

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

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-101  
March 4, 2004

RECEIVED  
NOV 18 2005  
OOD-ARTESIA  
Submit to appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies  
☐ 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, L.L.C. 601 N. MARIENFELD, SUITE 508 MIDLAND, TEXAS 79701		<sup>2</sup> OGRID Number 155615
<sup>3</sup> Property Code 35247	<sup>4</sup> Property Name ROCA STATE	<sup>5</sup> API Number 30 - 015 - 28197
		<sup>6</sup> Well No. 1

<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
O	32	21-S	22-E		992'	SOUTH	1,976'	EAST	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

<sup>9</sup> Proposed Pool 1 Under. Rocky Arroyo MORROW	<sup>10</sup> Proposed Pool 2 84160
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Drilling Pit Location and Other Information

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	32	21-S	22-E		992'	SOUTH	1,976'	EAST	EDDY
Depth to ground water 150' TO 200'			Distance from nearest fresh water well MORE THAN 1000'			Distance from nearest surface water MORE THAN 1000'			
<sup>11</sup> Work Type Code N		<sup>12</sup> Well Type Code G		<sup>13</sup> Cable/Rotary ROTARY		<sup>14</sup> Lease Type Code S		<sup>15</sup> Ground Level Elevation 4,498'	
<sup>16</sup> Multiple NO		<sup>17</sup> Proposed Depth 9,400'		<sup>18</sup> Formation MORROW		<sup>19</sup> Contractor PATTERSON		<sup>20</sup> Spud Date +/- 01/25/06	

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

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	40' 192c	1450 SX	CMT @ SURFACE
7-7/8"	5-1/2"	17#	9,400'	1900 SX	TOC +/- 1920'

22 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.

RE-ENTER FANNING DRAW STATE #1, DRILL / DEEPEN AND COMPLETE WELL IN THE MORROW WITH A PROJECTED TD OF 9,400'.  
NO H2S IS EXPECTED. BUT AN H2S CONTINGENCY LETTER AND PLAN IS ATTACHED.

23 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:

Josh Fernau

Printed name: JOSH FERNAU

Title: STAFF ENGINEER

E-mail Address: joshf@naguss.com

Date: 11/17/05

Phone: (432) 682-4429

OIL CONSERVATION DIVISION

Approved by:

Jim W. Gurn  
District II Supervisor

Title:

Approval Date: NOV 22 2005

Expiration Date: NOV 22 2008

Conditions of Approval:

Attached ☐

DISTRICT I  
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1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 84160	Pool Name Rocky Arroyo, Morrow
Property Code	Property Name ROCA STATE	Well Number 1
OGRID No.	Operator Name NADEL AND GUSSMAN PERMIAN	Elevation 4498'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	32	21 S	22 E		992	SOUTH	1976	EAST	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 320	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 the the information contained herein is true and complete to the best of my knowledge and belief.	
	Signature <u>Josh Fernau</u>	
	Printed Name Josh Fernau Title Staff Engineer Date 11/17/05	
	<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.	
	NOVEMBER 8, 2005	
	Date Surveyed Signature & Seal of Professional Surveyor <u>[Signature]</u> M.O. No. 5943 Certificate No. Gary L. Jones 7977 BASIN SURVEYS	

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State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
March 12, 2004

For drilling and production facilities,  
submit to appropriate NMOCD District  
Office.  
For downstream facilities, submit to Santa  
Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: NADEL AND GUSSMAN PERMIAN, LLC Telephone: (432) 682-4429 e-mail address: joshf@naguss.com  
Address: 601 N. Marienfeld, Suite 508 Midland, TX 79701  
Facility or well name: ROCA STATE # 1 API #: 30-015-28197 U/L or Qtr/Qtr: O Sec: 32 T: 21S R: 22E  
County: Eddy Latitude: N32° 25' 48.6" Longitude: W104° 43' 23.8" NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☐ State ☒ Private ☐ Indian ☐

Pit	Below-grade tank	RECEIVED NOV 18 2005 OCD-ARTESIA	
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness 20 mil Clay <input type="checkbox"/> Volume 20,000 bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why _____		
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) ( 0 points)	0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) ( 0 points)	0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) ( 0 points)	0
Ranking Score (Total Points)		0	

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Date: 11/17/05

Printed Name/Title Josh Fernau, Staff Engineer

Signature *Josh Fernau*

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date: 11/22/05

Printed Name/Title Mike Bratcher Asst

Signature *Mike Bratcher*

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

**11/17/05**

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

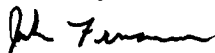
**Re: Roca State #1**  
**992' FSL & 1,976' FEL**  
**UL O Sec. 32-T21S-R22E**  
**Eddy, NM**  
**Rule 118 H2S Exposure**

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 re-entry and will continue monitoring the remainder of the well.

Please contact me if you have any additional questions.

Sincerely,



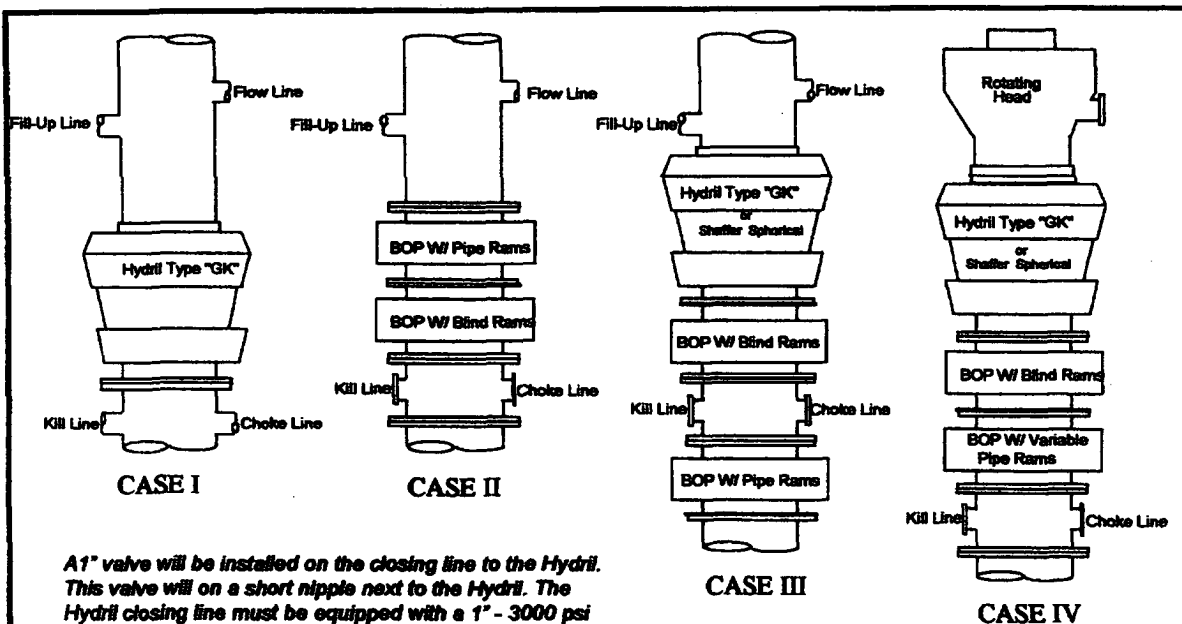
Josh Fernau  
Staff Engineer

## **Hydrogen Sulfide Drilling Operations Plan**

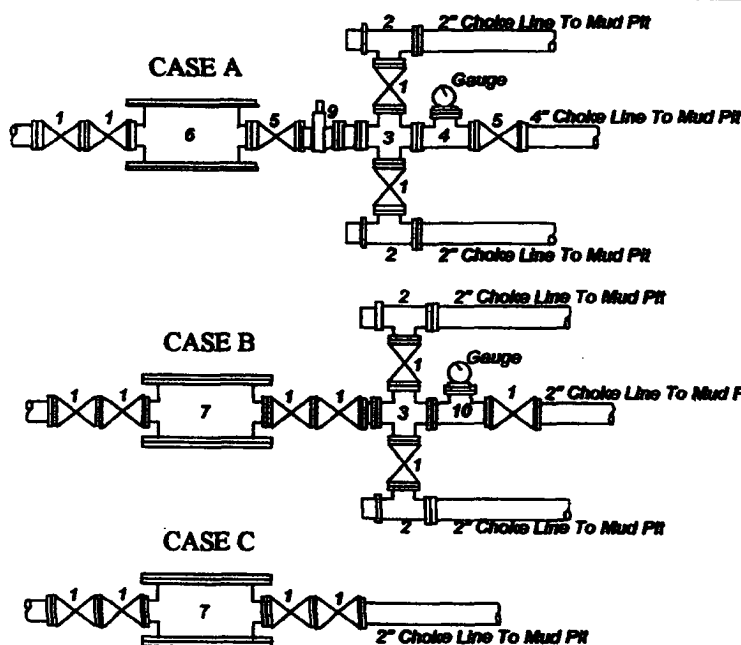
1. Company and Contract personnel admitted on location should be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S.
  - B. Physical Effects and Hazards.
  - C. Proper Use of Safety Equipment and Life Support Systems.
  - D. Principle and 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



A1" valve will be installed on the closing line to the Hydril. This valve will be on a short nipple next to the Hydril. The Hydril closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydril.



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
15 3/8	II	5,000 #	A

**\*Rotating head required**

Bradenhead : \_\_\_\_\_  
 Mtr: \_\_\_\_\_  
 Size: \_\_\_\_\_ Type: \_\_\_\_\_

### Legend

1. 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shafter Flo-Seal.
2. 2" flanged adjustable chokes, min. 1" full opening & equipped with hard trim.
3. 4" x 2" flanged steel cross.
4. 4" flanged steel tee.
5. 4" flanged all steel valve (Type as in no. 1).
6. Drilling Spool with 2" x 4" flanged outlet.
7. Drilling Spool with 2" x 2" flanged outlet.
8. 2" x 2" flanged steel cross.
9. 4" pressure operated gate valve.
10. 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.

(10-31-98) WTXBOPS.PPT

## **Roca State #1 Mud Program**

### **Casing Program**

Remaining Casing		
0 – 1,920'	12 1/4" hole	8 5/8" casing
New Casing		
0-9,400' TVD	7 7/8" hole	5 1/2" casing

### **Estimated Formation Tops (TVD)**

Tubb	3,187'
Abo Shale	3,754'
Wolfcamp	4,872'
Penn.	7,024'
Morrow	9,200'
TD 9,400'	

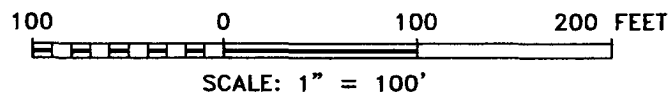
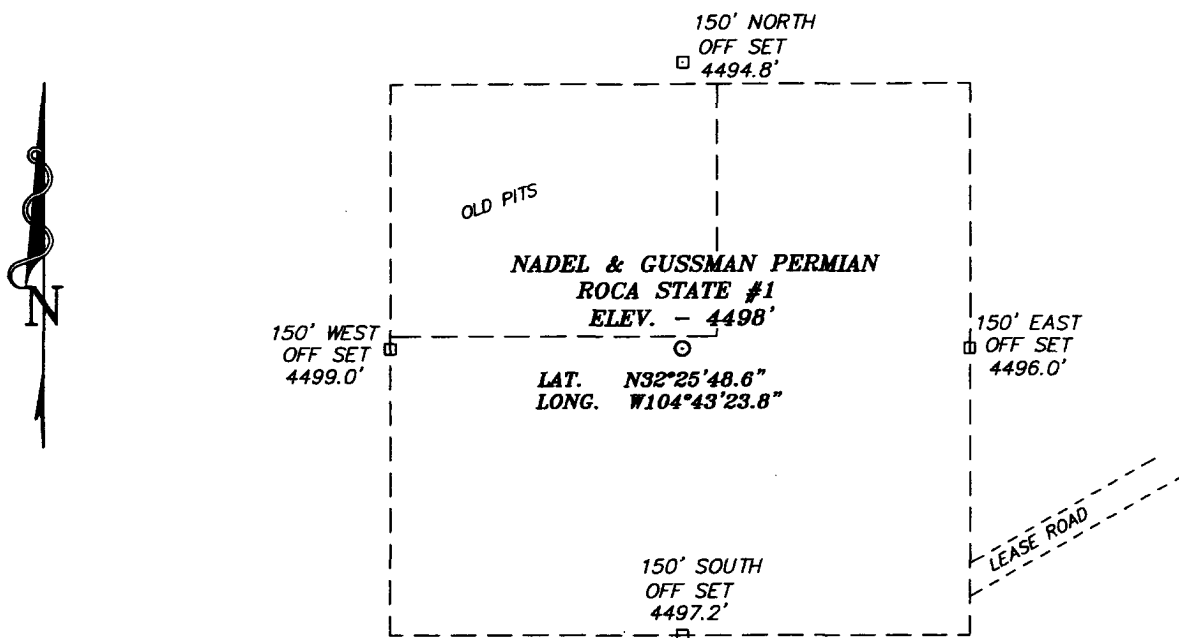
### **Suggested Mud Program**

<b>Surface Interval</b>	0 – 1,920'	Drilled
<b>Production Interval</b>		0 – 9,400'

Drill out cement plugs with 9.6# - 10.1# cut brine. Mud up before deepening well from 7,400' to 9,400'.

- Hole Cleaning: Use high vis sweeps every 200' or as needed for fill or drag.
- Mud Up: Use XCD – Polymer w/ fluid loss additives w/ mud weight between 9.6# - 10.1# per gal.
- Mud system: Use caustic soda to maintain the pH above 10.
- Lost Returns / Seepage: Pull up 5 -10 stands if loss circulation occurs and pump 10 – 20 lbs per barrel. Seepage requires 3 – 4 sacks per hour.

SECTION 32, TOWNSHIP 21 SOUTH, RANGE 22 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF CO. RD. 401 AND CO. RD. 400, GO NORTHWEST FOR 2.3 MILES TO LEASE ROAD; THENCE SOUTH FOR 1.4 MILE TO 2-TRACK ROAD; THENCE WEST FOR 1.8 MILE TO DRY HOLE LOCATION.

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

W.O. Number: 5943 Drawn By: K. GOAD

Date: 11-09-2005 Disk: KJG #9 - 5943A.DWG

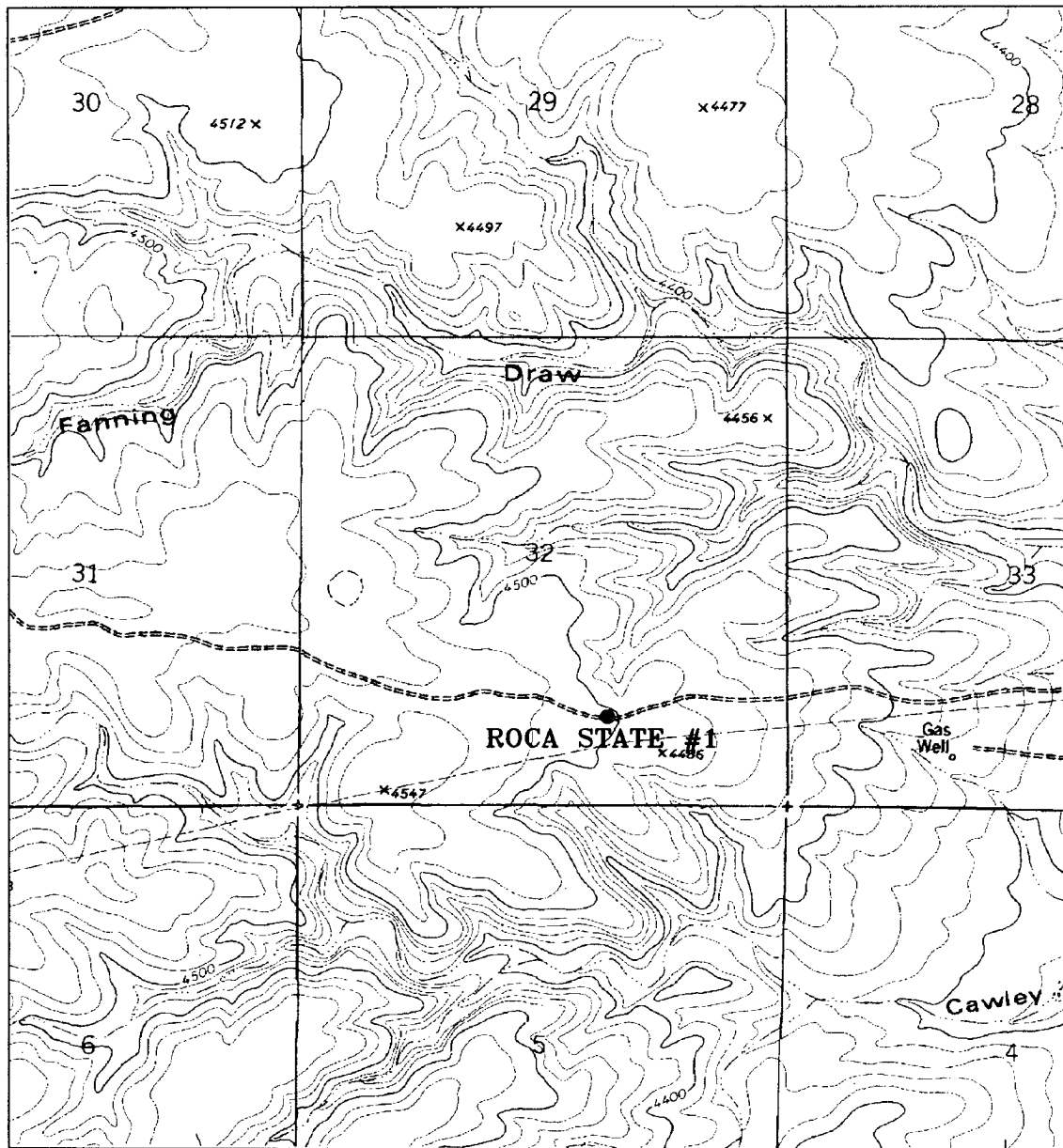
**NADEL AND GUSSMAN PERMIAN**

REF: ROCA STATE No. 1 / Well Pad Topo

ROCA STATE No. 1 LOCATED 992' FROM THE SOUTH LINE AND 1976' FROM THE EAST LINE OF SECTION 32, TOWNSHIP 21 SOUTH, RANGE 22 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 11-08-2005 Sheet 1 of 1 Sheets





ROCA STATE #1  
 Located at 992' FSL and 1976' FEL  
 Section 32, Township 21 South, Range 22 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

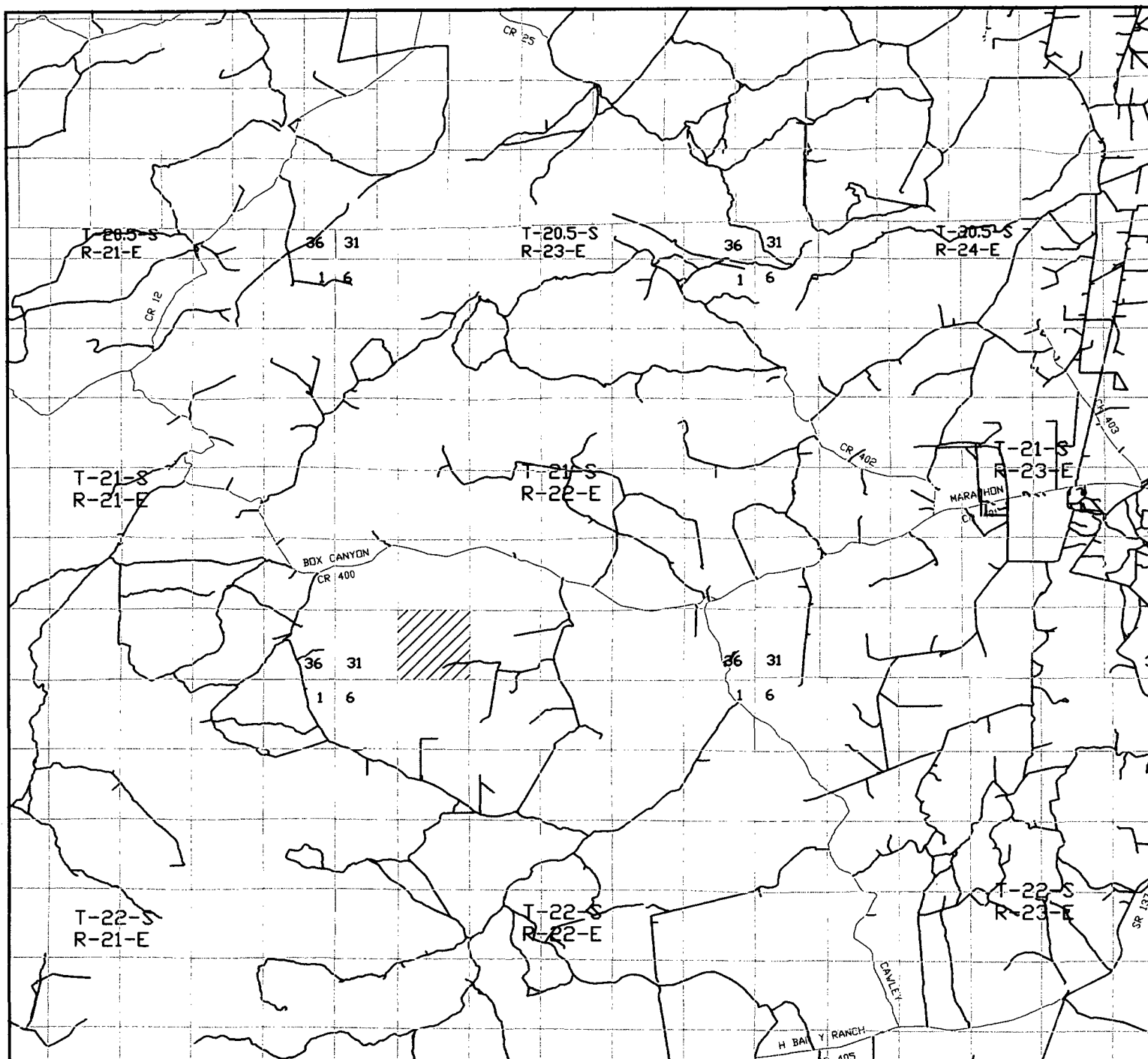
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Survey Date: 11-08-2005

Scale: 1" = 2000'

Date: 11-09-2005

**NADEL AND**  
**GUSSMAN PERMIAN,**  
**L.L.C.**



**ROCA STATE #1**  
 Located at 992' FSL and 1976' FEL  
 Section 32, Township 21 South, Range 22 East,  
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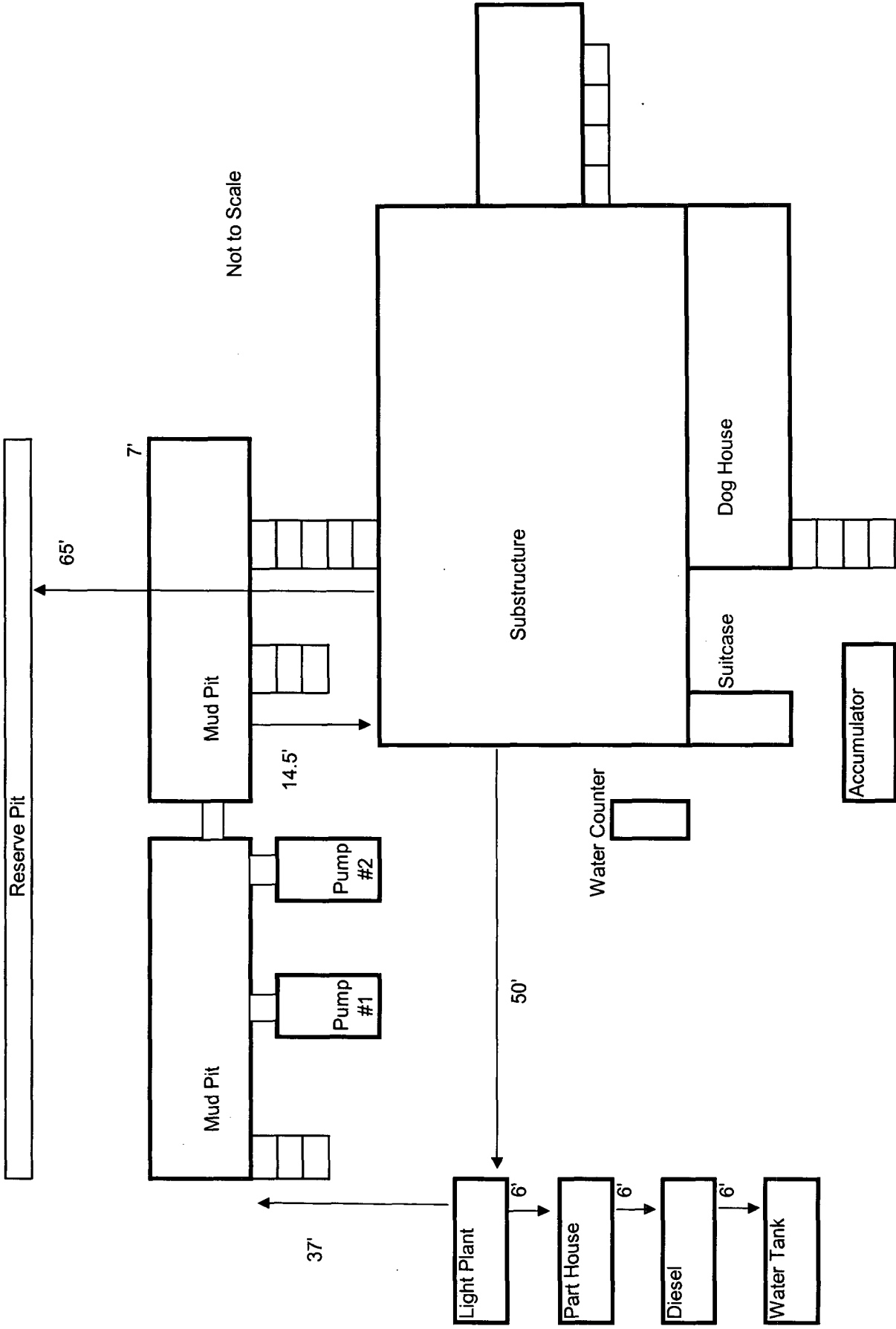
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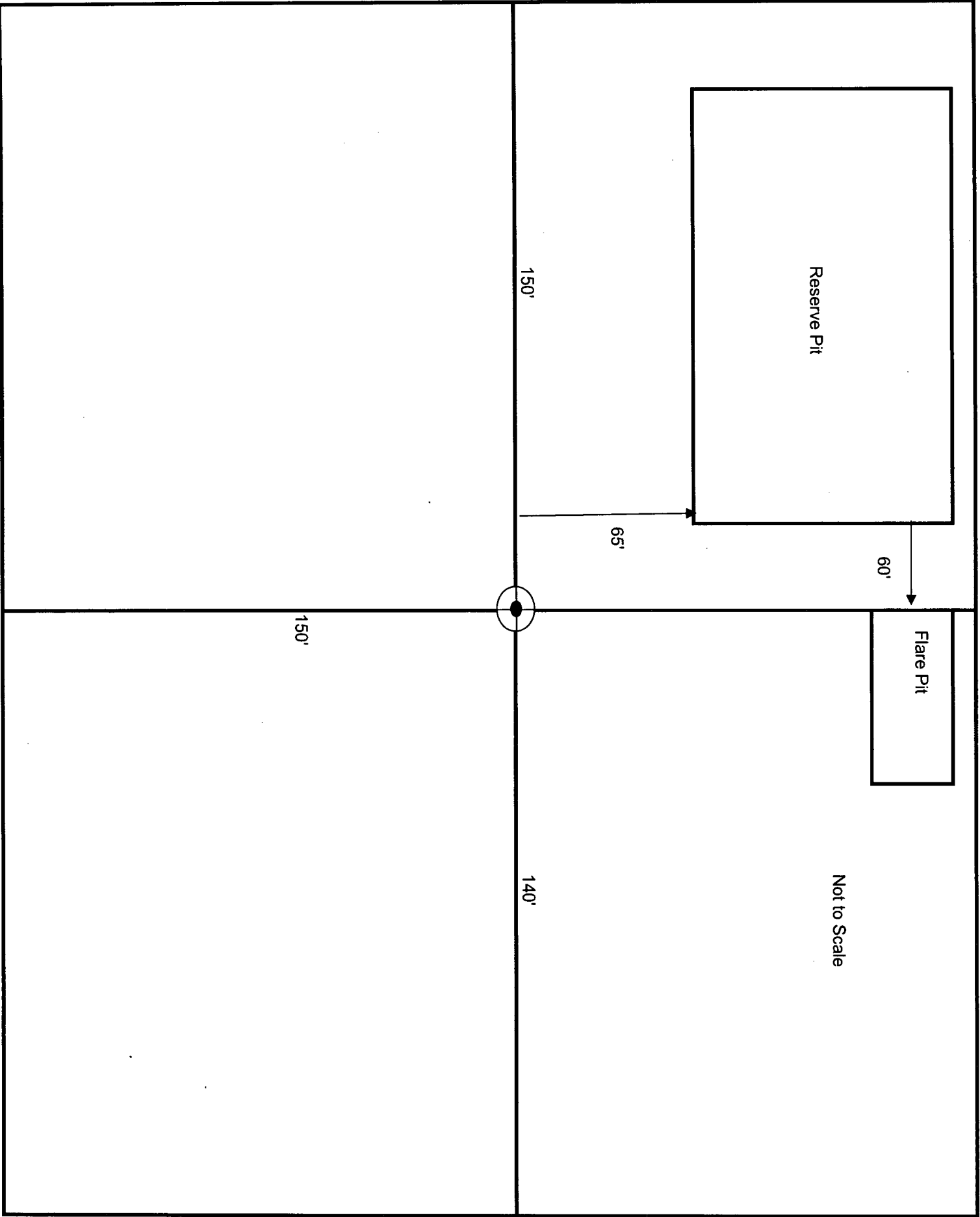
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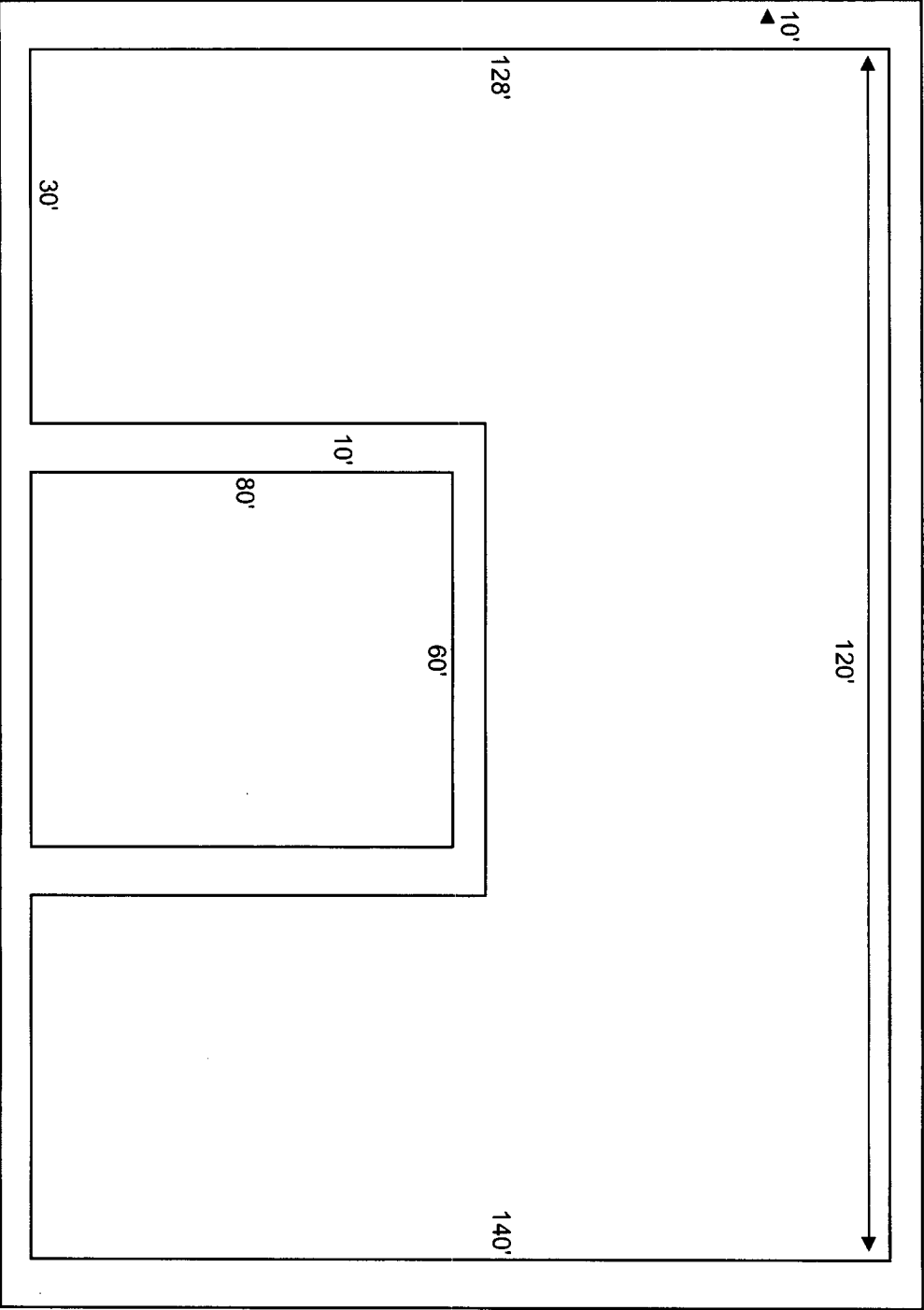
Scale: 1" = 2000'

Date: 11-09-2005

**NADEL AND**  
**GUSSMAN PERMIAN,**  
**L.L.C.**







Not to Scale

