

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

Feeder Main Number, Line Number, or Station Name L-132	Area 1	Division/District Redacted	Job Number 41497358	Date Job Authorized July 16, 2012
--	------------------	--------------------------------------	-------------------------------	---

Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts
Test 3 (B - C) - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" L-132. Existing pipeline material listed; ie. Pipe, elbows, sleeves are from the "Material of Record" (refer to Dwg 41497358, sheet 7 of 7). Revision 1 - Updated for 2012 construction.

Hydrotest L-132 from **Redacted** (TIM-037-11)

Location Class 1,3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 300 PSIG	Future Design Pressure 300 PSIG
------------------------------	--------------------------------	--	---

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation 1131 Ft.	Static Head Calculation	
	Min. Elevation 200 Ft.	For Water	0.433 X Elev. Diff. = 404 PSIG
	Elev. Diff. 931 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.	
30.00	0.375	Pipe, API 5L X-65, SAWL (item #103)	38'		18.46	27.69	57.23	1463
30.00	0.375	Elbow, Y-60, LR (item #119)	4 Ea.		20.00	30.00	62.00	1350
1.050	0.154	Pipe, API 5L GR B, SMLS (item #216)	8'		2.92	4.38	9.06	9240
30.00	0.375	Pipe, API 5L X-52, DSAW (item #1)	3655'		23.08	34.62	71.54	1170
30.00	0.312	Pipe, API 5L X-52, DSAW (item #3)	710'		27.74	41.61	85.98	974
30.00	0.500	Elbow, 30000 SMYS*, SR (item #5)	5 Ea.		30.00	45.00	93.00	900

Minimum Test Pressure @ Max. Elevation 450 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 930 PSIG			

Prepared By: Redacted	Date: 7/16/12	For Information or Changes, Call: Redacted	Date: 7-16-12
---------------------------------	-------------------------	--	-------------------------

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	Elevation at Test Point FT	Min. Required Test Press. At Test Point (1) PSIG	Max. Allowable Test Press at Test Point (4) PSIG
Time and Date Test Ended	Max. Elevation in Test Section FT	Min. Indicated Test Pressure (2) PSIG	Max. Indicated Test Pressure (5) PSIG
Actual Duration of Test	Min. Elevation in Test Section FT	Min. Test Pressure at Max. Elevation (3) PSIG	Max. Test Pressure at Min. Elevation (6) PSIG

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

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
---	----------------------	--	----------------------

Test Supervised By:	Date:	Approved By:	Date:
---------------------	-------	--------------	-------

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), GMS&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



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 **2** of **2**

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

Feeder Main Number, Line Number, or Station Name L-132	Area 1	Division/District Redacted	Job Number 41497358	Date Job Authorized July 16, 2012
--	------------------	--------------------------------------	-------------------------------	---

Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts
Test 3 (B - C) - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" L-132. Existing pipeline material listed; ie. Pipe, elbows, sleeves are from the "Material of Record" (refer to Dwg 41497358, sheet 7 of 7). Revision 1 - Updated for 2012 construction.

Hydrotest L-132 from **Redacted** (TIM-037-11)

Location Class 1,3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 300 PSIG	Future Design Pressure 300 PSIG
------------------------------	--------------------------------	--	---

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation 1131 Ft.	Static Head Calculation	
	Min. Elevation 200 Ft.	For Water	0.433 X Elev. Diff. = 404 PSIG
	Elev. Diff. 931 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.	
30.00	0.375	Elbow, Y-52, LR (item #6)	3 Ea.		23.08	34.62	71.54	1170
30.75	0.375	Sleeve, X-52 (item #8)	2 Ea.		23.65	35.48	73.33	1142
2.375	0.218	Pipe, 28000 SMYS*, Furnace Butt Welded* (E=0.6) (item #11)	8'		9.73	14.59	30.15	2776
30.00	0.375	Pipe, API 5L X-52, SMLS (item #14)	4'		23.08	34.62	71.54	1170
30.00	0.375	Insulating Joint, ANSI 300 (item #15)	1 Ea.		-	-	-	-

Minimum Test Pressure @ Max. Elevation 450 PSIG	Maximum Test Pressure @ Min. Elevation 930 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
---	---	---------------------------------------	---

Prepared By: Redacted	Date: 7/16/12	For Information or Changes, Call: Redacted	Date: 7-16-12
------------------------------	----------------------	---	----------------------

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	Elevation at Test Point	FT	Min. Required Test Press. At Test Point (1)	PSIG	Max. Allowable Test Press at Test Point (4)	PSIG
Time and Date Test Ended	Max. Elevation in Test Section	FT	Min. Indicated Test Pressure (2)	PSIG	Max. Indicated Test Pressure (5)	PSIG
Actual Duration of Test	Min. Elevation in Test Section	FT	Min. Test Pressure at Max. Elevation (3)	PSIG	Max. Test Pressure at Min. Elevation (6)	PSIG

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

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
---	----------------------	--	----------------------

Test Supervised By: _____	Date: _____	Approved By: _____	Date: _____
---------------------------	-------------	--------------------	-------------

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
--	--

An asterisk (*) indicates values are from the PG&E Technical Guidance Specification for Resolving Unknown Pipeline Features, published 08/01/11.