District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-101
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address.	[3] OGRID Number
THOMPSON ENGINEERING & PRODUCTION CORP. 7415 E. Main Farmington, New Mexico 87402 505 327-4892	037581
	[3] API Number 30 - 045-29398

[4] Property Code	[5] Property Name	[6] Well No.
19038	State	2R

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	26N	13W		1000	South	790	East	SJ

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[9] Proposed Pool 1	[10] Proposed Pool 2
87190 Ext Ind WAW Pictured Cliffs 160	

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	S	6030'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	1330'	Pictured Cliffs	Wayne Smith	8/26/96

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8-3/4"	7"	20# K-55	120'	30 sx	Surface
6-1/4"	4-1/2"	10.50# K-55	1330'	90 & 75 sx	Surface

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Propose to drill a vertical well to test the Pictured Cliffs Formation according to the attached Operations Plan.

RECEIVED
AUG 21 1996
OIL CON. DIV.
DIST. 3

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: John C. Thompson

Printed name: John C. Thompson

Title: Agent

Date: 8/21/96

Phone: 505 327-4892

OIL CONSERVATION DIVISION

Approved by: Ernie Busch 8/21/96

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date: AUG 21 1996 Expiration Date: AUG 21 1997

Conditions of Approval:
Attached ☐

District I
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PO Drawer DD, Artesia, NM 88211-0719
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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
30-045-29398	87190	WAW Fruitland Pictured Cliffs

⁴ Property Code	⁵ Property Name	⁶ Well Number
19038	State	2R

⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
037581	Thompson Engineering Corp.	6030'

¹⁰ Surface Location

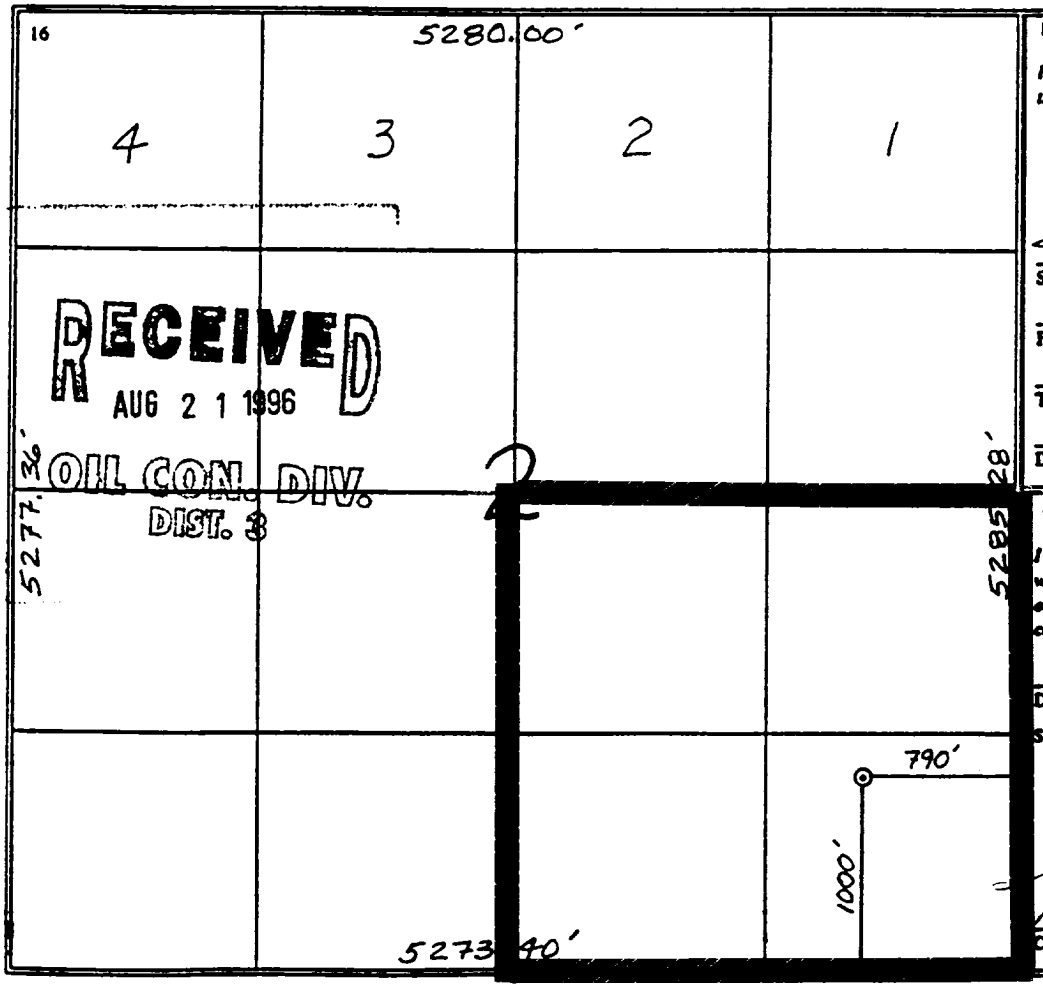
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	26 N	13 W		1000	South	790	East	S.J.

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

John C. Thompson
Printed Name

Agent
Title

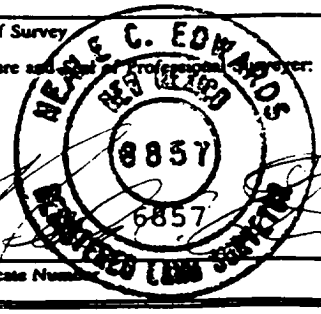
8/21/96
Date

¹⁸ 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 belief.

7-30-96
Date of Survey

Signature and Seal of Professional Surveyor:

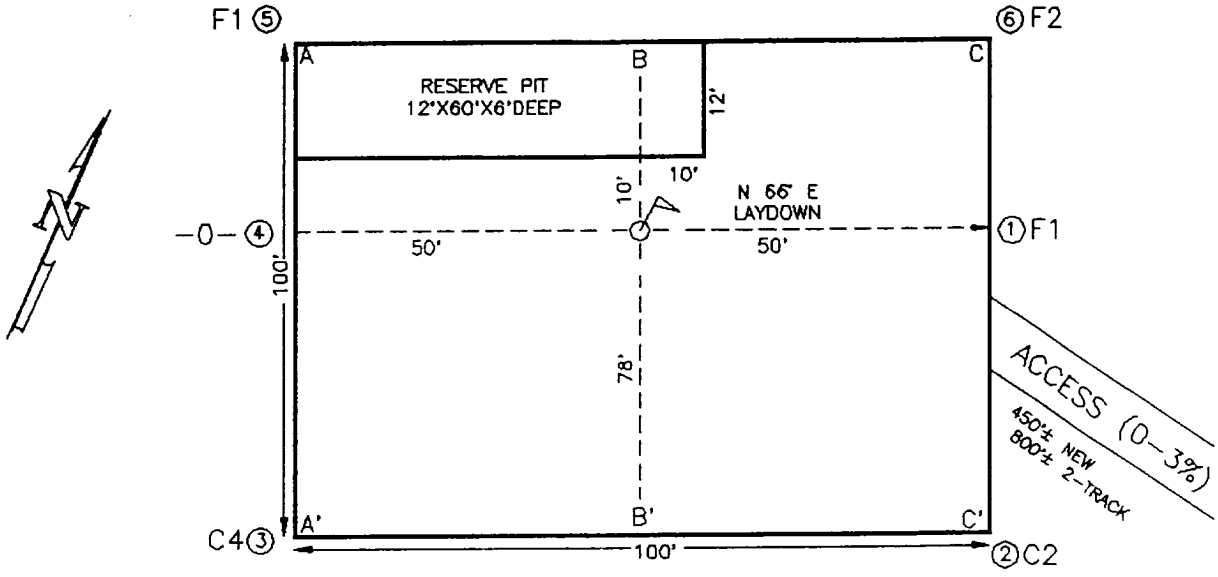


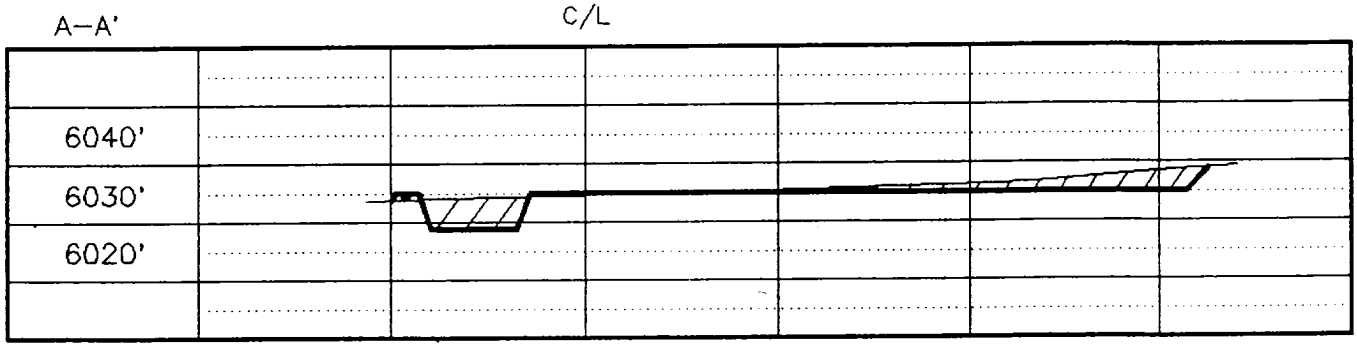
Certificate Number

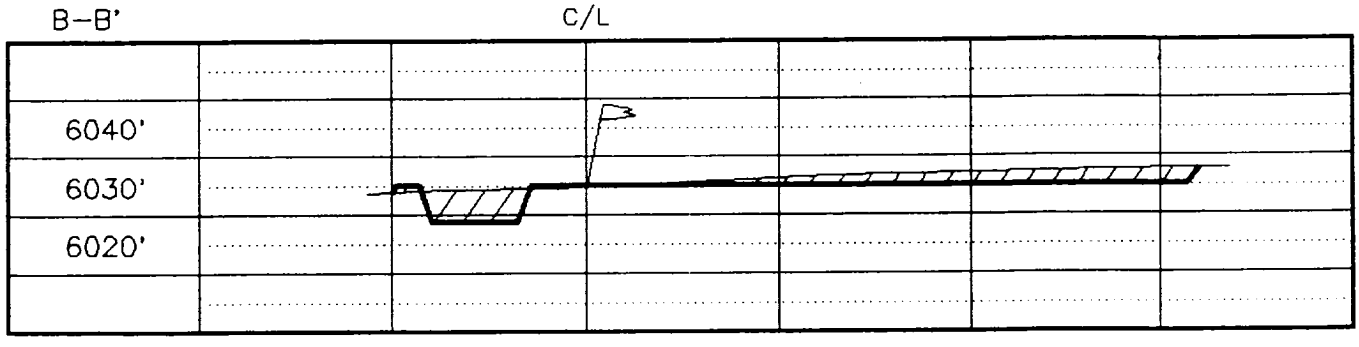
P.O. BOX 6612
FARMINGTON, NEW MEXICO 87402
(505) 325-2654

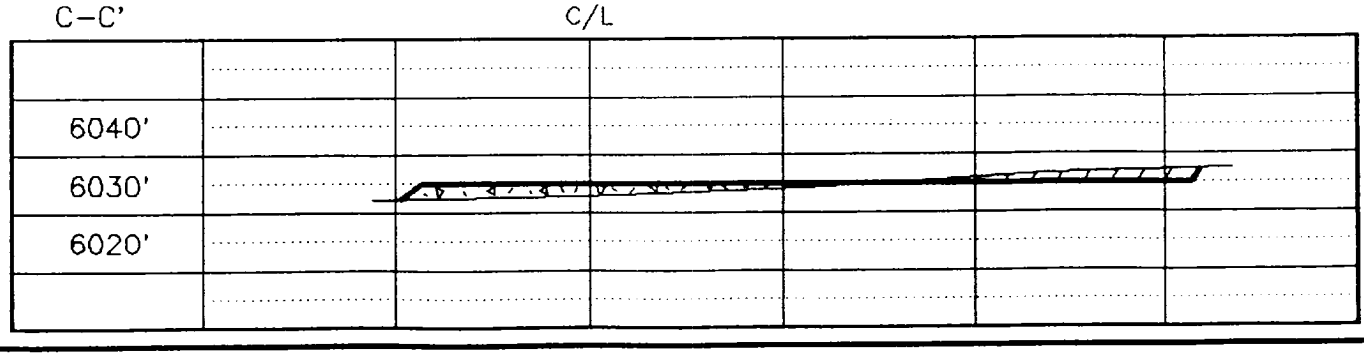
N C E
SURVEYS, INC.

NAME: THOMPSON ENGINEERING CORP. STATE #2R
FOOTAGE: 1000' FSL 790' FEL
SECTION: 2 T 26 N, R 13 W, NMPM
COUNTY: SAN JUAN STATE: NEW MEXICO
ELEVATION: 6030' DATE: 7/30/96









THOMPSON ENINEERING & PRODUCTION CORP.

State #2R

I. Location: 1000' FSL & 790' FEL — August 21, 1996
Sec 2 T26N R13W
San Juan County, NM

Field: WAW Pictured Cliffs — Elevation: 6030'
Surface: State
Minerals: LG 3735

II. Geology: Surface formation - Nacimento

A.

Formation Tops	Depths
Kirtland	150'
Fruitland	825'
Pictured Cliffs	1234'
Total Depth	1330'

Estimated depths of anticipated water, oil, gas and other mineral bearing formations which are expected to be encountered:
Water and gas - 825'; gas - 1234'

B. Logging Program: Induction/Gamma Ray & Density/Neutron logs

C. No over pressured zones are expected in this well. No H_2S zones will be penetrated in this well.

III. Drilling

A. Contractor: Wayne Smith

B. Mud program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.7 ppg.

C. Minimum Blowout Control Specifications:

Double ram type or annular type 2000 psi working pressure BOP with a rotating head. See the attached exhibits (1# through #3) for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi. The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	120'	7"	20#, K-55
6-1/4"	1330'	4-1/2"	10.5#, K-55

B. Float equipment:

a) Surface Casing: None

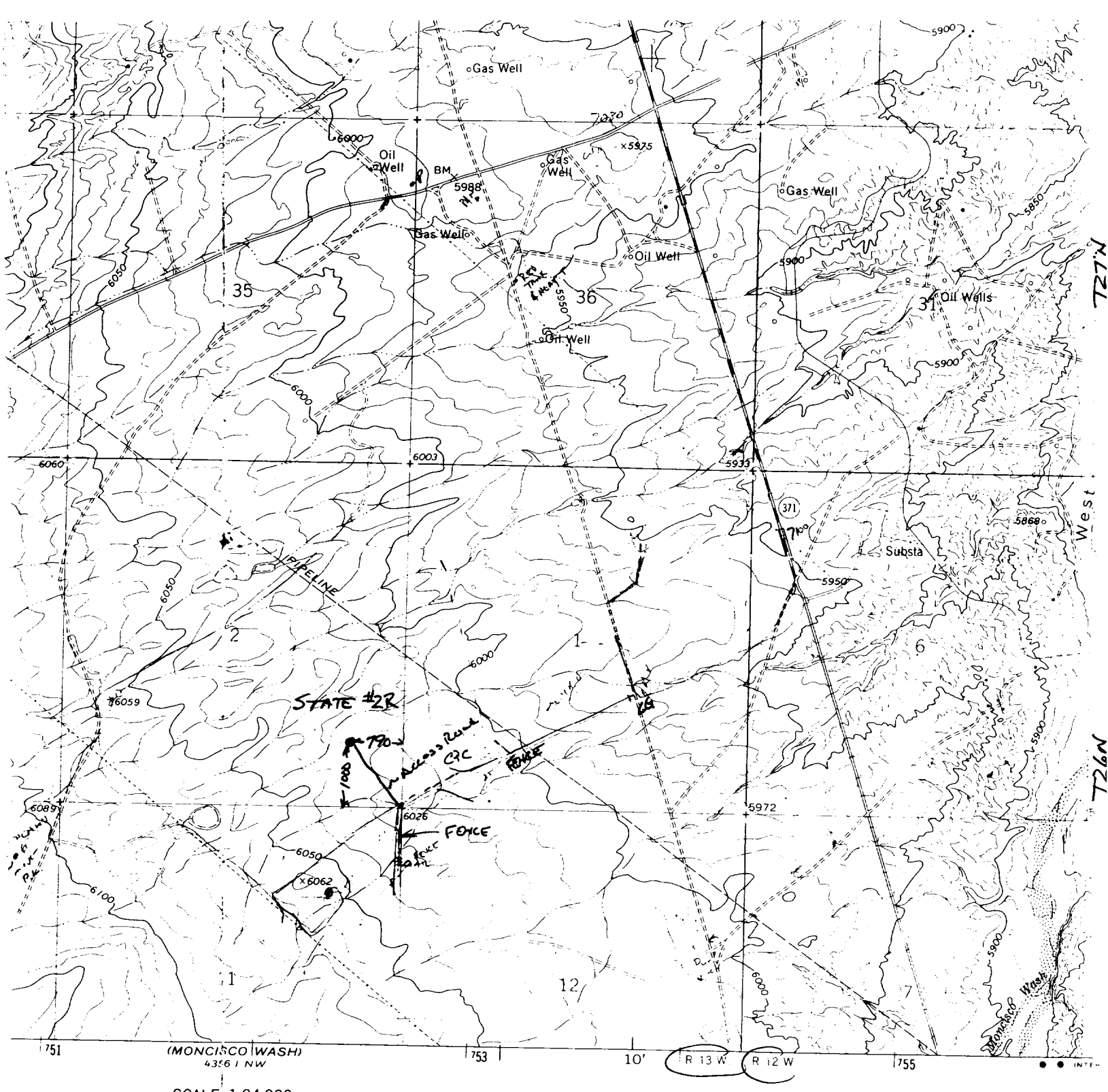
b) Production Casing: 4-1/2" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe and five turbolizers every other joint from the top.

V. Cementing:

Surface casing: 7" - Use 30 sx (36 cu.ft.) of Cl "B" with 2% $CaCl_2$ (yield = 1.18 cu.ft./sk; slurry weight = 15.6 ppg). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 600 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole with at least 1-1/2 hole volume of mud. Precede cement with 30 bbls of fresh water. Lead with 90 sx (185 cu.ft.) of Cl "B" with 2% metasilicate. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 ppg). Tail with 75 sx (89 cu.ft.) of Cl "B" with 2% $CaCl_2$ (Yield = 1.18 cu.ft./sk; slurry weight = 15.6 ppg). Total cement volume is 254 cu.ft. (100% excess to circulate cement to surface).

John C. Thompson
Engineer



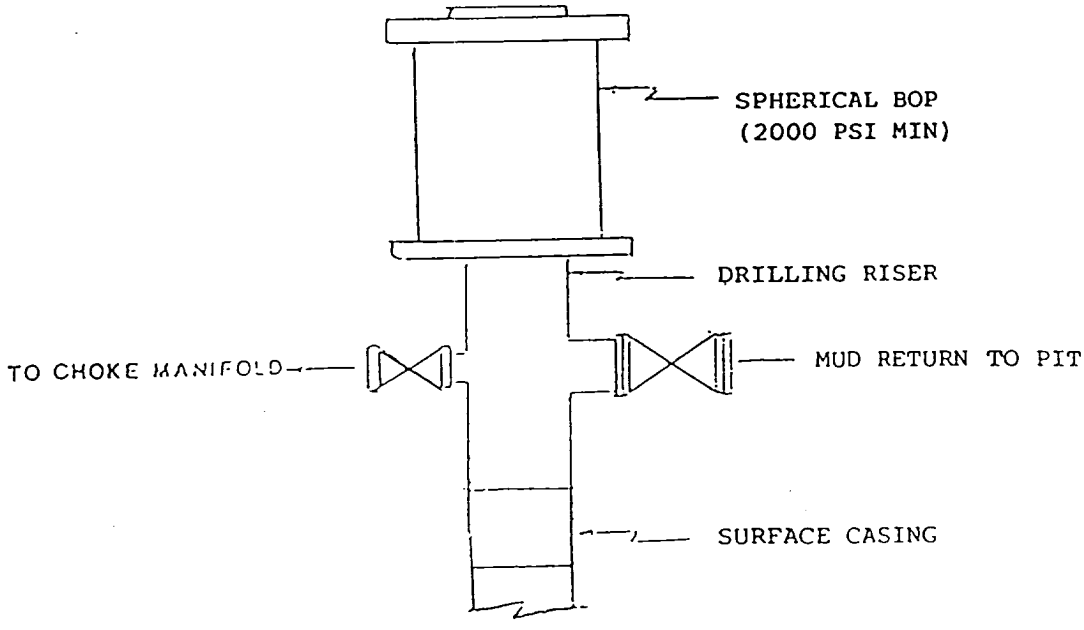
Medium-c

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
R DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

SURFACE WELL CONTROL EQUIPMENT

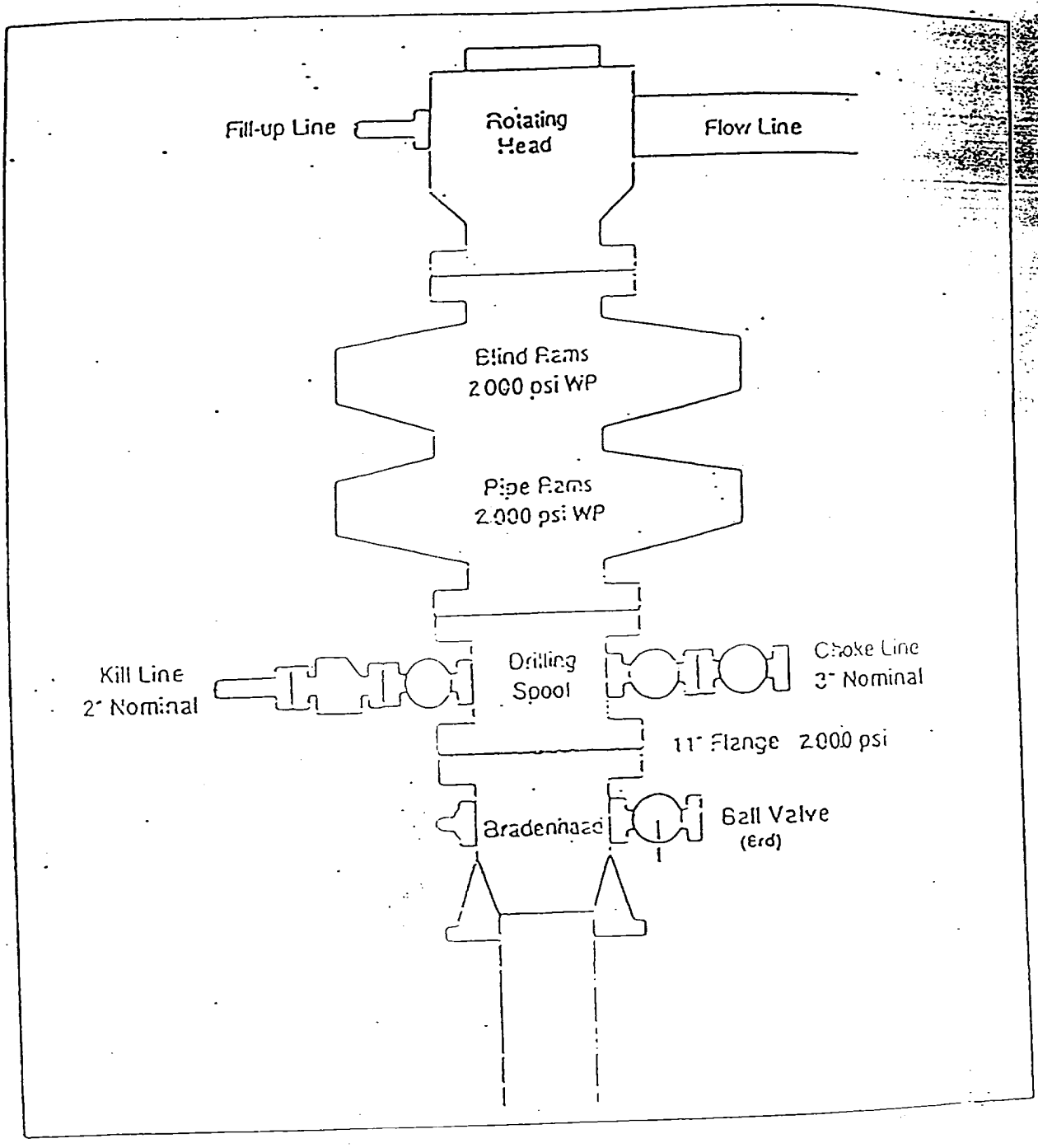
SCHEMATIC

EXHIBIT #1



BOP STACK ARRANGEMENT

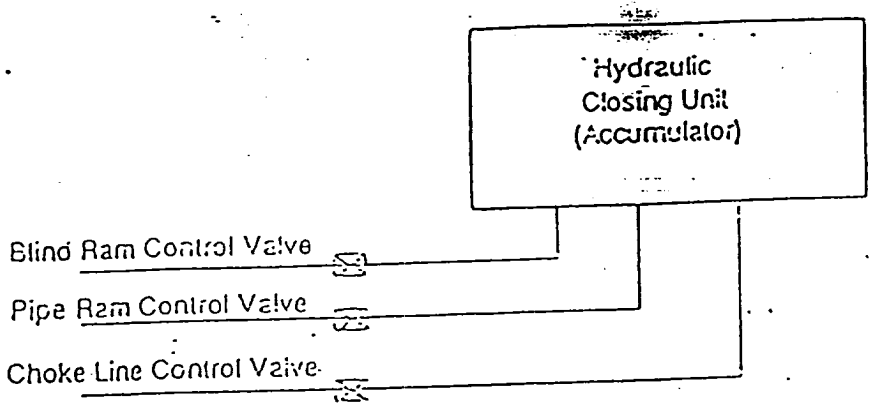
EXHIBIT 2

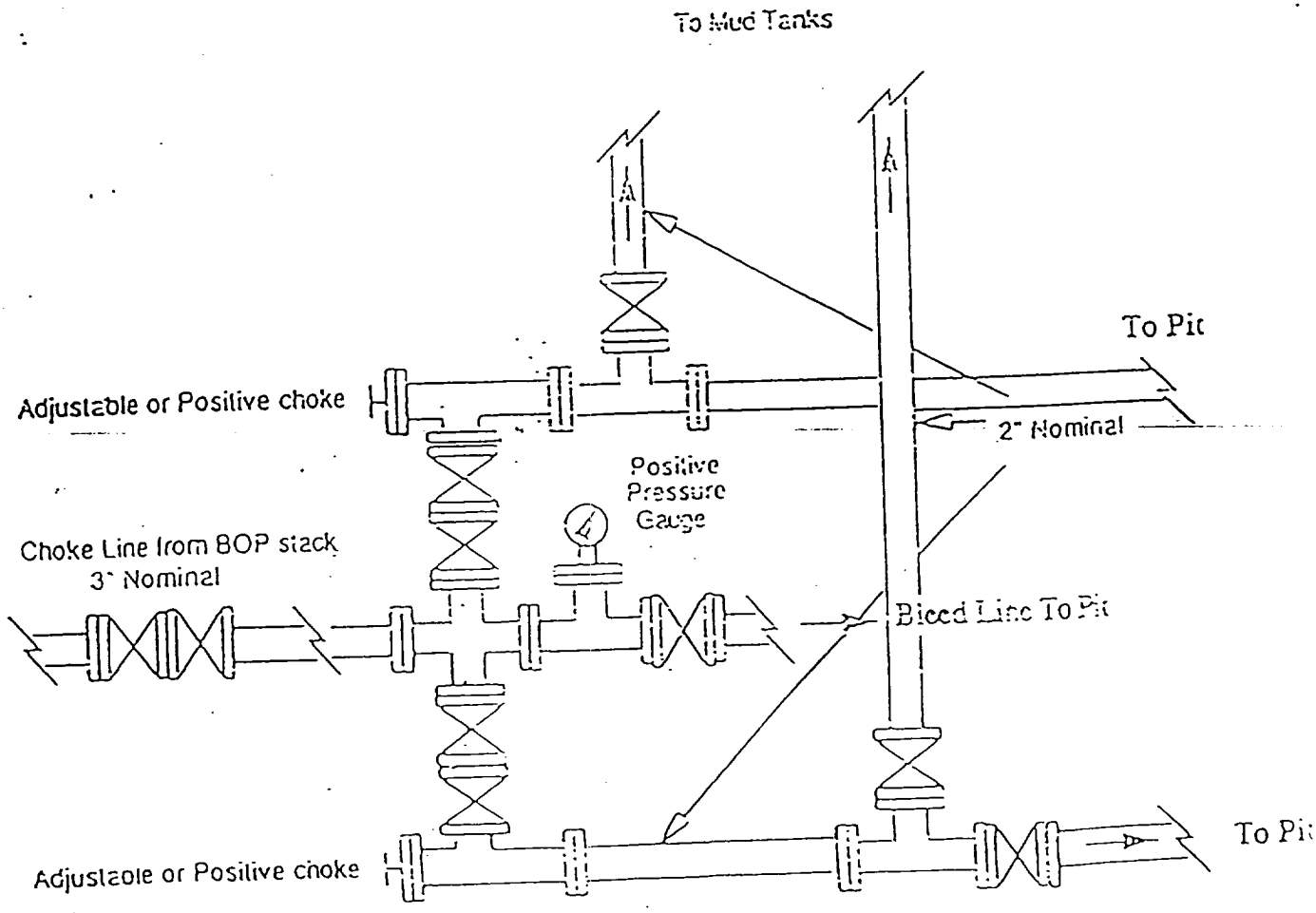


All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1500 psi. The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a k cock with handle, floor safety valve with change overs for each tool joint in the string, and choke manifold all rated to 2000 psi.

Choke Manifold & Accumulator Schematic

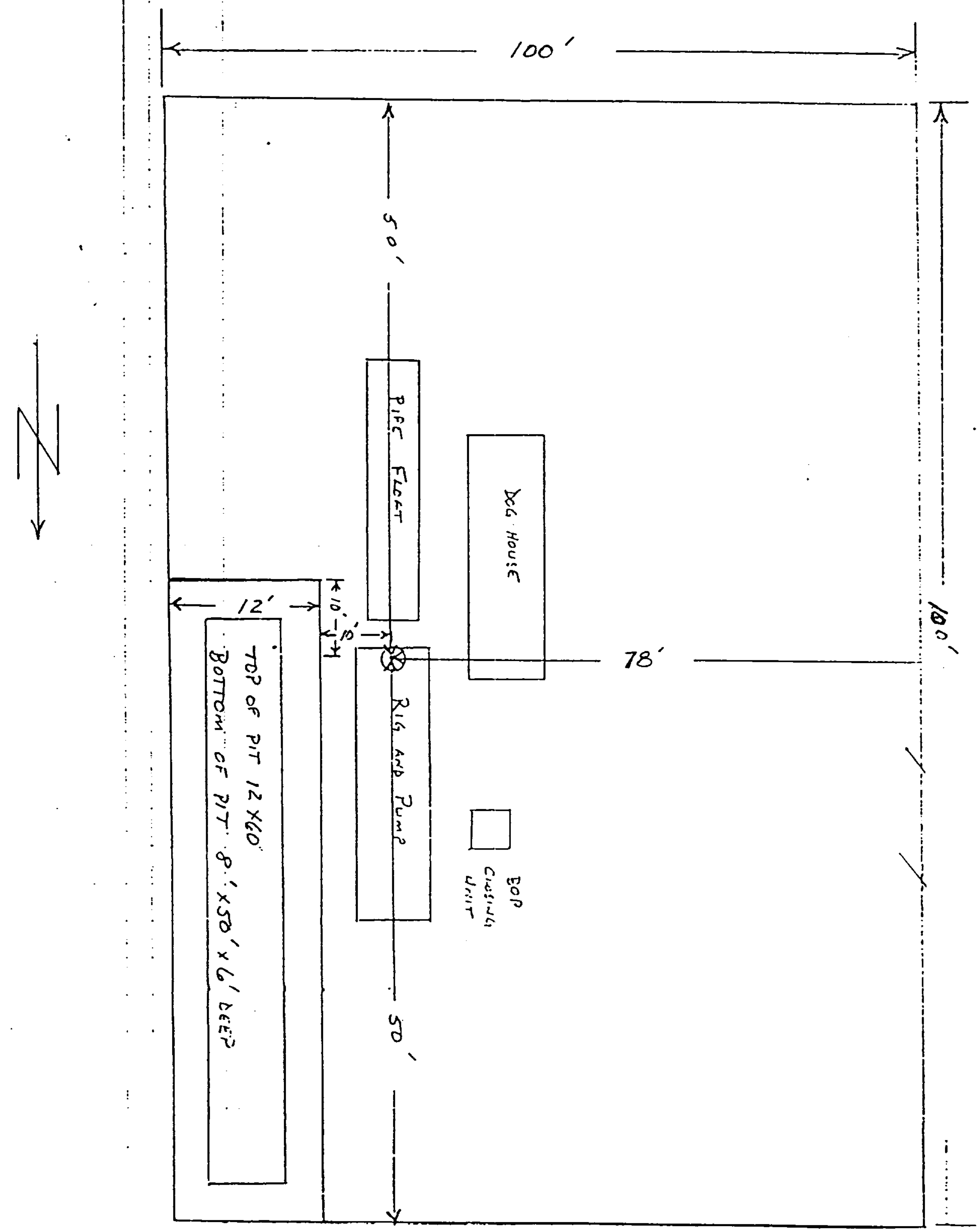
EXHIBIT 3





PROPOSED RIG LAYOUT

PLAT NO. 3



Pct 1/17/93