

**New Mexico Oil Conservation Division, District I**  
**1625 N. French Drive**

F-04-36

Form 3160-3  
 (September 2000)

OPER. OGRID NO. 215758  
 PROPERTY NO. 32080  
 POOL CODE 50542  
 EFF. DATE 6/8/04  
 API NO. 30-025-36724

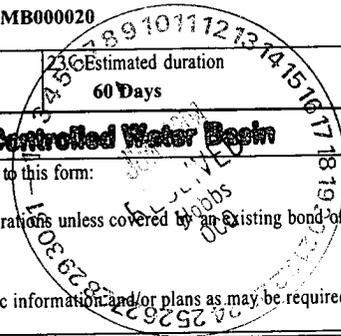
FORM APPROVED  
 OMB No. 1004-0136  
 Expires January 31, 2004

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM194967 94190
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Pecos Production Company		7. If Unit or CA Agreement, Name and No. NMNM092017
3a. Address 400 W. Illinois, Suite 1070, Midland, TX 79701		8. Lease Name and Well No. Querecho Plains Unit #3
3b. Phone No. (include area code) 432-620-8480		9. API Well No. 30-025-36724
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 760' FSL & 1930' FWL At proposed prod. zone Same <u>Unit N</u>		10. Field and Pool, or Exploratory North Lusk Morrow
14. Distance in miles and direction from nearest town or post office* 9 Miles South of Maljamar		11. Sec., T. R. M. or Blk. and Survey or Area Sec 22-T18S-R32E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 710'	16. No. of acres in lease 320	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1220'	19. Proposed Depth 13,000'	20. BLM/BIA Bond No. on file NMB000020
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3757'	22. Approximate date work will start* 06/15/2004	23. Estimated duration 60 Days

24. Attachments **Capitan Controlled Water Basin**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.



25. Signature [Signature] Name (Printed/Typed) **William R. Huck** Date **03/29/2004**  
 Title **VP-Engr & Operations**

Approved by (Signature) /s/ Joe G. Lara Name (Printed/Typed) **/s/ Joe G. Lara** Date **JUN 01 2004**  
 Title **FIELD MANAGER** Office **CARLSBAD FIELD OFFICE**

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, are attached.

**APPROVAL FOR 1 YEAR**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

\*(Instructions on page 2)

**DECLARED WATER BASIN**  
**CEMENT BEHIND THE 13 3/8"**  
**CASING MUST BE CIRCULATE**

**APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS  
 ATTACHED**

**DECLARED WATER BASIN**  
**CEMENT BEHIND THE 8 5/8"**  
**CASING MUST BE CIRCULATE**

[Signature]

## DRILLING PROGRAM

Attachment to Form 3160-3  
Pecos Production Company  
**Querecho Plains Unit No. 3**  
760' FSL & 1930' FWL  
Section 22, T18S, R32E  
Lea County, New Mexico

1. Geologic Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Formations

Top of Salt Section	1100'
Base of Salt Section	2700'
Yates	2700'
Queen	3850'
San Andres	4740'
Bone Spring	6850'
Wolfcamp	10,100'
Strawn	11,450'
Atoka	11,850'
Morrow Clastics	12,200'
Lower Morrow	12,400'
Upper Mississippian Lime	12,850'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

Water:	Approximately 200'
Oil:	3850', 6850', 10,100', 11,450'
Gas:	11,800'; 12,900'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Any surface fresh water sands will be protected by setting 13-3/8" casing at 725' and circulating cement back to surface. The Salt will be isolated with a 8-5/8" intermediate casing string set into the San Andres @ approximately 4500' and cement circulated to surface. The Strawn and Morrow will be isolated with 5-1/2" casing to total depth (13000'±) and cemented with cement back into the 8-5/8" intermediate casing.

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing</u> <u>OD</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
17-1/2"	0' - 725'	13-3/8"	48#	H-40	ST&C
12-1/4"	0' - 4500'	8-5/8"	32#	J-55	ST&C
7-7/8"	0' - 13000'	5-1/2"	17#	N-80 & P-110	LT&C

6. Types and Characteristics of Proposed Mud System

This well will be drilled to total depth with fresh water, brine and Duo Vis/Polypac cut brine mud systems. Depths are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity</u>	<u>Water Loss</u>
0' - 725'	Spud Mud	8.3 - 9.2	28 - 36	No control
725' - 4500'	Native/Brine	9.0 - 10.3	29	No control
4500' - 11200'	Cut Brine	8.6 - 9.8	29	No control
11200' - TD	Duo Vis/Poly Pac	9.8 - 10.0	35 - 38	5 - 6 cc

7. Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

8. Logging, Testing and Coring Program

- A. Possible of drill stem test of Strawn and Morrow.
- B. The open hole electrical logging program will be:
  - 1. DLL/MSFL/GR (TD-4500')  
Note: GR will be pulled to Ground Level
  - 2. DEN/NEU/CAL (TD to 4500')  
Note: Neutron log will be pulled to Ground Level
- C. No coring program is planned.
- D. No additional testing will be initiated subsequent to setting the 5-1/2" production casing.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are expected. The anticipated bottom hole temperature at total depth is 180 degrees and maximum bottom pressure is 5000 psia. Lost circulation within the surface and intermediate intervals have been encountered in adjacent wells. Small quantities of hydrogen sulfide gas are associated with the Queen, Grayburg and San Andres formations in this area. Appropriate training and monitoring equipment will be installed prior to drilling below 2500'.

10. Anticipated Starting Date and Duration of Operations

Archeological Survey Consultants has been requested to perform and submit a cultural resources examination to the BLM office in Carlsbad, New Mexico.

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date for this well is as soon as the LPC stip allows. The drilling operation should require approximately 35 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days for completion and testing.

## SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3  
Pecos Production Company  
**Querecho Plains Unit No.3**  
760' FSL & 1930' FWL  
Section 22, T18S, R32E  
Lea County, New Mexico

### 1. Existing Roads

- A. The well site and elevation plat for the proposed Querecho Plains Unit No. 3 are reflected on Exhibit #2. The well was staked by John West Engineering of Hobbs, New Mexico.
- B. Approximately 100 feet of new road will be built from the existing lease road to the NE corner of drilling pad on Exhibit #3.
- C. Intersection of Hwy 529 and Hwy 126 in Lea County. South (on Hwy 126) 1.6 miles to Mewbourne Oil Querecho Plains Unit sign. Left 2.5 miles on main lease road. Right 1.1 miles on existing lease road. Right onto new lease road to Querecho Plains Unit No. 3.

### 2. Proposed Access Road

Only 100 feet of new road will be built.

### 3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed Querecho Plains Unit No. 3.

### 4. Location of Existing and/or Proposed Facilities

- A. If the well is productive, a new facility will be built on well pad. Gas produced will be transported through a 3 or 4" line to be buried along, existing road East and South to Querecho Plains Unit No. 1 located 1980' FSL & 1980' FWL of Sec 22.
- B. New tank battery facility if constructed will consist of one high pressure 3 phase gas unit, one low pressure 3 phase gas unit, one 300 barrel steel stock tank, and one 250 barrel fiberglass water tank as reflected on Exhibit 6.
- C. The well should be a flowing oil or gas well with flow rate controlled through an adjustable choke.
- D. If the well is productive, rehabilitation plans are as follows:
  - 1. Free water will be hauled to disposal and the reserve pit will be back-filled after the contents of the pit are dry, and topsoil replaced (within 120 days of completion, weather permitting).

9. Well Site Layout

- A. The drill pad is shown on Exhibit #5. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil, if any found, will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" compacted caliche.
- B. No permanent living facilities are planned, temporary trailers for the tool pusher, and company supervisors may be on location throughout drilling operations.
- C. The reserve pit and earthen pits will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

- A. After concluding the drilling, completion and/or production operations, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will remain intact during reclamation in order to prevent leaching. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment. Original topsoil will be returned to the pit area.
- C. The location will be rehabilitated as recommended by the BLM.

11. Surface Ownership

This well site is owned by the U.S.A. An agreement for surface orientation and use has been reached with the BLM Field Inspector during the onsite meeting.

12. Other Information

- A. The area surrounding the well site is gypsiferous and supportive of desert scrub and grassland formation. The vegetation is moderately sparse with desert scrub.
- B. No permanent water or water wells are within a 1 mile radius of this location.
- C. Archeological Survey Consultants has been requested to perform and submit a cultural resources examination to the BLM office in Carlsbad, New Mexico.

13. Lessee's and Operator's Representative

The Pecos Production Company representative responsible for ensuring compliance of the surface use plan is:

William R. Huck  
VP – Engr. and Operations  
(432) 620-8480

Pecos Production Company  
400 W. Illinois, Suite 1070  
Midland, TX 79701

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road, that I am familiar with the conditions that presently exist; 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 Pecos Production Company and its contractors under which it is approved.

Signed:   
William R. Huck – VP-Engr. & Operations

Date: 3-29-04

# BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP  
11" CAMERON SPHERICAL, 5000 psi WP  
120 GALLON, 5 STATION KOOMEY ACCUMULATOR  
5000 psi WP CHOKE MANIFOLD

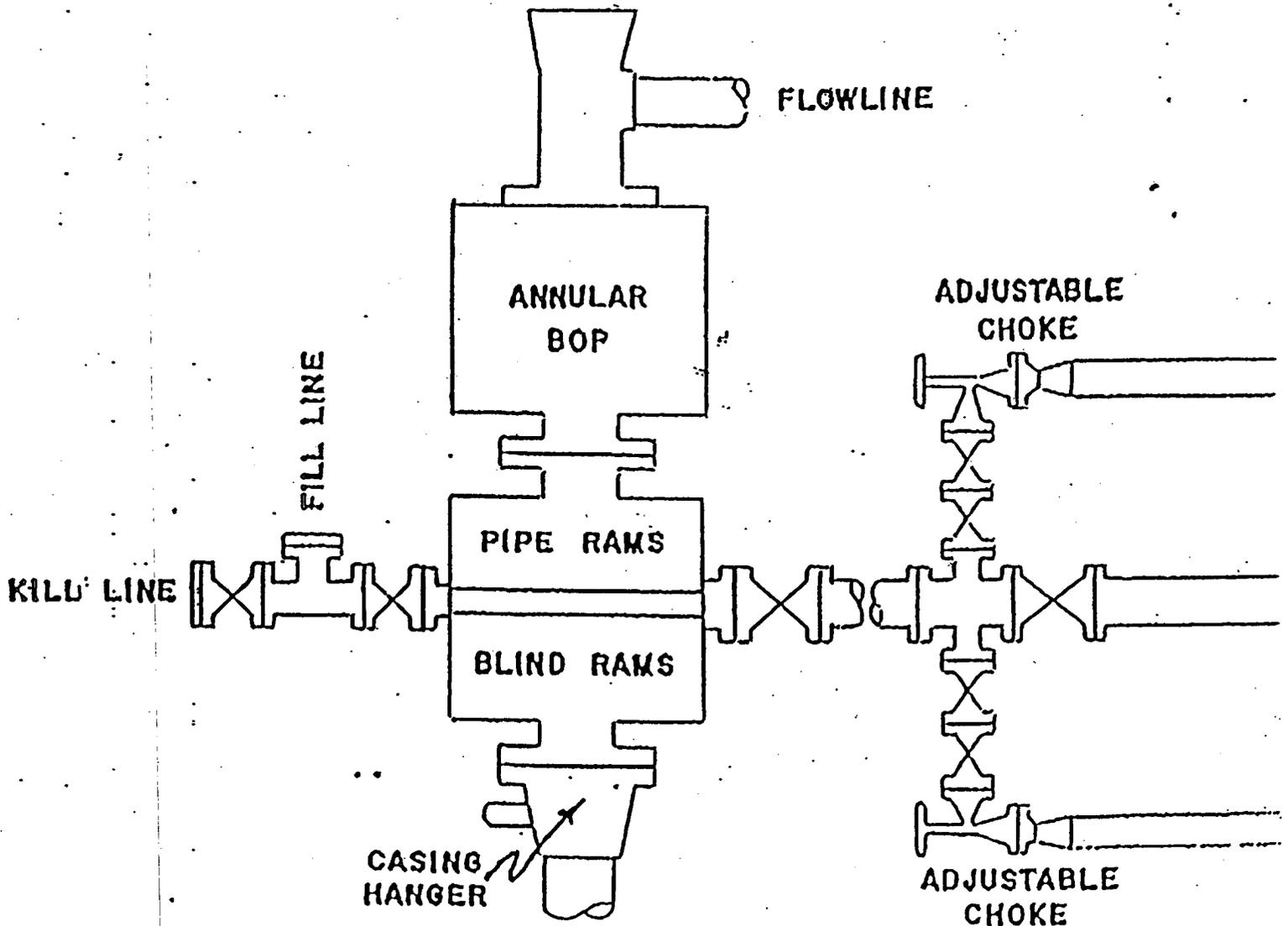


Exhibit #1  
Pecos Production Company  
Querecho Plains Unit #3  
760' FSL & 1930' FWL  
Sec. 22, T-18-S, R-32-E  
Lea Co., NM

Attachment to Exhibit #1  
Attachment to Form 3160-3  
Pecos Production Company  
**Querecho Plains Unit No. 3**  
760' FSL & 1930' FWL  
Section 22, T18S, R32E  
Lea County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
7. Will maintain a kelly cock attached to the kelly.
8. Hand wheels and wrenches will be properly installed and tested for safe operation.
9. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

DISTRICT I  
P.O. Box 1960, Hobbs, NM 88241-1960

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code 80800	Pool Name North Lusk Morrow
Property Code 32086	Property Name QUERECHO PLAINS UNIT	Well Number 3
OGRID No. 215758	Operator Name PECOS PRODUCTION COMPANY	Elevation 3757'

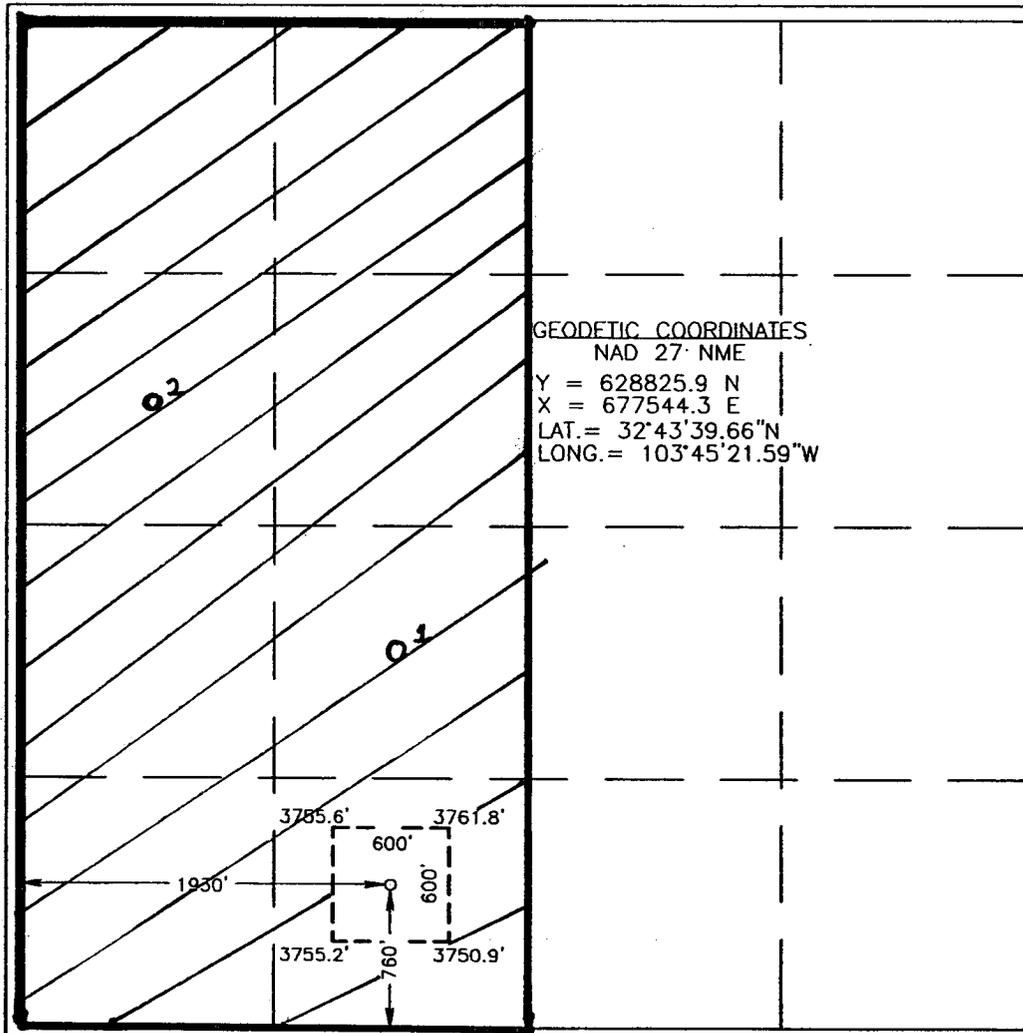
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	22	18-S	32-E		760'	SOUTH	1930'	WEST	LEA

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



GEODETIC COORDINATES  
NAD 27 NME  
Y = 628825.9 N  
X = 677544.3 E  
LAT. = 32°43'39.66"N  
LONG. = 103°45'21.59"W

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

*William R. Huck*  
Signature  
William R. Huck  
Printed Name  
VP-Engr & Operations  
Title  
3-29-04  
Date

SURVEYOR CERTIFICATION

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.

February 23, 2004

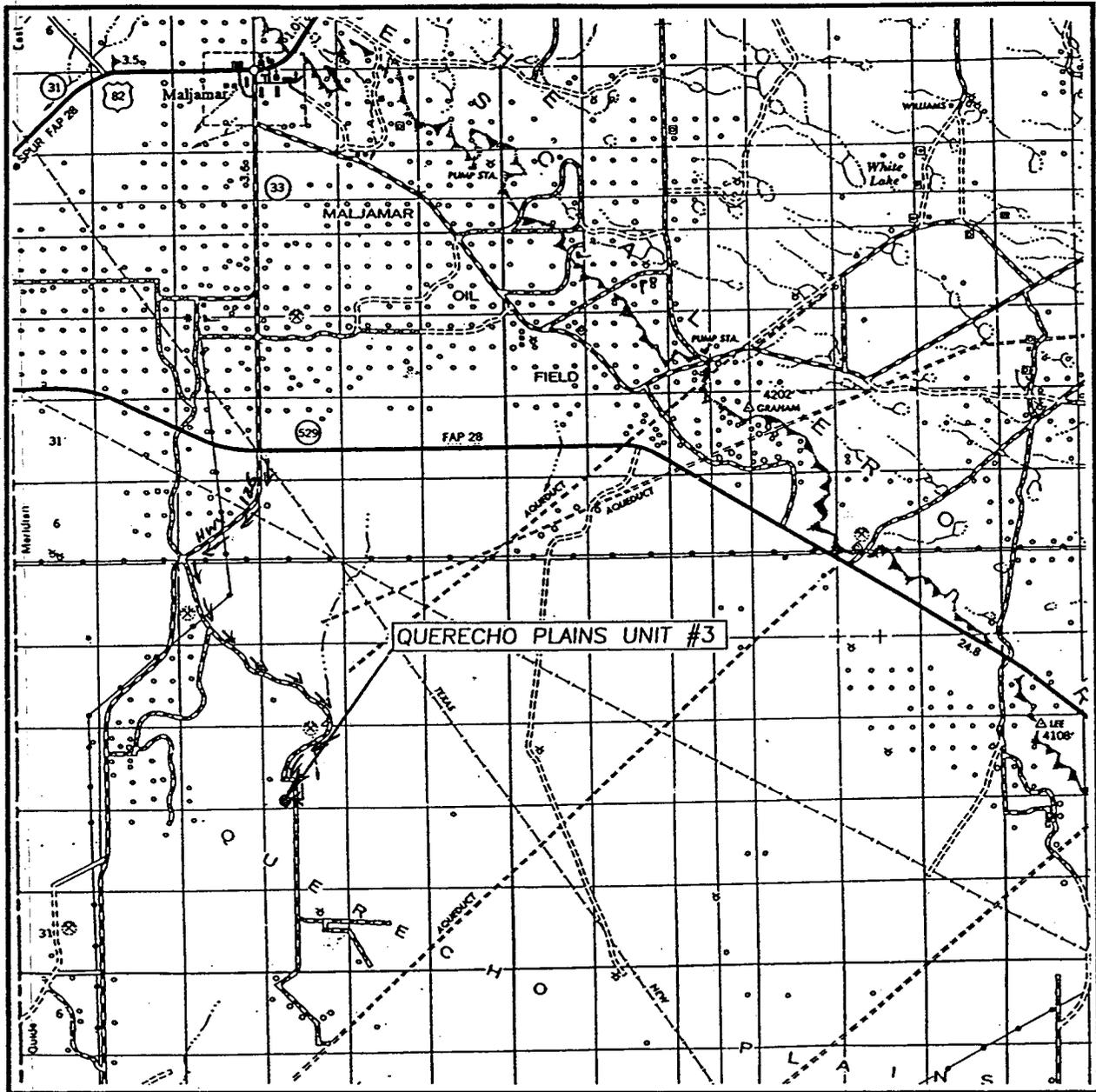
Date Surveyed A.W.B

Signature & Seal  
Professional Surveyor

*Gary Bidson*  
Professional Surveyor  
NEW MEXICO  
2/27/04  
04.11.0196

Certificate No. GARY BIDSON 12641

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 22 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 760' FSL & 1930' FWL

ELEVATION 3757'

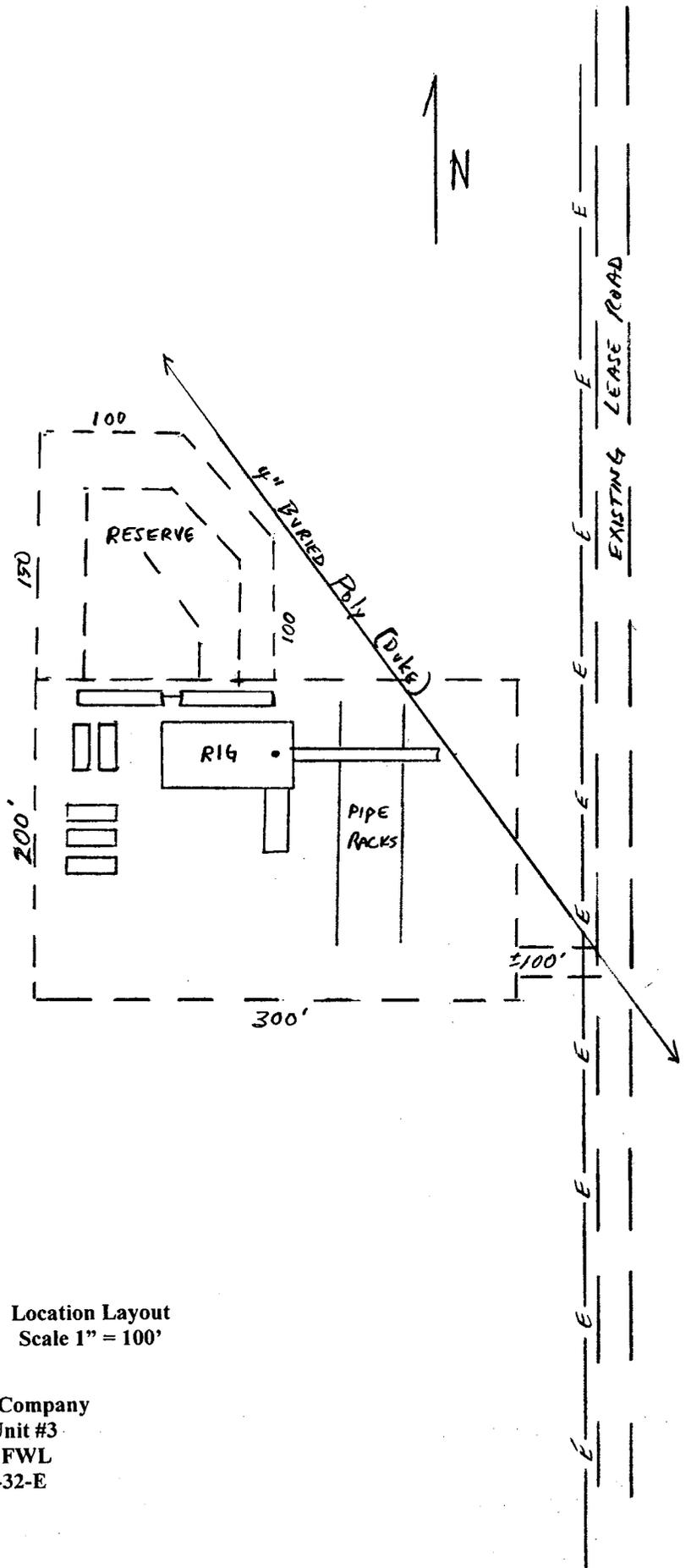
OPERATOR PECOS PRODUCTION COMPANY

LEASE QUERECHO PLAINS UNIT

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

Exhibit #3  
Pecos Production Company  
Querecho Plains Unit #3  
760' FSL & 1930' FWL  
Sec. 22, T-18-S, R-32-E

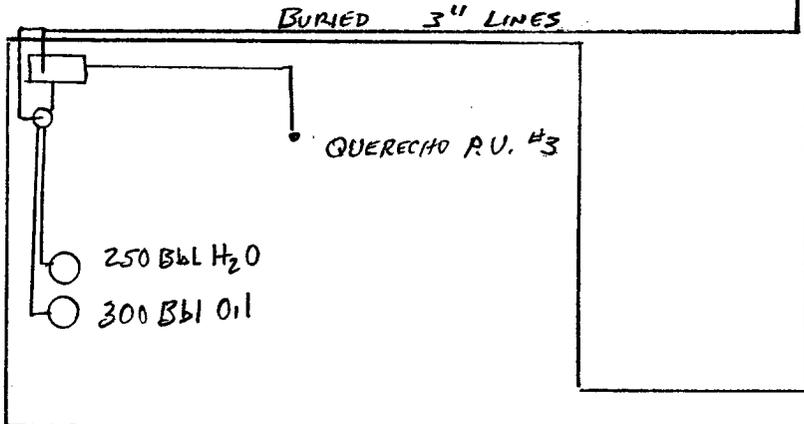




Location Layout  
Scale 1" = 100'

Exhibit #5  
 Pecos Production Company  
 Querecho Plains Unit #3  
 760' FSL & 1930' FWL  
 Sec. 22, T-18-S, R-32-E  
 Lea Co., NM

HP SEP  
LP SEP



GO QUERECHO P.U. #1 LOC →

EXISTING LEASE ROAD



Production Facilities  
Scale 1" = 100'

Exhibit #6  
Pecos Production Company  
Querecho Plains Unit #3  
760' FSL & 1930' FWL  
Sec. 22, T-18-S, R-32-E  
Lea Co., 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: Pecos Production Company  
Street or Box: 400 W. Illinois, Suite 1070  
City, State : Midland, TX  
Zip Code : 79701

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

Lease No.: NMNM 94190

Legal Description of Land: 760' FSL & 1930' FWL of Section 22, T18S, R32E

Formation(s) (if applicable): Morrow & Strawn

Bond Coverage (State if individually bonded or another's bond): \$25,000  
Statewide (NM)

BLM Bond File No.: NMB000020

Authorized Signature:   
Title: VP-Engr & Operations  
Date: 6-1-04

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-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

**AMENDED**

Operator: Pecos Production Company Telephone: 432-620-8480 e-mail address: billh@pecosproduction.com  
Address: 400 W. Illinois, Suite 1070, Midland, TX 79701  
Facility or well name: Querecho Plains Unit #3 API #: \_\_\_\_\_ U/L or Qtr/Qtr N Sec 22 T 18S R 33E  
County: Lea Latitude 32° 43' 39.66" N Longitude 103° 45' 21.59" W NAD: 1927  1983  Surface Owner Federal  State  Private  Indian

<b>Pit</b>	<b>Below-grade tank</b>	
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 <u>12</u> mil Clay <input type="checkbox"/> Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) Nearest Well 300'	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.) 1150'	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.) NA	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more - √	(20 points) (10 points) ( 0 points)      0
<b>Ranking Score (Total Points)</b>		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: 6-10-04  
Printed Name/Title William R. Huck, VP- Engr. & Operations Signature William R. Huck 6-11-04

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.

Approved **AUG 18 2004**  
Date: \_\_\_\_\_  
Printed Name/Title \_\_\_\_\_

ORIGINAL SIGNED BY  
PAUL F. KAUTZ  
PETROLEUM ENGINEER

