NM OIL CONSERVATION COMMISSION
Drawer DD
Artesia, NM 88210

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-25915

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
MAY 11 '88
O. C. D.
ARTESIA, OFFICE

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: BASS ENTERPRISES PRODUCTION CO.

3. ADDRESS OF OPERATOR: P.O. BOX 2760 MIDLAND, TEXAS 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FNL & 1980' FWL SEC 30 T21S R28E (Unit letter C) Eddy Co. New Mexico
At proposed prod. zone: Same as above

5. LEASE DESIGNATION AND SERIAL NO.: LC-059365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: BIG EDDY UNIT

8. FARM OR LEASE NAME: BIG EDDY UNIT

9. WELL NO.: 108

10. FIELD AND POOL, OR WILDCAT: ~~EAST CARLSBAD~~ UND. BASS MORROW GAS

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: S30,T21S, R28E

12. COUNTY OR PARISH: EDDY

13. STATE: NEW MEXICO

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Two 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): 660'

16. NO. OF ACRES IN LEASE: 2553.61

17. NO. OF ACRES ASSIGNED TO THIS WELL: 316.68

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ± 2,640

19. PROPOSED DEPTH: 12,100

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): Ungraded GR 3158.5'

22. APPROX. DATE WORK WILL START*: Undetermined

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4	42	540	340 SX CIRCULATE
10 5/8"	8 5/8	24 & 28	2835	850 SX
7 7/8"	5 1/2	17 & 20	12100	700 SX

APR 11 8 53 AM '88
RECEIVED

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 Ingy L. Beeson TITLE Engineering Assistant DATE April 7, 1988

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 5-10-88

CONDITIONS OF APPROVAL, IF ANY:

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.

EXHIBIT A

Operator	Lease	Well No.
BASS ENTERPRISES PRODUCTION Co.	BIG EDDY UNIT	108

Unit Letter	Section	Township	Range	County
C	30	21-SOUTH	28-EAST	EDDY

Actual Footage Location of Well:
660 feet from the NORTH line and 1980 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3158.5'	Morrow	~~East Carlsbad Gas~~ (Morrow)	316.68 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

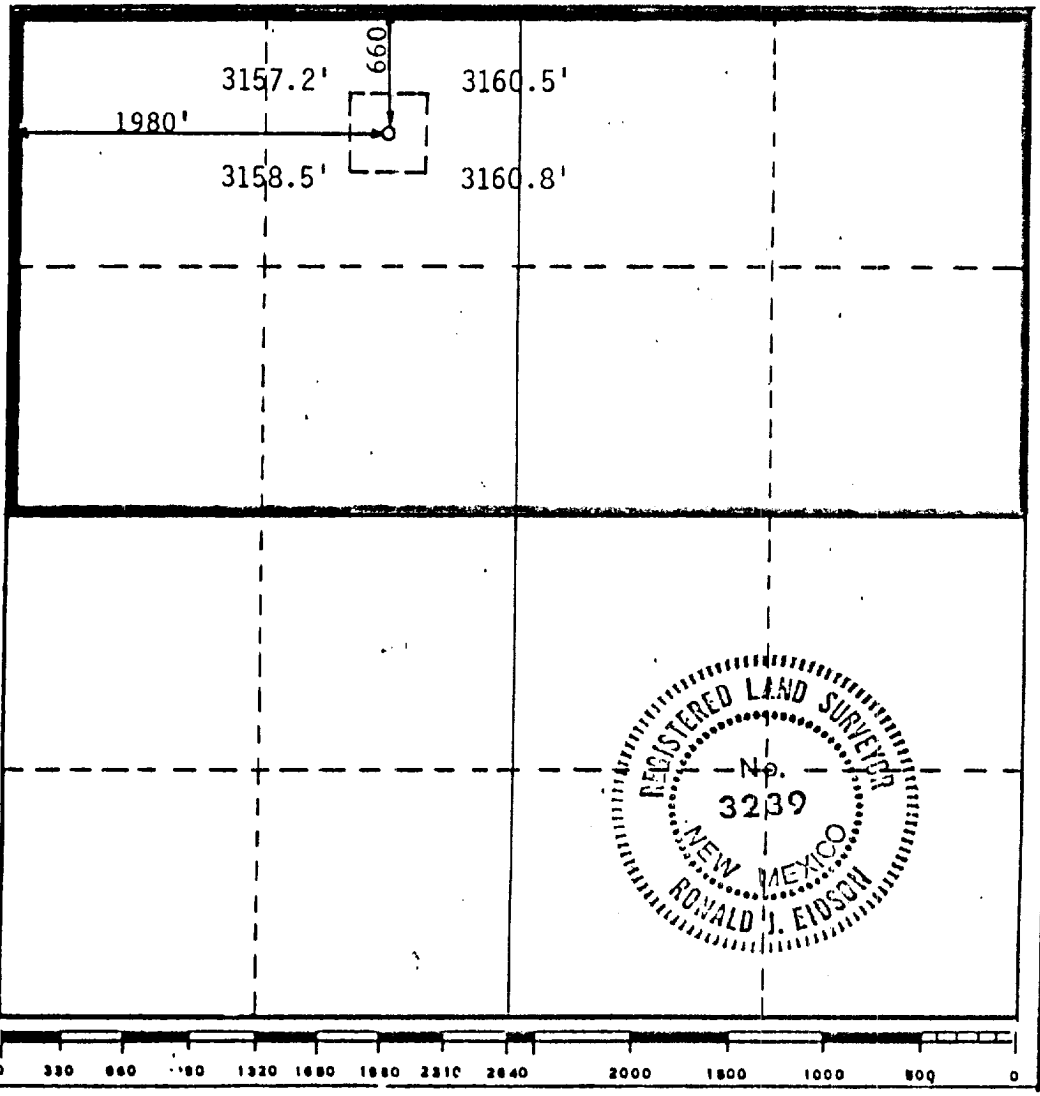
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation Unitization

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.

Troy L. Bevers

Name: Troy L. Bevers

Position: Engineering Assistant

Company: Bass Enterprises Production Co.

Date: April 08, 1988

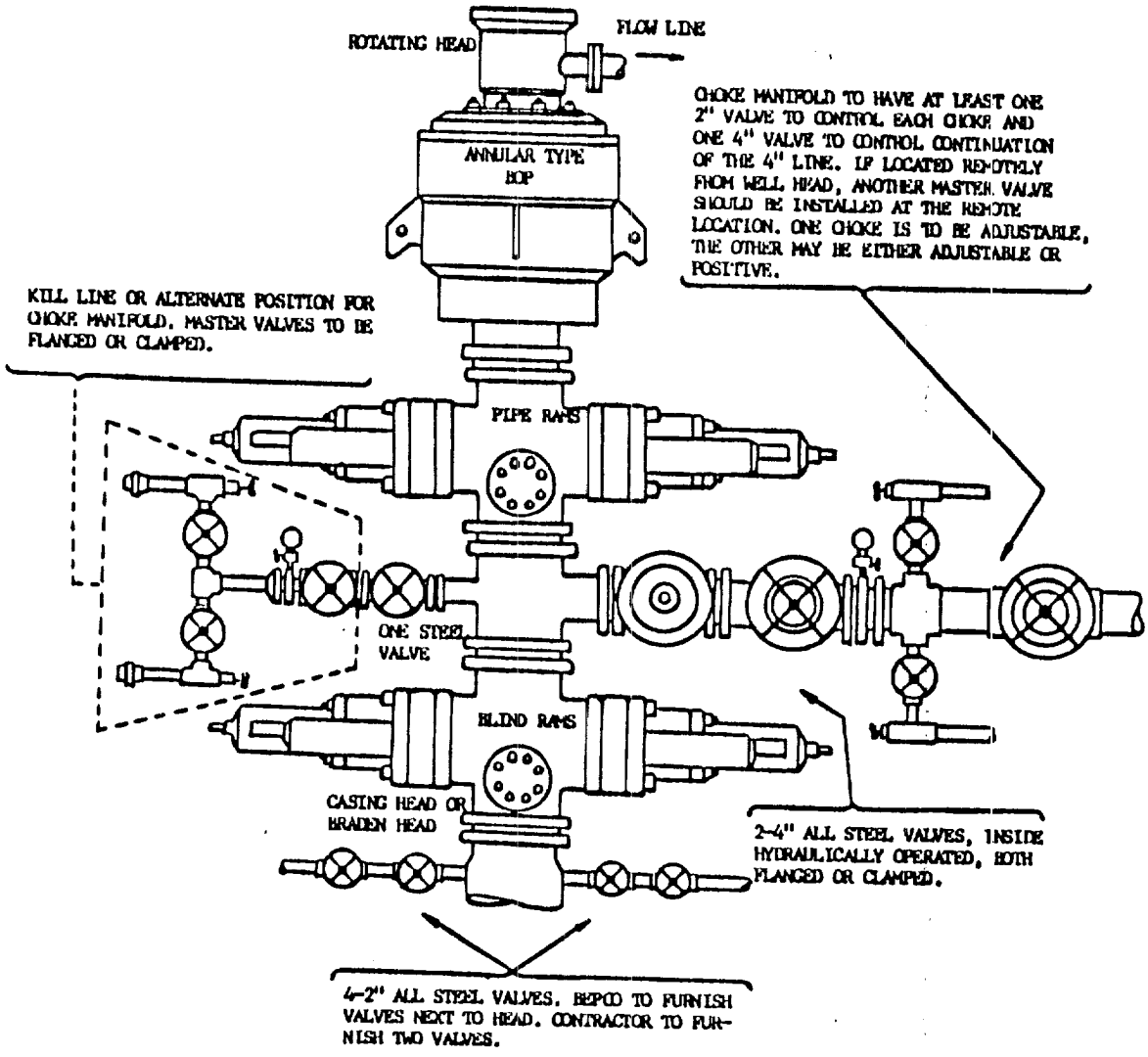
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: APRIL 8, 1988

Registered Professional Engineer and/or Land Surveyor

Ronald J. Eidson

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. Conditions may be met with an annular type blowout preventer and pipe ram type blowout preventer above a choke spool, and a blind ram below the choke spool.

B. Opening on choke spool to be flanged, studded or clamped.

C. All connections from operating manifolds to preventers to be all steel hose or tube a minimum of one inch in diameter.

D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.

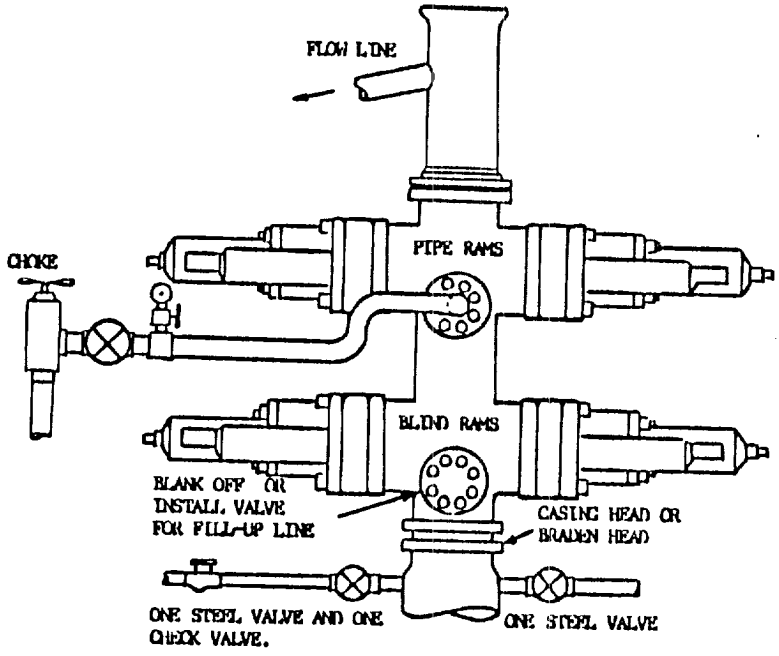
E. All connections to and from preventer to have a pressure rating equivalent to that of the BOP's.

F. Manual controls to be installed before drilling cement plug.

G. Kelly cock to be installed on kelly.

H. Inside blowout preventer to be available on rig floor.

I. Dual operating controls: one located by drillers position and the other located a safe distance from the rig floor.



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. One double gate blowout preventer with lower rams blind and upper rams for pipe, all hydraulically controlled.

B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches diameter.

C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.

D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.

E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.

F. Manual controls to be installed before drilling cement plug.

G. Valve to control flow through drill pipe to be located on rig floor.

H. Choke may be either positive or adjustable. Choke spool may be used between rams.

REPCO II

ONE HYDRAULIC DUAL BLOWOUT PREVENTER

EIGHT POINT DRILLING PROGRAM

NAME OF WELL: Big Eddy Unit No. 108
LOCATION: 660' FNL & 1980' FWL, Sec 30, T21S, R28E, Eddy County, NM

POINT 1: ESTIMATED FORMATION TOPS (SEE NO. 2 BELOW)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated formation tops: Estimated KB 3185'
Estimated Graded GL 3165'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUBSEA TOP	BEARING
B/Rustler	540'	+2645	Water
T/Capitan Reef	935'	+2250	Water
B/Capitan Reef and T/Delaware Mtn Group	2835'	+350	Oil/Gas/Wtr
T/Bone Spring Formation	5660'	-2475	Oil/Gas
T/Wolfcamp Formation	9160'	-5975	Oil/Gas
T/Strawn Formation	10356'	-7171	Oil/Gas
T/Strawn "C" Reservoir	10618'	-7433	Oil/Gas
T/Atoka Formation	10748'	-7563	Oil/Gas
T/Morrow Formation	11328'	-8143	Oil/Gas
T/Me Morrow	11597'	-8412	Oil/Gas
T/Lr Morrow	11828'	-8643	Oil/Gas
TD Morrow Formation	12100'	-8915	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS	PURPOSE	CONDITION
20"	0'- 40'	Conductor	Contr Discretion
11-3/4" 42#/ft H-40 ST&C	0'- 540'	Surface	New and/or Used
8-5/8" 24#/ft K-55 ST&C	0'- 2500'	Intermediate	New and/or Used
8-5/8" 28#/ft S-80 ST&C	2500'- 2835'	Intermediate	New and/or Used
5-1/2" 17#/ft N-80	0'- 6000'	Production	New
5-1/2" 20#/ft N-80	6000'-12100'	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED EXHIBIT A)

A BOP equivalent to a BEPCo II (copy attached), furnished by the contractor will be nippled up on the surface casinghead. A BOP equivalent to a BEPCo IV, furnished by the contractor will be nippled up on the intermediate casinghead. Each entire BOP stack, choke, kill lines, kelly cock, kelly safety valve, inside blowout preventer, etc. will be tested to the rated working pressure of the preventer or casinghead, whichever is less. Both a low pressure (200 psi) and a working pressure test will be required:

a) Upon initial installation
b) After any component changes

A function test to insure that the preventers are operating correctly will be performed on each trip, but not more than once per day.

POINT 5: MUD PROGRAM

DEPTH	WT	FUNNEL SEC VISCOSITY	PV	YP	API FLUID LOSS	Ph
0'-540'	8.4-8.8	34-38	NC	NC	NC	NC

Drill the surface hole with a 15" bit using FW spud mud. Maintain a funnel viscosity of 34-38 sec. for adequate hole cleaning. Use ground paper to prevent seepage and filter cake buildup through FW sands. If circulation is lost, well can be drilled blind to casing point.

540'-2835'	8.4-9.0	28-30	NC	NC	NC	9.5

Drill out surface casing with FW. Maintain a funnel viscosity of 28-30 sec. for adequate hole cleaning. Circulation problems are possible in the Capitan Reef. Circulation problems should be combatted by mixing a viscous mud pill of 200-250 bbls with 18-25 ppb of ground paper, cedar fiber and cellophane (kwik-seal) fiber. The paper and cedar fiber should provide a fibrous matrix and the kwik-seal should fill in the gaps and re-establish returns. If returns cannot be re-established after two or three mud pills, dry drill to casing depth with FW.

2835'-12100'	9.2-11.5	34-44	5-11	3-8	NC-10	10

After intermediate pipe is set, jet & clean the working pits and drill out with cut BW while circulating the steel pits. This cut brine system should be used to drill to ±200' above the T/Wolfcamp @ ±9160'. At ±8860', the drilling mud should be a 10# brine system with 2% KCl and a Ph of 10. Before drilling the T/Wolfcamp, the mud-gas separator and rotating head should be fully operational. Mud density should gradually be brought up to at least a 10.5 ppg before drilling the Strawn. Bring the API fluid loss down to 10 cc before drilling the T/Strawn (1st objective) at 10356'. This water loss control should be maintained to TD. Additional objectives are the Atoka (T/Atoka 10748') and Morrow formations (T/Morrow 11328'). Mud wt should be steadily increased to ±10.8 ppg system for the Atoka and a ±11.5 ppg system for the Morrow. A small gas flare could be possible from the Atoka to TD. Lost circulation in the Delaware Mtn Group is not expected, but should be anticipated. From 5550' to TD, sack and mark drill cuttings. The FV PV and YP should be varied to provide good formation samples for the company geologist and/or mud logger.

POINT 6: TECHNICAL STAGES OF OPERATION

A: Testing

As drilling shows merit within the Strawn and Atoka

B: Logging

Run No.	Tool	Interval	Status
1 @ 12100'	GR-DLL-MSFL (Caliper & Tension)	TD to intermediate csg	Definite
2 @ 12100'	GR-Neu-Lithodensity (Cal & Tension)	TD to intermediate csg	Definite

C: Coring

No cores are anticipated on this well

D: Cement

Interval	Amount sxs	Ft of Fill	Type	Gal/sx	ppg	Ft^3/sx
Surface	*340 (75% excess)	540	Class "C" Neat w/ 2% $CaCl_2$ & 1/4 ppg flocele	6.3	14.8	1.32
Intermediate Stage 1						
Lead	150	1085	Lite cmt w/ 1/4 #/sx LCM	9.9	12.7	1.84
Tail	100	520	Class "C" Neat w/ 1/4 sx LCM	6.3	14.8	1.32
DV Tool set @ 1100'						
Stage 2						
Lead	**200 (100% excess)	725	Lite cmt w/ 1/4 #/sx LCM	9.9	12.7	1.84
Tail	**150 (100% excess)	390	Class "C" Neat w/ 1/4 sx LCM	6.3	14.8	1.32
Production						
Lead	***200 (20% excess)	1700	Lite w/ 3% KCl & additives	9.9	12.7	1.84
Tail	***500 (20% excess)	3050	Class "H" w/ 3% KCl & additives	5.18	15.7	1.19

* Cmt must circulate or be topped off. If circulation is lost before cmt job, use 200% excess.
** Cmt must circulate on second stage or be topped off.
*** Volume should be verified from caliper log TOC (Class "H") should be brought back to above T/Wolfcamp @ 9160'.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

No abnormal pressures or temperatures are anticipated.

POINT 8: OTHER PERTINENT INFORMATION:

A: Auxiliary Equipment

A kelly cock will be utilized and a full opening stab in valve will be on the rig floor.

B: Anticipated Starting Date

As yet undetermined.

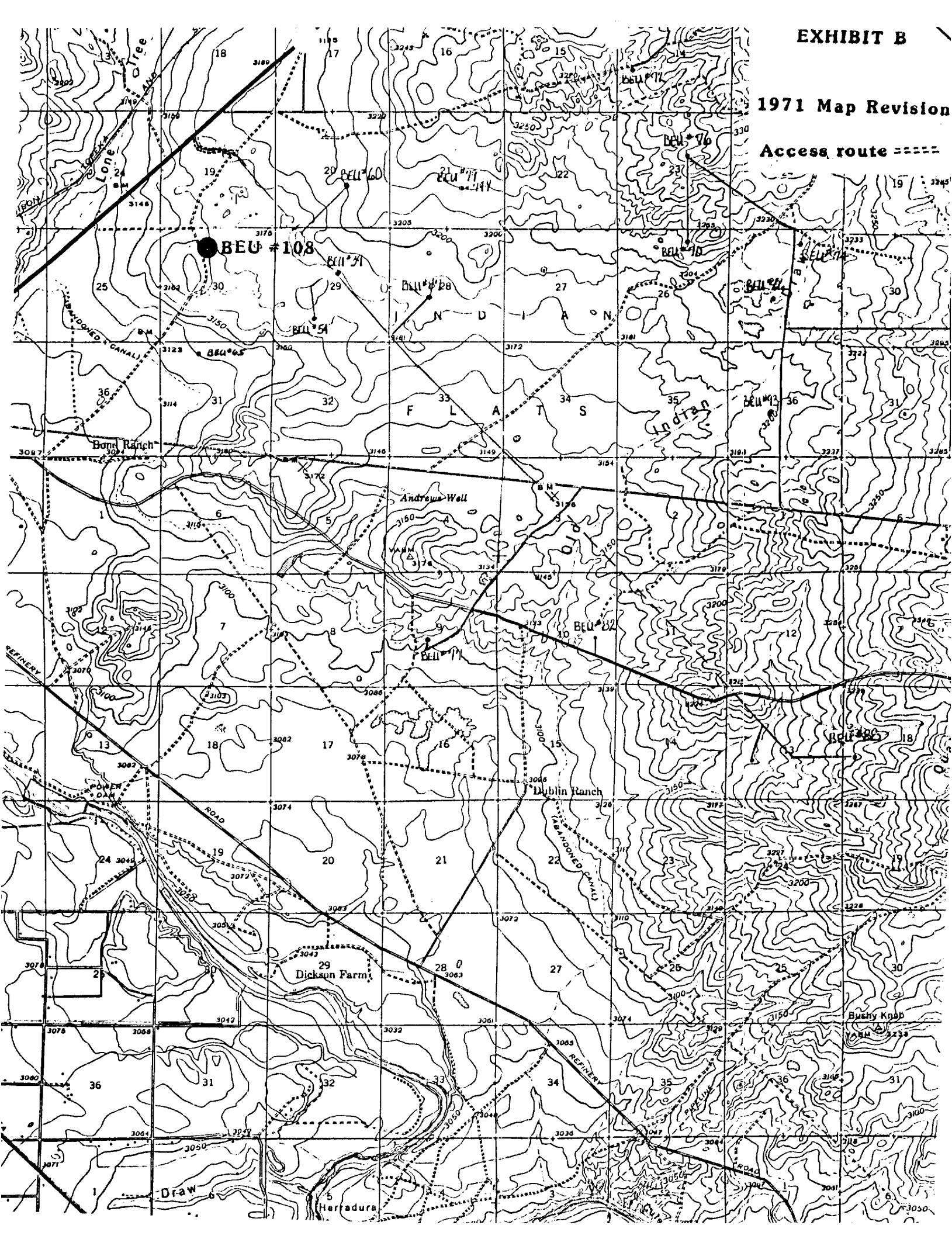
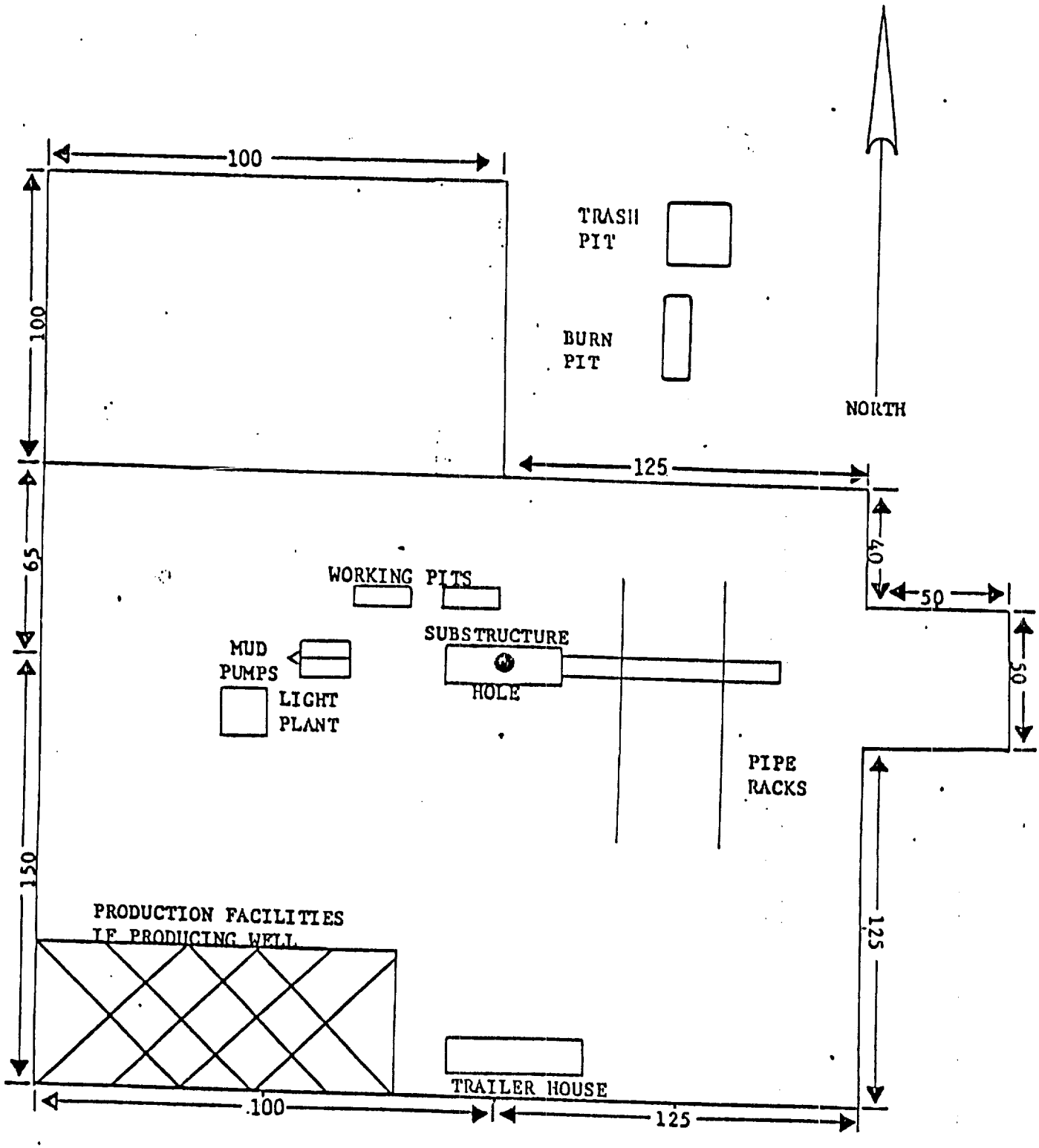


EXHIBIT B
1971 Map Revision
Access route
BEU #108
BEU #60
BEU #77
BEU #70
BEU #10
BEU #74
BEU #91
BEU #28
BEU #54
BEU #65
BEU #12
BEU #82
BEU #71
BEU #80
INDIAN
FLATS
Bond Ranch
Andrews Well
Dublin Ranch
Dickson Farm
Bushy Knob
Draw
Herradura
Long Tree Arroyo
ABANDONED CANAL
REFINERY
POWER DAM
ROAD
PIPELINE

EXHIBIT D


100
100
TRASH PIT
BURN PIT
NORTH
125
65
40
50
WORKING PITS
MUD PUMPS
LIGHT PLANT
SUBSTRUCTURE
HOLE
50
PIPE RACKS
150
125
PRODUCTION FACILITIES IF PRODUCING WELL
TRAILER HOUSE
100
125