UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE GULF OF MEXICO REGION ACCIDENT INVESTIGATION REPORT 1. OCCURRED 8. CAUSE: COUIPMENT FAILURE X HUMAN ERROR DATE: 06-MAR-2006 TIME: 1130 HOURS EXTERNAL DAMAGE 2. OPERATOR: Samson Contour Energy E&P, SLIP/TRIP/FALL LLC WEATHER RELATED LEAK REPRESENTATIVE: Tom Koscelny UPSET H20 TREATING TELEPHONE: (918) 591-1386 OVERBOARD DRILLING FLUID 3. LEASE: **G01142** X OTHER INCORRECT PREP FOR HOT WORK AREA: VR LATITUDE: 9. WATER DEPTH: **120** FT. BLOCK: 218 LONGITUDE: 10. DISTANCE FROM SHORE: 58 MI. 4. PLATFORM: B 11. WIND DIRECTION: S RIG NAME SPEED: 2 M.P.H. EXPLORATION(POE) 12. CURRENT DIRECTION: S 5. ACTIVITY: SPEED: 0 M.P.H. DEVELOPMENT/PRODUCTION x (DOCD/POD) 13. SEA STATE: 0 FT. 6. TYPE: X FIRE EXPLOSION x BLOWOUT 16. OPERATOR REPRESENTATIVE/ COLLISION SUPERVISOR ON SITE AT TIME OF INCIDENT: X INJURY NO. 2 JIM LOFTON FATALITY NO. CITY: LAKE CHARLES STATE: LA POLLUTION TELEPHONE: (337) 855-6010 OTHER CONTRACTOR: Wood Group Production Services 7. OPERATION: X PRODUCTION DRILLING WORKOVER CONTRACTOR REPRESENTATIVE/ SUPERVISOR ON SITE AT TIME OF INCIDENT: COMPLETION MOTOR VESSEL CITY: STATE: PIPELINE SEGMENT NO. TELEPHONE: X OTHER PLATFORM SHUT IN SINCE RITA

EV2010R

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

AS THE WELDER AND WELDERS HELPER WERE PERFORMING HOT WORK ON THE TOP DECK (PRE FAE 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.

EV2010R

21. PROPERTY DAMAGED:

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.

G-116-OPERATIONS NOT CONDUCTED IN ACCORDANCE WITH HOT WORK PE

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

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: WELDING SLAG

2.	TYPE	OF	FUEL:		GAS
					OIL
					DIESEL
					CONDENSATE
					HYDRAULIC
				x	OTHER METHANOL
3.	FUEL	SOI	JRCE :	PORTABLE	E METHANOL TANK
4.	WERE KNOWI		ECAUTIO DURCES		TIONS TAKEN TO ISOLATE TION PRIOR TO THE ACCIDENT ? NC

5.	TYPE	OF	FIREFIGHTING	EQUIPMENT	UTILIZED:	x	HANDHI	ELD
							WHEELE	ED UNIT
							FIXED	CHEMICAL
							FIXED	WATER
							NONE	
							OTHER	

EV2010R

INJURY/FATALITY/WITNESS ATTACHMENT

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