

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No 1004-0135  
Expires November 30, 2000

SEP 23 2009

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandon well. Use Form 3160-3 (APD) for such proposals.

<b>SUBMIT IN TRIPLICATE. Other instructions on reverse side.</b>	
1 Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	5 Lease Serial No NM 0522A
2 Name of Operator BOPCO, L.P.	6 If Indian, Allottee or Tribe Name
3a Address P O Box 2760 Midland, Texas 79702-2760	7 If Unit or CA/Agreement, Name and/or No Poker Lake Unit 001796
3b Phone No (include area code) (432) 683-2277	8 Well Name and No Poker Lake Unit # 199
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) NESW, UN K, 1000' FSL, 1685' FWL, Section 28, T24S, R31E, Mer NMP Lat N 32.183792, Lon W 103.785828	9 API Well No 30-015-36506
	10 Field and Pool, or Exploratory Area Undesignated Nash Draw Morrow
	11 County or Parish, State Eddy County, N M

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/ Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input checked="" type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposed is to deepen directionally or recompleat horizontally, give subsurface locations 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 shall be filed within 30 days.

testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

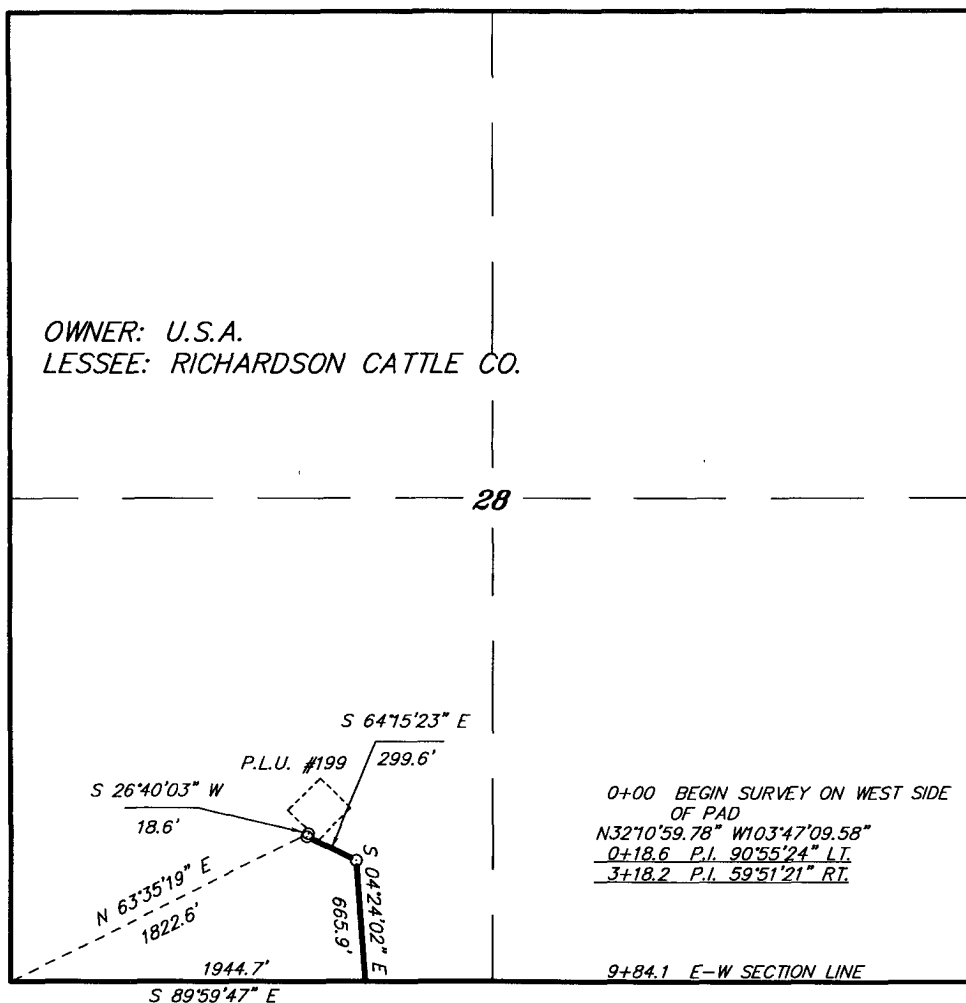
BOPCO, L.P. respectfully requests to install a temporary gas flowline that will service the Poker Lake Unit # 199 located in Section 28, T24S, R31E during testing of the Morrow. The proposed gas line will consist of 2-7/8" steel pipe and run for 8,890' and will be in service for 60 days after the well has been put into production. The proposed line will connect with an existing Southern Union gas line located at the Poker Lake Unit # 50 Lot 2, Section 4, T25S, R31E and will operate at 50 psig and not be buried. We will not blade the ROW at this time. After testing a permanent gas line will be installed as follows.

BOPCO, L.P. respectfully requests to install a buried high pressure gas line (wp 900 psig) to service the Poker Lake Unit # 199. The proposed gas line will consist of 6" .280 wall steel welded pipe and run for 14,149'. The gas line will begin in Section 28, T24S, R31E and will run southeast through Section 33, T24S, R31E intersecting with a lease road located at the Poker Lake Unit # 197, then continuing east on the south side of the lease road, 30' from the center line. It will then turn south following on west side, 50' from the center line of the county road (Buck Thorn Road). The gas line will continue into Section 4, T25S, R31E and connect with the Poker Lake Unit 50 well and then continue south. The gas line will cross the county road and continue east following the Poker Lake Unit #67 lease road and two existing pipeline ROW's in Section 3 and 4, T25S, R31E. The well will connect with an existing Enterprise connection point located at the PLU # 67 well Section 4, T25S, R31E. The route has been arch cleared and a map along with the survey plats are attached showing the proposed route of the gas line. A section of the proposed gas line will require a monitor in Section 28, T24S, R31E and Section 33, T24S, R31E for both the temporary and permanent lines.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Bill Franks	Title Pipeline Foreman
Signature <i>Bill Franks</i>	Date 7/28/2009
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>	
Approved by <i>/s/ Don Peterson</i>	Title Date SEP 15 2009
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 BLM Carlsbad Field Office
Title 18 U.S.C. Section 1001, makes 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.	

SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

OWNER: U.S.A.  
LESSEE: RICHARDSON CATTLE CO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

984.1 FEET = 59.64 RODS = 0.19 MILES = 0.68 ACRES

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES

No. 7977  
No. 5074

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 21528

Drawn By: James Presley

Date: 07/13/09

Disk: JLP #1 - BOP21528

1000 0 1000 2000 FEET

**BOPCO, L.P.**

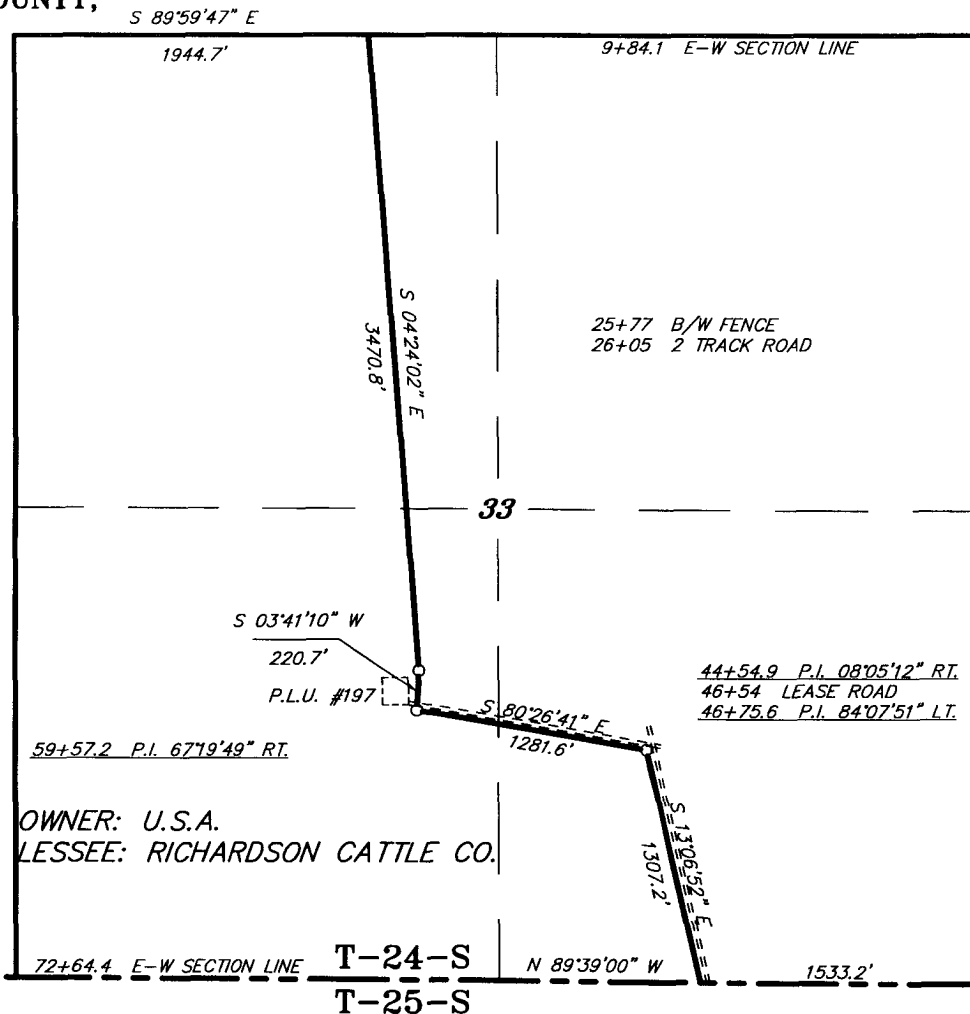
REF: PROP. PIPELINE FOR THE BOPCO-POKER LAKE UNIT #199

A PIPELINE CROSSING U.S.A. LAND IN  
SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 07/10/09

Sheet 1 of 3 Sheets

SECTION 33, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 33, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

6280.3 FEET = 380.62 RODS = 1.19 MILES = 4.33 ACRES

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES

TEXAS P.E.S.

No. 7977  
No. 5074

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 21528

Drawn By: James Presley

Date: 07/13/09

Disk: JLP #1 - BOP21528

Survey Date: 07/10/09

Sheet 2 of 3 Sheets

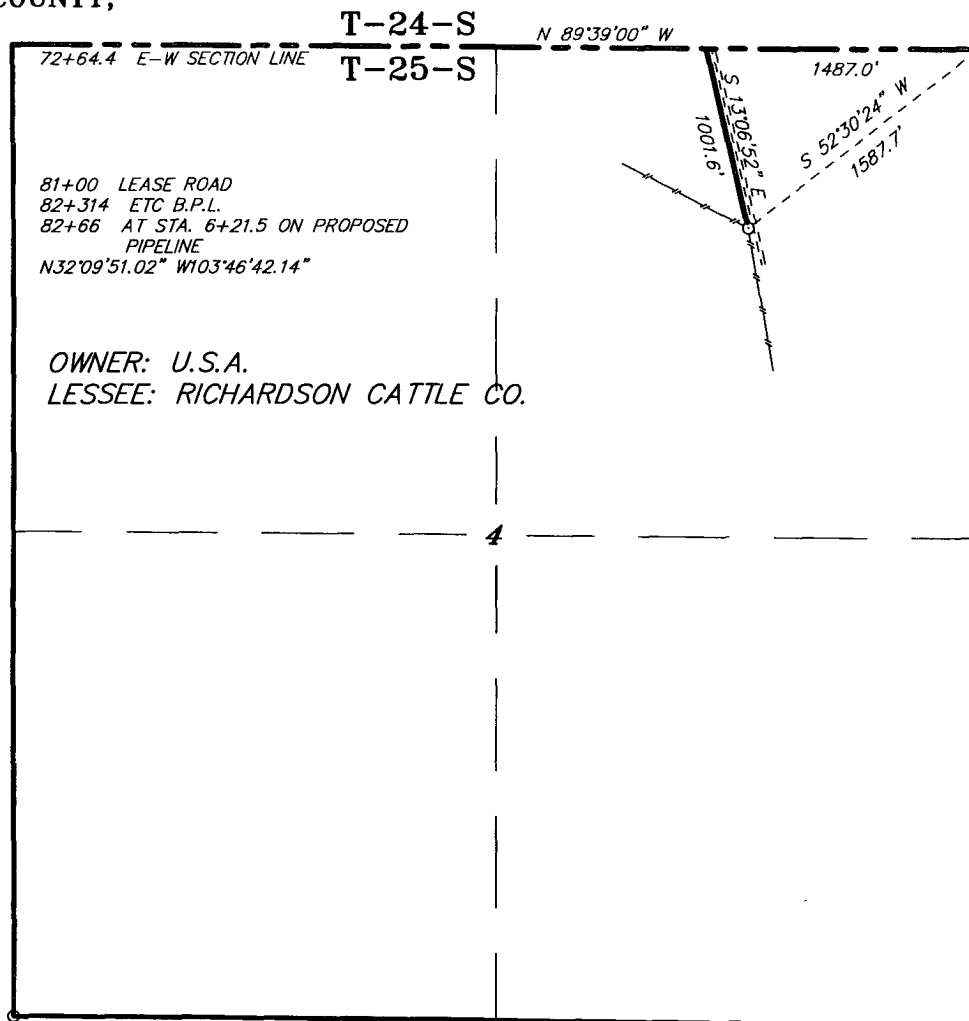
1000 0 1000 2000 FEET

**BOPCO, L.P.**

REF: PROP. PIPELINE FOR THE BOPCO-POKER LAKE UNIT #199

A PIPELINE CROSSING U.S.A. LAND IN  
SECTION 33, TOWNSHIP 24 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

1001.6 FEET = 60.70 RODS = 0.19 MILES = 0.69 ACRES

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED  
FROM FIELD NOTES OF AN ACTUAL SURVEY AND  
MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND  
SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES

TEXAS P.L.S.

No. 7977  
No. 5074

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 21528

Drawn By: James Presley

Date: 07/13/09

Disk: JLP #1 - BOP21528

1000 0 1000 2000 FEET

**BOPCO, L.P.**

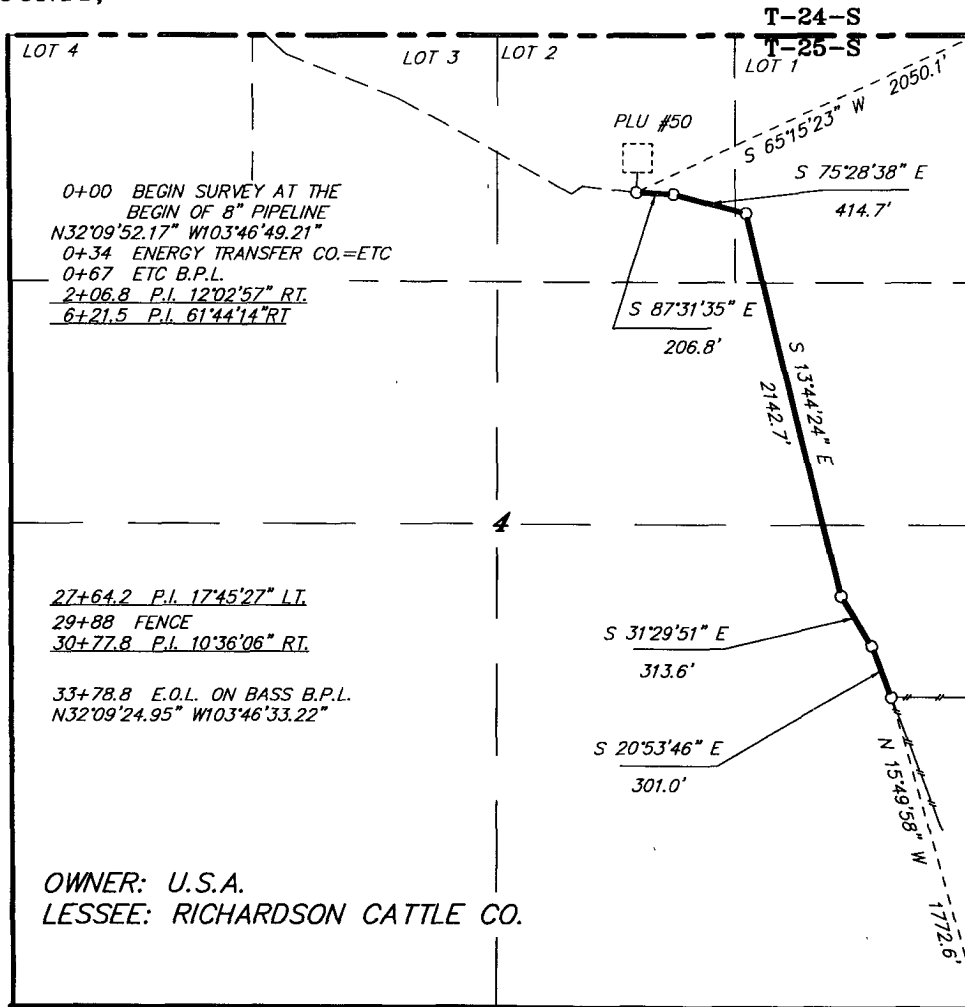
REF: PROP. PIPELINE FOR THE BOPCO-POKER LAKE UNIT #199

A PIPELINE CROSSING U.S.A. LAND IN  
SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 07/10/09

Sheet 3 of 3 Sheets

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

3378.8 FEET = 204.78 RODS = 0.64 MILES = 2.33 ACRES

I HEREBY CERTIFY THAT THIS MAP WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THE STATE.

GARY L. JONES, P.S. No. 7977  
Professional Land Surveyor  
No. 5074

**BASIN SURVEYS** P.O. BOX 1786—HOBBS, NEW MEXICO

W.O. Number: 20983 Drawn By: James Presley

Date: 01/23/09 Disk: BOP20983

1000 0 1000 2000 FEET

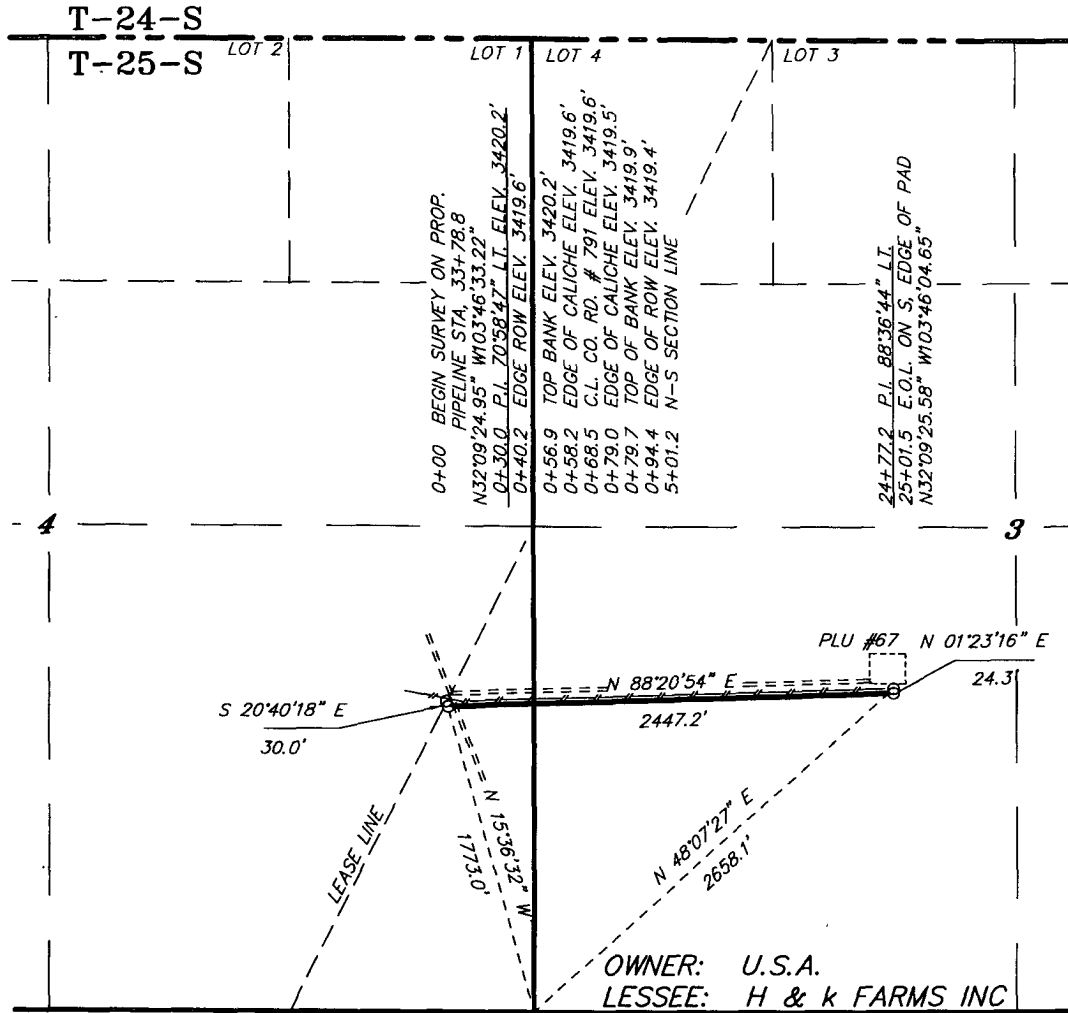
**BOPCO, L.P.**

REF: PROPOSED 8" PIPELINE TO THE EXISTING PIPELINE

A PIPELINE CROSSING U.S.A. LAND IN  
SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 01/13/09 Sheet 1 of 1 Sheets

SECTION 3&4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

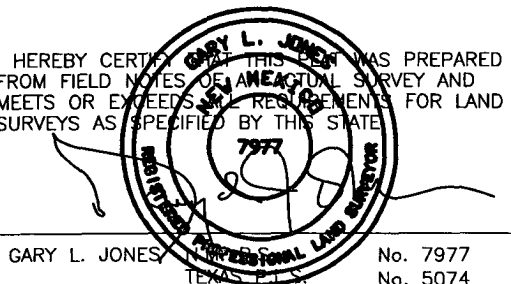
A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTIONS 3&4, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

SEC. 4 501.2 FEET = 30.38 RODS = 0.09 MILES = 0.34 ACRES

SEC. 3 2000.3 FEET = 121.23 RODS = 0.38 MILES = 1.38 ACRES

TOTAL 2501.5 FEET = 151.61 RODS = 0.47 MILES = 1.72 ACRES

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE



**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 21547

Drawn By: James Presley

Date: 07/13/09

Disk: JLP #1 - BOP21547

1000 0 1000 2000 FEET

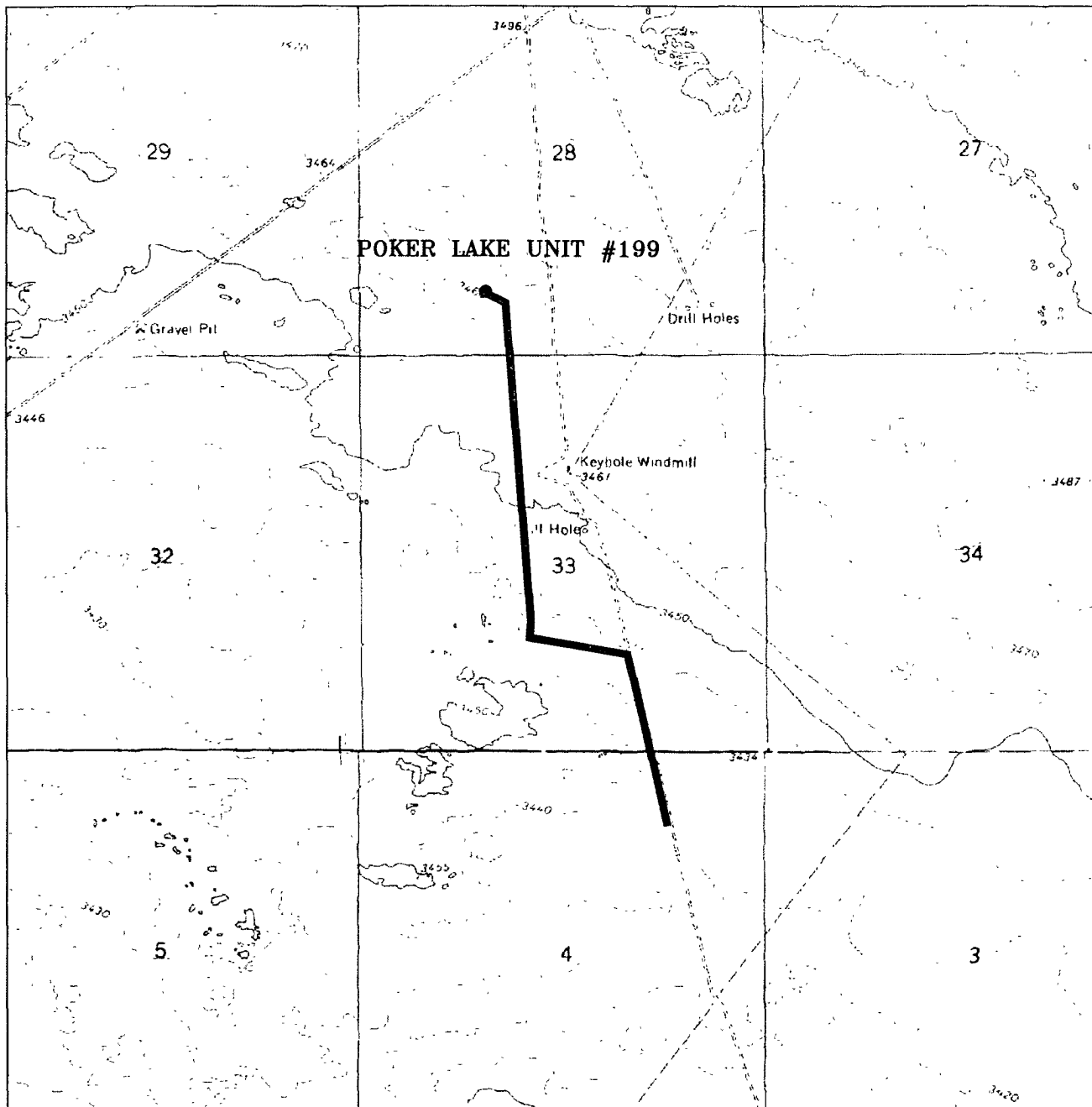
**BOPCO, L.P.**

REF: PROPOSED PIPELINE TO THE PLU #67

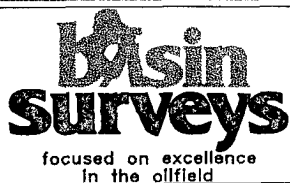
A PIPELINE CROSSING U.S.A. LAND IN  
SECTIONS 3&4, TOWNSHIP 25 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 07/10/09

Sheet 1 of 1 Sheets



**PROPOSED PIPELINE TO THE BOPCO-POKER LAKE UNIT #199**  
 Sections 23&33, Township 24 South, Range 31 East,  
 & Section 4, Township 25 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

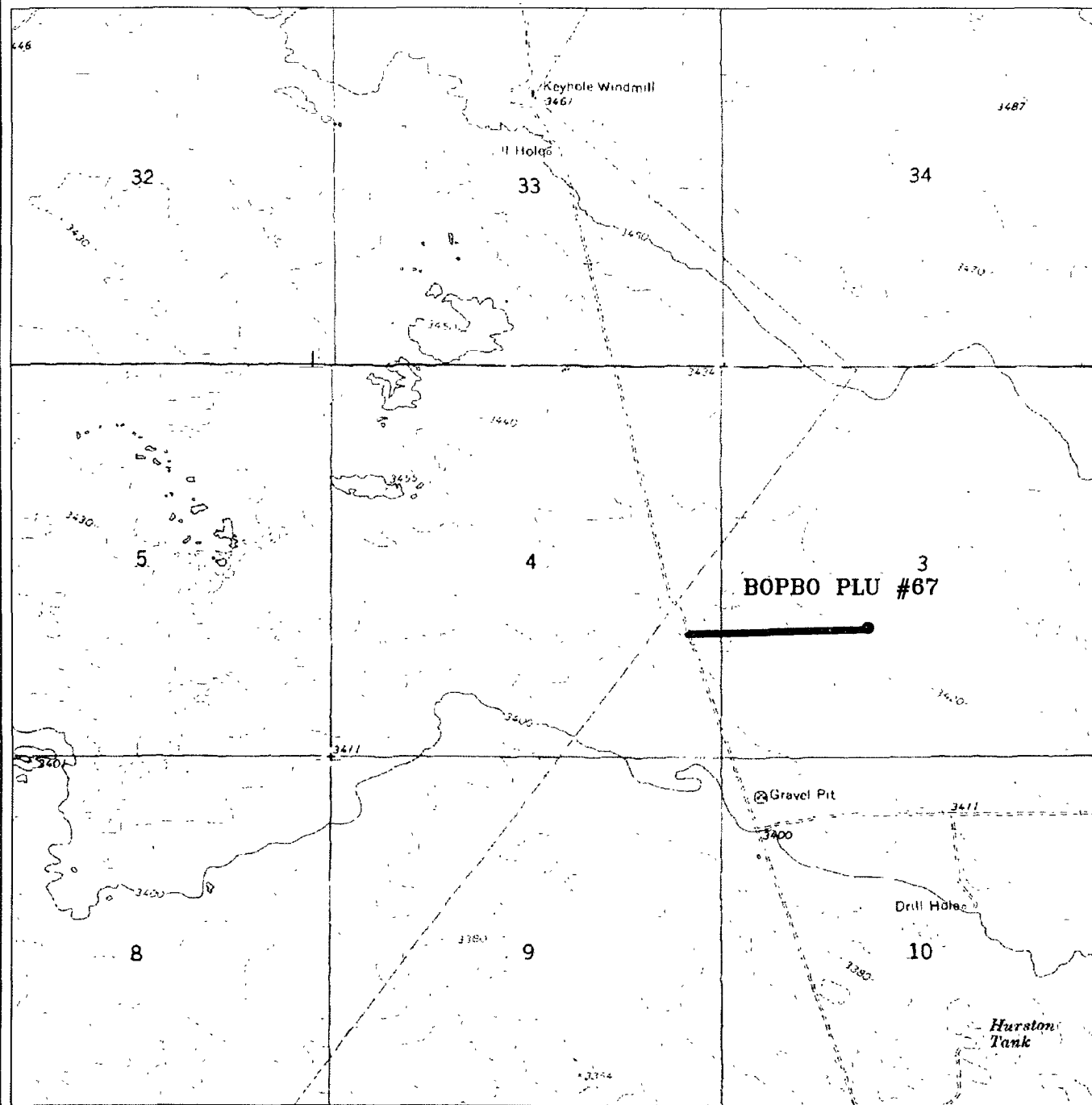
W.O. Number: 21528

Survey Date: 7/10/09

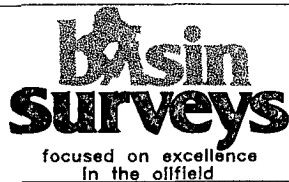
Scale: 1" = 2000'

Date: 07/14/09

**BOPCO, L.P.**



**PROPOSED PIPELINE TO THE BOPBO PLU #67**  
 Section 3, Township 25 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 21547

Survey Date: 07/10/09

Scale: 1" = 2000'

Date: 07/13/09

**BOPCO, L.P.**



# NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 114407	2a. Lead (Sponsoring) Agency:  BLM	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:
4. Title of Report: A class III archaeological survey of two proposed pipelines for BOPCO, LP. The first connects the PLU well #199 pad and the PLU well #197 pad to an existing service and the second connects the PLU well #67 pad to an existing service.  Author(s) Jeffrey Pangburn and Vanessa Hughie			5. Type of Report <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Positive
6. Investigation Type <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other			
<p>7. Description of Undertaking (what does the project entail?): Between the 6th and 10th of July, 2009 Jeffrey Pangburn with Boone Archaeological Services conducted a class III survey for two proposed pipelines the first to connect the PLU well #199 pad and the PLU well #197 pad to an existing service and the second to connect the PLU well #67 pad to an existing service for BOPCO, LP. The project was conducted to meet the federal and state laws for preserving and protecting cultural resources. These laws include Section 106 of the National Historic Preservation Act of 1966. This survey was designed to meet, but not limited to, the requirements detailed in the BLM Manual Supplement H-8100-1 New Mexico, Oklahoma and Texas, Procedures for Performing Cultural Resource Fieldwork on Public Lands in the area of New Mexico BLM Responsibilities 2002.</p> <p>The project consists of two proposed pipelines. The beginning of the first line (BOL) is located on the west side of the PLU well #199 pad and extends in a southeasterly direction to station 0+18.6 and turns left continuing to station 3+18.2 and turns right, then extends to station 44+54.9 and turns right continuing to station 46+75.6 and turns left, then extends to station 59+57.2 and turns right continuing to station 82+66 the end of the line (EOL) located at an existing service. The BOL for the second line is located at an existing service and extends in an easterly direction to station 0+30.0 and turns left continuing to station 24+77.2 and turns left, then extends to station 25+01.5 the EOL located on the south edge of the PLU well #67. The first proposed line is 8,266' (+/-) in length, and the second line is 2,501.5' (+/-) in length for a grand total of 10,767.5' (+/-) surveyed for this project. The survey corridor for this project is 100' (+/-) wide centered on the flagged right of way (ROW). The impact area is unknown but estimated to be a 50' wide corridor centered on the flagged right of way. With a noted exception that portions of this project which parallel existing surveys, the survey corridor was extended 50 foot from existing disturbed right of ways.</p> <p>Bill Franks with BOPCO, LP requested an infield meeting to delineate the project area and to discuss any possible problems with the cultural materials which could affect this project. Jeffrey Pangburn with Boone Archaeological Services met with Bill Franks on 7 July 2009. The meeting resulted in the project ROW being delineated with lathe and marking tape, the cultural survey followed. The project ROW was delineated by Bill Franks, however, immediately a cultural site LA 163428 was located. The site was documented and the original ROW was abandoned and an alternate ROW was selected. Both the original ROW and the currently staked ROW are plotted on the attached project map. The currently staked ROW does not intersect LA 163428, however, a cultural monitor is recommended to be present as construction passes between stations 0+18.5 and 8+00 to ensure the proposed undertaking does not adversely impact any cultural materials. The location of the cultural site required a consultation with Martin Stein, a staff archaeologist with the BLM-CFO. In the consultation the location of LA 163428 was discussed and relocation of the proposed ROW. Martin Stein informed this researcher that as long as the project did not intersect LA 163428 the project could be recommended to proceed.</p> <p>LA 163428 was recorded to reflect the current infield observations of the distribution of cultural materials. The noted cultural materials are within the survey area along the project right of way but do not intersect the estimated impact area of the ROW. It is suspected construction will not adversely affect the cultural site.</p> <p>Additionally several surveys are directly adjacent to portions of the currently staked ROW. The previous surveys include two lease roads and a pipeline ROW and were surveyed under BLM project numbers 02-NM-080-100, 99NM-080-67, and 02-NM-080-192. Each survey is parallel to the proposed ROW and after a consultation with Martin Stein of the BLM-CFO it was determined that the current undertaking would need to extend the survey corridor 50' from the disturbed portions of the existing right of ways.</p> <p>The proposed ROW crosses through a coppice dune field and portions of the proposed project ROW are bordered by an existing lease road, and flow lines. The proposed project is plotted on the attached project map. Location plots for the project were obtained by utilizing a hand held GPS. The project was delineated by the client prior to field work with lathe and marking tape. The areas recommended for monitoring are delineated on the attached project and site maps.</p>			
8. . Dates of Investigation: (from: 7/6/2009 to: 7/10/2009)		9. Report Date: 7/17/2009	
10. Performing Agency/Consultant: Boone Archaeological Services, LLC 2030 North Canal Carlsbad NM 88220  Principal Investigator: Danny Boone Field Supervisor: Jeffrey Pangburn Field Personnel Names:		11. Performing Agency/Consultant Report No.: BAS 06-09-27	
		12. Applicable Cultural Resource Permit No(s): BLM 190-2920-08-K    STATE: NM-09-157-S	

13. Client/Customer (project proponent): <b>BOPCO, LP.</b> Contact: Bill Franks Address: <b>PO BOX2760</b> <b>Midland TX 79702</b>  Phone: <b>(432) 683-2277</b>	14. Client/Customer Project No..
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15. Land Ownership Status (*Must be indicated on project map*).  

Land Owner	Acres Surveyed	Acres in APE
BLM	23.31 (+/-)	12.40 (+/-)
TOTALS	23.31 (+/-)	12.40 (+/-)

16 Records Search(es):  
  

Date(s) of ARMS File Review 3 July 2009	Name of Reviewer(s) Jeffrey Pangburn	
Date(s) of NR/SR File Review	Name of Reviewer(s)	
Date(s) of Other Agency File Review 3 July 2009	Name of Reviewer(s) Jeffrey Pangburn	Agency BLM

Findings: A review of the BLM and ARMS databases located LA 107816 and LA 147527 within one quarter mile of the current undertaking.

17. Survey Data:  
 a. Source Graphics    ☒ NAD 27    ☐ NAD 83  
                               ☒ USGS 7.5' (1:24,000) topo map    ☐ Other topo map, Scale:  
                               ☒ GPS Unit    Accuracy ☐ <1.0m    ☒ 1-10m    ☐ 10-100m    ☐ >100m  
  
 b. USGS 7.5' Topographic Map Name                      USGS Quad Code  

Big Sinks, NM (1968)	32103-B7

  
 c. County(ies): Eddy

17. Survey Data (continued):

d Nearest City or Town. Malaga, NM

e Legal Description

Township (N/S)	Range (E/W)	Section	$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$
24S	31E	28	(anchored in SW corner) SE $\frac{1}{4}$ SW $\frac{1}{4}$ , ,
24S	31E	33	(anchored in NW corner) NE $\frac{1}{4}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ , ,
25S	31E	4	(anchored in NW corner) NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ , ,
25S	31E	3	(anchored in NW corner) NW $\frac{1}{4}$ SW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , ,
			, , ,
			, , ,
			, , ,
			, , ,

Projected legal description? Yes ☒ No ☐ Unplatted ☐

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:

Intensity: ☒ 100% coverage ☐ <100% coverage

Configuration: ☐ block survey units ☒ linear survey units (l x w): Total[BLM]- 10,767.5' (+/-) [First Line- 8,266' (+/-)] [Second Line- 2,501.5' (+/-)] ☐ other survey units (specify):

Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 15 Crew Size: 1 Fieldwork Dates: 6 July- 10 July 2009

Survey Person Hours: 6 Recording Person Hours: 2 Total Hours: 8

Additional Narrative:

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):

Topography: Low hills within a coppice dune field

Vegetative community: Mesquite, creosote, 4-wing salt bush, thistle, broom snake weed, drop seed grass, yucca and various other desert grasses and forbes

NRCS: Kermit-Berino association: Sandy, deep soils from wind-worked mixed sand deposits

Elevation: 3420'- 3485'

20. a. Percent Ground Visibility: 90% b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): Grazed

21. CULTURAL RESOURCE FINDINGS ☒ Yes, See Page 3 ☐ No, Discuss Why:

22. Required Attachments (check all appropriate boxes):

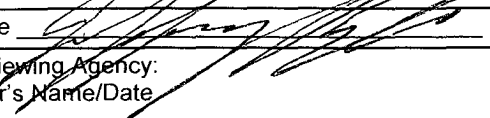
- ☒ USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
- ☒ Copy of NMCRIS Mapserver Map Check
- ☒ LA Site Forms - new sites (*with sketch map & topographic map*)
- ☐ LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
- ☐ Historic Cultural Property Inventory Forms
- ☐ List and Description of isolates, if applicable
- ☐ List and Description of Collections, if applicable

23. Other Attachments:

- ☒ Photographs and Log
  - ☒ Other Attachments
- (Describe): Plats

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Crew Chief/Responsible Archaeologist: Jeffrey Pangburn

Signature  25. Reviewing Agency: Reviewer's Name/Date Accepted ( )      Rejected ( ) Tribal Consultation (if applicable): <input type="checkbox"/> Yes <input type="checkbox"/> No	Date: 17 July 2009 Title (if not PI): Field Supervisor 26. SHPO Reviewer's Name/Date: HPD Log #: SHPO File Location: Date sent to ARMS:
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## CULTURAL RESOURCE FINDINGS

*[fill in appropriate section(s)]*

1. NMCRIS Activity No. 114407	2. Lead (Sponsoring) Agency: BLM	3. Lead Agency Report No..
----------------------------------	-------------------------------------	----------------------------

### SURVEY RESULTS:

Sites discovered and registered: 1  
 Sites discovered and NOT registered: 0  
 Previously recorded sites revisited (*site update form required*): 0  
 Previously recorded sites not relocated (*site update form required*): 0  
 TOTAL SITES VISITED: 1  
 Total isolates recorded: 0      Non-selective isolate recording? ☐  
 Total structures recorded (*new and previously recorded, including acequias*): 0

**MANAGEMENT SUMMARY:** Archaeological clearance is recommended, for the proposed right of way for two proposed pipelines, the first to connect the PLU well #199 pad and the PLU well #197 pad to an existing service and the second to connect the PLU well #67 pad to an existing service for BOPCO, LP as the project is currently staked. Provided a cultural monitor is present as construction passes between stations 0+18.5 and station 8+00. If cultural materials are encountered, at any time, all work should cease and a BLM-CFO Staff archaeologist notified immediately.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

### SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)
163428	BAS 06-09-27 JP1	Yes; Criterion "D"

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

### MONITORING LA NUMBER LOG (*site form required*)

Sites Discovered (*site form required*) :      Previously recorded sites (*Site update form required*):

LA No.	Field/Agency No.	LA No.	Field/Agency No.
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Areas outside known nearby site boundaries monitored? Yes ☐, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG (site form required)

Tested LA number(s)	Excavated LA number(s)

A Class III Archaeological Survey

Of

Two Proposed Pipelines, One to connect the PLU well #199 pad  
and the PLU well #197 pad to an existing service and the other to  
connect the PLU well #67 pad to an existing service

For

BOPCO, LP

By

Jeffrey Pangburn  
Boone Archaeological Services, LLC  
Carlsbad, New Mexico 88220

BAS No.: 06-09-21

NMCRIS No.: 114407

**Attention: Bill Franks****Introduction:**

Between the 6<sup>th</sup> and 10<sup>th</sup> of July, 2009 Jeffrey Pangburn with Boone Archaeological Services conducted a class III survey for two proposed pipelines the first to connect the PLU well #199 pad and the PLU well #197 pad to an existing service and the second to connect the PLU well #67 pad to an existing service for BOPCO, LP. The project was conducted to meet the federal and state laws for preserving and protecting cultural resources. These laws include Section 106 of the National Historic Preservation Act of 1966. This survey was designed to meet, but not limited to, the requirements detailed in the BLM Manual Supplement H-8100-1 New Mexico, Oklahoma and Texas, Procedures for Performing Cultural Resource Fieldwork on Public Lands in the area of New Mexico BLM Responsibilities 2002.

The project consists of two proposed pipelines. The beginning of the first line (BOL) is located on the west side of the PLU well #199 pad and extends in a southeasterly direction to station 0+18.6 and turns left continuing to station 3+18.2 and turns right, then extends to station 44+54.9 and turns right continuing to station 46+75.6 and turns left, then extends to station 59+57.2 and turns right continuing to station 82+66 the end of the line (EOL) located at an existing service. The BOL for the second line is located at an existing service and extends in an easterly direction to station 0+30.0 and turns left continuing to station 24+77.2 and turns left, then extends to station 25+01.5 the EOL located on the south edge of the PLU well #67. The first proposed line is 8,266' (+/-) in length, and the second line is 2,501.5' (+/-) in length for a grand total of 10,767.5' (+/-) surveyed for this project. The survey corridor for this project is 100' (+/-) wide centered on the flagged right of way (ROW). The impact area is unknown but estimated to be a 50' wide corridor centered on the flagged right of way. With a noted exception that portions of this project which parallel existing surveys, the survey corridor was extended 50 foot from existing disturbed right of ways.

Bill Franks with BOPCO, LP requested an infield meeting to delineate the project area and to discuss any possible problems with the cultural materials which could affect this project. Jeffrey Pangburn with Boone Archaeological Services met with Bill Franks on 7 July 2009. The meeting resulted in the project ROW being delineated with lathe and marking tape, the cultural survey followed. The project ROW was delineated by Bill Franks, however, immediately a cultural site LA 163428 was located. The site was documented and the original ROW was abandoned and an alternate ROW was selected. Both the original ROW and the currently staked ROW are plotted on the attached project map. The currently staked ROW does not intersect LA 163428, however, a cultural monitor is recommended to be present as construction passes between stations 0+18.5 and 8+00 to ensure the proposed undertaking does not adversely impact any cultural materials. The location of the cultural site required a consultation with Martin Stein, a staff archaeologist with the BLM-CFO. In the consultation the location of LA 163428

was discussed and relocation of the proposed ROW. Martin Stein informed this researcher that as long as the project did not intersect LA 163428 the project could be recommended to proceed.

LA 163428 was recorded to reflect the current infield observations of the distribution of cultural materials. The noted cultural materials are within the survey area along the project right of way but do not intersect the estimated impact area of the ROW. It is suspected construction will not adversely affect the cultural site.

Additionally several surveys are directly adjacent to portions of the currently staked ROW. The previous surveys include two lease roads and a pipeline ROW and were surveyed under BLM project numbers 02-NM-080-100, 99NM-080-67, and 02-NM-080-192. Each survey is parallel to the proposed ROW and after a consultation with Martin Stein of the BLM-CFO it was determined that the current undertaking would need to extend the survey corridor 50' from the disturbed portions of the existing right of ways. The proposed ROW crosses through a coppice dune field and portions of the proposed project ROW are bordered by an existing lease road, and flow lines. The proposed project is plotted on the attached project map. Location plots for the project were obtained by utilizing a hand held GPS. The project was delineated by the client prior to field work with lathe and marking tape. The areas recommended for monitoring are delineated on the attached project and site maps.

### **Legal Description:**

T 24S, R 31E, Sec. 28 (anchored in SW corner) SE  $\frac{1}{4}$  SW  $\frac{1}{4}$ , Sec. 33 (anchored in NW corner) NE  $\frac{1}{4}$  NW  $\frac{1}{4}$ , SE  $\frac{1}{4}$  NW  $\frac{1}{4}$ , NW  $\frac{1}{4}$  SW  $\frac{1}{4}$ , NW  $\frac{1}{4}$  SW  $\frac{1}{4}$ , NW  $\frac{1}{4}$  SE  $\frac{1}{4}$ , SW  $\frac{1}{4}$  SE  $\frac{1}{4}$ , T 25S, R 31E, Sec. 4 (anchored in NW corner) NW  $\frac{1}{4}$  NE  $\frac{1}{4}$ , NE  $\frac{1}{4}$  NE  $\frac{1}{4}$ , NE  $\frac{1}{4}$  SE  $\frac{1}{4}$ , Sec. 3 (anchored in NW corner) NW  $\frac{1}{4}$  SW  $\frac{1}{4}$ , NE  $\frac{1}{4}$  SW  $\frac{1}{4}$

USGS 7.5' Series: Big Sinks, NM (1968) 32103-B7

Land Status: BLM

### **Environment:**

Topography: Low hills within a coppice dune field

Vegetation: Mesquite, creosote, 4-wing salt bush, thistle, broom snake weed, drop seed grass, yucca and various other desert grasses and forbes.

NRCS: Kermit-Berino association: Sandy, deep soils from wind-worked mixed sand deposits



Aspect: 360 degrees

Elevation: 3420' - 3485'

Lithic Resources: Some cherts, in gravels, very sparse.

Water Sources: (Potential) Keyhole Windmill 700' (+/-) east of the project area and several small playas within .5 miles of the project area.

(Permanent) Pecos River, 10.5 miles west of the proposed right of way.

### **Methods of Examination:**

The undertaking was conducted by a pedestrian survey, with one field person, walking at 15-meter intervals along either side of the center flagged line for 100% coverage of the survey area. This survey was designed to meet, but not limited to, the requirements detailed in the BLM Manual Supplement H-8100-1 New Mexico, Oklahoma and Texas, Procedures for performing Cultural Resource Fieldwork on Public Lands in the area of New Mexico BLM Responsibilities 2002.

Area Delineation: Staked by client prior to fieldwork with lathe and marking tape.

Visibility: 85% (+/-)

Weather: Clear, sunny, warm

Lighting Conditions: Fair

Work Hours on the Ground: 8

Crew Size: one person

### **Findings:**

Jeffrey Pangburn conducted a review of the site files at BLM Carlsbad office in the Archaeological Records Management Section on 3 July 2009 and the ARMS file review was conducted on 3 July 2009. The results of these searches indicated LA 107816 and LA 147527 within one quarter mile of the current undertaking.

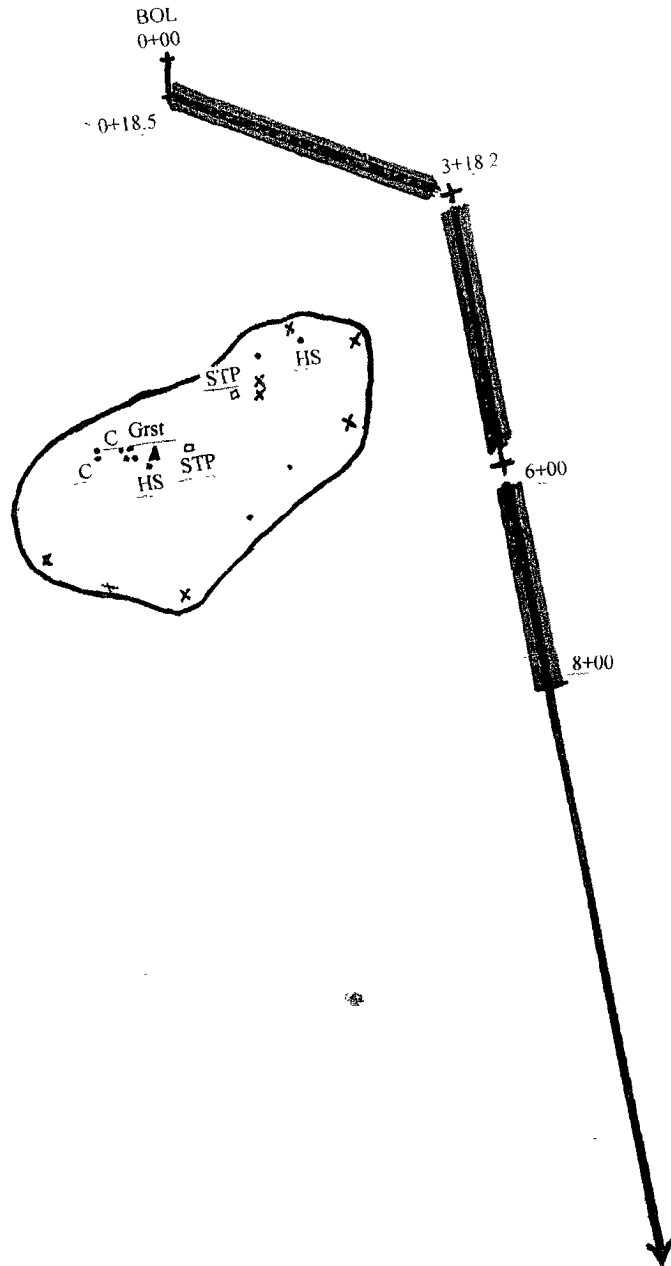
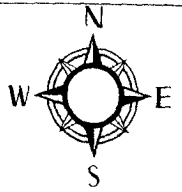
### **Recommendations:**

Archaeological clearance is recommended, for the proposed right of way for two proposed pipelines, the first to connect the PLU well #199 pad and the PLU well #197 pad to an existing service and the second to connect the PLU well #67 pad to an existing service for BOPCO, LP as the project is currently staked. Provided a cultural monitor is present as construction passes between stations 0+18.5 and station 8+00. If cultural materials are encountered, at any time, all work should cease and a BLM-CFO Staff archaeologist notified immediately.

# Site Map

## LA 163428

### BAS 06-09-27



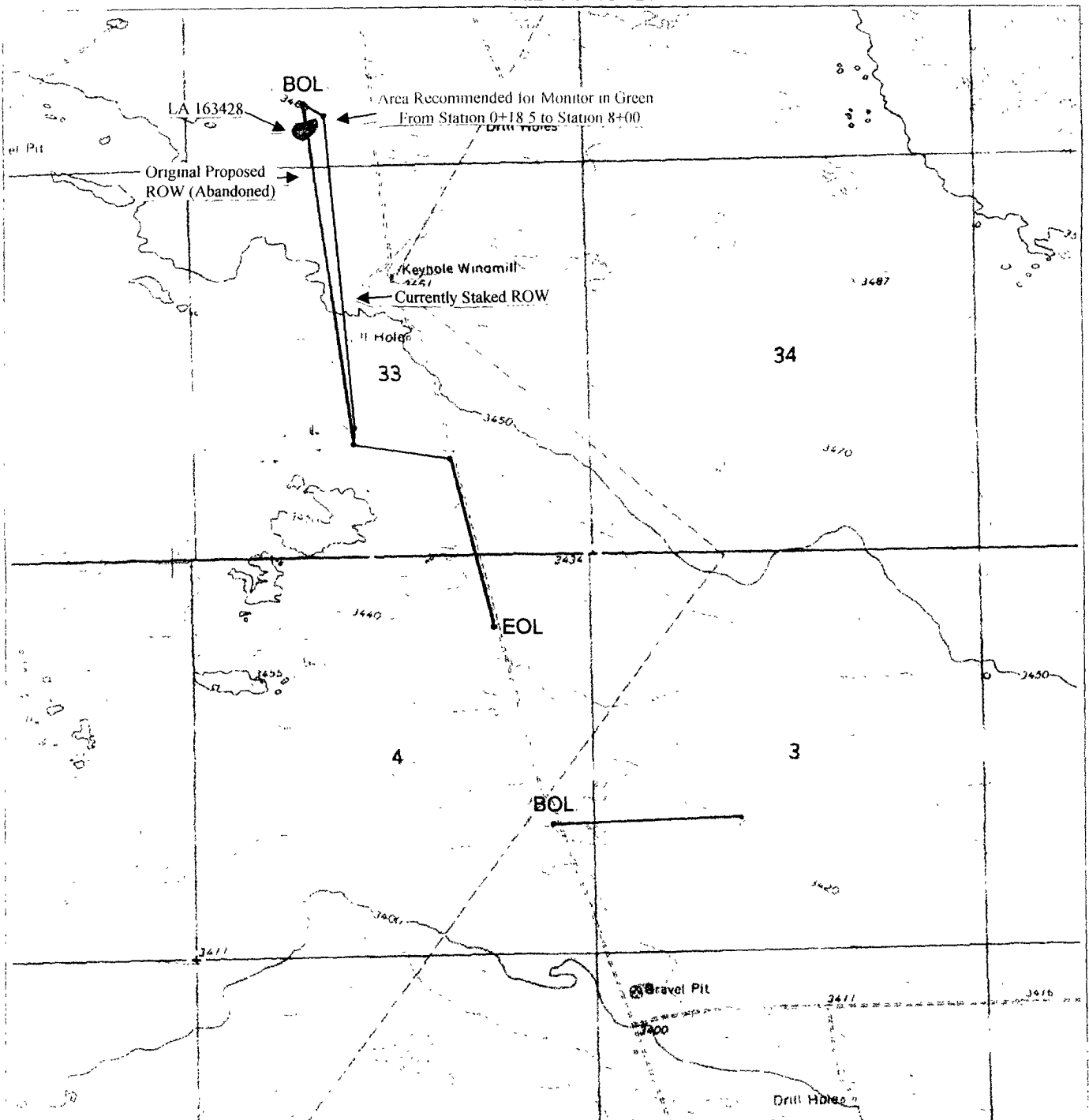
## Legend

- STP= Shovel Test Pit
- Grst= Groundstone
- C = Core
- HS = Hammerstone
- X = Fire Cracked Rock
- Artifact
- Datum (NAD 27)

scale  
1 cm = 20m

Area Recommended for Monitor in place  
from Station 0+18.5 to Station 8+00

# Project Map BAS 06-09-27



Location map of two proposed pipelines. The first connecting the PLU well #199 pad and the PLU well #197 pad to an existing service and the second connecting the PLU well #67 pad to an existing service for BOPCO, LP. The project is located in T 24S, R 31E, Sec. 28 (anchored in NW corner) SE ¼ SW ¼, Sec. 33 (anchored in NW corner) NE ¼ NW ¼, SE ¼ NW ¼, NW ¼ SW ¼, NW ¼ SW ¼, NW ¼ SE ¼, SW ¼ SE ¼, T 25S, R 31E, Sec. 4 (anchored in NW corner) NW ¼ NE ¼, NE ¼ NE ¼, NE ¼ SE ¼, Sec. 3 (anchored in NW corner) NW ¼ SW ¼, NE ¼ SW ¼ Eddy County, NM. Map Reference. USGS 7.5' minute Series; Big Sinks, NM (1968) 32103-B7

SCALE 1:24 000

