DA. Route Number:	<u>'ILI</u>	<u>DA</u> N-Segment:		ILI Lo	<u>ILI</u> g Distance:	
Examination Date:	11/13/2011	–		RMP-11 R	ef. Section: Table	
Mile Point: mination Performed By:	Talli	Region Number:		Reference	Girth Weld: n Girth Weld:	
PG&E Project Manager:		Subregion # (ICDA):		Distance 1107		
Approved By:						
Excavation Priority			Excavation	Reason		
		1 Year Other)	ECDA		Recoat	
Irhmediate  Monitor	Scheduled (For ILI - Effectiveness		I¢DA			
Montroi	Enectiveness	ICDA	_ іфра	Otne <u>wac</u>	P Validation	
•	or CIS reads before exc					
xcavation Details: Cer Northing:	iterline on GPS Coordinat		anned Inspection I	ength (Ft.):		
			Actual Inspection I	_ength (Ft.):		
		(Uncorrected Field Measurem	nent):	SPS File Name:		
		Corrected Field Measuremer	nt): Nominal Wal	Thickness:		
Northing:		· 	•	Pipe Diameter:		
Easting:						
.0 Data Before Coatin				_		
1.1 Native Soil Type	: ау	Rock Sand	am '	Met Other		
1.1a Backfill M	aterial Found Sand	Slurry				
	_	_ <b>_</b>	Depth of	Cover (Ft.):		
Comments:						
1.2 Coating Type		Somastic Plasti	ic Tape	Wax Tape	FBE I	Powercrete
Bare	/None Paint	dther:	Comm	ents: Poor condition	disbonded	
Coating Thicknes	s (Inches): <u>1/8"</u>	Ni	umber of Laye <u>ts:</u>			
1.3 Holiday Testing	Performed?: Yes	o Voltage Used:		Map Location	of Holidays Below.	
	Device Used: Qoil	V/et Sponge Co	omments:			
•	entials in Ditch (-mV):	ს <u></u> Meg 1190 mv		DASg_	1190 mv	
	Ditate (O)-					
1.5 Soil Resistivity i Method:	Pin Δiten (Ω-em):			oil Box 5300 oh	ms	
1.6 Soil Sample Loc	ation: Comments:	D/S end				
1.7 Ground Water P		_	ollected?:	Yes No	Sample pH:	
Comments:						
1.8 Coating Condition	on: Good -	Adhered to Pipe	Fair - Coating	Partially Disbonded	or Degraded	
	oor -	Coating Significantly Disbond	led or Missing			
Comments Coa	ting disbonded and falling	off with soil removal 100% o	ver expossed pipe			
				atata at 2		
40 11 1	Degradation*: eous deposit locations	;	∠ero Keference P	oint: edge of exposs	sea pipe.	
1.9 Map of Coating  *Note any calcare				Flow		
*Note any calcare						
*Note any calcare						
*Note any calcare						
*Note any calcare						
*Note any calcare						
*Note any calcare						
*Note any calcare						
*Note any calcare  12 o'clock  9 o'clock						
*Note any calcare  12 o'clock  9 o'clock						
*Note any calcare  12 o'clock  9 o'clock						
*Note any calcare  12 o'clock  9 o'clock  6 o'clock						
*Note any calcare  12 o'clock  9 o'clock  6 o'clock						

Ex	<u>DA/ILI</u> Route Number: camination Date: <u>11/13/20</u>	)11		<u>DA</u> Segment: Number:			RMP-11 Re		able 5.6.2	
	Mile Point: n Performed By: Project Manager: Approved By: Order Number:		Subregion	# (ICDA): tationing:			Distance From			
1.10	Photos Taken?*: *See Photo Log for addition	es No	,							
1.11	Coating Sample Taken?	': <b>=</b> e	s No	Location	of Sample: <u>D</u>	/S end				
1.12	Liquid Underneath Coat	ting?: Ye	s o	If Yes, p	H of Liquid:					
1.13	Corrosion Product Pres	ent?: Ye	s o	If Yes,	Was Sample	Taken?:	Yes	o		
1.14	Soil pH (Sb Electrode):	Upstrea	m5	Dowr	nstrea <b>6m5</b>					
ata Af	fter Coating Removal									
2.1	Pipe Temperature (°F):			Meas	sured Pipe Dia	meter (In.):				
2.2	Weld Seam Type:	DSAW	SSAW	RW	SMLS					
		Spiral	Lap	Flash	AO Sm	nith				
2.3	Girth Weld Coordinates  Northing:  Easting:  Elevation:					LS	Weld Clock F	osition:		
2.4	Damage Found:									
	Corrosion Damage Other Damage:	e? Yes	o	М	lechanical Dar	mage?	Yes	o		
2.5		TD	C: 0.149"	1 O'cloc	k: 0.149"	20	D'clock: 0.149'	!	3 O'clock: 0.149"	
			k: 0.149"	-	k: <u>0.149"</u>		D'clock: <u>0.149'</u>		7 O'clock: 0.149"	
		8 O'cloc	k: <u>0.149"</u>	9 O'clock	k: <u>0.149"</u>	10 0	D'clock: <u>0.149'</u>	·	11 O'clock: <u>0.149"</u>	
	2 Ea Naminal Wall This	kness: <u>0.148"</u>								
	2.5a Nominai wan inic		d. Be sure to	attach grid to F	orm H electro	nically So	6 - 6 40	1		
	UT Wall Thickness Grid (	₱ 6:00 is require		attaon gna to i	ommin olootic	ilically. Se	e page 6 of 10	,,		
				s: Two linear in		•			itions.	
2.6	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind	art. Is Required	. Comment	s: Two linear in		e noted ple	ase see MT retronically as p	eport for loca art of the Fo	rm H.	
	UT Wall Thickness Grid @	rart. Is Required ications?	. Comment	s: Two linear in	ndications wers, attach NDE	e noted ple	ase see MT retronically as p	eport for loca art of the Fo	rm H.	
2.6	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for addition Overview Map of Corrocompletes to the control of the corrocompletes the corroco	rart. Is Required ications?  ent Corrosion aronal information.  ded Area*:	. Comment es  d Other Anom	s: Two linear in No If Yes Repo	ndications wer s, attach NDE ort to include b	e noted ple report elect lack light ar	ase see MT ri tronically as p nd white light i	eport for loca art of the For ohotos of ind	rm H.	
2.6	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind  Take Photos to Docume *See Photo Log for additi  Overview Map of Corroc *See Pit Depth Measuren	eart. Is Required ications?  ent Corrosion are onal information.  ded Area*:  nent Grid for add	. Comment es  d Other Anom	s: Two linear in No If Yes Repo	ndications wers, attach NDE	e noted ple report elect lack light ar	ase see MT ri tronically as p nd white light i	eport for loca art of the For ohotos of ind	rm H.	
2.6	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for addition Overview Map of Corrocompletes to the control of the corrocompletes the corroco	eart. Is Required ications?  ent Corrosion are onal information.  ded Area*:  nent Grid for add	. Comment es  d Other Anom	s: Two linear in No If Yes Repo	ndications wer s, attach NDE ort to include b	e noted ple report elect lack light ar	ase see MT retronically as pend white light pend white light pend ge of exposse	eport for loca art of the For ohotos of ind	rm H.	
2.6 2.7 2.8	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind  Take Photos to Docume *See Photo Log for additi  Overview Map of Corroc *See Pit Depth Measuren *Note any calcareous dep	eart. Is Required ications?  ent Corrosion are onal information.  ded Area*:  nent Grid for add	. Comment es  d Other Anom	s: Two linear in No If Yes Repo	ndications wer s, attach NDE ort to include b	e noted ple report elect lack light ar	ase see MT retronically as pend white light pend white light pend ge of exposse	eport for loca art of the For ohotos of ind	rm H.	
2.6 2.7 2.8	UT Wall Thickness Grid ( Wet Fluorescent Mag. P Were there any linear ind  Take Photos to Docume *See Photo Log for additi  Overview Map of Corroc *See Pit Depth Measuren *Note any calcareous dep	rart. Is Required ications?  ent Corrosion are onal information.  ded Area*: nent Grid for add posits.	. Comment es  ad Other Anom itional Information	s: Two linear in No If Yes Report Report No Zeron Zero	ndications wer s, attach NDE ort to include b ero Reference	re noted ple report elect lack light ar e Point: ed; Flow	ase see MT ri tronically as p nd white light p ge of exposse	eport for loca art of the For ohotos of ind d pipe.	rm H. lications.	
2.6 2.7 2.8	Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for additi Overview Map of Corror *See Pit Depth Measuren *Note any calcareous dep	eart. Is Required ications?  ent Corrosion are onal information.  ded Area*: nent Grid for add posits.	. Comment es  ad Other Anom itional Information	s: Two linear in No If Yes Repo	ndications wer s, attach NDE ort to include b ero Reference	re noted ple report elect lack light ar e Point: edu	ase see MT ri tronically as p nd white light i	eport for loca art of the For ohotos of ind d pipe.	rm H. lications.	
2.6 2.7 2.8	Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for additi Overview Map of Corror *See Pit Depth Measuren *Note any calcareous dep	rart. Is Required ications?  ent Corrosion are onal information.  ded Area*: nent Grid for add posits.	. Comment es  ad Other Anom itional Information	s: Two linear in No If Yes Report Report No Zeron Zero	ndications wer s, attach NDE ort to include b ero Reference	re noted ple report elect lack light ar e Point: ed; Flow	ase see MT ri tronically as p nd white light p ge of exposse	eport for loca art of the For ohotos of ind d pipe.	rm H. lications.	_
2.6 2.7 2.8 12 o'clos	Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for additi Overview Map of Corror *See Pit Depth Measuren *Note any calcareous dep	rart. Is Required ications?  ent Corrosion aronal information.  ded Area*: nent Grid for add posits.	es and Other Anomitional Information	S: Two linear in No If Yes Report Report No Zeron Zero	ero Reference	re noted ple report elect lack light ar  e Point: ed; Flow	ase see MT ri tronically as p nd white light   ge of exposse	eport for local art of the Foundation of industrial distribution of the Foundation o	rm H. lications.	
2.6	Wet Fluorescent Mag. P Were there any linear ind Take Photos to Docume *See Photo Log for additi Overview Map of Corroc *See Pit Depth Measuren *Note any calcareous dep	rart. Is Required ications?  ent Corrosion aronal information.  ded Area*: nent Grid for add posits.	es and Other Anomatic litional Informatic lip 20	s: Two linear in No If Yes Report Rep	ero Reference	re noted ple report elect lack light ar  e Point: ed; Flow	ase see MT ri tronically as p nd white light   ge of exposse	eport for local art of the Foliohotos of indicate displaying the folio	rm H. lications.	_

Examination Date: 1 Mile Point: _ tion Performed By:	1/13/2011		N-Seg	ment:			_	LI Log Di		_	
E Project Manager: _ Approved By: _	IMA Number:					RMP Reference Distance	ence Girtl	h Weld:	Table 5.6.2		
Excavation Drawing: At minimum draw p Place an arrow on t	<u>:</u> iipe elevation p	profile and in								(e.g. "to S	station'
			Inclir	ation Ang	ıle (degree	es)					
						•					
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											_
											_
											_
				Distanc	e (ft.)						
				Flow	<i>,</i> [						
STATIONING									S	NINOITATE	IG
S: (Record stationi help in spatially			andmarks sı	ıch as cre	eks and r	oads. Pr	ovide any	addition	al inforn	nation tha	t may
noip in spandily	Paging Inia bil										

# Form H: Direct Examination Data Sheet - Page 4 of 10 EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

	DA/ILI Route Number: Examination Date: 11/13/2011				N-Seg	<u>D</u> jment:						ILI L	og Dis	<u>II</u> tance:		562						
Examinati	l on Perf	Mile Po ormed	int: By:	d}				Reg	IMA Nu jion Nu	ımber:					Ref Dista	erence	Girth	Weld:				
PG&E	Project App Orde	: Manaç oroved r Numl	ger: By:					Subreg	ion # (	ICDA):												
<b>Grid Size</b> lock Positi	=	_inch x						-														
OK F OSK		maly #:											Grid <u>#:</u>									
	1_	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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PIT DEPTH GRID 1 OF 2

# Form H: Direct Examination Data Sheet - Page 5 of 10 EXTERNAL PIT DEPTH MEASUREMENT GRID SHEETS

	DA/ILI  Route Number:  Examination Date: 11/13/2011  Mile Point:		_		N-Seç IMA Nu	<u>D</u> gment: umber:	<u>A</u> 				RMP-11 Ref. Section: Table 5.6.2											
BOSE Bro									jion Nu	ımber:					Dist	erence ance Fr	Girth om Girt	Weld: h Weld:				
PG&E Pro	Appro Order N	ved By	y:						Stati	oning:												
rid Size = _ ck Position (				inch (s	specify	grid siz	re)															
	Anoma	aly #:											Grid <u>#:</u>									
А	1	2	3	4_	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
В																						
С																						
D																						
E																						
F																						
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V																						
w																						
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PIT DEPTH GRID 2 OF 2

Form H: Direct Examination Data Sheet - Page 6 of 10
INTERNAL CORROSION PIT DEPTH GRID

<u>DA/ILI</u>	<u>DA</u>	<u>iLl</u>
Route Number:	N-Segment:	
Examination Date: 11/13/2011	IMA Number:	RMP-11 Ref. Section: Table 5.6.2
Mile Point:		Reference Girth Weld:
Examination Performed By: d}	Region Number:	Distance From Girth Weld:
PG&E Project Manager:	Subregion # (ICDA):	
Approved By:	Stationing:	
Order Number:		

Grid Size = 6.0 Inch x 6.0 Inch Clock Position (specify below)

1	2	3	4	5	6	7	8	9	10	11	12
д 0.149	0.149	0.149	0.150	0.150	0.149						
В 0.149	0.149	0.149	0.151	0.149	0.150						
C 0.149	0.150	0.149	0.151	0.150	0.150						
D 0.150	0.150	0.150	0.149	0.151	0.150						
E 0.149	0.149	0.149	0.150	0.150	0.149						
F 0.150	0.149	0.149	0.150	0.151	0.149						
G											
Н											
*****											
J											
K											
<u>.</u>											

INTERNAL CORROSION GRID

1 of 1

Form H: Direct	Examination	Data Sheet	t - Page '	7 of 10
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## COATING DAMAGE

			GO, TIMO D, TIM, TOL	
	<u>DA</u>		<u>DA</u>	<u> L </u>
_	Route Number:		N-Segment:	ILI Log Distance:
Ex	amination Date: Mile Point:	11/13/2011	IMA Number:	
xaminatio	n Performed By:		Region Number:	Distance From Girth Weld:
PG&E F	Project Manager:		_ Subregion # (ICDA):	
	Approved By:		Stationing:	
	Order Number:		<del></del>	
NO	FEET FROM	0101 001	MAY I FAIGTH (INI.)	MAY CIDO EVTENT (IN )
NO.	REFERENCE	O'CLOCK	MAX LENGTH (IN.)	
1	0	360 deg	12'	14.13
	<u>                                      </u>			

Form H: Direct	Examination	Data	Sheet -	- Page	8	of '	10
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## **CORROSION LOG**

xaminat	DA/ILI Route Number: Examination Date: 11/13/2011 Mile Point: 12/13/2011 mination Performed By: 12/13/2011 Approved By: 12/13/		Region Number:  Subregion # (ICDA):  Stationing:	RMP-11 Rel Reference G Distance From	ILI Distance: 5. Section: Table 5.6.2 irth Weld: Girth Weld:
or EC	REFERENCE	O'CLOCK	MAX PIT DEPTH (MILS)	MAX LENGTH (IN.)	MAX CIRC EXTENT (IN.)

	Examination		

		PHOTO LOG	
	DA/ILI	<u>DA</u>	<u>iLl</u>
Route Number: Examination Date: 11/13/2011 Mile Point:		N-Segment:	ILI Log Distance:
		IMA Number:	
		Region Number:	
PG&E Project	ormed By: <mark>C }</mark> Manager:	Subregion # (ICDA):	Distance From Girth Weld.
App	roved By:	Stationing:	
Order	Number:	_	
10TO NO.	LOCATION	DESCRIPTION	COMMENTS

or	m H: Di	rect Examination Data Sheet - Page 1 <u>DA/ILI</u>	0 of 10 <u>DA</u>	<u>ILI</u>
	E	Route Number:	N-Segment: _ IMA Number:	ILI Log Distance:  RMP-11 Ref. Section: Table 5.6.2
		Mile Point:		Reference Girth Weld:
Exa		n Performed By: d} Project Manager:		Distance From Girth Weld:
		Approved By:	Stationing:_	
		Order Number:		
0	Recoat	Data		
		Sandblast Media:		Anchor Profile Measurement:
		Pipe Recoated With:		Alleron Frome measurement.
	0.2	Powercrete J Wax Tape	Bar-Rust 235	Dev Grip 238 Dev Tar 247 Protal 7200 PE Tape
	3.3	For Epoxy Coating Systems, Record Envir		
		Air Temperature:	_	Dew Point:
		Pipe Temperature: Time of Day:	<del></del>	Relative Humidity:
	3.4	Repair Coating Hardness (If ARC Coating:		
		Measured Coating Thickness: 3:00		9:00 12:00
		Holiday Tested?: Yes No		
			Sponge Voltage (	Used: Repair All Holidays.
	3.6	Coupon Test Station Installed?:		ETS Installed?: Yes No
		If Yes, Date Installed:		
			G-5 Box Carso	nite
	3.7	Backfill Material: Native	Imported Sand	Other:
		Coating Protections?: Yes	No	
		If Yes, Check One: Rockguard		PipeSaver
	3.8	Pipe-to-Soil Readings Over Bell Hole After		
		*If specified, a CIS should be done for approx		de of the bell hole. Attach data.
		Comments:		
	3.9	Attach site sketch of excavation site.		
	3.9	Attach site sketch of excavation site.		
.0	Repair	<u>Data</u>		
	4.1	Repair Made: Yes No	4.1 Number of Re	pairs Made:
	4.3	Repair Type: Metallic Sleeve	Non Metallic Sleeve	Replace Can Filler Metal Other
	4.4	Damage Repaired: Corrosion	Mechanical	Other
=				
(lise	c. Comm	ents/Information:		

### Form H: Direct Examination Data Sheet

	DA/II Route Number:		N-Segm		ILI Log Distance:					
	Examination Date: 1 Mile Point:	1/13/2011	IMA Num	RMP-11 Ref. Section: Table 5.6.2  Reference Girth Weld:						
	tion Performed By:		Region Num	nber:						
PG&	E Project Manager: _		Subregion # (IC	DA):						
			Station	ning:						
Tes	t Equipment	Serial No.	Technique	Test Medium	Qua	lity Control		Surface Condi	tion	
	Yoke	15386/B300	Continuous	Wet		‡	_			
Perma	anent Magnet		Residual	Dry		<u> </u>		Bare Metal		
	Coil		AC	Fluorescent		09f001	П	As Ground		
	Other		DC	Black on White		<u> </u>		Painted		
								Other (Walnut B	lasted)	
	Reference GPS:		Aco	ceptance Criteria: API 1	1160					
	Northing:			Accepted?	Yes	No, See Tabl	e below.			
	Easting: _			_		_				
Ma	p of Magnetic Partic	le Indications:		Zero Reference	Point: e	dge of expossed	pipe.			
						Flow				
12:00										
9:00										
6:00										
3:00										
10.00										
12:00 Feet:	0 1	2 3 4	5 6	7 8	9	10				
Гable										
Ind No.	Axial Position	Circumferential Position	Indication Length	Wall Thickne before Softp		Wall Thickne		Indicatio Removed (Ye		
1	4'	6:00	.75"	in weld			•			
2	7	12:00	1"	in weld	in weld					
Notes:	Linear indication 1 is l	ocated in the reinforcmen	t weld at 6:00. Linea	ar indication 2 is located	I in the 90	deg tangent weld	at 12:00.			
The exam	ination above was p	erformed to the best of	my professional al	bility in accordance wi	th Mears I	MPE-01.				
Ted	chnician's Signature:_			Mears L	_evel:			Date:		
	Assistant:_			Mears L	_evel:			Date:		

Examination Date:	ILI 11/13/2011	<u>D</u> N-Segment: IMA Number:		ILI ILI Log Distance: RMP-11 Ref. Section: Table 5.6.2 Reference Girth Weld: Distance From Girth Weld:  *Sketch Not Drawn to Scale				
Mile Point: ination Performed By: G&E Project Manager: Approved By:	<u>a}</u>	Region Number: Subregion # (ICDA): Stationing:						
Order Number:		=						

## Form H: Direct Examination Data Sheet - Page 6 of 10

<u>DA/I</u>	LI	<u>DA</u>	<u> </u>	<u>ILI</u>
Route Number:		N-Segment:		ILI Log Distance:
Examination Date: 1	1/13/2011	IMA Number:_		RMP-11 Ref. Section: Table 5.6.2
Mile Point:_		_		Reference Girth Weld:
Examination Performed By:	d}	Region Number:_		Distance From Girth Weld:
PG&E Project Manager:_		Subregion # (ICDA):_		
Approved By:_		Stationing:_		_
Order Number:_				

### Section of pipe

		1	2	3	4	5	6	7	8	9	10	11	12
	1:00	0.149	0.149	0.149	0.151	0.152							
	2:00	0.149	0.151	0.151	0.151	0.151							
	3:00	0.149	0.151	0.150	0.149	0.152							
	4:00	0.150	0.150	0.150	0.152	0.153							
ition	5:00	0.149	0.151	0.151	0.153	0.152							
Clock Position	6:00	0.149	0.149	0.149	0.152	0.150							
Ü	7:00	0.149	0.151	0.149	0.152	0.152							
	8:00	0.150	0.150	0.150	0.152	0.153							
	9:00	0.150	0.149	0.149	0.152	0.152							
	10:00	0.149	0.149	0.149	0.153	0.152							
	11:00	0.149	0.151	0.150	0.151	0.152							
	12:00	0.149	0.151	0.150	0.151	0.153							