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

ACCIDENT INVESTIGATION REPORT

| 1. | OCCURRED | 8. | CAUSE: EQUIPMENT FAILURE | | | | |
|----|--|-----|---|--|--|--|--|
| | DATE: 06-MAR-2006 TIME: 1130 HOURS | | x HUMAN ERROR | | | | |
| | OPERATOR: Samson Contour Energy E&P, LLC | | EXTERNAL DAMAGE SLIP/TRIP/FALL | | | | |
| 2. | | | | | | | |
| | | | WEATHER RELATED | | | | |
| | REPRESENTATIVE: Tom Koscelny | | ☐ LEAK | | | | |
| | 10111 1101202117 | | ☐ ☐ UPSET H2O TREATING | | | | |
| 2 | TELEPHONE: (918) 591-1386 | | OVERBOARD DRILLING FLUID | | | | |
| 3. | LEASE: G01142 | | X OTHER INCORRECT PREP FOR HOT WORK | | | | |
| | AREA: VR LATITUDE: | | | | | | |
| | BLOCK: 218 LONGITUDE: | 9. | WATER DEPTH: 120 FT. | | | | |
| 4. | PLATFORM: B | 10. | DISTANCE FROM SHORE: 58 MI. | | | | |
| | RIG NAME | | WIND DIRECTION: s | | | | |
| | NTO WATE | | SPEED: 2 M.P.H. | | | | |
| 5. | ACTIVITY: EXPLORATION(POE) | 12. | CURRENT DIRECTION: S | | | | |
| | DEVELOPMENT/PRODUCTION | | SPEED: 0 M.P.H. | | | | |
| | (DOCD/POD) | 13. | SEA STATE: 0 FT. | | | | |
| 6. | TYPE: X FIRE | | | | | | |
| | X EXPLOSION | | | | | | |
| | BLOWOUT | | | | | | |
| | COLLISION X INJURY NO. 2 FATALITY NO POLLUTION OTHER | | OPERATOR REPRESENTATIVE/ SUPERVISOR ON SITE AT TIME OF INCIDENT: | | | | |
| | | | | | | | |
| | | | JIM LOFTON | | | | |
| | | | CITY: LAKE CHARLES STATE: LA | | | | |
| | | | TELEPHONE: (337) 855-6010 | | | | |
| 7 | OPERATION: X PRODUCTION | | CONTRACTOR: Wood Group Production Services | | | | |
| | DRILLING | | | | | | |
| | WORKOVER COMPLETION | | | | | | |
| | | | CONTRACTOR REPRESENTATIVE/ SUPERVISOR ON SITE AT TIME OF INCIDENT: | | | | |
| | | | SOLEMATOR ON BILL III TIME OF INCIDENT. | | | | |
| | MOTOR VESSEL | | CITY: STATE: | | | | |
| | PIPELINE SEGMENT NO. | | _ TELEPHONE: | | | | |
| | | | | | | | |

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17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

AS THE WELDER AND WELDERS HELPER WERE PERFORMING HOT WORK ON THE TOP DECK (PRE FAB HANDRAILS) SLAG FELL TO THE BOTTOM DECK AND IGNITED A 1/4 FULL TANK OF METHANOL, CAUSING IT TO EXPLODE. THIS RESULTED IN A FLASH FIRE, FOLLOWED BY SEVERAL SMALL FIRES INVOLVING RESIDUAL PLASTIC AND PAPER PRODUCTS.

THE EXPLOSION AND RESULTING FIRE CAUSED BURNS TO TWO OF THE WELDERS. THEY WERE EVACUATED TO SHORE FOR TREATMENT. BOTH WRE ADMITTED FOR TREATMENT, WHICH RESULTED IN LOST TIME.

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

HOT WELDING SLAG FROM TOP DECK. IT IS BELIEVED THAT METHANOL WAS INADVERTENTLY RELEASED INTO CHEMICAL TANK SKID PRIOR TO EXPLOSION/FIRE. THE WELDING WAS TAKING PLACE DIRECTLY OVER THE METHANOL TANK WHICH IS LOCATED ON THE BOTTOM DECK. A PIECE OF PLYWOOD WAS PLACED OVER THE TANK AND SECURED WITH ROPE, BUT DID NOT COVER THE ENTIRE SKID, ALLOWING THE IGNITION SOURCE TO IGNITE THE METHANOL IN THE SKID AND BEGIN HEATING THE METHANOL CONTAINER. AT THIS POINT A BLEVE OCCURRED. (boiling liquid expanding vapor explosion)

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

THE PLYWOOD THAT WAS PLACED ON TOP OF THE METHANOL TANK ACTUALLY RESTRICTED THE VENT, THIS IN TURN ALLOWED PRESSURE TO BUILD IN THE VAPOR SECTION OF THE TANK AS IT WAS BEING HEATED. PROCEDURES LISTED ON HOT WORK PERMIT WERE NOT FOLLOWED. THE METHANOL SKID COULD HAVE BEEN MOVED OR THE WELDING COULD HAVE TAKEN PLACE AT A SAFER LOCATION. THE FIRE WATCH WAS PLACED ON THE TOP DECK WHERE THE WELDER WAS POSITIONED, AND NO ONE WAS MONITORING THE BOTTOM DECK WHERE THE WELDING SLAG WAS FALLING TO THE BOTTOM DECK. THE JSA FOR THE JOB AT HAND HAD NO MENTION OF REMOVING COMBUSTIBLE OR FLAMMABLE LIQUIDS AWAY FROM THE WORK AREA. THE HOT WORK PERMIT THAT WAS UTILIZED DOES NOT CLEARLY DEFINE THE NAME AND RESPONSIBILITY OF THE FIRE WATCH. THERE IS NO DOCUMENTATION OR PROOF THAT THE CHEMICAL SKID IN QUESTION WAS CHECKED FOR FLAMMABLE LIQUIDS PRIOR TO JOB. NEITHER OF THE PLATFORM OPERATORS (LEAD AND "A") WERE OUTSIDE SUPERVISING THE WELDER AND HIS OPERATION. THEREFORE A LACK OF SUPERVISION CAN VERY WELL BE INCLUDED AS A CONTRIBUTING CAUSE.

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

CHEMICAL TANK AND SKID, EXTENSION CORDS, HEAT/ FIRE WELDING LEADS, PPE, FACE SHEILD, HARD HAT, GOGGLES.

ESTIMATED AMOUNT (TOTAL): \$1,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

THERE ARE NO RECOMMENDATIONS FOR MMS.

THE OPERATOR RECOMMENDS THAT THEY AMEND HOT WORK PERMITS TO INCLUDE 2 FIREWATCHES IF HOT WORK IS TAKING PLACE IN ONE AREA, AND SLAG IS FALLING TO ANOTHER AREA. TAKE APPROPRIATE ACTION TO VERIFY THAT ALL COMBUSTIBLE OR FLAMMABLE LIQUIDS HAVE BEEN REMOVED FROM THE WORKSITE, OR CONTAINERS HAVE BEEN PURGED OF FLAMMABLE LIQUIDS OR RENDERED INERT. MAKE CERTAIN THAT DESIGNATED FIREWATCH IS CLEAR OF HIS RESPONSIBILITY AND DOCUMENTED ON APPROPRIATE JSA OR HOT WORK PERMIT.

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

G-112-FAILED TO TAKE ALL NECESSARY PRECAUTIONS AND REMOVE ANY HEALTH, SAFETY OR FIRE HAZARDS.

G-116-OPERATIONS NOT CONDUCTED IN ACCORDANCE WITH HOT WORK PERMIT.

25. DATE OF ONSITE INVESTIGATION:

08-MAR-2006

26. ONSITE TEAM MEMBERS:

ERIC FONTENOT /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

FPausina for LWilliamson

APPROVED

DATE: 04-MAY-2006

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FIRE/EXPLOSION ATTACHMENT

| 1. | SOURCE OF IGNITIO | N: W I | ELDING SI | LAG | | |
|----|--------------------------------------|---------------|------------------------|-------------|---|-----------------------|
| 2. | TYPE OF FUEL: | | GAS OIL DIESEL CONDENS | ATE | | |
| | | | HYDRAUL | IC | | |
| | | x | OTHER | METHANOL | | |
| 3. | FUEL SOURCE: POF | RTABLI | E METHANO | OL TANK | | |
| 4. | WERE PRECAUTIONS KNOWN SOURCES OF | - | | | | |
| 5. | TYPE OF FIREFIGHT | ING E | QUIPMENT | UTILIZED: X |] | HANDHELD WHEELED UNIT |
| | | | | |] | FIXED CHEMICAL |
| | | | | |] | FIXED WATER |
| | | | | |] | NONE |
| | | | | |] | OTHER |

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INJURY/FATALITY/WITNESS ATTACHMENT

| OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE X OTHER WELDER | x injury FATALITY witness | |
|---|---|-------|
| NAME: HOME ADDRESS: CITY: WORK PHONE: (361) 775-1800 EMPLOYED BY: | STATE: TX TOTAL OFFSHORE EXPERIENCE: | YEARS |
| BUSINESS ADDRESS: CITY: ZIP CODE: | STATE: | |
| Π | | |
| OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE X OTHER WELDER HELPER | x INJURY FATALITY x WITNESS | |
| NAME: HOME ADDRESS: CITY: WORK PHONE: (361) 775-1800 | STATE: TX TOTAL OFFSHORE EXPERIENCE: | YEARS |
| EMPLOYED BY: BUSINESS ADDRESS: CITY: | STATE: | |
| ZIP CODE: | | |

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