

Attachment 1



Statistical Report for the Calendar Year Ending December 31, 2010

Division: Sierra	Auditor: Paul Penney	Date: April 25 - 29, 2011
-------------------------	-----------------------------	----------------------------------

GO 112-E Section 126 - REPORTABLE PRESSURE UPRATING ANTICIPATED IN 2011

Line & Location	Diameter (Inches)	Length (Miles)	Present Pressure (PSIG)	Proposed Pressure (PSIG)
NONE				

192.227 and 192.285 - QUALIFICATION OF WELDERS AND PERSONS TO PERFORM PLASTIC FUSION

Number Qualified to:	2009	2010
Oxy-Acetylene Weld	16	15
Arc Weld	6	4
Perform Plastic Fusion	34	32

191.11; 192.455 and 192.457 - SYSTEM STATISTICS OF PIPELINES AND SERVICES

Transmission Main	Installed before 8/1/71		Installed after 7/31/71		Total Pipe	
	2009	2010	2009	2010	2009	2010
Coated Steel	159.2	159.16	91.01	92.93	250.21	252.09
Bare Steel	0.07	0.07	0.0	0.0	0.07	0.07
Total Pipe	159.27	159.23	91.01	92.93	250.28	252.16

Total Transmission Main Cathodically Protected	2008: All	2009: All
--	-----------	-----------

Distribution Main	Installed before 8/1/71		Installed after 7/31/71		Total Pipe	
	2009	2010	2009	2010	2009	2010
Coated Steel	451.39	449.60	460.57	462.31	911.97	911.92
Bare Steel	3.92	3.73	0.14	0.14	4.06	3.88
Plastic	0.92	0.92	1720.67	1723.96	1721.6	1724.88
Cast Iron	0.0	0.0	0.0	0.0	0.0	0.0
Copper	0.0	0.0	0.0	0.0	0.0	0.0
Total Pipe	456.23	454.25	2181.38	2186.41	2637.63	2640.68

Total Distribution Main Cathodically Protected	2009: 912.60	2010: 912.66
--	--------------	--------------

Number of Services	2009: 181620	2010: 181813
--------------------	--------------	--------------



Pacific Gas and Electric Company

Statistical Report for the Calendar Year Ending December 31, 2010

192.465 - EXTERNAL CORROSION MONITORING

	2009	2010
Number of Cathodic Protection Areas	131	131
Number of Rectifiers	95	95
Number of Test Stations	365	366
Isolated Mains & Services - Total	53*	55*
Isolated Mains & Services - Number Monitored	7*	5*
Number of Reverse Current Switches	-	-
Number of Diodes	-	-
Number of Interference Bonds	-	-

* Need to combine with Colusa District numbers for total # Monitored by Marysville Office

192.625 - ODORIZATION

- See separate report on Page 3
- See staff report
- None in Division

192.627 - HOT TAP QUALIFICATION

Number of Personnel Qualified to Hot Tap	2009: 33	2010: 32

192.703 - LEAK ACTIVITY DURING YEAR

	Number of Leaks Found		Number of Leaks Repaired		Number of Leaks Repaired, Checked, Downgraded, or Deleted LATE	
	2009	2010	2009	2010	2009	2010
Grade 1 Leaks	377	204	380	206	0	-
Grade 2 Leaks	3,489	411	3,183	456	15	8
Grade 3 Leaks	792	580	1	10	-	-
Total Leaks	4,658	1,195	3,564	672	15	8

MAINTENANCE STATISTICS

ITEM	2009	2010
GO 112-E Section 183 Number of Pipe or Bottle Holders	1	1
192.739 Number of Pressure Limiting or Regulating Stations	169	171
192.743 Number of Pressure Relief Devices	131	131
192.745 Number of Transmission Valves indicated by 192.745	417	419
192.747 Number of Distribution Valves indicated by 192.747	112	112
192.749 Number of Vaults 200 Cubic Feet and over	47	47



Pacific Gas and Electric Company

Statistical Report for the Calendar Year Ending December 31, 2010

192.625 ODORIZATION

NON-ODORIZED LINES:

Line Number	Length in Miles	Class Location
NONE		

ODORIZERS:

Location	Method	Odorant Type	Injection Rate Lb./MMCF	Solubility in Water Parts/100
CAMP FAR WEST STATION	BYPASS ODORIZER	50% TBM/50% THT	N/A	NEGLIGIBLE PER MSDS

SAMPLING POINT LOCATIONS:

AUBURN (END OF L-173)

NEVADA CITY (END OF L-202)

Attachment 2

Sierra Division
Internal Review of Gas Maintenance Records
Date: 4/22/2011

The following summary identifies PG&E's internal findings and the corrective and preventative actions taken in response to PG&E's review of Sierra Division's 2009 and 2010 Gas Maintenance activities.					
Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
Leak Survey Distribution	1,335 Maps	1. PG&E personnel identified 35 maps in the 2010 5-year Leak Survey that exceeded their compliance window due to inclement weather limiting available survey days. Refer to filed memo in 2010 5-year Leak Survey book for details.	1. PG&E personnel leak surveyed the remaining facilities between April 2010 and July 2010, completing the last "cannot get in" services on 7/16/10.	1. Sierra Division implemented a new 5-year leak survey schedule (2011-2015) to avoid leak surveys in January and to minimize the volume of maps surveyed in February and March.	1. Corrective: 7/16/10 Preventative: 3/31/11
		2. During an ongoing review process by the Leak Survey Supervisor and Mapper, PG&E personnel identified facilities on 2 maps not surveyed after the map was initially completed. (2345-B8 in 2009 Annual, 2214-C3 in 2010 5-Year)	2. PG&E personnel leak surveyed the facilities associated with the 2 maps.	2. Sierra Division implemented a new leak survey schedule (2011-2015) that provides sufficient time to correct omitted maintenance identified by the supervisor or mapping review.	2. Corrective: 9/24/10 Preventative: 3/31/11
		3. During its internal review, PG&E personnel identified facilities on seven 5-year Leak Survey maps that were surveyed outside the compliance window. Refer to filed memo in 2009 and 2010 5-year Leak Survey books for details.	3. Sierra Division confirmed that all installed facilities were leak surveyed in 2009 and 2010.	3. Sierra Division implemented a new scheduling process to ensure that newly installed facilities (posted after 5/1/08) are leak surveyed within the compliance window.	3. Corrective: 3/5/11 Preventative: 4/18/08
Leak Survey Transmission	562 Sequences (2009)	1. During its internal review, PG&E identified 5 leaks that were not entered in IGIS at the time they were found. (Leak 09-00490; Leak 10-00070; Leak 10-00073; Leak 10-00074; and Leak 10-00071)	1. The Leak Surveyor created Leak Logs based on recorded information on the map and sign-off sheet, which enabled the Mapper to enter the leaks into IGIS.	1. The Sierra Division Leak Survey Supervisor initiated a weekly documentation review with each surveyor to confirm the leak survey sign-off sheet matches the Leak Survey Log. In addition, the supervisor now retains a copy of the Leak Survey Log after it is sent to mapping, and cross-references that log when reviewing the completed Transmission Leak Survey book.	1. Corrective: 3/24/11 Preventative: 3/1/11
	562 Sequences (2010)				
		1. PG&E personnel determined that the monitor at regulator station CM-01 was set 1 psig above the maximum in WP 4540-01 (Attach 4).	1. PG&E personnel lowered the monitor set point.	1. PG&E released new Form 62-6271 (Data Sheet), which specifically identifies the required set pressure for each regulator and monitor per WP 4540-01. Sierra Division Gas Engineering reviewed all regulator station folders to confirm that Form 62-6271 (Data Sheet) has the correct regulator and overpressure protection settings, and complies with the limits established in WP 4540-01 (Attach 4).	1. Corrective: 9/15/09 Preventative: 12/1/09

Sierra Division
 Internal Review of Gas Maintenance Records
 Date: 4/22/2011

Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
District Regulator Stations	219	2. PG&E personnel determined that the regulator at regulator station CM-01 was set above the maximum in WP 4540-01 (Attach 4).	2. PG&E personnel lowered the monitor set point.	2. PG&E released new Form 62-6271 (Data Sheet), which specifically identifies the required set pressure for each regulator and monitor per WP 4540-01. Sierra Division Gas Engineering reviewed all regulator station folders to confirm that Form 62-6271 (Data Sheet) has the correct regulator and overpressure protection settings, and complies with the limits established in WP 4540-01 (Attach 4).	2. Corrective: 10/30/09 Preventative: 12/1/09
		3. During its internal review, PG&E identified 3 regulator stations with regulators set 1 psig above the maximum in WP 4540-01 (Attach 4). (R125, R126, MRC76)	3. PG&E personnel lowered the monitor set point.	3. Sierra Division Gas Engineering reviewed all regulator station folders to confirm that Form 62-6271 (Data Sheet) has the correct regulator and overpressure protection settings, and complies with the limits established in WP 4540-01 (Attach 4).	3. Corrective: 4/15/11 Preventative: 4/15/11
Relief Valves	193	During its internal review, PG&E identified no findings regarding Relief Valves.			

Sierra Division
 Internal Review of Gas Maintenance Records
 Date: 4/22/2011

Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
Distribution Emergency Valves	112	1. PG&E personnel identified 5 valves that were not maintained after their associated regulator stations were deactivated and removed from the maintenance schedule. (V-1, V-3, V-4, V-5 @ [Redacted]; V-20 @ [Redacted])	1. PG&E personnel maintained the valves per WP 4430-04.	1. Sierra Division's T&R Supervisor updated the SAP Work Management Plan to ensure these valves were scheduled for regular annual maintenance.	1. Corrective: 1/27/11 Preventative: 1/27/11
Transmission Valves	499	1. During its internal review, PG&E identified 7 power-actuated valves that were not lubed every 6 months as required in WP 4430-04. (V-3.42 @ Baseline Station; V-16 @ [Redacted]; V-6, V-25, V-52, V-53, V-63 @ [Redacted])	1. PG&E personnel updated the maintenance schedule in SAP to ensure valve maintenance occurs on a semi-annual basis.	1. Sierra Division's T&R Supervisor updated the SAP Work Management Plan to schedule these valves for semi-annual maintenance.	1. Corrective: 4/18/11 Preventative: 4/18/11
		2. During its internal review, PG&E identified 1 power-actuated valve that was not lubed every 2 weeks as required in WP 4430-04. (regulator V-15 @ [Redacted])	2. PG&E personnel started to lube the valve bi-weekly.	2. Sierra Division's T&R Supervisor updated the SAP Work Management Plan to schedule this valve for bi-weekly maintenance.	2. Corrective: 4/14/11 Preventative: 4/18/11
Corrosion Control	228 Bi-Monthly Areas	PG&E identified no findings regarding CP Bi-monthly Areas.			
	130 Annuals	PG&E identified no findings regarding CP Annual Areas.			
	31 Resurveys	PG&E identified no findings regarding CP Resurveys.			
	260 Rectifiers	PG&E identified no findings regarding CP Rectifiers.			
	140 Casing Tests	PG&E identified no findings regarding Casing Tests.			
	18 - 10%ers	PG&E identified no findings regarding CP 10%ers.			
	Equipment Calibrations	PG&E identified no findings regarding CP Equipment Calibrations.			
CGI Calibrations	65	1. PG&E identified 5 CGI instruments that were not calibrated in April 2009 when the responsible employee transferred to another department. (CY1257, AU1017, 13874, 13729, 14898)	1. PG&E personnel calibrated the CGI instruments.	1. Sierra Division in Q3-2011 will use SAP Work Management to schedule instrument calibration and to generate compliance reports for any missed work.	1. Corrective: 5/14/09 Preventative: Q3-2011
HFI, RMLD, OMD Calibrations	26	During its internal review, PG&E identified no findings regarding HFI, RMLD, or OMD Calibrations.			
Instrument Calibrations	140	During its internal review, PG&E identified no findings regarding Instrument Calibrations.			

Sierra Division
 Internal Review of Gas Maintenance Records
 Date: 4/22/2011

Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
Leak Repair	98 (2009) 263 (2010)	1. PG&E identified 9 riser thread Grade 2+ leaks that were repaired late due to lost original A-forms. (09-90386, 09-90518, 09-90646, 09-90713, 09-02116, 09-04516, 09-04535, 09-10034, 09-90367)	1. PG&E personnel repaired each leak.	1. Sierra Division implemented a new workflow process, in which Sierra Division Mapping forwards the A-forms (within 5 months before repair due date) directly to the M&C Coordinator to plan and schedule the repair in SAP.	1. Corrective: 12/30/09 Preventative: 8/1/10
		2. PG&E identified one Grade 1 leak that was responded late. (09-00151)	2. PG&E dispatched a Leak Surveyor and crew to repair the leak.	2. PG&E released Utility Procedure TD-4110P-13 "Outside Gas Leak and Odor Investigation", which identifies belowground leak investigation procedures for qualified Field Service or M&C personnel.	2. Corrective: 12/30/09 Preventative: 11/10/10
		3. PG&E identified 2 riser thread Grade 2+ leaks that were downgraded late in 2009 as a result of lost/misplaced original paperwork. (09-90268, 09-90365)	3. PG&E rechecked the risers, and determined that no leak exists.	3. Sierra Division implemented a new workflow process, in which Sierra Division Mapping forwards the A-forms (within 5 months before repair due date) directly to the M&C Coordinator to plan and schedule the repair in SAP.	3. Corrective: 12/17/09 Preventative: 8/1/10
		4. PG&E identified four Grade 2 leaks that were rechecked late in 2009. (08-10025; 08-00164; 08-10188; and 08-00807).	4. PG&E rechecked each leak.	4. Sierra Division's Sr. Gas Engineer reviewed the Auburn Monthly Gas Leak Reports (IGIS) checklist with Mapping. The checklist includes steps to print a Recheck Log for all districts each month, and to confirm Recheck Logs are returned before the end of the month.	4. Corrective: 12/9/09 Preventative: 4/20/11
		5a,b. PG&E identified three Grade 2+ and one Grade 2 leaks that were repaired late in 2010 due to misplaced/lost original Leak Logs and A-form. (09-10002, 09-10003, 09-10005, 09-93787)	5a. PG&E personnel repaired three Grade 2+ leaks upon finding the misplaced Leak Logs.	5a. PG&E changed its process from the QC Assessment Supervisor hand-delivering paperwork to the Leak Survey Supervisor to now scanning Leak Logs and related paperwork directly to the responsible Mapping group.	5a. Corrective: 7/16/10 Preventative: 6/1/09
			5b. PG&E personnel repaired one Grade 2 leak.	5b. PG&E implemented a new A-form, in which the leak's Repair Compliance Date is printed by IGIS on the front of the A-form.	5b. Corrective: 9/24/10 Preventative: 3/14/11
		6a,b. PG&E identified two riser thread Grade 2+ leaks and one Grade 2 leak that were rechecked late in 2010 due to misplaced/lost original Leak Logs. (09-10001, 09-10006, 09-04606)	6a,b. PG&E personnel rechecked the risers, and determined that no leak exists.	6a. Sierra Division implemented a new workflow process, in which Sierra Division Mapping forwards the A-forms (within 5 months before repair due date) directly to the M&C Coordinator to plan and schedule the repair in SAP.	6a. Corrective: 7/16/10 Preventative: 6/1/09

Sierra Division
Internal Review of Gas Maintenance Records
Date: 4/22/2011

Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
				6b. Sierra Division's Sr. Gas Engineer reviewed the leak survey review process with Sierra Gas Mapping to ensure that any new leak identified on the map matches those documented on the Daily Leak Survey Log and to confirm that leaks are entered in IGIS.	6b. Corrective: 12/28/10 Preventative: 4/20/11
		7. During its internal review, PG&E identified one Grade 2 riser threaded leak that was rechecked late in 2010, because the leak was not identified on the Leak Survey Log and never entered in IGIS. (09-01195)	7. PG&E personnel repaired the leak.	7. Sierra Division's Sr. Gas Engineer reviewed the leak survey review process with Sierra Gas Mapping to ensure that any new leak identified on the map matches those documented on the Daily Leak Survey Log and to confirm that leaks are entered in IGIS.	7. Corrective: 4/19/11 Preventative: 4/20/11
		8. During its internal review, PG&E identified 4 leak repairs where a 100 psig test was not performed for a disconnected service. (09-93680, 10-04177, 10-03056, 10-03061)	8. PG&E personnel returned and tested each service at 100 psig for 5 minutes.	8. Sierra Division's Construction Supervisor tailboarded gas employees on leak repair findings discovered during the internal review and instructed Sierra Division gas employees that a disconnected service must be air tested from the point of disconnection to the riser valve.	8. Corrective: 3/22/11 Preventative: 3/11/11
		9. During its internal review, PG&E identified 5 leak repairs where an excess flow valve was not installed as required in GIB 323. (10-20015, 10-20019, 10-00001, 10-01040, 10-04042)	9. PG&E personnel returned and installed an excess flow valve at these five locations.	9. Sierra Division's Construction Supervisors tailboarded GIB 323 to gas employees.	9. Corrective: 4/22/11 Preventative: 2/1/11
		10. During its internal review, PG&E identified 1 leak repair that was made by re-firing an existing electrofusion tee cap in service. After discussions with the Plastic Committee, the Distribution Specialist confirmed that re-firing an electrofusion fitting installed by another crew is not approved since there is no way to know how many times the fitting was fired already.	10. PG&E personnel removed the tee by installing a short section of main and new tee.	10. Sierra Division's Construction Supervisor explained to affected Sierra Division gas employees that a previously installed electrofusion fitting cannot be "re-fired" and used.	10. Corrective: 3/14/11 Preventative: 3/14/11
Deactivation	1	During its internal review, PG&E identified no findings regarding Deactivations.			
Odorization	24	During its internal review, PG&E identified no findings regarding Odorization.			

Sierra Division
Internal Review of Gas Maintenance Records
Date: 4/22/2011

Topic	# of Records Reviewed	Finding(s)	Corrective Action To Close Findings	Action to Prevent Recurrence	Actual or Anticipated Completion Date
Patrols	133	1. PG&E personnel determined that ground patrol for 1 pipeline was performed 3 days late in Q2-2009. (District 10 DFM)	1. PG&E personnel patrolled this pipeline.	1. Sierra Division's T&R Supervisor reorganized the patrol binder to tab each pipeline group and added a master patrol schedule in the front. The supervisor also reviewed the binder contents and compliance due dates with the affected Sierra Division T&R group.	1. Corrective: 7/22/09 Preventative: 8/11/09
		2. PG&E personnel determined that ground patrols for 6 pipelines were performed late in Q2-2010. (District 10 DFM, Greenleaf I DFM, Greenleaf II DFM, South Sutter DFM, Feather River DFM, Algodon DFM)	2. PG&E personnel patrolled these pipelines.	2. Sierra Division's T&R Supervisor separated the patrol forms into two separate binders, and created two entries in the FM scheduling tool to represent each Patrol Binder.	2. Corrective: 8/24/10 Preventative: 9/11/10
Emergency Plan	1	During its internal review, PG&E identified no findings regarding emergency plans.			
Emergency Zones	3	During its internal review, PG&E identified no findings regarding emergency zones.			
Atmospheric Corrosion	8	During its internal review, PG&E identified no findings regarding atmospheric corrosion.			
MAOP	158	During its internal review, PG&E identified no findings regarding MAOP.			
Joiner Qualification	154	During its internal review, PG&E identified no findings joiner qualification.			

Attachment 3



Leak Survey, Repair, Inspection, and Gas Quarterly Incident Report (Form "A")

62-4060 (Rev 3/08)
Gas T&D
Utility Standard
S4110

CONFIDENTIAL - Provided Pursuant to P.U. Code §583

Redacted

05 937

INITIAL LEAK DATA

Leak Number: 09-00151-1 USA Ticket #: 250496 Valid Date: 08-17-09
 Date Reported: 08-14-09 Time Reported: 1125 (24 hr Time) PCC Number: 12055
 Response Date: 08-17-09 Response Time: 0845 (24 hr Time) Paved Wall-To-Wall: Yes No
 Moratorium Expire Date: SAP Recheck Order #: SAP Repair Order #: 41136639
 Address: Between Redacted City: Yuba City

Re Description of Reading Location: Service Tee
 REPORTED BY: Call-In Mobile Survey Other Employee
 Foot Survey SURFACE OVER LEAK: Concrete Unsurfaced
 Asphalt Other

READINGS				2% or Less ^c or Suspect Copper (S)	Down Grade Via Vent (Yes/No)	DATE	Time (24 hr Time)	OPERATOR LAN ID	UNIT SERIAL NUMBER (Last 4 Digits)	LOCATION REMARKS (Not needed, if the same as previous)
PPM	% LEL	% GAS	Instr ^a Grade ^b							
		10	C 1 F			08-17-09	0845	Redacted	9405	

PRIORITY 2+ REQUESTED REPAIR DATE (Only needed if less than 90 days) (Repair required within 90 calendar days)

- a Instrument Type: Enter H for Hydrogen Flame Ionization, C for Combustible Gas Indicator, or V for Visual.
 b Enter Grade or enter 2+ for Priority Grade 2. Enter 0 (zero) if no leak is found. If a competent first responder from other than M&C determines that the leak is non-hazardous, enter as a Grade 2+. The % Gas will be zero, the instrument will be "V" and the 2% reason code will be "H". Use the next line below to upgrade or downgrade the leak.
 c 2% or less reason code is required if leak is graded as 1, 2+, or 2:
 A-Wall to wall and traveling, B-Next to, at or under building, C-Odor and next to public gathering location, D-In foreign structure, E-Audible and/or visible, F-On facility in extremely poor condition, G-At least second customer call out, H-Leak is reported as 0% Gas Visual, J-Leak within the scope of work by others, S-Leak is suspected to be on a copper service

MAPPING DATA

Leak Location Map Wall Map: 2153 Plat: I 8 Federal Land Yes No SYSTEM PRESSURE (MAOP)
 Recorded Location Map Wall Map: 2153 Plat: I 8 Block: LP (≤10.5" WC) SHP (≤25 psig)
 Normally Cathodically Protected Yes No CPA: MOP (TP only) HP (≤60 psig) TP (>60 psig)
 Year Inst. TP Line # Mile Post: Original Job # (TP Only)
 For Leaks On Services: Main Connected to Service Cast Iron Plastic Steel Installation Year of Main 7969

PIPE DATA

LEAK SOURCE: Bell Joint SS Fitting in Plastic System Valve Unknown Other
 Body of Pipe Clamp Drip Encapsulation Fitting Fusion Joint Girth Weld Longitudinal Weld Mechanical Joint Plastic Tee Cap Other Welds Regulator Riser Tap Connection
 LEAK CAUSE: Atmospheric Corrosion Cast Iron Fracture Construction Defect Damage by Electrical Facility Damage by Heavy Rains/Flood Damage by Earth Movement Damage by 3rd Party External Corrosion Internal Corrosion Stress Corrosion Cracking Material Failure Plastic Crack Failure Plastic Embrittlement Vandalism Structure Fire
 LINE MATERIAL: Copper Steel/Wrought Iron Cast/Ductile Iron Aldyl A (Tan or Gray) PE2406 (Yellow or Orange) PE2406/2708 (Yellow) PE 3408 (Black) PE 4710 (Black) Other Plastic
 LINE USE: Distribution Main Gathering Single Service Branch Service Transmission
 Line Size 0.50 Line Above Ground Yes No Internal Liner Yes No Line Inserted Yes No
 High Consequence Area Yes No (Transmission Only) EFV Installed Yes No EFV Operated Yes No
 Incident Report #: Material Problem Report #:

REPAIR DATA

Repair Location @ SRVC TEE TO 20.50 MTR # 29780322 LEAK @ TRANSITION POINT ON TEE

Yes No Pipeline Engineer Consulted

Repair Remarks

Repaired By: Redacted Repair Date 08-17-09 Repair Time 1515 Pipe-to Soil (mV)

- REPAIR CODE: Mechanical Repair Fitting, Replace Valve > or = 2-inch, Fill Weld, Clockspring, Bell Joint Seal, Replace Dist Main < 100 ft, Replace Plastic Tee Cap, Patch Weld, Aquawrap, Bell Joint Clamp, Replace Dist Main > or = 100 ft, Tighten Cap/Bolt, Direct Deposition Weld, Other, CI Repair Sleeve, Deactivated Entire Service, Aldyl Electrofusion Overcap, Welded Sleeve/Can, BJ Permabond, Deactivated Partial Service, Skinner Clamp, Welded Save-A-Valve, Deactivate TP Main, Replace Entire Service, SS Clamp w/Anode, Type A Sleeve, Replace TP Main, Replace Partial Service, Soap and/or Tape, Type B Sleeve, Deactivate Dist Main (1 foot or more), Replace Valve < 2-inch, Tee Fused Over Defect, Grinding

SIZE INSTALLED: 0.50 REPLACED WITH: STEEL PE2406/2708 (Yellow) Copper Entirely Replaced PE 4710 (Black)

Field Reviewed By: Redacted Date 08-19-09 Post Repair Check: Yes No Date

Mapping Reviewed By: Redacted Date 08-20-09 Posting Required: Yes No

GENERAL INSPECTION DATA

Date: 08-17-09 Inspected by: Redacted Line Use: Distribution Main Gathering Single Service Branch Service Transmission

LINE MATERIAL: Steel/Wrought Iron, Cast/Ductile Iron, Copper, Aldyl-A (Tan or Gray), PE 2406 (Yellow or Orange), PE 2406/2708 (Yellow), PE 3408 (Black), PE 4710 (Black). SOIL TYPE: Clay, Rock, Sand, Loam, Wet, Exposed Facility, Other. SURFACE OVER PIPE: Concrete, Asphalt, Soil (Previously Unsurfaced), Exposed, Other. FEET EXPOSED: 4. COVER ON PIPE (Inches): 28. INTERNAL LINER: No. PAVED WALL TO WALL: No. NEAR PUBLIC ASSEMBLY: No. Line Size: 0.50

METALLIC PIPE CONDITION

COATING TYPE: Bare/None, Epoxy, Paint, Tape, Single Wrap, Double Wrap, Somatic, Plastic Coated, Tar, Other. COATING CONDITION: Excellent, Fair, Good, Poor. CIRCUMFERENTIAL WELD CONDITION (Visual): Acceptable, Cracked, High/Low Observed, Dimensions not in tolerance. LONG SEAM: DSAW, ERW, AO Smith, Spiral, SSAW, SMLS, LAP, Flash.

EXTERNAL INSPECTION

RUST: None, Light, Heavy. WALL THICKNESS (Req. for TP) (inches): [grid]. WALL THICKNESS MEASURED: Yes No. PITTING: None, Light, Heavy. MAX. PIT DEPTH (Req. for TP) (inches): [grid]. GRAPHITIZED (CAST IRON): Yes No. GOUGING: None, Light, Heavy. MAX. GOUGE DEPTH (Req. for TP) (inches): [grid].

INTERNAL INSPECTION

RUST: None, Light, Heavy. PITTING: None, Light, Heavy. MAX. PIT DEPTH (Req. for TP) (inches): [grid]

PLASTIC PIPE CONDITION

PRINTLINE VISIBLE: Yes No. PIPE MANUFACTURER (LOCATED ON PIPE): ALOYA. MANUFACTURE DATE: [grid]. LOCATING WIRE: Good, Bad, None. GOUGING: Yes No. UNDER STRESS/BENT: Yes No. DISCOLORING TO GRAY: Yes No. CRACKING: Yes No. IN CONTACT WITH HARD OBJECTS: Yes No. ESTIMATE GOUGE DEPTH: <10%, 10-50%, >50%. VISUAL BEAD APPEARANCE (SEE NUMBERED DOCUMENT D-21): Acceptable, Unacceptable. TEE CAP CRACKING: Yes No.

GAS QUARTERLY INCIDENT DATA

Damaging Party: Address: City: Damaging Party Working For PG&E: Yes No. Zip Code: Phone: # INJURED: EMPLOYEES OTHERS DAMAGE \$ # Cust. Interrupted # Cust. Hours FIRE: Yes No EXPLOSION: Yes No # FATAL: EMPLOYEES OTHERS Media: Yes No Media Type: TV Radio Newspaper Name/Channel: DOT REPORTABLE (Fatality, In-patient Hospitalization, >=\$50K Property Damage): Yes No CPUC REPORTABLE (Major News Media): Yes No

LOCATION SKETCH

REQUIRED for new or returned to service segments of main and/or service: <input checked="" type="checkbox"/> On-Site Test <input type="checkbox"/> Pre-Test TESTED AT <u>100</u> PSIG FOR <u>5</u> Hour/minutes TEST in accordance with <u>A-34</u> BY <u>BP</u> DATE <u>8-17-09</u> TEST QUALIFIES PIPE FOR - <u>260</u> PSIG MAOP	(if any fittings are used, then text and/or sketch must show location)		WELDED BY: _____ Date: _____
	TYPE OF PLASTIC MATERIAL INSTALLED Manufacturer Name (Polypipe, US Poly, Performance, or KWH) <u>US POLY</u> <u>01-02-07</u>	MFG. DATE (MM/DD/YY) <u>11</u> See Numbered Document A-93	WELDING INSPECTED PER PG&E NUMBERED DOCUMENT <u>D-40</u> BY: _____ Date: _____ INSPECTOR _____

COMMENTS: LEAK @ TRANSITION POINT PL TO STL TEE / Replace 1' PL pipe
 ILLIMINATE STRESS @ TRANSITION

A sketch is required for all repairs (or directions as to where to find the sketch is required, if it is located on another record).

Redacted

Please Note: EMS Markers are to be installed for Deactivated Facilities and where plastic is found without wire. All EMS markers shall be clearly dimensioned.

Attachment 4

PG&E
Employee Transcripts

Date: 4/26/2011

Page: 1

Selection Criteria:

Corp ID: Reda Employee Type: Job Code:
 Employee Name: Org: Course Type: OQ
 PCC: Date From: Date To:

Employee Name: Collins, Ronald

Corp ID: RSCH

Org: M&C Area 1 GC Gas Constr

PCC: 11851

Course Code	Course Name	Course Type	Status	Status Date
OQ02-01.00	Mechanical Repairs - Steel	Operator Qualification	Transitional Qual	12/3/2001
OQ02-01.00	Mechanical Repairs - Steel	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-01.00	Mechanical Repairs - Steel	Operator Qualification	Subsequent Qual	6/2/2010
OQ02-03.00	Pipe Squeezing Steel	Operator Qualification	Transitional Qual	12/3/2001
OQ02-03.00	Pipe Squeezing Steel	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-03.00	Pipe Squeezing Steel	Operator Qualification	Subsequent Qual	6/2/2010
OQ02-04.00	Pipe Squeezing - Plastic	Operator Qualification	Transitional Qual	12/3/2001
OQ02-04.00	Pipe Squeezing - Plastic	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-04.00	Pipe Squeezing - Plastic	Operator Qualification	Subsequent Qual	6/2/2010
OQ02-05.00	Pipe Squeezing - Plastic (1/2" and 1")	Operator Qualification	Transitional Qual	12/3/2001
OQ02-05.00	Pipe Squeezing - Plastic (1/2" and 1")	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-05.00	Pipe Squeezing - Plastic (1/2" and 1")	Operator Qualification	Subsequent Qual	6/2/2010
OQ02-06.00	Abandonment or Deactivation Pipeline Facilities	Operator Qualification	Transitional Qual	12/3/2001
OQ02-06.00	Abandonment or Deactivation Pipeline Facilities	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-06.00	Abandonment or Deactivation Pipeline Facilities	Operator Qualification	Subsequent Qual	6/2/2010
OQ02-07.00	Pipeline Replacement	Operator Qualification	Transitional Qual	12/3/2001
OQ02-07.00	Pipeline Replacement	Operator Qualification	Subsequent Qual	2/17/2005
OQ02-07.00	Pipeline Replacement	Operator Qualification	Subsequent Qual	6/2/2010
OQ03-01.00	Distribution Pipe Coatings -- Tape / Paint	Operator Qualification	Transitional Qual	12/3/2001
OQ03-01.00	Distribution Pipe Coatings -- Tape / Paint	Operator Qualification	Subsequent Qual	2/17/2005

PG&E
Employee Transcripts

Date: 4/26/2011

Page: 2

Selection Criteria:

Corp ID: rsch Employee Type: Job Code:
 Employee Name: Org: Course Type: OQ
 PCC: Date From: Date To:

Employee Name: Redacted
 Org: M&C Area 1 GC Gas Constr

Corp ID: Redacted
 PCC: ed

<u>Course Code</u>	<u>Course Name</u>	<u>Course Type</u>	<u>Status</u>	<u>Status Date</u>
OQ03-01.00	Distribution Pipe Coatings -- Tape / Paint	Operator Qualification	Subsequent Qual	6/2/2010
OQ03-02.00	Transmission Pipe Coatings -- All	Operator Qualification	Initial Qual	2/17/2005
OQ03-02.00	Transmission Pipe Coatings -- All	Operator Qualification	Subsequent Qual	6/2/2010
OQ03-05.00	Pipe Inspection	Operator Qualification	Transitional Qual	12/3/2001
OQ04-00.00	Leak Test	Operator Qualification	Transitional Qual	12/3/2001
OQ04-01.00	Soap Test / Stand-up Test	Operator Qualification	Subsequent Qual	2/17/2005
OQ04-01.00	Soap Test / Stand-up Test	Operator Qualification	Subsequent Qual	6/2/2010
OQ06-01.00	Operate Svc Tee Tapping/Plugging Equip. (3/4"-2")	Operator Qualification	Transitional Qual	12/3/2001
OQ06-01.00	Operate Svc Tee Tapping/Plugging Equip. (3/4"-2")	Operator Qualification	Subsequent Qual	2/17/2005
OQ06-01.00	Operate Svc Tee Tapping/Plugging Equip. (3/4"-2")	Operator Qualification	Subsequent Qual	6/2/2010
OQ06-02.00	Operate Top Tapping/Plugging Equip. (3/4"-4")	Operator Qualification	Transitional Qual	12/3/2001
OQ06-02.00	Operate Top Tapping/Plugging Equip. (3/4"-4")	Operator Qualification	Subsequent Qual	2/17/2005
OQ06-02.00	Operate Top Tapping/Plugging Equip. (3/4"-4")	Operator Qualification	Subsequent Qual	6/2/2010
OQ06-03.00	Operate Split Cntrl Tapping/Plugging Equip(3/4-2")	Operator Qualification	Transitional Qual	12/3/2001
OQ06-03.00	Operate Split Cntrl Tapping/Plugging Equip(3/4-2")	Operator Qualification	Subsequent Qual	2/17/2005
OQ06-03.00	Operate Split Cntrl Tapping/Plugging Equip(3/4-2")	Operator Qualification	Subsequent Qual	6/2/2010
OQ06-08.00	Low Pressure / Semi-High Bagging Operations	Operator Qualification	Transitional Qual	12/3/2001
OQ06-09.00	Low Pressure Drilling / Threading Operations	Operator Qualification	Transitional Qual	12/3/2001
OQ06-10.00	Operate Riser Valve Changer Equipment	Operator Qualification	Transitional Qual	12/3/2001
OQ06-11.00	Low Pressure Foaming Operations	Operator Qualification	Transitional Qual	12/3/2001

PG&E
Employee Transcripts

Date: 4/26/2011

Page: 3

Selection Criteria:

Corp ID: Red	Employee Type:	Job Code:
Employee Name:	Org:	Course Type: OQ
PCC:	Date From:	Date To:

Employee Name: Redacted
Org: M&C Area 1 GC Gas Constr

Corp ID: Redac
PCC: Reda

<u>Course Code</u>	<u>Course Name</u>	<u>Course Type</u>	<u>Status</u>	<u>Status Date</u>
OQ06-12.00	TP - Oprs Tap/Plug Equip (3/4" -2")	Operator Qualification	Initial Qual	3/26/2006
OQ06-12.00	TP - Oprs Tap/Plug Equip (3/4" -2")	Operator Qualification	Subsequent Qual	6/2/2010
OQ06-13.00	PE Tapping Tee (outlet sizes 1/2" to 2")	Operator Qualification	Initial Qual	3/18/2004
OQ06-13.00	PE Tapping Tee (outlet sizes 1/2" to 2")	Operator Qualification	Subsequent Qual	2/17/2005
OQ06-13.00	PE Tapping Tee (outlet sizes 1/2" to 2")	Operator Qualification	Subsequent Qual	6/2/2010
OQ07-01.00	Air Purging	Operator Qualification	Transitional Qual	12/3/2001
OQ07-01.00	Air Purging	Operator Qualification	Subsequent Qual	2/17/2005
OQ07-01.00	Air Purging	Operator Qualification	Subsequent Qual	6/2/2010
OQ07-02.00	Gas Purging	Operator Qualification	Transitional Qual	12/3/2001
OQ07-02.00	Gas Purging	Operator Qualification	Subsequent Qual	2/17/2005
OQ07-02.00	Gas Purging	Operator Qualification	Subsequent Qual	6/2/2010
OQ07-03.00	Inert Purging	Operator Qualification	Initial Qual	6/2/2010
OQ10-04.00	Transmission Line Repairs - Mechanical	Operator Qualification	Initial Qual	6/2/2010
OQ18-01.00	Inspect Vault	Operator Qualification	Initial Qual	2/17/2005
OQ18-01.00	Inspect Vault	Operator Qualification	Subsequent Qual	6/2/2010



Pacific Gas and Electric Company
Daily Crew Timecard

Regular Work Hours: 0700 - 1630 Lunch Hours: 1130-1200
By signing this document, I / We certify that I / we have recorded any missed meal periods during this pay period on this timecard, and that absent such recording I / we did receive a meal period (s).

Foreman's Name (Print) Redacted
Foreman's Signature Redacted
Headquarters Dublin

Date 11-24-09

TKG# 138 Day of the Week Tue

Note: All work activities such as travel time, in-lieu meal time, lunch time (if different than shown above), rest periods, etc. are to be noted as a line item below

Printed Name and EE Number Each employee must sign crew timecard	Clock Time Start/End	Hours	Abst/Akt Code	Work Reason Code	OT Reason	PR Shift	Wage Type	Upgrade	5/1%	Activity Type	Receiving Order or PCC	Operation #
Redacted		8.								Cons 12	30642311	
	1630 1930	3	1000	E1							41231970	
	1930 2330	4	1000	E1								
Vehicle #		1	1006	7								
CDL Clock Time		1										
Redacted		8									30642311	
		1	PTI				1002	50251368				
		3	1000								41232569	
Vehicle #	B23005	3	1000	E1								
CDL Clock Time		2	1000	E1								
Redacted												
EE Sig												
Vehicle #												
CDL Clock Time												
Redacted		8	1000					50010321			30642311	
		1	PTI				1002					
		3	1000								41232569	
Vehicle #		0.5	1006	E1								
CDL Clock Time		2	1000	E1								
EE Sig												
Vehicle #												
CDL Clock Time												

Comments LOADS & Tree Down Check

OT Meal Eaten Start Time _____ End Time _____ OT Meal Eaten Start Time _____ End Time _____

OT Meals Missed Time _____ Time _____ Time _____ Time _____ Time _____

2-Man Crew Y / N Hours _____ Job Site Y / N Worked Through Lunch Y / N Worked Through Lunch Approved By _____

Supervisor Name (print) Redacted Supervisor Signature Redacted

Revised July 3, 2009

Nov. 25, 2009 8:17AM

P. No. 4173

Pacific Gas and Electric Co.



Pacific Gas and Electric Company
Daily Crew Timcard

Regular Work Hours: 0700 - 1630 Lunch Hours: 1130-1200

By signing this document, I / We certify that I / we have recorded any missed meal periods during this pay period on this timcard, and that absent such recording I / we did receive a meal period (s).

Foreman's Name (Print) _____

Foreman's Signature _____

Headquarters - Arbura

Date 11-24-09

Note: All work activities such as travel time, in-lieu meal time, lunch time (if different than shown above), rest periods, etc. are to be noted as a line item below.

No.	Printed Name and EE Number Each employee must sign crew timcard	Clock Time Start/End	Hours	Abs/Alt Code	Work Reason Code	OT Reason	PR Shift	Wage Type	Upgrade	S/%	Activity Type	Receiving Order or PCC	Operation #
417	Redacted / Redacted	0700 1000	3	1000					50010161		Const.	Trailer lights Repair	
	EE Sig Redacted	1000 1200	2	1000					"		"	41219500	
	Vehicle # <u>1000</u>	1200 1230	0.5	1019								41219500	
	CDL Clock Time	1230 1500	2.5	1000					"		"	41231970	
	EE Sig	1500 1900	4		1				"		"		
	Vehicle #	1900 2300	4.0		7				"		"		
	CDL Clock Time												
	<u>Missed meal</u>		0.5	1006	17				"		"		
	EE Sig												
	Vehicle #												
	CDL Clock Time												
	EE Sig												
	Vehicle #		3					1050					
	CDL Clock Time												
	EE Sig												
	Vehicle #												
	CDL Clock Time		1/6										

Nov. 25, 2009 - 7:50AM

Comments _____

1st Meal Eaten Start Time 2130 End Time 2230 OT Meal Eaten Start Time _____ End Time _____

2nd Meals Missed Time 1900 Time 1930 Time _____ Time _____

2-Man Crew Y/N Hours _____ Job Site Y/N Worked Through Lunch Y/N Worked Through Lunch Approved By _____

Supervisor Name (print) Redacted Supervisor Signature Redacted Date _____

Gas used @ 31.75 miles - Ractin

Revised July 3, 2009

Attachment 5

SOUTHERN CROSS

Buster 1105/3148
 CONFIDENTIAL Provided Pursuant to P.U. Code §583

62-4060 (Rev 3/08)
 Gas T&D
 Utility Standard
 S4110



Leak Survey, Repair, Inspection, and Gas Quarterly Incident Report (Form "A")

INITIAL LEAK DATA

104162469

Leak Number: 09-93680-7
 USA Ticket #: 367575
 Valid Date: 01-24-09
 Date Reported: 11-24-09
 Time Reported: 1050 (24 hr Time)
 PCC Number: 12055
 Response Date: 11-24-09
 Response Time: 1600 (24 hr Time)
 Paved Wall-To-Wall: Yes No
 Moratorium Expire Date:
 SAP Recheck Order #:
 SAP Repair Order #: 411231970
 Address: Redacted
 City: Rocklin

pp 8hrs.

Description of Reading Location: 4% in back hole App. 12 FT from Home over SEVC. Line.
 REPORTED BY: Call-In Mobile Survey Other Employee
 Foot Survey SURFACE OVER LEAK: Concrete Unsurfaced
 Asphalt Other

READINGS				2% or Less ^c or Suspect Copper (S)	Down Grade Via Vent (Yes/No)	DATE	Time (24 hr Time)	OPERATOR LAN ID	UNIT SERIAL NUMBER (Last 4 Digits)	LOCATION REMARKS (Not needed, if the same as previous)
PPM	% LEL	% GAS	Instr ^a Grade ^b							
		4%	C 2		No	11-24-09	1050	Redacted	4053	No possible closer spot to back hole due to concrete

PRIORITY 2+ REQUESTED REPAIR DATE (Only needed if less than 90 days)
 (Repair required within 90 calendar days)

- a Instrument Type: Enter H for Hydrogen Flame Ionization, C for Combustible Gas Indicator, or V for Visual.
 b Enter Grade or enter 2+ for Priority Grade 2. Enter 0 (zero) if no leak is found. If a competent first responder from other than M&C determines that the leak is non-hazardous, enter as a Grade 2+. The % Gas will be zero, the instrument will be "V" and the 2% reason code will be "H". Use the next line below to upgrade or downgrade the leak.
 c 2% or less reason code is required if leak is graded as 1, 2+, or 2:
 A-Wall to wall and traveling, B-Next to, at or under building, C-Odor and next to public gathering location, D-In foreign structure, E-Audible and/or visible, F-On facility in extremely poor condition, G-At least second customer call out, H-Leak is reported as 0% Gas Visual, J-Leak within the scope of work by others, S-Leak is suspected to be on a copper service

MAPPING DATA

Leak Location Map Wall Map: 2405 Plat: C3 Federal Land Yes No
 Recorded Location Map Wall Map: 2405 Plat: C3 Block: 12 LP (≤10.5" WC) SHP (≤25 psig)
 Normally Cathodically Protected Yes No CPA: 125010 MOP (TP only) HP (≤60 psig) TP (>60 psig)
 Year Inst. 11976 TP Line #
 Mile Post:
 Original Job # (TP only)
 For Leaks On Services: Main Connected to Service Cast Iron Plastic Steel Installation Year of Main 11963

PIPE DATA

LEAK SOURCE: <input type="checkbox"/> Bell Joint <input checked="" type="checkbox"/> Body of Pipe <input type="checkbox"/> Clamp <input type="checkbox"/> Drip <input type="checkbox"/> Encapsulation <input type="checkbox"/> Fitting <input type="checkbox"/> Fusion Joint <input type="checkbox"/> Girth Weld <input type="checkbox"/> Longitudinal Weld <input type="checkbox"/> Mechanical Joint <input type="checkbox"/> Plastic Tee Cap <input type="checkbox"/> Other Welds <input type="checkbox"/> Regulator <input type="checkbox"/> Riser <input type="checkbox"/> Tap Connection Line Size <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 5/2 High Consequence Area <input type="checkbox"/> Yes <input type="checkbox"/> No (Transmission Only) Incident Report #:	LEAK CAUSE: <input type="checkbox"/> SS Fitting in Plastic System <input type="checkbox"/> Valve <input type="checkbox"/> Unknown <input type="checkbox"/> Other <input type="checkbox"/> Atmospheric Corrosion <input type="checkbox"/> Cast Iron Fracture <input type="checkbox"/> Construction Defect <input type="checkbox"/> Damage by Electrical Facility <input type="checkbox"/> Damage by Heavy Rains/Flood <input type="checkbox"/> Damage by Earth Movement <input type="checkbox"/> Damage by 3 rd Party <input type="checkbox"/> External Corrosion <input type="checkbox"/> Internal Corrosion <input type="checkbox"/> Stress Corrosion Cracking <input type="checkbox"/> Material Failure <input checked="" type="checkbox"/> Plastic Crack Failure <input type="checkbox"/> Plastic Embrittlement <input type="checkbox"/> Vandalism <input type="checkbox"/> Structure Fire Line Above Ground <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Internal Liner <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No EFV Installed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Material Problem Report #:	LINE MATERIAL: <input type="checkbox"/> Copper <input type="checkbox"/> Steel/Wrought Iron <input type="checkbox"/> Cast/Ductile Iron <input checked="" type="checkbox"/> Afdyl A (Tan or Gray) <input type="checkbox"/> PE2406 (Yellow or Orange) <input type="checkbox"/> PE2406/2708 (Yellow) <input type="checkbox"/> PE 3408 (Black) <input type="checkbox"/> PE 4710 (Black) <input type="checkbox"/> Other Plastic <input type="checkbox"/> Other LINE USE: <input type="checkbox"/> Distribution Main <input type="checkbox"/> Gathering <input type="checkbox"/> Single Service <input checked="" type="checkbox"/> Branch Service <input type="checkbox"/> Transmission Line Inserted <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No EFV Operated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--	--

RECEIVED NOV 25 2009

RECEIVED DEC 09 2009

RECEIVED NOV 25 2009

REPAIR DATA

Repair Location Redacted / Redacted to Branch Service
 Yes No Pipeline Engineer Consulted Repair Remarks

Repaired By: Redacted Repair Date 11-24-09 Repair Time 1900 Pipe-to-Soil (mV)

--	--	--	--

(External Corrosion Only)

- REPAIR CODE: Redacted
- Bell Joint Seal
 - Bell Joint Clamp
 - CI Repair Sleeve
 - BJ PermaBond
 - Deactivate TP Main
 - Replace TP Main
 - Deactivate Dist Main (1 foot or more)
 - Mechanical Repair Fitting
 - Replace Dist Main < 100 ft
 - Replace Dist Main > or = 100 ft
 - Deactivated Entire Service
 - Deactivated Partial Service
 - Replace Entire Service
 - Replace Partial Service
 - Replace Valve < 2-Inch
 - Replace Valve > or = 2-Inch
 - Replace Plastic Tee Cap
 - Tighten Cap/Bolt
 - Aldyl Electrofusion Overcap
 - Skinner Clamp
 - SS Clamp w/Anode
 - Soap and/or Tape
 - Tee Fused Over Defect
 - Fill Weld
 - Patch Weld
 - Direct Deposition Weld
 - Welded Sleeve/Gan
 - Welded Save-A-Valve
 - Type A Sleeve
 - Type B Sleeve
 - Grinding
 - Clockspring
 - Aquawrap
 - Other

SIZE INSTALLED:

--	--	--	--

 REPLACED WITH: STEEL PE2408/2708 (Yellow) PE 4710 (Black) Copper Entirely Replaced

Field Reviewed By: Redacted Date 11-25-09 Post Repair Check Yes No Date

--	--	--	--

Mapping Reviewed By: Redacted Date 12-07-09 Posting Required Yes No

GENERAL INSPECTION DATA

Date: 11-24-09 Inspected by Redacted Line Use: Distribution Main Gathering Single Service Branch Service
LAN ID: Redacted Transmission

- | LINE MATERIAL | SOIL TYPE | For TP Only SOIL RESIST (ohm-cm) | SURFACE OVER PIPE |
|--|---|---|---|
| <input type="checkbox"/> Steel/Wrought Iron
<input type="checkbox"/> Cast/Ductile Iron
<input type="checkbox"/> Copper
<input checked="" type="checkbox"/> Aldyl-A (Tan or Gray)
<input type="checkbox"/> PE 2408 (Yellow or Orange)
<input type="checkbox"/> PE 2408/2708 (Yellow)
<input type="checkbox"/> PE 3408 (Black)
<input type="checkbox"/> PE 4710 (Black) | <input type="checkbox"/> Clay
<input type="checkbox"/> Rock
<input type="checkbox"/> Sand
<input type="checkbox"/> Loam
<input type="checkbox"/> Wet
<input type="checkbox"/> Exposed Facility
<input type="checkbox"/> Other | <input type="checkbox"/> 0 - 1,000
<input type="checkbox"/> 1,000 - 2,000
<input type="checkbox"/> 2,000 - 5,000
<input type="checkbox"/> 5,000 - 10,000
<input type="checkbox"/> >10,000 | <input checked="" type="checkbox"/> Concrete
<input type="checkbox"/> Asphalt
<input type="checkbox"/> Soil (Previously Unsurfaced)
<input type="checkbox"/> Exposed
<input type="checkbox"/> Other |

FEET EXPOSED	<u>02</u>
COVER ON PIPE (Inches)	<u>510</u>
INTERNAL LINER	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
PAVED WALL TO WALL	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
NEAR PUBLIC ASSEMBLY	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Line Size	<u>50</u>

METALLIC PIPE CONDITION

- COATING TYPE Bare/None Epoxy Paint Tape Single Wrap Double Wrap SomaSlic Plastic Coated Tar Other
- CIRCUMFERENTIAL WELD CONDITION (Visual) Acceptable Cracked High/Low Observed Dimensions not In tolerance (See Numbered Document D-20 or D-22)
- LONG SEAM DSAW ERW AO Smith Spiral SSAW SMLS LAP Flash
- COATING CONDITION Excellent Fair Good Poor

EXTERNAL INSPECTION

- RUST None Light Heavy WALL THICKNESS (Req. for TP) (Inches)

--	--	--

 WALL THICKNESS MEASURED Yes No
- PITTING None Light Heavy MAX. PIT DEPTH (Req. for TP) (Inches)

--	--	--

 GRAPHITIZED (CAST IRON) Yes No
- GOUGING None Light Heavy MAX. GOUGE DEPTH (Req. for TP) (Inches)

--	--	--

INTERNAL INSPECTION

- RUST None Light Heavy
 PITTING None Light Heavy MAX. PIT DEPTH (Req. for TP) (Inches)

--	--	--

PLASTIC PIPE CONDITION

- PRINTLINE VISIBLE Yes No
 PIPE MANUFACTURER (LOCATED ON PIPE) Aldyl-A MANUFACTURE DATE (MM/DD/YY) 11/11 LOCATING WIRE Good Bad None
- GOUGING Yes No UNDER STRESS/BENT Yes No DISCOLORING TO GRAY Yes No CRACKING Yes No IN CONTACT WITH HARD OBJECTS Yes No
- ESTIMATE GOUGE DEPTH <10% 10-50% >50% VISUAL BEAD APPEARANCE (SEE NUMBERED DOCUMENT D-21) Acceptable Unacceptable TEE CAP CRACKING Yes No

GAS QUARTERLY INCIDENT DATA

Damaging Party _____ Address _____ City _____
 Damaging Party Working For PG&E Yes No Zip Code _____

Phone () - -
 # INJURED: EMPLOYEES _____ OTHERS _____ DAMAGE \$ _____ # Cust. Interrupted _____ # Cust. Hours _____ FIRE Yes No EXPLOSION Yes No

FATAL: EMPLOYEES _____ OTHERS _____ Media Yes No Media Type TV Radio Newspaper Name/Channel: _____
 DOT REPORTABLE (Fatality, In-patient Hospitalization, ≥\$50K Property Damage) Yes No CPUC REPORTABLE (Major News Media) Yes No

LOCATION SKETCH

<p>REQUIRED for new or returned to service segments of main and/or service: <input type="checkbox"/> On-Site Test <input type="checkbox"/> Pre-Test TESTED AT _____ PSIG FOR _____ Hour/Minutes TEST In accordance with <u>A-34</u> BY _____ DATE _____ TEST QUALIFIES PIPE FOR - _____ PSIG MAOP</p>	<p>(if any fittings are used, then text and/or sketch must show location)</p>	<p>WELDED BY: _____ Date: _____ WELDING INSPECTED PER PG&E NUMBERED DOCUMENT <u>D-40</u> BY: _____ Date: _____ INSPECTOR _____</p>
<p>TYPE OF PLASTIC MATERIAL INSTALLED Manufacturer Name (Polypipe, US Poly, Performance, or KWH)</p>		<p>MFG. DATE (MM/DD/YY) <u> / / </u> See Numbered Document A-93</p>

COMMENTS:
 SOAP test 1/2" ALYDAA Pinched at previous squeeze point. And Rock putting at squeeze point.
 (pressure)

A sketch is required for all repairs (or directions as to where to find the sketch is required, if it is located on another record).

27

Redacted

Please Note: EMS Markers are to be installed for Deactivated Facilities and where plastic is found without wire. All EMS markers shall be clearly dimensioned.

Pacific Gas and Electric Company Leak Repair, Inspection, and Gas Quarterly Incident Report (A-Form) 62-4060 (Rev 03/11) TD-4110P-11-F01

Form Type Leak Inspection Only or Non-Leak Damage

Dates

Compliance Due Date

-	-	-	-	-	-
---	---	---	---	---	---

Assigned to M&C Coordinator

-	-	-	-	-	-
---	---	---	---	---	---

 Assigned to Construction

-	-	-	-	-	-
---	---	---	---	---	---

INITIAL DATA

Leak Number

District	Year	Series	Location
-	-	-	-

 Location: A = Above Ground, B = Below Ground

USA Ticket #

00	4	5	5	03
----	---	---	---	----

 Valid Date

Month	Day	Year
03	14	11

Date Reported

-	-	-	-	-	-
---	---	---	---	---	---

 Time Reported

-	-	-	(24 hr Time)
---	---	---	--------------

 PCC Number

1	2	0	5	5
---	---	---	---	---

Response Date

03	-	22	-	11
----	---	----	---	----

 Response Time

08	00	(24 hr Time)
----	----	--------------

 Paved Wall-To-Wall Yes No

Gas Flow Stopped Date

-	-	-	-	-	-
---	---	---	---	---	---

 Gas Flow Stopped Time

-	-	-	(24 hr Time)
---	---	---	--------------

SAP Repair Order #

4	1	4	6	9	3	5	6
---	---	---	---	---	---	---	---

Address:

Redacted

 City: Rocklin

Description of Reading Location:

Reported By: Call-In Mobile Survey Foot Survey Other Employee Surface At Read Location: Concrete Unsurfaced Above ground Asphalt Water/Marsh/Tidal In Substructure Other

% Gas	Instr (a)	Grade (b)	Info Code (c)	Date			Time (24 hr Time)	Operator LAN ID	Unit Serial Number (Last 4 Digits)	Location Remarks (Not needed, if same as previous)
				-	-	-				

GRADE 2+ REQUESTED REPAIR DATE (Only needed if less than 50 days)

-	-	-
---	---	---

 (Repair required within 90 calendar days)

(a) Instrument Type Used to Grade: Enter, C for Combustible Gas Indicator, V for Visual, H for Hydrogen Flame Ionization (use for waterways or marsh only)
 (b) Enter Grade: (1, 2+, 2, or 3). Enter 0 (zero) if no leak is found.
 (c) Info code is required if leak is graded as 1, 2+, or 2 and is less than 2% gas:
 A-Wall to wall and/or Continuously Paved, B-Near to, at, inside or under building, C-Odor and next to public gathering location, D-In foreign structure, E-Audible and/or visible, F-On facility in extremely poor condition, G-At least second customer call out, H-Leak is reported as 0% Gas Visual, J-Leak within the scope of work by others, M - Migration, N - Downgrade to Grade 3 is not allowed, S-Leak is suspected to be on a copper service, T - T&R Facility

MAPPING DATA

Location Map Wall Map:

2	4	0	5
---	---	---	---

 Plat:

C	3
---	---

 Federal Land Yes No

Recorded Location Map Wall Map:

--	--	--	--

 Plat:

--	--

 Block:

		1	2
--	--	---	---

 LP (≤10.5" WC) SHP (≤25psig)

Normally Cathodically Protected Yes No CPA:

--	--	--	--

 MAOP (All):

--	--	--	--

 HP (≤60 psig) TP (>60 psig)

Operating Map/Diagram:

--	--	--	--

 NOP (All):

--	--	--	--

Year Inst.

1	9	7	6
---	---	---	---

 TP Line #

--	--	--	--	--	--

 Mile Point:

--	--	--	--	--	--

 Original Job # (TP Only)

--	--	--	--	--	--

For Leaks On Services: Main Connected to Service Cast Iron Plastic Steel Main Installation Year

1	9	6	3
---	---	---	---

HIGH CONSEQUENCE AREA

High Consequence Area Yes No (≥ 20% SMYS Only) Date source of leak was determined

-	-	-	-	-	-
---	---	---	---	---	---

Is leak source responsible for HCA? Yes No (CHOOSE "Yes" if the diameter & pressure of the effected pipe produce the impact circle creating HCA)

PIPE DATA

SOURCE : Choose One	CAUSE: Choose One	LINE MATERIAL:
<input type="checkbox"/> Bell Joint (1) <input type="checkbox"/> Body of Pipe (1) <input type="checkbox"/> Drip (1) <input type="checkbox"/> Encapsulation (1) <input type="checkbox"/> Fusion Joint (1) <input type="checkbox"/> Other Mechanical Joint (1) <input type="checkbox"/> Curb Valve (2) <input type="checkbox"/> Line Valve (2) <input type="checkbox"/> Clamp (3) <input type="checkbox"/> Compress Coupling/Fitting Plastic(3) <input type="checkbox"/> Compress. Coupling Steel (3) <input type="checkbox"/> Compression Coupling Stainless Steel (3) <input type="checkbox"/> Fitting (3) <input type="checkbox"/> Plastic Tee Cap (3) <input type="checkbox"/> Pressure Control Fittings(3) <input type="checkbox"/> Stab Type Fittings (3) <input type="checkbox"/> Tap Connection (3)	<input type="checkbox"/> Non-corrodible prefab riser (4) <input type="checkbox"/> Riser (4) <input type="checkbox"/> Riser Insert Kit (4) <input type="checkbox"/> Girth Weld (5) <input type="checkbox"/> Longitudinal Weld (5) <input type="checkbox"/> Other Welds (5) <input type="checkbox"/> Regulator/Pilot (6) <input type="checkbox"/> Riser Valve Threads (7) <input type="checkbox"/> Threads (7) <input type="checkbox"/> Unknown(Replaced Facility)(7) <input type="checkbox"/> *Other (7) *Other requires explanation. Describe reason for other. Categories for Source: (1)Body of Pipe, (2) Valves, (3) Fittings, (4) Riser, (5) Welds, (6) Regulation (7) Other	<input type="checkbox"/> Atmospheric Corrosion (1) <input type="checkbox"/> External Corrosion (1) <input type="checkbox"/> Internal Corrosion (1) <input type="checkbox"/> Stress Corrosion Cracking (1) <input type="checkbox"/> Damage by Earth Movement (2) <input type="checkbox"/> Damage by Heavy Rains/Flood (2) <input type="checkbox"/> Earthquake (2) <input type="checkbox"/> Lightning (2) <input type="checkbox"/> Other Natural Forces (2) <input type="checkbox"/> Damage by Third Party (3) <input type="checkbox"/> Digin/Excavation (3) <input type="checkbox"/> Previously Damaged (3) <input type="checkbox"/> Vehicle (3) <input type="checkbox"/> Damage by Electrical Facility (4) <input type="checkbox"/> Deliberate Acts/Vandalism (4) <input type="checkbox"/> Fire or Explosion on Company Facility (4) <input type="checkbox"/> Fire or Explosion on Customer Facility (4) <input type="checkbox"/> Cast Iron Fracture (5) <input type="checkbox"/> Compression Coupling (5)
	<input type="checkbox"/> Construction Defect (5) <input type="checkbox"/> No/Deteriorated Pipe Dope (5) <input type="checkbox"/> Plastic Crack Failure (5) <input type="checkbox"/> Plastic Embrittlement (5) <input type="checkbox"/> Material Failure (5) <input type="checkbox"/> Weld Failure (5) <input type="checkbox"/> Equipment Malfunction (6) <input type="checkbox"/> Incorrect Operation (6) <input type="checkbox"/> Rodent (7) <input type="checkbox"/> Root Damage (7) <input type="checkbox"/> Unknown (Replaced facility) (7) <input type="checkbox"/> Other (7) <input type="checkbox"/> Inspection Only (7)	<input type="checkbox"/> Cast Iron <input type="checkbox"/> Ductile Iron <input type="checkbox"/> Steel <input type="checkbox"/> Wrought Iron <input type="checkbox"/> Copper <input checked="" type="checkbox"/> Aloy A <input type="checkbox"/> PE2406 (Orange) <input type="checkbox"/> PE2406/2708 (Yellow) <input type="checkbox"/> PE 3408 (Black) <input type="checkbox"/> PE 4710 (Black) <input type="checkbox"/> Other Plastic <input type="checkbox"/> *Other
	<input type="checkbox"/> Distribution Main <= 60 PSIG <input type="checkbox"/> Distribution Main > 60 PSIG, not classified as Transmission <input type="checkbox"/> Gathering <input type="checkbox"/> Single Service <input checked="" type="checkbox"/> Branch Service <input type="checkbox"/> Transmission (>=20% SMYS)	Categories for Cause: (1) Corrosion, (2) Outside Forces (3,4) Damage by others (5) Failures (6) Malfunctions (7) other causes

Line Size	50	Line Above Ground	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Internal Liner	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Line Inserted	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Existing EFV	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	EFV Operated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Required for Distribution Services only)			
Incident Report #		Material Problem Report #					
Was the damage/leak discovered as the result of current construction activity occurring this calendar year? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

REPAIR DATA

Repair Location	<i>28 feet back of walk on service</i>						
Repair Remarks	<i>Just branch service at 100 lbs</i>						
Repaired By LAN ID:	Redacted	Repair Date	03	22	11	Repair Time (24 Hour Time)	1100
Pipeline Engineer Consulted	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	New EFV Installed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Paving Needed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is leak source a mechanical joint which can be repaired by tightening? <input type="checkbox"/> Yes <input type="checkbox"/> No (If no, normal leak grading and response applies)							

REPAIR CODE: Choose One -- either Capital or Maintenance (Expense)

CAPITAL	MAINTENANCE (Expense)	
<input type="checkbox"/> Deactivate #TP Main <input type="checkbox"/> Deactivate Dist Main =>1 foot <input type="checkbox"/> Deactivated Entire Service <input type="checkbox"/> Replace Entire Service <input type="checkbox"/> Replace #TP Main >= 50 ft <input type="checkbox"/> Replace Dist Main >= 100 ft <input type="checkbox"/> Replace Main Valve >= 2-inch <input type="checkbox"/> Replace Service Valve >= 2-inch	<input type="checkbox"/> Bell Joint Clamp - Cast Iron <input type="checkbox"/> Bell Joint Permabond - Cast Iron <input type="checkbox"/> Bell Joint Seal - Cast Iron <input type="checkbox"/> Cast Iron Repair Sleeve - Cast Iron <input type="checkbox"/> Full Circle Clamp - Clamp <input type="checkbox"/> Skinner Clamp - Clamp <input type="checkbox"/> Skinner Pipe Joint Clamp - Clamp <input type="checkbox"/> SS Clamp w/Anode - Clamp <input type="checkbox"/> Deactivated Partial Service <input type="checkbox"/> Mechanical Repair Fitting - Fitting <input type="checkbox"/> Remove/Replace Completion Plug - Fitting <input type="checkbox"/> Tighten Cap/Bolt - Fitting <input type="checkbox"/> Aloy A Overcap - Plastic	<input type="checkbox"/> Replace Plastic Tee Cap - Plastic <input type="checkbox"/> Tee Fused Over Defect - Plastic <input type="checkbox"/> Replace Dist Main < 100 ft <input type="checkbox"/> Replace Main Valve < 2-inch <input checked="" type="checkbox"/> Replace Partial Service <input type="checkbox"/> Replace Riser <input type="checkbox"/> Replace Service Valve <2-inch <input type="checkbox"/> Replace #TP Main < 50 ft <input type="checkbox"/> Direct Deposition Weld - Weld <input type="checkbox"/> Fill Weld - Weld <input type="checkbox"/> Patch Weld - Weld <input type="checkbox"/> Type A Sleeve - Weld <input type="checkbox"/> Type B Sleeve - Weld <input type="checkbox"/> Welded Sav-A-Valve - Weld <input type="checkbox"/> Welded Sleeve/Can - Weld <input type="checkbox"/> Aquawrap - Other <input type="checkbox"/> Clockspring - Other <input type="checkbox"/> Greased - Other <input type="checkbox"/> Grinding - Other <input type="checkbox"/> Reattached Anode - Other <input type="checkbox"/> Rewrapped Pipe - Other <input type="checkbox"/> Soap and/or Tape - Other <input type="checkbox"/> Trident Seal - Other <input type="checkbox"/> Other *Other requires explanation. Describe reason.

Size Installed:	50	Replaced With:	<input type="checkbox"/> STEEL <input type="checkbox"/> PE 4710 (Black) <input checked="" type="checkbox"/> PE2406/2708 (Yellow)	Copper Entirely Replaced	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
-----------------	----	----------------	---	--------------------------	---

GENERAL INSPECTION DATA

Reason for Inspection: Leak Repair WRO New Business Landslide Reconstruction Plugged Copper Capacity
 Facilities Exposed by Third Party Exposed Facility/Pipe Span Other P.G. & E Audit (explain)

Date: 03-22-11

Inspected by LAN ID: Redacted

LINE MATERIAL	SOIL TYPE	SOIL RESIST(TP)	SURFACE OVER	FEET EXPOSED					<u>2</u>
<input type="checkbox"/> Steel	<input checked="" type="checkbox"/> Clay	<input type="checkbox"/> 0 - 1,000	<input type="checkbox"/> Asphalt	COVER ON PIPE					
<input type="checkbox"/> Wrought Iron	<input type="checkbox"/> Rock	<input type="checkbox"/> 1,000 - 2,000	<input type="checkbox"/> Concrete	(Inches)					<u>60</u>
<input type="checkbox"/> Cast Iron	<input type="checkbox"/> Sand	<input type="checkbox"/> 2,000 - 5,000	<input type="checkbox"/> Above Ground	INTERNAL LINER	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
<input type="checkbox"/> Ductile Iron	<input type="checkbox"/> Loam	<input type="checkbox"/> 5,000 - 10,000	<input type="checkbox"/> In Substructure	PAVED WALL TO WALL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
<input type="checkbox"/> Copper	<input type="checkbox"/> Wet	<input type="checkbox"/> >10,000	<input checked="" type="checkbox"/> Unsurfaced	NEAR PUBLIC ASSEMBLY	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
<input checked="" type="checkbox"/> Aldyl-A	<input type="checkbox"/> Exposed Facility		<input type="checkbox"/> Water/Marsh/Tidal						
<input type="checkbox"/> PE 2406 (Orange)	<input type="checkbox"/> Gravel		<input type="checkbox"/> Other						
<input type="checkbox"/> PE 2406/2708 (Yellow)	<input type="checkbox"/> Other								
<input type="checkbox"/> PE 3408 (Black)									
<input type="checkbox"/> PE 4710 (Black)									
<input type="checkbox"/> Other Plastic									
<input type="checkbox"/> Other									

NLIS REFERENCE #; _____ LINE SIZE 50

CATHODIC PROTECTION SYSTEM CONDITION

Pipe to Soil (Mv)	LAN ID Taking Reading:	Cathodic Protection System Damaged <input type="checkbox"/> Yes <input type="checkbox"/> No	Corrective Form Issued <input type="checkbox"/> Yes <input type="checkbox"/> No
-------------------	------------------------	---	---

METALLIC PIPE CONDITION

COATING TYPE	<input type="checkbox"/> Bare/None <input type="checkbox"/> Paint <input type="checkbox"/> Single Wrap <input type="checkbox"/> Somatic <input type="checkbox"/> Hot Applied Asphalt	COATING CONDITION	<input type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Poor
<input type="checkbox"/> Epoxy <input type="checkbox"/> Tape <input type="checkbox"/> Double Wrap <input type="checkbox"/> Extru Coat <input type="checkbox"/> Other			
COATING DAMAGED	<input type="checkbox"/> Yes <input type="checkbox"/> No	COATING REPAIRED	<input type="checkbox"/> Yes <input type="checkbox"/> No
ASBESTOS	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	PIPE SUPPORT CONDITION	<input type="checkbox"/> Good <input type="checkbox"/> Possible Lack of - Consult Engineer
CIRCUMFERENTIAL WELD CONDITION (Visual)	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked <input type="checkbox"/> High/Low Observed <input type="checkbox"/> Dimensions not in tolerance (See D-20 or D-22)		
LONG SEAM (TP only)	<input type="checkbox"/> DSAW <input type="checkbox"/> ERW <input type="checkbox"/> AO Smith <input type="checkbox"/> Spiral <input type="checkbox"/> SSAW <input type="checkbox"/> SMLS <input type="checkbox"/> LAP <input type="checkbox"/> Flash		
Pipe Grade/Spec (TP only)	<input type="checkbox"/> Grade B <input type="checkbox"/> X42 <input type="checkbox"/> X52 <input type="checkbox"/> X60 <input type="checkbox"/> X65 <input type="checkbox"/> X70		
EXTERNAL INSPECTION			
RUST	<input type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Heavy	WALL THICKNESS (Req. for TP) (inches)	<input type="checkbox"/> Yes <input type="checkbox"/> No
PITTING	<input type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Heavy	MAX. PIT DEPTH (Req. for TP) (inches)	GRAPHITIZED (Cast Iron) <input type="checkbox"/> Yes <input type="checkbox"/> No
GOUGING	<input type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Heavy	MAX. GOUGE DEPTH (Req. for TP) (inches)	MAX. GOUGE Length (Req. for TP) (inches)
		MAX. EXTERNAL CORROSION Length (Req. for TP) (inches)	DEPTH OF DENTS (inches)
INTERNAL INSPECTION			
RUST	<input type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Heavy	PITTING	<input type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Heavy
		MAX. PIT DEPTH (Req. for TP) (inches)	

PLASTIC PIPE CONDITION

PRINTLINE LEGIBLE Yes No

PIPE MANUFACTURER (LOCATED ON PIPE)	MANUFACTURE DATE	LOCATING WIRE SIZE	LOCATING WIRE CONDITION
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>1/1</u>	<u>14</u>	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Bad <input type="checkbox"/> None
GOUGING	UNDER STRESS/ BENT	DISCOLORING TO GRAY	CRACKING
<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ESTIMATE GOUGE DEPTH	VISUAL APPEARANCE (SEE S4170)	TEE CAP CRACKING	
<input type="checkbox"/> <10% <input type="checkbox"/> 10-50% <input type="checkbox"/> >50%	<input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

GAS QUARTERLY INCIDENT DATA

Damaging Party Type	<input type="checkbox"/> First Party (PG&E) <input type="checkbox"/> Second Party (Contractor working on PG&E job) <input type="checkbox"/> Third Party (Everyone else)				
Damaging Party Name:	Address:				
Damaging Party Operator:					
City:	Phone:				
Zip Code:					
Zero Customers Out	Est. Date and Time of Restoration (or CGI)				
<input type="checkbox"/> Yes <input type="checkbox"/> No					
# INJURED:	DAMAGE	# Cust. Interrupted	# Cust. Hours	FIRE	EXPLOSION
EMPLOYEES _____ OTHERS _____	\$ _____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
# FATAL:	Media	Media Type	Name/Channel:		
EMPLOYEES _____ OTHERS _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TV <input type="checkbox"/> Radio <input type="checkbox"/> Newspaper			
DOT REPORTABLE (Fatality, In-patient Hospitalization, ≥\$50K Property Damage)			CPUC REPORTABLE (Major News Media)		
<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input type="checkbox"/> No		

LOCATION SKETCH

REQUIRED for new or returned to service segments of <input type="checkbox"/> main or <input checked="" type="checkbox"/> service: <input checked="" type="checkbox"/> On-Site Test <input type="checkbox"/> Pre-Test <input type="checkbox"/> Soap Test TESTED AT <u>100</u> PSIG FOR <u>5</u> Hour/Minutes TEST in accordance with <u>A-34</u> BY: (LAN ID) <u>Redacted</u> DATE <u>3-22-11</u>	TYPE OF MATERIAL INSTALLED <u>1/2" PL</u> Manufacturer Name <u>Dansco Poly</u> Size: <u>1/2 PL</u> SDR: <u>7</u> WT: _____	MFG. DATE (MM/DD/YY) <u>07/09/10</u> See A-93	WELDED BY: (LAN ID) _____ Date: _____ WELDING INSPECTED PER PG&E D-40 INSPECTED BY: (LAN ID) _____ Date: _____
REQUIRED for new or returned to service segments of <input type="checkbox"/> main or <input type="checkbox"/> service: <input type="checkbox"/> On-Site Test <input type="checkbox"/> Pre-Test <input type="checkbox"/> Soap Test TESTED AT _____ PSIG FOR _____ Hour/Minutes TEST in accordance with <u>A-34</u> BY: (LAN ID) _____ DATE _____	TYPE OF MATERIAL INSTALLED Manufacturer Name _____ Size: _____ SDR: _____ WT: _____	MFG. DATE (MM/DD/YY) <u>1/1</u> See A-93	D-34 Qualifications for joining plastic: Plastic Joined BY: (LAN ID) <u>Redacted</u> Date: <u>03-22-11</u>

TIE-IN DATA Socket Fusion Stab Coupling Electro-Fusion Compression Fitting Butt Fusion Transition Fitting

COMMENTS: air vent service at 100 lbs for 5 min install 1/2" pipe + 2 permanent couplings.

Responsible Person LAN ID: Redacted

A sketch is required for all repairs (or directions as to where to find the sketch is required, if it is located on another record).
 If any fittings are used, then text and/or sketch must show location.



Redacted

Redacted

Please Note: EMS Markers are to be installed for Unlocatable Facilities, Deactivated Facilities and where plastic is found without wire. All EMS markers shall be clearly dimensioned.

Field Supervisor Reviewed By LAN ID: Redacted Date 03-29-11 Post Repair Check Yes No Date _____

Mapping Reviewed By LAN ID: _____ Date 04-04-11 Posting Required Yes No

Attachment 6



STANDARD CATHODIC PROTECTION MAINTENANCE REPORT

(Form must be completed in Non-erasable Ink)

GT&D
01/09
FO-16-D

COPY

A. RECORD INFORMATION

LOCATION Redacted	CITY ROSEVILLE	CP SYSTEM NO. 15-S-001A	FM/PLM# AJ50
AREA 6	DIVISION SIERRA	DISTRICT PLACER	YEAR 2011

B. PIPE-TO-SOIL POTENTIAL MEASUREMENTS (MILLIVOLTS)

TEST LOCATION	BASE DATA	LAST YR READING	Jan	Mar	May	July	Sept	Nov			
1. Redacted	-956	910	961	967	781	869	711	866	798	863	901
2. 	-1069	979	1050	1069	859	974	820	1007	747	961	1006
3. 											
4. 											
5. 											
6. 											
DATA RECORDED BY (LAN ID)	Redacted										
DATA RECORDED BY (INITIALS)											
DATE (MONTH/DAY)	12-03	11-3	1-3-11	3-2-11	5-4-11	5-23-11	7-6-11	7-12-11	9-7-11	10-3-11	11-1-11

C. GALVANIC ANODE/RECTIFIER MEASUREMENTS

GALVANIC ANODE OR RECTIFIER LOCATION	BASE DATA	LAST YR READING	INTERFERENCE TEST RECTIFIER - 1. <u>4.5A</u> AMPS, 2. ____ AMPS, 3. ____ AMPS, 4. ____ AMPS									
			VOLTS/AMPS									
1. Redacted	3.2A	3.2A				3.9	3.9	3.9		3.2		
2. 	7.7V	8.7V				8.5	8.8	8.5		8.5		
3. 												
4. 												
5. 												
6. 												
DATA RECORDED BY (LAN ID)	Redacted											
DATA RECORDED BY (INITIALS)												
DATE (MONTH/DAY)	7/28/04	5-29				5/23/11	7-6-11	7-12-11		10-3-11		

D. RECORD REVIEW

BI-MONTHLY REVIEWED BY (LAN ID)	Redacted										
BI-MONTHLY REVIEWED BY (INITIALS)											
DATE (MONTH/DAY)			1/19/11	2/16/11	5/20/11	8/4/11	8/4/11	8/4/11	10/2/11	10/2/11	11/4/11

CONFIDENTIAL - Provided Pursuant to P.U. Code §5939



E. LOG OF CATHODIC PROTECTION MAINTENANCE WORK

(Form must be completed in Non-erasable Ink)

GT&D
01/09
PO 36-D

COPY
CPA System No. _____

DATE	LAN ID	INITIALS	WORK DESCRIPTION	
5/23/11	Redacted		After multiple days trouble shooting determined there were no contacts. Interference test on rectifier is 4.5 amps. Determined anodes are depleting raised rectifier to 3.9amps area now is up.	
7-12-11				Blown fuse on rectifier, area now up.
10-3-11				Meter set had a ground wire attached to riser.
			line was contacted. Ground removed, area now up.	
			Redacted	

Attachment 7

Scott

Here are the results of testing done 5/25/11 on the PUC audit findings:

Redacted Audit P/S read = 804mv..... 5/25 P/S read = 1020mv
Audit P/S read = 843mv..... 5/25 P/S read = 889mv

Redacted Audit P/S read = 814mv..... 2# driveable anode installed 5/25, P/S read = 1636mv

Redacted (10%er) service is cut off and abandoned.

Redacted address does not exist. CP records do not show a P/S read ever at this address. Where did the PUC get this address?

Redacted

Follow up reads 9/10/12 by SEP5 & Kevin Stevens

Redacted

P/S = -983mv

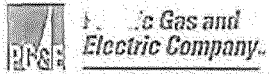
P/S = -1221mv

As found P/S = -820mv. Installed driveable Anode.

As left P/S = -1221mv.

No Redacted could be found.

Redacted



STANDARD CATHODIC PROTECTION MAINTENANCE REPORT

(Form must be completed in Non-erasable Ink)

GT&D
01/09
FO-16-D

A. RECORD INFORMATION

LOCATION COLUSA 10% SHEET 1	CITY COLUSA	CP SYSTEM NO.	FM/PLM#
AREA 6	DIVISION SACRAMENTO	DISTRICT COLUSA	YEAR

B. PIPE-TO-SOIL POTENTIAL MEASUREMENTS (MILLIVOLTS)

TEST LOCATION	BASE DATA	LAST YR READING	2009	2010	2011	2012						
1. Redacted		1001/05	—	—	—	976						
2. Redacted		945/01	—	1010	—	925						
3. Redacted		945/01	—	1072	—	—						
4. Redacted		1071/04	—	—	1004	—						
5. Redacted		1321/02	—	1561	—	—						
6. Redacted		1012/06	—	—	—	—						
DATA RECORDED BY (LAN ID)		SEP3	Redacted									
DATA RECORDED BY (INITIALS)		SP	Redacted									
DATE (MONTH/DAY)			4/16/12	4/12/11	4/30/10							

C. GALVANIC ANODE/RECTIFIER MEASUREMENTS

GALVANIC ANODE OR RECTIFIER LOCATION	BASE DATA	LAST YR READING	INTERFERENCE TEST RECTIFIER - 1. ___ AMPS, 2. ___ AMPS, 3. ___ AMPS, 4. ___ AMPS											
			VOLTS/AMPS											
1.														
2.														
3.														
4.														
5.														
6.														
DATA RECORDED BY (LAN ID)														
DATA RECORDED BY (INITIALS)														
DATE (MONTH/DAY)														

D. RECORD REVIEW

BI-MONTHLY REVIEWED BY (LAN ID)			Redacted									
BI-MONTHLY REVIEWED BY (INITIALS)			Redacted									
DATE (MONTH/DAY)			4/21/10	4/15/11	7/13/12							



**E. LOG OF CATHODIC PROTECTION
MAINTENANCE WORK**
(Form must be completed in Non-erasable Ink)

GT&D
01/09
FO-16-D

CPA System No. _____

DATE	LAN ID	INITIALS	WORK DESCRIPTION
9/14/12	Redacted	Redacted	Follow up read from PUC permit - 983000. Read during PUC Audit was - 330mc on 5/25/11. Work read at - 1000 mc.



STANDARD CATHODIC PROTECTION MAINTENANCE REPORT

GD&TS
11/04
O-16-D

A. RECORD INFORMATION

LOCATION Colusa 10%ers sheet #12	CITY Colusa	CP SYSTEM NO.	FM/PLM#
AREA 6	DIVISION Sacramento	DISTRICT Colusa	YEAR

B. PIPE-TO-SOIL POTENTIAL MEASUREMENTS (MILLIVOLTS)

TEST LOCATION	BASE DATA	LAST YR. READ	2009	2010	2011	2012						
1. Redacted		10/2/08	-	964	-	-1221						
2.		8/13/08	304	100	100							
3.		5/23/08	1003/09									
4.		12/1/08	922/08									
5.			1746									
6.			1730									
7.			1243									
8.				948		-1221						
DATA RECORDED BY			Redacted									
DATE (MONTH/DAY)			11/17/07	De		R	11/19/07					

C. GALVANIC ANODE/RECTIFIER MEASUREMENTS

GALVANIC ANODE LOCATION OR RECTIFIER LOCATION	BASE DATA	LAST YR. READ	INTERFERENCE TEST RECTIFIER 1. _____ AMPS, 2. _____ AMPS, 3. _____ AMPS, 4. _____ AMPS VOLTS/AMPS												
1.															
2.															
3.															
4.															
5.															
DATA RECORDED BY															
DATE (MONTH/DAY)															

D. RECORD REVIEW

REVIEWED BY (REQUIRED BIMONTHLY)			Redacted										
DATE (MONTH/DAY)			1/3/08	8/2/09	Redact		9/13/12						



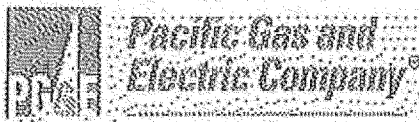
E. LOG OF CATHODIC PROTECTION MAINTENANCE WORK

GD&TS
11/04
FO-16-D

CP System No. _____

DATE	INITIALS	WORK DESCRIPTION
4/7/07	Redacted	Redacted Installed 2 nd driveable anode.
4/7/07		Redacted Installed 3 rd driveable anode.
4/7/07		Redacted Installed 4 th driveable anode.
5/2/07		Redacted P/S Read during PIC count was -843mv. Record on 5/25/11 is -859mv.
9/14/07		Redacted Install driveable anode, to left P/S read: -1221mv.

Attachment 8



Work Ticket

Always put safety first!

Order No.: 41496235

Operation No.: 0010

Assigned Individuals: N/A				
Date: 04/29/2011 - 06/23/2011		Work Location: Redacted		
Description: LOW PIPE TO SOIL 10% ISOLATED SERV				
Headquarters: MRYSVLLE		Job Owner: Redacted		
MAT Code: Fil - Maint-Corr-G Cath Prot		Job Owner No.: 530/634-6628		
Operation: 0010	Notification: 105317014	LAN Id:	Date:	Act. Hrs.:
Tech Id: N/A	Location: GD.CORR CORROSION	Equip.: N/A	Oper. Desc.: CONSTRUCTION	
Latitude:				
Problem: Pipe to Soil less negative than -850 mV				
CAUSE		ACTIVITY		
3rd Party Damage	MeterContact	Clear Contact		
Area Found Up	No Power	Other		
Bad Connections	No Test Lead	Re-Read		
Broken Wire	Other	Repair		
Depleted Anode	Rectifier (reset/replace fuse)	Replace		
Electrical Ground	Underground Contact			
Gas Construction	Uninsulated Meter Set			
Comments:				
Operation: 0020	Notification: 105317014	LAN Id:	Date:	Act. Hrs.:
Tech Id: N/A	Location: GD.CORR CORROSION	Equip.: N/A	Oper. Desc.: Post-Read ETS's	
Latitude:				
Comments:				
Operation: 0030	Notification: 105317014	LAN Id:	Date:	Act. Hrs.:
Tech Id: N/A	Location: GD.CORR CORROSION	Equip.: N/A	Oper. Desc.: ASSET INFORMATION	
Latitude:				
Problem: Pipe to Soil less negative than -850 mV				
CAUSE		ACTIVITY		
3rd Party Damage	MeterContact	Clear Contact		
Area Found Up	No Power	Other		
Bad Connections	No Test Lead	Re-Read		
Broken Wire	Other	Repair		
Depleted Anode	Rectifier (reset/replace fuse)	Replace		



Work Ticket

Always put safety first!

Electrical Ground	Underground Contact		
Gas Construction	Uninsulated Meter Set		
Comments:			
Long Text:	* 05/24/2011 13:20:21 [Redacted]	Phone [Redacted]	
	* LOW PS READ. REPAIR AND REREAD. ISOLATED SERVICE. NEED TO INSTALL		
	* DRIVEABLE ANODE.		
Items:			
<input type="checkbox"/> *10 Percenter (<100')	<input type="checkbox"/> *Pipe to Soil less negative than -850 mV	<input type="checkbox"/> *Repair	
Facility Report Reviewed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Asset Registry Update Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> As-Built Attached			
COMMENTS			
Notification Number: 000105317014		Completion Date:	
<i>I have reviewed and approve this Work Ticket and Facility Report (if applicable) for accuracy.</i>			
Supervisor Signature [Redacted]		Date 5/26/11	

	CATHODIC PROTECTION CORRECTIVE WORK FORM GAS TRANSMISSION & DISTRIBUTION	REFERENCE TROUBLESHOOTING PERMIT NOTIFICATION # 105313426	NOTIFICATION # 105317014
			ORDER #: 411496235

CREW

1. PROBLEM DESCRIPTION: *low P/S read. Repair and Reread*

2. STREET ADDRESS: Redacted **3. CITY:** *Columbus*

4. CPA No: *Isolated Service* **5. TECH ID:** **6. PIPELINE No:**

7. COMMENTS (LONG TEXT): *Need to install driveable outside*
 CLEARANCE REQUIRED PERMIT REQUIRED ESTIMATING REQUIRED
Asset Registry does not need to be updated *SR*

GAS DISTRIBUTION		GAS TRANSMISSION	
EXPENSE	CAPITAL	EXPENSE	CAPITAL
8. <input checked="" type="checkbox"/> GC NOTIFICATION (GAS DIST - CORRECTIVE/EXPENSE)	<input type="checkbox"/> GR NOTIFICATION (GAS DIST - PROJECT/CAPITAL)	<input type="checkbox"/> TC NOTIFICATION (GAS TRANS - CORRECTIVE/EXPENSE)	<input type="checkbox"/> TR NOTIFICATION (GAS TRANS - PROJECT/CAPITAL)
9. PRIORITY: <input checked="" type="checkbox"/> B <input type="checkbox"/> E	PRIORITY: <input type="checkbox"/> B	PRIORITY: <input type="checkbox"/> B <input type="checkbox"/> E	PRIORITY: <input type="checkbox"/> B
B = URGENT COMPLIANCE E = SCHEDULE COMPLIANCE -Yr 0	B = URGENT COMPLIANCE	B = URGENT COMPLIANCE E = SCHEDULE COMPLIANCE -Yr 0	B = URGENT COMPLIANCE
10. WORK TYPE CODE (GC): <input type="checkbox"/> 579 - GD CP Area Up Repair <input type="checkbox"/> 656 - GD CP Area Down T/S <input checked="" type="checkbox"/> 658 - GD CP Area Down Repair <input type="checkbox"/> 765 - GD CP Area Up T/S	WORK TYPE CODE (GR): <input type="checkbox"/> 316 - GD CP Area Down Repair <input type="checkbox"/> 349 - GD CP Area Up Repair	WORK TYPE CODE (TC): <input type="checkbox"/> 561 - GT CP Area Up Repair <input type="checkbox"/> 655 - GT CP Area Down T/S <input type="checkbox"/> 657 - GT CP Area Down Repair	WORK TYPE CODE (TR): <input type="checkbox"/> 317 - GT CP Area Down Repair <input type="checkbox"/> 380 - GT CP Area Up Repair

11. CREW CLASS: <input checked="" type="checkbox"/> T&R CP Mech. Only <input type="checkbox"/> T&D Crew Needed GD CNMN2	Duration Needed: <i>8</i> MIN/H MIN/H	CREW CLASS: <input type="checkbox"/> Troublemaker Needed ED_TMAN1 <input type="checkbox"/> GSR Needed GSR_1	Duration Needed: MIN/H MIN/H
--	--	--	---

12. READINGS:

Post-Read ETS		Post-Read Rectifiers	
<i>10/20/11</i>	Pipe-To-Soil (mV): <i>11636</i>	Volts:	Amps:
	Pipe-To-Soil (mV):	Volts:	Amps:
	Pipe-To-Soil (mV):	Volts:	Amps:

13. REPORTED BY (LAN ID): Redacted **14. EST. MATERIAL COST:** \$

15. REQUIRED START DATE: *4/29/11* **16. REQUIRED END DATE:** *5/29/11*

17. WORK COMPLETED BY (TECH INSPECT BY): LAN ID: Redacted	18. WORK COMPLETED ON (TECH INSPECT ON): DATE: <i>5/25/11</i>	19. ACTUAL LABOR/WRENCH HOURS: <i>5</i>
---	---	---

20. SUPERVISOR
Task: REVW **Work Reviewed/Approved by Supervisor (LAN ID):** **Reviewed/Comp. Date:** / /

LOCAL HEADQUARTER CLERK
21. PLANT SECTION/COUNTY: **22. LOCATION/DIVISION:** *SE* **23. MAIN WORK CENTER:** *Columbus*

24. FUNCTIONAL LOCATION:

25. SAP EQUIPMENT #: *GD.Phys. 2087.00 H/S* *42654611*

Attachment 9

Pole Mount/Pedestal Mount Rectifier Test and Site Evaluation Form

(Form must be completed in Non-erasable ink)

Record Information						
Address Redacted		City MARYSVILLE		CPA # 12M005		
Rectifier # 120085		Rectifier Manufacturer GOODALL		Rectifier Serial # 84F2167		
Area 6		Division SIERRA		District COLGATE		
Check AC Switch Box, Rectifier and DC Riser, for AC before starting any work. If AC is found correct immediately, or de-energize Rectifier. Check box for all items inspected and Record AC/DC voltage and DC amperage measurements leave blank if not applicable. Note corrections or changes in Log on back of form. All defective items must be corrected within 30 days, initiate an action plan for items not corrected within 30 days.						
Items of Inspection						
AC Voltage	Verify Arc Flash sticker is installed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Test riser, switch box, and rectifier for AC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Check for continuity between the AC disconnect and the DC riser	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inspect paint condition of rectifier and AC disconnect switch enclosures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	PVC service riser free of separations, defects, and securely strapped	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify AC disconnect switch enclosure is locked	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify AC disconnect switch handle can be and is locked in the "on" position	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inspect AC disconnect switch for any openings or exposed wires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inspect AC disconnect switch for internal corrosion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify ground wire is connected to AC disconnect neutral bus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify bonding screw or jumper is installed in AC disconnect neutral bus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify bonding screw or jumper and AC disconnect switch box are common	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify that the hot leg is fused and that the neutral wire is connected to the neutral bus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Record AC Breaker disconnect switch rating					
	Record Fusible AC disconnect switch rating					
Record AC Voltage (per Electric Rule 2 could range between 114 VAC – 126 VAC)	120v	121v	122v	122v		
Record AC Breaker or Fuse size (fuse should be rated 10% above the maximum amp rating of rectifier or next highest size)	64A	64A	64A	64A		
Ground Resistance	Verify ground rods are below grade and resistance is at or below 25 ohms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Record Ground Resistance as found (in ohms)	6.8	6.6	6.9	6.8	
	If Ground Resistance is above 25 ohms, verify integrity of all grounding connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Ground resistance is above 25 ohms, 2 nd ground rod is installed 6' apart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Record Ground Resistance as left (in ohms)	6.8	6.6	6.9	6.8	
Rectifier	Verify Rectifier Enclosure is locked	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Verify PG&E Equipment Identification sticker is installed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inspect Rectifier for any openings or exposed wires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inspect rectifier for internal corrosion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Record Rectifier DC Amps Rating	5A	5A	5A	5A	
	Record Rectifier DC Volts Rating	40v	40v	40v	40v	
	Record Rectifier DC Amps	2.4A	2.4A	2.5A	2.5A	
	Record Rectifier DC Volts	7.0v	7.1v	12.6v	12.5v	
Re-Review	RECORDED BY (INITIALS)	Redacted				
	RECORDED BY (LAN ID)	Redacted				
	DATE (MONTH/DAY)	3/17/09	3/22/10	3/22/11	3/27/12	
	REVIEWED BY (INITIALS)	Redacted				
	REVIEWED BY (LAN ID)	Redacted				
	DATE (MONTH/DAY)	3/26/09	3/31/10	4/15/11	5/22/12	