Form 9-331 C
(May 1963)

NMOCC COPY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22391

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

2. NAME OF OPERATOR
Perry R. Bass

3. ADDRESS OF OPERATOR
P. O. Box 2760, Midland, Texas 79702

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JAN 9 1978
O. C. C.
ARTESIA, OFFICE

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface 1650' FWL, 990' FNL, Sec 35, T-21-S, R-28-E
Eddy County, New Mexico
At proposed prod. zone Same as above

5. LEASE DESIGNATION AND SERIAL NO.
LC-067144

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.
59

10. FIELD AND POOL, OR WILDCAT
Indian Flats ~~Field~~ Delaware

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

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
10 miles east of Carlsbad

12. COUNTY OR PARISH: Eddy County | 13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

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.

19. PROPOSED DEPTH
3800'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3183 'GL

22. APPROX. DATE WORK WILL START*
30 days after approval

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	500'	315 sx
7 7/8"	5 1/2"	14	3800'	315 sx

Drilling procedures, BOPE diagram, anticipated formation tops, and surface use plans are attached.

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ARTESIA, NEW MEXICO

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 Ben Young TITLE Engineer Assistant DATE 12-19, 1977

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE JAN 6 - 1978

APPROVED BY Joe D. Lara TITLE ACTING DISTRICT ENGINEER DATE JAN 6 - 1978

CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES APR 6 - 1978

*See Instructions On Reverse Side

Perry R. Bass | Big Eddy Unit | 59

C | 35 | 21 South | 28 East | Eddy

990 | North | 1650 | West

3183.0 | Delaware | Indian Flats ~~Field~~ Delaware | 40

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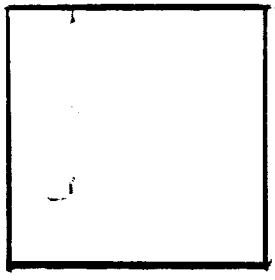
ARTESIA, NEW MEXICO



Gene A. Young

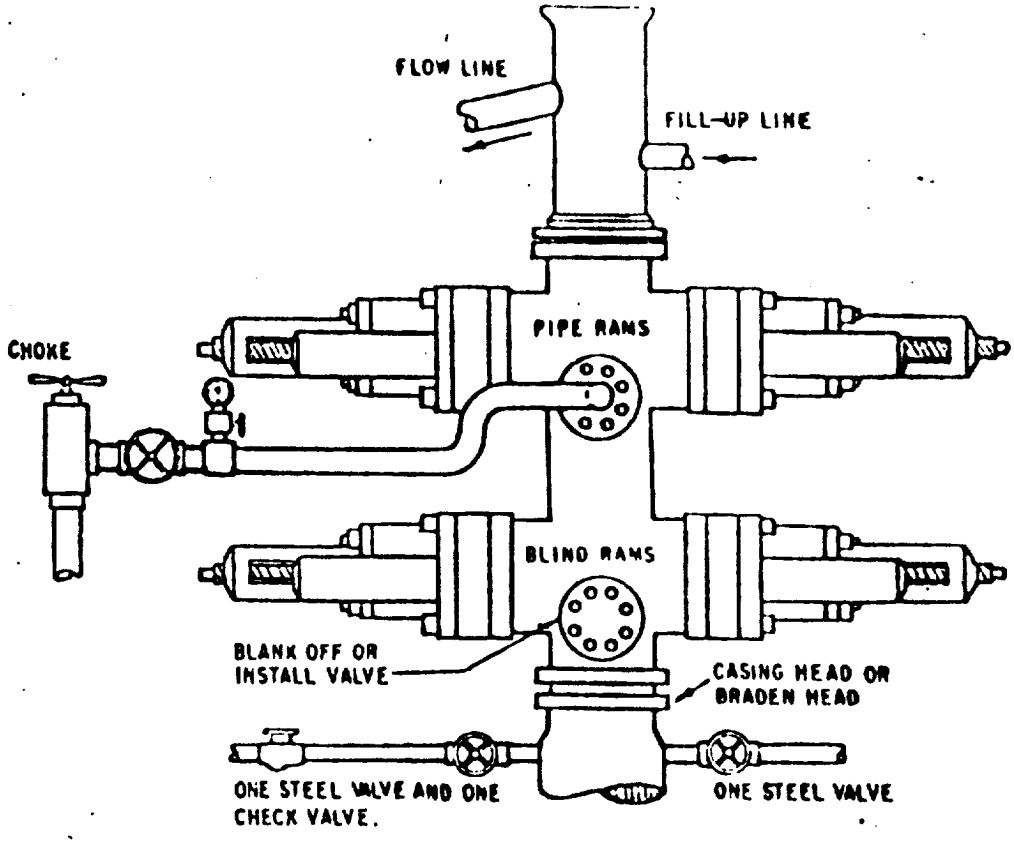
Engineer Assistant

Perry R. Bass

December 19, 1977

December 5, 1977

576



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. CONDITIONS MAY BE MET BY EITHER
   (1) ONE MANUALLY OPERATED DUAL BLOWOUT PREVENTER WITH THE LOWER RAMS BLIND AND THE UPPER RAMS FOR PIPE AND AN OUTLET BETWEEN THE RAMS
   (2) TWO MANUALLY OPERATED BLOWOUT PREVENTERS WITH A CHOKE SPOOL BETWEEN THEM, THE LOWER UNIT CONTAINING BLIND RAMS AND THE UPPER UNIT CONTAINING PIPE RAMS.

B. THE OPENING BETWEEN PREVENTERS TO BE FLANGED, STUDDED, OR CLAMPED AND AT LEAST TWO INCHES DIAMETER.

C. ALL CONNECTIONS TO AND FROM PREVENTERS TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE BLOWOUT PREVENTERS.

D. MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

E. VALVE TO CONTROL FLOW THROUGH DRILL PIPE TO BE LOCATED ON RIG FLOOR.

F. CHOKE MAY BE EITHER POSITIVE OR ADJUSTABLE

G. Choke spool may be used between rams instead of connection shown.

BEPCO I

TWO CLOSURE MANUAL BLOWOUT PREVENTER

BIG EDDY UNIT #59

Location - 1650' FWL, 990' FNL, Sec. 35, T-21-S, R-28-E, Eddy County, New Mexico
Indian Flats Field Development Estmated TD - 3800'

(1) Surface Casing: To protect ground water sands, 8 5/8" 24# K-55 ST&C surface casing will be set at 500' in a 12 1/4" hole. The hole will be drilled with fresh water native mud using gel and paper as needed to clean hole and control seepage. Casing will be cemented to surface using an estimated 315 sacks of Class "C" containing 2% $CaCl_2$. Manually operated 10"-3000# WP BOP's will be installed (BEPCO I minimum). Preventer stack and choke line will be pressure tested to 1000 psi. Casing will be pressure tested to 1000 psi before drilling out shoe joint.

(2) Production Casing: a 5 1/2", 14#, K-55, ST&C casing string will be run to TD at an estimated depth of 3800' in a 7 7/8" hole. The hole will be drilled with brine water (10 ppg) to minimize washouts in the salt sections. Paper will be used to control seepage and lime will be used to maintain pH (caustic may be required if hardness of water is too high). Casing will be cemented using an estimated 315 sacks of 50-50 Pozmix Class "C" containing 2% gel, 15 lbs salt per sack. Anticipated cement top at 2000 feet. The Pozmix cement is recommended due to its better perforating characteristics and it is more resistant to water channeling.

(3) Anticipated Drilling Problems: Hole deviation problems have been encountered while drilling the salt intervals and it may be necessary to reduce the WOB to control deviation. Due to unavoidable washouts in the salt sections, experience has shown that bottom hole stabilization has been useless in deviation control.

(4) Evaluation: 10' drilling samples will be caught from surface casing to TD. An estimated 20 sidewall cores will be taken in the Delaware Sands after reaching TD. Wireline logs to be run at TD are: BH Sonic w/ GR Caliper and DLL-GR.

(5) Rig Time: This well is estimated to require a total of 10 days rig time from spud to move off.

BIG EDDY UNIT NO. 59

ANTICIPATED FORMATION MARKERS

T/Salt	455'
B/Salt	2300'
T/Delaware Limestone	2660'
T/Delaware Sand	2790'
T/Indian Flats Zone	3550'

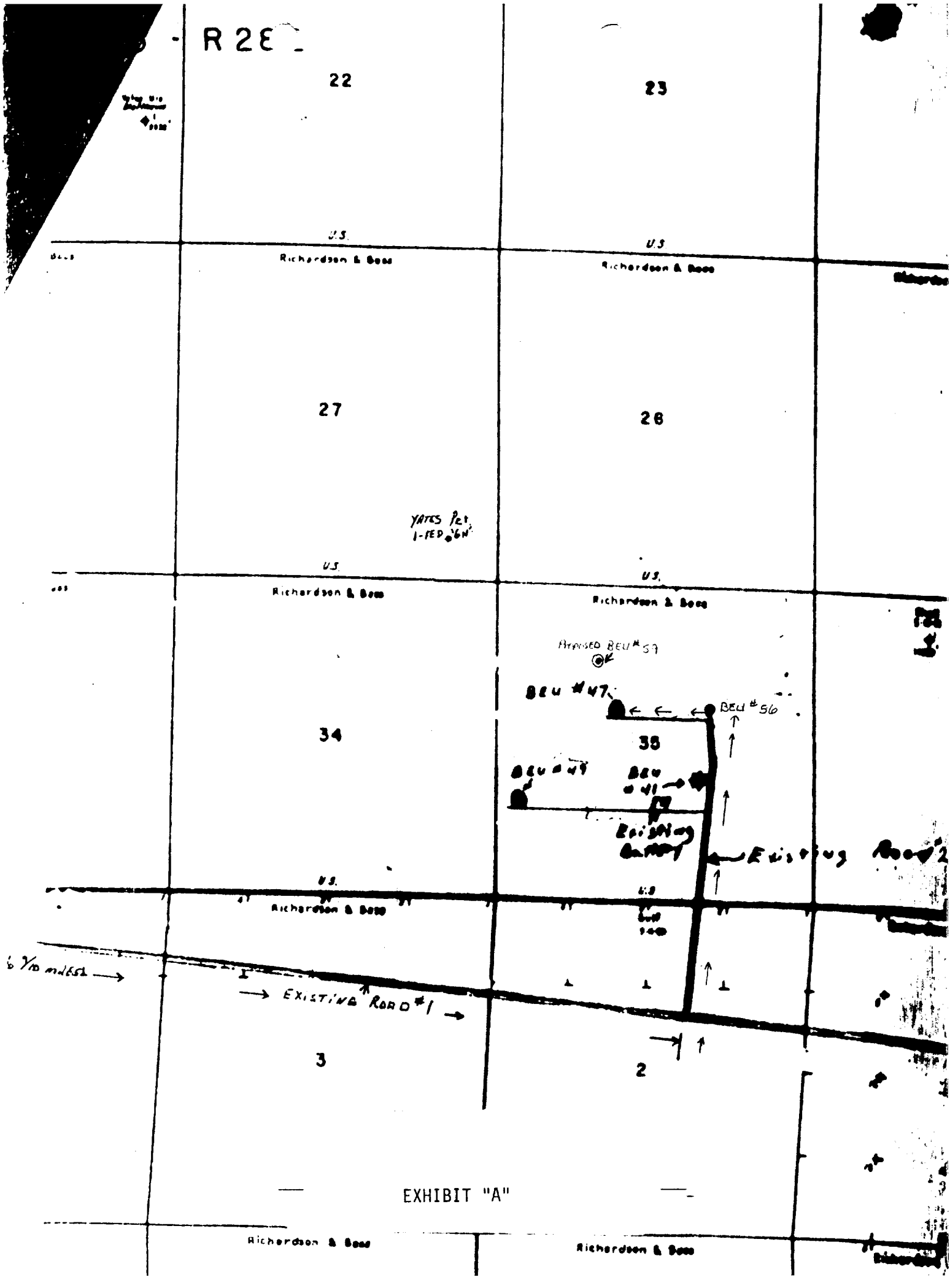
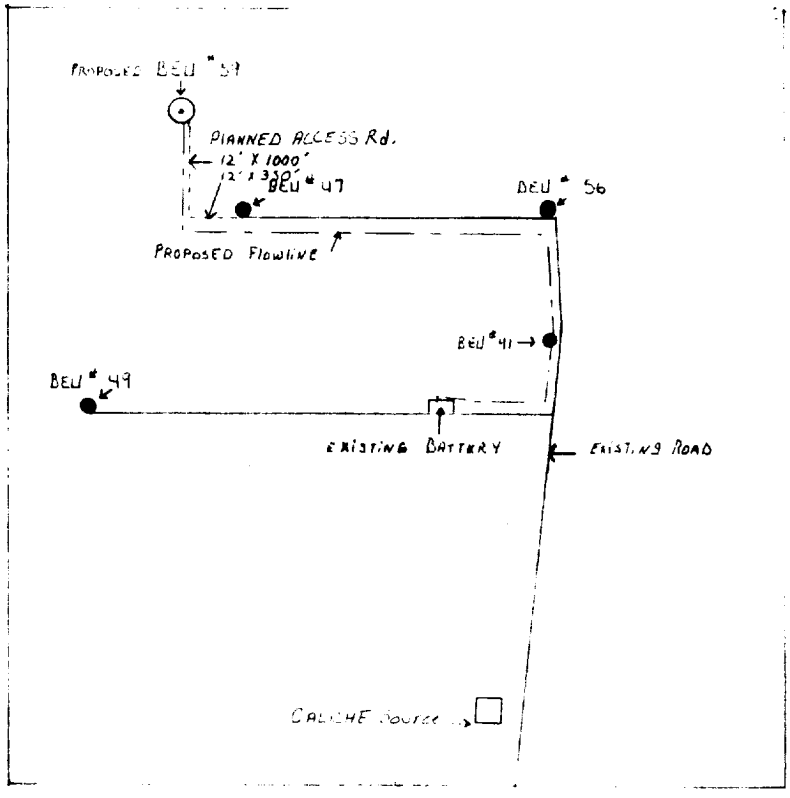

R 2E
22
23
27
26
34
35
3
2
U.S.
Richardson & Bond
YATES PET.
1-FED "6H"
PROPOSED BEU #57
BEU #47
BEU #56
BEU #49
BEU #41
EXISTING ROAD
6 Y/10 miles
EXISTING ROAD #1

EXHIBIT "A"



EXISTING ROAD _____

PLANNED ACCESS RD - - - - - - - - - - - -

PLANNED FLOWLINE _ _ _ _ _ _ _

EXHIBIT "B"