

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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.
NMNM104730

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
PATTON 18 FED 3

API Well No.

30-015-33451

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
OXY USA INCContact: RYAN NEWPORT
E-Mail: ryan_newport@oxy.com3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 770463b. Phone No. (include area code)
Ph: 713-366-515410. Field and Pool or Exploratory Area
SAND DUNES

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

11. County or Parish, State

EDDY COUNTY 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 type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Right of Way
	<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 recomple 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 recomple 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.

We need to install a treated produced water pond with access road located in Section 4, T24S-R31E, Eddy County, NM as seen on the attached plat. This pond will be 12.727 acres in size.

In addition to this treated produced water pond we also need to install a re-cycled water facility with access road. This facility will be located in Section 4, T24S-R31E, Eddy County, NM as seen on the attached plat. This re-cycled water facility will be 1.148 acres in size and will be used to treat the water that will be going into our treated produced water pond.

These two facilities are part of our treated produced water project for both our Sand Dunes & Mesa

Adopted for record

NM/OCD

Requires permit/Registration on form C-147 w/NMOCs

NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 22 2017

RECEIVED

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

Electronic Submission #378415 verified by the BLM Well Information System
For OXY USA INC, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/13/2017 ()

Name (Printed/Typed) RYAN NEWPORT

Title LANDMAN

Signature (Electronic Submission)

Date 06/08/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

NEN for L&M

Date

11/06/17

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

CFO

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 **

OXY USA Inc
APD ATTACHMENT: SPUDDER RIG DATA

OPERATOR NAME / NUMBER: OXY USA Inc

1. SUMMARY OF REQUEST:

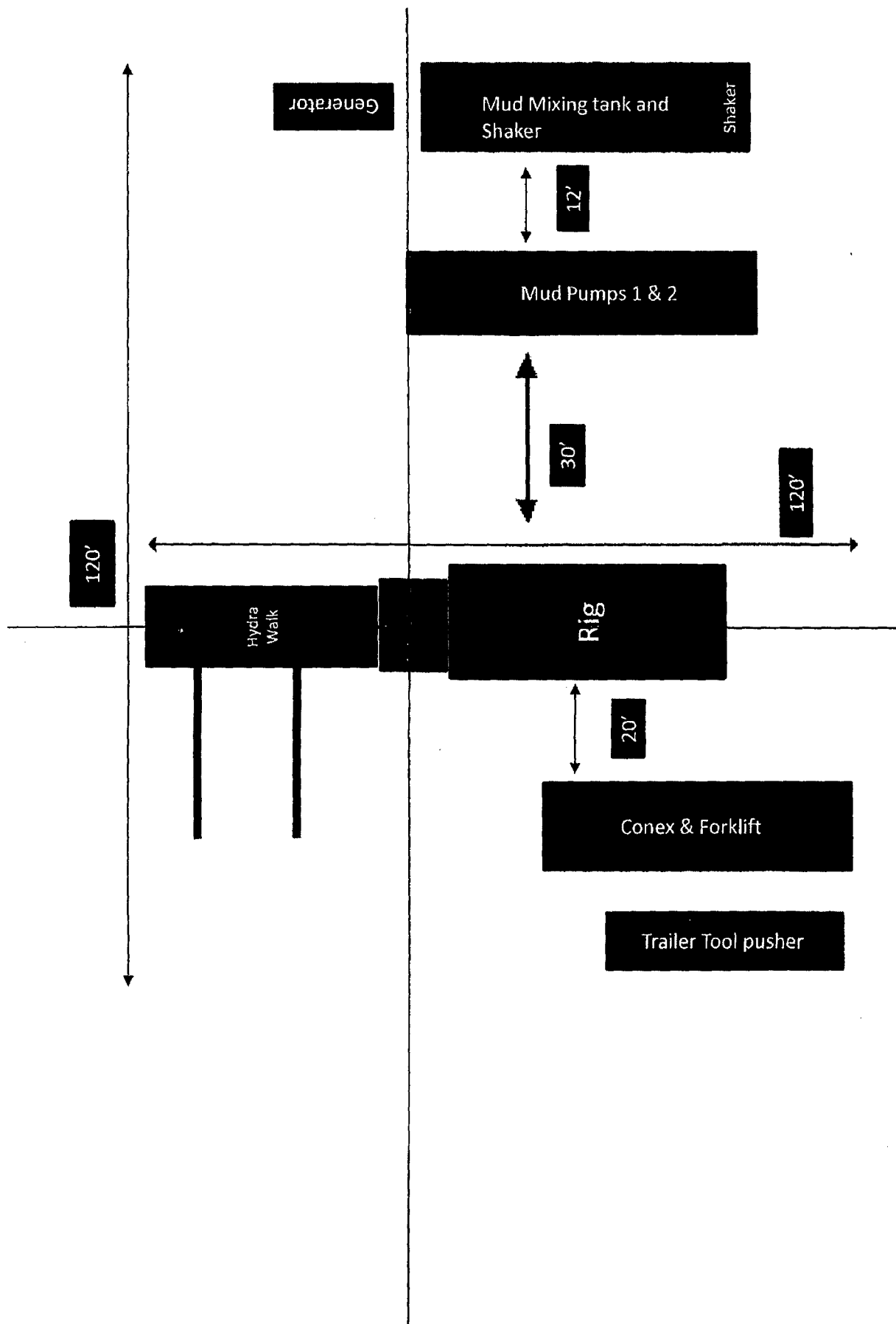
Oxy USA respectfully requests approval for the following operations for the surface hole in the drill plan:

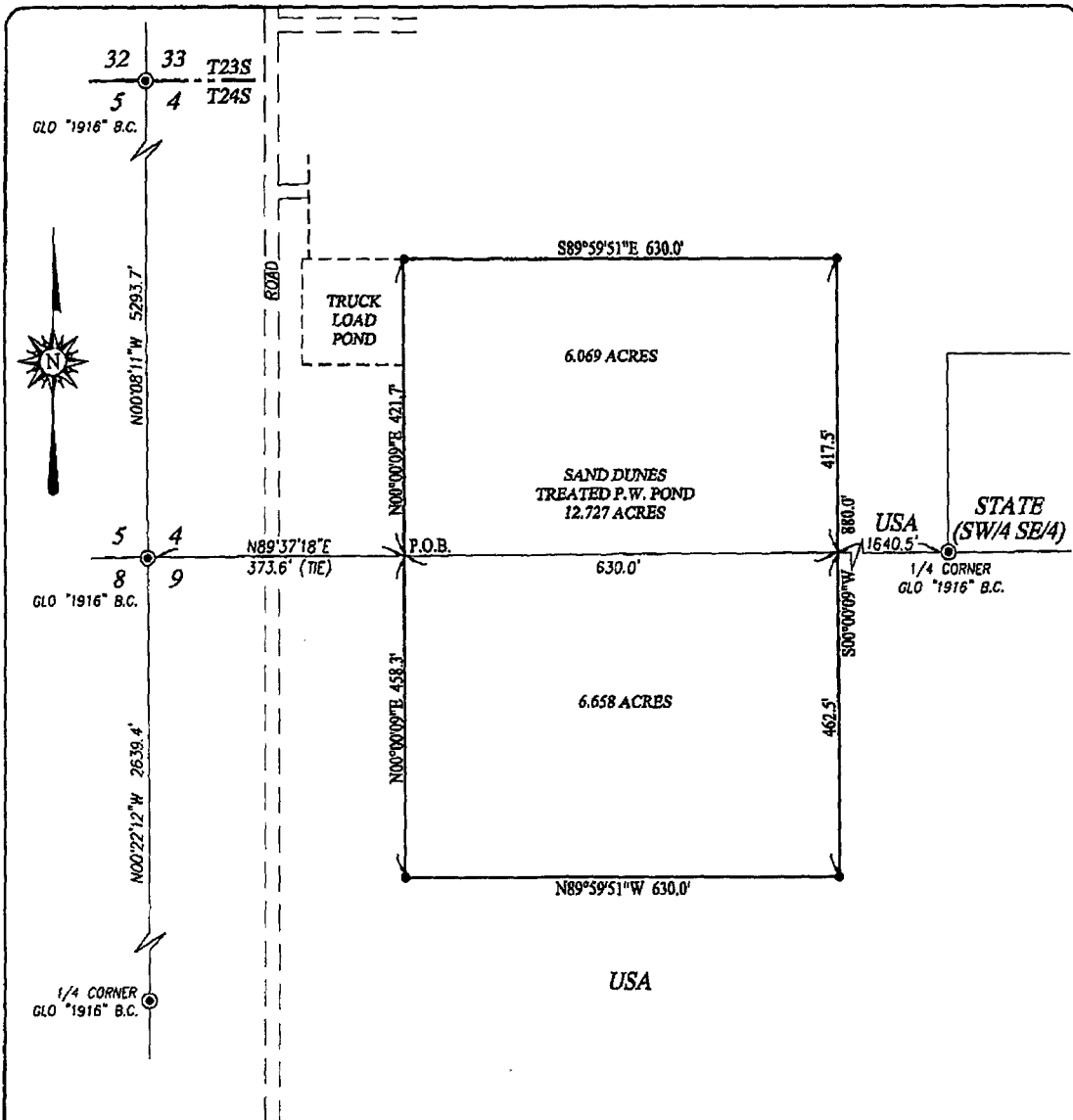
1. Utilize a spudder rig to pre-set surface casing for time and cost savings.

2. Description of Operations

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and the WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
 - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
 - b. The BLM will be contacted / notified 24 hours before the larger rig moves back on the pre-set locations.
7. Oxy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, Oxy will secure the wellhead area by placing a guard rail around the cellar area.

Spudder Rig Layout





DESCRIPTION:

A TRACT SITUATED IN THE SOUTHWEST QUARTER OF SECTION 4 AND NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE WHICH LIES N89°37'18"E 373.6 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 4; THEN N00°00'09"E 421.7 FEET; THEN S89°59'51"E 630.0 FEET; THEN S00°00'09"W 880.0 FEET; THEN N89°59'51"W 630.0 FEET; THEN N00°00'09"E 458.3 FEET TO THE POINT OF BEGINNING AND CONTAINING 12.727 ACRES MORE OR LESS.

SECTION 4 6.069 ACRES
SECTION 9 6.658 ACRES

LEGEND

- ⊙ DENOTES FOUND CORNER AS NOTED
- DENOTES SET SPIKE NAIL

NOTE

BEARINGS SHOWN HEREON ARE MERIDIAN OR TRUE AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, "NEW MEXICO, EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON

DATE: 03/31/2017



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwscbiz
TBPLSF 10021000

OXY U.S.A. INC.

SURVEY FOR A 880 x 630 TRACT FOR THE SAND DUNES
TREATED P.W. POND SITUATED IN THE SW/4 OF SECTION 4
AND NW/4 OF SECTION 9, TOWNSHIP 24 SOUTH, RANGE 31
EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 3/30/17	CAD Date: 3/31/17	Drawn By: ACK
W.O. No.: 17110253	Rev.:	Rel. W.O.: 17110059
		Sheet 1 of 1

32 33 T23S
5 4 T24S
GLO "1916" B.C.

S09°18'27"E
1081.1' (TIE)

PROPOSED RD.

S89°49'20"E 200.0'

P.O.B.

N00°08'11"W 5293.7'

N00°10'40"E 250.0'

SAND DUNES RE-CYCLED
WATER FACILITY
1.148 ACRES

S00°10'40"W 250.0'

N89°49'20"W 200.0'

USA

5 4
8 9
GLO "1916" B.C.

LEGEND

- DENOTES FOUND CORNER AS NOTED
- DENOTES SET SPIKE NAIL

NOTE

BEARINGS SHOWN HEREON ARE MEASUREMENTS AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, NEW MEXICO EAST ZONE, NORTH AMERICAN DATUM, 1983. DISTANCES ARE SURFACE VALUES.

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND, WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON *Ronald J. Eidson*

DATE: 02/02/2017

DESCRIPTION:

A TRACT SITUATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER WHICH LIES S09°18'27"E 1081.1 FEET FROM THE NORTHWEST CORNER; THEN S89°49'20"E 200.0 FEET; THEN S00°10'40"W 250.0 FEET; THEN N89°49'20"W 200.0 FEET; THEN N00°10'40"E 250.0 FEET TO THE POINT OF BEGINNING AND CONTAINING 1.148 ACRES MORE OR LESS.

60 0 60 120 Feet
Scale: 1"=60'

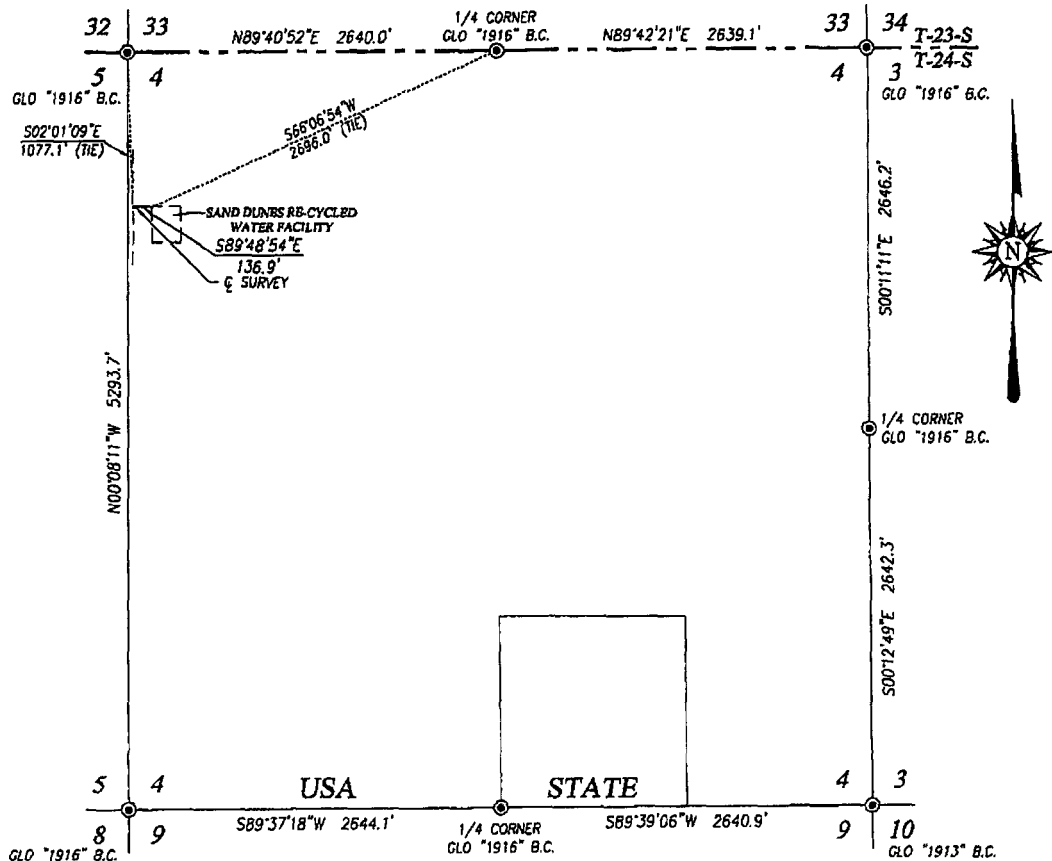
OXY U.S.A. INC.

SURVEY FOR A 200 x 250 TRACT FOR THE SAND DUNES RE-CYCLED WATER FACILITY SITUATED IN THE SW/4 OF SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 1/27/17	CAD Date: 2/1/17	Drawn By: ACK
W.O. No.: 17110061	Rev: .	Rel. W.O.:
		Sheet 1 of 1



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000



DESCRIPTION

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 136.9 FEET OR 0.026 MILES IN LENGTH CROSSING USA LAND IN SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

BEARINGS SHOWN HEREON ARE MEASURED OR CALCULATED AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983, EAST ZONE. DISTANCES ARE SURFACE VALUES.

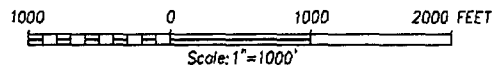
I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED, WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON *Ronald J. Eidson*

DATE: 02/02/2017

LEGEND

● DENOTES FOUND CORNER AS NOTED



OXY U.S.A. INC.

SURVEY FOR AN ACCESS ROAD TO THE SAND DUNES RE-CYCLED WATER FACILITY CROSSING SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO HOBBS, N.M. 88240
 (575) 393-3117 www.jwsc.biz
 TBPLS# 10021000

Survey Date: 1/27/17 CAD Date: 2/02/17 Drawn By: ACK
 W.O. No.: 17110061 Rev.: Rel. W.O.: Sheet 1 of 1

BLM LEASE NUMBER: NMNM-66925 and NMNM-104730

COMPANY NAME: Oxy USA, Inc.

ASSOCIATED WELL NAME: Water Recycle Project in Eddy and Lea Counties, New Mexico

FRAC POND CONDITIONS OF APPROVAL

A copy of the application (APD, Grant, or Sundry Notice) and attachments, including stipulations, survey plat and diagram, will be on location during construction. BLM personnel may request to see a copy of your permit during construction to ensure compliance with all conditions of approval.

Holder agrees to comply with the following conditions of approval to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this permit.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated.

3. Required Standard Conditions of Approval:

a. Notification

Contact the Supervisory Environmental Protection Specialist, Jim Amos, at 575-234-5909 at least 24 hours prior to starting construction.

b. Freshwater Only

The frac pond will only be authorized to contain freshwater and testing of water quality is required. Additives are not allowed without consent of the authorized officer in writing.

c. Contamination

If at any time the water in the frac pond becomes polluted with salts or other contaminants, use of the frac pond will cease and desist, and all liquids will be removed from the frac pond and disposed of properly. The operator will preclude releases of oil into open pits. The operator must remove any accumulation of oil, condensate, or contaminant in a pit within 48 hours of discovery.

d. Authorized Disturbance

Confine all construction and maintenance activity to the approved authorized area applied for in the application.

e. Facilities

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations. Grey-water, sewage, and trash shall be removed from the site and disposed of properly at a state approved facility.

f. Escape Ramps

The operator will construct and maintain frac ponds to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in frac ponds. Escape ramps must be installed at every corner of

the frac pond and in the center of each side if that side exceeds 100 feet in length. Escape ramps must be in contact with the side of the frac pond, bottom of the frac pond, and the top of the frac pond berm. Escape ramps cannot be made of metal and cannot be steeper than a 3:1 slope (Horizontal Distance: Vertical Distance) or 30% slope. (*Examples of escape ramps: 12" wide wooden planks wrapped in matting, felt lining, etc.*)

g. Frac Pond Pipelines

Temporary pipelines flowing from the frac pond to the target well will be laid along existing roadways unless an exception has been granted by the authorized officer in writing.

h. Mineral Material from Excavation

Mineral materials extracted during construction of the frac pond will be stored on-location and/or used for constructing the frac pond.

i. Frac Pond Liner

The frac pond will be lined with at least a 20 mil. plastic liner.

j. Topsoil Stockpile

The operator shall strip at least the top 6 inches of soil (root zone) from the entire frac pond area and stockpile the topsoil approximately 25 feet outside the bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion. Topsoil shall not be used for constructing the frac pond. The topsoil will be used for final reclamation purposes only.

k. Frac Pond Fence

The operator will install and maintain enclosure fencing on all sides of the frac pond to prevent access to public, livestock, and large forms of wildlife. The fence shall be installed at the base of the berm and never on top of the berm.

Construction of the fence shall consist of steel and/or wooden posts set firmly into natural ground. Hog panel or chain-link fencing must be used as the fence and tied securely to the fence posts. Barbed-wire fencing or electric fences shall not be used. The fence height shall not be shorter than six (6) feet. The erected fence shall be maintained in adequate condition until the frac pond is reclaimed.

l. Erosion Prevention

Install earthen erosion-control structures as are suitable for the specific terrain and soil conditions.

m. Reclamation Start

- I. Reclamation efforts will commence immediately after the frac pond is no longer needed for the purpose of completing wells.
- II. Within 3 months of completion of frac operations on associated wells, all earthwork and final reclamation must be completed. This includes reclaiming and/or removal of:
 - i. Any roads approved for use with the pond
 - ii. Surface water lines
 - iii. Tanks, pumps, fencing etc.

Requirements for Operations and Final Reclamation:

4. If, during any phase of the construction, operation, maintenance, or termination of the frac pond, any pollutant should be released from the contaminated frac pond, the control and total removal, disposal, and cleaning up of such pollutant, wherever found, shall be the responsibility of holder, regardless of fault.

Upon failure of holder to control, dispose of, or clean up such discharge, or to repair all damages resulting there-from, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

6. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

7. After all disturbed areas have been satisfactorily contoured and prepared for seeding the location needs to be revegetated with the seed mixture provided. Seeding may need to be repeated until revegetation is successful. Operators shall contact Jim Amos, Supervisor, Environmental Protection – (575)234-5909, **prior** to beginning surface reclamation operations.

8. Seeding is required: Use the following seed mix.

- | | |
|--|--|
| <input type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3 |
| <input checked="" type="checkbox"/> seed mixture 2 | <input type="checkbox"/> seed mixture 4 |
| <input type="checkbox"/> LPC mixture | <input type="checkbox"/> Aplomado Falcon mix |

Special Stipulations:

Measures to minimize impacts to wildlife are described in the standard COAs (BLM 1997: Appendix 2, BLM 2008a:7,8). Special requirements for this project include:

- An audible wildlife protection system is recommended to satisfy the requirements of NMAC 19.15.34.12(E). The audible system uses intermittent sound signals at various

frequencies to deter birds from the area. Along with the audible system, the containments will be inspected monthly for any potential wildlife concerns.

- A minimum 6-foot high fence with chain link and breakaway on the short side of the containment area.

In May 2008, the Pecos District Special Status Species Resource Management Plan Amendment (RMPA) was approved and is being implemented. In addition to the standard practices that minimize impacts, as listed above, the following COA will apply:

- Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken, to minimize noise associated impacts which could disrupt breeding and nesting activities.
- The entire pond areas and water treatment facilities would be bermed to prevent salt and other chemical contaminants from leaving the areas. Topsoil would not be used to construct the berms. No water flow from the uphill side(s) of the bermed areas would be allowed to enter ponds or other water facilities. The berm would be maintained through the life of the proposed project and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the water features during the life of the proposed project would be quickly corrected and proper measures would be taken to prevent future erosion.

BLM LEASE NUMBER: NMNM-66925 and NMNM-104730

COMPANY NAME: Oxy USA, Inc.

ASSOCIATED WELL NAME: Water Recycle Project in Eddy and Lea Counties, New Mexico

PRODUCED WATER FRAC POND CONDITIONS OF APPROVAL

A copy of the application (APD, Grant, or Sundry Notice) and attachments, including stipulations, survey plat and diagram, will be on location during construction. BLM personnel may request to see a copy of your permit during construction to ensure compliance with all conditions of approval. Construction will cease until the permit is on location.

Holder agrees to comply with the following conditions of approval to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this permit.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated.
3. Required Standard Conditions of Approval:
 - a. **Notification**
Contact the Supervisory Environmental Protection Specialist, Jim Amos, at 575-234-5909 at least 24 hours prior to starting construction.
 - b. **Contamination**
The operator will preclude releases of oil into open ponds. The operator must remove any accumulation of oil, condensate, or contaminant in a pond within 48 hours of discovery.
 - c. **Authorized Disturbance**
Confine all construction and maintenance activity to the approved authorized area applied for in the application.
 - d. **Liner**
The pond must have at least two 60 mil liners. The pond liner shall be maintained in good working condition, with no tears or holes, until the pond is closed. No trash, pipe, barrels, wireline, or metal equipment is permitted in the pond.
 - e. **Freeboard**
Ponds shall be constructed to preclude the accumulation of precipitation runoff and maintain a minimum of 2 feet of freeboard between the maximum fluid level and the lowest point of containment at all times. If pond fluids threaten to rise to a level allowing less than 2 feet of freeboard, steps shall immediately be taken to prevent introduction of additional fluids until sufficient pond capacity has been restored through fluid removal or an alternative containment method is approved and installed.
 - f. **Monitor:**
Personnel or a monitor must be onsite when the pond is in use.

g. **Escape Ramps**

The operator will construct and maintain frac ponds to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in frac ponds. Escape ramps must be installed at every corner of the frac pond and in the center of each side if that side exceeds 100 feet in length. Escape ramps must be in contact with the side of the frac pond, bottom of the frac pond, and the top of the frac pond berm. Escape ramps cannot be made of metal and cannot be steeper than a 3:1 slope (Horizontal Distance: Vertical Distance) or 30% slope. (*Examples of escape ramps: 12" wide wooden planks wrapped in matting, felt lining, etc.*)

h. **Exclosure Netting**

The operator will prevent humans, wildlife (including avian wildlife), and livestock access to fluid ponds that contain or have potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will install approved netting over ponds containing fluid in accordance with the requirements below. (*Note: The BLM does not approve of the use of flagging, strobe lights, metal reflectors, or noise makers as techniques for deterring wildlife.*)

Minimum Netting Requirements - The operator will:

- Construct a rigid structure made of steel tubing or wooden posts with cable strung across the pond at no more than seven (7) foot intervals along the X- and Y-axes to form a grid of 7 foot squares.
- Suspend netting a minimum of 2 feet above the fluid surface.
- Use a maximum netting mesh size of 1 ½ inches to exclude most birds.
- Cover the top and all sides of the netting support frame with netting and secure the netting at the ground surface around the entire pond to prevent wildlife entry at the netting edges. (***Note:*** *Hog wire panels or other wire mesh panels or fencing used on the sides of the netting support frame is ineffective in excluding small wildlife and birds unless covered by the smaller mesh netting.*)
- Installation of the net must commence immediately after high activity operations cease. High activity operations include drilling operations and fracturing operations.
- Monitor and maintain the netting sufficiently to ensure the netting is functioning as intended, has not entrapped wildlife, and is free of holes and gaps greater than 1 ½ inches.
- Flagging or tags must be installed on the net in the center of the pond.

i. **Mineral Material from Excavation**

Mineral materials extracted during construction of the frac pond will be stored on-location and/or used for constructing the frac pond.

j. **Topsoil Stockpile**

The operator shall strip at least the top 6 inches of soil (root zone) from the entire frac pond area and stockpile the topsoil approximately 25 feet outside the bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion. Topsoil shall not be used for constructing the produced water pond. The topsoil will be used for final reclamation purposes only.

k. **Frac Pond Fence**

The operator will install and maintain enclosure fencing on all sides of the frac pond to prevent access to public, livestock, and large forms of wildlife. The fence shall be installed at the base of the berm and never on top of the berm.

Construction of the fence shall consist of steel and/or wooden posts set firmly into natural ground. Hog panel or chain-link fencing must be used as the fence and tied securely to the fence posts. Barbed-wire fencing or electric fences shall not be used. The fence height shall not be shorter than six (6) feet. The erected fence shall be maintained in adequate condition until the frac pond is reclaimed.

l. **Erosion Prevention**

Install earthen erosion-control structures as are suitable for the specific terrain and soil conditions.

m. **Reclamation Start**

- I. Reclamation efforts will commence immediately after the frac pond is no longer needed for the purpose of completing wells.
- II. Within 3 months of completion of frac operations on associated wells, all earthwork and final reclamation must be completed. This includes reclaiming and/or removal of:
 - i. Any roads approved for use with the pond
 - ii. Surface water lines
 - iii. Tanks, pumps, fencing etc.

Requirements for Operations and Final Reclamation:

4. If, during any phase of the construction, operation, maintenance, or termination of the frac pond, any pollutant should be released from the contaminated frac pond, the control and total removal, disposal, and cleaning up of such pollutant, wherever found, shall be the responsibility of holder, regardless of fault.

Upon failure of holder to control, dispose of, or clean up such discharge, or to repair all damages resulting there-from, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to

determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

6. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

7. After all disturbed areas have been satisfactorily contoured and prepared for seeding the location needs to be revegetated with the seed mixture provided. Seeding may need to be repeated until revegetation is successful. Operators shall contact Jim Amos, Supervisor, Environmental Protection – (575)234-5909, **prior** to beginning surface reclamation operations.

8. Seeding is required: Use the following seed mix.

- | | |
|--|--|
| <input type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3 |
| <input checked="" type="checkbox"/> seed mixture 2 | <input type="checkbox"/> seed mixture 4 |
| <input type="checkbox"/> LPC mixture | <input type="checkbox"/> Aplomado Falcon mix |

9. Special Stipulations:

Measures to minimize impacts to wildlife are described in the standard COAs (BLM 1997: Appendix 2, BLM 2008a:7,8). Special requirements for this project include:

- An audible wildlife protection system is recommended to satisfy the requirements of NMAC 19.15.34.12(E). The audible system uses intermittent sound signals at various frequencies to deter birds from the area. Along with the audible system, the containments will be inspected monthly for any potential wildlife concerns.
- A minimum 6-foot high fence with chain link and breakaway on the short side of the containment area.

In May 2008, the Pecos District Special Status Species Resource Management Plan Amendment (RMPA) was approved and is being implemented. In addition to the standard practices that minimize impacts, as listed above, the following COA will apply:

- Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken, to minimize noise associated impacts which could disrupt breeding and nesting activities.
- The entire pond areas and water treatment facilities would be bermed to prevent salt and other chemical contaminants from leaving the areas. Topsoil would not be used to construct the berms. No water flow from the uphill side(s) of the bermed areas would be allowed to enter ponds or other water facilities. The berm would be maintained through the life of the proposed project and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the water features during the life of the proposed project would be quickly corrected and proper measures would be taken to prevent future erosion.

Stockpiling of topsoil is required. The topsoil would be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control