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 | Topock | Kern | 41497332-4 | 8-18-11 |

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

**Test 4 – Segment B – C** – Hydrotest existing 34" materials listed in the "Material of Record" (refer to DWG 41497332, sheet 6) Hydrostatically test 34" tie-in piping, test piping and existing 34" L-300B. **REV 1-** Added ½" pipe off of the Drip and 13' to item #3. **REV 2:** Hydrotest instead of Nitrogen.
Hydrotest L-300B from MP 0.1548 – 0.2241 **Segment B-C** Needles, CA (Test section 76)

| Location Class | Design Factor (F) | MAOP to be Established for this Piping by this Test | Future Design Pressure |
|---|---|---|---|
| 1 | .72 | 700 PSIG | 700 PSIG |

| STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE) | | | | Static Head Calculation | | | |
|---|---|---|---|---|---|---|---|
| | Max. Elevation | 509 | Ft. | For Water | 0.433 X Elev. Diff. = | 9 | PSIG |
| | Min. Elevation | 489 | Ft. | Other (Specify) | | X Elev. Diff. = | PSIG |
| | Elev. Diff. | 20 | 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. | |
| 34.00 | .500 | API 5L, GR X65, DSAW (item# 101) | 2' | 2' | 36.62 | 45.77 | 50.37 | 1721 |
| 34.00 | .505 | CAPS, GR Y60 (item# 153) | 2 Ea. | 2EA. | 39.27 | 49.09 | 54.03 | 1604 |
| 34.00 | .500 | API 5L, GR X52, DSAW (item# 1) | 403' | 403' NOR. | 45.77 | 57.21 | 62.97 | 1377 |
| 24.00 | .500 | API 5L, GR X52, DSAW (item# 2) | 8' | 8' | 32.31 | 40.38 | 44.45 | 1950 |
| 2.375 | .218 | API 5L, GR B, SMLS (item# 3) | 21' | 21' | 10.89 | 13.62 | 14.99 | 5783 |
| .840 | .147 | API 5L, GR B, SMLS (item# 4) | 20 | 20' | 5.71 | 7.14 | 7.86 | 11025 |
| | | | | | | | | |

| Minimum Test Pressure @ Max. Elevation | 875 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 | 1008 PSIG | Water | | |

| Prepared By: | Date: | For Information or Changes, Call: | Approved By: | Date: |
|---|---|---|---|---|
| Redacted | 8/25/2011 | Mark Cabral (925) 588-3640 | Redacted | 8-25-11 |

## 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 | 8/28/11 7:50 A | Elevation at Test Point | 509 FT | Min. Required Test Press. At Test Point (1) | 875 PSIG | Max. Allowable Test Press at Test Point JS (4) | 999 | 959 PSIG |
| Time and Date Test Ended | 8/28/11 4:15 P | Max. Elevation in Test Section | 509 FT | Min. Indicated Test Pressure JS (2) | 887 | 900 PSIG | Max. Indicated Test Pressure JS (5) | 900 | 887 PSIG |
| Actual Duration of Test | 9 HOURS 25 MINUTES | Min. Elevation in Test Section | 489 FT | Min. Test Pressure at Max. Elevation JS (3) | 887 | 875 PSIG | Max. Test Pressure at Min. Elevation JS (6) | 909 | 959 PSIG |

| Test Fluid Used | Pipe Specification and Footage Verified (See Part I) |
|---|---|
| WATER | STEVE BELMONT |

| 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#, 752002 | 8/15/2011 | CHANDLER 50-5000# 10329 | 8/16/2011 |

| Test Supervised By: | Date: | Approved By: | Date: |
|---|---|---|---|
| Redacted | 8/28/2011 | Redacted | 9-1-2011 |

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