

HIGH IMPACT - LIQUID PIPELINE CARRIER

Name of Operator: Mobil Pipeline Company		
HQ. Address: PO Box 900 Dallas, TX 75221	Unit Name and Address: AR PO Box 618 Corsicana, TX 75151	
Co. Official (Pres. or VP) Chester Morris, Jr. VP Telephone number: 214-658-2215 Fax Number: 214-658-2222 Vice President, Pipeline Operations	Telephone number: 903-654-5328 Fax Number: 903-654-5302	
Emergency Telephone: 214-742-3106	Emergency Telephone: 214-742-3106	
Operator ID#:12628	Unit Record ID#: 191 Inspection Record ID#:	
UREC#(s) of adjacent operator Units:		
Persons Interviewed	Titles	Phone Number
M. H. Adams	Field DOT Manager	903-654-5328
T. D. (Denny) Wedgeworth	Corrosion Technician	903-986-2056
C. W. Holt	Sr. Corrosion Technician	903-654-5325
OPS Representative: Michael Schwarzkopf & Gregory Hindman		Date: 10 - 12/17-19 May 99
Company System Maps - (copies for Region Files)		
Unit Description: Single 20" [20" x 0.312" wt API 5L X-42 with coal tar enamel coating] line pipeline from Texas - Arkansas stateline (MP 159.8) SW of Foreman, AR to Arkansas - Missouri (MP 455.8) state line SW of Doniphan, MO. Four pump stations: Foreman, Little River County - 3,300 HP; Glenwood, Montgomery County - 3,000 HP; Conway, Faulkner County - 3,350 HP; and Strawberry, Lawrence County - 3,000 HP Transports crude oil Counties in AR: Little River, Seveir, Howard, Pike, Montgomery, Garland, Saline, Perry, Pulaski, Faulkner, Whyte, Randolph, Independence, and Lawrence River crossings: Red River [AR-TX state line], Arkansas River, and White River		
Portion of Unit inspected: System type inspection with Lisa Wu, Southwest Region. Jointly inspected records and manuals, separate inspection of field locations.		

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Screening Questions (Unit specific)		
Does the operator have:	Yes	No
■ any lines operating above 72% of SMYS?		✓
■ gathering lines?		✓
■ HVL lines?		✓
■ Breakout tanks?		✓
■ low stress pipelines operating below 20% SMYS in a non-rural area?		✓
■ SCADA?	✓	
■ offshore operations in the Gulf of Mexico?		✓
■ bare or ineffectively coated pipe?		✓
■ unprotected pipe (not cathodically protected)?		✓
■ a history of internal corrosion problems?		✓
■ smart pig data? (if yes, see table below)		✓
■ any environmentally sensitive areas? (historic, natural)		✓
■ any construction plans? (see table below)		✓

Internal Inspection Information		
Segment	Miles or % Inspected	Year Inspected
None		

Pipeline Construction Information		
Location	Length	Date planned
None		

Mobil plans to run a Pipetronics ultrasonic tool on the line from Corsicana to Foreman. Not sure of the exact tool that will be used. Plan to run the tool prior to September 1999, may run a tool from Formena north in 2000.

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S - Satisfactory U - Unsatisfactory N/A - Not Applicable Unless otherwise noted, all code references are to Part 195. * indicates high risk question.

PART 195						
Operation & Maintenance			S	U	N/A	
.402 (a) Reviewed in May 1998 by Mobil. Mobil manuals were subject to a Joint O&M review. Reviewed the manual for the Coriscana to Patoka line in addition to Mobil Liquid DOT Manual	Maintenance and Normal Operating Procedures					
	*	.402 (c)(1)	Making construction records, maps, & operating history available necessary for safe operation and maintenance.	✓		
	*	.402 (c)(5)	Analyzing pipeline accidents to determine their causes?	✓		
	*	.402 (c)(7)	Startup and shut down any part of the pipeline system to assure operation within MOP? (See SCADA guidance)	✓		
	*	.402 (c)(8)	Systems not equipped with remote monitoring, locations must be attended while starting up and shutting in system to assure operation within MOP?	✓		
	*	.402 (c)(9)	Facilities not equipped with remote monitoring located in immediate response areas or that control receipt and delivery of the hazardous liquid or carbon dioxide; must transmit critical data to an attended location to detect abnormal operation.	✓		
		.402 (c)(12)	Establishing and maintaining liaison with fire, police, and other appropriate public officials?	✓		
	*	.402 (c)(13)	Periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.	✓		
.402 (a)	Abnormal Operating Procedures					
	*	.402 (d)(5)	Periodically reviewing the response of operating personnel to determine the effectiveness of the procedures and taking corrective action where deficiencies are found?	✓		
.402 (a)	Emergency Procedures					
	*	.402(e)(1)	Receiving, identifying, and classifying notices of events which require immediate response by the operator?	✓		
	*	(e)(2)	Prompt response to each type emergency, including: (I) Fire or explosion occurring near or directly involving a pipeline facility. (ii) Accidental release of hazardous liquid or carbon dioxide from a pipeline facility. (iii) Operational failure causing a hazardous condition. (iv) Natural disaster.	✓		
	*	(e)(3)	Availability of personnel, equipment, instruments, tools, & material required at the scene of an emergency	✓		
	*	(e)(4)	Actions such as emergency shutdown or pressure reduction, to minimize the volume that is released from any section of a pipeline system in the event of a failure.	✓		
	*	(e)(5)	Control of release at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable HVL.	✓		
	*	(e)(6)	Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action.	✓		

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	* (e)(7)	Notifying fire, police, and other appropriate public officials of pipeline emergency and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting HVL.	✓		
	* (e)(8)	In the case of failure of a pipeline transporting HVL, use of appropriate instruments to assess the extent and coverage of the vapor cloud and determine the hazardous areas.			✓
	* (e)(9)	Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.	✓		
.402 (a) .402 (c)(3)	Training Procedures				
	* .403 (b)	At intervals not exceeding 15 months, but at least once each calendar year, each operator shall: (1) Review with personnel their performance in meeting the objectives of the training program set forth in paragraph (a) of this section. (2) Make appropriate changes to the training program as necessary to insure that it is effective.	✓		
.402 (a) .402 (c)(3)	MOP Procedures				
	* .406 (a)	Establishing MOP that does not exceed any of the following: (1) The internal design pressure of the pipe determined by §195.106. (2) The design pressure of any other component on the pipeline. (3) 80% of the test pressure (Subpart E) (4) 80% of the factory test pressure or of the prototype test pressure for any individual component. (5) 80% of the highest operating pressure for a minimum of 4 hours for a pipeline that has not been tested.	✓		
	* .406 (b)	Pipeline may not be operated at a pressure that exceeds 110% of the MOP and adequate controls and protective equipment must be provided.	✓		
.402 (a) .402 (c)(3)	Inspections of Rights-of-Way and Crossings under navigable Waters Procedures				
	* .412 (a)	Patrol ROW conditions and follow-up. (3 weeks/26 yr)	✓		
	* .412 (b)	Inspect each crossing under a navigable waterway. (5 year excluding offshore)	✓		
.402 (a) .402 (c)(3)	Cathodic Protection Procedures				
	* .414 (a)	The following under cathodic protection: •All effectively coated lines (except tanks & pump stations), unless required by §195.414(c) ? •All bare & poorly coated lines where active corrosion has been found? •All breakout tank areas and pump station piping where found to be necessary?	✓		
	* .414 (b)	Have electrical surveys been performed to evaluate unprotected bare pipe for areas of active corrosion? (Interstate by 4/1/75), (Intrastate by 10/20/88), (Low Stress by 7/12/96)			✓
	* .414 (c)	Have electrical surveys been performed to evaluate coated and bare unprotected breakout tank areas and pump station's piping for the need of cathodic protection. (Interstate by 4/1/73, Interstate by 10/20/88)			✓
.402 (a) .402 (c)(3)	External Corrosion Control Procedures				
	* .416 (a)	Conduct tests on each underground facility under cathodic protection to determine whether the protection is adequate at intervals not exceeding 15 months, but at least once each calendar year? (Including breakout tanks)	✓		
	* .416 (b)	Maintain test leads required for cathodic protection measurements.	✓		
	* .416 (c)	Conduct inspections on each cathodic protection rectifiers at intervals not exceeding 2½ months, but at least six times each calendar year.	✓		
	* .416 (d)	Conduct electrical inspection of the bare pipe that is not cathodically protected & study leak records to determine if additional protection is needed at intervals not exceeding 5 years.			✓

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	*	.416 (e) Whenever any buried pipe is exposed for any reason, does the operator examine for evidence of external corrosion. If corrosion is found, the extent is investigated further.	✓		
	*	.416 (f) If the operator finds generally corroded pipe, is the pipe replaced, repaired, or pressure reduced. (ASME B31G or RSTRENG)	✓		
	*	.416 (g) If operator finds corroded pipe with isolated pitting, is pipe replaced, or pressure reduced. (ASME B31G or RSTRENG)	✓		
	*	.416 (I) Operator clean and coat pipe exposed to the atmosphere with material suitable for the prevention of atmospheric corrosion?	✓		
.402 (a)	Internal Corrosion Control Procedures				
	*	.418 (a) Investigate the corrosive effect of the hazardous liquid or carbon dioxide and has he taken adequate steps to mitigate corrosion.	✓		
	*	.418 (b) If corrosion inhibitors are used to mitigate internal corrosion; coupons must be used to determine their effectiveness.	✓		
	*	.418 (c) Coupons examined or other methods to determine the effectiveness of the inhibitors at intervals not exceeding 7½ months, but at least twice each calendar year?	✓		
	*	.418 (d) When any pipe is removed from the pipeline for any reason, inspect the internal surface for evidence of corrosion. If corrosion is found, the extent is investigated further and pipe is replaced or pressure reduced. (ASME B31G or RSTRENG)	✓		
.402 (a)	Valve Maintenance Procedures				
.402 (c)(3)	*	.420 Inspect each mainline valve to determine that it is functioning properly. (Biannually/ 7 1/2 mo)	✓		
.402 (a)	Pipe Movement Procedures				
.402 (c)(3)	*	.424 (a) Pressure reduction to 50% MOP for all lines.	✓		
	*	.424 (b) For HVL lines joined by welding: 1. When it does not contain HVL, unless impractical; 2. Precautions to protect public; and 3. Pressure reduced to 50% MOP or lowest practical level (minimum= V.P. + 50 psi)			✓
	*	.424 (c) For HVL lines not joined by welding: 1. When it does not contain HVL, unless impractical; 2. Precautions to protect public; and 3. Line section is isolated			✓
.402 (a)	Overpressure Safety Devices Procedures				
.402 (c)(3)	*	.428 (a) Inspect and test each pressure limiting device, relief valve, pressure regulator, or other pressure control equipment. (Annually/15 mo) (HVL - Biannually/7 1/2 mo).	✓		
	*	.428 (b) Inspect relief valves on HVL pressure breakout tanks. (5 years)			✓
.402 (a)	Firefighting Equipment Procedures				
.402 (c)(3)	*	.430 Maintain adequate firefighting equipment at each pump station and breakout tank area and the equipment must be in: (a) In proper operating condition at all times. (b) Plainly marked so that its identity as firefighting equipment is clear. (c) Located so that it is easily accessible during a fire.	✓		
.402 (a)	Security of Facilities Procedures				
.402 (c)(3)	*	.436 Protection for pumping stations, breakout tank areas, and other exposed facilities.	✓		
.402 (a)	Damage Prevention Program Procedures				
.402 (c)(3)					

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	* .442	Participation in a qualified one-call program, or if unavailable, a company program that complies with the following: (1) Identify persons who engage in excavating? (2) Provide notification to the public in the One Call area? (3) Provide means for receiving & recording notifications of pending excavations? (4) Provide notification of pending excavations to the members? (5) Provide means of temporary marking for the pipeline in the vicinity of the excavations? (6) Provides for follow up inspection of the pipeline where there is reason to believe the pipeline could be damaged? (I) Inspection must be done to verify integrity of the pipeline. (ii) After blasting, a leak survey must be conducted as part of the inspection by the operator.	✓		
.402 (a) .402 (c)(3) .422 (a)	Welding				
	* .228	Visually inspect and nondestructively test welds to ensure their acceptability according to Section 6 of API 1104 (18th edition).	✓		

Performance Review of Field & Records		S	U	N/A
.403	Personnel Training	✓		
.412	River Crossings	✓		
.414	Cathodic Protection	✓		
.416(I)	Pipeline Components Exposed to the Atmosphere	✓		
.416(c)	Rectifiers	✓		
.420	Valve Maintenance and Security	✓		
.428	Pressure Limiting Devices, relief valve, pressure regulator, or other pressure controller	✓		
.430	Fire Fighting Equipment	✓		
.436	Security (Pumping Stations and Breakout Tank areas)	✓		
O & M Records		S	U	N/A
.404(c)(3)	.402(a) O & M review (Annually)	✓		
.404(c)(3)	.402(c)(12) Liaison program with Public Officials	✓		
.404(c)(3)	.412(a) Right-of-way inspection. (3 weeks/26 times a year)	✓		
.404(c)(3)	.412(b) River crossing under a navigable river. (5 year)	✓		
.404(c)(3)	.416(a) Annual pipe-to-soil monitoring - pipe and tanks. (1yr/15 months)	✓		
.404(c)(3)	.416(c) Rectifier monitoring (6 times a year/21/2 months)	✓		
.404(c)(3)	.416(e) Examination of buried pipe when exposed.	✓		
.404(c)(3)	.418 Internal corrosion control coupon monitoring. (2 times a year/71/2 months)	✓		
.404(c)(3)	.420 Mainline valves. (2 times a year/71/2 months)	✓		
.404(c)(3)	.428(a) Overpressure devices. (1 per year/15 months) (HVL:2 times a year/71/2 months)	✓		
.404(c)(3)	.440 Public education program.	✓		
.404(c)(3)	.442 Damage Prevention Program. (miscellaneous)	✓		

Inspection Notes

Records portion Mobil's method of identifying and tracking exposed pipe was discussed with Mobil personnel. Mobil walks the ROW every 5 years and records the results on a form - "Inspection of Pipe Line Exposed to Atmospheric Corrosion". The report is passed to supervisory personnel and the areas listed are checked and evaluated. A decision is made whether to fill in the exposed areas or leave them alone. If not filled in Mobil makes any coating repairs needed and paints the exposed pipe orange and yellow so that the patrol pilot can see the area and check for erosion problems. Problems identified during the inspection were that Mobil could not find the exposed pipe reports for areas listed on the report and there is not a methods for tracking follow-up action on the areas. During the field portion of the inspection several

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exposed pipe areas were checked and no problems were found.

Field Portion

The ROW requires side-trimming at Possum Hollow Rd near MP 199