring notice. In some offsetting spacing units, Hilcorp may own 100% of the working interest, in which case there are no affected parties to notice.
- 14. **Exhibit A-1** is an overview map identifying the location of the subject Blanco-Mesaverde Gas Pool spacing unit, in the green outline, within the E/2 of Section 6, Township 28 North, Range 6 West, to which the well will be simultaneously dedicated.
- 15. Exhibit A-1 also identifies the locations of the existing Mesaverde wells as dark blue circles, as well as the San Juan 28-6 Unit 123R Well as a dark blue triangle.

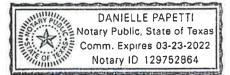
- 16. Exhibit A-1 also depicts the notice area comprised of the offsetting spacing units, which is the shaded area within the dark blue hashed line surrounding the subject spacing unit outlined in green. Hilcorp has provided notice of this application to the operators within the notice area. In some instances, Hilcorp may be the operator of offsetting spacing units within the notice area, in which case notice of the application was provided to all the working interest owners within the notice area.
- 17. Exhibit A-2 identifies the affected parties within the offsetting spacing units who are required to be noticed. I provided a list of all affected parties requiring notice to Holland & Hart LLP. All parties were locatable.
- 18. To the best of my knowledge, the addresses used to provide notice are valid and correct addresses which have been recently used by Hilcorp and at which mail has been received by the notice parties.
  - 19. Exhibits A-1 and A-2 were prepared by me or under my direction and supervision.
    FURTHER AFFIANT SAYETH NAUGHT.

Charles Crucks
Charles Creekmore

STATE OF TEXAS	)
COUNTY OF HAPPIS	)

SUBSCRIBED and SWORN to before me this \_\_\_\_\_ day of July, 2019 by

Charles Creekmore.

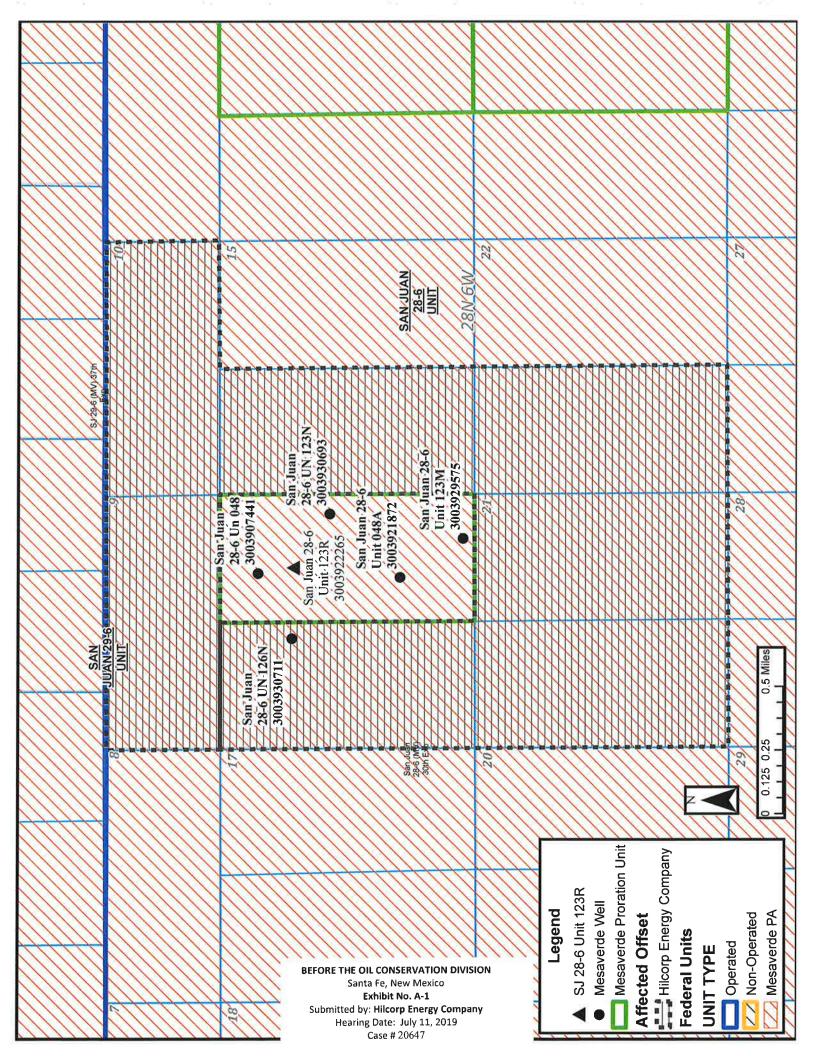


NOTARY PUBLIC

My Commission Expires:

3 23 2022

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Code Name	Address	City State	Zip Code	Zip Code nterest Type
1066712 BP AMERICA PRODUCTION COMPANY	PO BOX 848103	DALLAS TX	75284-8103 W0001	W0001
1113652 CROSS TIMBERS ENERGY LLC	400 W 7TH STREET	FT WORTH TX	76102	W0001
1125552 JAMES R BEAMON	6140 HWY 6 SUITE 154	MISSOURI	77459	W0001
1126167 ROBERT WALTER LUNDELL	2450 FONDREN STE 304	HOUSTON TX	77063-2318	W0001
1126258 SHARON BEAMON BURNS	200 BISCAYNE BOULEVARD WAY APT 3411	MIAMI FL	33131	W0001
1126294 SUSAN BEAMON PORTER	319 KNIPP FOREST	HOUSTON TX	77024-5030	W0001
300 Hilcorp San Juan, LP	1111 TRAVIS	HOUSTON TX	77002	W0001
1138962 OMIMEX PETROLEUM	7950 JOHN T WHITE ROAD	<b>FORT WOR TX</b>	76120	W0001
1139405 TH MCELVAIN OIL & GAS LLLP	511 16TH STREET SUITE 700	DENVER CO	80202	W0001
1139406 HARRINGTON ENERGY RESOURCES LP	A NM LP HARRINGTON SAN JUAN LLC GPPO BOX 219119	KANSAS CI' MO	64121	W0001
1139407 HARRINGTON SOUTHWEST ENERGY LP	A NM LP HARRINGTON SAN JUAN LLC GPPO BOX 219119	KANSAS CI' MO	64121	W0001
1139409 LINDA JEANNE LUNDELL LINDSEY	PO BOX 631565	NACOGDO:TX	75963	W0001
1139415 TAMACAM LLC	JAMES M RAYMOND AFENT & AIFPO BOX 291445	KERRVILLE TX	78029	W0001
1139481 LORRAYN GAY HACKER	PO BOX 291445	KERRVILLE TX	78029-1445	W0001
1139496 J&M RAYMOND LTD	RAYMOND & SONS I LLC GEN PARTNERPO BOX 291445	KERRVILLE TX	78029-1445	W0001
1139541 CLAUDIA MARCIA LUNDELL GILMER	723 W UNIVERSITY AVE STE 300-371	GEORGETCTX	78626	W0001
1139591 CHARLES W GAY	PO BOX 291445	KERRVILLE TX	78029-1445	W0001
1142889 CAROLYN BEAMON TILLEY	4 LAWRESTON PLACE	DALLAS TX	75225	W0001
1146418 CB LIFELINE PARTNERSHIP	C/O CAROLYN TILLEY AGENT4 LAURESTON PLACE	DALLAS TX	75225	W0001
1147116 ROBERT E BEAMON III	C/O JAMES R BEAMON6140 HWY 6, SUITE 154	MISSOURI - TX	77459	W0001
1149218 ENDURING RESOURCES IV LLC	1050 17TH STREET SUITE 2500	DENVER CO	80265	W0001

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

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, RIO ARRIBA COUNTY, NEW MEXICO.

**CASE NO. 20647** 

### <u>AFFIDAVIT</u>

STATE OF NEW MEXICO	)	
	)	SS
COUNTY OF SANTA FE	)	

Adam G. Rankin, attorney in fact and authorized representative of Hilcorp Energy Company, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application has been provided under the notice letters and proof of receipts attached hereto.

Adam G. Rankin

SUBSCRIBED AND SWORN to before me this 10th day of July, 2019 by Adam G. Rankin.

Votary Public

My Commission Expires:



Adam G. Rankin Phone (505) 988-4421 Fax (505) 983-6043 agrankin@hollandhart.com

June 21, 2019

### VIA CERTIFIED MAIL CERTIFIED RECEIPT REQUESTED

TO: AFFECTED PARTIES

Re: Application of Hilcorp Energy Company for an Exception to the Well Density

Requirements of the Special Rules and Regulations of the Blanco-Mesaverde

Gas Pool, Rio Arriba County, New Mexico.

### Ladies & Gentlemen:

T 505.988 4421 F 505.983 6043

www.hollandhart.com

110 North Guadalupe, Suite 1, Santa Fe, NM 87501-1849

Mail to: P.O. Box 2208, Santa Fe, NM 87504-2208

This letter is to advise you that Hilcorp Energy Company has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on July 11, 2019 and the status of the hearing can be monitored through the Division's website at http://www.emnrd.state.nm.us/ocd/. Division hearings will commence at 8:15 a.m. in Porter Hall at the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases are required by Division Rule 19.15.4.13.B to file a Pre-hearing Statement four business days in advance of a scheduled hearing. This statement must be filed at the Division's Santa Fe office at the above specified address and should include: the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this matter, please contact Chuck Creekmore at (832) 839-4601.

Adam G. Rankin

ATTORNEY FOR HILCORP ENERGY COMPANY

POSTAL DELIVERY REPORT HEC/San Juan 2&6 Unit 123R Case No. 20647

Case No. 20647	- 1					
TransactionDate	ToName	DeliveryAddress	City	State	Zip	USPS_Status
06/20/2019	HARRINGTON ENERGY RESOURCES LP	PO Box 219119	Kansas City	MO	64121- 9119	Your item was delivered at 10:00 pm on June 23, 2019 in KANSAS CITY, MO 64121.
06/20/2019	T H MCELVAIN OIL & GAS LLLP	511 16th St Ste 700	Denver	9	80202- 4248	Your item was delivered to the front desk, reception area, or mail room at 3:58 pm on June 25, 2019 in DENVER, CO 80202.
06/20/2019	OMIMEX PETROLEUM	7950 John T White Rd	Fort Worth	¥	76120- 3608	Your item was delivered to the front desk, reception area, or mail room at 1:40 pm on June 25, 2019 in FORT WORTH, TX 76120.
06/20/2019	SUSAN BEAMON PORTER	319 Knipp Forest St	Houston	۲	77024- 5030	Your item has been delivered to an agent at 4:39 pm on July 1, 2019 in HOUSTON, TX 77024.
06/20/2019	SHARON BEAMON BURNS	200 Biscayne Boulevard Way Apt 3411	Miami	7	33131- 2160	Your item was delivered to an individual at the address at 11:35 am on June 26, 2019 in MIAMI, FL 33131.
06/20/2019	ROBERT WALTER LUNDELL	2450 Fondren Rd Ste 304	Houston	¥	77063- 2316	Your item was delivered to the front desk, reception area, or mail room at 1:02 pm on June 24, 2019 in HOUSTON, TX 77063.
06/20/2019	JAMES R BEAMON	6140 Hwy 6 STE 154	Missouri City	¥	77459	Your item was delivered to an individual at the address at 1:17 pm on July 1, 2019 in MISSOURI CITY, TX 77459.
06/20/2019	ENDURING RESOURCES IV LLC	1050 17th St Ste 2500	Denver	8	802 <b>65</b> - 2080	Your item was delivered to the front desk, reception area, or mail room at 12:27 pm on June 24, 2019 in DENVER, CO 80202.
06/20/2019	CROSS TIMBERS ENERGY LLC	400 W 7th St	Ft Worth	¥	76102- 4701	Your item has been delivered to an agent at 9:12 am on June 24, 2019 in FORT WORTH, TX 76102.
06/20/2019	ROBERT E BEAMON III C/O JAMES R BEAMON	6140 Highway 6 Ste 154	Missouri City	¥	77459- 3802	Your item was delivered to an individual at the address at 1::17 pm on July 1, 2019 in MISSOURI CITY, TX 77459.
06/20/2019	CB LIFELINE PARTNERSHIP	4 Laureston Pl	Dallas	Ķ	75225- 1830	Your item was delivered to an individual at the address at 1:43 pm on June 24, 2019 in DALLAS, TX 75225.
06/20/2019	CAROLYN BEAMON TILLEY	4 Laureston Pl	Dallas	¥	75225- 1830	Your item was delivered to an individual at the address at 1:43 pm on June 24, 2019 in DALLAS, TX 75225.
06/20/2019	CHARLES W GAY	PO Box 291445	Kerrville	¥	78029- 1445	Your item was delivered at 11:33 am on June 27, 2019 in KERRVILLE, TX 78028.
06/20/2019	CLAUDIA MARCIA LUNDELL GILMER	723 W University Ave Ste 300-371	Georgetown	¥	78626- 6607	Your item was delivered to the front desk, reception area, or mail room at 10:57 am on June 24, 2019 in GEORGETOWN, TX 78626.
06/20/2019	J&M RAYMOND LTD RAYMOND & SONS I LLC	PO Box 291445	Kerrville	¥	78029- 1445	Your item was delivered at 11:33 am on June 27, 2019 in KERRVILLE, TX 78028.
06/20/2019	LORRAYN GAY HACKER	PO Box 291445	Kerrville	ř	78029- 1445	Your item was delivered at 11:33 am on June 27, 2019 in KERRVILLE, TX 78028.
06/20/2019	TAMACAM LLC JAMES M RAYMOND AFENT & AIF	PO Box 291445	Kerville	¥	78029• 1445	Your item was delivered at 11:33 am on June 27, 2019 in KERRVILLE, TX 78028.
06/20/2019	LINDA JEANNE LUNDELL LINDSEY	PO Box 631565	Nacogdoches TX	ř	75963- 1565	Your item was delivered at 1:48 pm on June 25, 2019 in NACOGDOCHES, TX 75965.

					64121-	Your item was delivered at 10:00 pm on June 23, 2019
06/20/2019	HARRINGTON SOUTHWEST ENERGY LP	PO Box 219119	Kansas City MO	MO	9119	in KANSAS CITY, MO 64121.
				İ		0
					75284-	Your item was delivered at 8:55 am on June 24, 2019 in
06/20/2019	BP AMERICA PRODUCTION COMPANY	PO Box 848103	Dalias	ĭ	8103	DALLAS, TX 75284.

A.M. on July 11, 2019, in the Oil Conservation Divi-A.M. on July 11, 2019, in the Oil Conservation Division Hearing Room at 1220 South St. Francis, Santa Fe, New Mexico, before an examiner duly appoint for the hearing. If you are an individual with you are an individual with a disability who is in need of a reader, amplifiler, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact: Florene Davidson at 505-476-3458 or through the New Mexico Relay Network, 1-800-659-1778 by July 1, 2019. Public documents, including the agenda and 2019. Public documents, including the agenda and minutes, can be provided in various accessible forms. Please contact Florene Davidson if a summary or other type of accessible form is needed.

STATE OF

NEW MEXICO TO:
All named parties and persons having any right, title, interest or claim in the following case and notice to the public.

(NOTE: All land descriptions herein refer to the

(NOTE: Áll land descriptions herein refer to the
New Mexico Principal Meridian whether or not so
stated.)
TO: ALL WORKING INTEREST OWNERS IN
THE SUBJECT SPACING UNIT AND OFFSETTING OPERATORS
OR LEASED MINERAL
INTEREST OWNERS, INCLUDING: BP AMERICA PRODUCTION
COMPANY; CROSS TIMBERS ENERGY LLC;
JAMES R. BEAMON,
JAMES R. BEAMON,
JAMES R. BEAMON, JAMES R. BEAMON, HIS HEIRS AND DEVISEES; ROBERT WALTER LUNDELL, HIS HEIRS AND DEVISEES; SHARON BEAMON POTTER, HER HEIRS AND DEVISEES; SUSAN BEAMON POTTER, HER HEIRS AND DEVISEES; OMIMEX PETROLEUM; HOLL OF THE POURCES LP. A NM LP. HARRINGTON SAN JUAN LLC GP; HARRINGTON SOUTHWEST ENERGY LP, A NM LP, HARRINGTON SAN JUAN LLC GP; LINDA JUAN LLC GP; LINDA JUAN LLC GP; LINDA SIN LLC GEN HARRINGTON SOUTHWEST ENERGY LP, HER HEIRS AND LEVISEES; LBM RAYMOND AFFINE AND LISEES; LBM RAYMOND, SONS ILLC GEN PARTNER, HER HEIRS AND LEVISEES; CAROLYN BEAMON TILLEY, HER HEIRS AND DEVISEES; CAROLYN BEAMON, TILLEY AG ENTINGER SHE POUR THE BEAMON, TO BEAMON TILLEY AG ENTINGER SHE PARTNER SHE, CO CAROLYN TO BEAMON TO BEAMON TO BEAMON TO BEAMON THE BEAMON, TO BEAMON THE BEAMON, TO BEAMON THE BEAMON, TO BEAMON THE BEAM TH III, HIS HEIRS AND DE-VISEES, C/O JAMES R. BEAMON; ENDURING RESOURCES IV LLC.

### Affidavit J. Publication

State of New Mexico County of Rio Arriba

I, Robert Trapp, being first duly sworn, declare and say I am the publisher of the Rio Grande SUN, a weekly newspaper published in the English language and having a general circulation in the County of Rio Arriba, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937. The publication, a copy of which is hereto attached, was published in said paper once each week for

\_consecutive weeks and on the same day of each week in the regular issue of the paper during the time of publication and the notice was published in the newspaper proper, and not in any supplement. The first publication being on the

21 day of June 2019

and the last publication on the \_21 day of

advedisement has been duly made, or assessed as court costs. The undersigned has personal knowledge of the matters and things set forth in

this affidavit.

Payment received at Rio Grande SUN

Publisher's Bill

\_\_\_lines one time at \_\\8^20

\_lines \_\_\_\_\_ times at \_\_\_

Affidavit\_ S

Subtotal 123.30

11-02

Total 134.32

Date Celating

By Mayra Alduz

Subscribed and sworn to before me this 27

day of June A.D. Zol9

OFFICIAL SEAL MARIA G CHAVEZ Notary Public State of New Mexico My Comm. Expires 10/2/ Maria G. Chavez/Notary Public

Publisher

My commission expires 21 October 2020

CASE 20647: Application of Hildon Exceytion of Hildon Excey
tion of Hildon Excey
Hillon Ex

Santa Fe, New Mexico Exhibit No. B-2

Submitted by: Hilcorp Energy Company Hearing Date: July 11, 2019

Case # 20647

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

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, RIO ARRIBA COUNTY, NEW MEXICO.

**CASE NO. 20647** 

### AFFIDAVIT OF MICHELLE SIVADON IN SUPPORT OF CASE NO. 20647

Michelle Sivadon, being of lawful age and duly sworn, declare as follows:

- 1. My name is Michelle Sivadon. I work for Hilcorp Energy Company ("Hilcorp") as a reservoir engineer.
- 2. I have previously testified before the New Mexico Oil Conservation Division as an expert in reservoir engineering. My credentials as a reservoir engineer have been accepted by the Division and made a matter of record.
- 3. I am familiar with the application filed by Hilcorp in this case and have conducted an engineering study of the subject area and of the Blanco-Mesaverde Gas Pool.
- 4. As with Hilcorp's prior applications for well density exceptions in the Blanco-Mesaverde Gas Pool, I used a decline curve analysis of existing wells to estimate ultimate recoveries for the subject spacing unit under the existing well density. I then compared the estimated ultimate gas recoveries against log-derived volumetric calculations for the original gas in place with the cumulative gas production in the spacing unit. Using this approach, we identified areas, including the subject spacing unit, that have substantial remaining recoverable

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gas and lower-than-expected gas recoveries where additional well bores or well completions are necessary to adequately drain remaining gas reserves.

- 5. Exhibit C-1 contains information relating to the subject spacing unit and the San Juan 28-6 Unit 123R Well (API No. 30-039-22265) within the E/2 of Section 16, Township 28 North, Range 6 West, which is the well Hilcorp proposes for simultaneous dedication within the Blanco-Mesaverde Gas Pool in this application. It is currently producing within the Dakota formation. It will be the third Mesaverde completion in the quarter section within the spacing unit. I anticipate that it will help drain the area to the south.
- 6. Exhibit C-2 is a basin-wide map reflecting Hilcorp's calculations for original gas in place across the Blanco-Mesaverde Gas Pool. The warmer colors represent areas where there is more original gas in place. The cooler colors indicate areas where there is less original gas in place. The red star indicates the location of the subject well in an area where we calculate moderately high volumes of original gas in place.
- 7. **Exhibit C-3** is a map depicting the calculated estimated ultimate recovery (EUR) from the Blanco-Mesaverde Gas Pool and drainage radius. The larger radius circles reflect wells with higher EURs and larger drainage areas. The red star identifies the location of the subject well where there is relatively low EURs and the drainage radii are smaller.
- 8. Exhibit C-4 is a map depicting calculated remaining recoverable gas. The cooler colors indicate areas where there is relatively less remaining recoverable gas. The warmer colors reflect areas where there is relatively more remaining recoverable gas. The red star identifies the location of the subject well in an area where we calculate that there is relatively considerable remaining recoverable gas and relatively low EURs under the existing well density.

- 9. **Exhibit C-5** is a table that supports this volumetric analysis. The first column titled "Volumetric OGIP" reflects the calculated volumetric original gas in place on a quarter section, section, and nine-section area basis around the subject spacing unit. The column titled "Section Equivalent OGIP" shows the estimated gas in place to show that the estimates are consistent across the area. The column titled "CTD/RF%" shows the cumulative gas production to date on a quarter section, section, and nine-section area basis and the calculated recovery factor. The column titled "Remaining GIP" shows the estimated remaining gas in place on a quarter section, section, and nine-section area basis. The last column titled "EUR/RF%" shows the estimated ultimate gas recovery and recovery factor calculated on a quarter section, section, and nine-section area basis.
- 10. I would expect recovery factors of approximately 70-80% in a gas pool of this type. The relatively low recovery factors in Exhibit C-5 reflected at the section and nine-section scale indicate that this area is not being sufficiently drained by the existing wells in the subject spacing unit under the existing well density and that additional well bores, or completions, are necessary to adequately drain the Blanco-Mesaverde Gas Pool in this area.
- 11. Approval of Hilcorp's application is therefore necessary to drain unrecovered gas reserves that will otherwise be left in place under the existing well density.
- 12. **Exhibit C-6** is a well bore diagram for the subject well. It provides the most current information known regarding the status and construction of the well, as well as the location and condition of cement within the wellbore. Hilcorp will separately seek administrative approval from the Division's Aztec District Office for authorization to recomplete this well in advance of undertaking any recompletion operations.

- 13. In my opinion, granting this application will not impair the Blanco-Mesaverde Gas Pool, and will be in the interest of conservation, the prevention of waste and will protect correlative rights.
- 14. Exhibits C-1 through C-6 were prepared by me or under my direction and supervision.

FURTHER AFFIANT SAYETH NAUGHT.

Michelle Sivadon

STATE OF TEXAS )
COUNTY OF Harris
SUBSCRIBED and SWORN to before me this day of July, 2019 by
Michelle Sivadon.
NOTARY PUBLIC

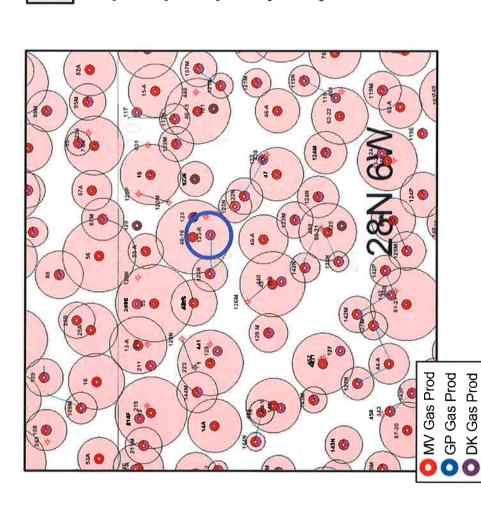
My Commission Expires:

BRENDA MARICELA GUZMAN Notary Public, State of Texas Comm. Expires 02-08-2023 Notary ID 130054546

13198266\_v1

# San Juan 28-6 Unit 123R





# Well Specifics

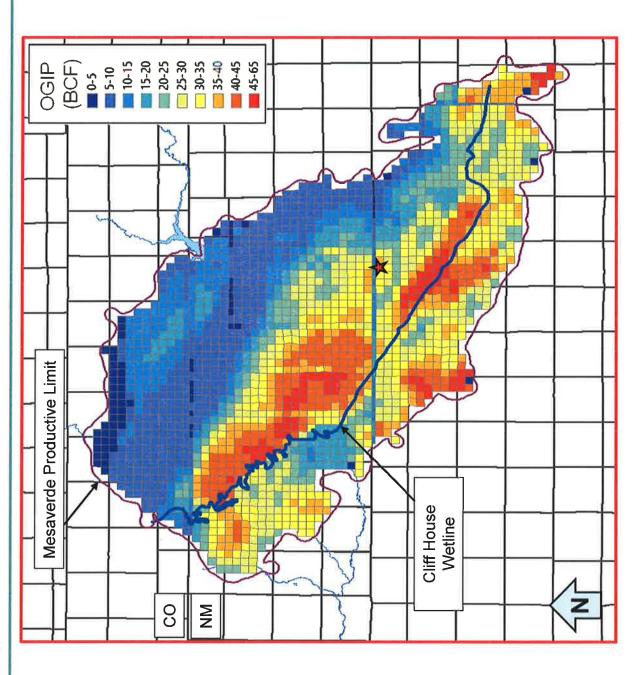
- NE16 28-6 3003922265 1981 drill
- 3rd MV completion in 1/4 section
- 740' from nearest MV producer
- Help drain area to the south
- Complete MV in 1-2 stages

Santa Fe, New Mexico Exhibit No. C-1

Submitted by: Hilcorp Energy Company Hearing Date: July 11, 2019 Case # 20647

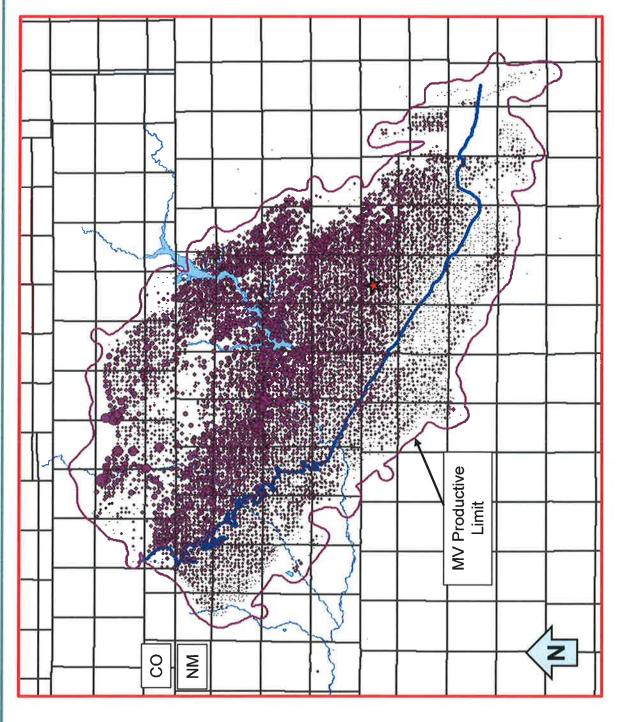


# MV Original Gas In Place



# MV EUR and Drainage Radius



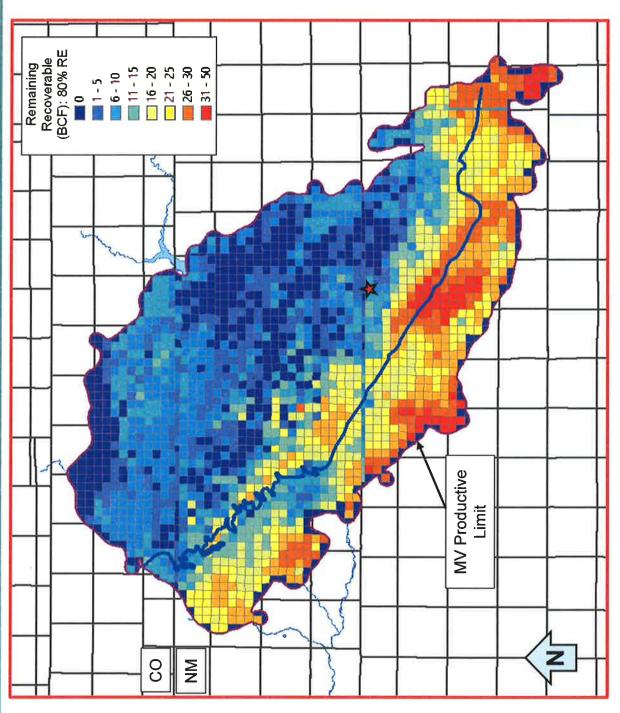


## BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Exhibit No. C-3

Submitted by: Hilcorp Energy Company Hearing Date: July 11, 2019 Case # 20647

# **MV Remaining Recoverable Gas**





# BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Exhibit No. C-4 Submitted by: Hilcorp Energy Company Hearing Date: July 11, 2019 Case # 20647



# San Juan 28-6 Unit 123R

Reference Area	Volumetric OGIP	Section Equivalent OGIP	CTD / RF%	Remaining GIP	EUR / RF%
Qtr Section	10.0 Bcf	40.0 Bcf	9.0 Bcf / 89%	1.0 Bcf	10.7 Bcf / 106%
Section	39.4 Bcf	39.4 Bcf	22.0 Bcf / 56%	17.4 Bcf	28.6 Bcf / 73%
9 Section	317.0 Bcf	35.2 Bcf	159.0 Bcf / 50%	158.0 Bcf	209.0 Bcf / 66%

Remaining Gas in Place in Quarter Section of 1.0 Bcf

Cumulative Recovery Factor to Date 89% and 56% in the Quarter Section and Section, respectively

Considerable gas remaining in area with opportunity to recover additional volumes utilizing existing wellbore



# San Juan 28-6 Unit 123R - Schematic

