



PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER)

Feeder Main Number, Line Number, or Station Name L-105N	Area	Division/District	Job Number 41449662-T11	Date Job Authorized
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Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts
 Test 1 Tie-in pieces, hydrostatic test piping & existing 24" L-105N. Existing pipeline material listed; pipe & elbows are from the "Material of Record"
 (refer to DWG 41449622-T11, Sheet 5 of 5)

Hydrotest L-105N from [Redacted] (Test section 11)

Location Class 3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 500 PSIG	Future Design Pressure 500 PSIG
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation 37 Ft.	Static Head Calculation	
	Min. Elevation 19 Ft.	For Water	0.433 X Elev. Diff. = 7.8 PSIG
	Elev. Diff. 18 Ft.	Other (Specify)	X Elev. Diff. = PSIG

Size		API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)	Footage to Be Tested	Pipe Spec. and Footage Verified In Field	% of SMYS			Pressure to Give 90% SMYS
O.D.	W.T.				At MAOP	At Min. Test Press.	At Max. Test Press.	
24.00	.375	API 5L, GR X60, DSAW (item#106)	55'	A 55'	26.67	40.00	45.33	1688
24.00	.375	Pipe, GR X-52, DSAW (item #5)	4591'	4591' MOR	30.77	46.15	52.31	1463
24.00	.250	Pipe, GR X-52, DSAW (item #6)	15'	A 33.42' MOR	46.15	69.23	78.46	975
24.00	.375	Ell, Forged, Y-52, 90° (item#1)	3 ea	3 ea MOR	26.67	40.00	45.33	1688
24.00	.375	Ell, Forged, Y-52, 45° (item#3)	2 ea	2 ea MOR	30.77	46.15	52.31	1463

Minimum Test Pressure @ Max. Elevation	750 PSIG	Test Fluid To Be Used WATER	MINIMUM TEST DURATION - UNDER 30% SMYS (1 HR. MINIMUM) - 30% SMYS & OVER (8 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	8 HOURS
Maximum Test Pressure @ Min. Elevation	850 PSIG			

Prepared By: *Mark Cabral* Date: **05/10/11** For Information or Changes, Call: **Redacted** Approved By: **Redacted** Date: **5/19/11**

PART II - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Note: Minimum test pressure and duration are not to be changed without written approval.

Time and Date Test Pressure Reached	8:50 am 6/5/11	Elevation at Test Point	20 FT	Min. Required Test Press. At Test Point (1)	758 PSIG	Max. Allowable Test Press at Test Point (4)	849 PSIG
Time and Date Test Ended	5:05 pm 6/5/11	Max. Elevation in Test Section	37 FT	Min. Indicated Test Pressure (2)	780 PSIG	Max. Indicated Test Pressure (5)	833 PSIG
Actual Duration of Test	8 hr 15 min	Min. Elevation in Test Section	19 FT	Min. Test Pressure at Max. Elevation (3)	773 PSIG	Max. Test Pressure at Min. Elevation (6)	833.43 PSIG

Test Fluid Used: **Water** Pipe Specification and Footage Verified (See Part I): **A TRESPANDO**

Make, Range, and Serial No. of Pressure Recording Gauge Barton 0-1000 PSI 242E-39612	Date Last Calibrated 4/4/11	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) Chandler 50-5000 PSI 2-001 21495	Date Last Calibrated 10-26-10
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Test Supervised By: **Redacted** Date: **5-4-11** A **Redacted** Date: **5-1-11**

PUT SCHEMATIC PIPING SKETCH ON BACK OF THIS SHEET
 SHOW LOCATION OF FACILITY TESTED, MINIMUM AND MAXIMUM ELEVATION IN FEET, MILE POINTS, VALVE NUMBERS AND INCORPORATED AREAS. USE AN ADDITIONAL SHEET IF NECESSARY (SHOW REFERENCE NUMBERS ON FACE OF ALL DRAWINGS AND ATTACHMENTS). FOR STATION PIPING, FABRICATED UNITS AND SHORT SECTIONS OF PIPE, ALSO SHOW A DETAILED SKETCH OF EACH ASSEMBLY TESTED.

NOTES:	DISTRIBUTION
(1) Add the static head due to elevation difference (between test point and maximum elevation) to "minimum test pressure at maximum elevation" from PART I.	JOB FILE (AT SPONSORING ORGANIZATION)
(2) Use lowest pressure on test gauge at any time during test.	GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
(3) Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.	PROJECT MANAGER/PROJECT ENGINEER
(4) Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.	TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
(5) Highest pressure on test gauge at any time during test.	CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
(6) Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.	RECORDS SECTION (WC), GSM&TS
(7) A dead weight tester is only required when testing to a pressure which produces a stress level of 90% of SMYS or greater. However, if a dead weight tester is used on any test, enter the information in the space provided above.	REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

- ① ORIGINAL DOCUMENT signed 6-30-11
- ② original document signed 6-5-11
- ③ original document signed 5/16/11
- ④ original document signed 5/10/11



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 (refer to DWG 41449622-T11 Sheet 5 of 5)

Hydrotest L-105N from [Redacted] (Test section 11)

Location Class 3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 500 PSIG	Future Design Pressure 500 PSIG
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	Min. Elevation 19 Ft.	For Water	0.433 X Elev. Diff. = 7.8 PSIG
	Elev. Diff. 18 Ft.	Other (Specify)	X Elev. Diff. = PSIG

Pipe Specification			Footage to Be Tested	Pipe Spec. and Footage Verified In Field	% of SMYS			Pressure to Give 90% SMYS
Size O.D.	W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)			At MAOP	At Min. Test Press.	At Max. Test Press.	
24.00	.375	API 5L, GR X60, DSAW (item#106)	55'	18'	26.67	40.00	45.33	1688
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Minimum Test Pressure @ Max. Elevation 750 PSIG	Test Fluid To Be Used WATER	MINIMUM TEST DURATION - UNDER 30% SMYS (1 HR. MINIMUM) - 30% SMYS & OVER (8 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	8 HOURS
Maximum Test Pressure @ Min. Elevation 850 PSIG			

Prepared By: M. Cabral	Date: 05/10/11	For Information or Changes Call: Redacted	Approved By: Redacted	Date: 5/16/11
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PART II - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

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Time and Date Test Ended 5:05 Pm 6-5-11	Max. Elevation in Test Section 37 FT	Min. Indicated Test Pressure (2) 780 PSIG	Max. Indicated Test Pressure (5) 833 PSIG
Actual Duration of Test 8 Hr. 15 Min	Min. Elevation in Test Section 19 FT	Min. Test Pressure at Max. Elevation (3) 773 PSIG	Max. Test Pressure at Min. Elevation (6) 833.43 PSIG

Test Fluid Used WATER	Pipe Specification and Footage Verified (See Part I) 18'
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Make, Range, and Serial No. of Pressure Recording Gauge BARTON 0-1000 psi 242E-39612	Date Last Calibrated 4-4-11	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) CHANDLER 50-5000 psi 2-001 21495	Date Last Calibrated 10-26-10
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Test Supervised By: Redacted	Date: 6-5-11	Approved By: Redacted	Date: 6-30-11
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NOTES:	DISTRIBUTION
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M.O.R. = "Material of Record"

Pipeline was tested as an assembly with associated piping, fitting and "The Material of Record".