UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE GULF OF MEXICO REGION ACCIDENT INVESTIGATION REPORT 1. OCCURRED STRUCTURAL DAMAGE DATE: 31-OCT-2007 TIME: 2245 HOURS CRANE OTHER LIFTING DEVICE 2. OPERATOR: Eni US Operating Co. Inc. DAMAGED/DISABLED SAFETY SYS. REPRESENTATIVE: SACHITANA, SUSAN INCIDENT >\$25K TELEPHONE: (504) 593-7260 H2S/15MIN./20PPM CONTRACTOR: Rowan Drilling REQUIRED MUSTER REPRESENTATIVE: SPILLARS, JOHN SHUTDOWN FROM GAS RELEASE TELEPHONE: (337) 783-8685 X OTHER FALLING OBJECT 3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 6. OPERATION: ON SITE AT TIME OF INCIDENT: PRODUCTION DRILLING 4. LEASE: **G27858** WORKOVER AREA: VR LATITUDE: COMPLETION BLOCK: 167 LONGITUDE: HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO. 5. PLATFORM: X OTHER PLUG AND ABANDON RIG NAME: ROWAN JUNEAU 8. CAUSE: 6. ACTIVITY: EXPLORATION(POE) х DEVELOPMENT/PRODUCTION EQUIPMENT FAILURE (DOCD/POD) X HUMAN ERROR 7. TYPE: EXTERNAL DAMAGE SLIP/TRIP/FALL HISTORIC INJURY WEATHER RELATED REQUIRED EVACUATION 1 LEAK LTA (1-3 days) UPSET H20 TREATING **X** LTA (>3 days 1 OVERBOARD DRILLING FLUID \square RW/JT (1-3 days) OTHER **falling object** X **RW**/JT (>3 days) X Other Injury 1 HEAD TRAUMA 9. WATER DEPTH: **98** FT. FATALITY POLLUTION 10. DISTANCE FROM SHORE: 52 MI. FIRE EXPLOSION 11. WIND DIRECTION: NE LWC 🔲 HISTORIC BLOWOUT SPEED: 10 M.P.H. UNDERGROUND SURFACE 12. CURRENT DIRECTION: NE DEVERTER SPEED: M.P.H. SURFACE EQUIPMENT FAILURE OR PROCEDURES ☐ <=\$25K 13. SEA STATE: 3 FT.</p> COLLISION HISTORIC │>\$25K

Operation at time of the accident was Plug and Abandon work. Crews were cutting a 30" Drive Pipe with 20" casing inside of it. They were removing the same through the rotary table on the rig floor. Two "Offshore Energy Services" welders were making cuts (windows) in the 30" casing to gain access to the 20" casing so they could cut it. During this process one of the window pieces, approximately 18" by 4" by 1" and weighing 22.4 lbs, fell unnoticed through a seven inch gap between the 30" casing and the rotary hole. There was a "horse shoe" base plate around the casing which covered all but 1/4 of the open area between the 30" pipe and the rotary. The area remaining open was measured at approximately seven inches. The metal piece of casing then lodged somewhere under the rig floor in the substructure around the permanent diverter package. Once the cutting was completed and the area was cleared, the casing section was lifted and secured by the driller, this was approximately a two foot lift. After confirming the rig floor was clear and secure, the derrickman and floor hand were requested to go down to the texas deck and check everything out for the final lift of casing through the texas deck and rig floor. The derrickman and floor hand approached the texas deck via a set of stairs from the rig main deck to the north west corner of the texas deck. The derrickman then proceeded across the texas deck to the South West corner where he proceeded down a ladder to a smaller "false deck" (made up of wood planks) established below the texas deck. The floor hand remained on the texas deck on the north west corner. At that point the floor hand heard a loud noise like a hammer hitting metal. He looked around at the derrick hand and found him on his knees on the false deck with the piece of metal from the rig floor next to him. The piece of metal in question had fallen some thirty five feet from its resting point under the rig floor, striking the derrickman on the top of hishardhat and upper forehead area causing extensive head trauma.

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

1. A piece of metal 18"x4"x1" and weighing 22.4 pounds fell unnoticed through a gap between a 30" drive pipe and the rotary table and became lodged in the rigs permanent diverter package. When the string of drive pipe was raised approximately 2 feet through the rotary opening the piece of metal was positioned in a manner that allowed it to fall through the opening between to 30" drive pipe and the diverter package. 2. The personnel performing the cutting on the drive pipe failed to ensure that the scrap metal from his cutting operation was properly gathered and accounted for. 3. Although a "horse shoe" type cover was being utilized to seal around the drive pipe, there was still 1/4 of the gap (seven inches wide) exposed to allow material to fall below it.

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

1. There was no mention of falling objects in the JSA that was conducted for the operation below the rig floor.

There was no mention of loose material falling into the open gap left between the drive pipe and the rotary in the JSA conducted for the operation on the rig floor.
 Although there was a "safety watch" appointed in the work permit process, his role is not clearly defined.

4. Inattentiveness or unwillingness of welder to stop work and correct a potential safety hazard.

5.Ineffectiveness of supervision on the rig floor to maintain a safe and uneventful work environment.

20. LIST THE ADDITIONAL INFORMATION:

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EV2010R

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake charles District recommends that a Safety Alert be issued to include the following:

1. Open Hole policies should be revisited by Operators to ensure that not only personnel, but loose materials should also be guarded from open holes and accounted for.

2. Operators should revisit and revise JSA's during operations if safety hazards are noticed by anyone.

3. With operations of this type (raising or lowering materials through an open hole), Operators should examine work area periodically to ensure that no loose material is in danger of becoming a falling hazard.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-112--OPERATOR FAILED TO CORRECT OR REMOVE A SAFETY HAZARD BY ALLOWING A PARTIALLY OPEN HOLE THAT LOOSE MATERIALS CAN FALL THROUGH.

25. DATE OF ONSITE INVESTIGATION:

01-NOV-2007

26. ONSITE TEAM MEMBERS: 29. ACCIDENT INVESTIGATION ERIC FONTENOT / WILLIAM OLIVE / PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Larry Williamson

APPROVED

DATE: **10-DEC-2007**

INJURY/FATALITY/WITNESS ATTACHMENT

 OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER Derrickman 	X INJURY FATALITY WITNESS	
NAME: Anthony Griffit		
HOME ADDRESS:		
CITY:	STATE:	
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE:	EAR
EMPLOYED BY:		
BUSINESS ADDRESS:		
CITY:	STATE:	
ZIP CODE:		