

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 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																	
Feeder Main N			on Name	Area	Divisio	n/Dist	1.21	Seria. 2				Date Job Authonzed 8/22/11					
Description of	L-10		wien Number	2 s. and Pin	eline Milenosts		East	вау	- injection of the second	4149	1309 8/22/11						
Description of Job — Include Reference Drawing Numbers, and Pipeline Mileposis Test 2 — Hydrostatically test tie-in pieces, hydrostatic test piping and existing 26", & New 24" MLV, Bridle, and Blow off on L-105N. Existing pipeline																	
material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497369, sheet 5 of 5) Hydrotest L-105N from MP 27.94 – 28.13 Oakland, CA (Test section 15)																	
Hydrotest	L-105N	from MP 27	7.94 – 28	,13 O	akland, CA		(Lest section	on 15)									
Location Class	s D	esign Factor (F)	MAC)P to be Es	tablished for this Pi	ping b			Design Pressure	9		no translation and make the state of the sta					
3:		.5		<u> </u>	<u> </u>	-	198 p	śig		····	275 PSIG						
STAT	TIC HEAD DU	ETO	Max. Elevi	ation	32 Ft.	s	Slatic Head Ca'culation				٤						
ELEVA	ENGE	Min. Eleva	bon .	Ft.	F	or Water		0.433 X I	∃ev, Diff, =		3 PSIG						
(WHE	The state of the s	Elev, Diff,		7 Ft.	0	ther (Specify)			Efev. Diff. =	PSIG							
Oi-	*	Pipe Sp	ecification	ASTM Gr	ede:		Footage to		Spec. and ge Verified	Al	% of SMYS At Min.	At Max.		sure to e 90%			
				ASTM Grade I, DSAW, Seamless, Elc.)			Be Tested		Field	MAOP	Test Press.	Test Press.	8	MYS			
26.00	0,375	X-33 SS/	W		(Item f	(1)	,949'	1947	14	20.80 .	35.40	39.92	1	57			
26.00	0.375	API 5L X	-65, DSA	W	(item #10	5)	22°	130	TIM.	, 10.56	17.97	20.27		688			
24.00	0.375	API 5L X-60, DSAW			(item #10	6)	38° 3	2/35	′ Tm³	10100	17.97	20.27	-	688			
8,625	0,322	API 5L Gr. B SMLS			(item #11		30°	114	Tm	7.58		12.90 14.54		352			
6.625	0.280	API 5L Gr. B SMLS			(item #11		38 2	Carrot Spirit	NUT '	6.69	11.39	12.84		663			
1.050	0.154	API 5L Gr. B SMLS			(item #223)		36	129	J.M.Z.	1.93	3,28	3.70		240			
26.00	0.375	Elbow, API 5L Y-60 92			479		2 Ea.	_	Tm	11.44 10.56	19.47 17.97	21.96	-	558 688			
24.00 0.375 Elbow, API 5L Y-60 96 (ftem #123) 2 Ea. Tow 10.56 17.97 20.27 Test Fluid MINIMUM TEST DURATION											1	000					
Minimum Test Pressure @ Max. Elevation 337 PSIG To Be Used UNDER 30% SMYS (1 HR. MINIMUM)													4 8	IOURS			
WATER -30% SMYS & OVER (8 HRS. MINIMUM)												2/1					
Prepared By:		@ Win. Eleva	HOU	Date:	. 000		SIG nformation or Char	nges, Call:	- TALMOTE		Date:						
Redacted	d			8/22/	11	Mai	rk Cabral (92	25) 588-36	40	ra Cal	rol 0-22-11						
PART II - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST) Note: **Maintain test pressure and duration are not to be changed without written approval.**																	
									<u> </u>	75		ngama engamen		79			
Time and Date 9:30 a.m.					Elevation at Test		25'	Min. Requ	ived Test	340	188605 0000	Walle I fal		380			
Reached 4-1\1-1\					Point		FT_	Press. At	Test Point	(1) PSIG				PSIG			
Time and Dale 5 45 F				A .	Max. Elevation in Test Section	ŀ	32,	Min. Indic		(2) 348 PSIG				374 PSIG			
Test Ended 9-1/-1			7.7.7		Min. Elevation in		25	Min. Test		349		Pressure		74			
Actual Duration of Test Shv 15 min					Test Section		FI	et Mac. E	evation		Elevation (6) PSIG						
Test Fluid Used Pipe Specification and Footage Verified (See Part I) TM-A550 AA050																	
Make, Range,	and Serial No		ecording Gat	uge	Date La	st Cal	ibrated M	ake, Range, ar	d Serial No. of D	ead Weight Tester	ad Weight Tester (See Note 7) Date Last Calibrated						
CLP_	0-5	12000	17-0	4.4		25		JMC.	<u> </u>	ф - 3cc	Open HL						
Test Supervise	cted			Dale;	9-	11-11	oproved By:	Redacted		/	1-9-1 Pate:						
DUTCOUGH	Redac	KETCH ON B	ACK OF THE	SSHEET					Tax annual		a time an emperior of the property of the contract of the cont						
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														SSARY KETCH			
OF EACH ASSEMBLY TESTED.																	
					point and maximum	eleva	sion) to	JOB FILE (AT SPONSORING ORGANIZATION)									
	n test pressum est pressume or							GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT									
(3) Subtract		e to elevation d			point and maximum	n elev	ation) from	PROJECT MANAGER/PROJECT ENGINEER									
(4) Subtract	static head du	e to elevation d			point and minimum	TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY											
(5) Highest (m lest pressur pressure on le	st gauge at any	time during l	lest.	a an an an	12 -	es. egeletet										
(b) Add stalic head due to elevation difference (between test point and minimum elevation) to maximum CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB) indicated test pressure.																	
(7) A dead weight tester is only required when testing to a pressure which produces a stress level of 90% RECORDS SECTION (WC), GMS&TS of SMYS or greater. However, if a dead weight tester is used on any test, enter the information in the																	
	ovided above.	onevel, ii e UBc	en meiñiu igo	ioi io noch	ou out real amen	no mit	Autonou (1 mo	· R	PORT FAILURE	S UNDER TEST T	O GAS ENGINEE	RING & PLANNIN	G				





Pacific Gas and Electric Company Gas Pipeline Facilities Strength Test Pressure Report

of SMYS or greater. However, if a dead weight tester is used on any test, enter the information in the

62-4921 (Rev. 2/04) California Gas Transmission (Use in Accordance with Gas Standard A-34 and GO 112-0)

(For Pipeline Facilities Designed to Operate over 100 PSIG) Sheet PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER) Job Number Feeder Main Number, Line Number, or Station Name Area Dale Job Authorized 41497369 East Bay 8/22/11 Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts Test 2 - Hydrostatically test tie-in pieces, hydrostatic test piping and existing 26", & New 24" MLV, Bridle, and Blow off on L-105N. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497369, sheet 5 of 5) Hydrotest L-105N from MP 27.94 - 28.13 Oakland, CA (Test section 15) Location Class Design Factor (F) MAOP to be Established for this Piping by this Test Future Design Pressure .5 198 275 PSIG 3 PSIG 32 Ft. Static Head Calculation STATIC HEAD DUE TO Max Flevation 3 25 Ft. PSIG 0.433 X Elev. Oiff. = **ELEVATION DIFFERENCE** Min. Elevation For Water 7 (WHERE APPLICABLE) Elev. Diff Ft. Other (Specify) X Elev. Diff. = PSIG % of SMYS Pipe Specification Pipe Spec. and Pressure to API or ASTM Grade Footage to Footage Verified At Min. At Max. Give 90% O.D. W.T. Long Seam (ERW, DSAW, Seamless, Etc.) In Field MAOP Test Press Re Tested Test Press SMYS 0.375 10.56 24.00 Valve, Y-60, ANSI 300 (item #144) 1 Ea. 19.97 20.27 1688 TWI 8.625 0.322 Valve, Gr. B, ANSI 300 (item #148) 2 Ea. 7,58 12,90 14.54 2352 TW 26.00 0.375 Reducer, 26" x 24" Y-60 (item #200) 1 Ea, 11.44 19.47 21.96 1558 TW 12.90 8.625 0.322 Tee, Gr. B (item #201) 1 Ea. 7.58 14.54 2352 TW 6.625 0.280 Valve, Gr. B, ANSI 300 (item #202) 2 Ea. 6.69 11.39 12.84 2663 TVA 6.625 0.280 Elbow, Gr. B, 90 Deg (item #210) 2Ea. 6,69 11.39 12.84 2663 4 TUM 1 Ea. 6.69 11.39 12.84 6.625 0.280 Tee, Gr. B. (item #211) 2663 TWA 8.625 0.322 Elbow, Gr. B, 90 Deg (item #214) 1 Ea. 7.58 12.90 14.54 2352 TIM MINIMUM TEST DURATION Test Fluid 337 **PSIG** To Be Used - UNDER 30% SMYS (1 HR. MINIMUM) 8 HOURS Minimum Test Pressure @ Max. Elevation WATER - 30% SMYS & OVER (8 HRS. MINIMUM) 380 - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD, A-34) PSIG Maximum Test Pressure @ Min. Elevation Approved By: For Information or Changes, Call: Prenated Ry: Redacted Date Date: Redacted 8/22/11 Mark Cabral (925) 588-3640 mark 8-20-11 Note: Minimum test pressure and duration are not to be changed without written approval. PART II - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST) Time and Dale 9:30am 25 340 380 Min. Required Test Max. Allowable Test Elevation at Test Test Pressure 9-11-11 FT Press. At Test Point (1)**PSIG** Press at Test Point (4) **PSIG** Reached Point 374 :45 pm 321 348 Min. Indicated Max. Indicated Time and Date Max. Elevation in PSIG **PSIG** Test Ended FT Test Pressure (2)Test Pressure Test Section 346 374 25 Min. Test Pressure Max. Test Pressure **Actual Duration** Min. Elevation in VSWIN FT at Max. Elevation **PSIG** at Min. Elevation PSIG Test Section (6 of Test Pipe Specification and Footage Verified (See Part I) Test Fluid Used Water M-A550 Make, Range, and Serial No. of Dead Weight Tester (See Note 7) Date Last Calibrated Date Last Calibrated Make, Range, and Serial No. of Pressure Recording Gauge LP ametak 6-7-11 -500 DS 703 -25-11 6-3000psi Test Supervised By Redacted Date: Redacted 9 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, FAURICATED UNITS AND SHORT SECTIONS OF PIPE, ALSO SHOW A DETAILED SKETCH OF EACH ASSEMBLY TESTED. NOTES: DISTRIBUTION Add the static head due to elevation difference (between test point and maximum elevation) to JOB FILE (AT SPONSORING ORGANIZATION) "minimum test pressure at maximum elevation" from PART L GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT 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, PROJECT MANAGER/PROJECT ENGINEER 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 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 CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB) indicated test pressure. A dead weight tester is only required when testing to a pressure which produces a stress level of 90% RECORDS SECTION (WC), GMS&TS



REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING



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-b)

	Sheet 3 of 3																		
PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER)																			
Feeder Main Number, Line Number, or Station Name Area Division/Dis													Job Number						
	L-10			2		-		East E	Bay		41497369			8/22/11					
Description of Job Include Reference Drawing Numbers, and Pipeline Meleposts Test 2 — Hydrostatically test tie-in pieces, hydrostatic test piping and existing 26", & New 24" MLV, Bridle, and Blow off on L-105N. Existing pipeline material listed; ie. pipe, elbows, sleeves, are from the "Material of Record" (refer to Dwg 41497369, sheet 5 of 5)																			
	Hydrotest L-105N from MP 27.94 – 28.13 Oakland, CA (Test section 15)																		
Location Class		esign Factor (F)	MAC)P to be Est	lablished fo	or this Piping	by this 1	est	Future	e Design Pressur	8		***************************************						
3		.5						198 PSI	G		CONTRACTOR OF THE STATE OF THE				27	5 PSIG			
STAT	IC HEAD DUI	ETO	Max, Elev	ation	32	_ Ft.	Static He	rad Calculatio	n					_					
ELEVA	TION DIFFER	ENCE	ation	25	_ Ft.	For Wate	i.	1	0.433 X	Elev. Di	ff. =	3 PSIG							
(WHE	RE APPLICA		Elev, Diff,		7	Ft.	Other (S	pecify)			iiff. =	PSIG							
Size	3	Pîpe Spi	ecification API or	r ASTM Gra	ida.		4			ipe Spec, and otage Verified At						Pressure to Give 90%			
O.D.	, DSAW, S		ic)	Be Tested		In Field		MAOP		Test Press. Test Press.			SMYS						
6.625	0.280	80 Elbow, Gr. B, 45 Deg						Ż€a.		Ton		3.69	11.39	12.84		2663			
1.050	0.154		Valve Tee, Mueller H-176				4 Ea.		<u> </u>	TML		.93	3.28	3.70		9240			
1.050	0.154	Elbow, %" Socket Weld (iter				n #224)	1 1	≄Ea.	12	TML	1	1.93	3.28	3.70	_	9240			
	<u> </u>		<u></u>			***************************************	-								-				
	<u></u>	·	MINISTER STATE OF THE PARTY OF				+		ļ						-				
			-			**************************************										7			
																<u> </u>			
Minimum To	Test Fluid MINIMUM TEST DURATION Minimum Test Pressure @ Max. Elevation 337 PSIG To Be Used - UNDER 30% SMYS (1 HR. MINIMUM) 8 HOURS													HOURS					
WHITHING IT I C	0111000010	W IVION, CIEVA	DOIL				FUIO.	······································	ATER			R (8 HRS. MIN		<u> </u>		nouns			
Maximum Te	est Pressure Redac	@ Min. Eleva	tion	Date:	eranana manana manana da		PSIG	tion or Chang	no Call	- PREINSTA			E ATTACHMEN	T 'A', GAS ST					
Redacted		120		8/22/1	11					340	, A	pploved By: May	6 Colo	0	3-2)ale: 2 -/ /			
PART II - TES	Redacted 8/22/11 Mark Cabral (925) 588-3640 Mark Cabral (925) 588-3640 Mark Cabral (925) 588-3640 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																		
	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			15.5 - 15.5 - 15.5						W	rithout w	rillen approv	31.						
Time and Dale Test Pressure	o aw	•	Elevatio	n at Test	25' Min			ulred Test				llowable Test		380					
Reached		9-1	Point				FT Press			Test Point	(1)			Test Point (4)		PSIG			
			(5 Pr	n	Max. Elevation in Test Section			32'	M.n. Indi Test Pre		(2) 348 PSIG		Max. Indicated Test Pressure		(5)	378- PSIG			
Actual Duration			* **		Min. Ele		\top	25'	1	l Pressure	15/	3 45	Max. Test Pressure		701	374			
of Test Shr - 15 min Test Section								FI	at Max. 8	Elevation	(3)	PSIG	at Min, El		(6)	PSIG			
Test Fluid Used Pipe Specification and Foolage Verified (See Part I) Water TW-4550																			
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																			
Test Supervise	<u>oossi.</u> acted	Dale:	Approved By: Dodastod					<u>020 ps</u>	osi H2-6301 6-7-11										
			Vale acres	o ourre		4	-11-	11		redacted //-9-//									
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 ASS							1 1 2000				200 7000								
NOTES: (1) Add the static head due to elevation difference (between test point and maximum elevation) to DISTRIBUTION JOB FILE (AT SPONSORING ORGANIZATION)																			
(2) Use lowe	est pressure o	e at maximum e n test gauge at a	any time dur	ing test.					G	SM&TS RESPO	VSIBLE	DISTRICTS	JPERINTENDE	NT					
(3) Subtract		ie to elevation d		point and i	Р	PROJECT MANAGER/PROJECT ENGINEER													
(4) Subtract	static head do	re to elevation d			point and		TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY												
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											CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)								
indicated	test pressure	k .											OUL FUE JUD	y.					
of SMYS	of SMYS or greater. However, if a dead weight tester is used on any test, enter the information in the											RECORDS SECTION (WC), GMS&TS REPORT FAILURES LINDER TEST TO GAS ENGINEERING & PLANNING							

