

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.**

5. Lease Serial No.  
NM0455265

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.  
OXY HOPSING FEDERAL #2

2. Name of Operator

LEGACY RESERVES OPERATING LP

9. API Well No.  
30-015-32032

3a. Address

PO BOX 10848  
MIDLAND, TX 79702

3b. Phone No. (include area code)

432-689-5200

10. Field and Pool or Exploratory Area  
BURTON FLAT; MORROW (PRO GAS)

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

1650' FNL &amp; 860' FEL, UNIT LETTER H, SEC 14, T20S, R27E

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

## TYPE OF ACTION

☐ Notice of Intent☐ Acidize☐ Deepen☐ Production (Start/Resume)☐ Water Shut-Off☒ Subsequent Report☐ Alter Casing☐ Fracture Treat☐ Reclamation☐ Well Integrity☐ Final Abandonment Notice☐ Casing Repair☐ New Construction☐ Recomplete☐ Other☐ Change Plans☐ Plug and Abandon☐ Temporarily Abandon☐ Convert to Injection☐ Plug Back☒ 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 recompleting 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.)

FORMATION - MORROW

WATER PRODUCED - 0

STORED - WATER TANK

MOVED - TRUCKED

DISPOSAL - NIX ANN SWD-1 API # 30-015-23580

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

PERMIT - NMOC D-246

RECEIVED

MAR 19 2013

NMOC D ARTESIA

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

APPROVED

MAR 17 2013

JAMES A. AMOS  
SUPERVISOR-EPS

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)

**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**  
**OXY Hopsing Federal #2**  
**Lease NM0455265 CA-NM107676 3001532032**

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.

## 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.

Morrow

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  $\frac{1}{4}$   $\frac{1}{4}$  Section, Township, and Range of the disposal system \_\_\_\_\_

Sec. 18 - T19S - R26E

c. The appropriate NMOCD permit number NMOCD # 246

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Production Phase

- PV1 - Open - Fill line for water tank
- PV2 - Open - Fill line for oil tank
- PV3 - Closed - Fill line for oil tank
- PV4 - Closed - line to pull Bottoms, water tank
- PV5 - Closed (sealed) - line to pull bottoms, oil tank
- PV6 - Closed (sealed) - line to pull bottoms, oil tank
- PV7 - Closed - Valve on end of load line to pull bottoms on tanks

## Sales Phase

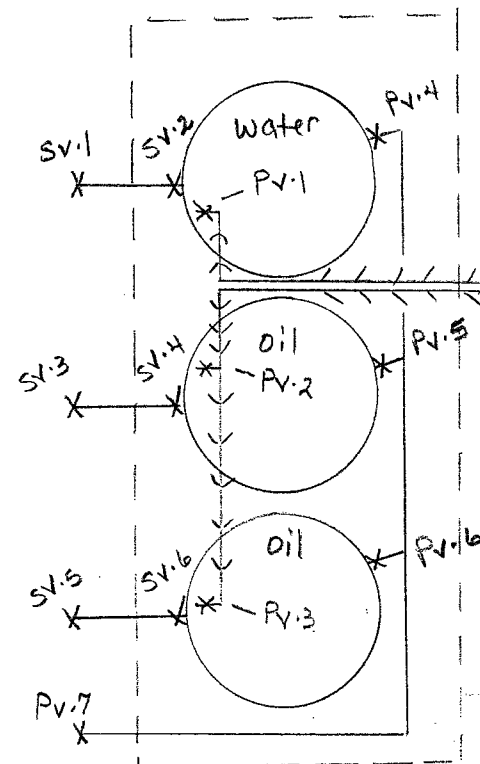
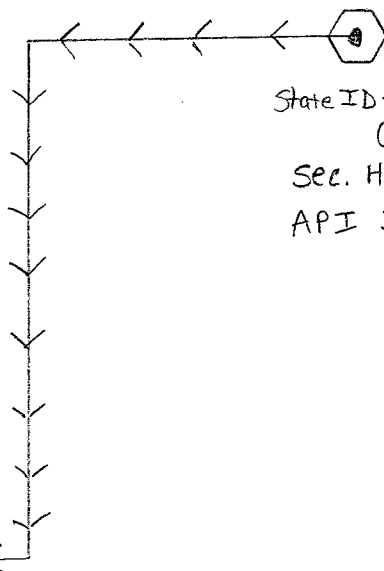
- SV1 - Closed - load line valve on water tank
- SV2 - Open - Watertank valve on load line
- SV3 - Closed - load line valve on oil tank
- SV4 - Closed (sealed) - oil tank valve on load line
- SV5 - Closed - load line valve on oil tank
- SV6 - Closed (sealed) - oil tank valve on load line

DCP  
Gas meter



## Legacy Reserves oxy Hopsing Federal #2

State ID - NM 0455265  
CA - NM 1076716  
Sec. H-14-20-S-27E  
API 30-D15-32032



Well hooked up direct to gas sales pipeline  
Battery Tanks not in service.

Accepted for Record Purposes.  
Approval Subject to Onsite Inspection.  
If BLM Objectives are not achieved,  
additional work may be required.

Date: 8-17-13

Signature:



# WATER ANALYSIS REPORT

## SAMPLE

Oil Co: LEGACY  
Lease: OXY HOPSING FED  
Well No.: 2  
Location: BATTERY  
Attention: ACCT. MANAGER

Date Sampled: 12/20/12  
Date Analyzed: 12/26/12  
Lab ID Number: 12/26/12LEGACYOXY HOPSING FED 2  
Account Manager: B. STRUBE  
Requested By: LAB  
File Name: 12/26/12LEGACYOXY HOPSING FED 2  
Note: L

## ANALYSIS

1 pH 6.4  
2 Specific Gravity 1.080  
3 CaCO<sub>3</sub> Saturation Index @80 F -0.18  
@140 F 0.67

## DISSOLVED GASES

4 Hydrogen Sulfide  
5 Carbon Dioxide  
6 Dissolved Oxygen

## CATIONS

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

## ANIONS

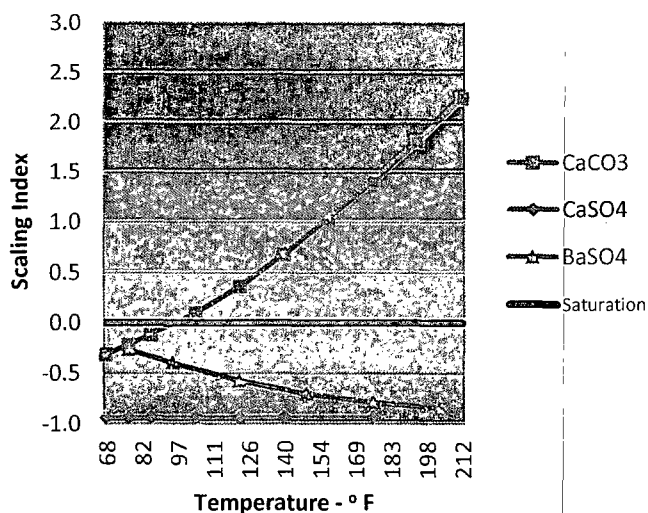
11 Hydroxyl (OH<sup>-</sup>)  
12 Carbonate (CO<sub>3</sub><sup>-</sup>)  
13 Bicarbonate (HCO<sub>3</sub><sup>-</sup>)  
14 Sulfate (SO<sub>4</sub><sup>-</sup>)  
15 Chloride (Cl<sup>-</sup>)  
16 Total Dissolved Solids 118,735  
17 Total Iron (Fe) 46  
18 Total Hardness as CaCO<sub>3</sub> 9,950  
19 Resistivity-NaCl equivalent@ 69 °F 0.0707

MG/L	EQ. WT	MEQ/L
0		
35		
NOT DETERMINED		

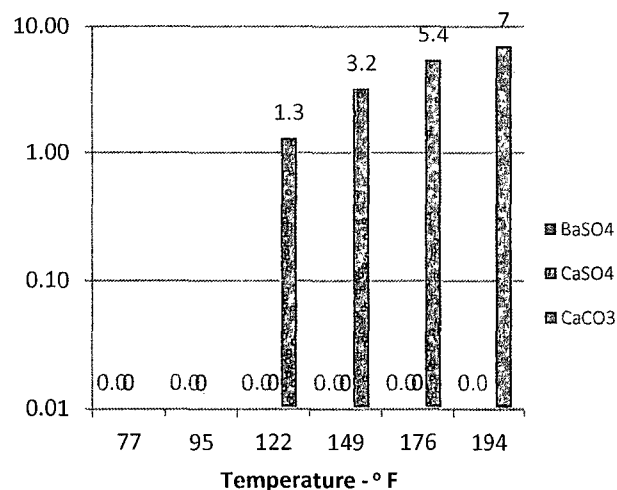
3,580	20.1	178.11
243	12.2	19.93
42,346	23.0	1841.15
1	68.7	0.01

	17.0	0.00
	30.0	0.00
342	61.1	5.59
142	48.8	2.91
72,000	35.5	2028.17
118,735		
46	18.2	2.53
9,950		
0.0707	OHM-METERS	

Composite  
Kel-tech Scaling Index



Maximum  
Amount of Scale in Pounds per 1000  
BBLs



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## **1.0 FACILITY INFORMATION**

### **1.1 Facility Type and Location**

Facility	Oxy Hopsing Federal #2		
Type Facility	Onshore Oil and Gas Production		
State Identification:	NM0455265 / API 30-015-32032		
Facility Location	10.9 miles north of Carlsbad		
County:	Eddy	State:	New Mexico
Latitude:	32.57613 N		
Longitude:	104.24589 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 79701
Telephone:	(432) 682-2516

Name and address of operator:

Name:	Legacy Reserves
Address:	303 W. Wall, Suite 1400 Midland, Texas 79701
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 Oxy Hopsing Federal #2 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 Angel Draw, 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	300	Steel	32389	Good	
Oil	300	Steel	32390	Good	
Water	300	Poly	N/A	Good	
Total Storage Capacity:		Oil: 600 Water: 300	BBLS BBLS	25,200 12,676	Gallons 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 Water: 0	BBLS BBLS	0 0	Gallons Gallons

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## 2.2 Transfer Facilities

The produced oil is removed from this facility by: Transport Truck ☒ Pipeline ☐

The transfer valve is located within the secondary containment structure. Yes ☐ No ☒

A containment vessel is located on the load line valve. Yes ☒ No ☐

The produced water is removed from this facility by: Transport Truck ☒ Pipeline ☐  
Injection ☐

The transfer valve is located within the secondary containment structure. Yes ☐ No ☒

A containment vessel is located on the load line valve. Yes ☒ No ☐

A full secondary containment structure for the truck loading area is not practical due to the terrain and site restrictions at the subject facility. All drivers will perform a walk-around inspection prior to moving the truck from the loading area. The driver will ensure that transfer lines are disconnected and properly secured, all valves are fully closed, and inspect for leaks from the truck and tank valves.

## 2.3 Treating and Processing Equipment:

Separators 0

Treaters: 0

Injection  
Pumps: 0

## 2.4 Description of Flow lines

The steel flow line(s) from the producing well(s) to the subject facility is buried. Yes ☒ No ☐

Steel flow lines have cathodic protection. Yes ☒ No ☐

Secondary containment for buried flow lines is not practical due to the depth of burial  
Secondary containment for flow lines laid on the surface of the ground is not practical due to the terrain and potential erosion of the ground.

A program for flow line maintenance is detailed in the Legacy Reserves Discharge Prevention Plan. The flow line rights-of-way are routinely checked for leaks and spills and the lines are repaired or replaced as necessary.

## 2.5 Types of Fluids Handled and Stored at Facility

This facility processes and stores produced oil and water from oil field operations.

## 2.6 Site Security

This oil production facility is not subject to the security provisions of 40 CFR 112.7 (g).



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### 3.0 FREEBOARD STANDARD FOR SECONDARY CONTAINMENT

Tank and flow-through process vessel (production equipment) installations include a means of secondary containment sufficient to contain 110% of the capacity of the largest tank/vessel. Calculations to determine the net capacity of each secondary containment structure (Sections 4.1 and 4.2) include adjustments for the displacement due to additional tanks and/or other obstructions within the containment structure.

### 4.0 DESCRIPTION OF SECONDARY CONTAINMENT

The secondary containment structure(s) will be maintained in a manner to assure the structure is capable of retaining the required volume of fluid in the event of an accidental discharge. Legacy Reserves depends on early detection and quick response to contain any leaks from company facilities. Response procedures for spills are detailed in the Legacy Reserves Spill Response Plan (SRP). Procedures for the drainage of accumulated rainwater from the secondary containment structure(s) are detailed in the Legacy Reserves Discharge Prevention Plan (DPP).

#### 4.1 Tank Battery

A secondary containment structure surrounds the tank battery installation to prevent the spread of produced oil and water from an accidental discharge of fluids from the tank battery.

Dimensions of Secondary Containment (ft.):	80 x 30 x 1
Total Capacity of Secondary Containment:	427 BBLS
Capacity of Largest Tank:	300 BBLS
Net Capacity of Secondary Containment:	387 BBLS
Required Secondary Containment Capacity:	330 BBLS
Type and condition of Berm:	Earth with rock cap, good
Type and Condition of Containment Floor:	Pea gravel, good
Type of Drain:	None
Direction of flow away from the tank battery area:	South

#### 4.2 Production Equipment

The treating and processing facilities at this site are within a secondary containment area.  
Yes ☐ No ☐ No equipment on site

The secondary containment area is separate from the tank battery. Below is a description of this area.

Dimensions of Secondary Containment (ft.):	None
Total Capacity of Secondary Containment:	N/A
Volume of Largest Production Vessel:	N/A
Net Capacity of Secondary Containment:	N/A
Required Secondary Containment Capacity:	N/A
Type and condition of Berm:	N/A
Type and Condition of Containment Floor:	N/A
Type of Drain:	N/A
Direction of flow away from the tank battery area:	N/A

## 5.0 PROBABLE DIRECTION AND RATE OF FLOW OF DISCHARGES

This facility processes 0 BBLS of oil, 0.5 BBLS of water, and 30.7 MCF of gas per 24-hour day. The surface drainage from this area is to the south / southeast direction for 0.28 miles to Angel Draw.

Areas where potential for an oil spill to exist are:

1. Tanks      Leak from tank due to overflow, corrosion hole in tank shell, failure of vent/vacuum system, or lightning striking tank resulting in explosion with spillage and/or fire.
2. Load Lines      Valve leak or overflow of containment system.
3. Flow Lines      Corrosion leak in line, damage due to construction activity.
4. Vessels      Leaks and equipment failure, pressure relief valve operation.
5. Connections      Leaks at connections, valves and fittings.
6. Wellhead      Leaks and equipment failure, stuffing box.

Table 3  
Storage Capacity and Potential Discharge

Source	Contents of Vessel	Total Volume (BBLS)	Leak Rate (BBLS/Hr.)	Secondary Containment
Tank 3	Oil	300	75	Dike
Tank 2	Oil	300	75	Dike
Tank 1	Water	300	75	Dike
Wellhead/Flow line	Oil/Water	NA	0.02	None

## 6.0 PLANS FOR THE PROTECTION OF ENVIRONMENTALLY SENSITIVE AREAS

The following measures have been established to protect all environmentally sensitive areas. These items are either in place at this facility or are readily available to company personnel.

Secondary Containment around:	Tank Battery <input checked="" type="checkbox"/>	Production Equipment <input type="checkbox"/>
Compressor Skid Sump <input type="checkbox"/>	Dehy Sump <input type="checkbox"/>	Absorbent Pads <input checked="" type="checkbox"/>
Weir Booms <input checked="" type="checkbox"/>	Hand Tools <input checked="" type="checkbox"/>	DPP & SRP Plans <input checked="" type="checkbox"/>

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## 7.0 DISCHARGE PREVENTION PLAN

The Legacy Reserves Discharge Prevention Plan is considered to be an integral part of this SPCC Plan. The Discharge Prevention Plan details information and procedures for: facility inspection, facility drainage, spill reporting and analysis, personnel training, and drilling and work over activities.

1. A section for filing required Facility Inspection Forms can be found at the end of this section of the SPCC Plan.
2. A section for filing required Spill Report Forms can be found at the end of this section of the SPCC Plan.

## 8.0 SPILL RESPONSE PLAN

The Legacy Reserves Spill Response Plan is considered to be an integral part of this SPCC Plan. The Spill Response Plan provides information and procedures to be utilized in the event of a discharge of oil from the subject facility.

## 9.0 PERSONNEL AND EQUIPMENT AVAILABLE FOR RESPONSE

1. See Spill Response (Emergency Response) Plan, Appendix A, for listing of Company Personnel and Equipment.
2. See Spill Response (Emergency Response) Plan, Appendix B, for listing of Contract Personnel and Equipment.

## 10. ACTION ITEMS

Any action items that are required by this Plan or recommended by the Professional Engineer to bring the Facility into compliance with the SPCC requirements shall be identified below. This Plan is conditionally approved and certified by the Professional Engineer based upon satisfactory completion and documentation of the Action Items.

ACTION ITEM	COMPLETED	
	DATE	SIGNATURE

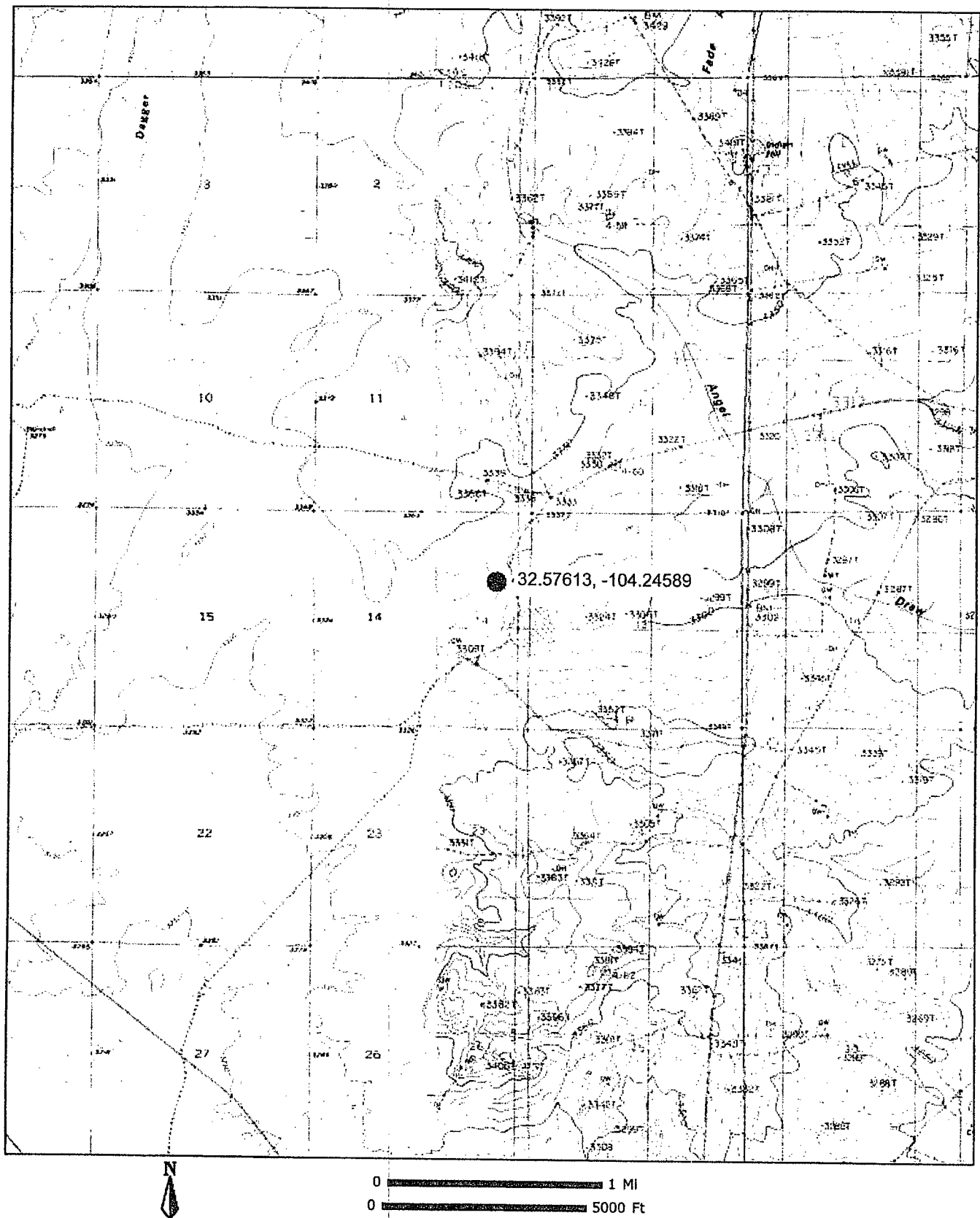
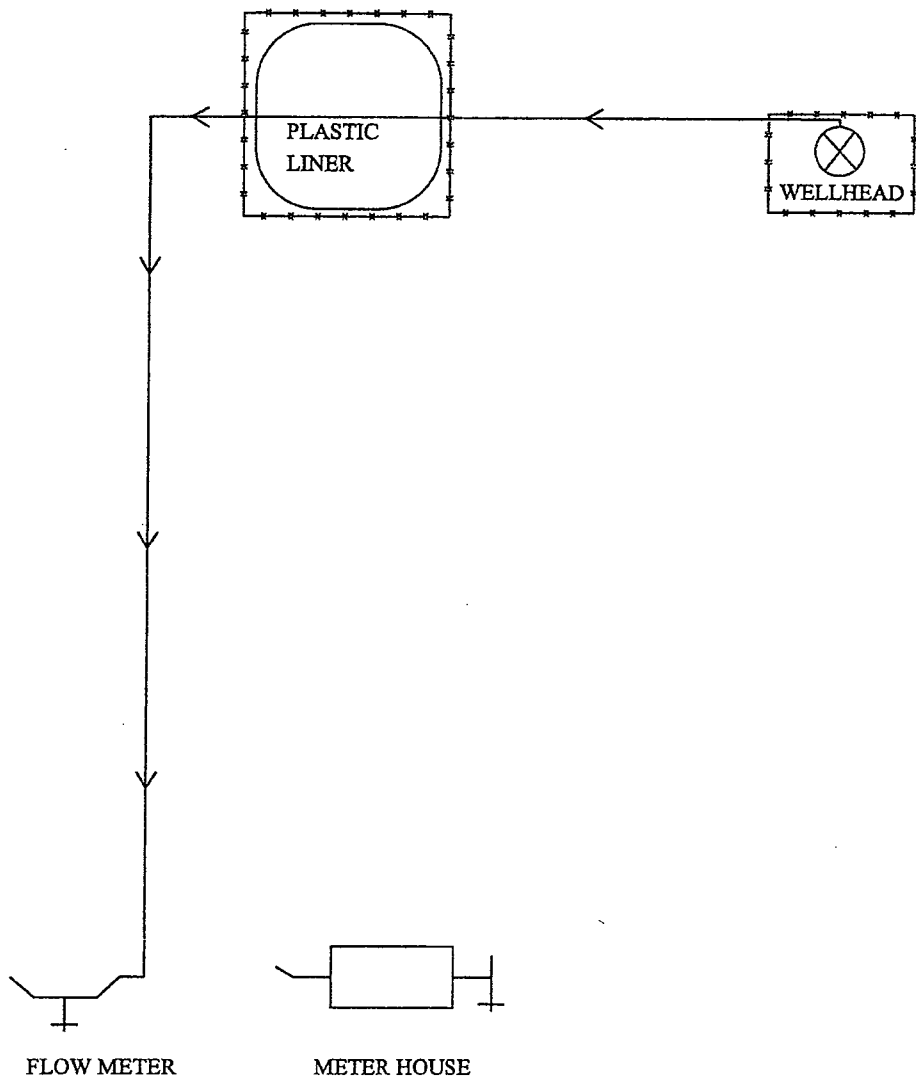


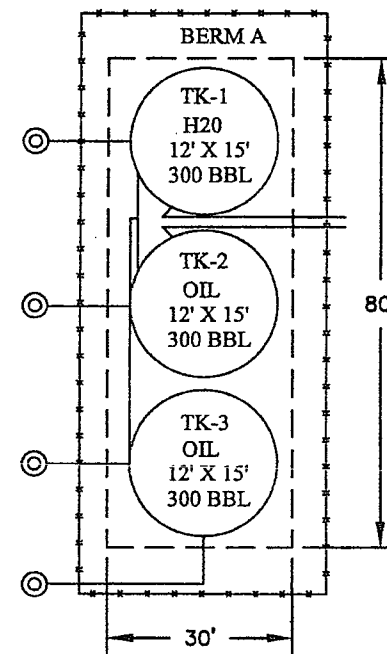
Figure 2-  
Topographic Map

Legacy Reserves / Oxy Hopping Federal #2  
Eddy County, New Mexico



- - Berm
- - - - - Fence
- — — Pipeline
- ⬡ - Oil Staining

SURFACE WATER  
DRAINAGE



Lat.: 32.57613° N  
Long.: -104.24590° W



Date: 06/07/2012

Scale: NTS

Drawn By: EMF

Oxy Hopsing Federal #2  
Legacy Reserves  
Eddy County, New Mexico  
SPCC Site Plan

**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