



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  
 (In accordance with Gas Standard A-31 and CGO 112-0)

Sheet 1 of 3

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

Feeder Main Number, Line Number, or Station Name <b>131</b>	Area <b>2</b>	Division/District <b>Milpitas/Mission</b>	Job Number <b>41497302</b>	Date Job Authorized <b>9/16/11</b>
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Description of Job - Include Reference Drawing Numbers, and Pipeline Mileposts  
**TEST 4 - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" & 34" L-131. Existing pipeline material listed; i.e. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497302, sheet 8 of 8) REV. 1 - Adjusted footage of item #5.**

Hydrotest L-131 from **Redacted** Fremont & Milpitas, CA (Test Section 22 South)

Location Class <b>3</b>	Design Factor (F) <b>.5</b>	MAOP to be Established for this Piping by this Test <b>595 PSIG</b>	Future Design Pressure <b>650 PSIG</b>
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation <b>30 Ft.</b>	Static Head Calculation For Water <b>0.433 X Elev. Diff. = 20 PSIG</b> Other (Specify)	X Elev. Diff. = <b>PSIG</b>
	Min. Elevation <b>-16 Ft.</b>		
	Elev. Diff. <b>46 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.	
30.00	0.625	Pipe, API-5L X-65, DSAW (item#103)	45'	14.9 JMK	21.97	32.97	37.48	2438
30.00	0.500	Pipe, API-5L X-65, DSAW (item#104)	36'	34' JMK	27.46	41.22	46.85	1950
30.00	0.625	Pipe, API-5L X-65, DSAW (item#3)	3108'	3232.2 JMK	21.97	32.97	37.48	2438
30.00	0.562	Pipe, API-5L X-52, DSAW (item#4)	49'	MOR	30.54	45.84	52.10	1753
30.00	0.500	Pipe, API-5L X-60, DSAW (item#5)	1800'	1855.7	29.75	44.65	50.75	1800
30.00	0.424	Pipe, API-5L X-65, DSAW (item#6)	37'	MOR	32.38	48.60	55.24	1654
30.00	0.375	Pipe, API-5L X-60, DSAW (item#7)	3727'	MOR	39.67	59.53	67.67	1350
30.00	0.625	Pipe API-5L X-65 DSAW item#5	24.1'	WCP	21.97	32.97	37.48	2438

Minimum Test Pressure @ Max. Elevation <b>893 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>1015 PSIG</b>			

Prepared By: <b>Redacted</b>	Date: <b>9/23/11</b>	For Information or Changes, Call: <b>Mark Cabral (925) 588-3640</b>	Approved By: <i>Mark Cabral</i>	Date: <b>9-23-11</b>
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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>4:15 am 10-13-11</b>	Elevation at Test Point <b>24 FT</b>	Min. Required Test Press. At Test Point (1) <b>896 PSIG</b>	Max. Allowable Test Press at Test Point (4) <b>997 PSIG</b>
Time and Date Test Ended <b>12:30 am 10-14-11</b>	Max. Elevation in Test Section <b>30 FT</b>	Min. Indicated Test Pressure (2) <b>914 PSIG</b>	Max. Indicated Test Pressure (5) <b>987 PSIG</b>
Actual Duration of Test <b>8 HR 15 min</b>	Min. Elevation in Test Section <b>- 25 FT</b>	Min. Test Pressure at Max. Elevation (3) <b>911 PSIG</b>	Max. Test Pressure at Min. Elevation (6) <b>1005 PSIG</b>

Test Fluid Used <b>WATER</b>	Pipe Specification and Footage Verified (See Part I) <b>Redacted</b>	AGSO
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Make, Range, and Serial No. of Pressure Recording Gauge <b>Barton 85346 0-3000</b>	Date Last Calibrated <b>9-23-11</b>	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) <b>CHANDLER 50-5000 22356</b>	Date Last Calibrated <b>9-6-11</b>
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Test Supervised By: <b>Redacted AKRI</b>	Date: <b>10-14-11</b>	Approved By: <b>Redacted</b>	Date: <b>10-20-11</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

**FINAL**



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-31 and CGO 112-D)

Sheet **2** of **3**

PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER)									
Feeder Main Number, Line Number, or Station Name <b>131</b>		Area <b>2</b>		Division/District <b>Milpitas/Mission</b>		Job Number <b>41497302</b>		Date Job Authorized <b>9/16/11</b>	
Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts <b>TEST 4 - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" &amp; 34" L-131. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497302, sheet 8 of 8) REV. 1 - Adjusted footage of item #5.</b>									
Hydrotest L-131 from MP <b>Redacted</b> Fremont & Milpitas, CA (Test Section 22 South)									
Location Class <b>3</b>		Design Factor (F) <b>.5</b>		MAOP to be Established for this Piping by this Test <b>595 PSIG</b>		Future Design Pressure <b>650 PSIG</b>			
STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)		Max. Elevation <b>30 Ft.</b>		Static Head Calculation		For Water <b>0.433 X Elev. Diff. = 20 PSIG</b>			
		Min. Elevation <b>-16 Ft.</b>		Other (Specify)		X Elev. Diff. = <b>PSIG</b>			
		Elev. Diff. <b>46 Ft.</b>							
Size		Pipe Specification		Pipe Spec. and Footage Verified In Field		% of SMYS			Pressure to Give 90% SMYS
O.D.	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.	
30.00	0.375	Pipe, API-5L X-52, DSAW (item#8)		14352'		45.77	68.69	78.08	1170
30.00	0.3125	Pipe, API-5L X-52, DSAW (item#9)		233'		54.92	82.43	93.69	975
6.625	0.280	Pipe, API-5L GR B, SMLS (item#25)		12' MOR WATER VERIFY		20.11	30.18	34.31	2663
4.50	0.237	Pipe, API-5L GR B, SMLS (item#26)		7' MOR		16.14	24.22	27.53	3318
4.50	0.156	Pipe, API-5L X-42, ERW		2'-1" A-MOR		20.43	30.67	34.86	2621
3.50	0.216	Pipe, API-5L GR B, SMLS (item#27)		3' MOR		13.77	20.67	23.50	3888
4.50		ELBOW 90° EI1		-					
3.50		VALVE #E-97		-					
Minimum Test Pressure @ Max. Elevation <b>893 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>1015 PSIG</b>									
Prepared By: <b>Redacted</b>		Date: <b>9/23/11</b>		For Information or Changes, Call: <b>Mark Cabral (925) 588-3640</b>		Approved By: <b>Mark Cabral</b>		Date: <b>9-23-11</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>4:15 am 10-13-11</b>		Elevation at Test Point <b>24 FT</b>		Min. Required Test Press. At Test Point (1) <b>896 PSIG</b>		Max. Allowable Test Press at Test Point (4) <b>994 PSIG</b>			
Time and Date Test Ended <b>12:30 am 10-14-11</b>		Max. Elevation in Test Section <b>30 FT</b>		Min. Indicated Test Pressure (2) <b>914 PSIG</b>		Max. Indicated Test Pressure (5) <b>984 PSIG</b>			
Actual Duration of Test <b>8 HR 15 MIN</b>		Min. Elevation in Test Section <b>-25 FT</b>		Min. Test Pressure at Max. Elevation (3) <b>911 PSIG</b>		Max. Test Pressure at Min. Elevation (6) <b>1005 PSIG</b>			
Test Fluid Used <b>WATER</b>				Pipe Specification and Footage Verified (See Part I) <b>A TRESPANDO A650</b>					
Make, Range, and Serial No. of Pressure Recording Gauge <b>OMRON 0-3000 85346</b>			Date Last Calibrated <b>9-23-11</b>		Make, Range, and Serial No. of Dead Weight Tester (See Note 7) <b>CHAMBER 50-5000 22856</b>			Date Last Calibrated <b>9-6-11</b>	
Redacted						Date: <b>11-20-11</b>			
<b>PUT SCHEMATIC PIPING SKETCH ON BACK OF THIS SHEET</b>									
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.									
<b>NOTES:</b>					<b>DISTRIBUTION</b>				
(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), GSM&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				

**FINAL**



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 112-0)

Sheet 3 of 3

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	
131		2		Milpitas/Mission		41497302		9/16/11	
Description of Job - Include Reference Drawing Numbers, and Pipeline Mileposts									
TEST 4 - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" & 34" L-131. Existing pipeline material listed; i.e. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497302, sheet 8 of 8) REV. 1 - Adjusted footage of item #5.									
Hydrotest L-131 from MP [Redacted] Fremont & Milpitas, CA (Test Section 22 South)									
Location Class		Design Factor (F)		MAOP to be Established for this Piping by this Test		Future Design Pressure			
3		.5		595 PSIG		650 PSIG			
STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)		Max. Elevation		30 Ft.		Static Head Calculation			
		Min. Elevation		-16 Ft.		For Water 0.433 X Elev. Diff. = 20 PSIG			
		Elev. Diff.		46 Ft.		Other (Specify) X Elev. Diff. = PSIG			
Pipe Specification									
Size		API or ASTM Grade		Footage to Be Tested	Pipe Spec. and Footage Verified in Field	% of SMYS			Pressure to Give 90% SMYS
O.D.	W.T.	Long Seam (ERW, DSAW, Seamless, Etc.)				At MAOP	At Min. Test Press.	At Max. Test Press.	
30.00	0.625	Elbow, Y-60 (item#12)		(19 Ea)	MDR	23.80	35.72	40.60	2250
30.00	0.500	Elbow, Y-60 (item#13)		(11 Ea)	MDR	29.75	44.65	50.75	1800
30.00	0.500	Elbow, Y-60 (item#123)		4 Ea	2EA JNK	29.75	44.65	50.75	1800
30.00	0.375	Elbow, Y-60 (item#15)		(26 Ea)	MDR	39.67	59.53	67.67	1350
30.00	UNK	Elbow, Grade Unknown (item#16)		(4 Ea)	MDR	----	----	----	----
30.00	0.438	Sleeve, Grade Unknown (item#21)		(2 Ea)	MDR	----	----	----	----
30.00	.375	Elbow Y-60 ITEM 124		-	2EA JNK	39.67	59.53	67.67	1350 (35)
Minimum Test Pressure @ Max. Elevation				893 PSIG		Test Fluid To Be Used		MINIMUM TEST DURATION	
Maximum Test Pressure @ Min. Elevation				1015 PSIG		WATER		- UNDER 30% SMYS (1 HR. MINIMUM) - 30% SMYS & OVER (6 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	
[Redacted]		Date: 9/23/11		For Information or Changes, Call: Mark Cabral (925) 588-3640		Approved By: Mark Cabral		Date: 9-23-11	
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		Elevation at Test Point		24 FT		Min. Required Test Press. At Test Point (1)		896 PSIG	
4:15 PM 10-13-11								Max. Allowable Test Press at Test Point (4) 994 PSIG	
Time and Date Test Ended		Max. Elevation in Test Section		30 FT		Min. Indicated Test Pressure (2)		914 PSIG	
12:30 AM 10-14-11								Max. Indicated Test Pressure (5) 984 PSIG	
Actual Duration of Test		Min. Elevation in Test Section		-25 FT		Min. Test Pressure at Max. Elevation (3)		911 PSIG	
8 Hr 15 min								Max. Test Pressure at Min. Elevation (6) 1005 PSIG	
Test Fluid Used				Pipe Specification and Footage Verified (See Part I)					
WATER				A TRESPANDO AG50					
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 85346				9-23-11		CHARLTON 50-5000 22356		9-6-11	
[Redacted]									
Date: 10-20-11									
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), GSM&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				

**FINAL**