

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK

DRILL ☒

DEEPEN ☐

MAR 7 1994

2. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

3. NAME OF OPERATOR

Bass Enterprises Production Company

4. ADDRESS AND TELEPHONE NO.

P. O. Box 2760 Midland, Texas 79702-2760 (915) 683-2277

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

660' FNL & 1980' FWL, Section 22, T-24-S, R-31-E

At proposed prod. zone

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

28 miles southeast of Carlsbad, New Mexico

7. DISTANCE FROM PROPOSED*

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

660'

8. NO. OF ACRES IN LEASE

1845.12

9. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

None

10. PROPOSED DEPTH

15,400'

11. NO. OF ACRES ASSIGNED

TO THIS WELL

320

12. ROTARY OR CABLE TOOLS

Rotary

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

3529.6 GR

14. APPROX. DATE WORK WILL START*

Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
* 26"	J-55 20"	94#	850'	1650 sx circ to surface
** 17-1/2"	N-80 13-3/8"	68#	4,450'	3900 sx circ to surface
*** 12-1/4"	P-110 9-5/8"	53.50#	12,000'	2060 sx Top of cement @ 5500', DV tool @ 8300' (TIE BACK)
**** 8-1/2"	P-110 7"	32#	14,800'	475 sx Top Liner @ 11,650' (Drilling Liner)
***** 6"	N-80 5"	18#	15,400'	120 sx Top Liner @ 14,450' (Production Liner)

* Surface casing to be set +100' above the salt in the Rustler Anhydrite.

** Intermediate casing to be set in the top of the Lamar Lime.

*** 2nd intermediate casing to be set in Wolfcamp +12,000'.

**** 7" liner above the Middle Morrow. Tie back into 9-5/8" casing.

***** 5" liner set at TD. Tieback into 7" liner.

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

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 William R. Dammeh TITLE Division Drlg. Supt. DATE 2/3/94

(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Timothy P. Corbett

TITLE

AREA MANAGER

DATE

MAR 3 1994

*See Instructions On Reverse Side

EIGHT POINT DRILLING PROGRAM BASS ENTERPRISES PRODUCTION CO.

NAME OF WELL: POKER LAKE UNIT #97

LEGAL DESCRIPTION - SURFACE: 660' FNL & 1980' FWL, Section 22, T-24-S, R-31-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 3555' (est.)
GL 3529.6'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Salt	949'	+ 2,606'	Barren
B/Salt	4,219'	- 664'	Barren
T/Lamar	4,439'	- 884'	Barren
T/Ramsey	4,475'	- 920'	Barren
T/Bone Spring	8,330'	- 4,775'	Oil
T/Wolfcamp	11,645'	- 8,090'	Gas
T/Strawn	13,615'	- 10,060'	Gas
T/Atoka	13,715'	- 10,160'	Gas
T/Morrow	14,429'	- 10,874'	Gas
T/MeMorrow	14,872'	- 11,317'	Gas
T/LrMorrow	15,315'	- 11,760'	Gas
TD	15,400'	- 11,845'	

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
30"	0'- 40'	Conductor	Contractor Discretion
20" 94" J-55 BT&C	0'- 850'	Surface	New
13-3/8" 68# N-80 ST&C & BT&C	0'- 4,450'	1st Intermediate	New
9-5/8" 53.50# P-110 LT&C	0'-12,000'	2nd Intermediate	New
7" 32# P-110 FJL	11,650'-14,800'	Liner	New
5" 18# N-80 FJL	14,450'-15,400'	Liner	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAMS)

A BOP equivalent to Diagram 1 will be nipped up on the surface casing head. 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) Two weeks 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' - 850'	FW Spud Mud	8.7 - 9.2		NC	NC	NC	NC
850' - 4,450'	BW	10.0 - 10.2	26-28	NC	NC	NC	9.5-10.0
4,450' - 12,000'	FW	8.4 - 8.7	26-28	NC	NC	NC	9.5-10.0
12,000' - 13,300'	BW	10.0 - 10.6	26-28	NC	NC	10 cc	9.5-10.0
13,300' - 14,800'	XCD Polymer	10.5 - 12.5	36-40	10-15	12-18	<5 cc	9.0-10.0
14,800' - 15,400'	XC Polymer Weighted	10.0 - 12.5	32-34	2-5	2-5	<5 cc	9.0-10.0

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

None Anticipated

B) LOGGING

GR-CNL-LDT and GR-DLL-MSFL from $\pm 8400'$ to 4450' (possible).
 GR-CNL-LDT and GR-DLL-MSFL 12,000' to 4,450' and GR-CNL 4,450' to surface.
 GR-CNL-LDT and GR-DLL-MSFL from TD to 12,000'.

C) CONVENTIONAL CORING

None 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>FT³/SX</u>
SURFACE						
Lead	1,200 (100% excess circ to surface)	650'	Premium Plus + 4% gel + 2% CaCl ₂ + 1/4#/sx Flocele	8.90	13.60	1.70
Tail	450 (100% excess circ to surface)	200'	Premium Plus + 2% CaCl ₂ + 1/4#/sx Flocele	6.30	14.80	1.32
1st INTERMEDIATE						
Lead	3,400 (150% excess circ to surface)	4100'	Halliburton Premium Plus 12 lbs Salt/sx + 1/4#/sx Flocele	11.36	12.70	2.10
Tail	500 (150% excess circ to surface)	350'	Premium Plus + 1/4#/sx Flocele	6.30	14.80	1.32
2nd INTERMEDIATE						
1st Stage						
Lead	910 (100% excess tie back to DV tool 8,300')	2700'	Halliburton Light Premium + .3% CFR-3 + 1/4#/sx Flocele	9.90	12.70	1.84
Tail	550 (100% excess)	1000'	Premium Cement + .5% Halad-322	5.20	15.60	1.18
2nd Stage						
	1,150 (100% excess)	2800'	Premium 50/50 Silica -Pozmix + .5% Halad-322	7.80	13.00	1.53

DRILLING LINER

11,650-14,800'	475 (50% excess tie back to 2nd int csg)	3150'	Premium Cement + 4 lbs Microbond M + .8% Halad-322 + .6% Gas stop + .4% HR-5	5.75	15.40	1.27
----------------	--	-------	---	------	-------	------

Page 3

PRODUCTION LINER

14,450-15,400'	120 (100% excess tie back to drilling liner)	1000'	Premium Cement + 4 lbs Microbond M + .8% Halad-322 + .6% Gas stop + .4% HR-5	5.75	15.40	1.27
----------------	--	-------	--	------	-------	------

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Abnormal pressures are anticipated throughout Morrow section. A BHP of 9641 psi (max) or MWE of 12.0 ppg is expected; thus, the maximum SITP is estimated at 8200 psi. H₂S gas can be expected in the Bone Springs (8,600' to 12,000'). There is a possibility of pressure in the Strawn or Atoka zones that will require drilling fluid in excess of 12.5 lbs/gal to control. The use of rotating heads will enable these formations to be drilled under balanced.

Estimated BHT is 214° F.

POINT 8: OTHER PERTINENT INFORMATION**A) Auxiliary Equipment**

Upper and lower kelly cocks. Full opening stab in valve on the rig floor. Rotating heads, gas busters, flare lines, degassers, PVT/FLO sho will be used on this well. Choke manifold and lines to pit will be anchored.

B) Anticipated Starting Date

Upon Approval

80 days drilling operations

15 days completion operations

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: POKER LAKE UNIT #97

LEGAL DESCRIPTION - SURFACE: 660' FNL & 1980' FWL, Section 22, T-24-S, R-31-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From Carlsbad, New Mexico, go 8 miles south on Highway 285 to Highway 31. Turn left and go 7 miles to Highway 128, turn right on Highway 128. Go 16 miles, turn right on Buck Jackson Road. Go 3.2 miles, turn right, and go 1950' on lease road to location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "A".

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

See Exhibit "A". The new road will be 12' wide and approximately 1950' long. The road will be constructed of watered and compacted caliche.

B) Width

12' wide.

C) Maximum Grade

Not applicable.

D) Turnout Ditches

Spaced per BLM requirements.

E) Culverts, Cattle Guards, and Surfacing Equipment

None.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit "B" 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:

Will be installed at Poker Lake Unit #97.

- 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 with the surrounding topography - See Point 10.

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

- A) Location and Type of Water Supply

Fresh water will be hauled from Johnson Water Station located 27 miles east of Carlsbad, New Mexico on Highway 128. Brine water may be hauled from any of the following 1) Champion Brine Water Station, located 3.5 miles east and 2.5 miles south of Carlsbad, New Mexico, 2) Fortson Oil Company Poker Lake Unit Tank battery and 3) Bass Enterprises Continental Federal #1 Tank battery.

- 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 anticipated for this drill site.

D) Access Roads

See Exhibit "A".

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 fluids 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 dictates.

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 immediately after spudding 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 according 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 with some small sand dunes.

B) Soil

Caliche and sand.

C) Vegetation

Spare, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There is a windmill and small pond approximately 1 mile northeast of location; no large ponds, lakes, streams, or rivers exist within several miles of the wellsite.

F) Water Wells

A windmill is located approximately 1 mile northeast of the location. No drill water source wells will be drilled.

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

W. R. Dannels
Box 2760
Midland, Texas 79702
(915) 683-2277

PRODUCTION

Mike Waygood
1012 West Pierce, Suite F
Carlsbad, New Mexico 88220
(505) 887-7329

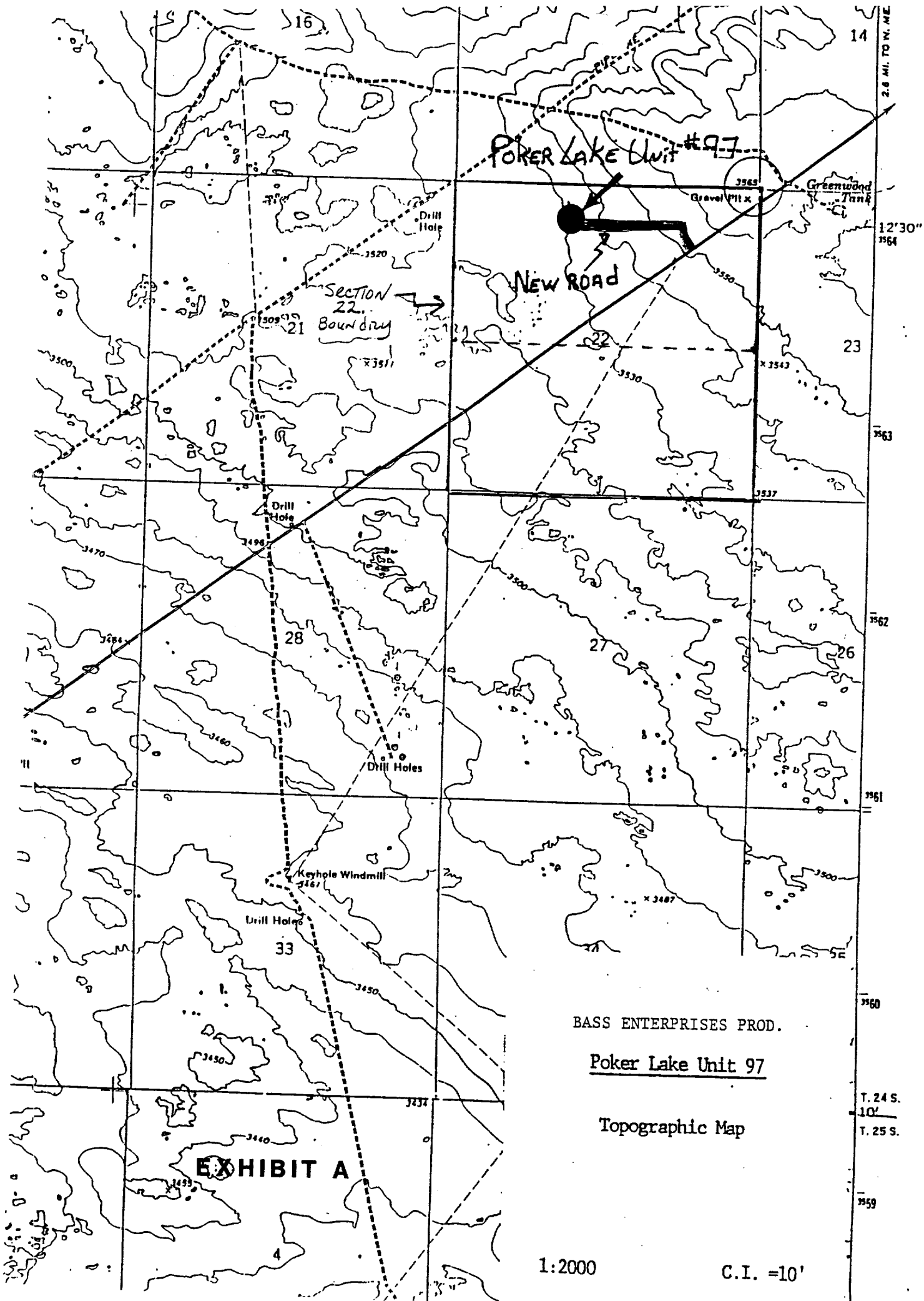
Keith E. Bucy
Box 2760
Midland, Texas 79702
(915) 683-2277

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.

2/3/94
Date

William R. Dannels
William R. Dannels



BASS ENTERPRISES PROD.

Poker Lake Unit 97

Topographic Map

1:2000

C.I. = 10'

<p>3</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>4</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>5</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>6</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>7</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>8</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>9</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>10</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>11</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>12</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>13</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>14</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>15</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>16</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>17</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>18</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>19</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>20</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>21</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>22</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>23</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>24</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>25</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>26</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>27</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>28</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>29</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>30</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>31</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>32</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>33</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>34</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>35</p> <p>San Jose Encl. 12-1-95 8993 9028</p>	<p>36</p> <p>San Jose Encl. 12-1-95 8993 9028</p>
--	--	--	--	--	--	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Scale = 400'

EXHIBIT B

Yellow

Lease Boundary

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

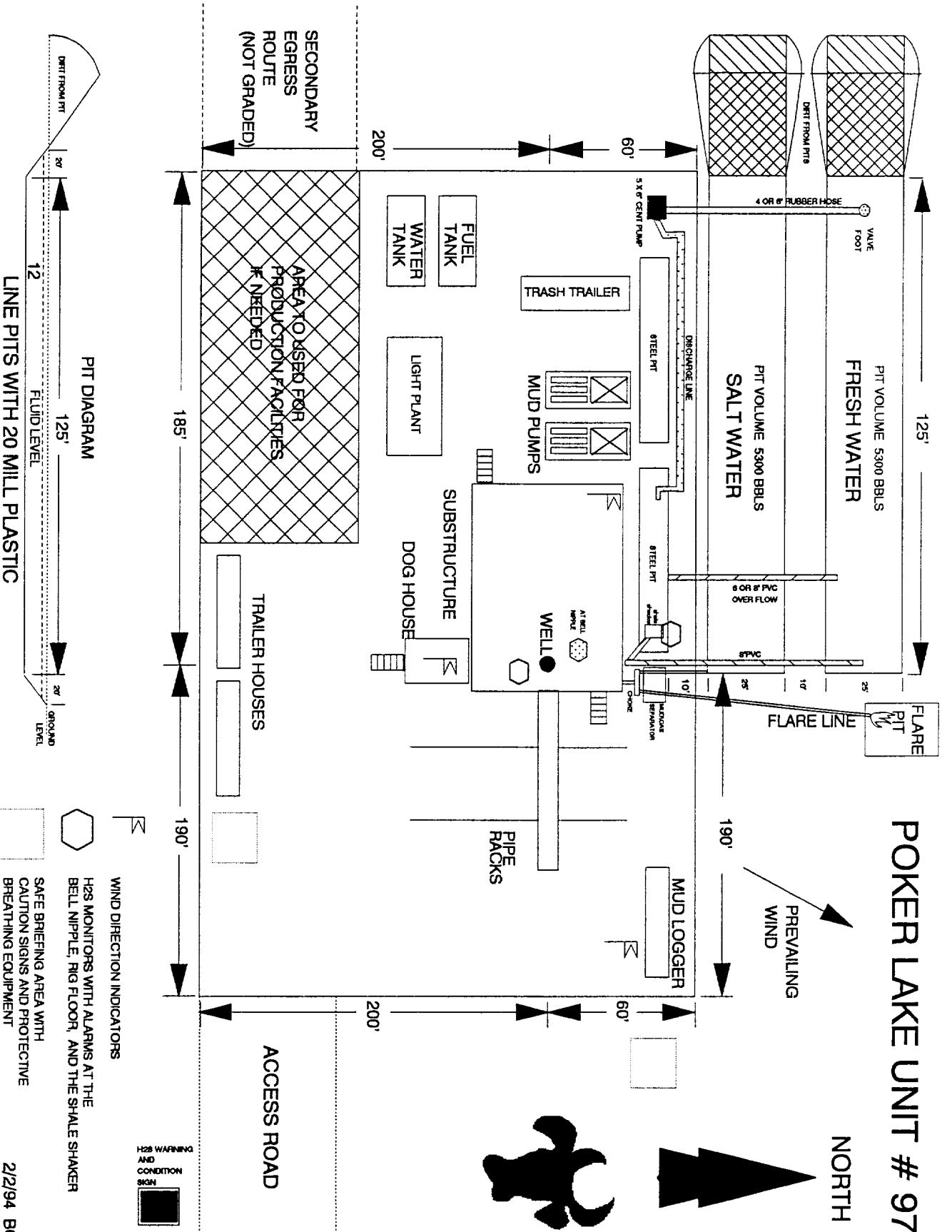
POKER LAKE UNIT # 97

NORTH

PREVAILING WIND



EXHIBIT "C"



PIT DIAGRAM

125'

12'

FLUID LEVEL

GROUND LEVEL

LINE PITS WITH 20 MILL PLASTIC

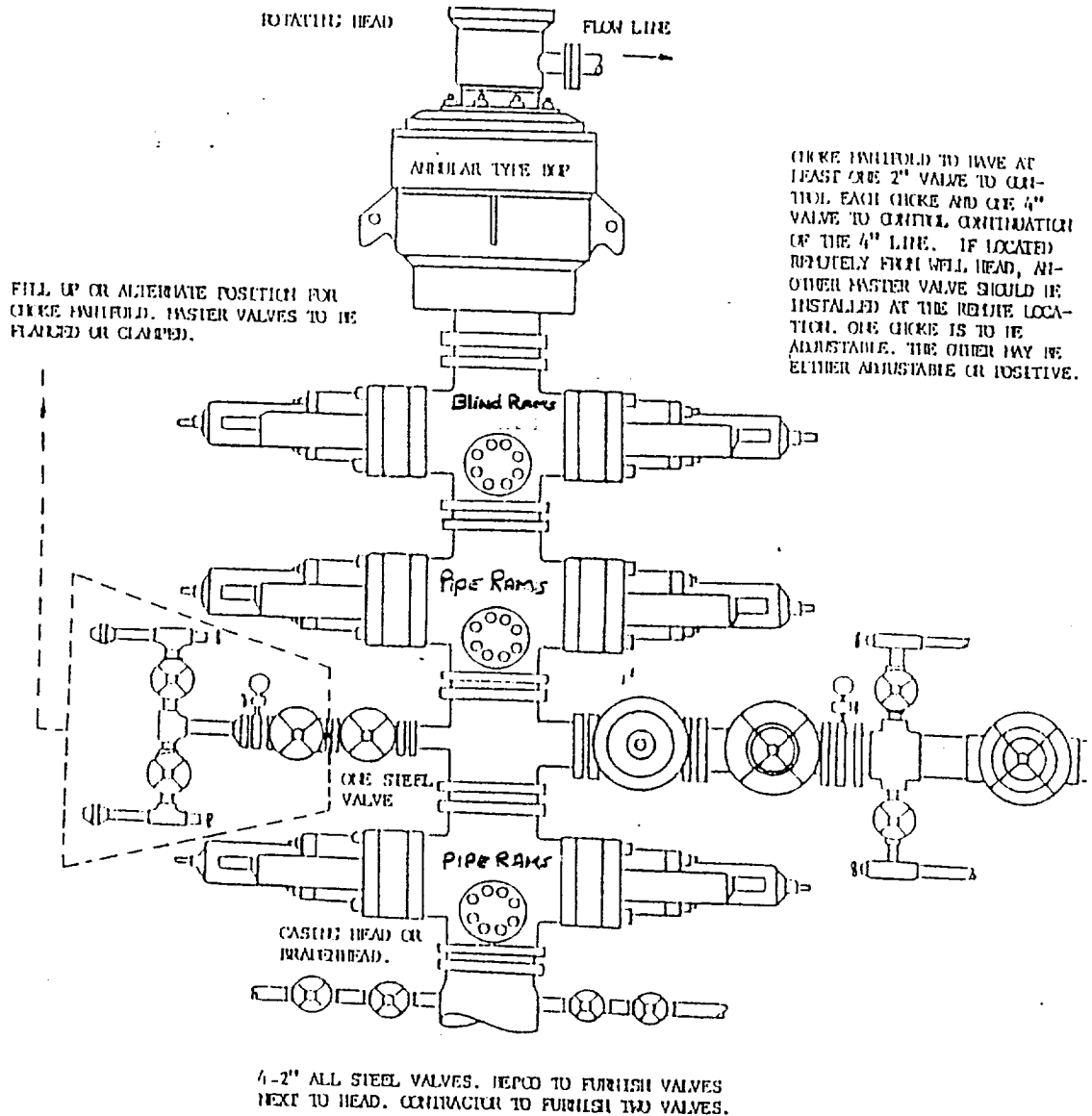
H2S CONTROL PLAN LOCATED IN TOP DOGGHOUSE AND TOOL PUSHERS TRAILER HOUSE

2/2/94 BGH

10,000 PSI WP

DIAGRAM 1

ATTACHED TO AND MADE A PART OF BID SHEET AND DRILLING ORDER #072490



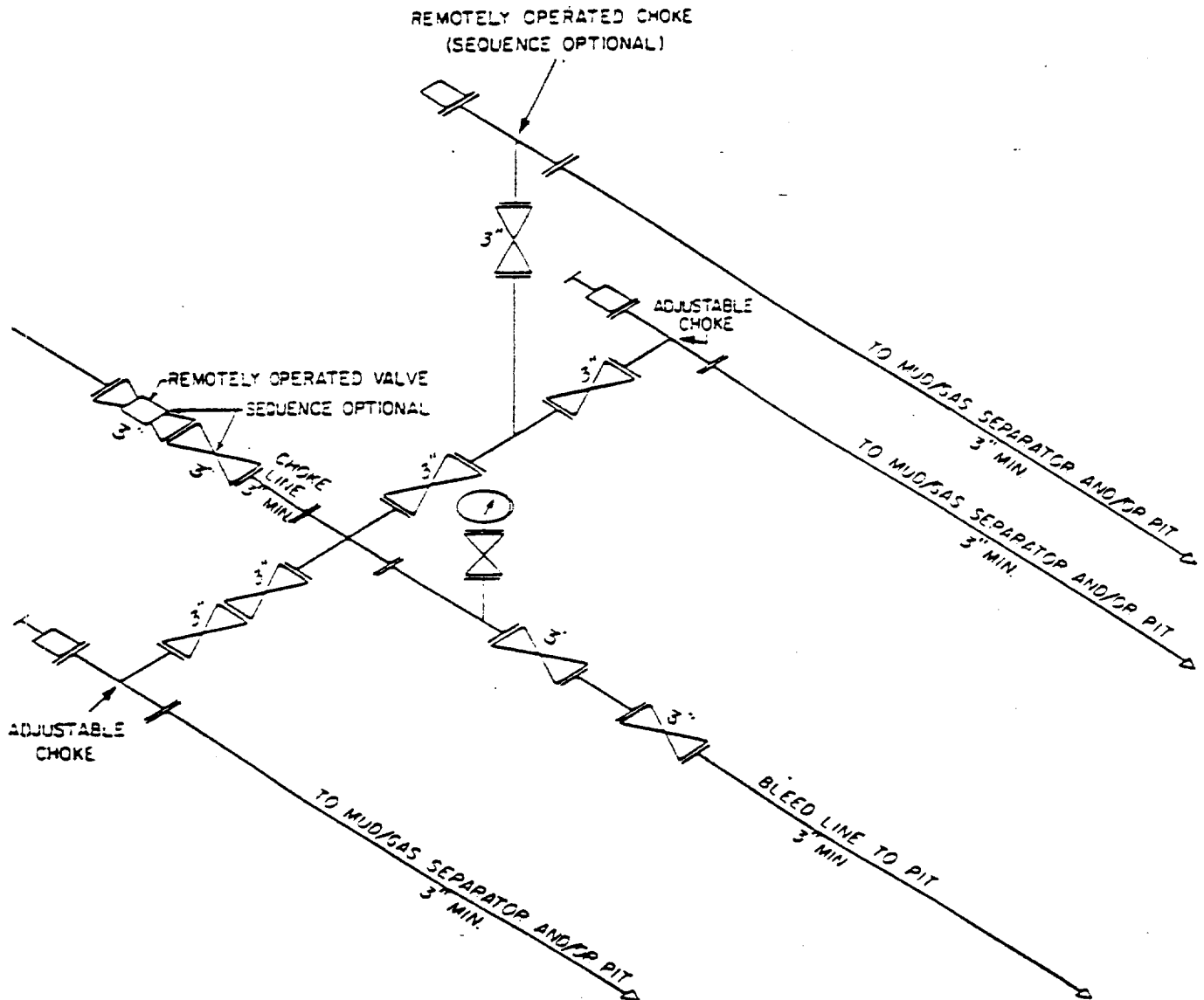
THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. Opening between the ram to be flanged, studded, or clamped.
- B. All connections from operating manifolds to preventers to be all steel hose or tube a minimum of one inch diameter.
- C. 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.
- D. All connections to and from preventer to have a pressure rating equivalent to that of the BOP's.
- E. Manual controls to be installed before drilling cement plug.
- F. Kelly cock to be installed on kelly.
- G. Inside blowout preventer to be available on rig floor.
- H. Dual operating controls: one located by drillers position and the other located a safe distance from the floor.

FOUR CLOSURE HYDRAULIC BLOWOUT PREVENTERS

DIAGRAM 2

Bass minimum requirements only.



10M AND 15M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION MAY VARY

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 "A" & "C"
- 6) Location of flare line and pits: See Exhibit "C"
- 7) Location of caution or danger signs at all briefing areas and location entrance: See Exhibit "C"

C. Description of H₂S Safety Equipment/Systems to be used on this location

- 1) Well control equipment:
 - a) BOP stack with 3 rams, annular and rotating head: See BOP Diagram #1
 - b) Flare line and means of ignition: See Exhibit "C"
 - c) Remote controlled choke: See Exhibit "C"
 - d) Flare gun/flares: See Exhibit "C"
 - e) Mud-gas separator: See Exhibit "C"
- 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 will be 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: Mud/Gas Separator and a degasser.

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.