

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT  
GULF OF MEXICO REGION

# ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **01-DEC-2010** TIME: **0055** HOURS

2. OPERATOR: **Stone Energy Corporation**

REPRESENTATIVE: **Delcambre, J.**

TELEPHONE: **(337) 593-9420**

CONTRACTOR: **Helmerich & Payne**

REPRESENTATIVE: **King, Mike**

TELEPHONE: **(601) 939-1589**

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

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

6. OPERATION:

4. LEASE: **G05825**

AREA: **MC** LATITUDE: **28.865833**  
BLOCK: **109** LONGITUDE: **-88.930833**

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

5. PLATFORM: **A-Amberjack**

RIG NAME: **H&P 206**

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

8. CAUSE:

7. TYPE:

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

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

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

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

9. WATER DEPTH: **1100** FT.
10. DISTANCE FROM SHORE: **14** MI.
11. WIND DIRECTION: **N**  
SPEED: **31** M.P.H.
12. CURRENT DIRECTION: **SE**  
SPEED: **2** M.P.H.
13. SEA STATE: **8** FT.

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

17. INVESTIGATION FINDINGS:

On 01 December 2010 at approximately 0055 hours, during the casing head washing procedure, 98 bbls of Synthetic Based Mud (SBM), of which 55.86 bbls or 57% synthetic base fluid, was inadvertently discharged overboard. While circulating, the Driller noticed the loss in returns and shut-down the operations. After investigating the line-up on the mud pits, the operators discovered that the return line was improperly aligned into the open overboard dump valve and line. It was determined that the overboard mud line valves were improperly aligned during simultaneous mud pit cleaning operations initiated prior to the incident. The cleaning crew had removed the skillets from the pits and dump lines in order to direct residuals overboard, but failed to communicate this to the drilling crew. The drilling crew failed to fully check the lines before conducting the casing head washing operations.

Sequence of Events:

Prior to the incident, on 30 November 2010 between 02230 and 02300 hours, the OCS cleaning crew cleaned the reserve and processing mud pits. The Shaker Hand was notified when the job was completed. When the wellhead was tagged, the Halliburton representative was consulted to the options available, and the Driller was informed to circulate the lines. The Shaker Hand was instructed to line-up the valves for circulation and checked the valve positions while the Floor Hand prepared the screen going to the trip tank. The Shaker Hand informed the Driller he could circulate and pump, and it was within this time frame that the spill started to occur. The Driller noticed the loss and attributed it to pipe fill. The Driller changed the gain-loss from plus 1 minus 5 bbls to plus 15 minus 30 bbls and continued to pump 20 bbls. The Driller realized that there was something wrong and called the Shaker Hand to close all valves. The Night Company Man came to the floor. The Shaker Hand closed all valves and the losses stopped. The tanks were strapped and the Shaker Hand walked out the lines. The Tool pusher was notified about the incident. A walk-through revealed a connection between the reserve mud tank transfer line and the overboard dump line. Further investigation determined the transfer line had been added subsequent to the initial rig construction and the associated mud schematic had not been revised to reflect this modification.

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

The mud pit return line was improperly aligned into the open overboard dump line since the crew members were unaware that the transfer line from the reserve pits to the active pits were tied into the overboard dump line.

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

- \* Improper communication between the cleaning crew and drilling crew in order for the drilling crew to check the lines prior to conducting operations.
- \* Improper direction by Floor Hand to the Driller since the Floor Hand was not aware of overboard valve placement.
- \* Improper overboard valve position with skillets removed from the pits and dump lines as a result of the improper communication between parties.
- \* Improper labeling and identification of the valves.
- \* The modification of the transfer line from the reserve pits to the active pits being tied into the dump line had not been indicated on the rig's mud flow schematic.
- \* The procedure used for pumping directly from the reserve pit did not follow a restriction for unlocking the transfer line valve.

20. LIST THE ADDITIONAL INFORMATION:

Drilling Contractor's recommendations to prevent recurrence:

- \*Implement a long-term lock out/tag out policy for overboard dump line valves and reserve mud transfer line valves, to include a Permit to Work approval to open these valves and lines with the Tool Pusher being assigned to keep the keys.
- \*A contingency plan to be applied should similar drilling operations occur, and that a JSA provide in detail that all personnel involved know their responsibilities and duties.
- \* Develop revised procedure for pit cleaning operation.
- \* Conduct piping verification audit of mud system.
- \* Visually label all piping which terminates into the overboard dump lines.
- \* Conduct rig-based training on the mud system components.

n 1-10-11.

(4 Pages)

21. PROPERTY DAMAGED:	NATURE OF DAMAGE:
98.8 bbls of Synthetic Base Mud loss.	Discharged overboard

ESTIMATED AMOUNT (TOTAL): \$17,883

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The New Orleans District makes the recommendation to the Regional Office of Safety Management (OSM) that we send out a safety alert that all rigs check their mud handling equipemnt to verify drawings match actual equipment/piping.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

Notification of Incident(s) of Noncompliance: G-110 - Two valves were left open after cleaning of mud tank, resulting in 98 bbls of Synthetic Based mud being dumped into gulf waters during circulating operations.

Notification of Incident(s) of Noncompliance: E-100 - 98 bbls of Synthetic Base Mud was released into gulf waters.

25. DATE OF ONSITE INVESTIGATION:

02-DEC-2010

26. ONSITE TEAM MEMBERS:

Robert Neal /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED

DATE: 08-FEB-2011

# INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER \_\_\_\_\_

WITNESS

NAME :

HOME ADDRESS :

CITY :

STATE :

WORK PHONE :

TOTAL OFFSHORE EXPERIENCE :

YEARS

EMPLOYED BY :

BUSINESS ADDRESS :

CITY :

STATE :

ZIP CODE :

# POLLUTION ATTACHMENT

1. VOLUME: GAL 98 BBL  
YARDS LONG X YARDS WIDE

APPEARANCE: **BARELY VISIBLE**

2. TYPE OF HYDROCARBON RELEASED:  OIL  
 DIESEL  
 CONDENSATE  
 HYDRAULIC  
 NATURAL GAS  
 OTHER Synthetic Base Mud

3. SOURCE OF HYDROCARBON RELEASED: **Mud pit return line was improperly aligned into open overboard dump line.**

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: **YES** IF YES, WHERE: **n/a**

11. WERE ANY LIVE ANIMALS OBSERVED NEAR: **NO**

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

