

<i>E&B Oilfield Services Inc.</i>	Activity: ALL WORK High PSI / Trapped PSI		Doc No:	HAZ-ID
			Initial Issue Date	4/1/2015
			Revision Date:	4/1/2016
HAZARD IDENTIFICATION AND ASSESSMENT			Revision No.	1
			Next Revision Date:	4/1/2017
Preparation: Kayden Kennedy	Authority: Danny Abegglen	Issuing Dept: Safety	Page:	1 of 3

Purpose

- **High PSI / Trapped PSI**

Key Responsibilities

- E&B Management will provide task appropriate training to all employees for High PSI / Trapped PSI
- Supervisors / Leads are required to ensure all employees have adequate training
- E&B Employees should make sure they feel comfortable before left on their own while in training

Hazard and Risk Identification

Employees MAY be exposed to dangerous High PSI / Trapped PSI during (but is not limited) to the following activities:

- Stuck pigs
- Frozen gas lines
- Valve blockage
- Crude oil in lines
- Opening bull plugs
- Any work around the wellhead
- Opening tanks or other vestals



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).

All oilfield employees will encounter pressured natural gas at all stages of the oil production process.



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E&B OILFIELD SERVICES INC. RISK ASSESSMENT MATRIX – HIGH PSI / TRAPPED PSI

Severity	CONSEQUENCE				PROBABILITY				
	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:

- Never trust your gauges they might be broke
- Vent pressure into a safe location before undoing fittings
- Use and maintain safety devices such a pressure alert valves
- Undo fittings and bull plugs extremely slowly to allow pressure to vent through the threads
- Use blow through procedures to check for blockages before opening caps
- Report equipment that lacks adequate pressure relieving safety equipment
- Never stand in front of the opening of pipe or vessels that have been pressurized
- Blowdown pipes must be straight and long enough to carry the gas away from the operator

Remember!!!

- Pressure never sleeps
- Gets complacent
- Forgets



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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
Reading your gauge	Trapped PSI / High PSI	Never trust your gauges, they could be broke. Make sure you use your check valve.

Other Info

Case study: A male in his 50's was using a high pressure sander and had the trigger secured in the 'on' position. The sander gun fell out of his grasp and proceeded to inject sand along his entire flank, groin, and scrotum. An exploratory laparotomy was done, and sand was found within the peritoneal cavity, but fortunately minimal bowel wall injury resulted. However, the most impressive part of the injury was the amount of sand and tissue injury found along the abdominal wall and groin. The end result was the need for multiple debridement's and a long-term recovery period. And interestingly enough, the initial physical exam was, as most high-pressure injection injuries, not nearly as impressive as the underlying damage. (although the high level of pain and large area of crepitus was a dead giveaway!)