Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report

(For Pipeline Facilities Designed to Operate over 100 PSIG)

FINAL

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-300A	Central	Fresno	41497306-T63	6-14-11

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

Test 1 – 34" L-300A tie-in and hydrostatic test piping – Existing 34" pipe from the "Material of Record" (refer to DWG 41497306-T63, sheet 5)

Hydrotest L-300A from MP 353.56 – 353.85 Kettleman, CA (Test section 63)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
1	.72	688 PSIG	688 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)

Max. Elevation 544 Ft.
Min. Elevation 520 Ft.
Elev. Diff. 24 Ft.

Static Head Calculation
For Water 0.433 X Elev. Diff. = 10.40 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	At Min. Test Press.	At Max. Test Press.	Pressure to Give 90% SMYS
34.00	.505	API 5L, GR X60, DSAW (item#101)	54'	74.7' A	38.60	48.25	53.30	1604
34.00	.500	API 5L, GR X46, DSAW (item#5)	12'	0 M.O.R. (2)	50.85	63.57	70.22	1218
34.00	.4375	API 5L, GR X48, DSAW (item#4)	285'	287' A	55.70	69.62	76.90	1112
34.00	.375	API 5L, GR X-60, DSAW (item#102)	14'	13.7' A	51.98	64.98	71.78	1192
34.00	.375	API 5L, GR X-52, DSAW (item#3)	7'	7' A	59.98	74.97	82.82	1032
34.00	.344	API 5L, GR X-52, DSAW (item#2)	679'	649' A	65.38	81.73	90.28	947
34.00	.3125	API 5L, GR X-52, DSAW (item#1)	957'	953' A	71.98	89.97	99.38	861

Minimum Test Pressure @ Max. Elevation: 860 PSIG
Maximum Test Pressure @ Min. Elevation: 950 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: Richard Avery (3) Date: 06/14/11 7/19/11
For Information or Changes, Call: Mark Cabral (925) 588-3640
Approved By: Mark S Cabral Date: 7-14-11

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	10:25 am, 6-24-11 949	Elevation at Test Point	522 FT	Min. Required Test Press. At Test Point (1)	869 PSIG	Max. Allowable Test Press at Test Point (4)	949 PSIG
Time and Date Test Ended	7:00 pm, 6-24-11 889	Max. Elevation in Test Section	544 FT	Min. Indicated Test Pressure (2)	885 PSIG	Max. Indicated Test Pressure (5)	949 PSIG
Actual Duration of Test	8 hours, 35 min	Min. Elevation in Test Section	520 FT	Min. Test Pressure at Max. Elevation (3)	875.5 PSIG	Max. Test Pressure at Min. Elevation (6)	950 PSIG

Test Fluid Used: Water
Pipe Specification and Footage Verified (See Part I): TM A-ATRESPANDO

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 624086	6-17-11	Chandler 50-3000 7850	6-17-11

Test Supervised By: Date: 7-13-11
Approved By: Date: 7-13-11

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

1- ORIGINAL DOCUMENT SIGNED 6-30-11
2- original Document signed 6-24-11
3 - ORIGINAL DOCUMENT SIGNED 6-14-11
4- original document signed 6-14-11 @

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Sheet 2 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-300A	Central	Fresno	41497306-T63	6-14-11

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

Test 2 -- Cut –caps to facilitate hydrotest (See Dwg 41497306-T63, SHT4 of 5)

Hydrotest L-300A from MP 353.56 – 353.85 Kettleman, CA (Test section 63)

Location Class	Design Factor (F)	MAOP to be Established for this Piping by this Test	Future Design Pressure
1	.72	688 PSIG	688 PSIG

STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)				Static Head Calculation			
	Max. Elevation	544	Ft.	For Water	0.433 X Elev. Diff. =	10.40	PSIG
	Min. Elevation	520	Ft.	Other (Specify)	X Elev. Diff. =		PSIG
	Elev. Diff.	24	Ft.				

Pipe Specification			Footage to Be Tested	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.	
34.00	.505	API 5L, GR X60, DSAW	4'	0	38.60	48.25	53.50	1604
34.00	.375	API 5L, GR X60, DSAW	4'	0	51.98	64.98	71.78	1192
34.00	.505	CAPS, GR Y60	2 ea	0	38.60	48.25	53.50	1604
34.00	.505	API 5L, GR X65/70, DSAW (FIELD SUBSTITUTE) ②	0	2.9	35.63	44.54	49.20	1,738

Minimum Test Pressure @ Max. Elevation	860 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	950 PSIG			

Prepared By:	Date:	For Information or Changes, Call:	Approved By:	Date:
Richard Avery ③	06/14/11 7/14/0	Mark Cabral (925) 588-3640	Mark O Cabral ④	7/14/11

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

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Test Supervised By:	Date:	Approved By:	Date:
②	7-13-11	CLH ①	7-13-11

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