

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-FEB-2015** TIME: **1115** HOURS

2. OPERATOR: **Hess Corporation**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **Stena Drilling -**

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: **G24101**

AREA: **MC** LATITUDE: **28.27129379 -**  
BLOCK: **726** LONGITUDE: **-88.85351818 -**

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

5. PLATFORM:

RIG NAME: **STENA FORTH**

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

9. WATER DEPTH: FT.

10. DISTANCE FROM SHORE: **50** MI.

11. WIND DIRECTION: **NNE -**  
SPEED: **17** M.P.H.

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

13. SEA STATE: FT.

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

On 13 February 2015, an incident occurred at MC 762 on the Stena Forth under contract with Hess Corporation. The operation at the time of the incident involved the Derrickman and the Operations Engineer Trainee (OET), dumping wash water overboard, after cleaning active mud pit #2 and active mud pit #4. The 260 barrel discharge of 15 pound per gallon (ppg) Synthetic Oil Based Mud (SOBM) into offshore waters occurred when the Derrickman thought he was transferring salt water from active pit #2 to active #4 pit. The Derrickman was unaware that SOBM, from equalized active pits #1 and #3 had flowed into active pit #2 when the air actuator for active pit #2 and the suction valve for active pit #3 failed. This allowed the valve to partially open and SOBM to flow from active pit #3 into active pit #2. Active pit #4 was the only pit lined up to the master dump valve. In order to dump the active pit #2 its contents had to be transferred to active pit #4.

The Derrickman gathered all permits and risk assessments needed to clean the pits and operate the master dump valve. The Derrickman notified the Driller of the operations and asked for assistance in order to open the master dump valve. According to the Derrickman's statement, he also informed the Mud Loggers. Tank washing and fluid transfers took place from 0740 hours to 1025 hours. At approximately 1025 hours active pit #2 was lined up to circulate seawater. At this time only active pit #4 is lined up to the master dump valve. The Derrickman and the OET then left the Mud Control Room (MCR) and went to the shakers to see the Mechanic. At approximately 1050 hours the Derrickman returned to the MCR and began transferring fluid, what he thought was sea water, from active pit #2 to active pit #4. At approximately 1057 hours, the Derrickman observed a low limit alarm in active pit #3 containing 15 ppg SOBM, and stopped the transfer from active pit #2 to active pit #4. The Derrickman then called the OET to close all dump valves. All dump valves were closed at 1105 hours.

On 18 February 2015, the BSEE Inspectors arrived on location to investigate the incident. It was discovered that poor communication and equipment failure lead to the unauthorized discharge. The logs from the Pit Volume Totalizer (PVT) indicated that active pit #1 and active pit #3 containing SOBM, were equalized and that an air actuated valve for #3 pit failed, allowing the valve to partially open at 1037 hours. This allowed the SOBM, in active pits #1 and #3 to flow into active pit #2. (Note: At this time the SOBM was still contained on the rig in active pit #2). Upon review of the Mud Loggers statement, it was discovered that the Mud Logger on duty noticed active pits #1 and #3 were losing mud at 1038 hours. The Mud Logger called the MCR two or three times with no answer. He assumed the Derrickman was moving mud to storage as he noticed no other pit going up or down and he was not informed of any dumping operations. He then called the Driller at approximately 1048 hours to inform him that he was going to lunch. At this time no personnel were monitoring pit volumes. After reviewing the Derrickman's statement he was not informed or aware that active pits #1 and #3 were losing mud. Upon review of the Permit to Work and the Risk Assessment, both documents clearly state continuous monitoring of pits or volumes.

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

- 1) Poor communication between the Derrickman and the Mud Loggers. The pits were left unattended when the Permit to Work and the Risk Assessment clearly state that the pits should be monitored continuously.
- 2) The air actuator for active pit #2 and active pit #3 suction valve failed. This allowed to valve to partially open and SOBM to flow from active pit #3 into active pit #2.

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

- 1) **The Derrickman did not check the pit levels upon returning to the MCR.**
- 2) **The Mud Logger failed to recognize that active pit #2 was gaining fluid. According to the screenshot taken from the Mud Loggers pit monitoring system, active pit #2 was clearly gaining fluid while active #1 and #3 were losing fluid.**

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

**260 barrel of SOBM.**

NATURE OF DAMAGE:

**Discharged overboard.**

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

**The New Orleans District has no recommendations at this time.**

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**E-100 - The lessee did not prevent an unauthorized discharge of pollutants into offshore waters. On 2-13-15 at 1115 hours, an incident occurred that resulted in a 260 barrel discharge of 15 ppg synthetic oil based mud into offshore waters. The discharged 15 ppg synthetic oil based mud was 52% oil, 18% water, and 30% solids.**

25. DATE OF ONSITE INVESTIGATION:

**18-FEB-2015**

26. ONSITE TEAM MEMBERS:

**Michael "Joe" Sonnier / Brennon  
Carriere /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**David Trocquet**

## INJURY/FATALITY/WITNESS ATTACHMENT

<input checked="" type="checkbox"/> OPERATOR REPRESENTATIVE	<input type="checkbox"/> INJURY
<input type="checkbox"/> CONTRACTOR REPRESENTATIVE	<input type="checkbox"/> FATALITY
<input type="checkbox"/> OTHER _____	<input checked="" type="checkbox"/> WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

<input type="checkbox"/> OPERATOR REPRESENTATIVE	<input type="checkbox"/> INJURY
<input checked="" type="checkbox"/> CONTRACTOR REPRESENTATIVE	<input type="checkbox"/> FATALITY
<input type="checkbox"/> OTHER _____	<input checked="" type="checkbox"/> WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY: **Stena Drilling / 21698**

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

# POLLUTION ATTACHMENT

1. VOLUME: GAL 260 BBL  
YARDS LONG X YARDS WIDE -

APPEARANCE: SILVERY SHEEN -

- 2. TYPE OF HYDROCARBON RELEASED:  OIL
- DIESEL
- CONDENSATE
- HYDRAULIC
- NATURAL GAS
- OTHER 15 ppg SBM

3. SOURCE OF HYDROCARBON RELEASED: The master dump valve on active mud pit #4.

4. WERE SAMPLES TAKEN? NO

5. WAS CLEANUP EQUIPMENT ACTIVATED? NO

- IF SO, TYPE:
- SKIMMER
  - CONTAINMENT BOOM
  - ABSORPTION EQUIPMENT
  - DISPERSANTS
  - OTHER \_\_\_\_\_

6. ESTIMATED RECOVERY: 0 GAL BBL

7. RESPONSE TIME: HOURS

8. IS THE POLLUTION IN THE PROXIMITY OF AN ENVIRONMENTALLY SENSITIVE AREA (CLASS I)? NO

9. HAS REGION OIL SPILL TASK FORCE BEEN NOTIFIED? NO

10. CONTACTED SHORE: NO IF YES, WHERE:

11. WERE ANY LIVE ANIMALS OBSERVED NEAR: NO

12. WERE ANY OILED OR DEAD ANIMALS OBSERVED NEAR SPILL: NO