**UNITED STATES DEPARTMENT OF THE INTERIOR**
**MINERALS MANAGEMENT SERVICE**
**GULF OF MEXICO REGION**

# ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **12-APR-2010** TIME: **2000** HOURS

2. OPERATOR: **Statoil Gulf of Mexico LLC**
   REPRESENTATIVE: **Becnel, Thomas**
   TELEPHONE: **(713) 579-9905**
   CONTRACTOR: **Maersk Oil America Inc.**
   REPRESENTATIVE: **John Kennedy**
   TELEPHONE:

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

4. LEASE: **G20341**
   AREA: **WR** LATITUDE:
   BLOCK: **543** LONGITUDE:

5. PLATFORM:
   RIG NAME: **MAERSK DEVELOPER**

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

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

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: **6606** FT.

10. DISTANCE FROM SHORE: **182** MI.

11. WIND DIRECTION: **N**
    SPEED: **1** M.P.H.

12. CURRENT DIRECTION: **N**
    SPEED: **13** M.P.H.

13. SEA STATE: **1** FT.

17. INVESTIGATION FINDINGS:

**On 12 April 2010 at approximately 2000 hours, a single joint of 11 7/8" casing was accidently released from the Weatherford Internal Lift Tool (ILT). While racking back 11 7/8" casing using the ILT, the Weatherford Supervisor was in the process of driving the tong to well center for making-up a connection from the Universsal Remote Control System (URCS). The joint had been stabbed in the joint box, and the manual stabbing guide had been removed by the Floorman. At this time the Weatherford Operator noticed that the ILT was not properly stabbed into the pipe. He opened the ILT to prevent damaging of the dies while the joint was being made-up. He proceeded to drive the tong in to make up the connection, and in the process he observed the joint of casing fall to the rig floor. The joint of 11 7/8" casing fell six feet, not injuring personnel as they were outside of this work area.**

**The ILT is designed with a fail-safe system, and can support its rated load in the event compressed air or hydraulic pressure is removed. It is also designed to prevent the Operator from releasing the ILT while a load is being suspended. The opening pressure of the ILT should be set between 500 to 550 psi. In order for the ILT to be opened inadvertenly under pressure it would have had to been set at or above 750 psi. The investigation determined the pressure was set at 1100 psi. If the opening pressure is set correctly the Operator cannot open the ILT unless there is no weight on the tool, thereby preventing the unintended drop of the load.**

**The ILT was undressed and all the die mechanisms were inspected for irregularity with no problems identified, other than the opening pressure being set at 1100 psi. The ILT by design cannot release it's gripping force in the event of hydraulic failure resulting in pressure loss. The ILT system keeps constant outward force on the body of the casing as long as the weight of the casing is hanging. There are a series of check valves in line with the grip/release cylinder that prevent any pressure loss in this cylinder in the event of hydraulic power failure.**

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

**The opening pressure of the ILT was set at 1100 psi (approximately 350 psi too high), which rendered the fail-safe system inoperable.**

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

**1) There were no specific procedure exists for running casing using the ILT.**
**2) The Operator of the ILT lacked adequate understanding of the equipment he was using (lack of training).**
**3) There was no documented maintenance recording system for the ILT.**

20. LIST THE ADDITIONAL INFORMATION:

**To prevent this incident from reoccurring, Statoil will be implementing several changes. Operational procedures and pre-job checklists will be made. Also, Weatherford will develop and implement a regular documented scheduled maintenance plan. Weatherford will educate operators on what release pressure/minimum pile weight chart is to be used.**

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

**None** **N/A**

ESTIMATED AMOUNT (TOTAL): **$**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

**The Houma District office has no recommendations to report to the Regional Office of Safety Management.**

**The Houma District concurs with Statoil's recommendations to prevent reoccurrance listed in Item 20 of this report.**

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**INC G-110 issued 02 June 2010 for failure of the lessee to perform all operations in a safe and workmanlike manner. The Internal Lifting Tool was not operated safely because the operator of this unit utilized the ILT with the fail safe system inoperable. The manufacturer of the Weatherfor ILT states that the opening pressure should be set at 500 to 550 psi, and that at this pressure the tool cannot be opened with weight on the tool. If the opening pressure is set at or above 750 psi, the ILT could be opened with weight. The opening pressure was found at 1100 psi after the incident.**

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:

**Josh Ladner /**

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Bryan A. Domangue**

APPROVED DATE: **01-AUG-2010**

# 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:

| | |
|---|---|
| ☐ 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:

# Crane/Other Material-Handling Equipment Attachment

## Equipment Information

Installation date: **01-AUG-2009**

Manufacturer: **OIL STATES INDUSTRIES INC**

Manufacture date: **01-JUN-2009**

Make/Model: **MOTION COMPENSATED ILT / 7"-13.625" 10 TON**

Any modifications since manufactured? Describe and include date(s).

What was the maximum lifting capacity at the time of the lift?

Static: **20000** Dynamic: **20000**

Was a tag line utilized during the lift? **N**

Were there any known documented deficiencies prior to conducting the lift? If yes, what were the deficiencies?

**The fail safe system was not utilized. The opening pressure should have been set for 500 to 550 psi.**

List specific type of failure that occured during this incident.(e.g. cable parted, sticking control valve, etc.)

**The operator inadvertenly released the ILT while a 11 7/8" joint of casing was being lifted.**

If sling/loose gear failure occurred does operator have a sling/loose gear inspection program in place? **NA**

Type of lift: **DD**

## Load Information

What was being lifted? **PIPE**

Description of what was being lifted (e.g. 10 joints of 2 3/8-inch pipe, ten 500-lb. sacks of sand, 2 employees, etc.)

**Single joint of 11 7/8" casing.**

Approximate weight of load being lifted: **3000**

Was crane/lifting device equipped with an operable weight indicator? **Y**

Was the load identified with the correct or approximate weight? **Y**

Where was the lift started, where was it destined to finish, and at what point in the lift did the incident occur? Give specific details (e.g. pipe rack, riser cart, drill floor, etc.)

**Running casing.**

If personnel was being lifted at the time of this incident, give specific details of lifting device and riding apparatus in use (e.g. 1) crane-personnel basket, 2) air hoist-boatswain chair, other)

**N/a**

Were personnel wearing a safety harness? **NA**

Was a lifeline available and utilized? **NA**

List property lost overboard.

**NONE**

## Rigger/Operator Information

Has rigger had rigger training?

If yes, date of last training:

How many years of rigger experience did rigger have?

How many hours was the operator on duty prior to the incident? **4**

Was operator on medication when incident occurred? **N**

How many hours was the rigger on duty prior to the incident?

How much sleep did rigger have in the 24 hours preceding this incident? **8**

Was rigger on medication when incident occurred?

Were all personnel involved in the lift drug tested immediately following this incident?

Operator: **N** Rigger: Other:

While conducting the lift, was line of sight between operator and load maintained?

**Y**

Does operator wear glasses or contact lenses? **N**

If so, were glasses or contacts in use at time of the incident? **N**

Does operator wear a hearing aid? **N**

If so, was operator using hearing aid at time of the incident? N

What type of communication system was being utilized between operator and rigger at time of this incident?

**For crane only:**

What crane training institution did crane operator attend?

Where was institution located?

Was operator qualified on this type of crane? **N**

How much actual operational time did operator have on this particular crane involved in this incident?

Years: Months:

List recent crane operator training dates.

**For other material-handling equipment only:**

Has operator been trained to operate the lifting device involved in the incident? **Y**

How many years of experience did operator have operating the specific type of lifting device involved in the incident?

**20**

## Inspection/Maintenance Information

**For crane only:**

Is the crane involved classified as Heavy, Moderate or Infrequent use.

Was pre-use inspeciton conducted?

For the annual/quarterly/monthly crane inspections, please fill out the following information:

What was the date of the last inspection?

Who performed the last inspection?

Was inspection conducted in-house or by a 3rd party?

Who qualified the inspector?

Does operators' policy require load or pull test prior to heavy lift?

Which type of test was conducted prior to heavy lift?

Date of last pull test: Load test:

Results:

If fail explain why:

Test Parameters: Boom angle: Radius:

What was the date of most recent crane maintenance performed?

Who performed crane maintenance? (Please clarify persons name or company name.)

Was crane maintenance performed in-house or by a third party?

What type of maintenance was performed?

**For other material-handling equipment only:**

Was equipment visually inspected before the lift took place? **Y**

What is the manufacture's recommendation for performing periodic inspection on the equipment involved in this incident?

**Under normal operating conditions, the ILT should be disassembled.**

## Safety Management Systems

Does the company have a safety management program in place? **N**

Does the company's safety management program address crane/other material-handling equipment operations?

**N**

Provide any remarks you may have that applies to the company's safety management program and this incident?

**Maersk conducted an investigation 4/15/2010 and at that time there was no formalized approach to documenting the work (JSA) that is to be done by WTRS.**

Did operator conduct a Job Safety Analysis (JSA) prior to job being performed?

**Y**

Did operator have an operational or safety meeting prior to job being performed?

**Y**

What precautions were taken by operator before conducting lift resulting in incident?

Procedures in place for crane/other material-handling equipment activities:

Did operator have procedures written? **N**

Did procedures cover the circumstances of this incident? **Y**

Was a copy available for review prior to incident? **N**

Were procedures available to MMS upon request? **Y**

Is it documented that operator's representative reviewed procedures before conducting lift?

**N**

Additional observations or concerns: