

8057

Larry

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004) 0822

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM101561	
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.	
3a. Address 400 W. Illinois, Suite 1070, Midland, TX 79701		8. Lease Name and Well No. Rio Siete Federal #1	
3b. Phone No. (include area code) 432-620-8480 Uudes.		9. API Well No. 30-015-33662	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1050' FSL & 1320' FEL At proposed prod. zone 1050' FSL & 1320' FEL		10. Field and Pool, or Exploratory Cementary; Morrow, SE	
14. Distance in miles and direction from nearest town or post office* OOD-ARTESIA		11. Sec., T. R. M. or Blk. and Survey or Area Sec 1, T21S, R24E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1050'	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. NA	19. Proposed Depth 10,500'	20. BLM/BIA Bond No. on file NMB000020	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3626' GL	22. Approximate date work will start* Upon Approval	23. Estimated duration 6 weeks	

RECEIVED
SEP 15 2004

CARLSBAD 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:

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

25. Signature <i>William R. Huck</i>	Name (Printed/Typed) William R. Huck	Date 07/27/2004
Title VP- Engr. & Operations		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 13 SEP 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)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Witness Surface Casing.

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-144
June 1, 2004

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

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: Pecos Production Company Telephone: 432-620-8480 e-mail address: billh@pecosproduction.com
Address: 400 W. Illinois, Ste 1070, Midland, TX 79701
Facility or well name: Rio Siete Federal #1 API #: U/I. or Qtr/Qtr, P, Sec, T, 21S, R, 24E
County: Eddy Latitude 32°30' 15.60" N Longitude 104°26' 48.50" W NAID: 1927 1983 Surface (owner Federal State Private Indian

Pit	Below-grade tank		
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 12-20 mil Clay <input type="checkbox"/> Pit Volume hbl	Volume: hbl 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.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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: (check the onsite box if you are burying in place) 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.

Additional Comments:

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 OGD-approved plan .

Date: 9-21-04
Printed Name/Title: William R. Huck Signature: *William R. Huck*

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: *Gild Sep 20* Signature: *Bill* Date: SEP 22 2004

DRILLING PROGRAM

Attachment to Form 3160-3
Pecos Production Company
Rio Siete Federal No. 1
1050' FSL & 1320' FEL
Section 1, T21S, R24E
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. Estimated Tops of Important Geological Formations

Queen	450'
San Andres	1250'
Delaware	1550'
Bone Spring	2300'
Wolfcamp	7200'
Strawn	8970'
Atoka	9470'
Morrow	9900'
TD	10,350'

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

Water:	Surface
Oil:	None
Gas:	7500', 10,000'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Any surface fresh water sands are protected by 8-5/8" casing at 1550' and circulated cement back to surface. The Morrow, Wolfcamp, Bone Spring, and Delaware will be isolated with 4-1/2" production casing to total depth and cemented with cemented back into the 8-5/8" casing.

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	WITNESS
11"	0' - 1550'	8-5/8"	24#	J-55	ST&C	
7-7/8"	0' - 10,500'	4-1/2"	11.6#	N-80	LT&C	

Cementing Program

1550' 8-5/8" ^{Surface} Intermediate Casing: Cement to surface: 450 sxs Class C containing 4% gel, 2% CaCl, 1/4#/sx Flocele followed by 250 sxs Class C containing 2% Calcium Chloride.

10,350' 4-1/2" Production Casing with DVT @ 8000'

First Stage

Tail Slurry: 15:61:11 Poz H containing 5# Salt, 0.5% FL-52, 0.5% FL-25.

Second Stage

Lead Slurry: 50:50 Poz H containing 10% gel, 0.1% FLAC, 5# Gilsonite.

Tail Slurry: 50:50:2 Poz H containing 2% gel, 0.5% FL-52, 5% Salt.

5. Minimum Specifications for Pressure Control

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000# WP) preventor and annular. This unit will be hydraulically operated. The BOP will be installed on the 8-5/8" casing and utilized continuously until total depth is reached. As per BLM Drilling Operatings Order #2, prior to drilling out of the 8-5/8" casing shoe, the BOP will be function and pressure tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function test will be documented on the daily driller's log. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having a 3000# WP rating.

6. Types and Characteristics of Proposed Mud System

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

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity</u>	<u>Water Loss</u>
0' - 1550'	Fresh Water	8.4	28	NC
1550' - 7000'	Fresh Water	8.4	28	NC
7000' - 9000'	Cut Brine	8.7	29	NC
9000' - 10,300'	Duo-Vis/DMS Pac	9.3	36	<10cc

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. No drillstem tests are planned.
- B. The open hole electrical logging program will be:
 - 1. DLL/MSFL/GR (TD-1550')
 - 2. DEN/NEU/CAL (TD to 1550')
- C. No coring program is planned.
- D. No additional testing will be initiated subsequent to setting the 4-1/2" 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 130 degrees and maximum bottom pressure is 4000 psia. Minor lost circulation intervals have been encountered in adjacent wells. Small quantities of San Andres formations in this area. However Radii of exposure is such that this operation is exempt from specific requirements. However a hydrogen sulfide plan has been prepared (See Attached).

10. Anticipated Starting Date and Duration of Operations

Southern New Mexico 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 permitted. The drilling operation should require approximately 30 days. If the well is deemed productive, completion operations will require, at minimum, an additional 15 days for completion and testing.

BLOWOUT PREVENTOR ARRANGEMENT

11" DOUBLE RAM – 3000 psi WP
80 GALLON, 3 STATION ACCUMULATOR
3000 PSI CHOKE MANIFOLD

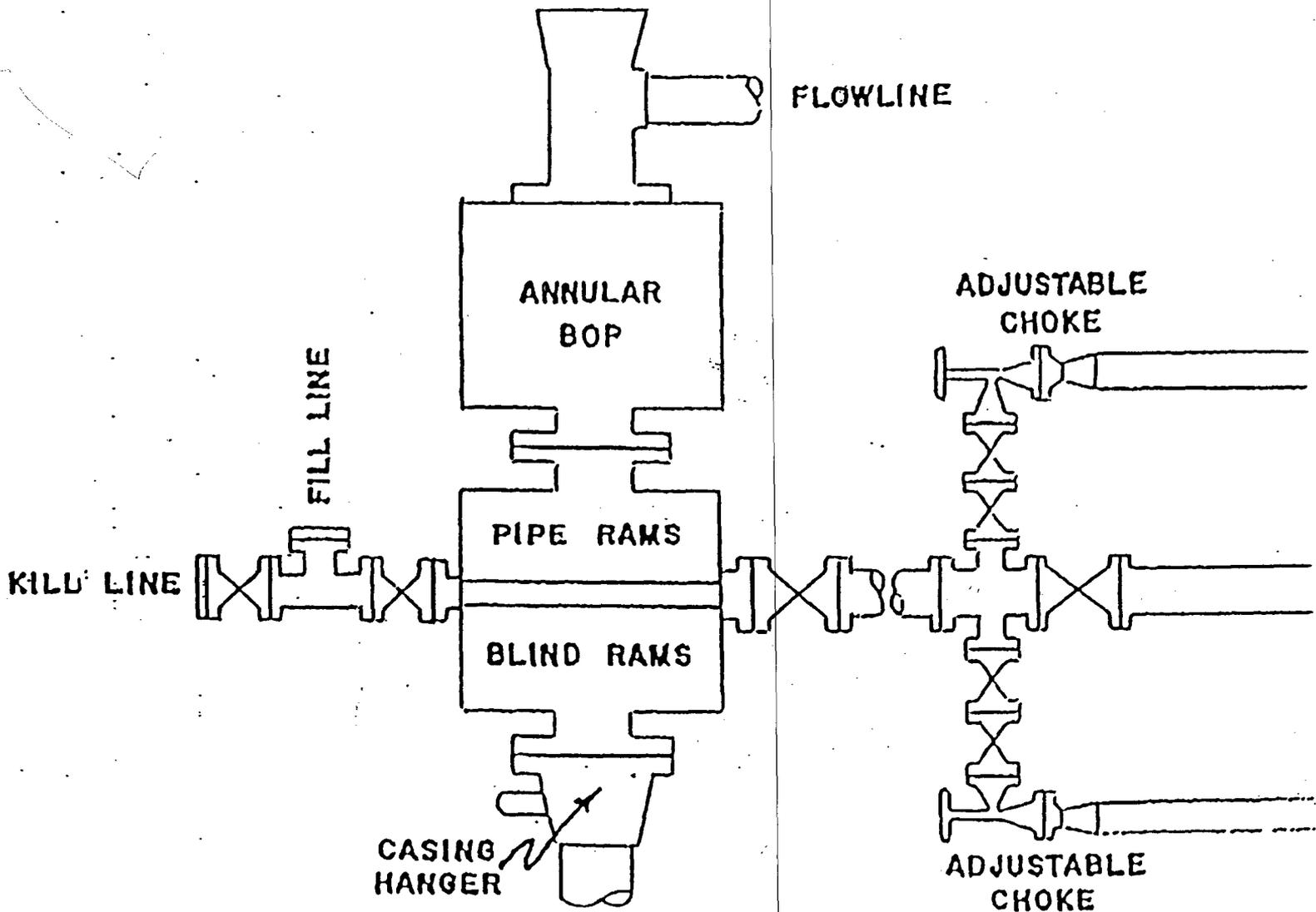


Exhibit #1
Pecos Production Company
Rio Siete Federal No. 1
1050' FSL & 1320' FEL
Sec. 1, T-21-S, R-24-E
Eddy Co., NM

Attachment to Exhibit #1
Attachment to Form 3160-3
Pecos Production Company
Rio Siete Federal No. 1
1050' FSL & 1320' FEL
Section 1, T21S, R24E
Eddy 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. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
3. All fittings will be flanged.
4. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
5. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
6. Will maintain a kelly cock attached to the kelly.
7. Hand wheels and wrenches will be properly installed and tested for safe operation.
8. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

SECTION 1, TOWNSHIP 21 SOUTH, RANGE 24 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

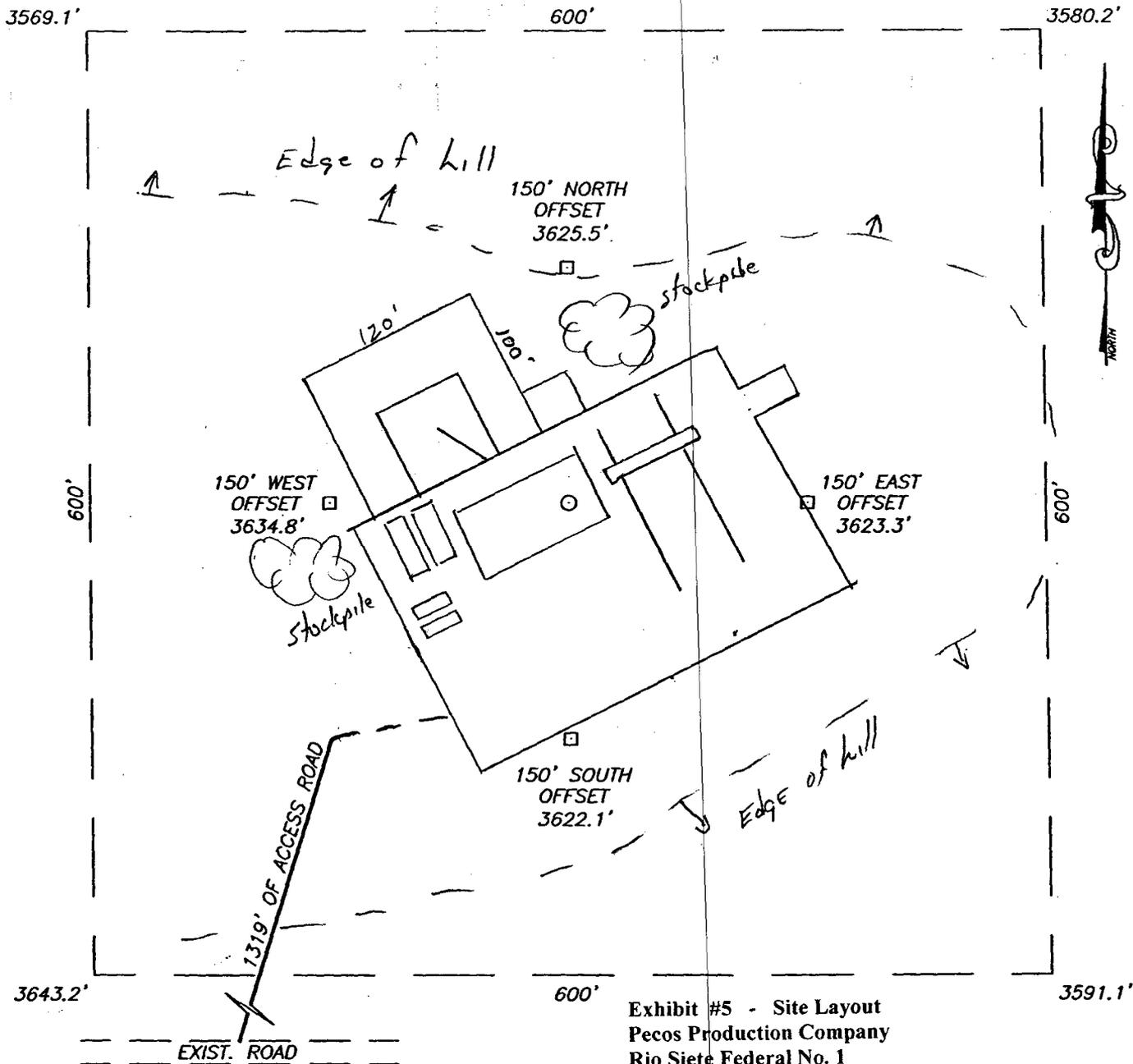
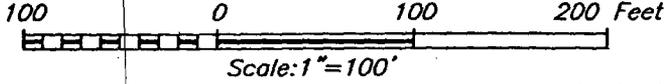


Exhibit #5 - Site Layout
 Pecos Production Company
 Rio Siete Federal No. 1
 1050' FSL & 1320' FEL
 Sec. 1, T-21-S, R-24-E
 Eddy Co., NM



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF QUEENS HWY. #137 AND CO. RD. #406 (WATERHOLE ROAD) GO APPROX. 0.8 MILES SOUTHWEST ON QUEENS HWY. #137. TURN RIGHT AND GO WEST 0.4 MILES TO A FORK IN THE ROAD. TAKE A RIGHT AT THE FORK AND GO APPROX. 1.0 MILE NORTHWEST TO ANOTHER FORK. TAKE A LEFT AT THE FORK AND GO APPROX. 0.5 MILES TO A STAKED ROAD. PROPOSED LOCATION IS APPROX. 0.25 MILES NORTH ALONG STAKED ROAD.

PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

PECOS PRODUCTION COMPANY			
RIO SIETE FEDERAL #1 WELL LOCATED 1050 FEET FROM THE SOUTH LINE AND 1320 FEET FROM THE EAST LINE OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 24 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.			
Survey Date:	6/25/04	Sheet	1 of 1 Sheets
W.O. Number:	04.11.0800	Dr By:	LA
Date:	6/28/04	Disk:	CD#3
		04110800	Scale: 1"=100'
			Rev 1:N/A

PECOS PRODUCTION COMPANY

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. Proper alarm response procedures and the proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

1. Well Control Equipment:
 - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - B. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

2. Protective Equipment For Essential Personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H2S Detection and Monitoring Equipment:
 - A. Minimum of 2- portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
4. Visual Warning Systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
5. Mud Program:
 - A. The mud program has been designated to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
 - B. If abnormal pressures anticipated. A mud-gas separator will be utilized.
6. Communication:
 - A. Cellular telephones in company vehicles.
 - B. Land line (telephone) communications at field office.
7. Well Testing:
 - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. If necessary the drill stem testing will be conducted during daylight hours. A thorough check of all monitors, safety equipment, and drill floor conditions will be made before all drill stem testing operations conducted in an H2S environment.
8. Alarm Response:
 - A. If, during any drilling or production operations, an alarm sounds, move immediately upwind of the source. Count heads before proceeding with assessment and corrective actions.

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.: NM 101561

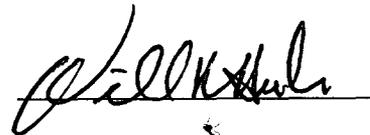
Legal Description of Land: 1050' FSL & 1320' FEL of Section 1, T21S-R24E:

Formation (s) (if applicable): Morrow

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: 7-28-04