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: **13-NOV-2014** TIME: **1930** HOURS

2. OPERATOR: **Arena Offshore, LP**
REPRESENTATIVE:
TELEPHONE: -
CONTRACTOR: **Hercules Offshore, Inc.** -
REPRESENTATIVE: -
TELEPHONE:

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

4. LEASE: **G33608**
AREA: **VR** LATITUDE:
BLOCK: **342** LONGITUDE: -

5. PLATFORM:
RIG NAME: **HERCULES 300**

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] 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
- [X] POLLUTION
- [ ] FIRE
- [ ] EXPLOSION

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

COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K

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

6. OPERATION:
- [ ] PRODUCTION
- [ ] DRILLING
- [ ] WORKOVER
- [X] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [X] OTHER **Completion Operations**

8. CAUSE:
- [ ] EQUIPMENT FAILURE
- [X] HUMAN ERROR
- [ ] EXTERNAL DAMAGE -
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [ ] OTHER _____

9. WATER DEPTH: **223** FT.

10. DISTANCE FROM SHORE: **95** MI.

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

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

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS: -

On 13-Nov-2014, the Hercules 300 was completing well A5 for Arena Offshore on Vermillion 342 A platform when an incident occurred, allowing an overboard discharge of approximately 66 bbls of 16.6 ppg Zinc Bromide completion fluid.

The Derrickman was instructed to transfer 16.6 ppg Zinc Bromide to the Pro-T filtration unit for filtering. The Derrickman prepared a Job Safety Analysis (JSA) which was reviewed and signed by the OIM and the Driller on tour. The Derrickman then lined up a centrifugal pump to transfer the fluid from the mud pits to the filtration unit. Prior to commencing the transfer he called the Pro-T filtration employee and told him he was ready to transfer fluid. The Pro-T employee gave the okay to start the pump and begin the transfer.

The Derrickman started the centrifugal pump and waited in the mud pit room monitoring the return line to confirm fluid was circulating to the filtration unit and being returned to the correct mud pit. After a few minutes elapsed without observing returns in the mud room, the Derrickman went to the filtration unit to investigate why. He asked the Pro-T filtration employee if he was filling a tank on his unit to which the Pro-T employee replied no. At this time the Derrickman went to the Halliburton cement unit to check the valves on the line to the cement unit's displacement tanks. The filtration unit and the cement unit share a common line for fluid transfers from the mud pits. The Derrickman discovered the valve on cement unit from the fluid delivery line to the mud pits was open, allowing the Zinc Bromide to go into the displacement tank of the cement unit. The drain valve on the displacement tank was also in the open position which was allowing the Zinc Bromide to go overboard. The Derrickman returned to the pit room and turned off the centrifugal pump, stopping the flow of fluid overboard and notified the Arena Rig Site Supervisor.

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

The valve on cement unit from the fluid delivery line to the mud pits was open, allowing the Zinc Bromide to go into the displacement tank of the cement unit. The drain valve on the displacement tank was also in the open position which was allowing the Zinc Bromide to go overboard.

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

The failures of the Derrickman to follow the risk reduction measures outlined on the JSA and confirm the valves isolating the cement unit were closed prior to beginning the Transfer of fluid to the filtration unit.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

ESTIMATED AMOUNT (TOTAL): **$**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Charles District office has no recommendations at this time.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **NO**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

N/A

25. DATE OF ONSITE INVESTIGATION:

19-NOV-2014

26. ONSITE TEAM MEMBERS:

Carl Matte / Larry Miller / Mitchell Klumpp /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

David C. Moore

APPROVED DATE: **10-DEC-2014**