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(7)

Pacific Gas and Electric Company

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62-492	1 (Rev. 2/04)
California Con T	Transmission
Computer Cost	DBHSHUSSION

		Gas F	'ipeline Fa	cilities	Streng	gth Test F	ress	sure Re	port	ngagamentak "Alla"				(Use in Acco	Califi rdance with Gas	Standard A	-34 and GO 112-C	
	78		enne racinu	es Designe		Derate Over	516)		FI	NA		ð	Sheet _	1	_of	3		
PAF	RT I -	DESIGN [DATA (TO BI	E PREPARE	D BY P	ROJECT ENG	SINEE	R)						4				
Feede	er Main	Number, Line	Number, or Stati	on Name	Area	Di	vision/[District				40	hlander =	+344	Date Job	Authorized	ſ	
L-13	32	ritati di altada	D.(1	1	P	enins	sula				41	474078-	T36A2	5/17/11	[- -		
T-36	Sou	th-Hydrost he "Materi	atically test	tie-in pip d". (refer	i, and Pip ing, hy to DW(drostatic te G 4147407	st pip 8,Sht	oing and .9).	existing 3	30" and	36" L-132	. Existi	ing mater	ial listed; ie	. pipe, el	bows,	sleeves,	
Hyd	Iro tes	st I-132 fro	m MP Reda	acted		San Bruno.	Ca (Test-Sec	tion 36 S	outh-Lo	cation A t	o B)						
Location Class Design Factor (F) MAOP						tablished for thi	s Pipin	g by this Ter 30	l IO PSIG	Future Design Pressure						3	00 psic	
	STAT	TIC HEAD DUE	то	Max. Elevat	Son	366	Ft.	Static Head	Calculation									
	ELEVA	TION DIFFER	ENCE	Min. Elevati	on	41	Ft.	For Water			0.433	X Elev. D	(ff. =		141	PSIG	k	
	(WHE	RE APPLICA	BLE)	Elev. Diff.		325	Ft.	Other (Spe	cify)			X Elev, I	 Diff. =			- PSIG		
			Pipe Spe	ecification				T	1	Pipe {	Spec. and			% of SMYS		T	Pressure to	
1.0	Siz),	e W.T.	Long	API or A Seam (ERW,	STM Gra DSAW, S	ide eamless, Etc.)		Foot Be 1	age to ested	Footag In	ge Verified Field	Ň	At MAOP	At Min. Test Press.	At M Test P	ax. ress.	Give 90% SMYS	
36.	00	0.500	API 5L, X	-65, DSA	W	(Item#	27)	2	3'	MO	R	1	6.62	28.25	40.9	98	1625	
30.	00	0.375	API 5L, X	-65, DSA	W	(Item#2	28)	3	8'	MC	R	1	8.46	31.38	45.	54	1462	
30.0	00	0.375	API 5L, X	-42, DSA	W	(item #	<u>1)</u>		3' :	MO	R	2	8.57	48.57	70.4	18	945	
36.	00	0.360	API 5L, X	60, DSA	W	(item #	<u>2)</u>	257	4.5'	_ <u>Mo</u>	R		5.00	42.50	61.0	57	1080	
30.0		0.300	API 5L, X	DEAL	N	(item #	<u>3)</u>	8	07	_ <u>M0</u>	R		8.85	49.04	71.	5	936	
20.0	00	0.400	API OL, A	DOAN	<u> </u>	(Item#4	<u>)</u>	14	10	MC	R		2.00	43.48	50.0	19	1055	
00.0	10 1	0.070	ALIDE, V	OZ DOAN	14 	(itelling	<i>''</i>	03	Toel F	<u>MC</u> Juid	<u>) K</u> E MINIMU	M TES	T DURAT	39.23	1 30.3		11/0	
Minim	um Tes	st Pressure () Max. Elevat	ion		5	10	PSIG	To Be I	Jsed ER	- UNDER 3	30% SMY 'S & OVEF	'S (1 HR. MII R (8 HRS. MIN	NIMUM) IIMUM)	L	8	HOURS	
Maxim	um Te	st Pressure (@ Min. Elevati	on	l:	7.	40	PSIG	01	0.8	- PREINST	TALLATIC	ON TEST (SE	5 ATTACHMEI	IT 'A', GAS	STD. A-3	4)	
Mark	ю ву: Cabr	al			Date: 06/03/	11	Re	edacted	or Changes,	es, Call: App Rec			Redac	lacted			C/4/11	
PARTI	- TEST	T DATA (TO B	E PREPARED E	Y PERSON	SUPERVI	SING TEST AT	TIME	OF TEST)			Note: Mi	inimum te without w	st pressure a ritten approv	ind duration are al.	not to be ch	anged		
Time an	d Date		ICAL	- 1.10	1			1				1	2.10				000	
Test Pre	ssure		1272	2 4/4	6/9/11 Elevation at Test			14		Win. Requi	red Test		(1) DSIC Dress al			205	739	
Reache	0		0001	<u>~ 163</u>	3 Point			<u>. See</u>		Tess. At I	est Point	<u>-(1)</u>	PSIG Press at 1			est Point (4)		
Time an Test End	d Date ded		200.	6/10		Max. Elevation in Test Section			FT	Test Pressure		(2)	PSIG	Max. Indicated Test Pressure		e (5)		
Actual D	luration		onr 22	C I	WINI	Min. Elevation in				lin. Test P	ressure		532	Max. Tes	Pressure	ssure 722		
of Test	id Hsed	20	0.0	0 100	15	Test Section		- 41	FT a	Max. Ele		<u>(3)</u> lacted	PSIG	at Min Fl	evation	(6)	PSIG	
		Cit	y Wa	oter					, ho obou	ioucon ent						Que:		
Make, R	ange, a <u>B</u> e	nd Serial No. (977081	Ø Pressure Rec 	ording Gauge 00, 24	2E-3	9611 Date	Last Ca	librated	Make, F EG (lange, and t G C	Serial No. of	Dead We ∾r, ⋜≾	ight Tester (5- 5, 000	See Note 7)	495	Date Las	t Calibrated 5/2010	
Reda	acted			0		Date	10	loni	Reda	cted						Date:	6-01	
Pursu	ICAIN	IC FIFINO ON	CACIT OIL DAG	NUT THIS S	HEET			<u>(~~~ (</u>	4	and the second	and the state of the			and the second of	<u>سا</u>	<u> </u>		
SHOW L	OCATI REFER	ON OF FACILI ENCE NUMBE	ny tested, m ERS on face (INIMUM AND	I MAXIMU VINGS AI	IM ELEVATION	I IN FEI Ents).	ET, MILE PO FOR STAT	DINTS, VALV	E NUMBE	RS AND INCO TED UNITS AI	DRPORA ND SHOP	TED AREAS	S OF PIPE, AL	ITIONAL SH SO SHOW A	EET IF NI	ECESSARY	
OF EAC	HASSE	MBLY TESTE	D.							DIO	TOIDUTION							
(1) Add	i the sta	uic head due t	o elevation diffe	rence (betwee	en test po	int and maximu	m eleva	ation) to		JOB	FILE (AT SPO	ONSORIA	IG ORGANIZ	ATION)		*		
"mii (2) Use	nimum t Iowest	lest pressure a pressure on te	t maximum elev est gauge at any	ation" from P. time during t	ART I. lest.					GSN	(&TS RESPO	NSIBLE C	DISTRICT SL	IPERINTENDEI	NT.			
(3) Sub	tract sta imum in	atic head due l	to elevation diffe	rence (betwe	en test po	oint and maxim	ım elev	ation) from		PRO	NECT MANAG	SEB/DBC	NECT ENGI	VEED	ċ.			
(4) Sub	tract sta	atic head due I	o elevation diffe	rence (betwe	en test po	oint and minimu	m eleva	ation) from		100		MOTOR	TION OF DI	1000 A00101	CO 1000 0	NT 57-		
(5) Higl (6) Add	nest pre static h	issure on test j read due to ele	a minimum elev gauge at any tin evation differenc	e during test. e (between te	est point a	ind minimum el	evation) to maximu	m	CAP	ITAL ACCOU	NTING (F	OREMAN'S	COPY OF JOB	E0 1082 0	IAF L		
india (7) A de	cated te ead well	st pressure. oht tester is or	ly required whe	n lestina to a	Dressure	which produce	s a she	ss level of Q	0%	REC	ORDS SECTI	ONINC	GMSATS					
1.					E					الشناد و	and the second sector building	~	1 - 11 - 11 - 1					
of S	MYS or	greater. How	ever, il a dead v	veight tester i	s used on	i any lest, enter	the info	ormation in I	he		ODTEANO	- ninin-	A TPAT **		ONO A PL	MANA		

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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)



11 POL	4					,			in a star	.10, _//	÷.	Sheet _	2	of	3
PART I -	DESIGN	JATA (TO B	E PREPARE	D BY PROJECT	ENGINEER	२)						e benne prok			
Feeder Main	Number, Line	Number, or Stat	ion Name	Area	Division/D	istrict		Zob Number 7344 Date Job Autho							
L-132	Clab Induda	Defenses Dee		1	Penins	sula				41474078-	178-T36A2 5/17/11				
T-36 So	uth-Hydro	statically te erial of Rec	st tie-in pip ord". (refer	bing, hydrost	atic test p 474078.Sł	iping a nt .9).	and existi	ng 30° ar	id 36" L-	132. E>	disting mat	erial listed; ie	e. pipe, elb	ows,	sleeves,
						<u></u>									
Location Clas	s [Jesign Factor (F)	MAOP	to be Established	for this Piping	by this	Test	Futur	e Design Pre	ssure					
3		5					300 ps	IG						30	0 PSIG
STA	TIC HEAD DU	ETO	Max. Elevati	on <u>366</u>	Ft.	Static H	ead Calculati	on							
ELEVA	TION DIFFER	RENCE	Min. Elevatio	n <u>41</u>	Ft.	For Wat	er	i	0.43	33 X Elev. 1	Diff. =		141	PSIG	
(WHE	ERE APPLICA	BLE)	Elev. Diff.	325	Ft.	Other (S	pecify)	<u> </u>		X Elev	. Diff. =			PSIG	
Siz	A	Pipe Spi	API or A	STM Grade	<u> </u>		oolage to	Pipe	Spec. and on Verified	<u> </u>	Δt	% of SMYS	AtMax		Pressure to Give 90%
0.D.	W.T.	Long	Seam (ERW, I)SAW, Seamless,	Etc.)	B	e Tested	1	n Field		MAOP	Test Press.	Test Press	. I	SMYS
30.00	.3125	API 5L, >	(-52, DSA	W ((Item 6)		641'	M)R		27.69	47.08	68.31		975
4.500	.237	API 5L,	Gr B, SML	. <u>S (</u>	Item #8)		2'	M	<u>R.</u>		8.12	13.80	20.03		3325
30.00	.375	Elbow, Y	42	(tem#10)		1 Ea.	M	R		34.29	58.29	84.57		18/
30.00	.375	Elbow, T	-02	<u> </u>	tem #11)	4	A Ea	Mo	<u> </u>		26.26	47.08	00.31		9/0
30.00	375	Elbow V.	-33 52	<u> </u>	$\frac{1}{1}$		4 Ca. 8 Fa	MO	<u>R</u>		23.08	30.22	56.02		142
30.00	.3125	Elbow.Y-	Elbow Y-52		(Item #15)		4 Ea.	I me	N N		27.69	47.08	68.31		975
				······		1			QR						
Minimum Tes	st Pressure (@ Max. Elevat	ion		510	PSIG	Tes To E	Test Fluid MINIMU To Be Used - UNDER 3			ST DURAT MYS (1 HR. MI	ION NIMUM)		8	HOURS
Maximum Te	st Pressure	@ Min. Elevat	lon		740	PSIG	W	ATER	- 30% SI	MYS & OV ISTALLAT	ER (8 HRS, MIN TION TEST (SE	RIMUM) EE ATTACHMEN1	L'A'-GAS STI). A-34)	
Prepared By: Mark Cabr	 al	0	[Date: 5/03/11	For	Informat	ion or Chang	es. Call:			Approved Re	edacted			
PART IL TEST		E PREPARED I	AY PERSON S	UPERVISING TE	ST AT TIME (SE TEST	1		Noter	Linimum	lest pressure :	and duration are r	iat to be chang	od	
					or mine v		×		11010.	without	written approv	val.	ior to be chang	ou:	
Test Pressure		11545	hr	Elevatio	n at Test	44 Min. Re			Required Test			Max. Allow	able Test		739
Reached		6-1-	hr	Point	Point			Press. At	Test Point	(1)	(I) PSIG Pres		s at Test Point		PSIG
Time and Date Test Ended		6-10	-11	Max. Ek Test Se	evation in ction		FT	Min. Indic Test Pres	ated sure	(2)	(2) PSIG Test Pr		licaled assure (5		PSIG
Actual Duration	þ		15	Min. Ele	Min. Elevation in			Min. Test	n. Test Pressure			Max. Test I	st Pressure		728
of Test Test Fluid Used	Ĩ	18hr	<u>- 250</u>	Test Sec	ction		FT Pipe Sp	at Max. El ecification ar	evation d Footage V	(3) enified (Si	PSIG ee Part I)	at Min. Eley	/ation	(6)	PSIG
	JJa	tro		······································			1					lever	- the	off	le i
Make, Range, a	and Serial No.	of Pressure Rec	ording Gauge	E 20 /	Date Last Ca	librated	Mak	e, Range, an	d Serial No.	of Dead V	Veight Tester (See Note 7)	Da	te Løst	Calibrated
Tes Redact	ed	$p = 1_1 \alpha$	<u>D 2-42</u>	<u>. E *3161</u>	Date:	<u></u>	Reda	acted	anan	<u>.</u>			<u>475 1</u>	o)ate:	<u>05 ° 0</u>
PUT SCHEMAT	IC PIPING SI	ETCH ON BAC	KOF THIS SI	IFFT	<u>[10] à</u>	1011	4						6	SC	1.11
SHOW LOCATI	ON OF FACIL	ITY TESTED, M ERS ON FACE	INIMUM AND	MAXIMUM ELEV	ATION IN FEI CHMENTS).	ET, MILE FOR ST	POINTS, VA	ALVE NUMB	ERS AND IN	CORPOR	ATED AREAS	USE AN ADDIT	IONAL SHEET	TAILE	CESSARY SKETCH
OF EACH ASSI	EMBLY TEST	ED,					nervejna vrak		TOIDUTI	<u></u>					
(1) Add the st	atic head due	lo elevation diffe	rence (betwee	n test point and m	naximum eleva	ation) to		JOI DI	3 FILE (AT 8	<u>JN</u> SPONSOF	RING ORGANI	ZATION)			
(2) Use lowes	t pressure on I	est gauge at an	y time during to	singer 1. Est.	. . 12	an anas		GS	M&TS RESP	ONSIBL	E DISTRICT SU	JPERINTENDEN	r		
 (3) Subtract st minimum in 	atic head due ndicated test c	to elevation differences ressure.	erence (betwee	en test point and r	naximum elev	ation) fro	m	PR	OJECT MAN	IAGER/PI	ROJECT ENGI	NEER			
(4) Subtract st "maximum	atic head due	to elevation diffe	erence (betwee ation" from P/	n test point and r	ninimum eleva	ition) from	m	TC	HNICAL &	CONSTR	UCTION SEPT	ICES - ASSIGNE	D 1086 OM	r.	
(5) Highest pre (6) Add static	essure on test	gauge at any tin evation difference	ne during lest.	st point and minia	um elevation	to mavi	mum	CA	PITAL ACCO	NINTING	(FORFMAN'S	COPY OF IOR			
indicated to (7) A dead we	est pressure.	nly required who	in testina to e	pressure which or	oduces a stro	s lovol r	of 90%	RC	CORDS SEC	TION W	C) GUSLTS				
of SMYS of snace prov	r greater. How	vever, if a dead	weight tester is	used on any test	, enter the info	mation	in the	RE	ORT FAIL	IRES UM	JER TEST TO	GAS ENGINEED	ING & PLANN	NG-	



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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)



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

I I GI	al .												Sheet	3	of	3		
PART I -	DESIGN	DATA (TO B	E PREPARE	D BY PROJE	CT ENGINE	ER)					41	497	344					
Feeder Main Number, Line Number, or Station Name Area Division/District											30		Date Job A					
L-132	of John Include	Deference Dre	uing Numbers	1 and Disoline M	Peni	nsu	la	41474078=T36A2							5/17/11			
T-36 Sc are from	outh-Hydro n the "Mat	statically te erial of Rec	st tie-in pip ord". (refer	ing, hydro to DWG 4	static test 1474078,	t pip Sht	ing and exis .9).	ting	30" and	36" L-13	2. Ex	isting ma	iterial listed; i	ie. pipe, e	lbows	, sleeves,		
Location Clar 3	ss I	Design Factor (F) 5	MAOP	to be Establish	ed for this Pip	oing b	y this Test 300 P	SIG	Future D)esign Pressu	ire				3	00 psig		
STA	TIC HEAD DU	e to	Max. Elevatio	m <u>36</u>	6 Ft.	s	latic Head Calcula	tion	L						,			
ELEV	ATION DIFFER	RENCE	Min. Elevatio	n <u>4</u>	1 Ft.	F	or Water			0.433 X	Elev, l	Diff. =		141	PSIG			
(WH	IERE APPLICA	BLE)	Elev. Diff.	32	5 Ft.	0	ther (Specify)				X Elev.	Diff. =			PSIG			
01		Pipe Sp	ecification	TUO			Testerit	Τ	Pipe Sp	ec. and		41	% of SMYS			Pressure to		
0.D.	W.T.	Long	API or As Seam (ERW, D	SAW, Seamler	is, Etc.)		Foolage to Be Tested		Foolage In F	Venhed Ield		at Maop	At Min. Test Press.	At Ma Test Pre	K. ISS.	Give 90% SMYS		
30	.532	Sleeve, !	50,000 SM	YS	(Item 17)		3 Ea.		MO	R		16.92	28.76	41.7	3	1596		
36	.511	Sleeve, 5	0,000 SMY	'S	(Item 19)):	<u>1 Ea.</u>		M	OR.		21.14	35.93	52.1	3	1277		
30	.312	Sleeve,5	0,000 SM1	5	(Item 21))	2 Ea.		M	OR		28.85	49.04	71.1	5	936		
20	375	Pina	VIC		······	-	110.2 C	+	-12		<u> </u>							
20	375	Flhai	<u>x-us</u>	1.0		-	2.	*	26	· ·			<u> </u>	1				
	1.2.5	<u>~~~~~~~</u>	, 1	<u> </u>		÷	<u></u>	+										
Minimum Te	est Pressure (@ Max. Eleval	ion		510	P	SIG To	Fluid MINIMUM TEST DURATION To Be Used - UNDER 30% SMYS (1 HR. MINIMUM) 8 WATER - 30% SMYS & OVER (8 HRS. MINIMUM) 8						HOURS				
Maximum Te	est Pressure	@ Min. Elevat	ion		740	P	sig			- PREINST/	ALLATI	ON TEST &	SEE ATTACHMEN	IT 'A' GASS	TD. A-34	1)		
Prepared By: Mark Cabi	ral		(ate: 6/03/11		For Information of Changes, Colle				A	pproved B	Redacted	Date:					
PART II - TES	T DATA (TO E	E PREPARED I	BY PERSON S	JPERVISING	IEST AT TIM	E OF	TEST)	202020000		Note: Min	imum t	est pressure	and duration are	not to be cha	nged	<u> </u>		
										W N	ithout v	written appro	wal.					
Time and Date Test Pressure Reached)	1549	5 hr 9-11	Eleva Point	tion at Test	at Test 44 FT			Min. Required Test Press. At Test Point (64° PSIG	Max. Allov Press at T	wable Test Test Point (4)		7-39 PSIG		
Time and Date Test Ended)	0001	10-11	Max. Test S	Elevation in Section	366 FT			Min. Indicated Test Pressure (2			6구 PSIG	Max. Indic Test Press	cated ssure (5		727 PSIG		
Actual Duration	n	01	15	Min. E	levation in		41	Min. Test Pressure				532	Max. Test	Pressure	<u></u>	728		
of Test Test Fluid User	þ	Onr	<u>=23M</u>	Test 8	lection		Pipe S	pecifid	Max. Eleva Redact	ition ted	(3)1	l PSIG	at Min. Fle	ivation	<u>(6)</u>	PSIG		
Wa	ter	10				<u> </u>												
Maxe, Range, a	and Senal No.	or Pressure Rec	ording Gauge	F-296	Date Last	Calib	rated Ma	ke, Ra	nge, anu o	enarino, or p	ead YN	eignt rester	(See Note 7)	1	Date Lasi	Calibrated		
Te Redacte	ed	<u>, , , , , , , , , , , , , , , , , , , </u>		<u></u>	Date:	10	AN R	edac	ted					i i i i i i i i i i i i i i i i i i i	Date:			
PUT SCHEMA SHOW LOCAT	TIC PIPING SI ION OF FACIL	CETON ON BAC ITY TESTED, N	K OF THIS SH	EET MAXIMUM ELE	VATION IN F	EET	, MILE POINTS, A	ALVE		S AND INCO	RPOR4					CESSARY		
OF EACH ASS	EMBLY TEST	D.																
1) Add the st	tatic head due	o elevation diffe	rence (betweer	test point and	maximum ele	evatio	on) to		JOB F	ILE (AT SPO	NSORI	NG ORGAN	IZATION)					
*minimum 2) Use lowes	test pressure a top the second s	at maximum ele est gauge at an	vation" from PA y time during te	RT I. st.	h <u>aran</u> (hariota) (h	ras transf			GSM&	TS RESPON	SIBLE	DISTRICT S	UPERINTENDEN	π				
ay Subtracts minimum i	Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.									PROJECT MANAGER/PROJECT ENGINEER								
 Subtract si *maximum 	tatic head due 1 test pressure	to elevation diffe at minimum elev	erence (betwee ration* from PA	n test point and RT I.	l minimum ele	evatio	on) from		TECHI	NICAL & CON	ISTRU	CTION SER	VICES - ASSIGNI	ED JOBS ON	LÝ			
 Highest price Add static 	essure on test head due to el	gauge at any tir evation difference	ne during test. ce (between tes	t point and min	imum elevatio	on) to	maximum		CAPIT	ALACCOUN	TING	FOREMAN	S COPY OF JORI					
indicated to 7) A dead we	est pressure. light tester is o	nly required whe	in testing to a p	ressure which	produces a st	iress	level of 90%		RECO	RDS SECTIC	N (WC), GMS&TS	i i i i i i i i i i i i i i i i i i i					
of SMYS o space prov	or greater. Hov vided above.	rever, if a dead v	weight tester is	used on any te	st, enter the l	nforn	nation in the		REPO	RT FAILURE	S UNDI	ER TEST TO	O GAS ENGINEER	RING & PLAN	NING			