

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT

OPER. LEASE NO. 5073
PROPERTY NO. 3056
POOL NAME 43329
EFF. DATE 9/26/00
APPROX. 30-025-35184

FORM APPROVED
OMB NO. 1004-0136
Expires February 28, 1995

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER ☐

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Conoco Inc.

3. ADDRESS AND TELEPHONE NO.

10 Desta Drive, Ste. 649W, Midland, TX 79705

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

At surface

2300' FNL & 1000' FWL

Unit E

At proposed prod. Zone

2300' FNL & 1350' FEL

Unit G

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

15. DISTANCE FROM PROPOSED*

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

6. 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.

9. PROPOSED DEPTH

4200' TVD; 6300' TMD

20. ROTARY OR CABLE TOOLS

Rotary

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

3930'

22. APPROX. DATE WORK WILL START*

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	WC-40, 11-3/4"	42#	825'	1200 sxs., circ
11"	J-55, 8-5/8"	24#	2145'	465 sxs., circ.
7-7/8"	J-55, 5-1/2"	17#	3753' TOC @1900'	305 sxs., circ.
4-3/4"	Open hole			

It is proposed to drill a horizontal well as a Grayburg/San Andres producer. An NOS was filed 6/8/00. The well will be drilled and equipped according to the following additional attachments:

1. Well Location and Acreage Dedication Plat (C-102) along with other associated maps and plats.
2. Proposed Well Plan Outline.
3. Cementing Plan.
4. Surface Use Plan
5. Trailer Mounted Rig Layout Drawing
6. BOP & Choke Manifold Specifications
7. H2S Drilling Operations Plan.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

This application includes ROW for the well pad and flowline.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described above and as covered by BLM Bond File No. ES-0085.

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.

25.

SIGNED

ITLE Sr. Property Analyst

ATE 8/11/00

(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:

/s/ LARRY D. BRAY

Assistant Field Manager,
Lands And Minerals

SEP 21 2000

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

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.

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brason Rd., Artesia, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name MCA	Well Number 389E
OGED No.	Operator Name CONOCO INC.	Elevation 3930'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	29	17 S	32 E		2300	NORTH	1000	WEST	LEA

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
G	30	17 S	32 E		2300	NORTH	1350	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
-----------------	-----------------	--------------------	-----------

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>Title _____</p> <p>Date _____</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date Surveyed June 16, 2000</p> <p>Signature & Seal of Professional Surveyor </p> <p>W.S. No. 55555A</p> <p>Surveyor's No. 7977 L. Jones</p> <p>BASIN SURVEYS</p>
--	--

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-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

API Number 30-025-35184	2 Pool Code 43329	3 Pool Name Maljamar Grayburg/SA
4 Property Code 3056	5 Property Name MCA Unit	6 Well Number #389H
7 OGRID No. 005073	8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500	9 Elevation

10 Surface Location

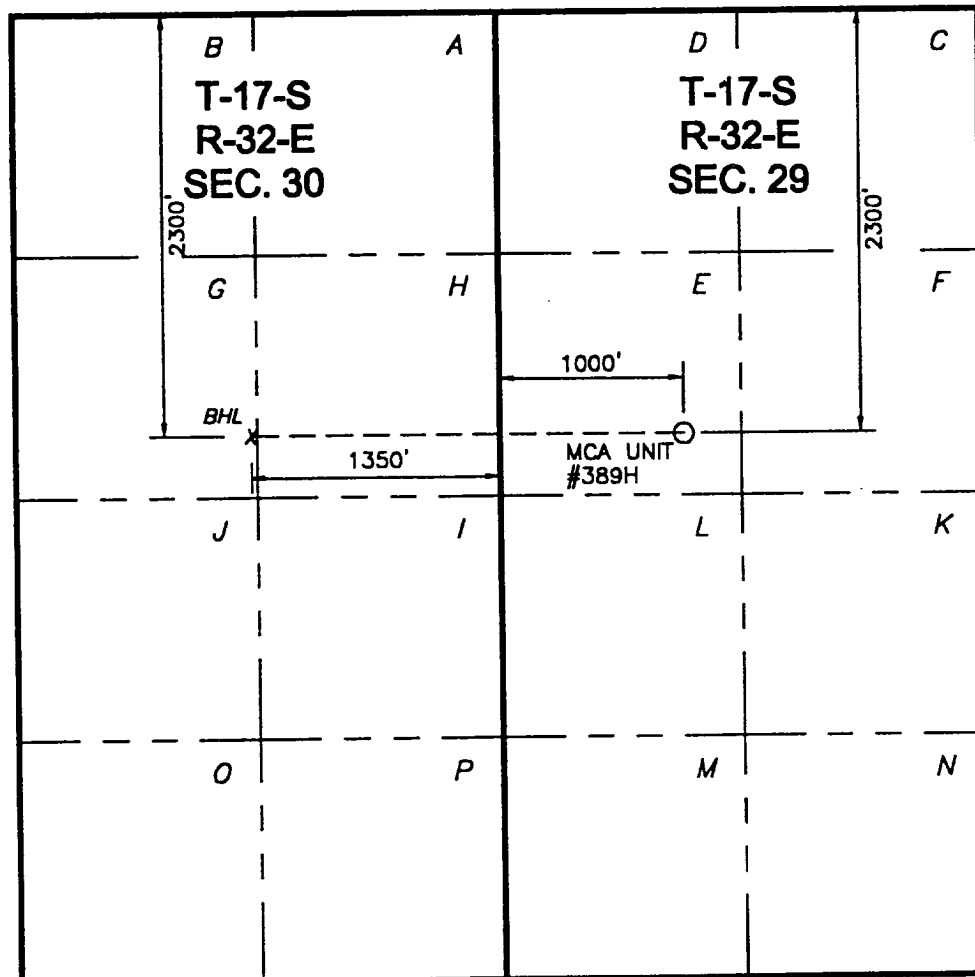
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	29	17S	32E		2300	North	1000	West	Lea

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
G	30	17S	32E		2300	North	1350	East	Lea

12 Dedicated Acres 40	13 Joint or Infill	14 Consolidation Code	15 Order No. Waterflood Division Order R - 2403
--------------------------	--------------------	-----------------------	--

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

Kay Maddox
Signature
Kay Maddox

Printed Name
Regulatory Agent

Title
June 8, 2000

Date

18 SURVEYOR CERTIFICATION

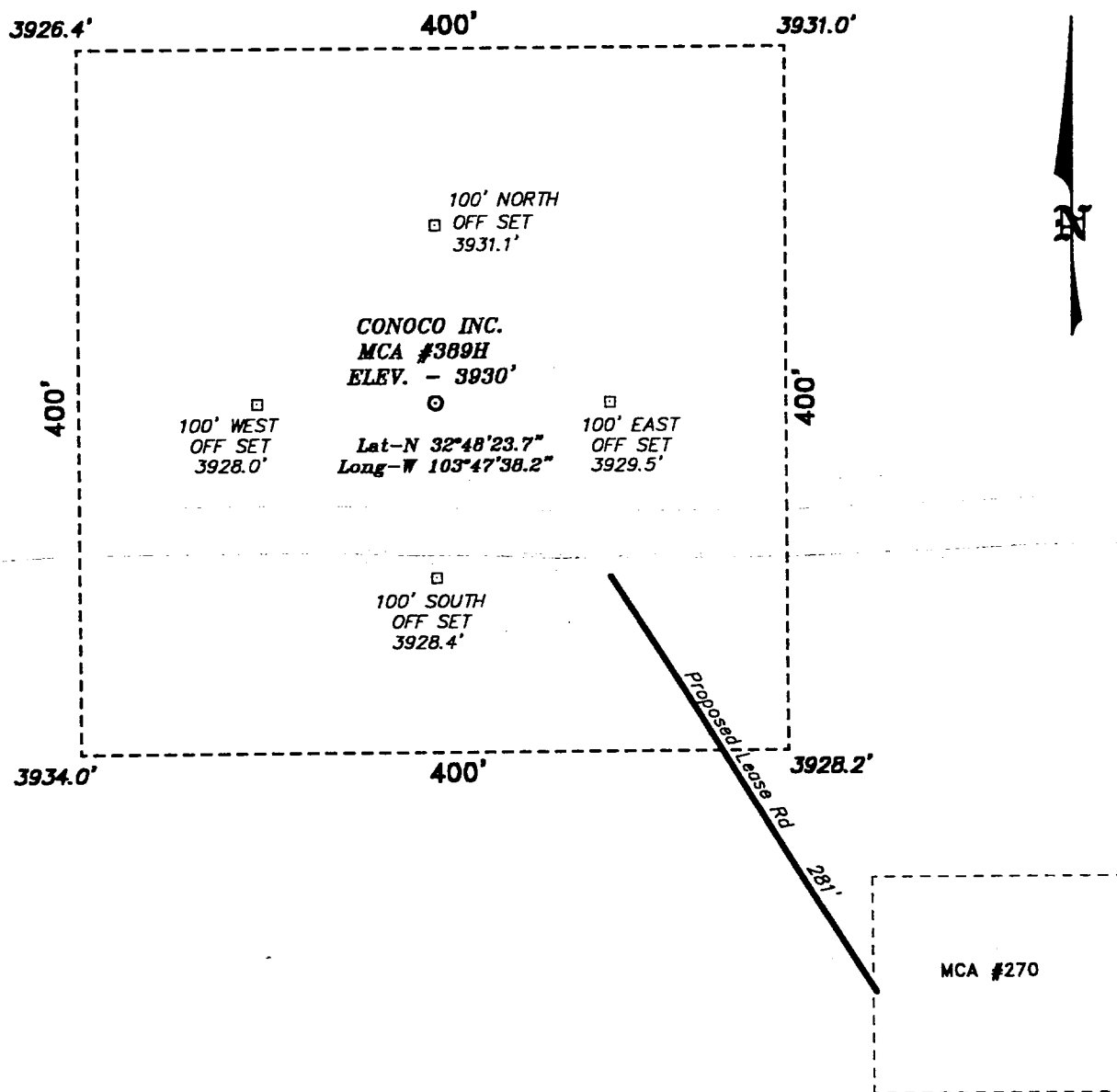
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor:

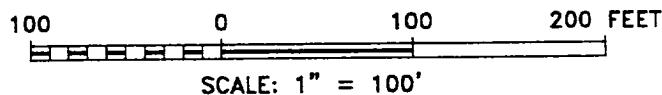
Certificate Number

**SECTION 29, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



DIRECTIONS TO WELL LOCATION:

FROM THE JUNCTION OF CO. RD. 126 AND STATE HWY 529, GO WEST ON HWY 529 APPROX. 2.5 MILES TO A LEASE ROAD; THENCE NORTH ON LEASE ROAD APPROX. 1600 FEET; THENCE EAST APPROX. 3300 FEET; THENCE NORTH APPROX. 700 FEET TO THE MCA #270 WHICH LIES 281 FEET SOUTHEAST OF THE PROPOSED WELL LOCATION.



BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 0335 Drawn By: K. GOAD

Date: 06-19-2000 Disk: KJG #122 - 0335A.DWG

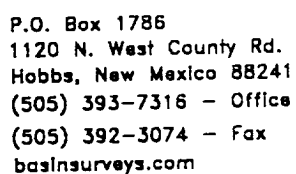
Conoco Inc.

REF: MCA No. 389H / Well Pad Topo

THE MCA No. 389H LOCATED 2300' FROM THE NORTH LINE AND 1000' FROM THE WEST LINE OF SECTION 29, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 06-16-2000 Sheet 1 of 1 Sheets

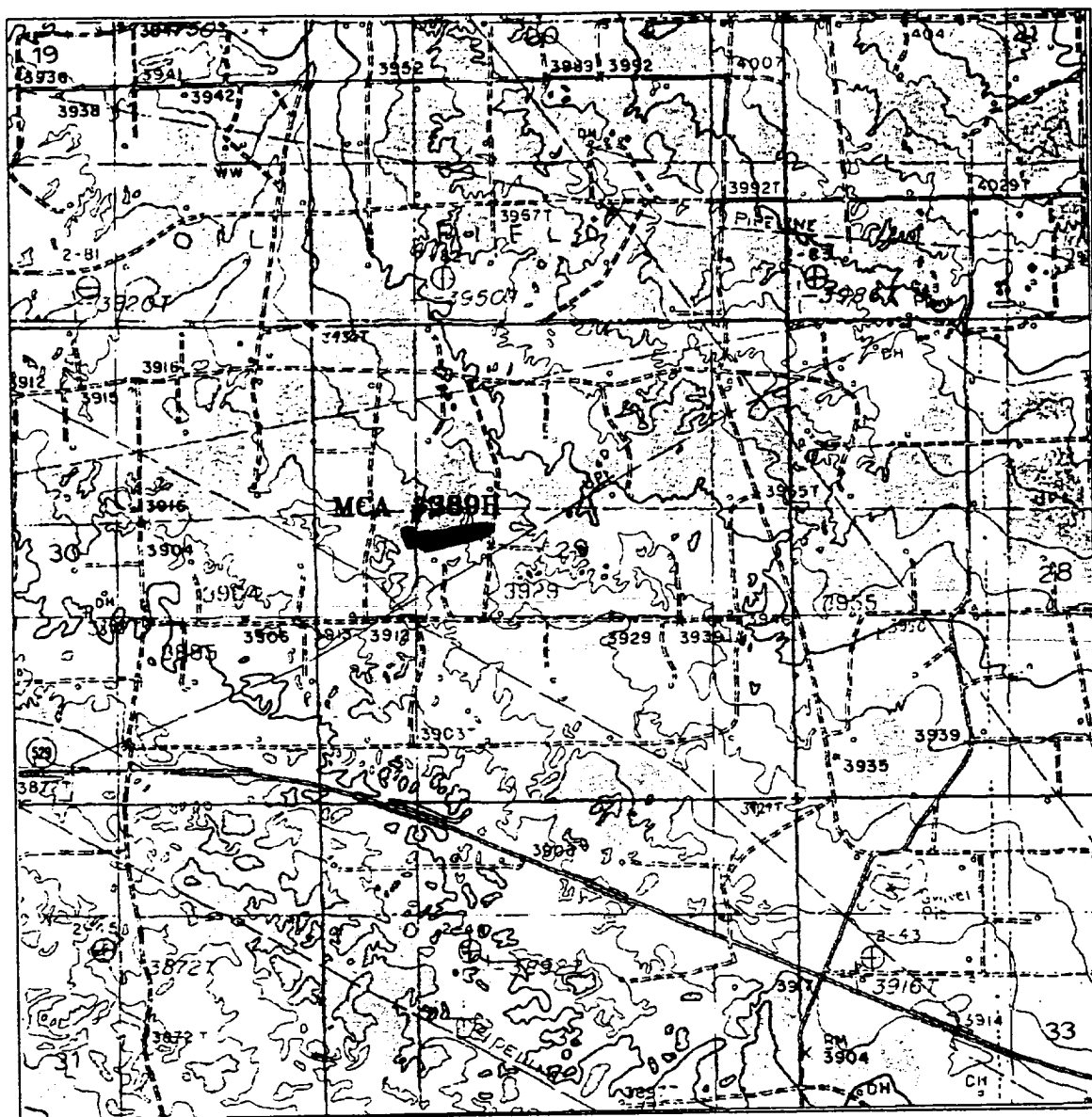
Located at 2300' FNL and 1000' FWL
Section 29, Township 17 South, Range 32 East,
N.M.P.M., Lea County, New Mexico.



Date: 06-19-2000

CONOCO INC.

POWELL 175'



MCA #389H

Located at 2300' FNL and 1000' FWL
Section 29, Township 17 South, Range 32 East,
N.M.P.M., Lea County, New Mexico.

basin
surveys

focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number: 0335AA - KJG #122

Survey Date: 06-16-2000

Scale: 1" = 2000'

Date: 06-19-2000

CONOCO INC.

CONOCO INC.

PROPOSED WELL PLAN OUTLINE

WELL NAME **MCA #389H**

LOCATION **Sec. 29 T 17S R 32E, Lea Co., NM**

TVD IN 1000'	MD	FORMATION TOPS & TYPE (TVD)	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE & DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT TYPE	DAYS
	0					PRESET 16"X 40' COND				
			GRAVEL BEDS LOST CIRCULATION					BELOW NORMAL	8.4 - 8.7 SPUD	1
		RUSTLER @ 721'			14-3/4"					
		Salado @ 840'	SALT SECTION			11-3/4" @ 825'				
	1000		SEEPAGE LOSSES		11"	42.0# WC-40 STC CIRC. CEMENT (set casing at least 100' into the Rustler)		9.0 PPG	10.0 BRINE	
		Tansill @ 1,892'		H2S MONITOR ON 1,900' to TD						
	2000	Yates @ 2,046'								
			INSTALL LOW PRESS ROTATING HEAD POSSIBLE LOSSES IF MW > 9.5 PPG		7-7/8"	8-5/8" @ 2,145' 24.0# J-55 STC CIRC. CEMENT				5
		7 RIVERS @ 2,439'		NO MUD LOGS WIRELINE LOGS: GR, RES, LDT, CNL						
	3000	QUEEN @ 3,040'	POSSIBLE CO2 or H2O INFLUX					8.5-9.0 PPG	9.0-9.2 CUT BRINE	
		GRAYBURG U @ 3,436'								
		ZONE 6 @ 3,656'								
		L. ZONE 6 @ 3,730'								
	4000				4-3/4"	5-1/2" @ 3,753' 17.0# J-55 LTC TOC @ 1,700'		8.7-9.3 PPG	FRESH WATER	12
	5000									
		TVD 3,796'		(AS PER GEOLOGISTS)		Open hole completion 5,938' MD				20

DATE **08/07/00**

APPROVED **Yong H. Cho**
Drilling Engineer

Mike Bradshaw
Geologist

Production Engineer

Reservoir Engineer



Proposal No: 180254423A

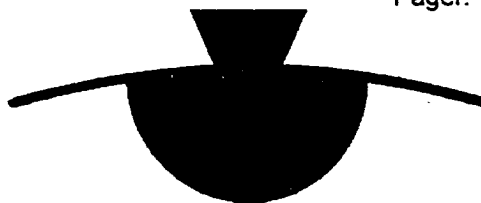
Conoco
MCA Unit #389H

Sec. 29, T17S, R32E
Lea County, New Mexico
August 6, 2000

Well Recommendation

Prepared for:
Mr. Yong Cho
Drilling Engineer

Prepared by:
Rocky Chambers
Region Engineer
Midland, Texas
Bus Phone: 915/683-2781
Mobile: 915/557-1239
Pager: 915/498-1605



POWERVISION™

Service Point:

Hobbs
Bus Phone: (505) 392-5556
Fax: (505) 392-7307

Service Representatives:

Wayne Davis
Account Manager
Bus Phone: (915) 683-2781
Fax: (915) 683-1443

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 11-3/4" SURFACE STRING
 Date: August 6, 2000



Proposal No: 180254423A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
14.750 HOLE	825	825

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
11.750	11.084	42	825	825

Float Collar set @ 785 ft
 Mud Density 8.40 ppg
 Est. Static Temp. 84 ° F
 Est. Circ. Temp. 80 ° F

VOLUME CALCULATIONS

525 ft	x	0.4336 cf/ft	with	100 % excess	=	455.3 cf
300 ft	x	0.4336 cf/ft	with	100 % excess	=	260.2 cf
40 ft	x	0.6701 cf/ft	with	0 % excess	=	26.8 cf (inside pipe)
TOTAL SLURRY VOLUME					=	742.3 cf
					=	132 bbls

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 11-3/4" SURFACE STRING
 Date: August 6, 2000



Proposal No: 180254423A

FLUID SPECIFICATIONS

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	455	/ 2.15	= 213 sacks Class C Cement + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 2% bwoc Sodium Metasilicate + 109.4% Fresh Water
Tail Slurry	287	/ 1.34	= 214 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water
Displacement			93.7 bbls DISPLACEMENT

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.40	14.80
Slurry Yield (cf/sack)	2.15	1.34
Amount of Mix Water (gps)	12.33	6.36
Amount of Mix Fluid (gps)	12.33	6.36
Estimated Pumping Time - 70 BC (HH:MM)	6:25	2:20
Free Water (mls) @ 80 ° F @ 90 ° angle	0.0	0.0
COMPRESSIVE STRENGTH		
12 hrs @ 89 ° F (psi)	124	1200
24 hrs @ 89 ° F (psi)	250	2000

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 8-5/8" INTERMEDIATE STRING
 Date: August 6, 2000



Proposal No: 180254423A

FLUID SPECIFICATIONS

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	636	/ 2.41	= 265 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 10% bwoc Bentonite + 136.9% Fresh Water
Tail Slurry	267	/ 1.34	= 200 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.3% Fresh Water
Displacement			134.1 bbls DISPLACEMENT

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.85	14.80
Slurry Yield (cf/sack)	2.41	1.34
Amount of Mix Water (gps)	13.79	6.34
Amount of Mix Fluid (gps)	13.79	6.34
Estimated Pumping Time - 70 BC (HH:MM)	4:15	2:00

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 8-5/8" INTERMEDIATE STRING
 Date: August 6, 2000



Proposal No: 180254423A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
11.084 CASING	825	825
11.000 HOLE	2,145	2,145

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
8.625	8.097	24	2,145	2,145

Float Collar set @ 2,105 ft
 Mud Density 10.00 ppg
 Est. Static Temp. 91 ° F
 Est. Circ. Temp. 90 ° F

VOLUME CALCULATIONS

825 ft	x	0.2643 cf/ft	with	0 % excess	=	218.1 cf
823 ft	x	0.2542 cf/ft	with	100 % excess	=	418.4 cf
497 ft	x	0.2542 cf/ft	with	100 % excess	=	252.7 cf
40 ft	x	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
TOTAL SLURRY VOLUME					=	903.5 cf
					=	161 bbls

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 5-1/2" LONG STRING
 Date: August 6, 2000



Proposal No: 180254423A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.097 CASING	2,145	2,145
7.875 HOLE	3,753	3,680

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	3,753	3,680

Float Collar set @ 3,713 ft
 Mud Density 9.20 ppg
 Est. Static Temp. 98 ° F
 Est. Circ. Temp. 96 ° F

VOLUME CALCULATIONS

500 ft	x	0.1926 cf/ft	with	0 % excess	=	96.3 cf
601 ft	x	0.1733 cf/ft	with	50 % excess	=	156.1 cf
1,007 ft	x	0.1733 cf/ft	with	50 % excess	=	261.8 cf
40 ft	x	0.1305 cf/ft	with	0 % excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME					=	519.4 cf
					=	93 bbls

Operator Name: Conoco
 Well Name: MCA Unit #389H
 Job Description: 5-1/2" LONG STRING
 Date: August 6, 2000



Proposal No: 180254423A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	252	/ 2.41	= 105 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 10% bwoc Bentonite + 136.9% Fresh Water
Tail Slurry	267	/ 1.34	= 200 sacks Class C Cement + 1% bwoc Calcium Chloride + 56.3% Fresh Water
Displacement			86.3 bbls DISPLACEMENT FLUID @ 8.33 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.85	14.80
Slurry Yield (cf/sack)	2.41	1.34
Amount of Mix Water (gps)	13.79	6.34
Estimated Pumping Time - 70 BC (HH:MM)	4:30	2:30
Free Water (mls) @ 80 ° F @ 90 ° angle	1.0	0.0
Fluid Loss (cc/30min) at 1000 psi and 80 ° F	800.0	715.0
COMPRESSIVE STRENGTH		
12 hrs @ 100 ° F (psi)	150	1000
24 hrs @ 100 ° F (psi)	350	1700

SURFACE USE PLAN

Conoco Inc.

MCA 389H

The following is required information concerning the possible effect which the drilling of this well may have on the environment, existing road sites, and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

A. The proposed well site is 2300' FNL & 1000' FWL, Sec. 29, T17S, R32E, Lea County, New Mexico.

B. Directions to the location are as follows:

See attached Well Pad Topo

C. No improvement or maintenance is anticipated for the existing roads.

2. Planned Access Roads

A. 281' of new access road will be required.

B. Turnouts as required by surface managing agency.

C. Culverts as required by surface managing agency.

D. Gates, cattleguards, or fences as required by surface managing agency.

3. Topographic Map and Well Location

A 7.5" quadrangle topo map was filed with the NOS.

4. Additional Rights-of-Way

Flowline as shown on attached plats.

Powerline as shown on attached plats.

5. Water Supply

Fresh and brine water will be obtained from commercial sources and will be trucked to location by the same directions for reaching the drilling site.

6. Source of Construction Materials

Construction materials will be obtained from commercial sources.

7. Methods of Handling Waste Disposal

- A. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured, and reseeded with the appropriate seed mixture as specified by the surface managing agency.
- B. All garbage and trash will be hauled away to designated landfill by Conoco.
- C. Chemical toilets will be provided and maintained during drilling operations.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Wellsite Layout

See attached Wellsite Layout. The V-door faces East. The reserve pit will be lined with plastic and the pad and pits are staked. All unguarded pits containing liquids will be fenced and any unguarded pit containing liquids will be fenced.

10. Plans for Restoration of Surface

Reserve pits will be rehabilitated once drilling fluids have been allowed to evaporate to the point the pits are dry enough for backfilling and leveling. In the event drilling fluids will not evaporate in a reasonable time period, the fluids will be removed and transported by tank truck to a state approved disposal facility. Backfilling and leveling of the location will be completed within a time period of one year upon cessation of drilling operations.

11. Surface Ownership

The well site surface ownership is Bureau of Land Management.

12. Archeological Clearance

An archeological survey is being conducted and will be provided upon completion.

13. Operator's Representative and Certification

The person who can be contacted concerning compliance of this Surface Use Plan is:

Mike L. Mankin
10 Desta Drive, Suite 649W
Midland, Texas 79705
(915) 686-5794

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site; that I am familiar with the conditions which currently exist; that the statements made in this plan, are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Conoco Inc. and its 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.

Mike L. Mankin

mc

Mike L. Mankin
Sr. Right-of-Way Agent

8-11-00

Date

WELLSITE LAYOUT



WDI



H2S Safety Contractor



Terrain is flat, and covered with native grasses:
Two of the three WDI (wind direction indicator) locations will be utilized
(Prevailing winds are SW to NE)



Conoco Quarters



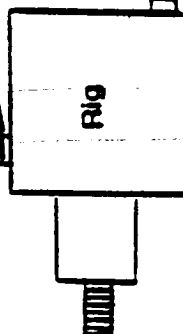
Muster Area No. 1



Contractor Quarters



WDI



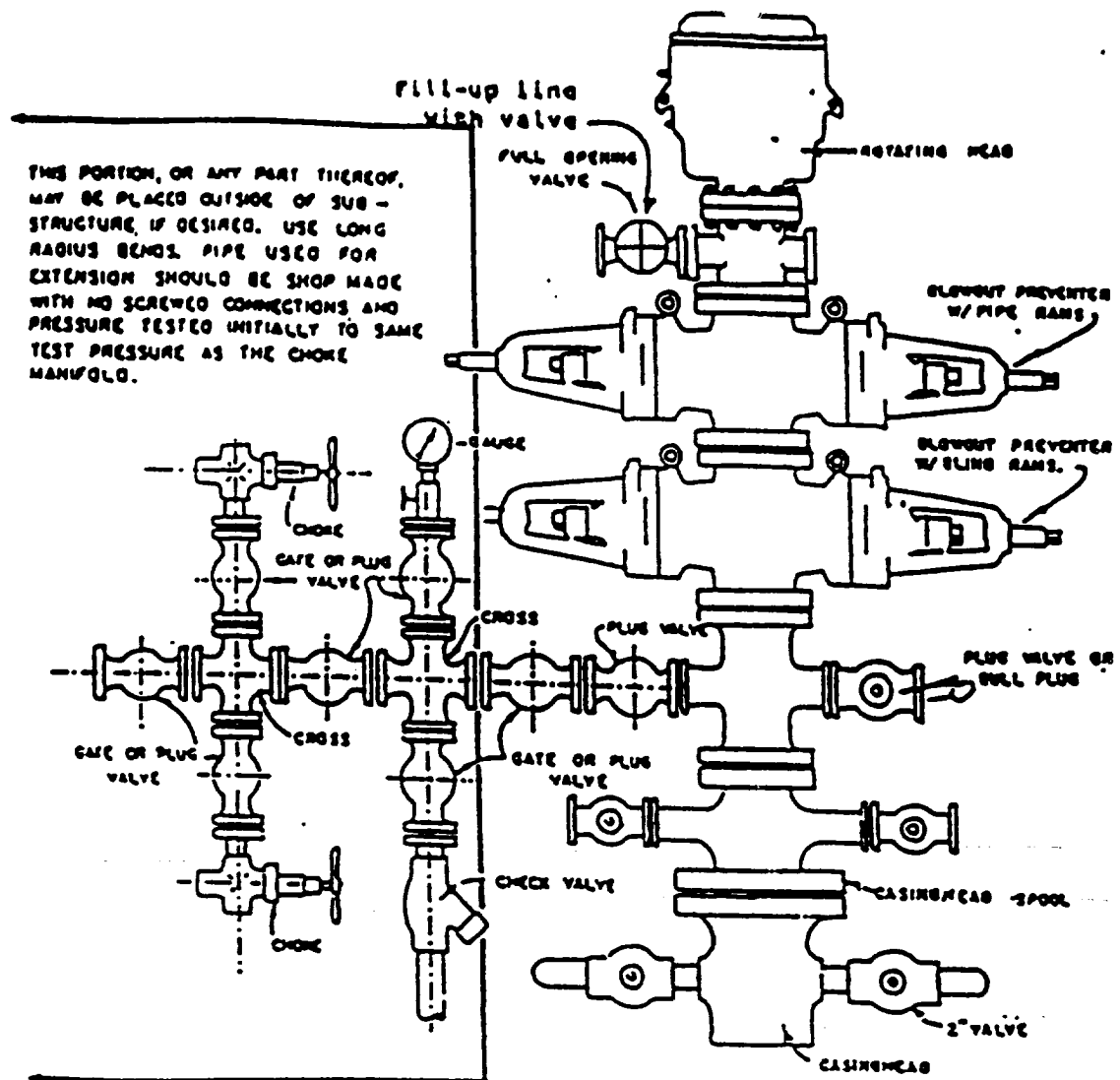
Choke Manifold



Muster Area No. 2

WDI



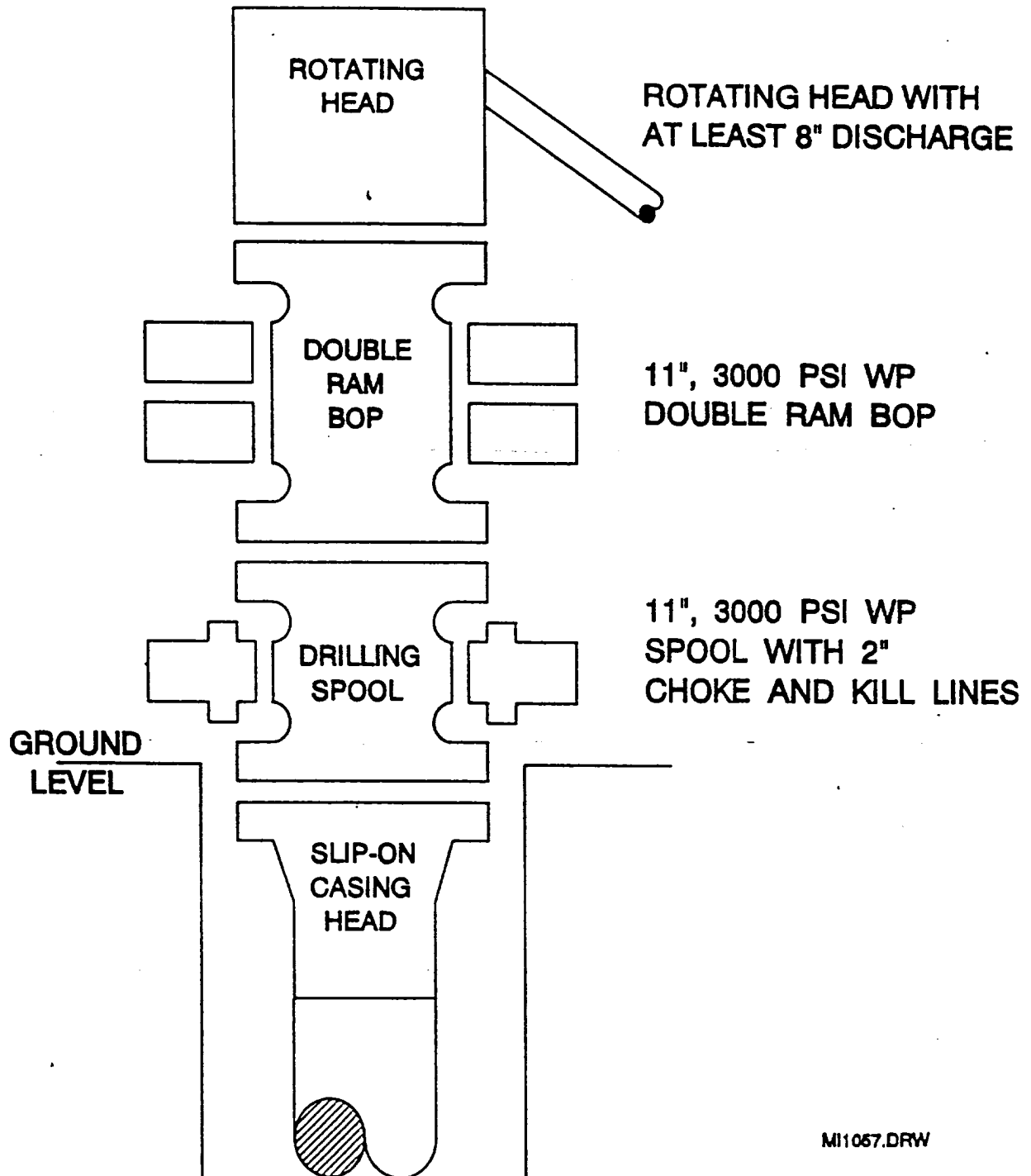


BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

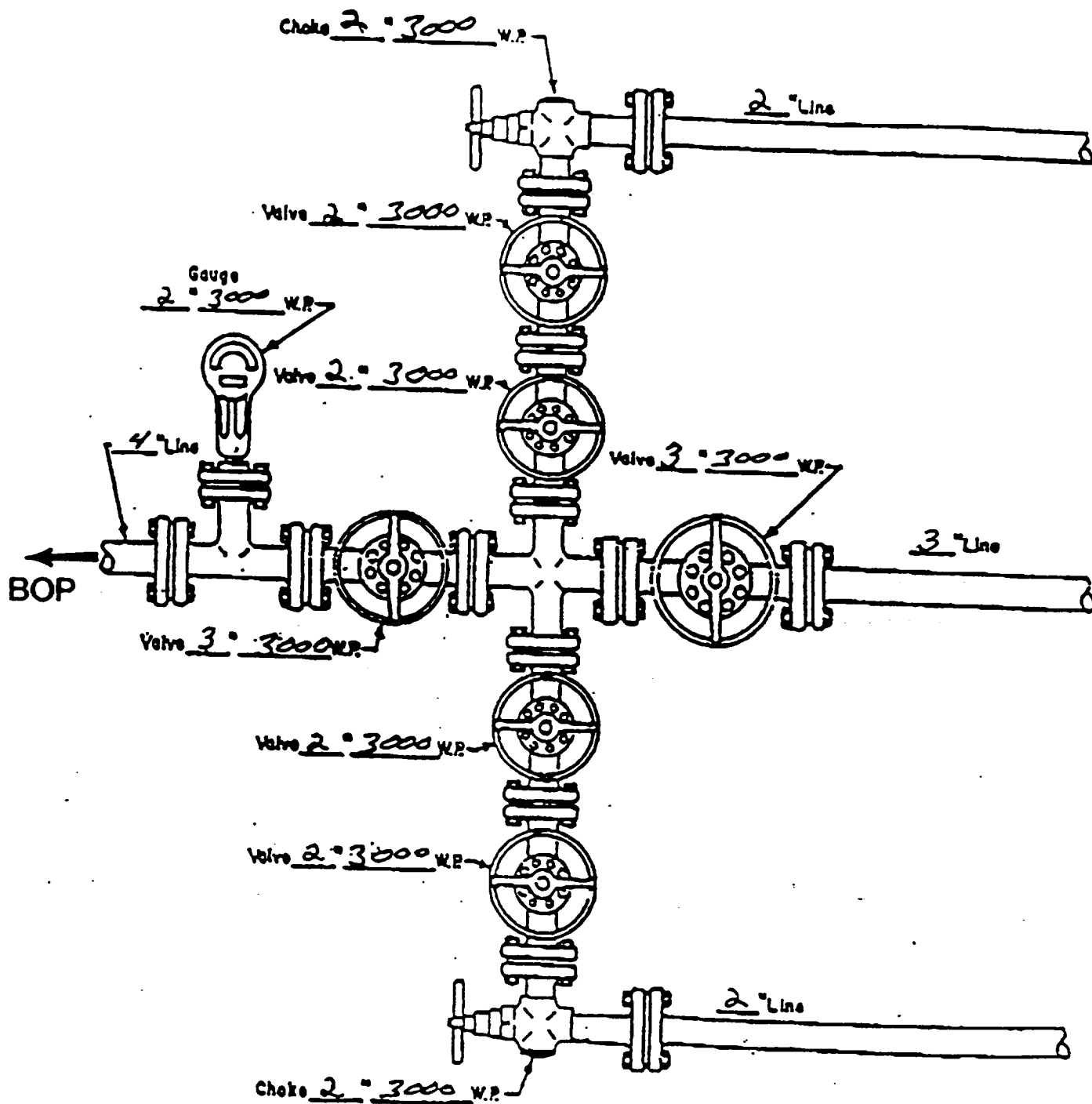
BOP SPECIFICATIONS



MI1057.DRW



CHOKE MANIFOLD DIAGRAM



MANIFOLD
3000 # W.P.

- ☒ Manual
- ☐ Hydraulic

H2S DRILLING OPERATIONS PLAN

Conoco, Inc. will comply with Onshore Order No. 2 for working in an H2S environment or a potential H2S environment.

I. Hydrogen Sulfide Training

All contractors and subcontractors employed by Conoco will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions.
3. Operations of safety equipment and life support systems.

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system, especially where high tensile strength tubulars are to be used.
2. Corrective action and shutdown procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

II. H2S EQUIPMENT AND SYSTEMS

1. Safety Equipment

The following minimum safety equipment will be on location:

- A. Wind direction indicators placed near rig floor/mud return lines and at points along the perimeter of the location to allow visibility of at least one indicator from any point on location.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the doghouse and at briefing areas on location.

2. Well Control Systems

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

1. Pipe rams to accommodate all pipe sizes
2. Blind rams
3. Choke manifold
4. Closing Unit
5. Flare line and means of ignition

B. Communication

The rig contractor will be required to have two-way communication capability. Conoco will have either land-line, satellite phone, microwave phone, or mobile (cellular) telephone capabilities.

C. Mud Program

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S bearing zones.

D. Drill Stem Tests

Any planned drill stem test will be cancelled if H₂S is detected prior to such test. In the event that H₂S is detected during testing, the test will be terminated immediately.