

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-015-21853

5. LEASE DESIGNATION AND SERIAL NO.

LC067144

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Big Eddy Unit

9. WELL NO.

49

10. FIELD AND POOL, OR WILDCAT

Undesignated Delaware

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
Sec 35, T-21-S  
R-28-E

12. COUNTY OR PARISH

Eddy

13. STATE

New Mexico

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

1b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Perry R. Bass

3. ADDRESS OF OPERATOR

Box 2760 Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations)

At surface  
330 FWL & 1650' FSL, Sec 35, T-21-S, R-28-E

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

12 miles East of Carlsbad New Mexico.

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 330

16. NO. OF ACRES IN LEASE

1280

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. BEU #41 & #47

19. PROPOSED DEPTH

3850

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3180 GL

22. APPROX. DATE WORK WILL START\*

July 28, 1976

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8	24#	300	200 sks - Circ to surface
7 7/8"	5 1/2	14#	3850	350 sks

Drilling procedure, BOPE diagram, anticipated formation tops, and Surface Use Plan attached.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

H. B. Murphy, Jr.

TITLE Div. Production Clerk

DATE June 14, 1976

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

(CONDITIONS OF APPROVAL, IF ANY)

TITLE

DATE

THIS APPROVAL IS VALID FOR 12 MONTHS.  
ALL HOS COMMENCED WITH 12 MONTHS.  
EXPIRES SEP 24 1976  
See Instructions On Reverse SideRECEIVED  
JUN 16 1976  
U. S. GEOLOGICAL SURVEY  
MIDLAND, TEXAS

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

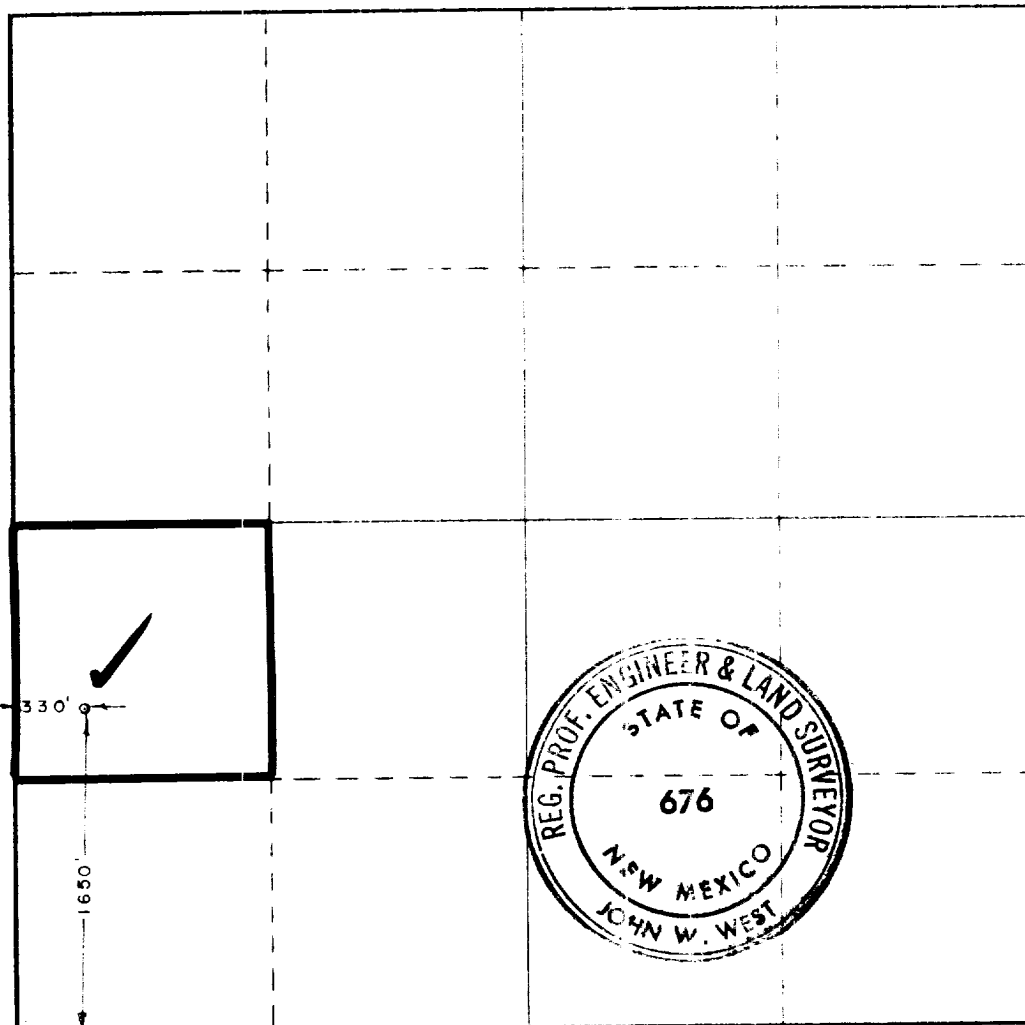
Operator <b>PERRY R. BASS</b>			Lease <b>Big Eddy Unit</b>		Well No. <b>49</b>
Unit Letter <b>L</b>	Section <b>35</b>	Township <b>21 South</b>	Range <b>28 East</b>	County <b>Eddy</b>	
Actual Footage Location of Well: <b>1650</b> feet from the <b>south</b> line and <b>330</b> feet from the <b>west</b> line					
Ground Level Elev. <b>3163.6</b>	Producing Formation <b>Delaware</b>		Pool <b>Undesignated</b>		Dedicated Acreage <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

*C. Alan Roberts*

Name

**C. Alan Roberts**

Position

**Division Engineer**

For Operator

**Perry R. Bass**

Date

**June 12, 1976**

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 knowledge and belief.

Date Surveyed

**June 12, 1976**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No.

**676**

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

~~Basic Enterprises Production~~ COMPANY  
PROGNOSIS TO DRILL

LEASE: Big Eddy Unit

WELL NO: 49

DIVISION: West Texas

DISTRICT/AREA: Kermit

PROJECTED DEPTH: 3350'

EST. ELEVATION: 3180'

LOCATION: Surface - 330' FWL & 1650' FSL, Sec. 35, T-21-S, R-28-E  
Eddy County, New Mexico

Proposed BH - Straight Hole

GENERAL INFORMATION:

12 miles East from Carlsbad, NM. Type  
Rig rotary. Distance from nearest state maintained road 10 mi.

## CASING AND CEMENTING:

### 1. Conductor Casing -

Depth\_\_\_\_\_ft Size \_\_\_\_\_"OD Wt\_\_\_\_\_#/ft Grd \_\_\_\_\_Thd \_\_\_\_\_

Cement -

Desired Top\_\_\_\_\_ft    Type Cement\_\_\_\_\_

## 2. Surface Casing -

Hole Size 12 1/2"

Clearance 1.31" Radial Clearance  
@ coupling

Depth 300 ft

Casing  $\frac{8.625}{\text{coupling OD} = 9.625}$  "OD

[illegible]

Cement -

Desired Top Surface Type Cement (slurry wt, yield factor

& est sx) cement w/  $\pm$  200 sx Glass C w/4% gel & 2% CaCl<sub>2</sub> &  $\frac{1}{2}$  lb cellophane  
flakes per sack at 13.5 lb/gal. Yield 1.69 ft<sup>3</sup>/sk

Percent excess 173 % Caliper Survey Yes, X No

Required ft<sup>3</sup> 338

Placement time 30 min Minimum Thickening Time      min

Head - 8 5/8" weld on w/2 X 2" outlets w/2 X 2 1/16" 3000 psi valves.

Accessories - 3 centralizers, float shoe, float collar

3. First Intermediate Casing -

Hole Size                      Clearance                     

Depth                      ft

Casing                      "OD

Interval	Footage	Wt/Ft	Grade	Type Jt	Intvl Wt	Cum Wt	CALC SAFETY FACTORS			
							Ten	Col	TB	BB

Cement -

Desired Top                      Type Cement (slurry wt, yield factor

& est sx)

Percent excess \_\_\_\_\_ %      Caliper Survey \_\_\_\_\_ Yes, \_\_\_\_\_ No

Required ft<sup>3</sup> \_\_\_\_\_ Placement time \_\_\_\_\_ min.

Minimum Thickening time \_\_\_\_\_ min.

Head -

Accessories -

4. Second Intermediate Casing -

Hole Size \_\_\_\_\_ Clearance \_\_\_\_\_

Depth \_\_\_\_\_ ft

Casing \_\_\_\_\_ "OD

Interval	Footage	Wt/Ft	Grade	Type	Intvl	Cum	CALC SAFETY FACTORS			
				Jt	Wt	Wt	Ten	Col	TB	BB
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Cement -

Desired Top

Type Cement (slurry wt, yield factor &

est sx) \_\_\_\_\_

Percent excess \_\_\_\_\_ % Caliper Survey \_\_\_\_\_ Yes, \_\_\_\_\_ No

Required ft<sup>3</sup> \_\_\_\_\_ Placement time \_\_\_\_\_ min.

Minimum Thickening time \_\_\_\_\_ min.

Head -

Accessories -

5. Third Intermediate Casing -

Hole Size \_\_\_\_\_ Clearance \_\_\_\_\_

Depth \_\_\_\_\_ ft

Casing \_\_\_\_\_ "OD

Interval	Footage	Wt/Ft	Grade	Type Jt	Intvl Wt	Cum Wt	CALC SAFETY FACTORS			
							Ten	Col	TE	BB
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Cement -

Desired Top \_\_\_\_\_ Type Cement (slurry wt, yield factor &  
est sx) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Percent excess \_\_\_\_\_ % Caliper Survey \_\_\_\_\_ Yes, \_\_\_\_\_ No

Required ft<sup>3</sup> \_\_\_\_\_ Placement time \_\_\_\_\_ min.

Minimum Thickening time \_\_\_\_\_ min.

Head -

Accessories -

6. Intermediate Liner Ca -

Hole Size \_\_\_\_\_ Clearance \_\_\_\_\_

Depth \_\_\_\_\_ ft

Casing \_\_\_\_\_ "OD

Interval	Footage	Wt/Ft	Grade	Type	Intvl	Cum	CALC SAFETY FACTORS			
				Is	Wt	Wt	Ten	Col	TB	BB

Cement -

Desired Top \_\_\_\_\_ Type Cement (slurry wt, yield factor,

& est sx) \_\_\_\_\_

Percent excess \_\_\_\_\_ % Caliper Survey \_\_\_\_\_ Yes, \_\_\_\_\_ No

Required ft <sup>3</sup> \_\_\_\_\_ Placement time \_\_\_\_\_ min.

Minimum Thickening time \_\_\_\_\_ min.

Head -

Accessories -

7. Production/Liner Casing

Hole Size 7 7/8" Clearance 0.9125" radial clearance  
@ couplings

Depth 3850' ft

Casing 5.5" "OD  
Coupling O.D. 6.05"

Interval	Footage	Wt/Ft	Grade	Type It	Intvl Wt	Cum Wt	CALC SAFETY FACTORS			
							Ten	Col.	TE	BB
3850	3850	14 lb	K-55	8.32	53,900	53,900	2.51	1.56	2.61	2.61

Design Conditions -

BHP 1668 psi TP 0 psi Drilling Mud 10 #/gal

Completion Fluid 8.32 #/gal

Cement -

Desired Top 1600 ft Type Cement (slurry wt. yield  
factor & est sx) cement w/+ 250 sacks 50-50 Class C Pozmix A w/6% salt  
and .5% friction reducer, density 13.9 lb/gal. Yield 1.36 ft<sup>3</sup>/sk.  
Tail with 100 sx Class C neat mixed to 14.8 lb/gal. Yield 1.32 ft<sup>3</sup>/sk

Percent excess 21 % Caliper Survey X Yes,    No

Required ft<sup>3</sup> 472 Placement time 45 min.

Minimum Thickening time    min. Reciprocate while

cementing X Yes    No.

Head - 5½" X 2 3/8 EUE Lockin prod off type.

Accessories - 10 centralizers, sandblast and ruff-coat across  
producing zone.



# DRILLING MUD

## 1. Surface Hole -

Mud Type Native, gel, lime

Properties at Casing Point: Wt 8.6 #/gal Visc 35 sec.

WL NC sec.

## 2. Below Surface Casing -

Properties:

Interval	Mud Type	Weight	PV/YP	Water Loss
<u>300-3300</u>	<u>Brine</u>	<u>10 lb</u>	<u>---</u>	<u>NC</u>
<u>3300-3850</u>	<u>Brine-gel</u>	<u>10 lb</u>	<u>6/4</u>	<u>15cc</u>
<u>Have WL less than 15cc by 3300</u>				

## 3. Remarks -

Centrifuge \_\_\_\_\_ Degasser \_\_\_\_\_ Diesel Content \_\_\_\_\_ %

after breakover Desander \_\_\_\_\_ Pit-O-Graph \_\_\_\_\_

## HOLE DEVIATION:

### 1. Vertical Hole -

Limits of Deviation:

Interval \_\_\_\_\_ Maximum Deviation \_\_\_\_\_

Surveys required every 500

Maximum Change in Deviation: 1 °/100'

2. Directional . . .

Direction \_\_\_\_\_

Deviation -

	MD	TVD	Deviation
Vertical Hole	_____	_____	_____
Build Angle, _____ $\nabla$ 100'	_____	_____	_____
Maintain Angle, _____ <sup>o</sup>	_____	_____	_____
Drop Angle, 1 $\nabla$ 100'	_____	_____	_____
Maintain Angle	_____	_____	_____

Target (s) \_\_\_\_\_

Maximum Change in Deviation \_\_\_\_\_  $\nabla$ 100'

LOG RUNS:

Depth			
3850-300'	DLL GR w/Rxo curve & GR 300'	- surface	
3850-300	BHC-Sonic w/GR & Caliper		
3850-2000	4-arm HRC dipmeter		

Remarks: \* At discretion of wellsite geologist or Engineer

Approximately 60 sidewall  
cores will be taken after  
logging. No conventional  
coring will be done.

### DRILLING SAMPLES:

Catch 2 sets of drilling samples (5' x 10 1/2" bag)  
at 10' intervals from 0 ft to TD. Samples will be  
maintained at the wellsite unless otherwise specified  
as follows:

Sample sack should be completely labeled with operator's  
name, well name, and number.

### RIG PROCEDURES:

#### 1. Blowout Prevention -

- a. Nipple up 2 BOPs ~~XXXXXX~~, (2 rams)  
on surface pipe as shown on attached diagram.
- b. Nipple up \_\_\_\_\_ BOPs (1-Hydril and 2-ORC's)  
on intermediate or production casing as shown on  
attached diagram.
- c. Test BOPs to working pressure for 30 min upon  
installation and every 30 days thereafter.
- d. Tighten BOP and head bolts once each week.
- e. Work BOPs daily.

#### 2. Measurements -

- a. Tally drill pipe at casing points, logging points,  
and otherwise as required by Company representative.
- b. Prepare detailed sketch to include length, OD, ID,  
and type connections of all tools run into hole on  
Company time.

3. Miscellaneous -

- a. Drill string should be stabilized while drilling all hole sizes.
- b. Continuous check on hydraulics should be made.
- c. Run consistometer tests on all cement used for production casing.
- d. After cement job, release pressure immediately if back pressure valves are holding, and begin nipple-up operations.
- e. Pressure test surface casing to 1000 psi before drilling plug; intermediate and production casing and/or liners to 1500 psi.

COMPLETION:

Procedure for completion will be outlined on separately issued Prognosis to Complete.

NOTIFICATION:

1. In case of emergency, please notify the following:  
Leroy Hurt  
Alan Roberts  
Jim Pullig

OFFICE	HOME
A/C 915-684-5723	A/C 915-943-2849
A/C 915-684-5723	A/C 915-694-1568
A/C 915-684-5723	A/C 915-694-7645

2. Prior to logging, please notify:  
Bill Ford  
Howard Hodges

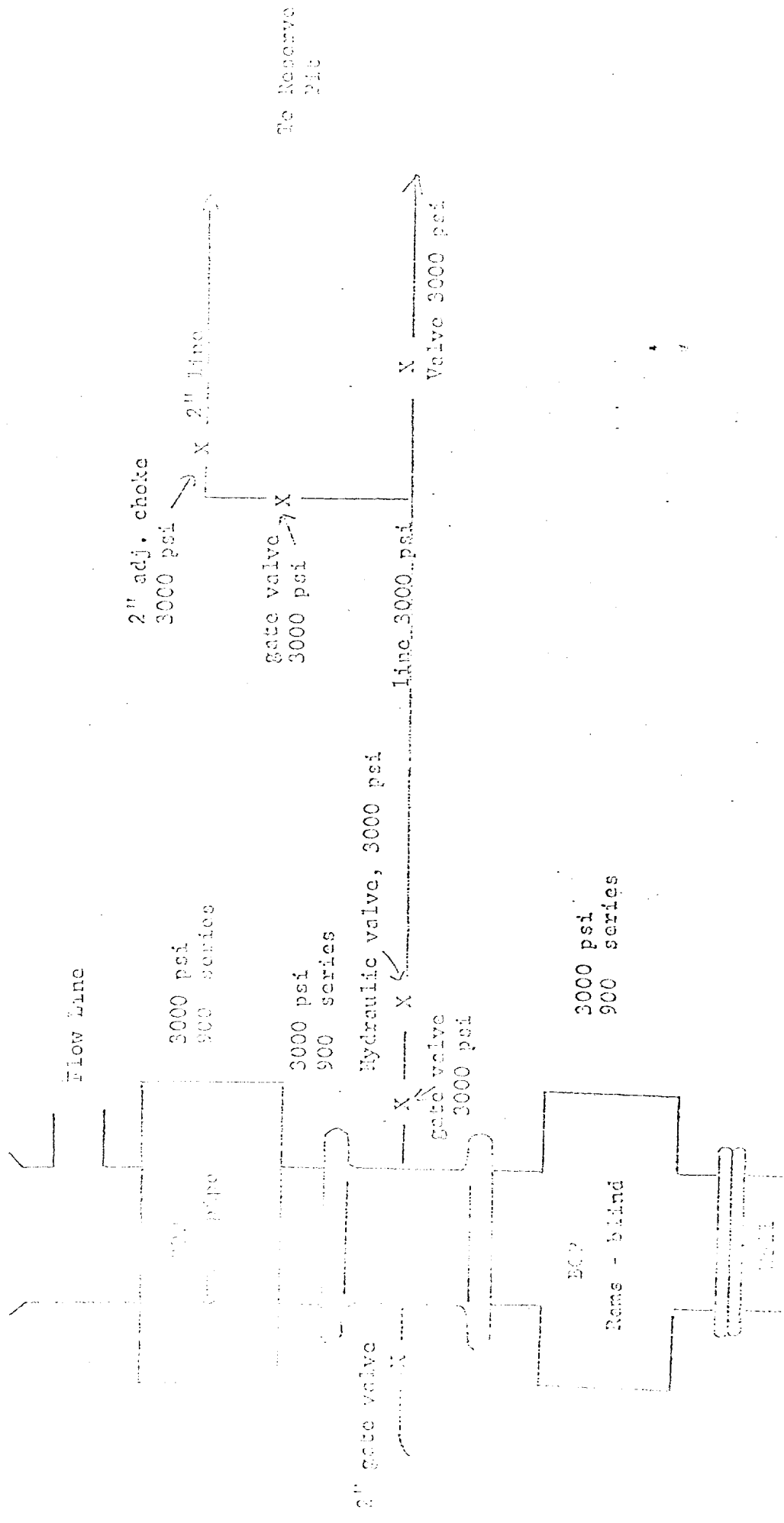
A/C 915-684-5723	A/C 915-683-3850
A/C 915-684-5723	A/C 915-697-3634

PREPARED BY: *Louie M. Cure* CHECKED BY:

APPROVED BY:

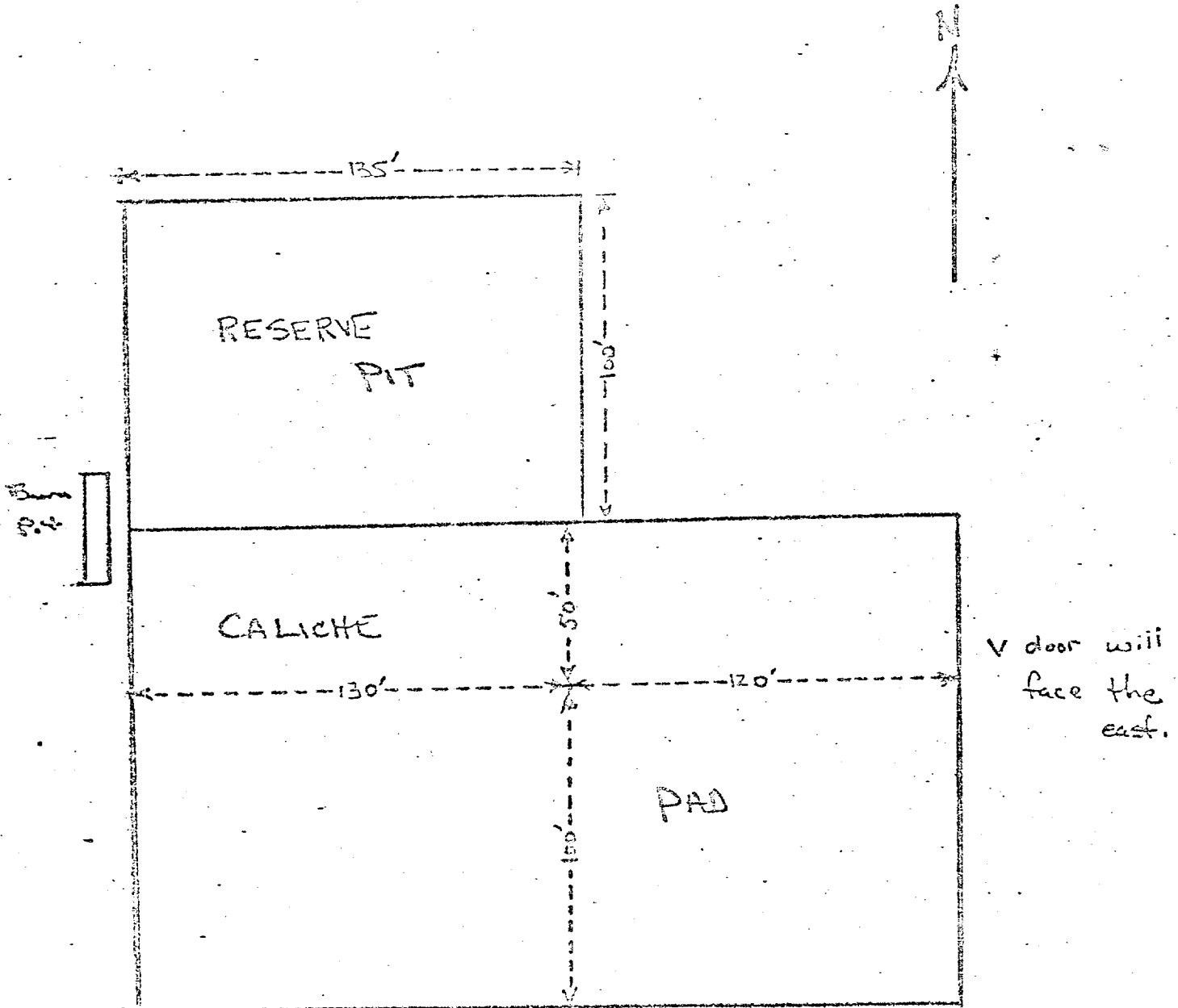
Louie M. Cure

Attachments: Estimated Drilling Time  
Minimum BOP Hook-up  
Sample Catching Instructions  
Proposed Mud Program  
Location Plat



# EXHIBIT 'B'

BIG EDDY # 47



BASS ENTERPRISES PRODUCTION COMPANY  
BIG EDDY UNIT No. 49  
EDDY COUNTY, NEW MEXICO

ANTICIPATED FORMATION TOPS

B/Salt	1920' (+1273')
Delaware Lime	2680' (+500')
Delaware Sandstone	2800' (+380')
B/Purple Carbonate	3555' (-375')

# BASS ENTERPRISES PRODUCTION CO.

800 Vaughn Building  
P. O. BOX 2760  
MIDLAND, TEXAS 79701

June 11, 1976

## SURFACE USE PLAN

Bass Enterprises Production Company Big Eddy Unit No. 49  
330' FNL & 1650' FWL, Section 35, T-21-S, R-28-E  
Eddy County, New Mexico

### 1. Access to Location - Exhibit A

Access to BEU #49 is obtained by traveling approximately  $2\frac{1}{2}$  miles NE of Carlsbad on Hwy 62-180, turning right at the Sheriffs Posse roping arena, continuing on this road for approximately  $6\frac{9}{10}$  miles, turning left at this point onto a lease road for approximately 1 mile leading to previously drilled BEU #41. The BEU #49 location is approximately  $\frac{3}{10}$  of a mile SW of BEU #41.

### 2. New Roads to Build

It will be necessary to construct approximately  $\frac{3}{10}$  of a mile of new road from the existing road to previously drilled BEU #41, to BEU #49 location.

### 3. Location and Pad - Exhibit B

A location 150' X 250' will be required for the drilling of the Big Eddy Unit #49. The pad will be covered with 6" of caliche which will be watered, rolled, and compacted. A 100' X 140' reserve pit will be built on the north side of the pad. The reserve pit will be lined with impermeable plastic. A burn pit for trash will be located as indicated on Exhibit B.

### 4. Location of Existing Wells

BEU #41 is located approximately  $\frac{3}{10}$  of a mile East of this subject well. BEU #48 is located approximately  $\frac{1}{2}$  mile NE of this well.

### 5. Setting and Environment

The terrain is fairly flat at the well site with low lying sandhills. Vegetation is sparse being primarily mesquite with very little grass. The only use for the area is grazing. The area is very sandy. Environmental risk is very low.

### 6. Distances to Water, Residences, etc.

There are no surface waters, residences, etc. within one mile of the location. There is a windmill approximately  $\frac{3}{4}$  mile SW of subject location.



SURFACE USE PLAN C E.

7. Well Identification  
Well signs will be posted at the exit onto the BEU #47 lease road, and at the BEU #49 location.
8. Open pits  
All pits containing liquid mud or chemicals will be fenced or guarded.
9. Tank Battery and Lease Lines  
If a commercial well is obtained a production battery will be constructed on the southeast corner of the pad.
10. Waste Disposal  
All drill cuttings will be disposed of in the reserve pit. Trash barrels will be available at the location and all detrimental waste will be burned, carried away, or buried with a minimum cover of 24" of dirt.
11. Water Supply  
Fresh water and brine will be hauled to the location by commercial haulers.
12. Archaeological Resources  
None were observed.
13. Restoration of Resources  
Pits will be backfilled and leveled as soon as practical after the well has been drilled. Upon final abandonment of the well, the site will be restored as close as practical to its original state.
14. Operators Representatives  
Field personnel who can be contacted concerning compliance with this Surface Use Plan are as follows:

DRILLING  
Leroy Hurt  
P. O. Box 2760  
Midland, TX 79701

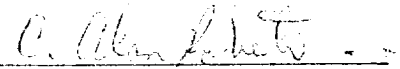
Alan Roberts  
P. O. Box 2760  
Midland, TX 79701

PRODUCTION  
Al Gallas  
P. O. Box 1043  
Kermit, Texas 79745

Alan Roberts  
P. O. Box 2760  
Midland, TX 79701

16. Certification

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 as they actually exist, that the statements made in this plan are to the best of my knowledge true and correct, and the proposed work performed by Bass Enterprises Production Company and its contractors and sub-contractors will conform to this plan.

  
C. A. Roberts

LAH/dh

