

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN APPLICATION
(Other instructions on
reverse side)

30-015-27204
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.

66-069159 - A

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.

116

10. FIELD AND POOL, WILDCAT

NE. Herradura - Delaware Pool

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Sec 25, T22S, R28E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Bass Enterprises Production Company

RECEIVED

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

1650' FWL & 330' FSL Section 25, T22S, R28E

At proposed prod. zone

Same

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

5 miles NE/Loving, NM

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

640

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.

None

19. PROPOSED DEPTH

6650'

20. ROTARY OR CABLE TOOLS

Rotary

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

3132' GL

22. APPROX. DATE WORK WILL START*

Upon approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

Carlsbad Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
* 15"	11-3/4"	42#	450'	370' sx circ to surface
** 11"	8-5/8"	24#	2700'	975' sx tie back to 250'
7-7/8"	5-1/2"	14# and 15.5#	6650'	695' sx tie back to 2450'

* Surface to be set in the Rustler Anhydrite.

** Intermediate to be set @ ±2700' in the Lamar Lime.

Drilling procedure, BOPE diagram, anticipated tops and surface use plans attached.

CERTIFIED P-154-194-268

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 Keith E. Bucy Keith E. Bucy TITLE Div Drlg and Prod Supt DATE 10-7-92

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

*See Instructions On Reverse Side

ATTACHED
Title 18 U.S.C. Section 1001, makes 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.

BIG EDDY UNIT #116
 BASS ENTERPRISES PRODUCTION COMPANY
 October 8, 1992

<u>DEPTH</u>	<u>CASING</u>	<u>HOLE SIZE</u>	<u>EVALUATION</u>	<u>ELECTRIC LOGS</u>	<u>CIRC FLUID</u>
40'	>16"	20" Conductor			FW Spud Mud
450'	>11-3/4"	15"			
		11"	Two man logging unit 2700' to 6650' TD		Brine Water
2700'	>8-5/8"	7-7/8"		T/DELAWARE DIL-SFL w/GR 2700' to TD CNL-LDT w/GR 2700' to TD BHC-SONIC w/GR Surface to TD	
6650'	>5-1/2"			FMI 500' Total	Fresh Wtr Mud

MJE:sjw

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator BASS ENTERPRISES PRODUCTION COMPANY		Lease BIG EDDY UNIT		Well No. 116
Unit Letter N	Section 25	Township 22 SOUTH	Range 28 EAST NMPM	County EDDY

Actual Footage Location of Well:

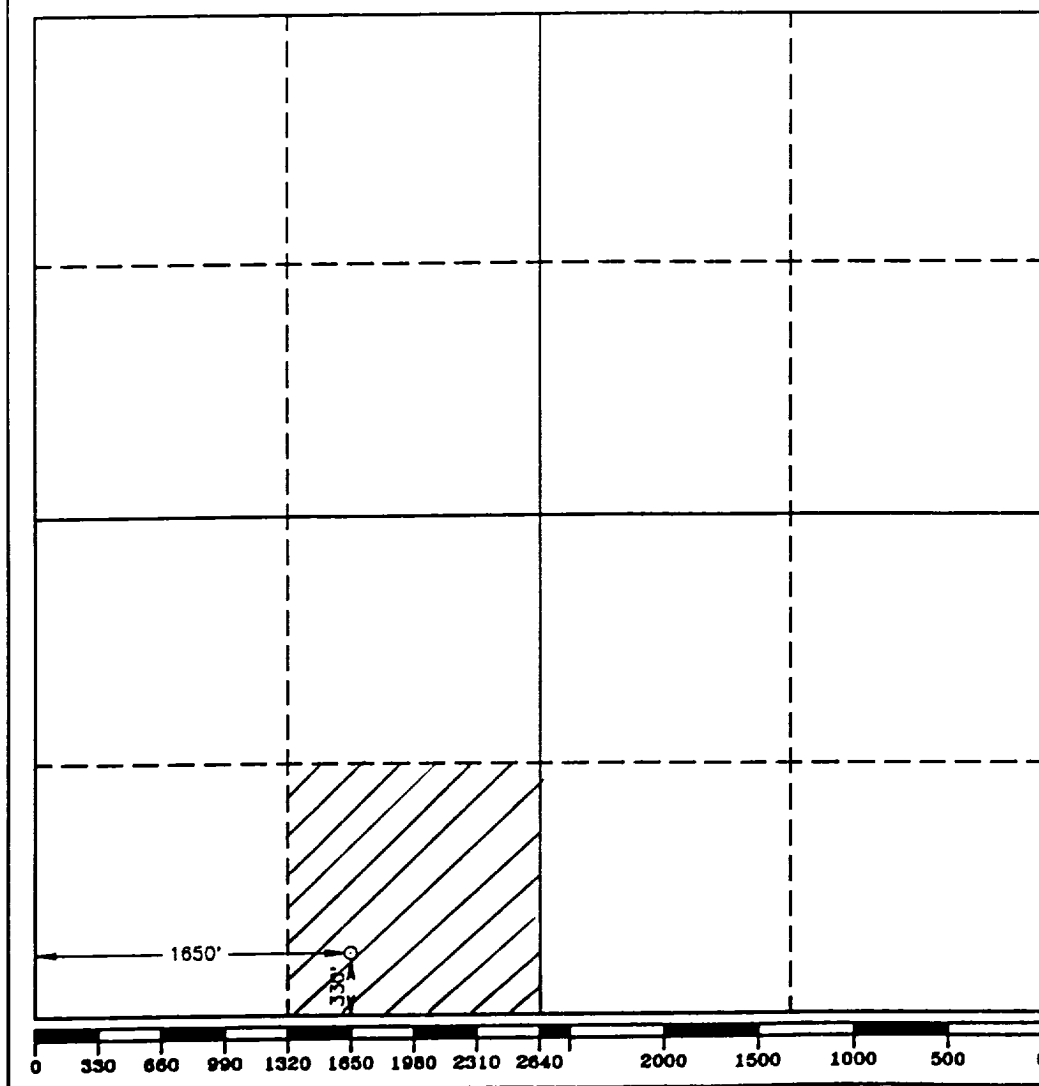
330 feet from the SOUTH line and		1650 feet from the WEST line	
Ground Level Elev. 3132.4'	Producing Formation Delaware	Pool E. Herradura - Delaware	Dedicated Acreage: 40 Acres

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 interest 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

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

Signature
Keith E. Bucy
Printed Name
Keith E. Bucy
Position
Div Drlg and Prod Supt
Company
Bass Enterprises Prod Co
Date
10-15-92

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 knowledge and belief.

Date Surveyed
SEPTEMBER 17, 1992
Signature & Seal of
Professional Surveyor
GARY L. JONES
7977
Certification No. JOHN W. WEST, 878
RONALD J. SIDSON, 3238
GARY L. JONES, 7977
92-11-1563

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: BIG EDDY UNIT #116

LEGAL DESCRIPTION - SURFACE: 1650' FWL & 330' FSL, Section 25, T-22-S, R-28-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From Carlsbad, go east on U.S. 62-180 for approx 2 miles. Go approx 7 miles south down U.S. Refinery Road. Turn NE 1-1/2 mile. Turn NW to location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "A".

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

See Exhibit "B". The new road will be 12' wide and approximately 700' long. The road will be constructed of watered and compacted caliche.

B) Width

Not applicable.

C) Maximum Grade

Not applicable.

D) Turnouts

None.

E) Culverts, Cattle Guards, and Surfacing Equipment

None.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit "A" indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

- A) Existing facilities within one mile owned or controlled by lessee/operator:

None

- B) New Facilities in the Event of Production:

Additional production facilities will be installed as required.

- C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following the construction of production facilities, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in the surrounding topography - See Point 10.

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

- A) Location and Type of Water Supply

Fresh water and brine will be hauled from the city of Carlsbad. Brine water will be hauled from Champion Brine Water Station, 3.5 miles east and 2.5 miles south of Carlsbad.

- B) Water Transportation System

Water hauling to the location will be over the existing and proposed roads.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials

Existing materials will be used for road and location.

B) Land Ownership

Federally owned.

C) Materials Foreign to the Site

No construction materials foreign to this area are anticipated for this drill site.

D) Access Roads

In this area, no additional caliche is anticipated.

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

A) Cuttings

Cuttings will be contained in the reserve pit.

B) Drilling Fluids

Drilling fluids will be contained in the reserve pit.

C) Produced Fluids

Water production will be contained in the reserve pit.

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

D) Sewage

Current laws and regulations pertaining to the disposal of human waste will be complied with.

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well.

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if testing indicates potential productive zones. In any case, the "mouse" hole and the "rat" hole will be covered. The reserve pit will be fenced and the fence maintained until the pit is backfilled. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "C" shows the dimensions of the well pad and reserve pits, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

B) Locations of Pits and Access Road

See Exhibits "A" and "C"

C) Lining of the Pits

The reserve pit will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup

A pit will be fenced at the time of rig release and shall be maintained until the pit is backfilled. Previous to backfill operations, any hydrocarbon material on the pit surface shall be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and soil adjacent to the reserve pit. The restored surface of the pit shall be contoured to prevent impoundment of surface water flow. Water- bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

The reserve pit will be backfilled and restored as described above under Item A. In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

The reserve pit will be restored as described above. With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded accordingly to the Bureau of Land Management's stipulations.

D) Rehabilitations Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

POINT 11: OTHER INFORMATION

A) Terrain

Relatively flat.

B) Soil

Caliche and sand.

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams, or rivers within several miles of the wellsite.

F) Water Wells

None known

G) Residences and Buildings

None

H) Historical Sites

None observed

I) Archeological Resources

An archeological survey will be obtained for this area. Before any construction begins, a full and complete archeological survey will be submitted to the Bureau of Land Management. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site and new access road is on Federally owned land.

K) Well signs will be posted at the drilling site.

L) Open Pits

All pits containing liquid or mud will be fenced and bird-netted.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

(Field personnel responsible for compliance with development plan for surface use).

DRILLING

Keith E. Bucy
Box 2760
Midland, Texas 79702
(915) 683-2277

PRODUCTION

C. K. "Buddy" Jenkins
P.O. Box 889
Monahans, Texas 79756
(915) 943-2479

Keith E. Bucy
Box 2760
Midland, Texas 79702
(915) 683-2277

POINT 13: 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 which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bass Enterprises Production Co. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

10/8/92
Date

Keith E. Bucy
Keith E. Bucy

MJE:sjw

**EIGHT POINT DRILLING PROGRAM
BASS ENTERPRISES PRODUCTION CO.**

NAME OF WELL: BIG EDDY UNIT #116

LEGAL DESCRIPTION - SURFACE: 1650' FWL & 330' FSL, Section 25, T-22-S, R-28-E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(SEE NO. 2 BELOW)

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

Anticipated Formation Tops: KB 3145' (est)
GL 3132'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	395'	+2750	Barren
B/Salt	2558'	+560	Barren
T/Delaware	2805'	+340	Oil/Gas
T/Lower Brushy Canyon	6035'	-2890	Oil/Gas
T/Bone Spring Lime	6375'	-3230	Oil/Gas
TD	6650'	-3505	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16"	0' - 40'	Conductor	Contractor Discretion
11-3/4" 42# ST&C	0' - 450'	Surface	New
8-5/8" 24# K-55 & S-80 S<&C	0' - 2700'	Intermediate	New
5-1/2" 14-15.5# LT&C	0' - 6650'	Production	New

See Exhibit D - (Casing Design)

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAMS)

A BOP equivalent to Diagram 1 will be nipped up on the surface casinghead. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to the lowest rated working pressure of the equipment being tested. In addition to the rated working pressure test, a low pressure (200 psi) test will be required. These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Thirty days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be

POINT 5: MUD PROGRAM

<u>DEPTH</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0' - 450'	FW Spud Mud	8.5-9.2	35-40	NC	NC	NC	NC
450' - 2700'	BW	9.6-10.0	29-30	NC	NC	NC	NC
2700' - 6650'	FW Mud	8.6-9.0	34-40	10-14	12-18	5-10	9-9.5

POINT 6: TECHNICAL STAGES OF OPERATION**A) TESTING**

Drill stem tests are not anticipated.

B) LOGGING

GR-CNL-LDT, GR-DIL-SFL run from TD (6650') to 2700', GR-Sonic run from TD (6650') to surface. FMI over Delaware Sands of interest $\pm 500'$ total.

C) CORING

Rotary Sidewall Cores (25) are anticipated.

D) CEMENT

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT/SX</u>
Surface	370 (100% excess circ to surface)	450	Class "C" with 2% CaCl ₂ and 1/4 ppg Cello-Flake	6.3	14.8	1.32
Intermediate	975 (100% excess w/TOC @ 250')	2700	Class "C" with Salt	6.3	14.8	1.32
Production	695 (25% excess)	4200	Class "C" w/additives	10.6	13.2	1.92

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section.

Est BHP 2000-2400 psi, Est BHT 112 max

Lost circulation is not anticipated in this area.

H₂S in this area is less than 100 ppm.

Deviation can be a problem between 500' and 1000' and will be monitored closely.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

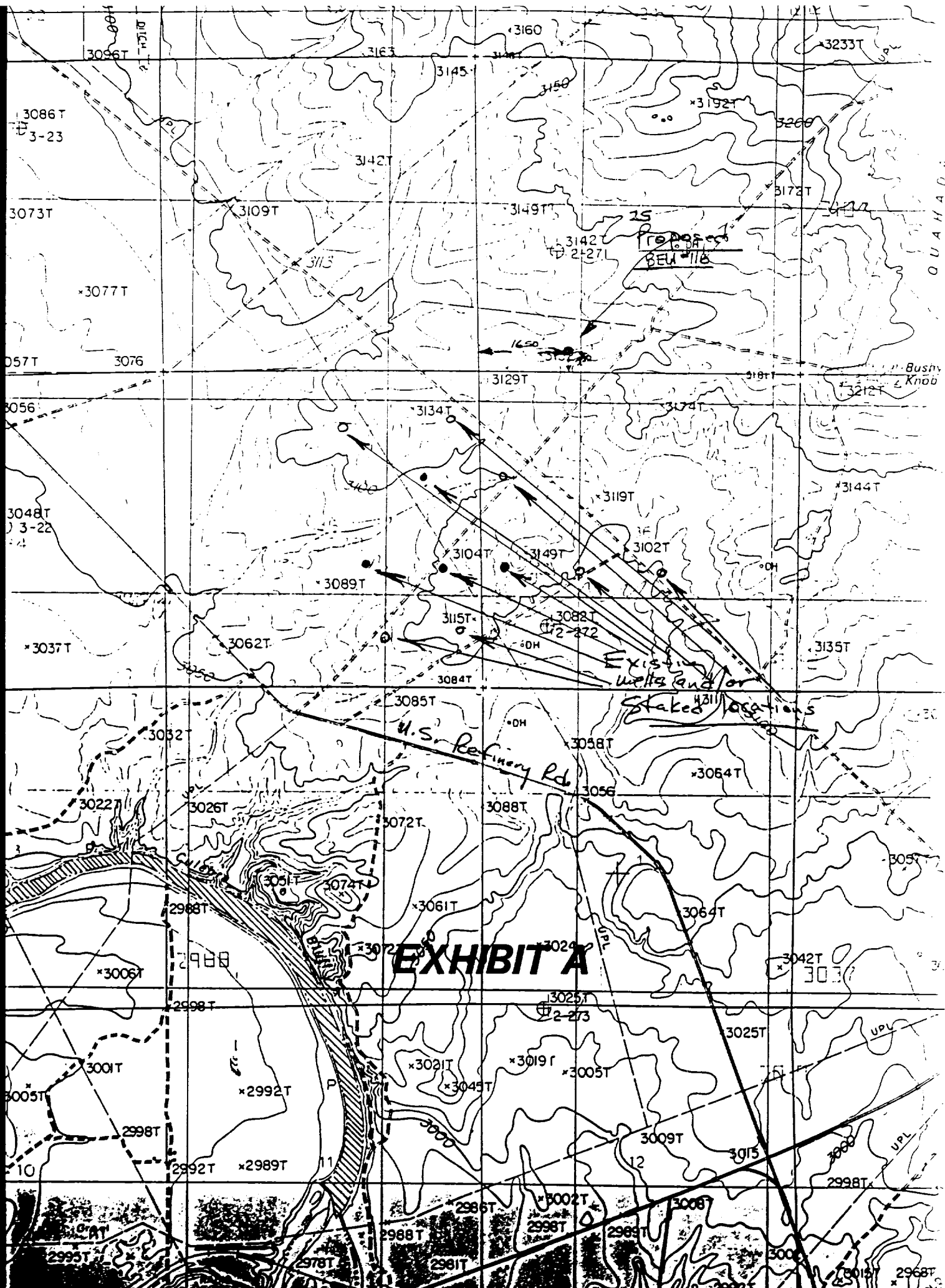
Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

15 days drilling operations

5 days completion operations



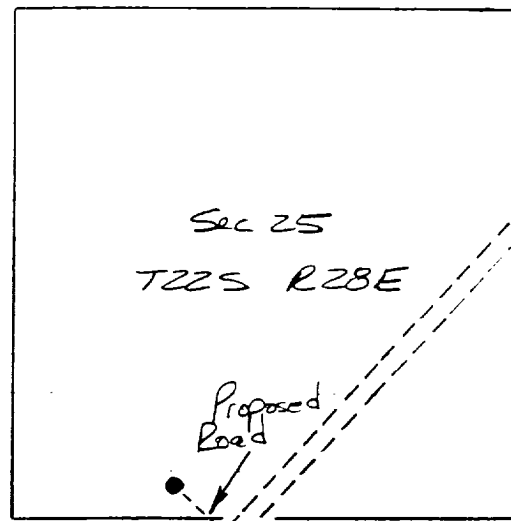


EXHIBIT B

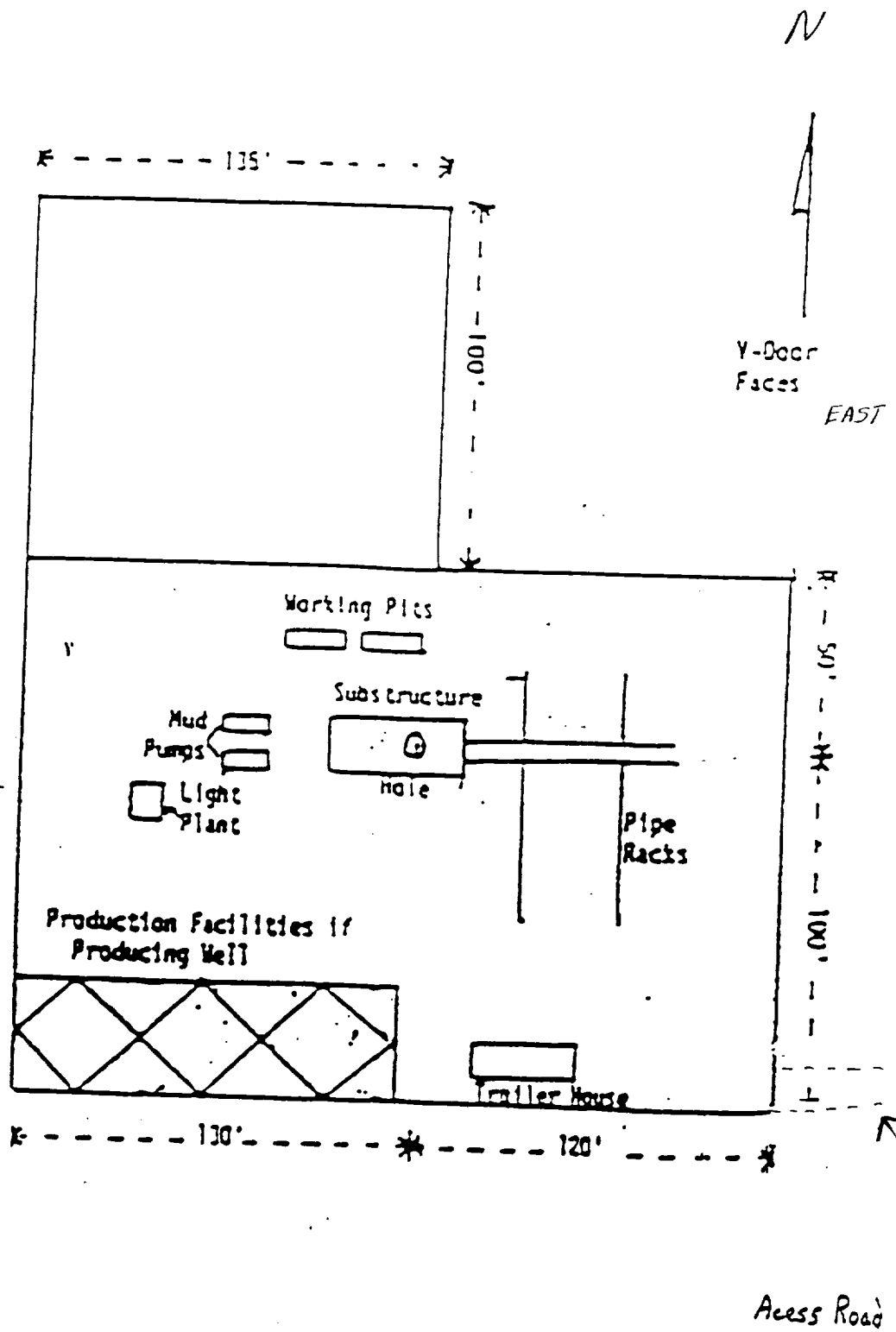


EXHIBIT C

DATE: 10/14/92

**BIG EDDY UNIT" NO. 116
SURFACE CASING**

1st TAPER CASING PARAMETERS		TOTAL DEPTH	450
SIZE (inches)	11.750	TOP DEPTH OF TAPER(ft)	0
WEIGHT (lbs/ft)	42.00	BOTTOM DEPTH OF TAPER(ft)	450
GRADE	H-40	MAX FLUID GRADIENT (ppg)	9.5
LONG OR SHORT THREAD	ST&C	AXIAL LOAD FACTOR "X"	0.000
INT. DIAMETER (inches)	11.084	AXIAL LOAD FACTOR "Y"	1.000
DRIFT DIAMETER (inches)	10.928	ANTICIPATED PSI @ SETTING	221.9
TENSION (lbs)	307,000		
COLLAPSE (psi)	1,070		
BURST (psi)	1,980	NET FOOTAGE =	450

TENSION-1.6 design factor	16.243	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	4.823	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	8.808	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
BURST/((.75*BHP+2.5 #/gal)		

EXHIBIT D-1

**BIG EDDY UNIT NO. 116
INTERMEDIATE CASING**

1st TAPER CASING PARAMETERS

TOTAL DEPTH 2,700

SIZE (inches)	8.625	TOP DEPTH OF TAPER(ft)	0
WEIGHT (lbs/ft)	24.00	BOTTOM DEPTH OF TAPER(ft)	2,500
GRADE	K-55	MAX FLUID GRADIENT (ppg)	10
LONG OR SHORT THREAD	ST&C	AXIAL LOAD FACTOR "X"	0.018
INT. DIAMETER (inches)	8.097	AXIAL LOAD FACTOR "Y"	0.995
DRIFT DIAMETER (inches)	7.972	ANTICIPATED PSI @ SETTING	1297.5
TENSION (lbs)	263,000		
COLLAPSE (psi)	1,370		
BURST (psi)	2,950	NET FOOTAGE =	2500

TENSION-1.6 design factor	4.059	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	1.051	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	2.145	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
BURST/ (.75*BHP+2.5 #/gal)		

2nd TAPER CASING PARAMETERS

SIZE (inches)	8.625	TOP DEPTH OF TAPER(ft)	2500
WEIGHT (lbs/ft)	24.00	BOTTOM DEPTH OF TAPER(ft)	2700
GRADE	S-80	MAX FLUID GRADIENT (ppg)	10
LONG OR SHORT THREAD	ST&C	AXIAL LOAD FACTOR "X"	0.000
INT. DIAMETER (inches)	8.097	AXIAL LOAD FACTOR "Y"	1.000
DRIFT DIAMETER (inches)	7.972	ANTICIPATED PSI @ SETTING	1401.3
TENSION (lbs)	326,000		
COLLAPSE (psi)	1,780		
BURST (psi)	2,950	NET FOOTAGE =	200

TENSION-1.6 design factor	67.917	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	1.270	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	2.105	DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
BURST/ (.75*BHP+2.5 #/gal)		

EXHIBIT D-2

DATE: 10/15/92

BIG EDDY UNIT #116

1st TAPER CASING PARAMETERS

TOTAL DEPTH 6,650

SIZE (inches)	5.500	TOP DEPTH OF TAPER(ft)	0
WEIGHT (lbs/ft)	14.00	BOTTOM DEPTH OF TAPER(ft)	5,800
GRADE	K-55	MAX FLUID GRADIENT (ppg)	10
LONG OR SHORT THREAD	ST&C	AXIAL LOAD FACTOR "X"	0.077
INT. DIAMETER (inches)	5.012	AXIAL LOAD FACTOR "Y"	0.977
DRIFT DIAMETER (inches)	4.887	ANTICIPATED PSI @ SETTING	3010.2
TENSION (lbs)	172,000		
COLLAPSE (psi)	3,120		
BURST (psi)	4,270	NET FOOTAGE =	5800

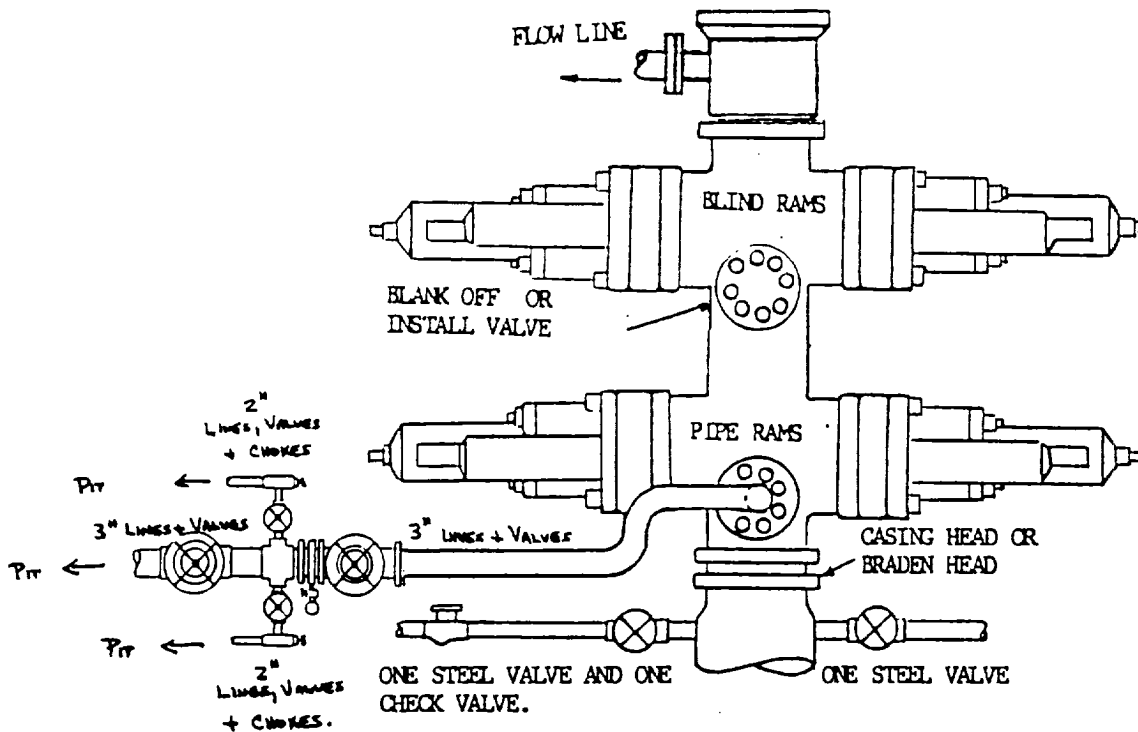
TENSION-1.6 design factor	1.823	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	1.013	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	1.278	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
BURST/((.75*BHP+2.5 #/gal)		

2nd TAPER CASING PARAMETERS

SIZE (inches)	5.500	TOP DEPTH OF TAPER(ft)	5800
WEIGHT (lbs/ft)	15.50	BOTTOM DEPTH OF TAPER(ft)	6650
GRADE	K-55	MAX FLUID GRADIENT (ppg)	10
LONG OR SHORT THREAD	LT&C	AXIAL LOAD FACTOR "X"	0.000
INT. DIAMETER (inches)	4.950	AXIAL LOAD FACTOR "Y"	1.000
DRIFT DIAMETER (inches)	4.825	ANTICIPATED PSI @ SETTING	3451.4
TENSION (lbs)	239,000		
COLLAPSE (psi)	4,040		
BURST (psi)	4,810	NET FOOTAGE =	850

TENSION-1.6 design factor	18.140	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	1.171	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	1.394	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
BURST/((.75*BHP+2.5 #/gal)		

3000 PSI BOP STACK



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

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