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District II
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Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Hilcorp Energy Company 382 Road 3100 Aztec, NM 87410	372171
	3. API Number 30-039-22989

4. Property Code	5. Property Name	6. Well No.
318839	San Juan 31-6 Unit	42

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
B	36	31N	06W		790	N	1020	E	Rio Arriba

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
Blanco Mesaverde	72319

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
A	G		S	6511
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
Y	5213-6207	Blanco Mesaverde		

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☐ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.** Signature: A Walker	OIL CONSERVATION DIVISION Approved By: Dean R McClure
Printed name: Amanda Walker	Title: Petroleum Engineer
Title: Operations Regulatory Tech Sr	Approved Date: 07/02/2024 — Expiration Date: 07/02/2026
E-mail Address: mwalker@hilcorp.com	
Date: 7/2/2024 — Phone: 346-237-2177	Conditions of Approval Attached

HILCORP ENERGY COMPANY
SAN JUAN 31-6 UNIT 42
MESAVERDE RECOMPLETION SUNDRY
API: 3003922989

JOB PROCEDURES

☑ NMOCD
☑ BLM

Contact OCD and BLM (where applicable) 24 hrs prior to MIRU or running MITs. Record and document all casing pressures daily, including BH, IC (if present) and PC. Comply with all NMOCD, BLM (where applicable), and HEC safety and environmental regulations.

1. Hold pre-job safety meeting. MIRU service rig and associated equipment. NU and test BOP per HEC, State, and Federal guidelines.
2. TOOH with **2-3/8"** tubing.
3. Set a **4-1/2"** plug within 50' of the top **Dakota** perforation (+/-**7,932'**) for zonal isolation.
4. Load hole with fluid, PT the csg to 600 psi and run a CBL on the **4-1/2"** casing. Verify cement bond within the Mesaverde and confirm TOC. Review CBL results with engineering and regulatory agencies. Perform cmt remediation, as required.
5. Perform a witnessed MIT test on the csg with the appropriate regulatory agencies (Notify NMOCD 24 hours prior to test).
6. **If frac will be pumped down casing:** ND BOP, NU frac stack and test frac stack and casing to frac pressure.
7. RU WL. Perforate the **Mesaverde**. (Top perforation @ **5,213'**, Bottom perforation @ **6,207'**).
8. **If frac will be pumped down a frac string:** RIH w/ frac string and packer. Set packer within 50' of top perforation. ND BOP, NU frac stack. Pressure test frac string and frac stack to frac pressure.
9. RDMO service rig. RU stimulation crew. Frac the **Mesaverde** in one or more stages. Set plugs in between stages, if necessary.
10. MIRU service rig and associated equipment. ND frac stack, NU BOP and test.
11. If frac was performed down frac string: POOH w/ frac string and packer.
12. TIH with a bit and drill out top isolation plug and any stage plugs (if necessary). Clean out to the top of the **Dakota** isolation plug.
13. Pending commingle approval, drill out **Dakota** isolation plug. Cleanout to PBTD at **8,062'**. TOOH w/ cleanout assembly.
14. Run and land production tubing. RDMO service rig and associated equipment. Return well to production.

HILCORP ENERGY COMPANY
SAN JUAN 31-6 UNIT 42
MESAVERDE RECOMPLETION SUNDRY

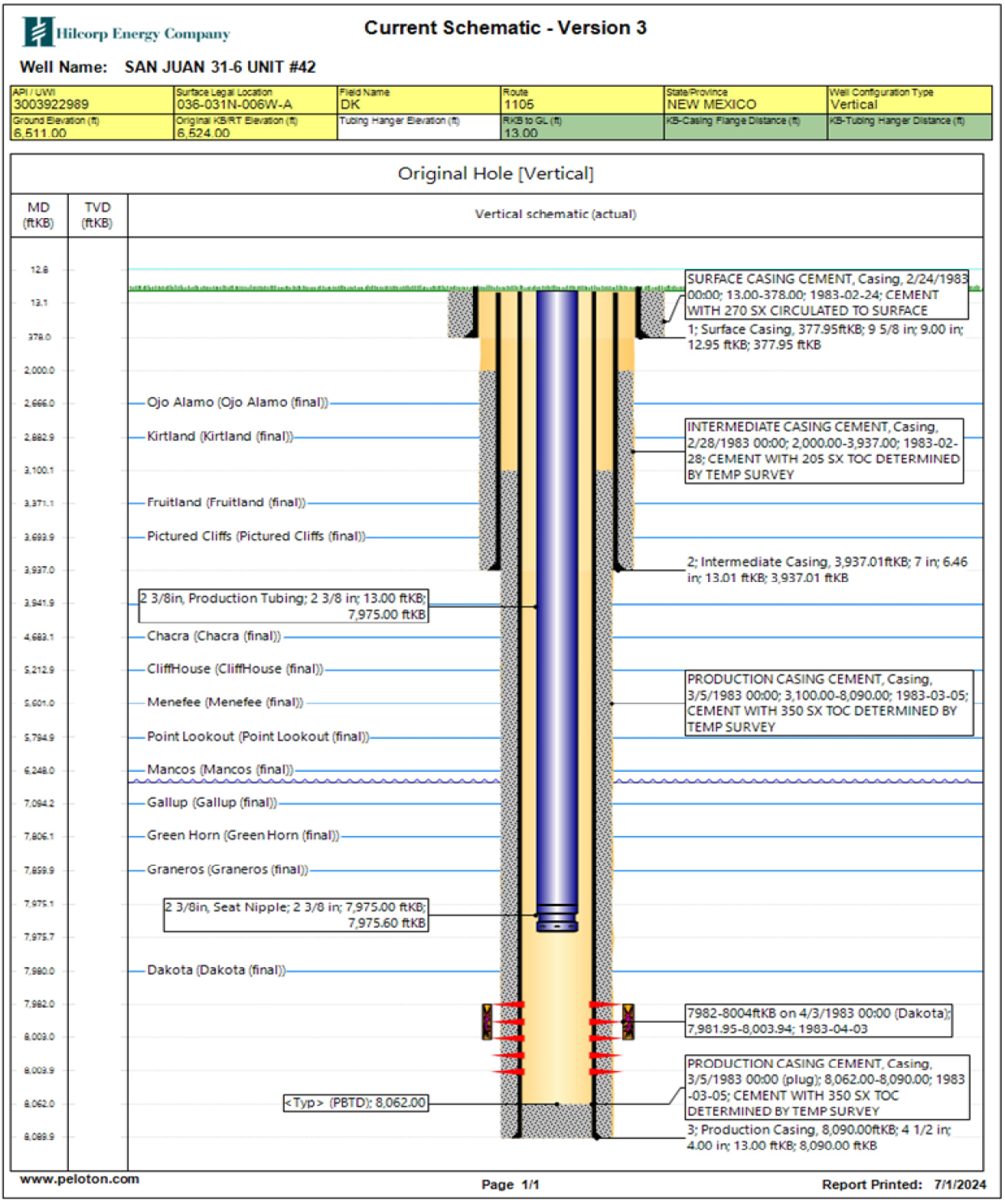
SAN JUAN 31-6 UNIT 42 - CURRENT WELLBORE SCHEMATIC

Hilcorp Energy Company

Current Schematic - Version 3

Well Name: SAN JUAN 31-6 UNIT #42

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3003922989	036-031N-006W-A	DK	1105	NEW MEXICO	Vertical
Ground Elevation (ft)	**Original KB/RT Elevation (ft)**	**Tubing Hanger Elevation (ft)**	**RKB to GL (ft)**	**KB-Casing Flange Distance (ft)**	**KB-Tubing Hanger Distance (ft)**
6,511.00	6,524.00		13.00		



www.peloton.com Page 1/1 Report Printed: 7/1/2024

HILCORP ENERGY COMPANY
SAN JUAN 31-6 UNIT 42
MESAVERDE RECOMPLETION SUNDRY

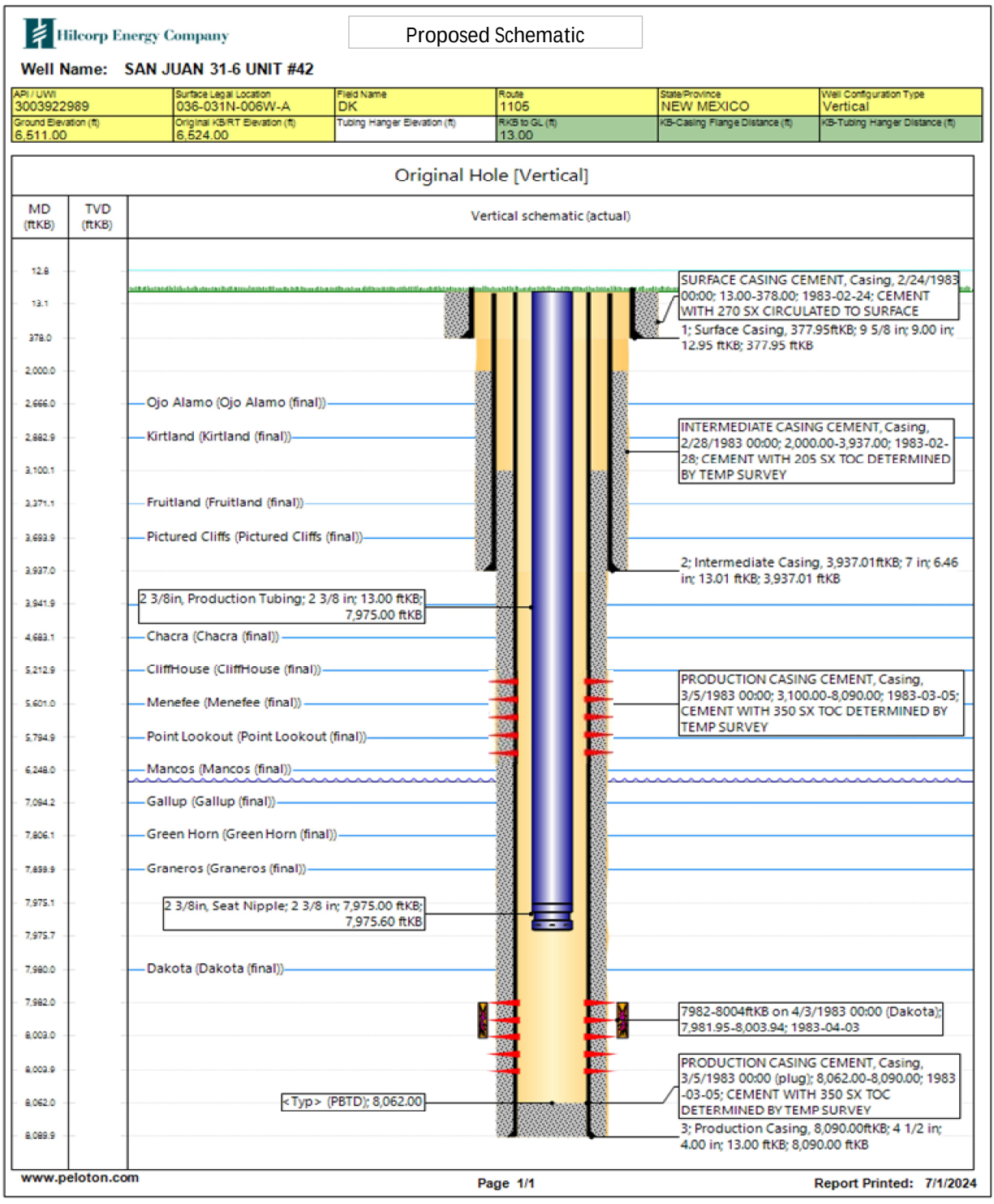
SAN JUAN 31-6 UNIT 42 - PROPOSED WELLBORE SCHEMATIC

Hilcorp Energy Company

Proposed Schematic

Well Name: SAN JUAN 31-6 UNIT #42

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3003922989	036-031N-006W-A	DK	1105	NEW MEXICO	Vertical
Ground Elevation (ft)	**Original KB/RT Elevation (ft)**	**Tubing Hanger Elevation (ft)**	**RKB to GL (ft)**	**KB-Casing Flange Distance (ft)**	**KB-Tubing Hanger Distance (ft)**
6,511.00	6,524.00		13.00		



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

Form C-102
August 1, 2011

Permit 365916

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-039-22989	72319	BLANCO-MESAVERDE (PRORATED GAS)
4. Property Code	**5. Property Name**	**6. Well No.**
318839	SAN JUAN 31 6 UNIT	042
7. OGRID No.	**8. Operator Name**	**9. Elevation**
372171	HILCORP ENERGY COMPANY	6511

10. Surface Location

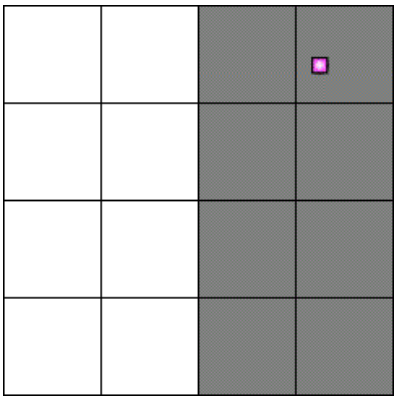
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	36	31N	06W		790	N	1020	E	RIO ARRIBA

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	13. Joint or Infill	14. Consolidation Code	15. Order No.
225.44			R-10987-A(6)

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By:
Title: Operations Regulatory Tech Sr.
Date: 5/21/2024

SURVEYOR CERTIFICATION

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

Surveyed By: Fred B Kerr Jr
Date of Survey: 2/4/1981
Certificate Number: 3950

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Hilcorp Energy Company **OGRID:** 372171 **Date:** 6/24/2024

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SJ 31-6 Unit 42	3003922989	B-36-31N-06W	790 FNL 1020 FEL	0.25	500	3

IV. Central Delivery Point Name: Ignacio Processing Plant [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
SJ 31-6 Unit 42	**3003922989**					

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Amanda Walker
Title: Operations Regulatory Tech Sr.
E-mail Address: mwalker@hilcorp.com
Date: 6/24/2024
Phone: 346-237-2177

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment:

Hilcorp Energy Company (HEC or Operator) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool of our recomplete project. HEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the recomplete to optimize gas capture and send gas to sales or flare based on analytical composition. HEC operates facilities that are typically one-well facilities. Production separation equipment is upgraded prior to well being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the recomplete operations.

VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas
   - HEC understands the requirements of NMAC 19.15.27.8 which outlines that the venting and flaring of natural gas during drilling, completion or production operations that constitutes waste as defined in 19.15.2 are prohibited.
2. Subsection (B) Venting and Flaring during drilling operations
   - This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompletion
   - Flowlines will be routed for flowback fluids into a completion or storage tank and if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
   - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
4. Subsection (D) Venting and flaring during production operations
   - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
   - Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.
   - HEC will not vent or flare except during the approved activities listed in NMAC 19.15.27.8 (D) 1-4.
5. Subsection (E) Performance standards
   - All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
   - If a flare is utilized during production operations it will have a continuous pilot and is located more than 100 feet from any known well or storage tanks.
   - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.

6. Subsection (F) Measurement or estimation of vented and flared natural gas
   - Measurement equipment is installed to measure the volume of natural gas flared from process piping.
   - When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8 (F) 5-6.

VIII. Best Management Practices:

1. Operator has adequate storage and takeaway capacity for wells it chooses to recomplete as the flowlines at the sites are already in place and tied into a gathering system.
2. Operator will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.
3. Operator combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. Operator will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.

From: Mandi Walker
To: McClure, Dean, EMNRD
Cc: Cheryl Weston
Subject: RE: [EXTERNAL] Application ID: 356927; 30-039-22989 SAN JUAN 31 6 UNIT #042
Date: Tuesday, July 2, 2024 5:26:30 AM
Attachments: SJ 31-6 Unit 42 - REVISED NOI.pdf

Good morning Dean,

Attached is the revised plan bringing up the bottom perforations. Please let me know if you need anything from me for your review and approval.

Mandi Walker
SJE/SJN (1,2,7) Regulatory Technician Sr.
Office: 346.237.2177
mwalker@hilcorp.com

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>
Sent: Friday, June 28, 2024 5:28 PM
To: Mandi Walker <mwalker@hilcorp.com>
Cc: Cheryl Weston <cweston@hilcorp.com>
Subject: [EXTERNAL] Application ID: 356927; 30-039-22989 SAN JUAN 31 6 UNIT #042

Mandi,

I am reviewing the C-101 referenced in the subject line of this email.

Please review Hilcorp's proposed perforations for the MV pool with consideration to the MV pool extending to 500' below the top of the Point Lookout.

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

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

CONDITIONS

Action 356927

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356927
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Notify NMOCD 24 Hours Prior to beginning operations.	7/2/2024
dmcclure	DHC required	7/2/2024
dmcclure	All conducted logs shall be submitted to the Division as a [UF-WL] EP Well Log Submission (WellLog).	7/2/2024
dmcclure	The appropriate compliance officer supervisor shall be consulted and remedial action conducted as directed if the cement sheath around the casing is not adequate to protect the casing and isolate strata from: (a) the uppermost perforation in each added pool to at least 150 feet above that perforation; and (b) the lowermost perforation in each added pool to at least 100 feet below that perforation.	7/2/2024