



**Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260**

Hydrogen Sulfide (H₂S) Contingency Plan

For

Rigel "20" Federal COM 4H

LAT. = 32.6434407° N (NAD83)

LONG = 103.8989157°W

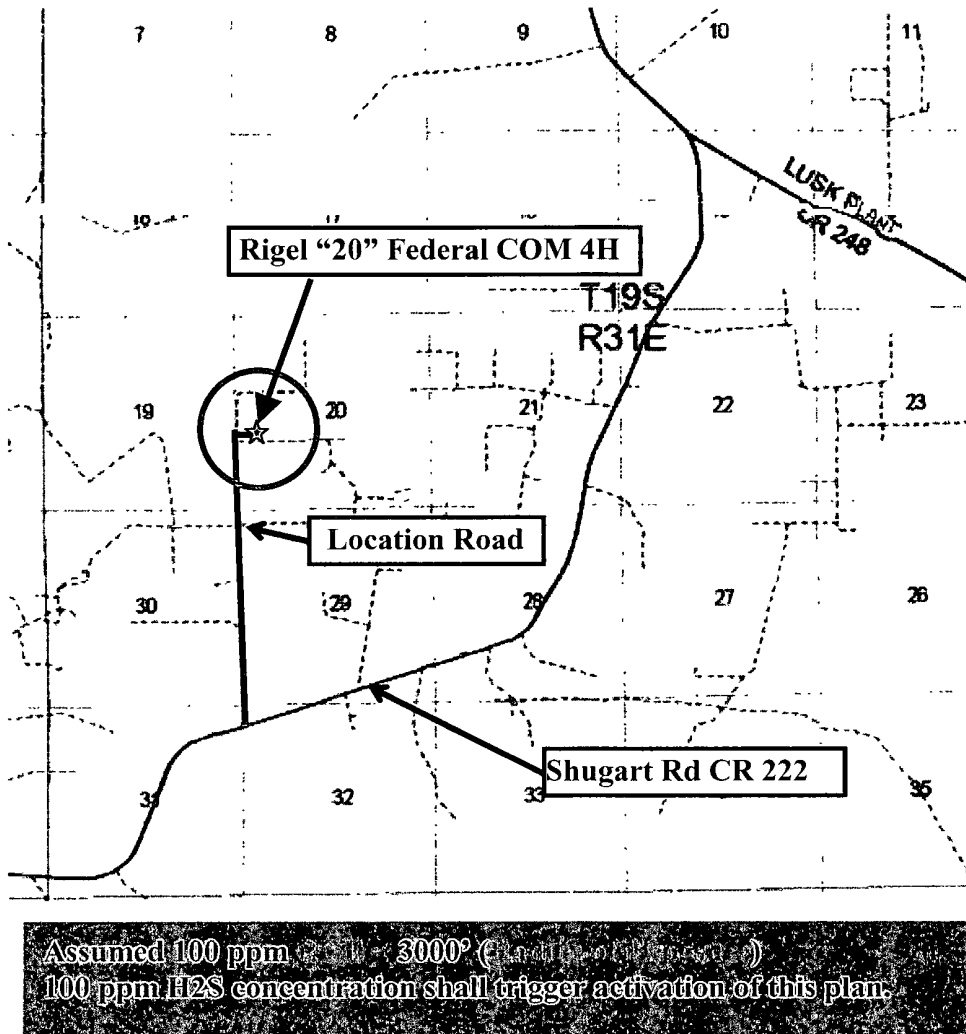
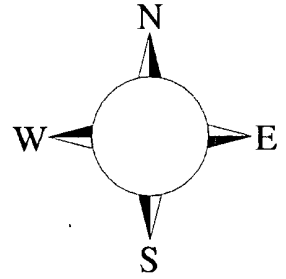
1750' FSL & 330' FWL,

Sec-20, T-19S R-31E

Eddy County NM

Rigel "20" Federal COM 4H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated by traveling West then 2.3 miles south on access road. Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. Evacuation should continue if necessary South on lease road approximately to Shugart Rd (CR 222).. There are no homes or buildings in the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the “buddy system” to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

Devon Energy Corp. Company Call List

<u>Artesia (575)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell.....	748-7448	748-0178.....	746-2991
Asst. Foreman –Tommy Polly.....	748-5290	748-0165.....	748-2846
Don Mayberry.....	748-5235	748-0164.....	746-4945
Montral Walker.....	390-5182	748-0193.....	936-414-6246
Engineer – Steven Jones	(405) 552-7994...	(405) 596-8041	

Agency Call List

<u>Lea</u>	<u>Hobbs</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office.....
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee)
	NMOCD
	US Bureau of Land Management

<u>Eddy</u>	<u>Carlsbad</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office.....
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	US Bureau of Land Management
	New Mexico Emergency Response Commission (Santa Fe) ...
	24 HR
	National Emergency Response Center (Washington, DC) ..

Emergency Services

	Boots & Coots IWC
	Cudd Pressure Control.....
	Halliburton
	B. J. Services.....
<i>Give</i>	Flight For Life - Lubbock, TX
<i>GPS</i>	Aerocare - Lubbock, TX
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM
	Lifeguard Air Med Svc. Albuquerque, NM

Prepared in conjunction with
Wade Rohloff





Proposed Interim Site Reclamation

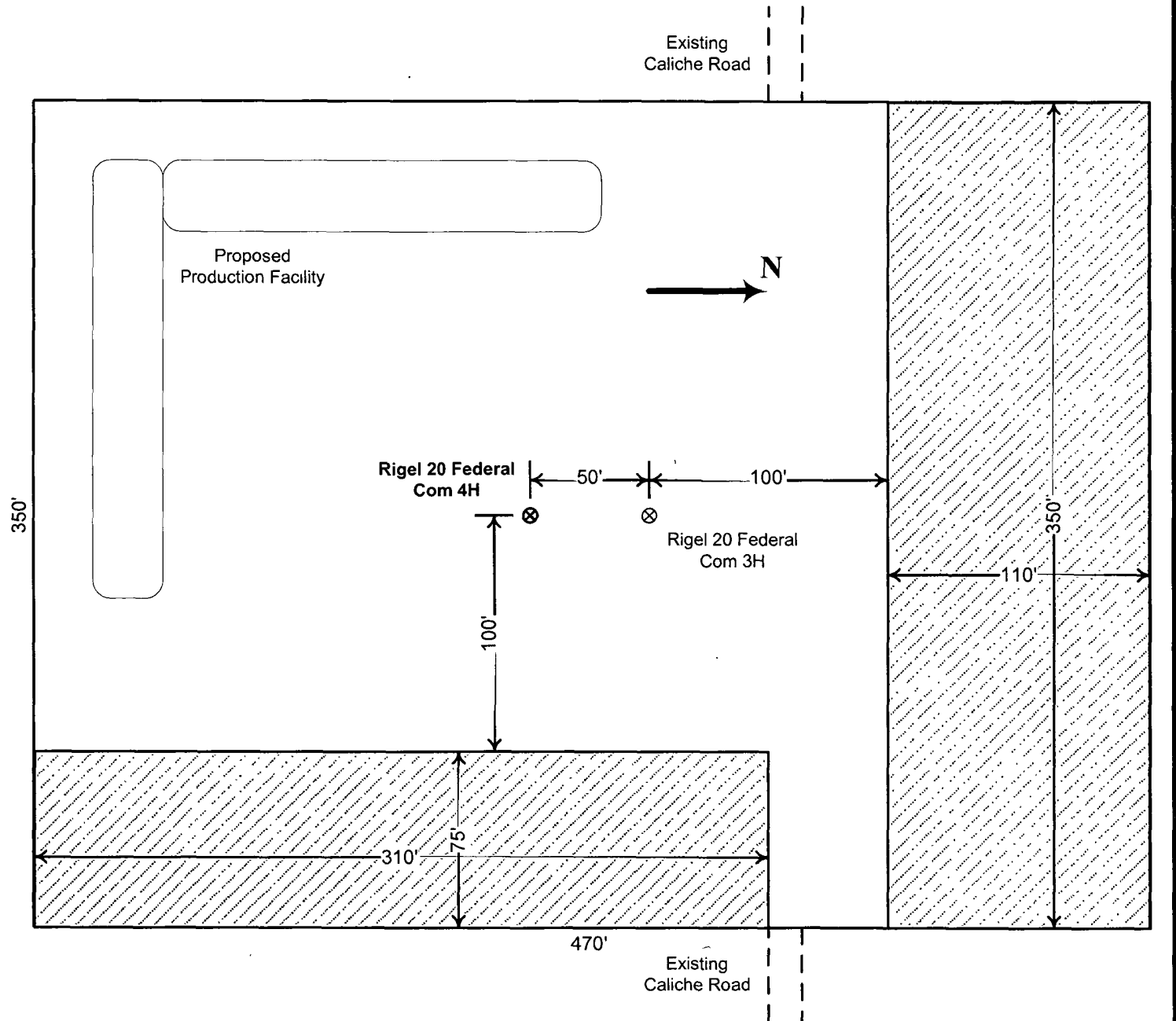
Devon Energy Production Co.
Rigel 20 Federal Com 4H
1750' FSL & 330' FWL
Sec. 20-T19S-R31E
Eddy County, NM



Proposed
Reclamation
Area

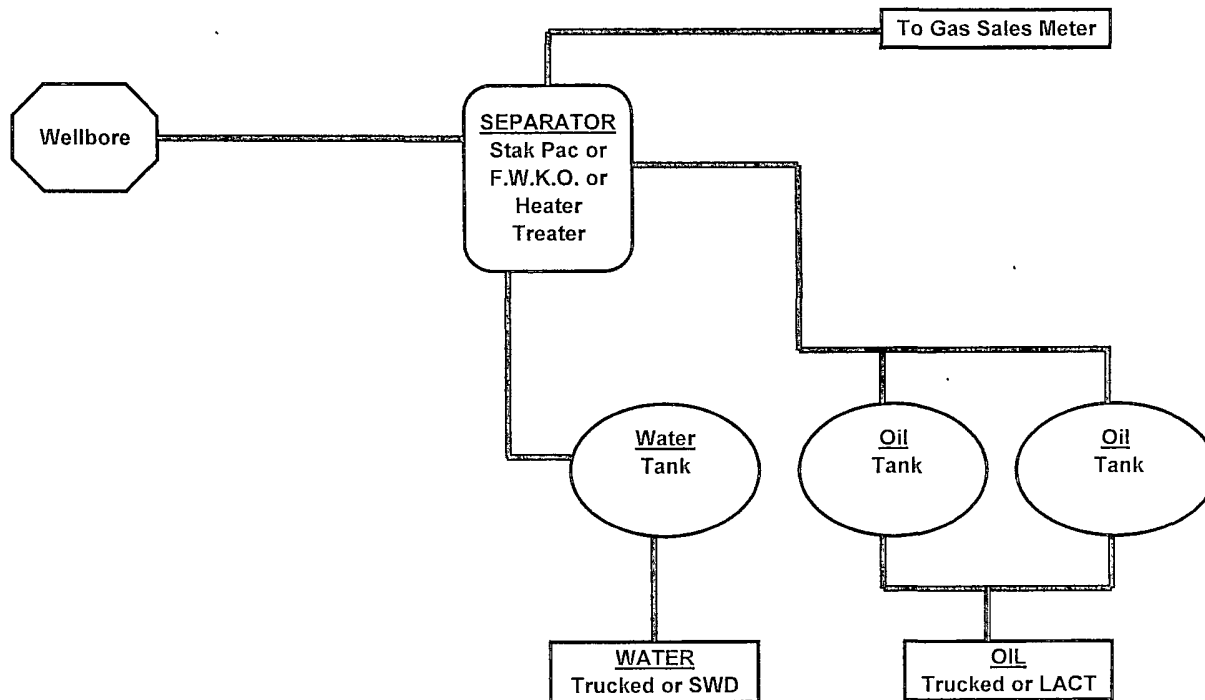


Scale: 1in = 60ft.



DEVON ENERGY PRODUCTION COMPANY LP

General Production Facilities Diagram



SURFACE USE PLAN

Devon Energy Production Company, LP

Rigel 20 Federal Com 4H

Surface Location: 1750' FSL & 330' FWL, Unit L, Sec 20 T19S R31E, Eddy, NM

Bottom hole Location: 400' FSL & 330' FEL, Unit P, Sec 20 T19S R31E, Eddy, NM

Surface Protection Specialist: Randy Rust

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 Basin Surveys.
- b. All roads into the location are depicted on the surveyor plats.
- c. Directions to Location: From CR #222 (Shugart Rd) and CR # 248 (Lusk Plant Rd) go southwest on 222 4.3 miles, turn right on caliche road go north 1.45 miles, location is on the right (east) 250'.
- 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 0' of new access road will be constructed 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.
- e. Devon will construct a temporary access road to the north of the proposed pad as shown on Form C-102. This road will provide access to the wells located to the east of this location during the drilling and completion of the subject well. Following drilling and completion this temporary road will be reclaimed and the existing caliche road will become the primary access road.

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 Rigel 20 Federal Com 4H tank battery (would be utilized and the 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. 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 the US Government and is administered by the Bureau of Land Management. 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 2 miles of 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.

Steven Jones
Operations Engineer Advisor

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) 552-7994 (office)
(405) 596-8041 (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 30th day of August, 2011.

Printed Name: Stephanie A. Masaga

Signed Name: 

Position Title: Sr. Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405)-552-7802

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

Address (if different from above):

Telephone (if different from above):

E-mail (optional):

The map displays a topographic representation of a region in North Carolina, centered around the Rigel 20 Federal Communications Station. The station is marked by a large black square and labeled "RIGEL 20" and "FEDERAL COM #4H". The map includes a grid with coordinates, contour lines, and various geographical features. Key locations and features include:

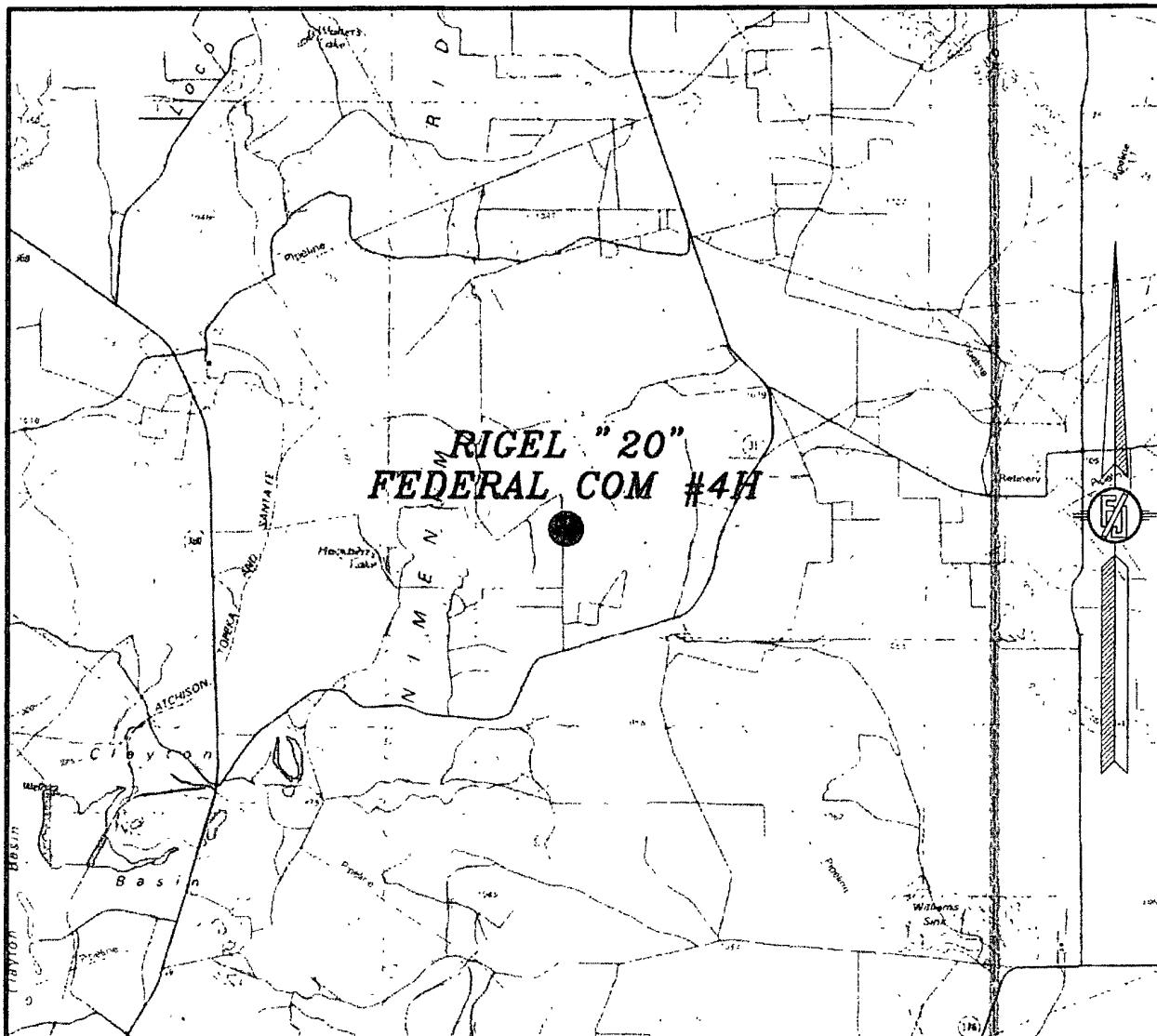
- Geographical Features:** Rigel River, Rigel Ridge, Rigel Field, HACKBERRY, Gravel Pit, Gravel.
- Coordinates and Grid:** The map shows a grid with coordinates ranging from 3416 to 3486 on the horizontal axis and 3423 to 3498 on the vertical axis.
- Other Labels:** "HACKBERRY", "Gravel Pit", "Gravel", "RIDGE", "FIELD", "RIGEL 20", "FEDERAL COM #4H", "3416", "3409", "3412T", "3401T", "3418T", "3425T", "3427T", "3429T", "3403", "3398T", "3408T", "3418", "3424T", "3425T", "3411T", "3408T", "3458T", "3423T", "3459", "3485T", "3479T", "3488T", "3494T", "3491T", "3486T", "3498T", "3486T", "3472T", "3465T", "3458T", "3475T", "3481T", "3482T", "3483T", "3484T", "3485T", "3486T", "3487T", "3488T", "3489T", "3490T", "3491T", "3492T", "3493T", "3494T", "3495T", "3496T", "3497T", "3498T".
- Compass Rose:** A compass rose is located on the right side of the map, indicating North.

NOT TO SCALE

AUGUST 11, 2011

MADRON SURVEYING, INC. 301 SOUTH CANAL
(505) 887-5848 CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

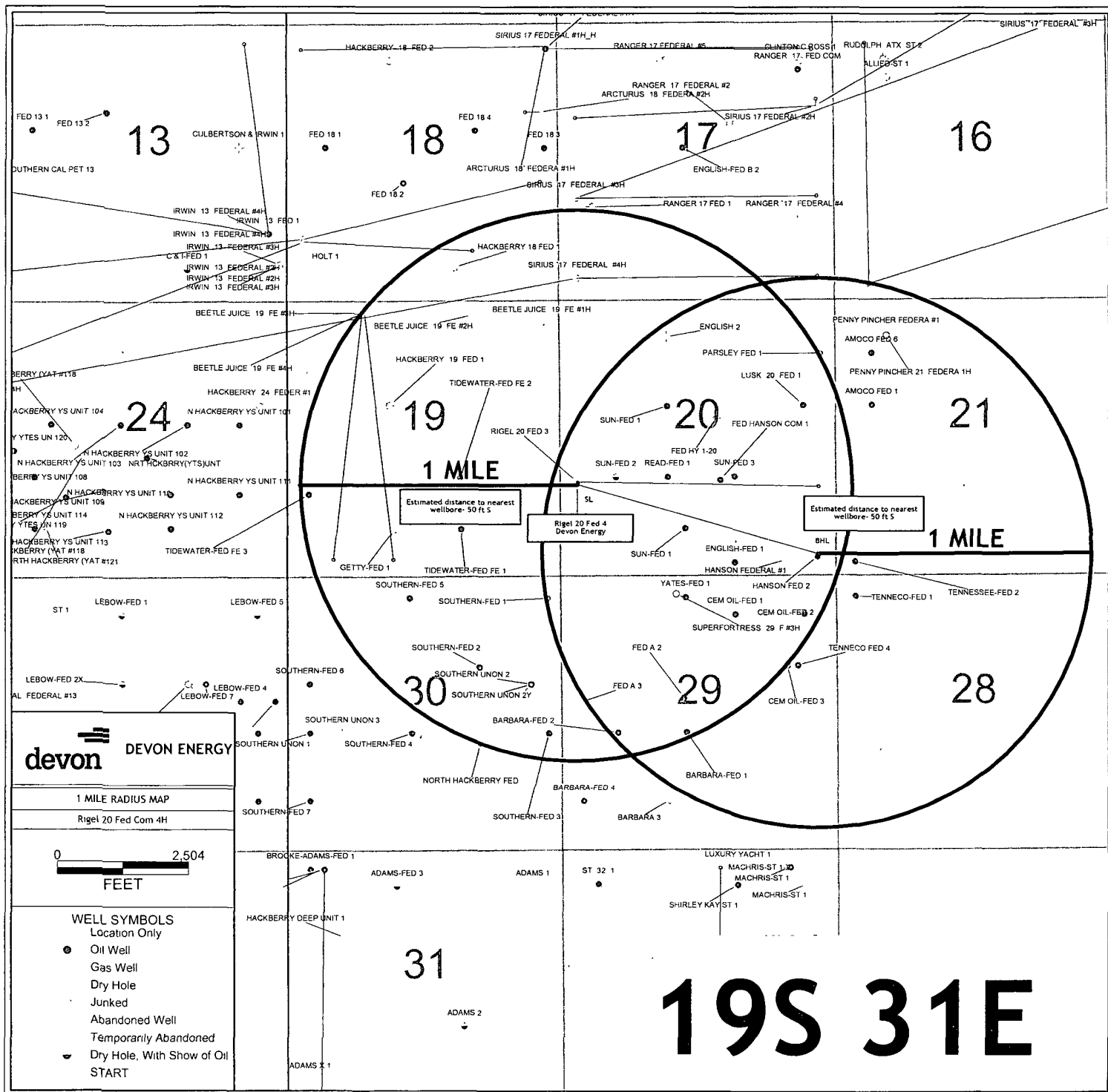
RIGEL "20" FEDERAL COM #4H

LOCATED 1750 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 20, TOWNSHIP 19 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

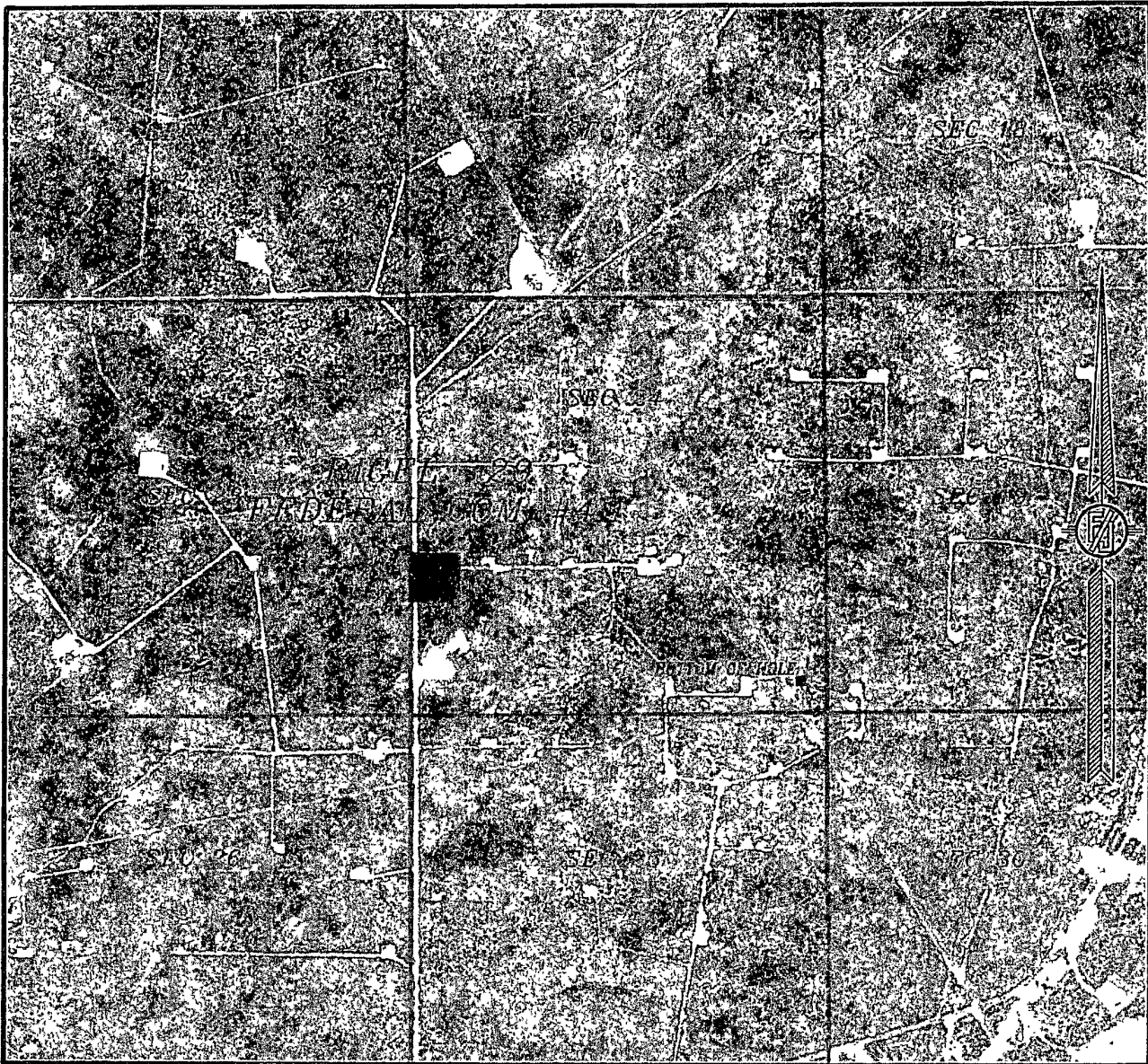
AUGUST 11, 2011

SURVEY NO. 539

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



SECTION 20, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



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

DEVON ENERGY PRODUCTION COMPANY, L.P.

RIGEL "20" FEDERAL COM #4H

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AND 330 FT. FROM THE WEST LINE OF
SECTION 20, TOWNSHIP 19 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 11, 2011

SURVEY NO. 539

MADRON SURVEYING, INC. 501 SOUTH CANAL CARLSBAD, NEW MEXICO
(505) 887-5830

TEMPORARY ACCESS ROAD

600'

PROPOSED PAD

150' NORTH
OFFSET
EL. 3408.1'

150' WEST
OFFSET
EL. 3405.5'

RIGEL "20" FEDERAL COM #4H

ELEV = 3406.2'

150' EAST
OFFSET
EL. 3407.2'

150' SOUTH
OFFSET
EL. 3403.0'

CALICHE RD.

SEC 20
SEC 19

CALICHE ROAD

NEW-NEW WEX RD.

LEGEND
① RIGEL "20" FEDERAL COM #3H

600'

SCALE 1" = 100'

DIRECTIONS TO LOCATION

DIRECTIONS TO LOCATION
FROM CR 222 AND CR 248 GO SOUTHWEST ON 222 4.3 MILES,
TURN RIGHT ON CALICHE ROAD AND GO NORTH 1.45 MILES, AND
LOCATION IS ON RIGHT 250'

RIGEL "20" FEDERAL COM #4H

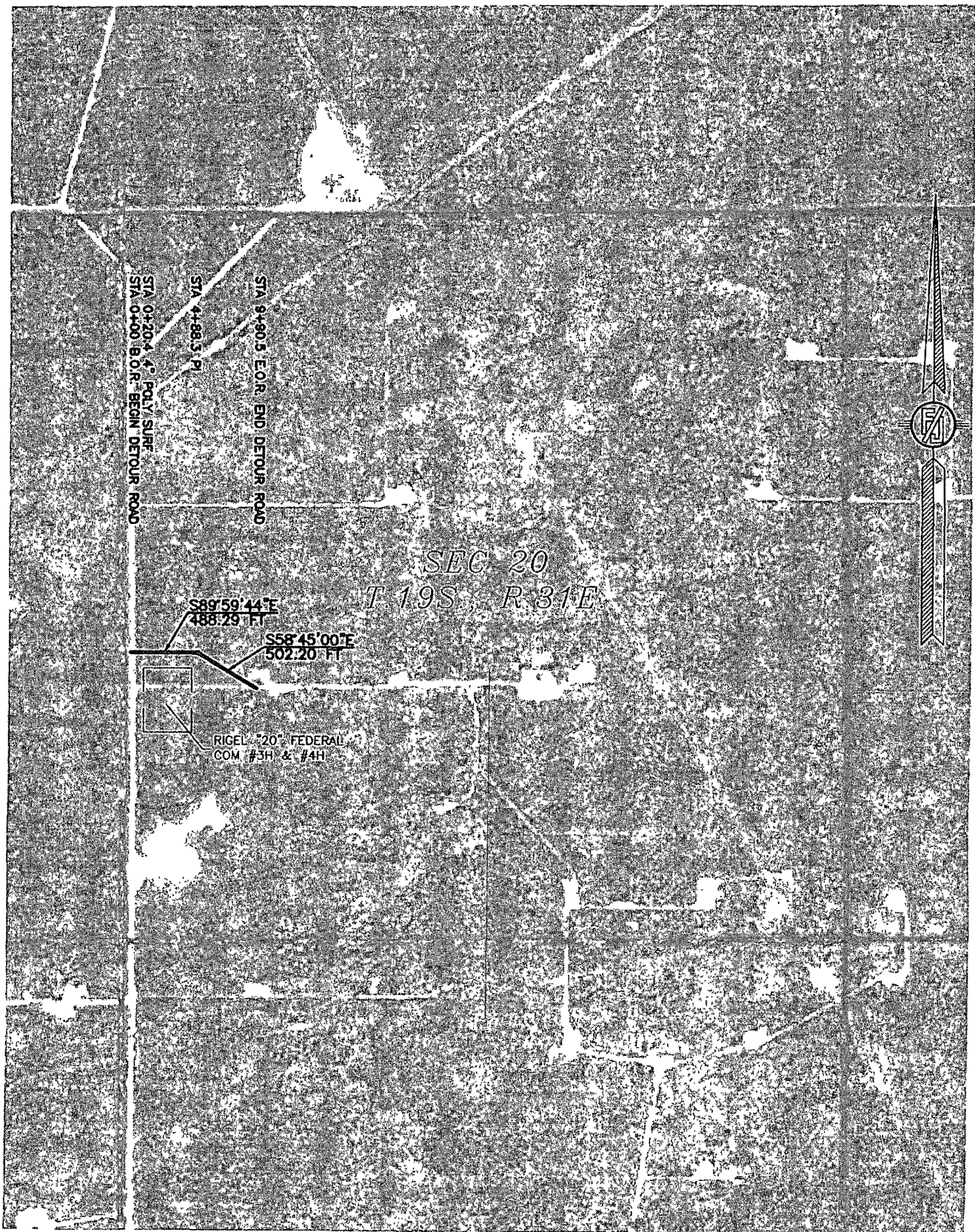
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EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 11, 2011

SURVEY NO. 539

MADRON SURVEYING, INC. 521 SOUTH CANAL
 (619) 867-5630 CARLSBAD, NEW MEXICO

301 SOUTH CANAL
FISHER 867-5830



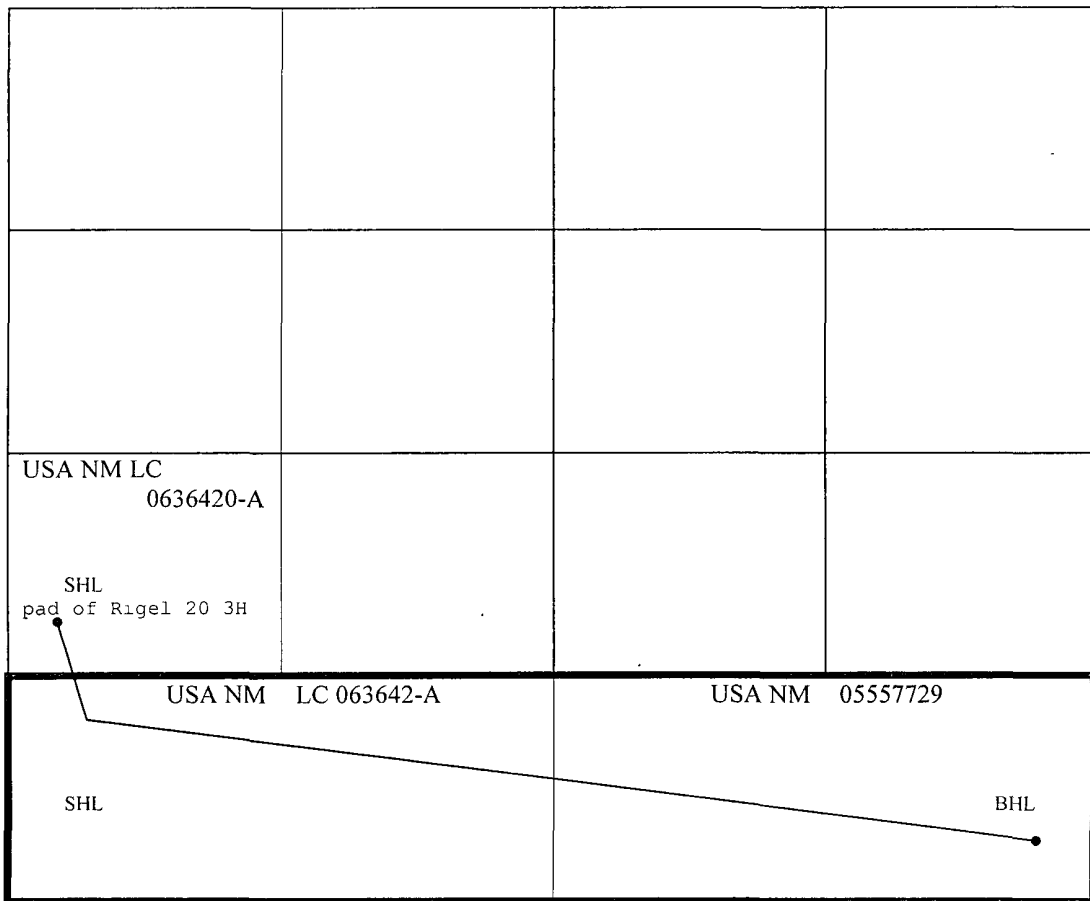
SECTION LAND PLAT

County Eddy State New Mexico

Section 20 Township 19 S Range 31 E

Rigel 20 Federal Com 4H

SHL: 1750' FSL, 330' FWL / BHL: 400' FSL, 330' FEL



NM LC 063642-A = 160 acres

NM 05557729 = 320 acres