

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-10

Revised February 10, 1995

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: Merit Energy Company P.O. Drawer NN Jal, NM 88252		OGRID Number 14591
Property Code 7689	Property Name Humphrey Queens Unit Lease	API Number 30-025-32932
		Well No. 35

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	3	25	37		2362	North	2488	East	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	3	25	37		2362	North	2488	East	Lea

Proposed Pool 1 Langlie Mattix SR Penrose Queens - GB	Proposed Pool 2
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Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code P	Ground Level Elevation 3136'
Multiple No	Proposed Depth 3,700	Formation Penrose Queen	Contractor Nabors	Spud Date ASAP

21 Proposed Casing and Cement Program

Well Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	8 5/8	24	1050	550sx Class A	Surface
7 7/8	5.5	15.5	3700	700sx Class C	Surface

" Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Merit Energy Company proposes to drill and test the 7-Rivers Queens formation. Approx 1050' surface casing will be set & circulated to surface. Approx 3700' production casing will be ran & cemented to surface, perforated & stimulated as need for product.

Mud Program FW to 1050', cut Brine to 3700'.

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

BOPE Program: BOPE will be installed at the offset and tested daily for operational conditions.

NSL-3513

" I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Title:

Date:

Phone:

OIL CONSERVATION DIVISION

Approved by:

ORIGINAL SIGNED BY JERRY SEXTON

Title:

DISTRICT I SUPERVISOR

Approval Date:

APR 14 1995

Expiration Date:

Conditions of Approval:

Attached ☐

3-13-95

505-395-2123

1997

SECRET

2007 11 9 PM

MERIT ENERGY COMPANY

Humphrey Queens #35
2362 FNL - 2488 FEL
Unit G, Section 3-T25S-R37E
Lea County, New Mexico

1. The estimated top of geologic markers are as follows:

Base Red Beds	1000'
Top Salt	1090'
Yates	2820'
7-Rivers	2900'
Queen	3300'
Penrose	3450'

2. The estimated depth at which anticipated water, oil and gas are expected to be encountered:

Water	Surface to 500'
Oil and Gas	Yates @ 2820' to Bottom Penrose 3700'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 3000#. BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B & B-1.

4. Auxiliary Equipment and proposed Casing Program:

A. Auxiliary Equipment: Kelly Cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit drill pipe and collars will be available on rig floor in open position at all times for use when Kelly is not in use.

B. Casing and Cementing Program:

Hole Size: 11"	Total Depth: 1050'	Casing Size: 8 5/8"
Setting Depth: 650'	Mud Weight: 8.8 ppg	

Casing Design:

O.D.	Weight	Grade	Thread	Coupling	Interval	Length
8 5/8"	24#	J-55	8R	ST & C	0-1050'	1050'

Minimum Casing Design Factors:

Collapse 1370, Burst 2950, Tensile Strength 3.81

Cement Program:

Lead Slurry: 550 sacks-Class A with 2% CaCl₂

1/4 lb per sack Cellophane Flake

Expected Linear Fill: True Hole Volume-1089 feet

Slurry Properties: Weight-12.8 ppg Yield-1.98 cu.ft./sack

Hole Size: 7 7/8" Total Depth: 3700' Casing Size: 5 1/2" Setting Depth: 3700' Mud Weight: 8.7 ppg

Casing Design:

O.D.	Weight	Grade	Thread	Coupling	Interval	Length
5 1/2"	15.5#	J-55	8R	LT & C	0-3700'	3700'

Minimum Casing Design Factors:

Collapse 40.40, Burst 48.10, Tensile Strength 2.17

Cement Program:

Lead Slurry: 900 sacks Class "C" with .2% Calcium Chloride, 1/4# per sx Cello-Flake

Calculated Linear Fill: True Hole Volume-3785.8.

Slurry Properties: Weight-15.6 ppg Yeild-1.18 cu.ft./sack

5. Mud Program and Auxiliary Equipment: From 0 to 1050' (Minimum).

Mud Weight: 8.6 ppg, Viscosity: 32 sec./1000 cc, Water Loss: N C cc, Mud Type:FW Gel/LCM. Mud will be checked tourly by mud engineer. Sufficeint quantities of mud will be kept on location to maintain minimum properties.

From 1050' to 3700' (Minimum Properties).

Mud Weight: 10.2 ppg, Viscosity: 34-40 sec./1000cc, Water Loss: N/C cc. Mud Type: Brine, use salt water gel for hole sweeps. Mud will be checked tourly by mud engineer. Sufficient quantities of mud will be kept on location to maintain minimum properties.

6. Testing, Logging and Coring Program: Samples: Every 10' from surface casing to TD. DST's: Any tests will be based on the recommendations of the wellsite Geologist as warranted by drilling breaks and shows. Coring: None Anticipated
Logging: CNL-FCD form TD to casing, with GR-CNL up to Yates @ 2820'.

7. Abnormal Conditions, Bottom Hole Pressure and Potential Hazards:

Anticipated BHP:

From: 0' to 1050' Anticipated Max. BHP: -0- PSI

From: 1050' to 3700' Anticipated Max. BHP: 1000 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Possible lost circulation 1050' to 3700'.

H2S Zones Anticipated: Yates 2820' 7-Rivers 2900', Queens 3300', Penrose 3450'

Maximum Bottom Hole Temperature: 104 degrees Fahrenheit

8. Anticipated starting date: As soon as possible after approval with the drilling time being approximately 10 days and the completion time being another 12 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Merit Energy Company
Humphrey Queens #35
2362 FNL - 2488 FEL
Unit G, Section 3-T25S-R37E
Lea County, New Mexico

This plan is submitted with a Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of BLM map showing the well and roads in the vicinity for the proposed location. The proposed well site is located approximately 3 miles east of Jal, New Mexico and the access route to the location is indicated in Blue and Red on Exhibit A.

2. DIRECTIONS:

Go east of Jal, New Mexico on Highway 128 towards Andrews, Texas approximately 3 miles. Turn left(north) onto blacktop. Go north for 1/2 mile to lease road. Turn left(west) and go approximately 1/2 mile. Turn north approximately 2 1/2 miles on new road access on your right(east) then 600 feet to new well site.

3. PLANNED ACCESS ROAD:

A. The proposed new access will be approximately 600 feet in length from the point of origin to the Southwest edge of the drilling pad the road will lie in a easternly direction.

B. The new road will be 12 feet in width (driving surface) and will be adequately drained to control run-off and soil erosion.

C. The new road will be bladed with a drainage on one side. One traffic turnout will be built.

D. The route to location is visible.

4. LOCATION OF EXISTING WELL:

A. There is no drilling activity within a one-mile radius of the well site.

B. Exhibit F shows existing wells within a one-mile radius of the proposed wellsite.

5. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive the necessary production facilities will be installed to go to existing facilities. If the well is productive oil or gas, electric line will be ran to provide the necessary power. No power will be required if the well is productive gas.

6. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh and brine water system. The water will be obtained from commercial sources and will be hauled to the location over the existing and proposed roads shown in Exhibit A.

7. SOURCE OF CONSTRUCTION MATERIALS:

- Road & location will be built with material Becky Jo Doom pit off of old El Paso plant #2 road.

8. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cutting will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with. Sanitary Port-O-Pottys will be provided during drilling operations, cleaned, sanitized, and/or replaced as necessary.
- F. Trash, waste paper, garbage and junk will be contained to prevent scattering by the wind. Containment will be obtained by using covered trash bins. Then, hauled off to approved landfill in Lea County, New Mexico.
- G. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

9. WELL SITE LAYOUTS:

- A. Exhibit C shows the relative location and dimensions of well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 200' x 200' area has been staked and flagged.

10. PLANS FOR RESTORATION:

A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned and all trash and junk to leave well site in as aesthetically a condition as possible.

B. Unguarded pits, if any, containing fluid will be fenced until they have dried and been levelled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the surface land owner will be complied with and will be accomplished as expedient as possible. All pits will be filled level within 90 days after abandonment.

11. SURFACE OWNERSHIP:

Private surface: owned by Becky Jo Doom.

12. OTHER INFORMATION:

The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:
Completions and Production:

B. Through Drilling Operations,

Russell Whited, Prod Supt
Merit Energy Company
118 West Nebraska
Jal, New Mexico 88252
(505) 395-2173

Russell Whited, Prod Supt
Merit Energy Company
118 West Nebraska
Jal, New Mexico 88252
(505) 395-2173

14. CLARIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which 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 Merit Energy Company and its terms and conditions under which it is approved. This statement is subject to the provisions of U.S.C. 1001 for the filing of a false statement.

Date

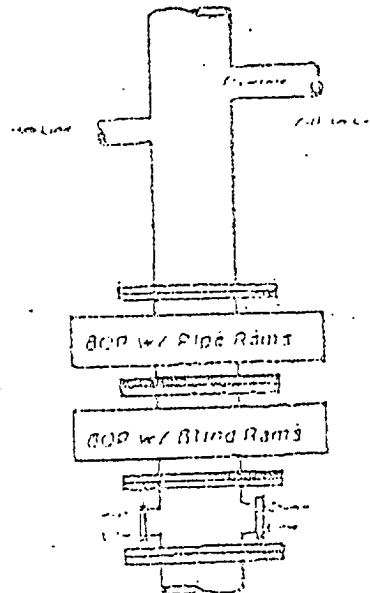
3-7-95

Russell Whited

West District,

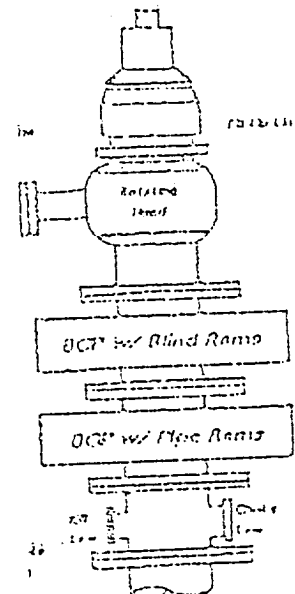
Production Superintendent

Exhibit B

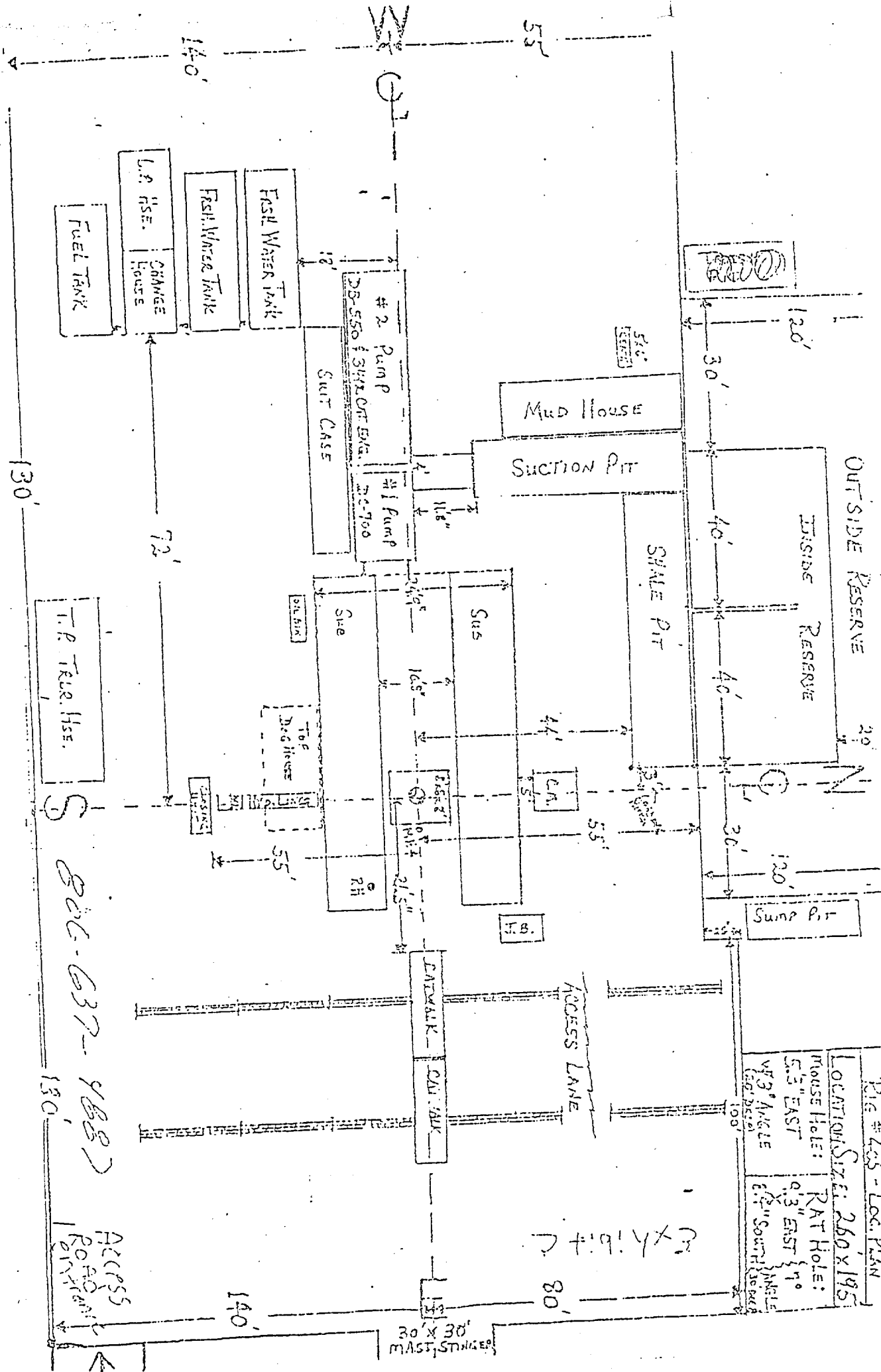


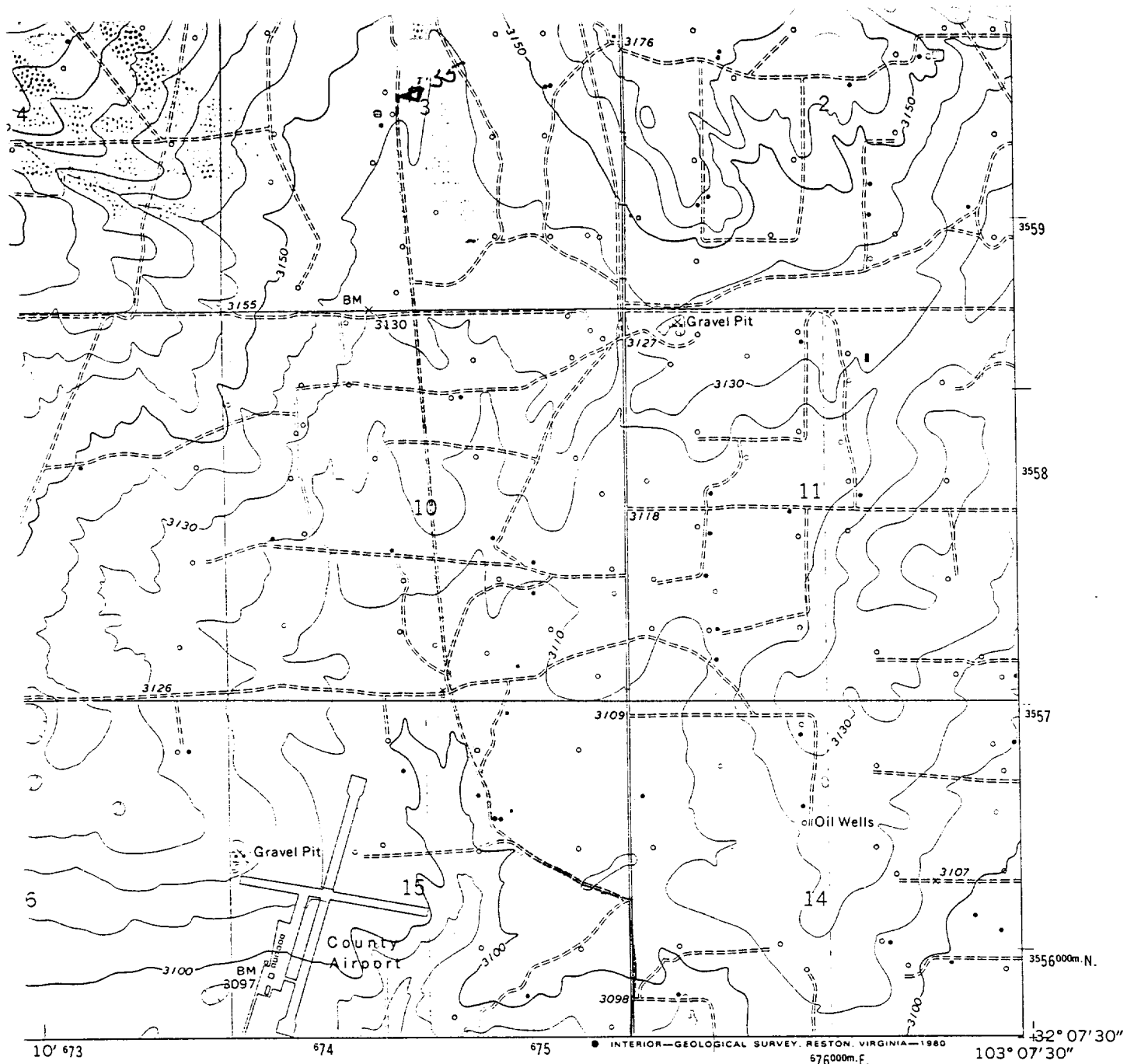
CASH II
300016s

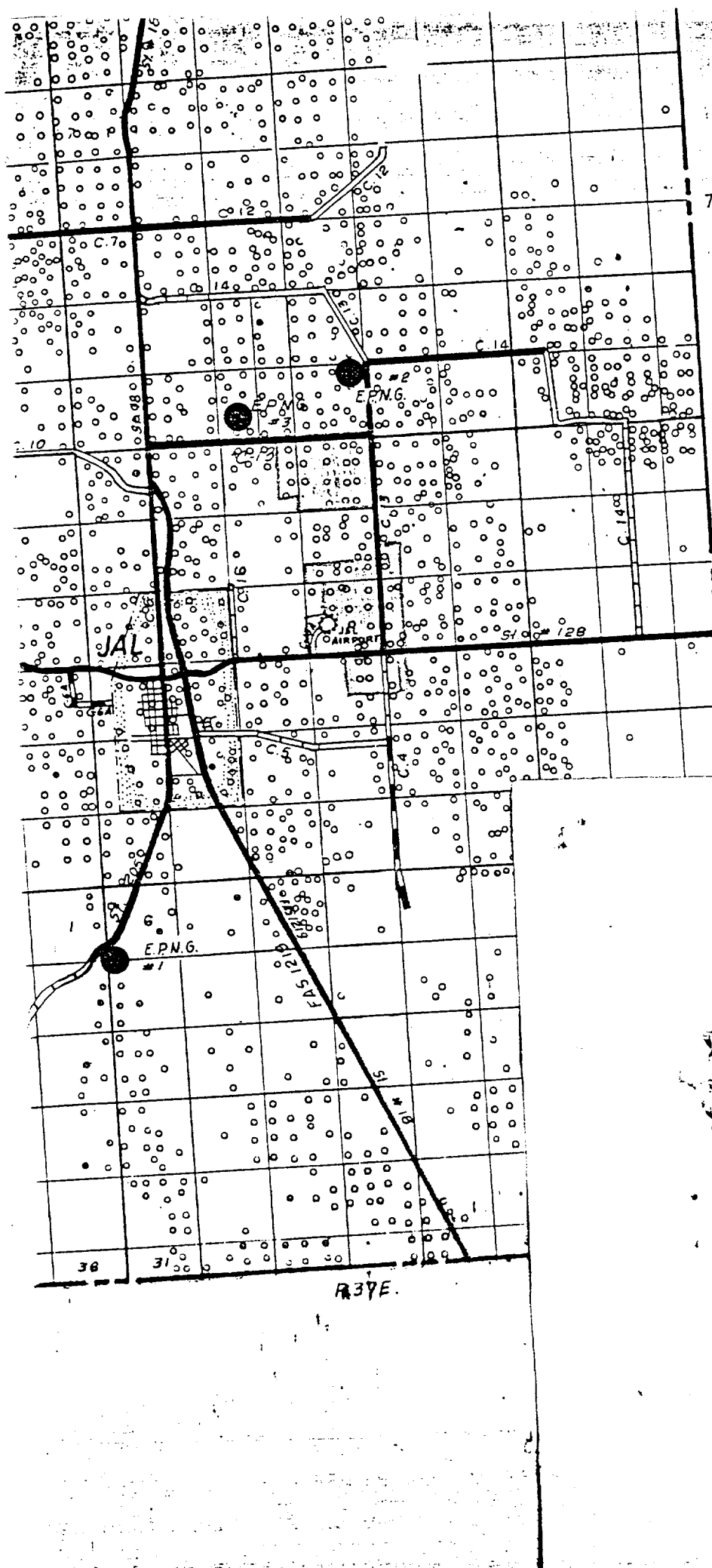
Exhibit B-1



CASH II
300016s







T.24S.

T.25S.

R37E.

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APR 1 1963
U. S. AIR FORCE
OFFICE

DISTRICT I
P.O. Box 1880, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3D-025-32932	Pool Code 37240	Langlie Mattix 7-Rivers Queens GB	Pool Name
Property Code 7689	Property Name HUMPHREY QUEENS		Well Number 35
OGRID No. 14591	Operator Name MERIT ENERGY COMPANY		Elevation 3136'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	3	25 S	37 E		2362	NORTH	2488	EAST	LEA

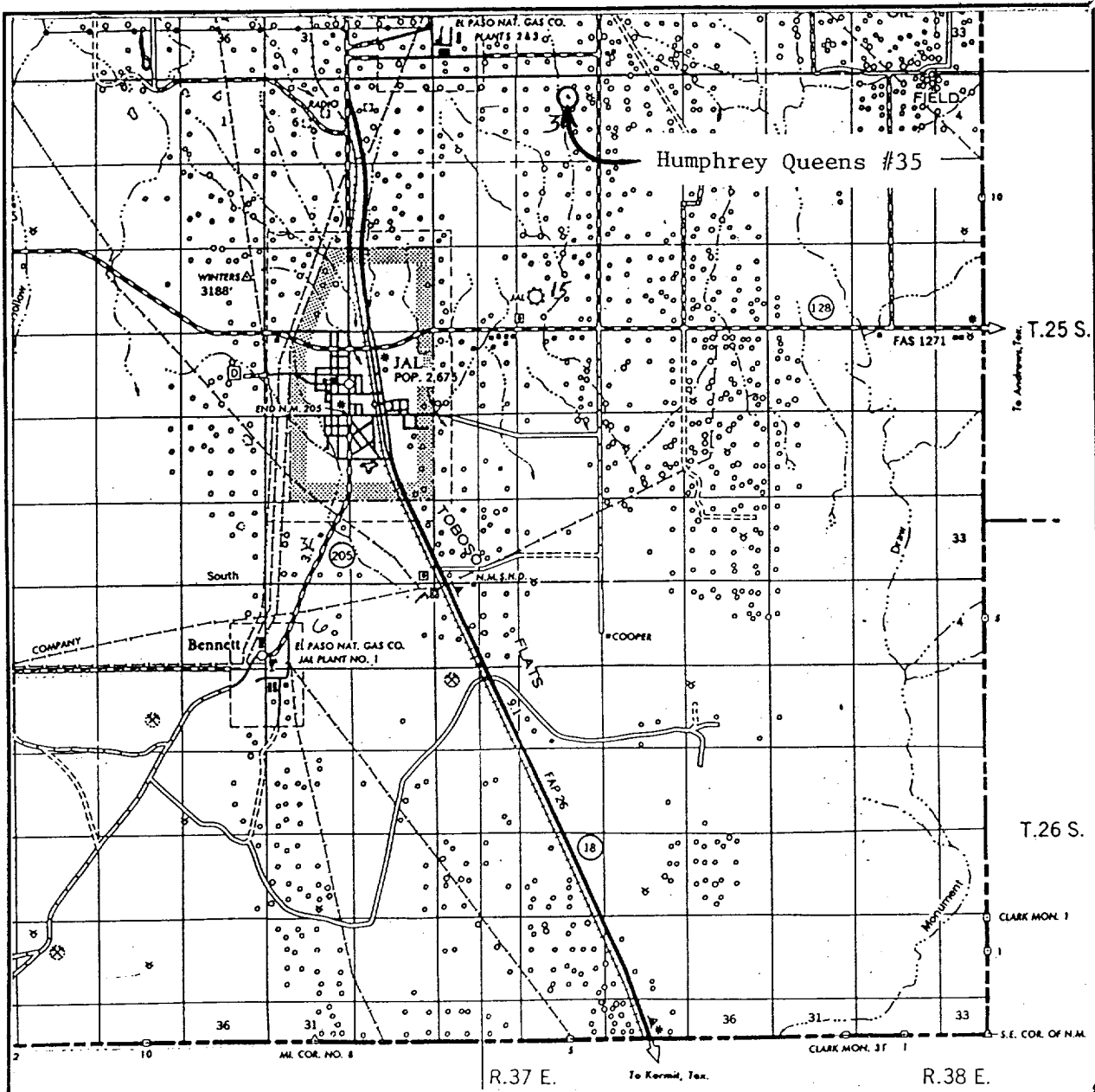
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		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

				OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>Russell Whited</u> Signature <u>Russell Whited</u> Printed Name <u>Operations Supt.</u> Title <u>3-7-95</u> 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. JAN 16 1995 Date Surveyed Signature & Seal of Professional Surveyor <u>W. G. EIDSON</u> W.G. EIDSON 95-0046 5CN Certificate No. JOHN W. WEST, 678 RONALD J. EIDSON, 3239					

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 3 TWP. 25 S RGE. 37 E

SURVEY N.M.P.M.

COUNTY Lea STATE NM

DESCRIPTION 2362' FNL & 2488' FEL

ELEVATION 3136'

OPERATOR Merit Energy Co.

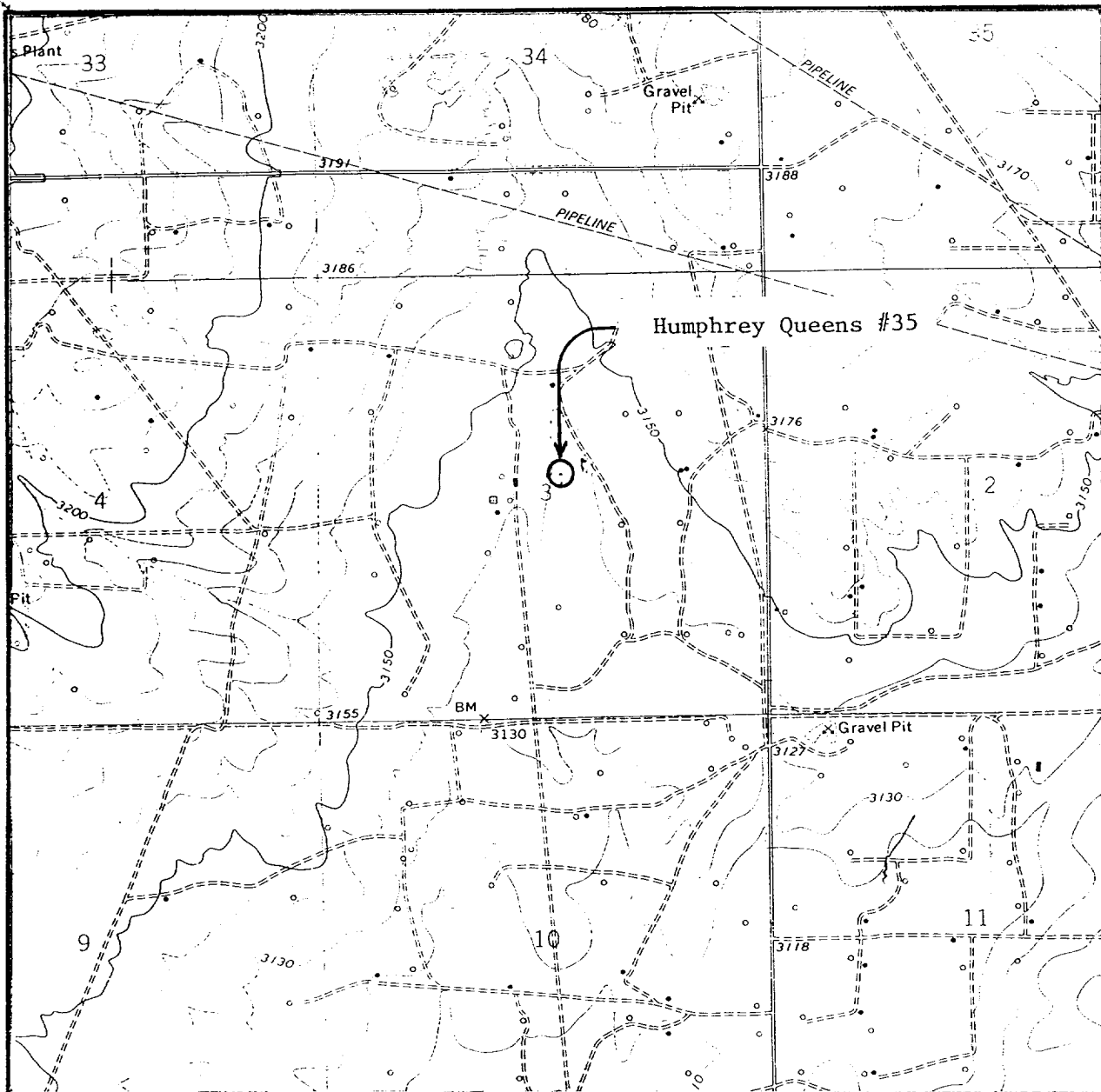
LEASE Humphrey Queens #35

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

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Mail Room
U.S. Customs and Border Protection
Office

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL 10'

SEC. 3 TWP. 25 S RGE. 37 E

SURVEY N.M.P.M.

COUNTY Lea STATE NM

DESCRIPTION 2362' FNL & 2488' FEL

ELEVATION 3136'

OPERATOR Merit Energy CO.

LEASE Humphrey Queens #35

U.S.G.S. TOPOGRAPHIC MAP

Jal NW

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