

**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103

Chief / EMC

Deputy Chief

Deputy Chief
Fire Marshal

**Cause and Origin Report
Vessel: Mary Dupre
28 June 2022
By: Jason Shafer, Freeport Fire Marshal
Requested By:
United States Coast Guard Investigation Division**



Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us



**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103

██████████
Chief / EMC

██████████
Deputy Chief

██████████
Deputy Chief
Fire Marshal

Assignment:

On June 29, 2022 at approximately 09:15 I, Investigator ██████████ with the Freeport Fire Marshal's Office responded to a water towing vessel fire located at J&S ship yard 1100 E. Brazos Blvd. Freeport Brazoria County, TX 77541. This was at the request of Chief Warrant Officer (CWO) ██████████ of the United States Coast Guard. On scene investigations was assisted by Chief ██████████ and Chief ██████████.

Scene Description:

On my arrival the scene was located on a 67-foot water towing vessel bearing the name Mary Dupre, the vessel was secured to the bulk head via ropes from the starboard side. The vessel presented with 3 decks, the main deck (lower), the second deck, and the third deck (wheel house). The exterior of the vessel presented with heavy thermal damage to all three decks of the hull.

This investigator was met by CWO ██████████ and Chief ██████████ of the Investigations Division of the United States Coast Guard. I was advised the fire occurred June 26, 2022 at 11:14am, in the Intercoastal waterway (ICW) at mile marker 407 east bound approaching Freeport. ██████████ advised the vessel was underway pushing a loaded barge. The vessel was later towed to the above location for investigative purposes

Weather data from Weather Underground from June 26 showed at 10:52am the temperature was 92.0 degrees Fahrenheit, dew point of 73 degrees Fahrenheit, 54 % relative humidity, barometric pressure of 30.08 inches, 10.0-mile visibility, W wind direction, wind speed was 5 mph, clear skies and no precipitation and there were no lightning strikes in the area according to Houston Lightning Mapping Array (LMA).

Scene Safety:

Proper personnel protective equipment was used by investigators during the investigation including helmet, boots, and work gloves.

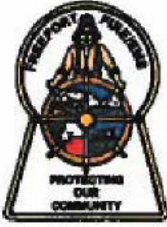
The scene was safe and secure.

Artificial lighting was provided by hand-held flashlights

Vessel description:

The Vessel is a 67- foot, water towing vessel presenting with three decks tied to the bulkhead by large ropes. The vessel bared the name Mary Dupre from Houma La. Blue and white painting on the outer hull

Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us



**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103

Chief / EMC

Deputy Chief

Deputy Chief
Fire Marshal

with exterior stairs and ladders contacting the decks. The decks contained ordinary work tools and rope material throughout.

Vessel Systems:

The electrical service was provided by the vessels on board generator, the generator was located in the engine room below the main deck and showed no damage, the electrical distribution panels were located in the interior of the main deck and second deck. The distribution panel on the main deck presented with thermal damage on the outer portion and all circuit breakers appeared in tact with thermal damage to the outer portion. The distribution panel in the interior of the second deck was in place, however, received severe thermal damage and most of its components were consumed by fire.

The vessels main thrust power was provided by two diesel engines located in the engine room, investigator did not observe any damage to engines.

Fire protection Systems:

The vessel is equipped with an on-board fire pump and operated during the fire.

The vessel also was equipped with hand held fire extinguishers.

Interviews:

CWO [REDACTED] JSCG

[REDACTED] stated he interviewed the Captain of the Barge and the vessel was occupied by a four-person crew at the time of the fire. The Captain received a smoke alarm in the wheel house indicating smoke on the second deck crew quarters. The crew investigated and found smoke coming from the ceiling area of the aft crew bunk area. The crew removed wooden ceiling covering attempting to locate to smoke source. The crew used fire extinguishers in attempting to extinguish the fire. The crew stated they observed smoke emitting from the engine room exhaust port at the exhaust chase. Crew witnessed paint bubbling on the outer hull on the second deck in the area around the exhaust port. [REDACTED] stated that he received several videos from the crew members recorded while crew was investigating the fire alarm. [REDACTED] also stated during with preliminary investigation he observed several broken welds on the exhaust piping and improperly placed insulation on the exhaust piping located within the exhaust pipe chase, adjacent to the second deck aft crew quarters.

Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us



**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

*131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103*

Chief / EMC

Deputy Chief

Deputy Chief
Fire Marshal

Insurance Information:

No insurance information available to investigator

Fire Damage:

Exterior:

The exterior of the vessel presented with heavy thermal damage to all three decks of the hull. The degree of damage increased moving upward and forward on the vessel. Little to no thermal damage was observed on the aft of the main deck and some melting and thermal damage was observed on the bow to the hull. All windows port holes were missing glass.

The second deck presented with thermal markings and paint damage. The door entering the interior presented with heavy thermal damage and melting. Thermal ventilation patterns were observed around doorway and windows. The degree of damage worsened moving towards the bow of the vessel. The crew entry door on the port side presented with heavy thermal, and melting damage. All windows port holes were missing glass.

The wheel house presented with heavy thermal damage all sides. All paint and combustibles in the area were completely consumed by fire and heat.

Interior:

The main deck presented with thermal damage throughout, the galley and crew quarters noted in this area show partial consumption of combustible materials. Fire appeared to have traveled into this area from heated gasses and fire traveling down the unprotected stairs.

The second deck presented with heavy thermal damage throughout, fire patterns and the degree of damage worsened towards the aft of the vessel into and crew sleeping area. The crew area presented with total consumption of combustible materials.

The wheel house presented with complete thermal damage and all combustible materials were consumed by fire and heat.

Area of Origin:

Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us



**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

*131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103*

Chief / EMC

Deputy Chief

Deputy Chief
Fire Marshal

Multiple fire patterns produced by both the movement and intensity of the fire indicate that the fire originated in the aft crew sleeping quarters on the second deck. This area presented with a V pattern on the aft wall within the insulation material that was located between the steel hull and wooden interior paneling. This area presented with the only area of low burning and the highest degree of thermal damage. The mattresses and wooden bed frame showed complete consumption by fire. Localized thermal damage was observed to the paint of the outer hull in immediate relation to the interior area.

Cause of Fire:

Investigators conducted a detailed scene examination in the area of origin and found the following items as possible ignition sources: Several electrical charging devices (phone and batteries), heat from operating equipment (exhaust).

Investigators were able to rule out discarded smoking materials as a cause of the fire.

Investigators were able to rule out charging devices as the batteries found showed no evidence of internal damage.

Investigators was able to rule out an intentional act. Upon Coast Guard investigators interviews they found no evidence of any intentional act being committed.

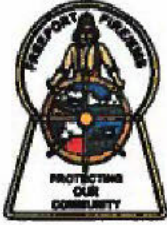
There were no reports of bad weather the day of the fire. There was no lightening in the area.

There are no candle remains in the area of origin.

No items of spontaneous combustion were found in the area of origin.

Upon examination of the scene, burn patterns, thermal damage, and speaking with witnesses. Investigators were able to determine the most probable cause of the fire was due to heating from operating equipment. The lack of insulation around the exhaust piping caused a heat buildup in the pipe chase, this caused an ignition of combustible materials on an adjoining wall. Upon reviewing the provided cellphone footage, it was apparent the heat source was produced from the operating exhaust with a high heat build up in the exhaust chase.

Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us



**CITY OF FREEPORT
FREEPORT FIRE & EMS DEPARTMENT
OFFICE OF THE FIRE MARSHAL**

131 East 4th Street
Freeport, Texas 77541
Phone (979) 233-2111
Fax (979) 233-4103

██████████
Chief / EMC

██████████
Deputy Chief

██████████
Deputy Chief
Fire Marshal

INJURIES OR FATALITIES:

No injuries were reported to the investigator as a result of this fire.

SCENE DOCUMENTATION:

Investigator ██████████ documented the scene with a series of still color images using a digital camera with flash. The images were captured directly to an internal compact flash memory card and transferred to a case file on a city computer. The images are a true and accurate depiction of the scene.

Videos from crew members phones taken during the incident were received and reviewed.

Exposures:

No exposure damage was reported

Legal Action:

No legal action to be taken at this time

Summary / Conclusion:

Based on the coordination of information derived from the recognition, identification, interpretation, and correlation of burn patterns, observations of witnesses and provided videos, the interpretation and analysis of relevant data, this fire is accidental. All-natural and intentional causes have been eliminated.

██████████
✓ End of report
██████████

Visit us online at www.freeport.tx.us
facebook.com/FreeportFire
fire@freeport.tx.us