

BUREAU OF LAND MANAGEMENT

Oil Cons. DIV-D

5. LEASE DESIGNATION AND SERIAL NO.
NM-109756

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

a. TYPE OF WORK

DRILL ☒MAR 01 2005 DEEPEN ☐

Artesia, NM 88210

b. TYPE OF WELL

OIL WELL ☐GAS WELL ☒OTHER ☐SINGLE ZONE ☒MULTIPLE ZONE ☐

2. NAME OF OPERATOR

LATIGO PETROLEUM, INC.

(JOE CLEMENT 432-684-4293)

3. ADDRESS AND TELEPHONE NO.

415 WEST WALL STREET SUITE 1900 MIDLAND, TEXAS 79701

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

At surface

1330' FNL & 1330' FWL SECTION 19 T25S-R27E EDDY CO. NM

At proposed prod. zone SAME per SN dated 2/4/05

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

Approximately 15 miles Southwest of Malaga New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1330'

(Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION*

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

16. NO. OF ACRES IN LEASE

960

17. NO. OF ACRES ASSIGNED TO THIS WELL

320

19. PROPOSED DEPTH

12,100'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3240' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20"	NA	40'	Cement to surface w/Redi-mix
17½"	H-40 13 3/8"	48	400'	400 Sx. Circulate cement.
12½"	J-55 9 5/8"	40 & 36	2100'	750 Sx. " "
8½"	N-80, P-110 7"	26	8800'	1000 Sx. " "
6 1/8"	P-110 4½"	11.5	12,100 to 8500'	400 Sx. cement to liner top.

CARLSBAD CONTROLLED WATER BASIN

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 400'. Run and set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. of Class "C" cement + ¼# Flocele/Sx; + 2% CaCl, circulate cement to surface.
3. Drill 12½" hole to 2100'. Run and set 2100' of 9 5/8" 36 & 40# J-55 ST&C casing. Cement with 750 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 8½" hole to 8800'. Run and set 8800' of 7" 26# N-80 & P110 LT&C casing. Cement with 1000 Sx. of Class "C" cement + additives, circulate cement to surface.
5. Drill 6 1/8" hole to 12,100'. Run and set a3600' 4½" 11.6# P100 LT&C liner from TD back to 8500' Cement with 400 Sx. of Class "H" Premium Plus cement + additives.

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

TITLE

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS

01/25/05

AND SPECIAL STIPULATIONS

ATTACHED

(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/ Joe G. Lara

ACTING

FIELD MANAGER

FEB 24 2005

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **LATIGO PETROLEUM, INC. (JOE CLEMENT 432-684-4293)**

3a. Address **415 WEST WALL STREET**

SUITE 1900 MIDLAND, TEXAS 79701

3b. Phone No. (include area code)

432-684-4293

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1130' FWL & 1480' FNL SECTION 19 T25S-R27E EDDY CO. NM

5. Lease Serial No.

NM-109756

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

MARINE "19" FEDERAL # 1

9. API Well No.

10. Field and Pool, or Exploratory Area

COTTONWOOD DRAW UNDES MORRO

11. County or Parish, State

EDDY CO. NEW MEXICO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Move location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. **LATIGO PETROLEUM, INC. Requests the approval to move the location of their MARINE "19" FEDERAL # 1**

FROM: 1330' FNL & 1330' FWL SECTION 19 T25S-R27E

TO: 1480' FNL & 1130' FWL SECTION 19 T25S-R27E

2. The reason for this move is to comply with the request of the BUREAU OF LAND MANAGEMENT DUE TO topography.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Joe T. Janica

Title

Agent

Signature

Joe T. Janica

Date

02/04/05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Joe G. Lara

ACTING

FIELD MANAGER

Title

FEB 24 2005

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		UNDES. COTTONWOOD DRAW-MORROW
Property Code	Property Name	Well Number
	MARINE 19 FEDERAL	1
OGRID No. 227001	Operator Name	Elevation
	LATIGO PETROLEUM, INC.	3238'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	19	25-S	27-E		1480	NORTH	1130	WEST	EDDY

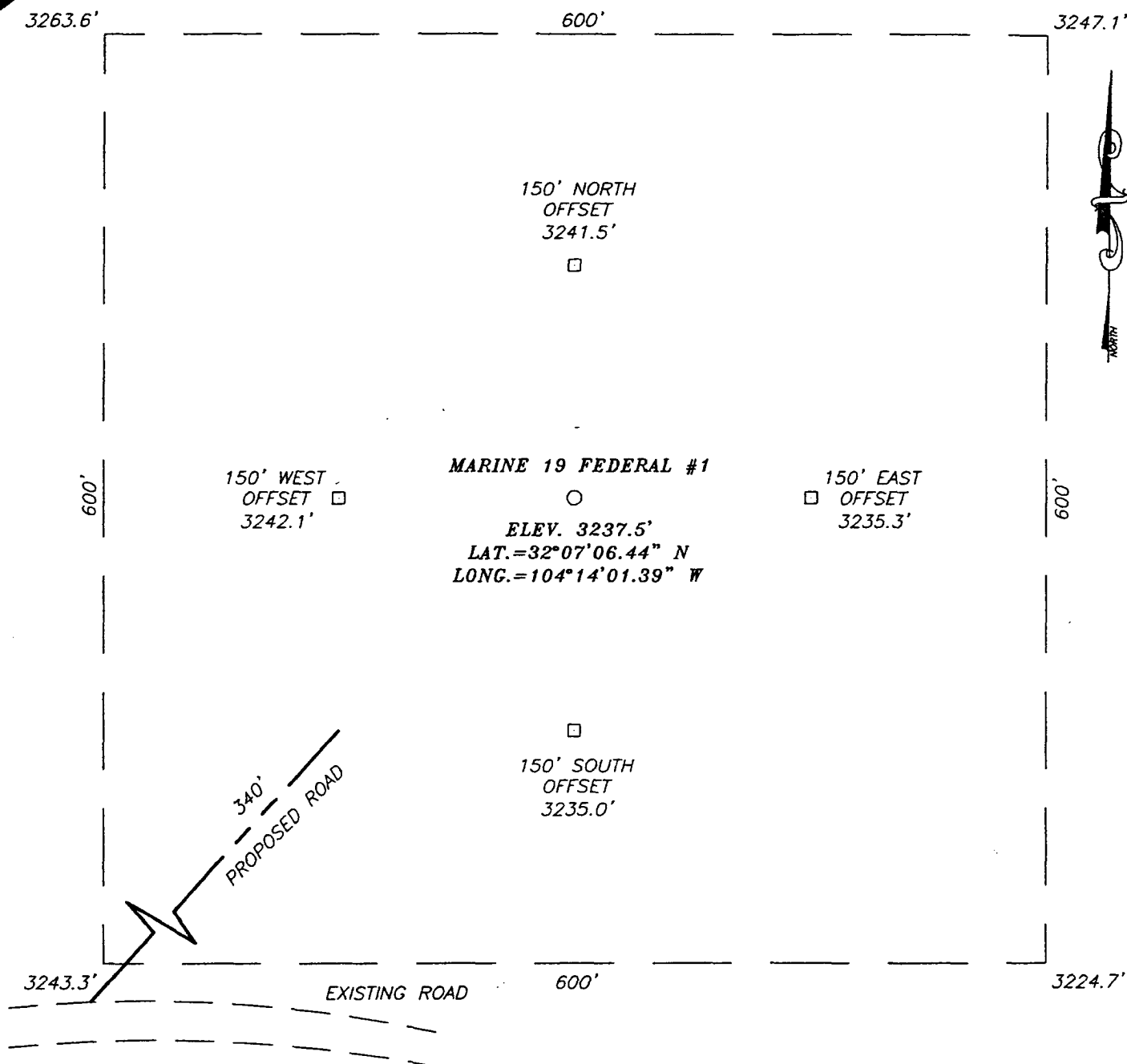
Bottom Hole Location - If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

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

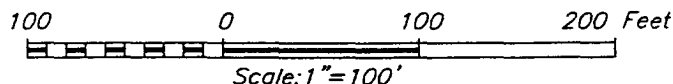
	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature</p> <p>Joe T. Janica Printed Name</p> <p>Agent Title</p> <p>02/04/05 Date</p>
<p>LOT 2</p> <p>LOT 3</p> <p>LOT 4</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=406831.4 N X=530839.7 E</p> <p>LAT.=32°07'06.44" N LONG.=104°14'01.39" W</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>JANUARY 25, 2005</p> <p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Ronald J. Eidson</i> Professional Surveyor</p> <p>3239' 05.11.0115</p> <p>Certificate No. RONALD EIDSON 3239 GARY EIDSON 12641</p>

EXHIBIT "A"



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF EDDY CO. ROAD 720 (BLACK RIVER ROAD) AND EDDY CO. ROAD 742 (JOHN C. FOREHAND). GO SOUTH ON FOREHAND ROAD APPROX. 8.4 MILES. TURN LEFT (EAST) FOR 0.3 MILES TO A DRY HOLE MARKER AND PROPOSED ROAD SURVEY ON THE NORTH SIDE OF ROAD. FOLLOW ROAD SURVEY NORTHEAST 340' FEET TO THIS LOCATION.



LATIGO PETROLEUM, INC.

MARINE 19 FEDERAL #1 WELL
LOCATED 1480 FEET FROM THE NORTH LINE
AND 1130 FEET FROM THE WEST LINE OF SECTION 19,
TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 01/25/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0115	Dr By: DEL	Rev 1:N/A	
Date: 01/27/05	Disk: CD#5	05110115	Scale: 1"=100'



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 1330' FNL & 1330' FWL SECTION 19 T25S-R27E EDDY CO. NM
2. Elevation above sea level: 3240' GR.
3. Geologic name of surface formation: Quaternary
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 12,100'
6. Estimated tops of geological markers:

Delaware	1880'	Strawn	10490'
Bone Spring	5340'	Atoka	10810'
Wolfcamp	5800'	Morrow Lime	10920'
Penn Shale	10190'	Morrow Clastics	11280'
7. Possible mineral bearing formation:

Strawn Gas

Morrow Gas

8. Casing program:

<u>Hole size</u>	<u>Interval</u>	<u>OD casing</u>	<u>Weight</u>	<u>Thread</u>	<u>Collar</u>	<u>Grade</u>
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-400'	13 3/8"	48	8-R	ST&C	H-40
12¼"	0-2100'	9 5/8"	36 & 40	8-R	ST&C	J-55
8½"	0-8800'	7"	26	8-R	LT&C	P-110
* 6 1/8"	8500-12,100'	4½"	11.6	8-R	LT&C	P-110

*Liner from 8500' to TD.

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM

9. CEMENTING AND CASING SETTING DEPTHS:

- 20" Conductor Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
9. 13 3/8" Surface Set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. of Class "C" cement + additives, circulate cement to surface.
- 9 5/8" Intermediate Set 2100' of 9 5/8" 36 & 40# J-55 ST&C casing. Cement with 750 Sx. of Class "C" cement + additives, circulate cement to surface.
- 7" 2nd Intermediate Set 8800' of 7" 26# P-110 LT&C casing. Cement with 1000 Sx. of Class "C" cement + additives, estimate top of cement 1800' from surface.
- 4 1/2" Prod. Liner Set 3600' of 4 1/2" 11.6# P-110 Liner from TD (12,100') back to 8500'. Cement with 400 Sx. of Class "H" Premium Plus cement + additives, cement to top of liner.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 5000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-400'	8.4-8.7	29-34	NC	Fresh water Spud Mud add paper to control seepage.
400-2100'	10.0-10.2	29-34	NC	Brine water use paper to control seepage use high viscosity sweeps to clean hole.
2100-8800'	10.0-10.3	29-40	NC	Same as above.
8800-12,100'	9.8-10.1	32-40	* 10 cc or less	Cut Brine use Gel to control viscosity, Dris-Pac to control water loss.

* Water loss may have to be controlled in order to run logs and casing as well to protect formation from damage.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, Spectral Density, LDT, CNL, MGRD, Gamma Ray Caliper from 2100' to 13 3/8" casing shoe. Gamma Ray, Neutron from 13 3/8" casing shoe to surface. Same open hole logs over intervals 8800 to 2100', TD to 8800'.
- B. Mud logger will be placed on hole at 1700'.
- C. No DST's are planned at this time.
- D. No cores are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 5200 PSI, and Estimated BHT 195°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 40 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

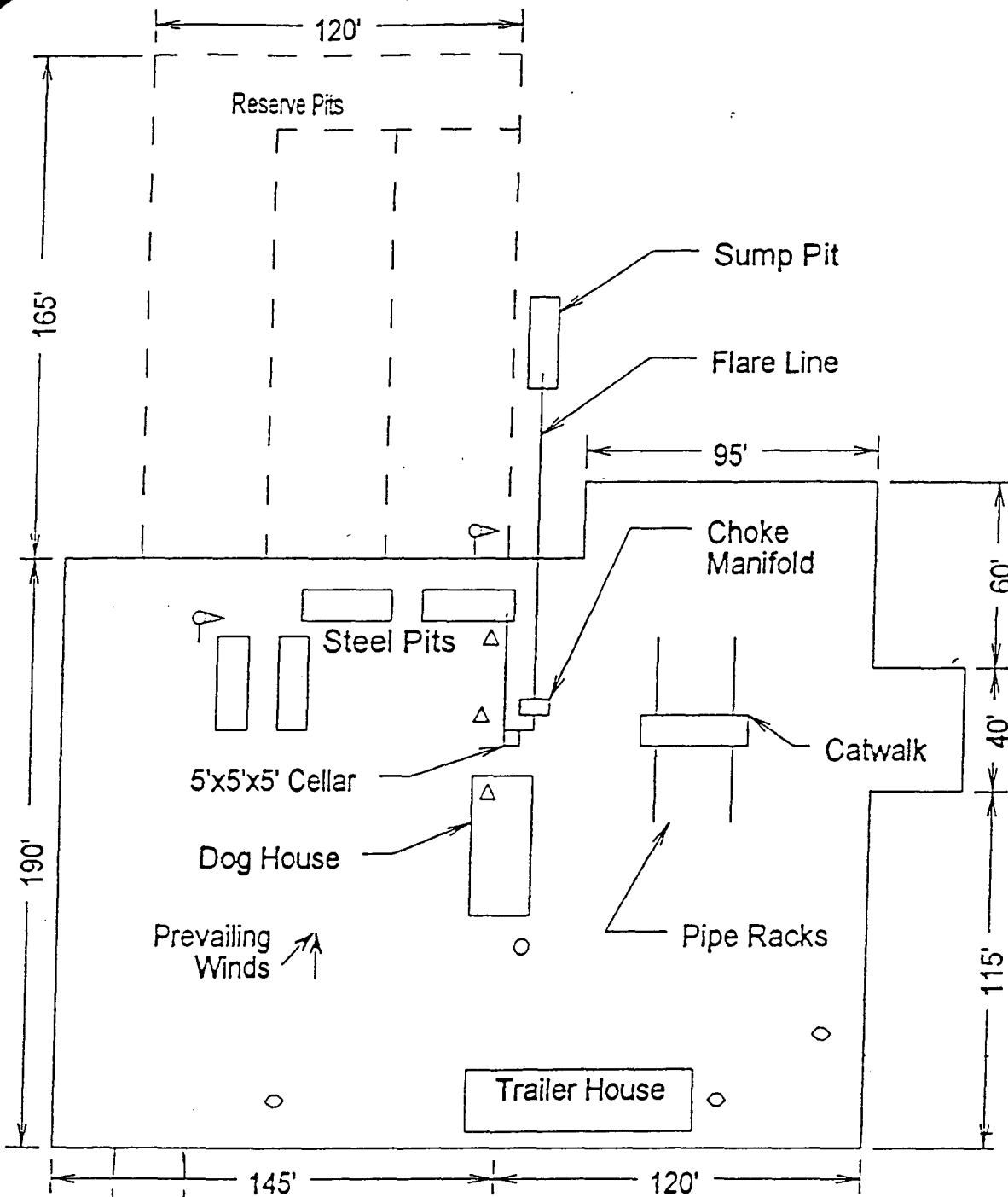
15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The MORROW formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as a gas well.

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blowline (mud pit) and on derrick floor or doghouse.
3. Windsack and/or wind streamers
 - A. Windsack at mudpit area should be high enough to be visible.
 - B. Windsack at briefing area should be high enough to be visible.
 - C. There should be a windsack at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "E-1"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

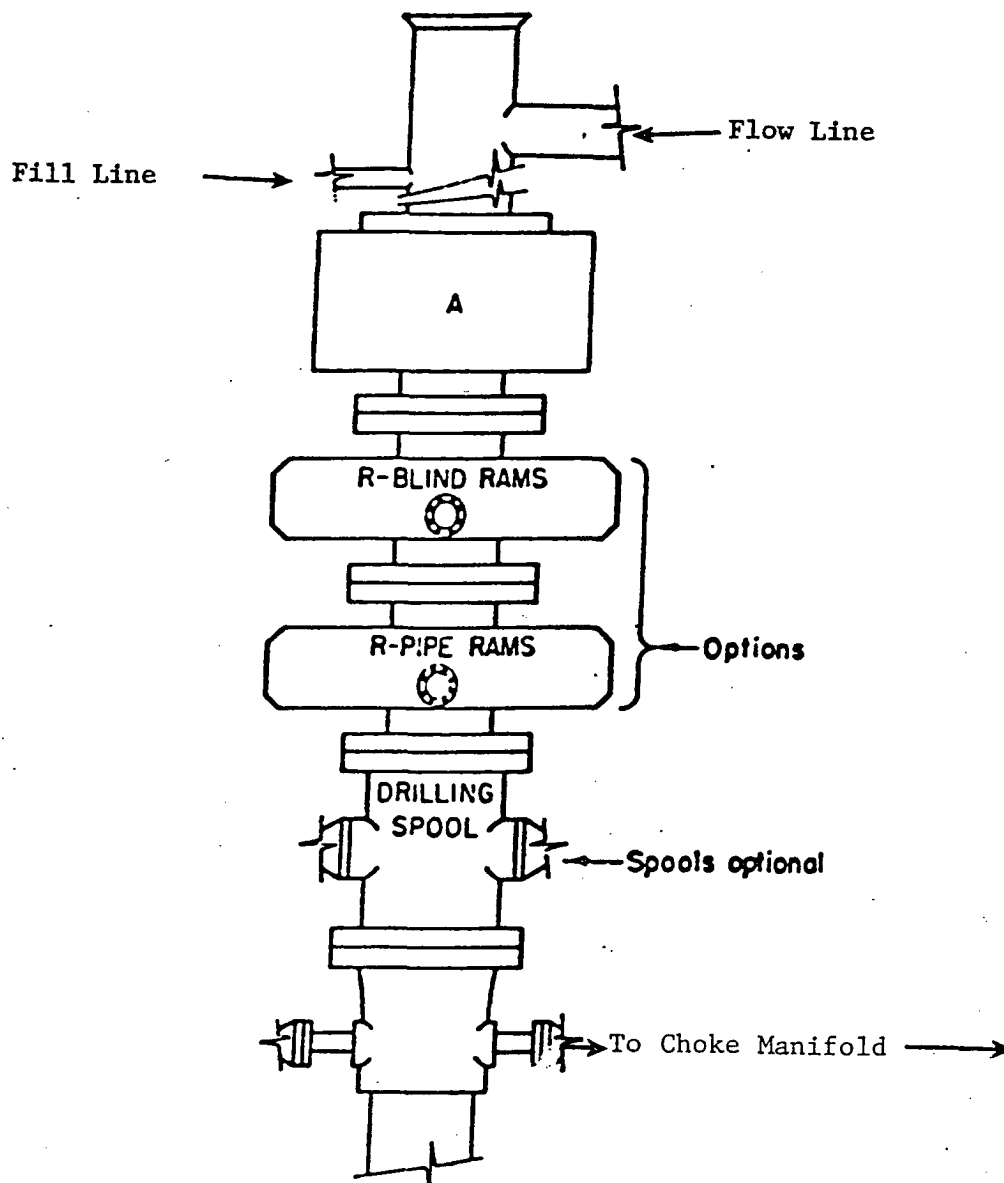


Access Road

- ⏏ Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM



ARRANGEMENT SRRA

1500 Series
5000# Working Pressure

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM

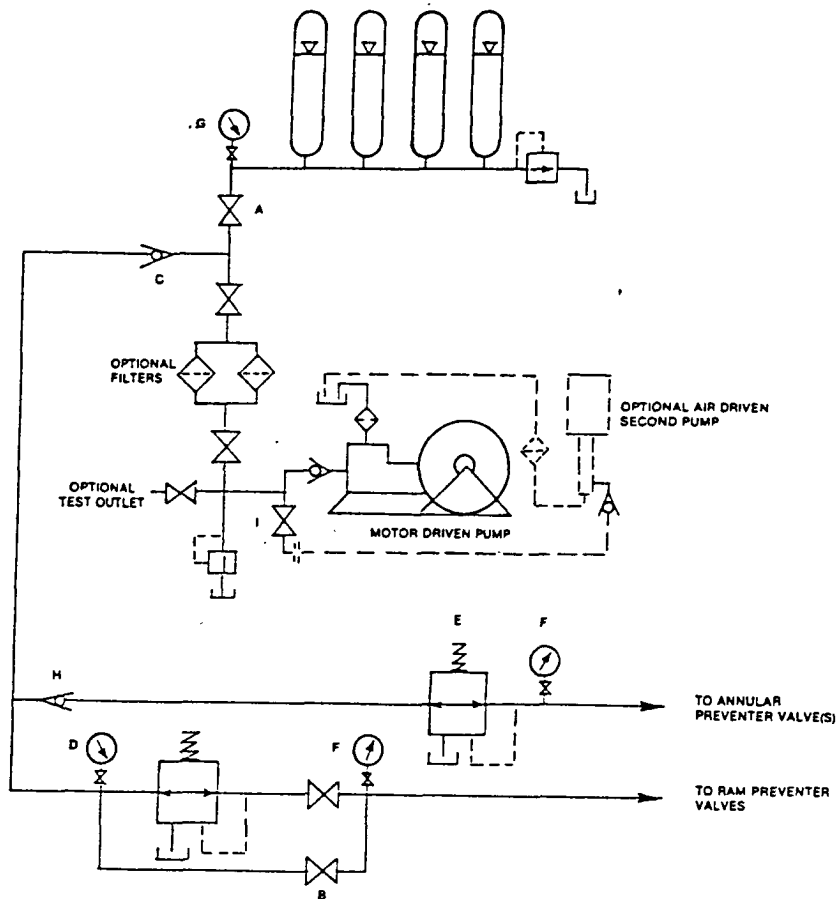


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

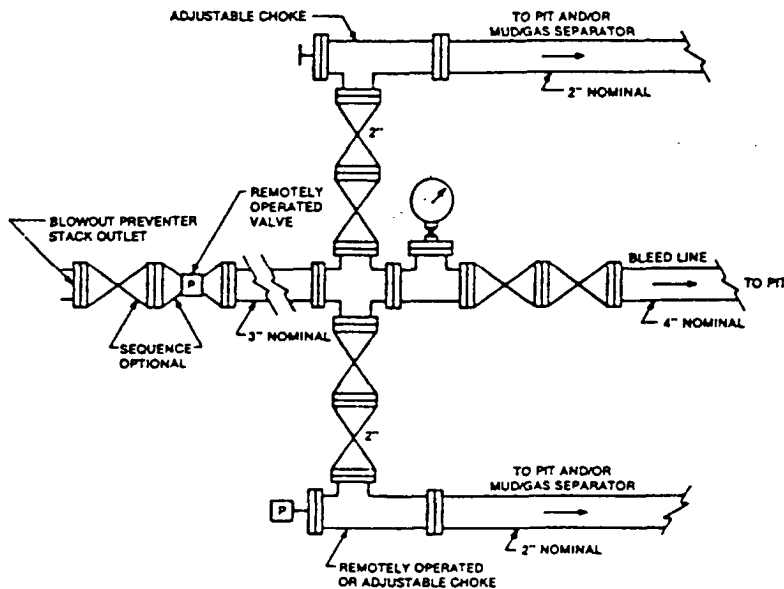


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LATIGO PETROLEUM, INC.
MARINE "19" FEDERAL # 1
UNIT "F" SECTION 19
T25S-R27E EDDY CO. NM