Revisions

Revision	Date	Comments
1.0	10/15/1999	Initial issuance of the User Guide for the GLM application, Version 1.34.
2.23	11/2002	Issuance of the User Guide for the IGIS application, Version 2.23.

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1 About IGIS

The Integrated Gas Information System (IGIS) is a comprehensive application to record, update, retrieve, and report on information for gas leaks, repairs, incidents, and inspections, as well as gas pipe inspections not associated with gas leaks. IGIS includes a "Leaks" module and an "Incident Data" module, with future plans to include a Gas Pipeline Replacement Program "GPRP" module.

The IGIS application is used to:

- Enter information on gas pipe leaks.
- Enter inspection information associated with gas pipe leaks.
- Enter gas pipe inspection information not associated with gas leaks.
- View or edit information on gas pipe leaks.
- View or edit gas pipe inspection information.
- Enter pipe segment information for gas leaks and inspections.
- Enter gas pipe leak information recorded on Form 62-0612, "Leak Survey Logs" (see Appendix 2).
- Generate and print reports on gas pipe leaks and inspections.
- Generate and print reports on gas pipe inspection information not associated with gas leaks.
- Create Recheck Logs for gas pipe leaks.
- Update Recheck Log information for gas pipe leaks.
- Record and report Gas Incident data as required by CPUC General Order 112-E, Quarterly Gas Incident Reports

The IGIS application is a rewrite and revamp of the previous PCLeaks and mainframe Leaks applications used by the Operations, Maintenance, and Construction (OM&C) department. Changes to the application are the result of efforts by the Gas Leaks and Records Subcommittee, a partnership of management, International Brotherhood of Electrical Workers (IBEW), and Engineers and Scientists of California (ESC) bargaining unit employees. The Leaks Subject Matter Experts (LSME) Team, a subset of the subcommittee, wrote new specifications and designed new forms for the IGIS.

In addition, IGIS has replaced the manual Excel® spreadsheets used to generate the Gas Quarterly Incident reports.

The following departments within Utility Operations use the IGIS application:

- Gas Estimating and Mapping (E&M)
- Gas Construction
- Gas Operations Engineering and Planning (E&P)
- Gas Technical and Field Support (GT)
- Gas Transmission and Regulation

California Gas Transmission (CGT) also uses the IGIS application.

2 System Requirements

2.1 Overview

The IGIS application was developed in PowerBuilder® with an ORACLE® database for use with the Microsoft Windows® operating system.

2.2 Hardware and Software Requirements

Running the IGIS application on a personal computer (PC) requires the following software:

- Windows®95, Windows NT 4.0®, or Windows 2000 Professional® operating system
- Oracle® SqlNet Version 2.3, 4.1, or Net 8

The PC also must have the following minimum hardware configuration:

- Pentium 200 MHz processor
- 64 MB of RAM
- 75 MB of available hard drive space
- Monitor display set at 800 x 600 pixels

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3 Getting Help

3.1 Basic PC Problems

Please **call the Technology Service Center (TSC)** at 223-9000 **first**!

3.2 IGIS Application Problems

Please email or call:

[redacted] *LAN ID* [redacted] ☎ [redacted]

3.3 Help and Validation Rules

Help information appears in the status bar at the bottom left corner of the IGIS screen when the user places the cursor over a data entry field. The status bar, illustrated in Figure 1 below, displays data entry instructions for that field.

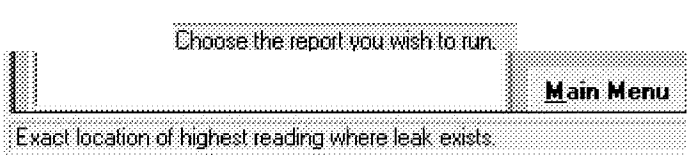

Figure 1: Status Bar

Access the IGIS Validation and Requirement Rules by clicking the Validation (?) button on the **View/Update** screen.

3.4 Online User Guide

The IGIS User Guide is available online from the Utility Operations, Resources & Information website at http://net01/techlib/. Select **OM&C**, **Technical Library Info**, then **Mapping**.

4 Program Conventions

The IGIS application is designed with ease-of-use in mind. The data entry fields are designed to closely follow information recorded on the "A" Form (see Appendix 1, "Form 62-4060, Leak Survey, Repair, Inspection, and Gas Quarterly Incident Report"). The program conventions that are used throughout the application are explained in the following sections.

4.1 Navigation

Use buttons, the [Tab] key, the mouse, or scroll bars to navigate from one screen to another, from one field to another, or through information contained in a section of a screen, as explained below:

- Use buttons to perform the action indicated by the button title. Some buttons may be disabled depending on the mode (such as "Add" or "Edit") the user is currently in.
- Use the [Tab] key to move from one field to the next.
- Use the horizontal or vertical scroll bars to view information that is not displayed entirely within a section of the screen.

4.2 Minimizing Screens

The user must enter the required information into many fields of the IGIS application before he or she can save the information and exit the application. Therefore, the IGIS screens may be minimized so that they disappear from the monitor but remain active on the Windows® task bar along the bottom of the screen, illustrated in Figure 1 below. This enables users to perform other tasks, if necessary, while logged into the IGIS application.

Figure 1: Windows Task Bar

Figure 2: Active IGIS Buttons Displayed on the Windows Task Bar

To minimize a screen, click the _ button displayed in the row of _ ⧉ ✕ buttons in the upper right corner of the screen.

4.3 Data Entry

Enter information in fields of IGIS screens either by typing information in a field, typing a character in a drop-down field, or selecting information from a list in a drop-down field.

To enter information in a drop-down field, either select the information from the drop-down list, or enter the first character of the information in the field and the first entry from the list with that character appears in the field. To access a lower choice on the list beginning with that character, press the same character again and continue to step down the list until the desired selection appears. Also, use the **Up [↑]** or **Down [↓]** arrows to navigate to the desired entry.

4.4 Information Types

Data entry fields in the IGIS screens have color-coded backgrounds to indicate optional, required, and critical data. Required fields differ depending on various factors such as whether the gas leak is assigned to transmission or distribution.

The field background colors denote the following:

- White: Optional information.
- Gray: Automatically generated information. All grayed-out data fields are automatically generated by the system and cannot be changed by the user.
- Blue Required : Required information. Users cannot save information in fields with blue backgrounds until they enter all required information.
- Yellow Critical : Required critical data. The yellow background color for critical data only appears after information is saved using the **Save** button. It is a warning that the user still needs to enter critical data, but that the information the user has entered can be saved.
- Red Missing : Missing information. The red background color for missing information only appears after the user has attempted to save the current leak data entry. It is a warning that the user still needs to enter required information.

4.5 Create or View Messages

The Messages option is currently disabled.

After logging into the IGIS system, a **Read New Message(s)** icon, illustrated in Figure 3 below, appears on the **IGIS Main Menu** screen. Clicking the icon opens the **IGIS Message** screen, illustrated in Figure 4 below. On this screen, the user may read messages from other IGIS users or create new messages.

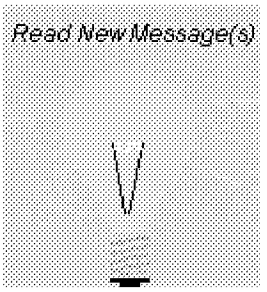

Figure 3: Read New Messages(s) Icon

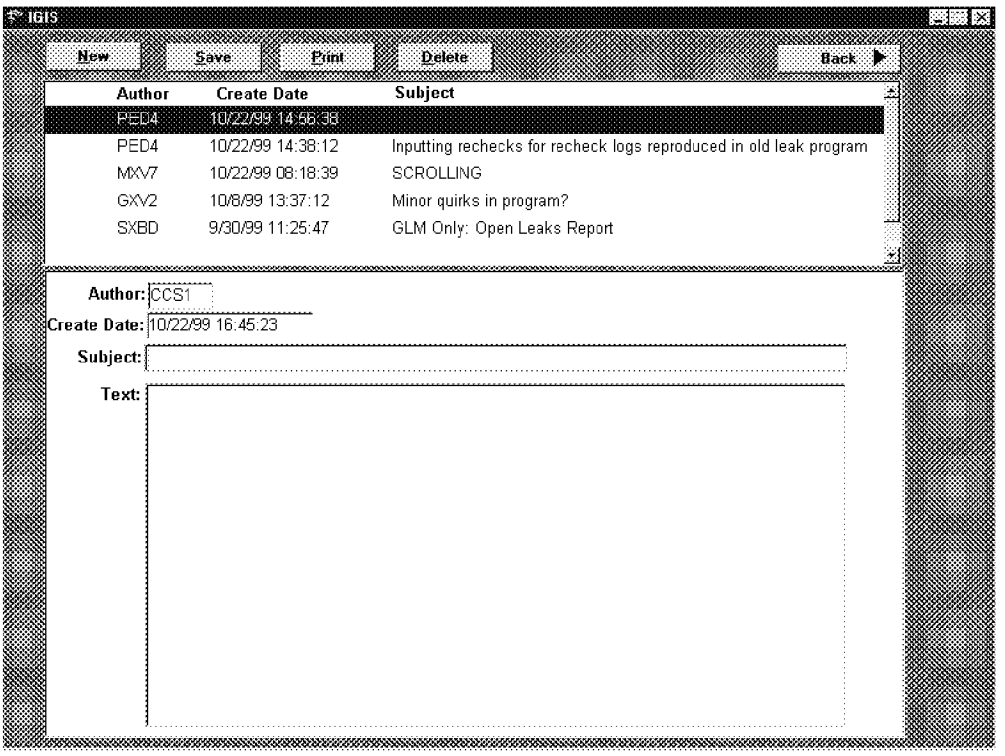

Figure 4: IGIS Message Screen

Also, clicking the right mouse button anywhere in the IGIS application brings up the pop-up menu, illustrated in Figure 5 below. Clicking the **Messages** option opens the **IGIS Message** screen.

Figure 5: Pop-Up Menu

Use the IGIS Message screen:

- To read an existing message, select the message from the list at the top of the screen.
- To create a message, click the **New** button to access a blank **Message** screen.
- To save a message, click the **Save** button.
- To delete a message, click the **Delete** button. You can only delete messages you create.
- To print a message, click the **Print** button.
- To return to the screen you were in before to accessing the **Message** screen, click the **Back** button.

4.6 Add or Update Tables

Clicking the right mouse button anywhere in the IGIS application brings up the pop-up menu, illustrated in Figure 5 above. Clicking the **Table** option opens the **Table Maintenance** screen, illustrated in Figure 6 on Page 11. By selecting the table in the **Select Table** list box, the user can add, update, and correct data that is in the table. The tables are:

- Blocks
- CPA Numbers
- Cities
- People
- Plats
- Street
- Wall Maps

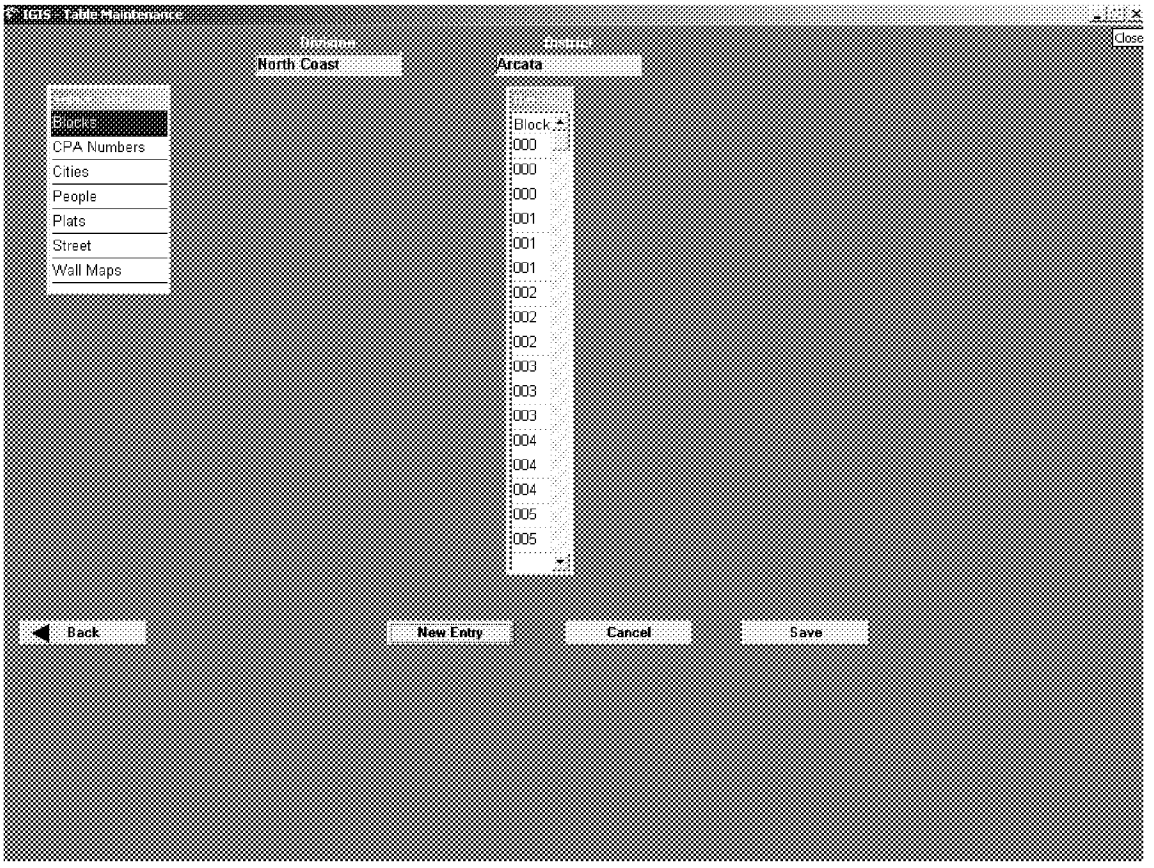

Figure 6: Table Maintenance Screen

At this time the following tables are disabled:

- Cities
- Plats
- Wall Maps

Clicking any of the disabled tables causes the message illustrated in Figure 7 below to appear.

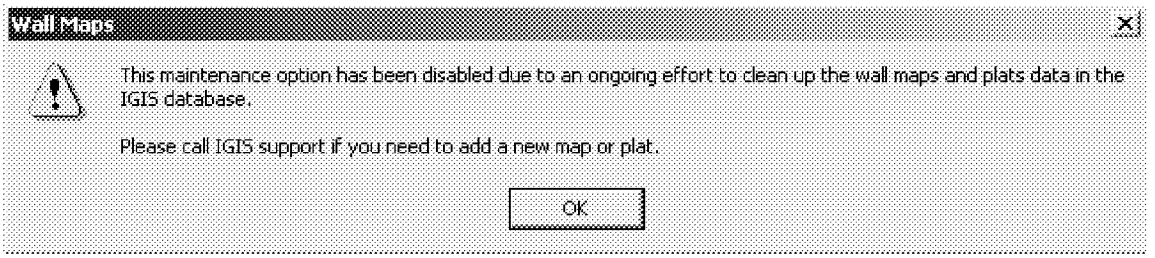

Figure 7: Disabled Table Message

To add a new **City, Plat,** or **Wall Map,** call IGIS Support Group (see Section 3.2, "IGIS Application Problems," on Page 5).

To add or update a table:

1) Click the desired Table.
2) Check to see if the information still needs to be added or corrected.
3) Click **New Entry** to enter the new information.
4) To save the new entry, click the **Save** button.
5) To correct an existing entry, find the desired entry, click it and change it.
6) To save the revised entry, click the **Save** button.
7) Click the **Back** button to return to the main menu.
8) Click the **Cancel** button to cancel entry. The warning message illustrated in Figure 8 below appears.

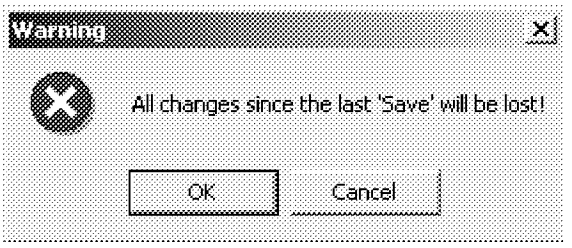

Figure 8: Table Update Cancel Warning Message

5 Getting Started

5.1 Log In

To log on to IGIS and access the application:

1) Click the IGIS icon  on the PC desktop. The **Logon** dialog box, illustrated in Figure 10 below, appears.

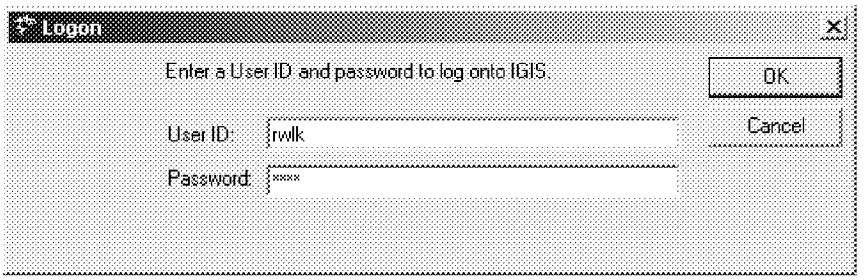

Figure 10: Logon Dialog Box

2) Type in your **User ID** and **Password** in the respective fields of the **Logon** dialog box. The **IGIS Main Menu** screen appears (see Figure 11 below). The IGIS support group initially provides your password.

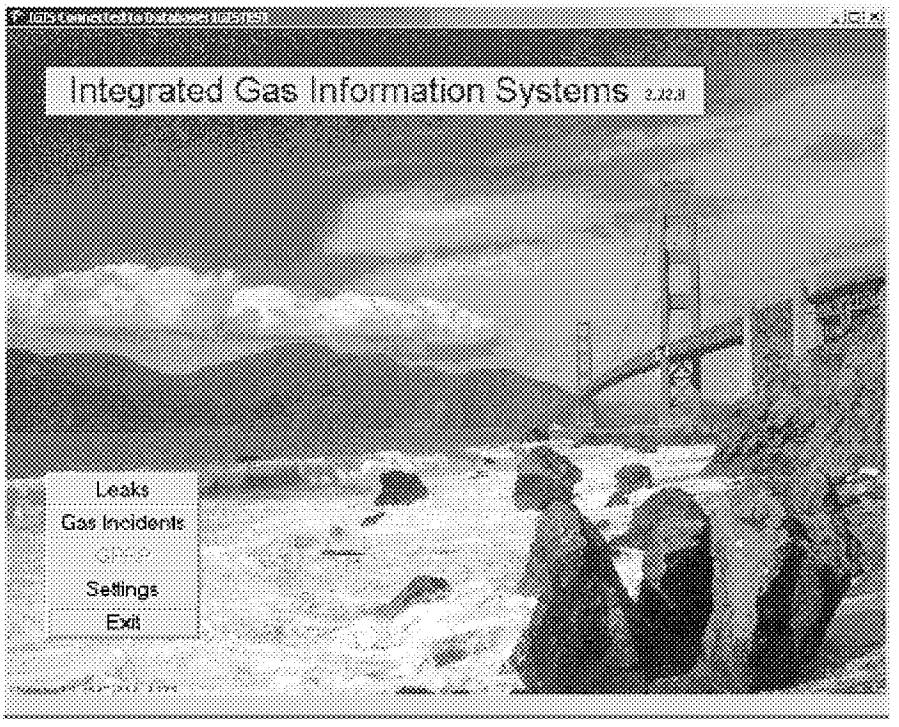

Figure 11: IGIS Main Menu Screen After Logging In

3) Click the **Leaks** option from the menu in the lower left corner of the screen. A menu of options for the IGIS application appears, illustrated in Figure 12 below. Click the IGIS option you want to access.

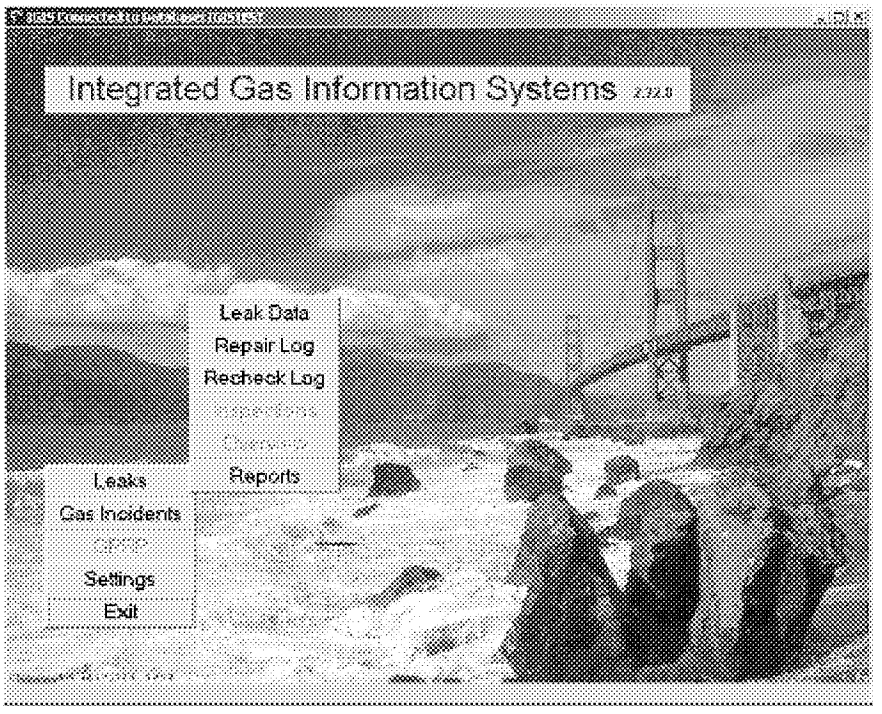

Figure 12: IGIS Main Menu Screen with Leaks Options Menu

If a **Leak Data** option includes sub-options, the sub-options display when the cursor is placed over the menu option title, illustrated in Figure 13 below.

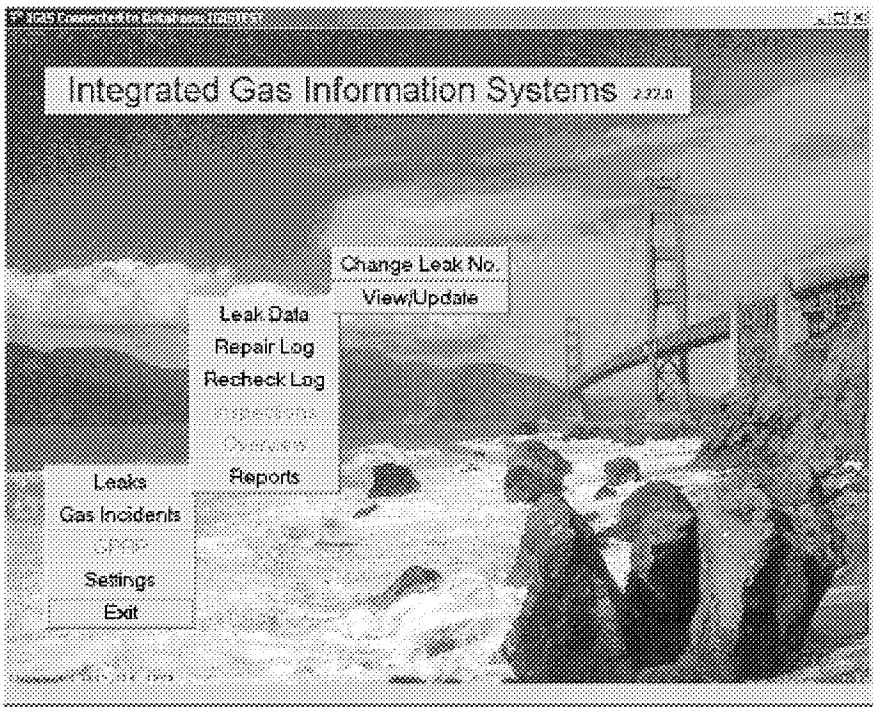

Figure 13: IGIS Main Menu Screen with Leaks Sub Options Menu

4) Click an option listed on the **Leaks** options menu or sub options menu. For data entry instructions, refer to the section of this guide that explains the option.

5.2 Set Division and District Defaults and Change the Password

The IGIS Administrator assigns the **Division** and **District**(s) a user may access, and their password; at the time they are initially authorized to use the IGIS application. The assigned **Division** and **District**(s) correspond to those the user needs to enter gas leak and inspection information or gas pipe inspection information. If a user needs to enter information for only one **District**, they may set up that **District** as their default. If a user needs to access information for a different **Division,** they do so by changing the desired Division & District. The user will be restricted to read-only access. Contact the IGIS Administrator for additional mapper access within your **Division.**

Clicking the **Settings** option on the **IGIS Main Menu** screen opens the IGIS **Set Default Options** dialog box, illustrated in Figure 14 below. The **Division** and **District** displayed in the respective drop-down lists are the default **Division** and **District** for these fields throughout the IGIS application. To change the default **District** within the **Division**, select the desired **District** from the drop-down list. Switching to another **Division** only allows the user read-only access.

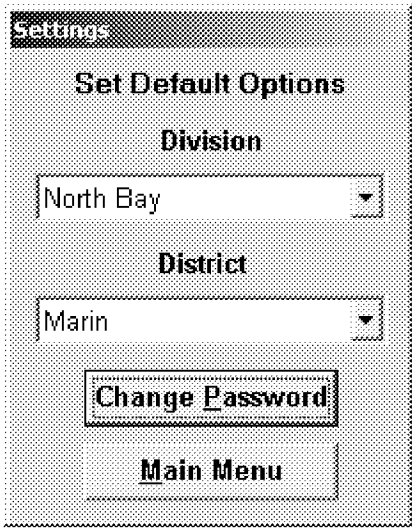

Figure 14: IGIS Set Default Options Dialog Box

To change an existing password, click the **Change Password** button on the IGIS **Set Default Options** dialog box. Type in, and confirm, your new password in the **Change Password** dialog box, as illustrated in Figure 15 below.

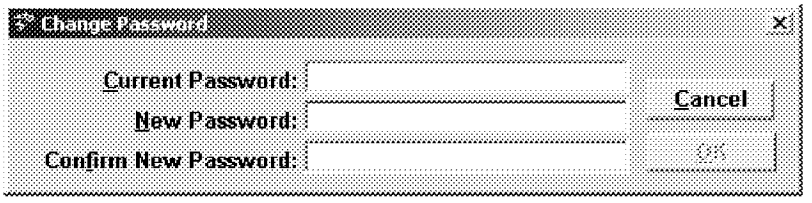

Figure 15: Change Password Dialog Box

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6 New Gas Leaks and Associated Inspections

Users record, view, edit, or create reports on new information on gas pipe leaks, repairs, and associated inspections using the **Leaks→Leak Data→View/Update** option of the IGIS application. The **Leak Data Input and Maintenance** screens depict the fields and information found on the "A" Form (see Appendix 1, "Form 62-4060, Leak Survey, Repair, Inspection, and Gas Quarterly Incident Report"). Use this screen to:

- Enter information on a new gas leak.
- Enter inspection information associated with a new gas leak.
- View or edit information on a recently entered gas leak.
- Report on gas leak and associated inspection information for a new or recently entered gas leak.

6.1 Enter Information on a New Gas Leak

Clicking the **Leaks→Leaks Data→View/Update** option on the **IGIS Main Menu** screen opens the **Leak Data Input and Maintenance** screen, illustrated in Figure 16 below. Use this screen to enter information on new gas leak or update information on an existing open leak.

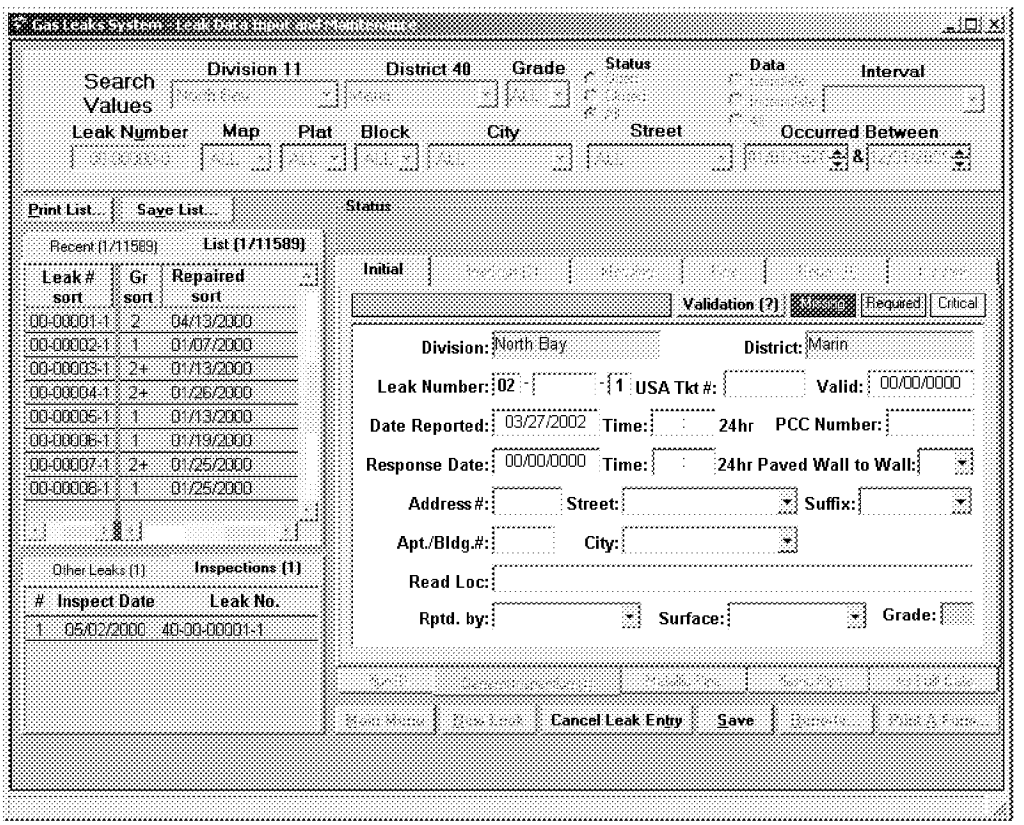

Figure 16: Leak Data Input and Maintenance Screen for New Gas Leaks

To enter leak information on a new gas leak:

1) Click the **New Leak** button and enter the **Leak Number** (see Figure 16 above). The **Date Reported** field defaults to the current date.

2) Enter information in fields of the **Initial, Readings, Mapping, Pipe, Repair,** and **Incident** tabs of the screen. (See Figure 16 above. Only the **Initial** tab is highlighted in Figure 16). Users enter most of the required data in these tabs. To access the fields of a tab, click the tab title. Data entry instructions for the fields of these tabs are provided on the following pages.

3) Click the Save button to save information. You must complete the **Initial, Readings,** and **Mapping** tabs to save the new leak entry. A message appears in the **Status** section of the screen indicating that the changes were successfully saved.

4) Click the Cancel Leak Edit button to undo a previous entry within a tab.

5) Click the Print A Form... button to print the "A" Form. The **Print A-Form** dialog box, illustrated in Figure 17 below, displays. Selecting **Print A-Form and Update Repair Log** adds the leak to the log.

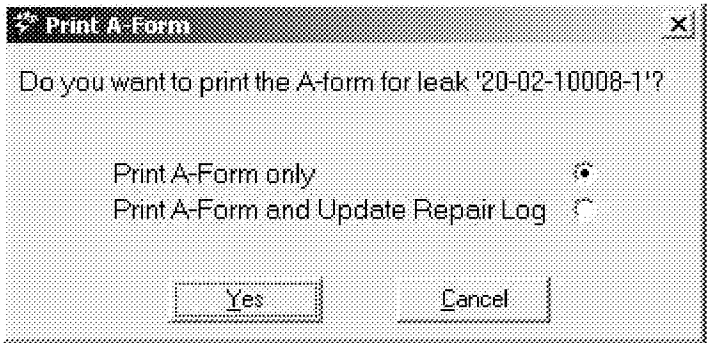

Figure 17: Print A-Form Dialog Box

6) Click the Reports... button to go to the **Report Options** screen and generate reports (see Section 14, "Reports" on Page 91).

7) Click the New Leak button to create another new leak record.

8) Click the Main Menu button to return to the **IGIS Main Menu** screen.

Note: To exit the screen, click **Save** or **Cancel Leak Edit.** Command buttons **Main Menu, New Leak, Reports,** and **Print A Form** are disabled during the "Add" or "Edit" mode.

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a) The message illustrated in Figure 18 below displays to confirm whether the user still wants to save the information entered after clicking the **Save** button.

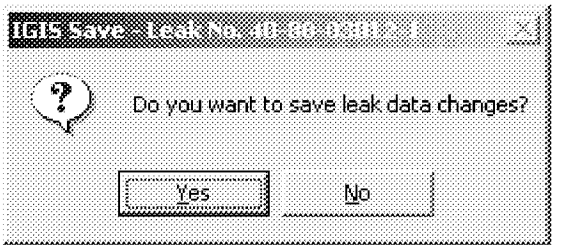


Figure 18: Save Message Box

b) A message appears in the **Status** section of the screen after clicking Yes**,** indicating Leak No ##-##-#####-# was saved successfully.

c) The message illustrated in Figure 19 below appears in the **Status** section located at the top of the tab if the user attempts to save information before entering all of the required information in a particular tab. The red warning text flashes, the cursor is placed in the field that is missing required information, and the background color of the field changes to red.

Figure 19: Required Data Missing Message

6.1.1 Initial Tab Fields

The fields contained in the **Initial** tab, illustrated in Figure 20 below, correspond to the "Initial Leak Data" section of the "A" Form.

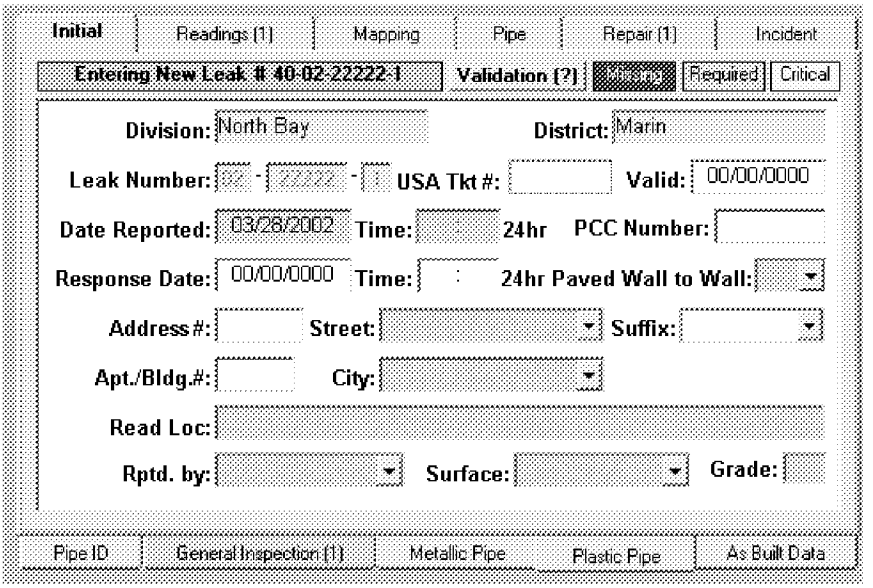


Figure 20: Initial Tab - Leak Data Input and Maintenance Screen

Table 1 beginning on Page 24 lists the fields of the **Initial** tab and provides the information required in each field.

Note: Enter data according to the instructions provided in the **Data Entry Information** column of Table 1 below, as follows:

- Use the [Tab] key to move from one field to the next.
- When the instructions state "enter," type information in the field.
- When the instructions state "select," either:
  1. Select the entry from the drop-down list.
  2. Type the first character of the entry in the field and the first entry from the drop-down list when that character appears in the field. If the drop-down list contains more than one entry with that character, type the character again in the field until the desired entry appears. Also, use the **Up [↑]** or **Down [↓]** arrows to navigate to the desired entry.

Table 1: Initial Tab Fields

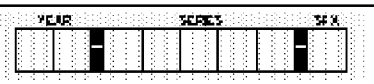
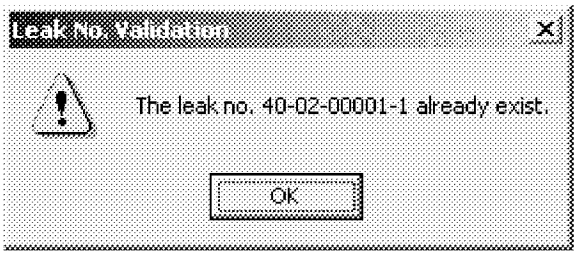
Field	Data Entry Information
Division	The field defaults to the Division specified in the program settings of the application.
District	The field defaults to the District specified in the program settings of the application. If necessary, select a different District from the drop-down list.
Leak Number	 Enter the leak number using the format: YR-Series-SFX, where: *YR* = The two-digit year in which the leak was found. *Series* = The five-digit, sequential number assigned and administered by the Mapping Department. *SFX* = The one-digit figure indicating the number of multiple leak repairs at one location (e.g., 1, 2, 3). If the user enters a leak number that already exists, the warning message below appears.  After entering the new leak number, the title above the tab changes to indicate the leak number, as illustrated below. 
USA Tkt #	Enter the Underground Service Alert (USA) ticket number requested by PG&E field personnel, as required, before digging to repair Grade 2+, 2, and 3 leaks.
Valid	Enter the date the USA ticket number became valid. This is normally two working days after the ticket was called in. Employees should not perform work before this date.
Date Reported	Date leak reported to PG&E.
Response Date	Time leak is first reported to PG&E in 24-hour clock.
Paved Wall to Wall	Select **Yes** or **No** to indicate whether the leak occurred on a gas facility under continuous paving that extends from either the center line of the thoroughfare to the building wall, or from the main to the building wall.
Address #	Enter the building number of the leak location.
Street	Select the street name where the leak occurred or enter a new street name to the list.
Suffix	Select the descriptive suffix for the address of the leak location.

Table 1: Initial Tab Fields (continued)

Field	Data Entry Information
Apt/Bldg.#	Enter the apartment or suite number for the address of the leak location.
City	Select the city, town, or area where the leak is located.
Read Loc	Enter a description of the exact location of the gas leak reading, such as "over tee" or "over service at curb."
Rptd. By	Select the method by which the leak was reported to PG&E.
Surface	Select the predominant surface material where the leak was found.
Grade	This field is filled after the user enters a leak grade in the **Grade** field on the **Readings** tab. Refer to the instructions for the **Readings** tab for information on the gas leak grades.

6.1.2 Readings Tab Fields

The fields contained in the **Readings** tab, illustrated in Figure 21 below, correspond to the "Readings" area of the "Initial Leak Data" section of the "A" Form.

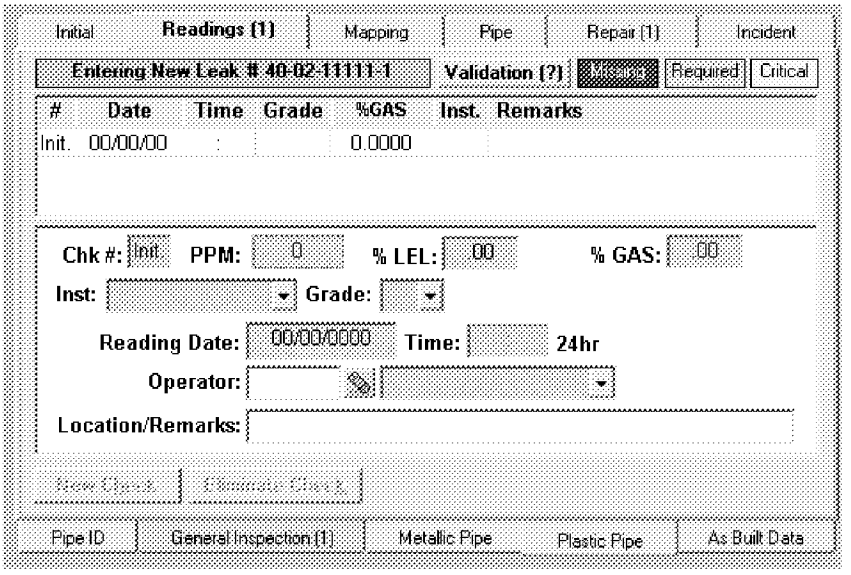


Figure 21: Readings Tab - Leak Data Input and Maintenance Screen

Table 2 on Page 26 lists the fields found in the **Readings** tab and provides the information required in each field.

Table 2: Readings Tab Fields

Field	Data Entry Information
Chk #	The application assigns the check number when the user enters leak inspection or recheck reading information. The first inspection is the "Init." inspection.
PPM, %LEL, %GAS	Enter either a parts per million (PPM), percent of the lower explosive limit (% LEL), or % GAS reading. (The application automatically calculates the reading into a %GAS reading.) *PPM:* Enter the "Hydrogen Flame Ionization" gas surface reading, in parts per million, taken during the response. *% LEL:* Enter the gas reading in % of the lower explosive limit taken during the response. *% Gas:* Enter the gas reading in % of gas taken during the response (up to 100%).
Inst	Select the type of instrument used to take the gas leak reading.
Grade	Select the leak grade. Refer to Utility Operations (UO) Standard D-S0350/S4110, "Leak Survey and Repair of Gas Transmission Distribution and Facilities." The leak grade categories are: *Grade 0*: No leak found. *Grade 1*: A leak that represents an existing or probable hazard to persons or property requiring immediate repair or continuous action until conditions are no longer hazardous. *Priority Grade 2+*: A leak that is not hazardous to life or property at the time of detection, but requires prioritized, scheduled repair based on probable future hazard. *Grade 2*: A leak that is not hazardous to life or property at the time of detection, but requires a scheduled repair based on probable future hazard. *Grade 3*: A leak that is nonhazardous at the time of detection and can reasonably be expected to remain nonhazardous.
Request Repair Date	Grade 2+ only: Enter the requested repair date. **Grade:** 2+ **Request Repair Date:** 07/27/2002
RECHECK INTERVAL MONTHS	Grade 3 only: Defaults to **60** months. Select from list **12, 36,** or **60,** or enter a specific month value between 12 and 60 months. **No effort should be made to select another recheck interval if the leak is to be rechecked within the next scheduled leak survey.** **Grade:** 3 **Recheck Interval Months:** 60
Reading Date	Enter the date the reported leak was checked or rechecked.
Time	Enter the time (in 24-hour clock) the reported leak was checked or rechecked.
Operator	Enter the four-character LAN ID or initials, and select the name, of the employee who took the gas leak reading.
Location/ Remarks	Enter the new location information, if necessary, and add any needed remarks.

Click the New Check button to clear all the fields in the tab and enter a new leak check or add a recheck reading.

Click the Eliminate Check button to delete a selected row (check) of information in the readings list area. Users cannot delete the "Init." check reading or a Grade 0 check reading. Users cannot delete a check on a leak that has an existing repair.

6.1.3 Mapping Tab Fields

The fields contained in the **Mapping** tab, illustrated in Figure 22 below, correspond to the "Mapping Data" section of the "A" Form.

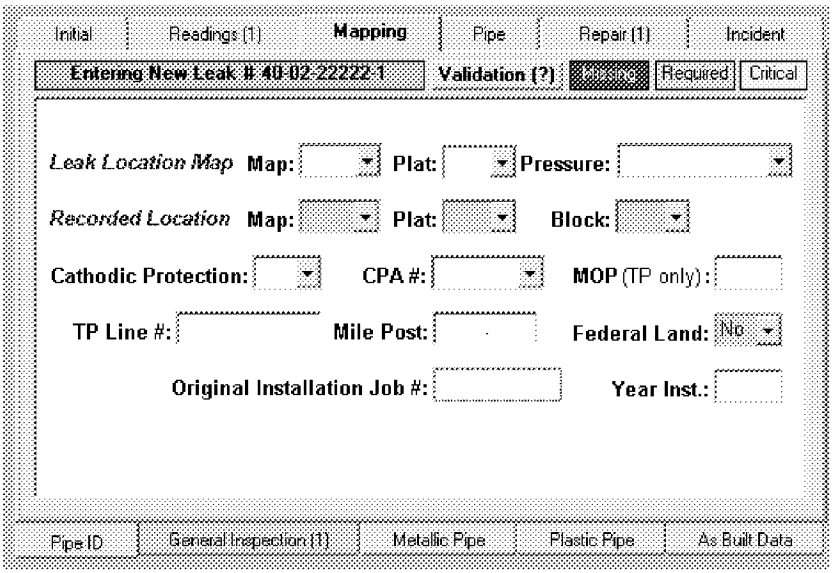


Figure 22: Mapping Tab - Leak Data Input and Maintenance Screen

Table 3 on Page 28 lists the fields found in the **Mapping** tab and provides the information required in each field.

Table 3: Mapping Tab Fields

Field	Data Entry Information
Leak Location Map	**Map** - Select the wall map number where the surface reading was discovered. **Plat** - Select the plat map number where the surface reading was discovered.
Pressure	Select the system pressure of the leaking gas facility. System pressure codes are: • **LP** = Low Pressure (<10.5 "wc) • **SHP** = Semi-High Pressure (=<25 psig) • **HP** = High Pressure (=< 60 psig) • **TP** = High Pressure (< 60 psig, transmission pressure)
Recorded Location	**Map** - Select the gas wall map number where the source (recorded) data exists. **Plat**: - Select the gas plat sheet where the source (recorded) data exists. **Block**: - Select the block number on the plat where the source (recorded) data exists.
Cathodic Protection	Select either **Yes** or **No** to indicate whether the metallic pipe is normally under cathodic protection.
CPA #	Select the assigned Cathodic Protection Area (CPA) number for the facility. This information is only required if the **Cathodic Protection** field indicated **Yes**.
MOP (TP only)	Enter the maximum operating pressure in pounds per square inch gauge (psig). This information is only required for TP.
TP Line #	Enter the respective transmission line number if the leak is on a transmission main. This information is only required for Transmission.
Mile Post	Enter the nearest milepost marker to the leaking facility. If this information is not available, it will be calculated by the Mapping department. Not required.
Federal Land	Select either **Yes** or **No** to indicate whether the gas facility is located on federal land, in a national park, on a military post, or on a Native American Reservation (Default is **No**).
Original Installation Job #	Enter the job number used to initially install the pipe.
Year Inst.	Enter the year the leaking main or service was installed. Required if a repair exist for the leak.

6.1.4 Pipe Tab Fields

The fields contained in the **Pipe** tab, illustrated in Figure 23 below, correspond to the "Pipe Data" section of the "A" Form.

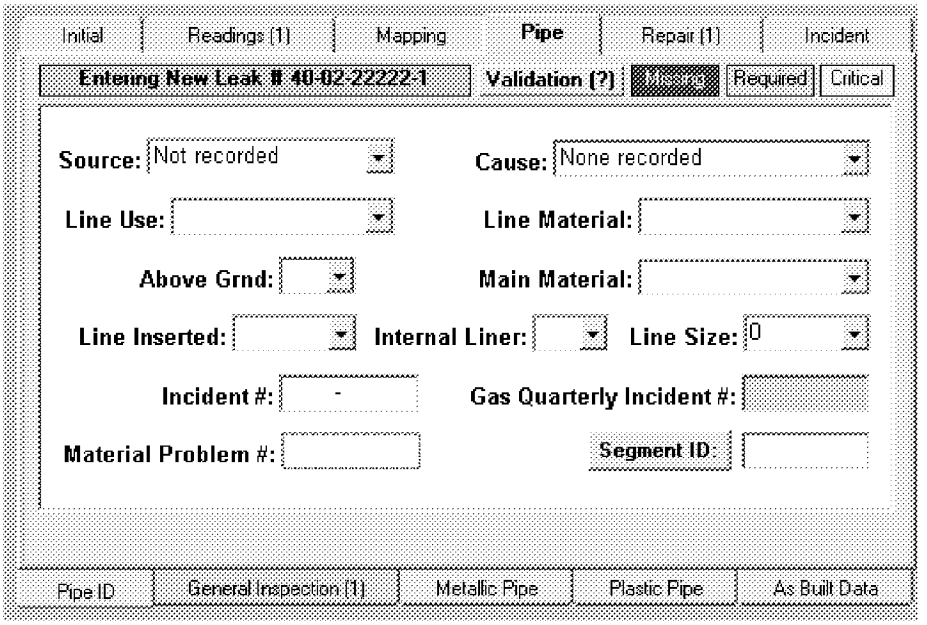


Figure 23: Pipe Tab - Leak Data Input and Maintenance Screen

Table 4 beginning on Page 30 lists the fields found in the **Pipe** tab and provides the information required in each field.

Table 4: Pipe Tab Fields

Field	Data Entry Information
Source	Select the location of the leak on the leaking gas facility. Choices include: • **Not Recorded** • **Bell Joint** • **Body of Pipe** • **Drip** • **Fusion Joint** • **Fitting** • **Girth Weld** • **Longitudinal Weld** • **Meter** • **Other** • **Physical/Mechanical Joint** • **Plastic Tee Cap** • **Regulator** • **Riser** • **SS Fitting in Plastic System** • **Tap Connection** • **Valves** • **Unknown** • **Valves**
Cause	Select the most evident cause of the gas leak. Choices include: • **Atmospheric Corrosion** - Corrosion leaks on above-ground, gas-carrying facilities (e.g., leaking external corrosion pit on an above-ground gas service riser or on an exposed section of a main). • **Cast Iron Fracture** - Cast iron fracture that has cracked on the body of the pipe. Do not use this cause for cracked-bell sealing material. • **Construction Defect** - Leaks caused by improper construction techniques (leaking poor quality welds, fusion joints, improper alignment, or hard objects impinging on pipe). • **Damage by 3rd Party** - Leaks caused by damage by a third party that is not an immediate dig-in (e.g., previous gouging of underground pipe that is now starting to leak or a vehicle running into a gas facility). If the damage exceeds $1,000, or if a fire or an explosion resulted, also enter the information in the **Gas Quarterly Incident #** field. • **Damage by Electrical Defect** - Leaks caused by improper electrical grounds or shorts. • **Damage by Natural Forces** - Leaks caused by weather or natural phenomenon (e.g., lightning, landslides). Do not use this cause for flooding. Instead, use the **Flood** cause. • **Dig-in** - Leaks occurring immediately, caused by a dig-in by a third party or PG&E. Also enter the information in the **Gas Quarterly Incident #** field if a third-party dig-in is the cause of the leak.

Table 4: Pipe Tab Fields (continued)

Field	Data Entry Information
Cause (continued)	• **Equipment Malfunction** - Leaks caused by equipment not operating properly (is not a **Material Failure).** • **External Corrosion** - Leaking corrosion pits that appear on the outside wall of a buried, steel, gas-carrying pipe. Do not use this cause for hard objects impinging on the pipe. Instead, use the **Construction Defect** cause. Do not use this cause for any leaks on copper pipe. Instead, use the **Material Failure** cause. Do not include corrosion leaks caused by improper pipe wrapping. • **Flood** - Leaks caused by flooding (a specific type of **Damage by Natural Forces).** • **Internal Corrosion** – Leaks that occurred as a result of the pipe corroding from the inside to outside. • **Material Failure** - Leaks caused by inherent material failures that are not listed above, such as cast iron bell sealing materials, poor quality steel, or any cooper leaks such as at sweat joints. Material failure may also include inherent design problems with a fitting, such as a valve stem leak, compression joints, Aldyl-A tees, or screwed fittings. Do not include cracked plastic pipe failures. Instead, use the **Plastic Crack Failure** cause. • **None Recorded** • **Other** - List any other leak causes that is not listed and that may be important for the Company to track. • **Plastic Crack Failure** - Leaks caused by cracks appearing in the body (not joints) of plastic pipe (e.g., Aldyl-A, TR418, or other types of plastic). • **Structure Fire** - Leaks caused by structure fire damaging PG&E facilities. • **Unknown** - Leak source is not specifically known or assigned to one of the other leak causes. For example, mark as **Unknown** a leaking service pipe repaired by inserting a new pipe without locating the specific leak cause. • **Vandalism** – Leaks caused by the intentional damage or tampering with PG&E facilities by a third party. • **Vehicle** - Leaks caused by vehicle impact (a specific type of Damage by Third Party).
Line Use	Select the type of gas facility: • **Distribution Main** • **Gathering** • **Service** • **Transmission**

Table 4: Pipe Tab Fields (continued)

Field	Data Entry Information
Line Material	Select the material found to be leaking. For example: • **Aldyl A Plastic** • **Cast/Ductile Iron** • **Copper** • **Other Plastic** • **Steel/Wrought Iron** • **TR 418** • **Other**
Above Grnd	Select either **Yes** or **No** to indicate whether the line is above-ground.
Main Material	Enter the main material when services or service tees are repaired.
Line Inserted	Select either **Yes, No or Unknown** if line has been inserted in existing pipe.
Internal Liner	Select either **Yes** or **No** to indicate whether the pipe has an internal liner.
Line Size	Select the nominal pipe diameter of the leaking pipe in inches.
Incident #	Enter the "Incident Report" (Form 62-0719) number assigned to the dig-in, accident, or incident.
Gas Quarterly Incident #	This number is automatically generated by IGIS after completing the **Incident** tab.
Material Problem #	Enter the "Material Problem Report" number assigned from the Material Problem Reporting Program.
Segment ID	Verify, select, or create the **Segment ID** for the Pipeline Replacement Program that prioritizes the segment of pipe where the leak was found. Follow the instructions Page 33.

6.1.5 Segment ID

Clicking the **Segment ID** button in the **Pipe** tab opens a screen containing pipe segment information (see Figure 24 below). Use this information to assign gas leaks to specific pipe segments. If necessary, the user can create new pipe segment IDs in order to properly identify a leak on a specific section of pipe.

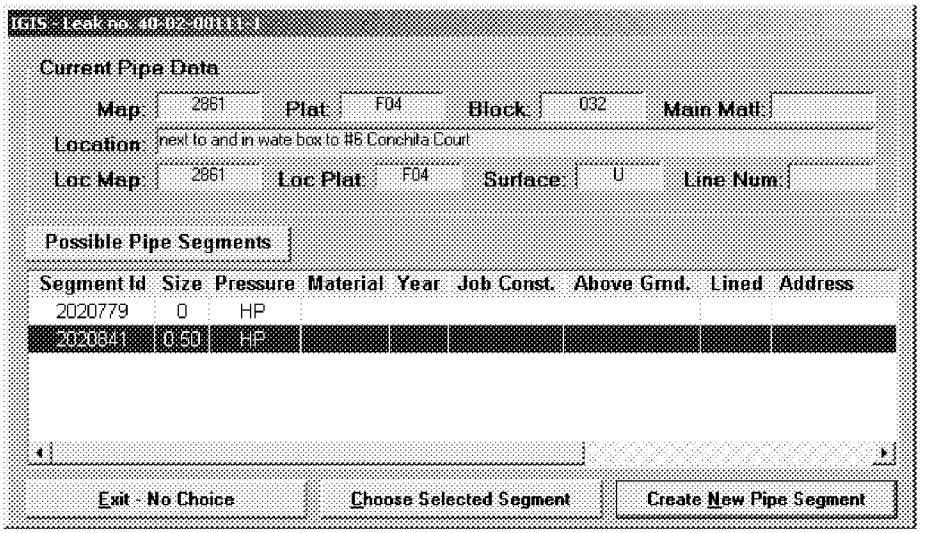


Figure 24: Segment ID Screen

To assign pipe segment ID information:

1) Select the row containing the correct pipe segment information from the **Current Pipe Data** section of the screen.

2) Click the 

button. The application returns to the **Pipe** tab and the segment ID appears in the **Segment ID** field.

3) Click the 

button to return to the **Pipe** tab without assigning a pipe segment ID.

To create a new pipe segment ID:

- Click the 

button. The application creates a new pipe segment and returns to the **Pipe** tab. The new pipe segment ID appears on the **Pipe Segment ID** button.

6.1.6 Repair Tab Fields

The fields contained in the **Repair** tab (see Figure 25 below) correspond to the "Repair Data" section of the "A" Form.

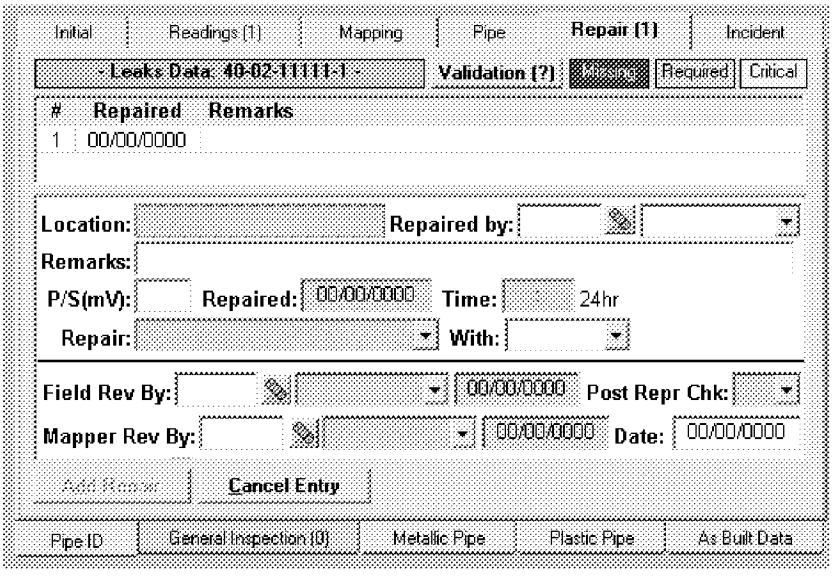


Figure 25: Repair Tab - Leak Data Input and Maintenance Screen

Table 5 on Page 35 lists the fields found in the **Repair** tab and provides the information required in each field.

Table 5: Repair Tab Fields

Field	Data Entry Information
Location	Enter the specific leak repair location (e.g., leak repair on service 5' from property line).
Repaired By	Enter the four-character LAN ID or initials, and select the name, of the employee who repaired the leak.
Remarks	Enter a description of the leak repair work, if meaningful.
P/S (mV)	Enter the soil voltage reading in mille volts (mV). Required for any external corrosion leak.
Repaired	Enter the date the repair was completed.
Time	Enter the time (in 24-hour clock) the flow of gas was stopped.
Repair	Select the type of leak repair performed. • **All** • **Bell Joint Clamp** • **Bell Joint Seal** • **BJ Permabond** • **Deactivate Dist Main <100 ft** • **Deactivate Dist Main >=100 ft** • **Deactivate TP Main** • **Mechanical Repair fitting** • **Other** • **Patch Weld** • **Replace Dist Main <100 ft** • **Replace Dist Main >= 100 ft** • **Replace TP Main** • **Replace Valve <2 inch** • **Replace Valve >= 2 inch** • **Service Entirely Replaced** • **Service Partially Replaced** • **Skinner Clamp** • **Soap and/or Tap** • **SS Clamp w/Anode** • **Tee Fused over Defect** • **Tighten Cap or Bolt** • **Welded Sleeve or Can**
With	Select either **Steel** or **TR 418** to indicate what the pipe was replaced with, if applicable.
Field Rev By	Enter the four-character LAN ID or initials, and select the name, of the gas construction supervisor or qualified management employee who reviewed the work and documentation. Also, enter the date of the review.
Post Repair Chk	Select **Yes** or **No** to indicate whether the leak repair needs to be checked. If **Yes,** enter the date the leak repair should be checked by calibrated instruments in the **Date** field.
Date	Enter the date the leak repair should be checked by calibrated instruments, if the leak repair needs to be rechecked.
Mapper Rev By	Enter the four-character LAN ID or initials, or select the name, of the qualified mapping employee who reviewed the documentation. Also, enter the date the documentation was reviewed.
Posting Required	This field is required **only** on the "A" form and is not an entry on IGIS. Select **Yes** or **No** to indicate whether posting is required from this leak repair.

Click the Add Repair button to clear all fields in the tab in order to enter a new leak repair.

Click the Eliminate Repair button to delete the information in the tab.

Click the Save button to save the repaired leak information if the **Incident Tab** is not required to be filled out. A message does not appear indicating that the changes have been made, but they are saved.

6.1.7 Incident Tab Fields

The fields contained in the **Incident** tab (see Figure 26 below) correspond to the "Gas Quarterly Incident Data" section of the "A" Form.

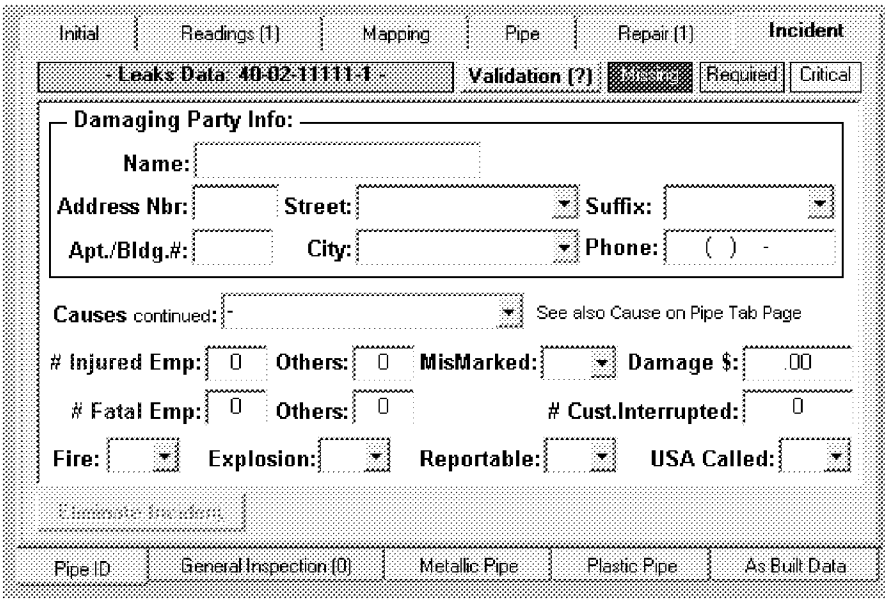


Figure 26: Incident Tab - Leak Data Input and Maintenance Screen

Table 6 on Page 37 lists the fields found in the **Incident** tab and provides the information required in each field.

Table 6: Incident Tab Fields

Field	Data Entry Information
Name	Enter the name of the person or business that damaged the PG&E facilities.
Address Nbr	Enter the building number of the person or business that damaged the PG&E facilities.
Street	Select the name of the street (or enter if the street name is not on the list) of the person or business that damaged the PG&E facilities.
Suffix	Select the street suffix of the address of the person or business that damaged the PG&E facilities.
Apt/Bldg#	Enter the apartment or suite number of the person or business that damaged the PG&E facilities.
City	Select the city (or enter if the city is not on the list) of the person or business that damaged the PG&E facilities.
Phone	Enter the telephone number, including the area code, of the person or business that damaged the PG&E facilities.
Causes continued	Select the cause of the incident.
# Injured Emp	Enter the number of employees injured as a result of the gas incident.
Others	Enter the number of people (other than PG&E employees) injured as a result of the gas incident.
MisMarked	Indicate if this was a mismarked pipe by selecting **Yes** or **No**.
Damage $	Enter the amount of damage (repair cost dollars) to PG&E and third-party facilities.
# Fatal Emp	Enter the number of PG&E employees killed as a result of the gas incident.
Others	Enter the number of people (other than PG&E employees) killed as a result of the gas incident.
# Cust. Interrupted	Enter the number of customers without gas service due to the incident.
Fire	Select **Yes** or **No** to indicate whether a fire resulted from the gas incident.
Explosion	Select **Yes** or **No** to indicate whether an explosion resulted from the gas incident.
Reportable	Select **Yes** or **No** to indicate whether this was a reportable incident per UO Standard D-S0355, "CPUC and DOT Reportable Incidents, Curtailments and Conditions and Low System Pressure Problem Reporting."
USA Called	Select **Yes** or **No** to indicate whether the damaging party contacted USA.

Note: A visual warning appears (see Figure 27 below) when the user selects or changes the **Cause** value on the **Incident** tab. A change updates the **Cause** field on the **Pipe** tab.

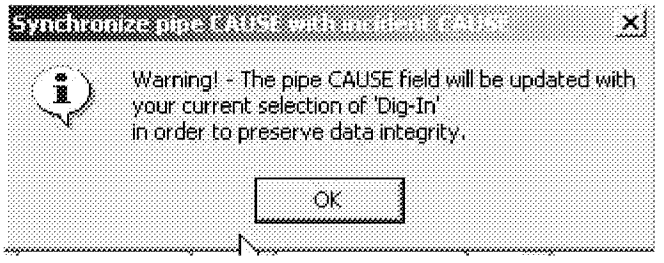


Figure 27: Synchronize Pipe CAUSE with Leak CAUSE Message Box

Click the Save button to save information. A message does not appear indicating that the changes have been made, but they are saved.

6.2 Enter Inspection Information Associated with a New Gas Leak

Users must enter all gas pipe inspections into IGIS. User should enter inspections with associated gas leaks in IGIS using the **Leaks Data→View/Update** option from the **IGIS Main Menu** screen.

To enter inspection information associated with a gas leak:

> **Note:** Users must enter inspection information associated with a new gas leak after entering leak information for the new gas leak. This is necessary because certain fields of the inspection tabs automatically fill with information from the leak tab fields.

1) After entering and saving leak data, click the General Inspection tab in the leak information area of the **Leak Data Input and Maintenance** screen, as illustrated in Figure 28 on Page 39.

2) Click the New Inspection button and the **General Inspection** data fields appear. IGIS automatically generates the **Inspection #**.

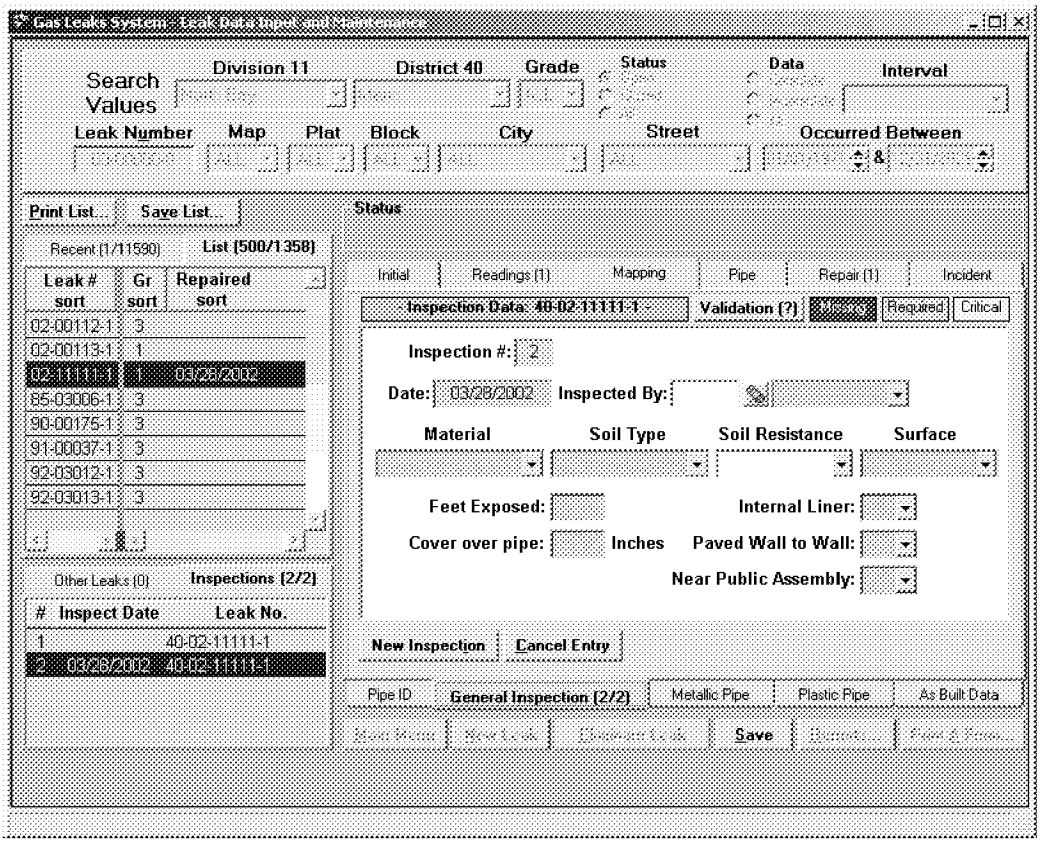


Figure 28: General Inspection Tab - Leak Data Input and Maintenance Screen

The fields on the **Pipe ID** tab automatically fill with data from corresponding fields in the leaks **Initial** tab. These are view-only fields for inspections associated with a leak.

3) Enter information in fields of the **General Inspection, Metallic Pipe, Plastic Pipe,** and **As Built Data** tabs of the screen. This is where users enter most of their data. To access the fields of a tab, click the tab title. Data entry instructions for the fields in these tabs are provided in the following pages.

4) Click the Cancel Entry button to clear all of the inspection data that was entered.

5) Click the Cancel Leak Edit button to undo a previous save of information within a tab.

6) Click the Save button to save information. A message does not appear indicating that the changes have been made, but they are saved.

7) Click the Print A Form... button to print the "A" Form. The option screen will appear and ask you if you want to 'Print A-Form only' or 'Print A-Form and Update Repair Log'. Select the option to 'Print A-Form only' and select Yes.

8) Click the Reports... button to go the **Report Options** screen and generate reports (explained in Section 14, "Reports," on Page 91).

9) Click the Main Menu button to return to the **IGIS Main Menu** screen.

   a) The message illustrated in Figure 29 below displays to confirm whether the user still wants to save the information entered after clicking the **Save** button.

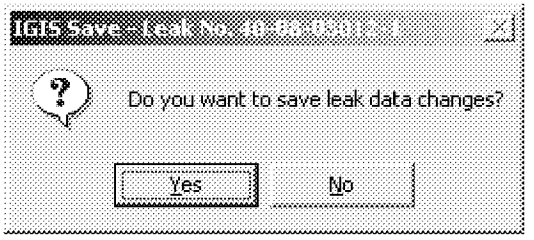


Figure 29: Save Message Box

   b) The message illustrated in Figure 30 below appears in the **Status** section located at the top of the tab if the user attempts to save information before entering all required information in a particular tab. The red warning text flashes, the cursor is placed in the field missing required information, and the background color of the field changes to red.

Figure 30: Required Data Missing Message

6.2.1 General Inspection Tab Fields

The fields contained in the **General Inspection** tab, illustrated in Figure 31 below, correspond to the "General Inspection Data" section of the "A" Form.

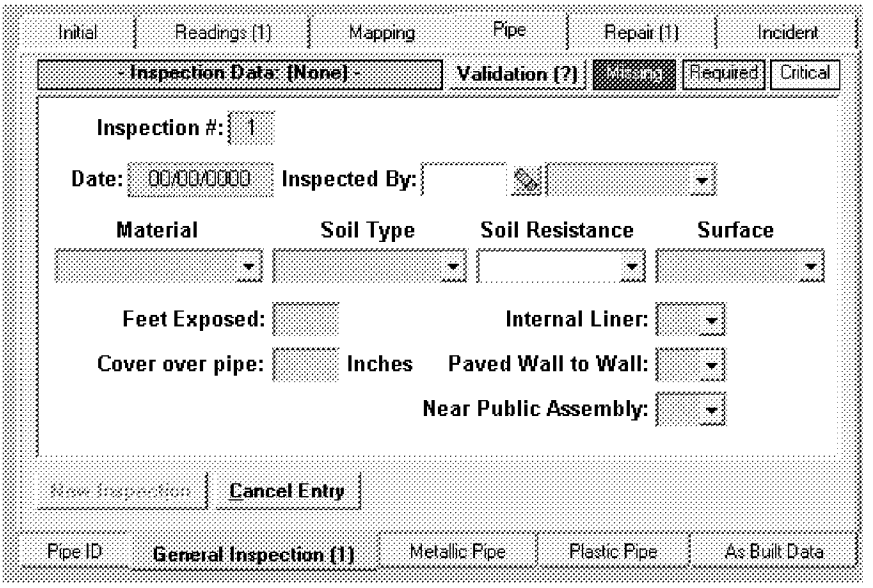


Figure 31: General Inspection Tab - Leak Data Input and Maintenance Screen

Table 7 on Page 42 lists the fields found in the **General Inspection** tab and provides the information required in each field.

Table 7: General Inspection Tab Fields

Field	Data Entry Information
Inspection #	The application automatically assigns the inspection number.
Date	Enter the date of the pipe inspection.
Inspected By	Enter the four-character LAN ID or initials, and select the name, of the employee inspecting the pipe.
Material	Select the type of pipe material inspected. • **Aldyl A plastic** • **Cast/Ductile Iron** • **Copper** • **Other** • **PE 2406 (Plastic)** • **Plastic, other** • **Steel/Wrought Iron** • **TR 418 (Plastic)**
Soil Type	Select the appropriate soil type. • **Clay** **C** • **Loam** **L** • **None record** **-** • **Other** **O** • **Rock** **R** • **Sand** **S** • **Wet** **W**
Soil Resistance	Select the pipe-to-soil resistance reading. Required for TP only.
Surface	Select the type of surface finish (as found) covering the inspected pipe. • **Concrete** • **Tar Compound** • **Unsurfaced** • **Other**
Feet Exposed	Enter the amount of feet exposed on the pipe for the inspection.
Cover over Pipe	Enter the measurement in inches of the cover from finished ground to the top of the pipe.
Internal Liner	Select **Yes** or **No** to indicate whether the pipe has an internal liner.
Paved Wall to Wall	Select **Yes** or **No** to indicate whether the pipe is under continuous paving from the main to the building wall.
Near Public Assembly	Select **Yes** or **No** to indicate whether the pipe is near a school, hospital, church, or building that is occupied by 20 or more people.

6.2.2 Pipe ID Tab Fields

The fields contained in the **Pipe ID** tab, illustrated in Figure 32 below, automatically fill with information entered in fields of the leak information tabs.

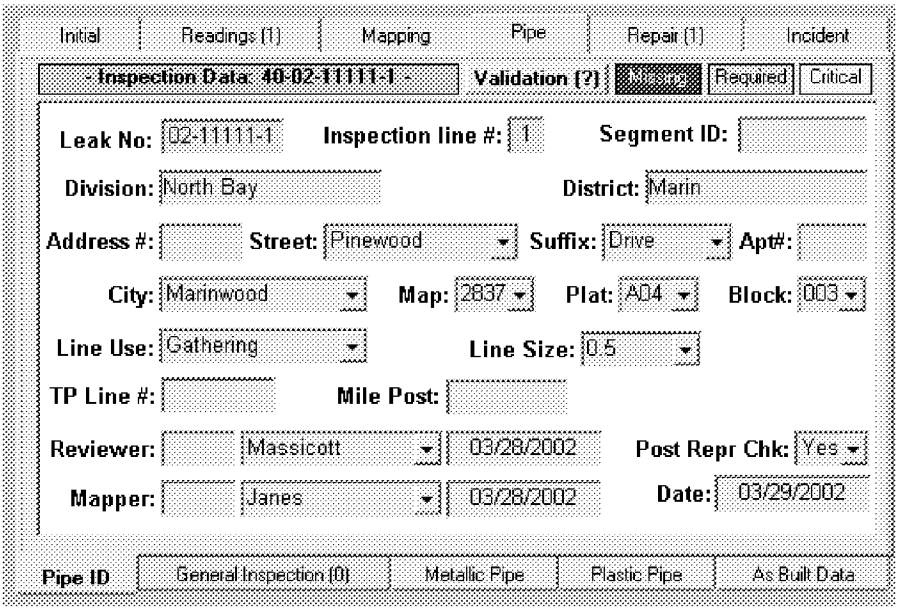


Figure 32: Pipe ID Tab - Leak Data Input and Maintenance Screen

6.2.3 Metallic Pipe Tab Fields

The fields contained in the **Metallic Pipe** tab, illustrated in Figure 33 below, correspond to the "Metallic Pipe Condition" section of the "A" Form.

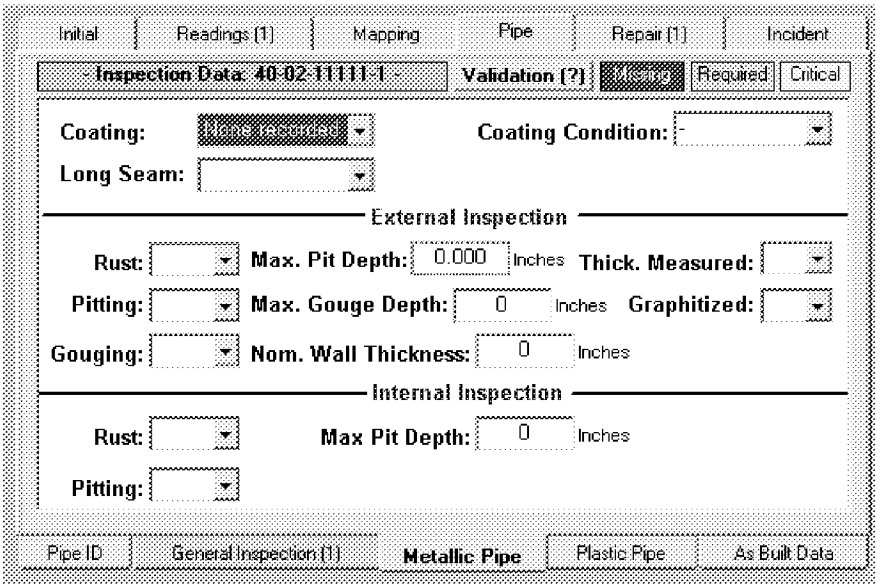


Figure 33: Metallic Pipe Tab - Leak Data Input and Maintenance Screen

Table 8, beginning on Page 45, lists the fields found on the **Metallic Pipe** tab and provides the information required in each field.

Table 8: Metallic Pipe Tab Fields

Field	Data Entry Information
Coating	Select the type of covering on the pipe protecting it from corrosion. • **Bare** • **Double Wrap** • **None recorded** • **Other** • **Paint** • **Plastic Coated** • **Single Wrap** • **Somastic** • **Tape** • **Tar**
Coating Condition	Select the appropriate information to indicate whether the pipe coating is damaged, and to what extent. • **Not Recorded** • **Excellent** • **Good** • **Fair** • **Poor**
Long Seam	Select the appropriate information to indicate what type of seam of the pipe. • **Not recorded** • **DSAW** • **ERW** • **AO SMITH** • **Spiral** • **SSAW** • **SMLS** • **LAP**
External Inspection Section	
Rust	Select the appropriate information to indicate the amount of corrosion (rust) on the pipe. • **None** • **Light** • **Heavy**
Pitting	Select the appropriate description for the amount of pitting on the pipe. • **None** • **Light** • **Heavy**
Gouging	Select the appropriate description as to how the pipe has been gouged by external forces. Note: If a leak occurs where heavy gouging exists, it should likely be a "3rd Party Damage" – Leak Cause. • **None** • **Light** • **Heavy**
Max. Pit Depth	Enter the depth of maximum pit as measured in thousandths of an inch. Required for Transmission.

Table 8: Metallic Pipe Tab Fields (continued)

Field	Data Entry Information
Max. Gouge Depth	Enter the depth of maximum gouge as measured in thousandths of an inch. Required for Transmission.
Nom. Wall Thickness	Enter the thickness of the pipe as measured in thousandths of an inch. Required for Transmission.
Thick. Measured	Select **Yes** or **No** to indicate whether the wall thickness was measured in the field.
Graphitized	Select **Yes** or **No** to indicate whether the cast iron pipe is discolored and deteriorated.
Internal Inspection Section	
Rust	Select the appropriate description of the amount of rust inside the pipe. • **None** • **Light** • **Heavy**
Pitting	Select the appropriate description of the amount of corrosion inside the pipe. Required for Transmission. • **None** • **Light** • **Heavy**
Max Pit Depth	Enter the depth of the maximum internal pit as measured in thousandths of an inch. Required for Transmission.

6.2.4 Plastic Pipe Tab Fields

The fields contained in the **Plastic Pipe** tab, illustrated in Figure 34 below, correspond to the "Plastic Pipe Condition" section of the "A" Form.

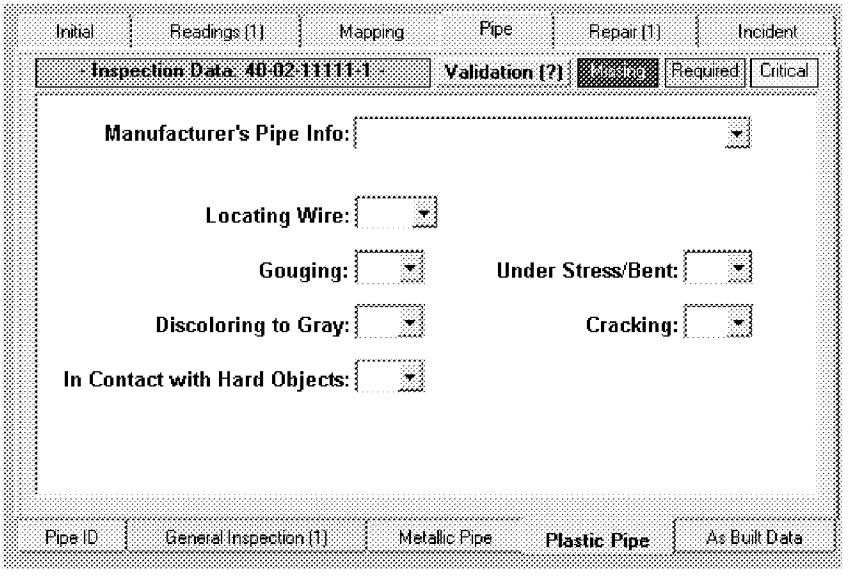


Figure 34: Plastic Pipe Tab - Leak Data Input and Maintenance Screen

Table 9 below lists the fields found in the **Plastic Pipe** tab and provides the information required in each field.

Table 9: Plastic Pipe Tab Fields

Field	Data Entry Information
Manufacturer's Pipe Info	Select the manufacturer's name, if available. • **<Illegible>** • **CSR Polypipe** • **DuPont Aldyl A** • **KWH Pipe** • **Nipak** • **Performance Pipe** • **Phillips Driscopipe** • **Plexco** • **Standard** • **Uponor**
Locating Wire	Select the appropriate description to indicate the condition of the insulated locating wire. • **Good** • **Bad** • **None**
Gouging	Select **Yes** or **No** to indicate whether the pipe is gouged.
Under Stress/Bent	Select **Yes** or **No** to indicate whether the pipe has tensile loading or is bent.
Discoloring to Gray	Select **Yes** or **No** to indicate whether Aldyl-A Pipe is abnormally colored.
Cracking	Select **Yes** or **No** to indicate whether the pipe shows signs of cracking.
In Contract With Hard Objects	Select **Yes** or **No** to indicate whether the pipe is in contact with hard objects.

6.2.5 As Built Data Tab Fields

The fields contained in the **As Built Data** tab, illustrated in Figure 35 below, correspond to the "Location Sketch" section of the "A" Form.

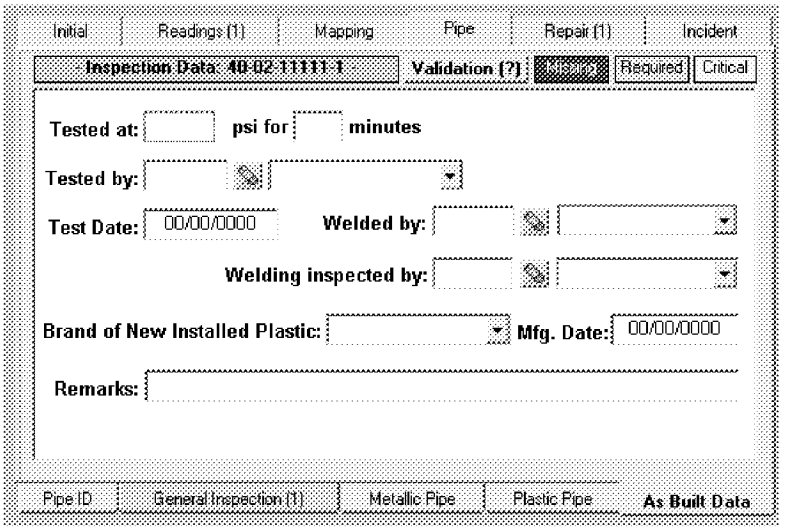


Figure 35: As Built Data Tab - Leak Data Input and Maintenance Screen

Table 10 below lists the fields found in the **As Built Data** tab and provides the information required in each field.

Table 10: As Built Data Tab Fields

Field	Data Entry Information
Tested at: psi for minutes	Enter the minimum indicated test pressure in pounds per square inch gauge (psig). Enter the number of minutes (minimum 5) the pipe was tested at the psig.
Tested by	Enter the four-character LAN ID or initials, and select the name, of the employee who performed the test.
Test Date	Enter the date the test was performed.
Welded by	Enter the four-character LAN ID or initials, and select the name, of the employee who performed the welding.
Welding inspected by	Enter the four-character LAN ID or initials, and select the name, of the welding inspector.
Brand of New Installed Plastic	Select the brand name of the plastic pipe installed, as required in Gas Design Standard A-93.1, "Plastic Gas Distribution System Construction and Maintenance." • **CSR Polypipe** • **KWH Pipe** • **Phillips** • **Uponor**
Mfg. Date	Enter the date the installed plastic pipe was manufactured, as required in Gas Design Standard A-93.1, "Plastic Gas Distribution System Construction and Maintenance."
Remarks	Enter any special conditions noted during the inspection.

6.3 View or Edit Leak and Inspection Information on a Recently Entered Gas Leak

Information on a recently entered gas leak may be viewed or edited on the **Leak Data Input and Maintenance** screen, as follows:

1) Select the leak number from the list in the **Recently Entered Leaks** section on the left side of the screen, as illustrated in Figure 36 below.

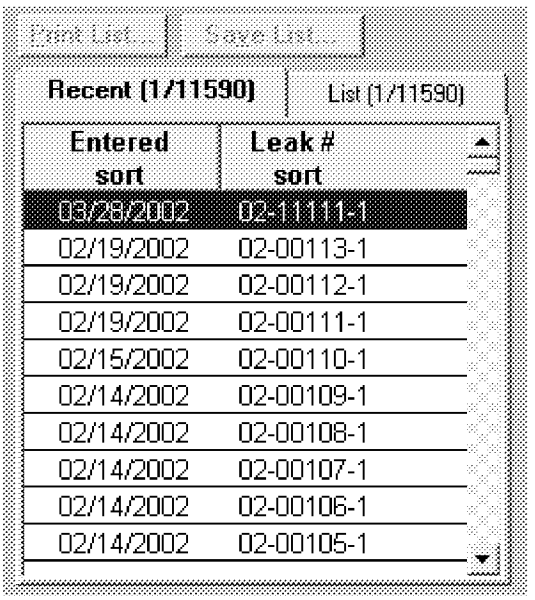


Figure 36: Recently Entered Leaks Section

2) Click a column title to sort the list by leak number or by the date the leak number was entered in the IGIS application. Click again to toggle the sort between ascending and descending order.

3) Click the Print List... button to print the list of recently entered leaks.

4) View or edit leak information on the selected leak in the fields of the **Initial, Readings, Mapping, Pipe, Repair,** and **Incident** tabs of the screen. To access the fields of a tab, click the tab title. Data entry instructions for the fields of these tabs are provided in Section 6.1, "Enter Information on a New Gas Leak," on Page 20. Users cannot update any field that is grayed out (e.g., leak number).

5) Click the General Inspection button to enter inspection information associated with the leak. Data entry instructions for the fields of these tabs are provided in Section 6.2, "Enter Inspection Information Associated with a New Gas Leak," on Page 38.

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7 View/Update Gas Leak and Inspection Information

Users view, edit, and report information on existing gas leaks, repairs, and inspections using the **Leak→Leak Data→View/Update** option of the IGIS application.

The **Leak Data Input and Maintenance** screens show the fields and information found on the "A" Form (see Appendix 1, "Form 62-4060, Leak Survey, Repair, Inspection, and Gas Quarterly Incident Report").

Use the screens in this portion of the application to:

- Edit leak information on a previously entered gas leak.
- Edit inspection information on a previously entered gas leak.
- View leak or inspection information on a previously entered gas leak.
- Report on information for a previously entered gas leak(s).

7.1 View or Edit Gas Leak and Inspection Information

Clicking the **Leaks Data→View/Update** option on the **IGIS Main Menu** screen opens the **Leak Data Input and Maintenance** screen, illustrated in Figure 37 below, for viewing or editing gas leak and inspection information.

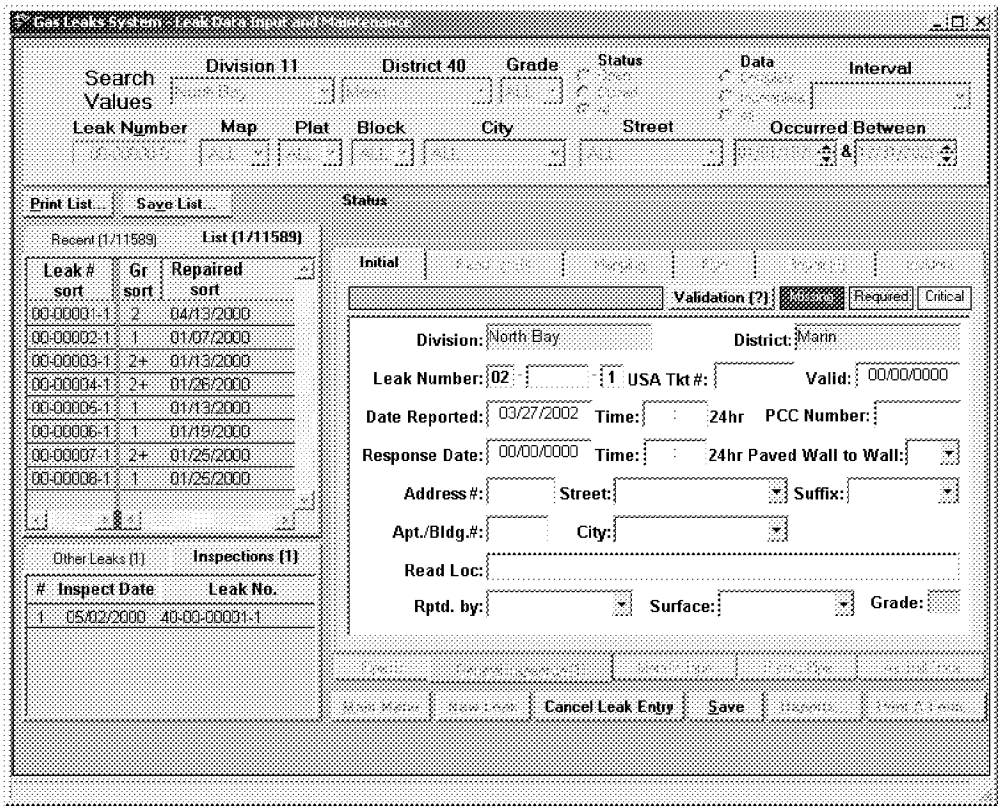

Figure 37: Leak Data→View/Update Option - Leak Data Input and Maintenance Screen Leak Data

To view or edit gas leak information:

1) Select the criteria for the gas leak in the **Search Values** section along the top of the screen, as illustrated in Figure 38 below.

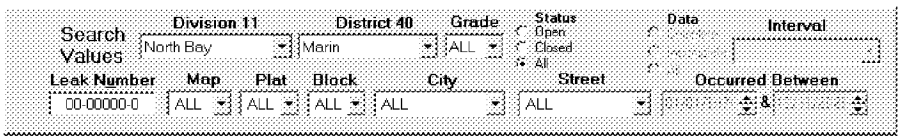

Figure 38: Search Values Section

Table 11 below lists the fields found in the **Search Values** section and provides the information required in each field.

Table 11: Leak Data - Search Values Section Fields

Field	Data Entry Information
Division	The field defaults to the division specified in the application's settings.
District	The field defaults to the district specified in the application's settings. If necessary, select a different division.
Grade	Select the leak grade. • **0** • **1** • **2** • **2+** • **3** • **ALL**
Status	Select the leak status: **Active, Inactive,** or **All.**
Data	This field is not operational with this version of IGIS.
Interval	This field is not operational with this version of IGIS.
Leak Number	Enter a leak number.
Map, Plat, Block	Select the wall map, plat number, or block number where the leak is located.
City	Select the city where the leak is located.
Street	Select the street name where the leak is located.
OCCURRED BETWEEN	This field is not operational with this version of IGIS.

After entering information in the **Search Values** fields, a list of gas leaks meeting the criteria displays in the **Selected Leaks List** section of the screen, illustrated in Figure 39 below. The list indicates the number of gas leaks meeting the criteria. The user may sort the list by leak number, grade, or date repaired. Click a column title to sort the list by that column's criterion.

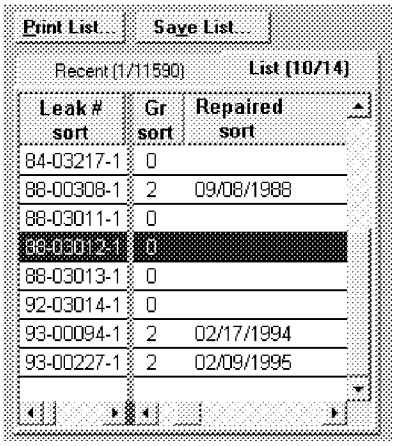

Figure 39: Selected Leaks List Section

If gas leaks meeting the search criteria do not exist, a message box appears indicating this as illustrated in Figure 40 below.

Figure 40: Block Data Message Box

2) Click the Print List... button to print the list of gas leaks.

3) Select a leak number from the **Selected Leak List.** Information about the selected gas leak displays in the **Leak Data** section of the screen.

   The application lists other gas leaks occurring on the same pipe in the **Other Leaks** section. If there are no additional leaks in the pipe segment, the message illustrated in Figure 41 below displays.

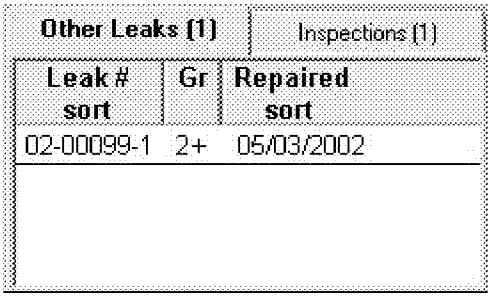

Figure 41: Other Leaks Section

4) View or edit the information located in the tabs of the **Leak Data** section of the screen. To access the fields of a tab, click the tab title. Instructions for viewing and editing the fields of each tab are explained in Section 6.1, "Enter Information on a New Gas Leak," on Page 20.

5) Click the New Leak button to enter information for a new gas leak.

6) Click the Save button to save information. A confirmation message does not display to indicate that the changes have been made, but they are saved.

7) Click the Cancel Leak Edit button to undo the most recently saved version of the information within a tab.

8) Click the Print A Form... button to print the "A" Form.

9) Click the Reports... button to go to the Report Options screen and generate reports (see Section 14, "Reports," on Page 91).

10) Click the General Inspection button to view or edit gas leak inspection information (see Section 7.2, "View or Edit Inspection Information for a Gas Leak," on Page 57).

    If there are no previous inspections for the pipe segment, the # **Inspections** field indicates **0,** and the **Enter Inspection Data for Leaking Pipe** button is displayed at the bottom of the screen, as illustrated in Figure 42 below.

Figure 42: Enter Inspection Data for Leaking Pipe Button

If there are previous inspections for the pipe segment, the # **Inspections** field indicates the number of inspections, and the **Display Inspection Data for Leaking Pipe** button displays at the bottom of the screen, as illustrated in Figure 43 below.

Figure 43: Display Inspection Data for Leaking Pipe Button

11) Click the Main Menu button to return to the **IGIS Main Menu** screen.

Note: To exit the screen, either **Save** or **Cancel Leak Edit.** The command buttons **Main Menu, New Leak, Reports,** and **Print A Form** are disabled in the "Add" or "Edit" mode.

a) The message illustrated in Figure 44 below displays to confirm whether the user still wants to save the information entered after clicking the **Save** button.

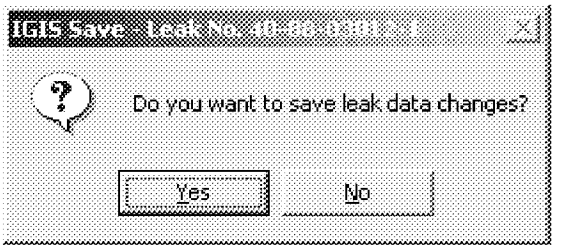

Figure 44: Save Message Box

b) After clicking the **OK** button, the application displays another message, illustrated in Figure 45 below. The message box described the missing information. Clicking the **OK** button places the cursor in the required field.

Figure 45: Save Data Warning Message Box

c) After saving information, but before entering all of the required information in a particular tab, the message illustrated in Figure 46 below appears in the **Status** section, located at the top of the tab. The red warning text flashes.

Figure 46: Required Data Missing Message

7.2 View or Edit Inspection Information for a Gas Leak

After accessing leak information for a gas leak in the **Leak Data Input and Maintenance** screen (see Section 6.3, "View or Edit Leak and Inspection Information on a Recently Entered Gas Leak," on Page 49), the user may view or edit inspection information.

To view or edit Inspection information on a gas leak:

1) If the pipe segment was not previously inspected, the **# Inspections** field indicates **0** on the **General Inspection** tab, as illustrated in Figure 47 below.

Figure 47: Zero Inspections Indicated on General Inspection Tab

If the pipe segment was previously inspected, the **# Inspections** is displayed on the General **Inspection** tab, as illustrated in Figure 48 below.

Figure 48: Number of Inspections Indicated on General Inspection Tab

The **Inspection Data** area of the screen appears as illustrated in Figure 49 below.

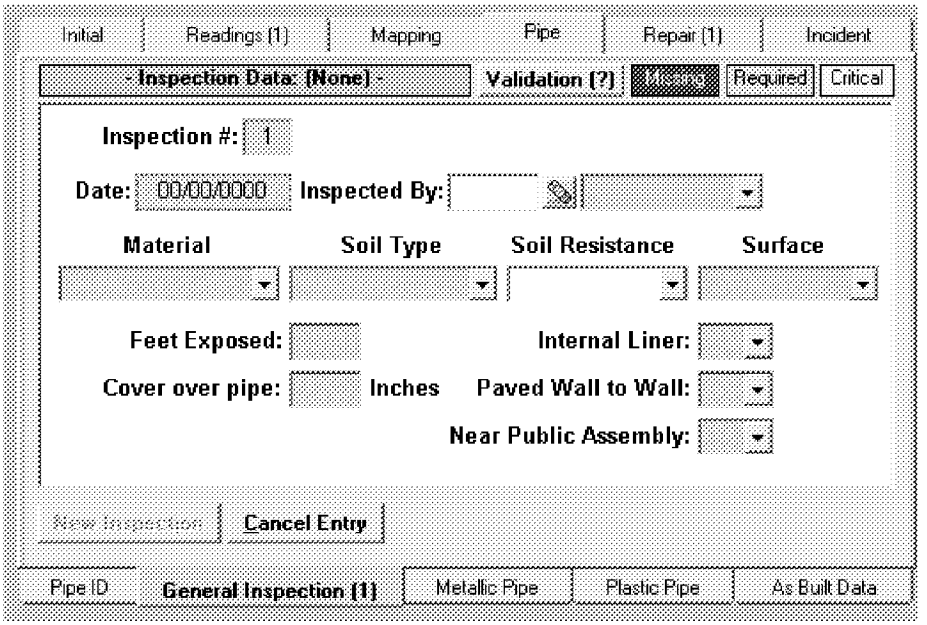

Figure 49: Leak Data→View/Update Option - Leak Data Input and Maintenance Screen, Inspection Data

Previous gas leak inspections for the pipe segment appear in the **Inspections** section of the screen, as illustrated in Figure 50 below.

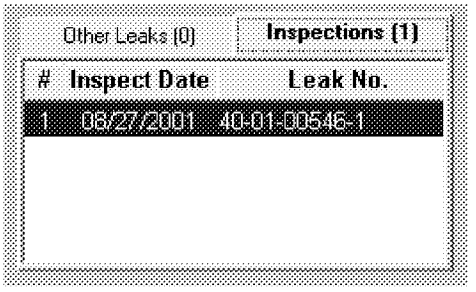

Figure 50: Inspections Section

2) View or edit the information located in the tabs of the **Inspection Data** section of the screen. To access the fields of a tab, click the tab title. Instructions for viewing and editing the fields of each tab are explained in Section 6.1, "Enter Information on a New Gas Leak," on Page 20.

3) Click the **New Inspection** button to enter information on a new gas leak inspection.

4) Click the Save button to save information. A confirmation message does not display to indicate that the changes have been made, but they are saved.

5) Click the Cancel Leak Edit button to undo a previous save of information within a tab.

6) Click the Print A Form... button to print the "A" Form.

7) Click the Reports... button to go to the **Report Options** screen and generate reports (explained in Section 14, "Reports," on Page 91).

8) Click the Main Menu button to return to the **IGIS Main Menu** screen.

Note: To exit the screen, either **Save** or **Cancel Leak Edit.** The command buttons **Main Menu, New Leak, Reports,** and **Print A Form** are disabled in the "Add" or "Edit" mode.

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a) The message illustrated in Figure 51 below displays to confirm whether the user still wants to save information entered after clicking the **Save** button.

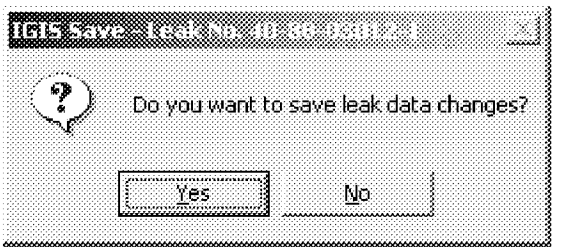

Figure 51: Save Message Box

b) After clicking the **OK** button, the application displays another message, illustrated in Figure 52 below. The message box described the missing information. Clicking the **OK** button places the cursor in the required field.

Figure 52: Save Data Warning Message Box

c) After saving information, but before entering all of the required information in a particular tab, the message illustrated in Figure 53 below appears in the **Status** section located at the top of the tab. The red warning text flashes.

Figure 53: Required Data Missing Message

8 Inspections

This feature is not operational with this version of IGIS.

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9 Repair Log

Users create a report on existing gas leaks that are scheduled for repair using the **Leak→Repair Log** option of the IGIS application.

The **Repair Log** screen (see Figure 54 below) is used to create a report on existing gas leaks that are scheduled for repair. The leak repair supervisor can assign the leak repair to a crew and use the log as a follow-up tool. Additionally, this log is designed to be used, if desired, as an interdepartmental record of transmittal. It can be used as a registry of transmittal if the office so chooses. The leak is added to the log by the Mapping department, when it chooses to print and enter the leak in the **Repair Log**. The leak is removed from the Log when it is entered into IGIS as repaired.

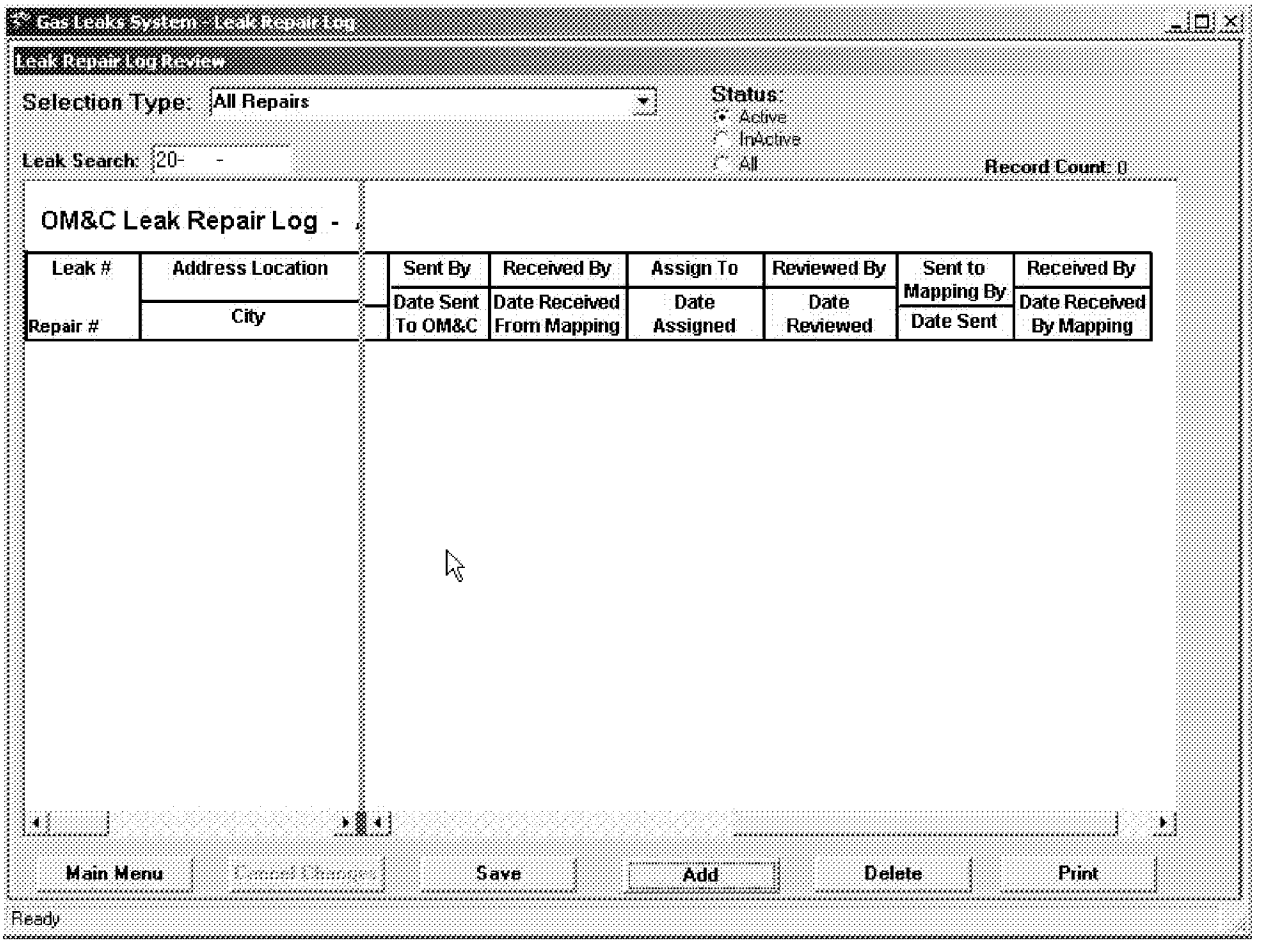

Figure 54: Repair Log Screen

To view or edit information on an existing gas leak:

1) Select one of the criteria from the **Selection Type** drop-down list (see Figure 55 below).

Figure 55: Selection Type Drop-Down List

2) Enter the leak number in the **Leak Search** field.

3) Select one of the option buttons for the **Status** of the leak:

   - Active
   - **Inactive**
   - **All**

4) Click the Add button to add the leak to the **Repair Log.** The **Add Leak** dialog box opens (see Figure 56 below).

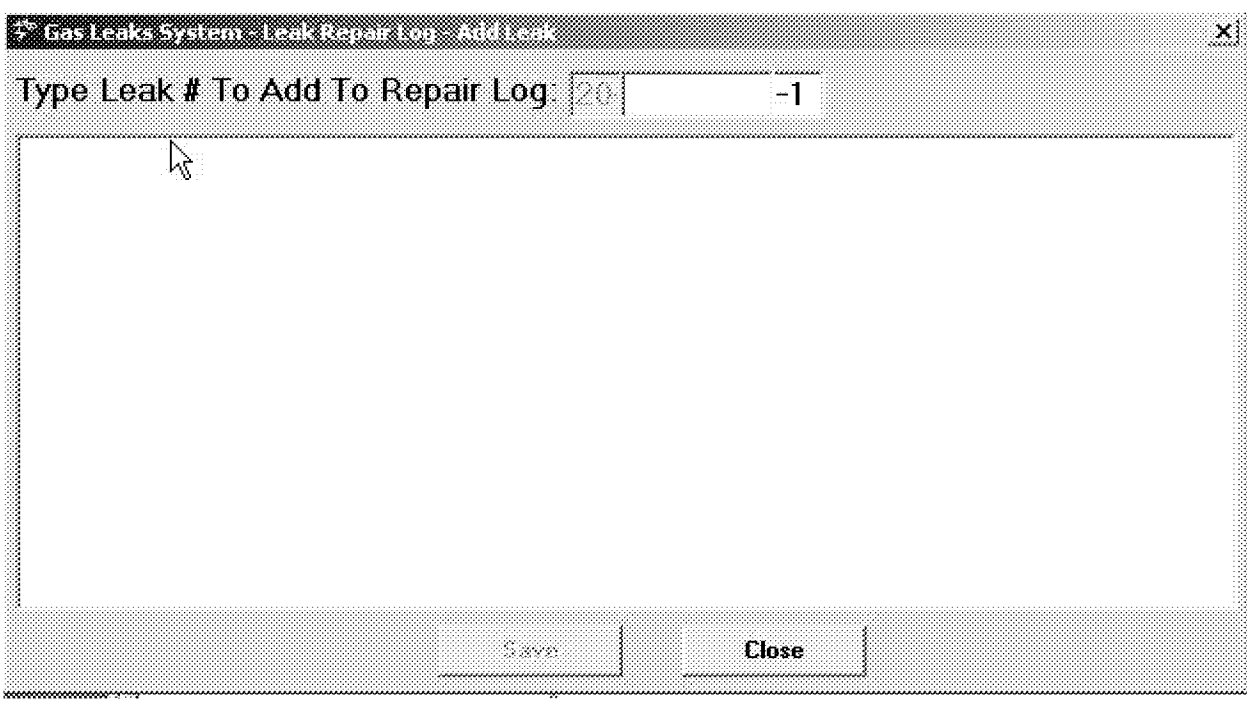

Figure 56: Add Leak Dialog Box

5) Enter the leak number into the **Type Leak # to Add To Repair Log** field.

6) Type information about the leak in the large text field.

7) Click the Save button to save information. The **Adding Leak to Repair Log** message box illustrated in Figure 57 below opens to confirm whether the user still wants to add the leak onto the Leak Repair Log.

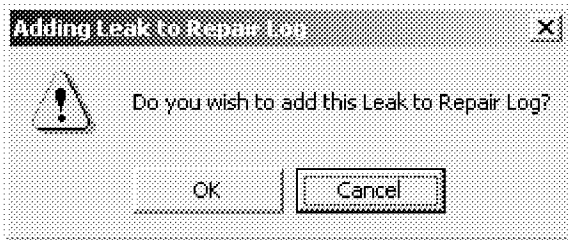

Figure 57: Adding Leak to Repair Log Message Box

8) Click the OK button to add the leak to the Repair Log. The **Update Successful** message box illustrated in Figure 58 below opens to confirm that the leak has been added to the Repair Log.

Figure 58: Update Successful Message Box

9) Click the Close button to close the **Add Leak** dialog box and return to the **Repair Log** screen.

10) To update the **Repair Log** as work on the leak progresses, select names from the following drop-down lists, and enter the date in the associated date fields:

- Sent By
- **Received By**
- **Assign To**
- **Reviewed By**

- **Sent to Mapping By**
- **Received By**

11) Click the 

button to print the Repair Log.

12) Click the 

button to save information.

13) Click the 

button to delete a leak from the Repair Log.

14) Click the 

button to return to the IGIS Main Menu screen.

10 Survey Log

This feature is not operational with this version of IGIS.

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11 Recheck Log

The IGIS application **Recheck Log** screen is used to enter information on gas leak rechecks. The user may enter recheck information on gas leaks in the screen either a line number at a time or multiple line numbers. The **Recheck Log** screen's appearance depends on the format that was selected for the log when it was created in the **Report Options** screen.

11.1 Enter Recheck Information for a Gas Leak

Clicking the **Recheck** option on the **IGIS Main Menu** screen opens the **Recheck Log** screen, illustrated in Figure 59 below. Use this screen for entering information on gas leak rechecks.

> **Note:** To have a recheck key number appear on this screen, the user must first create ***and print*** a **Recheck Log** in the **Report Options** screen. If the Log is not printed, the user will not be able to call it up in the **Recheck Log** screen to make updates.

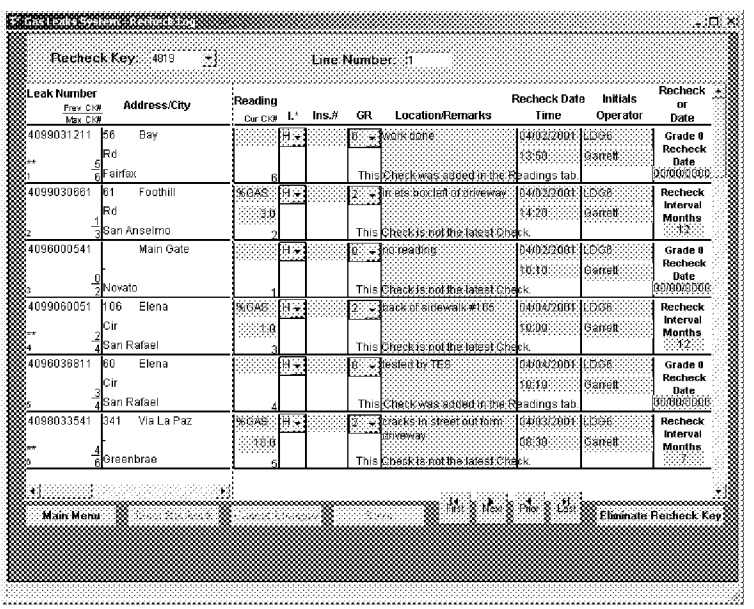

Figure 59: Recheck Log Screen

To enter recheck information for a gas leak:

1) Select the **Recheck Key** number from the drop-down list at the top of the screen, illustrated in Figure 60 below, to retrieve recheck data in the exact format of the printed report. The **Recheck Key** is a unique number that is generated when the **Recheck Leak Log Report** has been printed. The key number is used to recall the particular Log Number within the program for update.

Figure 60: Top of Recheck Log Screen

2) Enter the **Line Number** or use the mouse to select the line number. After the line number is selected, enter the required data in the **Line Number** field.

3) View information on gas leaks associated with the recheck key number in the columns on the left side of the screen, as illustrated in Figure 61 below. Use the horizontal scroll bar along the bottom of the columns to scroll through all of the recheck information for the gas leaks.

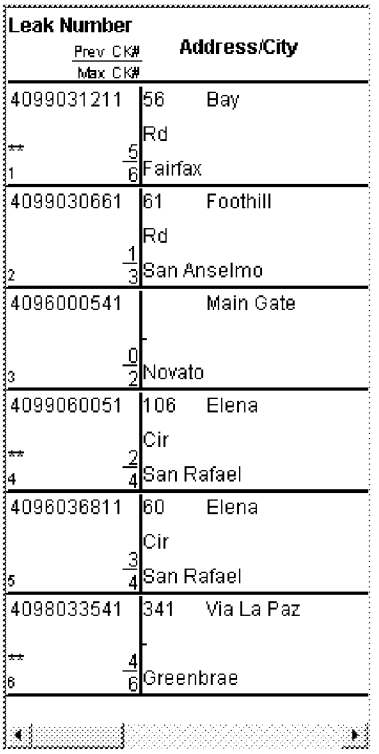

Figure 61: Left Side of Recheck Log Screen

4) Enter recheck information for a gas leak in the columns on the right side of the screen, as illustrated in Figure 62 below. Use the vertical scroll bar along the right side of the columns to scroll through the information. To enter data in columns, click the mouse in a column. Either a drop-down list or blinking cursor appears.

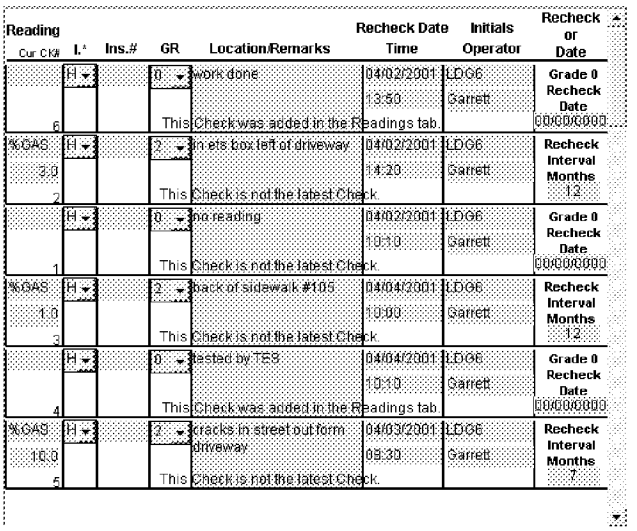

Figure 62: Right Side of Recheck Log Screen

Table 12 below lists the fields and column titles and the information to enter in each column.

Table 12: Recheck Log Fields

Field	Data Entry Information
Reading	Select the appropriate reading unit: **PPM, %LEL,** or **%GAS**.
L.*	Enter an **H, C, or V** for the instrument type.
Ins.#	Enter the instrument serial number.
GR	Select the leak grade. • **0** • **1** • **2** • **2+** • **3**
Location/Remarks	Enter the location of the rechecked leak and any remarks.
Recheck Date Time	Enter the date and time the leak was rechecked.
Initials Operator	Enter the initials of the employee who performed the recheck and select the name of the employee from the drop-down list.
Recheck or Date	Enter the time interval for rechecking the leak for Grade 3 leaks. This field defaults to 60 months which will dictate that it will be rechecked with the next scheduled leak survey. This field should only be changed to other than 60 months if the leak is to be rechecked prior to the next scheduled leak survey.

5) Click the 

navigational buttons to display the **First, Prior, Next,** or **Last** page of the log.

6) Click the 

button to clear the current row of recheck data.

7) Click the 

button after completing all of the updates to the log. This permanently deletes the recheck key number from the list.

Note: If necessary, the user can update a gas leak after deleting the recheck key number from the list by accessing the leak number via the **Leaks View/Update** option.

---

8) Click the 

button to save the recheck information.

12 Incidents Data

The **Incidents Data** module is a comprehensive application to record and report information for reportable and non-reportable gas incidents. Output from the system is sent to the California Public Utilities Commission (CPUC) as required by General Order 112-E, Section 122(e), Gas Quarterly Incident reports. The IGIS Incident data tabs follow the format of the CPUC Form 420 Report found in UO Standard D-S0355, "CPUC and DOT Reportable Incidents, Curtailments and Condition, and Low Pressure System Problem Reporting," Attachment 2.

Most Incident records are first created by the IGIS **Leaks** module, which automatically populates the **Incidents Data** module. Users enter Incident records directly only when a gas leak "A" form is not required. A Reportable Incident is defined as one of the following:

1) An event in which a release of gas from Company facilities or failed PG&E equipment contributed to the cause or scope of the incident, and either of the following occurred:

   a) A death, or personal injury necessitating in-patient hospitalization.

   b) Estimated property damage of $50,000 or more.

2) An event in the vicinity of Company facilities, regardless of whether or not Company facilities are involved, that has been given significant news media coverage, and that is suspected to involve natural gas.

3) An event that results in an emergency shutdown of a liquid natural gas (LNG) facility.

4) An event that is significant, in the judgment of the operator, even though it did not meet the criteria above.

A Non-Reportable Incident is defined as an event that involves a release of gas from Company facilities and:

1) Property damage in excess of $1,000; or

2) Fire, explosion or underground dig-in.

Use the screens in the **Incidents Data** module to:

- Enter information on the location of the incident.
- Enter information on the reasons for the incident.
- Enter information on the cause of the incident.
- Enter information pertinent to reporting the incident to the CPUC and/or the Department of Transportation (DOT).
- Enter information on the equipment involved in the incident.
- Enter information on the dig-in damage caused by the incident.
- Enter information on the recovery from the incident.

12.1 Enter Data for a Gas Incident

Clicking the **Gas Incident** option on the **IGIS Main Menu** screen opens the **Incidents Data** screen, illustrated in Figure 63 below.

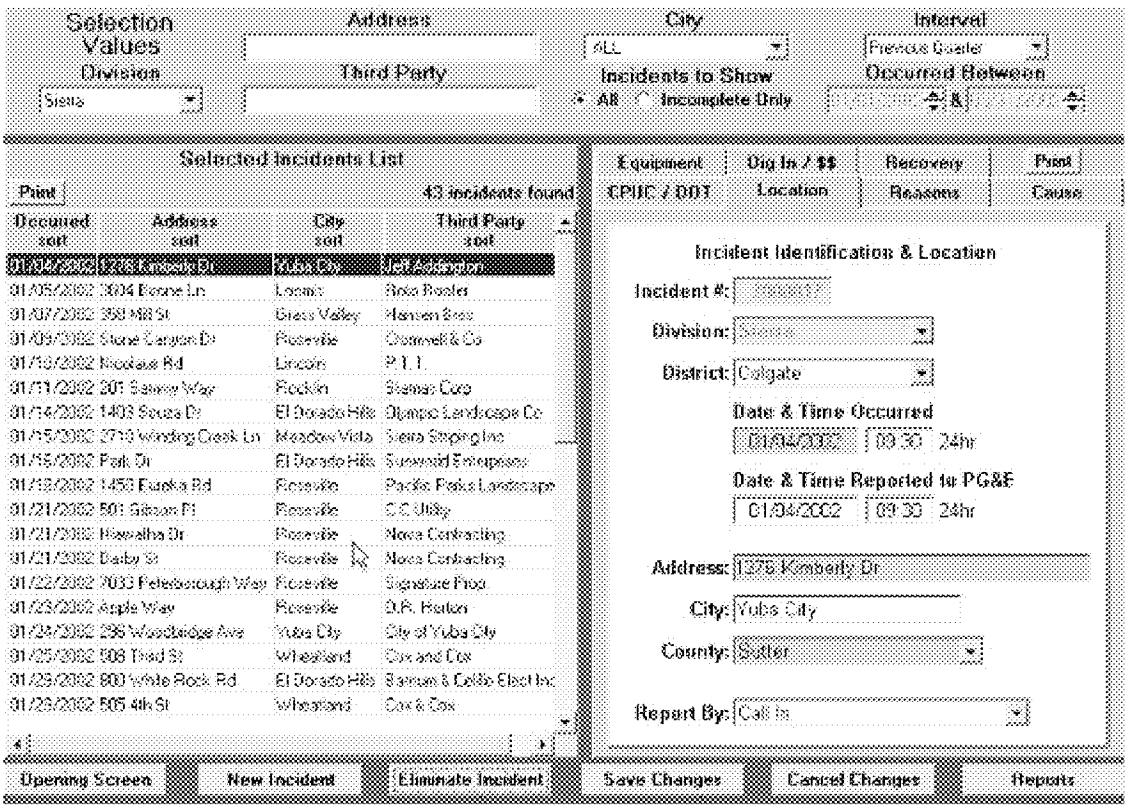

Figure 63: Incidents Data Screen

12.1.1 Location Tab Fields

Use the fields contained in the **Location** tab, illustrated in Figure 64 below, to enter information on the location of the gas incident. Be sure to select the correct **County** field, because IGIS initially displays the first county on the drop down list.

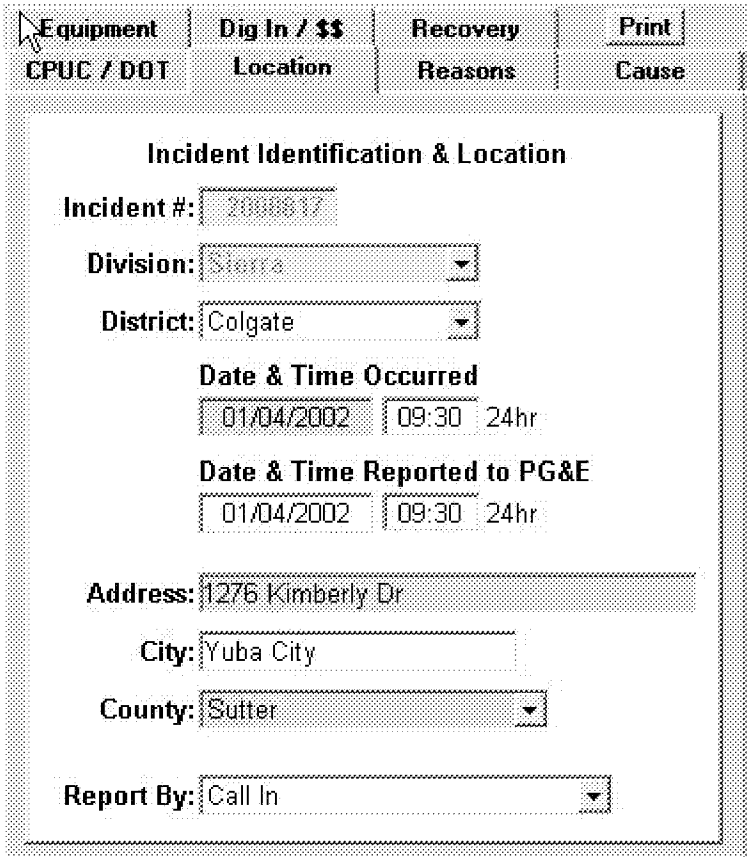

Figure 64: Location Tab - Incidents Data Screen

Table 13 on Page 76 lists the fields found in the **Location** tab and provides the information required in each field. Care should be taken to validate that the data correlates with the data in the CPUC 420 report if applicable.

Table 13: Location Tab Fields

Field	Data Entry Information
Incident #	Incident numbers are assigned by the computer and may not be changed.
Division	Select the division where this Incident occurred.
District	Select the district where this Incident occurred.
Date & Time Occurred	Enter the date and time on which this Incident occurred *(required for CPUC report).*
Date & Time Reported to PG&E	Enter the date and time on which this Incident was first reported to PG&E.
Address	Enter the street address where this Incident occurred *(required for CPUC report).*
City	Enter the city where this Incident occurred *(required for CPUC report).*
County	Enter the county where this Incident was occurred.
Reported By	Select the category of the person reporting this Incident to PG&E.

12.1.2 Reasons Tab Fields

Use the fields contained in the **Reasons** tab, illustrated in Figure 65 below, to enter information on the reasons for reporting the Incident. Care should be taken to validate that the data correlates with the data in the CPUC 420 report if applicable.

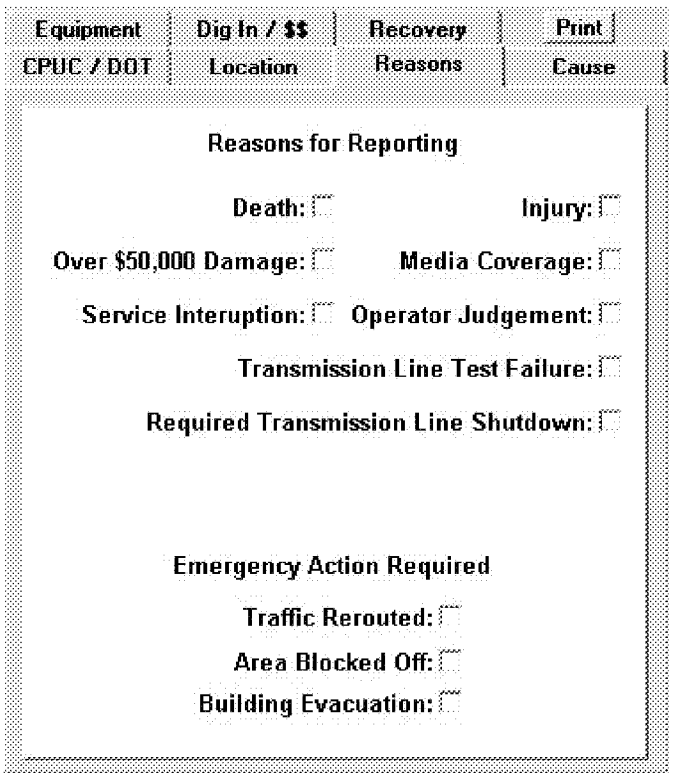

Figure 65: Reasons Tab - Incidents Data Screen

Table 14 below lists the fields found in the **Reasons** tab and provides the information required in each field.

Table 14: Reasons Tab Fields

Field	Data Entry Information
Death	Check this box if there were any fatalities involved in this Incident.
Injury	Check this box if there were any injuries requiring in-patient hospitalization involved in this Incident.
Over $50,000 Damage	Check this box if the dollar value of the damages due to gas exceeds $50,000.
Media Coverage	Check this box if this Incident received significant media coverage.
Service Interruption	This box is not applicable.
Operator Judgment	Check this box, if in the operator's judgment, this Incident should be reported to the CPUC.
Transmission Line Test Failure	Check this box if there was a failure during strength testing of a transmission line to be operated at more than 20% specified minimum yield strength (SMYS).
Required Transmission Line Shutdown	This box is not applicable.
Traffic Rerouted	Check this box if traffic was rerouted during this Incident.
Area Blocked Off	Check this box if an area was blocked off during this Incident.
Building Evacuation	Check this box if there was an evacuation during this Incident.

12.1.3 Cause Tab Fields

Use the fields contained in the **Cause** tab, illustrated in Figure 66 below, to enter information regarding the cause of the Incident.

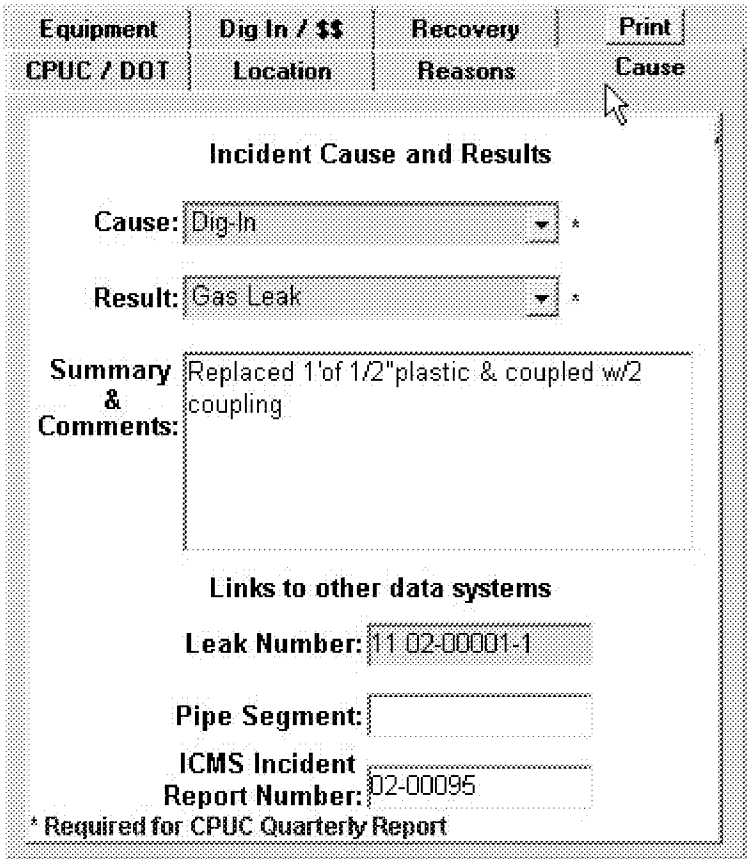

Figure 66: Cause Tab - Incidents Data Screen

Table 15 beginning on Page 79 lists the fields found in the **Cause** tab and provides the information required in each field.

Table 15: Cause Tab Fields

Field	Data Entry Information
Cause	Select the action or condition that caused this Incident to occur*(required for CPUC report)*. Choices include: • **Atmospheric Corrosion** - Corrosion leaks on above-ground, gas-carrying facilities (e.g., leaking external corrosion pit on an above-ground gas service riser or on an exposed section of a main). • **Cast Iron Fracture** – Cast iron fracture that has cracked on the body of the pipe. Do not use this cause for cracked-bell sealing material. • **Construction Defect** - Leaks caused by improper construction techniques (leaking welds, fusion joints, improper alignment, or hard objects impinging on pipe). • **Damage by 3rd Party** - Leaks caused by damage by a third party that is not an immediate dig-in (e.g., previous gouging of underground pipe that is now starting to leak, or a vehicle running into a gas facility). • **Damage by Electrical Defect** - Leaks caused by improper electrical grounds or shorts. • **Damage by Natural Forces** - Leaks caused by weather or natural phenomenon (e.g., lightning, landslides). • **Dig-in** - Leaks occurring immediately, caused by a dig-in by a third party. • **Equipment Malfunction** - Incident caused by equipment not operating properly. • **External Corrosion** - Leaking corrosion pits that appear on the outside wall of a buried, steel, gas-carrying pipe. Do not use this cause for hard objects impinging on the pipe. Instead, use the **Construction Defect** cause. Do not use this cause for any leaks on copper pipe. Instead, use the **Material Failure** cause. Do not include corrosion leaks caused by improper pipe wrapping. • **Flood** - Incident caused by flooding. • **Internal Corrosion** - Leaking corrosion pits that appear on the inside wall of a buried, metallic, gas-carrying pipe. • **Material Failure** - Leaks caused by inherent material failures that are not listed above, such as cast iron bell sealing materials, poor quality steel, or any cooper leaks such as at sweat joints. Material failure may also include inherent design problems with a fitting, such as a valve stem leak, compression joints, Aldyl-A tees, or screwed fittings. Do not include cracked plastic pipe failures. Instead, use the **Plastic Crack Failure** cause. • **None Recorded** • **Other** - List any other leak causes that is not listed above and that may be important for the Company to track.

Table 15: Cause Tab Fields (continued)

Field	Data Entry Information
Cause (continued)	• **Plastic Crack Failure** - Leaks caused by cracks appearing in the body (not joints) of plastic pipe (e.g., Aldyl-A, TR418, or other types of plastic). • **Structure Fire** - Incident caused by structure burning. • **Unknown** - Leak source is not specifically known or assigned to one of the other leak causes. For example, mark as **Unknown** a leaking service pipe repaired by inserting a new pipe without locating the specific leak cause. • **Vandalism** - Incident caused by 3rd party vandalizing company equipment. • **Vehicle** - Incident caused by motorized vehicle striking company facilities (i.e., car hit meter).
Result	Select the results of the above cause *(required for CPUC report)*.
Summary & Comments	Enter additional information about this Incident and/or explanations of responses to other fields.
Leak Number	Leak number assigned to this Incident (generated by the Gas Leak System).
Pipe Segment	Enter the pipe segment identification number (Leaks and/or GPRP Systems).
ICMS Incident Report Number	Enter the Safety Health & Claims (SH&C) Incident Claims Management System (ICMS) Incident Report Number.

12.1.4 CPUC/DOT Tab Fields

The fields contained in the **CPUC/DOT** tab, illustrated in Figure 67 below, are filled out by the General Office for Reportable Incidents. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

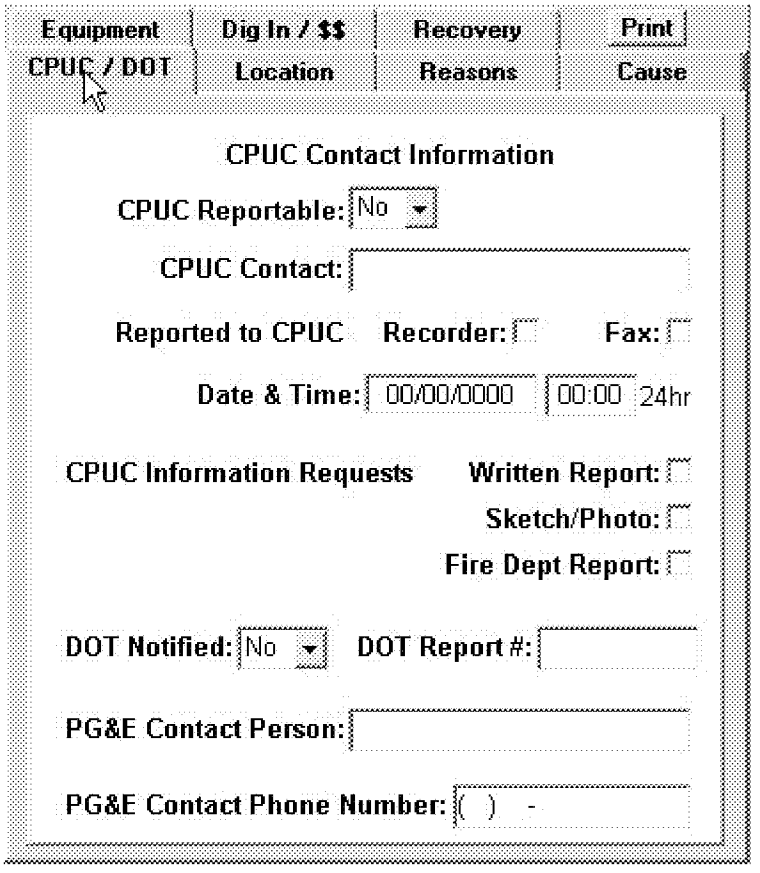

Figure 67: CPUC/DOT Tab - Incidents Data Screen

Table 16 below lists the fields found in the **CPUC/DOT** tab and provides the information required in each field. Normally Gas Distribution & Technical Services (GO) staff complete this section because they have the CPUC contact information.

Table 16: CPUC/DOT Tab Fields

Field	Data Entry Information
CPUC Reportable	Select **Yes** or **No** to indicate whether the Incident was reportable to the CPUC.
CPUC Contact	Enter the name of the person at the CPUC who was contacted.
Recorder	Check this box if the report was made to a telephone message recorder.
Fax	Check this box if the report was made via a FAX machine.
Date & Time	Enter the date and time on which the CPUC was first contacted. In most cases this will be the date and time that the first telephonic notification was made.
Written Report	Check this box if the CPUC has requested a written report.
Sketch/Photo	Check this box if the CPUC has requested a sketch and/or a photograph of the scene.
Fire Dept Report	Check this box if the CPUC has requested a copy of the fire department report on this Incident.
DOT Notified	Check this box if the Department of Transportation (DOT) was notified of this Incident.
DOT Report #	Enter the Department of Transportation report number obtained during the telephonic report to the DOT's National Response Center.
PG&E Contact Person	Enter the name of the General Office Gas Distribution Gas Incident On-Call Representative to be contacted regarding this Incident.
PG&E Contact Phone Number	Enter the PacBell phone number of the General Office Gas Distribution Gas Incident On-Call Representative to be contacted regarding this Incident.

12.1.5 Equipment Tab Fields

Use the fields contained in the **Equipment** tab, illustrated in Figure 68 below, as they apply to Company equipment affected by the Incident. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

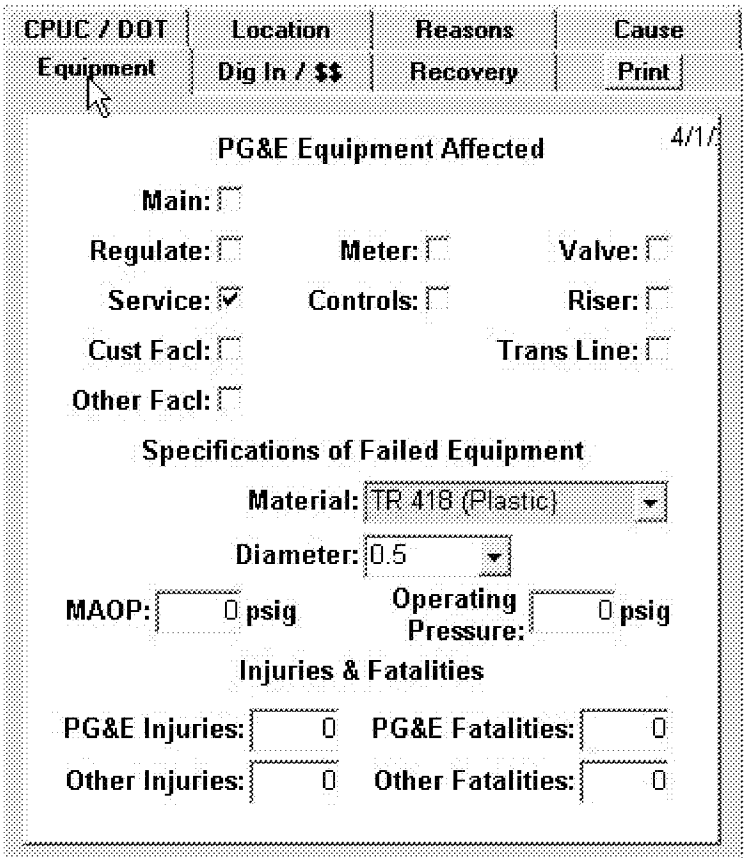

Figure 68: Equipment Tab - Incidents Data Screen

Table 17 below lists the fields found in the **Equipment** tab and provides the information required in each field.

Table 17: Equipment Tab Fields

Field	Data Entry Information
MAIN	Check this box if a gas main was involved in this Incident.
Regulate	Check this box if a regulator was involved in this Incident.
Meter	Check this box if a meter was involved in this Incident.
Valve	Check this box if a valve was involved in this Incident.
Service	Check this box if a service was involved in this Incident.
Controls	Check this box if controls was involved in this Incident.
Riser	Check this box if a riser was involved in this Incident.
Cust Facl	Check this box if customer facilities were involved in this Incident.
Other Facl	Check this box if other facilities were involved in this Incident. Describe them in the comments field on the **Cause** tab.
Material	Select a material if a pipe was involved in this Incident.
Diameter	Select the size if a pipe was involved in this Incident.
MAOP	Enter the maximum allowable operating pressure for the equipment involved in this Incident.
Operation Pressure	Enter the pressure of the equipment involved in this Incident.
PG&E Injuries	Enter number of PG&E employee injuries requiring in-patient hospitalization.
PG&E Fatalities	Enter the number of PG&E fatalities in this Incident.
Other Injuries	Enter the number of non-PG&E injuries requiring in-patient hospitalization.
Other Fatalities	Enter the number of non-PG&E fatalities in this Incident.

12.1.6 Dig In/$$ Tab Fields

Use the fields contained in the **Dig In/$$** tab, illustrated in Figure 69 below, to enter information related to dig-ins. Include both dig-in and non-dig in damages in the estimated monetary damages. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

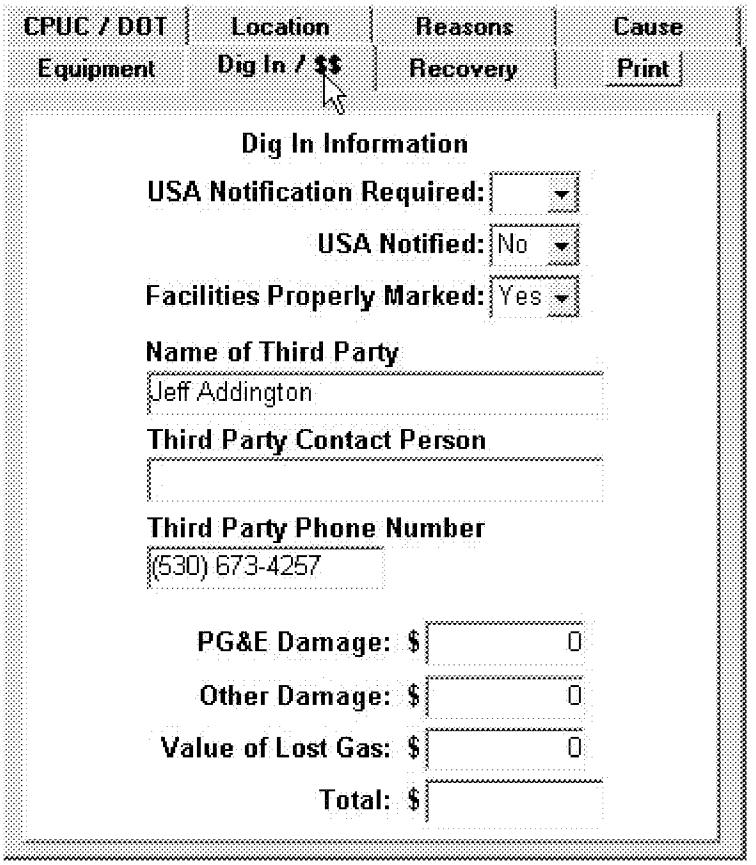

Figure 69: Dig In/$$ Tab - Incidents Data Screen

Table 18 below lists the fields found in the **Dig In/$$** tab and provides the information required in each field. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

Table 18: Dig In/$$ Tab Fields

Field	Data Entry Information
USA NOTIFICATION REQUIRED	Select **Yes** or **No** to indicate whether USA notification was required for the activity that caused this Incident.
USA Notified	Select **Yes** or **No** to indicate whether USA was notified before commencing the activity that caused this Incident.
Facilities Properly Marked	Select **Yes** or **No** to indicate whether the PG&E facilities involved in this Incident were properly marked. Leave blank if **No** is selected in the **USA Notification Required** box.
Name of Third Party	Enter the name of the company doing the digging or other party responsible for this Incident.
Third Party Contact Person	Enter the name of the person at the third party to contact regarding this Incident.
Third Party Phone Number	Enter the phone number of the third party contact named above.
PG&E Damage $	Enter the estimated value of the damage to PG&E facilities during this Incident. Do not include the value of lost gas. Include costs for Company emergency response, restoration and relights. Do not include any "upgrade" or "betterment" work done.
Other Damage $	Enter the estimated value of damage to non-PG&E facilities during this Incident.
Value of Lost Gas $	Enter the estimated value of the gas lost during this Incident that is attributable to Company gas or failed equipment.
Total $	Total value of losses. (This field is calculated automatically.)

12.1.7 Recovery Tab Fields

Use the fields contained in the **Recovery** tab, illustrated in Figure 70 below, to enter information regarding the action that was taken to recover from the Incident. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

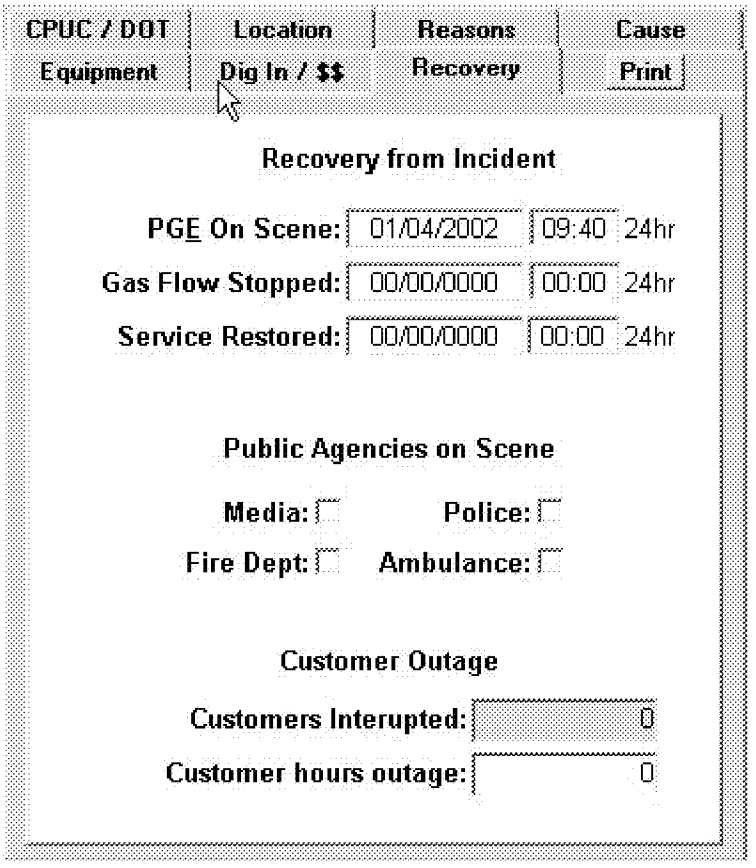

Figure 70: Recovery Tab - Incidents Data Screen

Table 19 below lists the fields found in the **Recovery** tab and provides the information required in each field. Care should be taken to verify that the data correlates with the data in the CPUC 420 report, if applicable.

Table 19: Recovery Tab Fields

Field	Data Entry Information
PG&E on Scene	Enter the date and time on which the first Company employee arrived on the scene.
Gas Flow Stopped	Enter the date and time on which leaking gas flow was stopped.
Service Restored	Enter the date and time on which interrupted service was restored, or was ready for restoration in the case where a Gas Service Representative could not get in (CGI) to relight a customer.
Media	Check this box if the media was present at the scene.
Police	Check this box if the police were present at the scene.
Fire Dept	Check this box if the fire department was present at the scene.
Ambulance	Check this box if an ambulance was present at the scene.
Customers Interrupted	Enter the total number of customers that were interrupted.
Customer hours outage	Enter the accumulation of each customer's hours of interrupted service.

13 Overview

The **Overview** screen, illustrated in Figure 71 below, contains the Management Reports, which provide a graphical representation of Incident report data. This screen also provides a graphical representation of Incidents that contain Incomplete Data **(Required** and **Critical** fields) entry.

Figure 71: Overview Screen

The **Data Entered by Division** section shows the percentage of expected (forecasted) entries by division. The expected (forecast) number on incidents entered is based on a historical average and may be updated periodically.

Click one of the Division Names in the **Data Entered by Division** section to see the detailed statistics for that Division in the **Data Values for** section.

The **Annual Counts** section shows a historical trend of key incident data.

14 Reports

Several report types are available for gas leaks and inspections using from the **Reports Options** screen in the IGIS application. These report types are:

- **Future Workload**
- **Incident-Leak Cross Reference**
- **Leak Activity**
- **Leak Grading Review Report**
- **Leak History Report**
- **Leak Performance Detail**
- **Leak Performance Summary**
- **New Entries Confirmation**
- **New Leaks Entered Late**
- **Open Leaks**
- **Recheck Leak Log**
- **Repaired Leaks**
- **Repairs Entered Late**
- **Soap and/or Tape**
- **Systemwide Digin**
- **Systemwide Digin Mains-C**
- **Systemwide Digin Mains-M**
- **Systemwide Digin Service-C**
- **Systemwide Digin Service-M**
- **Systemwide External Corrosion**

- **Systemwide Leaks Checked**
- **Systemwide Leaks Repaired**
- **Systemwide Leaks Reported**
- **Systemwide Non Digin Mains-C**
- **Systemwide Non Digin Mains-M**
- **Systemwide Non Digin Service-C**
- **Systemwide Non Digin Service-M**

The Mapping department mainly uses the following reports:

- **Leak Activity**
- **Leak Performance Summary**
- **New Leaks Entered Late**
- **Open Leaks**
- **Recheck Leak Log**
- **Repaired Leaks**
- **Repairs Entered Late**

Users may generate reports for either all districts and divisions, or specific districts and divisions, based on specified date ranges or time intervals. The reports include information pertinent to the report type. The fields on the **Reports Options** screen change, depending on the selected report type. In addition, the **Recheck Log** is created in the **Report Options** screen for use in the field. Instructions on the report criteria for each report type are explained in the following pages.

14.1 Generate Reports on Gas Leak or Inspection Information

Clicking the **Reports** option of the **Leaks** menu on the **IGIS Main Menu** screen opens the **Repaired Leaks Report** screen, as illustrated in Figure 72 below. Also, the user may access the **Repaired Leaks Report** screen from the **Leak Data Input and Maintenance** screen or the **Inspection Data Input and Maintenance** screen by clicking the **Reports** button. The screen defaults to the sort criteria fields for the **Leaks By Cause Report**. The **Open Leak Report** screen is shown in Figure 73 on Page 94.

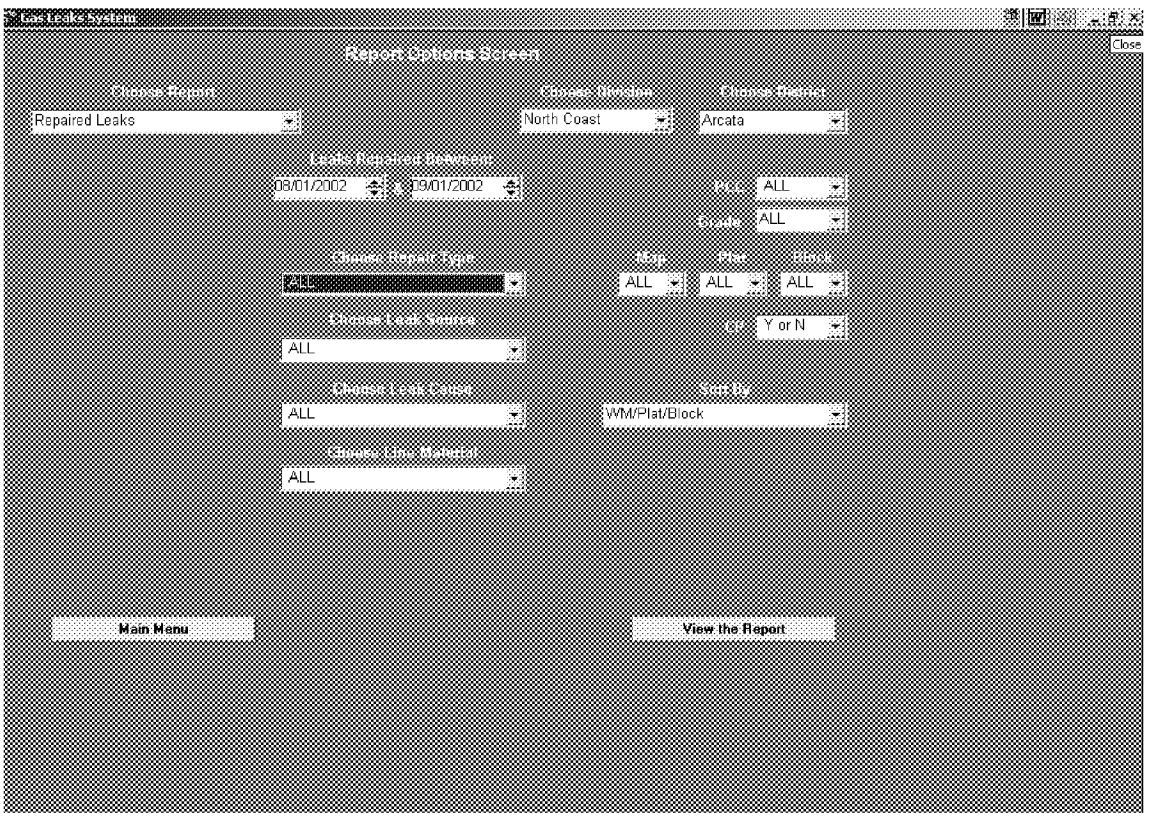

Figure 72: Repaired Leaks Report Screen

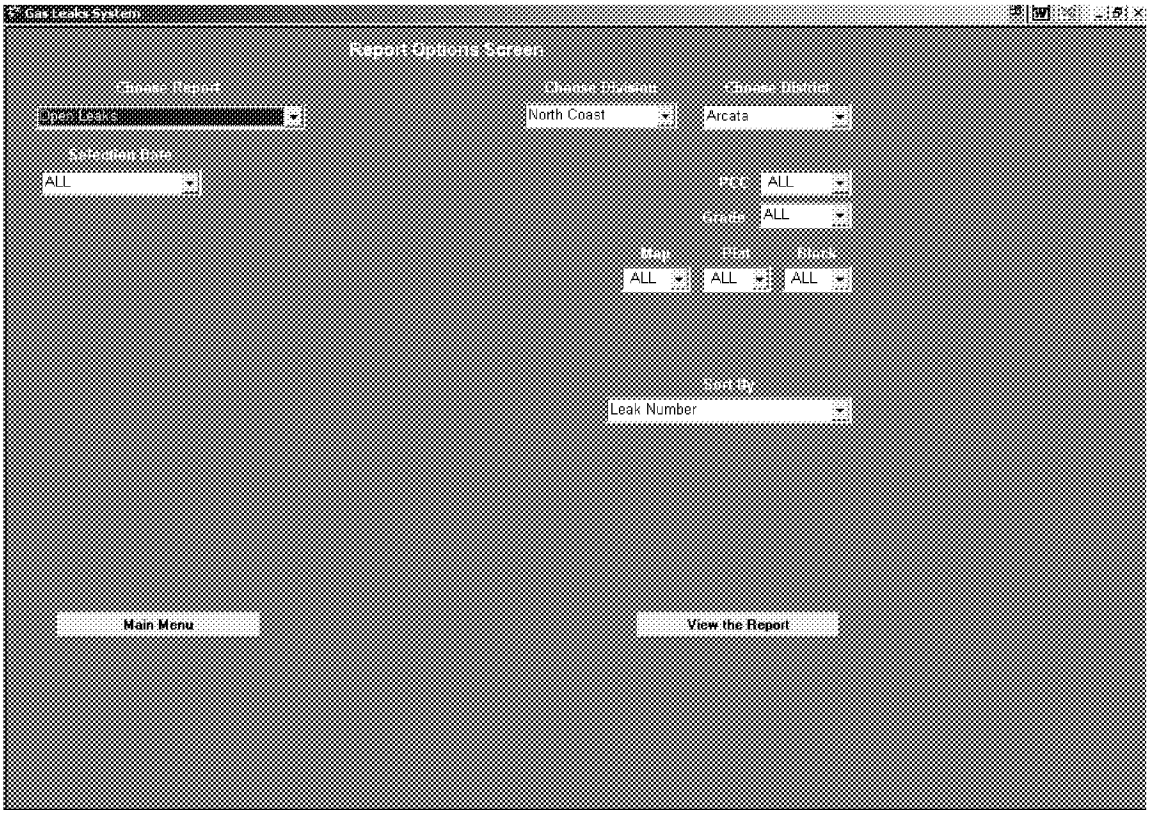

Figure 73: Open Leak Report Screen

To generate and/or print reports:

Note: Enter data according to the instructions found in the Data Entry Information column of the table as follows:

- Use the [Tab] key to move from one field to the next.
- When the instructions state "select," the user must perform one of the following steps:
    1. Select the entry from the drop-down list.
    2. Type the first character of the entry in the field and the first entry from the drop-down list with that character appears in the field. If the drop-down list contains more than one entry with that character, type the character again in the field until the entry you want appears.

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1) Select the report type from the **Choose Report** drop-down list.

2) Specify the report criteria by selecting information in the fields that appear on the screen for that report type. Type the first character of the entry in the field and the first entry from the drop-down list with that character appears in the field. If the drop-down list contains more than one entry with that character, type the character again in the field until the entry you want appears. Also, use the **Up [↑]** or **Down [↓]** arrows to navigate to the desired entry.

   Table 1 through Table 3 on Pages 95 though 98 list the fields of the **Report Options** screen that appear for each report type and include the data entry information for each field. The user can sort on **Cause** or **Source** from the **Repaired Leaks Report.**

Table 1: Repaired Leaks Report

Field	Data Entry Information
Choose Report	Select the type of report. Select **Repaired Leaks** for Cause and Source reports.
Choose Division	Select the division to report.
Choose District	Select the district to report.
Leaks Reported Between	Select the beginning and ending dates for reporting data on by clicking the arrow buttons on the right side of the date fields.
PCC	Select the Provider Cost Center (PCC) number to report.
Grade	Select the leak grade to report.
Map	Select the map number (or all map numbers) to report.
Plat	Select the plat number (or all plat numbers) to report.
Block	Select the block number (or all block numbers) to report.
Choose Repair Type	Select the leak repair type to report. Available leak repair type are: • **All** • **Bell Joint Clamp** • **Bell Joint Seal** • **BJ Permabond** • **Deactivate Dist Main < 100 ft** • **Deactivate Dist Main >= 100 ft** • **Deactivate TP Main** • **Mechanical Repair fitting** • **Other** • **Patch Weld** • **Replace Dist Main < 100 ft** • **Replace Dist Main >= 100 ft** • **Replace TP Main** • **Replace Valve < 2 inch** • **Replace Valve >= 2 inch** • **Service Entirely Replaced** • **Service Partially Replaced** • **Skinner Clamp** • **Soap and/or Tap** • **SS Clamp w/Anode** • **Tee Fused over Defect** • **Tighten Cap or Bolt**

Table 2: Open Leaks Report

Field	Data Entry Information
Selection Date	Select the time interval to report. Time interval options include: • **All** • **Recheck due date** • **Repair due date**
Leaks Reported Between	Select the beginning and ending dates for reporting data by clicking the arrow buttons on the right side of the date fields. Note: This field changes to **Leaks Due for Recheck** if the **Recheck Due Date** option is selected in the **Selection Date** field. Note: This field changes to **Leaks Due for Repair** if the **Repair Due Date** option is selected in the **Selection Date** field. Note: No dates selection will be appear if the **All** option is selected in the **Selection Date** field.
Choose Division	Select the division to report.
Choose District	Select the district to report.
PCC	Select the Provider Cost Center (PCC) number to report.
Grade	Select the leak grade to report: • **0** • **1** • **2** • **2+** • **3**
Map	Select the map number (or all map numbers) to report.
Plat	Select the plat number (or all plat numbers) to report.
Block	Select the block number (or all block numbers) to report.
Sort By	Select the sort criteria for the report. Sort options are: • **Date reported** • **Leak number** • **Repair due date** • **WM/Plat/Block**

Table 2: Open Leaks Report (continued)

Field	Data Entry Information
Choose Leak Source	Select the leak repair type to report. Available leak repair type are: • **All** • **Bell joint** • **Body of pipe** • **Compressor components** • **Drip** • **Fitting** • **Fusion joint** • **Gas cooler** • **Girth weld** • **Longitudinal weld** • **Meter** • **Not recorded** • **Other** • **Other weld** • **Physical (Mech) joint** • **Plastic tee cap** • **Regulator** • **Riser** • **Scraper trap** • **Tap connection** • **Unknown** • **Valves**
Choose Leak Cause	Select the leak cause to report. Available leak causes are: • **All** • **Atmospheric Corrosion** • **Cast Iron Fracture** • **Construction Defect** • **Damage by 3rd Party** • **Damage by Electrical Defect** • **Damage by Nature Forces** • **Dig-in** • **External Corrosion** • **Internal Corrosion** • **Material Failure** • **None Recorded** • **Other** • **Plastic Crack Failure** • **Unknown** • **Vehicle**
Sort By	Select the sort criteria for the report. Sort options are: • **CPA** • **Leak Cause** • **Leak Number** • **Leak Source** • **Line Material** • **Repair Date**

	• **Repair Type**

Table 3: Recheck Leak Log

Field	Data Entry Information
Checks Due	Select the time interval to report. Time interval options are: • **Enter dates** – if this option is selected, the **Leaks Reported** fields activate on the screen. Enter the dates in these fields. • **Next month** • **Next 2 months** • **Next 3 months** • **Current month**
Choose Division	Select the division to report.
Choose District	Select the district to report.
Recheck Due By	Select the date the recheck is due by clicking the arrow buttons on the right side of the date fields.
PCC	Select the Provider Cost Center (PCC) number to report.
Grade	Select the leak grade to report.
Map	Select the map number (or all map numbers) to report.
Plat	Select the plat number (or all plat numbers) to report.
Block	Select the block number (or all block numbers) to report.
Page By	Select an option to sort the pages of the log. Page sort options are: • **Wall Map** – to sort log pages by wall map • **WM/Plat** – to sort log pages by wall map/plat • **Compliance date** – to sort log pages by compliance date

3) View the report prior saving to a file or printing to verify that the desired information is present. To view the report, click the **View the Report** button. The **Report of Repairs** screen, illustrated in Figure 74 below, displays.

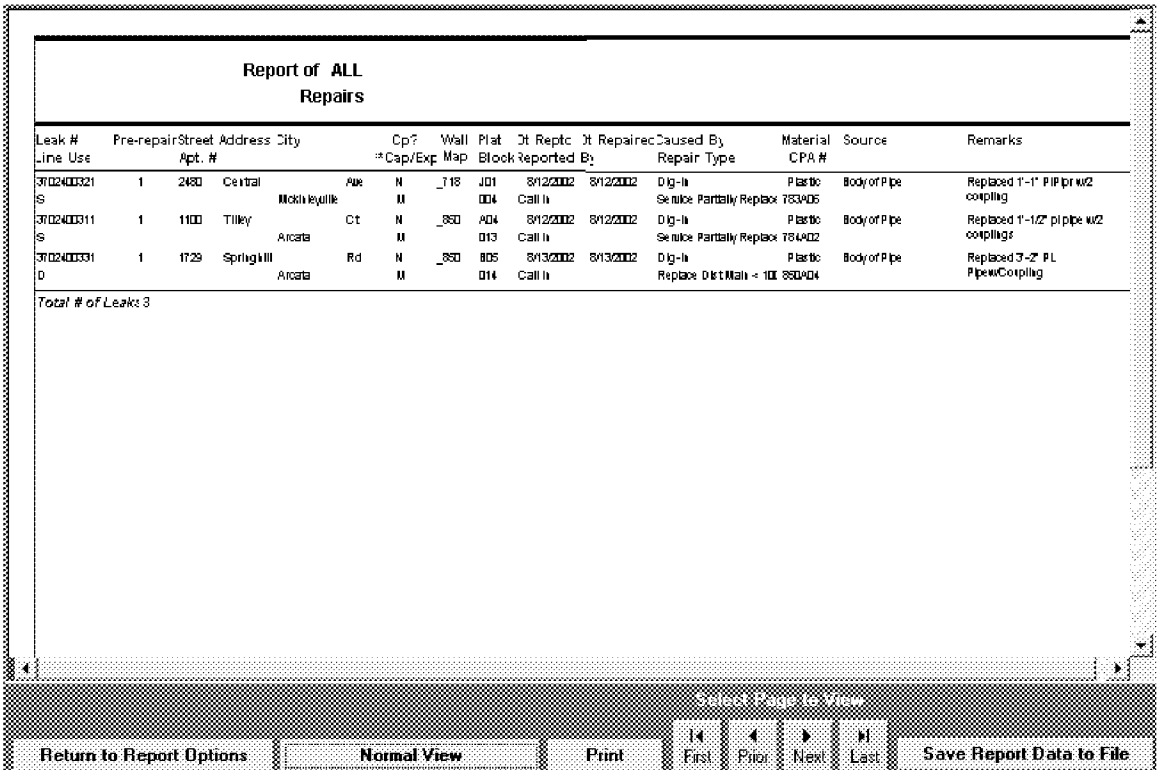

Figure 74: Report of Repairs Screen

4) Use the horizontal scroll bar beneath the report window to horizontally scroll through information in the report.

5) Click the First Next Prior Last navigational buttons to display the **First, Prior, Next,** or **Last** page of the report.

6) Click the **Print Preview** button to preview the printed report. Use the horizontal or vertical scroll bars to view information that is not displayed entirely within a section of the screen.

7) Click the **Save Report Data to File** button to save data in the report to a file for use by other applications. A **Save As** dialog box, illustrated in Figure 75 below, displays.

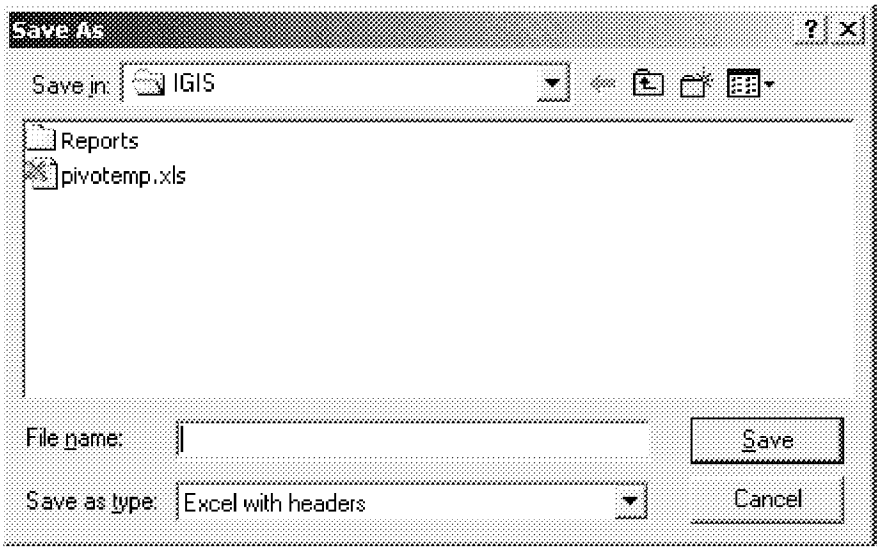

Figure 75: Save As Dialog Box

8) Type the desired **file name.**

9) Select the desired file type from the drop-down list.

10) Click **Save** to save the file and close the **Save As** dialog box and return to the **Report of Repairs Screen**.

11) Click the **Print** button to print the report.

12) Click the **Return to Report Options** button to generate a new report.

13) Click the **Return to Data Entry** button to return to the previous data entry screen (if the **Report Options** screen was accessed from a View/Update screen rather than the **IGIS Main Menu** screen).

14) Click the **Main Menu** button to return to the **IGIS Main Menu** screen.

IGIS Validation and Requirement Rules

Last Updated: August 21, 2002 - Vince Yu

Validation Level Definition

Level 1 – At a minimum, these fields are required whenever a new leak, reading, repair, or inspection is entered. A new or modified leak, reading, repair, or inspection cannot be saved successfully unless all the required fields have values.

Level 2 – A field that is required based on an entry of another field, regardless of the other field's value, or a field that does not pass entry format or boundary value validation.

Level 3 – A field that is required based on an entry of multiple fields and various combinations of multiple values for these fields.

Level 4 – A critical field that does not mandate an entry value.

A3-1 Leaks - Initial Tab

Level 1

These fields are required when entering a new leak or editing an existing leak record.

Rule No.	Field Name	Effective Date
100	DATE REPORTED DATE	1/1/1900
101	DATE REPORTED TIME	1/1/1900
102	PAVED WALL TO WALL	9/28/2001
103	STREET	9/28/2001
104	CITY	1/1/1900
105	READ LOC	9/28/2001
106	RPTD BY	1/1/1900
107	SURFACE	9/28/2001

Level 2

Rule No.	Validation Rule Definition	Effective Date
2100	The VALID date is required if there is a USA TKT# entry.	9/28/2001
2101	The RESPONSE DATE field is required if the GRADE is '1'.	9/28/2001
2102	The RESPONSE TIME field is required if the GRADE is '1'.	9/28/2001
2103	The RESPONSE TIME is required if there is a RESPONSE DATE entry.	9/28/2001
2104	The RESPONSE DATE is required if there is a RESPONSE TIME entry.	9/28/2001
2106	The DATE REPORTED date and time cannot be later than the RESPONSE DATE date and time.	9/28/2001
2107	The DATE REPORTED date and time cannot be later than the READING DATE date and time.	9/28/2001
2108	The DATE REPORTED date and time cannot be later than the REPAIRED date and time.	9/28/2001

Level 3

Rule No.	Validation Rule Definition	Effective Date
N/A	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
2105	The USA TKT# field is critical if the GRADE is '2', '2+', or '3', there is a repair date, and ABOVE GRND = 'NO'.	9/28/2001

A3-2 Leaks - Readings Tab

Level 1

These fields are required when entering a new reading entry or editing an existing reading record.

Rule No.	Field Name	Effective Date
200	PPM	1/1/1900
201	%LEL	1/1/1900
202	%GAS	1/1/1900
203	INSTRUMENT	9/28/2001
204	GRADE	1/1/1900
205	READING DATE	1/1/1900
206	READING TIME	1/1/1900
207	OPERATOR NAME	9/28/2001

Level 2

Rule No.	Validation Rule Definition	Effective Date
4005	The GRADE '2+' REQUEST REPAIR DATE cannot be earlier than or equal to the current check READING DATE.	1/1/1900
4006	The GRADE '0' RECHECK BY DATE cannot be earlier than or equal to the current check READING DATE.	1/1/1900
4007	The RECHECK INTERVAL MONTHS will default to '60' for a new GRADE 3 check. If an existing check RECHECK INTERVAL MONTHS is between 12 and 59 months, the user must enter a new value.	1/1/1900
4008	The READING DATE date and time cannot be earlier than the DATE REPORTED date and time.	9/28/2001
4009	The grade '0' RECHECK BY DATE cannot be more than 90 days beyond the READING DATE.	1/1/1900
4010	The grade '2+' REQUEST REPAIR DATE cannot be more than 90 days beyond the READING DATE.	1/1/1900
4011	The current check's CHECK DATE/TIME cannot be earlier than or equal to a previous check's CHECK DATE/TIME.	1/1/1900

Level 3

Rule No.	Validation Rule Definition	Effective Date
4000	The calculated % gas reading must be a '0' for a GRADE '0' reading that is not a post-repair check.	1/1/1900
4001	If the INSTRUMENT type is 'VISUAL' then PPM must be '0', %LEL must be '0', and %GAS must be either '0%' or '100%'.	1/1/1900
4002	An INSTRUMENT type may be 'VISUAL' only for an initial reading record or a record with a 100% gas reading, or a grade '0' record with 0% gas reading.	1/1/1900
4003	The GRADE must be '0', '1', or '2+' if the INSTRUMENT type is 'VISUAL'.	1/1/1900
4020	The reading calculated percent gas must be greater than '0' if the INSTRUMENT type is not 'VISUAL' and the GRADE is not '0'.	1/1/1900

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
4004	If it is a post-repair check entry and the reading % gas is greater than '0', then the message following will be displayed: "If a post-repair check has a reading of greater than '0', then a new leak should be created."	1/1/1900

material redacted

GTR0004901

A3-3 Leaks - Mapping Tab

Level 1

These fields are required when entering a new leak entry or editing an existing leak record.

Rule No.	Validation Rule Definition	Effective Date
300	RECORDED LOCATION MAP	1/1/1900
301	RECORDED LOCATION PLAT	1/1/1900
302	RECORDED LOCATION BLOCK	1/1/1900
303	FEDERAL LAND	9/28/2001

These fields are required only when entering a new repair entry or editing an existing repair record.

Rule No.	Validation Rule Definition	Effective Date
304	PRESSURE	9/28/2001
305	CATHODIC PROTECTION	1/1/1900
306	YEAR INST	1/1/1900

Level 2

Rule No.	Validation Rule Definition	Effective Date
2201	The MOP (TP ONLY) is required if the LINE USE is 'TRANSMISSION' and that there is a repair record.	1/1/1900
2202	The TP LINE # field is required if there is a LINE USE of 'TRANSMISSION'.	9/28/2001
2203	The CATHODIC PROTECTION field cannot be 'YES' if the LINE MATERIAL is 'CAST/DUCTILE IRON', 'PLASTIC OTHER', 'ADLDYL A – PLASTIC', 'TR 814 PLASTIC' or 'PE 2406 – PLASTIC'.	1/1/1900

Level 3

Rule No.	Validation Rule Definition	Effective Date
2200	The CPA# field is required if the CATHODIC PROTECTION is 'YES' and the CAUSE is 'EXTERNAL CORROSION'.	1/1/1900

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

A3-4 Leaks - Pipe Tab

Level 1

These fields are required only when entering a new repair or editing an existing repair record. Otherwise, optional when entering a new leak or editing an existing leak record.

Rule No.	Validation Rule Definition	Effective Date
400	SOURCE	1/1/1900
401	CAUSE	1/1/1900
402	LINE USE	1/1/1900
403	LINE MATERIAL	1/1/1900
404	ABOVE GRND	9/28/2001
405	LINE INSERTED	1/1/1900
406	INTERNAL LINER	9/28/2001
407	LINE SIZE	1/1/1900

This field is required if there is an inspection record associated with a leak. Otherwise, optional when entering a new leak or editing an existing leak record without an inspection record.

Rule No.	Validation Rule Definition	Effective Date
408	SEGMENT ID	1/1/1900

Level 2

Rule No.	Validation Rule Definition	Effective Date
2300	The MAIN MATERIAL field is required if the LINE USE is ‘SERVICE’.	9/28/2001
2302	A leak with a CAUSE of ATMOSPHERIC CORROSION must have an ABOVE GRND entry of 'YES'.	1/1/1900
2305	If the INCIDENT # field is not in the proper format, then the message “Expecting a mandatory 7-digit number in the format '##-#####'” will be displayed to the user.	1/1/1900
2306	A leak with a CAUSE of EXTERNAL CORROSION must not have an ABOVE GRND entry of ‘YES’.	1/1/1900

Level 3

Rule No.	Validation Rule Definition	Effective Date
2304	The MATERIAL PROBLEM # field should be in the format 'YYYYSSSS'. The 'YYYY' portion is a 4-digit year from '1900' to the present. It should also be greater than or equal to the year reported of the DATE REPORTED entry field on the INITIAL tab and it should be less than or equal to the system year at the time of the field entry. The 'SSSS' portion is a 4-digit sequence number with a valid range from '0001' through '9999'.	1/1/1900

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
2301	The MATERIAL PROBLEM # field is critical if the LINE MATERIAL is not 'Copper' and the CAUSE is 'MATERIAL FAILURE' or 'PLASTIC CRACK FAILURE'.	9/28/2001
2303	The INCIDENT # is critical if the CAUSE is a DIG-IN.	9/28/2001

A3-5 Leaks - Repair Tab

Level 1

These fields are required when entering a new repair or editing an existing repair record.

Rule No.	Validation Rule Definition	Effective Date
500	LOCATION	1/1/1900
501	REPAIRED DATE	1/1/1900
502	REPAIRED TIME	1/1/1900
503	FIELD REV BY NAME	9/28/2001
504	FIELD REV BY DATE	9/28/2001
505	POST REPR CHK	9/28/2001
506	MAPPER REV BY NAME	9/28/2001
507	MAPPER REV BY DATE	9/28/2001
508	REPAIR	1/1/1900

Level 2

Rule No.	Validation Rule Definition	Effective Date
3000	The DATE field is required if POST REPR CHK field is 'YES'.	1/1/1900
3001	The post-repair DATE field cannot be earlier than the REPAIRED date.	9/28/2001
3004	The REPAIRED date and time cannot be earlier than the DATE REPORTED date and time.	9/28/2001

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
3003	The P/S(mv) is critical if the LINE MATERIAL is STEEL/WROUGHT IRON or COPPER and the CAUSE is EXTERNAL CORROSION.	9/28/2001
3005	The CONTINUOUSLY WORKED field is critical if the leaks grade is '1' and the REPAIRED date is not the same as the DATE REPORTED. Valid selection for this field is 'Y', 'N', or null (unknown).	This validation rule is on HOLD pending decision as of 11/13/01.

A3-6 Leaks - Incident Tab

Level 1

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 2

Rule No.	Validation Rule Definition	Effective Date
2400	The NAME field is required if the CAUSE is a 'DIG-IN'.	9/28/2001
2402	The # INJURED EMP field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2403	The # INJURED OTHERS field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2404	The DAMAGE $ field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2405	The # CUST. INTERRUPTED field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2406	The FIRE field is required if the CAUSE is a 'DIG-IN'.	9/28/2001
2407	The EXPLOSION field is required if the CAUSE is a 'DIG-IN'.	9/28/2001
2408	The # FATAL EMP field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2409	The # FATAL OTHER field is required if the CAUSE is a 'DIG-IN'.	1/1/1900
2410	The REPORTABLE field is required if the CAUSE is a 'DIG-IN'.	9/28/2001
2411	The USA CALLED field is required if the CAUSE is a 'DIG-IN'.	9/28/2001

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
2401	The PHONE field is critical if the CAUSE is a 'DIG-IN'.	9/28/2001
2420	The MISMARKED field is critical whenever leaks-incident data is required.	9/13/2001

A3-7 Inspection - Pipe Id Tab

Level 1

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 2

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

A3-8 Inspection - General Inspection Tab

Level 1

These fields are required when entering a new inspection or editing an existing inspection record.

Rule No.	Validation Rule Definition	Effective Date
600	DATE	1/1/1900
601	INSPECTED BY NAME	9/28/2001
602	MATERIAL	9/28/2001
603	SOIL TYPE	9/28/2001
604	SURFACE	9/28/2001
605	FEET EXPOSED	1/1/1900
606	COVER OVER PIPE	1/1/1900
607	INTERNAL LINER	9/28/2001
608	PAVED WALL TO WALL	9/28/2001
609	NEAR PUBLIC ASSEMBLY	9/28/2001

Level 2

Rule No.	Validation Rule Definition	Effective Date
1060	The SOIL RESISTANCE is required if the LINE USE is 'TRANSMISSION'.	1/1/1900

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

A3-9 Inspection - Metallic Pipe Tab

Level 1

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 2

Rule No.	Validation Rule Definition	Effective Date
1000	The COATING field is required if the MATERIAL field on the PIPE ID tab is 'STEEL'.	9/28/2001
1001	The EXTERNAL INSPECTION RUST field is required if the MATERIAL field on the PIPE ID is 'STEEL'.	9/28/2001
1002	The EXTERNAL INSPECTION PITTING field is required if the MATERIAL field on the PIPE ID is 'STEEL'.	9/28/2001
1003	The EXTERNAL INSPECTION GOUGING field is required if the MATERIAL field on the PIPE ID is 'STEEL'.	9/28/2001
1004	The EXTERNAL INSPECTION GRAPHITIZED field is required if the MATERIAL field on the PIPE ID is 'CAST/DUCTILE IRON'.	9/28/2001

Level 3

Rule No.	Validation Rule Definition	Effective Date
1020	The EXTERNAL INSPECTION MAX. PIT DEPTH is required if the LINE USE is 'Transmission' and the CAUSE is 'ATMOSPHERIC CORROSION' or 'CORROSION'.	1/1/1900
1021	The MAX. GOUGE DEPTH is required if the LINE USE is 'Transmission' and the CAUSE is 'DAMAGED BY THIRD PARTY' or 'DIG-IN'.	1/1/1900
1030	The THICK. MEASURED field is required if the NOM. WALL THICKNESS is greater than zero and the LINE USE is a 'TRANSMISSION'.	9/28/2001
1040	The NOM. WALL THICKNESS is required if the LINE USE is 'TRANSMISSION' and the EXTERNAL INSPECTION MAX. PIT DEPTH is greater than a zero value.	1/1/1900
1050	The INTERNAL INSPECTION MAX. PIT DEPTH is required if the LINE USE is 'TRANSMISSION' and the INTERNAL INSPECTION PITTING is 'LIGHT' or 'HEAVY'.	1/1/1900

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

A3-10 Inspection - Plastic Pipe Tab

Level 1

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 2

Rule No.	Validation Rule Definition	Effective Date
1005	The LOCATING WIRE field is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC', or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'	9/28/2001
1006	The GOUGING field is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC' or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'.	9/28/2001
1007	The UNDER STRESS/BENT field is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC' or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'.	9/28/2001
1008	The DISCOLORING TO GRAY field is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC' or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'.	9/28/2001
1009	The CRACKING field is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC' or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'.	9/28/2001
1010	The IN CONTACT WITH HARD OBJECTS is required if the MATERIAL field on the PIPE ID is an 'ALDYL A - PLASTIC' or 'PLASTIC/OTHER' or 'TR 814 PLASTIC' or a 'PE 2406 - PLASTIC'.	9/28/2001

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

A3-11 Inspection - As Built Data Tab

Level 1

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 2

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 3

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

Level 4 - Critical Message Only

Rule No.	Validation Rule Definition	Effective Date
None	N/A	N/A

UO Document Title (and #)	Integrated Gas Information System (IGIS) User Guide
Document Type	Manual
Project Coordinator	[redacted]

TALKING POINTS SUMMARY

Whom does this document affect?	Gas Distribution Mapping, and California Gas Transmission GSM&TS Mapping.
What are the document's mandatory requirements?	Provide detailed guidelines for the IGIS user.
Is this document new or revised? If this is a revised document, what will change?	Revised. The IGIS User Guide has been revised due to the many enhancements of input screens and implementation of rules governing the validation of leak and incident information.
When is this document to be implemented?	4th quarter of 2002
What will this document accomplish?	Detailed documentation concerning the use and requirements for inputting gas leaks, gas incident and reporting functions. Provide new and current users a graphic and detailed reference to assist input and retrieval of information within the IGIS system.
How is this document going to be implemented?	None. This is a manual outlining the procedures for data entry.