

## Pacific Gas and Electric Company Gas Pipeline Facilities Strength Test Pressure Report (For Pipeline Facilities Designed to Operate over 100 PSIG)

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.

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

of PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER) Feeder Main Number, Line Number, or Station Name Job Number Date Job Authorized Redacted 41617928 L-300A 3-21-12 Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts Test 1 - Isolation Pup and Caps to facilitate Hydrotest 055-12 (See Dwg 41617928, SHT 4) per Detail 4 attached here to, to be fabricated & tested. Hydrotest L-300A from Redacted (Test Section 055-12) Location Class Design Factor (F) MAOP to be Established for this Piping by this Test Future Design Pressure **PSIG** 817 **PSIG** STATIC HEAD DUE TO Max. Elevation Ft. Static Head Calculation **PSIG ELEVATION DIFFERENCE** Min. Elevation Ft. For Water 0.433 X Elev. Diff. = 0 Elev Diff. Ft. **PSIG** (WHERE APPLICABLE) Other (Specify) X Elev. Diff. = % 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.) Be Tested In Field MAOP Test Press Test Press SMYS 34.00 .375 API 5L, X-65, SAWL 8 1291 56.00 70.02 80.00 34.00 505 **CAPS. Y-60** 2 Ea. 45.05 56.33 64.35 1604 Test Fluid MINIMUM TEST DURATION 1004 Minimum Test Pressure @ Max. Elevation **PSIG** To Be Used - UNDER 30% SMYS (1 HR. MINIMUM) HOURS - 30% SMYS & OVER (8 HRS, MINIMUM) WATER 1147 **PSIG** - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34) Maximum Test Pressure @ Min. Elevation Prepared By: Redacted For Information or Changes, Call Date: Redacted Redacted Redacted 3-23-12 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 Min. Required Test Test Pressure Max. Allowable Test **Elevation at Test** FT **PSIG** Press. At Test Point (1) (4) **PSIG** Reached Point Press at Test Point Min. Indicated Max. Indicated Time and Date Max. Elevation in FT **PSIG** (2)Test Ended Test Section Test Pressure Test Pressure (5)**PSIG** Min. Test Pressure **Actual Duration** Min. Elevation in Max. Test Pressure **PSIG** at Max. Elevation **PSIG** of Test Test Section at Min. Elevation (6)Test Fluid Used Pipe Specification and Footage Verified (See Part I) Make, Range, and Serial No. of Dead Weight Tester (See Note 7) Make, Range, and Serial No. of Pressure Recording Gauge Date Last Calibrated Date Last Calibrated Test Supervised By: Date: Approved By: Date: 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: DISTRIBUTION JOB FILE (AT SPONSORING ORGANIZATION) 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. GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT Subtract static head due to elevation difference (between test point and maximum elevation) from PROJECT MANAGER/PROJECT ENGINEER minimum indicated test pressure. Subtract static head due to elevation difference (between test point and minimum elevation) from TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY "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 CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB) indicated test pressure.

RECORDS SECTION (WC), GMS&TS

REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING



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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-3(	0A		Division/District Reda					Jo	b Number 41617		Date Job Authorized 3-21-12						
Test 2 - S Sheet 5).	Description of Job – Include Reference Drawing Numbers, and Pipeline Mileposts  Test 2 – Segment A-B – Hydrostatically Test existing 34" pipe on L-300A. Materials listed are from the "Material of Record" (refer to DWG 41617928, Sheet 5). No spike test for existing 34" piping in Class II due to major elevation changes.  Hydrotest L-300A from MP Redacted Segment A-C Redacte CA (Test Section 055-12)																	
•		esign Factor (F)						_				7						
Location Class	for this Pipir	ing by this Test Future Design Pressure 803 PSIG					817 PSIG											
STAT	IC HEAD DU	ETO	Max. Eleva	ation	5024	Ft.	Static Head Calculation											
ELEVA:	TION DIFFER	ENCE	4770	Ft.	For Water 0.433 X E					Elev. Diff. = 110 PSIG								
(WHE	RE APPLICA	BLE)	Elev. Diff.	4	254 Ft. Other (			cify) X			X Elev.	Diff. =		PSIG				
		Pipe Sp	ecification						Pipe Spec. and				% of SMYS		Pressure to			
O.D.	Size         API or ASTM           O.D.         W.T.         Long Seam (ERW, DSAV							tage to Tested	Footage Verified In Field			At MAOP	At Min. Test Press.	At Max. Test Press.	Give 90% SMYS			
34.00	.375	API 5L, X		***************************************		,		425'	58.8	2555		70.01	87.53	100.00	1032			
34.00	.375	Elbow Af	**************************************		1 Ea.			70.01		87.53 100.00		1032						
34.00	.375	API 5L, X			35'	<u> </u>			56.00	70.02 80.00		1291						
12.75	.500	API 5L, G			25'				29.25	36.57	41.78	2471						
12.75		Blind Flange Assembly, ANSI 600						Ea.			1		* *					
		***************************************					1	***************************************						<del></del>				
				HI AND	Mana													
			»				,				<u> </u>							
Minimum Test Pressure @ Max. Elevation 1004								PSIG To Be Used - UNDER 30%					TEST DURATION 6 SMYS (1 HR. MINIMUM) 8 HOURS 6 OVER (8 HRS. MINIMUM)					
Maximum Te			ion			,1147	PSIG - PREINSTAL					LLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)						
Prepared By:	Red	acted		-	lant	FO	o <u>r Information</u> edacted		s, Call:		F	Redacted	Date:					
Redacted / 3/23/con													num test pressure and duration are not to be changed					
PARI II - IESI	DATA(IO	IE PKEPAKED	BY PERSON	I SUPERV	ISING IE	SI AI IIME	: Ur IESI)					est pressure a written approva		ot to be changed				
Time and Date		Ť			***************************************	****************				1		I	1		- i			
Test Pressure Reached	est Pressure				Elevation Point	n at Test		FT		Min. Required Test Press. At Test Point		PSIG	Max. Allow Press at Te		PSIG			
Time and Date				Max. Ele			FT		Min. Indicated		A	Max. Indica	aled					
Test Ended Actual Duration					Test Sec Min. Elev			FI	Min. Test Pressure		(2)	PSIG	Test Pressi Max. Test F					
of Test Test Fluid Used					Test Section			FT T Ding Sn	at Max. Elevation		(3)	PSIG	at Min. Elev		PSIG			
rest riuid Oseo	ļ.					Pipe Specification and Footage Verified (See Part I)												
Make, Range, and Serial No. of Pressure Recording Gauge Date Last Cal							Calibrated	brated Make, Range, and Serial No. of Dead Weight Tester (See Note 7)  D						Date L	ast Calibrated			
Test Supervised By: Date:								Approved By: Date:										
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: DISTRIBUTION																		
(1) Add the sta					oint and m	aximum ele	vation) to		JOB I	FILE (AT SPO	ONSOR	ING ORGANIZ	ATION)					
"minimum test pressure at maximum elevation" from PART I. (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.																		
indicated to	est pressure.						•					!	JOPY OF JOB)					
(7) A dead we of SMYS o		only required wh wever, if a dead							RECO	ORDS SECTI	ON (W	C), GMS&TS						
	rided above.								REPO	ORT FAILURE	ES UND	ER TEST TO	GAS ENGINEER	UNG & PLANNING				



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Pacific Gas and Electric Company
Gas Pipeline Facilities Strength Test Pressure Report
(For Pipeline Facilities Designed to Operate over 100 PSIG) of \_\_\_1\_ Sheet \_\_\_1\_

		e Number, or Sta	-	RED BY P	ROJECT						17	h Mumbae		Date leb Auti	adaad		
recuei main i	300A	Alea	Division/District Redacte							Job Number							
Test 3 - 8	Segmen	de Reference Dr t B-C — Hyd e test for exi	rostatica	lly Test	existing	34" pipe				d are fro	m the	***************************************	of Record" (			17928,	
Hydrotes	t L-300	A from MP F	Redacted	d	Segme	nt A-C F	Redacte	, CA	(Test	Section	055-1	2)					
Location Class	Design Factor (F	MA	stablished f	Future D	Future Design Pressure 817 PSIG												
STAT	IC HEAD D	IVE TO	Max. Ele	vation	4776	Ft.	Static Head	Calculation	n					X 13.0			
ELEVA	TION DIFF	ERENCE	Min. Elev	ration	4518	_ Ft.	For Water		<b>Jenne</b> 100 - 100	0.433	X Elev.	Oiff. =	112 PSIG				
(WHE	RE APPLI		Elev. Diff		258	Ft.	Other (Speci	ify)			X Elev.	Diff. =	PSIG				
Pipe Specification Size API or ASTM					Grade Footage			ge to	Pipe Spec. and Footage Verified			% of SMYS At At Min, At M				ressure to Sive 90%	
O.D.	O.D. W.T. Long Seam (ERW, DSAV					i i				In Field		MAOP	Test Press.			SMYS	
34.00	.375	API 5L,					221				70.01 70.01	87.53	100.00		1032		
34.00 34.00	.375	Elbow A					3 E						87.53 70.02			1032	
34.00	.313	API DL,	1-00, OA	AAT			15'				+	56.00	10.02	00.00		1291	
	<del></del>	† —									1						
							-					***************************************					
		1	THE CONTRACT OF THE CONTRACT O				1				+				-	7	
					The state of the s		<del></del>	Test	Fluid	MINIM	JM TE	ST DURAT	I				
Minimum Tes	st Pressur	e @ Max. Elev	ation	_		1004	PSIG		Used	- UNDER	30% SN	YS (1 HR. MI	NIMUM)		8	HOURS	
Maximum Te	st Pressu	e @ Min. Eleva	ition			1147						& OVER (8 HRS. MINIMUM) LLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)					
Prepared By: Redacted		3/23/2012 For Information or C				inges, Call: Reda			Redacted	ted Date: 3-23-/2							
	DATA (TO	BE PREPARED	BY PERSO	N SUPERV		TEST AT TIME OF TEST): Note: Minir						mum test pressure and duration are not to be changed ithout written approval.					
Time and Date Test Pressure			***************************************		Elevation at Test			<b>-T</b>	Min. Required Test Press. At Test Point (		.74X	PSIG	Max. Allow	arrange of a second	(4) PSIG		
Reached Time and Date					Point Max. Ele		FT		Min. Indicated		(1)	Max. Inc		icaled			
Test Ended					Test Sec Min. Elev				Min. Test Pressure		(2)	Polu		Test Pressure  Max. Test Pressure		PSIG	
Actual Duration of Test Test Fluid Head				Test Sec			<u> </u>	at Max. Eleva	t Max. Elevation (3)			at Min, Ele			PSIG		
Test Fluid Used Pipe Specification and Footage Verified (See Part I)																	
Make, Range, a	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 C							alibrated	
Test Supervised		Date:				wed By;	***************************************					Date;					
SHOW LOCATI	ON OF FA ENCE NU	MBERS ON FACI	MINIMUM A	ND MAXIM									S. USE AN ADDI NS OF PIPE, ALS				
OF EACH ASSI NOTES:			.5 (4)			and the second	3.3		- Service and a	RIBUTIO						-	
(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.  PROJECT MANAGER/PROJECT ENGINEER  (4) Subtract static head due to elevation difference (between test point and minimum elevation) from																	
"maximum	test pressi	ue to elevation o tre at minimum e est gauge at any	evation" fror	n PART I.	even selv III	m 149011.5000	weed usu		TECH	NICAL & C	ONSTRU	ICTION SER	VICES - ASSIGNE	ED JOBS ONL	Υ.		
(6) Add static	head due t	elevation differe			and minim	um elevatio	n) to maximur	n	CAPIT	TAL ACCO	UNTING	(FOREMAN'S	COPY OF JOB)				
of SMYS o	ight tester i r greater.	s only required w However, if a dea										C), GMS&TS					
space prov	rided above	\$2	-						REPO	RT FAILU	RES UND	ER TEST TO	GAS ENGINEER	RING & PLANI	ING		