

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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **28-SEP-2010** TIME: **1615** HOURS

2. OPERATOR: **Nippon Oil Exploration U.S.A. Lim.**

REPRESENTATIVE: **Hubble, Tony**

TELEPHONE: **(713) 260-7463**

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING DEVICE
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER **Portable offshore office bldg.**

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

6. OPERATION:

4. LEASE: **G02226**

AREA: **WC** LATITUDE:

BLOCK: **534** LONGITUDE:

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

5. PLATFORM: **A**

RIG NAME:

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

9. WATER DEPTH: **175** FT.

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

10. DISTANCE FROM SHORE: **96** MI.

11. WIND DIRECTION: **WNW**
SPEED: **10** M.P.H.

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

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

13. SEA STATE: **3** FT.

17. INVESTIGATION FINDINGS:

On 28 September 2010 at approximately 1615 hrs., a 15' x 20' fiberglass and wood constructed office building caught fire on Nippon Oil Exploration USA's (Nippon) WC 534 A platform. The platform was already shut-in at the time of the fire since Nippon was conducting decommissioning activities and preparing to remove the building from the platform. An oxy-fuel cutting torch was being used to cut the tack welds that attached the skid base of the building to the platform's metal plate deck. The building rested on a skid constructed of I-beams. The torch cutting procedure produced hot molten slag that ignited the wood construction materials inside the walls of the building. The construction crew responded to the fire by puncturing holes into the building walls and discharging dry chemical agents directly into the walls where the fire was believed to be occurring. Additionally, a water hose from an attendant vessel was utilized in an unsuccessful attempt to extinguish the fire. An onsite witness statement indicated that the water hose was not immediately available or in close proximity as required in the Job Safety Analysis (JSA) prepared by a third party construction firm. Nippon's report of the fire indicated that the water hose also did not have sufficient pressure to extinguish the fire. According to additional onsite witness statements, twelve (12) thirty pound and one wheeled unit fire extinguishers were used in unsuccessful attempts to extinguish the fire over a period of approximately 30 minutes. At this point, the decision was made to evacuate all personnel aboard the WC 534 A platform to the attendant vessel and use the fire water monitor onboard the vessel to extinguish the fire. According to Nippon's report of the fire, after evacuation procedures, the vessel discharged water spray onto the fire until 1700 hrs. At this time the building's roof collapsed from water and fire damage, and the fire was subsequently extinguished. As a precautionary measure, water spray continued on the building and surrounding area for another two hours. The fire was limited to the subject office building with no report of injuries or pollution.

The BOEMRE investigation of the fire revealed that a JSA was performed, a Hot Work Permit was filed, a Fire Watch was utilized, and a combustible gas meter was used throughout the project to monitor for hazardous gas concentrations / LEL conditions.

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

The cutting process produced hot, incandescent, molten slag that was ejected from the cutting tool with sufficient quantity and force to reach the inside wooden area of the office building wall through a gap between the fiberglass exterior covering and the building's wood framing.

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

The severity of the fire could be contributed to the following:

* The JSA did not properly classify wood combustible materials that were located immediately adjacent to the torch cutting operation. Proper classification of the wood combustible materials as a Class "A" fire hazard would have shown that the cooling and quenching effects of water are of first importance. The initial response to the subject fire included the use of dry chemical type fire extinguishers that are better suited to fight a Class "B" type fire, such as flammable liquids, where the blanketing effects of the dry chemical are essential. The twelve (12) thirty pound and one wheeled unit dry chemical type fire extinguishers were used initially with no

success.

* A water hose was specified in the JSA to be available to eliminate or minimize the fire hazard, but it was not initially in the immediate area of the fire; nor was it capable of delivering the pressure and volume required to effectively fight the fire. The fire was not extinguished until the attendant vessel used its fire water monitor to spray large quantities of water on the fire.

* No shielding was present to prevent the hot slag from entering the wall of the building.

* The fire was not observed until well advanced into the burning process since the position of the torch cutter precluded him from observing the building's inside wall.

20. LIST THE ADDITIONAL INFORMATION:

No additional information.

21. PROPERTY DAMAGED:

One 15' x 20', fiberglass and wood constructed, portable, offshore office building.

NATURE OF DAMAGE:

Building was destroyed by the fire and water damage.

ESTIMATED AMOUNT (TOTAL): \$5,000

22. RECOMMENDATIONS TO PREVENT RECCURANCE NARRATIVE:

The Lake Charles District has no recommendations for the Regional Office of Safety Management.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 - the lessee did not perform operations in a safe and workmanlike manner, and provide for preservation of property during the torch cutting operation to remove the portable building. Nearby combustible materials should have been sheilded from the hot slag produced by the torch cutting operation. Also, the JSA specified a water hose as a requirement to eliminate or minimize the hazards associated with the torch cutting operation, and the water hose was not in close proximity to the operation during the initial response to the fire.

25. DATE OF ONSITE INVESTIGATION:

09-SEP-2010

26. ONSITE TEAM MEMBERS:

Wayne Meaux / Scott Mouton / Mark Osterman / Carl Matte / Cody Leblanc /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Larry Williamson

APPROVED
DATE:

16-DEC-2010

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Hot molten slag from torch cutting operation**

2. TYPE OF FUEL:
- GAS
 - OIL
 - DIESEL
 - CONDENSATE
 - HYDRAULIC
 - OTHER **Wood**

3. FUEL SOURCE: **Wood combustible materials in portable building**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE
KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **NO**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED:
- HANDHELD**
 - WHEELED UNIT**
 - FIXED CHEMICAL
 - FIXED WATER
 - NONE
 - OTHER **Boat's fire monitor**

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

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INJURY/FATALITY/WITNESS ATTACHMENT

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