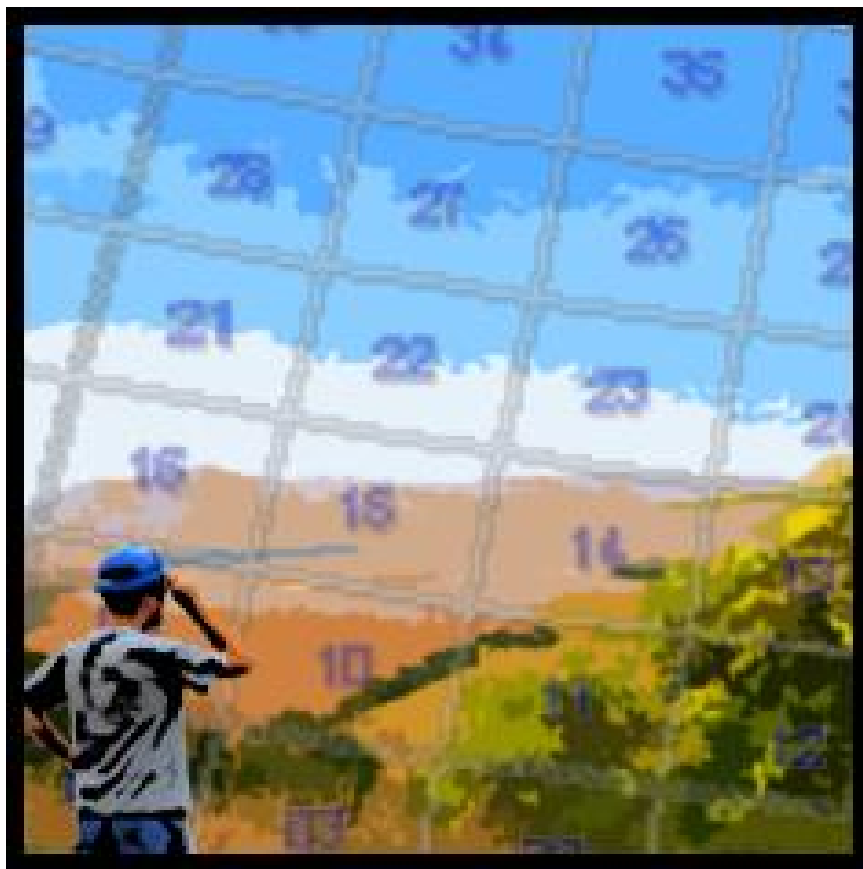


# Field Scout

Desktop Version II





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# Program Overview

## FUNCTIONAL OVERVIEW

Field Scout II is designed to facilitate the collection and management of well or point records while working in the field. It is particularly designed for managing well records. However, other types of point data can be collected.

- Datasets can be created or imported and exported. Exported datasets on one copy of Field Scout II, can be imported and used in another copy of the program on a different Computer or Pocket PC. They can also be opened and used in the original Field Scout program.
- Data can be entered and edited by user input or it can be entered and edited via GPS input.
- Field Scout II provides a mapping component to show your location and well locations referenced to the Alberta Township System and Saskatchewan Township System grids. A variety of map sets can be displayed in addition to the township data.
- A redline layer is provided allowing for the creation of ad hoc drawing and annotation on the map. This layer can also be used in other map programs for display.
- Track tables can be created, and using the GPS, your travel route can be recorded. The currently loaded route will be displayed on the map. You can record many routes in one table or record each route in its own table. These routes can also be exported and shared with other Field Scout II users or imported into map programs for display. With the GPS on, a user can follow a track back to its origin.
- Waypoints can be collected and stored using the GPS. A Latitude, Longitude, Elevation and Time are all provided by the GPS and a user Comment can also be added. The User can snap to a waypoint and use it as navigation destination.
- A well or point record can be set as a destination. If there is a drilling target set for the well, you will also see this displayed on the map. In addition, you can pick a section corner on the map to use as a destination. If the GPS is on, Field Scout II will tell you the distance and azimuth to this destination, from your current location. The program will give verbal cues as you get close to your destination.
- With the GPS on, a user can see their current location on the map, enter a new point record or update the current point record and obtain distance and bearing information relative to the user's selected destination.

## HARDWARE REQUIREMENTS

Field Scout II is designed for Laptop and Desktop computers running the Windows XP or Windows 2003 operating system. It has not been extensively tested on Windows Vista. The following are the hardware requirements for running the program.

- A PC with Windows XP, XP Pro or 2003 operating system.
- Minimum of 256MB of Ram with 512MB or more highly recommended.
- 400MB of available hard drive space.
- A GPS device that can connect to the PC.

## MAP DATA SETS PROVIDED

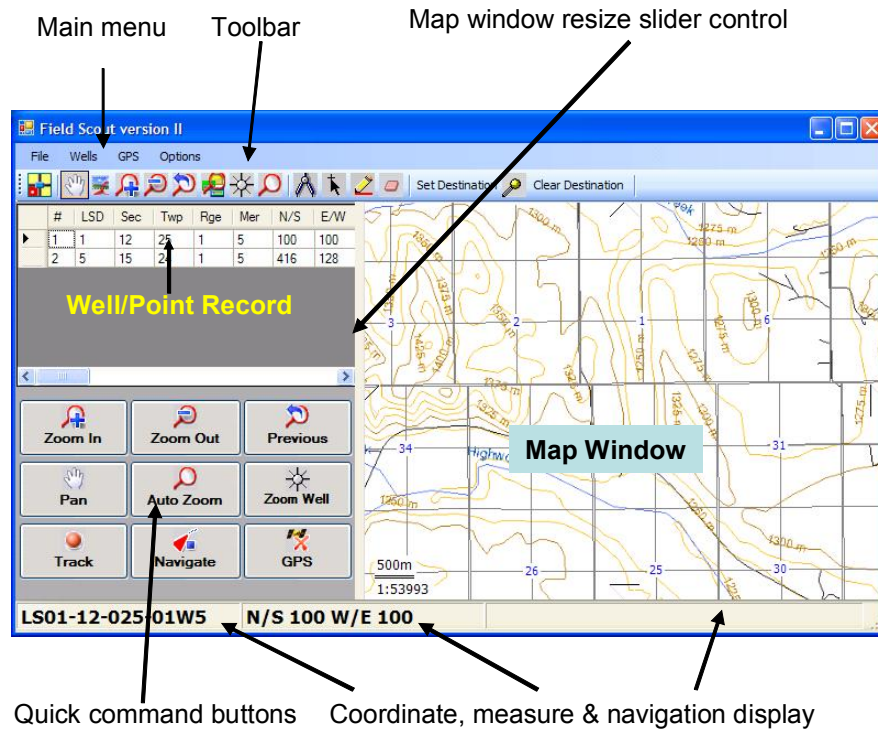
There are four map sets included with the program.

- The Alberta Township System data files (Based on ATS 2005 as provided by AltaLIS).
- The Saskatchewan Township System data files.
- An Alberta Base Map providing a high level background map with Roads, Contours, Hydrography, Urban Centers and Populated Places, Indian Reservations and Métis Settlements, Airports and Airfields and Parks. This dataset is viewable at map scales from 1:70000 to 1:20000
- A Saskatchewan Base Map providing a high level background map with Roads, Contours, Hydrography, Urban Centers and Populated Places, Indian Reservations and Métis Settlements, Airports and Airfields and Parks. This dataset is viewable at map scales from 1:70000 to 1:20000

In addition to the datasets listed above there are samples of a raster Digital Elevation Model (DEM), an Air Photo and a custom background map. Some raster datasets may be viewable at overlapping map scales. Turn these layers on and off, as required, from the Options dialog. (This dialog is documented below in this manual.) The data sets are viewable at various zoom scales and are located as noted below.

- A raster DEM dataset that covers a small portion of eastern Alberta and Western Saskatchewan. Near Twp7 Rge1 W4 and Twp7 Rge30 W3. This dataset is viewable at map scales from 1:200000 to 1:70000
- A sample air photo, in Alberta, at Twp13 Rge1 W4. This dataset is viewable at map scales from 1:65000 to 1:10000
- A sample of a custom background map in Alberta, at Twp13 Rge1 W4. This dataset is viewable at map scales from 1:10000 to 1:1

## USER INTERFACE OVERVIEW



Main menu	Access file, well, waypoint, track, map, GPS and program options from the main menu.
Toolbar	Toolbar offering access to many of the program commands.
Map window resize slider control	Drag this divider bar left and right to resize the map window.
Well / Point record data grid	Data grid displaying all well records for the currently loaded table. Scroll left and right to see additional record details. Double click to access well record functions.
Map window	Map display window showing, ATS and STS Grid, redlines, tracks, well records, background maps etc.
Quick command buttons	Quick access to most map display commands and common GPS functions. Finger operation supported on touch screens.
Coordinate, measure & navigation display	Status bar providing textual display of legal description and offsets for currently selected well record. Changes to display same information for GPS reported locations when the GPS is on and receiving information. Provides a display area for information from other coordinate tracking, measurement and navigation tools.
Map scroll arrows	There are four transparent arrows at the edges of the map window. These provide a simple scrolling mechanism for the map. Click in each area to move the map window in the direction indicated.

## Operating Field Scout II

This section of the manual provides a summary of Field Scout II operations. Use it as a guide to getting started with the program.

## Working with Well Records

### ACCESSING THE WELL MENU

In order to access the well menu you must double click on a well in the data grid list or select **Wells** from the main menu. The well context menu will be displayed as show below.



---


If you are adding a new well, it does not matter what well you select when clicking. If you intend to edit, copy, delete, view details, zoom to or set a well as a destination, then you must click on a specific well.

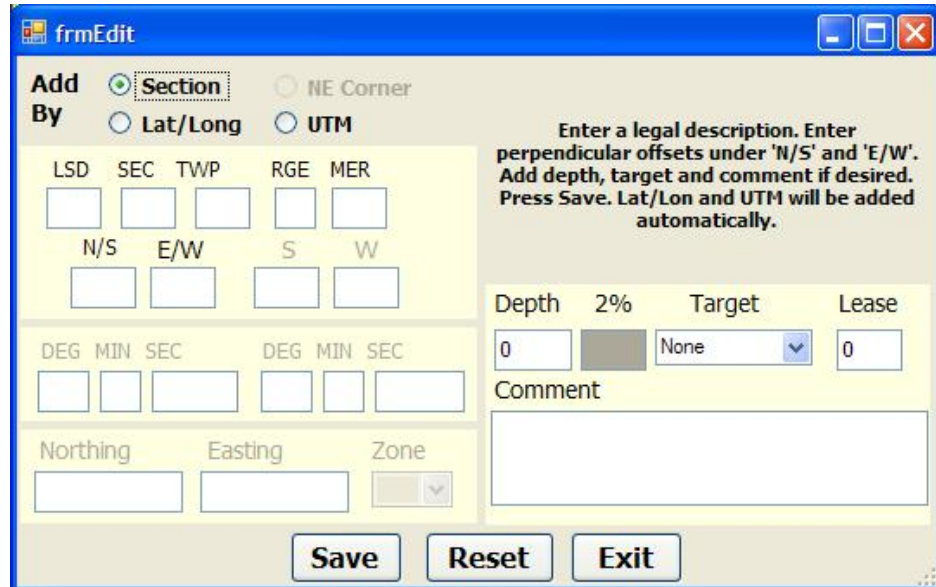
---

### CREATING WELL RECORDS

To add a new record, choose **Wells** from the main menu or double click on the data grid and choose **Add Well** from the data grid menu. The dialog below will be displayed. By selecting one of the *radio buttons* you can now enter a record by typing in the appropriate information. A full legal description including offsets must be entered if using *Section* or *NEC* as your input mode. If entering *Lat/Long* all degrees, minutes and seconds fields must be filled in. For *UTM*, enter a northing and easting and select the appropriate zone. A *Depth*, *Target*, *Comment* and *Lease* size may also be

added to the record. These values are optional.

If you have GPS mode on, wells are added by GPS input. To add wells manually turn GPS mode off then double click on the data grid and choose Add Well. The GPS mode button will look like this when it is turned off. 



The screenshot shows a dialog box titled "frmEdit" with a blue title bar and standard Windows window controls. The dialog is divided into several sections. At the top left, there are radio buttons for "Add" (selected) and "NE Corner", and "By" options for "Section" (selected), "Lat/Long", and "UTM". Below this are input fields for LSD, SEC, TWP, RGE, and MER, with "N/S" and "E/W" labels under the first two, and "S" and "W" under the last two. Further down are fields for "DEG MIN SEC" for both longitude and latitude, and "Northing", "Easting", and "Zone" for UTM coordinates. On the right side, there is a text area for a legal description, followed by "Depth" (0), "2%" (a shaded box), "Target" (None), and "Lease" (0). A "Comment" text area is at the bottom right. At the bottom of the dialog are three buttons: "Save", "Reset", and "Exit".

*Add a well*

When a well record is saved, the values for the other fields are automatically calculated. For example, if you add by section offset, then north east corner offsets, lat/long and UTM values are all calculated and stored in the table.

- Click the **Save** button to write the record to the database. When the record is saved the data entry form will clear. You can add another new record or click **Exit** to return to the main program screen.
- Click the **Reset** button to clear the data entry screen.
- Click the **Exit** button to close the data entry form.

When a record is added or updated in the point list, it is automatically written to the current data file.

## SELECT WELL RECORDS



To select a well record in the data grid, simply click on the row with your mouse. The coordinate display will update to reflect the values in the selected record. In the data grid you can scroll left and right to see more detail for a particular record. If there are several well records in the file, a scroll bar will be displayed on the right side of the data grid allowing you to scroll through the records.

---

Field Scout opens the most recently used data file each time the program is started. If you start the program and no points are displayed, either you have deleted the last opened file or you have not yet saved any data to a file. Anytime a record is added or updated in the well data grid, it is automatically written to the current data file.

---

## EDITING WELL RECORDS

To edit a record, choose **Wells** from the main menu or double click on the data grid and choose **Edit Well** from the data grid menu. The dialog, as shown below, will be displayed with the selected well record details.

The screenshot shows a software window titled 'frmEdit'. It contains a form with several sections:

- Edit By:** Three radio buttons: 'Section' (selected), 'Lat/Long', and 'UTM'. There is also an unselected 'NE Corner' radio button.
- Section Data:** Fields for LSD (1), SEC (12), TWP (25), RGE (1), MER (5), N/S (100), W/E (100), S (1510), and W (100).
- Lat/Long Data:** Fields for DEG, MIN, SEC (51, 6, 41.444) and DEG, MIN, SEC (114, 0, 11.706).
- UTM Data:** Fields for Northing (5666497.04), Easting (709755.98), and Zone (11).
- Well Data:** Fields for Depth (200), 2% (4), Target (a dropdown menu showing '#1 Gas 640'), and Lease (100).
- Comment:** A text area containing 'Test Well'.
- Buttons:** 'Save', 'Reset', and 'Exit' buttons at the bottom.

Instructions on the right side of the form state: "Enter a legal description. Enter perpendicular offsets under 'N/S' and 'E/W'. Add depth, target and comment if desired. Press Save. Lat/Lon and UTM will be added automatically."

By selecting one of the *radio buttons* you can now edit the record by typing in the appropriate information. A full legal description including offsets must be entered if using *Section* or *NEC* as your input mode. If entering *Lat/Long* all degrees, minutes and seconds fields must be filled in. For *UTM*, enter a northing and easting and select the appropriate zone. A *Depth*, *Target*, *Comment* and *Lease* size may also be added to the record. These values are optional.


- Click the **Save** button to write the record to the database.
- Click the **Reset** button to clear the edit screen.
- Click the **Exit** button to close the edit form.

---

When a record is added or updated in the point list, it is automatically written to the current data file.

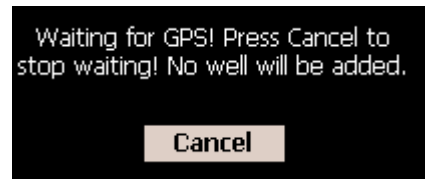
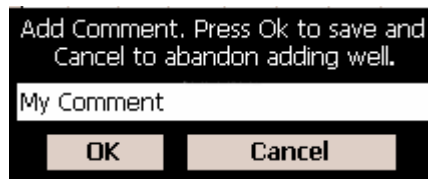
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### ADDING/EDITING IN GPS MODE

You are operating in GPS mode when the GPS receiver is turned on,  connected to Field Scout II and is receiving data. In this mode, two of the menu choices operate using the data from the GPS receiver. *Add Well* and *Update Well* both receive their input from the GPS.

### ADDING RECORDS BY GPS

To add a record in GPS mode you choose **Wells** from the main menu or double click on the data grid. Choose **Add Well** from the menu. A comment input form will be displayed. You can enter a comment or leave the input blank.



Click **OK** to add the GPS Point or **Cancel** to return to the program. If you click OK, you will see the message box shown above, on the right. The program will wait for a valid point from the GPS receiver and then this box will close, adding the new record. If you do not wish to wait, click **Cancel** and the add operation will be cancelled.

---

If you have a good GPS lock and signal there will be a very short delay in obtaining the point from the GPS receiver.

When a record is added or updated in the point list, it is automatically written to the current data file.

---

### UPDATING RECORDS BY GPS

To update a well in GPS mode you double click in the data grid on the well record that you wish to update. Choose **Update Current Well** from the menu. A comment input form will be displayed. You can edit the displayed comment or leave it as it is.

Click **OK** to update the GPS Point or **Cancel** to return to the program. If you click OK, you will see the message box shown above, on the right. The program will wait for a good point from the GPS receiver and then this box will close, updating the currently selected record. If you do not wish to wait, click **Cancel** and the update operation will be cancelled.

---

If you have a good GPS lock and signal there will be a very short delay in obtaining the point from the GPS receiver.

When a record is added or updated in the point list, it is automatically written to the current data file.

---

### COPYING WELL RECORDS

If you need to enter records where only one or two record details change then use the *Copy Well* command. Double click on the well record you want to copy then choose **Copy Well** from the menu. The record is copied and the edit dialog will open. Edit the well details as instructed in the section above titled *Editing Point Records*.

### VIEWING WELL RECORD DETAILS

If you want to view a record without editing, double click on the record you want to view and then choose **Detail View** from the menu. The selected record will be displayed in the dialog box as

shown in the above section titled *Editing Point Records*.

## ZOOMING TO WELL RECORDS

To center a well location on the map, double click on the well record you want to view and choose **Zoom To Well** from the menu. The map will move such that the well is in the center of the map display.

## SETTING A WELL AS A NAVIGATION DESTINATION

Field Scout II provides feedback to assist in navigating to a selected location. To select a well as your destination, double click on the well record then choose **Set as Destination** from the data grid menu. A pushpin will be displayed on the map at the point location.

---

To receive navigation assistance the GPS must be on and navigation mode enabled. These items are documented in greater detail, further on in this manual.

---

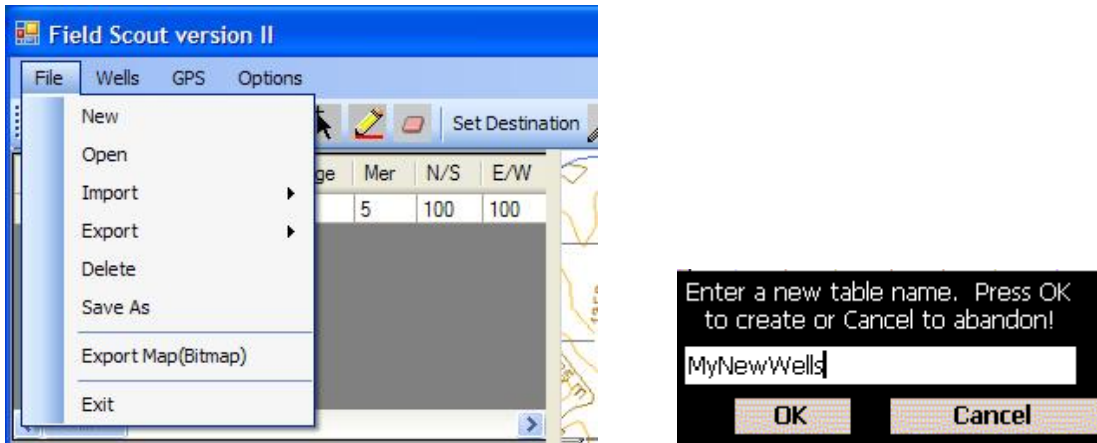
## CLEARING A NAVIGATION DESTINATION

If you want to clear a destination, double click on the well list then choose **Clear Destination** from the toolbar or menu.

# Managing Well Data Files

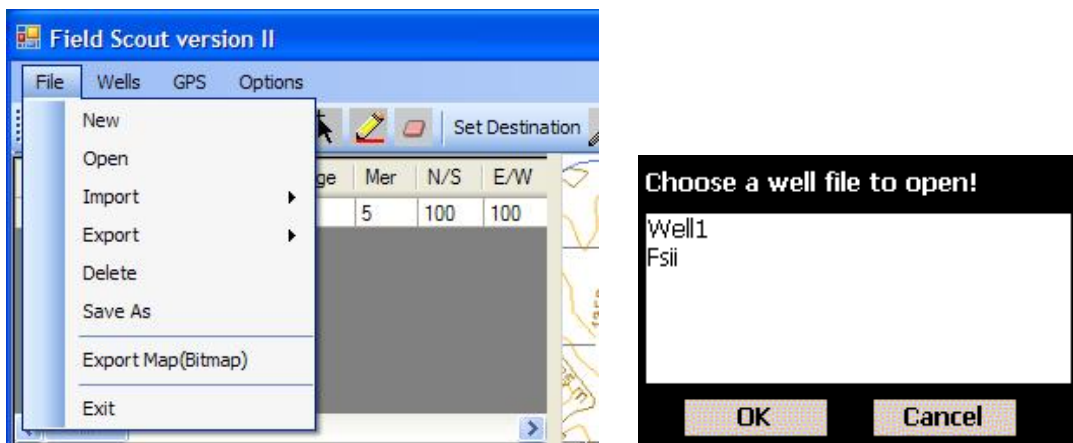
So far we have reviewed how to work with individual well records. The following section details how to work with the data tables that store the well records.

## CREATING A DATA TABLE



Field Scout data is stored in tables, in a database file. You can create tables to organize the data in any way you choose. There is always a default table called *Well1*. This table is created by the program and can never be deleted. You can use this table to store records if you wish. To create a new data table, choose **Menu File New**. Enter a table name when prompted. Click **OK** to create the new table and *make it your current data table*. Click **Cancel** to return to the program without creating a table.

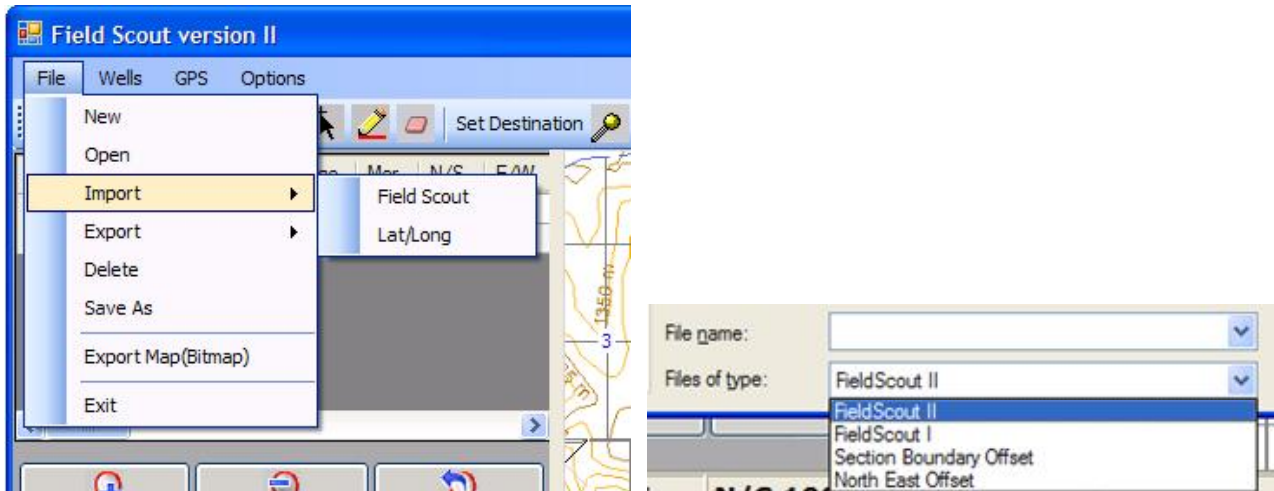
## OPENING A DATA TABLE



To open an existing data table, choose **Menu File Open**. Select a table from the list. Click **OK** to

open the table and *make it your current data table*. Click **Cancel** to return to the program without opening the table.

## IMPORTING A DATA TABLE



To import a data file into Field Scout II, choose **Menu File Import**. Browse for a file using the *Open Dialog*. Click on a file displayed in the dialog to import the file and *make it your current data table*. Click **Cancel** to return to the program without importing the table.

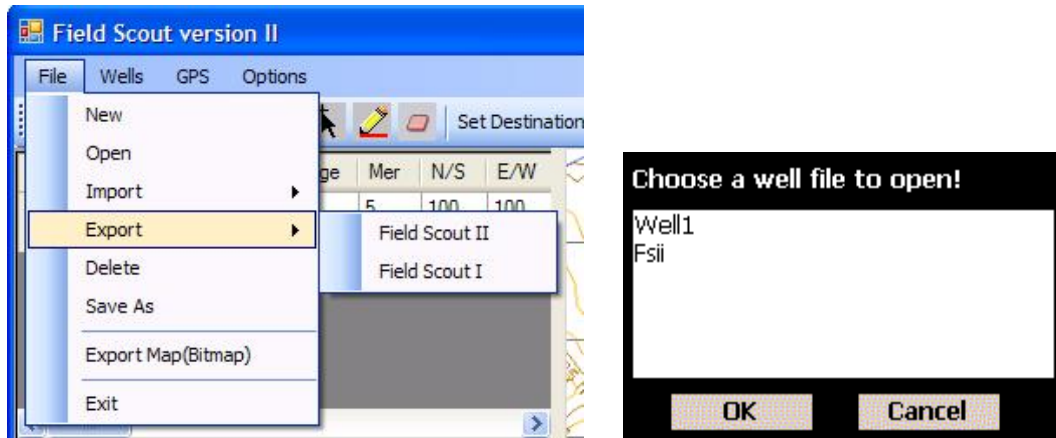
Data can be imported into Field Scout in a variety of formats. The *import* menu and the *file type* choices on the *open* dialog are used to determine what type of data you are importing. The following details may be helpful in choosing your import file format.

- Field Scout
  1. Field Scout II
    - Any file created using the *Export* command on the Field Scout II *File* menu.
  2. Field Scout I
    - Any “.csv” file created in the original of Field Scout.
  3. Section Boundary Offset
    - A “.csv” file that contains a legal description including section boundary offsets.
  4. North East Offset
    - A “.csv” file that contains a legal description including offsets from the North East corner of a section.

- Lat/Long
  - A “.txt” or “.csv” file that contains lat and long values.

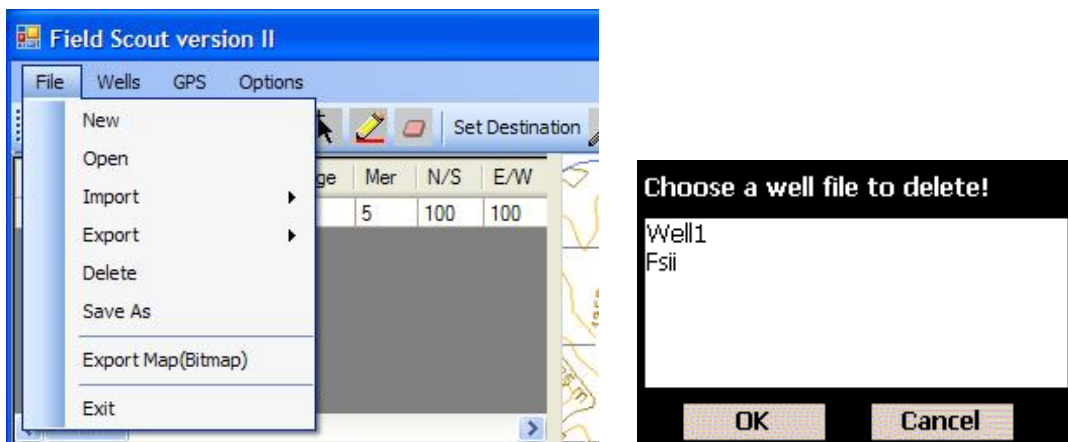
An imported file will create a new data table in the database with the same name as the import file. If a data table already exists by the same name as the import file, the records will be imported into that table.

### EXPORTING A DATA TABLE



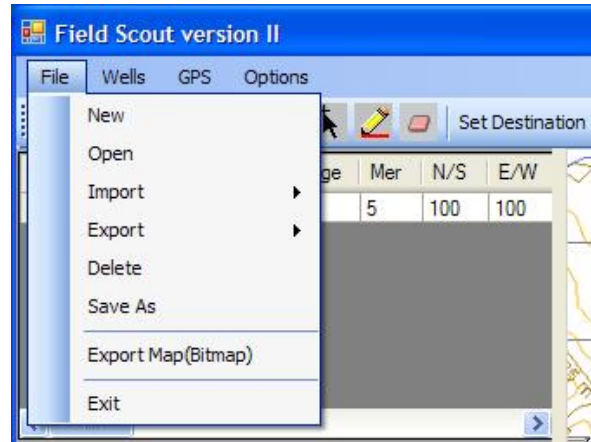
To export a data file, choose **Menu File Export**. Select FieldScout II or FieldScout I from the menu. Select a well table to export from the list. Click **OK** to export the file. Click **Cancel** to return to the program without importing the table.

### DELETING A DATA TABLE



To delete a data file, choose **Menu File Delete**. Select a table from the list. Click **OK** to delete the table. Click **Cancel** to return to the program without deleting the table.

## SAVE AS DATA TABLE



To save your current data table to a new data table, choose **Menu File Save As**. Enter a table name when prompted. Click **OK** to save the data table to the new name and *make it your current data table*. Click **Cancel** to return to the program without creating a table.

---

When you use the Save As command, the original data table remains intact. A new data table is created and this becomes your current table.

---

## Working with the GPS



Field Scout II provides all the tools necessary to collect and edit well locations via GPS. In addition you can collect waypoints or record tracks as you travel and use these as a guide to re-trace your tracks in the future. A *well* or a *section corner* can be set as a navigation destination. With the GPS on and *navigation mode* set, you will receive visual and verbal prompts indicating the bearing and distance to your selected destination. *To access these functions use the GPS menu.*



### CONNECT/DISCONNECT FROM THE GPS

Choose these menu options to attach to or detach from your GPS device. Your GPS device should be powered on before trying to connect. If you are using a Bluetooth device you should power on the GPS and ensure that it is paired with your computer.

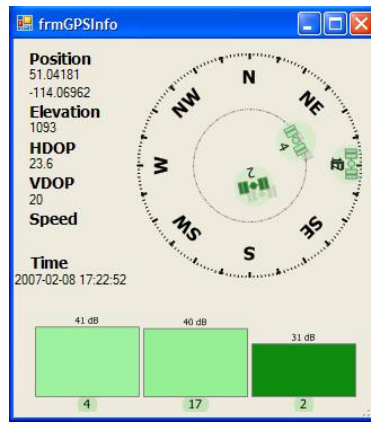
---

GPS is off when the  symbol is displayed and on when the  symbol is displayed. Tap the GPS Quick Command button to toggle the GPS On or Off or use the **Connect** and **Disconnect** commands from the main menu.


---

### VIEW GPS INFO

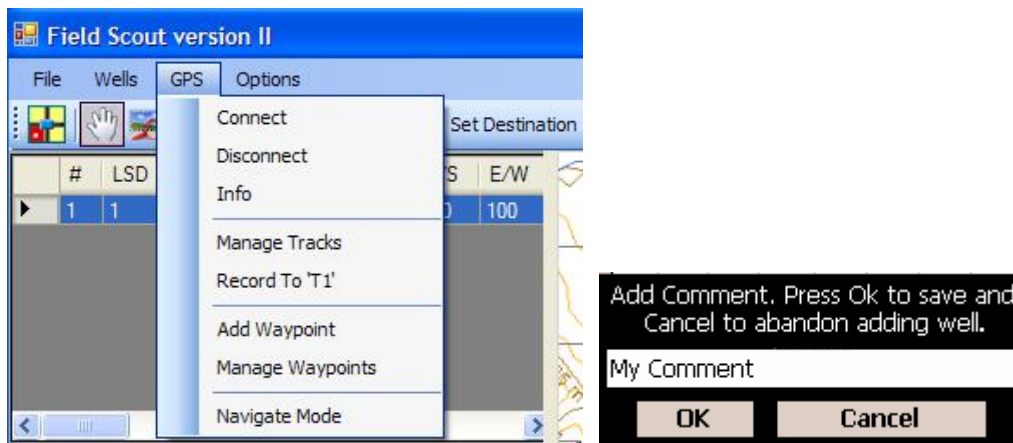
Choose **Info** on the GPS menu to access the GPS information dialog. This dialog shows satellites, signal strength, a compass and current position GPS position, accuracy and time information. Click the “X” button in the upper right corner to close the dialog.



## COLLECTING WAYPOINTS

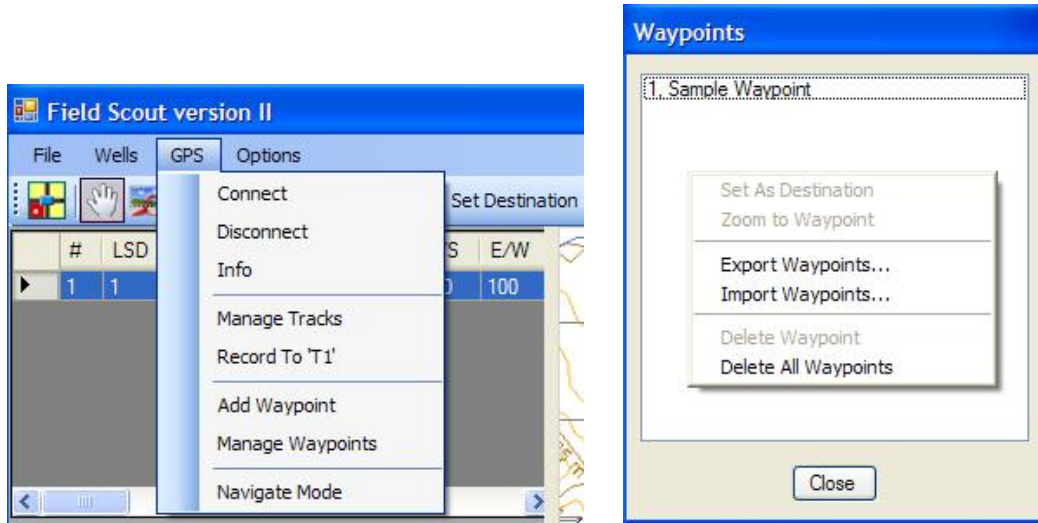
Field Scout Desktop version allows for the collection of waypoints. To collect waypoints the GPS receiver must be turned on and connected in the Field Scout Program. The GPS button will look like this  when you are connected and receiving data.

To add a waypoint, choose **GPS→Add Waypoint** from the main menu. A comment input form will be displayed. You can enter a comment or leave the input blank. Press **OK**.



## MANAGING WAYPOINTS

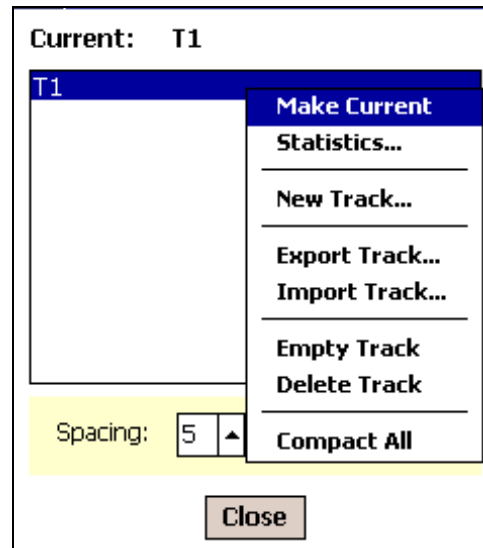
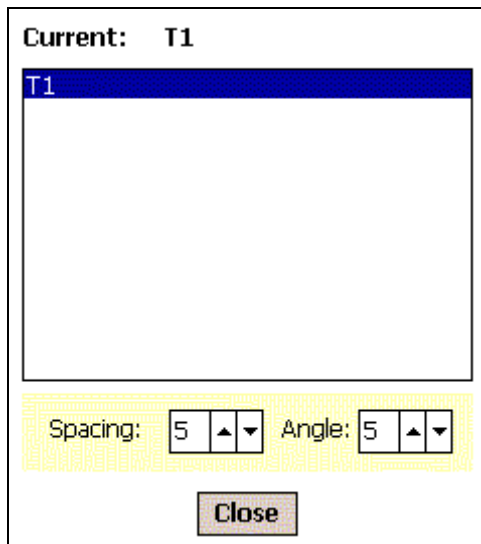
To manage waypoints choose **GPS→Manage Waypoint** from the main menu. The waypoints dialog shown below will be displayed. To display the menu, right click inside the waypoint list box. See the table below for an explanation of each waypoint command.

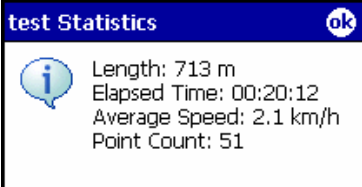


<b>Set as Destination</b>	Sets the currently selected waypoint to be your navigation destination.
<b>Zoom to Waypoint</b>	Centres the map on the waypoint at the current map scale.
<b>Export Waypoints</b>	Export waypoints to a comma separated values “.csv” file for use in other programs.
<b>Import Waypoints</b>	Import waypoints from a comma separated values “.csv” file. Usually created by another Field Scout User.
<b>Delete Waypoint</b>	Delete the currently highlighted waypoint.
<b>Delete all Waypoints</b>	Delete all stored waypoints.

## MANAGING TRACKS

Field Scout II supports extensive track recording functionality. Tracks may be recorded in a single table in or separate tables. It is usually best to record each track to its own table but there may be a time when recording multiple tracks to one table is useful. For example, if you want to see several tracks, on the map at the same time, you can record them all in one table. Each *Start/Stop* record action will create an independent track segment. Choose **Manage Tracks** on the GPS menu to display the *Tracks* dialog. To access the *Tracks* menu, click inside the track list box. The following context menu will be displayed. Each menu item is documented below.




<b>Make Current</b>	Sets the selected track as the current track for recording and display.
<b>Statistics</b>	Displays statistics for the selected track. Click OK to close the display. 
<b>New Track</b>	This option creates a new track. Type in a track name and press <b>OK</b> to create the track table.
<b>Export Track</b>	This option creates an export of the track as a “.csv” file. This file can be imported by other Field Scout II users or you can import it into other mapping programs that support this data format.
<b>Import Track</b>	This option imports a track file that has previously been exported from Field Scout II. A track table will be created with the same name as the import file.
<b>Empty Track</b>	This option deletes any existing data from a selected track file.
<b>Compact All</b>	This option removes dead space from recorded tracks. This option optimizes the storage space used by each track file.

Track “T1” is a special instance track. It cannot be deleted. It is used as the default track file if no other file has been created. Choosing delete will simply empty this track file of any recorded information.

## **RECORD TO “T1”**

Choose this option to begin recording to the selected track. The default track for recording is “T1”. The name you select from the list of tracks will be displayed in this place. Click this menu choice again to turn off track recording.

## **NAVIGATE**

Choose this option to receive navigation assistance. Turn the mode on and off by toggling the Navigate button on the menu bar at the bottom of the Field Scout II screen. The navigate icon looks like this  when navigate mode is turned on. The GPS icon will change from an arrow to an arrow with a line at the point. The arrow shows the direction of travel as reported by the GPS, and the line at the point is always pointing to your selected destination. The coordinate display area, just above the map, will show you a bearing and distance to your selected destination.

## Options

The following section describes the program options that can be set by the user. Set an option by making your selection in the dialog and then clicking the **Save** button. Click **Cancel** to close the dialog without saving your changes.

### GPS COM PORT

Use this to set the com port for your GPS device. You can set this to “*Redetect*”. Next time you choose to connect to the GPS, Field Scout II will attempt to automatically detect the GPS com port for your device. If it successfully detects the device it will save this in the settings file.

### CURSOR COORDINATE DISPLAY

Chooses what data will be displayed when you use the “*Track Coordinates*” tool that is documented below under *Mode Menu*.

<b>UTM</b>	Display Northing and Easting in the currently set UTM coordinate system
<b>Lat/Long</b>	Display Latitude and Longitude
<b>Section Boundary</b>	Display Legal location including offsets from the section boundaries.
<b>NE Corner</b>	Display Legal location including offsets from the north east corner of section.

### OFFSET METHOD

Choose the method used in well record offset calculations.

<b>Section Boundary</b>	Calculate offsets from the closest section line boundaries.
<b>NE Corner</b>	Calculate offsets from the North East corner of the section.

## MAP DISPLAY TEXT COLOUR

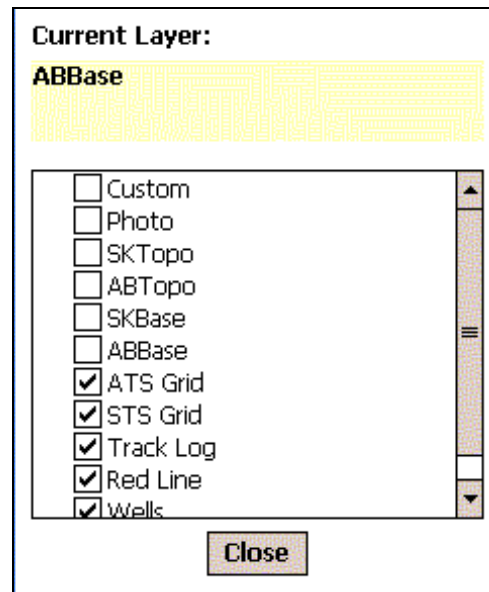
Choose the color scheme to be used in drawing the map lines and text. *White* is useful for display on dark backgrounds while *Black* works well on light backgrounds. *Color* is the default display mode.

## OPTIMIZE MAP DISPLAY

Choose the coordinate system most suitable for your area of interest. This is currently limited to a 10TM projection with a central meridian optimized for Alberta display or for Saskatchewan display.

## Layers

To control the display of layers, click the **Layer** button on the options dialog. The following dialog will be displayed. You can turn on or off any of the listed layers except *Wells*. Click **Close** to return to the *Options* dialog. You must use the **Save** button on the *Options* dialog to save the layer settings from one Field Scout session to the next. Otherwise your layer changes will apply only until you exit the program.



## EXPORTING MAPS

To export a map for printing, or for importing into other software programs, use the File, *Export Map(Bitmap)* menu command. In the Save As dialog, choose a directory and type a file name for your exported map then press the **Save** button. This will create two files. One is called “*yourfilename.bmp*”, the other is called “*yourfilename.bmpw*”. The *yourfilename.bmp* file is a windows bitmap file that can be printed as it is or it can be inserted into other software and documents.

If you use software such as AutoCAD, ArcMap, MapInfo or other mapping programs, you can use the “*yourfilename.bmpw*” file to geo-reference the image to other map data.

---

If your own mapping program supports this feature then the software manual will contain instructions on how to use these files.

---

## BACKING UP YOUR DATA FILES

User data files such as wells, waypoints, tracks and redlines are stored in a folder called “C:\Documents and Settings\All Users\Application Data\Can-Am Geomatics\CanamData\User”.










These files should be backed up to ensure your working files are kept safe and can be restored in the event of hardware failure.

## EXITING THE PROGRAM

To exit the program, use the *File* → *Exit* command on the main menu.

## PAN and ZOOM FUNCTIONS

The following zoom functions are available by clicking an icon on the Toolbar or by pressing a Quick Command button. Each choice is documented in the table below.

<b>Pan</b> 	Use this tool to drag or move the map. Click on the map screen and drag in any direction. Lift the mouse button to end the drag or pan.
<b>Zoom In</b> 	Click to zoom in to 50% of current display.
<b>Zoom Out</b> 	Click to zoom out to 200% of current display.
<b>Zoom Previous</b> 	Click to zoom to previous map view. (10 previous viewed stored)
<b>Zoom Window</b> 	Use this tool to set a zoom window on the map. Click on the screen and drag to set the zoom window.
<b>Zoom Current</b> 	Click to zoom to the extents of the currently selected layer. You can set the selected layer in the <i>Options</i> → <i>Layer</i> dialog box. Some layers extents may be an entire province so use the command with care.
<b>Auto Zoom</b> 	In GPS mode this will automatically move the map as your location changes keeping your current location in the center of the screen.
<b>Zoom Well</b> 	Use this tool to centre the map display on the well record that is currently selected in the well data grid.
<b>Zoom Township</b> 	Displays the dialog shown below. Select a township, range and meridian from the drop down lists. Press <b>Find</b> to zoom to that location.

Township:

Range:








Meridian:

*Zoom Township Dialog*

## CURSOR MODES

These are called Modes because each of these commands puts the program into a specific “operating mode”. The following functions are available by clicking an icon on the Toolbar or pressing a Quick Command button. Each choice is documented in the table below. Some of these commands support *Snap* mode. See the note below for *Snap* instructions. Each mode choice is documented in the table below.

**SNAP MODE:** Field Scout II supports snapping. To use this feature hold down the *Enter* key and the left mouse button then drag the stylus on the map until you see a blue circle appear around a point or object. Lift the mouse button first and then release the *Enter* key to complete the snap.

<b>Pan</b> 	Use this tool to drag or move the map. Hold your stylus on the map screen and drag in any direction. Lift the stylus to end the drag or pan.
<b>Auto Zoom</b> 	In GPS mode this will automatically move the map as your location changes keeping your current location in the center of the screen.
<b>Measure Distance</b> 	Use this tool to measure distances on the map. Select a start point and drag to an end point. Release the mouse button to complete. If you hold the <i>Enter</i> key (snap) while dragging, it will snap to the nearest well, waypoint or section corner.
<b>Track Coordinates</b> 	This tool allows you to display a coordinate readout as you hold down the left mouse button and drag your cursor around the screen. If you hold the <i>Enter</i> key (snap) while dragging, it will snap to the nearest well, waypoint or section corner.
<b>Draw Redline</b> 	Use this tool to draw on the redline layer.
<b>Erase Redline</b> 	Use this tool to erase on the redline layer. Draw a window around the redline objects you wish to erase.
<b>Pick Destination</b> 	Use this tool to select a navigation destination on the map. If you hold the <i>Enter</i> key (snap) while dragging, it will snap to the nearest well, waypoint or section corner. A pushpin will appear on the map at the selected destination
<b>Clear Destination</b>	Use this tool to clear the currently selected navigation destination on the map.

# Appendices

## WELL FILE FORMAT AND CONTENTS.

Field Scout II uses a database system to store information. Well or point records are stored in tables in a database file called *fieldscout.db*. This file can be found in the *FieldScoutII* program folder. Each collection of wells is stored in a user named table. There is always a default table called *well1*. This table can never be deleted and will be used as the default if no other table name is provided. Each table contains the following fields.

- Ptnum (A point number automatically assigned to each record)
- LSD (Legal Subdivision)
- Sec (Section Number)
- Twp (Township Number)
- Rge (Range Number)
- Mer (Meridian Number)
- NS (Offset from outside section line in North/South direction), *See diagram on page 5.*
- EW (Offset from outside section line in East/West direction), *See diagram on page 5.*
- Depth (Depth of the well in metres)
- Target (Target drilling area and acreage)
- Comment (A comment associated with the point)
- LatDeg (Degrees of Latitude)
- LatMin (Minutes of Latitude)
- LatSec (Seconds of Latitude to one decimal place)
- LonDeg (Degrees of Longitude)
- LonMin (Minutes of Longitude)
- LonSec (Seconds of Longitude to one decimal place)
- UTMX (Easting of point in NAD83 metres)
- UTMY (Northing of point in NAD83 metres)
- NEC\_S (Offset from North East Corner of section in a southerly direction)
- NEC\_W (Offset from North East Corner of section in a westerly direction)
- LEASE (Size of the well lease in meters)

## FIELDSCOUT II IMPORT/EXPORT FILE SAMPLE

### Field Scout Version II import or export file.

A full file export/import in the Field Scout II format. This file will be created, by the program, when you use the *Export FieldScout II* command. It is the preferred export format for sharing data between different Field Scout II users. It can also be created in external programs such as Excel. The file must have an extension of “.fsv”

---

**Pt,LSD,SEC,TWP,RGE,MER,NS,EW,Depth,Target,Comment,LATdeg,LATmin,LATsec,LONdeg,LONmin,LONsec,UTMX,UTMY,NEC\_S,NEC\_W,Lease**

1,8,16,13,1,4,444,119,0,None,,50,4,51.9,110,4,29.2,566195.347704173,5548057.09226595,1164,119,0  
2,12,16,13,1,4,455,100,0,None,,50,5,14.9,110,5,39.4,564793.056691506,5548749.03072008,455,1513,0  
3,14,16,13,1,4,15,740,0,None,,50,5,29.1,110,5,7.2,565426.771442248,5549196.32834592,15,874,0  
4,12,16,13,1,4,455,100,0,None,,50,5,14.9,110,5,39.4,564793.056691506,5548749.03072008,455,1513,0  
5,14,16,13,1,4,15,740,0,None,,50,5,29.1,110,5,7.2,565426.771442248,5549196.32834592,15,874,0  
6,14,16,13,1,4,15,740,0,None,,50,5,29.1,110,5,7.2,565426.771442248,5549196.32834592,15,874,0

---

*.fsv import/export example*

### Coordinate based import files.

At times it is more efficient to create your data records in an external program such as Excel and then import them into the program. The following three file format examples are all supported by the *Import* command.

1. A record specifying a full legal description including offsets calculated from the section boundaries. The file must have an extension of “.sec”
2. A record specifying a full legal description including offsets calculated from the north east corner of the section. The file must have an extension of “.nec”
3. A record specifying lat and long in the first two data columns. The file must have an extension of “.csv or .txt”

---

**LSD,SEC,TWP,RGE,MER,NS,EW**

8,16,13,1,4,444,119  
12,16,13,1,4,455,100  
14,16,13,1,4,15,740  
12,16,13,1,4,455,100  
14,16,13,1,4,15,740  
14,16,13,1,4,15,740

---

*.sec boundary import example*

---

**LSD,SEC,TWP,RGE,MER,NEC\_S,NEC\_W**

8,16,13,1,4,1164,119  
12,16,13,1,4,455,1513  
14,16,13,1,4,15,874  
12,16,13,1,4,455,1513  
14,16,13,1,4,15,874  
14,16,13,1,4,15,874

---

*.nec boundary import example*

---

**Lat,Long**

50.081094,-110.074785  
50.087471,-110.094265  
50.091424,-110.085331

---

*.txt or .csv lat/long import example*

---

**Field Scout Version I full import/export file.**

A file import/export in Field Scout I format is included to allow users of both programs to share data. This file will be created, by the program, when you use the *Export FieldScout I* command. It is loaded by selecting the “*FieldScout I*” option from the import dialog. It can also be created in external programs such as Excel. The file must have an extension of “.csv”

---

**Pt,LSD,SEC,TWP,RGE,MER,NS,EW,Depth,Target,Comment,LATdeg,LATMin,LATsec,LONdeg,LONmin,LONsec,UTMX,UTMY**

1,6,23,54,17,5,750,547,0,None,c1,53,40,43.1,116,24,13.7,539380.78,5947932.81  
2,6,13,54,17,5,600,700,0,None,c2,53,39,32.6,116,22,26.5,541367.11,5945771.44  
3,8,10,54,17,5,700,350,0,None,c3,53,38,37.4,116,25,1.2,538540.66,5944040.48  
4,4,2,54,17,5,100,200,0,None,c4,53,38,4.7,116,23,54.9,539767.12,5943039.83

---

*.csv FiledScout I import example*

---

## FIELDSCOUT II TRACK & WAYPOINT IMPORT/EXPORT FILE SAMPLE

### Waypoint import/export file.

Waypoint import/export allows users to share waypoints between different copies of Field Scout version II. Use the *Menu, GPS, Manage Waypoints* command to access waypoint import and export functions. The file must have an extension of “.csv”

---

```
dLat,dLong,dElev,dHDOP,dVDOP,utcTime,sDesc
51.04502833,-114.0656567,1124,3.4,20,'2007-02-07 20:58:01','Sample Waypoint'
51.04502959,-114.0749587,1129,5,20,2007-02-07 22:09:07,'Sample Waypoint Two'
51.04503013,-114.0568879,1117,4.9,20,2007-02-07 23:48:19,'Sample Waypoint Three'
```

---

*.csv Waypoint import/export file example*

### Track import/export file.

Track import/export allows users to share tracks between different copies of Field Scout version II. Use the *Menu, GPS, Manage Tracks* command to access track import and export functions. The file must have an extension of “.csv”

---

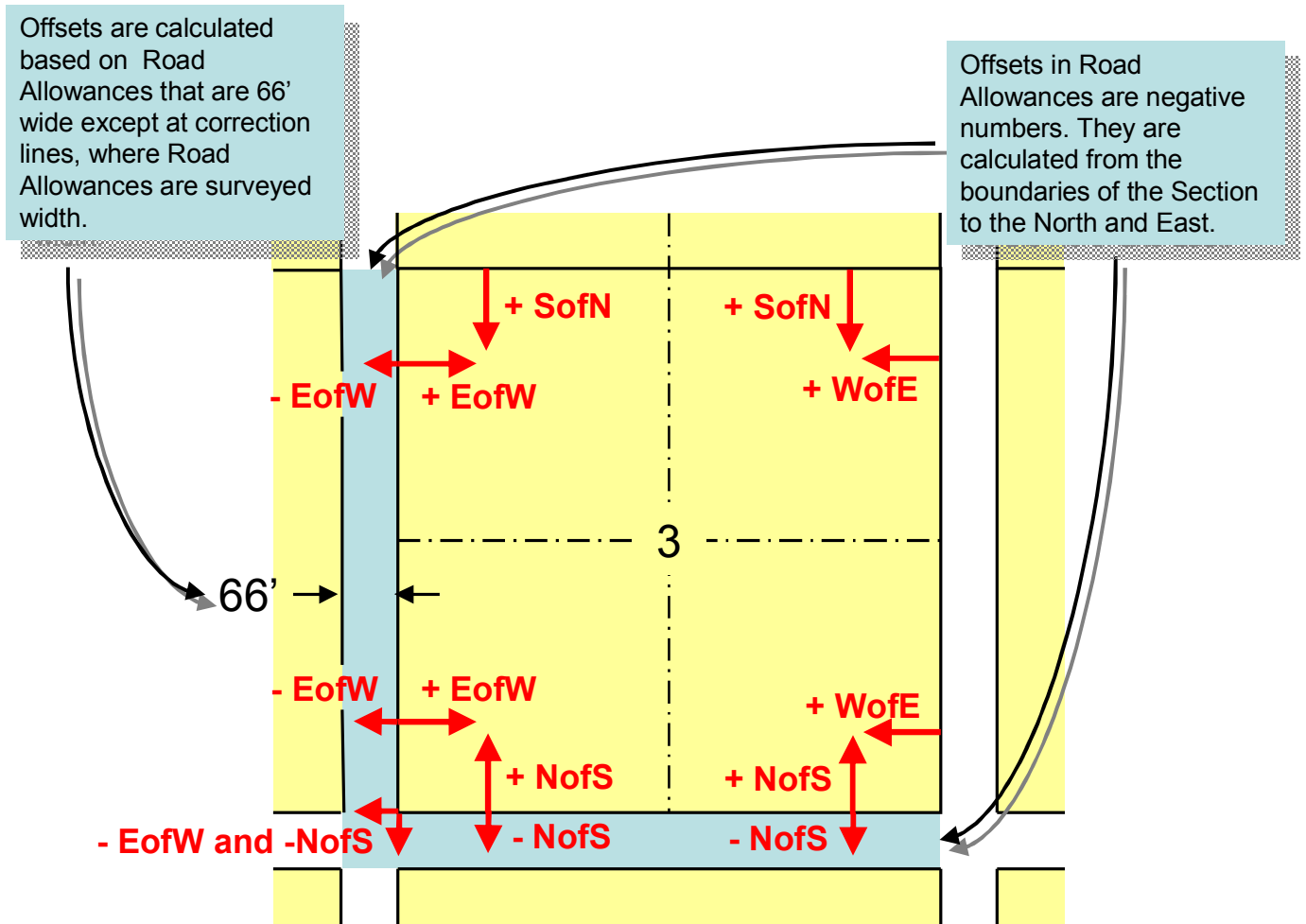
```
dLat,dLong,dElev,dHDOP,dVDOP,utcTime,sDesc
50.991795,-114.081473333333,1057.09999959624,1.5,1.1,'2006-05-26 01:04:15',"
50.9918166666667,-114.081513333333,1057.09999959624,1.8,1,'2006-05-26 01:04:16',"
50.9918383333333,-114.081555,1057.1999995962,1.8,1,'2006-05-26 01:04:17',"
50.9918566666667,-114.081653333333,1057.09999959624,3.2,1,'2006-05-26 01:04:19',"
50.9918666666667,-114.081821666667,1057.49999959609,7.3,1,'2006-05-26 01:04:22',"
50.991845,-114.082286666667,1057.29999959616,3.2,1.2,'2006-05-26 01:04:30',"
50.99185,-114.082388333333,1057.09999959624,7.9,1,'2006-05-26 01:04:32',"
50.9918883333333,-114.082425,1057.09999959624,2.2,1.2,'2006-05-26 01:04:33',"
50.9919233333333,-114.082415,1057.09999959624,3.1,1,'2006-05-26 01:04:34',"
50.9920433333333,-114.082428333333,1056.89999959631,1.8,1.1,'2006-05-26 01:04:37',"
50.992065,-114.082403333333,1056.59999959643,1.9,1.2,'2006-05-26 01:04:38',"
50.9920766666667,-114.082368333333,1056.59999959643,2.9,1,'2006-05-26 01:04:39',"
50.9920833333333,-114.082305,1056.39999959651,2.8,1,'2006-05-26 01:04:41',"
50.9920716666667,-114.082245,1056.59999959643,3.4,1,'2006-05-26 01:04:44',"
50.9920666666667,-114.082211666667,1057.1999995962,3.4,1,'2006-05-26 01:04:48','Record Off'
```

---

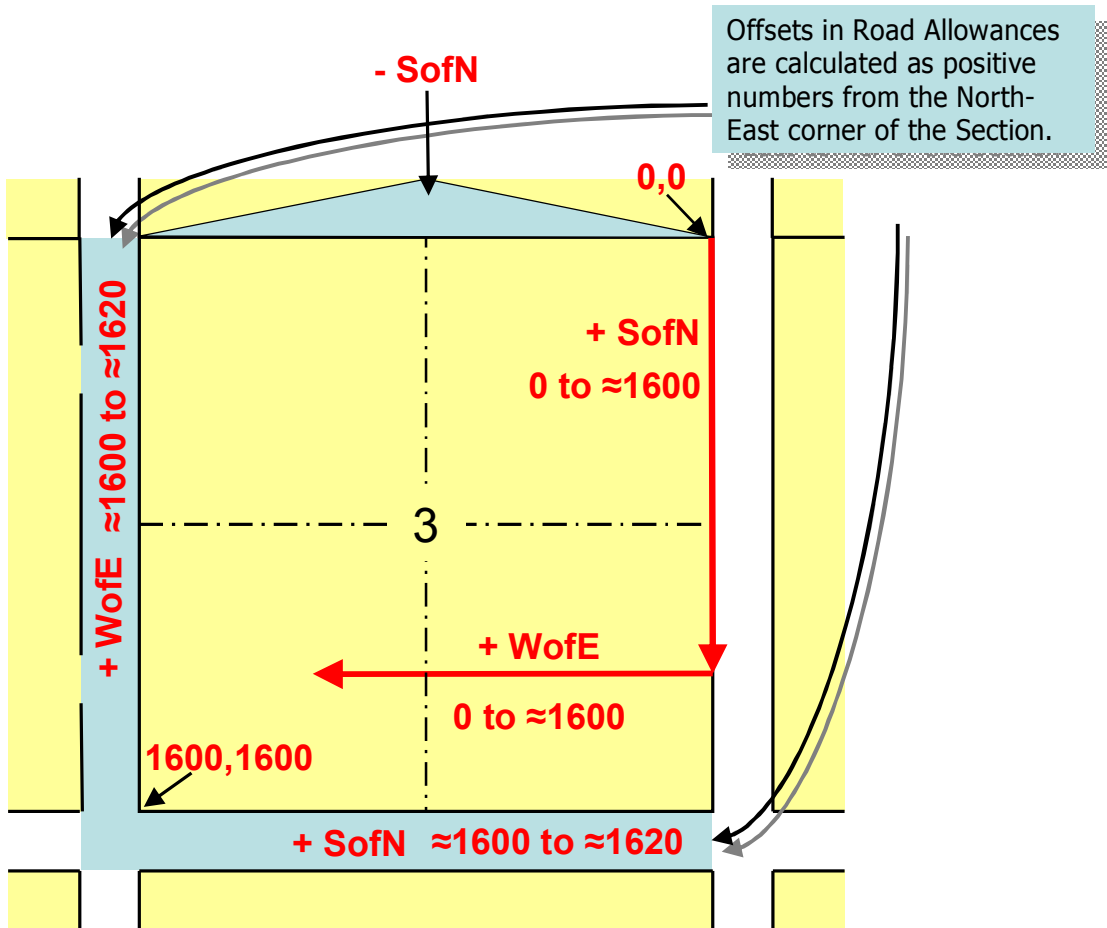
*.csv Track import/export file example*

## SECTION OFFSET DIAGRAMS

The following diagram shows how the NofS and EofW offsets are displayed and interpreted.



The following diagram shows how the North East Corner offsets are displayed and interpreted.



## Program Accuracies

Field Scout II provides coordinate information in 3 formats; Local, Lat/Long and UTM. Local coordinate values are calculated by look-up in the Alberta Township System and Saskatchewan Township system data files. The accuracy of data in these files determines the accuracy of the Field Scout II results.

---

**In no way is Field Scout II to be regarded as a coordinate calculator. Data sources do not guarantee the accuracy necessary to perform coordinate calculations.**

---

### ATS

The ATS data is derived from the ATS Master File MATS 2005, NAD 83, with an accuracy of plus or minus 3 metres.

### STS

The STS data is derived from the STS v1.5 data files, NAD 83, with a varying degree of accuracy.

### GPS RECEIVER

Accuracy of data from your GPS receiver is dependent on both the specifications of your individual GPS device and the quality of data received from satellites. The accuracy of your GPS receiver is available in the documentation that came with the device. To obtain quality of signal information, look at the **HDOP** value under **Menu, GPS, Info** on the Field Scout II main menu.

## Support and Contact Information

Record your serial number below.

Serial Number: \_\_\_\_\_

**Can-am Geomatics Corp.**  
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Calgary, Alberta T2R 1L5  
403-269-8887  
[fieldscout@canam.com](mailto:fieldscout@canam.com)