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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)



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	4						مستنسبة				Sheet_	1of	3	
PART I -	DESIGN	DATA (TO B	E PREPARED	BY PROJECT	ENGINEE	R)								
Feeder Main	Number, Line	Number, or Stat	ion Name A	ea	Division/L	District				Job Number		Date Job Authori	zed	
Decedation	L-'	132	3	d Di - Han Milan			De A	inza		4149	07350	July 27, 2011		
Test 2 -	Tie-in nied	e Reference Dia ses hvdrost	atic test pipi	na and exis	tina 24" l	-132. E	xistina	pipeline m	naterial liste	d:'ie, nine, e	lbows, sleev	es, are from t	he "Material	
of Record	d" (refer to	Dwg 41497	7350, sheet	7 of 7)			<i>0</i>	F.L		-1 6.6-1 -				
Hydrotes	t L-132 fi	om MP 10.	32 - 13.95	Mountain V	/iew, CA	i (Test se	ction 29)						
Location Clas	a 1	Design Factor (F)	MAOP to	be Established t	for this Pining	t by this Te	at	Future	Design Pressure	<u>.</u>		<u> </u>		
3		.5		00-20100101100	or and riping	4()0 ps	IG	on and a second second				400 PSIG	
STA	TIC HEAD DU	ETO	Max. Elevation	32	Ft.	Static Head	i Calculati	on						
ELEV.	ATION DIFFEI	RENCE	Min Elevation	1	- Ft.	For Water			0 433 X F	Tev Diff =		14 ps	iig I	
NMH		31	- Ft	Other (Sne	riful		v		PSIG					
	LIGE FULL LIGF			1	uijj	Pipe S	pec. and % of SMYS				Pressure to			
Siz	20		API or AST	M Grade	Foot	age to	Footag	e Verliled	At	At Min.	At Max.	Give 90%		
0.0.	W.I.	Long	Seam (ERW, DS	AW, Seamless, I	Be tested		In Field		MAOP	Test Press.	Test Press.	SMYS		
30.00	.3/5	API 5L, X	-65, DSAW	(Item #103	(Item #103)			0	1110	24.62	36,92	41.85	1463	
24.00	.3/5	API DL, X	-OU, DOAW	(item #106)	<u> </u>	45		100	1735	21.55	52.00	30.21	1000	
30.00	.3123	APISL, X	-JZ, USAW	(ICEITI #1)		<u>(3218)</u>		MUR		30.9Z	50.00	02.11	9/0	
24.00	2405	API DL, G	AN DEATH	(item #3)		TEDEN		10	0 30	25.01 25.01	20.00	01.11	1400	
24.00	2425	API JL, A	-00, DOAW	(Itom #5)	Chemical and a state of the sta	1020		161	7-24	20.00	1 30.40	40.0Z	1210	
24.00	2425	APIJL, A	12 DOAW	(Item #5)				1010		25.54	5/ 96	62.47	024	
24.00	.0120	45000 SM	VC CMI C	9 (item #0) 9 (item #7)		13600')		IAL C	8	27.06	56.0/	6/ 52	0/18	
24.00	281	40000 SM	VS SMLS	Item #8)		34	14'	- MC	12 -	42 70	64.06	72.60	843	
AL-1.00	12001	10000 011	10,0111201			1	Tes	t Fluid	MINIMUM	TEST DURA	TION	1 14.00		
Minimum Te	st Pressure (@ Max. Elevat	ion		600	PSIG	To B	le Used	- UNDER 30%	6 SMYS (1 HR. M	INIMUM)		8 HOURS	
A fairtairin To		CARA Floure	lan		680		W/	ATER	- 30% SMYS &	OVER (8 HRS, M	NIMUM) EE ATTACUMEN	T W PLOOTO A	140	
Prenared By:	est riessure	@ IVIIII. ⊏IEVal	Dal	e: ,	For	Information	or Change	es, Call:		Approved By:	LEAT AGOMEN	A GAS SID. A	Date:	
Redacted				7/20/11	Re	dacted				Redacte	ed	7	-27-11	
PART II - TES	T DATA (TO B	E PREPARED E	BY PERSON SU	ERVISING TES	T AT TIME (OF TEST)			Note: Minim	ium test pressure	and duration are	not to be changed		
TESt CO	inducte	vs By -	those u	um Bo	ytel	CC	L		Witt	iout written appro	vai.			
Time and Date		11:4	o pm	Elevation of Test			Min. Required Test			600	Max. Allov	vable Test	666.6	
Reached		9-	9-11	Point			T Press. At Test Point			I) PSIG	Press at T	est Point (4) PSIG	
Time and Date		8:/	5 Am	Max. Elev	Max. Elevation in			Min. Indicated		615	Max. Indic	ated	6602	
Test Ended		<u> </u>	10-11	Test Sect		FI FI		Test Pressure (2) PSIG Test Pre) PSIG		
Actual Duration	ť	8NR	35 min	Min, Elev Test Sect	FT		Min. Test Pressure at Max Elevation () PSIG at Min F		Pressure vation (6)	PSIG		
Test Fluid Used	J	1		1 1001 0001	1011	<u> </u>	PiperSac	ellication and	Enotane Verified	(See Part I)	ur marin End	10000		
	WA	TER	r 0.	17			Red	lacted	Solution of Day	1144 1 1 1 T	One Male 70	Data I	and Calibrated	
CLP A	and Serial No.	or Pressure Rec	ording Gauge			IDrated	AW	n etek		$P \leq 1 \mu = \mu$	386 NOLE 1)		19 - 10	
Test Supervise	d Rv:				Date:		Appro	oved By:		1 akn		Date	1	
Red	lacted				1-10-1				Redacte	d		Fres	1	
SHOW LOCATI	ON OF FACIL	ITY TESTED, M	K OF THIS SHE INIMUM AND MA	<u>=1</u> XIMUM ELEVA	TION IN FEE	T, MILE PO	DINTS, VA	LVE NUMBER	SAND INCORF	PORATED AREAS	. USE AN ADDI	NONAL SHEET IF	NECESSARY	
(SHOW REFER	ENCE NUMB	ERS ON FACE (OF ALL DRAWIN	GS AND ATTAC	HMENTS).	FOR STATI	ON PIPIN	G, FABRICAT	ED UNITS AND	SHORT SECTIO	NS OF PIPE, ALS	O SHOW A DETA	LED SKETCH	
NOTES:		· · · · · · · · · · · · · · · · · · ·			<u></u>	<u></u>		DIST	RIBUTION		un and an			
 Add the sta "minimum. 	atic head due test pressure :	o elevation different of maximum elev	rence (between t ation" from PAR	est point and ma	ximum eleva	tion) to		JOBI	FILE (AT SPONS	SORING ORGANI	ZATION)			
(2) Use lowes	t pressure on t	est gauge at any	time during test	ant nation and	wirmens also	ation' from		GSM	TS RESPONSI	BLE DISTRICT S	UPERINTENDEN	Т		
(o) oubtract st minimum h	auc nead due ndicated test p	io elevation diffé ressuré.	itence (peiween i	est point and ma	AVIANT DI	anon'i tioni		PROJ	ECT MANAGER	VPROJECT ENG	INEER		2	
(4) Subtract static head due to elevation difference (between test point and minimum elevation) from TechnicAL & CONSTRUCTION SERVICES ASSIGNED TOPS ONLY														
(5) Highest pre	essure on test	gauge at any tim	e during test.		m alaunita-V	to montan	-	0400	AL ACCOUNTS		CODV OF IOP	а. С. 1997 г. С.		
(o) Add static I indicated te	neau que to el est pressure.	svauon oinerenc	e (verween lest)	මාග කාල භාගාභාව	in elevation)	IO INIAMINO	11. 1967	GAPI	AL AUGUUNIII	NO (FOREIVAN'S	UUFI UFJUB)			
(7) A dead well of SMYS or	ght tester is o	nly required whe rever, if a dead w	n testing to a pre veloht tester is us	sure which proc ed on any test	luces a stres	s level of 90 mation in 1)% he	RECC	RDS SECTION	(WC), GMS&TS				
space prov	ided above.	and the second of						REPC	RT FAILURES L	JNDER TEST TO	GAS ENGINEER	ING & PLANNING	е 6 ¹	

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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)



IN IN													Sheet	2	of	3	
PART I -	DESIGN	DATA (TO B	E PREPAR	ED BY F	ROJECT	ENGINEE	R)										
Feeder Main	Number, Line	Number, or Stat	ion Name	Area		Division/[District		and all and the second of		Job	Number		Date Job Au	thorized	e e e e e e e e e e e e e e e e e e e	
	L-1	32		3	De Anza						41497350			July 27, 2011			
Description of	of Job - Include	e Reference Dra	wing Numbe	rs, and Pip	peline Milepo	osis Ing 24ª i	400 E	victina	ninolino m	atorial lista	d. In	nino olha		a ara fra	na th o	Whaterial	
of Record	d" (refer to	Dwg A1405	alic lest j 250 ehe	piping a bot 7 of	7)	iiiy 24 -i	-102, E	xisung j	hiheime u	aterial liste	iu, ie.	pipe, einc	ws, sieeve	is, are fro	m ine	waterial	
Hydrotes	t L-132 fr	om MP 10.3	32 – 13.9	05 Mc	y, ountain V	iew, CA	(Test see	ction 29)		<u></u>				an in an a n an	<u></u>	
Location Clas	5S [[Design Factor (F)	MAC)P to be E	stablished fo	or this Pipin	g by this Tes	at .	Future	Design Pressure	9		ana da ana ina mana mana mana ana ana ana ana ana an				
3		.5					40	0 psi	G		-				4	00 psig	
STA	TIC HEAD DU	E TO	Max. Eleva	ation	32	Ft.	Static Head	l Calculatio	'n			<i></i>					
ELEV/	ATION DIFFER	RENCE	Min. Eleva	tion	1	Ft.	For Water			0.433 X E	Elev, Di	(f. =		14	PSIG	^ ·	
WH	ERE APPLICA	BLE)	Elev. Diff.		31	Ft.	Other (Spec	cify)		x	Elev. D)iff. =			PSIG		
		, Pipe Sp	ecification				T T		Pipe S	pec, and			% of SMYS		T	Pressure to	
Siz	Z0		API or	ASTM G	Grade Foota				Footag	Verified	At		At Min. At M			Give 90%	
0.0.	W.E.	Long		, DSAW,	Seamless, E	iC.)	Bei	ested	10	-ieid	IV .		Test Press.	Test Pres	ss.	SMYS	
24.00	.250	API 5L, X	-52, DSA	AW (Ite	m #9)			8.	100	15	3	6.92	55.38	62.71		9/5	
30.00	.3/5	Elbow, Y	-52 (item	1#10)				ea	<u>MO</u>	<u>Ş</u>	3	0.77	40.15	52.31		11/0	
30.00	.3/5	EIDOW, Y	42 (Iten	1#11)	110	0	(30	ear	W/V U	5-16	3	8.10	57.14	64.76		945	
30.00	.375	ElDOW, G	rade Uni	KNOWN	(item #	12)	1 10	ea. Ma	MOR	<u>, - 1, 14</u>	0.	-	20.00			-	
24.00	.3/5	Elbow, Y	-60 (Item	#13)			$\left \begin{array}{c} 18 \\ \hline \end{array} \right $	ea	MO	8		1.33	32.00	36.27		1088	
24.00	.3/5	Elbow, Y.	52 (Item	#14)	114	(2)		ea.	WAC D	>	24	4.02	36.92	41.85	<u>l:</u>	1403	
24.00	.3/0	Elbow, G	rade Uni	known	(item #)				MO	12		-					
24.00	,3125	Elbow, G	rade Um	nown	(nem #)	10)	1 (4	Ed. Tool	Eluid	RAINUMALINA	TECT		-				
Minimum Te	st Pressure	@ Max. Elevat	ion			600	PSIG	To Bi	e Used	- UNDER 309	% SMY	S (1 HR. MINI	MUM)		8	HOURS	
		Y						WA	TER	- 30% SMYS 8	& OVER	(8 HRS, MININ	NUM)	L			
Maximum Te	est Pressure	@ Min. Elevat	lon	Datos		680	PSIG	or Chonne	o Colle	- PREINSTAL	LATIO	N TEST (SEE	ATTACHMENT	'A', GAS S	rd. A-34	i) Dotos	
Redacted	edacted				7/11	Re	dacted	OF CHANGE	inges, can			Redacted			7-27-11		
PART IL- TES	T DATA (TO I	E PREPARED	BY PERSON	SUPERV	ISING TES	T AT TIME	OF TESTI			Note: Minin	num tes	st pressure an	duration are n	ol to be char	aed		
red 1	fri con	-0 31	LT I	ന്ന	11 Arra	Bart	~1	COT		wit	hout wr	itten approval			4.55		
Time and Date)	$\overline{1}$	10 Pm	n				<u> </u>			T	1.60	The second	and the second		211 1	
Test Pressure		9.	9-11		Elevation at Test				Min. Required Test		1) PSIG Press at		Max. Allow	wable Test Fest Point (4)		PSIG	
		8:	IS AM	<u>.</u>	Mars There	allan fa	2	2	Min Indicat	id		615	Max Indice	lod	<u></u>	1.1.10	
rime and Date Fest Ended	3	9-	-10-11	(Max. Elevation in Test Section			FT Test		'est Pressure (2		() PSIG Test Prev		sure (5)		PSIG	
Actual Duration	n	an Un			Min. Elevation in					Min. Test Pressure		615 Max."		st Pressure		673.4	
of Test	•	8	<u>35 n</u>	1119	Test Secti	on	<u></u>	FT	at Max. Elev	ation (3	3)	PSIG	at Min. Elev	ration	(6)	PSIG	
est Fiuld Use	wat	ER					1	JE		Couldys vermen	0 (069)	ranı)					
Aake, Range,	and Serial No.	of Pressure Rec	ording Gauç	je	0	ate Last Ca	librated	Make	, Range, and	Serial No. of De	ad Weij	ght Tester (Se	e Note 7)	Ĵ (ate Las	t Calibrated	
<u>CLP, 0-</u>	1000 951,	1703				5-2-	<u>[]</u>	AN	nete k	,0-3000	<u>о; и</u>	12-284	<u> </u>		1-20	-10	
Reda	icted					Q-1	0-11	Аррго	ived by:	2/2-1	/ R	edacted		1	Date;		
UT SCHEMA	TIC PIPING S	KETCH ON BAG	K OF THIS	SHEET						<u></u>	ti dan	<u> </u>	1				
SHOW LOCAT	TON OF FACIL	JTY TESTED, M		D MAXIM	UM ELEVAT	FION IN FE	ET, MILE PO FOR STATI	DINTS, VAI	LVE NUMBER	S AND INCORI	PORAT	ED AREAS.	JSE AN ADDIT	IONAL SHEE	ET IF NE	CESSARY	
OF EACH ASS	EMBLY TEST	ED.	01.7 iLd 010														
OTES:	fatic boad due	to playation diffe	ronco (hotw	oon foct n	nint and ma	vimum elev	ation) to		DIST JOB I	RIBUTION	SORIN	G ORGANIZA					
"minimum	test pressure	at maximum ele	vation" from	PART I.			activity to										
 Use lowes Subtract s 	st pressure on static head due	test gauge at an to elevation diff	y time during erence (betw	j test. Jeen test r	point and ma	iximum elev	ation) from		GSM	(IS RESPONS)	IBLE D	ISTRICT SUP	ERINTENDENT	i .			
minimum	indicated test	oressure.			alat and all	time also	ستنا المعالم		PRO.	ECT MANAGE	r/Pro.	JECT ENGINE	ER			ľ	
 Subtract s "maximum" 	n test pressure	at minimum ele	vation" from	PART I.	will and init	an num elevi	auon) 110111		TECH	NICAL & CONS	STRUC	TION SERVIC	ES - ASSIGNE	D JOBS ONI	Y		
i) Highest pr	ressure on test	gauge at any fir levation differen	ne during tex	st. test naint	and minimu	m elevation) to maximu	m	CAPP								
indicated t	test pressure.		laatuooli	roor beauting		.,,	,	0.07			LUND-		a si sanî				
A dead we of SMYS of	eight tester is c or greater. Ho	only required whe wever, if a dead	en testing to weight tester	a pressure r is used o	e which prod in any test, e	uces a stre enter the inf	ss level of 90 ormation in t	u% he	RECO	INDS SECTION	i (WC),	GMS&IS				art and a second se	
SDACE DIO	vided above.								REPC	RT FAILURES	UNDER	R TEST TO G	AS ENGINEERI	NG & PLANI	VING		



Pacific Gas and Electric Company

Gas Pipeline Facilities Strength Test Pressure Report (For Pipeline Facilities Designed to Operate over 100 PSIG)



12 Para			•		* # 				9975) }	Sheet	3 of	3
PART I - DES	SIGN DATA (TO	BE PREPARED	BY PROJECT I	ENGINEER	₹)	an ini ini takeliken						
Feeder Main Numb	er, Line Number, or Si	lation Name A	ea	Division/D	istrict				Job Numb	er	Date Job Author	ized
			De A	Je Anza			497350	July 27, 2011				
Description of Job- Test 2 – Tie-i of Record" (re	- Include Reference D in pieces, hydros ofer to Dwg 4149	rawing Numbers, ar static test pipil 97350, sheet	nd Pipeline Milepo ng and existi 7 of 7)	ists ing 24" L	-132. E	xisting	pipeline m	aterial list	ed; ie. pipe	, elbows, slee\	ves, are from	the "Material
nyulolest L-	132 IIOITIVIP IL	1.52 - 15.95	WOULTIANT VI	IEW, CA	v	estse	icuon zej					
Location Class 3	Design Factor (I	MAOP to	be Established fo	r this Piping	by this Tesl 40	0 ps	Future I	Design Pressu	400 PSIG			
STATIC HE	EAD DUE TO	Max. Elevation	32	Ft.	Static Head	Calculatio	on			· · · · · · · · · · · · · · · · · · ·		te mana ter de faite de la company
ELEVATION	DIFFERENCE	Min. Flevation	1	Ft.	For Water	2		0 433 X	Flev Diff =		14 pg	NA
	PPLICABLE)	Flev Diff	31	Olher (Snec	16.0				' 898	DC	20	
	Pipe S	pecification		4 km] _	Callel Topec	<u>вуј</u>	Pipe Sr	ec, and	Ciev. Dal	% of SMYS		Pressure to
Size		API or AST	VI Grade	Grade			Footage Verified		At	At Min.	At Max.	Give 90%
0.0.	V.I. Lon	g Seam (ERW, DS/	W, Seamless, El	c.)	Bele	sted	ln F	ield	MAOP	Test Press.	Test Press.	SMYS
30.00 .3	75 Reduce	r 30" X 24", Y	-52 (Item #1	52 (ltem #17)			MOK		30.77	46.15	52.31	1170
30.00 .3	75 Reduce	r 30" X 24", Y	-42 (Item #1	18)	2 ea.		MOR		38.10	57.14	64.76	945
30.00 .5	00 Sleeve,	X-52 (Item #1	9)	<u>)</u>			MOK		23.08	34.62	39.23	1560
24.00 .5	UU Sleeve,	X-52 (Item #2	0)	<u>))</u>			<u>MOK</u>		18,46	27.69	31.38	1950
24.00 .5	00 Sleeve,	X-50 (Item #2	<u>1)</u>	2.ea.		MOR		19.20	28.80	32.64	1875	
24.00 .3	75 Sleeve,	X-50 (Item #2	2) ///#070			MOK		25.60	38.40	43.52	1406	
0.020 .2	60 API OL, C	JR. D, JIVILO	(Item #27)		5	3	MU	K	13.52	20.28	22.98	2663
2.3/3 .1	54 API 3L, (jr. d, Jivilj	(item #29)	: بر مد شده نسونه ور می و	<u> </u>	Teel	LEWIN U	MINUMER		13.ZZ	14.98	4085
Ainimum Test Pre	ssure @ Max. Eleva	ation		600 F	SIG	To B	e Used	- UNDER 30	% SMYS (1 HR	. MINIMUM)	2	8 HOURS
Ne. Mer and Mer and						WA	ATER	- 30% SMYS	& OVER (8 HRS	. MINIMUM)	L	
Maximum Test Pre	essure @ Min. Eleva	ation	<u>.</u>	680 F	SIG	r Chonon		- PREINSTA	LLATION TEST	(SEE ATTACHMEN	IT 'A', GAS STD. A	1-34) D-1-1-1
Redacted		Uak	ħ.		dacted			· ·	Redac	ted	1 2	-27-11
ART II - TEST DAT	A (TO BE PREPARED	BY PERSON SUP	ERVISING TEST	AT TIME O	FTEST)			Note: Mini	num test oressi	ire and duration are	not to be changed	
ESt Cons	oucteo (by Tho	e van	Bar	1-3-1	1c	T	wi	hout written ap	proval.		
ime and Date	11:4	opm	1	-	101	3		I	110	0		111.1.
est Pressure leached	9-0	1-11	Elevation a	Elevation at Test			Min. Required Test FT Press At Test Point		1) PS	Max. Allow	vable Test	Delo
ime and Date	8:1	s Am	May Elave	llan In	2	2	Min Indicato	ti onte q		Kay India	olad	1.610
est Ended	Q -	10-11	Test Sectio	non m n	F	T	Test Pressure) (2) PS	G Test Pres:	sure (5)) PSIG
ctual Duration 🙍	QHA	(Min. Elevati	on in)		Min. Test Pre	ssure	61	S Max. Test	Pressure	675.4
Test 0	0	33 min	Test Section	n	F	T	at Max. Eleva	tion (3) PSI	G at Min. Ele	valion (6)	PSIG
st riula osea	NATER					JE	ASB	oolage venne 4	o (See Parti)			
ake, Range, and Ser	rial No. of Pressure Re	cording Gauge	Da	te Last Calil	orated	Make,	, Range, and S	rial No. of De	ad Weight Test	er (See Note 7)	Date L	ast Calibrated
LP, 0-1000 1	251, 1703			5-2-1	1	AW	ieter,	0-3000	PSI, HU	-2845	11-2	9-10
st Supervised By	edacted			ale:	11	Appro	Reda	cted			9J 7-//	È.
JT SCHEMATIC PIP IOW LOCATION OF HOW REFERENCE	ING SKETCH ON BA FACILITY TESTED, I NUMBERS ON FACE	CK OF THIS SHEE MINIMUM AND MA OF ALL DRAWING	T XIMUM ELEVATI SS AND ATTACH	ON IN FEE MENTS). F	, MILE POI OR STATIC	NTS, VAL	LVE NUMBERS	AND INCOR	PORATED ARE SHORT SECT	AS. USE AN ADDI IONS OF PIPE, ALS	TIONAL SHEET IF	NECESSARY ILED SKETCH
EACH ASSEMBLY	TESTED.						nieti	PRITION				
Add the static hea	ad due to elevation diff	erence (between te	st point and maxir	num elevali	on) to		JOB FI	LE (AT SPON	SORING ORGA	NIZATION)		
"minimum test pre Use lowest press	essure at maximum ele ure on test dauge at ar	evation" from PART	Ŀ			i.e	GSME	SRESPONS	BLEDISTRICT	SUPERINTENDEN	T	
Subtract static he	ad due to elevation dif	ference (between te	st point and maxi	mum eleval	ion) from					SALEMATENACI	•	
minimum indicate Subtract static her	d test pressure. ad due to elevation difi	ference (between te	st point and minir	num elevati	on) from	÷	PROJE	CT MANAGEI	VPROJECT EN	IGINEER		i.
"maximum test pri	essure at minimum ele	vation" from PART	l. '				TECHN	ICAL & CONS	TRUCTION SE	RVICES - ASSIGNE	ED JOBS ONLY	
Add static head du	ue to elevation differen	nie ouning test. ice (between test po	oint and minimum	and minimum elevation) to maximum CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)								
Indicated test pres A dead weight tes	sure. ter is only required wh	en testing to a pres	sure which produc	ces a stress	level of 90%	6	RECOF	DS SECTION	(WC), GMS&T	S		
of SMYS or greate	er. However, if a dead	weight tester is use	d on any test, enl	ter the infor	nation in the	3	REPOR			TO GAS ENGINEED	ING & PLANNING	1
- opene provided au	the state in the second s		5 · · · · ·				INCE OF	a transfilled	water ter & third &	O ONO LINGUALEN	CINER CALL FOR CALL	·