Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

COPY

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-101	1	Peninsula	41474062-T2/3	5/27/11

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

STPR 41474062T2 - Hydrostatically test 36" tie-in piping, hydrostatic test piping and existing 34" and 36" L-101. Existing material listed; i.e. pipe, elbows, sleeves, are from the "Material of Record". (refer to DWG 414740062-T2/3,Sheet 7).

T-2 - Hydrotest L-101 from MP 0.62 to MP 3.08, in San Jose and Santa Clara. Test 2 (Location B to C on Dwg. 414740062-T2/T3))

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	400 PSIG	400 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	17 Ft.	For Water	0.433 X Elev. Diff. =	8 PSIG
	Min. Elevation	0 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	17 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.	
36.00	0.500	API 5L, X-65, DSAW	(Item#50)	75'	135' – 2"	22.15	37.66	43.20	1625
10.75	0.365	API 5L, GrB, SMLS	(Item #53)	8'	Tested with T-3	16.83	28.61	32.82	2139
3.500	0.216	API 5L, GrB, SMLS	(Item #54)	8'	Tested with T-3	9.26	15.74	18.06	3888
2.375	0.154	API 5L, GrB, SMLS	(Item #55)	4'	Tested with T-3	8.81	14.98	17.18	4085
36.00	0.350	API 5L, X-52, DSAW	(Item#1)	11,065'	M.O.R.	39.56	67.25	77.14	910 MAX
36.00	0.469	API 5L, X-52, DSAW	(Item#3)	310'	M.O.R.	29.52	50.19	57.57	1219

		Test Fluid To Be Used	MINIMUM TEST DURATION	
Minimum Test Pressure @ Max. Elevation	680 PSIG	WATER	- UNDER 30% SMYS (1 HR. MINIMUM)	8 HOURS
Maximum Test Pressure @ Min. Elevation	780 PSIG		- 30% SMYS & OVER (8 HRS. MINIMUM)	
			- PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	(3)

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date:
Redacted	05/27/11	Redacted	Redacted	9/2/11

(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	1045 hrs 6-5-11	Elevation at Test Point	8.0 FT	Min. Required Test Press. At Test Point	(1)	684 PSIG	Max. Allowable Test Press at Test Point	(4)	777 PSIG
Time and Date Test Ended	2000 hrs 6-5/11	Max. Elevation in Test Section	17 FT	Min. Indicated Test Pressure	(2)	710 PSIG	Max. Indicated Test Pressure	(5)	752 PSIG < 910 PSIG OK
Actual Duration of Test	9 hrs. 15 min	Min. Elevation in Test Section	0 FT	Min. Test Pressure at Max. Elevation	(3)	706 PSIG	Max. Test Pressure at Min. Elevation	(6)	756 PSIG

Test Fluid Used	Pipe Specification and Footage Verified (See Part I)
Water	Above

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
CPL 1703 0-1000 PSI	5-2-11	Ametek s/n 2845 0.3500 PSI	11-29-10

Test Supervised By:	Date:	Approved By:	Date:
Redacted	5-11-11	Redacted	8-4-11 (1)

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

JOB FILE (AT SPONSORING ORGANIZATION)
GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
PROJECT MANAGER/PROJECT ENGINEER
TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
RECORDS SECTION (WC), GMS&TS
REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

(1) originally signed on 6-8-11 (2) ORIGINAL Signed 6-5-11

(3) Original Signed 5/29/11

Gas Pipeline Facilities Strength Test Pressure Report
(For Pipeline Facilities Designed to Operate over 100 PSIG)

COPY

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-101	1	Peninsula	41474062-T2/3	5/27/11

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

STPR 41474062T2 - Hydrostatically test 36" tie-in piping, hydrostatic test piping and existing 34" and 36" L-101. Existing material listed; i.e. pipe, elbows, sleeves, are from the "Material of Record". (refer to DWG 414740062-T2/3,Sheet 7).

T-2 - Hydrotest L-101 from MP 0.62 to MP 3.08, in San Jose and Santa Clara. Test 2 (Location B to C on Dwg. 414740062-T2/T3))

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	400 PSIG	400 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	17 Ft.	For Water	0.433 X Elev. Diff. =	8 PSIG
	Min. Elevation	0 Ft.	Other (Specify)		
	Elev. Diff.	17 Ft.		X Elev. Diff. =	PSIG

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.	
34.00	0.500	API 5L, X-52, DSAW	(Item #6)	2'	M.O.R.	26.15	44.46	51.00	1377
34.00	0.375	API 5L, X-46, DSAW	(Item#10)	225'	M.O.R.	39.42	67.01	76.87	913
36.00	0.422	API 5L, X-52, DSAW	(Item #4)	520'	M.O.R.	32.81	55.78	63.98	1097
34.00	0.344	API 5L, X-52, DSAW	(Item #7)	324'	M.O.R.	38.01	64.62	74.13	947
34.00	0.437	API 5L, X-52, DSAW	(Item #8)	19'	M.O.R.	29.89	50.81	58.29	1205
36.00	0.375	Elbow, Y-52	(Item #14)	7 Ea.	M.O.R.	36.92	62.77	72.00	975
36.00	UNK	Elbow, Unknown Grade	(Item#15)	3 Ea.	M.O.R.	-	-	-	-
36.00	0.625	Elbow, Y-52	(Item#20)	4 Ea.	M.O.R.	22.15	37.66	43.20	1625
36.00	UNK	Elbow, Unknown Grade	(Item#30)	1 Ea.	M.O.R.	-	-	-	-
		SLEEVE JP							

		Test Fluid To Be Used	MINIMUM TEST DURATION	
Minimum Test Pressure @ Max. Elevation	680 PSIG	WATER	- UNDER 30% SMYS (1 HR. MINIMUM)	8 HOURS
Maximum Test Pressure @ Min. Elevation	780 PSIG		- 30% SMYS & OVER (8 HRS. MINIMUM)	
			- PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date: (3)
Mark A. Cabral	05/27/11	Redacted		9/7/11

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	1045 hrs 6-5-11	Elevation at Test Point	8 FT	Min. Required Test Press. At Test Point	(1)	684 PSIG	Max. Allowable Test Press at Test Point	(4)	777 PSIG
Time and Date Test Ended	2000 hrs. 6-5-11	Max. Elevation in Test Section	17 FT	Min. Indicated Test Pressure	(2)	710 PSIG	Max. Indicated Test Pressure	(5)	752 PSIG < 910 PSIG OK
Actual Duration of Test	9 hrs. 15 min	Min. Elevation in Test Section	0 FT	Min. Test Pressure at Max. Elevation	(3)	706 PSIG	Max. Test Pressure at Min. Elevation	(6)	756 PSIG

Test Fluid Used	Pipe Specification and Footage Verified (See Part I)
Water	Above

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
CPL 1703 0-1000 PSI	5-2-11	Ametek s/n 2845 0-3500 PSI	11-29-10

Test Supervised By:	Date:	Approved By:	Date:
(2)	8-11-11	Jack Marples	8-4-11 (1)

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

JOB FILE (AT SPONSORING ORGANIZATION)
GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
PROJECT MANAGER/PROJECT ENGINEER
TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
RECORDS SECTION (WC), GMS&TS
REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

(1) originally signed on 6-8-11 (2) ORIGINAL SIGNED 6-5-11
(3) original signed 5/25/11

Gas Pipeline Facilities Strength Test Pressure Report
(For Pipeline Facilities Designed to Operate over 100 PSIG)

COPY

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-101	1	Peninsula	41474062-T2/3	5/27/11

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

STPR 41474062T2 - Hydrostatically test 36" tie-in piping, hydrostatic test piping and existing 34" and 36" L-101. Existing material listed; i.e. pipe, elbows, sleeves, are from the "Material of Record". (refer to DWG 414740062-T2/3,Sheet 7).

T-2 - Hydrotest L-101 from MP 0.62 to MP 3.08, in San Jose and Santa Clara. Test 2 (Location B to C on Dwg. 414740062-T2/T3))

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	400 PSIG	400 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	17 Ft.	For Water	0.433 X Elev. Diff. =	8 PSIG
	Min. Elevation	0 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	17 Ft.			

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	At Min. Test Press.	At Max. Test Press.	Pressure to Give 90% SMYS
36.00	0.375	Sleeve,Y-60,GrE	(Item#29)	1Ea.	M.O.R.	32.00	54.40	62.40	1125
34.00	0.406	Elbow, Unknown Grade	(Item#17)	1Ea.	M.O.R.	-	-	-	-
34.00	0.625	Elbow, Unknown Grade	(Item#19)	2Ea.	M.O.R.	-	-	-	-
34.00	0.500	Elbow, Unknown Grade	(Item#18)	1Ea.	M.O.R.	-	-	-	-
34.00	0.375	Elbow, Y-52	(Item#16)	1Ea.	M.O.R.	34.87	59.28	68.00	1032
~~34.00~~	~~0.375~~	~~Elbow, Unknown Grade~~	~~(Item#24)~~	~~1Ea.~~	~~M.O.R.~~	/	/	/	/

Minimum Test Pressure @ Max. Elevation	680 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) (3)	8 HOURS
Maximum Test Pressure @ Min. Elevation	780 PSIG			

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date:
Mark A. Cabral	05/27/11	Redacted		9/7/11

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	1045 hrs. 6-5-11	Elevation at Test Point	8 FT	Min. Required Test Press. At Test Point	(1)	684 PSIG	Max. Allowable Test Press at Test Point	(4)	777 PSIG
Time and Date Test Ended	2000 hrs 6-5-11	Max. Elevation in Test Section	17 FT	Min. Indicated Test Pressure	(2)	710 PSIG	Max. Indicated Test Pressure	(5)	752 PSIG < 910 PSIG OK
Actual Duration of Test	9 hrs. 15min.	Min. Elevation in Test Section	0 FT	Min. Test Pressure at Max. Elevation	(3)	706 PSIG	Max. Test Pressure at Min. Elevation	(6)	756 PSIG

Test Fluid Used	Pipe Specification and Footage Verified (See Part I)
Water	Above

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
CPL 0-1000 PSI	5-2-11	Ametek s/n 2845 0-3500 PSI	11-29-10

Test Supervised By:	Date:	Approved By:	Date:
(2)	8-11-11	(5) 8-4-11	

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

JOB FILE (AT SPONSORING ORGANIZATION) (3) Original Signed on 5/28/11
GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
PROJECT MANAGER/PROJECT ENGINEER
TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
RECORDS SECTION (WC), GMS&TS
REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

(1) Original Signed on 6-8-11 (2) ORIGINAL SIGNED 6-5-11

Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

COPY

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

Sheet 1 of 2

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-101	1	Peninsula	41474062-T2/3	5/27/11

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

STPR #41474062T3 - Hydrostatically test 36" tie-in piping, hydrostatic test piping and existing 30" , 34" and 36" L-101. Existing material listed; ie. pipe, elbows, sleeves, are from the "Material of Record". (refer to DWG 414740062-T2/3,Sheet 7).

T-3 - Hydrotest L-101 from MP 3.08 to MP 4.66, in Santa Clara. (Location B to A on Dwg. 414740062-T2/T3)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	400 PSIG	400 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	8 Ft.	For Water	0.433 X Elev. Diff. =	4.0 PSIG
	Min. Elevation	0 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	8 Ft.			

Pipe Specification				Pipe Spec. and Footage Verified In Field	% 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		At MAOP	At Min. Test Press.	At Max. Test Press.	
36.00	0.500	API 5L, X-65, DSAW	(Item#50)	70 – 1 ½"	70 - 1½"	22.15	37.66	43.20	1625
30.00	0.500	API 5L, X-60, ~~SMLS~~ DSAW	(item #13)	1504.5'	1504.5'	20.00	34.00	39.00	1800
36.00	0.350	API 5L, X-52, DSAW	(item #1)	~~6437'~~	6106 JS	39.56	67.25	77.14	910 MAX.
36.00	0.4375	API 5L, X-52, DSAW	(Item#2)	217'	217'	31.65	53.80	61.70	1138
34.00	0.562	API 5L, X-60, DSAW	(Item#11)	6'	6'	20.17	34.28	39.32	1785
34.00	0.375	API 5L, X-46, DSAW	(Item#10)	419'	419'	39.42	67.01	76.87	913
36.00	0.432	API 5L, X-60, DSAW	(Item#5)	7.5'	7.5'	27.78	47.22	54.17	1296
34.00	0.4375	API 5L, X-52, DSAW	(Item#8)	64'	64'	29.89	50.81	58.29	1205
10.75	0.365	API 5L, GrB, SMLS	(Item #53)	10'	10'	16.83	28.61	32.82	2139
3.500	0.216	API 5L, GrB, SMLS	(Item #54)	10'	10'	9.26	15.74	18.06	3888
21.375	0.154	API 5L, GrB, SMLS	(Item #55)	JS ~~18'~~ 10'	10'	8.81	14.98	17.18	4085

Minimum Test Pressure @ Max. Elevation	680 PSIG	Test Fluid To Be Used	MINIMUM TEST DURATION - UNDER 30% SMYS (1 HR. MINIMUM)	8 HOURS
Maximum Test Pressure @ Min. Elevation	780 PSIG	WATER	- 30% SMYS & OVER (8 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date:
Mark Cabral	05/27/11	Redacted	(3)	9/7/11

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	6-7-11 751 PSI 1245 am	Elevation at Test Point	8 FT	Min. Required Test Press. At Test Point	(1)	680 PSIG	Max. Allowable Test Press at Test Point	(4)	777 PSIG
Time and Date Test Ended	6-7-11 702 PSI 900 am	Max. Elevation in Test Section	8 FT	Min. Indicated Test Pressure	(2)	702 PSIG	Max. Indicated Test Pressure	(5)	751 PSIG < 910 PSIG ok
Actual Duration of Test	8 hrs. 15 min	Min. Elevation in Test Section	0 FT	Min. Test Pressure at Max. Elevation	(3)	702 PSIG	Max. Test Pressure at Min. Elevation	(6)	754 PSIG

Test Fluid Used	Pipe Specification and Footage Verified (See Part I)
Water	Above JS

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
CPL 1703 0-1000 PSI	5-2-11	Ametek 0-3500 PSI 2845	11-29-10

Test Supervised By:	Date:	Approved By:	Date:
(2)	8-11-11	(1) 8-4-11	

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.
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(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

JOB FILE (AT SPONSORING ORGANIZATION)
GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
PROJECT MANAGER/PROJECT ENGINEER
TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
RECORDS SECTION (WC), GMS&TS
REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

(1) original signed 6-8-11 (2) ORIGINAL SIGNED 6-7-11

SB_GT&S_0482597

Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

COPY

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-101	1	Peninsula	41474062-T2/3	5/27/11

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

STPR 41474062T3 - Hydrostatically test 36" tie-in piping, hydrostatic test piping and existing 30" , 34" and 36" L-101. Existing material listed; ie. pipe, elbows, sleeves, are from the "Material of Record". (refer to DWG 414740062-T2/3,Sheet 7).

T- 3 - Hydrotest L-101 from MP 3.08 to MP 4.66, in Santa Clara. Test 3 (Location B to A on Dwg. 414740062-T2/T3)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	.5	400 PSIG	400 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	8 Ft.	For Water	0.433 X Elev. Diff. =	4.0 PSIG
	Min. Elevation	0 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	8 Ft.			

Pipe Specification				Pipe Spec. and Footage Verified In Field	% of SMYS			Pressure to Give 90% SMYS
Size O.D.	Size W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)			At MAOP	At Min. Test Press.	At Max. Test Press.	
36.00	0.375	Elbow, Y-52	(Item#14)	6 Ea.	36.92	62.77	72.00	975
30.00	0.500	Elbow, Y-60	(Item#22)	14 Ea.	20.00	34.00	39.00	1800
34.00	UNK	Sleeve, Unknown Grade	(Item#31)	1 Ea.	-	-	-	-
36.00	0.375	Elbow, Unknown Grade	(Item#24)	4 Ea.	-	-	-	-
36.00	UNK	Sleeve, Unknown Grade	(Item#30)	2 Ea.	-	-	-	-
34.00	0.500	Elbow, Unknown Grade	(Item#23	1 Ea.	-	-	-	-

Minimum Test Pressure @ Max. Elevation	680 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	780 PSIG			

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date:
Mark Cabral	05/27/11	Redacted		9/7/11

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	6-7-11 751 PSI 1245 am	Elevation at Test Point	8 FT	Min. Required Test Press. At Test Point (1)	680 PSIG	Max. Allowable Test Press at Test Point (4)	777 PSIG
Time and Date Test Ended	6-7-11 702 PSI 900 am	Max. Elevation in Test Section	8 FT	Min. Indicated Test Pressure (2)	702 PSIG	Max. Indicated Test Pressure (5)	751 PSIG < 910 PSIG OK
Actual Duration of Test	8 hrs. 15 min	Min. Elevation in Test Section	0 FT	Min. Test Pressure at Max. Elevation (3)	702 PSIG	Max. Test Pressure at Min. Elevation (6)	754 PSIG

Test Fluid Used	Pipe Specification and Footage Verified (See Part I)
Water	Above

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
CPL 1703 0-1000 PSI	5-2-11	Ametek 0-3500 PSI 2845	11-29-10

Test Supervised By:	Date:	Approved By:	Date:
(2)	8-11-11	Joel Monroe 8-4-11 (1)	

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

JOB FILE (AT SPONSORING ORGANIZATION)
GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
PROJECT MANAGER/PROJECT ENGINEER
TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
RECORDS SECTION (WC), GMS&TS
REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

(1) Originally signed on 6-8-11 (2) Original Signed 6-7-11
(3) Original Signed 5/29/11