

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

LEGACY RESERVES OPERATING LP

3a. Address

PO BOX 10848
MIDLAND, TX 79702

3b. Phone No. (include area code)

432-689-5200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

990' FSL & 990' FEL, UNIT LETTER P, SEC 15, T18S, R24E

5. Lease Serial No.
NM101077

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
NM1053638. Well Name and No.
SOUTHERN CROSS 15 FEDERAL COM #19. API Well No.
30-015-3147410. Field and Pool or Exploratory Area
PENASCO DRAW; PERMO PENN (GAS)11. County or Parish, State
EDDY COUNTY, NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
- ☒ Subsequent Report
- ☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input 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 checked="" 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 recompleat 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 recompleat 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.)

FORMATION - PENN

WATER PRODUCED - 0

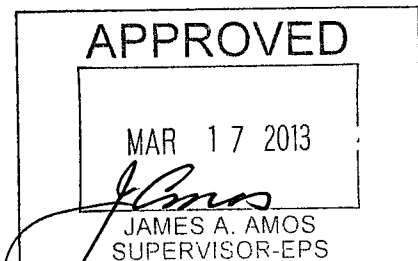
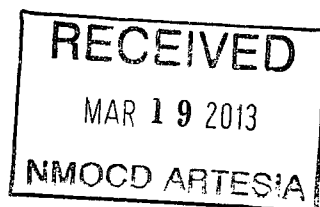
STORED - WATER TANK

MOVED - TRUCKED

DISPOSAL - NIX ANN SWD

LOCATION - 18-T19S-R26E - EDDY COUNTY, NM

PERMIT - NMOC D # 246

SEE ATTACHED FOR
CONDITIONS OF APPROVALAccepted for record
NMOC D

ALDade

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

KEVIN BRACEY

Title OPERATIONS SUPERINTENDENT

Signature

Date 02/19/2013

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)

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BUREAU OF LAND MANAGEMENT

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432-689-5200

7. If Unit of CA/Agreement, Name and/or No.
NM105363

8. Well Name and No.
SOUTHERN CROSS 15 FEDERAL COM #1

9. API Well No.
30-015-31474

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

990' FSL & 990' FEL, UNIT LETTER P, SEC 15, T18S, R24E

10. Field and Pool or Exploratory Area
PENASCO DRAW; PERMO PENN (GAS)

11. County or Parish, State
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<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____	
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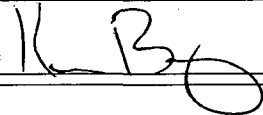
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(Instructions on page 2)

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Conditions of Approval

Legacy Reserves Operating LP
Southern Cross 15 Federal Com #1
Lease NM101077 / CA NM105363 / 3002531474

Active Amos

1. Tank battery must be bermed/diked (must be able to contain 1 1/2 times the volume of the largest tank).
2. Submit for approval of water disposal method.
3. Submit updated facility diagrams as per Onshore Order #3
4. This agency shall be notified of any spill or discharge as required by NTL-3A.
5. All outstanding environmental issue must be addressed within 90 days. Contact Jim Amos for inspection and to resolve environmental issues. 575-234-5909
6. Install legible well sign on location with operator name, well name and number, lease number, unit number, 1/4 1/4, section, township, and range. NMOCD requires the API number on well signs.
7. Subject to like approval by NMOCD.
8. Submit Designation Successor Operator for CA within 30 days. Copy attached to operators Sundry Copy.

WATER DISPOSAL ONSHORE ORDER #7

The following information is needed before your method of water disposal can be considered for approval.

1. Name(s) of formation (s) producing water on the lease.

Penn

2. Amount of water produced from each formation in barrels per day.

0

3. How water is stored on the lease.

Water Tank

4. How water is moved to disposal facility.

Trucking

5. Operator's of disposal facility

a. Lease name or well name and number Nix Ann SWD

b. Location by $\frac{1}{4}$ Section, Township, and Range of the disposal system _____

Sec. 18 - T19S - R26E

c. The appropriate NMOCD permit number _____

NMOCD # 246

Production Phase


- PV1 - Closed (Locked) - line to pull bottom on oil tank
- PV2 - Closed (Sealed) - line to pull bottom on oil tank
- PV3 - open (Sealed) - Fill line for oil tank
- PV4 - Closed - line to pull bottom on oil tank

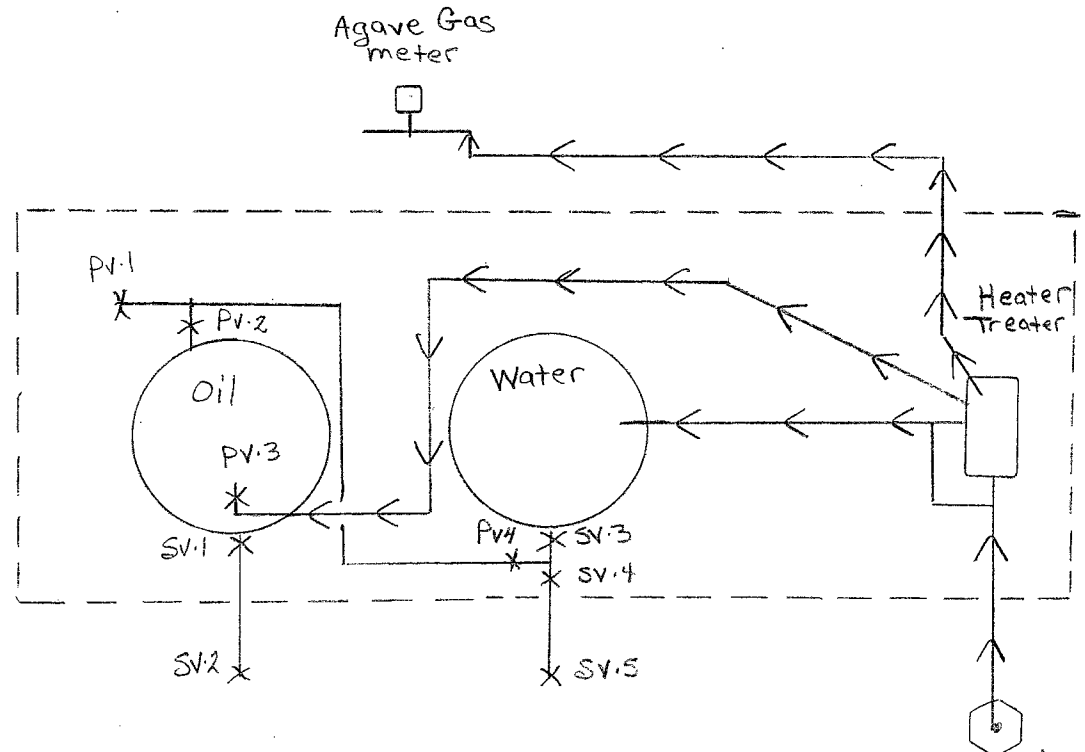
Sales Phase

- SV1 - Closed (Locked) - Oil tank valve on load line
- SV2 - Closed - Load line valve for oil tank
- SV3 - Closed - Water tank valve on loadline
- SV4 - Closed (Locked) - In line valve on water loadline
- SV5 - Closed - Load line valve on water tank

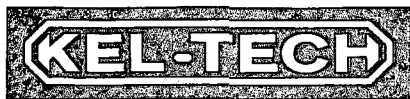
Legacy Reserves

Southern Cross 15 Federal Com #1
State ID - NM 101077
CA - NM 105363
Sec. P-15-188-24E
API# 30-015-31474

Accepted for Record Purposes.
Approval Subject to Onsite Inspection.
Date: 3-17-13




Southern Cross 15 Federal Com #1



WATER ANALYSIS REPORT

SAMPLE

Oil Co: LEGACY
Lease: SOUTHERN CROSS
Well No.: 5 FED COM 1
Location: TANK
Attention: ACCT. MANAGER

Date Sampled: 01/10/13
Date Analyzed: 01/11/13
Lab ID Number: 01/11/13LEGACY SOUTHERN CROSS 5 FED COM 1
Account Manager: B STRUBE
Requested By: LAB

File Name: 01/11/13LEGACY SOUTHERN CROSS 5 FED COM 1

ANALYSIS

1 pH 6.1
2 Specific Gravity 1.054
3 CaCO₃ Saturation Index @80 F -0.72
@140 F 0.18

DISSOLVED GASES

4 Hydrogen Sulfide
5 Carbon Dioxide
6 Dissolved Oxygen

MG/L	EQ. WT	MEQ/L
0		
58		
NOT DETERMINED		

CATIONS

7 Calcium (Ca⁺⁺)
8 Magnesium (Mg⁺⁺)
9 Sodium (Na⁺⁺) (Calculated)
10 Barium (Ba⁺⁺)

5,840	20.1	290.55
1,021	12.2	83.69
25,918	23.0	1126.88
3	68.7	0.04

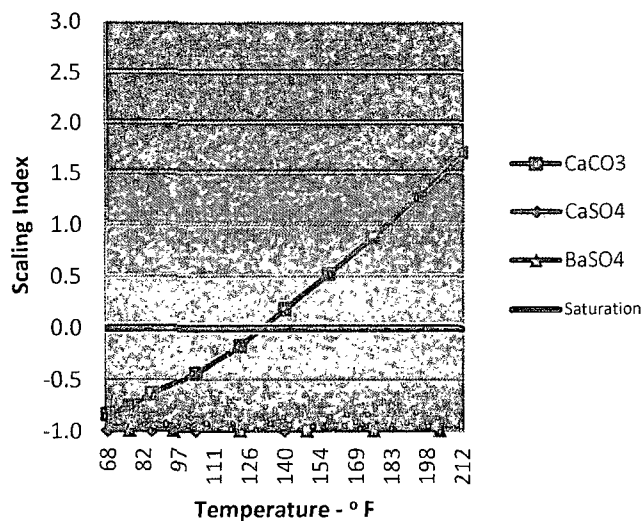
ANIONS

11 Hydroxyl (OH⁻)
12 Carbonate (CO₃⁻)
13 Bicarbonate (HCO₃⁻)
14 Sulfate (SO₄⁻)
15 Chloride (Cl⁻)
16 Total Dissolved Solids
17 Total Iron (Fe)
18 Total Hardness as CaCO₃
19 Resistivity-NaCl equivalent@ 69 °F

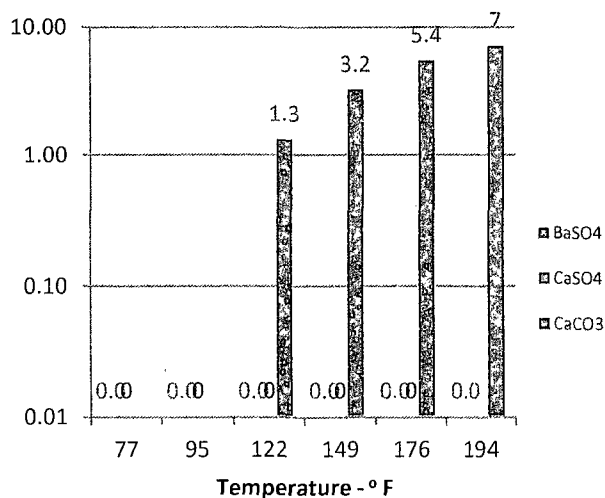
17.0	0.00
30.0	0.00
159	2.60
0	0.00
53,000	1492.96
86,101	
102	5.61
18,800	
0.0730	

OHM-METERS

Composite
Kel-tech Scaling Index



Maximum
Amount of Scale in Pounds per 1000
BBLs



1.0 FACILITY INFORMATION

1.1 Facility Type and Location

Facility	Southern Cross 15 Fed Com #1		
Type Facility	Onshore Oil and Gas Production		
State Identification:	API 30-015-31474		
Facility Location	11.8 miles southwest of Artesia		
County:	Eddy	State:	New Mexico
Latitude:	32.74399 N		
Longitude:	104.57090 W		
Directions to Facility:	Refer to Facility Location Map, Attachment 1		

1.2 Facility Owner and Operator

Name and address of owner:

Name:	Legacy Reserves
Address:	303 W. Wall, Suite 1400 Midland, Texas 79708
Telephone:	(432) 682-2516

Name and address of operator:

Name:	Legacy Reserves
Address:	303 W. Wall, Suite 1400 Midland, Texas 79708
Telephone:	(432) 682-2516

1.3 Designated Person Accountable for Oil Spill Prevention at Facility

This person is accountable for discharge prevention and response activities at the subject facility. See Spill Response Plan, Appendix A for designated person.

2.0 DESCRIPTION OF FACILITY OPERATIONS

The Southern Cross 15 Fed Com #1 facility is located in Eddy County, New Mexico as shown on Figure 1, Location Map. Figure 2 is a Topographic Map of the area surrounding the site. The site is located on the USGS Parish Ranch, New Mexico Quadrangle Map. The surface drainage from the facility site is described in Section 5.0.

The lease production flows from the wells through flow lines to the tank battery facility for separation and storage. Production separators and/or treaters separate the oil, water and gas produced from the wells. Produced fluids are removed from the facility as described in Section 2.2 below. Figure 3 is a Site Plan of the subject facility.

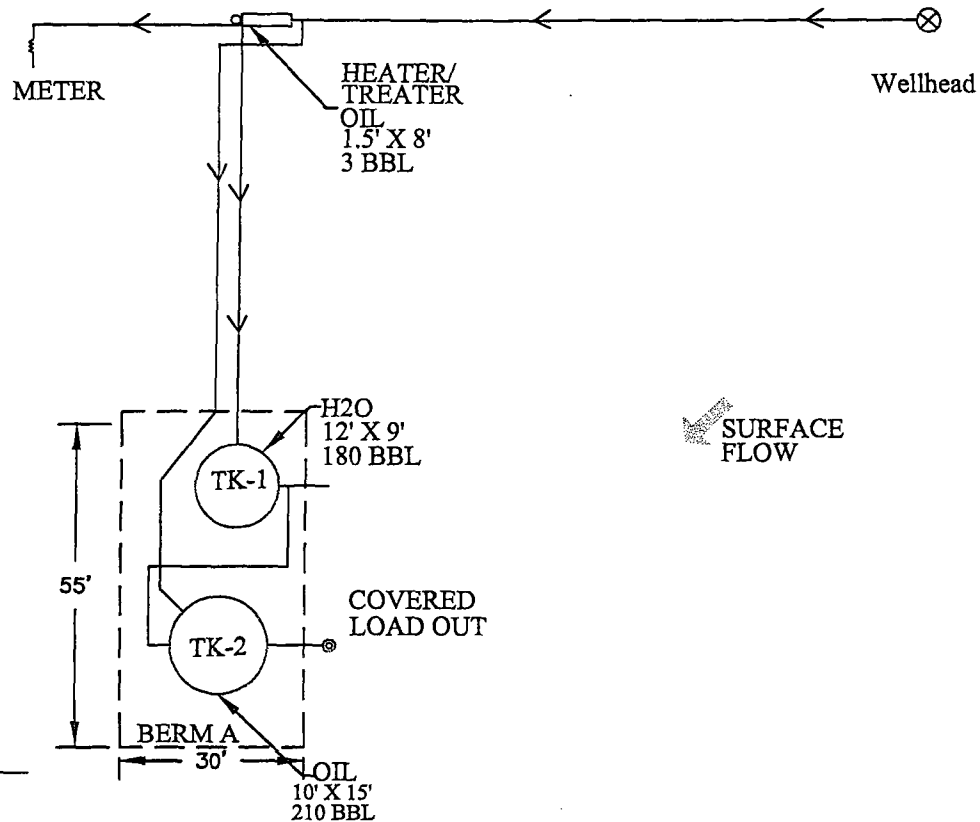
This is an unmanned facility that processes and stores produced fluids 24 hours per day. This facility is inspected at least once every day by operations personnel.

2.1 Tank Battery

The storage tanks at this facility are constructed to API specifications. The tank construction material is compatible with the fluids to be stored in each tank as detailed in Table 1 below. Each tank is equipped with vent lines and vacuum/pressure relief hatches to prevent tank rupture or collapse during product filling or removing operations. Multiple tank installations also include equalizing lines between the tanks to prevent accidental overflow of a tank. A description of the secondary containment structure for this tank battery facility is included in Section 4.0 below.

Table 1 DESCRIPTION OF OIL TANK BATTERY				
CONTENTS OF TANKS	CAPACITY (BBLs)	TANK CONSTRUCTION	SERIAL NUMBER	CONDITION
Oil	210	Steel	115577 / 1372	Good
Water	180	Fiberglass	None	Good
Total Storage Capacity:				
		Oil: 210	BBLS	8,820 Gallons
		Water: 180	BBLS	7560 Gallons

Table 2 DESCRIPTION OF OIL INJECTION STATION				
CONTENTS OF TANKS	CAPACITY (BBLs)	TANK CONSTRUCTION	SERIAL NUMBER	CONDITION
Oil				
Oil				
Oil				
Water				
Water				
Total Storage Capacity:				
		Oil: 0	BBLS	0 Gallons
		Water: 0	BBLS	0 Gallons



ROAD

METER HOUSE

Lat.: 32.743999° N
Long.: -104.57090° W



Date: 06/05/2012

Scale: NTS

Drawn By: EMF

Southern Cross 15 Fed. Com #1
Legacy Reserves
Eddy County, New Mexico
SPCC Site Plan

WATER PRODUCTION & DISPOSAL INFORMATION

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. _____

2. Amount of water produced from all formations in barrels per day. _____

3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates. (One sample will suffice if water is commingled.)
4. How water is stored on lease. _____
5. How water is moved to the disposal facility. _____
6. Identify the Disposal Facility by: _____
 - A. Facility Operators name. _____
 - B. Name of facility or well name and number. _____
 - C. Type of facility or well (WDW) (WIW) etc. _____
 - D. Location by $\frac{1}{4}$ $\frac{1}{4}$ _____ Section _____ Township _____ Range _____
7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, 620 EAST GREENE ST, CARLSBAD NM, 88220, the above required information on a Sundry Notice 3160-5. Submit 1 original and 5 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Disposal of Produced Water From Federal Wells
Conditions of Approval**

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.

9/22/09