

GOLDEN 8 FEDERAL #4
BASS ENTERPRISES PRODUCTION COMPANY
 October 29, 1992

<u>DEPTH</u>	<u>CASING</u>	<u>HOLE SIZE</u>	<u>EVALUATION</u>	<u>ELECTRIC LOGS</u>	<u>CIRC FLUID</u>
90'	>20"	24"	Conductor		FW Spud Mud
750'	>11-3/4"	15"			
3050'	>8-5/8"	11"	750' to 3050' One man logging unit 3050' to 4800' TD Two man logging unit		Brine Water
		7-7/8"		T/DELAWARE DIL-MSFL w/GR <u>3,050' to 4,800'</u> CNL-LDT w/GR <u>3,050' to 4,800'</u> BHC-SONIC w/GR <u>Surface to 4,800'</u> FMI <u>3,050' to 4,800'</u>	Fresh Wtr Mud
4800'	>5-1/2"				

MJE:sjw

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

NAME OF WELL: GOLDEN 8 FEDERAL #4

LEGAL DESCRIPTION - SURFACE: 990' FSL & 990' FWL, Section 8, T-21-S, R-29-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 3377' (est)
GL 3363'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Salado	864'	+2513	Barren
T/Reef	2289'	+1088	Barren
T/Delaware	2989'	+ 388	Oil/Gas
T/Cherry Canyon	3839'	-462	Oil/Gas
T/49'er Sand	4209'	-832	Oil/Gas
TD	4800'	-1423	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 90'	Conductor	Contractor Discretion
11-3/4" 42# H-40 ST&C	0' - 750'	Surface	New
8-5/8" 24# K-55 & S-80 ST&C	0' - 3050'	Intermediate	New
5-1/2" 14# J-55 LT&C	0' - 4800'	Production	New

*See Exhibits D1-D3 (Casing Design Program)

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 performed on each trip.

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' - 750'	FW Spud Mud	8.5 - 9.2	35-40	NC	NC	NC	NC
750' - 3050'	BW	9.6 - 10.0	29-30	NC	NC	NC	NC
3050' - 4800'	FW Mud	8.6 - 8.8	34-40	10-14	12-18	<5	9-9.5

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

Drill stem tests will be performed on significant shows in Delaware.

B) LOGGING

GR-CNL-LDT, GR-DIL-MSFL run from TD (4800') to 3050', GR-BHCSONIC run from TD (4800') to surface. FMI over Delaware Sands of interest from 4800' to 3050'.

C) CORING

No cores 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	470 (100% excess circ to surface)	750	Class "C" with 2% CaCl ₂ and 1/4 ppg Cello-Flake	6.3	14.8	1.32
Intermediate	950 (100% excess w/TOC @ 250')	2800	Class "C" with Salt	6.3	14.8	1.32
Production	232 (25% excess)	2250	Class "C" w/additives for Wtr Loss Control	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.

BHP 2146 psi max or ECD of 8.6 ppg, BHT 100°

Lost circulation can occur from surface to 2500'.

H₂S has been measured @ 12,000 ppm max in the Delaware - H₂S safety equipment will be installed at 3050'.

Deviation can be a problem from 1000' to 3000' 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

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: GOLDEN 8 FEDERAL #4

LEGAL DESCRIPTION - SURFACE: 990' FSL & 990' FWL, Section 8, T-21-S, R-29-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From Carlsbad, go NE on U.S. 62, approx 14 miles to it's intersection with Hwy 31 North. Continue 1 mile east on U.S. 62 and turn on caliche road due south for 1/4 mile, turn west for 1/4 mile then south again for 2-1/4 miles to Big Eddy Unit #85 location, then turn west 1/4 mile to the 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 1150' 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:

Production facilities and wells as shown on Exhibit "A" at Big Eddy Unit #73, Big Eddy Unit #85, Big Eddy Unit #113 (Golden "8" Federal #1), Golden "8" Federal #2 and Golden "B" Federal #1.

- 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. Alternate source of fresh water may come from water well located approximately 1.75 miles northeast of location.

- 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

Exhibit "A" shows location of caliche source.

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

No additional access roads are required.

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

There is a water well approximately 2 miles northeast of location.

G) Residences and Buildings

None

H) Historical Sites

No 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
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Midland, Texas 79702
(915) 683-2277

PRODUCTION

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(505) 887-7329

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Midland, Texas 79702
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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.

10/29/92
Date

Keith E. Bucy
Keith E. Bucy

MJE:sjw

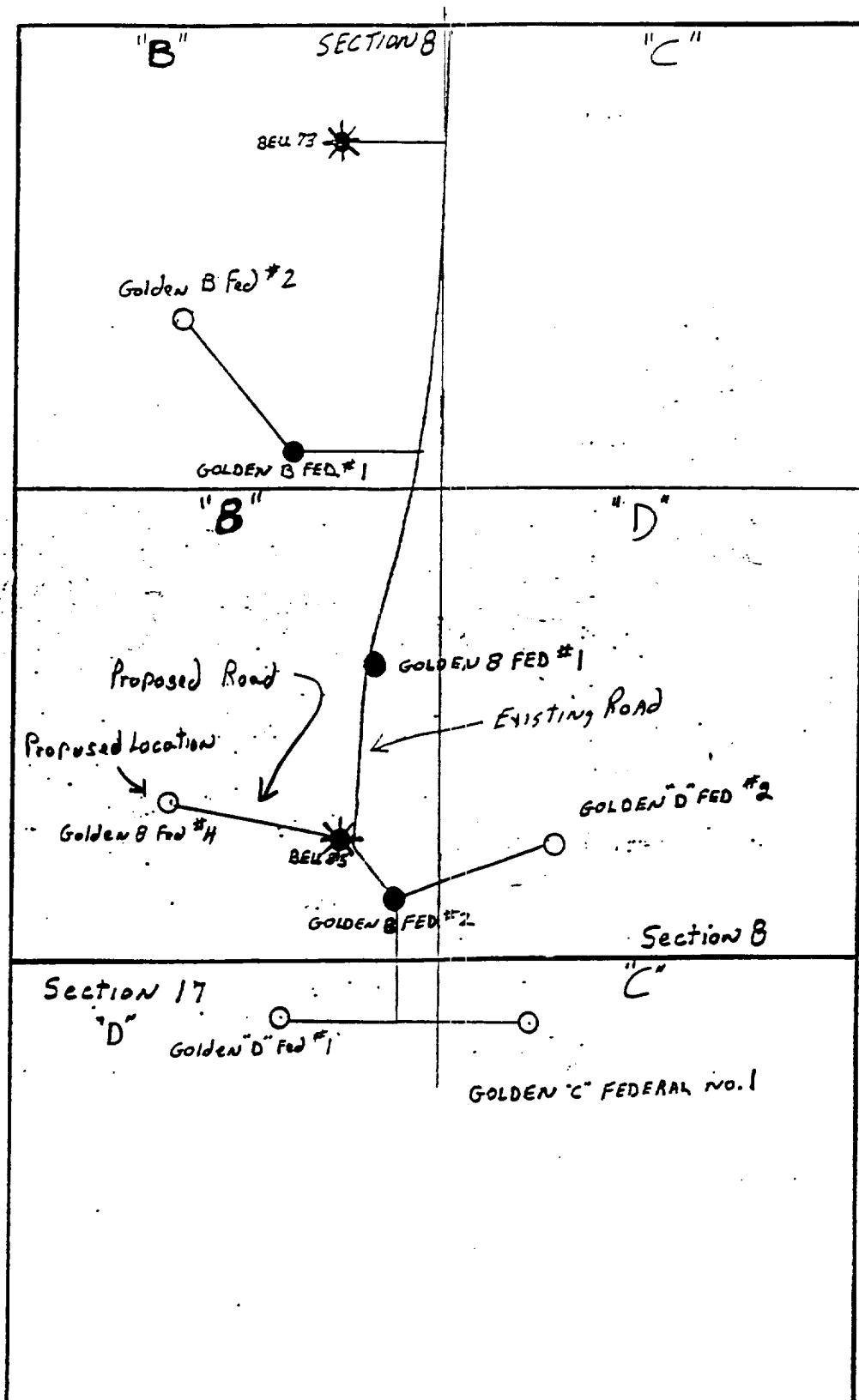
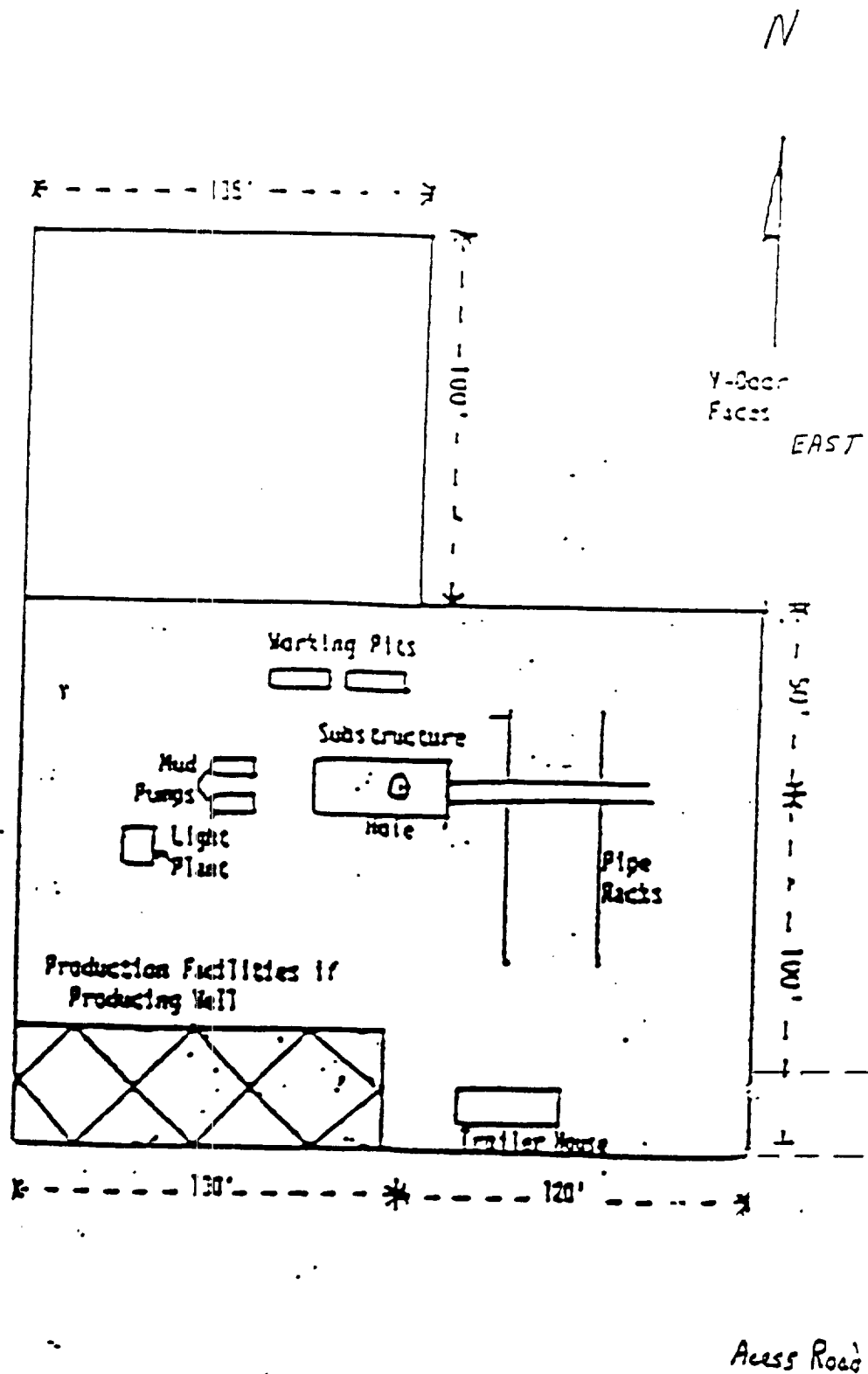


EXHIBIT "R"



DATE: 10/13/92

GOLDEN 8 FEDERAL NO. 4
SURFACE CASING

1st TAPER CASING PARAMETERS		TOTAL DEPTH	750
SIZE (inches)	11.750	TOP DEPTH OF TAPER(ft)	0
WEIGHT (lbs/ft)	42.00	BOTTOM DEPTH OF TAPER(ft)	750
GRADE	H-40	MAX FLUID GRADIENT (ppg)	10
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	389.3
TENSION (lbs)	307,000		
COLLAPSE (psi)	1,070		
BURST (psi)	1,980	NET FOOTAGE =	750

TENSION-1.6 design factor	9.746	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	2.749	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	5.087	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
BURST/(.75*BHP+2.5 #/gal)		

EXHIBIT D-1

GOLDEN 8 FEDERAL NO. 4
INTERMEDIATE CASING

1st TAPER CASING PARAMETERS

TOTAL DEPTH 3,050

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"	0.050
INT. DIAMETER (inches)	8.097	AXIAL LOAD FACTOR "Y"	0.986
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 3.593
TENSION/(DEPTH*WEIGHT)
COLLAPSE-1.0 design factor 1.041
(COLLAPSE * Y)/(PSI/FT * DEPTH)
BURST-1.0 design factor 1.952
BURST/(.75*BHP+2.5 #/gal)

DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
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2nd TAPER CASING PARAMETERS

SIZE (inches)	8.625	TOP DEPTH OF TAPER(ft)	2500
WEIGHT (lbs/ft)	24.00	BOTTOM DEPTH OF TAPER(ft)	3050
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	1583.0
TENSION (lbs)	326,000		
COLLAPSE (psi)	1,780		
BURST (psi)	2,950	NET FOOTAGE =	550

TENSION-1.6 design factor 24.697
TENSION/(DEPTH*WEIGHT)
COLLAPSE-1.0 design factor 1.124
(COLLAPSE * Y)/(PSI/FT * DEPTH)
BURST-1.0 design factor 1.864
BURST/(.75*BHP+2.5 #/gal)

DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT
DESIGN EXCEEDS SAFTEY FACTOR REQUIREMENT

EXHIBIT D-2

DATE: 10/23/92

GOLDEN 8 FEDERAL NO. 4

1st TAPER CASING PARAMETERS

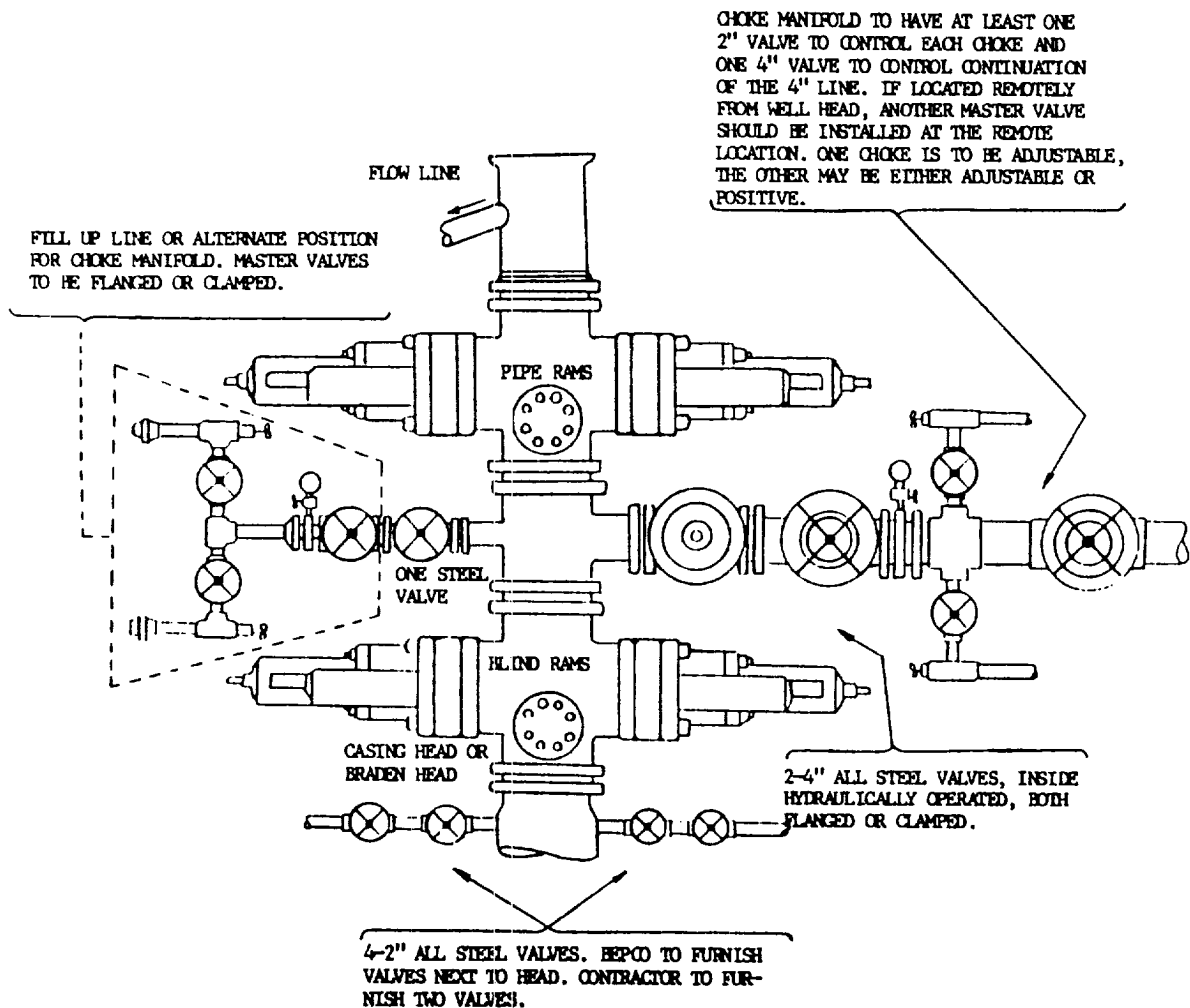
TOTAL DEPTH 4,800

SIZE (inches)	5.500	TOP DEPTH OF TAPER(ft)	0
WEIGHT (lbs/ft)	14.00	BOTTOM DEPTH OF TAPER(ft)	4,800
GRADE	J-55	MAX FLUID GRADIENT (ppg)	9.2
LONG OR SHORT THREAD	ST&C	AXIAL LOAD FACTOR "X"	0.000
INT. DIAMETER (inches)	5.012	AXIAL LOAD FACTOR "Y"	1.000
DRIFT DIAMETER (inches)	4.887	ANTICIPATED PSI @ SETTING	2291.9
TENSION (lbs)	172,000		
COLLAPSE (psi)	3,120		
BURST (psi)	4,270	NET FOOTAGE =	4800

TENSION-1.6 design factor	2.560	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
TENSION/(DEPTH*WEIGHT)		
COLLAPSE-1.0 design factor	1.361	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
(COLLAPSE * Y)/(PSI/FT * DEPTH)		
BURST-1.0 design factor	1.823	DESIGN EXCEEDS SAFETY FACTOR REQUIREMENT
BURST/(.75*BHP+2.5 #/gal)		

DIAGRAM 1

3000 PSI BOP STACK



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. Conditions may be met by either (1) an annular blowout preventer on top and blind rams below with a choke spool between them, (2) Pipe rams on top and blind rams below with a choke spool between them, (3) A dual blowout preventer with pipe rams on top and blind rams below with a side outlet between the rams at least four inches diameter.
- B. Openings between rams to be flanged, studded or clamped.
- 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 BOPs.
- 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.

BEPCO III

TWO CLOSURE HYDRAULIC BLOWOUT PREVENTERS

H₂S DRILLING OPERATIONS PLAN

A. H₂S Training

All personnel involved in this drilling operation, whether assigned, contracted or employed on a regular basis, will receive training from a qualified instructor prior to commencing drilling operations on this well.

B. Well Site Diagram

- 1) Drilling Rig orientation: See Exhibit "C"
- 2) Prevailing wind direction: SW
- 3) Terrain of surrounding area: See Point 11
- 4) Location of briefing areas: See Exhibit "C"
- 5) Location of access road: See Exhibit "B" & "C"
- 6) Location of flare line and pits: See Exhibit "C"
- 7) Location of caution or danger signs: See Exhibit "C"

C. Description of H₂S Safety Equipment/Systems

- 1) Well control equipment: See BOP Diagram
 - a. Flare line and means of ignition: NA
 - b. Remote controlled choke: NA
 - c. Flare gun/flares: NA
 - d. Mud-gas separator and rotating head: NA
- 2) Protective Equipment for Essential Personnel
 - a. Location, type, storage and maintenance of all working and escape breathing apparatus: Scott breathing packs located at briefing areas shown on Exhibit "C" and on the floor. Stored in water-proof container and maintained on a monthly basis by third party safety company.
 - b. Means of communication when using protective breathing apparatus: Hand signals or microphones in the breathing packs are used for communication.
- 3) H₂S Detection and Monitoring Equipment
 - a. H₂S sensors and associated audible/visual alarm(s): Otis sensors are used with a visual light @ 10 ppm and siren @ 20 ppm.
 - b. Portable H₂S and SO₂ monitor(s): Bendix Pumps

4) Visual Warning Systems

- a. Wind direction indicators: See Exhibit "C"
- b. Caution/danger sign(s) and flag(s): See Exhibit "C"

5) Mud Program

- a. Mud systems and additives: See Point 5
- b. Mud degassing system: NA

6) Metallurgy

- a. Metallurgical properties of all tubular goods and well control equipment which could be exposed to H₂S: All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

7) Means of Communication from Wellsite: Phones in trailer and on rig floor.**D. Plans for Well Testing**

Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.

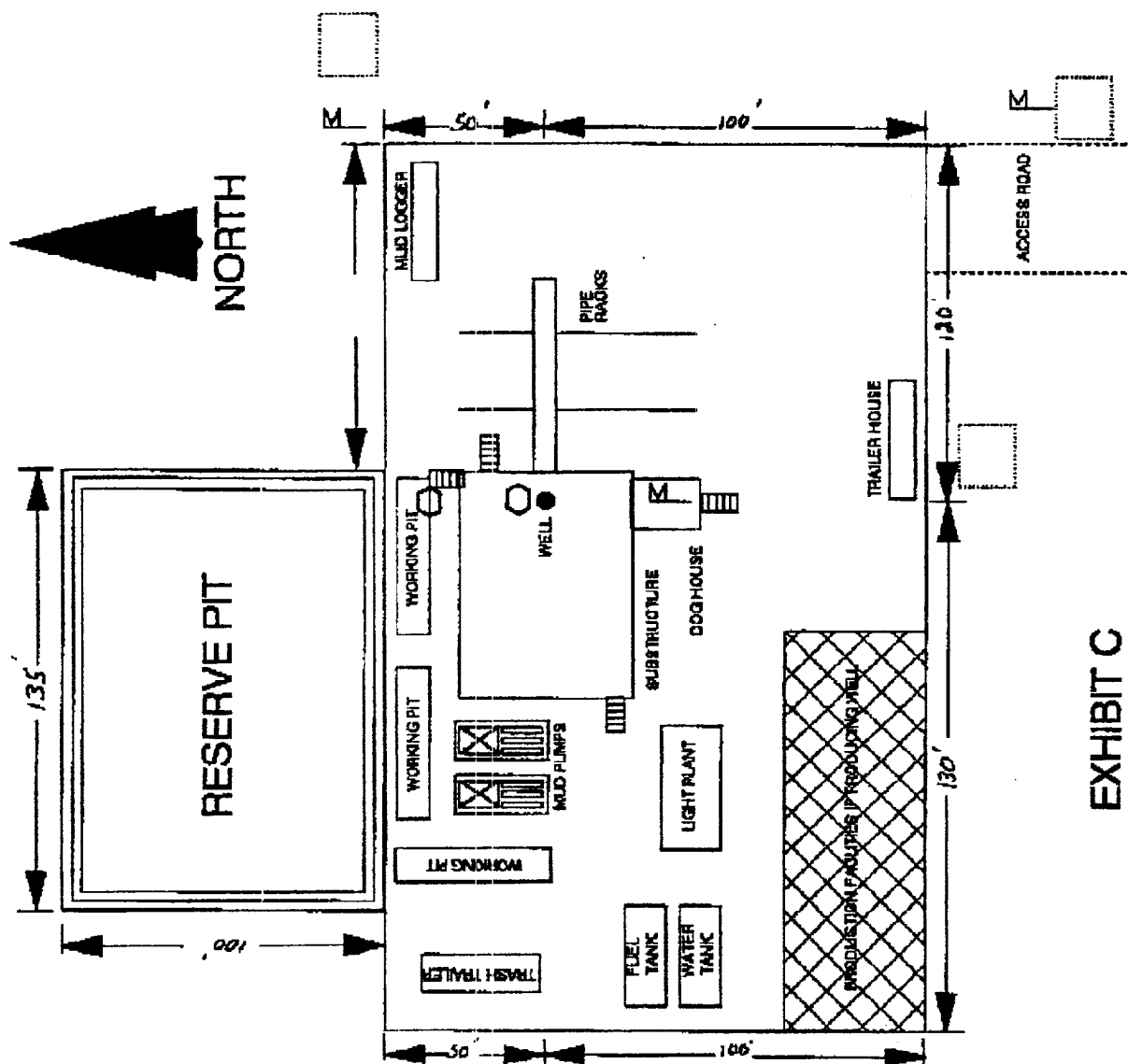


EXHIBIT C

- WIND DIRECTION INDICATORS
- H₂S MONITORS WITH ALARMS AT THE BELL NIPPLE AND THE SHALE SHAKER
- SAFE BRIEFING AREA WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT (MIN. 150 FEET FROM WELLHEAD)