



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 1 of 2

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

Feeder Main Number, Line Number, or Station Name 131	Area 2	Division/District Milpitas/Mission	Job Number 41497302	Date Job Authorized 9/16/11
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Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts
TEST 3 -- Hydrostatically test tie-in pieces, hydrostatic test piping and existing 30" & 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.

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

Location Class 3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 595 PSIG	Future Design Pressure 650 PSIG
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation	28 Ft.	Slab Head Calculation For Water 0.433 X Elev. Diff. = 23 PSIG Other (Specify) _____ X Elev. Diff. = _____ PSIG
	Min. Elevation	-25 Ft.	
	Elev. Diff.	53 Ft.	

Size		Pipe Specification		Footage to Be Tested	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.)				At MAOP	At Min. Test Press.	At Max. Test Press.	
34.00	0.375	Pipe, API-5L X-65, DSAW (item#102)		4'	0' JMK	41.50	62.28	70.79	1290
34.00	0.524	Pipe, API-5L X-60, DSAW (item#1)		6'	MOR	32.17	48.29	54.88	1664
34.00	0.438	Pipe, 48000 SMYS, DSAW (item#2)		3659'	MOR	48.11	72.21	82.07	1113
30.00	0.500	Pipe, API-5L X-65, DSAW (item#104)		5'	19.8' JMK	27.46	41.22	46.85	1950
30.00	0.375	Pipe, API-5L X-65, DSAW (item#105)		15'	14.1' JMK	36.62	54.95	62.46	1463
30.00	0.500	Pipe, API-5L X-60, DSAW (item#5)		30'	44.8' JMK	29.75	44.65	50.75	1800
30.00	0.375	Pipe, API-5L X-52, DSAW (item#8)		30'	31.4' JMK	45.77	68.69	78.08	1170
30.00	0.500	Elbow, Y-60 (item#123)		2 Ea.	MOR	29.75	44.65	50.75	1800
30.00	0.375	Elbow, Y-60 (item#124)		2 Ea.	MOR	39.67	59.53	67.67	1350
34.00	0.500	API 5L X 60 DSAW		-	5.52' JMK	33.38	50.10	56.95	1604

Minimum Test Pressure @ Max. Elevation	893 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	1015 PSIG			

Prepared By: Redacted	Date: 9/23/11	For Information or Changes, Call: Mark Cabral	Approved By: Mark Cabral	Date: 9-23-11
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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	4:15 PM 10-13-11	Elevation at Test Point	24 FT	Min. Required Test Press. At Test Point (1)	896 PSIG	Max. Allowable Test Press. at Test Point (4)	994 PSIG
Time and Date Test Ended	12:30 AM 10-14-11	Max. Elevation in Test Section	30 FT	Min. Indicated Test Pressure (2)	914 PSIG	Max. Indicated Test Pressure (5)	984 PSIG
Actual Duration of Test	8 HR 15 min	Min. Elevation in Test Section	-25 FT	Min Test Pressure at Max. Elevation (3)	911 PSIG	Max. Test Pressure at Min. Elevation (6)	1005 PSIG

Test Fluid Used WATER	Make, Range, and Serial No. of Pressure Recording Gauge BARTON 0-3000 85316	Date Last Calibrated 9-23-11	Make, Range, and Serial No. of Dead Weight Tester (See Note 7) CHAMBERLAIN 50-5000 22856	Date Last Calibrated 7-6-11
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Approved By: Redacted	Date: 10-14-11	Approved By: Redacted	Date: 10-20-11
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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
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 (For Pipeline Facilities Designed to Operate over 100 PSIG)

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 California Gas Transmission
 (Use in Accordance with Gas Standard A-34 and GO 112.0)

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

PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER)										
Feeder Main Number, Line Number, or Station Name 131			Area 2		Division/District Milpitas/Mission			Job Number 41497302		Date Job Authorized 9/16/11
Description of Job - Include Reference Drawing Numbers, and Pipeline Mileposts TEST 3 - 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 North)										
Location Class 3		Design Factor (F) .5		MAOP to be Established for this Piping by this Test 595 PSIG			Future Design Pressure 650 PSIG			
STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)		Max. Elevation 28 Ft.		Min. Elevation -25 Ft.		Elev. Diff. 53 Ft.		Static Head Calculation For Water 0.433 X Elev. Diff. = 23 PSIG Other (Specify) X Elev. Diff. = PSIG		
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.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)				At MAOP	At Min. Test Press.	At Max. Test Press.		
34.00	UNK	Elbow, Grade Unknown (item#11)		4 Ea.	MOR	----	----	----	----	
30.00	0.500	Elbow, Y-60 (item#13)		2 Ea.	MOR	29.75	44.65	50.75	1800	
30.00	0.500	Elbow, Y-52 (item#14)		1 Ea.	MOR	34.33	51.52	58.56	1560	
34x30	0.500	Reducer, ASTM A-633, 60000 SMYS (item#18)		1 Ea.	MOR	33.72	50.60	57.52	1588	
34x30	UNK	Reducer, Grade Unknown (item#19)		1 Ea.	MOR	----	----	----	----	
34x30	0.375	Reducer, Y-60 (item#140)		2 Ea.	A	44.96	67.47	76.69	1191	
1.05	0.113	Pipe, API-5L GR B, SMLS (item#28)		3'-6"	60' JMK	7.90	11.85	13.47	6760	
1.05		90° EL		-	3EA A					
1.05		VALVE		-	1EA A					
Minimum Test Pressure @ Max. Elevation				893 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				1015 PSIG						
Prepared By: Redacted		Date: 9/23/11		For Information or Changes, Call: Mark Cabral		(925) 588-3640		Approved By: <i>Mark Cabral</i>		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		4:15 P.M. 10-13-11		Elevation at Test Point 24 FT		Min. Required Test Press. At Test Point (1) 896 PSIG		Max. Allowable Test Press at Test Point (4) 994 PSIG		
Time and Date Test Ended		12:30 AM 10-14-11		Max. Elevation in Test Section 30 FT		Min. Indicated Test Pressure (2) 914 PSIG		Max. Indicated Test Pressure (5) 984 PSIG		
Actual Duration of Test		8 hrs 15 min		Min. Elevation in Test Section -25 FT		Min. Test Pressure at Max. Elevation (3) 911 PSIG		Max. Test Pressure at Min. Elevation (6) 1005 PSIG		
Test Fluid Used WATER				Pipe Specification and Footage Verified (See Part I) A TRESPANDO A650						
Make, Range, and Serial No. of Pressure Recording Gauge BARATOR 0-3000 85346			Date Last Calibrated 9-23-11		Make, Range, and Serial No. of Dead Weight Tester (See Note 7) CHAMOLLA 50-5000 22856			Date Last Calibrated 9-6-11		
Test Operator Redacted				Date: 10-14-11		Approved Redacted				
<p>PUT SCHEMATIC PIPING SKETCH ON BACK OF THIS SHEET</p> <p>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.</p>										
<p>NOTES:</p> <p>(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.</p> <p>(2) Use lowest pressure on test gauge at any time during test.</p> <p>(3) Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.</p> <p>(4) Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.</p> <p>(5) Highest pressure on test gauge at any time during test.</p> <p>(6) Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.</p> <p>(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.</p>					<p>DISTRIBUTION</p> <p>JOB FILE (AT SPONSORING ORGANIZATION)</p> <p>GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT</p> <p>PROJECT MANAGER/PROJECT ENGINEER</p> <p>TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY</p> <p>CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)</p> <p>RECORDS SECTION (WC), GSM&TS</p> <p>REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING</p>					

FINAL