PIPELINE SAFETY ENHANCEMENT PLAN PIPELINE REPLACEMENT AND ILI RETROFIT PROGRAM



Strength Test Pressure Report L-114 Replacement MP 12.70 – MP 16.57



Project No. 1581

PRSRS 27979; GM 30943472

Rev. No.	No. Date Revision		GIE Approva		Client Approval
01	11/08/2012	Initial Submittal		Redacted	
02	8/8/2013	Changed 22" Pipe Spec			8/13/2013 Redacted



Test D	escripti	lon											
Line Nu	umber o	r Statio	n Name L-	14			Divi	sion/	District	Diablo	Job Nu	mber 3	0943472
Purpos	e of Tes	t: Tes	t new instal	lation			MAG	OP to	be Estat	lished by	this Test	720 PSIC	X
				(include reference 114 from MP		S	· · · · · · · · · · · · · · · · · · ·			Drawing	30943472	sheets	4 - 6.
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		d) 🗌 Existin Yes 🗌 No (exp			lfno	o spik	e test fo	r existing f	acility, exp	lain:	
Static	Head C	alcula	tion										
Minimu	um Eleva Im Eleva on Differ	tion	86	FT FT FT			For	Othe	r Test Me	and the second sec			
	be Tes		×	•			Cont	act the	e responsi	ble engineer	for guidance	on compl	eting this field.
Si		API	or SMYS	Long Seam	JF	Footage	1 0.04	ual	Location	Most	<u> </u>	% of SI	WYS
OD (in.)	WT (in.)	AST Spe	M (psi)	(ERW, DSAW, SMLS etc.)	(E)	to be Tested	Fool		Class	Restricti Desigr Factor	MAOP	At Mi Tes Pres	t Test
24.000	0.375	API-	5L 60000	SAWL	1.00	1855			3	0.5	38.40	90.0	3 93.01
22.000	0.375	API-	5L 65000	HFW	1.00	5			3	0.5	32.49	76.1	8 78.70
24.000	0.375	MSS-SI	P-75 60000		-	1 ea			3	0.5	38.40	90.0	3 93.01
22.000	0.375	MSS-SI	P-75 60000	24x22 Reducer	•	A			3	0.5	35.19	82.5	2 85.26
A 19 51441.					م ما م الد م		L		the lot of the second			- 57	
	หม่งให้เสม ี่สะให้เหลือการการสารกำลังเกิด 	vioiesseausseitä riivaneoiseel		cept those lis Signature of p			ana na katala	Wall	UIIGAIRES	s anu grau		he 🕅	
Compo	nent(s)	limiting	j test pressi	ire/Control Po	oint exc	eptions						· · · · · · · · · · · · · · · · · · ·	
Test S	pecifica	itions	(include a sp	ike test when to	sting ex	isting faciliti	es)	****					
Test Fac	tor <u>1.5</u>	[1A]	Min. Test Pr	essure at Max.	Elev. <u>168</u>	38 PSIG	[18]	Max	. Test Pres	sure at Min	. Elev. <u>1744</u>	PSIG	
Spike T	est	[1C]	Spike Facto	r			[1D]	Spik	e Pressur	e at Max. El	ev. Box [1A]	x [1C] =	PSIG
(complet for spike	te only	[1E]	Spike Press	ure at Min. Elev	6. <u></u>	PSIG	(1F]	Max	. Post-Spi	ke Pressure =	u delene de la companya de		
) be Us	ed <u>WATE</u> F	Minimum	Test Du	ration <u>8.(</u>	<u>0</u> Hou		 Under 30% Pre-i 	ar 30% SMY SMYS and nstallation T e Test: 30 m	S: 1 hour min over: 8 hours est: Refer to	minimum A-34, Atta	ichment A
Signat	ures			1									
Prepar	ed by (si	gnatur	e) Redacted			Print Name	and P	hone	Number		Date 8/8/2013		LAN ID Redac
Approv	red by (s Redac	ianatu ted	re)			Print Name Redacted			· · · · · · · · · · · · · · · · · · ·		Date 8/12/1	2013	LAN ID Redacted
Test Su	upervise	d by (s	igr (áture)			Time and Da Reached (fro			essure	Time and Ended (fro			Duration of rom Part 2)



PART 2 - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Test Elevation										
	Max.	Elevation	in Test	Section	FT	Min. E	levation in	Test Section	FT	
Elevation at Test Point FT	[2A]	Static Hea	ıd b/t T	est Point and M	lax. Elev. PSIG	[28]	Static Hea	d b/t Test Poil	nt and Min. Elev. PSIG	
No Spike Test: Calc	ulatio	ns and Te	st Re	suits (complete l	for strength test with	iout a sp	ike test)			
Min. Required Test Press Box [1A] + Box [2A] =				Allowable Test Pre B] – Box [2B] =	essure at Test PointPSIG	Pressu	re Range Du	ring Test	PSIG	
[2C] Min. Test Pressur		ited PSIG	[2D]	Max. Test Pressi	ure Indicated PSIG					
Calculated Min. Test Pre Box [2C] – Box [2A] =	1			lated Max. Test Pr D] + Box [2B] =	ressure at Min. Elev. PSIG					
Spike Test: Calcula	tions	and Test F	Result	S (complete for s	trength test with a s	pike test)			
Spike Pressure at Test P Box [1E] – Box [2B] =		vSIG	a second	Required Test Pres A] + Box [2A] =	ssure at Test PointPSIG	Point		essure at Test =PSIG	After Spike Test	
[2E] Spike Pressure In		PSIG	[2F]	Min. Test Pressu	re Indicated PSIG	[2G] Max. Post-Spike Test Pressure IndicatedPSIG				
Calculated Spike Pressu Box [2E] + Box [2B] =			1.00000	lated Min. Test Pr F] – Box [2A] =	essure at Max. Elev. PSIG	a second day		st-Spike Pressu =PSid		
Test Acceptance			1			1				
Were Leaks Observed	1?				If yes, explain:					
Acceptable Strength			pliance		If no, explain:					
Test Medium Used	Time a	nd Date Te	est Pressure Reached Time and Date Test E				ed Actu	al Duration of	Test	
Test Instruments										
Make, Range, and Sei	rial No.	of Pressu	re Rec	ording Device			Date	Last Calibrate)d	
Make, Range and Ser A dead weight tester and/ or greater than 90% of SM	or an el	of Dead Weectronic press	eight 1 sure rec	Fester corder is required fo	or tests of any pipe set	gment eq	ual to Date	Last Calibrat	ed	
Signatures										
Test Supervised by (s	signatu	ire)		Print Name			Date		LANID	
Testing Contractor (if	third (oarty)								
Approved by (signatu	ire)			Print Name			Date		LANID	
Attachments • Test chart • Schematic piping sketch • Test log with pressure noted every 15 minutes					Distribution Gas Job Closeout Desk, 6121 Bollinger Canyon Road, Building Z1, San Ramon, CA 94583 					



Test D	escripti	ion											
Line Nu	umber o	Statio	n Name L-11	4			Divi	sion/Distric	t Diablo	lot	o Nui	mber 30	943472
Purpos	e of Tes	t: Tesl	t new installa	tion			MAC)P to be Es	tablished b	y this Te	st <u>7</u>	20 PSIG	
Test 36	617' new	ly inst	ing Tested (in alled 24" L-1 heets 6 – 9.										
Will spi	ke test l	be perfi	ke test required) ormed?	and the second			If no	o spike test	for existing	y facility,	expl	lain:	
	Head C um Eleva			٢			Ear	Water 10 (E	ilov Niff) y	0 /33 -	5 D Q	10	
	in Eleva		<u>99</u> F 89 F					Other Test		V.400 -	210	1 	
	on Differ		<u>10</u> F					act the respo	in the second second second	er for guid	ance	on comple	ting this field.
Pipe to) be Tes	sted					-						
Si		API	or SMYS	Long Seam	JF	Footage	Act	ual Loca	ion Mo	st		% of SN	IYS
OD (in.)	WT (in.)	ASTI Spe	M (psi)	(ERW, DSAW, SMLS etc.)	(E)	to be Tested	Foot	er en en la segur de la se	ss Restri Des Fac	ign M	At IAOP	At Mir Test Press	Test
24.000	0.375	API-	5L 60000	SAWL	1.00	3617		3	0.	5 3	8.40	90.03	93.01
22.000	0.375	API-	5L 65000	HFW	1.00	5		3	0	5 3	2.49	76.18	78.70
24.000	0.375	MSS-SF	60000	24x22 Reducer	*	1 ea	-	3	0.	5 3	8.40	90.03	93.01
22.000	0.375	MSS-SF	-75 60000	24x22 Reducer	and the second secon	٨		3	0	5 3	5.19	82.52	85.26
						-							
A 33 P****										طة مم خاذه			
		an a	the test (exc	gnature of pe			enite proposition in the second	wall mickn	ess and gri		le bit		
Pipe sp	ecs ven	neu m	field 🗌 Si	gnature or pe	ISUII SI	upervising	leol				· · · · ·		
Compo	nent(s)	imitinc	i test pressur	e/Control Poi	nt exce	ptions			and the second				······
					-						,		
Test S	pecifica	itions	(include a spik	e test when tes	ting exi	sting faciliti		-					
Test Fac	tor <u>1.5</u>	[1A]	Min. Test Pres	isure at Max. E	lev. <u>168</u>	8 PSIG	[18]	Max. Test I	Pressure at N	lin. Elev.	1744	PSIG	
Spike T	est	[1C]	Spike Factor				[1D]	Spike Pres	sure at Max.	Elev. Box	[1A] X	([1C] =	PSIG
(comple		[1E]	Spike Pressu	re at Min. Elev.		PSIG	[1F]	Max. Post-	Spike Pressu 95 =	ire at Min. PSIG	Elev	•	
Test M	edium to	be Us	ed <u>WATER</u>	Minimum T	est Du	ration <u>8.</u>	0 Hou	rs • 5	nder 30% SM 0% SMYS ar re-installatior pike Test: 30	d over: 8 l Test: Ref	ours er to i	minimum A-34, Attai	
Signat	ures												
Prepar	ed by (si	gnatur	e) Redacted	·	<u> </u>	edacted	and Pl	hone Numt	er	Date 8/8/20	013		LAN ID Redacte
Approv	red by (e Reda	cted				Redacted				Date 8/10	1/41	013	LAN ID Redacted
Test Si	upervise	d by (s	(gnature)		- 13 - C	ime and Da leached (fro	antara ni sette	st Pressure 2)		d Date T from Part :	ést	Actual	Duration of om Part 2)



PART 2 - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Test Elevation									
Elevation at	Max	Elevation	in Tes	t Section	FT	Min. E	levati	on in Test Section	FT
Test Point FT	[2A]	Static Hea	nd b/t 1	est Point and N	lax. Elev. PSIG	[28]	Stati	c Head b/t Test Poi	nt and Min. Elev. PSIG
No Spike Test: Cal	culatio	ons and Te	st Re	Suits (complete)	for strength test with	out a sp	ike tes	u)	
Min. Required Test Pres Box [1A] + Box [2A] =			1.	Allowable Test Pro B] – Box [2B] =		Pressu	ire Rar	ige During Test	_PSIG
[2C] Min. Test Pressu		ated PSIG	[2D]	Max. Test Press	ure Indicated PSIG				
Calculated Min. Test Pre Box [2C] – Box [2A] =			· · · · · · · · · · · · · · · · · · ·	lated Max. Test Pr D] + Box [2B] =	ressure at Min. Elev. PSIG				
Spike Test: Calcula	tions	and Test F	Result	S (complete for s	trength test with a s	j pike test)		
Spike Pressure at Test Box [1E] - Box [2B] =		>SIG	1	Required Test Pres A] + Box [2A] =	ssure at Test PointPSIG	Point		ike Pressure at Test < [2B] = PSIG	After Spike Test
[2E] Spike Pressure ir	ndicated		[2F]	Min. Test Pressu	ure Indicated PSIG	[2G]	out over a second of the secon	Post-Spike Test Pres	ananya da kata kata kata kata kata kata kata
Calculated Spike Press Box [2E] + Box [2B] =		Calculated Min. Test Pressure at Max. Elev Box [2F] – Box [2A] = PSIG					ax. Post-Spike Pressu x [2B] = PSI		
Test Acceptance	*****		I						
Were Leaks Observe	d?				If yes, explain:				
Acceptable Strength Yes No Report strength test failur		gulatory Com	pliance		If no, explain:				
Test Medium Used	Time a	nd Date Te	npliance est Pressure Reached Time and Date T				ed	Actual Duration of	Test
Test Instruments			****				pi pi ni		
Make, Range, and Se	rial No	. of Pressul	re Rec	ording Device				Date Last Calibrat	ed
Make, Range and Ser A dead weight tester and or greater than 90% of SI	or an el				or tests of any pipe sec	gment eq	jual to	Date Last Calibrat	ed
Signatures									
Test Supervised by (signature)				Print Name				Date	LAN ID
Testing Contractor (i	f third	party)							
Approved by (signature) Print N				Print Name	me Date				LAN ID
Attachments Test chart Schematic piping sketch					Distribution • Gas Job Clo Z1, San Rai			1 121 Bollinger Canyo	n Road, Building

Test log with pressure noted every 15 minutes



Test D	escripti	on												
Line Nu	umber or	Statio	n Name	L-11	4			Divi	sion/Di	strict C	Diablo	Job Nu	mber 30	943472
Purpos	e of Tes	t: Tes	t new in	stalla	tion			MAC)P to b	e Establ	ished by t	his Test 🧵	20 PSIG	
					clude reference 14 from MP 1						Drawing 3	0943472,	sheets 1	0 - 13
					Existing			If no	spike	test for	existing fa	cility, exp	lain:	
Static	Head C	alcula	tion											
Maxim	um Eleva	ition	<u>93</u>	F				For	Water 3	7 (Elev. I	Diff.) x 0.4	33 = <u>4</u> PSI	G	
	ım Eleva on Differ		86 <u>7</u>	F						Fest Mec		- or guidance	on complet	ing this field
Pipe to	be Tes	sted												
Si OD (in.)	ze WT (in.)	API AST Spe	М (MYS psi)	Long Seam (ERW, DSAW, SMLS etc.)	JF (E)	Footage to be Tested	Act Foot	And the second second	Location Class	Most Restrictiv Design Factor	e At MAOP	% of SM At Min Test Press	
24 000	0.375	API-	5L 60	0000	SAWL	1.00	3377	1.		3	0.5	38.40	90.03	93.01
24.000	0.500	API-		0000	SAWL	1.00	29			3	0.5	28.80	67.52	69 76
22.000	0.375	API-	5L 6!	5000	HFW	1.00	5			3	0.5	32.49	76.18	78.70
24.000	0.375	MSS-SI	P-75 6(0000	24x22 Reducer	-	1 ea	-		3	0.5	38.40	90.03	93.01
22.000	0.375	MSS-SI	P-75 6(0000	24x22 Reducer	*	٨			3	0.5	35.19	82.52	85.26
								-						
				www.exectedediterees			L			ana	L			
Pipe sp	ecs veri	fied in	field 🗌] Si	ept those list gnature of pe e/Control Poi	rson si	upervising	in state in the state of the st						
			-				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -							
lest 5	рестса	itions	T		e test when tes			1						
Test Fac	tor <u>1.5</u>	[1A]	Min. Te	st Pres	sure at Max. E	lev. <u>168</u>	8 PSIG	[18]	Max. T	est Press	sure at Min.	Elev. <u>1744</u>	PSIG	
Spike T	est	[1C]	Spike F	actor				[10]	Spike	Pressure	at Max. Ele	v. Box [1A] >	< [1C] =	PSIG
(comple for spike		[1E]	Spike P	ressur	e at Min. Elev.		_ PSIG	[1F]	and a second second	'ost-Spik 5] x 0 95 =	e Pressure	at Min. Elev PSIG		
Test M	edium to	be Us	ed <u>WA</u>	TER	Minimum T	est Dui	ration <u>8.</u>	0 Hou	(S	≈ 30% S ≈ Pre-in	30% SMYS SMYS and o stallation Te Test: 30 mi	ver: 8 hours st: Refer to	minimum A-34, Attac	diana anti Canada na
Signat	ures				L									
Prepar	ed by (si	gnatur	'e) R	Redact	ed		rint Name	and Pl	hone N	umber		Date 8/8/2013		LAN ID Redact
Approv	red by (e R	edacte	d				rint Name Redacted					Date 8/12/1/	1013	LAN ID Redacted
Test Si	upervise	d by (s	ignature	e)			ime and Da eached (fro		al a se para se a s		Time and I Ended (fror	and the second second	10.000	Duration of m Part 2)



PART 2 - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Test	Elevation			stangain itti eistensi annintar							
		Max.	Elevation	in Tesi	Section	FT	Min. E	levation in Test Secti	on FT		
	ation at Point FT	[2A]	Static Hea	id b/t 1	est Point and M	lax. Elev. PSIG	[28]	Static Head b/t Test	Point and Min. PSIG	Elev.	
No S	pike Test: Calc	ulatio	ns and Te	st Re	Suits (complete i	or strength test with	iout a sp	ike test)			
Min. F	Required Test Press	sure at	Test Point	Max.	Allowable Test Pro	essure at Test Point	Pressu	re Range During Test	PSIG		
Box [1	A] + Box [2A] =		PSIG	Box [1	B] – Box [2B] =	PSIG					
[2C]	Min. Test Pressure	1997 - 1997 -	ited PSIG	[2D]	Max. Test Press	ure Indicated PSIG					
	lated Min. Test Pred C] – Box [2A] =			1	lated Max. Test Pr D] + Box [2B] =	essure at Min. Elev. PSIG					
Spik	e Test: Calculat	tions	and Test F	Result	S (complete for s	trength test with a s	pike test	l.			
	Pressure at Test P E] – Box [2B] =		`SIG	1.	Required Test Pres A] + Box [2A] =	ssure at Test PointPSIG	Point	ost-Spike Pressure at T	After Spike		
[2E]	Spike Pressure Inc		PSIG	[2F]	Min. Test Pressu	PSIG	[2G] Max. Post-Spike Test Pressure Indicated PSIG				
	Iculated Spike Pressure at Min. Elev. x [2E] + Box [2B] = PSIG				lated Min. Test Pr F] – Box [2A] =		a contraction of the second	ited Max. Post-Spike Pr [] + Box [2B] =		ev.	
Test	Acceptance										
	Leaks Observed	?				If yes, explain:					
Y	ptable Strength 1 es INO t strength test failure		gulatory Con	pliance		lf no, explain:					
Test	Medium Used	lime a	nd Date Te	st Pre	sure Reached	Time and Date To	est End	ed Actual Duratio	n of Test		
Test	Instruments			den en a stad de jament fijzele, fan een							
Make	, Range, and Ser	ial No.	of Pressu	re Rec	ording Device			Date Last Calil	orated		
A dea	e, Range and Seri d weight tester and/o ater than 90% of SM	or an ele	of Dead We actronic press	eight 1 sure rec	ester order is required fo	r tests of any pipe se	gment eq	ual to Date Last Calil	brated		
Sign	atures										
Test	Supervised by (s	ignatu	re)		Print Name			Date	LANID		
Testi	ng Contractor (if	third (party)								
Appr	oved by (signatu	re)			Print Name			Date	LANID	······································	
• Te • Sc	hments est chart chematic piping sk est log with pressu		d 2007 1 1 5			Distribution • Gas Job Clo Z1, San Rai		esk, 6121 Bollinger C v94583	anyon Road, Bu	illding	

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Test D	escripti	ion											
Line N	umber o	Static	on Name L-1	14			Divi	sion/l	District	Diablo	Job Ni	imber 3	0943472
Purpos	e of Tes	t: Tes	t new installa	ation			MA	OP to	be Esta	blished by	this Test	720 PSIC	
				nclude reference -114 from MI						59. Drawir	ig 3094347	72, shee	ts 14-25.
) 🗌 Existing es 🗌 No (expl			If no	o spik	e test fo	r existing	facility, exp	olain:	
Static	Head C	alcula	tion				1						
	um Eleva		ing an	Т			For	Wate	r <u>64</u> (Ele	v. Diff.) x ().433 = <u>28</u> F	PSIG	
and the second second	im Eleva on Differ		enough an	T T					r Test M				
	be Tes							act the	eresponsi	bie engineei	for guidance	on compl	eting this field.
Si		API	or SMYS		JF	Footage	Act		t antin			% of SI	WYS
OD (in.)	WT (in.)	AST	M (psi)	Long Seam (ERW, DSAW, SMLS etc.)	(E)	to be Tested	Foot		Location	n Most Restrict Desig Facto	ive At n MAOF	At Mi	n At Max. t Test
24.000	0.375	API-	5L 60000	SAWL	1.00	10,989	-		3	0.5	38.40	90.0	3 93.01
24.000	0.500	API-	5L 60000	SAWL	1.00	55			3	0.5	28.80	67.5	2 69.76
									-				
									hada an				
a del Antipatrica del compositore													
All fittir	ngs inclu	ided in	the test (exc	ept those list	ed abov	/e) are the	same	wall t	thicknes	s and grad	le as the pi	pe 🛛	
Pipe sp	ecs veri	fied in	field 🗌 S	gnature of pe	erson si	upervising	test						
Compo	nent(s) l	imiting	g test pressu	e/Control Poi	int exce	ptions							
Test S	pecifica	tions	(include a spik	e test when tea	sting exi	sting faciliti	0S)						
Test Fac	tor <u>1.5</u>	[1A]	Min. Test Pre	ssure at Max. E	lev. <u>168</u>	8 PSIG	[1B]	Max.	Test Pre	ssure at Mir	n. Elev. <u>1744</u>	PSIG	
Spike T	oat	[10]	Spike Factor				[1D]	Snik	e Pressur	e at Max. E	ev. Box [1A]	x (1C) =	PSIG
(comple for spike	te only	(1E)		re at Min. Elev.		_ PSIG	[1F]	Max.	and a second	ke Pressure	at Min. Elev		
Test Me	dium to	be Us	ed WATER	Minimum T	est Dui	ration <u>8.</u> (<u>)</u> Hour		* Und * 30% * Pre-	er 30% SMY SMYS and installation 1	S: 1 hour min over: 8 hours est: Refer to inutes minim	minimum A-34, Atta	
Signat					4								
Prepare	ed by (si	gnatur	e) Redao	ted		rint Name acted	and Pł	none	Number		Date 8/8/2013		LAN ID Redacted
Approv	ed by /e Redac	ted	ral			rint Name edacted					Date 8/12/2	1013	LAN ID Redacted
Test Su	ipervised	d by (s	ignature)			me and Da eached (fro			ssure	Time and Ended (fro	Date Test	Actual	Duration of om Part 2)



PART 2 - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Elevation at	Max.	Elevation	in Test	Section	FT Contraction	Min. E	levation in Test Se	ction _	FT	
Test Point FT	[2A]	Static Hea	id b/t T	est Point and M	ax. Elev. PSIG	[28]	Static Head b/t Te	st Poir	nt and Min. Elev PSIG	
No Spike Test: Calc	ulatio	ns and Te	st Re	Suits (complete i	or strength test with	iout a sp	ike test)			
Min. Required Test Press Box [1A] + Box [2A] =				Allowable Test Pro B] – Box [2B] =		Pressu	re Range During Test	t	PSIG	
[2C] Min. Test Pressure	n seconda	ited PSIG	[20]	Max. Test Press	ure Indicated PSIG					
Calculated Min. Test Pres Box [2C] - Box [2A] =			1	lated Max. Test Pr D] + Box [2B] =	essure at Min. Elev. PSIG					
Spike Test: Calculat	tions	and Test I	lesult	S (complete for s	trength test with a s	l pike test				
Spike Pressure at Test P Box [1E] – Box [2B] =		rsig	1	Required Test Pres A] + Box [2A] =	sure at Test Point PSIG	Point	ost-Spike Pressure at] – Box [2B] =		Pressure Range After Spike Test PSIG	
[2E] Spike Pressure inc		'SIG	[2F]	Min. Test Pressu	re Indicated PSIG	iğ , anim men için me	Max. Post-Spike Tes	an and the second second	4	
Calculated Spike Pressu Box [2E] + Box [2B] =			and the second	lated Min. Test Pri F] – Box [2A] =	essure at Max. Elev. PSIG		ted Max. Post-Spike] + Box [2B] =			
Test Acceptance			*******							
Were Leaks Observed	1?				If yes, explain:					
Acceptable Strength 1 Yes No Report strength test failure			pliance		If no, explain:					
Test Medium Used 1	rime a	nd Date Te	st Pres	sure Reached	Time and Date To	ne and Date Test Ended Actual Duration of Test				
Test Instruments										
Make, Range, and Ser	ial No.	of Pressu	e Reci	ording Device			Date Last Ca	librate	d	
Make, Range and Seri A dead weight tester and/c or greater than 90% of SM	or an ele				r tests of any pipe seg	ment eq	ual to Date Last Ca	ılibrate	d	
Signatures										
Test Supervised by (s	re)		Print Name		Date		LAN ID			
Testing Contractor (if	third p	varty)		ning and the start of the start		· · · · · · · · · · · · · · · · · · ·				
Approved by (signatu	re)			Print Name			Date		LANID	
Attachments Test chart Schematic piping skill Test log with pressuit 	· · · · · · · · · · · · · · · · · · ·				Distribution • Gas Job Clo Z1, San Rar		esk, 6121 Bollinger 94583	Canyoi	n Road, Building	



Test D	escripti	ion												
Line N	umber or	Static	on Nam	ne L-11	4			Div	ision	District	Diablo	Job Nur	nber 309	43472
Purpos	se of Tes	t: Tes	it new i	installa	tion			MA	OP to	be Estab	lished by I	his Test <u>7/</u>	20 PSIG	
Test n	ewly inst	alled I	MLV-1	3.05 or	clude referend I L-108 at R I). See draw	edacted	and 23	31' of	new	8" line fro		3.05 to exi	sting L-3	16
					S No (exp			If n	o spil	ke test for	existing fa	icility, expl	ain:	
Static	Head C	alcula	tion					ahanincian						
Maxim	um Eleva	ition	<u>95</u>	F	Γ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		For	Wate	er <u>3</u> (Elev.	Diff.) x 0.4	33 = <u>2</u> PSI	3	
	ım Eleva on Differ	and the	<u>92</u> <u>3</u>	F F				4 1. 10. 11		r Test Me e responsib	10/10/10/00/00/00/00/00/00/00/00/00/00/0	or guidance c	n completi	na this field
Pipe to	be Tes	sted												
Si		API	or	SMYS	Long Seam	JF	Footage	Ac	tual	Location	Most		% of SMY	′S
OD (in.)	WT (in.)	AST Spe	М	(psi)	(ERW, DSAW, SMLS etc.)	(E)	to be Tested	1	tage	Class	Restrictiv Design Factor	e At MAOP	At Min. Test Press.	At Max. Test Press.
24.000	0.375	API-	5L	60000	SAWL	1.00	82			3	0.5	38.40	57.60	60.00
8.625	0.322	API-	5L	35000	SMLS	1.00	260			3	0.5	27.55	41.33	43.05
6.625	0.280	API-	5L	35000	SMLS	1.00	88			3	0.5	24.34	36.51	38.03
24.000	0.375	MSS-SI	P-75	60000	24x24x6 Tee		2 ea			3	0.5	38.40	57.60	60.00
6.625	0.280	MSS-SI	P-75	60000	24x24x6 Tee	•	A.			3	0.5	14.20	21.29	22.18
24.000	0.375	MSS-SI	P-75	60000	24x24x8 Tee		2 ea			3	0.5	38.40	57.60	60.00
8.625	0.322	MSS-SI	P-75	60000	24x24x8 Tee		· •			3	0.5	16.07	24.11	25.11
All fitti	ngs inclu	ided in	the te	st (exce	pt those lis	ted abo	ve) are the	same	wall	thickness	and grade	as the pip	e 🛛	1999 - 1999 -
Pipe sp	ecs veri	fied in	field [□ Si	gnature of p	ersons	upervising	test						
Compo	nent(s) l	imiting	g test p	ressur	e/Control Po	oint exc	eptions	Valve	S	· · · · · · · · · · · · · · · · · · ·				
Test S	pecifica	tions	(include	e a spike	etest when te	sting ex	listing facilitie	0 5)						
Test Fac	tor <u>1.5</u>	[1A]	Min. T	est Pres	sure at Max. I	Elev. <u>10</u>	80 PSIG	[18]	Max	. Test Pres	sure at Min.	Elev. <u>1125</u> P	SIG	
Spike T	est	[10]	Spike	Factor				[1D]	Spik	e Pressure	at Max. Ele	v. Box [1A] X	[1C] =	PSIG
(comple for spike		[1E]	Spike	Pressur	e at Min. Elev	•	PSIG	[1F]		. Post-Spik [1E] x 0.95 -	and the second secon	at Min. Elev. PSIG		
			<u>1</u>	and the second second				L	1 001			: 1 hour minir	ทบทา	
Test M	edium to	be Us	ed <u>W/</u>	ATER	Minimum	Test Du	iration <u>8.(</u>	<u>)</u> Hou	rs	• Pre-ir	stallation Te	ver: 8 hours n st: Refer to A tutes minimu	-34, Attach	and the second
Signat	ures													
Prepar	ed by (si	gnatur	e) Rec	dacted			Print Name a Redacted	and P	hone	Number		Date		AN ID
		anna an an Air							· · ·			8/8/2013	┈┟┹	
Approv	Reda	acted	rDi	·	n an		Print Name Redacted	74	<u> </u>	<u>Alenan († No</u>		Date 5/112/120		AN ID edacted
Test Su	pervised	d by (s	ighatu	re)			Fime and Da Reached (fro				Fime and C Ended (from	the second states of the	Actual D Test (from	uration of Part 2)



Test D	escripti	on											
Line N	umber or	Statio	n Name L-11	4			Divi	sion/l	District D)iablo	Job Nu	nber 309	943472
Purpos	e of Tes	t: Tes	t new installa	tion			MAC)P to	be Establ	ished by t	his Test <u>7</u>	20 PSIG	1000900000 - entities and discovery and the second second second second second second second second second seco
Test no	ewly inst	alled N	ing Tested (in MLV-13.05 or ty, Brentwood	L-108 at Re	dacted	and 23	31' of 1	new	8" line fro		3.05 to exi	sting L-3	16
			ke test required) ormed? Ye				If no	spik	e test for	existing fa	cility, expl	ain:	antanan (an ann an Ann Ann Ann Ann Ann Ann Ann An
Static	Head Ca	alcula	tion										
and the second	um Eleva		<u>95</u> F	r.			For	Wate	r <u>3</u> (Elev. I	Diff.) x 0.4	33 = <u>2</u> PSIC	3	an a
	m Eleva on Differ		92 F 3 F				(個化) 「「「」」」		r Test Mec e responsible		or guidance (on complet	ng this field
Pipe to) be Tes	ted											
Si	en e	API		Long Seam	JF	Footage	Act	ual	Location	Most		% of SM	
OD (in.)	WT (in.)	AST Spe	and the second	(ERW, DSAW, SMLS etc.)	(E)	to be Tested	Foot	age	Class	Restrictiv Design Factor	e At MAOP	At Min. Test Press.	At Max. Test Press
16.000	0.375	API-	5L 35000	SMLS	1.00	10			3	0.5	43.89	65.83	68.57
16.000	0.312	API-	5L 52000	HFW	1.00	51			3	0.5	35.50	53.25	55 47
1.050	0.154	API-	5L 35000	SMLS	1.00	60			3	0.5	7.01	10.52	10.96
	neveral of the second	workstanderstandigesteren	the test (exci	opt those list	Colora al Colora Constante de	augustassessessessessessessessessessessesses	indenauzeen erritairen in	wall 1	hickness	and grade	as the pip	e 🛛	
			i test pressur										
					and a state		annenenenen				19-11-10-00-00-00-00-00-00-00-00-00-00-00-		
Test S	pecífica	tions	(include a spik	e test when tes	ting exi	sting faciliti	es)						
Test Fac	tor <u>1.5</u>	[1A]	Min. Test Pres	sure at Max. E	lev. <u>108</u>	0 PSIG	[18]	Max.	Test Press	ure at Min.	Elev. <u>1125</u> I	PSIG	
Spike T	est	[1C]	Spike Factor				[1D]	Spik	e Pressure	at Max. Ele	v. Box [1A] X	[1C] =	PSIG
(comple for spike		[1E]	Spike Pressur	e at Min. Elev.		PSIG	[1F]		1E] x 0.95 =		at Min. Elev. PSIG		
Test Me	edium to	be Us	ed <u>WATER</u>	Minimum T	est Dui	ration <u>8 (</u>) Hour	S	= 30% \$ = Pre-in	MYS and o stallation Te	: 1 hour mini ver: 8 hours i st: Refer to A nutes minimu	minimum \-34, Attacl	
Signat	ures				<u>0</u>								
Prepare	ed by (si	gnatur	e) Redacte	ed		rint Name	and Pł	none	Number		Date		LANID
						edacted					8/8/2013	F	Redacted
Approv	ed by (si	Rec	lacted			rint Name Redacted				1. S. 1.	Date 5/12/20	1.	LAN ID Redacted
Test Su	Ipervised	d by (s	ignature)			ime and Da eached (fro	ann ann a	1997 - 1997 -	and and the set	Time and I Ended (from	ate Test	Concernance of the second second second	uration of n Part 2)



PART 2 - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Test Elevation										
Elevation at	Max.	Elevation	in Tes	t Section	FT	Min. E	levatio	n in Test S	ection _	FT
Test Point FT	[2A]	Static Hea	id b/t 1	Test Point and N	lax. Elev. PSIG	[28]	Static	Head b/t T	'est Poir	nt and Min. Elev PSIG
No Spike Test: Calc	ulatio	ns and Te	st Re	Suits (complete	for strength test with	iout a sp	i vike test)		
Min. Required Test Press Box [1A] + Box [2A] =			§	Allowable Test Pri B] – Box [2B] =	essure at Test Point PSIG	Pressu	ire Ranç	je During Te	st	PSIG
[2C] Min. Test Pressure		ited PSIG	[2D]	Max. Test Press	ure Indicated PSIG					
Calculated Min. Test Pre Box [2C] – Box [2A] =				lated Max. Test Pi [D] + Box [28] =	ressure at Min. Elev. PSiG					
Spike Test: Calculat	tions	and Test i	Result	S (complete for s	trength test with a si	oike test	0		*****	
Spike Pressure at Test P Box [1E] – Box [2B] =	oint		Min. F		ssure at Test Point	Max. P Point	ost-Spil	(e Pressure		After Spike Test
[2E] Spike Pressure In		PSIG	[2F]	Min. Test Pressu	re Indicated PSIG	State of the second second second	angles and a second	with the second se		sure Indicated PSIG
Calculated Spike Pressu Box [2E] + Box [2B] =	1		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997	lated Min. Test Pr F] – Box [2A] =	A CONTRACTOR OF A CONTRACTOR	مرجر كممارين	x. Post-Spik [2B] =		re at Min. Elev. 3	
Test Acceptance			<u>I</u>			1				
Were Leaks Observed	?				If yes, explain:		· · · · · · · · · · · · · · · · · · ·			
Acceptable Strength T		gulatory Com	pliance		If no, explain:					
Test Medium Used	lime a	nd Date Te	st Pre	ssure Reached	Time and Date To	əst End	led	Actual Dura	ation of	Test
Test Instruments						de synamise With Anna generati				
Make, Range, and Ser	ial No.	of Pressul	re Rec	ording Device				Date Last C	Calibrate	A
Make, Range and Seri A dead weight tester and/d or greater than 90% of SM	or an ele	of Dead We actronic press	e ight 1 sure rec	Fester Forder is required for	or tests of any pipe sec	yment eq	jual to	Date Last C	alibrate	зd
Signatures										
Test Supervised by (s	ignatu	re)		Print Name				Date		LANID
Testing Contractor (if	third _I	party)								
Approved by (signature) Print N				Print Name	ne Da					LANID
Attachments • Test chart • Schematic piping sk	etch				Distribution • Gas Job Cic Z1, San Rai			and the second	er Canyo	n Road, Building

Test log with pressure noted every 15 minutes