

Initial Application Part I

Received: 08/26/2019

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED: 08/26/2019	REVIEWER:	TYPE: DHC	APP NO: pMAM1923859921
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Hilcorp Energy Company **OGRID Number:** 372171
Well Name: Grambling C 3B **API:** 3004533131
Pool: Basin Fruitland Coal / Blanco Mesaverde / Basin Dakota **Pool Code:** 71629/72319/71599

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
 NSL NSP (PROJECT AREA) NSP (PRORATION UNIT) SD

DHC-5053

- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
 DHC CTB PLC PC OLS OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
 A. Offset operators or lease holders
 B. Royalty, overriding royalty owners, revenue owners
 C. Application requires published notice
 D. Notification and/or concurrent approval by SLO
 E. Notification and/or concurrent approval by BLM
 F. Surface owner
 G. For all of the above, proof of notification or publication is attached, and/or,
 H. No notice required

FOR OCD ONLY	
<input type="checkbox"/>	Notice Complete
<input type="checkbox"/>	Application Content Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Thomas Jacques
 Print or Type Name

Thomas Jacques
 Signature

8/26/2019
 Date

832.839.4582
 Phone Number

tjacques@hilcorp.com
 e-mail Address

8/26/2019

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division



Receipt of Fee Application Payment

PO Number: TMMN9-190826-C-107A

Payment Date: 8/26/2019 1:14:01 PM
Payment Amount: \$150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a downhole commingle.
Fee Amount: \$150.00
Application Status: Under OCD Review

OGRID: 372171
First Name: Mandi
Last Name: Ray
Email: mwalker@hilcorp.com

IMPORTANT: If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised August 1, 2011

District II
811 S. First St., Artesia, NM 88210

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

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING

Hilcorp Energy Company 382 Road 3100, Aztec, NM 87410
Operator Address

Grambling C #003B I 12-30N-10W San Juan
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 372171 Property Code 318534 API No. 3004533131 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BASIN FRUITLAND COAL	BLANCO-MESAVERDE	BASIN DAKOTA
Pool Code	71629	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2765'-2977'	3998'-5568'	7341'-7538'
Method of Production (Flowing or Artificial Lift)	New Zone	Plunger Lift	Plunger Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	150 psi	200 psi	200 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1000 BTU	1000 BTU	1000 BTU
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: N/A Rates:	Date: 6/2019 Rates: 0 BO, 2303 MCF, 14 BW	Date: 6/2019 Rates: 0 BO, 1135 MCF, 15 BW
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas Will be supplied upon completion	Oil Gas Will be supplied upon completion	Oil Gas Will be supplied upon completion

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No

NMOCD Reference Case No. applicable to this well: _____

- Attachments:
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
 - Production curve for each zone for at least one year. (If not available, attach explanation.)
 - For zones with no production history, estimated production rates and supporting data.
 - Data to support allocation method or formula.
 - Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
 - Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Amanda Walker TITLE Operations/Regulatory Technician Sr. DATE 8/26/2019

TYPE OR PRINT NAME Amanda Walker TELEPHONE NO. (505)324.5122

E-MAIL ADDRESS mwalker@hilcorp.com

District I
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-10
Revised February 21, 1999

District II
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Submit to Appropriate District Office
State Lease - 4 Copie
Fee Lease - 3 Copie

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

2005 JUN 1 PM 12 06

AMENDED REPORT

District IV
PO Box 2088, Santa Fe, NM 87504-2088

RECEIVED
WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045 33131		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7056	*Property Name GRAMBLING C		*Well Number 3B
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP		*Elevation 6287

¹⁰ Surface Location

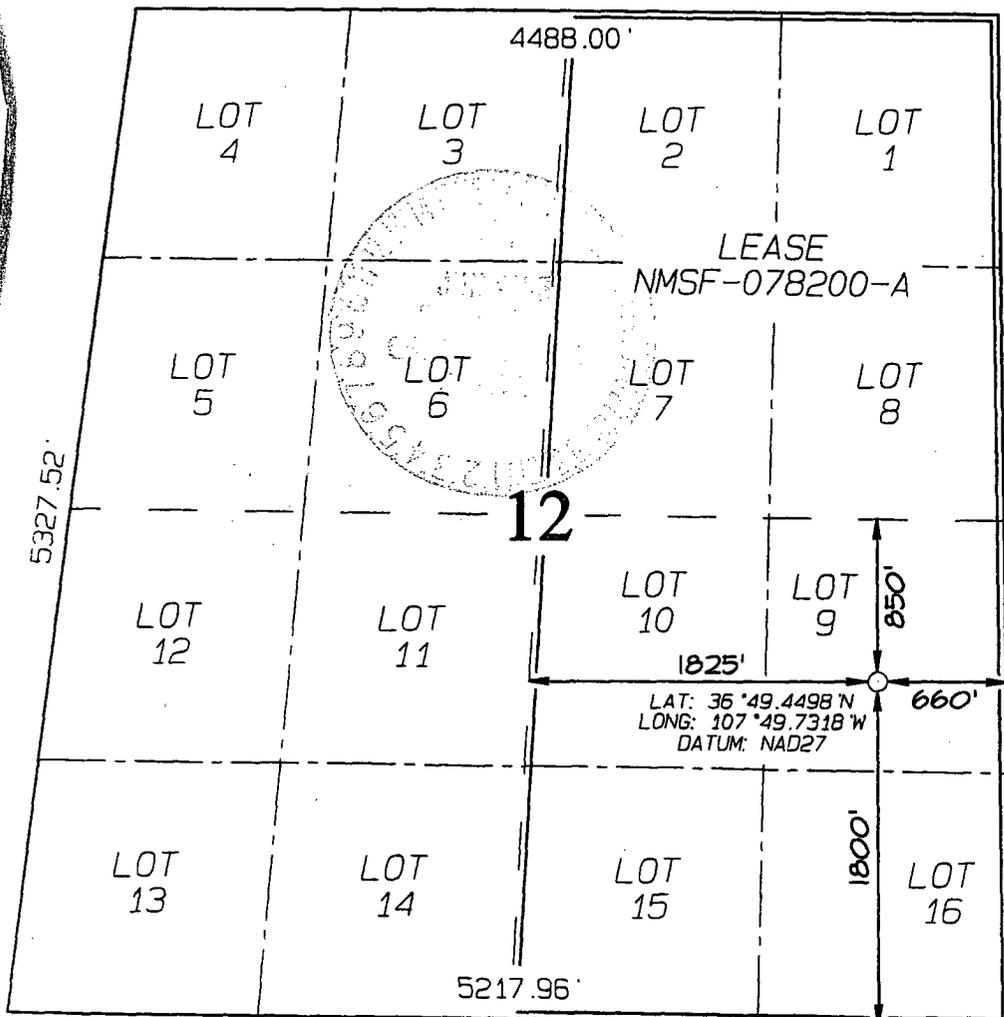
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	12	30N	10W		1800	SOUTH	660	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres MV/DK 296 E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

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

Frances Bond

Signature

Frances Bond

Printed Name

Regulatory Specialist

Title

3-29-05

Date

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: MARCH 7, 2005

Signature and Seal of Professional Surveyor



Jason C. Edwards

Certificate Number 15269

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-33131	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318534	5. Property Name GRAMBLING C	6. Well No. 003B
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6287

10. Surface Location

UL - Lot I	Section 12	Township 30N	Range 10W	Lot Idn 9	Feet From 1800	N/S Line S	Feet From 660	E/W Line E	County SAN JUAN
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 296.00	13. Joint or Infill			14. Consolidation Code			15. Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION	
	<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
	E-Signed By: Amanda Walker Title: Operations / Regulatory Tech Sr. Date: 8/26/2019	
	SURVEYOR CERTIFICATION	
<i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>		
Surveyed By: Jason Edwards Date of Survey: 3/7/2005 Certificate Number: 15269		

Grambling C #3B Basin Dakota Forecast

Company:
On Stream: 02/01/2006
Field: BASIN
Current Status: Flowing

GRAMBLING C
DAKOTA

Gp: 313 MMscf
Np: 1.293 Mstb
Wp: 1.766 Mstb
Qcond: 0.000 Mstb



Grambling C #3B Blanco-Mesaverde Forecast

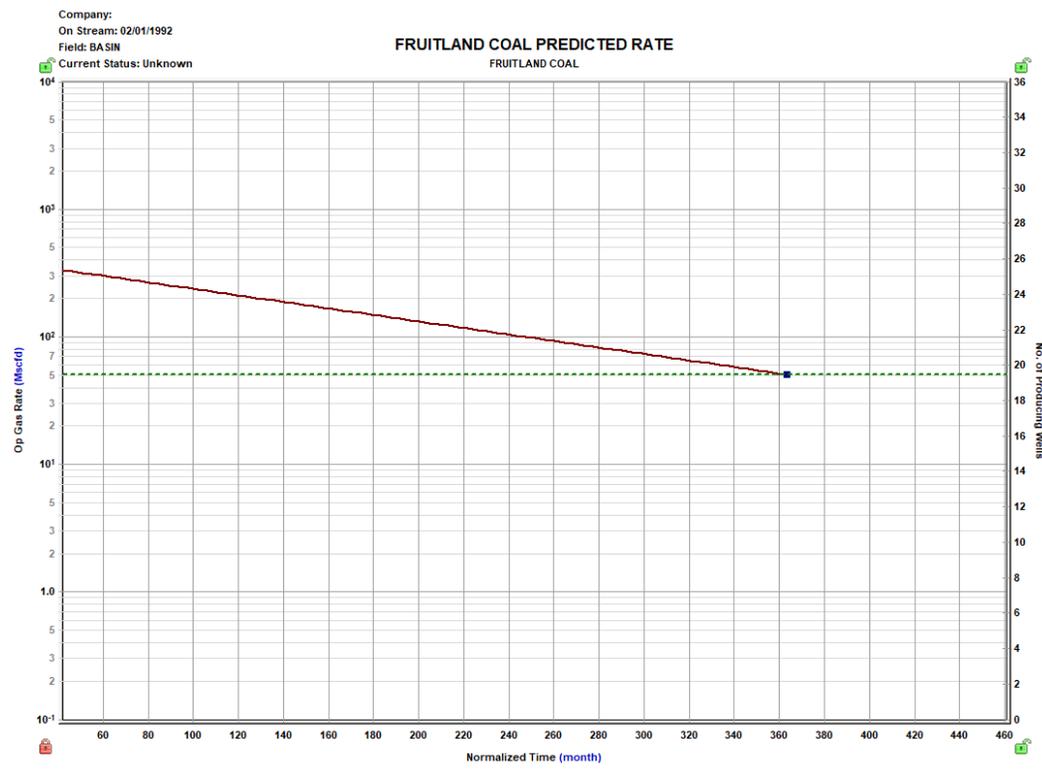
Company:
On Stream: 02/01/2006
Field: BLANCO
Current Status: Flowing

GRAMBLING C
MESAVERDE

Gp: 605 MMscf
Np: 0.105 Mstb
Wp: 0.620 Mstb
Qcond: 0.000 Mstb



Grambling C #3B Predicted Basin Fruitland Coal Forecast



The Grambling C #3B predicted Basin Fruitland Coal rate is based on type well and volumetric analysis of offset Basin Fruitland Coal producers. The reservoir fluids of the commingled completions are compatible.

JUSTIFICATION OF ALLOCATION: Hilcorp requests that production for the downhole commingle be allocated using the subtraction method. The base formations are the Blanco-Mesaverde and the Basin Dakota, and the added formation to be commingled is the Basin Fruitland Coal. The subtraction method applies an average monthly production forecast to the base formation(s) using historic production. All production from this well exceeding the forecast will be allocated to the new formation(s). A fixed percentage based allocation will be submitted after the fourth year of production. See attached documents for production forecast. The Basin Fruitland Coal will not produce oil. All oil produced will be allocated to the Blanco-Mesaverde and Basin Dakota using the current allocation formula.

Historical Production

Basin Dakota

	Oil (BBLs)	Gas (MCF)	Water (BBLs)
Jan-19	0	1076	15
Feb-19	40	1157	14
Mar-19	11	1257	15
Apr-19	11	1177	15
May-19	25	1147	15
Jun-19	0	1135	15

Blanco Mesaverde

	Oil (BBLs)	Gas (MCF)	Water (BBLs)
Jan-19	0	2186	15
Feb-19	0	2085	13
Mar-19	0	2551	15
Apr-19	0	2389	14
May-19	0	2329	15
Jun-19	0	2303	14

Discussion of Pressures

Reservoir	Bottom Hole Pressure
Basin Fruitland Coal	150 psi
Blanco-Mesaverde	200 psi
Basin Dakota	200 psi

The pressures provided are the near wellbore shut in bottom hole pressures of the Blanco-Mesaverde and the Basin Dakota. The near wellbore shut in bottom hole pressure is much lower than the far field stabilized reservoir pressure calculated with moving domain material balance due to the low permeability of the reservoirs. Based on pressure transient analysis performed in the San Juan Basin, it would take 7-25 years for shut in bottom hole pressures to build up to the calculated far-field reservoir pressure. Our observation is that even for areas of high static reservoir pressure, the low permeability of the reservoir rock results in rapid depletion of the near-fracture region quickly enough that the wells are unable produce without the aid of a plunger. Given low permeability and low wellbore flowing pressure in the Basin Dakota, Blanco-Mesaverde and Basin Fruitland Coal, loss of reserves due to cross-flow is not an issue during producing or shut-in periods. Given the low shut-in bottom hole pressures, commingling the Basin Dakota, Blanco-Mesaverde and Basin Fruitland Coal in this well will not result in shut-in or flowing wellbore pressures in excess of any commingled pool's fracture parting pressure.

John Brown 8/12/19
John Brown

Hilcorp San Juan Reservoir Engineer



August 26, 2019

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

Re: C-107-A (Downhole Commingle)
GRAMBLING C #003B
API: 30-045-33131
T30N-R10W-Section 12, Unit Letter: I
San Juan County, NM

Mr. McMillan:

Concerning Hilcorp Energy Company's C-107-A application to downhole commingle production in the subject well, this letter serves to confirm the following:

- **All working, royalty and overriding royalty interests are identical** between the Blanco Mesaverde (72319), Basin Dakota (71599) and Basin Fruitland Coal (71629) in the spacing unit dedicated to these formations; being the E/2 of Township 30 North, Range 10 West, Section 12. Therefore, no notice to interest owners is required.
- The spacing unit is comprised of a federal lease. Therefore, pursuant to Subsection C.(1) of 19.15.12.11 NMAC, a copy of the C-107-A has been sent to the BLM as of the date of this letter.

If you have any questions or concerns regarding this matter, please do not hesitate to contact me at the email or number provided below.

Regards,

Hilcorp Energy Company

A handwritten signature in blue ink, appearing to read 'Robert T. Carlson'.

Robert T. Carlson
Landman
(832) 839-4596
rcarlson@hilcorp.com

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMSF078200A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: COAL BED METHANE		8. Well Name and No. GRAMBLING C 3B
2. Name of Operator HILCORP ENERGY COMPANY		9. API Well No. 30-045-33131
3a. Address 1111 TRAVIS ST. HOUSTON, TX 77002		10. Field and Pool or Exploratory Area BASIN FRUITLAND COAL
3b. Phone No. (include area code) Ph: 505-324-5122		
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T30N R10W Mer NMP NESE 1800FSL 660FEL		11. County or Parish, State SAN JUAN COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal and downhole commingle with the existing Mesaverde/Dakota. Please see the attached procedure, wellbore diagram, plat and gas capture plan. A closed loop system will be used. Interim reclamation will be performed after surface disturbing activities using the following attached plan.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #480416 verified by the BLM Well Information System For HILCORP ENERGY COMPANY, sent to the Farmington	
Name (Printed/Typed) AMANDA WALKER	Title OPERATIONS REGULATORY TECH
Signature (Electronic Submission)	Date 08/26/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****



HILCORP ENERGY COMPANY
GRAMBLING C 3B
FRUITLAND COAL RECOMPLETION SUNDRY

GRAMBLING C 3B - CURRENT WELLBORE SCHEMATIC

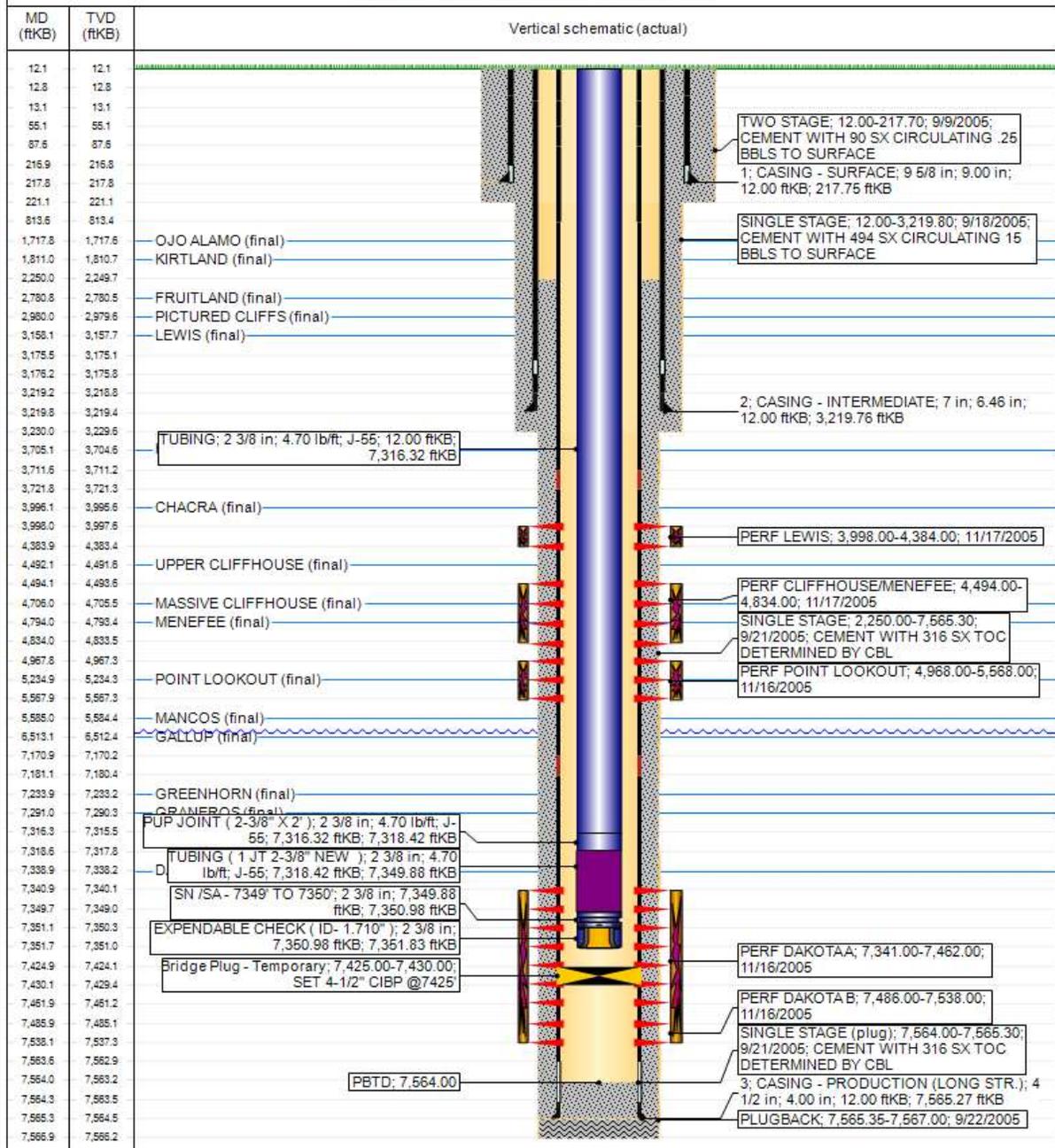


Current Schematic - Version 3

Well Name: GRAMBLING C #3B

API / UWI 3004533131	Surface Legal Location 012-030N-010W-1	Field Name BLANCO MESAVERDE (PRORATED GAS)	Route 0410	State/Province NEW MEXICO	Well Configuration Type
Ground Elevation (ft) 6,287.00	Original KB RT Elevation (ft) 6,299.00	KB-Ground Distance (ft) 12.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Original Hole, 8/22/2019 12:58:47 PM





HILCORP ENERGY COMPANY
GRAMBLING C 3B
FRUITLAND COAL RECOMPLETION SUNDRY

GRAMBLING C 3B - CURRENT WELLBORE SCHEMATIC



Proposed Schematic

Well Name: GRAMBLING C #3B

API / UWI 3004533131	Surface Legal Location 012-030N-010W-1	Field Name BLANCO MESAVERDE (PRORATED GAS)	Route 0410	State/Province NEW MEXICO	Well Configuration Type
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Original Hole, 8/22/2019 12:58:47 PM

