

Introduction

DigiTrak Log-While-Drilling (LWD™) software is compatible with Microsoft® Windows® XP, Vista, 7, and 8/8.1 operating systems. The LWD Kit includes two USB devices:



LWD USB flash drive Software, drivers, manuals, and sample data

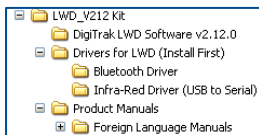


Bluetooth USB adapter Amp'ed RF Model BT-210) for Bluetooth connection to PC

The DataLog system on an F5 receiver records depth, pitch, elevation change, and pressure-tension data; it also captures steering (heading) data with an SST transmitter. Use LWD software on your computer to import this data to display, annotate, and create drill logs and graphs.

Install Drivers and Software

1. Insert the LWD flash drive in a USB port and open the **LWD Kit > Drivers for LWD (Install First)** folder.
2. For an F5[®] system, double-click the file in the **Bluetooth Driver** folder. For Eclipse[®] system, double-click the file in the **Infra-Red Driver (USB to Serial)** folder.
3. In the **DigiTrak LWD Software** folder, double-click the **setup** file to install LWD.
4. After installation, an LWD shortcut will appear on the desktop and in the Start menu.



Prepare for Upload

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Required for initial installation only

1. From the receiver Main menu, open the System Info screen and note the receiver **ID** number and Bluetooth (**BT**) device address.



Receiver ID number →

Bluetooth device address ←

ID: 0	BT: 00043eaaad52f
Tele region: US	BT ver: 100120B
Region: 1	F5 SW ver: 3.00.9470MT
DSP ver: 1.05.2	uC ver: 1.08.18
DSP boot ver: 1.01.0	Tele SW ver: 1.02
FPGA ver: 1.01.0	SBC HW ver: PXA-310
LibUtil ver: 1.10.9454	LibDSP ver: 3.00.9350
LibTele ver: 0.03.8866	LibDLg ver: 0.01.9352
Run time: 3:13	GPIO ver: 2.1.0
J-Lang ver: 1.0.13	OS IMG ver: 1.1.0

System info

2. Open the LWD application and select **View > Bluetooth Device List**.

Bluetooth devices previously added →

Address	Name
00043E2A127C	8516
00043E298C58	0147
00043EAAB4A6	7241

Bluetooth Device Address: Discover...

Bluetooth Device Name:

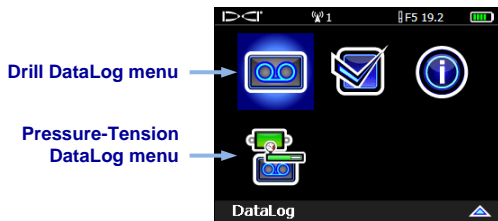
Show Wizard On Open...

OK Delete Change Add

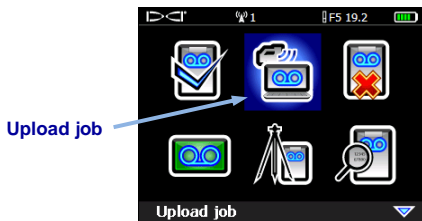
3. Enter an F5 receiver **Bluetooth Device Address** and **Name** (DCI recommends using the receiver ID number for the name).
4. Click **Add** and the receiver will appear in the Bluetooth device list. Click **OK** to exit.
5. Insert the Bluetooth adapter into a USB port on your computer; you are now ready to upload data.

Upload Data from Receiver to Computer

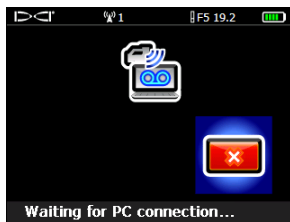
1. On the receiver, toggle down in the Main menu and select **Drill DataLog** or **Pressure-Tension DataLog**.



2. Select **Upload job**.

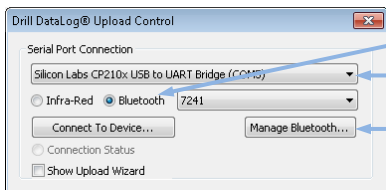


3. Select the DataLog job from the list (not shown). Data must be communicated within 15 minutes or the receiver will shut down.

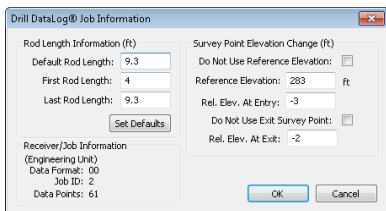


4. Open the LWD program, select **File > New**, and select the type of job (Drill Data, Pressure-Tension, or Steering); a blank job form opens.
5. Select **File > Upload Control**.

6. Make the following selections, then click **Connect to Device** to begin data transfer.



7. The F5 receiver beeps when the transfer is complete.
8. Enter or edit Job Information now or later. When finished, click **OK**. The data information fields and chart areas will fill with data. For a more detailed report, add utility flags and chart annotations.



Application Features

When a job is open, the LWD application shows detailed information about the job and the bore data, including a profile view of the bore. Pressure-tension data will include pressure and force charts.

Many of the program's menu items also appear as icons in the toolbar.

Other Resources

In addition to the Help in the LWD software, additional operator manuals are located on the LWD flash drive.

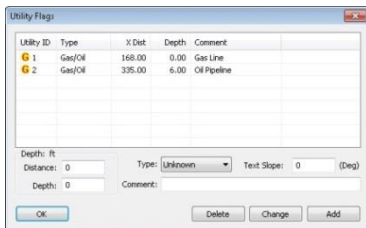


See our DigiTrak® Training Videos on YouTube at
<http://www.youtube.com/dcikent>

Creating Utility Flags

Utility flag entries display in the chart area and on the printed report.

1. Hold Shift and click on the profile chart where you want a utility flag. The Utility Flags dialog box opens with the position data for the point automatically entered.
2. Select the utility **Type**.
3. Click **Add** to post the new utility flag entry to the list, then **OK** to place the utility flag on the chart.

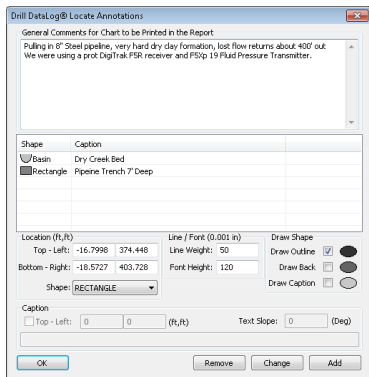


Double-click an existing utility flag to **Change** its properties or **Delete** it.

Creating Chart Annotations

Chart annotations use shapes and captions to identify features and enter notes that will appear in the chart area and on the printed report.

1. Hold Shift and drag a box around the area on the chart where the annotation should appear. The **Locate Annotations** dialog box opens with the coordinates of the box automatically entered.
2. Select shape, color, and caption for the annotation. Click **Add** to post the annotation to the list, then **OK** to place the annotation on the chart.



Double-click an existing annotation to **Change** its properties or **Remove** it.

Site info

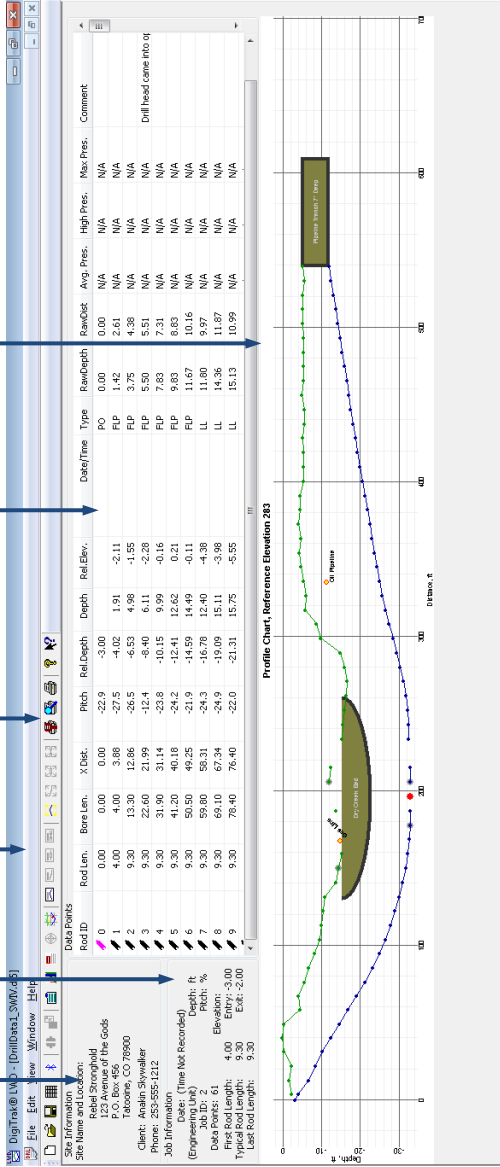
Job info

Menu bar

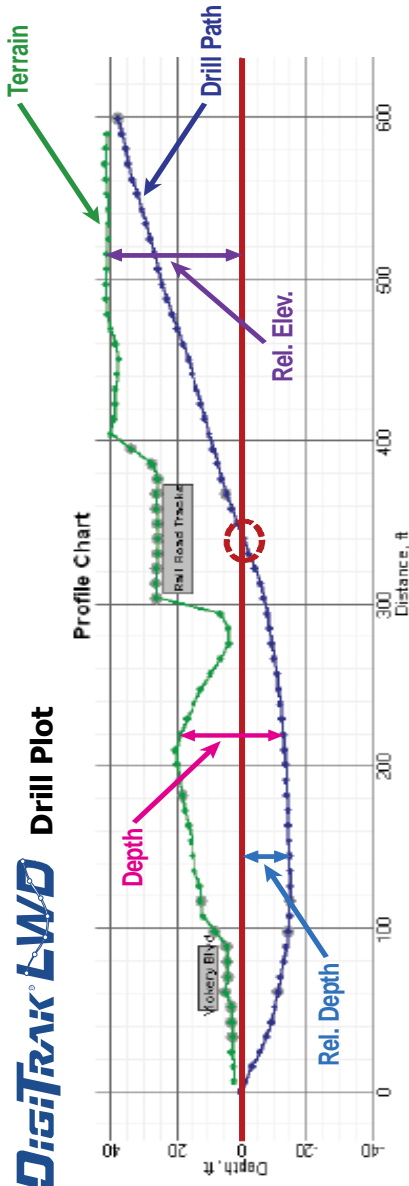
Toolbar

Data point list

Chart area



DigiTrak LWD Drill Plot



Blue: Drill Path -- Green: Calculated Terrain

- ▲ **Drill Path** – based on **Pitch x Rod Len.** and determines **Rel. Depth.**
- ▲ **Bore Len.** – the combined length of the installed drill rods.
- ▲ **X Dist.** – the distance from entry.
- ▲ **Terrain** – the depth recording plotted above the **Drill Path.**
- ▲ At a distance of 340' the **Rel. Depth** is 0'8"; thus, the **Drill Path** is at the same calculated elevation as the drill rig entry point.

For detailed information, see the F5 DataLog Log-While-Drilling (LWD) Operator's Manual, available at www.DigiTrak.com. If you have questions, contact your regional DCI office or Customer Service at 425-251-0559 or 800-288-3610.

Rod ID	Rod Len.	Bore Len.	X Dist.	Pitch	Rel.Depth	Depth	Rel.Elev.	Date/Time	Type	RawDepth	RawDist	Avg. Pres.	High Pres.	Max Pres.	Comment
31	9.33	286.55	285.10	7.9	-8' 9	12' 6	3' 8	10/04/2011 14:59	LL	12' 6	-0.66	49	87	215	
32	9.33	295.88	294.40	8.4	-8' 0	14' 3	6' 3	10/04/2011 15:15	LL	14' 4	-0.79	33	56	150	
33	9.33	305.21	303.67	13.2	-7' 0	f 33' 2	26' 2	10/04/2011 15:54	PO	18' 0	12.07	12	20	62	
34	9.33	314.54	312.92	14.0	-5' 9	f 32' 0	26' 3	10/04/2011 16:06	PO	22' 11	15.27	11	15	33	Crossing Railroad Tracks x 4
35	9.33	323.87	322.12	18.7	-4' 3	f 30' 5	26' 2	10/04/2011 16:21	PO	27' 2	17.68	14	24	90	Crossing Railroad Tracks x 4
36	9.33	333.20	331.28	20.1	-2' 6	f 28' 4	25' 10	10/04/2011 16:37	PO	31' 9	20.52	11	17	30	Crossing Railroad Tracks x 4
37	9.33	342.53	340.43	20.1	0' -8	o 26' 3	25' 7	10/04/2011 16:51	LL	42' 1	-5.49	16	26	57	
38	9.33	351.86	349.59	18.8	1' 2	f 24' 8	25' 10	10/04/2011 17:04	PO	35' 4	23.01	19	32	105	
39	9.33	361.19	358.76	18.2	2' 10	f 23' 2	26' 0	10/04/2011 17:06	PO	34' 1	22.26	17	21	25	
40	9.33	370.52	367.96	f 16.0	4' 5	f 21' 7	26' 0	10/05/2011 09:45	BL	33' 1	21.85	N/A	N/A	N/A	
41	9.33	379.85	377.19	13.8	5' 10	f 20' 0	25' 10	10/05/2011 10:07	PO	32' 1	21.41	29	37	51	

- FLP Front Locate Point
- o override
- LL Locate Line
- f filled in
- RLP Rear Locate Point
- i[*] interpolated
- PO Pitch Only
- BL No Data