

## District I

1625 N. French Dr., Hobbs, NM 88240

## District II

1301 W. Grand Avenue, Artesia, NM 88210

## District III

1000 Rio Brazos Road, Aztec, NM 87410

## District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101

May 27, 2004

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit to appropriate District Office

APR 22 2008

OCD-ARTESIA

☐ AMENDED REPORT

## APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>1</sup> Operator Name and Address Nadel and Gussman Permian, LLC 601 N. Maranfeld Suite 508 Midland, TX 79701		<sup>2</sup> OGRID Number 155615
<sup>3</sup> Property Code 35438	<sup>4</sup> Property Name Hannibal Fee	<sup>5</sup> API Number 30-015-36307
<sup>9</sup> Proposed Pool 1 Dublin Ranch - Morrow		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	31	22 S	28 E		660	North	1410	West	Eddy

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

## Additional Well Information

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code P	<sup>15</sup> Ground Level Elevation 3,032'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 12,900'	<sup>18</sup> Formation Morrow	<sup>19</sup> Contractor (To be Determined)	<sup>20</sup> Spud Date 05/15/08
Depth to Groundwater: 50' or less		Distance from nearest fresh water well 200' or More		Distance from nearest surface water: Less than 200'
Pit: Liner: Synthetic <input type="checkbox"/> 20_mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48# H-40	300'	350sx	Circ. to Surf.
12 1/4"	9 5/8"	40# N-80, HCN-80	6,800'	1300sx	Circ. to Surf.
8 3/4"	5 1/2"	17# HCP-110, 20# P-110	12,900'	1200sx	TOC @ +/- 6000'

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any Use additional sheets if necessary.

Nadel and Gussman Permian, LLC proposes to drill the Hannibal Fee #2. A mud gas separator will be installed and tested prior to drilling the Wolfcamp A BOP will be installed on the 9 5/8" casing and tested. Cement to cover all water, oil and gas producing zones. A closed-loop mud system will be used. NGP will notify NMOCD of spud date and cementing times so the surface and intermediate casing strings can be witnessed No H<sub>2</sub>S is expected, but a contingency is attached.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature:

Printed name: Terry West

Title: Engineer

E-mail Address: TerryW@naguss.com

Date: 4/14/08

Phone: 432-682-4429

## OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: 4/21/08

Expiration Date: 4/30/10

Conditions of Approval Attached ☐

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number <b>30-015-36307</b>	Pool Code <b>76140</b>	Pool Name <b>Dublin Ranch; Morrow</b>
Property Code <b>35438</b>	Property Name <b>HANNIBAL FEE</b>	Well Number <b>2</b>
OGRID No. <b>155615</b>	Operator Name <b>NADEL AND GUSSMAN PERMIAN</b>	Elevation <b>3032'</b>

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	31	22 S	28 E		660	NORTH	1410	WEST	EDDY

**Bottom Hole Location If Different From Surface**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<b>OPERATOR CERTIFICATION</b>  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  <b>Terry West</b> 4-15-08 Signature Date <b>TERRY WEST</b> Printed Name
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  APR 15 2008 Date Surveyed Signature Seal Professional Surveyor W.O. Jones Certificate No. Gary L. Jones 7977
	<b>BASIN SURVEYS</b>

NADEL AND GUSSMAN PERMIAN, L.L.C.  
601 N. Marienfeld, Suite 508  
Midland, TX 79701  
(432) 682-4429 (Office)  
(432) 682-4325 (Fax)

APR 22 2008  
OCD-ARTESIA

4/15/08

Mr. Bryan Arrant  
District 2 Geologist  
New Mexico Oil and Gas Division  
1301 West Grand Avenue  
Artesia, NM 88210

**Re: Hannibal Fee #2  
660' FNL & 1410' FWL  
Unit Letter C, Sec. 31-T22S-R28E  
Eddy, NM**


**Application for Permit to Drill**

Dear Mr. Arrant,

Attached you will find an original and 4 copies of a C-101, C-102, H2S contingency letter, blowout preventer requirements, mud program, plats, maps and rig plat for the referenced well. This well will be drilled with a closed loop mud system and drilling operations are scheduled to begin approximately on **05/15/08**.

Please contact me if you have any additional questions.

Sincerely,

  
Terry West  
Engineer

**NADEL AND GUSSMAN PERMIAN, L.L.C.**  
**601 N. Marienfeld, Suite 508**  
**Midland, TX 79701**  
**(432) 682-4429 (Office)**  
**(432) 682-4325 (Fax)**

4/15/08

Mr. Bryan Arrant  
District 2 Geologist  
New Mexico Oil and Gas Division  
1301 West Grand Avenue  
Artesia, NM 88210

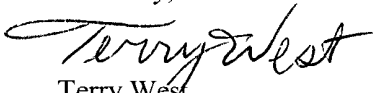
**Re: Hannibal Fee #2**  
**660' FNL & 1410' FWL**  
**Unit Letter C, Sec. 31-T22S-R28E**  
**Eddy, NM**  
**Rule 118 H2S Exposure**

Dear Mr. Arrant,

Nadel and Gussman Permian have evaluated this well and we do not expect to encounter hydrogen sulfide. However, we will employ a third party monitoring system. We will begin monitoring prior to drilling out the intermediate casing and will continue monitoring the remainder of the well.

Please contact me if you have any additional questions.

Sincerely,

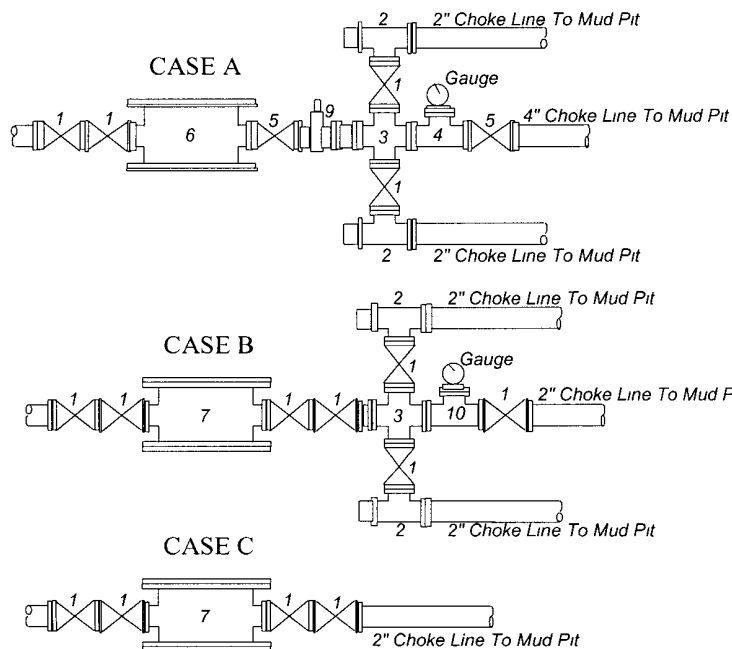
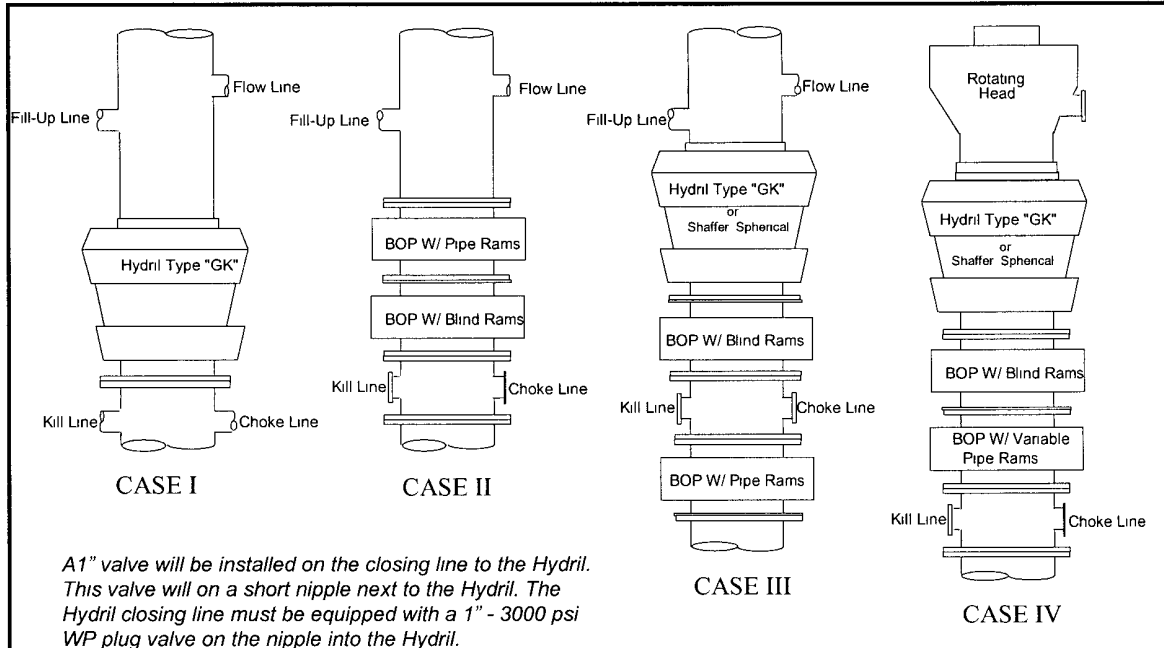
  
Terry West  
Engineer

## **Hydrogen Sulfide Drilling Operations Plan**

1. Company and Contract personnel admitted on location should be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S.
  - B. Physical Effects and Hazards.
  - C. Proper Use of Safety Equipment and Life Support Systems.
  - D. Principle and Operation of H<sub>2</sub>S Detectors, Warning System and Briefing.
  - E. Evacuation Procedure, Routes and First Aid.
  - F. Proper Use of 30 minute Pressure Demand Air Pack.
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S Detectors and Audio Alarm System to be Located at Bell Nipple, End of Blooie Line (mud pit) and on Derrick floor or doghouse.
3. Windsock and/or Wind Streamers
  - A. Windsock at Mud Pit Area Should be High Enough to be Visible.
  - B. Windsock at Briefing Area Should be High Enough to be Visible.
  - C. There Should be a Windsock at Entrance to Location.
4. Condition Flags and Signs
  - A. Warning Sign on Access Road to Location.
  - B. Flags to be Displayed on Sign at Entrance to Location.
    1. Green Flag, Normal Safe Condition.
    2. Yellow Flag, Indicates Potential Pressure and Danger.
    3. Red Flag, Danger H<sub>2</sub>S Present in Dangerous Concentration Only Emergency Personnel Admitted to Location.
5. Well Control Equipment
  - A. See Attached Diagram.
6. Communication
  - A. While Working Under Masks Chalkboards Will be Used for Communication.
  - B. Hand Signals will be Used Where Chalk Board is Inappropriate.
  - C. Two Way Radio or Cell Phone will be Used to Communicate off Location in Case of Available at Most Drilling Foreman's Trailer or Living Quarters.
7. Drillstem Testing
  - A. Exhausts will be Watered.
  - B. Flare Line will be Equipped with an Electric Igniter or a propane pilot light in case gas reaches the surface.
  - C. If Location is near any Dwelling a Closed DST will be Performed.
8. Drilling Contractor Supervisor will be Required to be Familiar with the Effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
9. If H<sub>2</sub>S Encountered, Mud system will be Altered if Necessary to Maintain Control of Formation. A Mud Gas Separator will be Brought into Service Along with H<sub>2</sub>S Scavengers if Necessary.

# Nadel and Gussman Permian

## MINIMUM BLOWOUT PREVENTER REQUIREMENTS



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13-5/8"	IV	5000 psi	A

**\*Rotating head required**

Bradenhead
Mfr: _____
Size: _____ Type: _____

### Legend

- 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
- 2" flanged adjustable chokes, min 1" full opening & equipped with hard trim
- 4" x 2" flanged steel cross.
- 4" flanged steel tee.
- 4" flanged all steel valve (Type as in no. 1).
- Drilling Spool with 2" x 4" flanged outlet.
- Drilling Spool with 2" x 2" flanged outlet.
- 2" x 2" flanged steel cross.
- 4" pressure operated gate valve
- 2" flanged steel tee.

### Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

(10-31-96) WTXBOPS PPT

## **PROPOSED MUD PROGRAM**

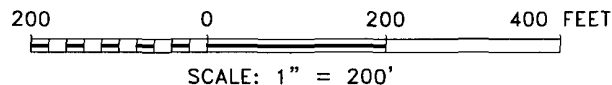
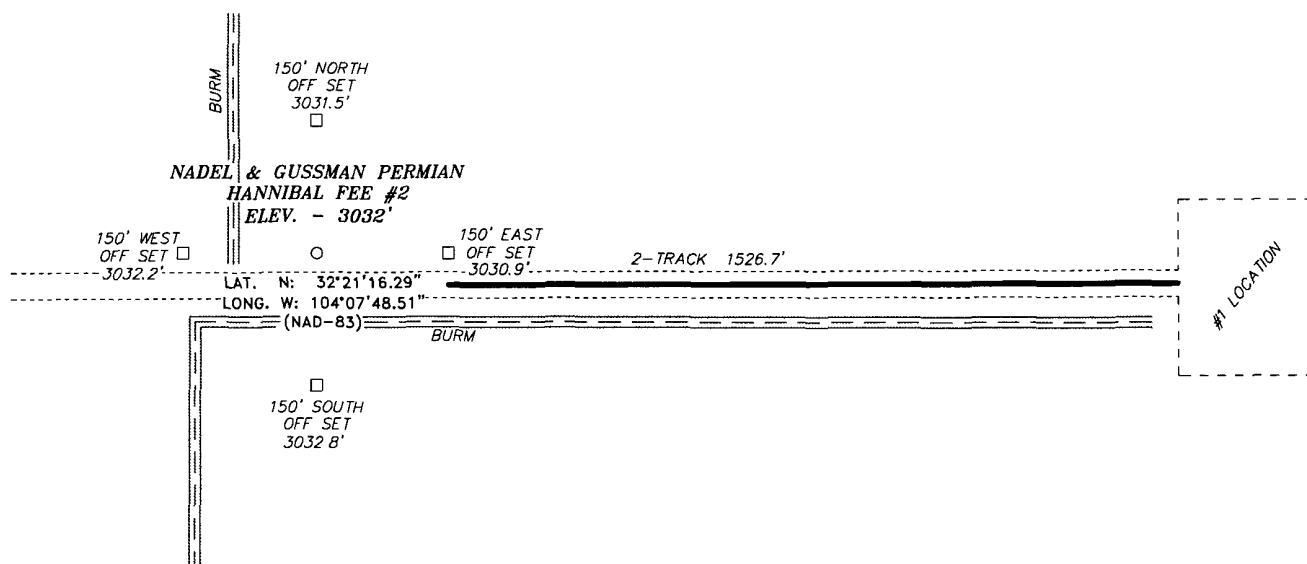
### **CASING DESIGN**

13 3/8"	Surface Casing	at	300'
9 5/8"	Intermediate Casing	at	6,800'
8 3/4"	Open Hole	to	12,800'

### **RECOMMENDED MUD PROPERTIES**

<b><u>DEPTH</u></b>	<b><u>MUD WEIGHT</u></b>	<b><u>VISCOSITY</u></b>	<b><u>FLUID LOSS</u></b>
Spud	8.6- 8.7	30-32	No Control
300'	8.9- 9.2	30-32	No Control
<b>Set 13 3/8" Surface Casing at 300'. Drill out with Brine Water.</b>			
400'	9.8-10.0	28-29	No Control
2,000'	9.8-10.0	28-29	No Control
3,500'	9.8-10.0	28-29	No Control
5,000'	9.8-10.0	28-29	No Control
6,800'	9.8-10.0	28-29	No Control
<b>Set 9 5/8" Intermediate Casing at 6,800'. Drill out with Fresh Water.</b>			
6,900'	8.4- 8.5	28-29	No Control
8,000'	8.4- 8.5	28-29	No Control
9,000'	8.4- 8.5	28-29	No Control
9,700'	9.4- 9.8	28-29	No Control
10,500'	9.6-10.0	28-29	No Control
10,900'	9.8-10.2	32-34	<12
11,200'	10.2-12.0	32-38	<12
11,500'	10.2-12.0	34-38	<12
11,800'	10.2-12.0	34-38	<8
12,800'	10.2-12.0	36-45	<8

SECTION 31, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF HWY 285 AND SMEDLEY ROAD, GO EAST 3.0 MILES TO LEASE ROAD, FOLLOW LEASE ROAD TO THE #1 LOCATION AND PROPOSED LEASE ROAD.

**NADEL AND GUSSMAN PERMIAN**

REF: HANNIBAL FEE #2 / Well Pad Topo

HANNIBAL FEE #2 LOCATED 660' FROM

THE NORTH LINE AND 1410' FROM THE WEST LINE OF  
SECTION 31, TOWNSHIP 22 SOUTH, RANGE 28 EAST,

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

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

W.O. Number: 19474

Drawn By: J. M. SMALL

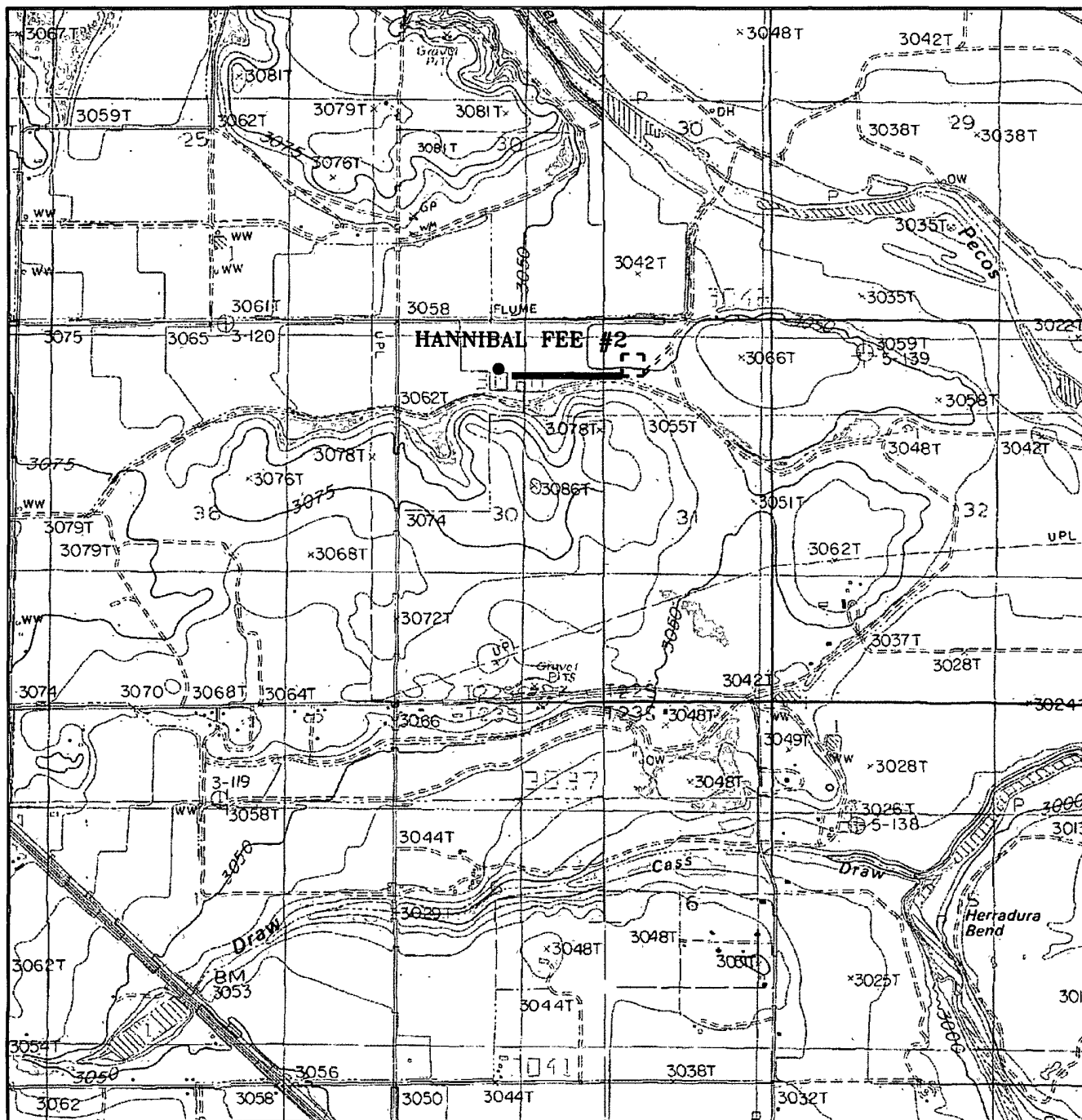
Date: 04-10-2008

Disk: JMS

19474W

Survey Date: 04-08-2008

Sheet 1 of 1 Sheets



## HANNIBAL FEE #2

Located at 660' FNL & 1410' FWL

Section 31, Township 22 South, Range 28 East,  
N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**

focused on excellence  
in the oilfield

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

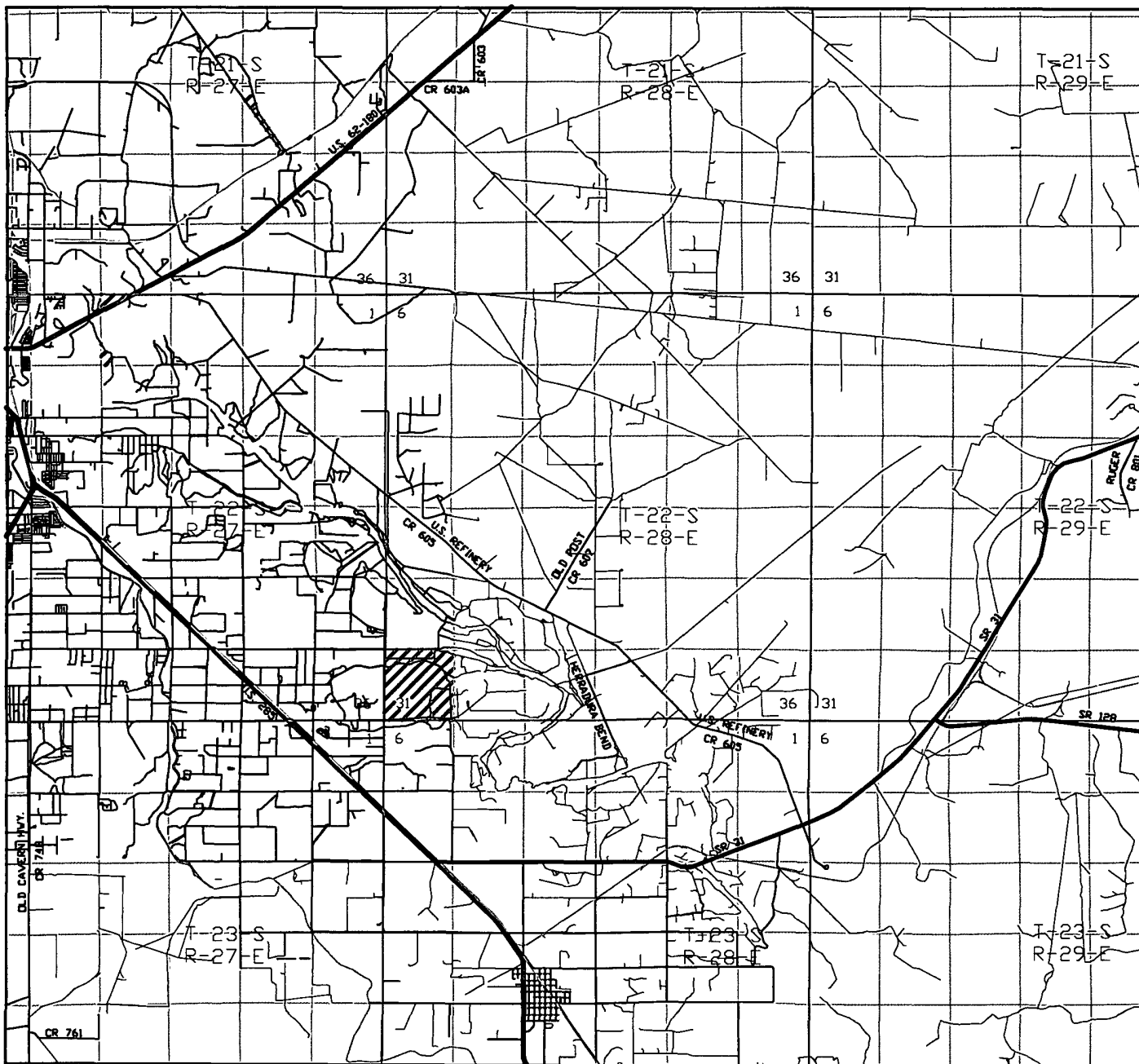
W.O. Number: 19474T

Survey Date: 04-08-2008

Scale: 1" = 2000'

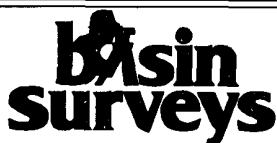
Date: 04-10-2008

**NADEL AND  
GUSSMAN  
PERMIAN**



### HANNIBAL FEE #2

Located at 660' FNL & 1410' FWL  
 Section 3, Township 22 South, Range 28 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](http://basinsurveys.com)

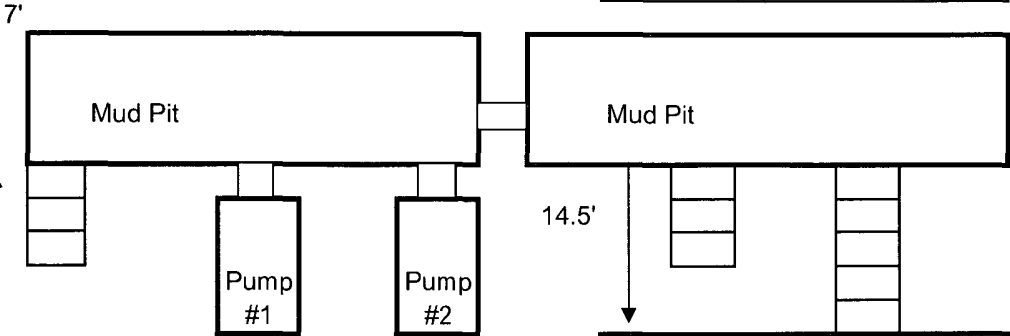
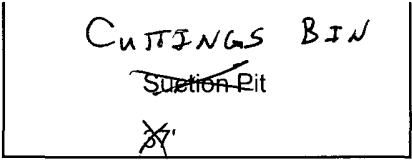
W.O. Number: JMS 19474T

Survey Date: 04-08-2008

Scale: 1" = 2 MILES

Date: 04-10-2008

NADEL AND  
 GUSSMAN  
 PERMIAN



Not to Scale

