

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 8/21/19

Well information:

Hilcorp Energy Company

Lambe #3M API#30-045-33680

Application Type:

P&A Drilling/Casing Change Location Change

Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)

Other:

Conditions of Approval:

- Notify NMOCD 24 Hours prior to commencing activities
- A tracer survey is required to be performed in the completion of this well.



NMOCD Approved by Signature

10/17/19
Date

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.
NMSF078285

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit or CA/Agreement, Name and/or No.
NMMN117224

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
LAMBE 3M

2. Name of Operator
HILCORP ENERGY COMPANY
Contact: PRISCILLA SHORTY
E-Mail: pshorty@hilcorp.com

9. API Well No.
30-045-33680-00-C1

3a. Address
1111 TRAVIS STREET
HOUSTON, TX 77002

3b. Phone No. (include area code)
Ph: 505-324-5188

10. Field and Pool or Exploratory Area
BASIN DAKOTA
BLANCO MESAVERDE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 21 T31N R10W SWSE 1110FSL 1885FEL
36.879962 N Lat, 107.885055 W Lon

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.

to Hilcorp Energy Company requests permission to recomplete the subject well in the Fruitland Coal and downhole trimingle with the existing Mesaverde and Dakota formations. Attached is the procedure, wellbore diagram, plat, gas capture plan, and interim reclamation plan. A pre-interim reclamation site inspection was completed by Bob Switzer, BLM, on 8/20/2019. A DHC application will be filed and approved prior to commingling. A closed loop system will be used.

NMOCD

OCT 11 2019

DISTRICT III

WORLD CLASS FOR DHC

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #479734 verified by the BLM Well Information System
For HILCORP ENERGY COMPANY, sent to the Farmington
Committed to AFMSS for processing by ALBERTA WETHINGTON on 08/26/2019 (19AMW0570SE)**

Name (Printed/Typed) PRISCILLA SHORTY	Title OPERATIONS REGULATORY TECH SR
Signature (Electronic Submission)	Date 08/21/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>JOE KILLINS</u>	Title <u>ENGINEER</u>	Date <u>10/09/2019</u>
--------------------------------	-----------------------	------------------------

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 Farmington

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

AV

District I1625 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

Form C-102
August 1, 2011

Permit 269985

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-33680	2. Pool Code 71629	3. Pool Name BASIN FRUITLAND COAL (GAS)
4. Property Code 318603	5. Property Name LAMBE	6. Well No. 003M
7. OGRID No. 372171	8. Operator Name HILCORP ENERGY COMPANY	9. Elevation 6188

10. Surface Location

UL - Lot O	Section 21	Township 31N	Range 10W	Lot Idn 15	Feet From 1110	N/S Line S	Feet From 1885	E/W Line E	County SAN JUAN
---------------	---------------	-----------------	--------------	---------------	-------------------	---------------	-------------------	---------------	--------------------

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 310.38	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: <i>Priscilla Shorty</i>	
	Title: Operations Regulatory Tech - Sr. Date: 07/18/2019	
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: 2/6/2006		
Certificate Number: 15269		



HILCORP ENERGY COMPANY
LAMBE 3M
FRUITLAND COAL RECOMPLETION SUNDRY

API #: 3004533680

JOB PROCEDURES

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

1. MIRU service rig and associated equipment; NU and test BOP.
2. TOOH with **2 3/8"** tubing set at **7,401'**.
3. MU a **4-1/2"** cast iron bridge plug and RIH with work string; set CIBP at +/- **3,945'** to isolate the Mesa Verde Formation.
4. RU pressure test truck. Load wellbore with fluid. Perform a Mechanical Integrity Test on wellbore. Chart record the MIT test (Notify NMOCD & BLM +24hr before actual test). Review and submit the MIT test results to the NMOCD and BLM. If the MIT fails, discuss with both the NMOCD and BLM on a plan of action to remediate the wellbore. Perform 2nd MIT once remediated.
5. Pressure test production casing to frac pressure. The pressure test will not exceed **83.5%** of the internal yield strength of the casing(s).

4-1/2" csg L-80 11.6#: 15' - 594'
4-1/2" csg J-55 10.5#: 594' - 7,479'

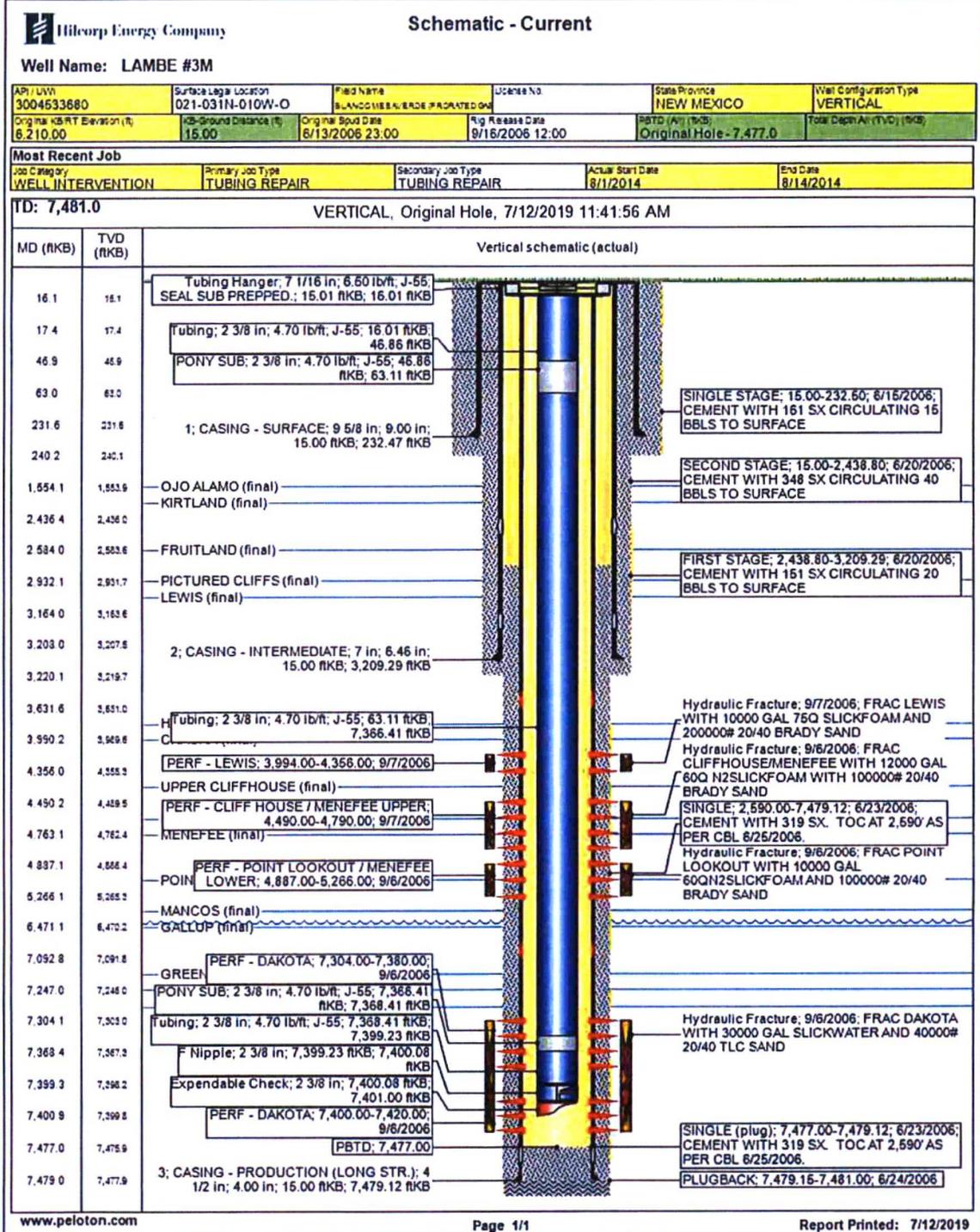
6. N/D BOP, N/U frac stack and test frac stack to frac pressure. RDMO service rig.
7. RU E-line and stimulation crew. Perforate and frac the **Fruitland Coal** in one or two stages. (Top perforation @ 2,717', Bottom perforation @ 2,921'). Set a top isolation plug once the stimulation is completed. RD E-line and stimulation crew.
8. MIRU service rig. Nipple down frac stack, nipple up BOP and test.
9. TIH with a mill and drill out the top isolation plug.
10. Clean out to the top of the Mesa Verde isolation plug. When water and sand rates are acceptable, drill out the plug.
11. Clean out the wellbore to PBTD of **7,477'**. TOOH.
12. TIH and land production tubing. Get a trimingled **Fruitland/ Mesa Verde/ Dakota** flow rate.

All formation tops have been reviewed by Hilcorp Energy for the Lambe 3M. The Fruitland Coal formation top has been adjusted to 2,584'.



HILCORP ENERGY COMPANY
LAMBE 3M
FRUITLAND COAL RECOMPLETION SUNDRY

LAMBE 3M - CURRENT WELLBORE SCHEMATIC



District I
1625 N. French Dr., 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 South St. Francis Dr.
Santa Fe, NM 87505

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 7/18/2019

Original Operator & OGRID No.: Hilcorp Energy Company 372171
 Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
LAMBE 3M	3004533680	O, 21, 31N, 10W	1110' FSL 1885' FWL	375	Vented	

Gathering System and Pipeline Notification

This is a recompletion of a producing gas well. Gas production, sales and transportation infrastructure is already in place. The gas is dedicated to Enterprise and will be connected to their gathering system located in San Juan County, New Mexico. Gas from these wells will be processed at Chaco Processing Plant located in Sec. 16, Twn. 26N, Rng. 12W, San Juan County, New Mexico.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be routed to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Enterprise system at that time. Based on current information, it is Hilcorp's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Hilcorp Energy
Interim Reclamation Plan
Lambe #3M
API: 30-045-33680
O – Sec.21-T031N-R010W
Lat: 36.879871, Long: -107.884313
Footage: 1110' FSL & 1885' FEL
San Juan County, NM

1. PRE- INTERIM RECLAMATION SITE INSPECTION

- 1.1) A pre-interim reclamation site inspection was completed by Bob Switzer with the BLM and Chad Perkins construction Foreman for Hilcorp Energy on August 20, 2019.

2. LOCATION INTERIM RECLAMATION PROCEDURE

- 2.1) Interim reclamation work will be completed after well recompletion in the fall of 2019 or spring of 2020.
- 2.2) Location tear drop will be defined as applicable during interim reclamation.
- 2.3) New inner tear drop v-ditch diversion will be install to define location tear drop.
- 2.4) Existing outer tear drop diversions that are bladed off for the recompletion will be re-establish during interim reclamation.
- 2.5) All disturbed areas will be seeded, any disturbed areas that are compacted will be ripped before seeding.
- 2.6) All trash and debris will be removed within 50' buffer outside of the location disturbance during reclamation.

3. ACCESS ROAD RECLAMATION PROCEDURE:

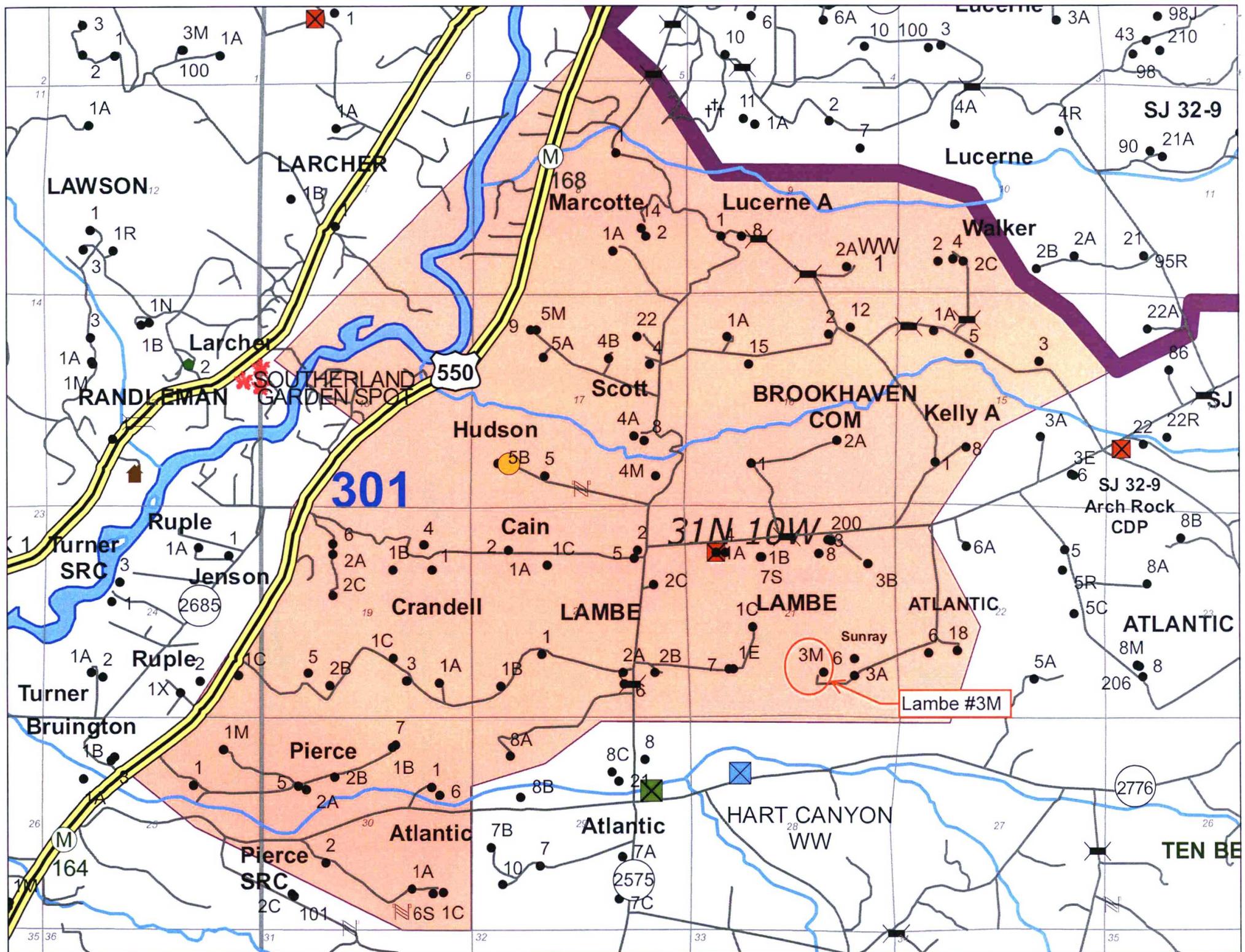
- 3.1) No lease access road issues were identified at the time of onsite.

4. SEEDING PROCDURE

- 4.1) A Pinion/Juniper seed mix will be used for all reclaimed and disturbed areas of the location.
- 4.2) Drill seeding will be done where applicable and all other disturbed areas will be broadcast seeded and harrowed, broadcast seeding will be applied at a double the rate of seed.
- 4.3) Timing of the seeding will take place when the ground is not frozen or saturated.

5. WEED MANAGEMENT

- 5.1) No action is required at this time for weed management, no noxious weeds were identified during the onsite.





New inner tear drop v-ditch diversion will be installed to define the tear drop.

Existing outer tear drop diversions that are bladed off for the re-completion will be re-establish.