Form 3160-5
(June 2015)

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

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 page 2

5. Lease Serial No.
NMNM0533177A

6. If Indian, Allottee or Tribe Name

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.
UBER EAST SWD 1

2. Name of Operator
MESQUITE SWD INC
Contact: MELANIE WILSON
E-Mail: mjp1692@gmail.com

9. API Well No.
30-015-43806

3a. Address
PO BOX 1479
CARLSBAD, NM 88221

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 24 T23S R31E Mer NMP NESE 2345FSL 660FEL

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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 recompletion 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 to make the following changes to the originally approved APD:

RECEIVED
OCT 25 2018
DISTRICT II-ARTESIA O.C.D.

Casing
Surface
Approved: 20" 106.5# J55 LTC set at 1060'
Change to: 20" 94# J55 BTC set at ~~850'~~ 1060'

1st Intermediate
Approved: 13 3/8" 68# J55 BTC set at 4500'. Cmt in 2 stages
Change to: 13 3/8" ~~54.5#~~ 68# J55 BTC set at 4500'. Cmt in single stage

SEE ATTACHED FOR CONDITIONS OF APPROVAL

emailed to P. Goetze 10-25-2018 mj

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #439256 verified by the BLM Well Information System
For MESQUITE SWD INC, sent to the Carlsbad
Committed to AFMSS for processing by MUSTAFA HAQUE on 10/11/2018 ()

Name *(Printed/Typed)* MELANIE WILSON — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 10/11/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Mustafa Haque — Title Petroleum Engineer — Date 10-22-2018

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.

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

KP 12-24-18

Additional data for EC transaction #439256 that would not fit on the form

32. Additional remarks, continued

2nd Intermediate
Approved: 9 5/8" 58.4# L80 LTC set at 11500'
Change to: 9 5/8" 53.5# N80 BTC set at 11500'

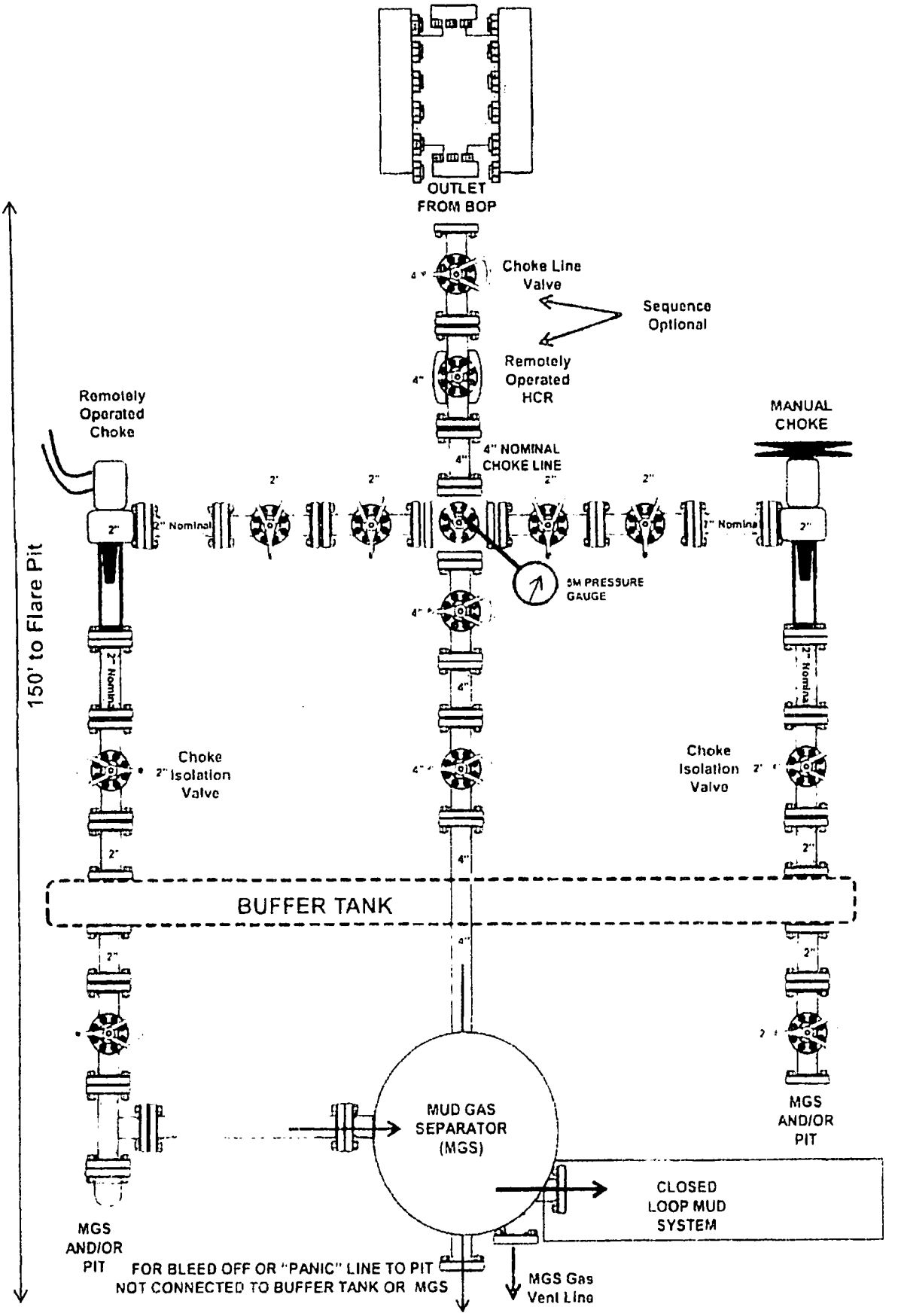
Production
Approved: 7" 29# P110/35# HCL80 LTC set 0-16390'
Change to: 7 5/8" 39# P110 FJM set 11200'-16390'

Open Hole
Approved: 5 7/8" open hole 16390-17500'
Change to: 6 1/2" open hole 16390-17500'

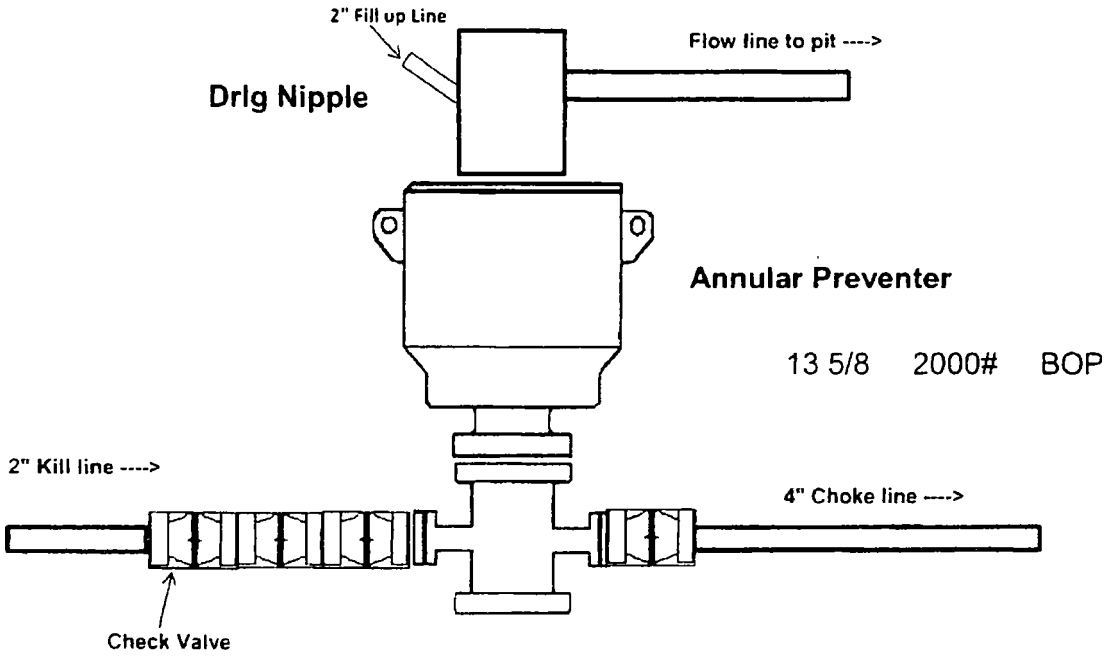
Tubing
Approved: 4 1/2" 11.6# P110/L80 set 0-16390'
Change to: 7" x 5 1/2" tapered string. 7" 0-10800', 5 1/2" 10800-16390'

Pressure Control
Approved: 10M BOP with 10M annular preventer
Change to: Nipple up on 20" csg w/2M BOP system. Nipple up on 13 3/8" csg w/5M BOP system. Nipple up on 9 5/8" csg w/10M BOP system. Request variance for use of 10M BOP with 5M annular. Well Control Plan and BOP diagrams are attached.

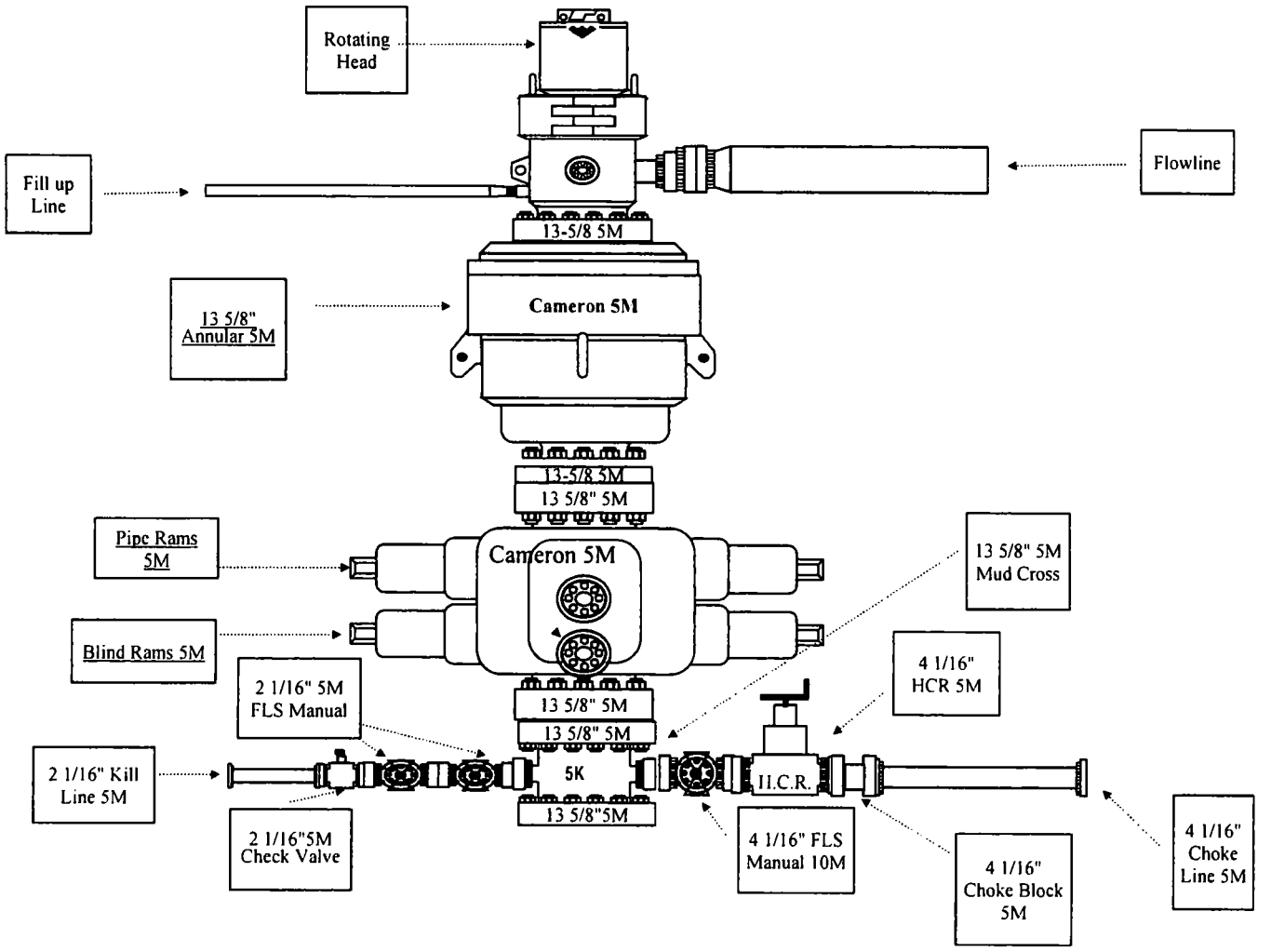
2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



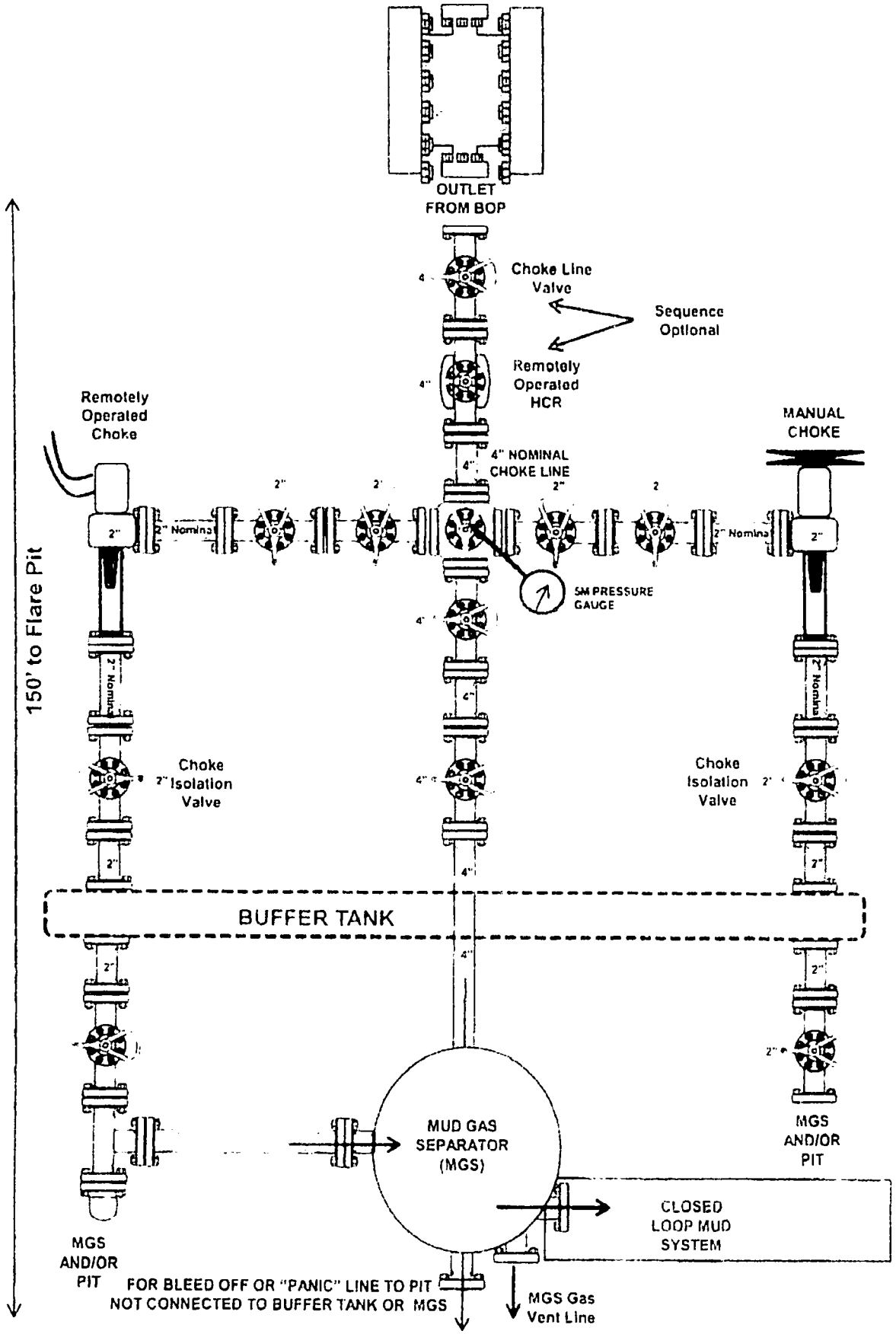
2,000 psi BOP Schematic



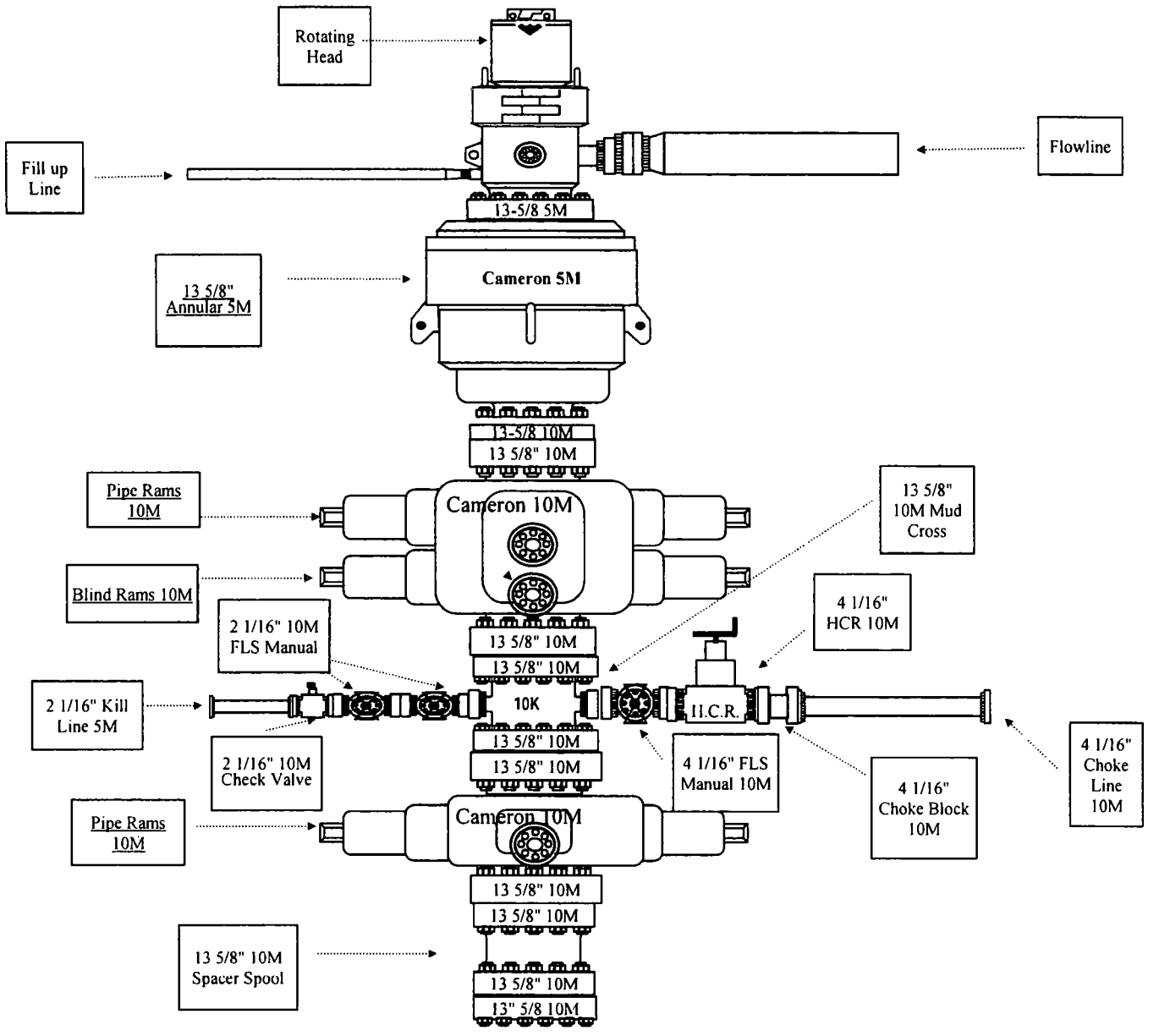
5M BOP with 5M Annular
Mesquite SWD, Inc.

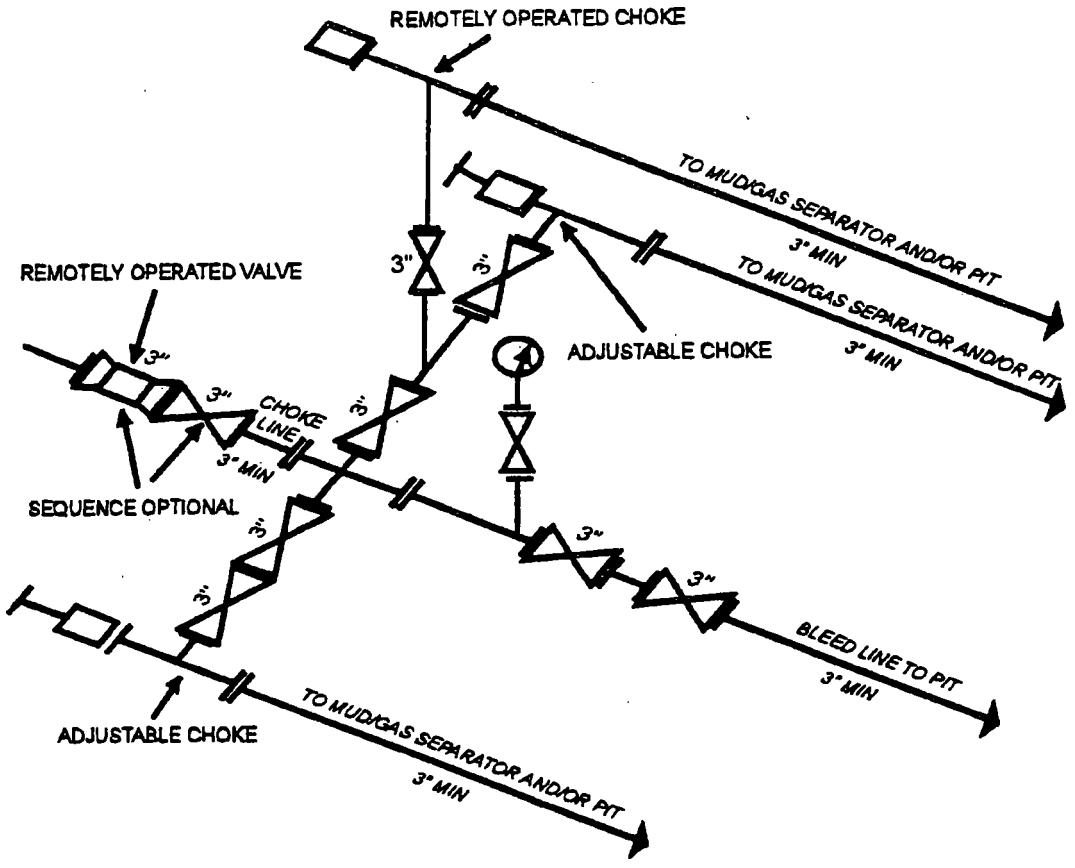


5M Choke Manifold Equipment (with MGS + closed loop)



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

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:

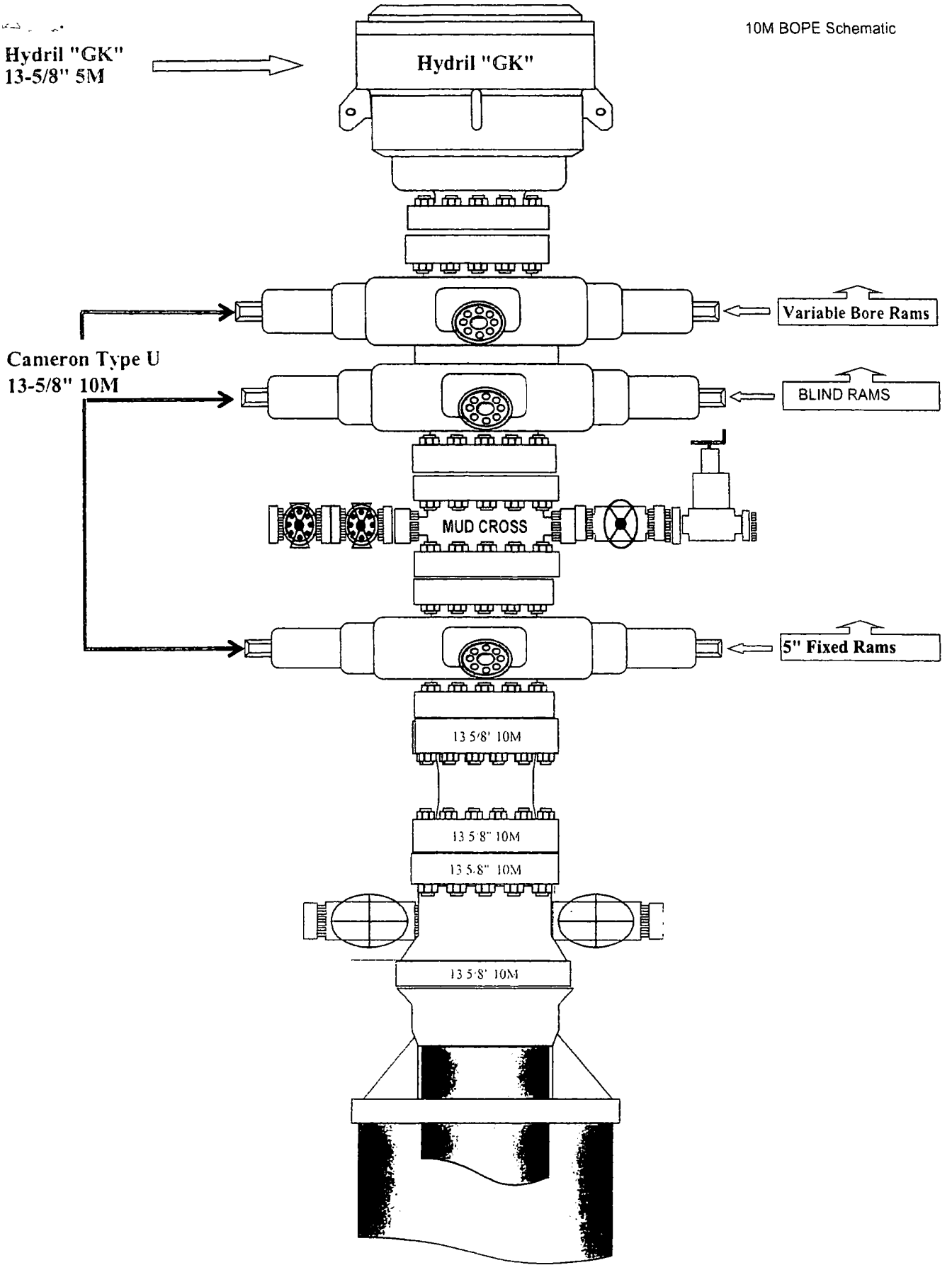
1. Prior to pulling last joint of drill pipe through stack
    A. Perform flow check and if flowing:
        a. Sound alarm – alert crew
        b. Stab full opening safety valve and close
        c. Space out drill string with tool joint just beneath upper pipe ram
        d. Open HCR
        e. Shut 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

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.

10M BOPE Schematic



CASING TABLES

Dimensional & Grade Designators

OD Size	Weight T&C	Weight P E	NOM Wall	NOM ID	API Drift	Alternate Drift	Product	Collapse Resistance
in.	lb/ft	lb/ft	in.	in.	in	in	Grade	psi
7 5/8	33.70	33.07	0.430	6.765	6.640	-	R95	7,280
7 5/8	33.70	33.07	0.430	6.765	6.640	--	T95	7,280
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS C95	7,280
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS C100	7,490
7 5/8	33.70	33.07	0.430	6.765	6.640	--	C110	7,870
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 SR16	7,870
7 5 8	33.70	33.07	0.430	6.765	6.640	--	P110	7,870
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 HC	9,110
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 HP	9,880
7 5/8	33.70	33.07	0.430	6.765	6.640	--	Q125	8,350
7 5/8	33.70	33.07	0.430	6.765	6.640	-	Q125 HC	9,480
7 5/8	33.70	33.07	0.430	6.765	6.640	--	Q125 HP	10,220
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS140	8,880
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS V150	8,850
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS CT80S	8,880
7 5/8	39.00	38.08	0.500	6.625	6.500	--	L80	8,880
7 5/8	39.00	38.08	0.500	6.625	6.500	--	L80 HC	9,480
7 5/8	39.00	38.08	0.500	6.625	6.500	--	L80 HP	10,010
7 5/8	39.00	38.08	0.500	6.625	6.500		N80 Type 1	8,880
7 5/8	39.00	38.08	0.500	6.625	6.500	--	N80	8,880
7 5/8	39.00	38.08	0.500	6.625	6.500	--	N80 HC	9,480
7 5/8	39.00	38.08	0.500	6.625	6.500	--	N80 HP	10,220
7 5/8	39.00	38.08	0.500	6.625	6.500	--	C90	8,880
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS C90	9,620
7 5/8	39.00	38.08	0.500	6.625	6.500	--	R95	10,000
7 5/8	39.00	38.08	0.500	6.625	6.500	--	T95	10,000
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS C95	10,000
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS C100	10,370
7 5/8	39.00	38.08	0.500	6.625	6.500	--	C110	11,080
7 5/8	39.00	38.08	0.500	6.625	6.500	--	P110 SR16	11,080
7 5/8	**39.00**	**38.08**	**0.500**	**6.625**	**6.500**	**--**	**P110**	**11,080**
7 5/8	39.00	38.08	0.500	6.625	6.500	--	P110 HC	12,180
7 5/8	39.00	38.08	0.500	6.625	6.500	--	P110 HP	13,190
7 5/8	39.00	38.08	0.500	6.625	6.500	--	Q125	12,060
7 5/8	39.00	38.08	0.500	6.625	6.500	--	Q125 HC	12,910
7 5/8	39.00	38.08	0.500	6.625	6.500	--	Q125 HP	13,790
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS140	12,930
7 5/8	39.00	38.08	0.500	6.625	6.500	--	USS V150	13,440
7 5/8	42.80	42.43	0.562	6.501	6.376	--	USS CT80S	10,810
7 5/8	42.80	42.43	0.562	6.501	6.376	--	L80	10,810
7 5/8	42.80	42.43	0.562	6.501	6.376	--	L80 HC	11,370
7 5/8	42.80	42.43	0.562	6.501	6.376	--	L80 HP	11,740
7 5/8	42.80	42.43	0.562	6.501	6.376	--	N80 Type 1	10,810
7 5/8	42.80	42.43	0.562	6.501	6.376	--	N80	10,810
7 5/8	42.80	42.43	0.562	6.501	6.376	--	N80 HC	11,730

TENSION				Internal Yield						Ductile Rupture Capped End	Outside Diameter	
				API Historical				Lame' - Von Mises				
Joint Strength, 1,000 lbs				Pipe Body	Threaded & Coupled			Open End	Capped End		Regular Coupling	Special Clr Coupling
Yield	Threaded and Coupled				STC	LTC	BTC					
Pipe Body	STC	LTC	BTCa	psi	psi	psi	psi	psi	psi	psi	in	in.
923		772	925	9,370		9,370	9,370	9,310	10,270	9,420	8.500	8.125
923	--	772	925	9,370	--	9,370	9,370	9,310	10,270	10,420	8.500	8.125
923		772	925	9,370		9,370	9,370	9,310	10,270	10,420	8.500	8.125
972	--	812	971	9,860	--	9,860	9,860	9,800	10,810	10,950	8.500	8.125
1,069				10,850				10,780	11,890	12,500	8.500	8.125
1,069	--	901	1,093	1,550	--	1,550	1,550	1,550	11,890	0	8.500	8.125
1,069		901	1,093	10,850		10,850	10,850	10,780	11,890	12,500	8.500	8.125
1,069	--	901	1,093	10,850	--	10,850	10,850	10,780	11,890	12,500	8.500	8.125
1,215		992	1,166	12,330		12,330	12,330	12,250	13,510	13,100	8.500	8.125
1,215		1,009	1,197	12,330	--	12,330	12,330	12,250	13,510	13,600	8.500	--
1,215		1,009	1,197	12,330	--	12,330	12,330	12,250	13,510	13,600	8.500	--
1,312	--	1,068	1,257	13,310	--	13,310	13,310	13,230	14,590	14,180	8.500	--
1,361		1,108	1,304	13,810	--	13,810	13,810	13,720	15,140	15,230	8.500	--
1,458	--	1,207	1,424	14,790	--	14,790	14,790	14,700	16,210	16,320	8.500	--
895		786	945	9,190	--	9,190	9,190	9,110	9,970	9,940	8.500	8.125
895	--	786	945	9,190		9,190	9,190	9,110	9,970	9,940	8.500	8.125
895	--	786	945	9,190	--	9,190	9,190	9,110	9,970	9,940	8.500	8.125
941	--	820	991	9,770	-	9,770	9,770	9,680	10,590	9,940	8.500	8.125
895		798	981	9,190		9,190	9,190	9,110	9,970	8,550	8.500	8.125
895	--	798	981	9,190	--	9,190	9,190	9,110	9,970	10,470	8.500	8.125
895		798	981	9,190		9,190	9,190	9,110	9,970	10,470	8.500	8.125
1,063	--	914	1,065	10,910	--	10,490	9,790	10,820	11,840	11,070	8.500	8.125
1,007	--	867	1,013	10,340		10,340	10,340	10,250	11,220	11,630	8.500	8.125
1,007		867	1,013	10,340		10,340	10,340	10,250	11,220	12,630	8.500	8.125
1,063		914	1,065	10,910		10,910	10,910	10,820	11,840	11,070	8.500	8.125
1,063		914	1,065	10,910		10,910	10,910	10,820	11,840	12,240	8.500	8.125
1,063		914	1,065	10,910		10,910	10,910	10,820	11,840	12,240	8.500	8.125
1,115	--	960	1,118	11,490	--	11,490	11,490	11,390	12,460	12,860	8.500	8.125
1,231				12,640				12,530	13,710	14,100	8.500	8.125
1,231	--	1,066	1,258	1,800	-	1,800	1,800	1,800	13,710	0	8.500	8.125
1,231	**--**	**1,066**	**1,258**	**12,640**	**--**	**12,640**	**12,640**	**12,530**	**13,710**	**14,680**	**8.500**	**8.125**
1,231		1,066	1,258	12,640	--	12,640	12,640	12,530	13,710	14,680	8.500	8.125
1,311		1,135	1,343	14,360	-	14,360	13,460	14,240	15,580	15,380	8.500	8.125
1,311	--	1,134	1,379	14,360		14,360	14,360	14,240	15,580	15,980	8.500	--
1,311		1,134	1,379	14,360	-	14,360	14,360	14,240	15,580	15,980	8.500	-
1,311	--	1,264	1,447	15,510	-	15,510	15,290	15,380	16,820	16,650	8.500	--
1,357	--	1,305	1,536	16,080		16,080	16,080	15,950	17,480	17,390	8.500	--
1,679	--	1,428	1,640	17,230	--	17,230	17,230	17,090	18,690	19,170	8.500	--
998		891	1,053	10,320	-	10,320	9,790	10,220	11,120	11,240	8.500	8.125
998	--	891	1,053	10,320	--	10,320	9,790	10,220	11,120	11,240	8.500	8.125
998		891	1,053	10,320		10,320	9,790	10,220	11,120	11,240	8.500	8.125
1,060	--	930	1,070	10,970	--	10,490	9,790	10,850	11,820	11,240	8.500	8.125
998	--	905	1,093	10,320	--	10,320	9,790	10,220	11,120	9,760	8.500	8.125
998	--	905	1,093	10,320	--	10,320	9,790	10,220	11,120	11,830	8.500	8.125
998	--	905	1,093	10,320	--	10,320	9,790	10,220	11,120	11,830	8.500	8.125

Performance Properties

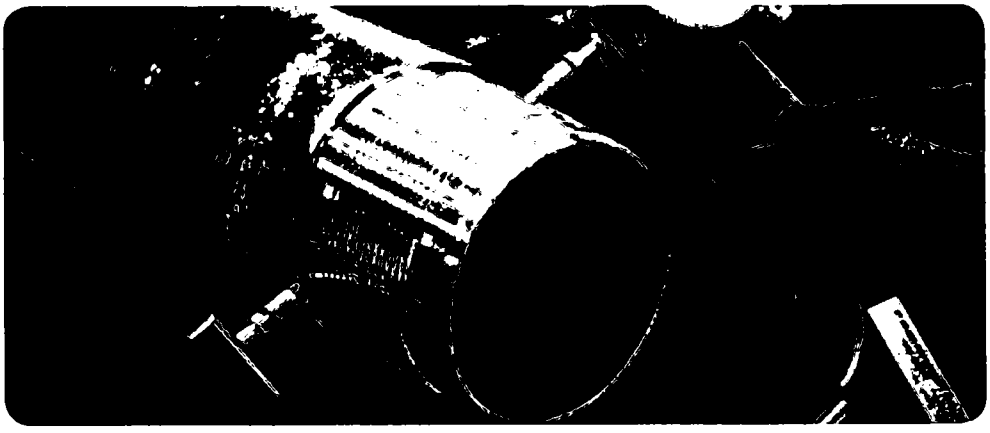
Pipe Nominal OD	Nominal Weight	Plain-End Weight	Nominal Wall	Drift Diameter	Pin Bored ID	Makeup Loss	Connection Efficiency	55 KSI Tensile and Compressive Strength	80 KSI Tensile and Compressive Strength	95 KSI Tensile and Compressive Strength
inches	lbs/ft	lbs/ft	inches	inches	inches	inches		1000 lbs	1000 lbs	1000 lbs
3 1/2	9.2	8.81	2.992	2.867	2.906	2.93	63.10%	90	131	155
3 1/2	10.2	9.92	2.922	2.797	2.836	3.17	62.64%	100	146	173
3 1/2	12.7	12.53	2.750	2.625	2.664	3.67	61.77%	125	182	216
3 1/2	14.3	14.11	2.640	2.515	2.554	4.05	61.48%	140	204	242
4	9.5	9.12	3.548	3.423	3.462	2.81	63.97%	94	137	163
4	11.0	10.47	3.476	3.351	3.390	2.93	62.77%	106	154	183
4	11.6	11.35	3.428	3.303	3.342	3.18	63.02%	116	168	200
4	13.2	12.95	3.340	3.215	3.254	3.43	62.45%	131	190	226
4 1/2	11.6	11.36	4.000	3.875	3.914	2.94	63.57%	117	170	202
4 1/2	12.6	12.25	3.958	3.833	3.872	3.07	63.24%	125	182	216
4 1/2	13.5	13.05	3.920	3.795	3.834	3.19	62.80%	132	193	229
4 1/2	15.1	15.00	3.826	3.701	3.740	3.44	62.28%	151	220	261
5	11.5	11.24	4.560	4.435	4.474	2.70	63.70%	116	168	200
5	13.0	12.84	4.494	4.369	4.408	2.95	63.15%	131	191	226
5	15.0	14.88	4.408	4.283	4.322	3.20	62.69%	151	219	261
5	18.0	17.95	4.276	4.151	4.190	3.58	62.00%	180	262	311
5	20.3	20.03	4.184	4.059	4.098	3.83	61.59%	199	290	344
5	20.8	20.65	4.156	4.031	4.070	3.95	61.56%	205	299	355
5	21.4	21.32	4.126	4.001	4.040	4.08	61.57%	212	309	366
5	23.2	23.11	4.044	3.919	3.958	4.33	61.42%	229	334	396
5 1/2	15.5	15.36	4.950	4.825	4.864	2.80	58.02%	144	210	249
5 1/2	17.0	16.89	4.892	4.767	4.806	2.97	58.14%	159	231	274
5 1/2	20.0	19.83	4.778	4.653	4.692	3.30	58.09%	186	271	322
5 1/2	23.0	22.56	4.670	4.545	4.584	3.47	57.66%	210	306	363
5 1/2	26.0	25.56	4.548	4.500	4.539	3.80	54.10%	224	325	386
6 5/8	20.0	19.51	6.049	5.924	5.963	3.27	59.60%	188	273	325
6 5/8	23.2	22.21	5.965	5.840	5.879	3.60	59.95%	215	313	372
6 5/8	24.0	23.60	5.921	5.796	5.835	3.76	60.03%	229	333	396
6 5/8	28.0	27.67	5.791	5.666	5.705	4.10	59.56%	266	388	460
6 5/8	28.6	28.60	5.761	5.636	5.675	4.10	59.21%	274	398	473
6 5/8	32.0	31.23	5.675	5.550	5.589	4.43	59.44%	300	436	518
6 5/8	33.0	32.74	5.625	5.500	5.539	4.60	59.38%	314	457	543
7	20.0	19.56	6.456	6.331	6.370	3.41	60.12%	190	277	328
7	23.0	22.65	6.366	6.250	6.289	3.58	58.80%	215	313	372
7	26.0	25.69	6.276	6.151	6.190	3.91	59.57%	247	360	427
7	29.0	28.75	6.184	6.125	6.164	4.24	56.15%	261	380	451
7	32.0	31.70	6.094	6.000	6.039	4.41	57.92%	297	432	513
7 5/8	26.40	25.59	0.328	6.844	6.883	3.76	59.94%	248	360	428
7 5/8	29.70	29.06	0.375	6.750	6.789	3.92	59.41%	279	406	482
7 5/8	33.70	33.07	0.430	6.640	6.679	4.26	59.23%	316	460	547
7 5/8	35.80	35.59	0.465	6.570	6.609	4.42	59.09%	340	495	587
7 5/8	39.00	38.08	0.500	6.500	6.539	4.75	59.55%	366	533	633
7 5/8	42.80	42.43	0.562	6.376	6.415	5.09	59.42%	407	593	704
7 5/8	45.30	44.71	0.595	6.310	6.349	5.25	59.34%	429	623	740
7 3/4	46.10	45.51	0.595	6.500	6.539	5.26	56.81%	418	608	722
8 5/8	28.00	27.04	0.304	7.892	7.931	3.91	60.71%	265	386	458
8 5/8	32.00	31.13	0.352	7.875	7.914	4.25	55.57%	280	407	483
8 5/8	36.00	35.17	0.400	7.700	7.739	4.58	60.70%	345	502	596
8 5/8	40.00	39.33	0.450	7.625	7.664	4.91	59.48%	378	550	653

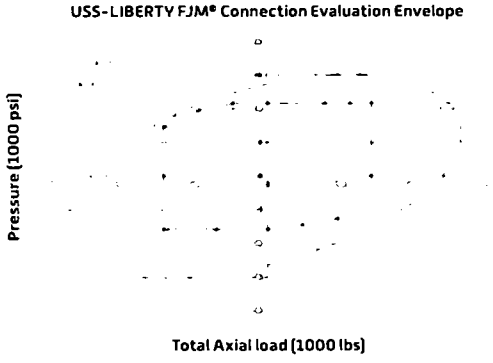
Notes:

1. Connection efficiency is calculated by dividing the connection-critical area by the nominal pipe body area.
2. Tensile and compressive strengths are calculated by multiplying the pipe body yield and connection critical area.

Contact U. S. Steel Tubular Products to receive information for grades not listed.

110 KSI Tensile and Compressive Strength	125 KSI Tensile and Compressive Strength
1000 lbs	1000 lbs
180	204
201	228
250	284
280	319
189	214
212	241
231	263
261	297
233	265
250	285
265	301
302	343
231	263
262	298
302	343
360	409
399	453
411	467
424	482
459	521
288	327
317	361
372	423
421	478
447	508
376	427
430	489
458	521
533	605
547	622
600	682
628	714
380	432
430	489
495	562
522	593
594	675
495	563
558	634
633	719
680	773
[illegible]	[illegible]
815	926
857	974
836	950
531	603
560	636
690	784
756	860





USS-LIBERTY FJM® connection is API RP 5C5:2014 CAL II Qualified

USS-LIBERTY FJM® Capped End FEA

USS-LIBERTY FJM® Make-Up FEA

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mesquite SWD Inc
LEASE NO.:	NM0533177A
WELL NAME & NO.:	1-Uber East SWD
SURFACE HOLE FOOTAGE:	2345'/S & 660'/E
BOTTOM HOLE FOOTAGE	'/ & '/
LOCATION:	Section 24, T. 23 S., R. 31 E., NMPM
COUNTY:	Eddy County, New Mexico

Potash	○ None	◉ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	◉ None	○ Flex Hose	○ Other
Wellhead	◉ Conventional	○ Multibowl	
Other	☐4 String Area	☐Capitan Reef	☐WIPP

All previous COAs still apply except for the following:

A. CASING

1. The **20** inch surface casing shall be set at approximately **1060** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **13 3/8** inch **68** lbs/ft first intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

    Second intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **9 5/8** inch second intermediate is:

    - Cement to surface. If cement does not circulate contact appropriate BLM office

4. The minimum required fill of cement behind the **7 5/8** inch production liner is:

    - Cement to top of liner. Operator shall provide method of verification.

5. **Open Hole completion from 16390' to TD of 17500'**

B. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **20** inch surface casing shoe shall be **2000 (2M)** psi. **In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13 3/8** inch first intermediate casing shoe shall be **5000 (5M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** inch second intermediate casing shoe shall be **10,000 (10M)** psi. **Variance in approved to use 5M Annular which shall be tested to 5000 psi.**

MHH 10222018

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

110 KSI Tensile and Compressive Strength	125 KSI Tensile and Compressive Strength
1000 lbs	1000 lbs
180	204
201	228
250	284
280	319
189	214
212	241
231	263
261	297
233	265
250	285
265	301
302	343
231	263
262	298
302	343
360	409
399	453
411	467
424	482
459	521
288	327
317	361
372	423
421	478
447	508
376	427
430	489
458	521
533	605
547	622
600	682
628	714
380	432
430	489
495	562
522	593
594	675
495	563
558	634
633	719
680	773
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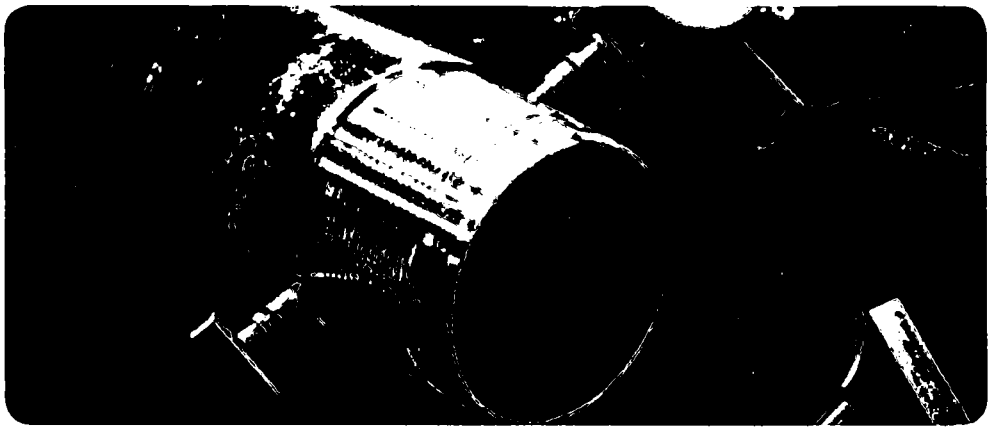
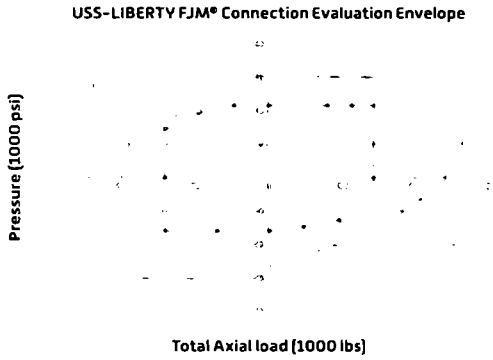
815	926
857	974
836	950
531	603
560	636
690	784
756	860





USS-LIBERTY FJM® connection is API RP 5C5:2014 CAL II Qualified

USS-LIBERTY FJM® Capped End FEA

USS-LIBERTY FJM® Make-Up FEA

Haque, Mustafa <mhaque@blm.gov>

[EXTERNAL] MESQUITE SWD INC - DRLG CHANGE SUNDRY - UBER EAST SWD #1

Melanie & Tommy Wilson <mjp1692@gmail.com> Mon, Oct 15, 2018 at 7:41 AM
To: "Haque, Mustafa" <mhaque@blm.gov>

Hi Haque,

Sheryl said on the 13 3/8" casing, we will run 68# J55 BTC casing instead of the 54.5#. Will that work?

Thank you!!

Melanie

From: Haque, Mustafa <mhaque@blm.gov>
Sent: Friday, October 12, 2018 9:06 AM
To: Melanie Wilson <mjp1692@gmail.com>
Subject: Re: [EXTERNAL] MESQUITE SWD INC - DRLG CHANGE SUNDRY - UBER EAST SWD #1

Good Morning Melanie,

Our geologist is not agreeing to change surface casing depth.

Also, the 13 3/8" casing burst safety factor does not meet the minimum requirement.

Thanks-

Haque

4.5

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PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mesquite SWD, Inc
LEASE NO.:	NM0405444
WELL NAME & NO.:	1-Uber North SWD
SURFACE HOLE FOOTAGE:	516'/N & 2355'/E
BOTTOM HOLE FOOTAGE	'/ & '/
LOCATION:	Section 15, T. 23 S., R. 31 E., NMPM
COUNTY:	Eddy County, New Mexico

Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	◉ None	○ Flex Hose	○ Other
Wellhead	◉ Conventional	○ Multibowl	
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

All previous COAs still apply except for the following:

A. CASING

1. The **20** inch surface casing shall be set at approximately **680** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **13 3/8** inch **68** lbs/ft first intermediate casing, which shall be set at approximately **4275** feet, is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

3. The minimum required fill of cement behind the **9 5/8** inch second intermediate, which shall be set at approximately **1150** feet, is:

    - Cement to surface. If cement does not contact appropriate BLM office

4. The minimum required fill of cement behind the **7 5/8** inch production liner is:

    - Cement to top of liner. Operator shall provide method of verification.

5. **Open Hole completion from 16510' to TD of 17500'**

B. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **20** inch surface casing shoe shall be **2000 (2M)** psi. **In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13 3/8** inch first intermediate casing shoe shall be **5000 (5M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** inch second intermediate casing shoe shall be **10,000 (10M)** psi. **Variance in approved to use 5M Annular which shall be tested to 5000 psi.**

MHH 10172018

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties
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During office hours call (575) 627-0272.
After office hours call (575)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.