UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION
ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: 17-JAN-2008  TIME: 0845  HOURS

2. OPERATOR:  McMoRan Oil & Gas LLC
   REPRESENTATIVE: Wyatt Tate
   TELEPHONE: (337) 735-9110
   CONTRACTOR:  ISLAND OPERATORS CO. INC.
   REPRESENTATIVE: Rusty Benson
   TELEPHONE: (337) 852-9600

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

4. LEASE:  G02051
   AREA:  EC  LATITUDE:  
   BLOCK:  286  LONGITUDE:  

5. PLATFORM:  C
   RIG NAME:  

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

7. TYPE:
   HISTORIC INJURY
   REQUIRED EVACUATION  1
   LTA (1-3 days)  1
   LTA (>3 days)  1
   RW/JT (1-3 days)  
   RW/JT (>3 days)  
   Other Injury
   FATALITY
   POLLUTION
   FIRE
   EXPLOSION
   LWC
   HISTORIC BLOWOUT
   UNDERGROUND
   SURFACE
   DEVERTER
   SURFACE EQUIPMENT FAILURE OR PROCEDURES
   COLLISION
   HISTORIC
   >$25K
   <=$25K
   STRUCTURAL DAMAGE
   CRANE
   OTHER LIFTING DEVICE
   DAMAGED/DISABLED SAFETY SYS.
   INCIDENT >$25K
   H2S/15MIN./20PPM
   REQUIRED MUSTER
   SHUTDOWN FROM GAS RELEASE
   OTHER

6. OPERATION:
   PRODUCTION
   DRILLING
   WORKOVER
   COMPLETION
   HELICOPTER
   MOTOR VESSEL
   PIPELINE SEGMENT NO.
   OTHER

8. CAUSE:
   EQUIPMENT FAILURE
   HUMAN ERROR
   EXTERNAL DAMAGE
   SLIP/TRIP/FALL
   WEATHER RELATED
   LEAK
   UPSET H2O TREATING
   OVERBOARD DRILLING FLUID
   OTHER

9. WATER DEPTH:  186 FT.

10. DISTANCE FROM SHORE:  84 MI.

11. WIND DIRECTION:  NW
    SPEED:  15 M.P.H.

12. CURRENT DIRECTION:
    SPEED:  M.P.H.

13. SEA STATE:  4 FT.
17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

MMS investigators found that an unsafe work practice was used to bleed approximately 1100 psi of pressure from the well C-5 flowline. The unsafe work practice consisted of using a non-standard, poorly designed bleed-off manifold assembly that will rapidly rotate (and come apart) at the base of the tee when the 1/4 turn ball valve is opened to bleed-off pressure in the flowline. The actual rotation is at the top threads of the close nipple that connects the Tee to the 3 port needle valve. The orientation of the 90 degree fitting at the discharge of the ball valve forces the rotation in the counter-clockwise or loosening direction. During the subject accident, after several rotations, the tee rotated free and disconnected from the rest of the assembly. The top portion of the rotating assembly was then ejected under pressure in the upwards direction.

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

The injured person opened the 1/4 turn ball valve to begin the bleed-off process. The force generated by the discharging gas/fluid as it exited the bleed-off manifold caused a portion of the bleed-off manifold assembly to rotate in a counter-clockwise or loosening direction. The rotating assembly struck the right hand of the injured person causing a severe injury.

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

A contributing factor was the use of a 1/4 turn ball valve in the bleed-off manifold assembly. The 1/4 turn ball valve, in this case, did not allow adequate control of the discharge volume. The use of a needle valve may have prevented the accident from occurring. A needle would have given the operator much more control of the bleed down process.

The use of a bleed-off manifold (1/2in Tee, 1/2in ball valve, 90deg.fitting, gauge) that has the tendency to create a pin-wheel effect when pressure is released also contributed to the accident.

20. LIST THE ADDITIONAL INFORMATION:

Severe corrosion was found on the platform throughout the entire production train and fuel gas system.
21. PROPERTY DAMAGED: Pressure Gauge 

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:
The Lake Charles District recommends OSM issue a Safety Alert which includes the following:

* Personnel must review the process flow design to determine a means of relieving pressure in a safe and pollution free manner.

* If so designed, personnel must relieve pressure through the platform vent scrubber.

* Bleed-off manifold assemblies should be designed to safely relieve pressure to the atmosphere. The bleed-off manifold assembly must be designed so that the force from discharging fluids will not create a tendency for any part of the assembly to rotate or move in a whipping action.

* Personnel must construct the bleed-off manifolds according to design and ensure that no part of the assembly will have a tendency of creating a pin-wheel effect when pressure is released to the atmosphere.

* When relieving pressure to the atmosphere, personnel should utilize a valve (i.e. needle valve) that allows good control of the pressure being released.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
G-110. The contract operator utilized an unsafe work practice to bleed pressure from the flowline of well C-5.

25. DATE OF ONSITE INVESTIGATION:
18-JAN-2008

26. ONSITE TEAM MEMBERS:
Mark Osterman / Scott Mouton /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

30. DISTRICT SUPERVISOR:
Larry Williamson

APPROVED
DATE: 13-FEB-2008