

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

Form 3160-3  
(September 2001)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR - 9 2004

OCD-ARTESIA

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


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER			5. Lease Serial No. LC029389 (A)	
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" 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 TX, 79701 400 W. Illinois, Ste 1070, Midland			8. Lease Name and Well No. Baish Federal #10	
3b. Phone No. (include area code) (432) 620-8480			9. API Well No. 30-015-30905	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL & 660' FEL At proposed prod. zone Same			10. Field and Pool, or Exploratory North Shugart Morrow	
14. Distance in miles and direction from nearest town or post office* 7 Miles SE from Loco Hills			11. Sec., T., R., M., or Blk. and Survey or Area Sec 9, T18S, R31E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'			12. County or Parish Eddy	
16. No. of Acres in lease 440 Acres			13. State NM	
17. Spacing Unit dedicated to this well 320 Acres				
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1140'			20. BLM/BIA Bond No. on file NMB000020	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3710' GL			22. Approximate date work will start* Upon Approval	
			23. Estimated duration 30 Days	

24. Attachments

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.                                                                                                | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.                                                                                                                             | 5. Operator certification.                                                                         |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) William R. Huck	Date 1-20-04
------------------------------------------------------------------------------------------------------	-----------------------------------------	-----------------

Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 1 MAR 2004
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify the 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 reverse)

Controlled Water Basin

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

## DRILLING PROGRAM

Attachment to Form 3160-3  
Pecos Production Company  
**Baish Federal No. 10 (Re-Entry)**  
1980' FSL & 660' FEL  
Section 9, T18S, R31E  
Eddy County, New Mexico

### 1. Geologic Name of Surface Formation

Quaternary Alluvium

### 2. Estimated Tops of Important Geological Formations

Top of Salt Section	780'
Base of Salt Section	1800'
Yates	1800'
Queen	3175'
San Andres	4255'
Bone Spring	5808'
Wolfcamp	9150'
Strawn	10,700'
Atoka	11,150'
Morrow	11,700'
Upper Mississippian	12,000'

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

Water:	None Anticipated
Oil:	3175', 7800', 8070'
Gas:	11,700'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Any surface fresh water sands are protected by 13-3/8" casing at 707' and circulated cement back to surface. The Salt is isolated with a 8-5/8" intermediate casing string set into the Yates @ 2201' and cement circulated to surface. The Morrow, Wolfcamp, Bone Spring, and Delaware will be isolated with 5-1/2" 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>
17-1/2"	0' - 707'	13-3/8"	48#	H-40	ST&C Existing
11"	0' - 2001'	8-5/8"	24#	J-55	ST&C Existing
7-7/8"	0' - 12,200'	5-1/2"	17#	K-55 & N-80	LT&C Planned

## Cementing Program

- 707' 13-3/8" Surface Casing: Cemented to surface: 360 sxs Class C containing 6% Gel, 2% Calcium Chloride followed by 250 sxs Class C containing 2% Calcium Chloride. Circ 127 sxs 6-18-2000.
- 2201' 8-5/8" Intermediate Casing: Cemented to surface: 525 sxs 50/50 Poz C containing 10% gel, 6.0# salt, 1/4#/sx Flocele followed by 218 sxs Class C containing 2% Calcium Chloride. Circ 90 sxs 6-21-2000.
- 12000' 5-1/2" Production Casing with DVT @ 9000'

### First Stage

- Lead Slurry: 50:50 Poz H containing 10% gel, 0.5% FLAC, 5# Gilsonite.
- 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 (5M system) double ram type (5000# 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 Operations 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 5000# 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>
10400' - TD	Duo Vis w/Starch	9.5 - 10.0	36 - 45	< 10 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. No drillstem tests are planned.
- B. The open hole electrical logging program will be:
  - 1. DLL/MSFL/GR (TD-7000')  
Note: Logs will be tied into DLL dated 7-12-00
  - 2. DEN/NEU/CAL (TD to 7000')  
Note: Log will be tied to CNL-LDT dated 7-12-00
- 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 130 degrees and maximum bottom pressure is 5000 psia. No major lost circulation 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. A hydrogen sulfide plan is attached.

10. Anticipated Starting Date and Duration of Operations

A cultural resources examination has been submitted by the Desert West to the BLM office in Carlsbad, New Mexico when the original APD was filed in December, 1999.

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date for this well is approximately February, 23, 2004. The drilling operation should require approximately 15 days. If the well is deemed productive, completion operations will require, at minimum, an additional 15 days for completion and testing.

## SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3  
Pecos Production Company  
**Baish Federal No. 10 (Re-Entry)**  
1980' FSL & 660' FEL  
Section 9, T18S, R31E  
Eddy County, New Mexico

### 1. Existing Roads

- A. The well site and elevation plat for the proposed Baish Federal No. 10 are reflected on Exhibit #2. The well was staked by John West Engineering of Hobbs, New Mexico.
- B. Existing roads will be utilized as shown on Exhibit #3.
- C. From Loco Hills 5.5 miles east on Highway 82 to County Road 222. South (right) 3.0 miles to County Road 249. Left 0.6 miles on existing lease road. Right 0.5 miles on existing lease road. Follow main road 0.5 miles South East to Baish Federal No. 10.

### 2. Proposed Access Road

No new road.

### 3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed Baish Federal No. 10 (Re-Entry).

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

- A. If the well is productive, a flowline will be laid following the lease road to the facilities near the Baish Federal No. 10.
- B. New facilities, if necessary will be on the well pad.
- C. The well will be operated by means of an electric motor.
- D. If the well is productive, rehabilitation plans are as follows:
  - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days of completion, weather permitting).
  - 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The Baish Federal No. 10 will be drilled using a combination of brine and XCD mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and trucked to location.

6. Sources of Contruction Materials

All caliche utilized for the drilling pad will be obtained from an existing BLM approved pit.

7. Methods of Handling Water and Waste Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks or lined earthen pits and the reserve pit. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 80' x 80' x 6' in size.
- C. The working pits & reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids.
- D. Water produced from the well during completion operations will be disposed into a steel tank. After placing the well on production through the production facilities, all water will be collected in tanks, pumped via an existing water line, and used as makeup water into Brothers Production Company, Tamano Unit. Produced oil will be separated into steel stock tanks until sold.
- E. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- F. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed. The portion of the drilling pad used by the production equipment will remain in use. If the well is deemed non-commercial, the pad will be re-ripped and only a dry hole marker will remain.

8. Ancillary Facilities

No campsite or other facilities will be constructed as a result of this well.

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, from the pit area, will be stored adjacent to the pad until reclamation efforts are undertaken. No cuts will be necessary to build the pad which will be re-compacted caliche, except under the drilling rig itself, which will be fresh caliche.
- B. No permanent living facilities are planned, but a temporary trailer for the tool pusher, 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, if the well is found non-commercial, the fresh caliche will be removed from the pad and the remaining pad re-ripped. The reserve pit area will be broken covered to grade after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pit and contoured, as close as possible, to the original topography.
- B. The location will be rehabilitated as recommended by the BLM.

11. Surface Ownership

This well site is owned by the U.S.A.

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. A cultural resources examination has been submitted by Desert West Archeological Services Inc. 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  
William R. Huck – VP-Engr. & Operations

Date: 1-20-04



## 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

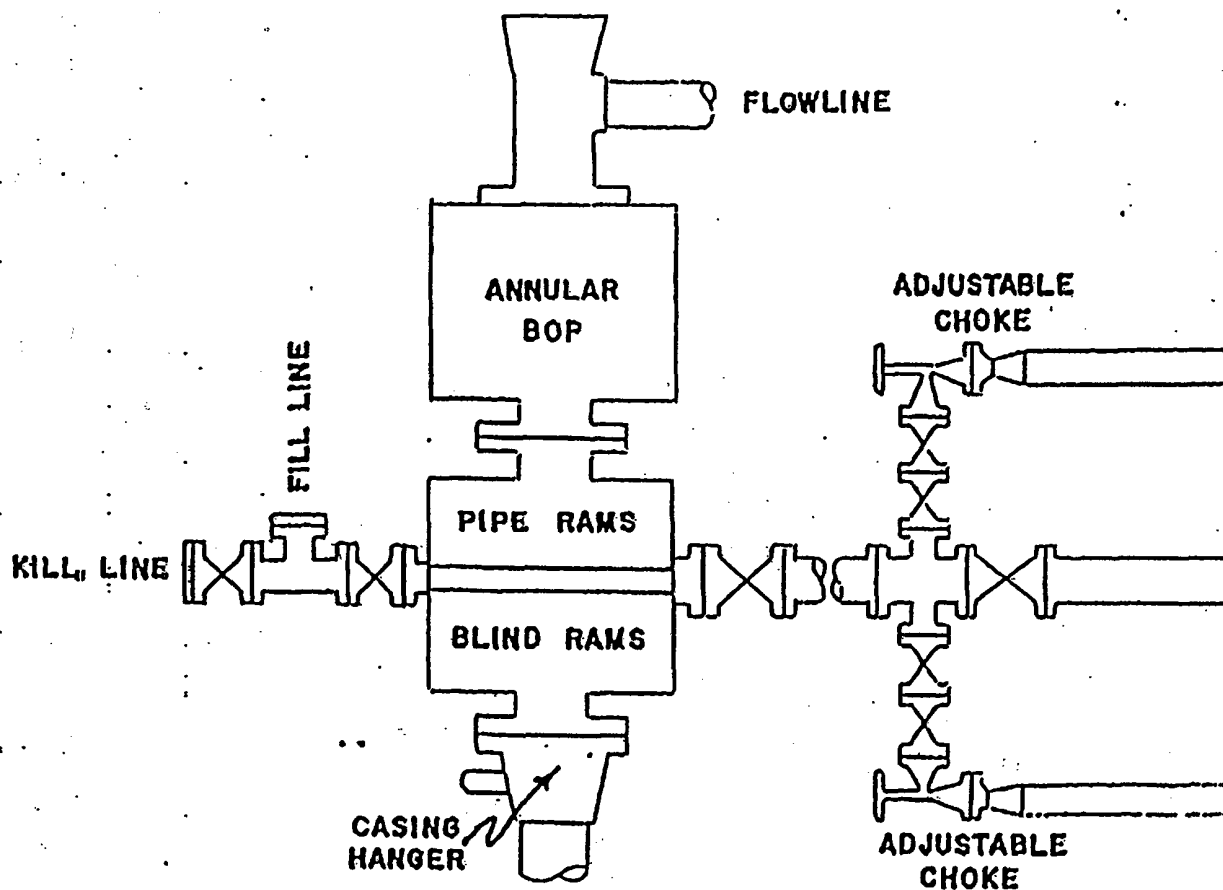


Exhibit #1  
Pecos Production Company  
Baish Federal No. 10 (Re-Entry)  
1980' FSL & 660' FEL  
Sec. 9, T-18-S, R-31-E  
Eddy Co., NM

BOP & Choke Manifold

Attachment to Exhibit #1  
Attachment to Form 3160-3  
Pecos Production Company  
**Baish Federal No. 10 (Re-Entry)**  
1980' FSL & 660' FEL  
Section 9, T18S, R31E  
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 5000 psi working pressure.
3. All fittings will be flanged.
4. 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.
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.

DISTRICT I  
P.O. Box 1900, Hobbs, NM 88241-1900

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

DISTRICT II  
P.O. Drawer 80, Arisaca, NM 86211-0718

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

DISTRICT IV  
P.O. Box 2000, Santa Fe, N.M. 87504-2000

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30905	Pool Code 85305	Pool Name North Shugart Morrow
Property Code 319452	Property Name BAISH FEDERAL	Well Number 10
GRID No. 215758	Operator Name Pecos Production Company	Elevation 3710

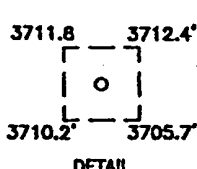
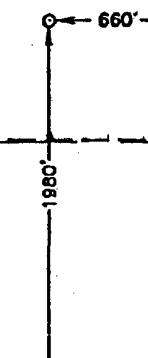
Surface Location

UL or lot No. 1	Section 9	Township 18 S	Range 31 E	Lot Idn.	Feet from the 1980	North/South line SOUTH	Feet from the 660	East/West line EAST	County EDDY
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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

				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Dora Lara</i> Signature</p> <p>Dora Lara Printed Name</p> <p>Engr. Asst. Title</p> <p>1-16-04 Date</p>	
				<p>SURVEYOR CERTIFICATION</p> <p>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> <p>NOVEMBER 4, 1999</p> <p>Date Surveyed Signature of Surveyor Professional Surveyor NEW MEXICO 11-18-99 19-11-0925 Certificate No. RONALD R. EDSON 3239 GARY L. EDSON 12041 WYOMON R. DONALD 12186</p>	

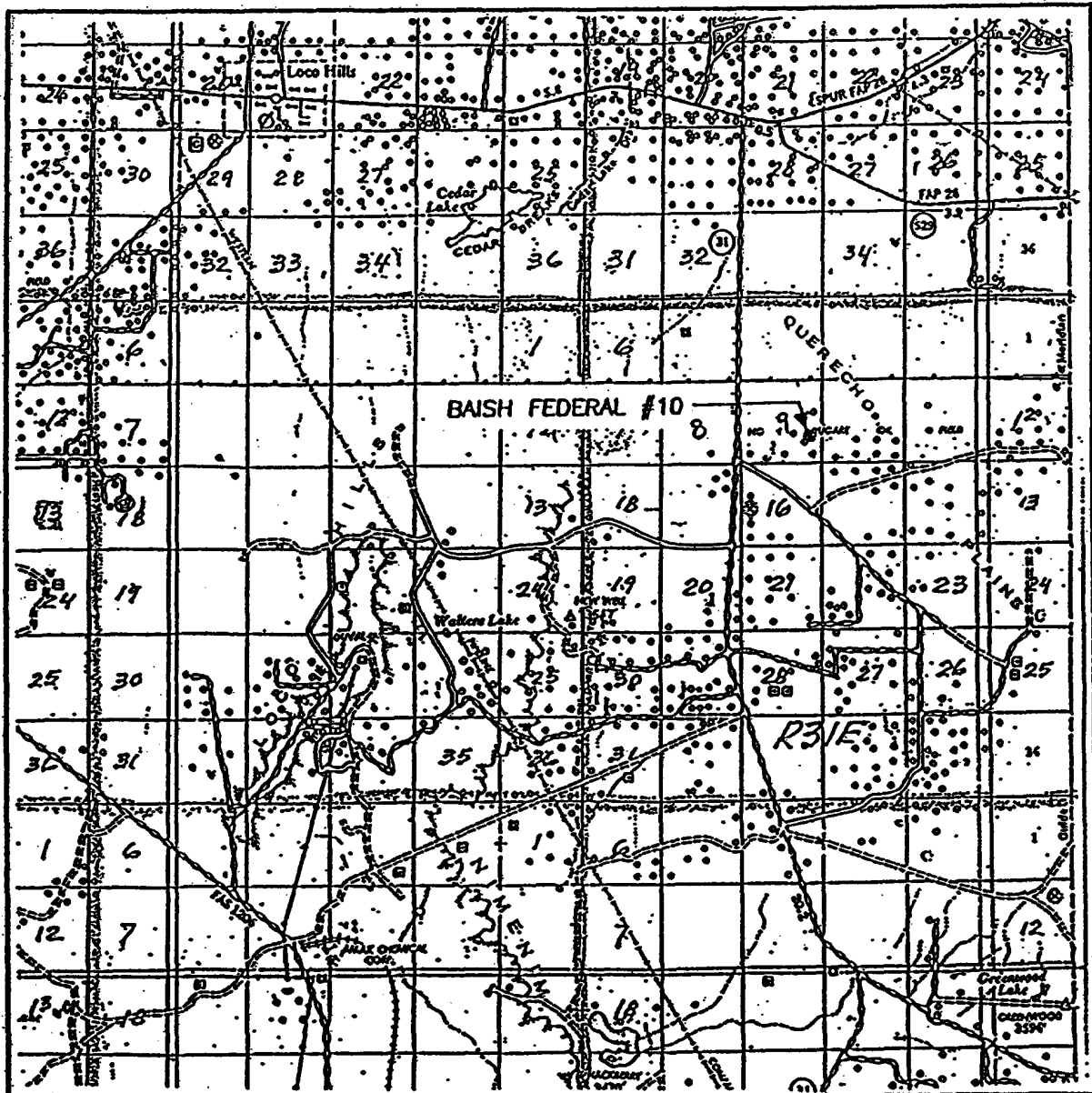
This is a detailed topographic map of a region in North Vietnam, overlaid with a coordinate grid. The map features contour lines indicating elevation, with labels such as 3684, 3703, 3711, 3726, 3731, 3733, 3734, 3737, 3743, 3749, 3750, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800. The map also shows various geographical features, including a 'PLAINS' area, a 'PIPELINE' running diagonally, an 'OIL FIELD' in the lower right, and a 'BAISH FEDERAL #10' area. Numerous elevation points are marked with numbers and letters, such as 3684, 3703, 3711, 3726, 3731, 3733, 3734, 3737, 3743, 3749, 3750, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800. The map also shows various geographical features, including a 'PLAINS' area, a 'PIPELINE' running diagonally, an 'OIL FIELD' in the lower right, and a 'BAISH FEDERAL #10' area. Numerous elevation points are marked with numbers and letters, such as 3684, 3703, 3711, 3726, 3731, 3733, 3734, 3737, 3743, 3749, 3750, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800.

CONTOUR INTERVAL:  
LOCO HILLS - 10'  
MALJAMAR - 10'

LOCO HILLS, MALJAMAR, -N.M.

**Eddy Co., NM**

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 18-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 660' FEL

ELEVATION 3710

OPERATOR

LEASE BAISH FEDERAL

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

Attachment to Exhibit #3  
Pecos Production Company  
Baish Federal No. 10 (Re-Entry)  
1980' FSL & 660' FEL  
Sec. 9, T-18-S, R-31-E  
Eddy Co., NM

HBP  
17595

W.A.E.E.R. Hudser  
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TD 4 4 10

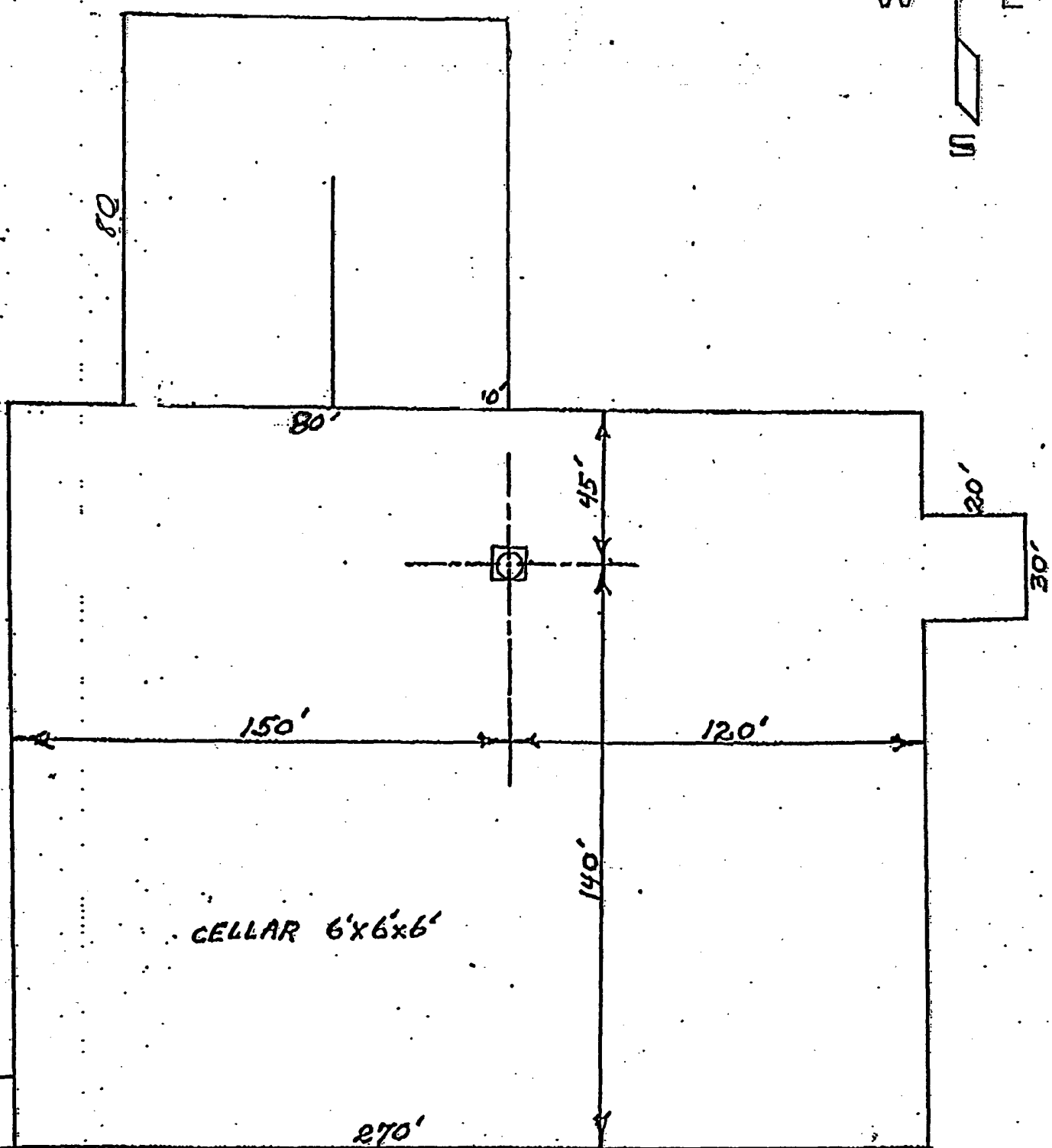
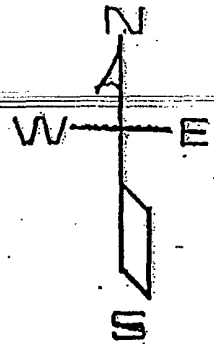


Exhibit #5  
Baish Federal No. 10 (Re-Entry)  
1980' FSL & 660' FEL  
Sec. 9, T-18-S, R-31-E  
Eddy Co., NM

Drill Pad

**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.:** LC 029389 (A)

**Legal Description of Land:** 1980' FSL & 660' FEL of Section 9, T18S-R31E:

**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:** 1-20-04