

<b><i>E&amp;B Oilfield Services Inc.</i></b>	Activity: <b>ALL WORK</b> <b>Lockout - Tagout</b>		Doc No:	HAZ-ID
			Initial Issue Date	4/1/2015
			Revision Date:	4/1/2016
<b>HAZARD IDENTIFICATION AND ASSESSMENT</b>			Revision No.	1
			Next Revision Date:	4/1/2017
Preparation: Jessica Lee	Authority: Danny Abegglen	Issuing Dept: Safety	Page:	1 of 4

## Purpose

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- **Lockout - Tagout**

## Key Responsibilities

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- Know when you need to use LOTO
- Communicate effectively about your LOTO to others so they know what is going on
- Supervisors / Leads are required to ensure that all employees are properly trained to use LOTO
- Fill out all the proper paperwork when using LOTO

## Hazard and Risk Identification

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Employees MAY be exposed to different dangers when using LOTO or needing to know what's going on with a certain LOTO.

- Use of LOTO are needed when:
  - Isolating a launcher / receiver
  - Building pressure
  - Closing a wheel valve or bar valve or any other kind of valve
- Do not remove someone's LOTO
- Communicate about your LOTO so others know what is going on and not to remove it
- Forgetting to write down everything that you put a LOTO on can result in you leaving a piece of equipment closed that shouldn't be



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## Risk Assessment

Hazards are classified and ranked based on severity. The program identifies hazards are classified/prioritized and addressed based on the risk associated with the task. (See the risk analysis matrix outlining severity and probability).

**E&B OILFIELD SERVICES INC. RISK ASSESSMENT MATRIX – LOCK OUT TAG OUT**

CONSEQUENCE					PROBABILITY				
Severity	People	Assets	Environment	Reputation	A	B	C	D	E
					Not Done	Rarely	Once a week	Several Times in a Week	Multiple Times in a Day
0	No health effect	No damage	No effect	No impact					X
1	Slight health effect	Slight damage	Slight effect	Slight impact		X			
2	Minor health effect	Minor damage	Minor effect	Limited impact		X			
3	Major health effect	Localized damage	Localized effect	Considerable impact		X			
4	Single fatality	Major damage	Major effect	National impact	X				
5	Multiple fatalities	Extensive damage	Massive effect	Global impact	X				

Key	Manage for continuous improvement (Low)	Incorporate risk reduction measures (Medium)	Intolerable (High)
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## Risk Controls/Methods to Ensure Identified Hazards Are Addressed and Mitigated

The following describes how identified hazards are addressed and mitigated:

- Steps in a Typical Lockout/Tagout Procedure An actual lockout/tagout procedure is simple and straightforward. There are two phases to the procedure.
  - Phase I — Locks, Blocks, or Releases Energy 1. The authorized employee notifies all affected employees that a lockout/tagout procedure is ready to begin. 2. The machinery or equipment is de-energized. 3. The authorized employee releases or restrains all stored energy. 4. All locks and tags are checked for defects. If any are found, the lock or tag is discarded and replaced. 5. The authorized employee places a personalized lock or tag on the energy-isolating device. 6. The authorized employee tries to start the machinery or equipment to ensure that it has been isolated from its energy source. The machine is then de-energized again after this test. 7. The machinery or equipment is now ready for service or maintenance.

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- Phase 2 — Returns the Machinery or Equipment to Production 1. The authorized employee checks the machinery or equipment to be certain no tools have been left behind. 2. All safety guards are checked to be certain that they have been replaced properly. 3. All affected employees are notified that the machinery or equipment is about to go back into production. 4. The authorized employee performs a secondary check of the area to ensure that no one is exposed to danger. 5. The authorized employee removes the locks and/or tags from the energy-isolating device and restores energy to the machinery or equipment. This example of the lockout/tagout procedure is used when only one person is performing service or maintenance on machinery or equipment and when no testing or positioning of the equipment is required.
- Multiple Lockout In a multiple lockout/tagout procedure, each person working on the machinery or equipment must place a lock or tag on the energy-isolating device. If the energy isolating device will not accept multiple locks or tags, a hasp (a multiple lockout device) may be used. The locks or tags must be placed in such a way that energy cannot be restored to the machinery or equipment until every lock or tag is removed. As each employee involved no longer needs to maintain his/her lockout/tagout protection, that employee removes his/her lock or tag. The employee attaching the lock or tag is the only person authorized to remove the lock or tag.
- Testing and Positioning Before a machine can be placed in service, the positioning of parts is sometimes required. The following procedure should be followed when testing or positioning machinery or equipment during service and maintenance: 1. The authorized employee makes certain that the work area is clear of tools and materials. 2. The authorized employee notifies all affected employees that the machinery or equipment will be positioned or tested. 3. All employees leave the area. 4. Locks or tags are removed. 5. The machine is started and tested or positioned. 6. When testing or positioning is complete, the machinery or equipment is de-energized following the proper lockout/tagout procedure for servicing or the machine is returned to production via the appropriate procedure.
- Inspections and Training each energy control procedure must be inspected at least annually to ensure that the requirements of the Lockout/Tagout Standard are being met. Each inspection will be conducted by an authorized employee other than the employee who normally uses the machinery or equipment or performs the lockout/tagout procedure. After each inspection, the employer must certify that the inspection has been completed. All employees working in an area requiring lockout/ tagout procedures must be trained. Training must include the following:
  - The recognition of lockout/tagout devices and the importance of not disturbing or removing them unless authorized
  - The safe application, use, and removal of energy controls
  - The limitations of tags in a lockout/tagout procedure
Training must occur whenever there is a change in job assignment, a change in machinery or equipment, an energy control procedure change, or a change in a process that presents a new hazard. Retraining is conducted whenever the employer believes that employees' knowledge of energy control procedures is inadequate and as part of the annual inspection.

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### JSA Sample

The following describes how identified hazards are addressed and mitigated:

Basic Job Step	Potential Injury or Hazards	Mitigation / Tools
Shutting valves to build pressure	Someone opening up a valve that shouldn't be opened where injury or death could occur	Use you LOTO when you close any wheel valve, bar valve, any type of valve or at a launcher / receiver. Also Communicate with others and write down everything that you put a LOTO on so you can make sure you go back later to open it back up.

### Other Info

