

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 8**

**Doniphan, MO**

**MP 472.57 - MP 437.74**

**December 20, 2005**

# Memorandum

**Date:** 4/6/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 8 (H8) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.

Metallurgical root cause failure analysis was performed on the ERW seam failure in this section that occurred on 12/19/05, located at MP - 441.4, and at a calculated failure pressure at the site of 1096 psig. Results of the analysis indicate the failure was caused by original factory/mill defects and damage during construction that failed after being tested to a higher pressure than the pipe had ever been subjected to before. No fatigue, selective corrosion, or other time dependant defects were observed.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
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# MOBIL PIPELINE COMPANY

647 Miles /20" Crude Line, Patoka, IL to Corsicana, TX

TestSection8 MP 472.57 - MP 437.74

**Date and Time:**

Dec 20, 2005, from 4:15 PM to 8:15PM. (Strength Test)

Dec 20/21, 2005, from 10:00 PM to Dec 21,2005 2:00 AM. (Leak Test)

**Facility Tested:**

The test section consisted of 34.83 miles of 20" x 0.312" W.T., X-42 ERW pipe

**Personnel Present:**

Conducted by: S.C. Hong - Test Engineer - BJ Process & Pipeline Services

Witnessed by: M.E. Marshall - Inspector - EMPCO Representative

**Procedure:**

On December 20, 2005, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by moving water from previously hydrotested sections. The test section was pressurized to approximately 500-psi with BJ's positive displacement pump at a rate of 15 psi/minute, and was allowed to stabilize for 15 minutes. The test manifold, pressure recorder, and deadweight tester were connected to the test section as shown in the attached sketch. The test manifold, pressure recorder, and the test section was pressurized at a rate of 10 psi / minute to 800 psi (approximately 80% of strength test pressure) by injecting water at MP 472.57 with a positive-displacement pump. Pressurization was halted for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 Psi/min to test pressure of 1024.5 Psi. The pressure stabilized at 4:15 PM, Dec 20, 2005 at 1021.5 psi.

**Conclusion:**

The strength test started at 4:15 PM on Dec 20, 2005 and was held for 4 hours starting at or above a pressure of 1021 psi. Over the duration of the strength test, there was a 0.50 psi pressure drop believed to be attributable to colder injection water stabilizing with the warmer test water temperature.

The leak test started at 10:00 PM on Dec 20, 2005 and was held for 4 hours starting at a pressure of 925.50 psi. Over the duration of the leak test, there was a 0.50 psi pressure drop, again being attributable to the colder injection water stabilizing with the warmer test water. At this point the leak test was deemed successful.

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful.

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Samuel C. Hong  
Testing  
Engineer  
BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 8 - Strength Test DATE 12/20/2005

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 8 MP 472.57 - MP 437.74SECTION LENGTH 34.83 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 472.57 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 472.57 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1021.5 psig TIME 4:15 PMINITIAL TEMPERATURE OF TEST SECT. 42 °F ELEV. AT POINT OF TEST 597 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1161.3 PSIG;ELEVATION 274 ft MSL; MP. 446.91 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 998.6 PSIG;ELEVATION 650 ft MSL; MP. 470.8 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1021 PSIG TIME 8:15 PMFINAL TEMPERATURE OF TEST SECT. 42 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °FINITIAL PRESSURE 78 % OF SMYS AT THE TEST SITE 76 % AT HIGH POINT 89 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1021 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 817 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test siteWERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN There was a previous test break at MP 441.2 which was replaced with new pipe.WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25601 ITT Barton 242E-50036TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-50036 ITT Barton 242E-44857REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R&ISNOTE: SEE DOT LIQUIDS MANUAL via teleconference

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 8 - Leak Test DATE 12/20,21/2005

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 8 MP 472.57 - MP 437.74SECTION LENGTH 34.83 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 472.57 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 472.57 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 925.5 psig TIME 10:00 PMINITIAL TEMPERATURE OF TEST SECT. 42 °F ELEV. AT POINT OF TEST 597 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1065.4 PSIG;ELEVATION 274 ft MSL; MP. 446.91 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 902.6 PSIG;ELEVATION 650 ft MSL; MP. 470.8 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 925 PSIG TIME 2:00 AMFINAL TEMPERATURE OF TEST SECT. 42 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60 °FINITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 925 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 817 PSIG. at test site BASED ON 80 % SMYSOR 80% of minimum test pressure of 1021 psig at the test site during the 4 hour strength testWERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE

HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25601 ITT Barton 242E-50036TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-50036 ITT Barton 242E-44857REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R & INOTE: SEE DOT LIQUIDS MANUAL via tele conference

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 12/20/2005	TO 12/20/05\
TEST NUMBER: Section 8			TIME: 4:15 PM 8:15 PM			
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 472.57 - MP 437.74						
Strength Test						
DEADWEIGHT TESTER NO. Chandler			25801			
PRESSURE RECORDER NO. ITT Barton			242E-50036			
TEMPERATURE RECORDER NO. ITT Barton			242E-44857			
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
04:15 PM	1021.5	31.5	42.0	N/A	N/A	Start 4 Hour Strength Test
04:30 PM	1021.5	31.5	42.0	"	"	
04:45 PM	1021.5	31.5	42.0	"	"	
05:00 PM	1021.5	31.5	42.0	"	"	
05:15 PM	1021.5	32.0	42.0	"	"	Pressure drop of 5 psig is likely due
05:30 PM	1021.5	32.0	42.0	"	"	to both trapped/compressed air
05:45 PM	1021.5	32.0	42.0	"	"	cooling off and temp. equalization
06:00 PM	1021.5	32.0	42.0	"	"	of colder injection water to warmer
06:15 PM	1021.5	32.0	42.0	"	"	test section water
06:30 PM	1021.0	31.5	42.0	"	"	
06:45 PM	1021.0	31.5	42.0	"	"	
07:00 PM	1021.0	31.5	42.0	"	"	
07:15 PM	1021.0	31.7	42.0	"	"	
07:30 PM	1021.0	32.0	42.0	"	"	
07:45 PM	1021.0	32.3	42.0	"	"	
08:00 PM	1021.0	32.3	42.0	"	"	
08:15 PM	1021.0	32.5	42.0	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 12/20/2005	TO 12/21/2005
TEST NUMBER: Section 8			TIME: 10:00 PM 2:00 AM			
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 472.57 - MP 437.74						
Leak Test						
DEADWEIGHT TESTER NO. Chandler			25801			
PRESSURE RECORDER NO. ITT Barton			242E-50036			
TEMPERATURE RECORDER NO. ITT Barton			242E-44857			
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
10:00 PM	925.5	32.0	41.9	N/A	N/A	Start 4 Hour Leak Test
10:15 PM	925.5	32.7	41.9	"	"	
10:30 PM	925.5	32.5	41.8	"	"	
10:45 PM	925.5	32.8	41.8	"	"	
11:00 PM	925.5	32.7	41.8	"	"	
11:15 PM	925.5	32.5	41.7	"	"	
11:30 PM	925.5	32.5	41.7	"	"	
11:45 PM	925.5	32.5	41.7	"	"	
12:00 AM	925.5	32.7	41.7	"	"	
12:15 AM	925.5	32.8	41.7	"	"	
12:30 AM	925.5	32.8	41.7	"	"	
12:45 AM	925.5	32.7	41.7	"	"	
01:00 AM	925.5	32.6	41.7	"	"	
01:15 AM	925.5	32.5	41.7	"	"	
01:30 AM	925.5	32.5	41.5	"	"	
01:45 AM	925.5	32.5	41.5	"	"	
02:00 AM	925.0	32.5	41.5	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 9**

**Strawberry, Arkansas**

**MP 410.29 - MP 437.74**

**January 10, 2006**

# Memorandum

**Date:** 4/6/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 9 (H9) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
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# MOBIL PIPE LINE COMPANY

647 Miles /20" Crude Line, Patoka, IL to Corsicana, TX

Test Section 9 MP410.29 -MP 437.74

**Date and Time:**

Jan 10, 2006, from 8:30 AM to 12:30 PM. (Strength Test)

Jan 10, 2006; from 1:45 PM to 5:45 PM. (Leak Test)

**Facility Tested:**

The test section consisted of 27.45 miles of 20" x 0.312" W.T., X-42 ERW pipe

**Personnel Present:**

Conducted by: S.C. Hong- Test Engineer - BJ Process & Pipeline Services

Witnessed by: D.E. Devore- Inspector - EMPCO Representative

**Procedure:**

On January 9, 2006, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by moving water from previously hydrotested sections. The test section was pressurized to approximately 700-psi with BJ's positive displacement pump at a rate of 15 psi / minute, and was allowed to stabilize overnight. The test manifold, pressure recorder; and deadweight tester were connected to the test section as shown in the attached sketch. The test manifold, pressure recorder, and test section was pressurized at a rate of 10 psi / minute to 925 psi (approximately 80% of strength test pressure) by injecting water at MP 410.29 with a positive-displacement pump. Pressurization was halted for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 psi/min to test pressure of 1165 psi. The pressure stabilized at 8:30 AM, January 10, 2006 to 1164 psi and the strength test commenced.

**Conclusion:**

The strength test started at 8:30 AM on Jan 10th, 2006 and was held 4-hours starting at a pressure of 1164 psi. Over the duration of the strength test, there was no pressure change. The leak test started at 1:45 PM on January 10th, 2006 and was held at a pressure of 1065psi. Over the duration of the test, there was no pressure change. At this point the leak test was deemed successful.

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful.

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Samuel C. Hong  
Testing Engineer  
BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 9 Strength Test DATE 1/10/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 9 MP 410.29 - MP 437.74SECTION LENGTH 27.45 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 410.29 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 410.29 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1164 psig TIME 8:30 AMINITIAL TEMPERATURE OF TEST SECT. 49.2 °F ELEV. AT POINT OF TEST 274 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1174.4 PSIG;ELEVATION 250 ft MSL; MP. 431.14 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 1101.6 PSIG;ELEVATION 418 ft MSL; MP. 424.85 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1164 PSIG TIME 12:30 PMFINAL TEMPERATURE OF TEST SECT. 49.2 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °FINITIAL PRESSURE 89 % OF SMYS AT THE TEST SITE 84 % AT HIGH POINT 90 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1164 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 931 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test siteWERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25601 ITT Barton 242E-47061TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-47061 ITT Barton 242E-41526REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman TITLE Risk & integrity Specialist EMPCoWITNESSED BY D. E. DeVore TITLE EMPLCo InspectorWITNESSED BY Chris Gorman TITLE R & I

NOTE: SEE DOT LIQUIDS MANUAL

via teleconference

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline Company  
 TESTING COMPANY NAME BJ Process & Pipeline Services  
 PRESSURE TEST NUMBER Test Section 9 Leak Test DATE 1/10/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TX

DESCRIPTION OF FACILITY TESTED Test Section 9 MP 410.29 - MP 437.74

SECTION LENGTH 27.45 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW

LOCATION OF TEST PRESSURE RECORDER CONNECTION MP 410.29 (See attached sketch)

LOCATION OF TEMPERATURE RECORDER BULB MP 410.29 (See attached sketch)

INITIAL PRESSURE AT POINT OF TEST 1065 psig TIME 1:45 PM

INITIAL TEMPERATURE OF TEST SECT. 49.2 °F ELEV. AT POINT OF TEST 274 ft MSL

INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A ft MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A ft MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

FINAL PRESSURE AT POINT OF TEST 1065 PSIG TIME 5:45 PM

FINAL TEMPERATURE OF TEST SECT. 49.2 °F

TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.

NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.

LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60 °F

INITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.

MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1065 PSIG

MAXIMUM ALLOWABLE OPERATING PRESSURE 931 PSIG. at test site BASED ON 80 % SMYS  
 OR 80% of minimum test pressure of 1164 psig at the test site during the 4 hour strength test

WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
 HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_

PRESSURE RECORDER MAKE AND SERIAL NO Chandler 25601 ITT Barton 242E-47061

TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-47061 ITT Barton 242E-41526

REMARKS: Tested in accordance with D O T CFR Title 49 Part 195 Subpart E

CONDUCTED BY Sam Hong TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman TITLE Risk & Integrity Specialist EMPCo

WITNESSED BY D. E. Devore TITLE EMPLCo Inspector

WITNESSED BY Chris Gorman TITLE R&I

NOTE: SEE DOT LIQUIDS MANUAL with field conference

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/10/2006	TO 1/10/2006
TEST NUMBER: Section 9				TIME:	8:30 AM	12:30 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 410.29 - MP 437.74						
<u>Strength Test</u>						
DEADWEIGHT TESTER NO. Chandler				25601		
PRESSURE RECORDER NO. ITT Barton				242E-47061		
TEMPERATURE RECORDER NO. ITT Barton				242E-41526		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
08:30 AM	1164.0	39.4	49.2	N/A	N/A	Start 4 Hour Strength Test
08:45 AM	1164.0	49.3	49.2	"	"	
09:00 AM	1164.0	39.7	49.2	"	"	
09:15 AM	1164.0	39.8	49.2	"	"	
09:30 AM	1164.0	39.8	49.2	"	"	
09:45 AM	1164.0	39.8	49.2	"	"	
10:00 AM	1164.0	40.0	49.2	"	"	
10:15 AM	1164.0	40.0	49.2	"	"	
10:30 AM	1164.0	40.0	49.2	"	"	
10:45 AM	1164.0	40.2	49.2	"	"	
11:00 AM	1164.0	40.3	49.2	"	"	
11:15 AM	1164.0	40.5	49.2	"	"	
11:30 AM	1164.0	40.8	49.2	"	"	
11:45 AM	1164.0	41.0	49.2	"	"	
12:00 PM	1164.0	41.9	49.2	"	"	
12:15 PM	1164.0	42.0	49.2	"	"	
12:30 PM	1164.0	42.1	49.2	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/10/2006	TO 1/10/2006
TEST NUMBER: Section 9				TIME:	1:45 PM	5:45 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 410.29 - MP 437.74						
<u>Leak Test</u>						
DEADWEIGHT TESTER NO. Chandler				25601		
PRESSURE RECORDER NO. ITT Barton				242E-47061		
TEMPERATURE RECORDER NO. ITT Barton				242E-41526		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
01:45 PM	1065.0	43.5	49.2	N/A	N/A	Start 4 Hour Leak Test
02:00 PM	1065.0	43.5	49.2	"	"	
02:15 PM	1065.0	44.6	49.2	"	"	
02:30 PM	1065.0	44.7	49.2	"	"	
02:45 PM	1065.0	44.8	49.2	"	"	
03:00 PM	1065.0	44.9	49.2	"	"	
03:15 PM	1065.0	44.9	49.2	"	"	
03:30 PM	1065.0	44.8	49.2	"	"	
03:45 PM	1065.0	44.5	49.2	"	"	
04:00 PM	1065.0	43.2	49.2	"	"	
04:15 PM	1065.0	42.9	49.2	"	"	
04:30 PM	1065.0	42.2	49.2	"	"	
04:45 PM	1065.0	41.6	49.2	"	"	
05:00 PM	1065.0	41.2	49.2	"	"	
05:15 PM	1065.0	40.5	49.2	"	"	
05:30 PM	1065.0	39.5	49.2	"	"	
05:45 PM	1065.0	39.2	49.2	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 10**

**Strawberry, Arkansas**

**MP 410.29 - MP 390.83**

**January 12, 2006**

# Memorandum

**Date:** 4/10/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 10 (H10) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
ExxonMobil Pipeline Company  
1604 South 15th St.  
Corsicana, TX 75110  
903-654-5323  
903-654-5302 fax  
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# MOBIL PIPE LINE COMPANY

647 Miles /20" Crude Line, Patoka, IL to Corsicana, TX

Test Section 10 MP 390.83 - MP 410.29

**Date and Time:**

Jan 11, 2006, from 6:30 AM to 10:30 PM. (Strength Test)

Jan 11/12, 2006, from 11:45 AM to 03:45 AM, (Leak Test)

**Facility Tested:**

The test section consisted of 19.46 miles of 20" x 0.312" w.t., X-42, ERW pipe

**Personnel Present:**

Conducted by: S.C. Hong - Test Engineer -BJ Process & Pipeline Services

Witnessed by: D.E. Devore- Inspector - EMPCO Representative

**Procedure:**

On January 9, 2006, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by moving water from previously hydrotested sections. The test section was pressurized to approximately 700-psi with BJ's positive-displacement pump at a rate of 15 psi/minute and was allowed to stabilize overnight. The test manifold, pressure recorder and dead weight tester were connected to the test section as shown in the attached sketch. The test manifold, pressure recorder, and the test section was pressurized at a rate of 10 psi/minute to 835 psi (approximately 80% of strength test pressure) by injecting water at MP 410.29 with a positive-displacement pump. Pressurization was halted for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 psi/min to test pressure of 1044.50 psi. The pressure stabilized at 6:30 AM, January 11, 06 to. 1044.50 psi.

**Conclusion:**

The strength test started at 6:30 PM on Jan 11th, 2006 and was held 4-hours starting at a pressure of 1044.50 psi. Over the duration of the strength test, there was 1.00-psi pressure drop. During this time, a 1.0 degree decrease in pipe wall temperature was also observed. The leak test started at 11:45 PM on January 11th, 2006 and was held at a pressure of 946 psi. Over the duration of the leak test, there was a pressure loss of 0.50 psi and during this period, an additional 1.0 degree in pipe wall temperature was also observed. At this point the leak test was deemed successful.

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful.

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Curtis Carter  
Testing Engineer  
BJ Process & Pipeline Services

*any test time  
being started  
at 11:45 PM  
and was held  
at 946 psi  
pressure from 12:45pm*

**CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST**

CARRIER NAME Mobil Pipeline Company

TESTING COMPANY NAME BJ Process & Pipeline Services

PRESSURE TEST NUMBER Test Section 10 Strength Test DATE 1/11/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TX

DESCRIPTION OF FACILITY TESTED Test Section 10 MP 410.29 - MP 390.83

SECTION LENGTH 19.46 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW

LOCATION OF TEST PRESSURE RECORDER CONNECT MP 410.29 (See attached sketch)

LOCATION OF TEMPERATURE RECORDER BULB MP 410.29 (See attached sketch)

INITIAL PRESSURE AT POINT OF TEST 1044.5 psig TIME 6:45 PM

INITIAL TEMPERATURE OF TEST SECT. 51.5 °F ELEV. AT POINT OF TEST 274 ft MSL

INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1063.6 PSIG;

ELEVATION 230 ft MSL; MP. 390.9 THE PRESSURE WAS  MEASURED  CALCULATED

INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 931.1 PSIG;

ELEVATION 536 ft MSL; MP. 401.13 THE PRESSURE WAS  MEASURED  CALCULATED

FINAL PRESSURE AT POINT OF TEST 1043.5 PSIG TIME 10:45 PM

FINAL TEMPERATURE OF TEST SECT. 50.5 °F

TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.

NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.

LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °F

INITIAL PRESSURE 80 % OF SMYS AT THE TEST SITE 71 % AT HIGH POINT 81 % AT LOW POINT.

MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1043.5 PSIG

MAXIMUM ALLOWABLE OPERATING PRESSURE 835 PSIG. at test site. BASED ON 80 % SMYS  
OR 80% of minimum test pressure at test site

WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_

PRESSURE RECORDER MAKE AND SERIAL N Chandler 25601 ITT Barton 242E-47061

TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-47061 ITT Barton 242E-50069

REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E

CONDUCTED BY Sam Hong TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman *Chris Gorman* TITLE Risk & Integrity Specialist, EMPCo

WITNESSED BY D. E. DeVore TITLE EMPCO Test Site Inspector

WITNESSED BY Chris Gorman *Chris Gorman* TITLE R&I S

NOTE: SEE DOT LIQUIDS MANUAL *in the reference manual*

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline Company  
 TESTING COMPANY NAME BJ Process & Pipeline Services  
 PRESSURE TEST NUMBER Test Section 10 Leak Test DATE 1/11/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka IL TO Corsicana TX

DESCRIPTION OF FACILITY TESTED Test Section 10 MP 410.29 - MP 390.33

SECTION LENGTH 19.46 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW

LOCATION OF TEST PRESSURE RECORDER CONNECTION MP 410.29 (See attached sketch)

LOCATION OF TEMPERATURE RECORDER BULB MP 410.29 (See attached sketch)

INITIAL PRESSURE AT POINT OF TEST 946 psig TIME 11:45 PM

INITIAL TEMPERATURE OF TEST SECT. 50.0 °F ELEV. AT POINT OF TEST N/A MSL

INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

FINAL PRESSURE AT POINT OF TEST 945.5 PSIG TIME 3:45 AM

FINAL TEMPERATURE OF TEST SECT. 49.0 °F

TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.

NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.

LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60 °F

INITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.

MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE)        PSIG

MAXIMUM ALLOWABLE OPERATING PRESSURE 835 PSIG. at test site BASED ON        % SMYS  
 OR 30% of minimum test pressure of 1043.5 psig at the test site during the 4 hour strength test

WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN       

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
 HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN       

PRESSURE RECORDER MAKE AND SERIAL NO Chandler 25601 ITT Barton 242E-47061

TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-47061 ITT Barton 242E-50069

REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E

CONDUCTED BY Sam Hong TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman Chris Gorman TITLE Risk & Integrity Specialist, EMPCo

WITNESSED BY D E DeVore TITLE EMPCO Test Site Inspector

WITNESSED BY Chris Gorman TITLE R&IS

NOTE: SEE DOT LIQUIDS MANUAL via tele conference

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/11/2006	TO 1/11/2006
TEST NUMBER: Section 10				TIME:	6:45 PM	10:45 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 410.29 - MP 390.83						
<u>Strength Test</u>						
DEADWEIGHT TESTER NO. Chandler				25601		
PRESSURE RECORDER NO. ITT Barton				242E-47061		
TEMPERATURE RECORDER NO. ITT Barton				242E-50069		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
06:45 PM	1044.5	45.1	51.5	N/A	N/A	Start 4 Hour Strength Test
07:00 PM	1044.5	44.9	51.5	"	"	
07:15 PM	1044.5	44.0	51.5	"	"	
07:30 PM	1044.0	43.0	51.5	"	"	
07:45 PM	1044.0	42.2	51.5	"	"	
08:00 PM	1044.0	42.2	51.5	"	"	
08:15 PM	1044.0	42.0	51.5	"	"	
08:30 PM	1043.5	41.0	51.5	"	"	
08:45 PM	1043.5	41.0	51.0	"	"	
09:00 PM	1043.5	41.5	51.0	"	"	
09:15 PM	1043.5	41.5	51.0	"	"	
09:30 PM	1043.5	41.5	50.8	"	"	
09:45 PM	1043.5	41.5	50.8	"	"	
10:00 PM	1043.5	41.5	50.5	"	"	
10:15 PM	1043.5	41.5	50.5	"	"	
10:30 PM	1043.5	41.5	50.5	"	"	
10:45 PM	1043.5	41.5	50.5	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/11/2006	TO 1/12/2006
TEST NUMBER: Section 10				TIME:	11:45 PM	3:45 AM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 410.29 - MP 390.83						
<u>Leak Test</u>						
DEADWEIGHT TESTER NO. Chandler				25601		
PRESSURE RECORDER NO. ITT Barton				242E-47061		
TEMPERATURE RECORDER NO. ITT Barton				242E-50069		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
11:45 PM	946.0	41.5	50.0	N/A	N/A	Start 4 Hour Leak Test
12:00 AM	945.5	41.5	50.0	"	"	
12:15 AM	945.5	40.0	50.0	"	"	
12:30 AM	945.5	39.0	50.0	"	"	
12:45 AM	945.5	39.0	49.5	"	"	
01:00 AM	945.5	38.5	49.5	"	"	
01:15 AM	945.5	38.0	49.5	"	"	
01:30 AM	945.5	38.0	49.0	"	"	
01:45 AM	945.5	36.0	49.0	"	"	
02:00 AM	945.5	36.0	49.0	"	"	
02:15 AM	945.5	36.0	49.0	"	"	
02:30 AM	945.5	36.0	49.5	"	"	
02:45 AM	945.5	36.0	49.5	"	"	
03:00 AM	945.5	35.5	49.0	"	"	
03:15 AM	945.5	35.5	49.0	"	"	
03:30 AM	945.5	36.0	49.0	"	"	
03:45 AM	945.5	36.0	49.0	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 11**

**Sunnydale, AR.**

**MP 368.42 - MP 390.83**

**January 17, 2006**

# Memorandum

**Date:** 4/14/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 11 (H11) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
ExxonMobil Pipeline Company  
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Corsicana, TX 75110  
903-654-5323  
903-654-5302 fax  
903-654-1324 cell

# MOBIL PIPE LINE COMPANY

647 Miles /20" Crude Line, Patoka, IL to Corsicana, TX

Test Section 11 . MP 368.42 - MP 390.83

**Date and Time:**

Jan 17; 2006, from 11:15 AM to 3: 15 PM. (Strength Test)

Jan 17, 2006, from 4:45 PM to 8:45 PM. (Leak Test)

**Facility Tested:**

The test section consisted of 22.41 miles of 20" x 0.312" W.T., X-42 ERW pipe

**Personnel Present:**

Conducted by: S.C. Hong - Test Engineer - BJ Process & Pipeline Services

Witnessed by: M.E. Marshall- Inspector – EMPCO Representative

**Procedure:**

On January 16, 2006, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by moving water from previously hydrotested sections. The test section was pressurized to approximately 700 psig with BJ's positive-displacement pump at a rate of 15 psi / minute, and was allowed to stabilize over night. The test manifold, pressure recorder, and deadweight tester were connected to the test section as shown in the attached sketch.

The test section was pressurized at a rate of 10 psi / minute to 925 psi (approximately 80% of strength test pressure) by injecting water at MP 368.42 with a positive-displacement pump. Pressurization was halted for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 psi/min to test pressure of 1162 psi. The pressure stabilized at 11:15 AM of January 17, 2006 at 1162.5 psi at the test point and the 4 hour strength test commenced.

**Conclusion:**

The strength test started at 11:15 AM on January 17th, 2006 and was held for 4 hours starting at a pressure of 1162.5 psi. Over the duration of the strength test, there was a pressure loss of 0.5 psi believed to be attributable to colder injection water from the frac tanks stabilizing with the warmer test water

The leak test started at 4:45 PM on January 17th, 2006 and was held for 4 hours starting at a pressure of 1066.5 psi. Over the duration of the leak test, there was no pressure change. At this point the leak test was deemed successful. .

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated. fluctuations caused by temperature changes. The tests were deemed successful

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Samuel C. Hong  
Testing Engineer  
BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 11 Strength Test DATE 1/17/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 11 MP 368.42 - MP 390.83SECTION LENGTH 22.41 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 368.42 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 368.42 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1162.5 psig TIME 11:15 AMINITIAL TEMPERATURE OF TEST SECT. 48.1 °F ELEV. AT POINT OF TEST 248 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1168.6 PSIG;ELEVATION 234 ft MSL; MP. 389.63 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 931.3 PSIG;ELEVATION 782 ft MSL; MP. 381.36 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1162 PSIG TIME 3:15 PMFINAL TEMPERATURE OF TEST SECT. 48.0 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60 ~~N/A~~ °FINITIAL PRESSURE 89 % OF SMYS AT THE TEST SITE 71 % AT HIGH POINT 89 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1162 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 930 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test siteWERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25602 ITT Barton 242E-47061TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-47061 ITT Barton 242E-46150REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman *Chris Gorman* TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R&ISNOTE: SEE DOT LIQUIDS MANUAL via teleconference

CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline Company

TESTING COMPANY NAME BJ Process & Pipeline Services

PRESSURE TEST NUMBER Test Section 11 Leak Test DATE 1/17/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TX

DESCRIPTION OF FACILITY TESTED Test Section 11 MP 368.42 - MP 390.83

SECTION LENGTH 22.41 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW

LOCATION OF TEST PRESSURE RECORDER CONNECTION MP 368.42 (See attached sketch)

LOCATION OF TEMPERATURE RECORDER BULB MP 368.42 (See attached sketch)

INITIAL PRESSURE AT POINT OF TEST 1066.5 psig TIME 4.45 PM

INITIAL TEMPERATURE OF TEST SECT. 48.0 °F ELEV. AT POINT OF TEST N/A MSL

INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS [ ] MEASURED [ ] CALCULATED

INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS [ ] MEASURED [ ] CALCULATED

FINAL PRESSURE AT POINT OF TEST 1066.5 PSIG TIME 8.45 PM

FINAL TEMPERATURE OF TEST SECT. 48.0 °F

TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.

NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.

LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60° N/A °F

INITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.

MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1066.5 PSIG

MAXIMUM ALLOWABLE OPERATING PRESSURE 930 PSIG. at test site BASED ON % SMYS OR 80% of minimum test pressure of 1162 psig at the test site during the 4 hour strength test.

WERE THERE ANY LEAKS? [ ] YES [X] NO; IF YES, EXPLAIN

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE HYDROSTATICALLY TESTED? [X] YES [ ] NO; IF NO, EXPLAIN

PRESSURE RECORDER MAKE AND SERIAL NO Chandier 25602 ITT Barton 242E-47061

TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-47061 ITT Barton 242E-46150

REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.

CONDUCTED BY Sam Hong

TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman

TITLE Risk & Integrity Specialist, EMPCo

WITNESSED BY Mark Marshall

TITLE EMPCO Test Site Inspector

WITNESSED BY Chris Gorman

TITLE R+IS

NOTE: SEE DOT LIQUIDS MANUAL

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET			DATE: FROM 1/17/2006 TO 1/17/2006			
TEST NUMBER: Section 11			TIME: 11:15 AM		3:15 PM	
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 368.42 - MP 390.83						
<u>Strength Test</u>						
DEADWEIGHT TESTER NO. Chandler			25602			
PRESSURE RECORDER NO. ITT Barton			242E-47061			
TEMPERATURE RECORDER NO. ITT Barton			242E-46150			
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
11:15 AM	1162.5	39.0	48.1	N/A	N/A	Start 4 Hour Strength Test
11:30 AM	1162.5	38.8	48.1	"	"	
11:45 AM	1162.5	38.8	48.1	"	"	
12:00 PM	1162.5	38.5	48.1	"	"	
12:15 PM	1162.5	38.0	48.1	"	"	
12:30 PM	1162.5	37.5	48.1	"	"	
12:45 PM	1162.5	36.8	48.1	"	"	
01:00 PM	1162.5	35.9	48.1	"	"	
01:15 PM	1162.5	35.0	48.1	"	"	
01:30 PM	1162.5	35.3	48.1	"	"	
01:45 PM	1162.5	35.9	48.1	"	"	
02:00 PM	1162.0	37.0	48.1	"	"	
02:15 PM	1162.0	39.6	48.0	"	"	
02:30 PM	1162.0	41.0	48.0	"	"	
02:45 PM	1162.0	41.9	48.0	"	"	
03:00 PM	1162.0	41.9	48.0	"	"	
03:15 PM	1162.0	42.0	48.0	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET			DATE: FROM 1/17/2006 TO 1/17/2006			
TEST NUMBER: Section 11			TIME: 4:45 PM		8:45 PM	
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 368.42 - MP 390.83						
<u>Leak Test</u>						
DEADWEIGHT TESTER NO. Chandler			25601			
PRESSURE RECORDER NO. ITT Barton			242E-47061			
TEMPERATURE RECORDER NO. ITT Barton			242E-46150			
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
04:45 PM	1066.5	41.0	48.0	N/A	N/A	Start 4 Hour Leak Test
05:00 PM	1066.5	40.8	48.0	"	"	
05:15 PM	1066.5	40.0	48.0	"	"	
05:30 PM	1066.5	39.5	48.0	"	"	
05:45 PM	1066.5	39.2	48.0	"	"	
06:00 PM	1066.5	39.0	48.0	"	"	
06:15 PM	1066.5	38.9	48.0	"	"	
06:30 PM	1066.5	38.5	48.0	"	"	
06:45 PM	1066.5	38.0	48.0	"	"	
07:00 PM	1066.5	37.0	48.0	"	"	
07:15 PM	1066.5	36.2	48.0	"	"	
07:30 PM	1066.5	36.0	48.0	"	"	
07:45 PM	1066.5	34.7	48.0	"	"	
08:00 PM	1066.5	33.7	48.0	"	"	
08:15 PM	1066.5	33.0	48.0	"	"	
08:30 PM	1066.5	33.0	48.0	"	"	
08:45 PM	1066.5	32.0	48.0	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 12**

**Sunnydale, AR.**

**MP 368.42 - MP 330.28**

**January 17, 2006**

# Memorandum

**Date:** 4/14/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 12 (H12) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
ExxonMobil Pipeline Company  
1604 South 15th St.  
Corsicana, TX 75110  
903-654-5323  
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# Mobil Pipe Line Company

## 647 Miles / 20" Crude Line, Patoka, IL to Corsicana, TX

### Date and Time:

January 17, 2006, from 9:00 AM to 1:00 PM. (Strength test)

January 17, 2006, from 2:00 PM to 6:00 PM. (Leak test)

### Facility Tested:

The test section consisted of 38.30 miles of 20" x 0.312" w.t., X-42 ERW pipe

### Personnel Present:

Conducted by: C. J. Carter - Test Engineer - BJ Process & Pipeline Services

Witnessed by: M.E. Marshall - Inspector - EMPCO Representative

### Procedure:

The morning of Tuesday, January 16, 2006, the piping was filled with water by moving water from previously hydrotested sections into this test section and the trapped air was bled through 2" valves. The test section was pressurized to approximately 700 psig with BJ's positive-displacement pump at a rate of 15 psi / minute. The pumping was then halted and the test section pressure was then allowed to stabilize for 30 min. The test manifold, pressure recorder, and deadweight tester were connected to the test section as shown in the attached sketch. The pipe test section was held at 697 psig overnight prior to the test strength test.

January 17, 2006, the test section was then pressurized at a rate of 10 psi / minute to 925 psi (approximately 80% of strength test pressure) by injecting water at MP 368.42 with BJ's positive displacement pump. Pressurization was halted for 20 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 Psi/min to the final test pressure of 1161 psi. The pressure stabilized at 1161 psi at 9:00 AM on January 17, 2006 and the 4 hour strength test commenced.

### Conclusion:

The strength test started at 9:00AM on January 17, 2006 and was held for 4 hours starting at a pressure of 1161 psig. Over the duration of the strength test, there was no pressure loss, with a final pressure of 1161 psig. The pipeline pressure was then bled down to 1064 psig for the leak test phase. The leak test started at 2:00 PM on January 17th, 2006 and was held for 4 hours starting at a pressure of 1064 psig. Over the duration of the leak test, there was no pressure drop with a final pressure of 1064psig. At this point the leak test was deemed successful.

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful. Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Curtis J. Carter -Testing Engineer

BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 12 Strength Test DATE 1/17/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 12 MP 368.42 - MP 330.28SECTION LENGTH 38.3 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 368.42 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 368.42 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1161 psig TIME 9:00 AMINITIAL TEMPERATURE OF TEST SECT. 49.0 °F ELEV. AT POINT OF TEST 248 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1173.1 PSIG;ELEVATION 220 ft MSL; MP. 367.95 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 930.6 PSIG;ELEVATION 780 ft MSL; MP. 352.51 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1161 PSIG TIME 1:00 PMFINAL TEMPERATURE OF TEST SECT. 49.0 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. NA °FINITIAL PRESSURE 89 % OF SMYS AT THE TEST SITE 71 % AT HIGH POINT 90 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1161 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 929 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test site.WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25602 ITT Barton 242E-51492TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-51492 ITT Barton 242E-50069REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman *Chris Gorman* TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY D. E. DeVore TITLE EMPCO Inspector

NOTE: SEE DOT LIQUIDS MANUAL

*Chris Gorman - vice to location for R&IS*

**CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST**

CARRIER NAME Mobil Pipeline Company

TESTING COMPANY NAME BJ Process & Pipeline Services

PRESSURE TEST NUMBER Test Section 12 Leak Test DATE 1/17/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TX

DESCRIPTION OF FACILITY TESTED Test Section 12 MP 368.42 - MP 330.28

SECTION LENGTH 38.3 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW

LOCATION OF TEST PRESSURE RECORDER CONNECTION MP 368.42 (See attached sketch)

LOCATION OF TEMPERATURE RECORDER BULB MP 368.42 (See attached sketch)

INITIAL PRESSURE AT POINT OF TEST 1064 psig TIME 2:00 PM

INITIAL TEMPERATURE OF TEST SECT. 49.0 °F ELEV. AT POINT OF TEST N/A MSL

INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;

ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED

FINAL PRESSURE AT POINT OF TEST 1064 PSIG TIME 6:00 PM

FINAL TEMPERATURE OF TEST SECT. 49.0 °F

TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.

NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.

LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. 60 °F

INITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.

MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1064 PSIG

MAXIMUM ALLOWABLE OPERATING PRESSURE 929 PSIG. at test site BASED ON - % SMYS  
OR 80% of minimum test pressure of 1161 psig at the test site during the 4 hour strength test.

WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_

PRESSURE RECORDER MAKE AND SERIAL NO Chandler 25602 ITT Barton 242E-51492

TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-51492 ITT Barton 242E-50069

REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.

CONDUCTED BY Sam Hong TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman *Chris Gorman* TITLE Risk & Integrity Specialist, EMPCo

WITNESSED BY Mark Marshall TITLE EMPCO Test Site Inspector

WITNESSED BY D. E. DeVore TITLE EMPCO Inspector

NOTE: SEE DOT LIQUIDS MANUAL *Chris Gorman - via tele.com finance R+I*

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/17/2006	TO 1/17/2006
TEST NUMBER: Section 12				TIME:	9:00 AM	1:00 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 368.42 - MP 330.28						
Strength Test						
DEADWEIGHT TESTER NO. Chandler				25602		
PRESSURE RECORDER NO. ITT Barton				242E-51492		
TEMPERATURE RECORDER NO. ITT Barton				242E-50069		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
09:00 AM	1161.0	38.5	49.0	N/A	N/A	Start 4 Hour Strength Test
09:15 AM	1161.0	39.0	49.0	"	"	
09:30 AM	1161.0	38.5	49.0	"	"	
09:45 AM	1161.0	38.5	49.0	"	"	
10:00 AM	1161.0	39.0	49.0	"	"	
10:15 AM	1161.0	39.0	49.0	"	"	
10:30 AM	1161.0	39.3	49.0	"	"	
10:45 AM	1161.0	40.0	49.0	"	"	
11:00 AM	1161.0	39.3	49.0	"	"	
11:15 AM	1161.0	39.3	49.0	"	"	
11:30 AM	1161.0	39.3	49.0	"	"	
11:45 AM	1161.0	39.0	49.0	"	"	
12:00 PM	1161.0	38.0	49.0	"	"	
12:15 PM	1161.0	37.5	49.0	"	"	
12:30 PM	1161.0	37.0	49.0	"	"	
12:45 PM	1161.0	36.0	49.0	"	"	
01:00 PM	1161.0	35.0	49.0	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/17/2006	TO 1/17/2006
TEST NUMBER: Section 12				TIME:	2:00 PM	6:00 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 368.42 - MP 330.28						
Leak Test						
DEADWEIGHT TESTER NO. Chandler				25602		
PRESSURE RECORDER NO. ITT Barton				242E-51492		
TEMPERATURE RECORDER NO. ITT Barton				242E-50069		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
02:00 PM	1064.0	41.5	49.0	N/A	N/A	Start 4 Hour Leak Test
02:15 PM	1064.0	42.5	49.0	"	"	
02:30 PM	1064.0	42.0	49.0	"	"	
02:45 PM	1064.0	42.0	49.0	"	"	
03:00 PM	1064.0	42.0	49.0	"	"	
03:15 PM	1064.0	42.0	49.0	"	"	
03:30 PM	1064.0	42.0	49.0	"	"	
03:45 PM	1064.0	41.5	49.0	"	"	
04:00 PM	1064.0	41.5	49.0	"	"	
04:15 PM	1064.0	41.0	49.0	"	"	
04:30 PM	1064.0	40.7	49.0	"	"	
04:45 PM	1064.0	40.5	49.0	"	"	
05:00 PM	1064.0	40.0	49.0	"	"	
05:15 PM	1064.0	39.0	49.0	"	"	
05:30 PM	1064.0	39.5	49.0	"	"	
05:45 PM	1064.0	38.0	49.0	"	"	
06:00 PM	1064.0	37.5	49.0	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 13**

**Conway, AR.**

**MP 312.64 - MP 330.12**

**January 24, 2006**

# Memorandum

**Date:** 4/14/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 13 (H13) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
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# MOBIL PIPE LINE COMPANY

647 Miles /20"Crude Line, Patoka, IL to Corsicana, TX

Test Section 13 MP 312.64 - MP 330.12

**Date and Time:**

January 24, 2006, from 9:15 AM to 1:30 PM. (Strength Test)

January 24, 2006, from 2:15 PM to 6:30 PM; (Leak Test)

**Facility Tested:**

The test section consisted of 17.47 miles of 20" x 0.312" w.t., X-42 ERW pipe.

**Personnel Present:**

Conducted by: Curtis Carter - Test Engineer- BJ Process & Pipeline Services

Witnessed by: M.E. Marshall - Inspector - EMPCO Representative

**Procedure:**

On January 23, 2006, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by transferring water from previously hydrotested sections. The test section was pressurized to approximately 700 psig with BJ's positive-displacement pump at a rate of 15 psi/minute, and was allowed to stabilize over night. The test manifold, pressure recorder, and deadweight tester were connected to the test section as shown in the attached sketch.

The test section was pressurized at a rate of 10 psi/minute to 871 psi (approximately 80% of strength test pressure) by injecting water at MP 312.65 with a positive-displacement pump. Pressurization was suspended for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 psi/min to test pressure of 1091 psi. The pressure stabilized at 9:15 AM on January 24, 2006 at 1091 psi at the test point and the 4 hour strength test commenced.

**Conclusion:**

The strength test started at 9:15 AM on January 24th, 2006 and was held for 4 hours starting at a pressure of 1091 psi. Over the duration of the strength test, there was no pressure change.

The leak test started at 2:15 PM on January 24th, 2006 and was held for 4 hours starting at a pressure of 989 psi. Over the duration of the leak test, there was no pressure change. At this point the leak test was deemed successful'

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Curtis Carter

Testing Engineer

BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 13 Strength Test DATE 1/24/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 13 MP 312.64 - MP 330.12SECTION LENGTH 17.48 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 312.64 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 312.64 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1091 psig TIME 9:15 AMINITIAL TEMPERATURE OF TEST SECT. 49.0 °F ELEV. AT POINT OF TEST 270 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1097.9 PSIG;ELEVATION 254 ft MSL; MP. 319.15 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 1041.2 PSIG;ELEVATION 385 ft MSL; MP. 330.12 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1091 PSIG TIME 1:15 PMFINAL TEMPERATURE OF TEST SECT. 49.0 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °FINITIAL PRESSURE 83 % OF SMYS AT THE TEST SITE 79 % AT HIGH POINT 84 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1091 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 873 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test site.WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 12403 ITT Barton 242E-51492TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-51492 ITT Barton 242E-44857REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R+ISNOTE: SEE DOT LIQUIDS MANUAL U.S. Federal Government

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 13 Leak Test DATE 1/24/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TXDESCRIPTION OF FACILITY TESTED Test Section 13 MP 312.64 - MP 330.12SECTION LENGTH 17.48 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECTION MP 312.64 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 312.64 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 989 psig TIME 2:15 PMINITIAL TEMPERATURE OF TEST SECT. 49.5 °F ELEV. AT POINT OF TEST N/A MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 989 PSIG TIME \_\_\_\_\_FINAL TEMPERATURE OF TEST SECT. 49.0 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °FINITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 989 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 873 PSIG. at test site BASED ON \_\_\_\_\_ % SMYS  
OR 80% of minimum test pressure of 1091 psig at the test site during the 4 hour strength test.WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL NO Chandler 12403 ITT Barton 242E-51492TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-51492 ITT Barton 242E-44857REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R+INOTE: SEE DOT LIQUIDS MANUAL in table conference.

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/24/2006	TO 1/24/2006
TEST NUMBER: Section 13				TIME:	9 15 AM	1:15 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 312.64 - MP 330.12						
Strength Test						
DEADWEIGHT TESTER NO. Chandler				12403		
PRESSURE RECORDER NO. ITT Barton				242E-51492		
TEMPERATURE RECORDER NO. ITT Barton				242E-44857		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
9:15 AM	1091.0	35.0	49.0	N/A	N/A	Start 4 Hour Strength Test
9:30 AM	1091.0	36.0	49.0	"	"	
9:45 AM	1091.0	38.0	49.0	"	"	
10:00 AM	1091.0	39.0	49.0	"	"	
10:15 AM	1091.0	41.0	49.0	"	"	
10:30 AM	1091.0	42.0	49.0	"	"	
10:45 AM	1091.0	43.5	49.0	"	"	
11:00 AM	1091.0	43.5	49.0	"	"	
11:15 AM	1091.0	47.0	49.0	"	"	
11:30 AM	1091.0	49.5	49.0	"	"	
11:45 AM	1091.0	50.5	49.0	"	"	
12:00 PM	1091.0	51.5	49.0	"	"	
12:15 PM	1091.0	52.5	49.0	"	"	
12:30 PM	1091.0	54.0	49.0	"	"	
12:45 PM	1091.0	54.0	49.0	"	"	
1:00 PM	1091.0	55.0	49.0	"	"	
1:15 PM	1091.0	56.0	49.0	"	"	End 4 Hour Strength Test

MOBIL PIPE LINE COMPANY						
HYDROSTATIC PRESSURE TEST DATA SHEET				DATE:	FROM 1/24/2006	TO 1/24/2006
TEST NUMBER: Section 13				TIME:	2:15 PM	6:15 PM
DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX						
MP 312.64 - MP 330.12						
Leak Test						
DEADWEIGHT TESTER NO. Chandler				12403		
PRESSURE RECORDER NO. ITT Barton				242E-51492		
TEMPERATURE RECORDER NO. ITT Barton				242E-44857		
TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
2:15 PM	989.0	58.0	49.5	N/A	N/A	Start 4 Hour Leak Test
2:30 PM	989.0	60.0	49.5	"	"	
2:45 PM	989.0	66.0	49.5	"	"	
3:00 PM	989.0	63.0	49.5	"	"	
3:15 PM	989.0	63.0	49.5	"	"	
3:30 PM	989.0	63.0	49.5	"	"	
3:45 PM	989.0	71.0	49.5	"	"	
4:00 PM	989.0	71.5	49.5	"	"	
4:15 PM	989.0	70.5	49.5	"	"	
4:30 PM	989.0	66.0	49.5	"	"	
4:45 PM	989.0	63.0	49.5	"	"	
5:00 PM	989.0	61.5	49.0	"	"	
5:15 PM	989.0	60.0	49.0	"	"	
5:30 PM	989.0	58.0	49.0	"	"	
5:45 PM	989.0	55.0	49.0	"	"	
6:00 PM	989.0	52.5	49.0	"	"	
6:15 PM	989.0	49.5	49.0	"	"	End 4 Hour Leak Test

***MOBIL PIPE LINE COMPANY***

**HYDROSTATIC PRESSURE TEST**

**647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX**

**Test Section 14**

**Conway, AR.**

**MP 312.64 - MP 299.41**

**January 24, 2006**

# Memorandum

**Date:** 4/14/06

**Subject:** Hydrotest Review & Endorsement

**To:** <Hydrotest Report and HCA  
Baseline Assessment File>

**cc:** <>

**From:** <Chris Gorman>

I've completed the review of the hydrostatic test report for Test Section - 14 (H14) for the Corsicana to Patoka Crude Line. It is consistent with my knowledge of the testing operations and facility and confirms we had a good test. The hydrotest and report documentation are accurate and thorough and will satisfy our needs for Data Integration, Risk & Threat Analysis, and Preventive & Mitigative Measures Analysis needed to comply with the HCA regulations and the testing requirements of DOT CFR Title 49, Part 195, Subpart E.



Chris D. Gorman  
Pipeline Risk & Integrity Specialist  
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903-654-1324 cell

# MOBIL PIPE LINE COMPANY

647 Miles /20" Crude Line, Patoka, IL to Corsicana, TX

Test Section 14 MP 312.64 – 299.41

**Date and Time:**

January 24, 2006, from 7:00 AM to 11:15 AM. (Strength Test)

January 24, 2006, from 12:15 PM to 4:30 PM. (Leak Test)

**Facility Tested:**

The test section consisted of 13.25 miles of 20" x 0.312" w.t., x-42 ERW pipe

**Personnel Present:**

Conducted by: Curtis Carter - Test Engineer - BJ Process & Pipeline Services

Witnessed by: M.E. Marshall - Inspector - EMPCO Representative

**Procedure:**

On January 23, 2006, the piping was filled with water and the air was allowed to bleed through 2" valves. The test section was filled with water by moving water from previously hydrotested sections. The test section was pressurized to approximately 700 psig with BJ's positive-displacement pump at a rate of 15 psi/minute, and was allowed to stabilize over night. The test manifold, pressure recorder, and deadweight tester were connected to the test section as shown in the attached sketch.

The test section was pressurized at a rate of 10 psi/minute to 886 psi (approximately 80% of strength test pressure) by injecting water at MP 312.64 with a positive-displacement pump. Pressurization was halted for 15 minutes to allow for stabilization and to check for leaks. The test section was then pressurized at a rate of 5 psi/min to test pressure of 1109 psi. The pressure stabilized at 7:15 AM on January 24, 2006 at 1108.5 psi at the test point and the four hour strength commenced.

**Conclusion:**

The strength test started at 7:15 AM on January 24th, 2006 and was held for 4 hours starting at a pressure of 1108.5 psi. Over the duration of the strength test, the pressure decreased 0.5 psi.

The leak test started at 12:15 PM on January 24th, 2006 and was held for 4 hours starting at a pressure of 1008 psi. Over the duration of the leak test, there was no pressure change. At this point the leak test was deemed successful.

The pressure trends over the duration of the leak test are within the accuracy of the instrumentation or within calculated fluctuations caused by temperature changes. The tests were deemed successful.

Therefore, in my judgment, this constitutes a valid pressure test meeting the requirements of the Department of Transportation Code of Federal Regulations Title 49, Part 195 Subpart E.

Curtis Carter  
Testing Engineer  
BJ Process & Pipeline Services

## CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST

CARRIER NAME Mobil Pipeline CompanyTESTING COMPANY NAME BJ Process & Pipeline ServicesPRESSURE TEST NUMBER Test Section 14 Strength Test DATE 1/24/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana TXDESCRIPTION OF FACILITY TESTED Test Section 14 MP 312.64 - MP 299.41SECTION LENGTH 13.25 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERWLOCATION OF TEST PRESSURE RECORDER CONNECT MP 312.64 (See attached sketch)LOCATION OF TEMPERATURE RECORDER BULB MP 312.64 (See attached sketch)INITIAL PRESSURE AT POINT OF TEST 1108.5 psig TIME 7:15 AMINITIAL TEMPERATURE OF TEST SECT. 50.0 °F ELEV. AT POINT OF TEST 270 ft MSLINITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION 1125.0 PSIG;ELEVATION 232 ft MSL; MP. 311.65 THE PRESSURE WAS  MEASURED  CALCULATEDINITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION 987.3 PSIG;ELEVATION 550 ft MSL; MP. 305.5 THE PRESSURE WAS  MEASURED  CALCULATEDFINAL PRESSURE AT POINT OF TEST 1108 PSIG TIME 11:15 AMFINAL TEMPERATURE OF TEST SECT. 49.5 °FTOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.NET CHANGE IN VOLUME OF THE TEST SECT N/A GAL.LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °FINITIAL PRESSURE 85 % OF SMYS AT THE TEST SITE 75 % AT HIGH POINT 86 % AT LOW POINT.MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1108 PSIGMAXIMUM ALLOWABLE OPERATING PRESSURE 886 PSIG. at test site. BASED ON - % SMYS  
OR 80% of minimum test pressure at test site.WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE  
HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_PRESSURE RECORDER MAKE AND SERIAL N Chandler 25602 ITT Barton 242E-47061TEMPERATURE RECORDER MAKE AND SERIAL N ITT Barton 242E-47061 ITT Barton 242E-46150REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.CONDUCTED BY Sam Hong TITLE BJ PPS Test EngineerCERTIFIED BY Chris Gorman Chris Gorman TITLE Risk & Integrity Specialist, EMPCoWITNESSED BY Mark Marshall TITLE EMPCO Test Site InspectorWITNESSED BY Chris Gorman TITLE R+ISNOTE: SEE DOT LIQUIDS MANUAL via teleconference

**CERTIFICATION OF PIPE LINE HYDROSTATIC PRESSURE TEST**

CARRIER NAME Mobil Pipeline Company  
 TESTING COMPANY NAME BJ Process & Pipeline Services  
 PRESSURE TEST NUMBER Test Section 14 Leak Test DATE 1/24/2006

THIS IS TO CERTIFY THAT THE PIPE LINE OR PIPELINE SECTION DESCRIBED BELOW WAS HYDROSTATICALLY PRESSURE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

PIPE LINE 20" Crude FROM Patoka, IL TO Corsicana, TX  
 DESCRIPTION OF FACILITY TESTED Test Section 14 MP 312.64 - MP 299.41  
 SECTION LENGTH 13.25 miles PIPE O.D. 20" WALL THICKNESS 0.312" GR. X-42 TYPE ERW  
 LOCATION OF TEST PRESSURE RECORDER CONNECTION MP 312.64 (See attached sketch)  
 LOCATION OF TEMPERATURE RECORDER BULB MP 312.64 (See attached sketch)  
 INITIAL PRESSURE AT POINT OF TEST 1008 psig TIME 12:15 PM  
 INITIAL TEMPERATURE OF TEST SECT. 49.5 °F ELEV. AT POINT OF TEST N/A MSL  
 INITIAL PRESSURE AT LOWEST ELEVATION POINT IN SECTION N/A PSIG;  
 ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED  
 INITIAL PRESSURE AT HIGHEST ELEVATION POINT IN SECTION N/A PSIG;  
 ELEVATION N/A MSL; MP. N/A THE PRESSURE WAS  MEASURED  CALCULATED  
 FINAL PRESSURE AT POINT OF TEST \_\_\_\_\_ PSIG TIME \_\_\_\_\_  
 FINAL TEMPERATURE OF TEST SECT. \_\_\_\_\_ °F  
 TOTAL FLUID INJ. N/A GAL. TOTAL FLUID WITHDRAWN N/A GAL.  
 NET CHANGE IN VOLUME OF THE TEST SECT. N/A GAL.  
 LENGTH OF TEST 4 HRS. 0 MIN; TESTING FLUID Water SPEC GVTY. 1.00 TEMP. N/A °F  
 INITIAL PRESSURE N/A % OF SMYS AT THE TEST SITE N/A % AT HIGH POINT N/A % AT LOW POINT.  
 MINIMUM TEST PRESSURE DURING A SELECTED 4 HOUR PERIOD (TEST PRESSURE) 1008 PSIG  
 MAXIMUM ALLOWABLE OPERATING PRESSURE 886 PSIG. at test site BASED ON - % SMYS  
 OR 80% of minimum test pressure of 1108 psig at the test site during the 4 hour strength test

WERE THERE ANY LEAKS?  YES  NO; IF YES, EXPLAIN \_\_\_\_\_

WAS EVERY COMPONENT THAT WILL BE SUBJECTED TO THE SYSTEM WORKING PRESSURE HYDROSTATICALLY TESTED?  YES  NO; IF NO, EXPLAIN \_\_\_\_\_

PRESSURE RECORDER MAKE AND SERIAL NO. Chandler 25602 ITT Barton 242E-47061

TEMPERATURE RECORDER MAKE AND SERIAL NO. ITT Barton 242E-47061 ITT Barton 242E-46150

REMARKS: Tested in accordance with D.O.T. CFR Title 49 Part 195 Subpart E.

CONDUCTED BY Sam Hong

TITLE BJ PPS Test Engineer

CERTIFIED BY Chris Gorman *Chris Gorman*

TITLE Risk & Integrity Specialist, EMPCo

WITNESSED BY Mark Marshall

TITLE EMPCO Test Site Inspector

WITNESSED BY Chris Gorman *Chris Gorman*

TITLE R&IS

NOTE: SEE DOT LIQUIDS MANUAL via teleconference

**MOBIL PIPE LINE COMPANY**

HYDROSTATIC PRESSURE TEST DATA SHEET

DATE 1/24/06 FROM 1/24/06 TO 1/24/06

TEST NUMBER Section 14 TIME 7 15 AM 11 15 AM

DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX  
MP 312 64 - MP 299 4  
Strength Test

DEADWEIGHT TESTER NO Chandler 25602  
PRESSURE RECORDER NO ITT Barton 242E-47061  
TEMPERATURE RECORDER NO ITT Barton 242E-46150

TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
7 15 AM	1108.5	27.0	50.0	N/A	N/A	Start 4 Hour Strength Test
7 25 AM	1108.5	27.0	50.0	"	"	
7 30 AM	1108.5	27.0	50.0	"	"	
7 45 AM	1108.5	28.0	50.0	"	"	
8 00 AM	1108.5	28.0	50.0	"	"	
8 15 AM	1108.5	30.0	50.0	"	"	
8 30 AM	1108.5	31.0	49.5	"	"	Lower pipe temperature believed to
8 45 AM	1108.5	32.0	49.5	"	"	be the result of injection water used
9 00 AM	1108.5	33.0	49.5	"	"	to pressure the pipeline from frac tanks
9 15 AM	1108.5	34.0	49.5	"	"	being at a much lower temperature
9 30 AM	1108.5	36.0	49.5	"	"	than the pipeline test water temperature
9 45 AM	1108.5	37.5	49.5	"	"	
10 00 AM	1108.5	39.0	49.5	"	"	
10 15 AM	1108.0	42.0	49.5	"	"	
10 30 AM	1108.0	42.0	49.5	"	"	
10 45 AM	1108.0	43.5	49.5	"	"	
11 00 AM	1108.0	45.0	49.5	"	"	
11 15 AM	1108.0	47.5	49.5	"	"	End 4 Hour Strength Test

**MOBIL PIPE LINE COMPANY**

HYDROSTATIC PRESSURE TEST DATA SHEET

DATE 1/24/06 FROM 1/24/06 TO 1/24/06

TEST NUMBER Section 14 TIME 12 15 PM 4 30 PM

DESCRIPTION: 647 Miles / 20" Crude Pipe Line, Patoka, IL to Corsicana, TX  
MP 312 64 - MP 299 4  
Leak Test

DEADWEIGHT TESTER NO Chandler 25602  
PRESSURE RECORDER NO ITT Barton 242E-47061  
TEMPERATURE RECORDER NO ITT Barton 242E-46150

TIME	PRESSURE (PSIG)	AMBIENT TEMP (°F)	PIPE TEMP (°F)	GALLONS INJECTED (GAL)	GALLONS BLED OFF (GAL)	COMMENTS
12 15 PM	1008.0	52.0	49.5	N/A	N/A	Start 4 Hour Leak Test
12 20 PM	1008.0	53.0	49.5	"	"	
12 30 PM	1008.0	54.5	49.5	"	"	
12 45 PM	1008.0	54.5	49.5	"	"	
1 00 PM	1008.0	55.5	49.5	"	"	
1 15 PM	1008.0	56.0	49.5	"	"	
1 30 PM	1008.0	56.5	49.5	"	"	
1 45 PM	1008.0	57.0	49.5	"	"	
2 00 PM	1008.0	57.5	49.5	"	"	
2 15 PM	1008.0	58.0	49.5	"	"	
2 30 PM	1008.0	58.5	49.5	"	"	
2 45 PM	1008.0	58.5	49.5	"	"	
3 00 PM	1008.0	59.0	49.5	"	"	
3 15 PM	1008.0	59.5	49.5	"	"	
3 30 PM	1008.0	60.0	49.5	"	"	
3 45 PM	1008.0	60.0	49.0	"	"	
4 00 PM	1008.0	60.0	49.0	"	"	
4 15 PM	1008.0	60.0	49.0	"	"	
4 30 PM	1008.0	60.0	49.0	"	"	End 4 Hour Leak Test