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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **20-NOV-2009** TIME: **0904** HOURS

2. OPERATOR: **Chevron U.S.A. Inc.**
   REPRESENTATIVE: **Goodridge, Latasha**
   TELEPHONE: **(985) 773-6860**
   CONTRACTOR:
   REPRESENTATIVE: **David Bond**
   TELEPHONE: **(985) 773-5740**

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

4. LEASE: **G01241**
   AREA: **ST** LATITUDE:
   BLOCK: **52** LONGITUDE:

5. PLATFORM: **A**
   RIG NAME:

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

7. TYPE:
- [ ] HISTORIC INJURY
- [X] REQUIRED EVACUATION **2**
- [ ] LTA (1-3 days)
- [ ] LTA (>3 days
- [X] RW/JT (1-3 days) **1**
- [ ] RW/JT (>3 days)
- [X] Other Injury **1 First Aid**
- [ ] FATALITY
- [ ] POLLUTION
- [X] 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:
- [X] 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
- [X] OTHER **Welding ignited oil weir h/c's**

9. WATER DEPTH: **61** FT.

10. DISTANCE FROM SHORE: **14** MI.

11. WIND DIRECTION: **ENE**
    SPEED: **10** M.P.H.

12. CURRENT DIRECTION: **E**
    SPEED: **2** M.P.H.

13. SEA STATE: **1** FT.

17. INVESTIGATION FINDINGS:

On 19 November 2009, a contracted environmental cleaning crew began pressure washing the inside of the #1 low pressure bulk production separator (MBD 1000) with salt water. The crew did not enter the vessel to pressure wash, but instead sprayed the vessel from the 18 inch manhole opening at the top of the separator. The cleanout operation was conducted in preparation of repairing holes located in the separator's oil bucket.

On 20 November 2009, at approximately 0820 hours, initial tests for atmospheric hazards were performed and welding operations commenced inside the separator. There was one welder inside the separator and two individuals located on top of the separator serving as fire watch personnel. After 20 minutes of welding, the vessel was retested and welding operations resumed. Within 3 to 5 minutes subsequent to resuming welding operations, a loud rumble was heard and felt according to witnesses' reports. Fire and smoke was observed from the separator's manhole and vent. The fire watch personnel immediately pulled the welder out of the separator, and the fire was extinguished using dry chemical extinguishers and a fire hose. Two individuals were evacuated from the facility. The welder received first and second degree burns and was placed on restrictive duty. One of the fire watch personnel was treated for smoke inhalation and released to full duty.

The onsite MMS investigation determined that the Operator failed to continuously monitor the confined space for hazardous conditions as required by Chevron's Confined Space Entry Program; the space was monitored only every 15-20 minutes. In addition, the oil weir inside the separator was believed to contain a layer of hydrocarbon or other flammable substance beneath the oil weir. The scope of work for cleaning the vessel called for a physical inspection inside of the separator, but the inpsection was never completed. Onsite supervisory personnel had only assumed the inspection had been performed.

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

The welding operation ignited the flammable material beneath the oil weir.

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

*** The cleaning crew's failure to clean the separator from within allowed the build-up of flammable material trapped beneath the oil weir to remain in place.**
*** Onsite supervisory personnel's failure to perform a physical inspection of the separator allowed the flammable material trapped beneath the oil weir to go undected.**
*** The Operator's failure to continuously monitor the separator's confined space during welding operations prevented personnel from being aware of the flammable substance located within the separator.**

20. LIST THE ADDITIONAL INFORMATION:

***Chevron Management met with the contractor and set clear expectations for cleaning and repairing the vessel repair and Persons Leading Work/Stop Work Authority responsibilities.**

***Chevron Management to review the findings of the incident with all personnel responsible for this type of activity in the Gulf of Mexico.**

***Chevron Management will require People Leading Work training of all appropriate personnel (company and contract) during 2010.**

21. PROPERTY DAMAGED:

No damage caused by fire inside production separator

NATURE OF DAMAGE:

Not applicable

ESTIMATED AMOUNT (TOTAL): **$**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Due to the specific nature of this incident, the Houma District has no recommendations to report to the Regional Office.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

A G-110 Notification Of Incident(s) Of Noncompliance was issued for failure to continuously monitor the air quality while conducting confined space entry during welding operations.

25. DATE OF ONSITE INVESTIGATION:

23-NOV-2009

26. ONSITE TEAM MEMBERS:

Sammy Viola / Julie King /

29. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: **22-FEB-2010**

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Welding torch**

2. TYPE OF FUEL:
- [ ] GAS
- [ ] OIL
- [ ] DIESEL
- [ ] CONDENSATE
- [ ] HYDRAULIC
- [x] OTHER **Hydrocarbons**

3. FUEL SOURCE: **Hydrocarbon or other flammable substance inside the low pressure bulk separator**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **NO**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED:
- [x] HANDHELD
- [ ] WHEELED UNIT
- [ ] FIXED CHEMICAL
- [ ] FIXED WATER
- [ ] NONE
- [x] OTHER **Fire hose**

INJURY/FATALITY/WITNESS ATTACHMENT

[ ] OPERATOR REPRESENTATIVE
[ ] CONTRACTOR REPRESENTATIVE
[X] OTHER **Welding Supervisor**

[X] INJURY
[ ] FATALITY
[ ] WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

[ ] OPERATOR REPRESENTATIVE
[ ] CONTRACTOR REPRESENTATIVE
[X] OTHER **hotwork attendant**

[X] INJURY
[ ] FATALITY
[ ] WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

☐	OPERATOR REPRESENTATIVE	☒	INJURY
☐	CONTRACTOR REPRESENTATIVE	☐	FATALITY
☒	OTHER **Welder**	☐	WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE: