

30-025-40057

SURFACE USE PLAN

Devon Energy Production Company, LP

Thistle Unit 19H

Surface Location: 150' FNL & 2490' FEL, Unit B, Sec 28 T23S R33E, Lea, NM

Bottom Location: 150' FSL & 1470' FEL, Unit O, Sec 28 T23S R33E, Lea, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Madron Surveying, Inc.
- b. All roads into the location are depicted on the surveyor plats.
- c. Directions to Location: From State HWY 128 and caliche CR #J2 (Brinistool) go northwest 4.2 miles, turn right on caliche road (XL Rd) Go east 0.6 miles to a proposed road survey and follow the flags north 4904', bend left at BPL and follow flags 891' to a PI left and follow the flags west 1486' to the northeast pad corner for this location.
- d. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.
- e. If existing road is shared with other operators, Devon will share in its cost to maintain the road as required by the BLM.

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 shows approximately 7292' of access road will be utilized as follows:
- b. The maximum width of the road will be 14'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 2%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells:

1 Mile Radius Plat shows all existing and proposed wells within a one-mile radius of the proposed location. See attached plat.

4. Location of Existing and/or Proposed Production Facilities:

- a. In the event the well is found productive, the Thistle Unit 19H will be connected to the Thistle Unit 18H tank battery located west of the 19H. All necessary production equipment will be installed at the well site.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. All flowlines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
 - i. A closed loop system will be utilized.
 - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

4. Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

5. Construction Materials:

The caliche utilized for the drilling pad and proposed access road will be from minerals that are located onsite or will be used onsite. If minerals are not available onsite, then an established mineral pit will be used to build the location and stem road.

6. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in a closed loop system.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be sent to a closed loop system. Water produced during completion will be put into a closed loop system. Oil and condensate produced will be put into a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
 - i. American Production Service Inc, Odessa TX
 - ii. Gandy Corporation, Lovington NM
 - iii. I & W Inc, Loco Hill NM
 - iv. Jims Water Service of Co Inc, Denver CO

7. Ancillary Facilities: No campsite or other facilities will be constructed as a result of this well.

8. Well Site Layout

- a. The rig layout diagram shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. A closed loop system will be utilized.
- d. If a pit or closed loop system will be utilized, Devon will comply with the NMOCD requirements 19.15.17 and submit form C-144 CLEZ to the appropriate NMOCD District Office. An unapproved copy is provided within the APD.
- e. Topsoil Stockpiling:
 - i. Standard practice is topsoil will be pushed to the high side of location to prevent water from running across location to control erosion. If a cut out is done and there are two or three high sides, we will use those there.

9. Plans for Surface Reclamation Include Both Final & Interim:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and used for other drilling locations, repair existing roads, repair existing locations, etc. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography. We will use a closed loop system.
- b. The location and road will be rehabilitated as recommended by the BLM.
- c. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.
- d. All disturbed areas not needed for active support of production operations will undergo interim reclamation. The portions of the cleared well site not needed for operational and safety purposes will be recontoured to a final or intermediate contour that blends with the surrounding topography as much as possible. Topsoil will be respread over areas not needed for all-weather operations.

10. Surface Ownership

- a. The surface is owned by a private surface owner. Devon has settled surface access and has an agreement with the owner. The private owner is: Brininstool XL Ranch, PO Box 940, Jal, NM 88252. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- b. The proposed road routes and the surface location will be restored as directed by the BLM.

11. Other Information:

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebush, yucca and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 1 miles of location. There is a ranch house approximately 2 miles from location.
- d. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

13. Bond Coverage:

Bond Coverage is Nationwide; Bond # is CO-1104

Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

Ron Hays
Operations Engineer

Don Mayberry
Superintendent

Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, NM 88211-0250

(405) 552-8150 (office)
(405) 464-4214 (cell)

(505) 748-0164 (office)
(505) 748-5235 (cell)

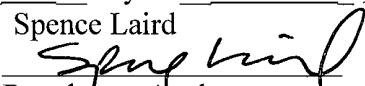
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 13th day of December, 2010.

Printed Name: Spence Laird

Signed Name: 

Position Title: Regulatory Analyst

Address: 20 North Broadway, OKC OK 73102

Telephone: (405)-228-8973

Field Representative (if not above signatory): Don Mayberry (see above)

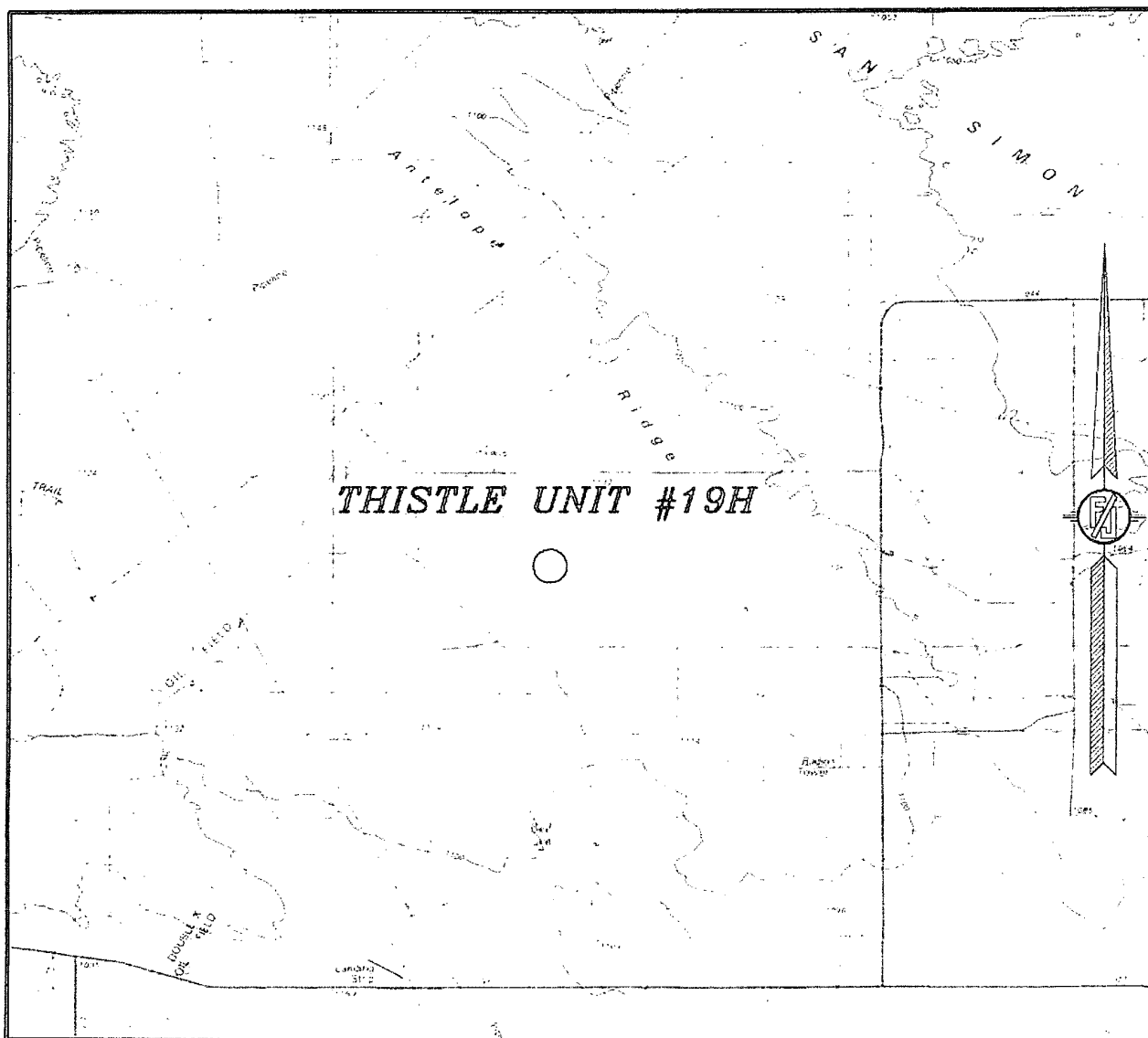
Address (if different from above):

Telephone (if different from above):

E-mail (optional):

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

THISTLE UNIT #19H

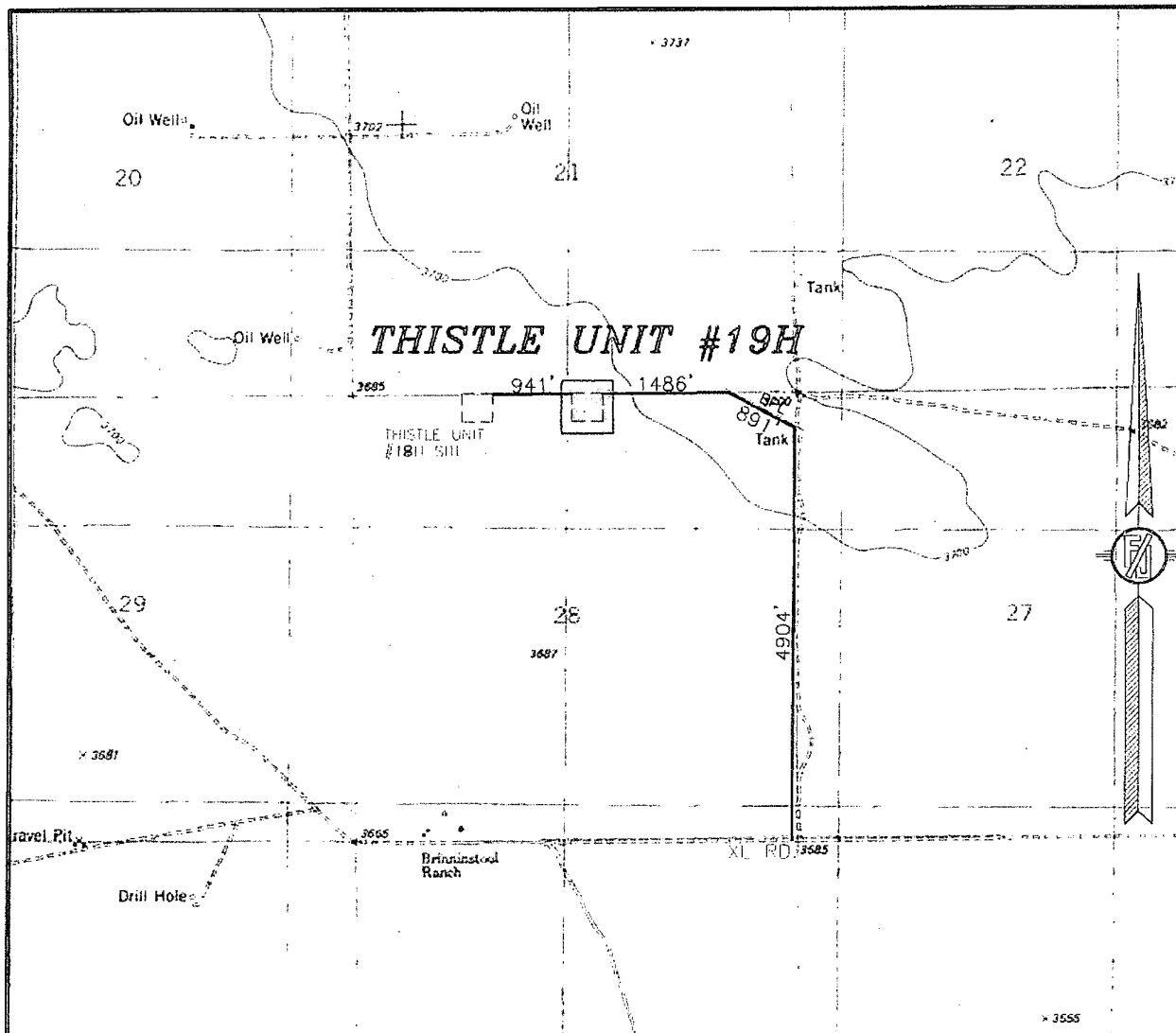
LOCATED 150 FT. FROM THE NORTH LINE
AND 2490 FT. FROM THE EAST LINE OF
SECTION 28, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 8, 2010

SURVEY NO. 313

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 887-5830

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



CONTOUR INTERVAL:
TIP TOP WELLS

NOT TO SCALE

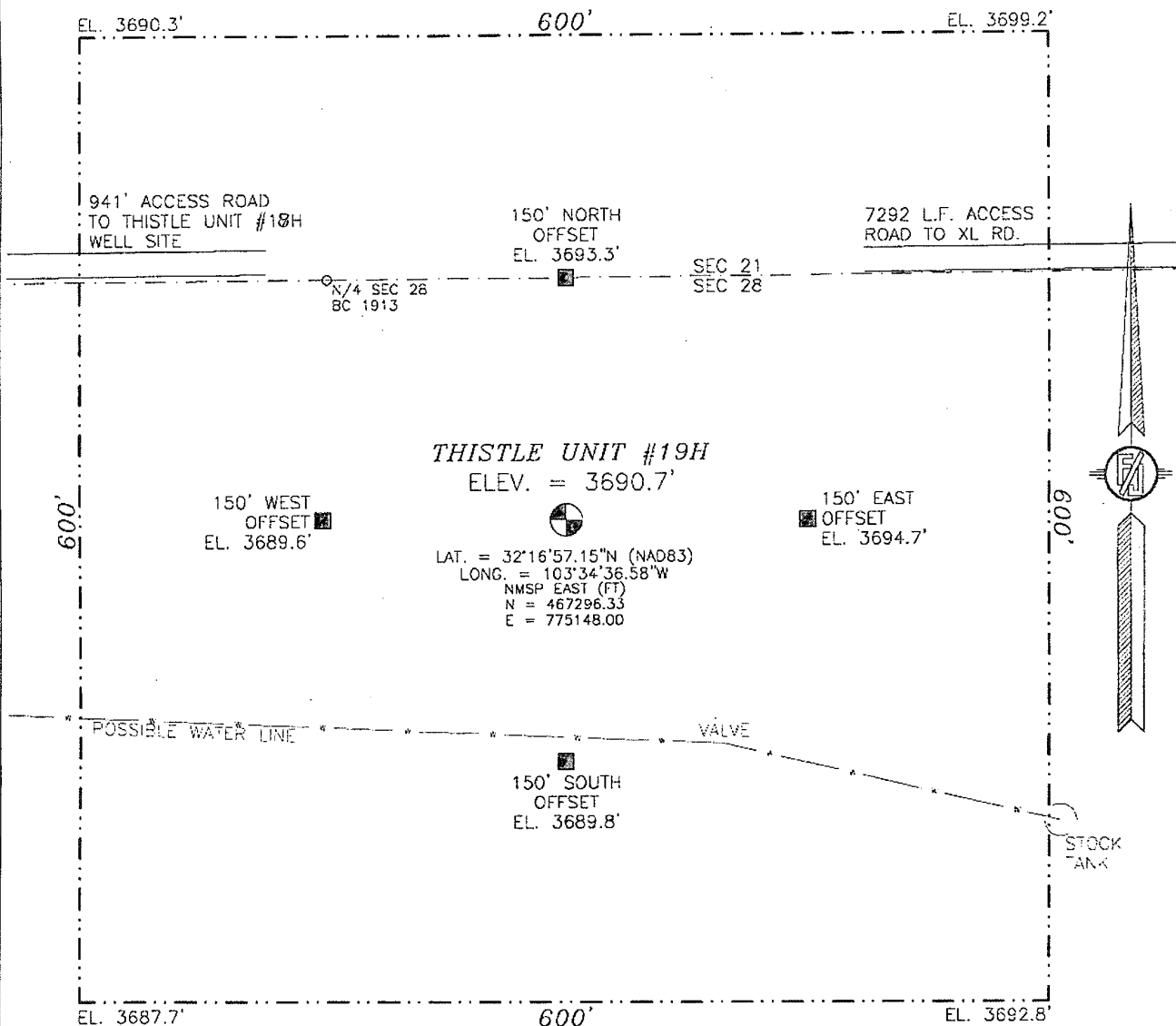
DEVON ENERGY PRODUCTION COMPANY, L.P.
THISTLE UNIT #19H
LOCATED 150 FT. FROM THE NORTH LINE
AND 2490 FT. FROM THE EAST LINE OF
SECTION 28, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 8, 2010

SURVEY NO. 313

MADRON SURVEYING, INC. 361 SOUTH CAROLINA CARLSBAD, NEW MEXICO
(505) 887-5830

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO



0 10 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM HWY 126 AND BRINNINSTOOL ROAD GO NORTHWEST ON BRINNINSTOOL RD 4.2 MILES, TURN RIGHT ON XL ROAD AND GO EAST 0.6 MILES TO A PROPOSED ROAD SURVEY, FOLLOW FLAGS NORTH 4904' BEND LEFT AT BPL AND FOLLOW FLAGS 891' TO A PI LEFT AND FOLLOW FLAGS WEST 1486' TO THE NORTHEAST PAD CORNER FOR THIS SITE.

DEVON ENERGY PRODUCTION COMPANY, L.P.

THISTLE UNIT #19H

LOCATED 150 FT. FROM THE NORTH LINE
AND 2490 FT. FROM THE EAST LINE OF
SECTION 28, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

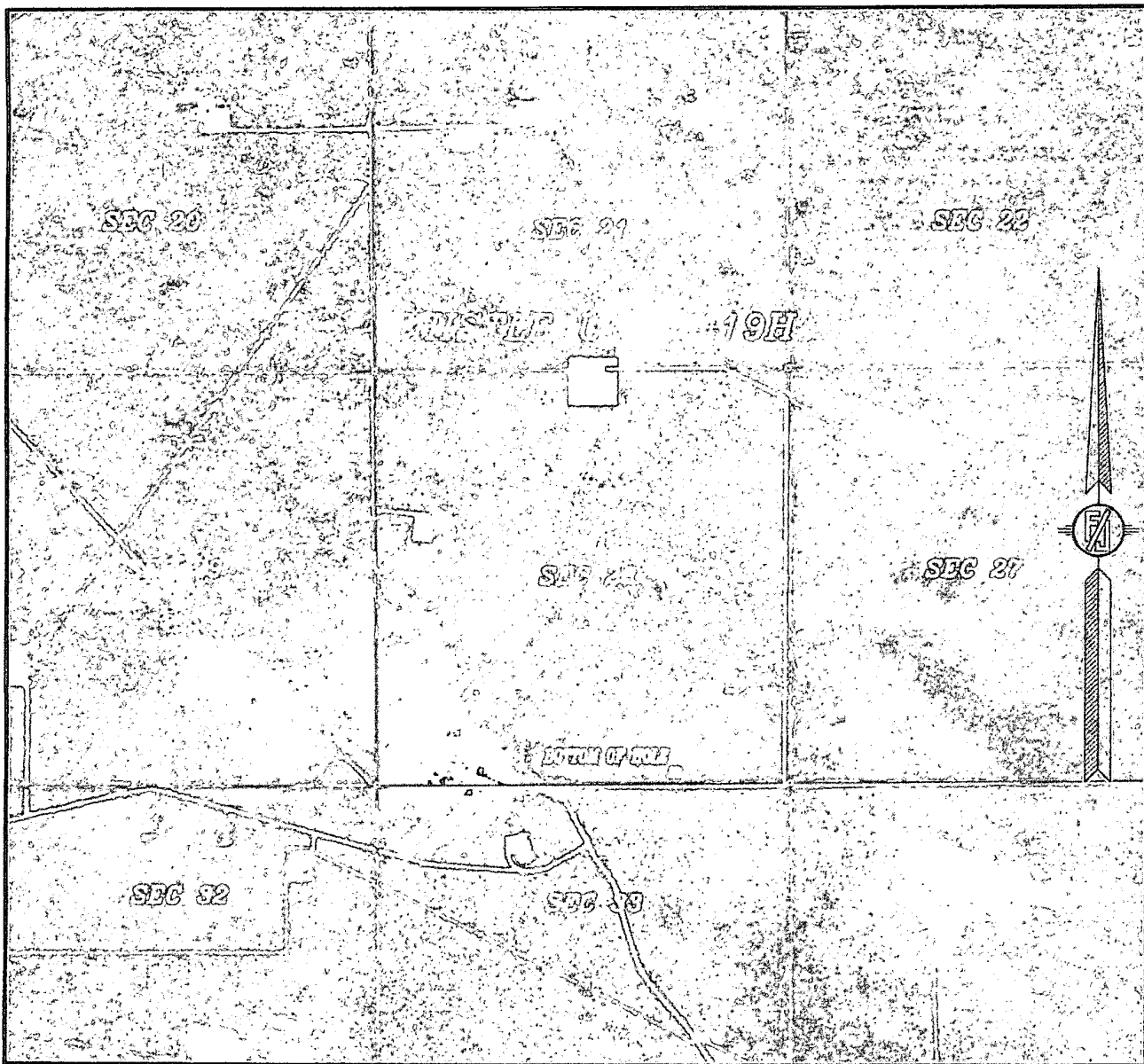
NOVEMBER 8, 2010

SURVEY NO. 313

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 887-5830 CARLSBAD, NEW MEXICO

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
USDA - AUG. 2009

DEVON ENERGY PRODUCTION COMPANY, L.P.

THISTLE UNIT #19H

LOCATED 150 FT. FROM THE NORTH LINE
AND 2490 FT. FROM THE EAST LINE OF
SECTION 28, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

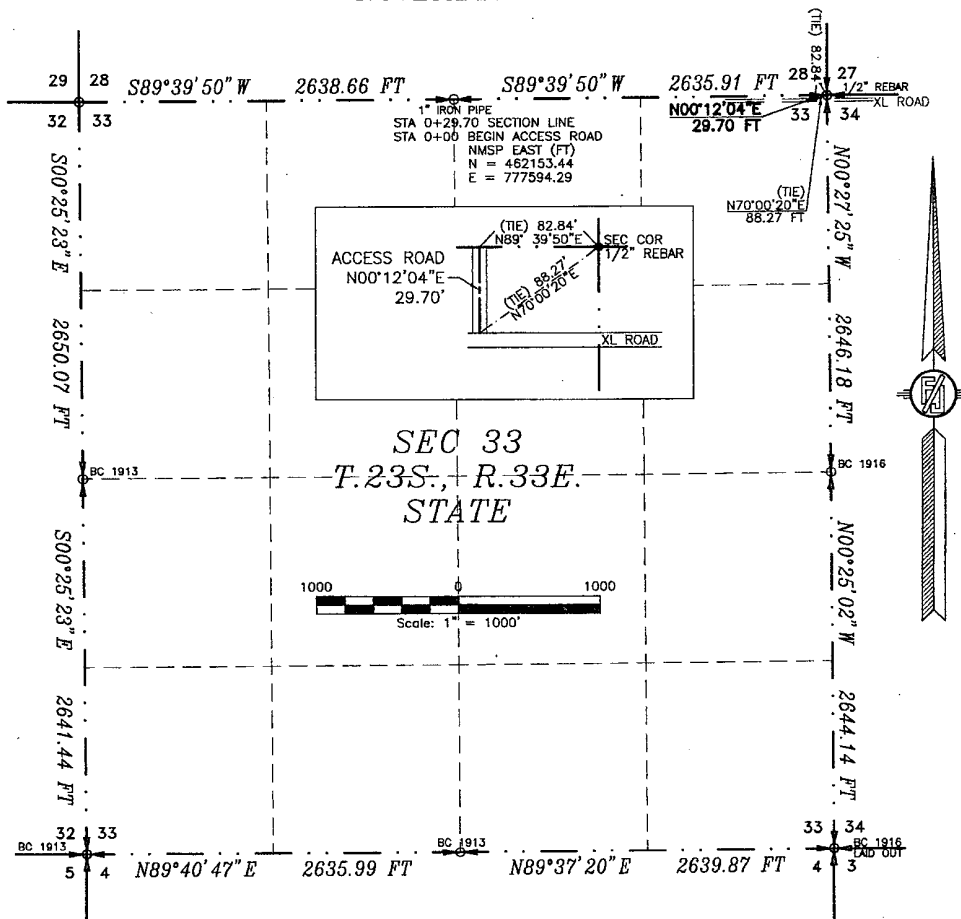
NOVEMBER 8, 2010

SURVEY NO. 313

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 847-5832 CARLSBAD, NEW MEXICO

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROUTE TO
THE THISTLE UNIT #19H WELL CROSSING
SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 2010



DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 NE/4 OF SAID SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS N70°00'20"E, 88.27 FEET; THENCE N00°12'04"E A DISTANCE OF 29.70 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 33, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS N89°39'50"E, 82.84 FEET;

SAID STRIP OF LAND BEING 29.70 FEET OR 1.80 RODS IN LENGTH, CONTAINING 0.020 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NE/4 29.70 L.F. 1.80 RODS 0.020 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW-MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT SOCORRO, NEW MEXICO, THIS 27 DAY OF NOVEMBER 2010

FILMON F. JARAMILLO, PLS. 12797
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (505) 887-5830

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT ACROSS STATE LAND TO FOR ACCESS.

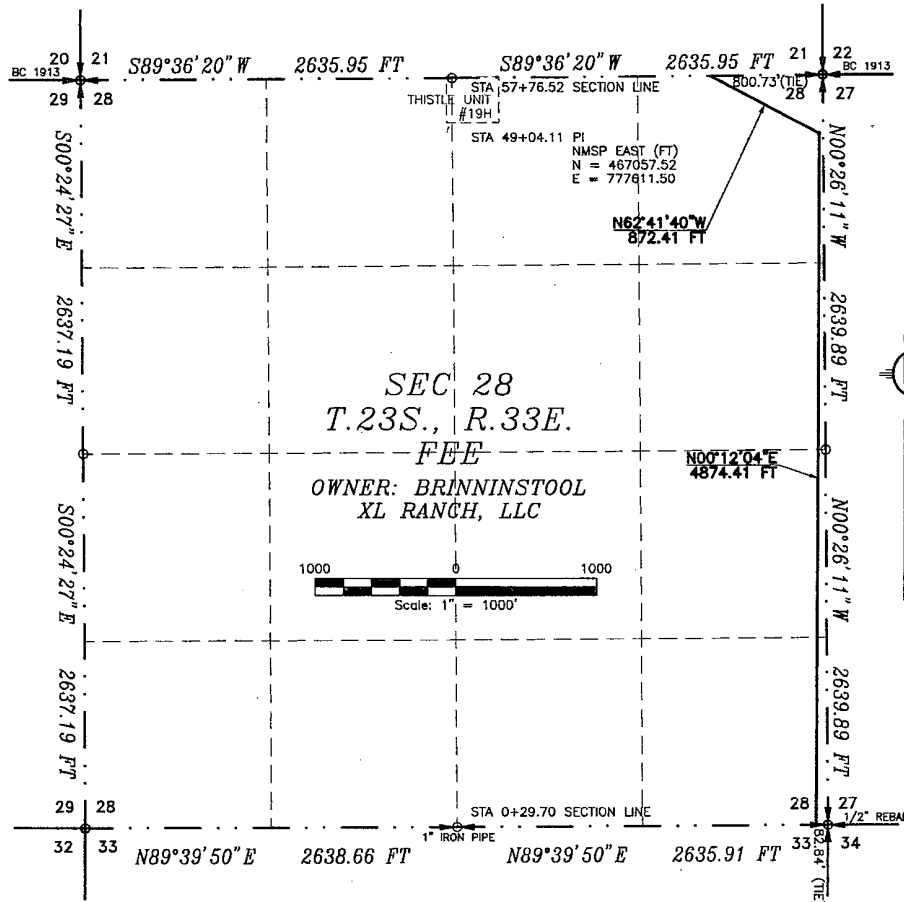
2.) BASIS OF BEARING IS NEW MEXICO STATE PLANE EAST ZONE

SURVEY NO. 313A SHEET 1-3

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROUTE TO
THE THISTLE UNIT #19H WELL CROSSING
SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 2010



DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING LAND IN SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS N89°39'50"E, 82.84 FEET; THENCE N00°12'04"E A DISTANCE OF 4874.41 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE N62°41'40"W A DISTANCE OF 872.41 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 28, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS N89°36'20"E, 800.73 FEET;

SAID STRIP OF LAND BEING 5746.82 FEET OR 348.29 RODS IN LENGTH, CONTAINING 3.958 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

| | | | |
|-----------|--------------|-------------|-------------|
| SE/4 SE/4 | 1319.98 L.F. | 80.00 RODS | 0.909 ACRES |
| NE/4 SE/4 | 1319.99 L.F. | 80.00 RODS | 0.909 ACRES |
| SE/4 NE/4 | 1320.00 L.F. | 80.00 RODS | 0.909 ACRES |
| NE/4 NE/4 | 1786.86 L.F. | 108.29 RODS | 1.231 ACRES |

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT SOCORRO,

NEW MEXICO, THIS 27th DAY OF NOVEMBER 2010

[Signature of Filimon F. Jaramillo]
 FILIMON F. JARAMILLO PLS. 12797
 301 SOUTH CANAL
 (575) 887-5830

MADRON SURVEYING, INC.
 391 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (505) 887-5830

GENERAL NOTES

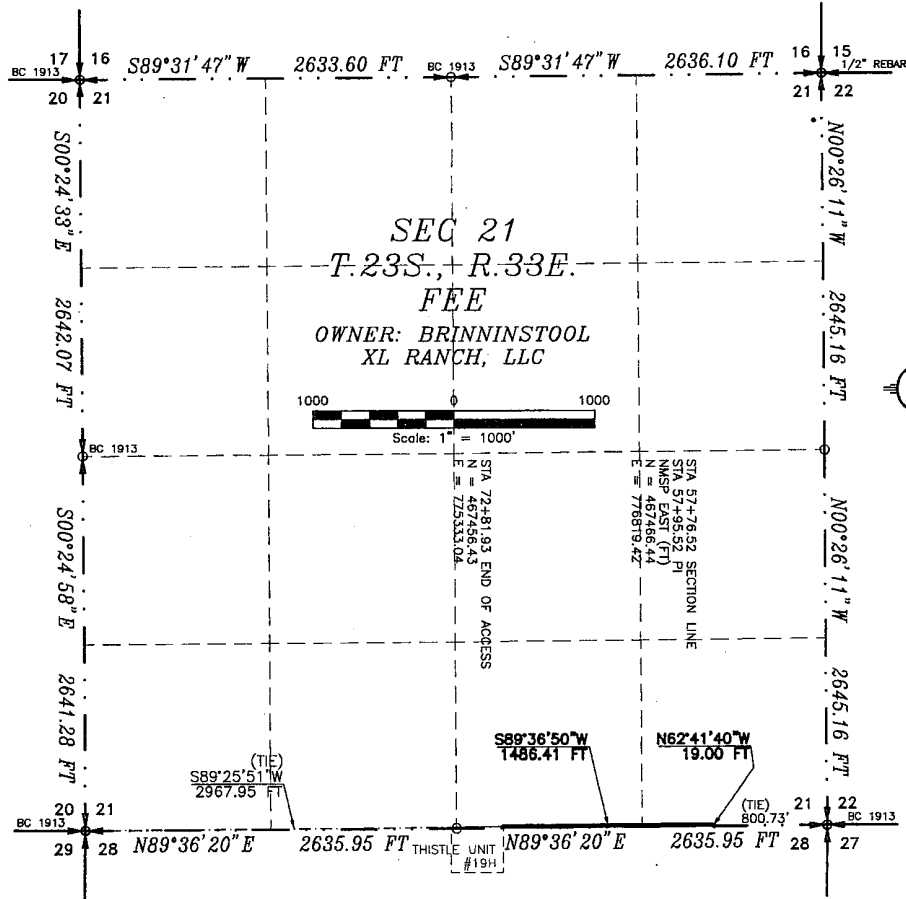
- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT FOR ACCESS.
- 2.) BASIS OF BEARING IS NEW MEXICO STATE PLANE EAST ZONE

SURVEY NO. 313A SHEET 2-3

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

DEVON ENERGY PRODUCTION COMPANY, L.P.
 CENTERLINE SURVEY OF AN ACCESS ROUTE TO
 THE THISTLE UNIT #19H WELL CROSSING
 SECTION 21, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
 LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 2010



DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING LAND IN SECTION 21, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 21, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 21, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS N89°36'20\"E, 800.73 FEET;
 THENCE N62°41'40\"W A DISTANCE OF 19.00 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
 THENCE S89°36'50\"W A DISTANCE OF 1486.41 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHWEST CORNER OF SAID SECTION 21, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M. BEARS S89°25'51\"W, 2967.95 FEET;

SAID STRIP OF LAND BEING 1505.41 FEET OR 91.24 RODS IN LENGTH, CONTAINING 1.037 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

| | | | |
|-----------|-------------|------------|-------------|
| SE/4 SE/4 | 519.43 L.F. | 31.48 RODS | 0.358 ACRES |
| SW/4 SE/4 | 985.98 L.F. | 59.76 RODS | 0.679 ACRES |

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT SOCORRO, NEW MEXICO, THIS 21 DAY OF NOVEMBER 2010

[Signature of Filimon F. Jaramillo]
 FILIMON F. JARAMILLO, P.E.S. 12797
 301 SOUTH CANAL
 (575) 887-5830

MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (505) 887-5830

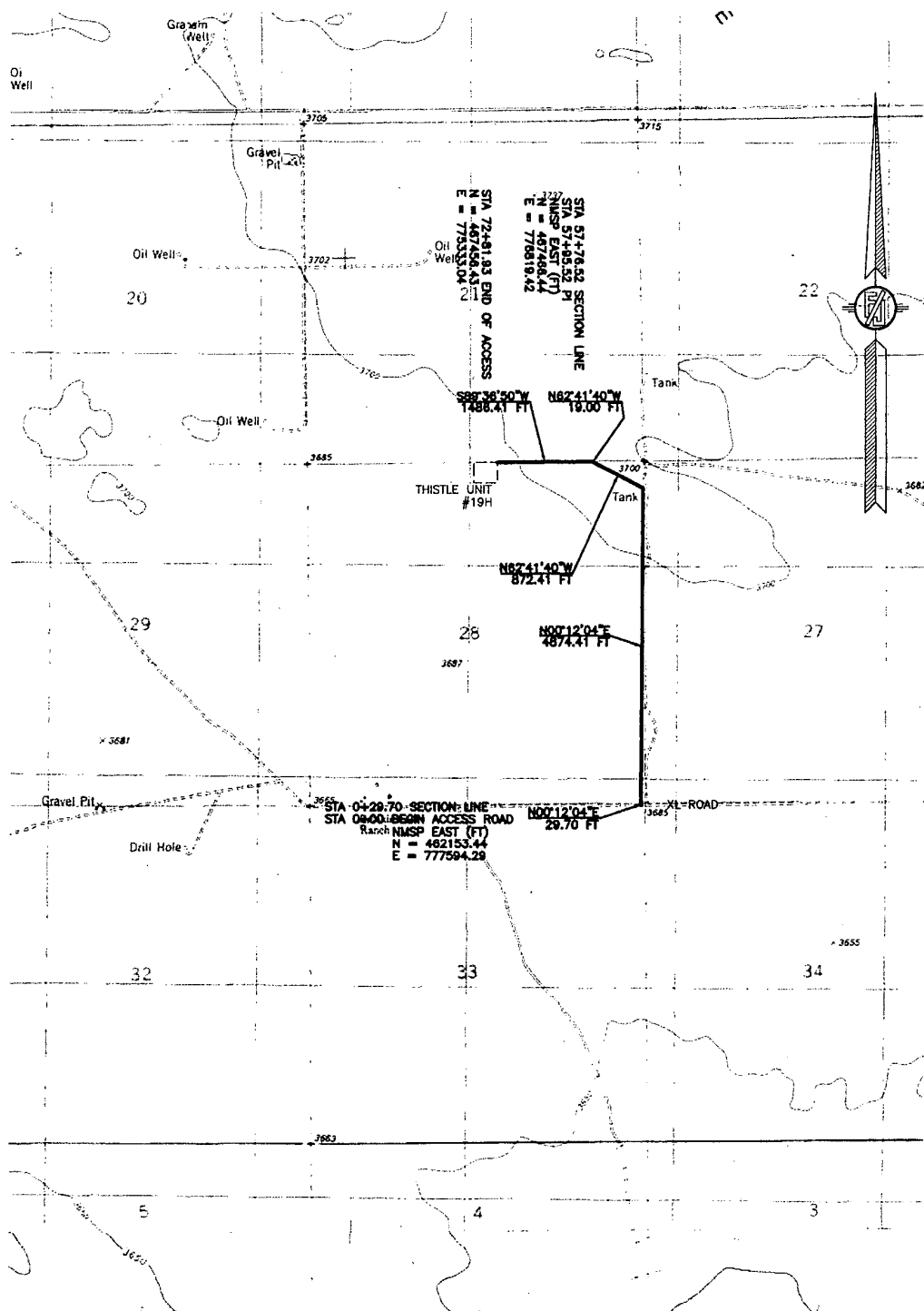
GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT FOR ACCESS.
- 2.) BASIS OF BEARING IS NEW MEXICO STATE PLANE EAST ZONE

SURVEY NO. 313A SHEET 3-3

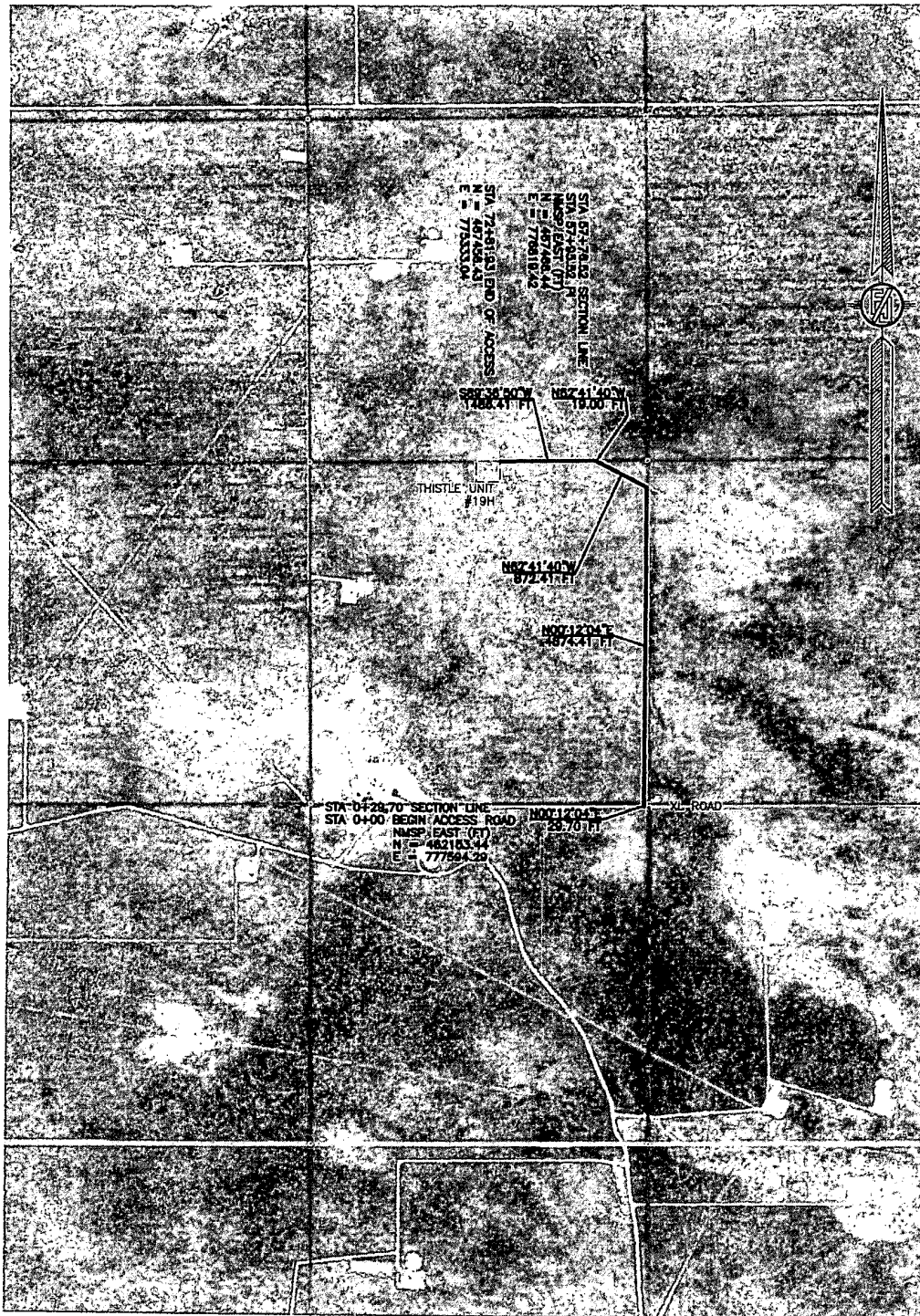
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

NOVEMBER 2010



MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 887-5830 **CARLSBAD, NEW MEXICO**

NOVEMBER 2010



MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 887-5830 CARLSBAD, NEW MEXICO

301 SOUTH CANAL
(575) 887-5830

