

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

For Public Release

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **20-FEB-2026** TIME: **1246** HOURS

2. OPERATOR: **Beacon Growthco Operating Company**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR: **Oceaneering International, Inc.**
REPRESENTATIVE:
TELEPHONE:

☐ STRUCTURAL DAMAGE
☐ CRANE
☐ OTHER LIFTING
☒ DAMAGED/DISABLED SAFETY SYS. **ROV**
☒ INCIDENT >\$25K **ROV & assoc umbilical**
☐ H2S/15MIN./20PPM
☐ REQUIRED MUSTER
☐ SHUTDOWN FROM GAS RELEASE
☐ OTHER

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

4. LEASE: **G35833**
AREA: **MC** LATITUDE: **28.18510034**
BLOCK: **759** LONGITUDE: **-89.40424678**

5. PLATFORM:
RIG NAME: **T.O. DEEPWATER ATLAS**

6. ACTIVITY: ☐ EXPLORATION(POE)
☒ DEVELOPMENT/PRODUCTION(DOCD/POD)
☐ DECOMMISSIONING

7. TYPE:
INJURIES:

☐ HISTORIC INJURY
☐ REQUIRED EVACUATION
☐ LTA (1-3 days)
☐ LTA (>3 days)
☐ RW/JT (1-3 days)
☐ RW/JT (>3 days)
☐ FATALITY
☐ Other Injury

☐ POLLUTION
☐ FIRE
☐ EXPLOSION

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

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

8. OPERATION:

☐ 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
☐ HUMAN ERROR
☐ EXTERNAL DAMAGE
☐ SLIP/TRIP/FALL
☐ WEATHER RELATED
☐ LEAK
☐ UPSET H2O TREATING
☐ OVERBOARD DRILLING FLUID
☐ OTHER

10. WATER DEPTH: **3533** FT.

11. DISTANCE FROM SHORE: **49** MI.

12. WIND DIRECTION: **S**
SPEED: **15** M.P.H.

13. CURRENT DIRECTION: **SE**
SPEED: **1** M.P.H.

14. SEA STATE: **0** FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

INCIDENT SUMMARY:

On 20 February 2026, at approximately 1225 hours Central Daylight Time (CDT), a disabled safety system incident occurred at Beacon Growthco Operating Company, L.L.C. (Beacon) Mississippi Canyon (MC) 759 Personnel lost control of a Remotely Operated Vehicle (ROV) ML242 and its tether management system (TMS) during recovery aboard the Transocean International (TOI) Deepwater Atlas drillship. The recovery winch, an SH Group model 4300 Series, experienced uncontrolled free spooling, causing ROV ML242 to descend to the seafloor. Approximately 13,000 feet of umbilical cable accumulated on the seafloor and covered portions of nearby subsea assets. Personnel vacated the hazardous area, secured the well, and suspended operations. The incident was reported to the Bureau of Safety and Environmental Enforcement (BSEE), New Orleans District on 20 February 2026 at 1523 hours CDT.

At the time of the investigation, Marine Minerals Administration (MMA) personnel were operating under the former Bureau of Safety and Environmental Enforcement (BSEE). Therefore, all MMA personnel referenced in this report will be identified as BSEE personnel.

SEQUENCE OF EVENTS:

The following sequence of events was developed from information provided to BSEE by Beacon, TOI and Oceaneering International, Inc. (OII) during the investigation. Prior to the incident, on 16 February 2026, at approximately 0916 hours CDT, ROV ML242, operated by OII aboard the TOI Deepwater Atlas contracted by BEACON, commenced Dive No. 616 at MC 759 Zephyrus 002 well, API No. 608174151601. At the time the dive commenced, OII stated conditions included approximately 2-foot seas, 15mph winds, and a worksite depth of approximately 3,533 feet seawater (FSW). ROV ML242 continued planned subsea operations from 16 February 2026 through 20 February 2026, completing approximately 98.73 hours of dive time.

On 20 February 2026, at approximately 1200 hours CDT, the OII ROV crew initiated a planned recovery of ROV ML 242 and its TMS to the surface to conduct a subsea tooling package changeout. During the recovery operation, an OII ROV Supervisor, assisted by an OII ROV Technician, operated the SH Group's 4300 Series electric Umbilical winch from the ROV control station. The control station was located behind the winch assembly, and deck cameras were available to provide real-time monitoring of the recovery operation.

As ROV ML242 and the TMS were being recovered through approximately 1,428 FSW, the OII ROV Supervisor heard an audible metallic rattling sound coming from the winch area. In response, the Supervisor reduced the recovery speed. Shortly thereafter, personnel from the OII ROV crew heard two distinct banging noises outside the control station.

At approximately 1225 hours CDT, the SH Group winch began to free-spool, resulting in an un-commanded payout of umbilical cable from the winch drum. As a result, ROV ML242 and the TMS began an uncontrolled descent toward the seafloor. The OII ROV crew attempted to regain control using normal winch commands; however, the winch did not respond. The OII ROV Supervisor then activated the emergency shutdown system (ESD), but the ESD did not stop or slow the uncontrolled payout.

After control of the winch was lost, the OII ROV crew notified the vessel bridge and exited the control station, relocating to a safe area outside the immediate hazard zone. ROV ML242 ultimately came to rest on the sea floor. After the winch came to a stop, personnel observed that the umbilical cable had jumped out of the A-frame sheave and had become wedged against the sheave cheek plate. The uncontrolled payout resulted

in approximately 13,000 feet of umbilical cable being deposited in a tangled configuration over portions of nearby subsea assets.

Because ROV ML242 served as a critical safety component supporting subsea operations, TOI and BEACON personnel-initiated steps to secure the well, suspending further operations until an assessment and recovery plan could be developed and implemented. Two ROV support vessels, the M/V Harvey Blue Seas and M/V Island Performer, were mobilized from Port Fourchon on 21 February 2026 to assist with the recovery of ROV ML242 and support operations on the Deepwater Atlas. ROV ML242 was located intact and recovered. The further recovery of the umbilical has been postponed and is scheduled to commence in August of 2026.

BSEE INVESTIGATION:

The BSEE investigator assigned reviewed evidence related to the loss of control of ROV ML242 and its TMS, including witness statements, video evidence, maintenance records, operator-provided contractor findings and original equipment manufacturer (OEM) analysis. The BSEE investigator did not perform a physical inspection of the SH Group 4300 Series electrical umbilical winch, and BSEE did not contract an independent third party to inspect the winch. Findings related to the internal mechanical condition of the winch, including gear tooth damage, lubrication condition and gearbox failure, were based on contractor and OEM analyses provided to BSEE by the operator.

On 22 April 2026, BEACON and OII representatives presented their findings to the BSEE New Orleans District. The primary root cause presented was:

"Gear tooth failure caused by insufficient lubrication and frequency of use. This is considered as a probable cause, identified by visual examination and initial investigative work conducted by the OEM representative."

The operator later provided additional OEM analysis which identified the failure mechanism as:

"... progressive scuffing (adhesive wear) of the pinion and slewing ring gear teeth resulting from operation of the gear mesh under inadequate lubrication conditions. Under boundary-lubrication operation, the lubricant film was insufficient to fully separate the contacting tooth surfaces, leading to metal-to-metal contact. This condition produced localized frictional heating and surface tempering, followed by plastic deformation, destruction/removal of the hardened surface layer, and progressive loss of tooth material, culminating in functional loss of the gear mesh."

During the 22 April 2026 presentation, BSEE asked whether the same model of winch was operating on other vessels. The OII presenters stated that one similar winch was operating in the Gulf of America with no reported issues. They further stated that the similar winch had been inspected and found to have sufficient grease and no degradation of the gear teeth. The explanation provided was that the crew assigned to that vessel had greater experience with the equipment and applied sufficient grease during use.

The BSEE investigator reviewed witness statements and video evidence regarding the crew's response. The evidence showed that the OII crew did not initially identify the cause of the uncontrolled winch movement; however, they promptly notified the vessel bridge, exited the ROV control station, and moved to a safe area outside the immediate hazard zone.

Through questioning an OII subject matter expert, the investigator determined that the winch did not include an independent secondary braking system. Although the emergency

brake used a separate hydraulic system, the braking function still relied on the same gearing mechanism to initiate stopping of the winch. When the gear failure occurred, the emergency shutdown system did not stop or slow the uncontrolled payout.

BSEE asked whether OII or BEACON planned to incorporate an independent braking system that did not rely on the same gear arrangement. OII and BEACON stated that there were no current plans to include an independent secondary braking system in any redesign of the winch.

IN CONCLUSION:

Based on the evidence reviewed, the incident resulted from the loss of gear mesh function within the electric umbilical winch during recovery of ROV ML242 and its tether management system. Operator-provided contractor and OEM analyses attributed the failure to progressive gear tooth damage caused by inadequate lubrication conditions during operation.

The BSEE investigation further determined that the winch's emergency stopping function was not independent of the failed gear arrangement. Consequently, once the gear mesh failed, the emergency shutdown system did not stop or slow the uncontrolled payout.

The loss of winch control resulted in the uncontrolled descent of ROV ML252 to the seafloor and the payout of approximately 13,000 feet of umbilical cable. Witness statements and video evidence showed that OII, TOI, and BEACON personnel vacated the hazardous area, secured the well and suspended further operations.

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

- Loss of winch gear mesh function. - The electric umbilical winch lost gear mesh function during recovery of ROV ML242, resulting in uncontrolled payout of the umbilical cable.

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

1. Inadequate lubrication practices - Although scheduled maintenance records indicated gear greasing had been completed, OEM analysis identified inadequate lubrication conditions as the mechanism that led to progressive gear tooth damage and loss of gear mesh function.

2. Lack of independent emergency stopping capability - The winch's emergency stopping function relied on the same gear arrangement associated with the failure and did not provide an independent means to stop the drum after gear mesh function was lost.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

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ROV, ROV Umbilical reel, Umbilical Winch

Mechanical Winch damage, ROV/Cable
Uncontrolled decent to sea floor.

ESTIMATED AMOUNT (TOTAL): **\$3,500,000**

22. RECOMMENDATIONS TO PREVENT RECCURANCE NARRATIVE:

The BSEE New Orleans District does not have any recommendations for the Office of Incident Investigations at this time.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

26. Investigation Team Members/Panel Members: 29. ACCIDENT INVESTIGATION PANEL FORMED:
NO

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Brody Vial

APPROVED

DATE: **30-JUL-2026**