

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 0400512-A																					
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME																					
2. NAME OF OPERATOR Nadel and Gussman Permian		7. UNIT AGREEMENT NAME 27324																					
3. ADDRESS AND TELEPHONE NO. 601 N. Marienfeld Suite 508, Midland, Texas 79701		8. FARM OR LEASE NAME, WELL NO. ICA "31" Federal #1																					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1800' FSL, 840' FWL, Unit Letter L At proposed prod. zone same		9. API WELL NO. 30-015-31587																					
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 3 miles south of Malaga, NM		10. FIELD AND POOL, OR WILDCAT Avalon Morrow																					
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drg. unit line, if any) 840'		11. SEC., T., R., M., OR BLK AND SURVEY OR AREA 31 - T20S - R27E																					
16. NO. OF ACRES IN LEASE 320		12. COUNTY OR PARISH Eddy																					
17. NO. OF ACRES ASSIGNED TO THIS WELL 320		13. STATE New Mexico																					
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. na		19. PROPOSED DEPTH 10,800'																					
20. ROTARY OR CABLE TOOLS rotary		21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3237' GL																					
22. APPROX. DATE WORK WILL START* 12/15/00		23. PROPOSED CASING AND CEMENT																					
<table border="1"><thead><tr><th>SIZE OF HOLE</th><th>GRADE, SIZE OF CASING</th><th>WEIGHT PER FOOT</th><th>SETTING DEPTH</th><th>QUANTITY OF CEMENT</th></tr></thead><tbody><tr><td>17-1/2"</td><td>13-3/8", H-40</td><td>48#</td><td>400'</td><td>500 sx, circulated</td></tr><tr><td>12-1/4"</td><td>9-5/8, J-55</td><td>40#</td><td>2000'</td><td>750 sx, circulated</td></tr><tr><td>7-7/8"</td><td>5-1/2", N-80 *</td><td>17#, 20#</td><td>10,800'</td><td>1000 sx, TOC @ 7000' **</td></tr></tbody></table>				SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	17-1/2"	13-3/8", H-40	48#	400'	500 sx, circulated	12-1/4"	9-5/8, J-55	40#	2000'	750 sx, circulated	7-7/8"	5-1/2", N-80 *	17#, 20#	10,800'	1000 sx, TOC @ 7000' **
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT																			
17-1/2"	13-3/8", H-40	48#	400'	500 sx, circulated																			
12-1/4"	9-5/8, J-55	40#	2000'	750 sx, circulated																			
7-7/8"	5-1/2", N-80 *	17#, 20#	10,800'	1000 sx, TOC @ 7000' **																			

The operator proposes to drill to a depth sufficient to test the Morrow formation. If productive, 5-1/2" casing will be set at TD and cemented to approximately 7,000'. If non-commercial, the well will be plugged in accordance with federal regulations. A 5000# tree will be nipped up prior to perforating.

* If necessary, will run 7" liner above Atoka.

** May use more cement to cover the Delaware sands if prospective and may set DV tool above Strawn interval

Attachments:

Surface use and operating plans
BOP and choke schematics
lease, road and topographical maps
H2S drilling operations plan
wellsite and rig layouts
certified location plat

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Robert McNaughton TITLE Operations Engineer DATE 11-14-00

(This space for Federal or State office use)

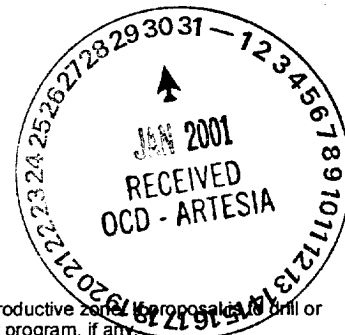
PERMIT NO. _____ APPROVAL DATE _____

Application approval 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.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

***See Instructions On Reverse Side**

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.



☐ AMENDED REPORT

	<div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <div style="margin-top: 10px;"> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> Signature </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> Robert McNaughton </div> <div style="display: flex; justify-content: space-between;"> Printed Name </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> Operations Engineer </div> <div style="display: flex; justify-content: space-between;"> Title </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> 11-14-00 </div> <div style="display: flex; justify-content: space-between;"> Date </div> </div> </div>
<div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">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.</p> <div style="text-align: center; margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> November 1, 2000 </div> <div style="display: flex; justify-content: space-between;"> Date Surveyed </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> GARY L. JONES </div> <div style="display: flex; justify-content: space-between;"> Signature & Seal of </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> Professional Surveyor </div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> W.O. No. 08154 </div> <div style="display: flex; justify-content: space-between;"> Certificate No. Gary Jones 7977 </div> </div> </div>	

NADEL AND GUSSMAN PERMIAN, L.L.C.
601 N. Marienfeld, Suite 508
Midland, TX 79701
Office: (915) 682-4429
Fax: (915) 682-4325

November 14, 2000

Bureau of Land Management
Lands & Minerals
2909 W. Second St.
Roswell, New Mexico 88201

Ms. Linda Askwig,

Nadel and Gussman Permian, as operator, requests permission to drill the ICA "31" Federal No.

1. Barry Hunt has inspected and verbally approved the location at 1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E in Eddy County, NM. The following items are attached:

1. 13 Point Surface Use and Operation Plan,
2. 13 Point Drilling Plan,
3. Lease Responsibility Statement,
4. BOP and Choke Diagrams,
5. Lease and Topographical Maps,
6. Archeological Survey and
7. Location Photographs.

There are no archeological or environmental problems at this site. If you have any questions, contact Robert McNaughton at 915- 682- 4429.



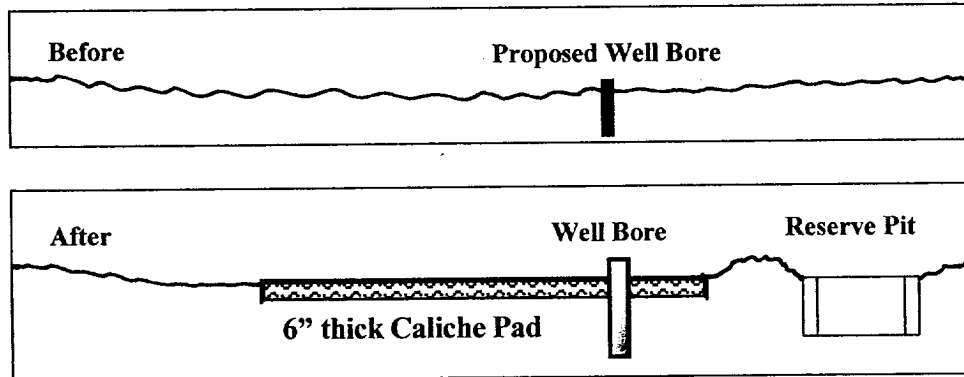
Robert McNaughton
Operations Engineer

13 Point Land Use Plan

1. Existing Roads - A small scale map is attached (**Exhibit #1**) which shows the location of this well in relation to Carlsbad, New Mexico and Capitan Reef Road (NM 30), which is the nearest paved road. A larger scale topographical map is (**Exhibit #2**) shows the location of the well in relationship to the Pecos River and the existing lease roads.
2. Planned Access Roads – We propose a 1756’ caliche road from the location to the existing lease road, which is shown on **Exhibit #3**. The lease is not fenced and a cattle guard or gate will not be needed.
3. Location of Existing Wells – This is the first well on a new lease. The nearest offset producer is a gas well approximately ½ mile to the East. Several new wells have been staked in the vicinity of this well.
4. Location of Tank Batteries, Production Facilities & Lines –
 - We anticipate gas production from the Morrow and Strawn, with minimal produced oil or water. We will build a battery with two 210 Bbl steel tanks, one for oil and one for water. We will also have a Stack-Pack separator on location.
 - All produced fluids will be hauled off lease by road. There are no plans for oil pipelines, LACT units or SWD lines.
 - A gas flowline is proposed (**Exhibit #4, #5**) parallel to the new lease road. It will run to the nearest gas tie-in south of our location.
 - We do not anticipate a need for electrical service on the lease at this time.
5. Location & Type- of Water Supply - Fresh and salt water will be trucked from Carlsbad by a third-party contractor.
6. Source of Construction Material - Primary source of caliche will be the reserve pit area of the new drilling location. There are several alternate caliche sources in this area.
7. Methods of Handling Waste Disposal - Enclosed drill site plat (**Exhibit #5**) indicates location of drilling pits, reserve pit & trash trailer. After sufficient time has elapsed to allow drilling fluids to dry, all pits will be closed and leveled. All trash and debris will be removed from the location.
6. Ancillary Facilities – There are no camps or airstrips planned.
7. Well Site Layout – The well site (see **NMOCD C-102 Form**) has been staked and is also indicated on the enclosed maps (**Exhibits #1, #2 & #3**). The drilling site is mainly caliche rock and some soil, covered by sparse native vegetation (see location photos). The drilling pad will be covered with 6”

caliche with measurements as per attached drawing. The drilling pad will blend in with the terrain since the topography is generally flat.

Cross section – Before and After is shown below:



8. Plans for Restoration of Surface – Commercial Well:

- Reshaped Topography – Rubbish will be hauled off upon completion of drilling operations. All future rubbish will be removed by the subcontractor generating same.
- Caliche Pad – Caliche drilling pad will remain intact until well is abandoned.
- Road – The road will remain intact as long as there is production on the lease.
- Timetable – This well is expected to produce for several years.
- Plans for Restoration of Surface – Plugged and Abandoned Well:

Surface will be restored in accordance with all regulations in effect at the time of abandonment.

9. Other Information –

- Topography – flat with a gentle drainage slope to the South-East.
- Soil Characteristics – compacted calcium and gypsum grains.
- Flora – sparse grass and weeds
- Fauna – rabbits, mice, rats, birds and snakes
- Other Surface Use Activities – leased grazing land.
- Surface Ownership – US Government
- Water Wells – a windmill is located 3000' to the West of the location.
- Lakes, Streams, Ponds – Brantley Lake lies about 5 miles North of the location and the Pecos River is 1 mile to the South and South-East. Preferential surface drainage is to the North and East. In the event of a spill, it is unlikely that any produced fluid will reach the river. However, a firewall will be built around the battery and, if necessary, a separate SPCC plan will be prepared under Federal guidelines: 40 CFR Sections 109, 110, 113 and 114 and Section 311 of the Clean Water Act.

- Dwellings – There are houses and recreational facilities located at Brantley lake which is approximately five miles to the North.
- Archaeological Sites – none based on the survey run by Southern New Mexico Archeological Services, Inc. over the proposed location and proposed road, the Cultural Resource Use Permit Holder suggests clearance for this drilling operation.
- Historical Sites – none
- Cultural Sites - none

10. Operator's Representative -

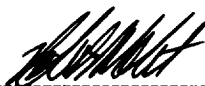
Gordon Barker - -----Mobile Phone - (915) 664-6328

Robert McNaughton ---Office Phone (915) 682-4429
Home Phone (915) 694-2553

Ernie Little -----Office Phone (915) 682-4429
Home Phone (505) 392-4907

12. Other facets: none

13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and access route; that I am familiar with the condition which presently exists; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by B&H Construction Company or their contractors and sub-contractors in conformity with this plan



Robert McNaughton
Operations Engineer

13 Point Drilling Plan:

1. Location: 1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E, Eddy County, New Mexico (**Form C-102**)
2. Elevation: 3237' GL, 3255' KB
3. Geological Name of Surface Formation: Quaternary Rock
4. Type of Drilling Tools to be utilized: Rotary Tools
5. Proposed Drilling Depth: 10,800'

6. Tops of Important Geological Markers:

Delaware	2,000'	Pennsylvanian	8,620'	Morrow	10,120'
Bone Springs	3,460'	Strawn	9,360'	Morrow clastics	10,260'
3 rd Bone Springs	7,500'	Atoka	9,700'	Lower Morrow	10,470'

7. Estimated Depth of Anticipated Water, Oil or Gas:

Oil and water	- Delaware	2,000'
Gas	- Strawn	9,360'
Gas	- Morrow	10,260'

8. Casing Program:

- 13 ⁵/₈" 48# H-40 @ 400' 500 sx, circulated to surface
- 9 ⁵/₈" 40# K-55 or J 55 @ 2000' 750 sx, circulated to surface
- 5 ¹/₂" 17#, 20# N 80 @ 10,800' 1000 sx, TOC @ ~7000' **

The surface and intermediate casing strings will be cemented to the surface. ** The TOC behind the production casing will be determined after running open hole logs.

9. Specifications for Pressure Control Equipment: (see figures No. 6, No. 7 & No. 8)

This rig will have a series 900 BOP with 5 ¹/₂" pipe rams and blind rams, kill line, choke manifold, Koomey hydraulic controls, and accumulator with remote controls. When nipping up, will test BOP and choke to 1000 psi, will operate BOP once a day or as directed by the company representative.

10. Mud Program:

Spud and drill with fresh water to a depth of approx. 400'. Drill out from under surface casing with fresh water. Slowly add 10# brine water and drill to the intermediate casing point at 2000'. Drill out cement and drill to 8000' with fresh water while maintaining a Ph of 10. Drill from 8,000' to TD with cut brine at approximately 9.2 PPG. Use starch for filtrate control and mix pre-hydrated freshwater gel slurry to clean and condition hole prior to running electric logs.

11. Testing, Logging & Coring Program:

- a. Testing: We expect to run DSTs in the Strawn and Morrow.
- b. Coring: no coring is planned.
- c. Logging: open hole logs will be run prior to running production casing. The standard suite will be a Dual Lateral/ ML and GR/Density/Neutron combination.
- d. Depending on the sand quality, a FMI and/or formation tester may be run.
- e. Open hole logs will not be run through the intermediate hole section; GR neutron to surface.

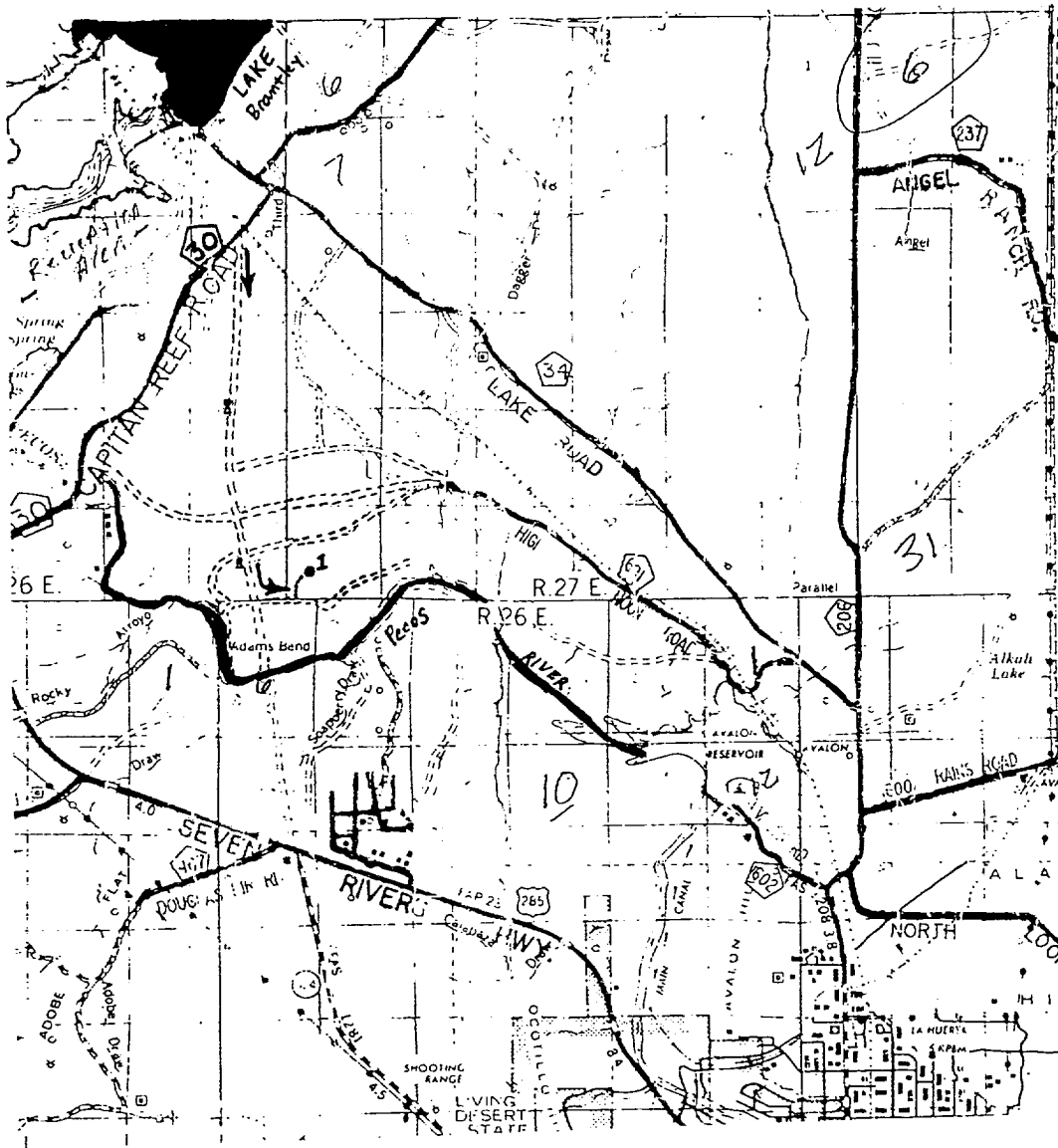
12. Potential Hazards:

None significant. Lost circulation may occur, but H₂S should not be present.

13. Anticipated starting date & duration:

Plans are to begin drilling operations about January 1, 2000; approximately 38 days will be required to drill the well and 8 days will be needed for the completion.

ICA 31 Federal #1: Figure # 1



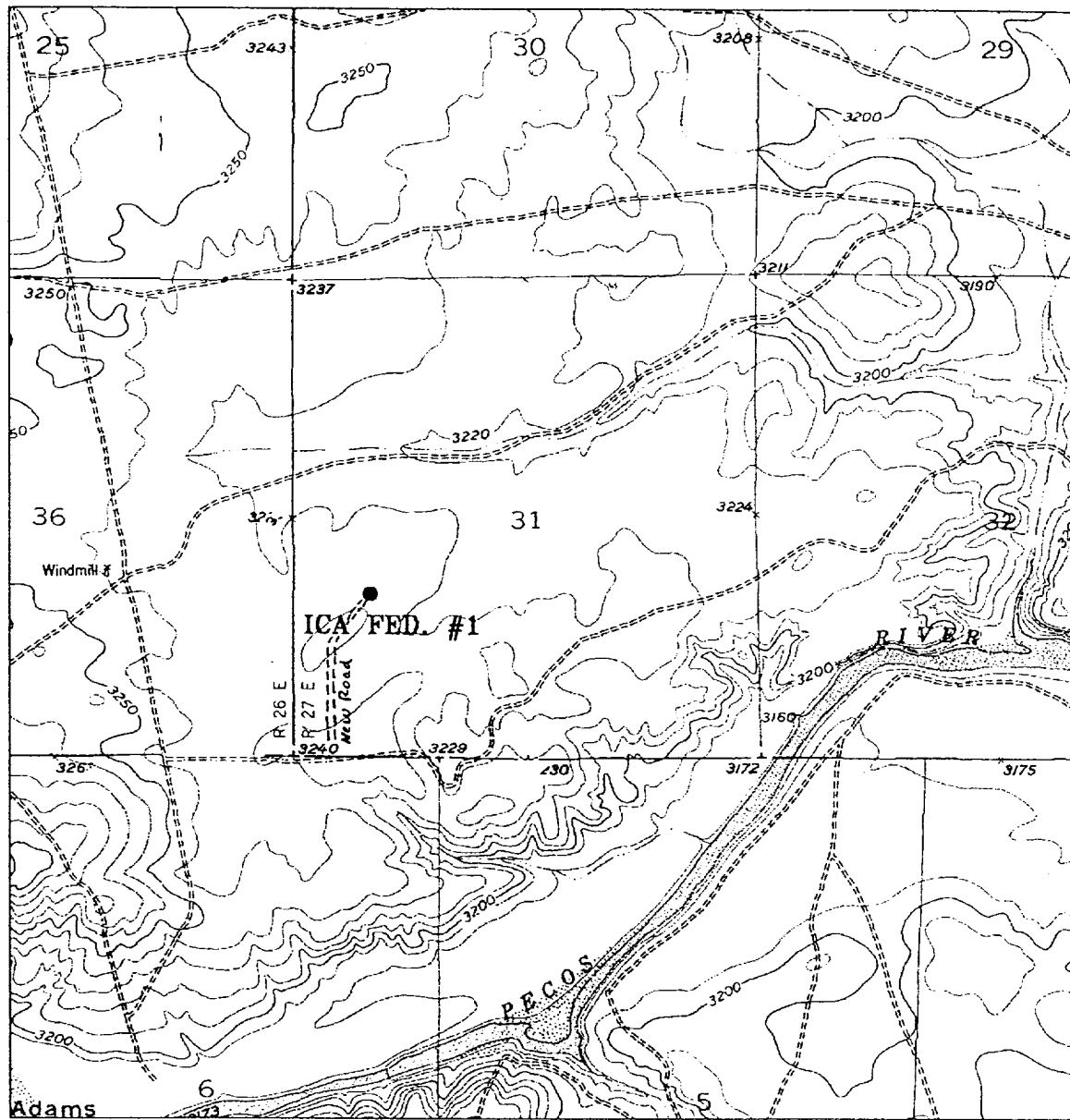
ICA FEDERAL #1

Located at 1800' FSL and 840' FWL

Section 31, Township 20 South, Range 27 East,

N.M.P.M., Eddy County, New Mexico.

ICA 31 Federal #1: Figure # 2



ICA FEDERAL #1

Located at 1800' FSL and 840' FWL
 Section 31, Township 20 South, Range 27 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

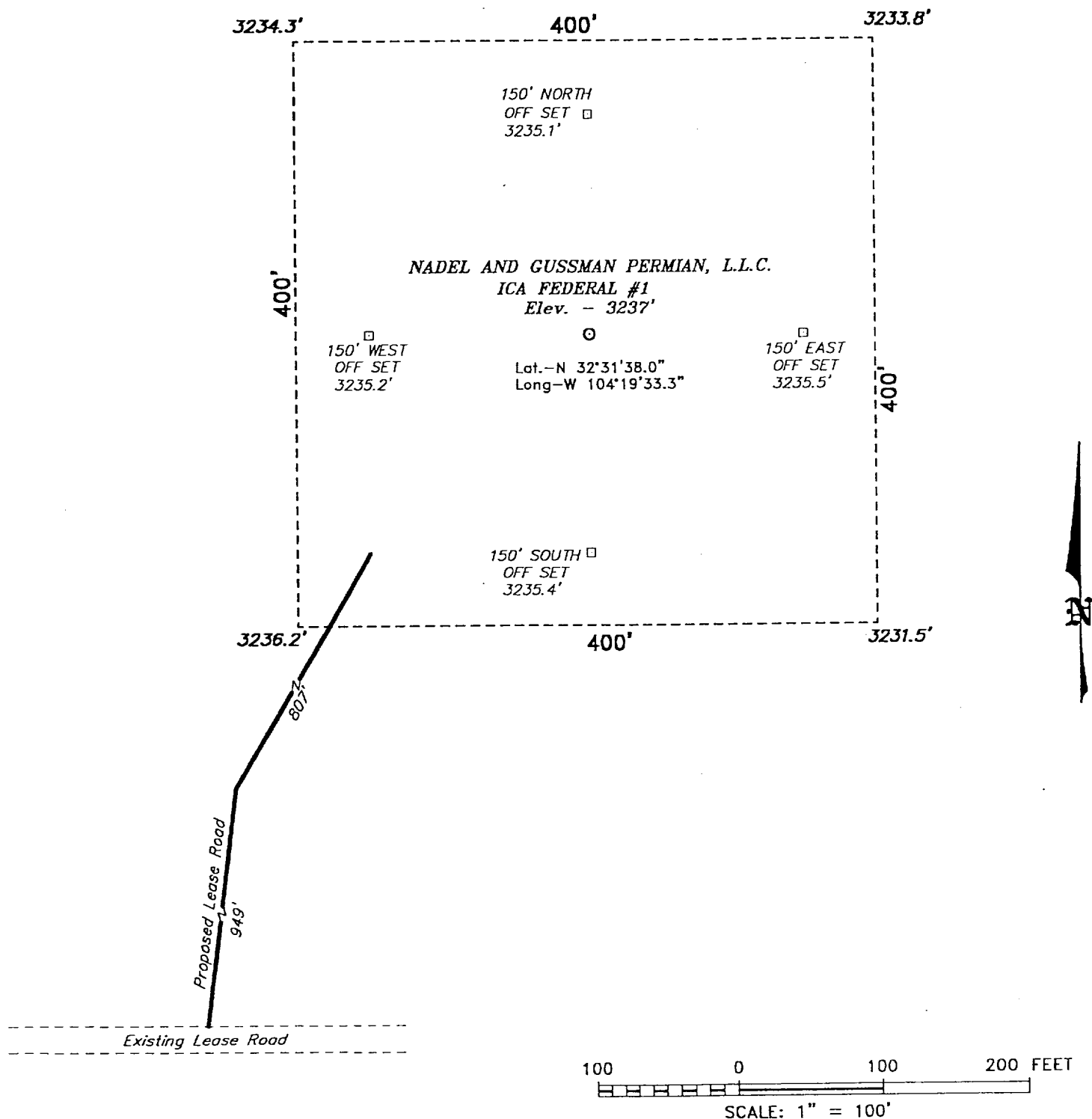
W.O. Number: 0611AA - KJC #122

Survey Date: 11-01-2000

Scale: 1" = 2000'

NADEL AND GUSSMAN
 PERMIAN, L.L.C.

SECTION 31, TOWNSHIP 20 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

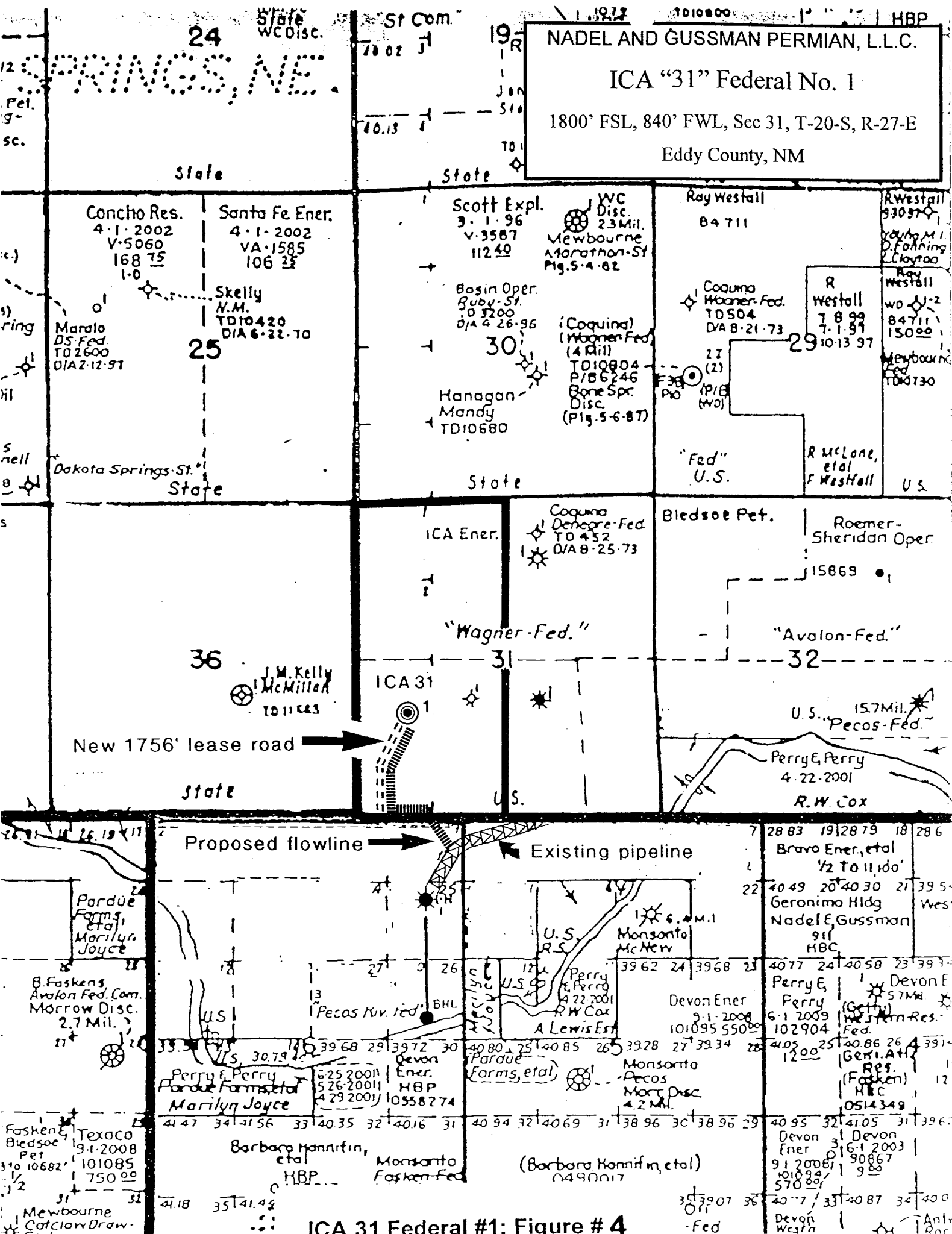


ICA 31 Federal #1: Figure #3

NADEL AND GUSSMAN PERMIAN, L.L.C.

REF: ICA Federal #1 / Well Pad Topo

THE ICA FEDERAL No. 1 LOCATED 1800' FROM
THE SOUTH LINE AND 840' FROM THE WEST LINE OF
SECTION 31, TOWNSHIP 20 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.



NADEL AND GUSSMAN PERMIAN, L.L.C.
ICA "31" Federal No. 1
1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E
Eddy County, NM

ICA 31 Federal #1: Figure # 4

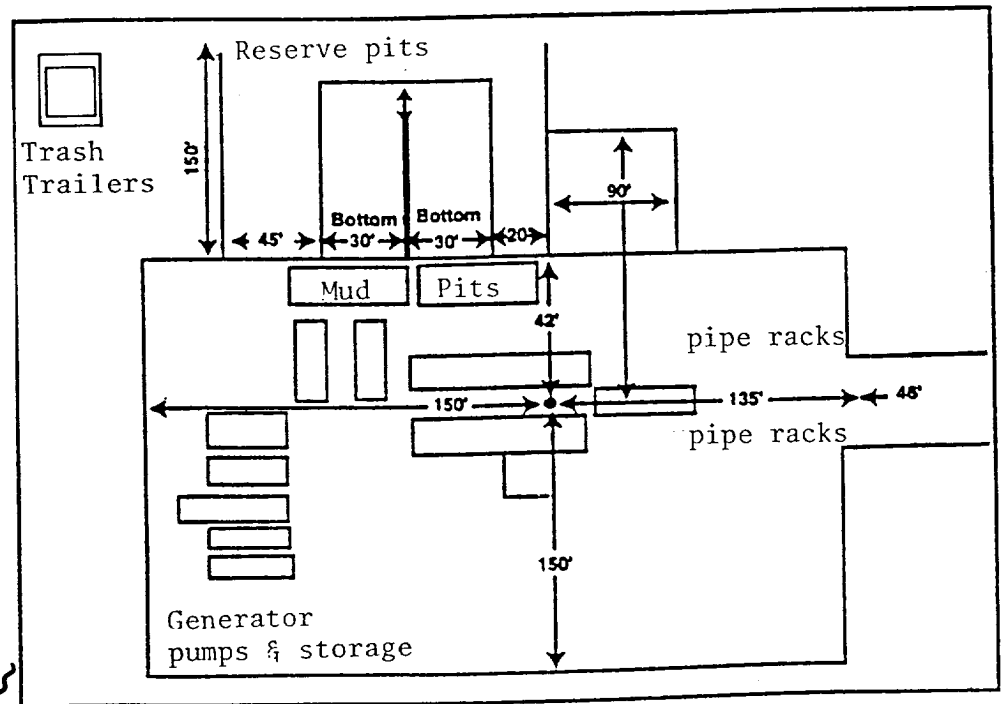


NADEL AND GUSSMAN PERMIAN, L.L.C.

ICA "31" Federal No. 1

1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E

Eddy County, NM

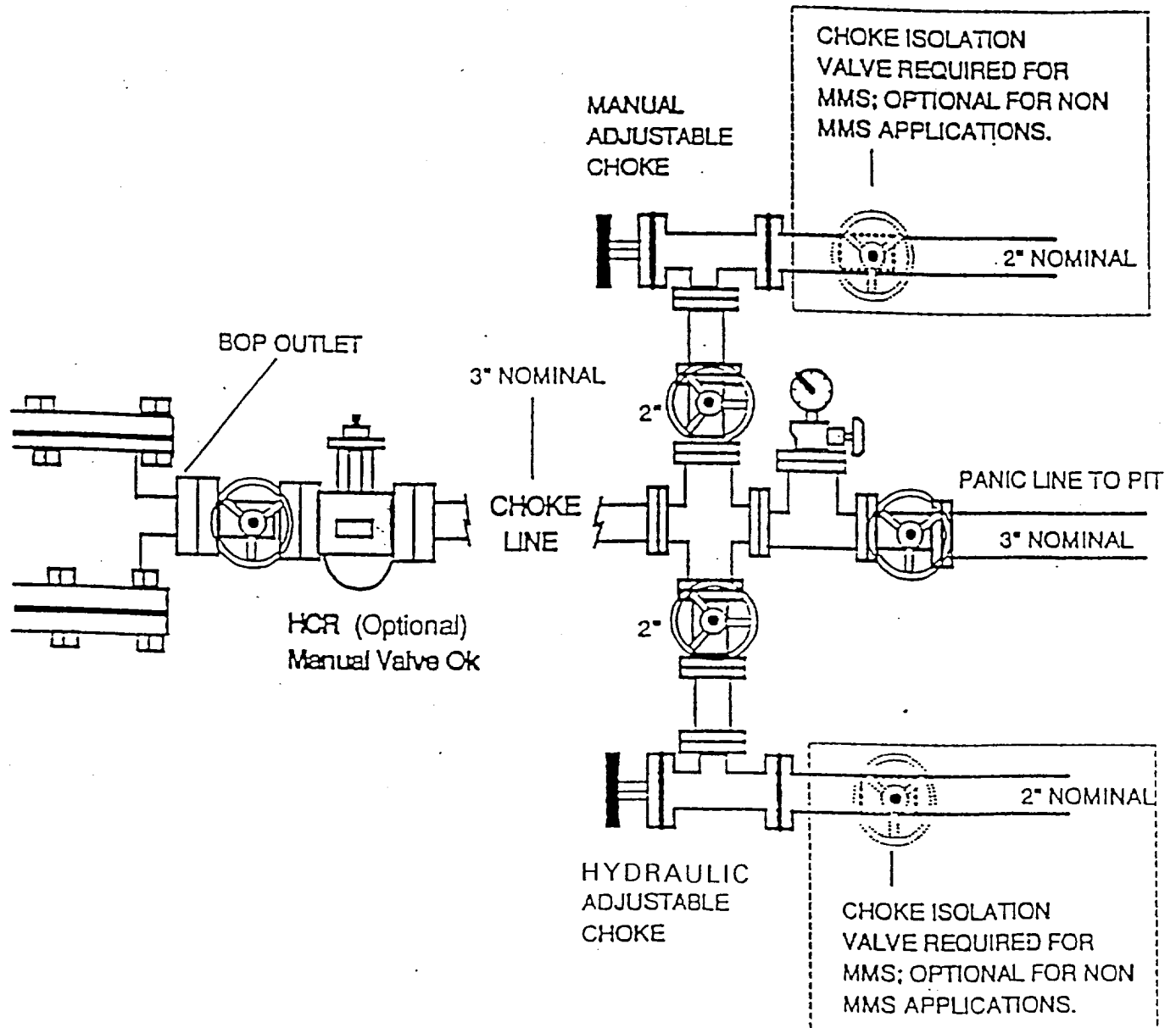


Patterson Rig Layout

New Lease Road

Proposed Flowline

DRILLING OPERATIONS
CHOKE MANIFOLD
2M AND 3M SERVICE



NADEL AND GUSSMAN PERMIAN, L.L.C.

ICA "31" Federal No. 1

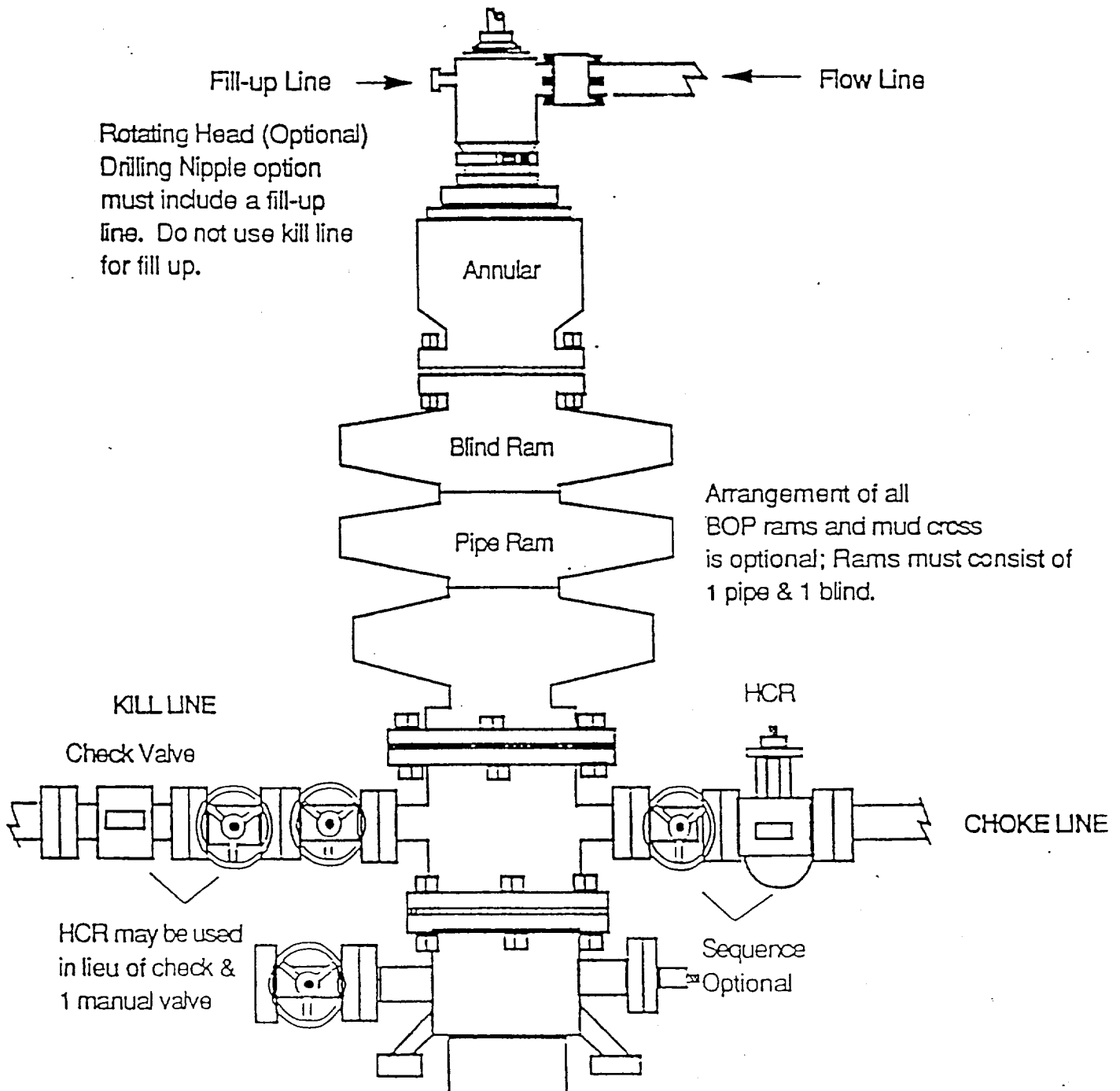
1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E

ICA 31 Federal #1: Figure # 6

DRILLING OPERATIONS

CLASS -1: NORMAL PRESSURE < 10PPG

OPTION - 2: MMS STANDARD; SINGLE SIZE DRILL STRING



NADEL AND GUSSMAN PERMIAN, L.L.C.

ICA "31" Federal No. 1

1800' FSL, 840' FWL, Sec 31, T-20-S, R-27-E

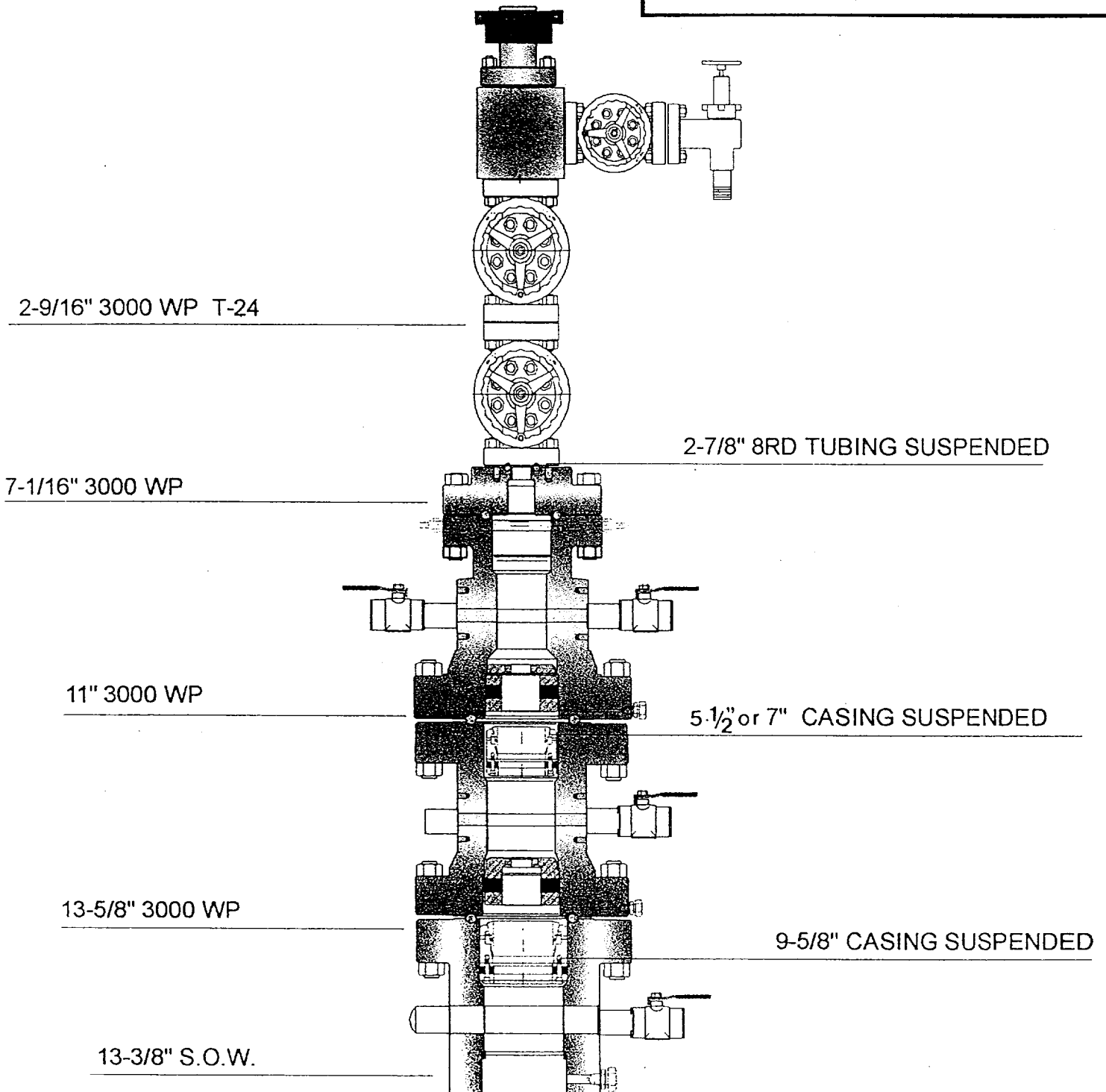
ICA 31 Federal #1: Figure # 7

NADEL AND GUSSMAN PERMIAN, L.L.C.

ICA "31" Federal No. 1.

1650' FSL, 990' FWL, Sec 31, T-20-S, R-27-E

Eddy County, NM



UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Nadel and Gussman Permian L.L.C.
Address: 601 N. Marienfeld Suite 508
City, State: Midland, Texas
Zip Code: 79707

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease Name: **ICA 31 Federal**

Lease Number: **NM -0400512A**

Legal Description of Land: **S/2 of Section 31, T-20-S, R-27-E, NMPM, Eddy County, New Mexico.**

Formations: **All uncommitted mineral interests from the surface to the base of the Morrow.**

Bond Coverage: **Statewide**

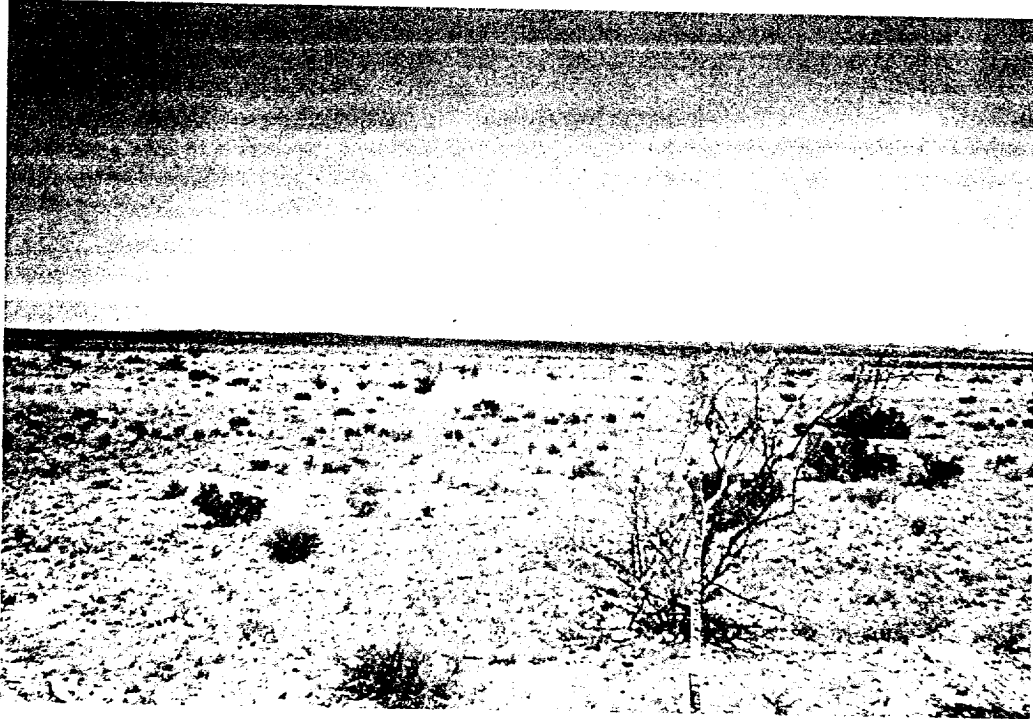
BLM Bond File Number: **NM2427**

Authorized Signature: 

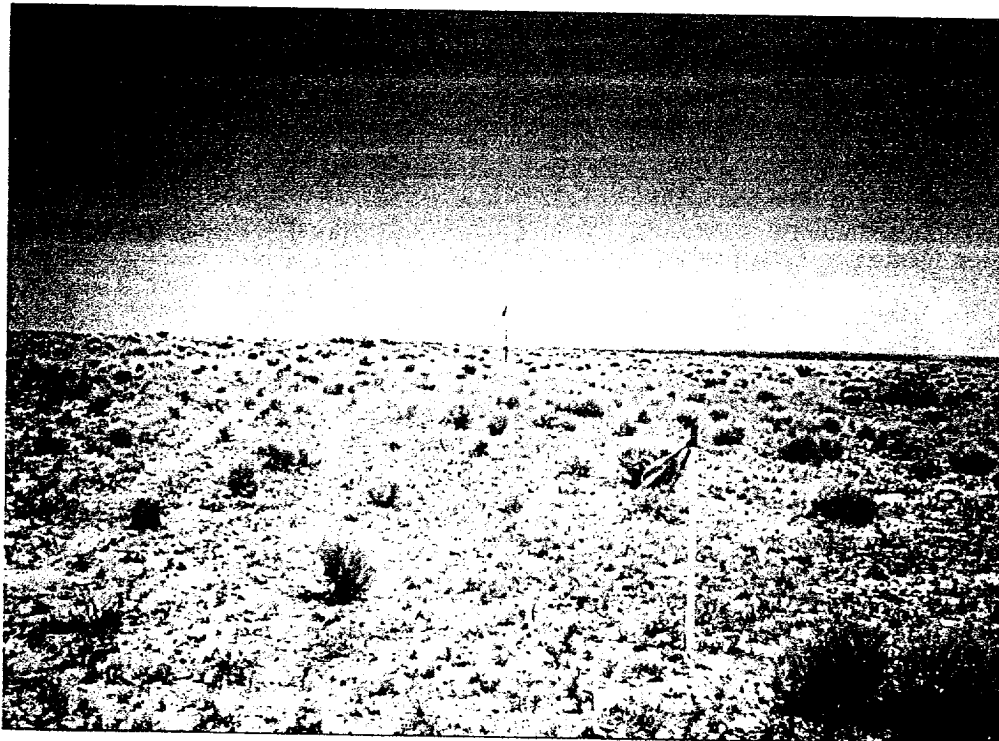
Name: Robert McNaughton

Title: Operations Engineer

Date: October 26, 2000



ICA 31 Federal #1 location: Above - Looking North from marker on county road across pasture to the proposed location. Below - looking North across the location to the SE corner stake.



NOV 14 2000

S.N.M.A.S.

SOUTHERN NEW MEXICO ARCHAEOLOGICAL SERVICES, INC.
P.O. Box 1 Bent, New Mexico 88314 Office (505) 671-4797

November 7, 2000

Nadel and Gussman Permian, L.L.C.
Mr. Gordon Barker
601 N. Marienfeld, Suite 508
Midland, Texas 79701

Dear Mr. Barker;

Enclosed is our cultural resource report for the following Nadel and Gussman Permian L.L.C. proposed project:

A Class III Cultural Resources Inventory
The Proposed ICA Federal Number 1
Well Location and Access Road
Section 31, T.20S., R.27E
Eddy County, New Mexico

A records check was completed at the Bureau of Land Management, Roswell District, Carlsbad Resources Area Office, and the State of New Mexico Archaeological Records Management Section. The record check of T. 20S., R.27E., Section 31 and within one mile revealed no previously recorded sites. During the current inventory, no cultural resources were encountered.

Archaeological clearance is recommended for the proposed ICA Federal Number 1 well location and access road, **with no stipulations.**

If you have any questions regarding the report, please give me a call. Thank you.

Sincerely,



Doralene Sanders
Office Manager

CULTURAL RESOURCE MANAGEMENT REPORT

**Nadel and Gussman Permian, L.L.C.
The Proposed ICA Federal Number 1
Well Location and Access Road
Section 31, T.20S., R.27E
Eddy County, New Mexico**

Written By:
Doralene Sanders
And
Joe Ben Sanders
Project Archaeologist
Principal Investigator

Prepared For:
**Nadel and Gussman Permian, L.L.C.
601 Marienfeld, Suite 508
Midland, Texas 79701**

Prepared By:

**SOUTHERN NEW MEXICO
ARCHAEOLOGICAL SERVICES, Inc.**

Post Office Box 1
Bent, New Mexico 88314-0001

Date:
November 7, 2000

**Project # SNMAS 00-NM-427
NMCRIS # 72392**

**TITLE PAGE/ABSTRACT
NEGATIVE SITE REPORT
ROSWELL DISTRICT**

BLM/ RDO 1/95

Page 1

1. BLM Report No.

**2. (Accepted)
(Rejected)**

3. NMCRIS No. 72392

4. Title of Report (Project Title):

The Proposed ICA Federal Number 1

Well Location and Access Road

Section 31, T.20S., R.27E

Eddy County, New Mexico

A Cultural Resource Inventory

5. Project Date(s)

October 29, 2000

6. Report Date

November 7, 2000

7. Consultant Name & Address:

Direct Charge: Joe Ben Sanders

Name: Southern New Mexico Archaeological Services, Inc.

Address: PO Box 1 Bent, New Mexico 88314

Author's Name: Doralene Sanders

Field Personnel Names: Don Clifton

Phone No. (505) 671-4797

8. Permit No.

145-2920-00-G

Consultant Report #

SNMAS-00NM-427

10. SPONSOR NAME AND ADDRESS:

Individual Responsible: Gordon Barker

Name: Nadel and Gussman Permian, L.L.C.

Address: 601 Marienfeld, Suite 508

Midland, Texas 79701

Phone: (915) 682-4429

11. FOR BLM USE

12. ACREAGE:

Total No. of acres

Surveyed 7.1

Per Surface

Ownership:

Federal 7.1

State _____

Private _____

Bureau of Reclamation

13. Location and Area: (Maps Attached if negative survey)

a. State: New Mexico

b. County: Eddy

c. BLM District: Roswell

Field Office: Carlsbad

d. Nearest City or Town: Carlsbad, New Mexico

e. Location: T.20S., R.27E Sec. 31

Well Pad Footage's **1800' FSL and 840' FWL**

Well Pad ¼'s: S1/2NW1/4SW1/4 Access Road ¼'s: W1/2SW1/4SW1/4

f. 7.5' Map Name(s) and Code Number(s): USGS Lake McMillan South (1955) 32104-E3

g. Area: Block:

Impact: 200' X 200'

Surveyed: 400' X 400'

Linear: 50' X 1,500'

Surveyed: 100' X 1,500'

14. a. Records Search:

Location: ARMS HPD.

Date: October 27, 2000

BLM Carlsbad

Date: October 26, 2000

List by LA # All sites within .25 miles of the project: None

b. Description of Undertaking:

The proposed ICA Federal Number 1 well location is staked in Section 31, T.20S., R.27E at 1800 ft FSL and 840 ft FWL. The impact area for the proposed well location is an area of 200 ft by 200 ft. The proposed access road is 1500 ft long with an impact area of 50 ft by 1500 ft. The proposed access road begins on the southwest corner of the well location and trends southwest/south/southeast 1500 ft to an existing lease road.

c. Environmental Setting NRCS soil designation: vegetative community: etc.:

The project is located on a flat plain on the north side of small Playa. Soils are sandy with caliche fragments. The vegetation in the project area consists of acacia, little leaf sumac, snakeweed and grasses. The elevation is 3235'.

d. Field Methods:

Transect Intervals: 8 zigzag transects across well pad and 50 ft intervals over staked corridor.

Crew Size: one

Time in Field: 8 hours

Collections: NONE

15. Cultural Resource Findings:

a. Identification and description: (Location shown on project map)

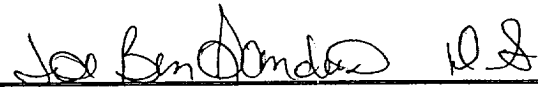
During the current survey, no cultural resources were encountered.

16. Management Summary (Recommendations):

During the cultural resource inventory, no cultural resources were encountered. Therefore, archaeological clearance is recommended for the Nadel and Gussman Permian L.L.C. proposed ICA Federal Number 1 well location and access road, with no stipulations

I certify the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist: Signature



Joe Ben Sanders

Date: November 7, 2000

Principal Investigator

