Form 3160-5
(June 2015)

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.

Carlsbad
HOBBS OCD
JUN 27 2018
RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM125057
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA/Agreement, Name and/or No. NMNM112723X
	8. Well Name and No. EAST BLINEBRY DRINKARD UNIT 21
2. Name of Operator APACHE CORPORATION Contact: DEAN JARRETT E-Mail: dean.jarrett@apachecorp.com	9. API Well No. 30-025-06523-00-S1
3a. Address 303 VETERANS AIRPARK LANE SUITE 3000 MIDLAND, TX 79705 3b. Phone No. (include area code) Ph: 432-818-1938	10. Field and Pool or Exploratory Area BLINEBRY OIL & GAS EUNICE
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)* Sec 11 T21S R37E NWNE 660FNL 1980FEL	11. County or Parish, State LEA 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Surface Disturbance
	☐ 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 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.

This Sundry is for the approval of approximately 120? feet of buried 2? high pressure fiberglass line across Federal Lease NMNM-125057, in order for the EAST BLINEBRY DRINKARD UNIT (EBDU) #21 (API #30-025-06523) (NW/4 NE/4 Section 11-T21S-R37E; 660 FNL, 1980 FEL) to be converted to an injection well (CTI) within and for the benefit of the EBDU UNIT (NMNM 112723X).

Approved JAC 06/20/2018 DOI-BLM-NM-P020-2018-0586-EA Stipulations attached

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

Electronic Submission #387350 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 10/18/2017 (18PP0015SE)

Name *(Printed/Typed)* CARL YORK — Title LANDMAN

Signature (Electronic Submission) — Date 09/02/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By [signature] — Title AFM — Date 06/26/2018

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.

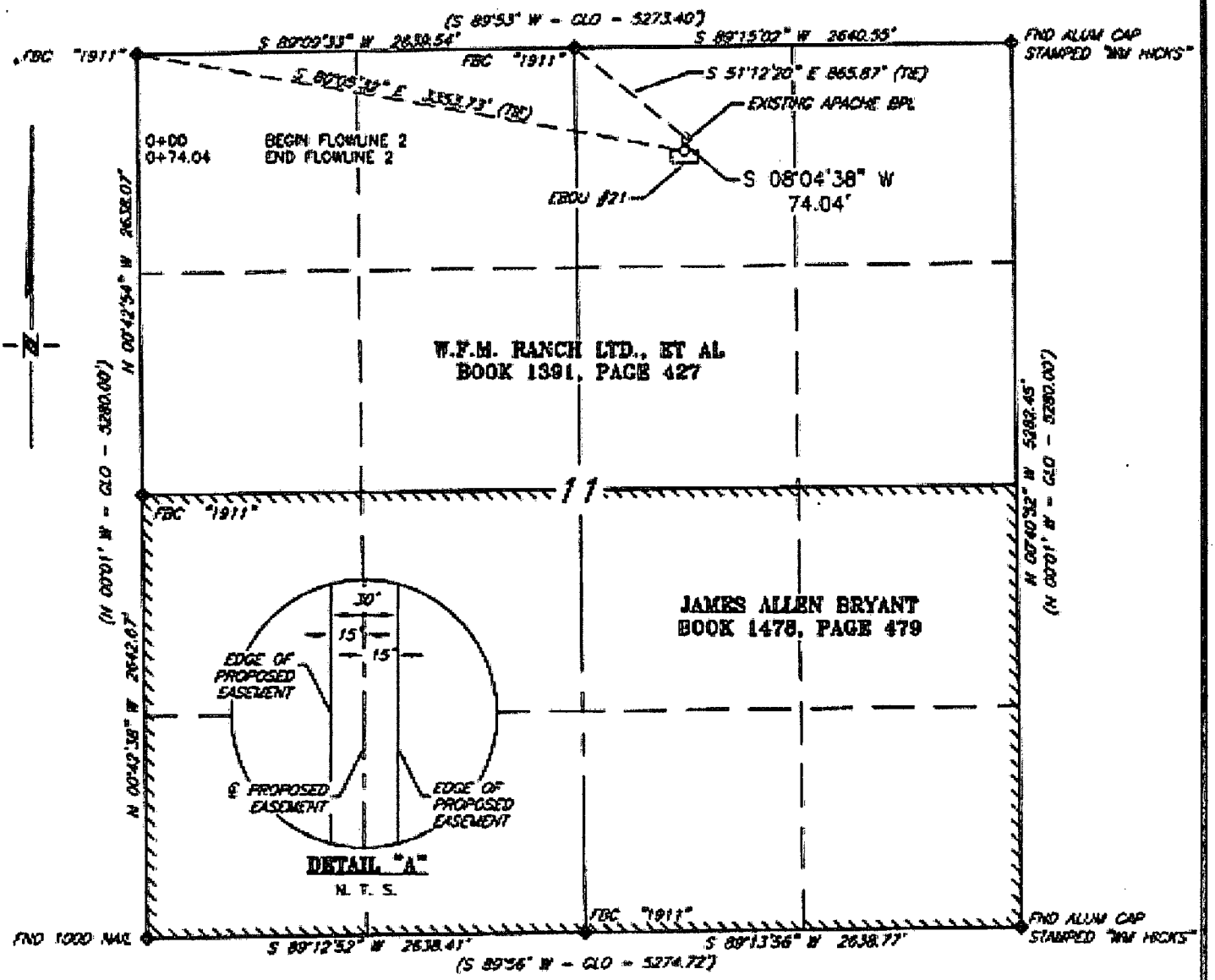
Office CFO

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)

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

MBB/OCD
6/28/2018



DESCRIPTION

A strip of land 30 feet wide, being 74.04 or 4.487 rods in length, lying in Section 11, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of W.F.M. Ranch, LTD., Etal, according to a deed filed for record in Book 1319, Page 427, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 11, which bears, S 51°12'20" E, 865.87 feet from a brass cap, stamped "1911", found for the North quarter corner of Section 11;

Thence S 08°04'38" W, 74.04, to Engr. Sta. 0+74.04, the End of Survey, a point in the Northeast quarter of Section 11, which bears, S 80°05'32" E, 3,353.73 feet from a brass cap, stamped "1911", found for the Northwest corner of Section 11.

Said strip of land contains 0.051 acres, more or less, and is allocated by forties as follows:

NW1/4 NE1/4	4.487 Rods	0.051 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND

LEGEND

( ) RECORD DATA - GLO

◆ FOUND MONUMENT AS NOTED

PROPOSED FLOWLINE

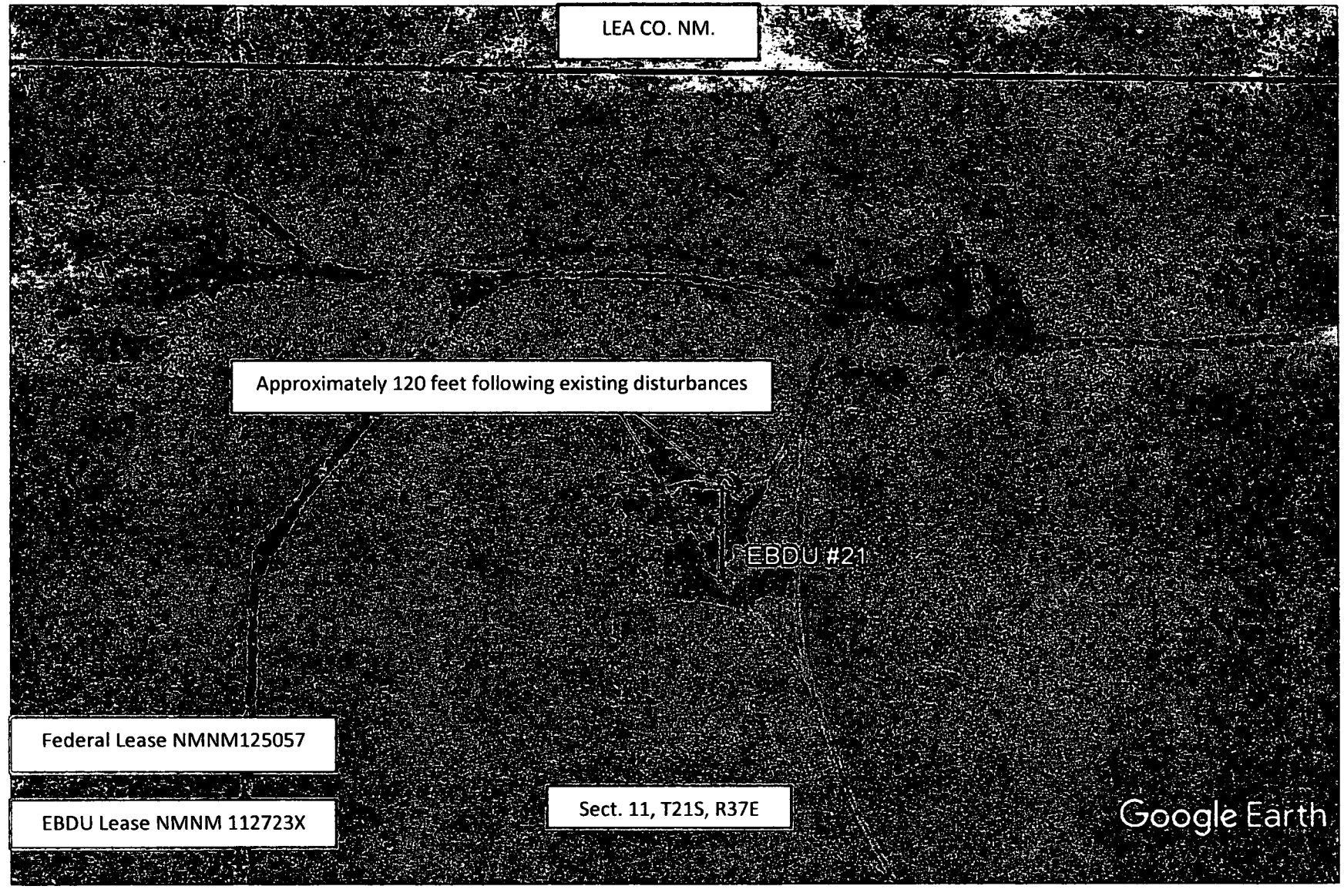
I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT
NEW MEXICO
19680
2/2/2018
PROFESSIONAL SURVEYOR

Apache/East Blinebry Drinkard Unit



BLM LEASE NUMBER: NMNM125057
COMPANY NAME: Apache Corporation
ASSOCIATED WELL NAMES: East Blinebry Drinkard Unit 12, 17, 21, 24, 25, 43, 51

BURIED PIPELINE STIPULATIONS

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

Holder agrees to comply with the following stipulations 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 grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other 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 on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, 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. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
(**X**) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land 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.

17. 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 associated roads, 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.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] 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 the trenches according to the following criteria:

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

19. Special Stipulations:

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the

maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Dunes Sagebrush Lizard Trench Stipulation

- Pre-construction contact with a BLM wildlife biologist is required within 5 days before any ground disturbing activities associated with the project occurs.
- Successful completion of the BLM Trench Stipulation Workshop is required for a non-agency person to be approved as a monitor.
- Any trench left open for (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, an agency approved monitor shall walk the entire length of the open trench and remove all trapped vertebrates. The bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.
- For trenches left open for eight (8) hours or more the following requirements apply:
    - Earthen escape ramps and/or structures (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Metal structures will <u>not</u> be authorized. Options will be discussed in detail at the required Trench Stipulation Workshop.
    - One approved monitor shall be required to survey up to three miles of trench between the hours of 11 AM-2 PM. A daily report (consolidate if there is more than one monitor) on the vertebrates found and removed from the trench shall be provided to the BLM (email/fax is acceptable) the following morning.
    - Prior to backfilling of the trench all structures used as escape ramps will be removed and the bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.

- This stipulation shall apply to the entire length of the project in the DSL habitat polygon regardless of land ownership or CCA/CCAA enrollment status.
  A project closeout will be required within three business days of the completion of the project

<u>Livestock Watering Requirement</u>

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

Seed Mixture for LPC Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

NEPA Log No: IT4RM-P020-2018-0717-EA

Reference Number: --

Project Lead: Jonathan Chastain

Recd Date: 06-04-2018

Project Type: Sundry

Project Title: East Blinebry Drinkard Unit 21

Applicant: Apache Corporation

Routing Started: 06-04-2018

NEPA Checklist

Resource/Activity	Not Present	Not Impacted	**May be Impacted	Reviewer	COAs/Stips Req	Sign Off Date
Wastes, Hazardous or Solid	○	◉	○	Jonathan Chastain	☐	06-04-2018
Public Health and Safety	○	◉	○			
Enivronmental Justice	○	○	◉	Jonathan Chastain	☐	06-04-2018
General Topography/Surface Geology	○	○	◉			
Socio Economics	○	○	◉			
Lands/Realty, ROW	○	◉	○	Jonathan Chastain	☐	06-04-2018
Access/Transportation	○	◉	○			
Vegetation/Forestry	○	○	◉	Jana Onsurez	☐	06-20-2018
Livestock Grazing	○	○	◉			
Invasive, Non-Native Species	○	○	◉			
Soils	○	○	◉	Chelsie Dugan	☐	06-07-2018
Air Quality	○	○	◉			
Floodplains	◉	○	○	Chelsie Dugan	☐	06-07-2018
Water Quality Surface/Ground	○	○	◉			
Watershed	○	○	◉			
Mineral Materials	○	◉	○	Jonathan Chastain	☐	06-04-2018
Potash	◉	○	○	Jonathan Chastain	☐	06-04-2018
Endangered Species	◉	○	○	Dustin Mudgett	☐	06-06-2018
Wetlands/Riparian Zones	○	○	◉			
Special Status Species	○	○	◉			
Wildlife Habitat	○	○	◉			
Karst Resources	○	○	◉	Jonathan Chastain	☐	06-04-2018
ACECs	◉	○	○	Jonathan Chastain	☐	06-04-2018
Wild/Scenic Rivers	◉	○	○	Tracy Hughes	☐	06-13-2018
Wilderness	◉	○	○			
Outdoor Recreation	○	◉	○			
Visual Resources	○	○	◉			
Native American Religious Concerns	◉ Unknown			Bruce Boeke	☐	06-05-2018
Cultural Resources	◉	○	○			
Paleontology	◉ Unknown					

United States Department of the Interior
Bureau of Land Management

Environmental Assessment DOI-BLM-NM-P020-2018-0586-EA

Apache Corporation
Lease Number NMNM125057

East Blinebry Drinkard Unit 12
East Blinebry Drinkard Unit 17
East Blinebry Drinkard Unit 21
East Blinebry Drinkard Unit 24
East Blinebry Drinkard Unit 25
East Blinebry Drinkard Unit 43
East Blinebry Drinkard Unit 51

Sundry for Buried Pipelines

U.S. Department of the Interior
Bureau of Land Management
Pecos District
Carlsbad Field Office
620 E Greene Street
Carlsbad, NM 88220
Phone: (575) 234-5972
FAX: (575) 885-9264

BLM

Carlsbad Field Office

Confidentiality Policy
Any comments, including names and street addresses of respondents, you submit may be made available for public review. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

TABLE OF CONTENTS

1. PURPOSE AND NEED FOR ACTION

1.1. Background

Apache Corporation (Apache) has submitted Sundry Notices (Form 3160-5) to the BLM, Carlsbad Field Office (CFO), and is requesting permission to construct, operate, terminate, upgrade and maintain seven buried pipelines within their East Blinebry Drinkard Unit. The general location is approximately 3.5 miles northeast of Eunice, NM. The legal land description of the proposed project is described as follows:

New Mexico Principal Meridian, Lea County

T. 21 S., R. 37 E.,
Section 11 and 14

Preparing Office:
Pecos District, Carlsbad Field Office
620 East Greene Street
Carlsbad, NM 88220

1.2. Purpose and Need for Action

The purpose of the action is to provide reasonable access across BLM-managed lands for a new battery pad, access road, overhead electric line, and buried flow line. The need for the action is established by BLM's responsibility under the Mineral Leasing Act of 1920 as amended, the Mining and Minerals Policy Act of 1970, the Federal Land Policy and Management Act of 1976, the National Materials and Minerals Policy, Research and Development Act of 1980 and the Federal Onshore Oil and Gas Leasing Reform Act of 1987 to allow reasonable access to develop a federal oil and gas lease.

1.3. Decision to be Made

Based on the information provided in this Environmental Assessment, the BLM Field Manager will decide whether to approve the Sundry Notice with appropriate mitigation measures, or whether to reject it.

1.4. Conformance with Applicable Land Use Plan(s)

The 1988 Carlsbad Resource Management Plan, as amended by the 1997 Carlsbad Approved Resource Management Plan Amendment have been reviewed, and it has been determined that the proposed action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5.

Name of Plan: 1988 Carlsbad Resource Management Plan
Date Approved: September 1988
Decision: [Page 10] "In general, public lands are available for utility and transportation facility development..." [Page 13] "BLM will encourage and facilitate the development by private industry of public land mineral resources so that national and local needs are met, and environmentally sound exploration, extraction, and reclamation practices are used."

Name of Plan: 1997 Carlsbad Approved Resource Management Plan Amendment
Date Approved: October 1997
Goal: [Page 4] "Provide for leasing, exploration and development of oil and gas resources within the Carlsbad Resources Area." The proposed action aids in the development of oil and gas resources and complies with the Surface Use and Occupancy Requirements.

Name of Plan: 2008 Special Status Species Approved Resource Management Plan Amendment
Date Approved: April 2008
Decision: [Page 7] "The BLM will continue to require oil and gas lessees to conduct operations in a manner that will minimize adverse impacts to resources, land uses, and other uses. To that end, the BLM will continue to apply reasonable mitigation measures to all oil and gas activities." The proposed action

will utilize best management practices when developing leases in Lesser Prairie-Chicken and Sand Dune Lizard Habitat. Special mitigation measures will be included into the Pecos District Conditions of Approval.

1.5. Relationship to Statutes, Regulations or Other Plans

The following is a list of statutes that may apply to a proposed action:

- **Archaeological and Historic Preservation Act of 1974 (16 USC 469)** - Provides for the preservation of historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed as the result of (1) flooding, the building of access roads, the erection of workmen's communities, the relocation of railroads and highways, and other alterations of the terrain caused by the construction of a dam by any agency of the United States, or by any private person or corporation holding a license issued by any such agency or (2) any alteration of the terrain caused as a result of any Federal construction project or federally licensed activity or program.
- **Archaeological Resources Protection Act of 1979, as amended (16 USC 470 et seq.)** - Secures, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals.
- **Clean Air Act of 1970, as amended (42 USC 7401 et seq.)** - Defines EPA's responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer.
- **Clean Water Act of 1977, as amended (30 USC 1251)** - Establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.
- **Endangered Species Act of 1973 (16 USC 1531 et seq.)** - Protects critically imperiled species from extinction as a consequence of economic growth and development untempered by adequate concern and conservation.
- **Federal Cave Resources Protection Act of 1988 (16 USC 4301 et seq.)** - Protects significant caves on federal lands by identifying their location, regulating their use, requiring permits for removal of their resources, and prohibiting destructive acts.
- **Lechuguilla Cave Protection Act of 1993** - Protects Lechuguilla Cave and other resources and values in and adjacent to Carlsbad Caverns National Park.
- **Migratory Bird Treaty Act of 1918 (16 USC 703-712)** - Implements the convention for the protection of migratory birds.
- **Mining and Mineral Policy Act of 1970, as amended (30 USC 21)** - Fosters and encourages private enterprise in the development of economically sound and stable industries, and in the orderly and economic development of domestic resources to help assure satisfaction of industrial, security, and environmental needs.
- **National American Graves Protection and Repatriation Act of 1990 (25 USC 301)** - Provides a process for museums and Federal agencies to return certain Native American cultural items such as human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations and includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on Federal and tribal lands, and penalties for noncompliance and illegal trafficking.
- **National Historic Preservation Act of 1966, as amended (16 USC 470)** - Preserves historical and archaeological sites.
- **Wild and Scenic Rivers Act of 1968, as amended (16 USC 1271 et seq.)** - Preserves certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.
- **Wilderness Act of 1964 (16 USC 1131 et seq.)** - Secures for the American people of present and future generations the benefits of an enduring resource of wilderness.

1.6. Scoping, Public Involvement, and Issues

The Carlsbad Field Office (CFO) publishes a NEPA log for public inspection. This log contains a list of proposed and approved actions in the field office. The log is located in the lobby of the CFO as well as on the BLM New Mexico website (http://www.blm.gov/nm/st/en/prog/planning/nepa_logs.html).

The CFO uses Geographic Information Systems (GIS) in order to identify resources that may be affected by the proposed action. A map of the project area is prepared to display the resources in the area and to identify potential issues.

The proposed action was circulated among CFO resource specialists in order to identify any issues associated with the project. The issues that were raised include:

- How would air quality be impacted by the proposed action?
- How would climate change be impacted by the proposed action?
- How would range management be impacted by the proposed action?
- How would soils be impacted by the proposed action?
- How would vegetation be impacted by the proposed action?
- How would watershed resources be impacted by the proposed action?
- How would wildlife habitat be impacted by the proposed action?
- How would visual resources be impacted by the proposed action?
- How would noxious weeds be impacted by the proposed action?
- How would cultural resources be impacted by the proposed action?
- How would paleontological resources be impacted by the proposed action?

2. PROPOSED ACTION AND ALTERNATIVE(S)

2.1. Proposed Action

The BLM Carlsbad Field Office is proposing to allow Apache Corporation to construct, operate and maintain seven buried pipelines within their East Blinebry Drinkard Unit. The pipelines are needed to convert the existing wells into injection wells.

The legal land description of the proposed buried lines are described as follows:

T. 21 S., R. 37 E.:

East Blinebry Drinkard Unit 12, 21, 24 and 25: Section 11 NMPM

East Blinebry Drinkard Unit 17: Start in Section 11 NMPM, End in Section 14 NMPM

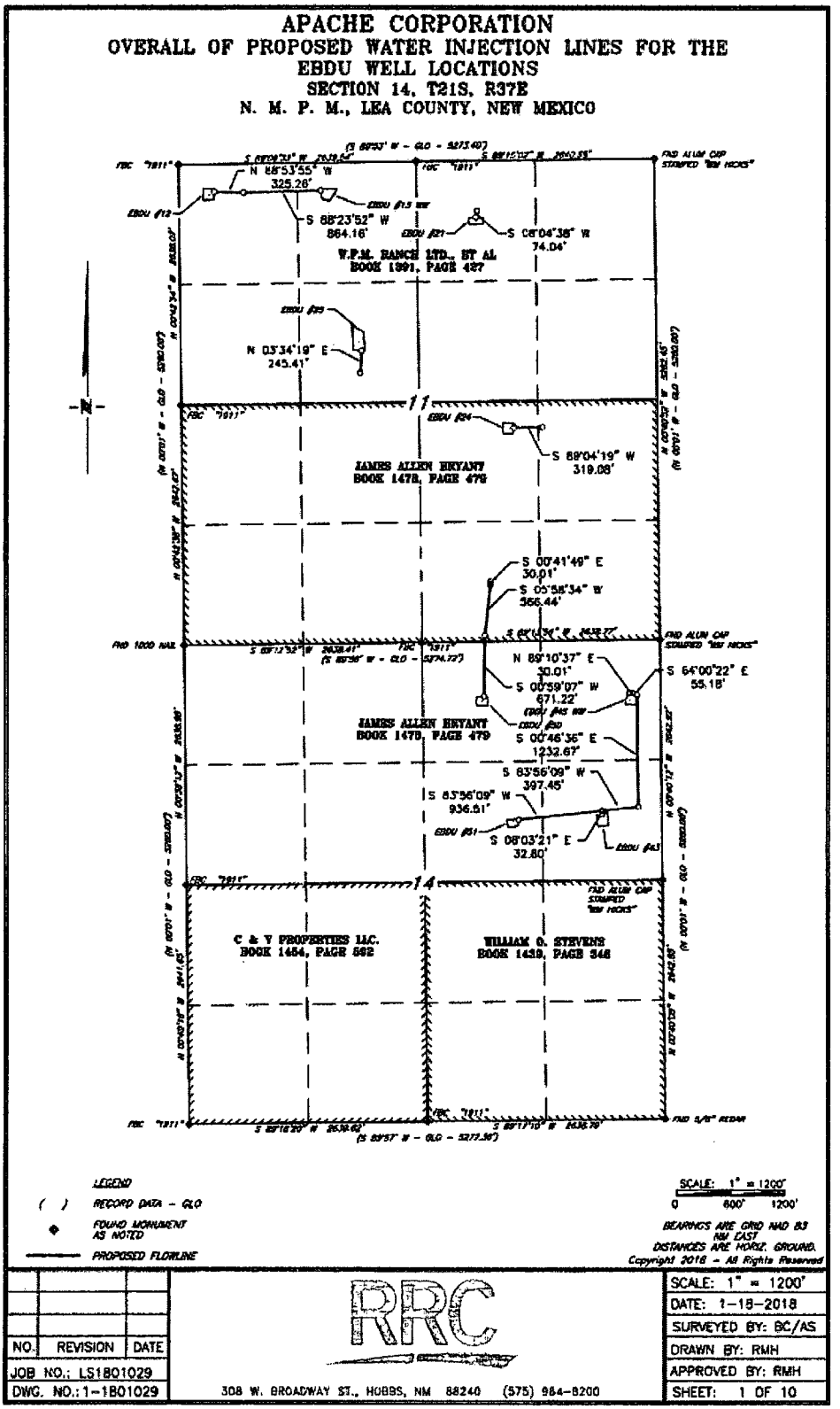
East Blinebry Drinkard Unit wells 43 and 51: Section 14 NMPM

Mitigation Measures: The mitigation measures include:

1. Standard Stipulations for Buried Pipelines
2. Dune Sagebrush Lizard Buried Pipeline Stipulations
3. Lesser Prairie Chicken Timing Stipulation

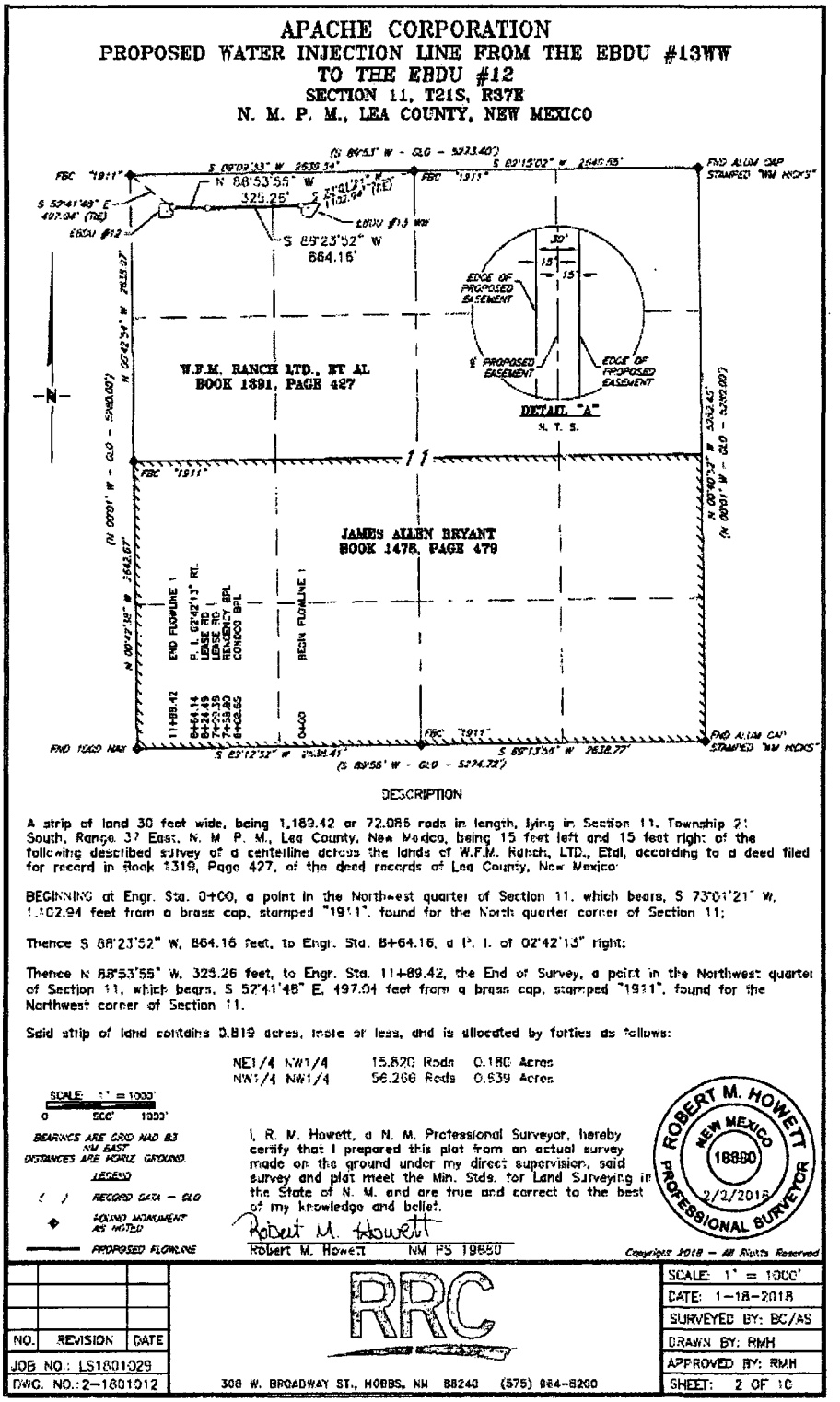
Overview of Proposed Buried Pipelines:

Apache proposes to install seven buried pipelines within sections 11 and 14 of T. 21 S., R. 37 E.



Proposed East Blinebry Drinkard Unit (EBDU) 12 Pipeline:

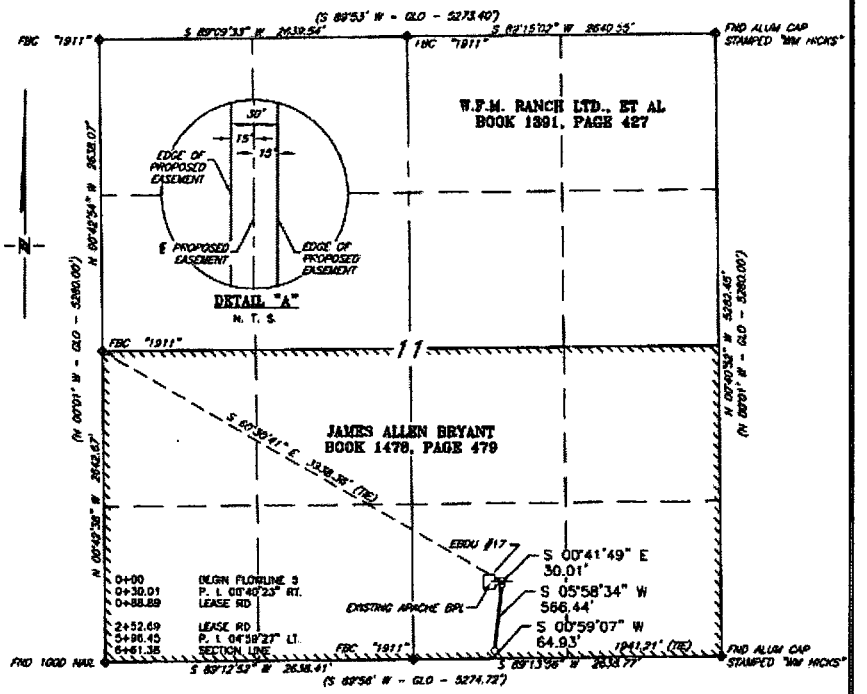
Apache plans to install a 2" fiberglass buried pipeline from the EBDU 12 well pad to the EBDU 13 well pad. The pipeline would exit off the northeast corner of the well location and travel east for approximately 1,189.42' feet along the access road to tie into the EBDU 13 well pad.



Proposed EBDU 17 Pipeline:

Apache plans to install a buried, 2" high pressure fiberglass pipeline from the EBDU 17 well pad to the EBDU 50 pad. The pipeline would exit off the east well pad edge and travel for approximately 30.01'. The pipeline route would then turn south and travel approximately 1,240.66' to tie into the EBDU 50 pad. The total length for the pipeline will be approximately 1,270.67'.

APACHE CORPORATION
PROPOSED WATER INJECTION LINE FOR THE EBDU #17
SECTION 11, T21S, R37E
N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 661.38 or 40.084 rods in length, lying in Section 11, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of James Allen Bryant, according to a deed filed for record in Book 1478, Page 479, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 11, which bears, S 60°30'41" E, 3,938.36 feet from a brass cap, stamped "1911", found for the West quarter corner of Section 11;

Thence S 00°41'49" E, 30.01 feet, to Engr. Sta. 0+30.01, a P. I. of 06°40'23" right;

Thence S 05°58'34" E, 566.44 feet, to Engr. Sta. 5+96.45, a P. I. of 04°59'27" left;

Thence S 00°59'07" W, 64.93 feet, to Engr. Sta. 6+61.38, a point on the South line of Section 11, which bears, S 89°13'56" E, 1,941.21 feet from an aluminum cap, stamped "W.M. Hicks", found for the Southeast corner of Section 11.

Said strip of land contains 0.455 acres, more or less, and is allocated by forties as follows:

SW1/4 SE1/4 40.084 Rods 0.455 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED FLOWLINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

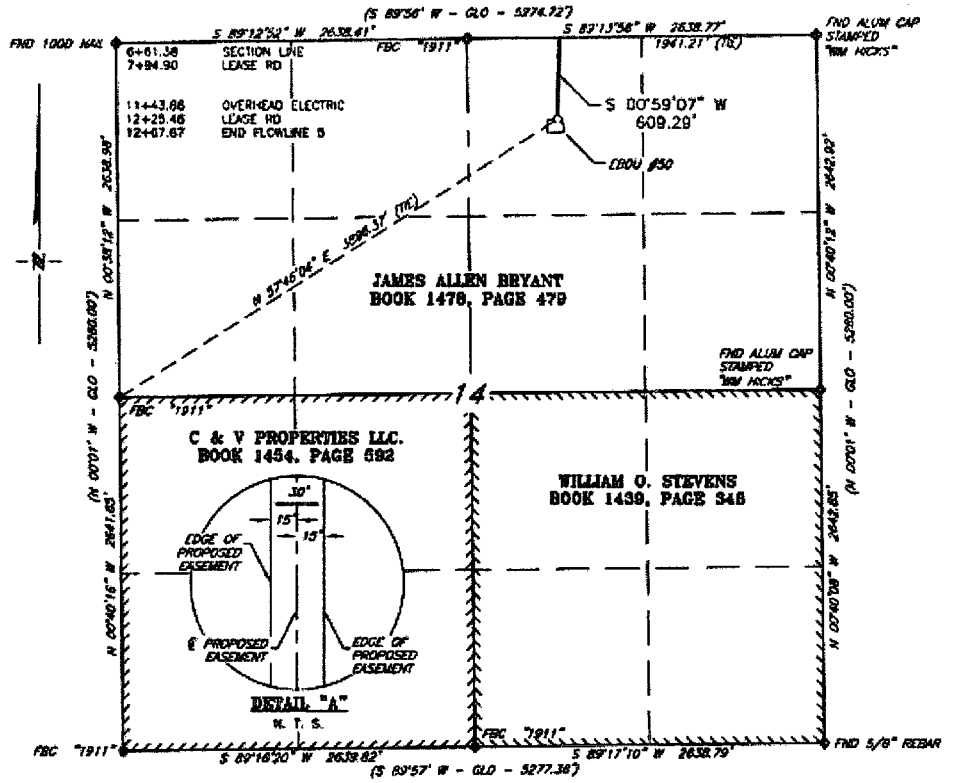
NO.	REVISION	DATE

JOB NO.: LS1801029
DWG. NO.: 7-1801029

RRC
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 1-18-2018
SURVEYED BY: BC/AS
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 7 OF 10

APACHE CORPORATION
PROPOSED WATER INJECTION LINE FOR THE EBDU #17
SECTION 14, T21S, R37E
N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 609.29 or 36.745 rods in length, lying in Section 14, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of James Allen Bryant, according to a deed filed for record in Book 1478, Page 479, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 6+61.38, a point on the North line of Section 14, which bears, S 89°13'56" W, 1,941.21 feet from an aluminum cap, stamped "W.M. Hicks", found for the Northeast corner of Section 14;

Thence S 00°59'07" W, 609.29 feet, to Engr. Sta. 12+67.67, the End of Survey, a point in the Northeast quarter of Section 14, which bears, N 57°46'03" E, 3,896.37 feet from a brass cap, stamped "1911", found for the West quarter corner of Section 14.

Said strip of land contains 0.418 acres, more or less, and is allocated by forties as follows:

NW1/4 NE1/4	36.745 Rods	0.418 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
——— PROPOSED FLOWLINE

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Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS1801029
DWG. NO.: 8-1801029

RRC

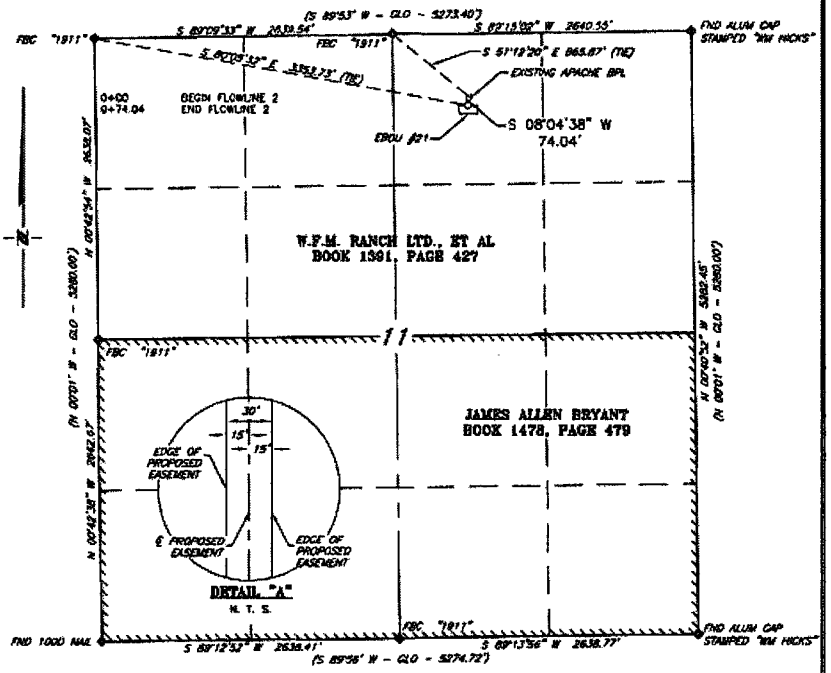
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 1-18-2018
SURVEYED BY: BC/AS
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 8 OF 10

Proposed EBDU 21 Pipeline:

Apache plans to install a buried 2" high pressure fiberglass pipeline to convert the EBDU 21 into an injection well. The pipeline would exit off the north edge of the EBDU 21 pad and travel north for approximately 74.04' to tie into an existing pipeline.

APACHE CORPORATION
PROPOSED WATER INJECTION LINE FOR THE EBDU #21
SECTION 11, T21S, R37E
N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 74.04 or 4.487 rods in length, lying in Section 11, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of W.F.M. Ranch, LTD., Etal, according to a deed filed for record in Book 1319, Page 427, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 11, which bears, S 51°12'20" E, 865.87 feet from a brass cap, stamped "1911", found for the North quarter corner of Section 11;

Thence S 08°04'38" W, 74.04, to Engr. Sta. 0+74.04, the End of Survey, a point in the Northeast quarter of Section 11, which bears, S 80°05'32" E, 3,353.73 feet from a brass cap, stamped "1911", found for the Northwest corner of Section 11.

Said strip of land contains 0.051 acres, more or less, and is allocated by forties as follows:

NW1/4 NE1/4	4.487 Rods	0.051 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
——— PROPOSED FLOWLINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS1801029
DWG. NO.: 3-1801029

RRC

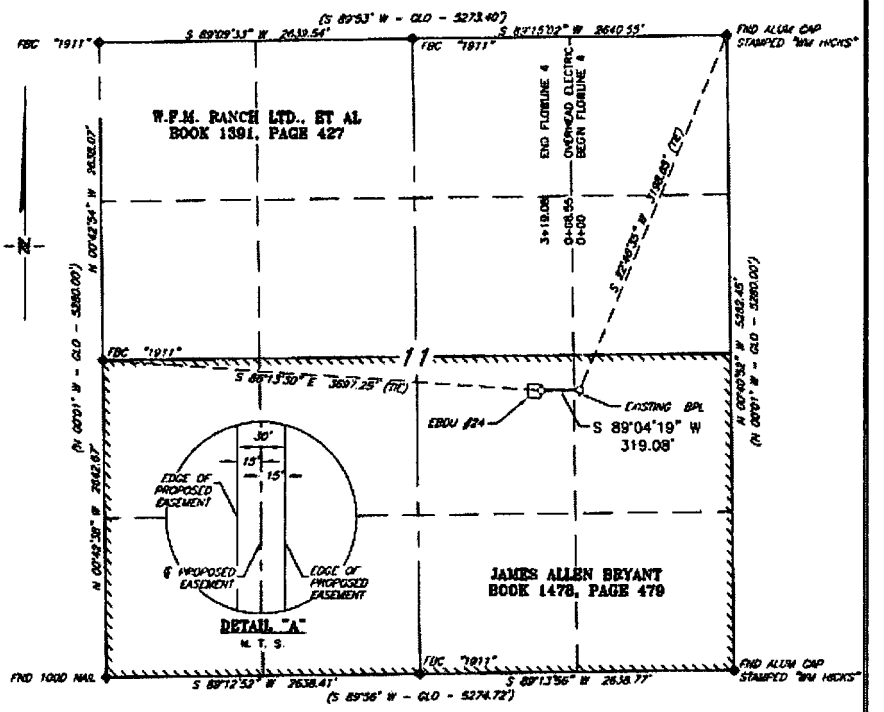
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 1-18-2018
SURVEYED BY: BC/AS
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 3 OF 10

Proposed EBDU 24 Pipeline:

Apache plans to install a 2" buried high pressure fiberglass pipeline to convert the EBDU 24 well into an injection well. The pipeline would exit off the east EBDU 24 pad edge and travel approximately 319.08' to tie into an existing pipeline.

APACHE CORPORATION
PROPOSED WATER INJECTION LINE FOR THE EBDU #24
SECTION 11, T21S, R37E
N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 319.08 or 19.338 rods in length, lying in Section 11, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of James Allen Bryant, according to a deed filed for record in Book 1478, Page 479, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 11, which bears, S 22°46'35" W, 3,198.85 feet from an aluminum cap, stamped "W.M. Hicks", found for the Northeast corner of Section 11;

Thence S 89°04'19" W, 319.08 feet, to Engr. Sta. 3+19.08, the End of Survey, a point in the Southeast quarter of Section 11, which bears, S 86°13'30" E, 3,697.25 feet from a brass cap, stamped "1911", found for the West quarter corner of Section 11.

Said strip of land contains 0.220 acres, more or less, and is allocated by forties as follows:

NE1/4 SE1/4	2.813 Rods	0.032 Acres
NW1/4 SE1/4	16.525 Rods	0.188 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
——— PROPOSED FLOWLINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS1801029
DWG. NO.: 5-1801029

RRC

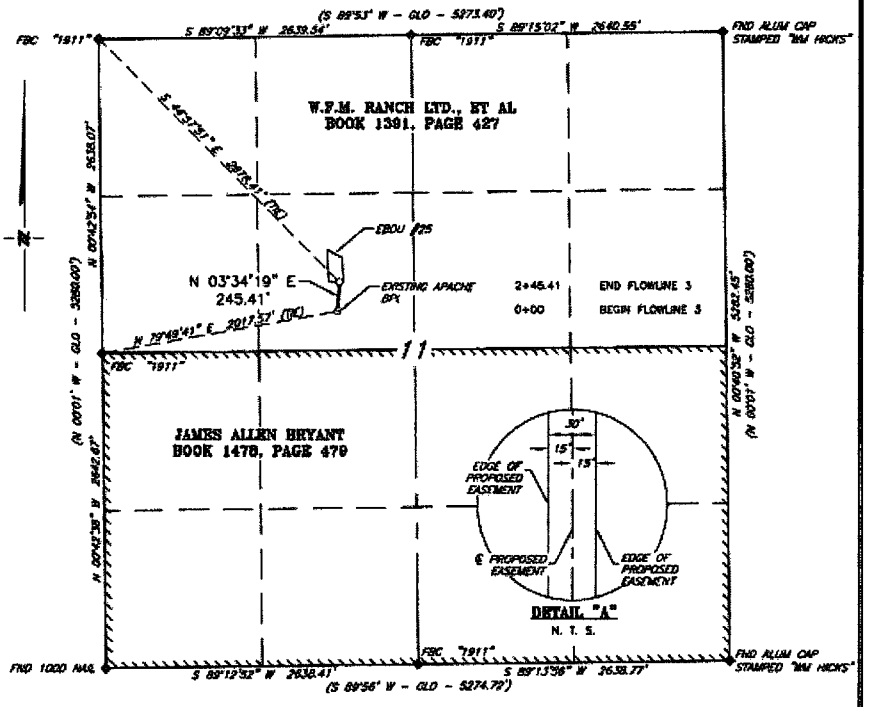
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 1-18-2018
SURVEYED BY: BC/AS
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 5 OF 10

Proposed EBDU 25 Pipeline:

Apache plans to install a 2" buried high pressure buried pipeline to convert the EBDU 25 well into an injection well. The pipeline would exit off the south EBDU 25 well pad edge and travel approximately 245.41' to tie into an existing buried pipeline.

APACHE CORPORATION
PROPOSED WATER INJECTION LINE FOR THE EBDU #25
SECTION 11, T21S, R37E
N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 245.41 or 14.873 rods in length, lying in Section 11, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of W.F.M. Ranch, LTD., Etal, according to a deed filed for record in Book 1319, Page 427, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 11, which bears, N 79°49'41" E, 2,017.57 feet from a brass cap, stamped "1911", found for the West quarter corner of Section 11;

Thence N 03°34'19" E, 245.41 feet, to Engr. Sta. 2+45.41, the End of Survey, a point in the Northwest quarter of Section 11, which bears, S 44°57'51" E, 2,878.41 feet from a brass cap, stamped "1911", found for the Northwest corner of Section 11.

Said strip of land contains 0.011 acres, more or less, and is allocated by forties as follows:

SE1/4 NW1/4	14.873 Rods	0.011 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
——— PROPOSED FLOWLINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS1801029
DWG. NO.: 4-1801029

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 1-18-2018
SURVEYED BY: BC/AS
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 4 OF 10

Proposed EBDU 43 Pipeline:

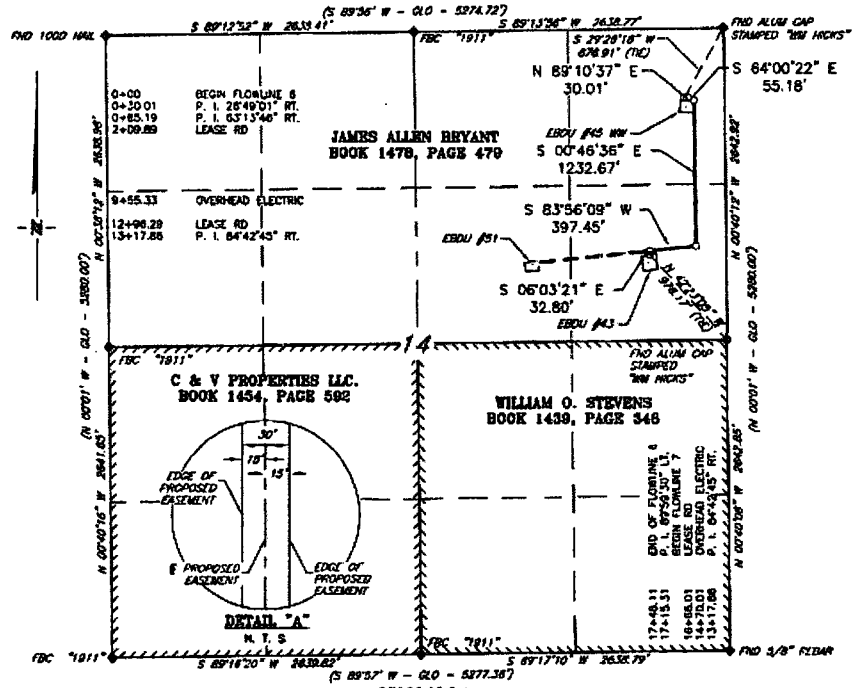
Apache plans to install a 2" buried high pressure buried pipeline to convert the EBDU 43 well into an injection well. The pipeline would exit off the north EBDU 45 well pad edge and travel approximately 30.01' north, 55.18' east, 1,232.67 south, 397.45 west, and then 32.8' south to tie into to tie into the EBDU 43 north pad edge. The total proposed pipeline length is 1,748.11'.

APACHE CORPORATION

PROPOSED WATER INJECTION LINE FOR THE EBDU #43

SECTION 14, T21S, R37E

N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 1,748.11 feet or 105.946 rods in length, lying in Section 14, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of James Allen Bryant, according to a deed filed for record in Book 1478, Page 479, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 14, which bears, S 29°28'18" W, 676.91 feet from an aluminum cap, stamped "W.M. Hicks", found for the Northeast corner of Section 14;

Thence N 89°10'37" E, 30.01 feet, to Engr. Sta. 0+30.01, a P. I. of 26°49'01" right;

Thence S 64°00'22" E, 55.18 feet, to Engr. Sta. 0+85.19, a P. I. of 63°13'46" right;

Thence S 00°46'36" E, 1,232.67 feet, to Engr. Sta. 13+17.86, a P. I. of 84°42'45" right;

Thence S 83°56'09" W, 397.45 feet, to Engr. Sta. 17+15.31, a P. I. of 89°59'30" right.

Thence S 06°03'21" E, 32.80 feet, to Engr. Sta. 17+48.11, the End of Survey, a point in the Northeast quarter of Section 14, which bears, N 42°23'05" W, 978.17 feet from an aluminum cap, stamped "W.M. HICKS", found for the East quarter corner of Section 14.

Said strip of land contains 1.204 acres, more or less, and is allocated by forties as follows:

NE1/4 NE1/4	48.300 Rods	0.549 Acres
SE1/4 NE1/4	57.646 Rods	0.655 Acres

SCALE: 1" = 1000'

0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST. DISTANCES ARE HORIZ. GROUND.

LEGEND

( ) RECORD DATA - GLO

◆ FOUND MONUMENT AS NOTED

——— PROPOSED FLOWLINE

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Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 2/2/2018 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS1801029

DWG. NO.: 9-1801029

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-6200

SCALE: 1" = 1000'

DATE: 1-18-2018

SURVEYED BY: BC/AS

DRAWN BY: RMH

APPROVED BY: RMH

SHEET: 9 OF 10

Proposed EBDU 51 Pipeline:

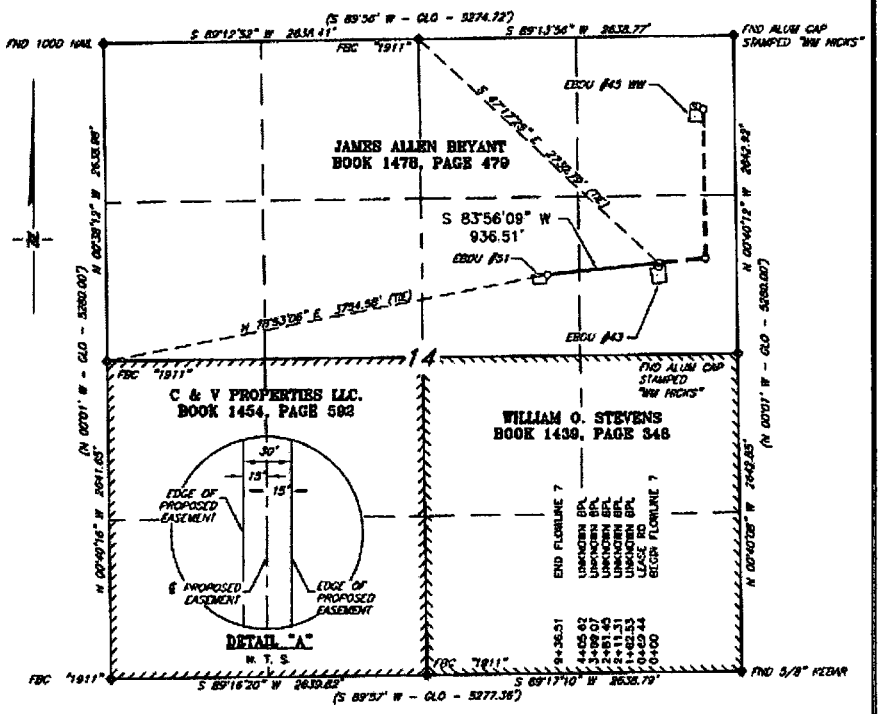
Apache plans to install a 2" buried high pressure buried pipeline to convert the EBDU 51 well into an injection well. The pipeline would exit off the east EBDU 51 well pad edge and travel approximately 936.51' to tie into the proposed EBDU 43 buried pipeline.

APACHE CORPORATION

PROPOSED WATER INJECTION LINE FOR THE EBDU #51

SECTION 14, T21S, R37E

N. M. P. M., LEA COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 936.51 feet or 56.758 rods in length, lying in Section 14, Township 21 South, Range 37 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of James Allen Bryant, according to a deed filed for record in Book 1478, Page 479, of the deed records of Lea County, New Mexico:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 14, which bears, S 47°17'25" E, 2730.79 feet from a brass cap, stamped "1911", found for the North quarter corner of Section 14;

Thence S 83°56'09" W, 936.51 feet, to Engr. Sta. 9+36.51, the End of Survey, a point in the Northeast quarter of Section 14, which bears, N 78°53'06" E, 3754.58 feet from a brass cap, stamped "1911", found for the West quarter corner of Section 14.

Said strip of land contains 0.645 acres, more or less, and is allocated by forties as follows:

SE1/4 NE1/4	40.508 Rods	0.461 Acres
SW1/4 NE1/4	16.250 Rods	0.184 Acres

SCALE: 1" = 1000'

0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND

( ) RECORD DATA - GLO

◆ FOUND MONUMENT AS NOTED

——— PROPOSED FLOWLINE

I, R. M. Howell, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell

Robert M. Howell NM PS 19680

ROBERT M. HOWELL NEW MEXICO 19680 PROFESSIONAL SURVEYOR 1/2/2018

NO.	REVISION	DATE

JOB NO.: LS1801029

DWG. NO.: 10-1801029

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-0200

SCALE: 1" = 1000'

DATE: 1-18-2018

SURVEYED BY: BC/AS

DRAWN BY: RMH

APPROVED BY: RMH

SHEET: 10 OF 10

Proposed Action Surface Disturbance:

Action	Length (ft.)	Width (ft.)	Acres
EBDU 12 Buried Pipeline	1,189.42	30	0.82
EBDU 17 Buried Pipeline	1,270.67	30	0.88
EBDU 21 Buried Pipeline	74.04	30	0.05
EBDU 24 Buried Pipeline	319.08	30	0.22
EBDU 25 Buried Pipeline	245.41	30	0.17
EBDU 43 Buried Pipeline	1,748.11	30	1.20
EBDU 51 Buried Pipeline	936.51	30	0.64
Total	**5,783.24**		**3.98**

2.2. No Action

The BLM NEPA Handbook (H-1790-1) states that for Environmental Assessments (EAs) on externally initiated proposed actions, the No Action Alternative generally means that the proposed activity will not take place. This option is provided in 43 CFR 3162.3-1 (h) (2). This alternative would deny the approval of the proposed Sundry Notice, and the current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

2.3. Alternatives Analyzed in Detail

There are no alternate routes that will have significantly fewer impacts or any clearer advantages over the proposed action. Overall impacts to the natural resources, if an alternate route were required, would be substantially identical to the proposed action with only minor differences in disturbances to soil, vegetation, and wildlife occurring.

Field investigation of all areas of proposed surface disturbance for the Proposed Action were inspected to ensure that potential impacts to natural and cultural resources would be minimized through the implementation of mitigation measures. These measures are described for all resources potentially impacted in Chapter 3 of this EA. Therefore, no additional alternatives other than those listed above have been considered for this project.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Projects requiring approval from the BLM such as Sundry Notices and right of way grants can be denied when the BLM determines that adverse effects to resources (direct or indirect) cannot be mitigated to reach a Finding of No Significant Impact (FONSI). Under the No Action Alternative, the proposed project would not be implemented and there would be no new impacts to natural or cultural resources from the proposed project. The No Action Alternative would result in the continuation of the current land and resource uses in the project area and is used as the baseline for comparison of environmental effects of the analyzed alternatives.

During the analysis process, the interdisciplinary team considered several resources and supplemental authorities. The interdisciplinary team determined that the resources discussed below would be affected by the proposed action.

3.1. Air Resources

3.1.1. Affected Environment

The two components of air resources are air quality and climate. This document summarizes the technical information related to air resources and climate change associated with oil and gas development and the methodology and assumptions used for analysis.

Air Quality

Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology and terrain, and also includes applications of noise, smoke management, and visibility. The area of the proposed action is within the Pecos River airshed and is classified as a Class II Air Quality Area. A Class II area allows moderate amounts of air quality degradation. The primary causes of air pollution in the project area are from motorized equipment and dust storms caused by strong winds during the spring. Particulates from nearby oil and gas production, agricultural burning, recreational and industrial vehicular traffic and ambient dust can also affect air quality. Air quality in the area near the proposed action is generally considered good, and the proposed action is not located in any of the areas designated by the Environmental Protection Agency (EPA) as "non-attainment areas" for any listed pollutants regulated by the Clean Air Act.

The EPA's Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2012 found that in 2012, total U.S. GHG emissions were over 6 billion metric tons and that total U.S. GHG emissions have increased by 4% from 1990 to 2012. The report also noted that GHG emissions fell by 3% from 2011 to 2012. This decrease was, in part, attributed to the increased use of natural gas and other alternatives to burning coal in electric power generation (U.S. Environmental Protection Agency, 2014).

Climate

The 2013 Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) states that the atmospheric concentrations of well-mixed, long-lived greenhouse gases (GHGs), including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), have increased to levels unprecedented in at least the last 800,000 years. Further, human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, in global mean sea level rise, and in changes in some climate extremes. It is extremely likely (95 – 100% probability) that human influence has been the dominant cause of the observed warming since the mid-20th century (Intergovernmental Panel on Climate Change, 2013).

Global mean surface temperatures have already increased 1.5 degrees F from 1880 to 2012. Additional near-term warming is inevitable due to the thermal inertia of the oceans and ongoing GHG emissions. Assuming there are no major volcanic eruptions or long-term changes in solar irradiance, global mean surface temperature increase for the period 2016 – 2035 relative to 1986-2005 will likely be in the range of 0.3 – 0.7°C (0.5 – 1.3°F). Global mean temperatures are expected to continue rising over the 21st century under all of the projected future RCP concentration scenarios. Global mean temperatures in 2081 – 2100 are projected to be between 0.3 – 4.8°C (0.5 – 8.6°F) higher relative to 1986 – 2005. The IPCC projections are consistent with reports from other organizations (e.g. NASA Goddard Institute for Space Studies, 2013; The National Academy of Sciences, 2005).

Climate change will impact regions differently and warming will not be equally distributed. Both observations and computer model predictions indicate that increases in temperature are likely to be greater at higher latitudes, where the temperature increase may be more than double the global average. Warming of surface air temperature over land will very likely be greater than over oceans (Intergovernmental Panel on Climate Change, 2013). There is also high confidence that warming relative to the reference period will be larger in the tropics and subtropics than in mid-latitudes. Frequency of warm days and nights will increase and frequency of cold days and cold nights will decrease in most regions. Warming during the winter months is expected to be greater than during the summer, and increases in daily minimum temperatures are more likely than increases in daily maximum temperatures. Models also predict increases in duration, intensity, and extent of extreme weather events. The frequency of both high and low temperature events is expected to increase. Near- and long-term changes are also projected in precipitation, atmospheric circulation, air quality, ocean temperatures and salinity, and sea ice cover.

Several activities contribute to the phenomena of climate change, including emissions of GHGs (especially carbon dioxide and methane) from fossil fuel development, large wildland fires and activities

using combustion engines; changes to the natural carbon cycle; and changes to radiative forces and reflectivity (albedo). It is important to note that GHGs will have a sustained climatic impact over different temporal scales. For example, recent emissions of carbon dioxide can influence climate for 100 years.

3.1.2. Impacts from the Proposed Action

Air Quality

The winds that frequent the southeastern part of New Mexico generally disperse odors and emissions, however, air quality would be impacted temporarily from exhaust emissions, chemical odors, dust caused by vehicles traveling to and from the project area and from motorized equipment used during construction. Impacts to air quality will diminish upon completion of the construction of the proposed action.

The EPA has the primary responsibility for regulating air quality, including seven nationally regulated ambient air pollutants. The state of New Mexico has an EPA-approved state implementation plan that regulates air quality throughout the state, except on tribal lands and within Bernalillo County. The New Mexico Air Quality Bureau's (NMAQB) mission is to protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality. The NMAQB is responsible for: ensuring air quality standards are met and maintained; issuing air quality Construction and Operating Permits; enforcing air quality regulations and permit conditions. Any emission source must comply with the NMAQB regulations.

Impacts to air quality on lands managed by BLM in southeastern New Mexico are reduced by the following standard practices which include: utilizing existing disturbance; minimizing surface disturbance; reclaiming and quickly establishing vegetation on areas not necessary for production; periodic watering of access roads during dry periods; removal and reuse of caliche for building other projects.

Climate Change

Climate change analyses are comprised of several factors, including GHGs, land use management practices, and the albedo effect. The tools necessary to quantify incremental climatic impacts of specific activities associated with those factors are presently unavailable. As a consequence, impact assessment of effects of specific anthropogenic activities cannot be performed. Additionally, specific levels of significance have not yet been established. Qualitative and/or quantitative evaluation of potential contributing factors within the project area is included where appropriate and practicable. When further information on the impacts to climate change in southeastern New Mexico is known, such information will be incorporated into the BLM's NEPA documents as appropriate.

Environmental and economic climate change impacts from commodity consumption are not effects of the proposed planning decisions and thus are not required to be analyzed under the NEPA. They are not direct effects, as defined by the Council on Environmental Quality (CEQ), because they do not occur at the same time and place as the action. Neither are they indirect effects because the proposed plan actions and resulting greenhouse gas emissions production are not a proximate cause of the emissions or other factors resulting from consumption. The BLM does not determine the destination of the resources produced from Federal lands. The effects from consumption are not only speculative, but beyond the scope of agency authority or control. Therefore, this document does not include analysis of the consumption of resources produced as a result of planning decisions.

Mitigation Measures and Residual Impacts

None

3.2. Range

3.2.1. Affected Environment

A portion of the proposed action is within the Jones City North #76016 allotment. This allotment is a yearlong cow-calf deferred rotation operation. Range improvement projects such as windmills, water

delivery systems (pipelines, storage tanks, and water troughs), earthen reservoirs, fences, and brush control projects are located within the allotment. The proposed access road crosses through an existing fence line. In general, an average rating of the rangeland within this area is 6 acres per Animal Unit Month (AUM). In order to support one cow, for one year, about 72 acres are needed. This equals about nine cows per section.

3.2.2. Impacts from the Proposed Action

Direct and Indirect Impacts

The loss of 3.98 acres of vegetation will not affect the Animal Unit Months (AUMs) which are authorized for livestock use in this area. There are occasional livestock injuries or deaths due to accidents such as collisions with vehicles, falling into excavations and ingesting plastic or other materials present at the work site. If further development occurs, the resulting loss of vegetation could reduce the AUMs authorized for livestock use in this area.

Impacts to the ranching operation are reduced by standard practices such as utilizing existing surface disturbance, minimizing vehicular use, placing parking and staging areas on caliche surfaced areas, and quickly establishing vegetation on the reclaimed areas.

Mitigation Measures and Residual Impacts

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

Fence Requirement
Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Livestock Watering Requirement
Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

3.3. Soils

3.3.1. Affected Environment

The area of the proposed action is mapped as KN- kimbrough loam (0-3% slopes) and KO- kimbrough gravelly loam (0-3% slopes). These are shallow soils and are described below:

These soils are shallow to very shallow, well-drained, calcareous, stony and rocky loams over limestone and caliche. Topography ranges from nearly level ridgetops to side slopes to cliffs and escarpments. Permeability is moderate, water-holding capacity is very low to low, and runoff is rapid after the soils become saturated. They are subject to water erosion, but the stones and rock outcrops help to stabilize the soils on nearly level to gently sloping areas. Careful management is needed to maintain a cover of desirable forage plants and to control erosion. Reestablishing native plant cover could take 3-5 years due to unpredictable rainfall and high temperatures.

These soils typically have scattered populations of squamulose lichens and a few crustose lichens, while gelatinous lichens and cyanobacteria are occasionally present primarily in the pockets of deeper soils. These soil crusts are important in binding loose soil particles together to stabilize the soil surface and reduce erosion. Biological soil crusts can contribute positively to soil stability, fixing atmospheric nitrogen, nutrient contributions to plants, water infiltration, and plant growth. They function in the nutrient cycle by fixing atmospheric nitrogen, contributing to soil organic matter, and maintaining soil moisture. In addition, they can act as living mulch which discourages the establishment of annual/invasive weeds. Structurally they form an uneven, rough carpet that reduces rain drop impact and slows surface runoff. Below the surface, lichen and moss rhizines, fungal hyphae, and cyanobacterial filaments all act to bind the soil surface particles just below and at the surface. Horizontally, they occur in nutrient-poor areas between plant clumps. Because they lack a waxy epidermis, they tend to leak nutrients into the surrounding soil. Vascular plants such as grasses and forbs can then utilize these nutrients.

3.3.2. Impacts from the Proposed Action

Direct and Indirect Impacts

There is a potential for wind and water erosion due to the erosive nature of these soils once the cover is lost. There is always the potential for soil contamination due to spills or leaks. Soil contamination from spills or leaks can result in decreased soil fertility, less vegetative cover, and increased soil erosion. The biological soil crusts are susceptible to compressional damage, which is due to vehicle traffic. Disruption of the crust can result in decreased soil organism diversity, soil nutrient levels, soil stability, and organic matter. These impacts are expected to be limited to the buried pipeline routes.

Impacts to soil resources are reduced by standard practices such as utilizing existing surface disturbance, access road total surface disturbance, minimizing vehicular use, placing parking and staging areas on caliche surfaced areas, quickly establishing vegetation on the reclaimed areas.

Mitigation Measures and Residual Impacts

Topsoil will be stockpiled to enhance reclamation.

3.4. Vegetation

3.4.1. Affected Environment

Shallow Soil Type Plant Communities

Warm season, short and midgrasses make up most of the understory in the proposed project area. These include gramas, tridens, curlyleaf muhly, wolftail, dropseeds, threeawn, and green sprangletop. The shrub overstory consists primarily of sotol, agaves, cactus, catclaw, sacahuista, yucca, skunkbush, piñon/juniper, and broom snakeweed. A large variety of forbs, including croton, bladderpod, buckwheat, and globemallow can be found, with large fluctuations from season to season based on rainfall.

3.4.2. Impacts from the Proposed Action

Direct and Indirect Impacts

Construction of the right of way would remove about 3.98 acres of vegetation. By using the proper seed mix for LPC habitat, good seed bed preparation, and proper seeding techniques, this impact would be short term (two or three growing seasons) depending on timely rainfall.

Impacts to vegetation will be reduced by following standard practices such as utilizing existing surface disturbance and quickly establishing vegetation on the reclaimed areas.

Mitigation Measures and Residual Impacts

None

3.5. Watershed

3.5.1. Affected Environment

The area of the proposed action drains in a southwestern direction Monument Draw, as close as 200 meters away. Stream flow occurs in Monument Draw during times of heavy rain, and it is likely a source of groundwater recharge. The ground water recharge is from local precipitation entering through playas, sinkholes and swallets. Water quality and quantity is influenced by physical, chemical, and biological reactions that occur as water moves over and through the land surface toward streams and into aquifers. The rate at which water moves through the watershed strongly affects these reactions.

3.5.2. Impacts from the Proposed Action

Direct and Indirect Effects

Ephemeral surface water from local rain events will wash down-slope through the area of the proposed action. Localized decreases in vegetative surface cover could result in decreased infiltration rates and increased runoff volume and velocity. This causes increased erosion, top soil loss, and sedimentation.

Water quality can be adversely affected following the occurrence of an undesirable event such as a leak or spill.

Standard practices or design features of the proposed project that minimize impacts to the watershed and water quality include utilizing existing surface disturbance, minimizing vehicular use, and reclaiming the areas not necessary for production and quickly reestablishing vegetation on the reclaimed areas.

Mitigation Measures

None

3.6. Wildlife

3.6.1. Affected Environment

This project occurs in the sand shinnery habitat type. Sand shinnery communities extend across the southern Great Plains occupying sandy soils in portions of north and west Texas, west Oklahoma, and southeast New Mexico. Portions of Eddy, Lea and Chaves counties consist largely of sand shinnery habitat and are intermixed with areas of mesquite to a lesser degree. The characteristic feature of these communities is co-dominance by shinnery oak and various species of grasses. In New Mexico Shinnery oak occurs in sandy soil areas, often including sand dunes.

Various bird, mammal, reptile and invertebrate species inhabit the sand shinnery ecosystem in New Mexico. Herbivorous mammals include mule deer, pronghorn, and numerous rodent species. Carnivores include coyote, bobcat, badger, striped skunk, and swift fox. Two upland game bird species, scaled quail and mourning dove, are prevalent throughout the sand shinnery in New Mexico. Many species of songbirds nest commonly, with a much larger number that use the habitat during migration or for non-nesting activities. Common avian predators include northern harrier, Swainson's hawk, red-tailed hawk, kestrel, burrowing owl, and Chihuahuan raven. Numerous snake and lizard species have been recorded, including the sand dune lizard, the only vertebrate species restricted entirely to sand shinnery habitat.

Lesser Prairie-Chicken (Tympanuchus pallidicinctus)

In New Mexico, the lesser prairie-chicken (LPC) formerly occupied a range that encompassed the easternmost one-third of the state, extending to the Pecos River, and 48 km west of the Pecos near Fort Sumner. This covered about 38,000 km^2. By the beginning of the 20th Century, populations still existed in nine eastern counties (Union, Harding, Chaves, De Baca, Quay, Curry, Roosevelt, Lea, and Eddy). The

last reliable records from Union County are from 1993. Currently, populations exist only in parts of Lea, Eddy, Curry, Chaves, and Roosevelt counties, comprising about 23% of the historical range.

LPC are found throughout dry grasslands that contained shinnery oak or sand sage. Currently, they most commonly are found in sandy-soiled, mixed-grass vegetation, sometimes with short-grass habitats with clayey or loamy soils interspersed. They occasionally are found in farmland and smaller fields, especially in winter. Shinnery oak shoots are used as cover and produce acorns, which are important food for LPC and many other species of birds, such as the scaled quail, northern bobwhite, and mourning dove. Current geographic range of shinnery oak is nearly congruent with that of the lesser prairie-chicken, and these species sometimes are considered ecological partners. Population densities of LPC are greater in shinnery oak habitat than in sand sage habitat.

LPC use a breeding system in which males form display groups. These groups perform mating displays on arenas called leks. During mating displays male vocalizations called booming, attract females to the lek. Leks are often on knolls, ridges, or other raised areas, but in New Mexico leks are just as likely to be on flat areas such as roads, abandoned oil drill pads, dry playa lakes or at the center of wide, shallow depressions. Leks may be completely bare, covered with short grass, or have scattered clumps of grass or short tufts of plants. An important physical requirement for location of leks is visibility of surroundings, but the most important consideration is proximity of suitable nesting habitat, breeding females and the ability to hear male vocalizations.

In the late 1980s, there were 35 documented active booming grounds known to exist within the CFO. Due to population decreases and unpredictable weather cycles the LPC is currently proposed for federal listing, and potentially may become extirpated from Eddy and southern Lea counties. The last documented sighting within the Carlsbad field office boundaries was on March 15th 2011.

In June 1998, the US Fish and Wildlife Service (USFWS) issued a statement regarding their status review of the lesser prairie-chicken. It stated, "Protection of the lesser prairie-chicken under the Federal Endangered Species Act (ESA) is warranted but precluded which means that other species in greater need of protection must take priority in the listing process." Given the current Federal Candidate status of this species, the Bureau of Land Management is mandated to carry out management consistent with the principles of multiple use, for the conservation of candidate species and their habitats, and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered (Bureau Manual 6840.06). On December 11, 2012 the USFWS proposed to list the lesser prairie-chicken as a threatened species under the ESA of 1973, as amended. On March 27, 2014 the USFWS in response to the rapid and severe decline of the lesser prairie-chicken announced the final listing of the species as threatened under the ESA, as well as a final special rule under section 4(d) of the ESA that will limit regulatory impacts on landowners and business from the listing. Currently, the USFWS has not determined or designated critical habitat regarding the lesser prairie-chicken. The final rule to list the lesser prairie-chicken as threatened was published in the *Federal Register* on April 10, 2014, and will be effective on May 12, 2014. On July 20, 2016 the U.S. Fish and Wildlife Service formally removed the lesser prairie chicken from protection under the Endangered Species Act. Prescribed management for the species still follows BLM Resource Management Plan guidelines.

Dune Sagebrush Lizard (Sceloporus arenicolus)

The Dunes Sagebrush Lizard (DSL) is a species with a limited geographic range including parts of Chaves, Eddy, Lea and Roosevelt Counties of southeastern New Mexico and 4 counties in Texas. The DSL is a habitat specialist, found exclusively in association with shinnery oak dune complexes. These complexes are patchworks of shinnery oak and scattered sandsage interspersed with areas of open sand and wind-created sandy blowouts. These complexes create ideal habitat for the DSL.

The DSL may also require specific sand particle size. Research has shown that there are significant differences in the composition of sand between sites that are occupied and unoccupied by DSL. Occupied sites have slightly coarser sand than unoccupied sites. This suggests that DSL may not occur in areas with high percentages of sand particles smaller than 250 micrometers (Fitzgerald et al, 1997).

The USFWS was petitioned on May 28, 2002 by The Center for Biological Diversity and Chihuahuan Desert Conservation Alliance to list the DSL as an endangered species under the Endangered Species Act. In May 2005 the USFWS issued a statement regarding their status review of the DSL. It stated, "Protection of the Dunes Sagebrush Lizard under the ESA is warranted but precluded, which means that other species in greater need of protection must take priority in the listing process." Given the current Federal Candidate status of this species, the Bureau of Land Management is mandated to carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered (Bureau Manual 6840.06). On December 14th 2010 the USFWS proposed to list the dunes sagebrush lizard as endangered under the ESA of 1973, as amended. On June 19th 2012, the USFWS withdrew the proposed rule to list the dunes sagebrush lizard as endangered under the Endangered Species Act of 1973, as amended. The lizard was not listed based on several conservation agreements in place and plans like the current BLM land use plan. The lizard is still considered a BLM special status species.

3.6.2. Impacts from the Proposed Action

Direct and Indirect Impacts

Impacts of the proposed action to wildlife in the localized area may include but are not limited to: possible mortality, habitat degradation and fragmentation, avoidance of habitat during construction and drilling activities and the potential loss of burrows and nests.

Standard practices and elements of the proposed action minimize these impacts to wildlife. These include: the NTL-RDO 93-1(modification of open-vent exhaust stacks to prevent perching and entry from birds and bats), nets on open top production tanks, interim reclamation, closed loop systems, exhaust mufflers, berming collection facilities, minimizing cut and fill, road placement, and avoidance of wildlife waters, stick nests, drainages, playas and dunal features. These practices reduce mortality to wildlife and allow habitat to be available in the immediate surrounding area thus reducing stressors on wildlife populations at a localized level. Impacts to local wildlife populations are therefore expected to be minimal.

Special Status Species

Lesser Prairie-Chicken (Tympanuchus pallidicinctus)

Impacts of the proposed action to LPC in the localized area may include but are not limited to: disruptions in breeding cycles, habitat degradation and fragmentation, avoidance of habitat during construction and drilling activities and potential loss of nests. Noise and human activity generated from construction activity could impact the LPC by reducing the establishment of seasonal "booming grounds" or leks, thus possibly reducing reproductive success in the species. It is believed that the noise generated by construction activity and human presence could mask or disrupt the booming of the male prairie-chicken and thus inhibiting the females from hearing the booming. In turn, female LPC would not arrive at the booming ground, and subsequently, there would be decreased courtship interaction and possibly decreased reproduction. Decreased reproduction and the loss of recruitment into the local population would result in an absence of younger male LPC to replace mature male LPC once they expire, eventually causing the lek to disband and become inactive. Additionally, habitat fragmentation caused by development could possibly decrease the habitat available for nesting, brooding and feeding activities.

The CFO takes every precaution to ensure that active booming grounds and nesting habitats are protected by applying a timing and noise condition of approval within portions of suitable and occupied habitat for the LPC. It is not known at this time whether active booming grounds or nest locations are associated with this specific location. Only after survey efforts during the booming season are conducted, will it be known whether an active lek is in close proximity (within 1.5 miles) of the proposed location or not.

Exceptions to timing and noise requirements will be considered in emergency situations such as mechanical failures, however, these exceptions will not be granted if BLM determines, on the basis of biological data or other relevant facts or circumstances, that the grant of an exception would disrupt LPC booming activity during the breeding season. Requests for exceptions on a non-emergency basis may also be considered, but these exceptions will not be granted if BLM determines that there are prairie-chicken sightings, historic leks and or active leks within 1.5 miles of the proposed location, or any combination of the above mentioned criteria combined with suitable habitat.

In light of the circumstances under which exceptions may be granted, minimal impacts to the LPC are anticipated as a result of the grant of exceptions to the timing limitation for LPC Condition of Approval. On account of these requirements and mitigation measures as below, minimal impacts to the LPC are anticipated as a result of oil and gas activity.

Dune Sagebrush Lizard (Sceloporus arenicolus)

The Dunes Sagebrush Lizard (DSL- *Sceloporus arenicolus*) is threatened by activities that remove shinnery oak, disrupt the morphology of the sand dunes, or otherwise degrade suitable habitat. Construction of the proposal in sand dune complexes that are suitable habitat or occupied habitat could impact local populations of DSL by reducing the size of habitat available to the species and possibly extirpating DSL from the location.

In May 2008, the Pecos District Special Status Species Resource Management Plan Amendment (RMPA) was approved and is being implemented. The RMPA requires that existing leases within the DSL habitat be surveyed for the species and habitat suitability prior to development when surveys are requested by BLM. These surveys determine if the area proposed for development is occupied, suitable but unoccupied, or unsuitable. Depending on the results of surveys, proposed development is moved to avoid suitable or occupied DSL habitat.

The CFO ensures that occupied and suitable dune complexes are protected by conducting intensive surveys during the summer months. Once identified, proposed locations are relocated to avoid impacts to the active dune complexes.

Mitigation Measures and Residual Impacts

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Dunes Sagebrush Lizard Trench Stipulation

- Pre-construction contact with a BLM wildlife biologist is required within 5 days before any ground disturbing activities associated with the project occurs.
- Successful completion of the BLM Trench Stipulation Workshop is required for a non-agency person to be approved as a monitor.
- Any trench left open for (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, an agency approved monitor shall walk the entire length of the open trench and remove all trapped vertebrates. The bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.

- For trenches left open for eight (8) hours or more the following requirements apply:
    - Earthen escape ramps and/or structures (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Metal structures will not be authorized. Options will be discussed in detail at the required Trench Stipulation Workshop.
    - One approved monitor shall be required to survey up to three miles of trench between the hours of 11 AM-2 PM. A daily report (consolidate if there is more than one monitor) on the vertebrates found and removed from the trench shall be provided to the BLM (email/fax is acceptable) the following morning.
    - Prior to backfilling of the trench all structures used as escape ramps will be removed and the bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.

- This stipulation shall apply to the entire length of the project in the DSL habitat polygon regardless of land ownership or CCA/CCAA enrollment status.
- A project closeout will be required within three business days of the completion of the project.

3.7. Noxious Weeds and Invasive Plants

3.7.1. Affected Environment

There are four plant species within the CFO that are identified in the New Mexico Noxious Weed List Noxious Weed Management Act of 1998. These species are African rue, Malta starthistle, Russian olive, and salt cedar. African rue and Malta starthistle populations have been identified throughout the Carlsbad Field Office and mainly occur along the shoulders of highway, state and county roads, lease roads and well pads (especially abandoned well pads). The CFO has an active noxious weed monitoring and treatment program, and partners with county, state and federal agencies and industry to treat infested areas with chemical and monitor the counties for new infestations.

Currently there are no known populations of invasive, non-native species within the project vicinity.

3.7.2. Impacts from the Proposed Action

Direct and Indirect Impacts

Any surface disturbance could increase the possibility of establishment of new populations of invasive, non-native species. The construction of the proposed action may contribute to the establishment and spread of African rue and Malta starthistle. The main mechanism for seed dispersion would be by equipment and vehicles that were previously used and/or driven across noxious weed infested areas. Noxious weed seed could be carried to and from the project area by construction equipment and transport vehicles.

Mitigation Measures and Residual Impacts

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.

3.8. Cultural and Historical Resources

3.8.1. Affected Environment

The project falls within the Southeastern New Mexico Archaeological Region. This region contains the following cultural/temporal periods: Paleoindian (ca. 11,500 – 7,000 B.C.), Archaic (ca. 6,000 B.C. – A.D. 500), Ceramic (ca. A.D. 500 – 1400), Post Formative Native American (ca. A.D. 1400 – present), and Historic Euro-American (ca. A.D. 1865 to present). Sites representing any or all of these periods are known to occur within the region. A more complete discussion can be found in *Permian Basin Research Design 2016-2026 Volume I: Archaeology and Native American Cultural Resource published in 2016 by* SWCA Environmental Consultants, Albuquerque, New Mexico.

Native American Religious Concerns

The BLM conducts Native American consultation regarding Traditional Cultural Places (TCP) and Sacred Sites during land-use planning and its associated environmental impact review. In addition, during the oil & gas lease sale process, Native American consultation is conducted to identify TCPs and sacred sites whose management, preservation, or use would be incompatible with oil and gas or other land-use authorizations. With regard to Traditional Cultural Properties, the BLM has very little knowledge of tribal sacred or traditional use sites, and these sites may not be apparent to archaeologists performing surveys in advance of construction.

3.8.2. Impacts from the Proposed Action

Direct and Indirect Effects

Cultural resources on public lands, including archaeological sites and historic properties, are protected by federal law and regulations (Section 106 of the National Historic Preservation Act and the National Environmental Policy Act). Class III cultural surveys will be conducted of the area of effect for realty or oil and gas projects proposed on these lands prior to the approval of any ground disturbing activities to identify any resources eligible for listing on the National Register of Historic Places. Cultural resource inventories minimize impacts to cultural sites and artifacts by avoiding these resources prior to construction of the proposed project. If unanticipated or previously unknown cultural resources are discovered at any time during construction, all construction activities shall halt and the BLM authorized officer will be immediately notified. Work shall not resume until a Notice to Proceed is issued by the BLM.

A Class III cultural resource inventory was conducted (18-0376) and no historic properties were identified within the area of potential effect.

Mitigation Measures

None.

3.9. Paleontology

3.9.1. Affected Environment

Paleontological resources are any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth. Fossil remains may include bones, teeth, tracks, shells, leaves, imprints, and wood. Paleontological resources include not only the actual fossils but also the geological deposits that contain them and are recognized as nonrenewable scientific resources protected by federal statutes and policies.

The primary federal legislation for the protection and conservation of paleontological resources occurring on federally administered lands are the Paleontological Resources Preservation Act of 2009 (PRPA), the Federal Land Policy and Management Act of 1976 (FLPMA), and the National Environmental Policy Act of 1970 (NEPA). BLM has also developed policy guidelines for addressing potential impacts to

paleontological resources (BLM, 1998a,b; 2008, 2009). In addition, paleontological resources on state trust lands are protected by state policy from unauthorized appropriation, damage, removal, or use.

The Potential Fossil Yield Classification (PFYC) is a tool that allows the BLM to predict the likelihood of a geologic unit to contain paleontological resources. The PFYC is based on a numeric system of 1-5, with PFYC 1 having little likelihood of containing paleontological resources, whereas a PFYC 5 value is a geologic unit that is known to contain abundant scientifically significant paleontological resources. The fossil resources of concern in this area are the remains of vertebrates, which include species of fish, amphibians, and mammals.

3.9.2. Impacts from the Proposed Action

Direct and Indirect Effects

Direct impacts would result in the immediate physical loss of scientifically significant fossils and their contextual data. Impacts indirectly associated with ground disturbance could subject fossils to damage or destruction from erosion, as well as creating improved access to the public and increased visibility, potentially resulting in unauthorized collection or vandalism. However, not all impacts of construction are detrimental to paleontology. Ground disturbance can reveal significant fossils that would otherwise remain buried and unavailable for scientific study. In this manner, ground disturbance can result in beneficial impacts. Such fossils can be collected properly and curated into the museum collection of a qualified repository making them available for scientific study and education.

The location of the proposed project is within a PFYC 2, piedmont alluvial deposits, upper and middle Quarternary. A pedestrian survey for paleontological resources was not necessary and there should be no impacts to paleontological resources.

Mitigation Measures

There are no mitigation measures for this project, as currently proposed.

3.10. Visual Resource Management

3.10.1. Affected Environment

The Visual Resource Management (VRM) program identifies visual values, establishes objectives in the RMP for managing those values, and provides a means to evaluate proposed projects to ensure that visual management objectives are met.

This project occurs within a Visual Resource Management Class IV zone. The objective of VRM Class IV is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic landscape elements of color, form, line and texture.

3.10.2. Impacts from the Proposed Action

Direct and Indirect Effects

This project will cause some short term and long-term visual impacts to the natural landscape. Short term impacts occur during construction operations. These include the presence of construction equipment vehicle traffic.

Long term impacts are visible to the casual observer through the life of the pipeline. These include the visual evidence of piping which cause visible contrast to form, line, color, and texture. Those contrasts will be visible to visitors in the area.

After final abandonment, the pipeline and associated infrastructure will be removed, reclaimed, recontoured and revegetated, if necessary, thereby eliminating visual impacts.

Short and long term impacts are minimized by best management practices such as utilizing existing surface disturbance, no blading in the right-of-way, color selection and screening facilities with natural features and vegetation.

Mitigation Measures

None

3.11. Impacts from the No Action Alternative

The No Action Alternative is used as the baseline for comparison of environmental effects of the analyzed alternatives. Under the No Action Alternative, the proposed project would not be constructed and there would be no new direct or indirect impacts to natural or cultural resources from oil and gas production. The natural and cultural resources in the project area would continue to be managed under the current land and resource uses.

3.12. Cumulative Impacts

Cumulative impacts are the combined effect of past projects, specific planned projects, and other reasonably foreseeable future actions within the project study area to which oil and gas exploration and development may add incremental impacts. This includes all actions, not just oil and gas actions, that may occur in the area including foreseeable non-federal actions.

The combination of all land use practices across a landscape has the potential to change the visual character, disrupt natural water flow and infiltration, disturb cultural sites, cause minor increases in greenhouse gas emissions, fragment wildlife habitat and contaminate groundwater. However, the likelihood of these impacts occurring is minimized through standard mitigation measures, special Conditions of Approval and ongoing monitoring studies.

All resources are expected to sustain some level of cumulative impacts over time; however these impacts fluctuate with the gradual abandonment and reclamation of wells. As new wells are being drilled, there are others being abandoned and reclaimed. As the oil field plays out, the cumulative impacts will lessen as more areas are reclaimed and less is developed.

4. SUPPORTING INFORMATION

4.1. List of Preparers

Prepared by: Aaron Chastain, Natural Resource Specialist, BLM-CFO

Date: 06/04/2018

The following individuals assisted in the preparation of this document:

- Bruce Boeke, Archaeologist, BLM-CFO
- Dustin Mudgett, Wildlife Biologist, BLM-CFO
- Chelsie Dugan, Hydrologist, BLM-CFO
- Jana Onsurez, Natural Resource Specialist-Range, BLM-CFO

- Tracy Hughes, Outdoor Recreation Planner, BLM-CFO

4.2. References

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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Pecos District
Carlsbad Field Office
620 E Greene Street
Carlsbad, NM 88220

DECISION RECORD
for the

Apache Corporation
Sundry for Buried Pipelines
East Blinebry Drinkard Unit 12
East Blinebry Drinkard Unit 17
East Blinebry Drinkard Unit 21
East Blinebry Drinkard Unit 24
East Blinebry Drinkard Unit 25
East Blinebry Drinkard Unit 43
East Blinebry Drinkard Unit 51

NEPA No. DOI-BLM-NM- P020-2018-0586-EA

I. Decision

I have decided to select the proposed action for implementation as described in the 06/04/2018, Sundry for Buried Pipelines. Based on my review of the Environmental Assessment (EA) and project record, I have concluded that the proposed action was analyzed in sufficient detail to allow me to make an informed decision. I have selected this alternative because the proposed treatments will provide reasonable access to oil and gas development.

II. Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the EA for the DOI-BLM-NM-P020-2018-0586-EA. I have also reviewed the project record for this analysis. The effects of the proposed action are disclosed in the Environmental Consequences sections of the EA. I have determined that the proposed action as described in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary.

III. Other Alternatives Considered

No reasonable action alternative was substantially different in design or effects from the proposed action for this project. Therefore no other alternative was considered or analyzed.
Other action alternatives were substantially similar in design and had sustainably similar effects to the proposed action alternative analyzed in the EA. Therefore no other alternative was considered or analyzed.

IV. Public Involvement

The Carlsbad Field Office (CFO) publishes a NEPA log for public inspection. This log contains a list of proposed and approved actions in the field office. The log is located in the lobby of the CFO as well as on the BLM New Mexico website (http://www.blm.gov/nm/st/en/prog/planning/nepa_logs.html).

V. Appeals

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Any appeal must be filed within 30 days of this decision. Any notice of appeal must be filed with the Carlsbad Field Manager, at 620 E.Greene St., Carlsbad, NM 88220. The appellant shall serve a copy of the notice of appeal and any statement of reasons, written arguments, or briefs on each adverse party named in the decision, not later than 15 days after filing such document (see 43 CFR 4.413(a)). Failure to serve within the time required will subject the appeal to summary dismissal (see 43 CFR 4.413(b)). If a statement of reasons for the appeal is not included with the notice, it must be filed with the IBLA, Office of Hearings and Appeals, U. S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the IBLA, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300 Arlington, VA 22203 within 30 days after the notice of appeal is filed the Carlsbad Field Manger.

Notwithstanding the provisions of 43 CFR 4.21(a)(1), filing a notice of appeal under 43 CFR Part 4 does not automatically suspend the effect of the decision. If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal.

A petition for a stay is required to show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied;
(2) The likelihood of the appellant's success on the merits;
(3) The likelihood of immediate and irreparable harm if the stay is not granted; and
(4) Whether the public interest favors granting the stay.

In the event a request for stay or an appeal is filed, the person/party requesting the stay or filing the appeal must serve a copy of the appeal on the Office of the Field Solicitor, 1100 Old Santa Fe Trail, Santa Fe, NM 87505.

for Field Manager

06/20/2019
Date

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Pecos District
Carlsbad Field Office
620 E Greene Street
Carlsbad, NM 88220

Finding of No Significant Impact

Apache Corporation
Sundry for Buried Pipelines
East Blinebry Drinkard Unit 12
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East Blinebry Drinkard Unit 25
East Blinebry Drinkard Unit 43
East Blinebry Drinkard Unit 51

NEPA No. DOI-BLM-NM- P020-2018-0586-EA

FINDING OF NO SIGNIFICANT IMPACT:

I have determined that the proposed action, as described in the EA will not have any significant impact, individually or cumulatively, on the quality of the human environment. Because there would not be any significant impact, an environmental impact statement is not required.
In making this determination, I considered the following factors:
1. The activities described in the proposed action do not include any significant beneficial or adverse impacts (40 CFR 1508.27(b)(1)). The EA includes a description of the expected environmental consequences of seven buried pipelines.
2. The activities included in the proposed action would not significantly affect public health or safety (40 CFR 1508.27(b)(2)).
3. The proposed activities would not significantly affect any unique characteristics (40 CFR 1508.27(b)(3)) of the geographic area such as prime and unique farmlands, caves, wild and scenic rivers, designated wilderness areas, wilderness study areas, or areas of critical concern.
4. The activities described in the proposed action do not involve effects on the human environment that are likely to be highly controversial (40 CFR 1508.27(b)(4)).
5. The activities described in the proposed action do not involve effects that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).
6. My decision to implement these activities does not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).
7. The effects of a seven buried pipelines would not be significant, individually or cumulatively, when considered with the effects of other actions (40 CFR 1508.27(b)(7)). The EA discloses that there are no other connected or cumulative actions that would cause significant cumulative impacts.

8. I have determined that the activities described in the proposed action will not adversely affect or cause loss or destruction of scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places (40 CFR 1508.27(b)(8)). Cultural resource surveys were completed.
9. The proposed activities are not likely to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (40 CFR 1508.27(b)(9)).
10. The proposed activities will not knowingly threaten any violation of Federal, State, or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)). *Section 1.4 and 1.5 of the EA.*

APPROVED:

for Field Manager
Carlsbad Field Office

06/20/2018
Date