



**Detailed Description of Accident:**

- Do not include names of injured, injuries, or medical treatment information.
- Subsequent Report must include Root Cause.

Six previously used 500-barrel production tanks had been installed and were being installed and prepped for service on the Khaki Campbell location. The same contractor was hired to perform the work on the previous location and the Khaki Campbell Location. The six tanks had been placed at the new Briggsdale site on Wednesday 10/24/18 and no plumbing connections had yet been made between the tanks. The tanks that were installed on the northeast and southeast of the 6-tank battery at Briggsdale were oil-containing tanks at the previous site. At the Briggsdale site, these two tanks were going to be used for water. The tank involved in the explosion was designated as Water Tank #2.

As part of the tank installation and preparatory work, the Contractor's employees were tasked with removing grade level inspection hatches from the tanks in order to replace gasket seals on these same hatches. Prior to the incident, Mallard Exploration had communicated to the Contractor the potential for flammable atmospheres within the tanks and that no power tools could be used on or near the tanks. A job safety analysis (JSA) form was completed by the Contractor prior to site work which identified the potential for flammable tank atmospheres and controls for safe work.

The incident occurred when one of the Contractor's employees used an angle grinder to remove rusted bolts from the bottom of Tank #2. It is believed that a spark from the grinding or use of non-intrinsically safe power tools caused the residual hydrocarbon vapors in the tank to explode.

The resulting explosion injured three of the Contractor's employees. All three of the Contractor's employees were transported to local emergency rooms.

According to the Contractor's management personnel, the contractor employee was informed not to use a grinder by two different Contractor employees after the JSA was completed and prior to the explosion.

Root Cause: Contractor employee performed grinding (hot work) in flammable atmosphere environment.

**Contributing Conditions:**

- Flammable/explosive conditions in tank where inspection hatch bolt grinding occurred.

**Contributing Actions:**

- Contractor employee used equipment unsafely/used wrong equipment to open inspection hatch
- Contractor employee inattention to hazard, desire to gain or save time, and/or additional unknown factors influenced these contributing actions.

**Corrective Action:**

Use of non-sparking tools/hand tools to remove inspection hatch bolts.

Mallard Exploration will install additional warning signage on all tanks, locating them on the inspection plates, indicating use of power tools can cause explosion.

Mallard Exploration will confirm re-instruction of hazards and hazard control methods to site contractors performing tank construction and maintenance activities.

**OTHER NOTIFICATIONS**

List all parties and agencies that were notified or responded to the accident. (For example: Local Government Designee, Municipality, County, BLM, EPA, CDOT, Local Emergency Planning Coordinator, etc.)

Date	Agency	Contact	Response

**OPERATOR COMMENTS and SUBMITTAL**

The surface owner was also notified.

This form must be signed by an authorized agent of the entity making assertion.

I certify under penalty of perjury that this report has been examined by me and to the best of my knowledge is true, correct and complete.

Print Name: Dustin Dyk Email: ddyk@mallardexploration.com  
 Signature: \_\_\_\_\_ Title: Chief Operating Officer Date: 01/24/2019

**CONDITIONS OF APPROVAL, IF ANY:**

**COA Type**

**Description**

--	--

**Attachment Check List**

**Att Doc Num**

**Name**

--	--

Total Attach: 0 Files

---

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
		Stamp Upon Approval

Total: 0 comment(s)

---

]