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 1

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-300B	1	San Jose	41497331-3	8/18/11

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

TEST 3 – Hydrostatically test tie-in piping, hydrostatic test piping and existing 34" L-300B. Existing pipeline material listed are from the "Material of Record" (refer to Dwg. 41497331 Sheet 7) ***Rev. 2*** -- *Additional pipe specs 34.00" OD 0.505"WT X-60, 34.00" OD 0.375" WT X-65, & 1.05"OD 0.113" WT GR B*

Hydrotest L-300B from MP 489.33– 490.915 San Jose, CA (Test section 89 North)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
3	0.5	631 PSIG	631 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)			Static Head Calculation		
	Max. Elevation	796 Ft.	For Water	0.433 X Elev. Diff. =	261 PSIG
	Min. Elevation	193 Ft.	Other (Specify)	X Elev. Diff. =	PSIG
	Elev. Diff.	603 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
34.00	0.500	API 5L, GR X-65, DSAW (item#101)	~~24'~~	40' RLC	33.01	49.54	65.70	1721
34.00	0.505	API 5L, GR X-60, DSAW	~~16'~~	0 RLC	35.40	53.13	70.47	1604
34.00	0.560	API 5L, GR X-60, DSAW (item#1)	17'	MOR	31.93	47.91	63.55	1779
34.00	0.500	API 5L, GR X-52, DSAW (item#2)	~~1184'~~	1183' A	41.26	61.92	82.12	1376
34.00	0.4375	API 5L, GR X-52, DSAW (item#3)	3154'	MOR	47.15	70.76	93.85	1204
34.00	0.375	API 5L, GR X-52, DSAW (item#4)	433'	MOR	55.01	82.56	109.50*	1032
34.00	0.344	API 5L, GR X-52, DSAW (item#5)	3483'	MOR	59.97	90.00	119.36*	947
34.00	0.375	API 5L, GR X-65, DSAW (item#102)	19'	19' RLC	44.01	66.05	87.60	1291
1.050	0.113	API 5L, GR B, SMLS	40'	40' RLC	8.38	12.57	16.67	6780

		Test Fluid To Be Used	MINIMUM TEST DURATION	
Minimum Test Pressure @ Max. Elevation	947 PSIG	WATER	- UNDER 30% SMYS (1 HR. MINIMUM)	8 HOURS
Maximum Test Pressure @ Min. Elevation	1256 PSIG		- 30% SMYS & OVER (8 HRS. MINIMUM)	
			- PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	

Prepared By: Mark Cabral Mark Cabral Date: 8-18-11 Redacted Redacted Date: 8/18/11

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	3:45 pm 8-20-2011	Elevation at Test Point	774 FT	Min. Required Test Press. At Test Point (1)	957 PSIG	Max. Allowable Test Press at Test Point (4)	1004 PSIG
Time and Date Test Ended	12:00 pm 8-21-2011	Max. Elevation in Test Section	796 FT	Min. Indicated Test Pressure (2)	976 PSIG	Max. Indicated Test Pressure (5)	981 PSIG
Actual Duration of Test	8 hour 15 min	Min. Elevation in Test Section	193 FT	Min. Test Pressure at Max. Elevation (3)	966 PSIG	Max. Test Pressure at Min. Elevation (6)	1233 PSIG

Test Fluid Used: Water

Pipe Specification and Footage Verified: A. ADRIAN THOMPSON 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-17553 12	6-7-2011	Chandler 50-3000 6196	5-19-2011

Test Supervised: Redacted Date: 8-21-2011 Approved By: Joel A Munnie Date: 8-22-11

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)
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

*Item #4 on MOR, 34.00"OD x 0.375"WT, API 5L, X-52 will not experience test pressure commensurate with this % of SMYS. Minimum elevation of this pipe (see Dwg. 4147331, sheet 4 of 7) is 631' and maximum test pressure will be 1066 psig (93.0% of SMYS) at this location. Item #5 on MOR, 34.00"OD x 0.344"WT, API 5L, X-52 will not experience test pressure commensurate with this % of SMYS. Minimum elevation of this pipe (see Dwg. 4147331, sheet 4 of 7) is 680' and maximum test pressure will be 1045 psig (99.3% of SMYS) at this location.