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: **24-JUN-2022** TIME: **1147** HOURS

2. OPERATOR: **Destin Pipeline Company, L.L.C.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR:
   REPRESENTATIVE:
   TELEPHONE:

- [ ] STRUCTURAL DAMAGE
- [ ] CRANE
- [ ] OTHER LIFTING
- [ ] DAMAGED/DISABLED SAFETY SYS.
- [ ] INCIDENT >$25K
- [ ] H2S/15MIN./20PPM
- [ ] REQUIRED MUSTER
- [ ] SHUTDOWN FROM GAS RELEASE
- [ ] OTHER

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

4. LEASE:
   AREA: **MP** LATITUDE: **29.34301556**
   BLOCK: **260** LONGITUDE: **-88.06711796**

5. PLATFORM: **P**
   RIG NAME:

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] DEVELOPMENT/PRODUCTION (DOCD/POD)

7. TYPE:
   INJURIES:
- [ ] HISTORIC INJURY

	OPERATOR	CONTRACTOR
[X] REQUIRED EVACUATION	**0**	**2**
[ ] LTA (1-3 days)		
[ ] LTA (>3 days)		
[ ] RW/JT (1-3 days)		
[ ] RW/JT (>3 days)		
[ ] FATALITY		
[ ] Other Injury		

- [ ] POLLUTION
- [ ] FIRE
- [X] EXPLOSION

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

COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K

8. OPERATION:
- [X] PRODUCTION
- [ ] DRILLING
- [ ] WORKOVER
- [ ] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [X] OTHER **Construction - ROW-G17689**

9. CAUSE:
- [ ] EQUIPMENT FAILURE
- [X] HUMAN ERROR
- [ ] EXTERNAL DAMAGE
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [X] OTHER **Root cause unknown**

10. WATER DEPTH: **300** FT.
11. DISTANCE FROM SHORE: **55** MI.
12. WIND DIRECTION:
    SPEED: M.P.H.
13. CURRENT DIRECTION:
    SPEED: M.P.H.
14. SEA STATE: FT.
15. PICTURES TAKEN:
16. STATEMENT TAKEN:

INCIDENT SUMMARY:

On 24 June 2022, an incident occurred on Main Pass 260, Platform "P" (MP 260 P). MP 260 P is a Right-of-Way (ROW) platform owned by Destin Pipeline Company, L.L.C. (Destin Pipeline) and located 55 miles from shore in 300 feet of water. At the time of the incident, Gulf Island Services (GIS) employees were performing construction work for Occidental Petroleum Corp. While two GIS employees were in the process of installing a skillet to isolate the flare scrubber and flare, it was determined that the skillet did not fit. The two Injured Personnel (IP) were waiting on the scaffolding for the correct size skillet to be brought up when pressure was heard escaping from the flange. The pressure became more pronounced, and an explosion was heard followed by a large plume of smoke. The IPs reported feeling a burning sensation and having smoke inhalation. As a result, the IPs were flown in for further evaluation to an onshore medical facility. Both IPs were released that same day to full work duty without restrictions. No pollution or damage to the facility occurred as a result.

SEQUENCE OF EVENTS:

On 24 June 2022 at approximately 1147 hours, two IPs employed by GIS were on scaffolding unbolting a 10-inch flange to install a skillet. Both IP's determined the skillet did not fit and waited for further instructions. At the same time, another GIS employee (Witness #1) was instructed by his supervisor to go on the scaffolding and take measurements of the skillet and verify the pipe size. Upon arrival, Witness #1 saw that both IPs had already unbolted the flange and attempted to install a skillet. Witness #1 had both IPs hand down the gasket to verify pipe size, then went to the tool shed to retrieve a fall protection harness. Moments later, both IPs' handheld gas detector detected the presence of gas, alarming both of the IPs. Pressure was then heard escaping from the pipe flange opening and started to become more pronounced. Witness #1 stated that while in the tool shed, a rumbling sound and loud noise was heard, followed by him witnessing a black plume of smoke. Witness #1 then went to the muster station and notified production operations that two workers were still on the scaffolding.

Witnesses #2 & #3 were working in a nearby area when they reported hearing a loud boom and observed a lot of smoke. The witnesses rushed to the area and spotted both IPs climbing down the ladder. They escorted both IPs upstairs to the medic who was already headed down to their location. Once inside, the medic began evaluating both IPs and providing basic first aid. Both IPs reported being knocked against the railing of the scaffolding and having a sunburn-like sensation and smoke inhalation. It was determined that IP #1, who was closest to the flange, should be sent in for further evaluation at an onshore medical facility. At approximately 1425 hours, IP #1 was transported to an onshore medical facility for further evaluation. Later at approximately 2017 hours, IP #2 was also sent to an onshore medical facility for further evaluation as a precautionary measure. Both IPs were released back to full duty the same day without any restrictions.

BSEE INVESTIGATION:

12 July 2022, the incident was reported to the Bureau of Safety and Environmental Enforcement (BSEE).

15 July 2022, BSEE Accident Investigator (AI) received additional information that was requested by the AI on 13 July 2022.

30 August 2022 at 1330 hours, the AI had a Teams meeting with two Destin Pipeline

For Public Release

personnel who stated that no root cause to the incident has been identified, only potential contributing factors.

1 September 2022, Destin Pipeline provided the AI with an incident summary identifying potential contributing causes and corrective actions and considerations to consider in future operations.

2 September 2022, the AI received requested and received witness statements, GIS work plans, and other relevant documents of the incident.

16 September 2022, BSEE personnel conducted an on-site investigation. During the investigation, BSEE verified all the isolation points and did not find any unisolated sources. BSEE also searched for any ignition sources near the area. No ignition sources were found and all equipment was properly installed per the hazardous area classification drawings. The personnel on board also detailed all the tools being used in the equipment which were also rated for the area. Though no root cause was identified, BSEE did find three plausible explanations as to how the incident occurred. The first and most likely is Pyrophoric Iron (FeS) within the piping that could have caused the iron deposits to combust when exposed to oxygen; in this case, air that entered in through the flange when the workers separated the flange to install the skillet could have ignited the FeS. The second plausible cause is galvanic cell corrosion from a chain hoist that generated an electric current to the piping, causing flammable liquids or fluid to ignite. The third and less likely conclusion, is the possibility of a hydrate located somewhere within the piping that released while the IPs' waited for the right size skillet to be brought up.

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

• Human Performance Error – Not aware of hazards: Workers were not aware of the possible hazards within the piping.

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

• Management Systems – Inadequate hazard analysis/written job procedures: No purging or flushing of the piping was done prior to the work being done. Personnel failed to identify the possibility of pyrophoric materials within the piping.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE recommends that the Office Incident Investigations consider a safety alert warning operators Pyrophoric Iron (FeS) and ways to mitigate risk of having these reactions.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

For Public Release

25. DATE OF ONSITE INVESTIGATION:

16-SEP-2022

26. Investigation Team Members/Panel Members:

Nathan Bradley / Pierre Lanoix / Anthony Pizza /

27. OPERATOR REPORT ON FILE: **NO**

28. ACCIDENT CLASSIFICATION:

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: **11-FEB-2023**