

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

Case Serial No.
NMNM19848

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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other: INJECTION

8. Well Name and No.
LAKESIDE 20702 SWD 1

2. Name of Operator

MESQUITE SWD INCORPORATED

Contact: MELANIE WILSON

E-Mail: mjp1692@gmail.com

9. API Well No.
30-015-45146-00-X1

3a. Address

CARLSBAD, NM 88220

3b. Phone No. (include area code)

Ph: 575-914-1461

10. Field and Pool or Exploratory Area
SWD-DEVONIAN

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

Sec 29 T23S R29E 1750FNL 2640FEL
32.278263 N Lat, 104.006508 W Lon

11. County or Parish, State

EDDY COUNTY, NM

12. CHECK THE 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"/> Hydraulic Fracturing	<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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<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 recomple 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Mesquite SWD, Inc. requests permission for the following changes to the original APD:

Well Control

Approved: 10M BOP system

Change to:

Nipple up on 20" surface casing with 2M BOP system

Nipple up on 13 3/8" casing with 3M BOP system

Nipple up on 9 5/8" casing with 10M BOP system with 5M annular (well control plan attached)

Casing

Approved: Liner - 7" 29# P110 LTC set 10500'-14507'

Change to: Liner - 7 5/8" 39# P110 set 10500'-14507'

HC US-Liberty FSM, Spec Sheet attached. DRZ

RECEIVED

APR 12 2019

DISTRICT II-ARTESIA O.C.D.

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

Electronic Submission #460120 verified by the BLM Well Information System
For MESQUITE SWD INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 04/03/2019 (19PP1556SE)

Name (Printed/Typed) MELANIE WILSON

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 04/03/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By DYLAN ROSSMANGO

Title PETROLEUM ENGINEER

Date 04/04/2019

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

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

RUF 7-28-19

Additional data for EC transaction #460120 that would not fit on the form

32. Additional remarks, continued

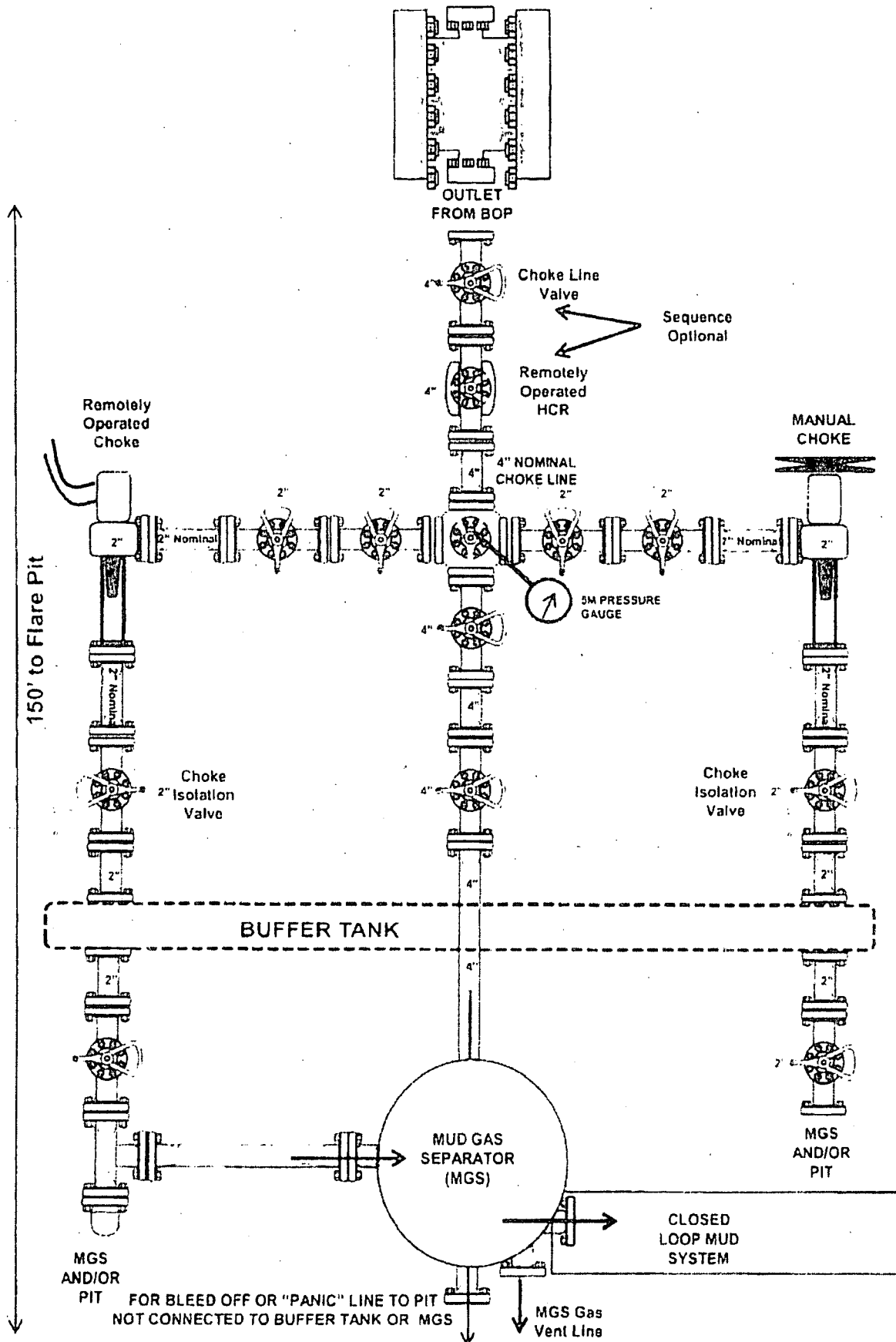
Note: We plan to run 53.5# L-80 LTC 9 5/8" 2nd intermediate casing as approved in drilling plan

Open Hole

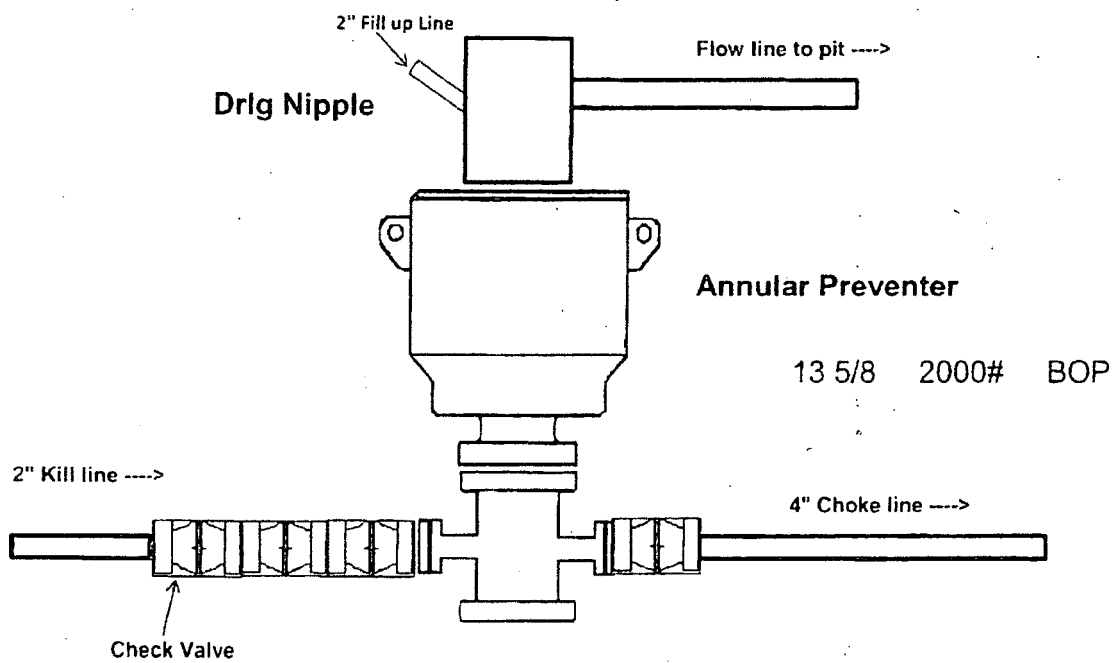
Approved: 6" open hole to 16000'

Change to: 6 1/2" open hole to 16000'

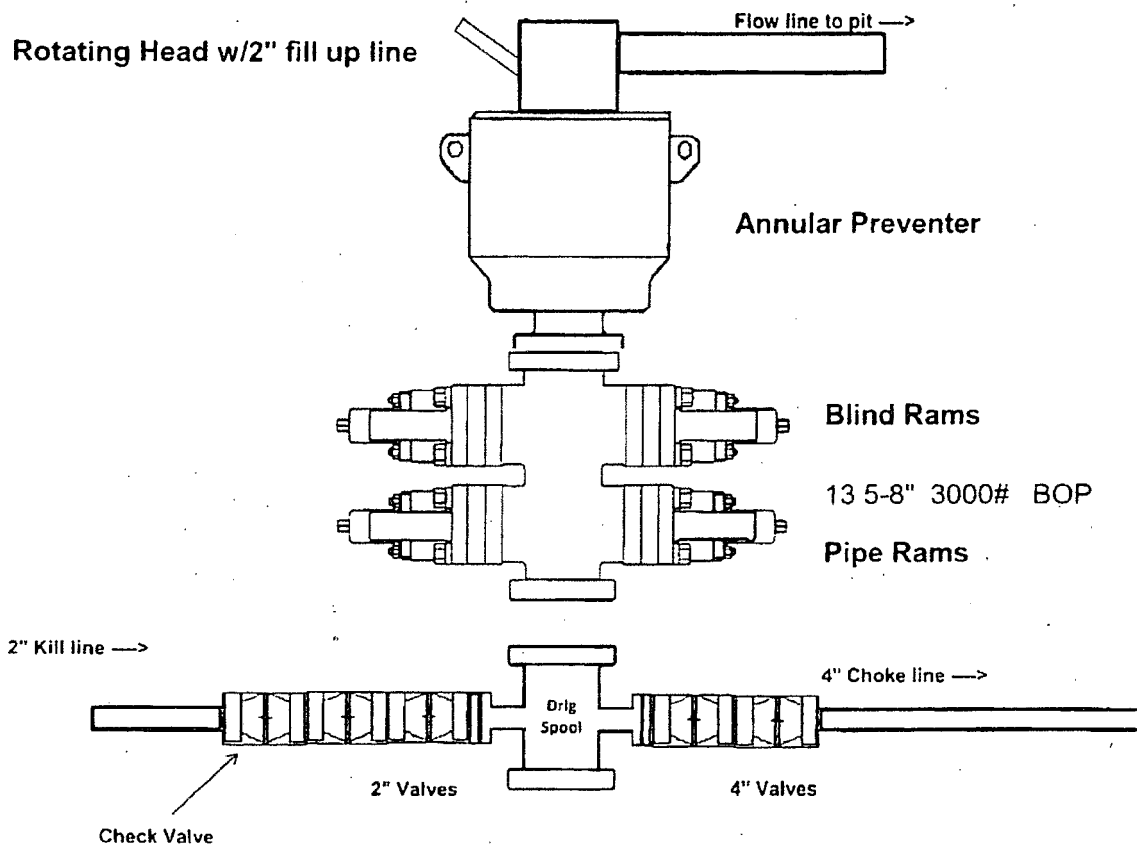
2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



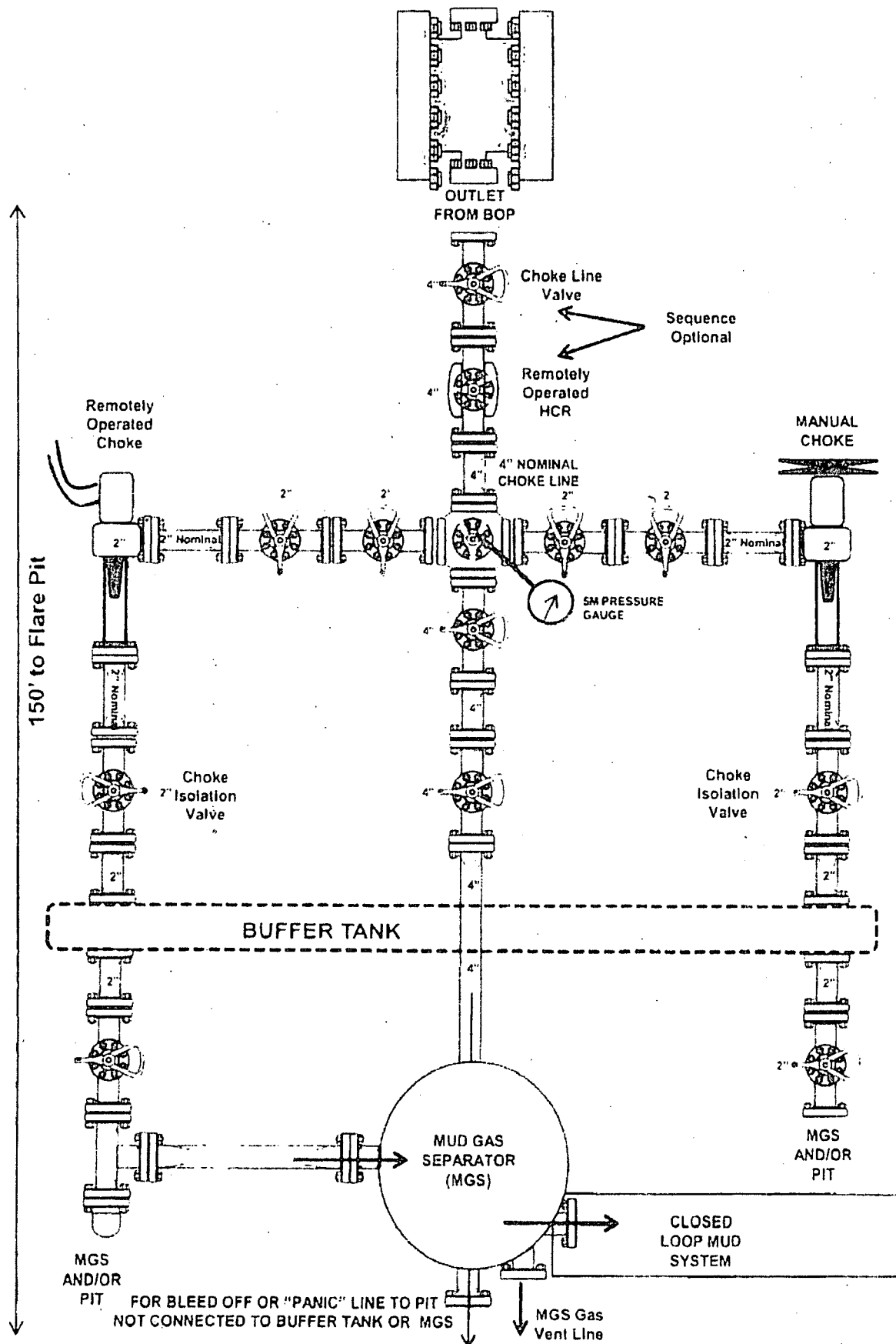
2,000 psi BOP Schematic



3,000 psi BOP Schematic



3M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)





U. S. Steel Tubular Products

4/4/2018 10:33:14 AM

7.625" 39.00lbs/ft (0.500" Wall) P110 HC USS-LIBERTY FJM®

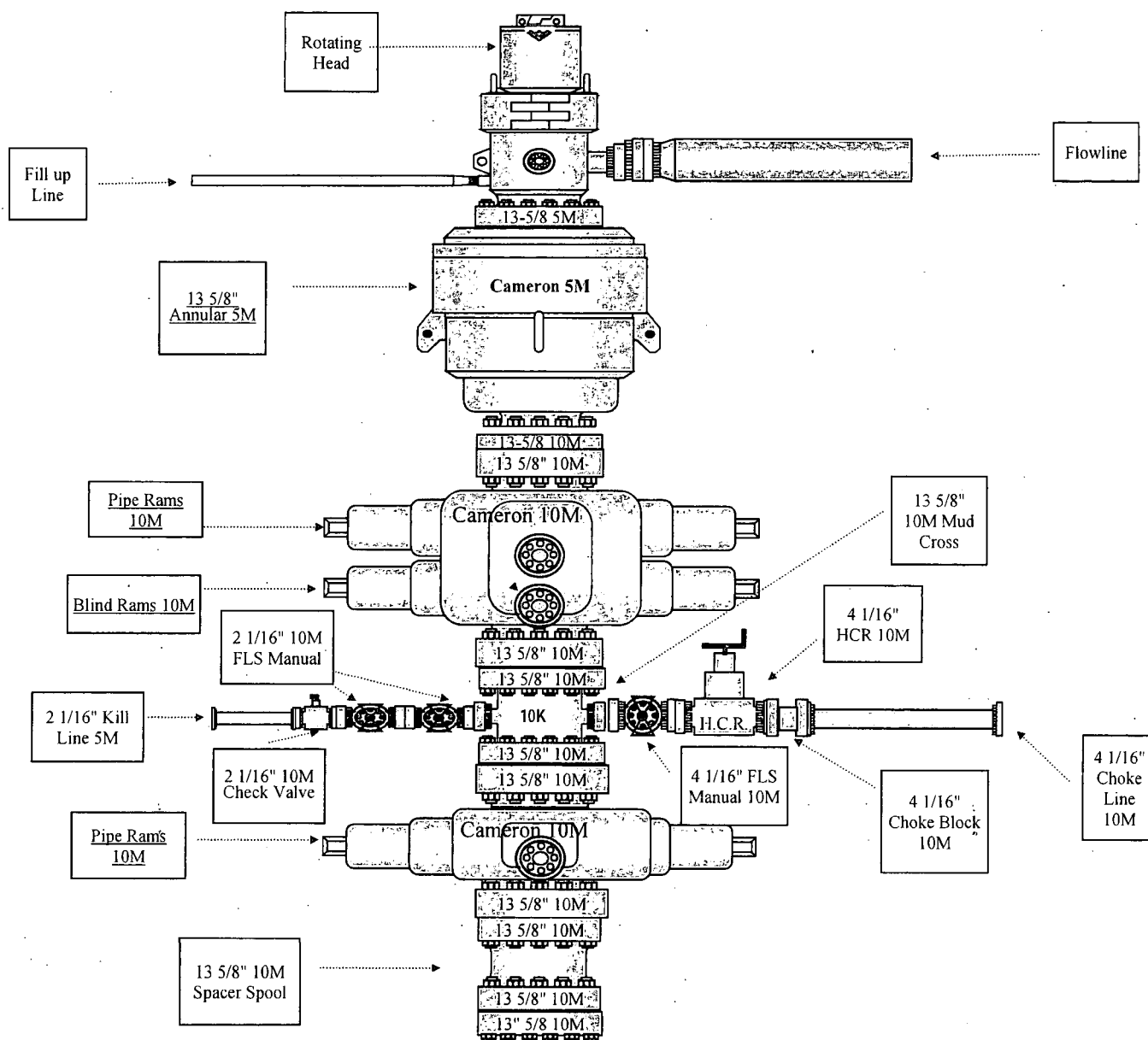
MECHANICAL PROPERTIES	Pipe	USS-LIBERTY FJM®	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	140,000	--	psi
Minimum Tensile Strength	125,000	--	psi
DIMENSIONS	Pipe	USS-LIBERTY FJM®	
Outside Diameter	7.625	7.625	in.
Wall Thickness	0.500	--	in.
Inside Diameter	6.625	6.539	in.
Standard Drift	6.500	6.500	in.
Alternate Drift	--	--	in.
Nominal Linear Weight, T&C	39.00	--	lbs/ft
Plain End Weight	38.08	--	lbs/ft
SECTION AREA	Pipe	USS-LIBERTY FJM®	
Critical Area	11.192	6.665	sq. in.
Joint Efficiency	--	59.5	%
PERFORMANCE	Pipe	USS-LIBERTY FJM®	
Minimum Collapse Pressure	12,180	12,180	psi
External Pressure Leak Resistance	--	12,180	psi
Minimum Internal Yield Pressure	12,640	12,640	psi
Minimum Pipe Body Yield Strength	1,231,000	--	lbs
Joint Strength	--	733,000	lbs
Compression Rating	--	733,000	lbs
Reference Length	--	12,843	ft
Maximum Uniaxial Bend Rating	--	39.4	deg/100 ft
MAKE-UP DATA	Pipe	USS-LIBERTY FJM®	
Make-Up Loss	--	4.75	in.
Minimum Make-Up Torque	--	14,700	ft-lbs
Maximum Make-Up Torque	--	20,750	ft-lbs

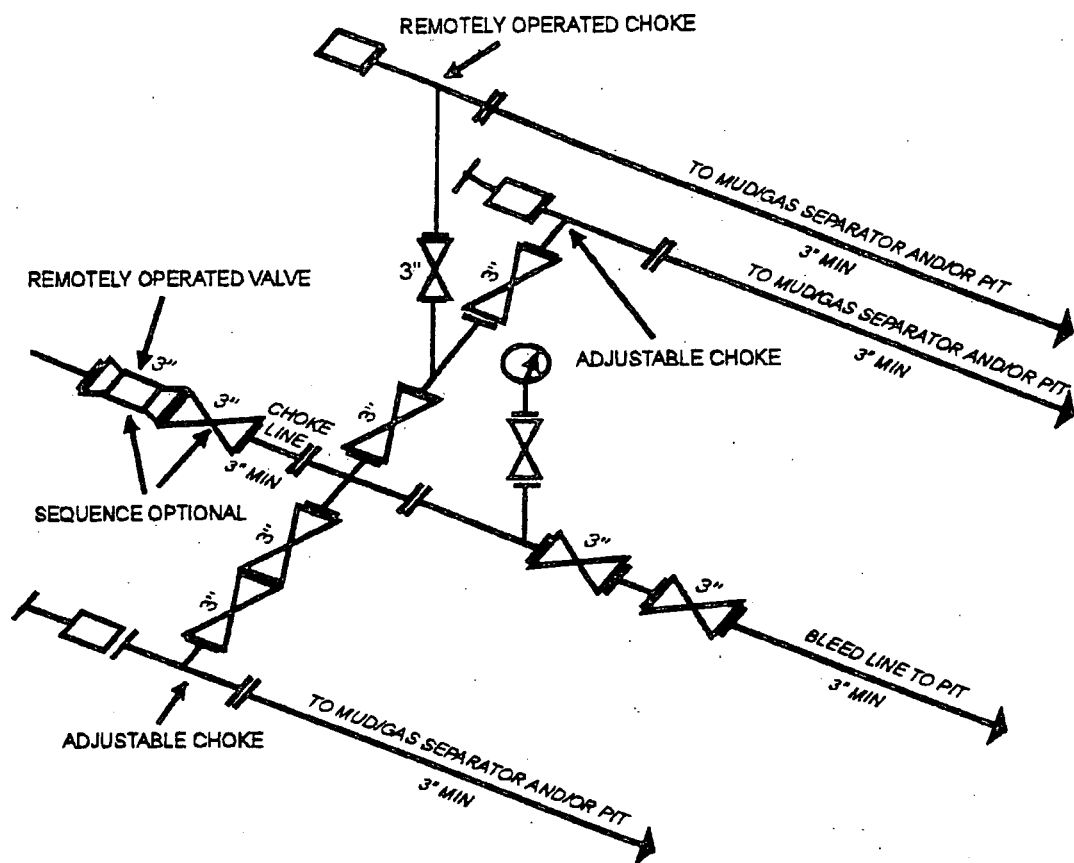
1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
4. USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness and cannot be interchanged.
5. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
6. Reference length is calculated by joint strength divided by nominal plain end weight with 1.5 safety factor.
7. Connection external pressure leak resistance has been verified to 100% API pipe body collapse pressure following the guidelines of API 5C5 Cal III.

Legal Notice

USS-LIBERTY FJM® is a trademark of U. S. Steel Corporation. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U.S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

10M BOP with 5M Annular
Mesquite SWD, Inc.





10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY
 [53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]

**Mesquite SWD, Inc.
Well Control Plan**

A. Component and Preventer Compatibility Table

Component	OD	Preventer	RWP
Drill Pipe	5"	Upper VBR: 4" - 7" Lower: 5" fixed	10M
Heavyweight Drill Pipe	5"	Upper VBR: 4" - 7" Lower: 5" fixed	10M
Drill Collars & MWD Tools	6 1/2"	Upper VBR: 4" - 7"	10M
Mud Motor	6 1/2"	Upper VBR: 4" - 7"	10M
Production Casing	5 1/2"	Upper VBR: 4" - 7"	10M
All	0 - 13 5/8"	Annular	5M
Open Hole		Brind Rams	10M

B. Well Control Procedures

- I. General Procedures While Drilling:
 - a. Sound alarm – alert crew
 - b. Space out drill string
 - c. Shut down pumps and stop rotary
 - d. Open HCR
 - e. Shut well in, utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut in
 - h. Notify rig manager and Mesquite SWD, Inc. company representative
 - i. Call Mesquite SWD, Inc. engineer
 - j. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - k. Regroup, identify forward plan

- II. General Procedures While Tripping:
 - a. Sound alarm – alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drill string
 - d. Open HCR
 - e. Shut well in, utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut in
 - h. Notify rig manager and Mesquite SWD, Inc. company representative
 - i. Call Mesquite SWD, Inc. engineer
 - j. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - k. Regroup, identify forward plan

Mesquite SWD, Inc.
Well Control Plan

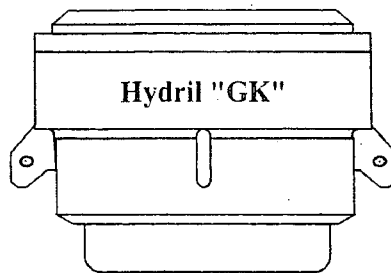
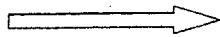
- III. General Procedures While Running Casing:
- a. Sound alarm – alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drill string
 - d. Open HCR
 - e. Shut well in, utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut in
 - h. Notify rig manager and Mesquite SWD, Inc. company representative
 - i. Call Mesquite SWD, Inc. engineer
 - j. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - k. Regroup, identify forward plan
- IV. General Procedures With No Pipe in Hole (Open Hole):
- a. Sound alarm – alert crew
 - b. Open HCR
 - c. Shut well in with blind rams
 - d. Close choke
 - e. Confirm shut in
 - f. Notify rig manager and Mesquite SWD, Inc. company representative
 - g. Call Mesquite SWD, Inc. engineer
 - h. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - i. Regroup, identify forward plan
- V. General Procedures While Pulling BHL Through BOP Stack:
- 1. Prior to pulling last joint of drill pipe through stack
 - A. Perform flow check and if flowing:
 - a. Sound alarm – alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drill string with tool joint just beneath upper pipe ram
 - d. Open HCR
 - e. Shut well in utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut in
 - h. Notify rig manager and Mesquite SWD, Inc. company representative
 - i. Call Mesquite SWD, Inc. engineer
 - j. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - k. Regroup, identify forward plan

Mesquite SWD, Inc.
Well Control Plan

2. With BHL in the BOP stack and compatible ram preventer and pipe combo immediately available.
 - a. Sound alarm – alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drill string with tool joint just beneath upper pipe ram
 - d. Open HCR
 - e. Shut well in utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut in
 - h. Notify rig manager and Mesquite SWD, Inc. company representative
 - i. Call Mesquite SWD, Inc. engineer
 - j. Read and record:
 - i. Shut in drill pressure and shut in casing pressure
 - ii. Pit gain
 - iii. Time
 - k. Regroup, identify forward plan
3. With BHA in the BOP stack and no compatible ram preventer and pipe combo immediately available
 - a. Sound alarm – alert crew
 - b. If possible to pick up high enough, pull string clear of the stack and follow Open Hole scenario (III)
 - c. If impossible to pick up high enough to pull the string clear of the stack:
 - i. Stab crossover, make up one joint/stand of drill pipe and full opening safety valve and close
 - ii. Space out drill string with tool joint just beneath the upper pipe ram
 - iii. Open HCR
 - iv. Shut in utilizing upper VBRs
 - v. Close choke
 - vi. Confirm shut in
 - vii. Notify rig manager and Mesquite SWD, Inc. company representative
 - viii. Read and record:
 1. Shut in drill pipe pressure and shut in casing pressure
 2. Pit gain
 3. Time
 - d. Regroup and identify forward plan

** If annular is used to shut in well and pressure build to or is expected to get to 50% of RWP, confirm space-out and swap to upper VBRs for shut in.

Hydril "GK"
13-5/8" 5M



Hydril "GK"

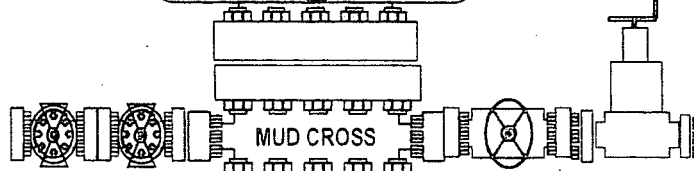


Variable Bore Rams

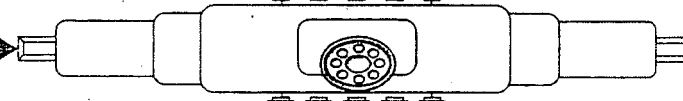
Cameron Type U
13-5/8" 10M



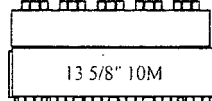
BLIND RAMS



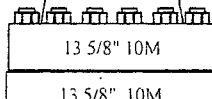
MUD CROSS



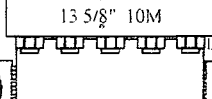
5" Fixed Rams



13 5/8" 10M



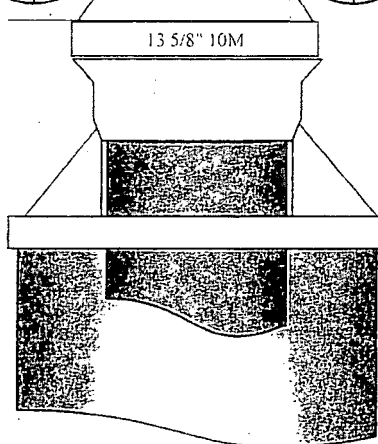
13 5/8" 10M



13 5/8" 10M



13 5/8" 10M



**PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL
Change of APD Sundry EC#460120**

OPERATOR'S NAME:	Mesquite SWD Incorporated
LEASE NO.:	NMNM19848
WELL NAME & NO.:	Lakeside 20702 SWD 1
SURFACE HOLE FOOTAGE:	1750' FNL & 2640' FEL
LOCATION:	Section 29, T. 23 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input type="radio"/> Flex Hose	<input checked="" type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input checked="" type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

A. CASING

1. The minimum required fill of cement behind the 7-5/8 inch production liner is
 - a. Cement should tie-back at least 100 feet into previous casing string. **Operator shall provide method of verification.**
2. Note: Open hole size has been changed from 6" to 6.5" (14507' to 16000')

B. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi.**
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-5/8 inch intermediate casing shoe shall be **3000 (3M) psi.**
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing shoe shall be **10,000 (10M) psi. Variance approved to use a 5M annular. The annular must be tested to 100% of full working pressure (5000 psi).**

**All additional previous Conditions of Approval still apply.
DR 4/3/2019**