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UNITED STATES DEPARTMENT OF THE INTERIOR
MARINE MINERALS ADMINISTRATION
GULF OF AMERICA REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **30-JUL-2026** TIME: **1000** HOURS
2. OPERATOR: **Byron Energy Inc.**
   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
- [x] OTHER **Lost Item Overboard**

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

4. LEASE: **G01194**
   AREA: **SM** LATITUDE:
   BLOCK: **58** LONGITUDE:

5. PLATFORM: **G**
   RIG NAME:

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

7. TYPE:
   INJURIES:
- [ ] HISTORIC INJURY

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

- [x] POLLUTION
- [ ] FIRE
- [ ] 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.
- [ ] OTHER
- [ ] TEMP ABAND
- [ ] PERM ABAND
- [ ] DECOM PIPELINE
- [ ] DECOM FACILITY
- [ ] SITE CLEARANCE

9. CAUSE:
- [ ] EQUIPMENT FAILURE
- [x] HUMAN ERROR
- [ ] EXTERNAL DAMAGE
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [ ] OTHER _____

10. WATER DEPTH: **130** FT.
11. DISTANCE FROM SHORE: **58** 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:

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On 30 July 2026, at approximately 2200 hours, a crude oil spill occurred on Byron Energy Inc. (Byron), OCS-G01194, South Marsh Island (SM) 58 G Facility. The incident was reported to the U.S. National Response Center (NRC) and to the Marine Minerals Administration (MMA). At 2200 hours crude oil was inadvertently discharged from the Heater Treater – NBK-0400 (HT) when a temperature gauge became inadvertently detached from the HT. Byron's initial investigative report established that approximately 20 barrels (bbls) of crude oil was released into the Gulf of America (GOA). Bryon's final investigative report, after analyzing all sheen data using a modeling tool, was a total of 2.5 bbls released into the GOA.

Sequence of Events:
On 30 July 2026, Operator-C (Op-C), working nights, was performing his normal rounds and noticed that the G-6 Well was about to reach a high level in the Production Separator #1 – MBD-0120. He proceeded to the office to inform Operator-A (Op-A) of the issue. While they were investigating the issue, Op-C discovered that the HT appeared to be very hot at the bottom of the vessel but the temperature gauge on top of the vessel had dropped from 142℉ to 120℉ . Op-C, a C-operator who had been onboard for approximately one year and was working offshore for the first time, asked Op-A, an A-operator, whether he had experience with HTs in general. Op-A confirmed that he did but explained that this was only his second hitch onboard SM 58-G, indicating that he was also relatively unfamiliar with the facility and its associated processing equipment. After being informed of the situation, Op-A began troubleshooting the problem. Op-A first checked the flame on the burner making a small adjustment to give it a little more fuel. They then blocked off the water outlet on the HT to let the water level rise in the vessel.

Op-A proceeded up the side of the vessel to check if the temperature probe was actually contacting the end of the suspected thermowell. At that point he noticed the temperature gauge was loose. Using a pair of channel lock pliers, he made about a quarter turn on the nut to tighten when the temperature gauge inadvertently dislodged from the threads of the vessel and blew out, flying overboard, just missing his face by a couple of inches. When oil was released under pressure from the vessel into the Gulf of America, Op-A reported that he was covered in oil during the incident. Op-C then pulled the emergency shut down (ESD) near the HT shutting in the platform.

In an effort to drop the level in the HT to prevent further spillage into the GOA, Op-A and a mechanic opened the 2-inch water bypass valve on the HT, closed the lower ball valve of the Level Safety High (LSH) bridle and opened the top ball valve of the LSH in order to bleed pressure of the HT, which ultimately decelerated the spillage.

Op-A then retrieved a ½-inch nipple and ball valve with a 1-inch bushing. When he attempted to remove the old bushing, it blew out and went overboard. This is when Op-A discovered there was no temperature gauge thermowell installed on the HT. A new bushing, nipple, and ball valve were installed and the spill was secured, clean up began thereafter.

BSEE INVESTIGATION:
On 30 July 2026, the MMA Lafayette District Production Operations After-Hours Engineer received a telephonic notification of an oil spill and preliminary findings of the associated incident at Byron's SM-58-G Facility.

On 31 July 2026, MMA Accident Investigator (AI) and MMA Inspector received and reviewed information submitted via emails and phone conversations from Forefront Emergency Management and Lafayette Production Ops After Hours from Byron concerning the oil spill. Due to the reported amount of crude oil released into the GOA, a flight

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was performed by the MMA investigation team that morning and the sheen was found at approximately 0840 hours. The estimated size of the sheen was 2 miles long by 200 yards wide located N 28° 41.65’ by W 092° 00.21’, approximately 4.8 miles from the facility. MMA Inspectors then proceeded to SM 58 G to conduct an onsite investigation and perform interviews with all personnel involved. Interviews were conducted with Op-A, Op-C and the person in charge (PIC) who were all involved with the incident. Upon completion of the interviews a physical inspection and walkthrough of the facility was conducted. During the MMA onsite visit, no observable evidence of oil being released into the GOA was identified. The oil spill was secured and clean-up had been performed. The estimated time the oil spill flowed for before securing was approximately 30 minutes.

During the interview process it was determined that the G-1 Well was also having flow assurance issues (paraffin) and they had treated the well with diesel, which may have ultimately caused an abnormal fluid layer (pad) build up in the HT identified on 30 July 2026 at approximately 2100 hours. The operators also stated that the HT normally operates at 32-34 psi and when a pad builds up in the HT they normally float it out with no issues. The operators suspected that the abnormal temperatures in the HT may have been caused by the pad, which ultimately caused them to start troubleshooting the temperature issue, prior to the incident. When asked why the thermowell for the temperature gauge was not installed on the vessel, OP-A stated, “Don’t know that’s the million-dollar question”. Op-C was asked whether any nuisance alarms had occurred before the incident. Op-C confirmed that no alarms associated with the HT had occurred but reported one overnight divert alarm on the Lease Automatic Custody Transfer system. No abnormalities were identified in connection with that alarm.

During the closing meeting with everyone involved in the incident, along with additional personnel onboard, specific documents and statements were requested, including the Job Safety Analysis (JSA). Op-A stated that no JSA had been completed before troubleshooting the issue with the HT or during the incident.

Stop Work Authority should have been used before troubleshooting the issue with the HT. A JSA should also have been completed before attempting to tamper with the loose temperature gauge on the HT, because the vessel was in-service and pressurized.

CONCLUSION:

While troubleshooting the problem of the temperature decreasing from 142℉ to 120℉ and the water remaining very hot in the lower part of the HT, Op-A thought that the temperature probe might not be working and that the temperature gauge reading could be incorrect. Assuming a thermowell had been installed, Op-A climbed the side of the HT and stood on a 2-inch line to access the temperature gauge and verify whether the temperature probe was contacting the end of the thermowell. Op-A then noticed that the temperature gauge was loose.

After placing a wrench on the nut of the temperature gauge and making a quarter turn, the temperature gauge inadvertently dislodged and blew overboard, narrowly missing Op-A’s face by a couple of inches. Oil was released along with the gauge.

Once the flow of oil had decelerated due to the pressure and volume within the vessel, Op-A returned with a new nipple, ball valve, and bushing. Op-A climbed back up the side of the HT using a 10’ ladder. While attempting to remove the old bushing, the bushing dislodged and blew overboard. Op-A discovered that no thermowell had been installed.

The Lessee provided a photograph of the temperature gauge taken during an API 581 “Risk-Based Inspection Program” Inspection 3 to 4 days before the incident. A review of the photograph did not appear to show any signs of leakage surrounding the temperature gauge, revealing that the temperature gauge was seated firmly within the threads of the bushing and that the bushing was seated firmly within the threads of the HT. The bushing did, however, show signs of discoloration/corrosion.

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

Human Performance Error: Op-A never confirmed a thermowell was installed prior to manipulating the temperature gauge. Being there was no thermowell installed, when the temperature gauge was manipulated on the in-service and pressurized HT, it allowed for the incident to occur.

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

Human Performance Error:
-Inadequate knowledge of HT operation for a specific facility:
Op-A has experience in the Offshore Oil and Gas Industry but was on this facility for only his second hitch. When the temperature gauge became dislodged, it blew overboard, and oil began to discharge into the GOA. OP-A then walked around vessel trying to determine how to quickly drop the level within the vessel to stop the oil spillage.

Op-C, a C-operator who was operating in the Offshore Oil and Gas Industry for the first time, had been on the facility for approximately one year and is still learning. Op-C relied on Op-A's experience while troubleshooting the issue involving the decreasing temperature and the very hot water in the HT.

-Inattention to Task/ Flawed Assumption/Lack of Verification:
Op-A treated the tightening of the temperature gauge as a minor, routine mechanical adjustment and overlooked the massive, stored energy behind the gauge.
Op-A also assumed that a thermowell had been installed without verifying its presence before adjusting the temperature gauge on the in-service, pressurized HT. Op-A failed to properly isolate the HT and/or use technical documentation, equipment drawings, or physical markings to ensure a thermowell was installed prior to manipulating the temperature gauge. This flawed assumption resulted in a significant amount of oil spillage into the GOA. The spill could have been avoided if proper protocol had been followed.
Stop Work Authority should have been used, and a JSA should have been completed before any work was performed on the HT regardless of how minor it may be to perform.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

None

NATURE OF DAMAGE:

NA

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The MMA Lafayette District Office makes no recommendations to the Regional Office of Incident Investigations (OII).

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

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25. DATE OF ONSITE INVESTIGATION:

31-JUL-2026

26. Investigation Team Members/Panel Members:

28. ACCIDENT CLASSIFICATION:

29. ACCIDENT INVESTIGATION PANEL FORMED:

NO

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Mark Malbrue

APPROVED DATE: **19-OCT-2026**