UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF AMERICA REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **25-APR-2025** TIME: **1330** HOURS

2. OPERATOR: **GOM Shelf LLC**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Louisiana Safety Systems, Inc.**
   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: **00133**
   AREA: **GI** LATITUDE: **28.9456**
   BLOCK: **47** LONGITUDE: **-90.031173**

5. PLATFORM: **AP**
   RIG NAME:

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

7. TYPE:
   INJURIES:
- [ ] HISTORIC INJURY

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

Medical Treatment

- [ ] 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.
- [X] OTHER **Communication**
- [ ] 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: **89** FT.
11. DISTANCE FROM SHORE: **14** 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 25 April 2025, at approximately 1330 hours, an incident occurred at Grand Isle (GI) 47 AP platform. GI 47 AP platform is a fixed leg platform located in the Gulf of America that is owned and operated by GOM Shelf LLC (GOM Shelf). During the incident, a Louisiana Safety Systems, Inc. (LSS) Valve Technician (IP) was in the process of replacing the trim and seal in a control valve located on a 6-inch gas line. While disassembling the control valve in need of repair, a sudden gas release occurred. Due to the gas release, the bonnet flange with piston/stem attached, weighing approximately 50 pounds, struck the Injured Person (IP) in the left side of his abdomen and chest area. The IP was also knocked backwards and fell to the decking of the work platform he was working on. The IP believes that he may have lost consciousness due to the fall. The IP was able to climb down from the working platform without assistance and was then evaluated by a paramedic who was flown in from a nearby platform. After being evaluated by the field paramedic, the IP was flown by helicopter to shore where he was then transported by an ambulance to Medical Center for further evaluation.

SEQUENCE OF EVENTS:

On 25 April 2025, shortly before the incident occurred, the IP stated that he verified the 6-inch gas line was free of pressure. The IP verified that the 6-inch gas line's analog gauge indicated that there was zero pressure in the line. The IP then stated that the valve downstream of the control valve being worked on was closed and locked out. The upstream side of the control valve being worked on was an open-ended piping which the IP took as further indication that the gas line was free of pressure.

Once the IP verified that the 6-inch gas line did not have any pressure on it, he began disassembling the control valve. The IP stated that he removed the actuator off the control valve and then broke the valve bonnet bolts loose. The IP then started to wedge the bonnet off the valve body. While doing so, the IP witnessed no gas, fluid or pressure of any kind coming out. The valve bonnet then blew off and struck the IP in the chest, knocking him back and causing him to lose consciousness.

After being struck by the valve bonnet, getting knocked backwards, and possibly losing consciousness, the IP was able to climb down from the working platform he was on without assistance. The IP then reported this incident and his injuries to the platform's Person in Charge (PIC). A field paramedic then flew from GI 43 platform to GI 47 AP platform to evaluate and treat the IP. Upon arrival at GI 47 AP, the field paramedic found the IP awake, alert, and stable, complaining of an aching pain on the left-side of his abdomen and chest area. Due to the IP falling and possibly losing consciousness, the paramedic stated that the IP would have to be sent to an onshore medical facility to have further evaluations performed. The paramedic also stated that there was no scenario in which he would be able to evaluate the IP and clear him to stay offshore under the circumstances.

Once it was determined that the IP would need further evaluations performed, travel arrangements were made for the IP to travel to an onshore medical facility to be evaluated. The IP's Health, Safety and Environment (HSE) representative was notified of the incident and arranged for an ambulance to meet the IP at the heliport in Galliano, Louisiana. The IP was flown from GI 47 AP to the heliport where he was then transported by an ambulance to Medical Center. After arriving at Medical Center, the IP had a Drug and Alcohol screening performed. The IP then had X-Rays and CT scans performed, the attending physician verified both tests were negative. There were no fractures or any signs of a concussion. The IP received one single staple to

close a laceration behind his ear, which he sustained during the incident. The IP was also given a prescription for pain medication by the ER Physician. The IP was then released to full duty without restrictions and informed him to follow up with his company doctor or personal care provider in a week or so.

The IP was then re-evaluated on 28 April 2025 at Urgent Care. At the time of the evaluation at Urgent Care, the IP was still complaining of pain in the abdomen. The IP described the pain as sharp, stabbing, and shooting pains. The IP also stated that it hurts breathing and every time he breathes, he can feel some bones moving. The IP then had X-Rays performed by Urgent Care that revealed the IP had an anterior rib fracture of the 8th left rib. The IP was prescribed pain medication and given a pain management plan from the Urgent Care physician. The IP was then released on 28 April 2025 for full duty without restrictions.

BSEE INVESTIGATIONS:

On 08 May 2025, GOM Shelf submitted an incident report to the Bureau of Safety and Environmental Enforcement (BSEE) concerning an incident that occurred on 25 April 2025 at GI 47 AP. The report that was submitted by GOM Shelf consisted of a brief description of the incident, witness statements, medical treatment of the IP, work job safety analysis (JSA), work permits, photographs of the worksite, and other relevant documentation concerning the incident. The incident was assigned to a BSEE Accident Investigator (AI). The AI began communicating with GOM Shelf and collecting additional information concerning the incident. The AI requested additional photographs of the work area where the incident occurred and gathered additional information relevant to the incident.

The BSEE AI found, on 25 April 2025, an LSS Valve Technician, the IP, completed a JSA for repairing a control valve on a 6-inch gas line located on GI 47 AP platform. In the JSA, the IP identified multiple hazards such as stored energy, pressure, pinch points, spills/leaks and tools/equipment that could potentially be present during the work being performed. Along with identifying possible hazards associated with the repair of the control valve, he also listed the sequence of job steps to be performed, and the potential safety or environmental hazards as well as controls for those hazards.

After the IP completed the JSA, the IP traveled to the work location and began the sequence of steps to repair the control valve. According to GOM Shelf's internal investigation, the PIC of the platform never signed off on the JSA for the IP to begin work. As per GOM Shelf's investigation and the witness statement provided by the IP, it was stated that the IP personally verified that there was no pressure on the 6-inch gas line that the control valve being worked on was installed on.

Prior to the incident, the GI 47 AP facility along with other platforms in the GI 47 field were temporarily shut in for a turnaround (TAR) for maintenance/repairs. The investigation also indicated that the GI 47 AP facility had bled off pressure to certain areas of its production process train to accommodate repairs and maintenance being performed specifically on the GI 47 AP facility.

On the day of the incident, the IP stated that he was told by the PIC that the 6-inch gas line had been bled down the morning of 25 April 2025. According to the PIC, the IP did not have his (the PIC's) authorization to begin the work on the control valve located on the 6-inch gas line. GOM Shelf also stated that per the investigation, the IP did not obtain the PIC's signature on the LSS JSA, the GOM Shelf Energy Isolation Permit to ensure the line was free of pressure, or the Working at Heights Permit that is required when working above 6 feet of the main deck surface. The IP also failed to utilize the required fall-protection of a full body harness along with a retractable lifeline. The IP had less than two years experience in the field with an experienced

mentor, although he had performed this type of valve servicing alone in the past. He stated he was unaware of the GOM Shelf procedural processes to perform this type of task: i.e. (gas line condition must be verified by an operator, Energy Isolation Form, Working at Heights Form, etc.) other than the JSA.

While the BSEE AI reviewed documentation, the AI noticed that the PIC had signed the LSS JSA for approval to begin work. GOM Shelf stated that upon conversation with the PIC post incident, the PIC admitted to signing the LSS Valve Technician's JSA after the incident occurred rather than before the job began. While there was an Energy Isolation Permit that was issued on 25 April 2025, GOM Shelf stated that the permit was issued for different valves that were being replaced, not the valve the IP was working on.

Because the IP did not receive permission to work at heights during the work being performed, the IP used an unapproved scaffolding platform that was identified with a white tag by the Competent Scaffold Builder. The white tag indicated that the scaffolding was not safe to use as it was missing a ladder for entry and kick plates. Also, the IP did not utilize the required fall protection while working 6 feet or higher from the main deck. The use of the scaffolding should have been addressed prior to the IP utilizing it to perform the maintenance on the control valve. Had the IP and PIC addressed the scaffolding issues, it would have prevented the IP from entering an unsafe condition that could have resulted in far worse injuries.

Once the IP climbed on the unapproved scaffolding, he began verifying that the 6-inch gas line was free of pressure. The IP stated that he verified the analog pressure gauge on the line indicated that there was zero pressure on the line. The IP then opened two needle valves, one on each side of the control valve, to allow any pressure that was in between the valves to be relieved. The IP stated that there were no signs of fluid or pressure coming out of the needle valves when opened. He also stated that the downstream isolation valve was blocked off and locked out as well as the upstream isolation valve having an open-end which indicated that it was vented to atmosphere and had no pressure on the 6-inch line.

Once the IP verified that there was no pressure on the 6-inch gas line, the IP stated that he removed the valve actuator and broke the bonnet bolts and nuts loose. The IP then started to wedge the bonnet off the body by using a hammer and chisel. While performing the wedging technique, the IP experienced a sudden release of pressure from the valve which caused the valve bonnet to blow off, hitting the IP in the chest and knocking him backwards and landing on the scaffolding working deck. The IP stated that he believes he lost consciousness, because of the impact and falling to the deck..

After the incident, the GOM Shelf investigation stated that the bonnet flange piston/stem assembly was located on the main deck approximately 10 feet behind the scaffolding structure. The valve assembly was lying at a 45-degree angle from its origin on the 6-inch gas line. The findings suggest that when the valve assembly was forced upwards, the flange struck the overhead structure in the area and deflected it to its final resting position on the deck.

The only witness to the incident was a Crosby Energy Services (Crosby) production operator nearby, who had just given the IP an impact wrench to assist in removing the valve. The witness stated that he observed the IP remove bolts and start hammering on the valve top with a chisel, before walking away. Just after walking away, he heard a loud noise and then saw the valve assembly fall on the deck and noticed the IP laying on the scaffolding deck and was found to be not very responsive. The witness then called for help on the radio and got the IP rags and several bottles of eye wash solution due to the IP's face being very dirty. The witness stated that after several minutes, the IP was aware and not complaining about any obvious injuries and wanted to

finish the job of repairing the control valve. The IP then walked to GI 47 AQ platform without assistance where he waited with the PIC for the medic to arrive and be evaluated. The witness noted that he was not involved in the valve repair work or included on the LSS Valve technician's JSA.

Further evidence from the investigation indicates that the Supervisory Control and Data Acquisition (SCADA) data taken from the Daniel's Meter on the 6-inch gas line upstream of the control valve indicated that there was 143 psi on the 6-inch gas line at the time of the gas release which was at 1311 hours and 29 seconds. The pressure then took 20 seconds to drop to and settle at approximately 15 psi. GOM Shelf stated that the SCADA could be slightly out of calibration, as it was still reading 15 psi after all the pressure was relieved. GOM Shelf notes that the pressure in the line may have been 128 psi at the time of the incident, due to the possibility of the SCADA being out of calibration.

The IP failed to follow manufacturer recommendations while working on the control valve. According to the GOM Shelf's internal investigation, it was stated that the IP failed to keep 4 nuts on the studs of the bonnet flange, which would prevent the possibility of the bonnet flange being forced upwards due to an unforeseen pressure release. The manufacturer recommends that during maintenance, the hex nuts or cap screws attaching the bonnet to the valve body should have been loosened approximately 3 mm or 1/8 inch. Next, the body-to-bonnet gasketed joint should be loosened by either rocking the bonnet or prying between the bonnet and valve, working the prying tool around the bonnet until the bonnet loosens. Once it is confirmed that no fluid leaks from the joint, the nuts or cap screws can then be completely removed and carefully lift the bonnet off the valve.

GOM's investigation stated that during a post-incident interview with the IP, the IP recalled that when he began performing the maintenance on the control valve, another crew was simultaneously nippling up a previously removed valve and adjacent piping. GOM Shelf's investigation stated that it is a possibility there could have been pressure trapped in the line due to previous work having been performed on the gas line. During BSEE review of the incident documentation, the historical SCADA information provided by GOM Shelf, indicates that the gas line had 730.56 PSI on 22 April 2025 and 160.66 PSI on 23 April 2025. This information indicates that after the line was bled down, it still had approximately 160 PSI remaining in the gas line on 25 April 2025, when the incident occurred. By the IP failing to have the PIC verify energy isolation before commencing work, the trapped pressure in the 6-inch line went unidentified while the IP was performing maintenance on the control valve.

IN CONCLUSION:

On 25 April 2025, there were numerous breakdowns in communication that occurred while maintenance was being performed on the GI 47 AP platform. The IP failed to ensure that the area in which he was working was verified to be a safe working area before starting his work on the control valve. In addition, the PIC and IP failed to properly communicate the work and hazards associated with the work that was to be performed on the control valve. Due to the lack of communication prior to the work being performed, there was potential for the incident resulting in a far worse outcome.

The IP's LSS Valve Technician JSA should have been reviewed by both the PIC of the platform and the IP before the job began. As the hazards were not discussed prior to commencing work, the IP utilized unapproved scaffolding to perform his task without the personal fall protection that is required when working at heights above 6 feet. This breakdown in communication allowed for the IP to commence work on a gas line that had not been deemed safe by the PIC or verified as having zero pressure on the line prior to commencing work. The IP also should have been more aware of the hazards associated with the maintenance of the control valve and should have followed

manufacturer recommendations when working on the valve. Due to these steps not being followed, when the IP began prying on the valve assembly, he was struck in the chest by the control valve bonnet/flange assembly and fell backwards on an elevated working deck that was over 6 feet above the main deck without any fall protection.

In addition, the PIC of the GI 47 AP facility should have also been more aware of the operations taking place on the platform. As the IP started working on the valve without the JSA having been signed by the PIC, this caused an unsafe operation that could have resulted in far worse consequences. For similar projects in the future, additional attention should be given to adhering to the operator and contractor policies and procedures. Specifically, the Energy Isolation Permit that was initiated on 25 April 2025 should not have remained open for more than one day as noted on the permit. By allowing the permit to remain open until 29 April 2025 (4 days), potential changes in the isolation process that the PIC and others on the platform were not aware of could have occurred. Those changes in isolation could have caused additional incidents if they were not identified.

To prevent similar incidents from occurring in the future. GOM Shelf has stated that the following corrective actions will be taken.

• Management is meeting with GI 47 AP leadership to review the learnings of this incident and bring awareness to them of the contributing factors identified that allowed the event to happen.

• Site leadership must ensure, through clear communication to service providers, that task(s) involving pressurized systems must be authorized by the PIC; with appropriate documentation (JSA, Permit, Isolations, etc.) prior to work beginning.

• Site leadership must ensure that third (3rd) party service personnel who are asked to work on pressurized systems or valves are accompanied by a member of operations group to walk the task down, verify the ability and execution of double-block and bleed and verification of the line bled down.

• Scaffolding contractors will be requested, in addition to posting the required inspection tag on the scaffolding, to include red caution tape around erected scaffolding as an additional visual indicator that the structure is not ready for use until approved by a competent scaffold builder.

• Task JSA development will include, through collective discussion and/or review by intended task leadership and workers, all possible hazards associated with the task and proper mitigation that will eliminate or significantly reduce the risk to an acceptable level, i.e. (lighting, working at heights, fall protection, eye protection, etc.)

• Task JSAs should include the mitigation of employing the usage “four (4) nuts maintained on bolts” to prevent a flange and/or components from being dislodged by unforeseen pressure releases.

• Management will develop, distribute, and verify field-leadership review of a Safety Alert describing the case findings of this incident, the learnings, and the action necessary to prevent/avoid a future incident of this type.

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

HUMAN ERROR: NOT AWARE OF HAZARDS - The IP was unaware of the hazards associated with the work he was performing. The IP did not adhere to manufacturer recommendations while working on the control valve and the PIC and IP did not ensure the gas line was free of pressure before starting work.

COMMUNICATION: INADEQUATE COMMUNICATION BETWEEN THE OPERATOR AND CONTRACTOR PERSONNEL - The PIC and contractor (IP) did not communicate prior to the IP starting his work on the 6-inch gas line. Had communication been better, the IP would not have been able to start work without the PIC's approval.

HUMAN ERROR: INEXPERIENCE DOING TASK RELATED TO THE INCIDENT - The IP was inexperienced with the GOM Shelf processes and policies pertaining to the work being performed. The IP had less than two years' experience with an experienced mentor.

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

SUPERVISION: NO OR INADEQUATE WORK PERMITS PREPARED/APPROVED - The PIC was not aware of the scope of work being performed and did not approve of the appropriate work permits for the IP prior to the IP beginning his work. The IP was not aware of the specific permits required by GOM Shelf which should have been explained to him by the PIC during platform orientation. The LSS JSA was not approved by the PIC prior to starting work.

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 New Orleans District recommends the Office of Incident Investigations should consider issuing a Safety Alert regarding the incident.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110: Authority: 30 CFR 250.107 DOES THE LESSEE PERFORM ALL OPERATIONS IN A SAFE AND WORKMANLIKE MANNER AND PROVIDE FOR THE PRESERVATION AND CONSERVATION OF PROPERTY AND THE ENVIRONMENT?

The LSS Valve Technician (Injured Person) and Person-in-charge (PIC) of the platform did not follow the appropriate policy procedures leading up to and post incident.

-The Injured Person failed to acquire permission from the PIC to begin work on control valve, failed to acquire a Working from Heights Permit and failed to have the PIC issue an Energy Isolation Permit for the work being performed.

-The PIC failed to issue the Injured Person the Working from Heights Permit, the Energy Isolation Permit and making sure the Injured Person did not start work without the PIC's approval and signature on the LSS Valve Technician's JSA. The PIC also signed the LSS Valve Technician's JSA after the incident had occurred.

25. DATE OF ONSITE INVESTIGATION:

26. Investigation Team Members/Panel Members:

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

29. ACCIDENT INVESTIGATION PANEL FORMED:
NO

OCS REPORT:

30. DISTRICT SUPERVISOR:
Michael Saucier

APPROVED DATE: **28-AUG-2025**