

**Pipeline Group Factual Report**

**ATTACHMENT 41**

**ERW-LF & HF significant Haz Liquid accidents- PHMSA 2002-2007**

**Carmichael, Mississippi  
DCA 08 MP 001**

All HL accidents since 2002 where "Failure Occurred", "Other" of "Failure Occurred", and/or "Narrative" field indicates Girth Weld.

Data as of 03/17/2008

Type of accident	HL form type	IYEAR	RPTID	OPERATOR_NAME	IDATE	OFFSHORE	ACSTATE	ACCOUNTY	ACCITY	LATITUDE
Failure Occurred and/or "Narrative" field ii New Form		2003	20030083	11169 ENBRIDGE E	01/24/03	N	WI	DOUGLAS	SUPERIOR	46 41
Failure Occurred and/or "Narrative" field ii New Form		2003	20030187	11169 ENBRIDGE E	04/14/03	N	MN	POLK	TRAIL	47 47 50
Failure Occurred and/or "Narrative" field ii New Form		2002	20020042	2731 CHEVRON PI	01/07/02	N	NM	SIERRA	LAS CRUCES	
Failure Occurred and/or "Narrative" field ii New Form		2005	20050292	12470 MID-VALLEY	09/23/05	N	OH	ALLEN	LIMA	84.71
Failure Occurred and/or "Narrative" field ii New Form		2003	20030111	4906 EXXONMOBI	03/02/03	N	LA	PLAQUEMINES		29.24.22
Failure Occurred and/or "Narrative" field ii New Form		2002	20030001	4906 EXXONMOBI	11/20/02	N	LA	ASSUMPTION		N29.59.52
Failure Occurred and/or "Narrative" field ii New Form		2002	20020189	12452 MID - AMERIK	05/16/02	N	KS	MCPHERSON		N 38.3724397
Failure Occurred and/or "Narrative" field ii New Form		2003	20040008	31884 ENBRIDGE P	10/19/03	N	LA	PLAQUEMINES		29.6307297
Failure Occurred and/or "Narrative" field ii New Form		2004	20040045	31415 PREMCOR P	01/24/04	N	TX	JEFFERSON	BEAUMONT	29.92.069
Failure Occurred and/or "Narrative" field ii New Form		2002	20020411	12471 MID - VALLE\	11/13/02	N	OH	WOOD	CYGNET	41.221816671
Failure Occurred and/or "Narrative" field ii New Form		2004	20040080	31684 CONOCOPHI	03/13/04	N	WY	BIG HORN	FRANNIE	
Failure Occurred and/or "Narrative" field ii New Form		2004	20040079	18718 SUNOCO PIF	02/16/04	N	TX	HALL		N34, 39.49
Failure Occurred and/or "Narrative" field ii New Form		2003	20030417	22610 MAGELLAN F	10/06/03	N	KS	JOHNSON		N 39.033368C
Failure Occurred and/or "Narrative" field ii New Form		2003	20030334	1845 BUCKEYE PII	08/12/03	N	IL	PEORIA	PEORIA	40.92
Failure Occurred and/or "Narrative" field ii New Form		2005	20050073	12470 MID VALLEY	01/26/05	N	KY	OWEN	CARROLLTO	-85.0216
Failure Occurred and/or "Narrative" field ii New Form		2005	20050177	31618 ENTERPRISE	06/01/05	N	IA	JACKSON	BERNARD	42D12'35"
Failure Occurred and/or "Narrative" field ii New Form		2002	20020410	31174 SHELL PIPEL	11/19/02	Y				
Failure Occurred and/or "Narrative" field ii New Form		2006	20060162	19237 TE PRODUC	06/07/06	N	OH	CLINTON	PORT WILLI	N39 32.940
Failure Occurred and/or "Narrative" field ii New Form		2005	20050351	31618 ENTERPRISE	11/11/05	N	IL	LA SALLE	OTTAWA	41D28'44
Failure Occurred and/or "Narrative" field ii New Form		2006	20060151	31618 ENTERPRISE	05/23/06	N	NE	DOUGLAS	VALLEY	41D19'15
Failure Occurred and/or "Narrative" field ii New Form		2006	20060131	31618 ENTERPRISE	04/05/06	N	NE	SAUNDERS	ASHLAND	41D 02' 15
Failure Occurred and/or "Narrative" field ii New Form		2007	20070063	31627 DENBURY RI	01/09/07	N	MS	JONES	SHARON	N31 48.004'
Failure Occurred and/or "Narrative" field ii New Form		2005	20050344	1845 BUCKEYE PII	10/17/05	N	PA	LEHIGH	EMMAUS	40.518
Failure Occurred and/or "Narrative" field ii New Form		2002	20020082	11169 ENBRIDGE E	01/20/02	N	WI	DOUGLAS	SUPERIOR	46 -41' -17
Failure Occurred and/or "Narrative" field ii New Form		2008	20080031	22610 MAGELLAN F	01/05/08	N	OK	ROGERS	OOLOGAH	36.449603 N
Failure Occurred and/or "Narrative" field ii New Form		2007	20070287	22610 MAGELLAN F	08/28/07	N	IL	OGLE	ROCHELLE	W 89.16727
Failure Occurred and/or "Narrative" field ii New Form		2008	20080046	31618 ENTERPRISE	01/27/08	N	KS	COMANCHE	COLDWATEF	N37D21.8392
Failure Occurred and/or "Narrative" field ii New Form		2007	20070105	31618 ENTERPRISE	03/19/07	N	KS	CLARK	ASHLAND	37.2176685
Failure Occurred and/or "Narrative" field ii New Form		2006	20060261	31618 ENTERPRISE	08/22/06	N	IL	GRUNDY	MORRIS	41D22'20

LONGITUDE	GEN_CAUSE	GEN_CAUSE	INJURE	FATAL	PRPTY	CLASS_TEXT	LOSS_BBL	RECOV_BBL	NETLOSS_BI	IGNITE	EXPLO	EVAC	EVACNO
92 03	5	MATERIAL AI	0	0	\$2,853,000	CRUDE OIL	4,500.000	4,450.000	50.000	No	No	No	
95 43 10	5	MATERIAL AI	0	0	\$1,000,000	CRUDE OIL	125.000	75.000	50.000	Null	Null	No	
	5	MATERIAL AI	0	0	\$76,000	GASOLINE, C	950.000	0.000	950.000	No	No	No	
40.4294	5	MATERIAL AI	0	0	\$60,500	CRUDE OIL	40.000	40.000	0.000	No	No	No	
89.47.00	5	MATERIAL AI	0	0	\$3,300,000	CRUDE OIL	995.000	240.000	755.000	No	No	No	
W90.58.32	5	MATERIAL AI	0	0	\$50,001	CRUDE OIL	0.048	0.000	0.048	No	No	No	
W 97.882522:	1	CORROSION	0	0	\$444,362	HVLS/OTHEF	1,512.000	0.000	1,512.000	No	No	No	
-89.9521332	5	MATERIAL AI	0	0	\$400,025	HVLS/OTHEF	0.405	0.000	0.405	No	No	No	
94.02053	5	MATERIAL AI	0	0	\$23,000	CRUDE OIL	75.000	75.000	0.000	No	Null	Yes	0
83.64200000\	1	CORROSION	0	0	\$11,060	CRUDE OIL	8.000	5.000	3.000	No	No	No	
	5	MATERIAL AI	0	0	\$6,250	CRUDE OIL	7.000	0.000	7.000	No	No	No	
W100, 26.780	8	OTHER	0	0	\$105,654	CRUDE OIL	900.000	60.000	840.000	No	No	No	
W 94.741149'	5	MATERIAL AI	0	0	\$7,839,201	GASOLINE, C	700.000	671.000	29.000	No	No	No	
-89.58	5	MATERIAL AI	0	0	\$2,699,400	GASOLINE, C	4,200.000	3,413.000	787.000	No	No	No	
38.6664	2	NATURAL FC	0	0	\$8,500,000	CRUDE OIL	6,909.000	3,987.000	2,922.000	No	No	No	
90D49'22"	5	MATERIAL AI	0	0	\$56,200	HVLS/OTHEF	81.000	0.000	81.000	No	No	No	
	4	OTHER OUTS	0	0	\$900,000	CRUDE OIL	0.024	0.000	0.024	No	No	No	
W083 44.924	8	OTHER	0	0	\$133,218	HVLS/OTHEF	5.000	0.000	5.000	No	No	No	
88D51'21	5	MATERIAL AI	0	0	\$25,143	HVLS/OTHEF	5.000	0.000	5.000	No	No	No	
96D23'47	5	MATERIAL AI	0	0	\$124,000	HVLS/OTHEF	2.000	0.000	2.000	No	No	No	
96D 26' 12	5	MATERIAL AI	0	0	\$55,620	HVLS/OTHEF	0.381	0.000	0.381	No	No	No	
W089 09.382	5	MATERIAL AI	0	0	\$84,722	CO2/N2 OR C	24,319.000	0.000	24,319.000	No	No	No	
-75.532	5	MATERIAL AI	0	0	\$15,634,800	GASOLINE, C	1,020.000	600.000	420.000	No	No	No	
92-3'-25	5	MATERIAL AI	0	0	\$52,515	CRUDE OIL	10.000	9.000	1.000	No	No	No	
95.714285W	5	MATERIAL AI	0	0	\$669,700	GASOLINE, C	1,075.000	385.000	690.000	No	No	No	
N 41. 91665	5	MATERIAL AI	0	0	\$57,938	HVLS/OTHEF	131.000	0.000	131.000	No	No	No	
W-99D25.159	5	MATERIAL AI	0	0	\$289,000	HVLS/OTHEF	10.000	0.000	10.000	No	No	No	
-99.748673	1	CORROSION	0	0	\$54,010	HVLS/OTHEF	0.238	0.000	0.238	No	No	No	
88D21'50	5	MATERIAL AI	0	0	\$481,773	HVLS/OTHEF	5.000	0.000	5.000	No	No	No	

(Decoded value)

EVAC_REAS\NPS	WALLTHK	SPEC	SMYS	SEAM	Pipe Seam Type	VALVE	MANU
	24	0.34 API 5LX		OTHER	OTHER		UNKNOWN
	34	0.28 X52	52000				U.S. STEEL
	8	0.25 X42 ERW	42000	SEAMLESS	SEAMLESS		
	20	375 GRADE B	1310				
	4	237 GRADE B	35000	NA	N/A	NA	NA
	16	0.25 X-52	52000				
	6.63	0.16 API 5LX	42000	ERW	ERW		LONE STAR :
	16	0.31 API 5L X52	52000	DSAW	DSAW		REPUBLIC S
REQUIRED C	10	0.4 WT L.W.					
	12	0.25 GRADE B	35000	UNKNOWN	UNKNOWN		UNKNOWN
	8.63	0.16 5L	52000	ERW	ERW	GATE	GROVE
	10	365 GRADE A	30000	ACETYLENE	ACETYLENE		NATIONAL PI
	12	0.31 API 5L	42000	SEAMLESS	SEAMLESS	N/A	JONES & LAL
	8	0.28 UNKNOWN	0	SEAMLESS	SEAMLESS	N/A	UNKNOWN
	22	0.5 X-42	42000	FLASH WELC	FLASH WELD	N/A	A O SMITH
	6.63	0.19 API 5L - X46	46000	LF-ERW	LOW FREQUENC	NA	LONE STAR :
	6.63	0.31 5LX	42000	SMLS	SMLS	N/A	USS
	8	0.2 X42	42000	SEAMLESS	SEAMLESS		
	10	0.19 API 5L	52000	HF ERW	HIGH FREQUENCY		AMERICAN S
	8.63	0.16 API 5L	46000	HF-ERW	HIGH FREQUENCY		LONE STAR :
	20	0.31 API 5L	80000	LONGITUDIN	LONGITUDINAL		STUPP & MA
	34	0.38 API 5L	35000	DSAW	DSAW		
	12.75	0.3	1140	FLASH WELC	FLASH WELD		A. O. SMITH
	800	0.19 API GRADE E	35000	ERW	ERW		REPUBLIC S
	6.63	0.16 API 5L	46000	ERW	ERW		LONE STAR :
	6.63	0.16 API-5L	46000	LF ERW	LOW FREQUENCY		LONE STAR :
	8.63	0.25 API-5L	60000	HF ERW	HIGH FREQUENCY		TEX-TUBE S

(Decoded value)

MANYR	LOCLK_TEXT\LOCLKO	DEPTH_COV	RUPTURE_T\IPRTYR	Decade failed prt instl	FAIL_OC_TEXT	FAIL_OCO
	UNDER GROUND	12		1950 1950-1959	GIRTH WELD	
1967	UNDER GROUND	42		Unknown	GIRTH WELD	
	UNDER GROUND	36		1954 1950-1959	GIRTH WELD	
	UNDER GROUND	36		1980 1980-1989	GIRTH WELD	
	ABOVE GROUND	0		1996 1990-1999	GIRTH WELD	
	UNDER GROUND			Unknown	GIRTH WELD	
1964	UNDER GROUND	40		1964 1960-1969	GIRTH WELD	
1959	UNDER WATER			1959 1950-1959	BODY OF PIPE	
	OTHER EVACUATION TRENCH			1922 1920-1929	GIRTH WELD	
	UNDER GROUND	40		Unknown	GIRTH WELD	
1962	UNDER GROUND	36		1962 1960-1969	GIRTH WELD	
1927	UNDER GROUND	60	CIRCUMFERI	1927 1920-1929	GIRTH WELD	
1950	UNDER GROUND	144	CIRCUMFERI	1950 1950-1959	GIRTH WELD	
1929	UNDER GROUND	24	CIRCUMFERENTIAL-SEPA	Unknown	JOINT	
1950	UNDER GROUND	166	CIRCUMFERI	1950 1950-1959	GIRTH WELD	
1960	UNDER GROUND	30		1960 1960-1969	GIRTH WELD	
1977	UNDER WATER			Unknown	GIRTH WELD	
	UNDER GROUND	36		1962 1960-1969	GIRTH WELD	
1973	UNDER GROUND	40		1973 1970-1979	GIRTH WELD	
	UNDER GROUND	60		1997 1990-1999	GIRTH WELD	
1968	UNDER GROUND	36		1968 1960-1969	GIRTH WELD	
2005	UNDER GROUND	8	CIRCUMFERI	2005 2000-2009	GIRTH WELD	
	ABOVE GROUND			1968 1960-1969	GIRTH WELD	
	UNDER GROUND	180		1994 1990-1999	GIRTH WELD	
1929	UNDER GROUND	18		Unknown	GIRTH WELD	
1977	UNDER GROUND	26		Unknown	GIRTH WELD	
1968	UNDER GROUND	48		1968 1960-1969	GIRTH WELD	
1968	UNDER GROUND	42		1968 1960-1969	GIRTH WELD	
1987	UNDER GROUND	50		1987 1980-1989	GIRTH WELD	

#### NARRATIVE1

ON JANUARY 24, 2003, AN INCIDENT OCCURRED AT OUR SUPERIOR, WISCONSIN TERMINAL FACILITIES DURING A SWING FROM TANK 19 TO TANK 23 OFF LINE 4. WHILE OUR INVESTIGATIVE CANADIAN PACIFIC RAILROAD EMPLOYEES WERE WORKING IN THE AREA OF MP 894 WHEN THEY SPOTTED A CONTRACT INSPECTOR WORKING WITH A SLEEVING CREW. THEY REPORTED A RELEASE OCCURRED IN A REMOTE AREA ON THE 8" EL PASO TO ALBUQUERQUE PRODUCTS SYSTEM @ MILEPOST 89. ON 01/05/02 @ 09:00 AM MST, A CHEVRON PIPE LINE, CUSTOMER'S LOW PRESSURE 20" TANK FARM BY-PASS LINE. LOCALIZED CORROSION CELL IN WELD BETWEEN PIPE AND 90 DEGREE BEND. INADEQUATE HI/LO LINEUP WHEN 90 DEGREE BEND WAS IN THE RELEASE OCCURRED ON EXXONMOBIL PIPELINE COMPANY'S (EMPCO) EMPIRE CRUDE OIL PIPELINE SYSTEM AT A PRODUCTION PLATFORM KNOWN TO EMPCO AS THE LAKE WASHI LEAK WAS INITIALLY REPORTED AS A STAIN ON THE GROUND BY AN AIR PATROL PILOT. INVESTIGATION REVEALED THE LEAK TO BE A PINHOLE IN A WELD, WITH NO MORE THAN 2 GALLONS AT APPROXIMATELY 7:25 A.M.(CST) AN EMPLOYEE NOTICED A PATCHY COVERING OF FOG-LIKE SUBSTANCE ON THE GROUND JUST OUTSIDE THE COMPANY'S CONWAY PUMP STATION, THE LEAK RESULTED FROM A 2" (+/-) CRACK, WHICH LIKELY BEGAN IN THE GIRTH WELD AND PROPAGATED INTO THE PARENT PIPE. HOWEVER, THE CAUSE OF THE CRACK IS STILL BEING EVALUATED. EL PASO ENERGY INSTALLING A 24" PIPELINE (CAMERON HIGHWAY) ALONG PREMCOR PIPELINE COMPANY RIGHT-OF-WAY. EL PASO CONTRACTORS HAD DUG A 20-YARD LONG X 10' WIDE TRENCH ON 11/08/02 A 14,000 BBL. DELIVERY TOOK PLACE UTILIZING THIS LINE SEGMENT. THE DELIVERY LASTED APPROXIMATELY 2 HOURS. NO OIL WAS SEEN ON THE GROUND DURING THIS DELIVERY. ON MAR. 13TH, 2004 CONOCO PIPE LINE COMPANY WAS NOTIFIED BY A LOCAL LANDOWNER THAT CRUDE OIL WAS VISIBLE NEAR OUR FRANNIE 8". COMPANY PERSONNEL WERE DISPATCHED TO THE INCIDENT INVESTIGATION IS NOT YET COMPLETE. PIPE HAS BEEN SENT TO A METALLURGICAL LABORATORY FOR FAILURE ANALYSIS. A SUPPLEMENTAL REPORT WILL BE FILED WHEN THE PIPELINE OPERATIONS CONTROL CENTER DETECTED A LINE IMBALANCE ON THE AFFECTED LINE SEGMENT. ANALYSIS AND INVESTIGATION CONFIRMED A PIPELINE BREACH, RESULTING IN A LEAK ON AUGUST 12, 2003 BUCKEYE PIPE LINE COMPANY STARTED TO REFILL THE NORCO PIPELINE AFTER MAINTENANCE WORK WAS CONDUCTED ON THE PIPELINE. ON AUGUST 13, 2003 A FAILURE OCCURRED IN WELD LOCATED 50 FT FROM THE BANK OF THE KENTUCKY RIVER. THE FAILURE IS BELIEVED TO HAVE BEEN CAUSED BY SOIL SUBSIDENCE WHICH WAS CAUSED BY THIS LEAK WAS DISCOVERED IN A GIRTH WELD. REPAIR MADE USING A FULL ENCIRCLEMENT BOLT-ON SLEEVE. THE VOLUME REPORTED INCLUDES THE BLOW DOWN VOLUME FOR REFILL. THE LINE APPEARS TO HAVE BEEN SNAGGED BY AN ANCHOR. A 7000# ANCHOR WAS FOUND APPROXIMATELY 10 FEET TO THE NORTH OF THE DAMAGED AREA. THE DENT IS APPROXIMATELY AS PER KIEFNER AND ASSOCIATES THE LEAK WAS CAUSED BY A BREACH IN A CONSTRUCTION DEFECT WITHIN THE GIRTH WELD DUE TO AN INCOMPLETE PASS. WHILE TILLING HIS FIELD, THE LANDOWNER DISCOVERED ON 11/11/05 A FIVE FOOT DIAMETER AREA WITH DEAD VEGETATION AND NOTIFIED THE COMPANY. THE COMPANY LOWERED TANK OPERATIONS PERSONNEL DISCOVERED A PINHOLE LEAK ON A BURIED GIRTH WELD. THE PIPELINE WAS SHUTDOWN ON MAY 23, 2006 FOR REPAIR AND RETURNED TO SERVICE ON MAY 24, 2006. A PINHOLE LEAK ON A BURIED GIRTH WELD WAS DISCOVERED FROM DEAD VEGETATION. THE LEAK WAS AT THE 12 O'CLOCK POSITION. A PLIDCO SPLIT SLEEVE WAS INSTALLED TO REPAIR THE LEAK.

ON OCTOBER 24, 2005, BUCKEYE PARTNERS MACUNGIE CONTROL CENTER SUSPECTED THAT TANK 220 AT BUCKEYE'S MACUNGIE STATION MAY HAVE A RELEASE DUE TO VOLUMETRIC MEASUREMENTS.

#### PENDING METALLURGICAL REPORT

WESTSHORE PIPELINE COMPANY AERIAL PATROL PILOT REPORTED A FROST BALL ON THE LINE DURING AERIAL PATROL. INVESTIGATION INDICATED A PINHOLE SIZE LEAK AT A GIRTH WELD. DEAD VEGETATION IN A REMOTE AREA WAS DISCOVERED AND CALLED INTO PIPELINE CONTROL. THE LEAK WAS VERIFIED TO BE A PINHOLE LEAK IN A GIRTH WELD. PRODUCT WAS STOPPED. A CONTRACTOR WHILE EXCAVATING AN ILI ANOMALY, SMELLED AMMONIA AND CALLED OPERATIONS. OPERATIONS PERSONNEL REDUCED THE LINE PRESSURE, EXCAVATED THE PIPE, AND A BICYCLIST DISCOVERED SMALL GAS BUBBLES ON THE ILLINOIS AND MICHIGAN CANAL ON 8/22/06 AND CALLED THE LEAK INTO THE COMPANY LIQUID CONTROL CENTER. UPON ARRIVAL AT THE LOCATION, THE LEAK WAS STOPPED AND THE LINE WAS RE-pressurized.

Excel functions				
Picked up by Narrative Text	HVL & Spill >= 5	Significant Accident	LONGITUDINAL-TEA	Prpty in Millions
	NO	YES	NO	\$2.9
	NO	YES	NO	\$1.0
	NO	YES	NO	\$0.1
	NO	YES	NO	\$0.1
	NO	YES	NO	\$3.3
	NO	YES	NO	\$0.1
	YES	YES	NO	\$0.4
WHICH LIKELY B	NO	YES	NO	\$0.4
	NO	YES	NO	\$0.0
	NO	NO	NO	\$0.0
	NO	NO	NO	\$0.0
	NO	YES	NO	\$0.1
	NO	YES	NO	\$7.8
THUS OVER STR	NO	YES	NO	\$2.7
	NO	YES	NO	\$8.5
	YES	YES	NO	\$0.1
	NO	YES	NO	\$0.9
	YES	YES	NO	\$0.1
	YES	YES	NO	\$0.0
	NO	YES	NO	\$0.1
	NO	YES	NO	\$0.1
	NO	YES	NO	\$0.1
	NO	YES	NO	\$15.6
	NO	YES	NO	\$0.1
	NO	YES	NO	\$0.7
	YES	YES	NO	\$0.1
	YES	YES	NO	\$0.3
	NO	YES	NO	\$0.1
	YES	YES	NO	\$0.5