

Subject: [Redacted]

Surveyor: [Redacted]

This is a summary of experience at [Redacted], on the 25<sup>th</sup> of May 2012. I was called out to the address at approximately 5:45-6PM, for an odor complaint, by the on call supervisor, [Redacted]. [Redacted] informed that the customer was reporting a gas leak around the area of her house, and that we had apparently been out to this particular address several times before, with apparently no success of finding a leak. I was on the backside of [Redacted], finishing up a separate odor complaint, and I left as soon as I could. I arrived at the address at approximately 7PM, and met up with [Redacted], out of the [Redacted] yard, and we proceeded to the address. [Redacted] had informed me that we had been out to this address multiple times, with GSR's, and [Redacted] was on site the previous day, for almost 4 hours, and had no success in finding a leak. We made customer contact, and the customer informed us that she had been smelling gas, and that it was coming into her house through her vents at night, and that it was coming up the street at or through the water lines. She informed me that [Redacted] had been out to her residence the previous day, and that he had found 50 PPM at the service tee, and 15 PPM up by the house. She informed me that her hedge in her front yard was dying because of it as well. I asked her some basic questions about when she was smelling it, and where. She said that [Redacted] had found a small leak on one of her water heater lines, and that a plumber had come out to fix it. She was adamant about what she was smelling and where. I tried to describe what could create such small readings, such as natural methane pockets in the ground, that are not PG&E gas. She immediately proceeded to tell me that this entire area had been built on the site of an old ranch. I told her that was a perfect scenario to have small pockets of methane releasing a small amount of natural gas. I have experienced this same situation in Dublin, when I was doing

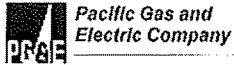
survey out of Hayward Division(Supervisor [Redacted]). It was explained to me by crew foreman in the area, that parts of it were built using landfill, and the naturally occurring methane created by this was setting our machines of just the same as gas leaking from one of our lines would. Several grade 2, 2+, and grade 1 leaks were dug up, and entire stretches of main exposed and checked, and no leaks were ever found. If my memory serves me, they took samples of the gas and made the determination that it was naturally occurring methane. I explained to the customer that this same situation could be happening up here, with as minor as the gas readings were that [Redacted] had found. Not long after she then changed her story, and said that as far as she knew, the ranch started down by the [Redacted] station off of [Redacted], and went part of the way up the hill, but she didn't know if it extended up as far as her house. I explained to her that I would walk the area with my machine, a DPIR(Calibrated 5/25), and I would check the entire area and report anything that I found. [Redacted] had a laptop with him, and was able to pull up the gas plat map, so I could look at it and get an accurate idea of where the gas main and services were. Her service was a ½ plastic line, coming off of a 2 inch main, 6 feet out from property line, short side service. Her service, along with every other house in this area, is joint trench. The electric, gas, and telecommunications lines, are all run in the same trench, which is backfilled with sand. As a surveyor, this tells me that any potential gas leak, will move much more easily through the sand, than it would through a heavier clay soil. As far as findings leaks goes, in my experience, the gas will migrate through the trench, in every direction possible, through every duct that it can, in every direction that it can, because there is so little resistance from the sand itself. This makes it much easier as a surveyor to find a potential leak in an area like this. I walked the houses [Redacted], [Redacted], [Redacted], [Redacted]. I checked every water box, every disk in the street for sewer or water, every PG&E electric box, every telecom box, and every sewer cover in the driveways of

the addresses, and I found nothing anywhere. The only possible leak that I thought I may have had, was at [Redacted]. I made a sweep on the meter set, cupping every single fitting, and my machine went off. The machine takes a few seconds from the initial intake of air, to the initial read by the machine, so I thought it was in the area of the bypass tee on the outlet side of the meter. I told this to [Redacted] as I was talking to her, and he went and got a soap bottle, and proceeded to spray down the entire meter set to be on the safe side. He did not find any leak anywhere, and asked if I would go back and sweep the set again. I did, and the most I could get was a small rise in the readings when I held the wand up to the regulator vent, and nothing else. I attributed the alarm on the machine going off, due to a small amount of purge coming off of the regulator, which is normal as it was explained to me. I explained to her, that the regulator is designed to turn down the pressure coming in from the service line, to house pressure, and the lines are constantly changing in pressure, and the entire purpose of the vent is to bleed off the high side of the line to prevent and over-pressure. I explained that a very small amount is normal, and that I was unable to find any other read, or attribute it to anything else. She seemed to accept my answer, but asked me if I was going to report it, I told her I wasn't. She then told me that the alarm on my machine went off, and that there MUST be a leak there. I told her that there was no leak there, and that I can only attribute it to the regulator purging in a very minor way. She asked me why I wasn't going to report it, and I told her that I believed in the amounts that it happened, it was normal, and there was no need to report it. She told me that I should report it, so that they know, and that we should all, "be on the same playing field", which confused me slightly. I told her that I had no need to report something that I considered to be normal in my experience, and she did not want to accept that, and that I should report it, and that there WAS a leak there. I did not want to argue with her, so I let it go and moved on with the investigation. I proceeded to get my sub-surface probe, and my punch bar, and [Redacted] and I went over to the approximate

location of the service tee, by her mailbox, also where she said that [Redacted] had probed holes, and we proceeded to punch holes there. We asked her how deep [Redacted] had gone, and she said that he had punched down almost 3 feet at least. [Redacted] and I looked at each other and thought that was a little odd, because a full U.S.A was not done at the site, only the gas and electric were marked out, but no telecom lines were marked. We told her that the standard depth for punching holes is twelve inches, so that we don't drive a probe through an underground line and cause any damage to the lines or bodily harm to ourselves. I thought it was odd that [Redacted] would go so deep, as he knows this rule as well. My curiosity turned out to be right, because when I asked him about it on the following Tuesday after Memorial day, he said that he had only gone down 12", and that was it. [Redacted] and I punched holes in various places around the mailbox, the electric box, and a small telecom box set back into her hedge. I found no readings, and had no indications of a gas leak. She had said that her hedge was dying in a certain place, which is actually a good pre-cursor to a gas leak, as gas will dry out the soil and cause the vegetation to die out. This was my first and only positive sign of a potential gas leak, but I was wrong. I punched 3 different holes around the area that the hedge was dying, and couldn't get a single read anywhere. I proceeded to punch two more holes up by the gas meter, and could find nothing as well. I saw that there was a tree growing fairly close to the meter, and took a guess that the roots could possibly be growing into a line, but could find nothing on the surface, or sub-surface. I told her and her husband, he had come home by this point, that I had found nothing, at any of the areas that I investigated. She immediately went right back to [Redacted], and that he got readings over the service tee, and up by the house, so there must be something there. I told her that from my findings, I didn't believe there was a gas leak present in the area, either in the trench, or in the street around the water main. I told her that [Redacted] readings were interesting in themselves, and that I would request a gas sample to be taken from the ground in the area, and send it off

to be tested, to make the determination whether it was out gas that was leaking out of the ground, or a natural methane pocket, or pocket of swamp gas. She wanted to know if a crew was coming out that night to take investigate it, and I told her that that would be up to the supervisors discretion. She seemed happy that I was going to request a sample, and that progress was going to be made. [Redacted] and I waited on site for [Redacted], to speak to [Redacted] [Redacted] called us back, and told us that we could leave, and that it would be handled from there.





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

62-4060  
TD-4110P-11-F01

Form Type  Leak

Compliance Due Date  Assigned to Construction   
Assigned to Work and Resource

### INITIAL LEAK DATA

District - Year - Series - Suffix Month - Day - Year  
 Leak Number  USA Ticket #  Valid Date   
 Location:  A = Above Ground  B = Below Ground PCC Number   
 Date Reported  Time Reported  (24 hr Time) Paved Wall To Wall  Yes  No  
 Response Date  Response Time  (24 hr Time) SAP Repair Order #   
 Gas Flow Stopped Date  Stopped Time  (24 hr Time)  
 Address:  City:

Description of Reading Location: *dig-in at svc 15' from riser*

Reported By:  Call In  Mobile Survey  Other Employee  
 Foot Survey  Other Employee

Surface at Read Location:  Concrete  Water/Marsh/Tidal  Exposed Facility  
 Asphalt  Aboveground  Other  
 Unsurfaced  In Substructure

READINGS			Grading Reason Code (c)	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)
%GAS	Instr (a)	Grade (b)							
100	V	1			11 - 21 - 2003	13:15	REST		SVC

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

- a Instrument Type Used to Grade: Enter, C for Combustible Gas Indicator, V for Visual  
 b Enter Grade (1, 2+, 2, or 3). Enter 0 (zero) if no leak is found.  
 c Grading reason code is required if leak is graded as 1, 2+, or 2 and/or 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 - Grade 3 downgrade is not allowed. S - Leak is suspected to be on a copper service. T - T&R Facility

### MAPPING DATA

Location Map Wall Map:  Plat:  Federal Land  Yes  No SYSTEM PRESSURE  
 Recorded Location Map Wall Map:  Plat:  Block:   LP (<=10.5"WC)  SHP (<=25psig)  
 Normally Cathodically Protected  Yes  No CPA:  MAOP (all)   HP (<=60psig)  TP (>60psig)  
 Operating Map/Diagram  NOP (all)   
 Year Inst:  TP Line #  Mile Point:  Original Job # (TP only)   
 For Leaks On Services: Main Connected to Service  Cast Iron  Plastic  Steel Installation Year of Main

### 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 (Yes if dia & press produce impact circle creating HCA)  
 Is leak source a mechanical joint which can be repaired by tightening?  Yes  No (if no, normal leak grading and response applies)

**PIPE DATA**

**SOURCE:**

- Bell Joint
- Body of Pipe
- Drip
- Encapsulation
- Fusion Joint
- Other Mechanical Joint
- Curb Valve
- Line Valve
- Clamp
- Compression Coupling Plastic
- Compression Coupling Steel
- Compression Coupling Stainless Steel
- Fitting
- Plastic Tee Cap
- Pressure Control Fittings
- Stub Type Fittings
- Tap Connection
- Non-corrodible prefab riser
- Riser
- Riser Inset Kit
- Girth Weld
- Longitudinal Weld
- Other Welds
- Regulator/Pilot
- Riser Valve Threads
- Threads
- Unknown (Replaced Facility)
- Other

**CAUSE:**

- Atmospheric Corrosion
- External Corrosion
- Internal Corrosion
- Stress Corrosion Cracking
- Damage by Earth Movement
- Damage by Heavy Rains/Flood
- Earthquake
- Lightning
- Other Natural Forces
- Damage by Third Party
- Digin/Excavation
- Previously Damaged
- Vehicle
- Damage by Electrical Facility
- Deliberate Acts/Vandalism
- Fire or Explosion on Customer Facilities
- Cast Iron Fracture
- Compression Coupling
- Construction Defect
- No/Deteriorated Pipe Dope
- Plastic Crack Failure
- Material Failure
- Weld Failure
- Equipment Malfunction
- Incorrect Operation
- Rodent
- Root Damage
- Unknown (Replaced facility)
- Inspection only, no leak, no damage
- Fire or Explosion on Company Facilities
- Plastic Embrittlement
- Other

**LINE MATERIAL:**

- Cast Iron
- Ductile Iron
- Steel
- Wrought Iron
- Copper
- Aldyl A
- PE 2406 (Orange)
- PE 2406/2708 (Yellow)
- PE 3408 (Black)
- PE 4710 (Black)
- Other Plastic
- Other

**LINE USE:**

- Distribution Main (<=60 PSIG)
- Distribution Main (>60 PSIG and <20% SMYS)
- Gathering
- Single Service
- Branch Service
- Transmission (>=20% SMYS)

Line Size  Line Above Ground  Yes  No Internal Liner  Yes  No Line Inserted  Yes  No

Existing EFV  Yes  No EFV Operated  Yes  No

Incident Report # 0318500 Material Problem Report # \_\_\_\_\_

Was the damage/leak discovered the result of current construction activity occurring this calendar year?  Yes  No

**REPAIR DATA ( 1 )**

Repair Location on svc15' away from riser

Repair Remarks replaced 1' of 1/2" PL

Repaired By LAN ID: Redacted Repair Date 11 - 21 - 2003 Repair Time 13:30

Senior/Pipeline Engineer Consulted  Yes  No New EFV Installed  Yes  No

**Repair Code:**

**CAPITAL**

- Deactivate #TP Main
- Deactivate Dist Main (1 foot or more)
- Deactivated Entire Service
- Replace Entire Service
- Replace TP Main
- Replace Dist Main >=100ft
- Replace Valve >= 2 inch
- Replace Service Valve >=2-inch
- Replace #TP Main >= 50 ft
- Replace #TP Main <50 ft - Replace
- Replace Main Valve >= 2 inch

**MAINTENANCE (EXPENSE)**

- Bell Joint Clamp - Cast Iron
- Bell Joint PermaBond - Cast Iron
- Bell Joint Seal - Cast Iron
- Cast Iron Repair Sleeve - Cast Iron
- Full Circle Clamp - Cast Iron
- Skinner Clamp - Clamp
- Skinner Pipe Joint Clamp - Clamp
- SS Clamp w/Anode - Clamp
- Deactivated Partial Service
- Greased

**MAINTENANCE (EXPENSE)**

- Mechanical Repair Fitting - Fitting
- Remove/Replace Completion Plug - Fitting
- Tighten Cap/Bolt - Fitting
- Aldyl A Overcap - Plastic
- Replace Plastic Tee Cap - Plastic
- Tee Fused Over Defect - Plastic
- Replace Dist Main <100ft - Replace
- Replace Main Valve <2-inch - Replace
- Replace Partial Service - Replace
- Replace Riser - Replace
- Replace Valve < 2 inch
- Replace Service Valve <2 Inch - Replace

**MAINTENANCE (EXPENS)**

- Direct Deposition Weld - Weld
- Fill Weld - Weld
- Patch Weld - Weld
- Type A Sleeve - Weld
- Type B Sleeve - Weld
- Welded Sav-A-Valve - Weld
- Welded Sleeve/Can - Weld
- Aquawrap - Other
- Clockspring - Other
- Grinding - Other
- Soap and/or Tape - Other
- Trident Seal - Other
- Other

SIZE INSTALLED:  REPLACED WITH:  STEEL  PE2406/2708 (Yellow)  PE4710 (Black)  Copper Entirely Replaced  Yes  No



GENERAL INSPECTION DATA

Reason for Inspection:

- Leak Repair, Capacity, Landslide, Reconstruction, WRO, New Business, Plugged Copper, Facilities Exposed by Third Party, Exposed Facility / Pipe Span, Other

Date: 11 - 21 - 2003 Inspected by LAN ID: Redacted

LINE MATERIAL, SOIL TYPE, For TP Only SOIL RESIST, SURFACE OVER PIPE, FEET EXPOSED, COVER ON PIPE, INTERNAL LINER, PAVED WALL TO WALL, NEAR PUBLIC ASSEMBLY, Line Size

CATHODIC PROTECTION SYSTEM CONDITION

Pipe to Soil (mV), Cathodic Protection System Damaged, Corrective Form Issued

METALLIC PIPE CONDITION

COATING TYPE, COATING DAMAGED, ASBESTOS, PIPE SUPPORT CONDITION, CIRCUMFERENTIAL WELD CONDITION, LONG SEAM, Pipe Grade/Spec

EXTERNAL INSPECTION

RUST, PITTING, GOUGING, WALL THICKNESS, GRAPHITIZED, MAX. GOUGE DEPTH, MAX. EXTERNAL CORROSION Length

INTERNAL INSPECTION

RUST, PITTING, MAX. PIT DEPTH

PLASTIC PIPE CONDITION

PRINTLINE LEGIBLE, PIPE MANUFACTURER, GOUGING, UNDER STRESS/BENT, DISCOLORING TO GRAY, CRACKING, ESTIMATE GOUGE DEPTH, VISUAL BEAD APPEARANCE

GAS QUARTERLY INCIDENT REPORT

Damaging Party Type, Damaging Party Name, City, Phone, Zip Code, Zero Customers Out, Estimated Date and Time of Restoration, # Injured, # Fatal, DOT REPORTABLE, CPUC REPORTABLE

**LOCATION SKETCH**

<p>REQUIRED for new or returned to service segments of main and/or service:</p> <p><input type="checkbox"/> On-Site Test   <input type="checkbox"/> Pre-Test   <input type="checkbox"/> Soap Test</p> <p>TESTED AT <u>100</u> PSIG for <u>10</u> <input type="radio"/> Hours <input checked="" type="radio"/> Minutes</p> <p>TEST in accordance with A-34</p> <p>BY <u>Redacted</u> DATE <u>11/21/2003</u></p> <p>TEST QUALIFIES PIPE FOR - <u>    </u> PSIG MAOP</p>	<p>TYPE OF PLASTIC MATERIAL INSTALLED</p> <p>Manufacturer Name <u>Uponor</u></p> <p>Size <u>    </u></p> <p>SDR <u>    </u></p>	<p>MFG. DATE (mm/dd/yy)</p> <p><u>07/20/2003</u></p> <p>See Numbered Document <u>A-93</u></p>	<p>WELDED BY: <u>    </u> <u>0</u></p> <p>Date: <u>    </u></p> <p>WELDING INSPECTED PER PG&amp;E NUMBERED DOCUMENT <u>D-40</u></p> <p>BY: <u>    </u> <u>0</u></p> <p>Date: <u>    </u></p>
<p>REQUIRED for new or returned to service segments of main and/or service:</p> <p><input type="checkbox"/> On-Site Test   <input type="checkbox"/> Pre-Test   <input type="checkbox"/> Soap Test</p> <p>TESTED AT <u>    </u> PSIG for <u>    </u> <input type="radio"/> Hours <input type="radio"/> Minutes</p> <p>TEST in accordance with A-34</p> <p>BY <u>    </u> DATE <u>    </u></p> <p>TEST QUALIFIES PIPE FOR - <u>    </u> PSIG MAOP</p>	<p>TYPE OF PLASTIC MATERIAL INSTALLED</p> <p>Manufacturer Name <u>    </u></p> <p>Size <u>    </u></p> <p>SDR <u>    </u></p>	<p>MFG. DATE (mm/dd/yy)</p> <p><u>    </u></p> <p>See Numbered Document <u>A-93</u></p>	

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

COMMENTS:

replaced 1' of 1/2" pl

Crew Leader Signature: \_\_\_\_\_ Crew Leader LAN ID:

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



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

Field Reviewed By <u>Reda</u>	LJD Date <u>12-01-2003</u>	Post Repair Check <input type="radio"/> Yes <input checked="" type="radio"/> No	Date <u>    </u>
Mapping Reviewed By <u>Redac</u>	JCBM Date <u>12-02-2003</u>	Posting Required <input type="radio"/> Yes <input type="radio"/> No	

Redacted

**From:** Redacted  
**Sent:** Wednesday, May 30, 2012 9:43 AM  
**To:** Redacted  
**Subject:** RE: CPUC Data Request: Redacted - Index No. 2938

Redacted last surveyed on 6-3-10 no leaks found

**From:** Redacted  
**Sent:** Wednesday, May 30, 2012 8:54 AM  
**To:** Redacted  
**Subject:** FW: CPUC Data Request: Redacted - Index No. 2938  
**Importance:** High

Redacted

*Can you help gather the information requested below regarding the leak survey for Redacted. Let me know if you have any questions.*

Redacted

Redacted

**From:** Redacted  
**Sent:** Tuesday, May 29, 2012 10:31 AM  
**To:** Redacted  
**Cc:** Redacted  
**Subject:** CPUC Data Request: Redacted - Index No. 2938

Hi Redacted,

Could you please help respond to the CPUC data request below?

Thanks,

Redacted

IGIS

Grace

11/21/2003

Call @ 1/100

Redacted

**From:** SB Responder Group  
**Sent:** Friday, May 25, 2012 3:32 PM  
**To:** [Redacted]

**Cc:** GT&D GE Regulatory Support & Analysis; SB Responder Group; San Bruno Incident Data Requests; 'SanBrunoDiscoveryTeam@consultcelerity.com' (SanBrunoDiscoveryTeam@consultcelerity.com) (SanBrunoDiscoveryTeam@consultcelerity.com) (SanBrunoDiscoveryTeam@consultcelerity.com); Garber, Stephen (Law)

**Subject:** RE: Data Request: [Redacted] - Index No. 2938

Category: Distribution

Priority: 1

Assignee: [Redacted]

**Request:**

This is a priority 1 request from the CPSD. Please address the following:

**Answer Information Source:**

**Question(s):**

2938.01 Provide last leak survey records for the residential area in which the property at [Redacted] is located.

2938.02 Please specify locations, grading, and percentage of LEL or ppm of all leaks that were discovered as a result of the last leak survey and a list of all repaired and pending leaks in the area.

2938.03 Provide any records or findings for any leak survey or leak investigation conducted recently, i.e. 2012, from the mainline to the customer meter at [Redacted]