

# In-Field Lubrication Procedure



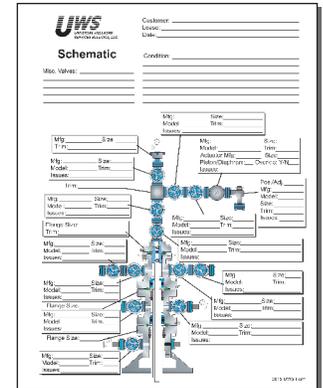
**In-Field Lubrication Procedure  
for  
6A Gate Valves:**

**Use with JSA  
for Each Well**

LICENSED UNDER

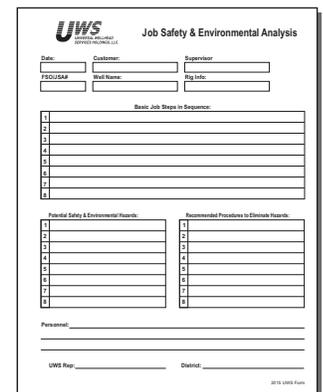


## Required Forms:



### SCHMATIC

See Page 11



### JSA

*Job Safety &  
Environmental Analysis  
See Page 12*

## VALVE LUBRICATION

### PURPOSE

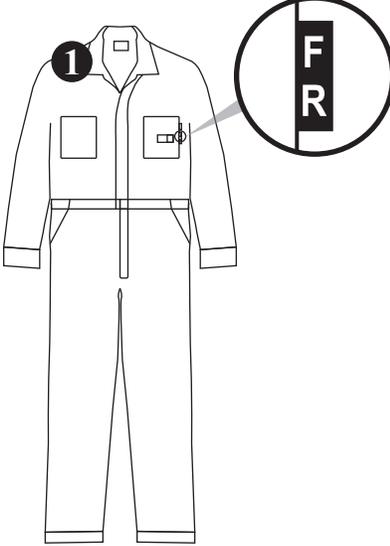
These procedures are in place for Field Service Technicians during annual valve lubrication.

### SCOPE

After valve lubrication and inspection, the wellhead voids may or may not be tested, depending on customer requirements.

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**Required PPE:**

APPROPRIATE PPE	<b>Personnel <u>MUST DON</u> these items before <i>Exiting</i> vehicle.</b>
<p><b>1</b> <b>Flame Resistant Long-sleeve Coveralls,</b> compliant to FR standard NFPA 2112.</p> 	
<p><b>2</b> <b>Hard Hat,</b> ANSI- Z89.1-2003 approved.</p>	
<p><b>3</b> <b>Steel Toe Boots,</b> ASTM- F2413-05 approved.</p>	
<p><b>4</b> <b>Safety Glasses,</b> ANSI- Z87.1+ approved.</p>	
<p><b>5</b> <b>Multi-Gas Detector,</b> Combustible / Oxygen / CO / H<sub>2</sub>S.</p>	

**ON TRUCK**

- 
- 
- 
- 

**ON SKID**

- 
- 
- 

**OTHER**

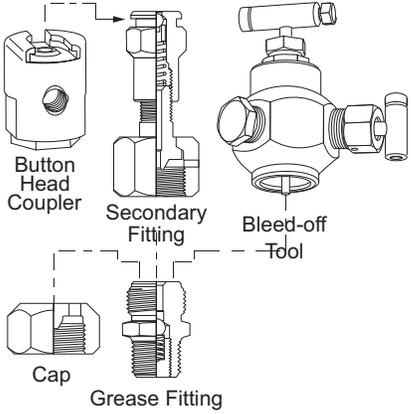
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**Required Equipment:**

MAIN EQUIPMENT	QTY.	PHOTO
		

PUMPS		
		

FITTINGS AND HOSES		
		

LUBRICANTS / GREASE		

ENVIRONMENTAL		
		

**Rules on Location**

***Parking***

When arriving on location, park your vehicle by the hand wheel side of the tree assembly, but do not park directly in front of the valve bonnets. Make sure the entire vehicle is just past the valve bonnets.

***PPE***

Exit the vehicle **ONLY** after ensuring all of your PPE is in place. Smoking and open flames are prohibited while on location.

***Leaks / Spills***

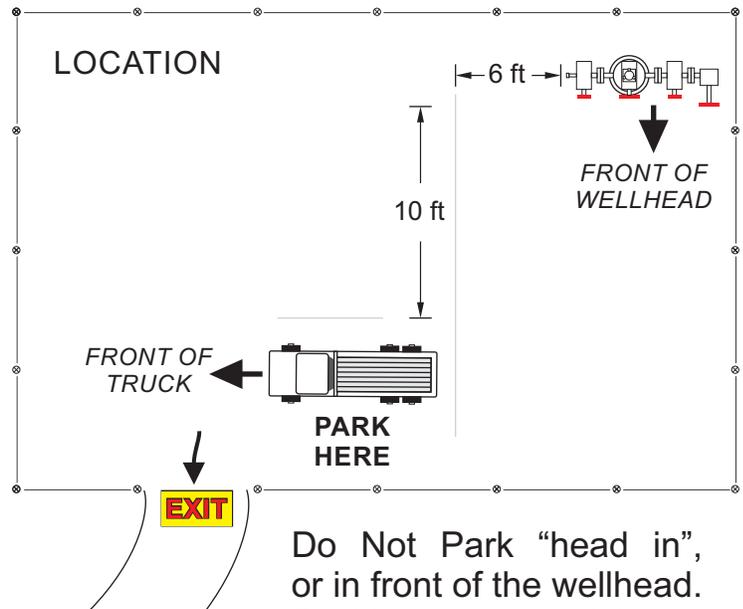
Be aware of your surroundings and look for leaks or spills. Check the immediate area around the wellhead with your multi-gas detector. If there are any warnings contact the company Rep. immediately and leave the location awaiting further instructions.

Immediately report a spill to the company Rep. before attempting any work on the wellhead or valves.

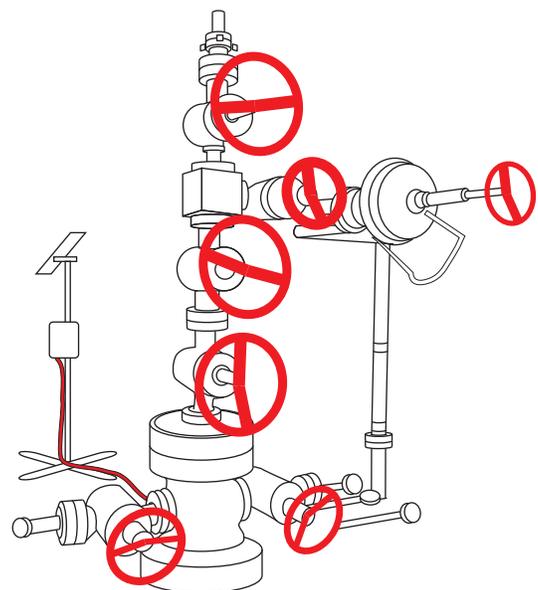
Company will determine if the valves can be shut in for the lubrication procedure. Do not operate any valves unless you have permission from the company Rep.

***JSA***

Fill out a JSA for each well and discuss possible hazards with your coworker before proceeding.



Do Not Park “head in”, or in front of the wellhead. Position your vehicle so you can make a quick escape if need be.



**Preparing The Valves for Greasing**

**A. Communicate with the company:**

If the valves are to be left open;  
– ensure they are fully opened.

If the valves can be shut in;  
– fully close the lower master valve.

After ensuring all valves are in the proper position (fully opened or fully closed) ...

**Proceed with These Steps:**

Loosen the grease fitting dust caps and check for leaks. If no leaks are found, install the secondary lube fittings.

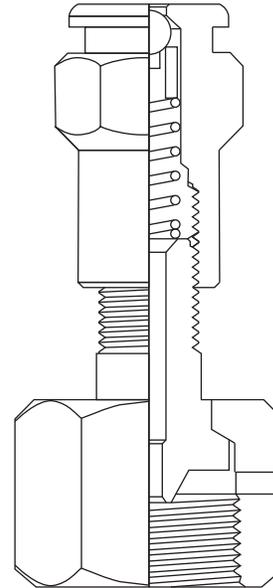
If a valve fitting leaks, contact the company Rep. about shutting-in the well so you can proceed.

**B. Shutting in the well to replace defective body grease fittings:**

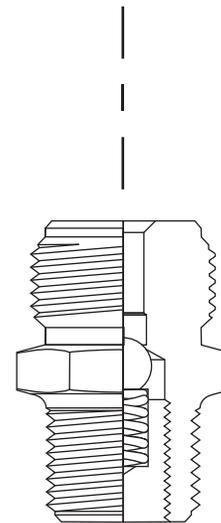
- Close the valve below the leaking fitting. ***Must Have Company Approval.***
- If you close the valve, bleed off all of the pressure above the closed valve, including any trapped pressure in the valve body.

**C. Remove the grease fitting dust cap and install a bleed-off tool on the primary fitting.**

- Fully engage the bleed-off tool to release all pressure behind the fitting.
- Once secure and verified that the primary fitting has no pressure on it, remove and replace the primary fitting with the appropriate trim fitting.
- Re-install the secondary fitting and proceed with the lubrication procedure.



Secondary Fitting



Grease Fitting

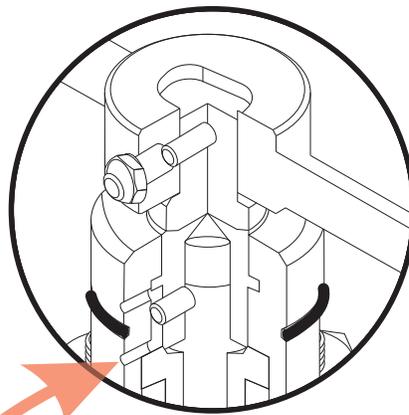
***Under no circumstances are you to grease a valve without a Secondary Fitting installed.***

**D. Lubricating the Valves**

- 1  Start the diesel engine and make sure there is 100 psi of regulated air pressure going to the pump.
- 2  Attach the HP grease hose to the secondary fitting and open the HP ball valve.
- 3  Pump grease until the pump slows down indicating the valve body is full (approximately 10 – 12 strokes for 1-13/16" and 2-1/16" 10k valves).
- 4  Do not over fill the valve body; keep excessive grease out of the bore.
- 5  After greasing all the valves and removing the hose assembly, loosen the secondary fittings slowly.
- 6  If the primary fitting (on the valve body) is leaking, re-tighten the secondary fitting and follow these steps:

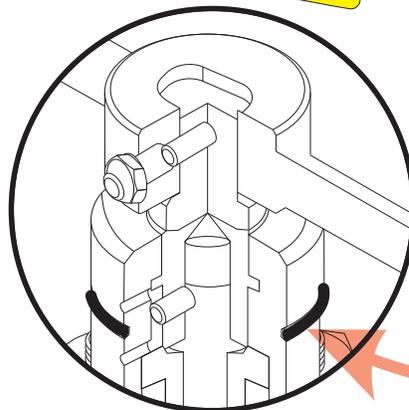
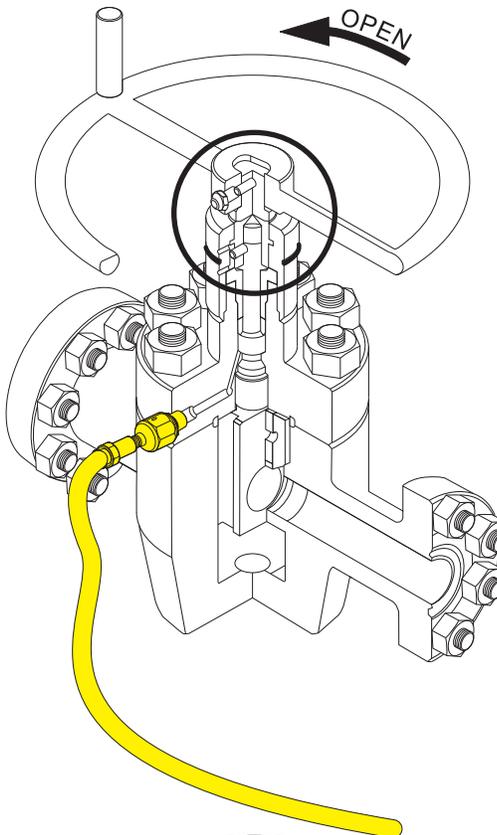
Close the valve below the leaking fitting.  
**Must Have Company Approval.**

- 7  Once the valve is closed, bleed all of the pressure above the closed valve completely off.



Detail A

Grease bearings here thru Alemite fitting.



Detail B

**Open any closed valves ONLY with permission from the Company Rep.**

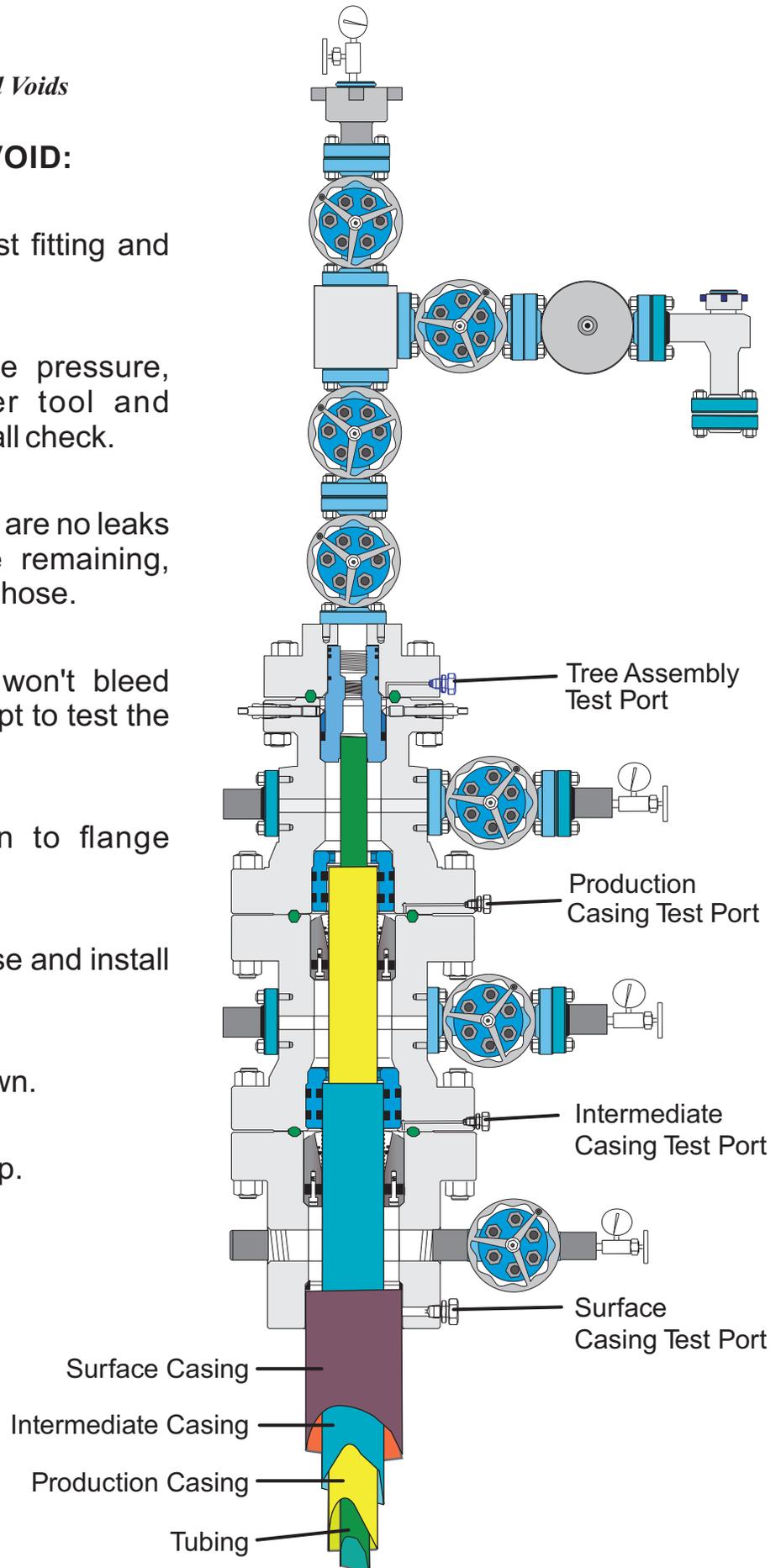
- 8  Remove the secondary fitting and install a bleed-off tool on the primary fitting.
- 9  Fully engage the bleed-off tool to release all pressure behind the fitting.
- 10  Once the well is shut in and you can verify the primary fitting has no pressure on it, replace the primary fitting.
- 11  If you can't shut in the well and the primary fitting is leaking, leave the secondary fitting on the valve and note this on your paperwork.
- 12  After securing all body grease fittings, grease the thrust bearings through the Alemite fittings. Pump until you see a return of new grease around the stem or through the bearing cap weep hole.
- 13  Replace defective or damaged Alemite fittings as needed. Install a plastic protective Alemite cap on each fitting.
- 14  Ensure there is an o-ring around the bearing cap vent groove.

**Ensure O-ring is in-place.**

*Optional: Testing of the Wellhead Voids*

**TREE ASSEMBLY VOID:**

- 1  Locate the proper test fitting and loosen the dust cap.
- 2  If there is no visible pressure, install your bleeder tool and engage the internal ball check.
- 3  After confirming there are no leaks or trapped pressure remaining, attach your test pump hose.
- 4  If internal pressure won't bleed down, do NOT attempt to test the connection.
- 5  Test the connection to flange working pressure.
- 6  Remove your test hose and install the bleeder tool.
- 7  Bleed all pressure down.
- 8  Re-install the dust cap.
- 9  Note the results on your paperwork.



### *Optional: Testing of the Wellhead Voids*

#### **TUBING HEAD VOID:**

- 1  Locate the proper test fitting and loosen the dust cap.
- 2  If there is no visible pressure, install your bleeder tool and engage the internal ball check.
- 3  After confirming there are no leaks or trapped pressure remaining, attach your test pump hose.
- 4  If internal pressure won't bleed down, do NOT attempt to test the connection.
- 5  Test the connection to flange working pressure or 80% of casing collapse, whichever is less.
- 6  Remove your test hose and install the bleeder tool.
- 7  Bleed all pressure down.
- 8  Re-install the dust cap.
- 9  Note the results on your paperwork.

***Optional: Testing of the Wellhead Voids*****CASING SPOOL VOID:**

- 1  Locate the proper test fitting and loosen the dust cap.
  
- 2  If there is no visible pressure, install your bleeder tool and engage the internal ball check.
  
- 3  After confirming there are no leaks or trapped pressure remaining, attach your test pump hose.
  
- 4  If internal pressure won't bleed down, do NOT attempt to test the connection.
  
- 5  Test the connection to flange working pressure or 80% of tubing collapse, whichever is less.
  
- 6  Remove your test hose and install the bleeder tool.
  
- 7  Bleed all pressure down and re-install the dust cap.
  
- 8  Note the results on your paperwork.

Customer: \_\_\_\_\_

Lease: \_\_\_\_\_

Date: \_\_\_\_\_

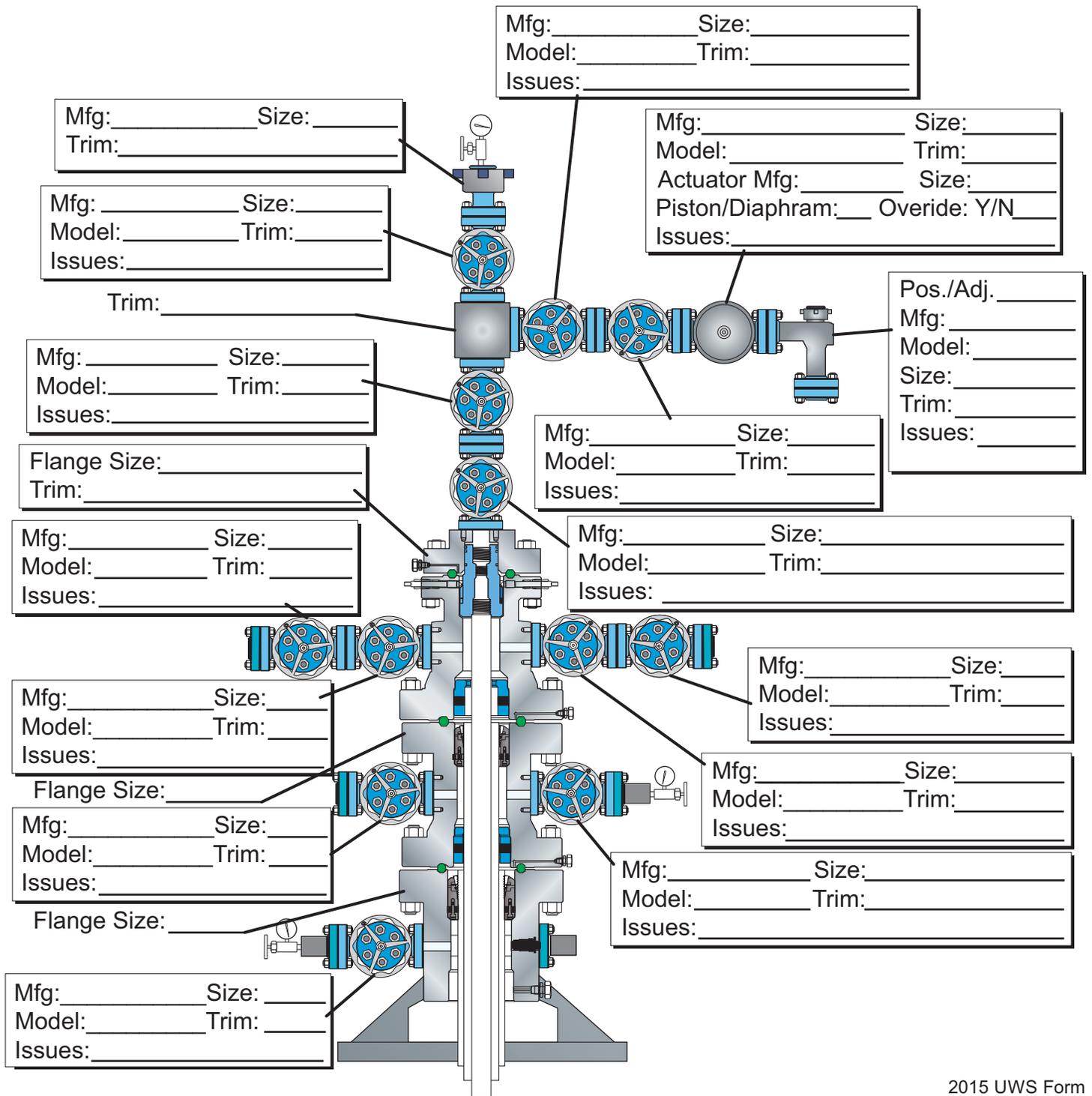
# Schematic

Condition: \_\_\_\_\_

Misc. Valves: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





# Job Safety & Environmental Analysis

Date:

Customer:

Supervisor

FSO/JSA#

Well Name:

Rig Info:

## Basic Job Steps in Sequence:

1	
2	
3	
4	
5	
6	
7	
8	

## Potential Safety & Environmental Hazards:

1	
2	
3	
4	
5	
6	
7	
8	

## Recommended Procedures to Eliminate Hazards:

1	
2	
3	
4	
5	
6	
7	
8	

Personnel: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

UWS Rep: \_\_\_\_\_

District: \_\_\_\_\_

<b>Revision Log</b>			
Revision	Date	Details	
0	December 18, 2014	Procedure Draft	

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