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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **07-SEP-2007** TIME: **1630** HOURS

2. OPERATOR: **Apache Corporation**
   REPRESENTATIVE: **Gary Wetzel**
   TELEPHONE: **(337) 344-3050**
   CONTRACTOR: **ISLAND OPERATORS CO. INC.**
   REPRESENTATIVE: **Timothy Burns**
   TELEPHONE:

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

4. LEASE: **00438**
   AREA: **EI** LATITUDE:
   BLOCK: **175** LONGITUDE:

5. PLATFORM: **F**
   RIG NAME:

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

7. TYPE:
   - [ ] HISTORIC INJURY
     - [X] REQUIRED EVACUATION **0**
     - [ ] LTA (1-3 days)
     - [ ] LTA (>3 days
     - [ ] RW/JT (1-3 days)
     - [ ] RW/JT (>3 days)
     - [X] Other Injury **1 With First Degree Burns**
   - [ ] 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
   - [X] OTHER **Fire with one injury.**

6. OPERATION:
   - [ ] PRODUCTION
   - [ ] DRILLING
   - [ ] WORKOVER
   - [ ] COMPLETION
   - [ ] HELICOPTER
   - [ ] MOTOR VESSEL
   - [ ] PIPELINE SEGMENT NO.
   - [X] OTHER **P&A Operations**

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

9. WATER DEPTH: **83** FT.

10. DISTANCE FROM SHORE: **43** MI.

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

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

13. SEA STATE: **3** FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

On September 7, 2007, at approximately 1630 hours on the Eugene Island Block 175 Platform F, a flash fire resulted in the injury of a Tetra Applied Technology Welder (TATW).The TATW was in the process of Plugging & Abandoning (P&A) Well F-7 by cutting and pulling the 7 inch casing. In preparation to initiate P&A operations on Well F-7, the flowline from the wellhead to the header had been disconnected at the flange immediately downstream of the F-7 wellhead wing valve and choke. The flowline for Well F-7 was not disconnected from the header, and the disconnected flowline flange downstream of the F-7 wellhead wing valve and choke was not blind flanged. The fire occurred when an uncontrolled hydrocarbon release through the disconnected open-ended flowline of Well F-7 became ignited by the TATW's cutting torch.

Tetra Applied Technology had been contracted to conduct P&A operations for several wells on the F platform, with P&A operations being conducted during daylight hours only. Well F-9 was open to production during the hours that the P&A operations were shut down. A third operation, of testing safety devices for Well F-9, was being conducted by two Island Operating Compliance Technicians located at the main panel. Upon verifying that all valves at the header and the wing valve for Well F-9 were closed, one of the Technician's pulled the Surface Safety Valve (SSV) and Shut Down Valve (SDV) relays at the panel to conduct a full circuit actuation test of the Pressure Safety High/Low (PSH/L) sensors for Well F-9. Well F-9 has a shut in tubing pressure of 2400 psi and a flowline pressure rating of 1440 psi that was protected from overpressure by a pressure relief valve (PSV) set at 1440 psi. Immediately upon pulling the relays to open the SSV and SDV on Well F-9, the Crane Operator began yelling and blowing the horn to alert everyone that fire had occurred in the wellbay. Subsequent investigation determined that the manual wing valve on Well F-9 was leaking sufficiently to subject the 1440 psi flowline to 2400 psi. The PSV protecting the 1440 psi flowline for Well F-9 relieved through a one (1) inch common vent line for both Well F-9 and Well F-7 to the vent header. Both one (1) inch valves on the common vent piping for Wells F-9 and F-7 were in the open position. Gas and condensate migrated through the one (1) inch common vent header piping to the disconnected open ended flange immediately downstream of Well F-7 piping to the disconnected open ended flange immediately downstream of Well F-7 and immediately above the TATW. Hydrocarbons, blown approximately fifteen (15) feet above the TATW, came in contact with the TATW's cutting torch and ignited resutling in first degree burns to his face with cuts and scrapes to both knees. The fire was immediately extinguished by the Fire Watch using one 30 lb. handheld unit, with no environmental pollution.

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

Uncontrolled hydrocarbons that were released through the open-ended flowline of Well F-7 came in contact with the welder's cutting torch.

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

1) The open-ended flowline for Well F-7 was not properly isolated or blind flanged from the process header and pressure relief vent piping.

2) The flowline piping from Well F-7 to the process header was not isolated at the header to prevent liquid hydrocarbons and gas from migrating through the header to the open-ended flowline of Well F-7.

3) One (1) inch manual block valves on the common pressure relief system to the vent scrubber were open for both Well F-9 and F-7.

4) The leaking manual wing valve on Well F-9 subjected the 1440 psi working pressure flowlines of Well F-9 and F-7 to the 2400 psi shut-in tubing pressure of Well F-9.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

None **None**

ESTIMATED AMOUNT (TOTAL): **$**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The MMS Lafayette District recommends that the MMS Office of Safety Management submit a Safety Alert requiring that operating and contract personnel must adhere to and enforce the following:

1) 30 CFR 250.803(c)(4) stating in part that all open-ended lines connected to producing facilities and wells shall be plugged or blind flanged, except those lines designed to be open-ended such as flare or vent lines.

2) 30 CFR 250.113(c)(4) stating in part that welding cannot take place within 10 feet of a wellbay unless all producing wells in the wellbay have been shut in.

3) 30 CFR 250.113(c)(5) stating in part that welding cannot take place within 10 feet of a production area, unless that producing area has been shut in.

4) Initiate and jointly participate in Job Safety Analysis (JSA) meetings prior to any operation, but it is especially critical to conduct JSAs for operations involving hot work, dismantling of piping, or simultaneous operations.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

An "After-The-Fact" P-105 Incident of Noncompliance was issued to document Lessees failure to properly supervise and manage decommissioning operations at its EI Block 175 F platform on September 7, 2007, to prevent a flash fire and injury to personnel by failing to ensure that the F-7 well flowline was blind flanged to prevent the uncontrolled release of hydrocarbons to the atmosphere.

25. DATE OF ONSITE INVESTIGATION:

10-SEP-2007

26. ONSITE TEAM MEMBERS:

Jason Abshire / Leo Dartez / Tom Basey / Maxie Lambert /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE: **15-OCT-2007**

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Welders Torch**

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

3. FUEL SOURCE: **Open-ended Flowline**

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
   - [ ] OTHER

INJURY/FATALITY/WITNESS ATTACHMENT

- [ ] OPERATOR REPRESENTATIVE
- [x] CONTRACTOR REPRESENTATIVE
- [ ] OTHER ______________________________

- [ ] INJURY
- [ ] FATALITY
- [x] WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY: **ISLAND OPERATORS CO. INC.**

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

- [ ] OPERATOR REPRESENTATIVE
- [x] CONTRACTOR REPRESENTATIVE
- [ ] OTHER ______________________________

- [ ] INJURY
- [ ] FATALITY
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