

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: 02-AUG-2017 TIME: 1515 HOURS

2. OPERATOR: W & T Offshore, Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Alliance Oilfield Services

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING DEVICE
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
ON SITE AT TIME OF INCIDENT:

6. OPERATION:

4. LEASE: 00590

AREA: SS LATITUDE:

BLOCK: 177 LONGITUDE:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER **Decommissioning**

5. PLATFORM: A

RIG NAME:

6. ACTIVITY: EXPLORATION(POE)
 DEVELOPMENT/PRODUCTION
(DOCD/POD)

8. CAUSE:

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER _____

7. TYPE:

- HISTORIC INJURY
 - REQUIRED EVACUATION
 - LTA (1-3 days)
 - LTA (>3 days)
 - RW/JT (1-3 days)
 - RW/JT (>3 days)
 - Other Injury

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

- LWC
- HISTORIC BLOWOUT
 - UNDERGROUND
 - SURFACE
 - DEVERTER
 - SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION HISTORIC >\$25K <=\$25K

9. WATER DEPTH: 90 FT.

10. DISTANCE FROM SHORE: 47 MI.

11. WIND DIRECTION:
SPEED: M.P.H.

12. CURRENT DIRECTION:
SPEED: M.P.H.

13. SEA STATE: FT.

14. PICTURES TAKEN:

15. STATEMENT TAKEN:

On August 2, 2017, a fire occurred on Ship Shoal (SS) 177 A platform during decommissioning operations of well A4. The fire was extinguished immediately and there was no harm to personnel, the environment, or equipment.

SS 177 A consists of five wells; one well is flowing (A5), three (A1, A2, A3) are Temporarily Abandoned (TA'd), and A4 was being decommissioned at the time of the incident. The cutting crew, which consisted of a Welder and Fire Watch, were tasked with removing the casing valve from well A4's conductor casing so that the casing could be removed. In order to remove the casing valve, a cutting torch would be used to cut the valve from the casing. Well A5 was located within the same well bay as A4 and needed to shut-in prior to hot work starting, so a Production Operator was assigned to the job to ensure that well A5 was shut-in prior to hot work commencing. A Job Safety Environmental Analysis (JSEA) and a Hot Work Permit were created to identify the job steps, potential hazards, and hazard mitigations. Once the JSEA and Hot Work Permit were reviewed and signed, the cutting crew started removing the casing valve from well A4. Shortly after they started cutting the casing valve on A4, a fire ignited at a weep hole on A5's Surface Safety Valve (SSV). The Fire Watch immediately extinguished the fire with a portable fire extinguisher, and the duration of the fire was approximately 3 seconds. There was no damage identified, paint in the area of the weep hole was not scorched or discolored, and the Temperature Safety Element (TSE) fusible loop was not activated.

On August 7, 2017, Bureau of Safety and Environmental Enforcement (BSEE) Inspectors conducted an investigation and collected documentation for this incident. It was discovered that the SSV for well A5 had a leaking diaphragm, which allowed gas to be ignited by the slag from the cutting torch. The Fire Watch had a gas detector and was taking samples in the area of the hot work, but the SSV was a few feet higher than where the cutting was taking place. The gas that was leaking past the diaphragm was a very small amount and was not reading on the Fire Watch's gas detector.

The JSEA identified that well A5 was flowing and needed to be shut-in prior to hot work commencing, and was signed by the Welder, Fire Watch, Production Operator, and Company Representative. However, the Hot Work Permit had Not Applicable (N/A) checked off next to the requirements to shut-in flowing wells, redirect flowing wells, and/or protect flowing wells from hot work operations. The Hot Work Permit was signed by all personnel except the Production Operator. The Welder and Fire Watch both stated that they were informed by the Company Representative and others that well A5 was already shut-in so they did not think they needed to talk to the Production Operator. The Production Operator confirmed that the cutting crew never requested him to shut-in A5.

The primary cause of this incident was the failure to shut-in well A5 prior to commencing hot work. Well A5 had a leaking diaphragm in its SSV, but if the well had been shut-in the hazard would not have existed. There was confusion among the crew as to if the well was already shut-in, which included the Company Representative who was the Ultimate Work Authority for the job. The Production Operator was the only personnel on the facility with the knowledge to ensure the well was shut-in, and he was not present when the hot work started nor was he consulted with to ensure the well was shut-in.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

- Failure to shut-in well A5 prior to commencing hot work.
- Well A5 had a leaking diaphragm in its SSV which allowed gas to be ignited.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

- Lack of Communication: The cutting crew and Company Representative failed to communicate with the Production Operator to ensure well A5 was shut-in.
- Conflicting procedures: The JSEA and the hot work permit conflicted. The JSEA stated that well A5 needed to be shut-in, but the hot work permit had N/A next to the requirement to shut-in the well.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:	NATURE OF DAMAGE:
N/A	N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE Houma District has no recommendations to make to the Office of Incident Investigations at this time.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

Two INC's were issued as follows:

1) G-316: On August 2, 2017, W&T Offshore Inc. conducted welding and burning operations in the well bay of Ship Shoal Block 177 Platform A without shutting in well A5 at the Surface Safety Valve (SSV). A small fire ignited from a weep hole on well A5's SSV and was extinguished approximately 3 seconds later.

2) G-303: On August, 2 2017, W&T Offshore Inc. failed to protect hydrocarbon bearing equipment from welding and burning operations in the well bay of Ship Shoal Block 177 Platform A. A small fire ignited from a weep hole on well A5's Surface Safety Valve (SSV) and was extinguished approximately 3 seconds later.

25. DATE OF ONSITE INVESTIGATION:

07-AUG-2017

26. ONSITE TEAM MEMBERS:

**Chris Treland / Paul Reeves /
Cedric Bernard /**

29. ACCIDENT INVESTIGATION
PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

APPROVED

DATE: **11-OCT-2017**