

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: 15-SEP-2015 TIME: 0510 HOURS

2. OPERATOR: **Murphy Exploration & Production Co**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR: **Performance Energy Service, LLC**
REPRESENTATIVE:
TELEPHONE:

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

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

6. OPERATION:

4. LEASE: **G27306**
AREA: **MC** LATITUDE: **28.26728694**
BLOCK: **736** LONGITUDE: **-88.39892063**

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

5. PLATFORM: **A (Thunder Hawk)**
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: **6050** FT.

LWC HISTORIC BLOWOUT
 UNDERGROUND
 SURFACE
 DEVERTER
 SURFACE EQUIPMENT FAILURE OR PROCEDURES

10. DISTANCE FROM SHORE: **66** MI.

11. WIND DIRECTION: **S**
SPEED: **20** M.P.H.

12. CURRENT DIRECTION: **SE**
SPEED: **10** M.P.H.

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

13. SEA STATE: FT.

On 15 September 2015 at 0510 a fire occurred at Murphy Exploration MC 736-A OCS-G 27306 (Thunder Hawk) Platform. A Pressurized Welding Enclosure (PWE) was constructed with the approximate dimensions: 32' (L) x 6' (W) X 8' (H) to accommodate the removal of bumper pads and the repair of deck plates.

During the Night Contractor's shift, a fire started at approximately 0510 hours during hot work operations inside the PWE #39 while using a torch to wash off the welds. During the weld washing, slag rolled under the Velcro portion of the PWE wall, heated up to the point of smoldering and ignited. The inside Firewatch was not aware of the fire on the outside of the PWE. SafeZone (Tech #1) was watching the control panel for PWE #39 when he noticed a fire about 2' high at approximately 0510 hours on the outside wall. Tech #1 then hit the Emergency Shutdown (ESD) to shut down the PWE and all welding.

According to witness statements, Tech #1's first instinct was to stomp the fire out. Once he noticed the fire was out, he grabbed a H2O fire extinguisher and soaked the fire retardant blanket and the panel wall. Simultaneously; SafeZone (Tech #2), the designated Firewatch, was making his way around to the location of the fire and witnessed Tech #1 putting it out. Tech #2 said he ran to find another H2O fire extinguisher and when he returned Tech #1 had already extinguished the fire.

The SafeZone Techs failed to have fire protection equipment readily available in the work area for hazardous conditions arising due to hotwork. Murphy's Safe Welding and Burning Plan states that there should be a spare fire extinguisher in the area of the hot work in an event that the primary extinguisher should fail. In this case, there was no additional fire protection equipment available to use as secondary. Firewatchers failed to use the appropriate 30# ABC fire extinguisher that is designated for hot work operations; instead, a H2O extinguisher was used.

During the course of the investigation, miscommunication between Murphy Exploration and Noble Energy was identified as a contributing factor. Firewatch shall have a portable radio to communicate in the event of an emergency. Firewatch shall know the location of platform alarms (Fire, ESD and abandon platform) for the safety of all personnel and the protection of equipment and environment. The Firewatch shall stay alert and perform no other duties during hot work activity. SafeZone Techs, Performance Energy Services (PES) Supervisor and the Noble Inspector failed to notify the Control Room Operators immediately. This incident was found to be part of an unsafe situation that posed an immediate danger to all personnel and the overall safety of the facility.

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

During the weld washing in PWE #39, slag rolled under the Velcro portion of the PWE wall, heated up to the point of smoldering and ignited.

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

SafeZone Tech #1 first instinct was to stomp the fire out instead of grabbing a 30 # Fire Extinguisher to control the situation.

At the time of the fire outside of PWE #39, SafeZone and PES Contractors failed to report the fire immediately to the Murphy's Control Room or Platform Operations. This

incident was found to be part of an unsafe situation that posed an immediate danger to personnel and overall safety of the facility.

Personnel involved with the PWE #39 operations did not have access to Radios or Gaionics in order to communicate with Platform Personnel to sound the fire alarm, shut in the platform and muster all personnel.

20. LIST THE ADDITIONAL INFORMATION:

DATES OF ONSITE INVESTIGATION: 9-16-15 9-20-15 9-24-15

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

PWE panel walls were burned.

Hot slag from welding operations.

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ESTIMATED AMOUNT (TOTAL): \$25,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Agency.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-112 250.107 PWE #39 was not properly installed leaving a gap under the wall of the PWE where hot slag rolled out onto deck causing a fire within 35 feet from equipment containing hydrocarbons.

G-303 250.113 Vessel MBD 1020 inlet separator B located 20 feet from where hot slag escaped through PWE #39 material exposing area vessels to ignition source causing a fire within 35 feet from equipment containing hydrocarbons.

G-313 250.113 During the welding operations outside fire watcher of PWE#39 didn't follow Murphy Expro Hot work permit procedures of having firefighting equipment ready and available for hazardous condition arising during a fire.

G-110 250.107 At the time of the fire outside of PWE #39, SafeZone and PES and Noble Contractors failed to report a fire immediately to the Murphy's control room or Platform Operations. This incident was found to be part of an unsafe situation that posed an immediate danger to personnel and overall safety of the facility.

25. DATE OF ONSITE INVESTIGATION:

16-SEP-2015

26. ONSITE TEAM MEMBERS:

4. Alan Williams (Inspector)
Carl Bohling (Inspector)
Lee Carter (Lead Inspector)
Perre Lanoix (District Investigator)

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Hot Slag**

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

3. FUEL SOURCE: **None**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE
KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **YES**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED:
- HANDHELD
 - WHEELED UNIT
 - FIXED CHEMICAL
 - FIXED WATER
 - NONE
 - OTHER

INJURY/FATALITY/WITNESS ATTACHMENT

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<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:

26 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:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

For Public Release

<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: 3 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: 20 YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

For Public Release

<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: 3 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: 2 YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

For Public Release

<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: **.83** 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: **4** YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

For Public Release

<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: .25 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: 2 YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

For Public Release

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME :

HOME ADDRESS : CITY :

WORK PHONE :

STATE :

TOTAL OFFSHORE EXPERIENCE : 10 YEARS

EMPLOYED BY :

BUSINESS ADDRESS :

CITY :

STATE :

ZIP CODE :