



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

Feeder Main Number, Line Number, or Station Name <b>L-132</b>	Area <b>3</b>	Division/District <b>De Anza</b>	Job Number <b>41474078</b>	Date Job Authorized <b>June 6, 2011</b>
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Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts  
**TEST 1 - Hydrostatically test drip replacement tested with pg. 2 of 3 appx. Sta. 19+ 00**

Hydrotest L-132 from MP 3.05 -- 4.00 Santa Clara, CA (Test section 25)

Location Class <b>3</b>	Design Factor (F) <b>.5</b>	MAOP to be Established for this Piping by this Test <b>400 PSIG</b>	Future Design Pressure <b>400 PSIG</b>
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation <b>19 Ft.</b>	Static Head Calculation For Water 0.433 X Elev. Diff. = <b>8 PSIG</b> Other (Specify) _____ X Elev. Diff. = _____ PSIG
	Min. Elevation <b>0 Ft.</b>	
	Elev. Diff. <b>19 Ft.</b>	

Size		API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)	Footage to Be Tested	Pipe Spec. and Footage Verified In Field	% of SMYS			Pressure to Give 90% SMYS
O.D.	W.T.				At MAOP	At Min. Test Press.	At Max. Test Press.	
<b>24.00</b>	<b>.375</b>	<b>API 5L, GR X-60, DSAW (item#106)</b>	<b>4'</b>	<b>3.04 A</b>	<b>21.33</b>	<b>36.27</b>	<b>41.60</b>	<b>1688</b>

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

Prepared By: Redacted	Date: <b>7-14-11</b> 06/06/11	For Information or Changes, Call: Redacted	Approved By: Redacted	Date: <b>7/14/11</b> (3)
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**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 <b>11:45 pm</b> 6-18-11	Elevation at Test Point <b>19 FT</b>	Min. Required Test Press. At Test Point (1) <b>680 PSIG</b>	Max. Allowable Test Press at Test Point (4) <b>771 PSIG</b>
Time and Date Test Ended <b>0800</b> 6-19-11	Max. Elevation in Test Section <b>19 FT</b>	Min. Indicated Test Pressure (2) <b>695 PSIG</b>	Max. Indicated Test Pressure (5) <b>748 PSIG</b>
Actual Duration of Test <b>8 hrs 15 min</b>	Min. Elevation in Test Section <b>0 FT</b>	Min. Test Pressure at Max. Elevation (3) <b>695 PSIG</b>	Max. Test Pressure at Min. Elevation (6) <b>756 PSIG</b>

Test Fluid Used <b>Water</b>	Pipe Specification and Footage Verified (See Part I) <b>Redacted</b>
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Make, Range, and Serial No. of Pressure Recording Gauge <b>CPL 1703 0-1000 PSI</b>	Date Last Calibrated <b>5-2-11</b>	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) <b>AMETEK 0-3500 PSI 2845</b>	Date Last Calibrated <b>11-29-10</b>
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Test Supervisor <b>Redacted</b>	Date: <b>7-14-11</b>	Approved By: <b>Redacted</b>	Date: <b>7-13-11</b>
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**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:**
- Add the static head due to elevation difference (between test point and maximum elevation) to "minimum test pressure at maximum elevation" from PART I.
  - Use lowest pressure on test gauge at any time during test.
  - Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.
  - Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.
  - Highest pressure on test gauge at any time during test.
  - Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.
  - 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

- ORIGINAL DOCUMENT signed 6-22-11  
 1) ORIGINAL Document signed 6-19-11  
 2) Original document signed 6/6/11  
 3) original document signed 6/16/11



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

Feeder Main Number, Line Number, or Station Name <b>L-132</b>	Area <b>3</b>	Division/District <b>De Anza</b>	Job Number <b>41474078</b>	Date Job Authorized <b>June 06, 2011</b>
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Description of Job - Include Reference Drawing Numbers, and Pipeline Mileposts  
**TEST 2 - Hydrostatically test tie-in piping, hydrostatic test piping and existing 24" L-132. Existing pipeline material listed; ie. pipe, elbows, sleeves, etc. are from the "Material of Record" (refer to Dwg. 41474078, Sheet 7)**

Hydrotest L-132 from MP 3.05 - 4.00 Santa Clara, CA (Test section 25)

Location Class <b>3</b>	Design Factor (F) <b>.5</b>	MAOP to be Established for this Piping by this Test <b>400 PSIG</b>	Future Design Pressure <b>400 PSIG</b>
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation	<b>19</b> Ft.	Static Head Calculation For Water: 0.433 X Elev. Diff. = <b>8</b> PSIG Other (Specify): _____ X Elev. Diff. = _____ PSIG
	Min. Elevation	<b>0</b> Ft.	
	Elev. Diff.	<b>19</b> Ft.	

Pipe Specification		Footage to Be Tested	Pipe Spec. and Footage Verified In Field	% of SMYS			Pressure to Give 90% SMYS	
Size	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)			At MAOP	At Min. Test Press.	At Max. Test Press.		
O.D.	W.T.							
24.00	.375	API 5L, GR X-60, DSAW (item#106)	38'	51.56	21.33	36.27	41.60	1688
24.00	.281	API 5L, GR B, 40000 SMYS, SMLS (item#1)	4400.0	4375.1 M.O.R.	42.70	72.60	83.27	843 MAX.
24.00	.375	API 5L, GR B, SMLS (item#2)	19'	M.O.R.	36.57	62.17	71.31	984
24.00	.375	API 5L, GR X-60, DSAW (item#3)	900'	M.O.R.	21.33	36.27	41.60	1688
24.00	.500	API 5L, GR X-52, SMLS (item#4)	146'	M.O.R.	18.46	31.38	36.00	1950
24.00	.375	EII, Forged, LR, Y-60 (item#123)	4 Ea.	4 Ea.	21.33	36.27	41.60	1688
24.00	.281	EII, Forged, LR, GR Unknown (item#5)	5 Ea.	M.O.R.	-	-	-	-
24.00	.375	EII, Forged, LR, GR Y-52 (item#6)	6 Ea.	M.O.R.	24.62	41.85	48.00	1463
24.00	.500	EII, Forged, LR, GR B (item#7)	4 Ea.	M.O.R.	27.43	46.63	53.49	1313
24.00	.375	Sleeve, X-52 (item#9)	2 Ea.	M.O.R.	24.62	41.85	48.00	1463

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

Redacted	Date: <b>7-14-11</b>	For Information or Changes, Call: <b>Redacted</b>	App: <b>Redacted</b>	Date: <b>7/14/11</b> (3)
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**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	11:45 pm 6-18-11	Elevation at Test Point	<b>19 FT</b>	Min. Required Test Press. At Test Point (1)	<b>680 PSIG</b>	Max. Allowable Test Press at Test Point (4)	<b>771 PSIG</b>
Time and Date Test Ended	0800 6-19-11	Max. Elevation in Test Section	<b>19 FT</b>	Min. Indicated Test Pressure (2)	<b>695 PSIG</b>	Max. Indicated Test Pressure (5)	<b>748 PSIG</b>
Actual Duration of Test	<b>8 hr. 15 min</b>	Min. Elevation in Test Section	<b>0 FT</b>	Min. Test Pressure at Max. Elevation (3)	<b>695 PSIG</b>	Max. Test Pressure at Min. Elevation (6)	<b>756 PSIG</b>

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

Make, Range, and Serial No. of Pressure Recording Gauge <b>CPL 1703 0-1000 PSI</b>	Date Last Calibrated <b>5-2-11</b>	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) <b>AMETEK 0-3500 PSI 2845</b>	Date Last Calibrated <b>11-29-10</b>
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Test: <b>Redacted</b> (2)	Date: <b>7-12-11</b>	Appr: <b>Redacted</b>	Date: <b>7-13-11</b>
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**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:**

- Add the static head due to elevation difference (between test point and maximum elevation) to "minimum test pressure at maximum elevation" from PART I.
- Use lowest pressure on test gauge at any time during test.
- Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.
- Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.
- Highest pressure on test gauge at any time during test.
- Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.
- 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), GSM&TS
- REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

2 - ORIGINAL DOCUMENT SIGNED 6-21-11

(3) Original document signed 6/6/11



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 **3** of **3**

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

Feeder Main Number, Line Number, or Station Name <b>L-132</b>	Area <b>3</b>	Division/District <b>De Anza</b>	Job Number <b>41474078</b>	Date Job Authorized <b>June 6, 2011</b>				
Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts <b>TEST 2 - Hydrostatically test tie-in piping, hydrostatic test piping and existing 24" L-132. Existing pipeline material listed; ie. pipe, elbows, sleeves, etc. are from the "Material of Record" (refer to Dwg. 41474078, Sheet 7)</b>								
Hydrotest L-132 from MP 3.05 - 4.00 Santa Clara, CA (Test section 25)								
Location Class <b>3</b>	Design Factor (F) <b>.5</b>	MAOP to be Established for this Piping by this Test <b>400 PSIG</b>	Future Design Pressure <b>400 PSIG</b>					
STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation <b>19 Ft.</b>	Static Head Calculation	For Water <b>0.433 X Elev. Diff. = 8 PSIG</b>					
	Min. Elevation <b>0 Ft.</b>	Other (Specify)	X Elev. Diff. = <b>PSIG</b>					
	Elev. Diff. <b>19 Ft.</b>							
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.			At MAOP	At Min. Test Press.	At Max. Test Press.		
	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)							
<b>24.00</b>	<b>.500</b>	<b>Sleeve, 38000 SMYS (item#10)</b>	<b>2 Ea.</b>	<b>M.O.R.</b>	<b>25.26</b>	<b>42.95</b>	<b>49.26</b>	<b>1425</b>
<b>24.00</b>	<b>.533</b>	<b>Sleeve, GR X-60 (item#11)</b>	<b>2 Ea.</b>	<b>M.O.R.</b>	<b>15.01</b>	<b>25.52</b>	<b>29.27</b>	<b>2399</b>
<b>10.750</b>	<b>.365</b>	<b>API 5L, GR X-42, ERW (item#12)</b>	<b>70'</b>	<b>M.O.R.</b>	<b>14.02</b>	<b>23.84</b>	<b>27.35</b>	<b>2567</b>
<b>10.750</b>	<b>.365</b>	<b>API 5L, GR B, SMLS (item#12)</b>	<b>6'</b>	<b>M.O.R.</b>	<b>16.83</b>	<b>28.61</b>	<b>32.82</b>	<b>2139</b>
<b>10.750</b>	<b>.250</b>	<b>API 5L, GR X-42, ERW (item#13)</b>	<b>114' 8"</b>	<b>M.O.R.</b>	<b>20.48</b>	<b>34.81</b>	<b>39.93</b>	<b>1758</b>
<b>8.625</b>	<b>.322</b>	<b>API 5L, GR B, SMLS (item#13)</b>	<b>6' 4"</b>	<b>M.O.R.</b>	<b>15.31</b>	<b>26.02</b>	<b>29.85</b>	<b>2352</b>
<b>6.625</b>	<b>.432</b>	<b>API 5L, GR B, SMLS (item#13)</b>	<b>6"</b>	<b>M.O.R.</b>	<b>8.76</b>	<b>14.90</b>	<b>17.09</b>	<b>4108</b>
<b>6.625</b>	<b>.280</b>	<b>API 5L, GR B, SMLS (item#12&amp;13)</b>	<b>26' 4"</b>	<b>M.O.R.</b>	<b>13.52</b>	<b>22.98</b>	<b>26.36</b>	<b>2663</b>
<b>3.5</b>	<b>.216</b>	<b>API 5L, GR B, SMLS (item#14)</b>	<b>56' 6"</b>	<b>M.O.R.</b>	<b>9.26</b>	<b>15.74</b>	<b>18.06</b>	<b>3888</b>
Minimum Test Pressure @ Max. Elevation	<b>680 PSIG</b>	Test Fluid To Be Used <b>WATER</b>	MINIMUM TEST DURATION - UNDER 30% SMYS (1 HR. MINIMUM) - 30% SMYS & OVER (8 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)			<b>8 HOURS</b>		
Maximum Test Pressure @ Min. Elevation	<b>780 PSIG</b>							
Prepared By: <b>Redacted</b>	Date: <b>7-14-11</b>	For Information or Changes, Call: <b>Redacted</b>	Approved By: <b>Redacted</b>	Date: <b>7/14/11 (3)</b>				

**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 <b>1145 pm 6-18-11</b>	Elevation at Test Point <b>19 FT</b>	Min. Required Test Press. At Test Point (1) <b>680 PSIG</b>	Max. Allowable Test Press at Test Point (4) <b>771 PSIG</b>
Time and Date Test Ended <b>0800 6-19-11</b>	Max. Elevation in Test Section <b>19 FT</b>	Min. Indicated Test Pressure (2) <b>695 PSIG</b>	Max. Indicated Test Pressure (5) <b>748 PSIG</b>
Actual Duration of Test <b>8 hrs. 15 min</b>	Min. Elevation in Test Section <b>0 FT</b>	Min. Test Pressure at Max. Elevation (3) <b>695 PSIG</b>	Max. Test Pressure at Min. Elevation (6) <b>756 PSIG</b>
Test Fluid Used <b>Water</b>	Pipe Specification and Footage Verified (See Part I)		
Make, Range, and Serial No. of Pressure Recording Gauge <b>CPL 170370-1000 PSI</b>	Date Last Calibrated <b>5-2-11</b>	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) <b>AMETEK 0-3500 PSI 2845</b>	Date Last Calibrated <b>11-29-11</b>
Test Supervisor <b>Redacted</b>	Date: <b>7-14-11</b>	Approved By: <b>Redacted</b>	Date: <b>7-13-11</b>

**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), GSM&TS
  - REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING

**1 - ORIGINAL SIGNED 6-21-11**  
**2 - ORIGINAL SIGNED 6-19-11**  
**(3) original document signed 6/6/11**  
**(4) original documents signed 6/6/11 @**