

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: 31-MAY-2013 TIME: 1230 HOURS

2. OPERATOR: **Arena Offshore, LP**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR: **HERCULES OFFSHORE DRILLING**
REPRESENTATIVE:
TELEPHONE:

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

4. LEASE: **G22606**
AREA: **VR** LATITUDE:
BLOCK: **52** LONGITUDE:

5. PLATFORM: **C**
RIG NAME: **HERCULES 150**

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

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

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

8. CAUSE:
 PRODUCTION
 DRILLING
 WORKOVER
 COMPLETION
 HELICOPTER
 MOTOR VESSEL
 PIPELINE SEGMENT NO.
 OTHER **Rig Maintenance**
 EQUIPMENT FAILURE
 HUMAN ERROR
 EXTERNAL DAMAGE
 SLIP/TRIP/FALL
 WEATHER RELATED
 LEAK
 UPSET H2O TREATING
 OVERBOARD DRILLING FLUID
 OTHER

9. WATER DEPTH: 15 FT.

10. DISTANCE FROM SHORE: 15 MI.

11. WIND DIRECTION: **SE**
SPEED: 15 M.P.H.

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

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS:-

On Friday May 31, 2013, hot slag from a torch-cutting operation being performed on the Hercules 150 drilling rig fell onto non-flame resistant tarpaulins on the Vermillion 52-C production platform resulting in a fire. The tarpaulins had been placed over the platform compressor, crane and chemical pumps to protect the equipment from drilling fluids during drilling operations. The total cost of the damage done to the affected equipment by the fire is estimated to be \$150,000. At the time of the incident the production platform wells were shut-in and the facility was unmanned.

At approximately 9:00 AM Friday May 31, 2013, the Hercules 150 Offshore Installations Manager (OIM), the Rig Maintenance Supervisor and the Rig Welder inspected an area on the port side aft of the rig cantilever where a section of hand railing was to be replaced. The railing was to be torch cut during the removal process. The Welder received permission to proceed with the planning and permits for the hand rail replacement. The Welder completed the required Hercules permits 508ork (PTW) and the

Job Safety Analysis (JSA), and submitted the forms to the OIM. The Arena Rig Site Supervisor (Arena's designated Person-In-Charge) signed the PTW at approximately 11:45 AM. At approximately 12:30 PM the Welder began cutting the handrail, his Fire Watch was positioned six feet forward of him on a grating walkway. The hot slag fell (approximately 47 feet) from the work area onto the tarpaulins below igniting the tarpaulins. The fire was observed by the Fire Watch; who stopped the Welder and announced the fire over the rig intercom. Rig personnel responded to the fire and safely extinguished the fire within an estimated eight to ten minutes utilizing a thirty pound dry chemical extinguisher. The rig fire water system was then used to douse the smoldering tarpaulin remains and cool the affected equipment.

On June 03, 2013 BSEE inspectors performed an onsite investigation. Further investigation of the incident found the tarpaulins had been placed over the compressor, crane and chemical pumps on the platform May 08, 2013, and prior to the rig moving on location. The rig arrived on location, Vermillion 52-C production platform, on May 10, 2013. The drilling package was moved into position on June 3, 2013. Between May 9th and June 3rd the rig maintenance and repair was being performed.

After reviewing the PTW, JSA, witness statements, rig morning reports, Arena General Welding Plan, and the Arena incident investigation report the following were found.

1. The OIM, the Rig Maintenance Supervisor and the Rig Welder failed to recognize the platform, adjacent to the rig, as being part of the hot work area.
2. The Arena Rig Site Supervisor signed the PTW without visiting the work area as required by the approved Arena General Welding Plan.
3. All flammable materials and/or substances on the platform within 35 feet of the slag impact areas were not removed or rendered inert.
4. No fire watch was stationed on the platform for immediate response in the event of a fire on the platform.

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

Hot slag from the torch cutting operation of the rig handrail falling (approximately 47 feet) onto the non-flame resistant tarpaulins below igniting the tarpaulins.

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

Human error by all parties involved which included the following:

1. The OIM, the Rig Maintenance Supervisor and the Rig Welder failed to recognize the platform, adjacent to the rig, as being part of the hot work area.
2. The Arena Rig Site Supervisor signed the PTW without visiting the work area as required by the approved Arena General Welding Plan.

- 3. All flammable materials and/or substances on the platform within 35 feet of the slag impact areas were not removed or rendered inert.
- 4. No fire watch was stationed on the platform for immediate response in the event of a fire on the platform.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED: NATURE OF DAMAGE:
The total cost of the damage to the affected equipment by the fire is estimated to be \$150,000; \$90,000 for the crane and \$60,000 for the compressor and chemical pumps. Fire and heat damage to the equipment.

ESTIMATED AMOUNT (TOTAL): \$150,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lakes Charles District office has no recommendations.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

INC G-303 REG. 30 CFR 250.113(a) Flammable materials and/or substances on the Vermilion 52-C production platform were not relocated 35 feet horizontally from the impact areas of the slag from the torch cutting operation. Hot slag from the torch cutting operation of the handrail fell (approximately 47 feet) onto the tarpaulins below igniting the tarpaulins.
INC G-110 REG. 30 CFR 250.107(a) (1) The OIM, the Rig Maintenance Supervisor and the Rig Welder failed to recognize the platform, adjacent to the rig, as being part of the hot work area.
The Arena Rig site Supervisor (Arenas designated Person-In-Charge) signed the PTW without visiting the work area as required by the approved Arena General Welding Plan.
No fire watch was stationed on the platform for immediate response in the event of a fire on the platform.

25. DATE OF ONSITE INVESTIGATION:

03-JUN-2013

26. ONSITE TEAM MEMBERS:

Larry Miller / Bill olive / Mitchell Klumpp /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Williamson, Larry

APPROVED
DATE:

18-JUL-2013

