Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

62-4921 (Rev. 2/04)
California Gas Transmission
(Use in Accordance with Gas Standard A-34 and GO 112-D)

Sheet 1 of 3

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

Feeder Main Number, Line Number, or Station Name	Area	Division/District	Job Number	Date Job Authorized
L-300A	3	San Jose	41497325	September 1, 2011

Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts

Test 2 – Tie-in pieces, hydrostatic test piping and existing 34" L-300A. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497325, sheet 6 of 6)

Hydrotest L-300A from MP Redacted Morgan Hill, CA (Test section 68)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	631 PSIG	631 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)				Static Head Calculation		
	Max. Elevation	448	Ft.	For Water	0.433 X Elev. Diff. =	60.2 PSIG
	Min. Elevation	309	Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	139	Ft.			

Pipe Specification						% of SMYS			
Size O.D.	Size W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)		Footage to Be Tested	Pipe Spec. and Footage Verified In Field	At MAOP	At Min. Test Press.	At Max. Test Press.	Pressure to Give 90% SMYS
34.00	.375	API 5L, X-65, DSAW	(Item #100)	~~51'~~	37.3 RLC	44.01	66.05	72.88	1291
34.00	.505	Elbow, Y-60	(Item #118)	4 ea.	MOR	35.40	53.13	58.63	1604
34.00	.507	API 5L, X-60, DSAW	(Item #1)	337'	MOR	35.26	52.92	58.40	1611
34.00	.406	API 5L, X-60, DSAW	(Item #2)	3107'	MOR	44.04	66.09	72.93	1290
34.00	.344	API 5L, X-52, DSAW	(Item #3)	~~13299'~~	13299.5 RLC	59.97	90.00	99.31	947
34.00	.500	Elbow, Y-60	(Item #4)	4 ea.	MOR	35.76	53.66	59.22	1588
34.00	.500	API 5L, X-65 DSAW			33.7 RLC	33.01	49.54	54.66	1721 SP

Minimum Test Pressure @ Max. Elevation	947 PSIG	Test Fluid To Be Used	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	1045 PSIG	WATER		

Redacted Date: 9/2/2011 For Information or Changes, Call: Mark Cabral (925) 588-3640 Approved By: Mark Cabral Date: 9-2-11

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	10:44am 11-3-11	Elevation at Test Point	309' FT	Min. Required Test Press. At Test Point	(1)	1007 PSIG	Max. Allowable Test Press at Test Point	(4)	1045 PSIG
Time and Date Test Ended	7:00pm 11-3-11	Max. Elevation in Test Section	448' FT	Min. Indicated Test Pressure	(2)	1030 PSIG	Max. Indicated Test Pressure	(5)	1034 PSIG
Actual Duration of Test	8hr 16min	Min. Elevation in Test Section	309' FT	Min. Test Pressure at Max. Elevation	(3)	970 PSIG	Max. Test Pressure at Min. Elevation	(6)	1034 PSIG

Test Fluid Used: Water

Pipe Specification and Footage Verified (See Part I): Redacted

Make, Range, and Serial No. of Pressure Recording Gauge	Date Last Calibrated	Make, Range, and Serial No. of Dead Weight Tester (See Note 7)	Date Last Calibrated
Barton, 0-3000, 202A-175572	6-7-11	Chandler, 50-3000, 16393	5-19-11

Redacted Date: 11-3-11 Approved By: Redacted Date: 11-14-11

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:

(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.
(2) Use lowest pressure on test gauge at any time during test.
(3) Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.
(4) Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.
(5) Highest pressure on test gauge at any time during test.
(6) Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.
(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.

DISTRIBUTION

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GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
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REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

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Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

62-4921 (Rev. 2/04)
California Gas Transmission
(Use in Accordance with Gas Standard A-34 and GO 112-D)

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

Feeder Main Number, Line Number, or Station Name	Area	Division/District	Job Number	Date Job Authorized
L-300A	3	San Jose	41497325	September 1, 2011

Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts

Test 2 – Tie-in pieces, hydrostatic test piping and existing 34" L-300A. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497325, sheet 6 of 6)

Hydrotest L-300A from MP Redacted Morgan Hill, CA (Test section 68)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	631 PSIG	631 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)

Max. Elevation 448 Ft.
Min. Elevation 309 Ft.
Elev. Diff. 139 Ft.

Static Head Calculation
For Water 0.433 X Elev. Diff. = 60.2 PSIG
Other (Specify) X Elev. Diff. = PSIG

Pipe Specification Size O.D.	Size W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)	Footage to Be Tested	Pipe Spec. and Footage Verified In Field	% of SMYS At MAOP	% of SMYS At Min. Test Press.	% of SMYS At Max. Test Press.	Pressure to Give 90% SMYS
34.00	.406	Elbow, Y-60 (Item #5)	4 ea.	MOR	44.04	66.09	72.93	1290
34.00	UNK	Elbow, Unknown Grade (Item #6)	8 ea.	MOR	-	-	-	-
34.00	.500	Sleeve, X-60 (Item #7)	1 ea.	MOR	35.76	53.66	59.22	1588
34.00	.500	Sleeve, X-52 (Item #8)	1 ea.	MOR	41.26	61.92	68.33	1377
34.00	.375	Sleeve, X-60 (Item #9)	4 ea.	MOR	47.68	71.55	78.96	1191
12.75	.500	API 5L, GR. B, SMLS (Item #10)	108'	MOR	22.99	34.50	38.07	2471

Minimum Test Pressure @ Max. Elevation 947 PSIG

Maximum Test Pressure @ Min. Elevation 1045 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

Redacted 9/2/2011

For Information or Changes, Call: Mark Cabral (925) 588-3640

Approved By: Mark Cabral Date: 9-2-11

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	10:44am 11-3-11	Elevation at Test Point	309' FT	Min. Required Test Press. At Test Point (1)	1007 PSIG	Max. Allowable Test Press at Test Point (4)	1045 PSIG
Time and Date Test Ended	7:00pm 11-3-11	Max. Elevation in Test Section	448' FT	Min. Indicated Test Pressure (2)	1030 PSIG	Max. Indicated Test Pressure (5)	1034 PSIG
Actual Duration of Test	8hr 16min	Min. Elevation in Test Section	309' FT	Min. Test Pressure at Max. Elevation (3)	970 PSIG	Max. Test Pressure at Min. Elevation (6)	1034 PSIG

Test Fluid Used: water

Pipe Specification and Footage Verified (See Part I) Redacted

Make, Range, and Serial No. of Pressure Recording Gauge	Date Last Calibrated	Make, Range, and Serial No. of Dead Weight Tester (See Note 7)	Date Last Calibrated
Barton, 0-3000, 202A-175572	6-7-11	Chandler, 50-3000, 16393	5-19-11

Test Supervised By: Redacted Date: 11-3-11

Approved By: Redacted Date: 11-14-11

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:

(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.
(2) Use lowest pressure on test gauge at any time during test.
(3) Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.
(4) Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.
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62-4921 (Rev. 2/04)
California Gas Transmission
(Use in Accordance with Gas Standard A-34 and GO 112-D)

Sheet 3 of 3

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

Feeder Main Number, Line Number, or Station Name	Area	Division/District	Job Number	Date Job Authorized
L-300A	3	San Jose	41497325	September 1, 2011

Description of Job – Include Reference Drawing Numbers, and Pipeline Mileposts

Test 2 – Tie-in pieces, hydrostatic test piping and existing 34" L-300A. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497325, sheet 6 of 6)

Hydrotest L-300A from MP 480.7432 – 483.7562 Morgan Hill, CA (Test section 68)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	631 PSIG	631 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	448 Ft.	For Water	0.433 X Elev. Diff. =	60.2 PSIG
	Min. Elevation	309 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	139 Ft.			

Pipe Specification						% of SMYS			Pressure to Give 90% SMYS
Size O.D.	Size W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)		Footage to Be Tested	Pipe Spec. and Footage Verified In Field	At MAOP	At Min. Test Press.	At Max. Test Press.	
2.375	.154	API 5L, GR. B, SMLS	(Item #11)	10'	MOR	13.90	20.86	23.02	4085
1.66	.140	API 5L, GR. B, SMLS	(Item #12)	10'	MOR	10.69	16.04	17.70	5313

Minimum Test Pressure @ Max. Elevation	947 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	1045 PSIG		

Prepared By: Richard Avery Date: 9/2/2011

For Information or Changes, Call: Mark Cabral (925) 588-3640

Approved By: Mark Cabral Date: 9-2-11

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Actual Duration of Test	8 hr 16 min	Min. Elevation in Test Section	309' FT	Min. Test Pressure at Max. Elevation (3)	970 PSIG	Max. Test Pressure at Min. Elevation (6)	1034 PSIG

Test Fluid Used: Water

Pipe Specification and Footage Verified (See Part I): Robert L Choat A629

Make, Range, and Serial No. of Pressure Recording Gauge	Date Last Calibrated	Make, Range, and Serial No. of Dead Weight Tester (See Note 7)	Date Last Calibrated
Barton, 0-3000, 202A-175572	6-7-11	Chandler, 50-3000, 16393	5-18-11

Test Supervised By: Brandon Durand Date: 11-3-11

Approved By: Joel Mannie Date: 11-14-11

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