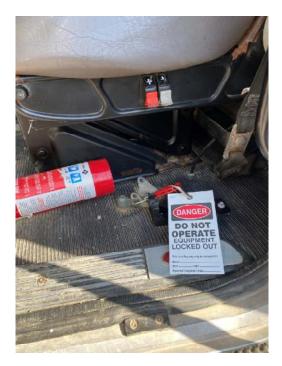
Texas Pumpdown & Torque Solutions	Owner/Facilitator: Justin Buckner
Lockout Tagout Procedure for Pump Maintenance	Date: 7/5/2019

Objective of this documentation: Standard Operating Procedure (SOP) for site/ shop specific pump maintenance on the **2500 hp pumps** to ensure all equipment is deenergized prior to the startup of task and or repairs on tractor trailer combination by competent personnel.

- 1. Identify the types of energy sources used, potential hazards, and all control devices.
- 2. Notify all effected personnel.
- 3. Turn OFF all operating controls.
- 4. Locate all energy sources.
- 5. Isolate all energy sources by blocking, bleeding, and venting stored energy as found in electrical systems, hydraulic systems, and pneumatic systems.
- 6. **Performed by Lead Personnel ONLY** LOCKOUT all switches and energy controls in the "OFF" or "SAFE" position.
- 7. Lock Out Points:
 - Place hasp and locks on the battery disconnect inside/outside the tractor while in the OFF position.





 Place hasp and locks on one or both battery disconnect or main circuit switch while in the OFF position.





- Bleed off all fluid end pressure and disconnect 1502 iron from pump unit.
- 8. Lead maintenance operator collects all keys and puts them inside a LOTO box. LMO locks the box and keeps the key on himself until all maintenance has been completed, and equipment is ready to be turned back on.
- 9. Lead maintenance operator will test all lock out points to ensure snergy sources and all equipment and de-energized and depressurized. Lead maintenance personnel will document pump unit/tractor "Out of Service" on LOTO form.
- 10. Report LOTO documentation to company representative on duty, so they may verify LOTO is safe to proceed with and to sign off on.
- 11. Perform required task.
- 12. **Performed by Lead Personnel ONLY** Remove lockout devices only after the equipment is fully assembled and all effected personnel have been notified. Each lockout device MUST be removed by the person who put it on. Now the lead maintenance personnel will document the equipment "Back in Service".

LOCKOUT TAGOUT LOG

Pump Unit #:		
Date:		Customer/Operation:
Out Time:	In Time:	-
Name of all personnel working on maintenance:		Location/Shop:
		Job Description:
Things to ask yo	urself before you start th	e task:
Has a JSA been cor	mpleted prior to performing t	he task? YES or NO (Circle One)
Has maintenance b	peen communicated with all e	effected personnel? YES or NO (Circle One)
Have all affected p	ersonnel verified isolation? Y	ES or NO (Circle One)
Has all Lockout Poi	ints been tested and tried pri	or to maintenance? YES or NO (Circle One)
Times "OUT & IN"	Service Times: OUT:	IN:
		Comments:

