## Table of Contents - Fuel Inventory

Fuel Inventory ..... 2
Introduction ..... 2
Pump Tickets Browse Table ..... 3
Fuel Tank Conversion Tables ..... 4
Adding a New Tank Conversion Table Entry ..... 5
Editing an Existing Tank Conversion Table Entry ..... 5
Deleting a Tank Conversion Table Entry ..... 5
Fuel Tank Readings and Setup ..... 6
Adding a New Fuel Tank ..... 7
Editing an Existing Fuel Tank ..... 9
Deleting a Fuel Tank ..... 9
Fuel Pump Readings \& Setup ..... 10
Adding a New Fuel Pump ..... 11
Editing an Existing Fuel Pump ..... 12
Deleting a Fuel Pump ..... 12
Recording a Pump Ticket ..... 13
Editing an Existing Fuel Pump Ticket ..... 16
Voiding a Fuel Pump Ticket ..... 16
Deleting Old Pump Tickets ..... 17
Pump Summary Report ..... 18
Tank Summary Report ..... 19
Fuel Usage Report ..... 20

## Fuel Inventory

## Introduction

The Fuel Inventory Module provides functions for the recording of Fuel Usage, monitoring Fuel Pump Activity and Storage Tank Levels.
As Pump Tickets are entered, system integration features automatically update Vehicle Fuel Usage, Fuel Budget/Expense Accounts, Inventory Stock Levels, Tanks, Fuel Inventory Records and Pump Activity.

## Pump Tickets Browse Table

The Pump Tickets Browse Table displays a list of Pump Tickets showing Date, Property Number, Equipment Description, Pump Number and Gallons Pumped. On screen controls permit you to browse through the file by Pump Ticket or Property Number in ascending or descending order.
Pump Tickets that appear in Blue Italics indicate these are Pump Tickets are from fuel purchased at retail outlets.

| - PUMP TICKETS EROWSE TABLE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ele Procedures Reports |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | Sorted Descending by Ticket No. |  |  |  |
| Ticket No. | Property No. | Equipment Description | Pump No. | Date | Gallons |  |
| 1010 | V-103 | TOYOTA PICKUP | 2 | 03/03/2018 | 18.6 |  |
| 1009 | NONE | No Equipment Specified | 2 | 03/01/2018 | 4.5 |  |
| 1008 | V-101 | JEEP | 2 | 03/01/2018 | 18.0 |  |
| 1007 | V-100 | DAIHATSU | 2 | 03/01/2018 | 17.5 |  |
| 1006 | V -102 | GMC TRUCK | 1 | 02/28/2018 | 27.0 |  |
| 1005 | V-102 | GMC TRUCK | 1 | 02/28/2018 | 10.0 |  |
| 1004 | M-100 | MOW MASTER | 2 | 02/23/2018 | 17.0 |  |
| 1003 | 10907A | TRENCH MASTER | 2 | 02/22/2018 | 35.0 |  |
| 1002 | V-101 | JEEP | 2 | 02/22/2018 | 23.0 |  |
| 1001 | V-100 | DAIHATSU | 2 | 02/21/2018 | 10.8 |  |
| 1000 | V-102 | GMC TRUCK | 1 | 02/15/2018 | 15.0 |  |

Menu and Toolbar Functions provide access to the following procedures and reports:

| PROCEDURES | REPORTS |
| :--- | :--- |
| Add Pump Ticket | Pump Summary |
| Edit Pump Ticket | Tank Summary |
| Tank Conversion Tables | Fuel Usage |
| Tank Readings \& Setup |  |
| Pump Readings \& Setup |  |
| Delete Old Pump Tickets |  |
| Import Pump Tickets - See Bar Code Functions |  |

## Fuel Tank Conversion Tables

Tank Conversion Tables are used by the Fuel Inventory Programs to convert Fuel Tank Depth Measurements ("Stick Inch") to Gallons.

From the Pump Tickets Browse Table, click on the Procedures Toolbar Menu, then choose Tank Conversion Tables.

This procedure is used only at Setup Time to enter the Tank Manufacturer's Conversion Tables.

The Tank Conversion Tables Screen displays a list of the Inch to Gallon conversions for each size or shape fuel tank at your facility. On screen controls permit you to browse through the file by Table Number in either ascending or descending order.

Only one Table is needed if all your Fuel Storage Tanks have the exact same Shape, Dimensions and Capacity. However, additional Tables will be required if you have Tanks of various sizes and shapes.


## Adding a New Tank Conversion Table Entry

From the Tank Conversion Tables Screen, click on the NEW tool and the Add/Edit Bar will appear.


Enter the Tank Table Number, Stick Reading, and corresponding number of Gallons for that Stick Reading.
Click on ACCEPT when entry is complete.
Repeat this process for all possible stick readings from 0 to Max Depth.

| FIELD | DESCRIPTION |
| :--- | :--- |
| Table Number | A numeric identifier (1-99) for this Table. |
| Stick Reading | Fuel Depth in 0.01 Inch Increments (0-999.99) |
| Gallons | Fuel Quantity corresponding to Stick Reading (10,000 Gallon Maximum). |

## Editing an Existing Tank Conversion Table Entry

From the Tank Conversion Tables Screen, position the scroll bar on the Table Entry to be changed and click on the EDIT tool. The Add/Edit Bar will appear with the selected information displayed. Once the information is displayed, you can make any necessary changes.
Click on ACCEPT when changes are complete.

## Deleting a Tank Conversion Table Entry

From the Tank Conversion Tables Screen, position the scroll bar on the Table Entry to be deleted and click on the DELETE tool. The Delete Confirmation Window will appear asking for confirmation of the delete request.

## Fuel Tank Readings and Setup

The Tank Readings and Setup Program is used to maintain Inventory information on each Fuel Tank.
From the Pump Tickets Browse Table, click on the Procedures Toolbar Menu, then choose Tank Readings \& Setup.
The Fuel Tanks Browse Table displays a list of the Fuel Tanks at your facility, Current Inventory, Month-to-Date Purchases and Month-to-Date Usage. On screen controls permit you to browse through the file by Fuel Tank Number in either ascending or descending order.

Fuel levels in each Tank are automatically updated by the Purchase Order and Pump Ticket Programs.


## Adding a New Fuel Tank

From the Fuel Tanks Browse Table, click on the NEW tool and the Add/Edit Panel will appear.


| FIELD | DESCRIPTION |
| :--- | :--- |
| Tank No. | The number (1-99) of this Tank. |
| Conversion Table | Conversion Table (1-99) to be used for this Tank. |
| Capacity in Gallons | Tank Capacity (0-10,000) in Gallons. |
| Stock No. | Inventory Stock Number for the Product in this Tank. The Stock Number |
|  | MUST be a Type F, G, D, or M Inventory Classification. |
|  | G, or $M$ is used when Workstation Options - Automatic Fuel Pump |
|  | Selection is checked. |
| Product | Stock Number Description (no entry permitted). |
| Last Inventory Date | Date of Beginning Inventory or Date of Last Stick Measurement if Fuel |
|  | Inventory levels are reset. |
| Beginning Inventory | Beginning Inventory Quantity or Actual Fuel Remaining Quantity if |
| Purchased this Month | Inventory levels are reset (Gallons). |
|  | Quantity of Fuel (Gallons) Purchased this Month. Updated automatically <br> whenever Fuel is purchased on Purchase Orders. |
|  |  |


| FIELD | DESCRIPTION |
| :--- | :--- |
| Pumped this Month | Quantity of Fuel (Gallons) Pumped this Month. Updated automatically <br> whenever a Pump Ticket is entered. |
| Fuel Remaining | Fuel Remaining in the Tank (no entry permitted). Calculated by: Fuel <br> Remaining = Beginning Inventory + Purchased - Pumped. |
| Physical Inventory Date | Date of Last Stick Measurement. |
| Stick Measurement (Inches) | Depth of the Fuel in the Tank (0 - 999.99) in inches. This measurement <br> MUST exist in the Tank Conversion Table. |
| Fuel Remaining | Quantity of Fuel in the Tank as determined from Stick Measurement and <br> Tank Conversion Table. <br> Quantity of Fuel (Gallon) either Over or Short (no entry permitted). <br> Calculated by: Over/Short = Actual Fuel Remaining - Fuel Remaining. |
| Over/Short enter (+/-)\% Gallons | Quantity of Fuel (expressed as a Percentage) either Over or Short (no <br> entry permitted). Calculated as above. |

Enter the Tank Number and a valid Tank Conversion Table Number. If the Tank Conversion Table Number is not known, click on the LOOK-UP tool. Next, enter its Capacity (1-10,000).
Enter a valid Stock Number for the product to be pumped from this tank. If the Stock Number is not known, click on the LOOK-UP tool.

No two tanks can contain the same Stock Number. ONLY Inventory Expense Classification Type F, G, D, or M Inventory Items are allowed to be entered. The Product Description will be automatically displayed.
The Current Date and On Hand Quantity (as recorded in the Inventory File) will appear in the Beginning Inventory Date and Gallon fields. The Stick Measurement Date and Inches fields can be entered at this time. If the exact Stick Measurement Inches reading from the Tank Conversion Tables is not known, click on the LOOK-UP tool.

If necessary, the Actual Fuel Remaining field can be changed.
Click on the SAVE tool when entry is complete.
You will be asked if you wish to RESET INVENTORY TO ACTUAL? By clicking on YES, you will reset the Beginning Inventory Date and Gallons fields to the physical inventory indicated by the Stick Measurement Date and Actual Fuel Remaining fields. The Purchased and Pumped this Month Totals will be reset to zero and the Inventory File will be adjusted to account for Fuel Quantities either Over or Short. Clicking on NO will not reset any of these fields.

## Editing an Existing Fuel Tank

From the Fuel Tank Browse Table, position the scroll bar on the Fuel Tank to be changed and click on the EDIT tool. The Add/Edit Panel will appear with the selected information displayed. Once the information is displayed, you can make any necessary corrections.
Click on the SAVE tool when changes are complete.
You will be asked if you wish to RESET INVENTORY TO ACTUAL? By clicking on YES, you will reset the Beginning Inventory Date and Gallons fields to the physical inventory indicated by the Stick Measurement Date and Actual Fuel Remaining fields. The Purchased and Pumped this Month Totals will be reset to zero and the Inventory File will be adjusted to account for Fuel Quantities either Over or Short. Clicking on NO will not reset any of these fields.

## Deleting a Fuel Tank

From the Fuel Tank Browse Table, position the scroll bar on the Fuel Tank to be deleted and click on the DELETE tool. The Delete Confirmation Window will appear asking for confirmation of the delete request.

## Fuel Pump Readings \& Setup

The Pump Readings and Setup Program is used to record and monitor individual Pump Meter Readings and Pump Activity.

From the Pump Tickets Browse Table, click on the Procedures Toolbar Menu, then choose Pump Readings \& Setup.

The Fuel Pumps Browse Table displays a list of the Fuel Pumps at your facility, Current Meter Readings and fuel pumped Month-to-Date. On screen controls permit you to browse through the file by Fuel Pump Number in either ascending or descending order.

Meter Readings and Quantity Pumped Month-to-Date levels for each pump are automatically updated by the Pump Ticket Programs.


## Adding a New Fuel Pump

From the Fuel Pumps Browse Table, click on the NEW tool and the Add/Edit Panel will appear.


| FIELD | DESCRIPTION |
| :--- | :--- |
| Pump Number | The number (1-99) of this Pump. |
| Pumping Fuel from Tank \# | Tank Number (1-99) connected to this Pump. |
| Meter Roll Over Limit | Highest Pump Meter Reading (maximum of 999,999.9) before the Meter <br> Rolls-Over to zero. |
| Last Reading | Last Meter Reading in Gallons. |
| Last Reading Date | Date of the Last Meter Reading. <br> Gallons Pumped |
| Quantity of Gallons Pumped since the Pump was last reset. This field is <br> updated automatically whenever a Pump Ticket is entered. |  |
| Current Meter Reading | Meter Reset Date. |
|  | The Current Meter Reading (no entry permitted). Calculated by: Current = |
|  | Last Reading + Gallons Pumped. |

Enter the new Pump Number. Next, enter the Tank Number connected to this pump. If the Tank Number is not known, click on the LOOK-UP tool.
Enter the highest Pump Meter Reading (up to 999,999 ) that will appear before the Meter Rolls-Over to zero in the Meter Roll-Over Limit field. The number entered will be forced to end in ".9".

Next, enter the Current Pump Meter Reading in the Last Reading Gallons field and Today's Date.
Finally, enter the Quantity of Gallons Pumped since the Pump was last reset and the Meter Reset Date.
Click on the SAVE tool when entry is complete.
You will be asked to CONFIRM PUMP RESET. By clicking on YES, you will reset the Last Reading to the value of the Current Meter Reading and the Gallons Pumped field will be reset to zero. Clicking on NO will not reset any of these fields.

## Editing an Existing Fuel Pump

From the Fuel Pumps Browse Table, position the scroll bar on the Fuel Pump to be changed and click on the EDIT tool. The Add/Edit Panel will appear with the selected information displayed. Once the information is displayed, you can make any necessary changes.

Click on the SAVE tool when changes are complete.
You will be asked to CONFIRM PUMP RESET. By clicking on YES, you will reset the Last Reading to the value of the Current Meter Reading and the Gallons Pumped field will be reset to zero. Clicking on NO will not reset any of these fields.

## Deleting a Fuel Pump

From the Fuel Pumps Browse Table, position the scroll bar on the Fuel Pump to be deleted and click on the DELETE tool. The Delete Confirmation Window will appear asking for confirmation of the delete request.

## Recording a Pump Ticket

From the Pump Tickets Browse Table, click on the NEW tool and the Add/Edit Panel will appear.
If your system is set to automatically generate Pump Ticket Numbers see the Sequence Control Tab in System Utilities - Software Registration \& Configuration, the Ticket Number field will indicate the number assigned to this Pump Ticket. If your system is NOT set to automatically generate Pump Ticket Numbers, you must enter a number of your choice in this field.


| FIELD | DESCRIPTION |
| :--- | :--- |
| Pump No. | The Pump used in this Transaction. |
| Product | Fuel Description. |
| Date | The Date of this Transaction. |
| Ticket No. | The Pump Ticket Number. |
| Property No. | Property Number of the Equipment receiving the Fuel. |
| Hrs/Miles | Current Hour or Odometer reading. |
| Gallons | Quantity of Gallons Pumped in this Transaction. |
| Pumped By | The Name of the Person Operating the Pump. |
| Retail Purchase | Retail Purchase Indicator. <br> (This field does not appear if the Allow Retail Fuel Purchase Pump Tickets Setup <br> Option is not selected for the Workstation). |
| Cost/Gallon | The Cost per Gallon of the fuel that is being pumped. <br> (This field does not appear if the Variable Fuel Cost Setup Option or Allow Retail <br> Fuel Pump Tickets Setup Option is not selected for the Workstation). |
| Usage Recorded | The Difference between Meter and Current Meter Reading. <br> (This field is not visible when editing a Pump Ticket) |

Enter the Pump Number the fuel was pumped from. If the Pump Number is not known, click on the LOOK-UP tool. The Description of the Fuel will be displayed.
Enter the Date of this Pump Ticket.
Next, enter the Property Number of the Equipment receiving the Fuel. If the Equipment is not known, click on the LOOK-UP tool. If the Fuel is being Pumped into a container rather than a vehicle, enter the word NONE in the Property Number field and "No Equipment Specified" will then be displayed as the equipment description.

If Equipment Usage is to be logged when Fueling Vehicles, enter the Current Odometer or Hour Meter Reading in the Hrs/Miles field. If the Equipment is marked as "Has No Meter" in the Equipment Add/Edit/Delete screen, data entry is NOT permitted in the Hrs/Miles field.
Enter the Quantity of Fuel Pumped. Next, enter the Name or Initials (optional) of the Person operating the Pump or click on the LOOK-UP tool.
If the Cost per Gallon field is visible you may change the cost if necessary.
Click on Save to record the Pump Ticket.

## Non Metered Usage

If the Hrs/Miles Field is left at Zero and the Current Meter Reading for this Equipment in the Equipment/Property file is also Zero you can record Non-Metered Usage.
The number entered in the Usage Recorded field will be added to the Hours/Miles fields for This Year and Lifetime on the Equipment/Property - Add/Edit/Delete screen. The current meter WILL NOT be incremented and a Usage Transaction WILL be placed in the Equipment Usage Log.


Click on Save when entry is complete. The last Pump Number, Date, Property Number and Pumped By fields will be saved and both the Hours/Miles and Gallons fields will clear in preparation for another pump ticket to be entered.

If your system is set to automatically generate Pump Ticket Numbers, the Ticket Number field will advance to the next sequential ticket number and the cursor will be placed in the Property Number field. If your system is NOT set to automatically generate Pump Ticket Numbers, the Ticket Number field will reset to zero to allow a new pump ticket number to be entered.

The following files are updated whenever a Pump Ticket is SAVED:

| Fuel Pump File* | Gallons Pumped |
| :--- | :--- |
| Fuel Tank File* | Gallons Pumped this Month |
| Inventory File* | Fuel Used |
| Equipment File | Fuel Used, Equipment Usage Hours or Miles |
| Budget/Expense File | Fuel Cost (See Inventory Classification) |
| *These files are not updated if using Allow Retail Fuel Purchase Pump Tickets option is selected. |  |

## Recording a Pump Ticket - Automatic Fuel Pump Selection is Checked

Enter the Date of this Pump Ticket.
Next, enter the Property Number of the Equipment receiving the Fuel. If the Equipment is not known, click on the LOOK-UP tool.

If the fuel type was assigned on the Filters \& Plugs Tab in the
Equipment/Property File, the pump number will automatically be displayed.

If the fuel type was NOT assigned
 on the Filters \& Plugs Tab in the the Equipment/Property File, a pop-up window will appear asking to Specify Fuel Type.

Click OK to continue data entry.

## Recording Retail Pump Tickets

Pump Tickets for vehicle fuel purchased at retail fuel outlets (gas stations) can now be recorded and will automatically be charged to the Budgets/Expense Accounts. Equipment usage will also be recorded in the Equipment/Property File.
Make sure Allow Retail Fuel Purchase Pump Tickets option is selected on the System Utiltiies - Workstation Options Tab is checked. Next, ensure all fuel inventory items have been setup.

Enter the Pump Number the fuel was pumped from. If the Pump Number is not known, click on the LOOK-UP tool. The Description of the Fuel will be displayed.

Enter the Date of this Pump Ticket.
Next, enter the Property Number of the Equipment receiving the Fuel. If the Equipment is not known, click on the LOOK-UP tool.
If Equipment Usage is to be logged when Fueling Vehicles, enter the Current Odometer or Hour Meter Reading in the Hours/Miles field.


Enter the Quantity of Fuel Pumped. Next, enter the Name or Initials (optional) of the Person operating the Pump or click on the LOOK-UP tool.
Click on Retail Purchase and change the Cost per Gallon if needed.
Click on Save to record the Pump Ticket.

## Editing an Existing Fuel Pump Ticket

From the Pump Tickets Browse Table, position the scroll bar on the Pump Ticket to be changed and click on the EDIT tool. The Add/Edit Panel will appear with the selected information displayed. Once the information is displayed, you can change ONLY the Gallons or the Pumped By fields.
Click on ACCEPT when changes are complete.

The Pump, Tank, Inventory and Equipment Files will be automatically adjusted.

## Voiding a Fuel Pump Ticket

From the Pump Tickets Browse Table, position the scroll bar on the Pump Ticket to be changed and click on the EDIT tool. The Add/Edit Panel will appear with the selected information displayed.

Click on the Void button to Void this Pump Ticket.

Once a fuel ticket is marked as VOID, it cannot be edited.

The Void Procedure performs the following adjustments:

- Gallons/Litres will be set to Zero and the ticket IS NOT removed from the Pump Ticket Browse Table.
- Fuel Pump Settings are rolled back as if the ticket did not exist.
- Fuel Tank Settings are rolled back as if the ticket did not exist.
- An Adjusting Inventory Transaction is created to account for the adjustment.
- Inventory Levels are rolled back as if the ticket did not exist.
- Equipment Fuel Cost is rolled back as if the ticket did not exist.
- If Usage Hours/Miles/KM was recorded on this ticket, the Equipment Meter Reading, Usage MTD and YTD are adjusted as if the ticket did not exist. The Usage Transaction in the Equipment Usage Log is deleted.
- The Budget/Expense Account associated with this Pump Ticket is rolled back as if the ticket did not exist.

All Fuel Pump Daily Tickets issued prior to the Last Pump Reading Date or Tank Inventory Date are deleted using this procedure. The earliest date on each Pump/Tank combination is used when determining which Fuel Pump Tickets are to be deleted.
This program should be run periodically to remove outdated information from the Fuel Pump Ticket File.

From the Pump Tickets Browse Table, click on the Procedures Toolbar Menu, then choose Delete Old Pump Tickets.

```
    ^. DELETE OLD PUMP TICKETS
        \square
        ×
```

        Pump Tickets Dated Prior to the Last Pump Reading Date
        or Tank Inventory Date Will Be Deleted
    Click on the DELETE tool to begin deletion. The Delete Confirmation Window will appear asking for confirmation of the delete request.

There are no reports printed for this program function.

## Pump Summary Report

The Pump Summary Report is used to list the Activity on each Pump for either a specified time period or since the Pump was last reset.

From the Pump Tickets Browse Table, click on the Reports Toolbar Menu, then choose Pump Summary.


Report Fuel Pump Activity
$\subset$ Since Last Pump Reading

- Within Date Range


If Since Last Pump Reading is selected, all Fuel Pump Activity since the Date of the Last Pump Readings will be reported.

If all Fuel Pump Activity within a Date Range is to be reported, enter the Date Range indicating the time period to be reported.
Click on the PRINT tool to begin printing.
See Sample Reports - Appendix A-73

## Tank Summary Report

The Tank Summary Report is used to list Activity Detail on each Fuel Tank since the Fuel Tank Beginning Inventory Date.

From the Pump Tickets Browse Table, click on the Reports Toolbar Menu, then choose Tank Summary.


If reporting Specific Tanks you can select more than one Fuel Tank.
Click on the PRINT tool to begin printing.

## Fuel Usage Report

The Fuel Usage Report is used to Report Fuel Usage within a specified time period for either All or Selected Equipment.

From the Pump Tickets Browse Table, click on the Reports Toolbar Menu, then choose Fuel Usage.


## Equipment Selection

- All Equipment
$\bigcirc$ Specific Equipment
C Group Selection

Enter the Date Range indicating the time period to be reported.
Select if you want Equipment Detail, Summary Totals Only or Monthly Fuel Usage on this report.
If Match Property No is selected, you can report only those Items with Property Numbers containing the specified character sequence.

Select Report \& Total By Group for subtotal groupings.
Select SubTotal by Fuel Type for fuel type groupings.
Next, make an Equipment Selection of All Equipment, Specific Equipment or Group Selection.
If reporting Specific Equipment, click on the LOOK-UP tool. If reporting an Equipment Group, you can select more than one Equipment Group for reporting.

Click on the PRINT tool to begin printing.
See Sample Reports - Appendix A-75

