

LSGAM Software

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What is LSGAM?

- ❖ Configured for operation with other companies systems and online service
- ❖ Used offline as a local application storing information on the desktop/laptop computer
- ❖ Use of the GEM5000 or GEM200 out of the box without software does not allow the user to generate flow rate values, select comments or select IDs with the instrument and prevents downloading of readings to the computer.
- ❖ Display GEM Information
- ❖ Project Setup
- ❖ Set up Id's
- ❖ Download readings
- ❖ Change Units of Measure
- ❖ Export data to Excel



Connecting LSGAM to the Instrument

- ❖ Communication Connections is done by setting up drivers for the USB Serial communications or Configuring Bluetooth Serial communications.
- ❖ The Instrument must be powered ON and in the Gas Reading screen
- ❖ Launch the LSGAM software by clicking on the icon on your desktop
- ❖ Once the software is installed on your computer with an internet connection this instrument communications program has Auto application updates. This enables you to always have the most current version of the LSGAM software.

Connecting to LSGAM...Cont

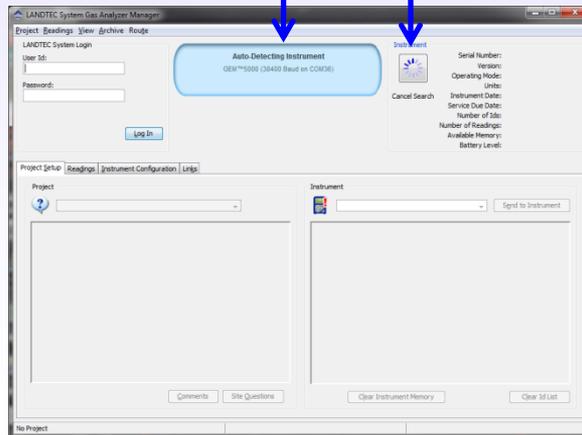
1. Power on Unit and place in Gas Reading Screen



2. Simple Connection

3. Open LSGAM Program

4. Automatic Connection



Once Connected, Now what?

- ❖ GEM Info Displayed
- ❖ Current Instrument Contents
- ❖ Projects
- ❖ Download/Import Readings
- ❖ Instrument Settings/Configuration
- ❖ Add ID's/Projects/Comments and Questions

LANDTEC System Gas Analyzer Manager | LS Edition

Project Readings View Archive Route

LANDTEC System Login

User Id:

Password:

Log In

ID Download Complete

Instrument

Serial Number: G500488
Version: G5 V1.12.41
Operating Mode: GEM
Units: Imperial
Instrument Date: Jul 8, 2016 3:10:37 PM
Service Due Date: Apr 1, 2016 3:09:48 PM
Number of IDs: 387
Number of Readings: 15
Available Memory: 100%
Battery Level: 16%

Project Setup Readings Instrument Configuration Technicians Links

Project

Shannon (Local) Save

Device Id	Flow Device
CAL15035	User Input
CAL11515	User Input
CALID209	User Input
CALID004	User Input
CALIBH2S	User Input
0000002V	Accu-Flo 1.0V
00000005	Accu-Flo 2V
00000014	User Input (System Pressure)
00000015	Orifice Plate (Well Side, System Pressure)
00000016	User Input
00000017	Orifice Plate
00000018	No Flow (GA Mode)
00000019	User Input (System Pressure)
00000020	Accu-Flo 1.0V (System Pressure)

49 IDs Comments Site Questions Add Id Load IDs

Instrument

Current Instrument Contents Send to Instrument

Device Id	Flow Device
CAL15035	User Input
CAL11515	User Input
CALID209	User Input
CALID004	User Input
WM00400P	Orifice Plate (Well Side, System Pressure)
WM00500P	Orifice Plate (Well Side, System Pressure)
WM00750P	Orifice Plate (Well Side, System Pressure)
WM01000P	Orifice Plate (Well Side, System Pressure)
WM01250P	Orifice Plate (Well Side, System Pressure)
WM01400P	Orifice Plate (Well Side, System Pressure)
PROBE01A	User Input
PROBE01B	User Input
PROBE01C	User Input
PROBE01D	No Flow (GA Mode)

387 IDs Cold Start Clear Instrument Memory Clear Id List

Shannon (Local, Imperial) Version:6.0.20150403 , Port:COM80

Create a new project

Project Setup

- ❖ Name Project
- ❖ Create a new empty project
- ❖ Create a new project with comments and site questions from current project
- ❖ Create a new project from data in my instrument
- ❖ Units of Measure (UOM)

Create New Project

Please enter a name for your new project

SAMPLE PROJECT

Create a new empty project

Create a new project with comments and site questions from current project

Create a new project from the data in my instrument

Units of measurement

US Units (Imperial) Metric Units

Done Cancel

Create a new ID

Add New ID

- ❖ Device ID must be 8 characters
- ❖ Choose Device Type
- ❖ Choose Flow Device (i.e. Orifice Plate, Accu-Flo)
- ❖ Input Pipe and Orifice Diameter if Required
- ❖ Input Pump Run Time
- ❖ Enter GPS Coordinates if Applicable
- ❖ Device Information

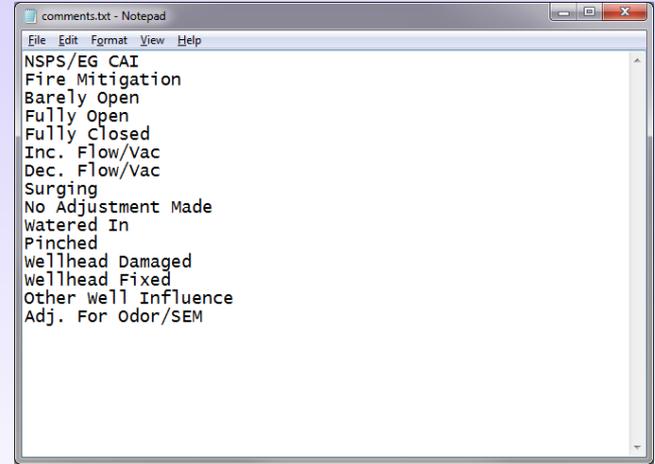
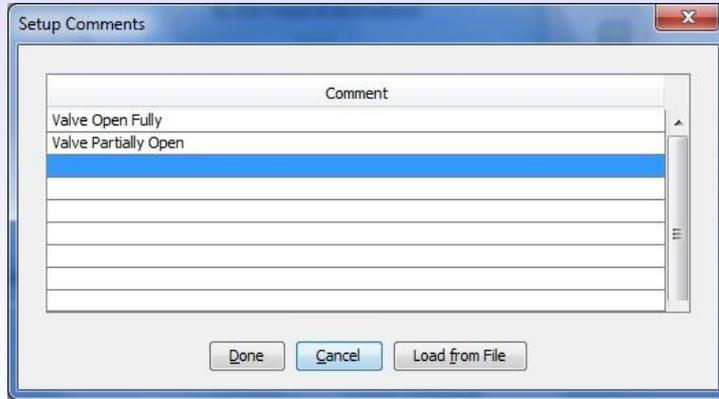
The screenshot shows a dialog box titled "Add New Id" with a close button in the top right corner. It features two tabs: "Id Information" (active) and "Id Questions". The "Id Information" tab contains the following fields:

- Device Id: [Text input field]
- Device Type: [Dropdown menu, selected: Well]
- Flow Device: [Dropdown menu, selected: Accu-Flo 1.0V]
- Internal Pipe Diameter: [Text input field] in
- Orifice Diameter: [Text input field] in
- Pump Run Time: [Text input field] Seconds
- LAT: [Text input field]
- LONG: [Text input field]
- Device Information: [Text area]

At the bottom of the dialog are two buttons: "Done" and "Cancel".

Set Up Comments

- ❖ Set up comments in either LSGAM or Import Comments from Notepad



Send ID's to the Instrument

Once IDs have been created in the project, they must be uploaded to the instrument. To perform this operation, select the desired IDs from the left hand table under the Project name (computer side), left click and hold while dragging the IDs to the right hand table and release the mouse button. This action is known as a “Drag & Drop”.

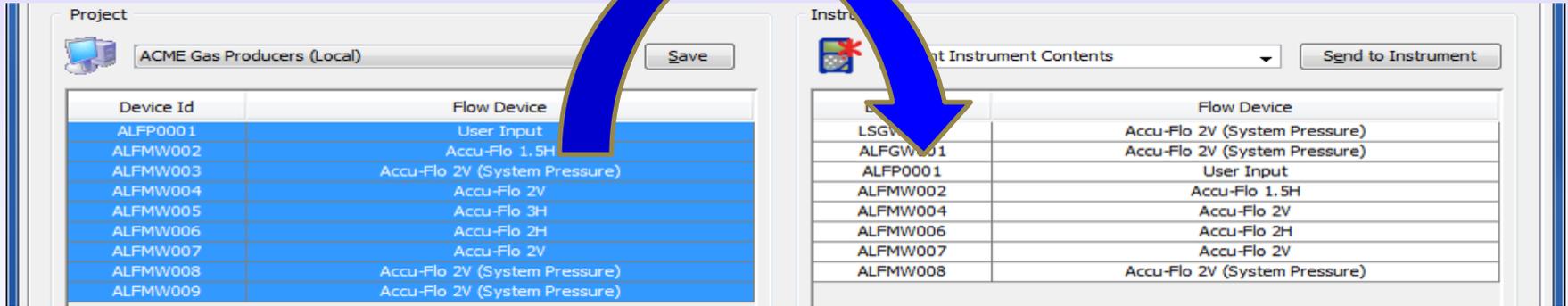
Three basic methods of selecting IDs exist.

- ❖ Select Specific ID(s)
- ❖ Select a Range of IDs
- ❖ Select All IDs

Send ID's to the Instrument

Selecting All IDs

- ❖ All IDs can be selected by selecting one ID in the Project window and then pressing Ctrl-A.



- ❖ Now move IDs from the Project Side to the Instrument Side by dragging and dropping them. Click on the button to send these IDs to the instrument.

Data Management

- ❖ After successfully creating projects, ID's, and setting appropriate instrument settings, the instrument is now ready for field use.
- ❖ When used in the field, readings are collected and stored within the instrument's memory.
- ❖ These readings must be downloaded from the instrument to be reviewed on the computer and stored for review at a later time.
- ❖ The readings consist of the measured, input, and calculated parameters such as CH₄, CO₂, O₂, Gas Temperature, Flow Rate, etc.

Data Management

- ❖ To view your readings from the instrument, select the Readings tab of the LANDTEC System Gas Analyzer Manager software. Then click on the Get Readings button.

The screenshot displays the LANDTEC System Gas Analyzer Manager software interface. The 'Readings' tab is selected, and the 'Get Readings' button is highlighted with a red circle. The interface shows a login section, instrument details, and a table of gas readings.

LANDTEC System Gas Analyzer Manager | LS Edition

Project Readings View Archive Route

LANDTEC System Login

User Id:

Password:

Log In

ID Download Complete

Instrument

GEM™5000

Serial Number: G500038
Version: G5 V1.02
Operating Mode: GEM
Units: Imperial
Instrument Date: Feb 23, 2012 8:32:57 PM
Service Due Date: Jan 1, 2011 12:32:17 PM
Number of Ids: 0
Number of Readings: 0
Available Memory: 100 %
Battery Level: 56 %

Project Setup Readings Instrument Configuration Links

September 18, 2012 3:50:32 PM PDT [175] Get Readings Post Readings Export Readings Clear Instrument Readings

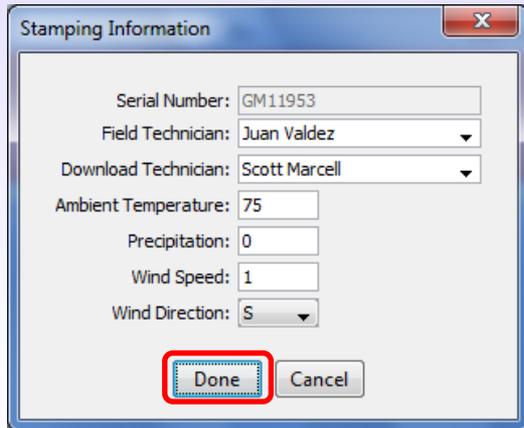
Device Id	Date Time	CH ₄	CO ₂	O ₂	Comments	Project	Posted
AUTO-LOG	9/18/09 3:53 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:54 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:55 PM	0.4	0.1	20.0		<No Project>	
AUTO-LOG	9/18/09 3:56 PM	0.4	0.1	20.1		<No Project>	

ACME Gas Producers (Local) Online Project Local Project Unknown Project Duplicate Reading

Version:5.0.0 , Port:COM2

Data Management

- ❖ To export the readings to a file, click the **Export Readings** button
- ❖ This will open the Stamping Information Screen. Stamping information are details that are most often stored with the historical data but not directly stored by the instrument.



Stamping Information

Serial Number: GM11953

Field Technician: Juan Valdez

Download Technician: Scott Marcell

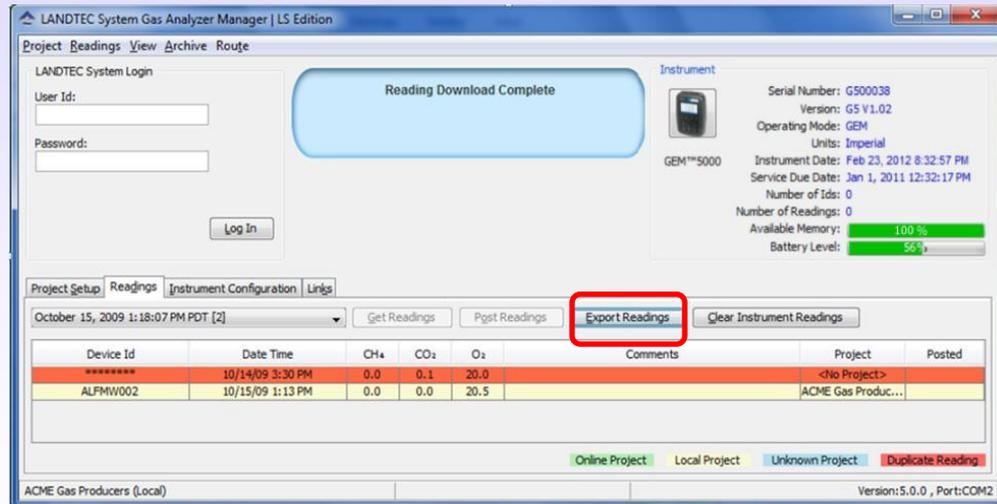
Ambient Temperature: 75

Precipitation: 0

Wind Speed: 1

Wind Direction: S

Done Cancel



LANDTEC System Gas Analyzer Manager | LS Edition

Project Readings View Archive Route

LANDTEC System Login

User Id:

Password:

Log In

Reading Download Complete

Instrument

Serial Number: G500038

Version: G5 V1.02

Operating Mode: GEM

Units: Imperial

Instrument Date: Feb 23, 2012 8:32:57 PM

Service Due Date: Jan 1, 2011 12:32:17 PM

Number of Ids: 0

Number of Readings: 0

Available Memory: 100 %

Battery Level: 55 %

Project Setup Readings Instrument Configuration Links

October 15, 2009 1:18:07 PM PDT [2] Get Readings Pget Readings **Export Readings** Clear Instrument Readings

Device Id	Date Time	CH ₄	CO ₂	O ₂	Comments	Project	Posted
*****	10/14/09 3:30 PM	0.0	0.1	20.0		<No Project>	
ALFMW002	10/15/09 1:13 PM	0.0	0.0	20.5		ACME Gas Produc...	

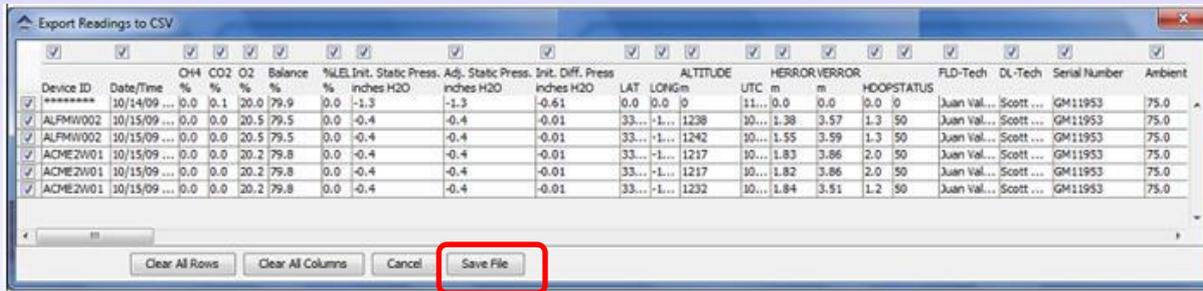
Online Project Local Project Unknown Project Duplicate Reading

ACME Gas Producers (Local) Version: 5.0.0, Port: COM2

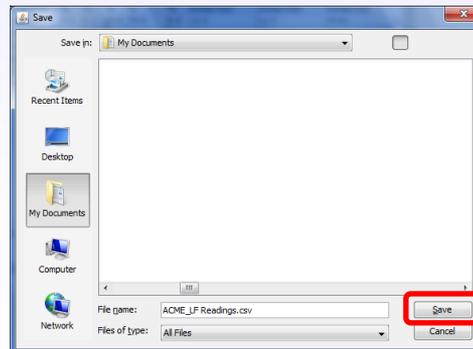
- ❖ Clicking on Done will open the **Export Readings to CSV screen**.

Data Management

- ❖ Click the Save File button to save to your computer which will open a Save window.



- ❖ Create a file name and click SAVE



Data Management

❖ Once saved open the file with Microsoft Excel

Device ID	Date/Time	CH4	CO2	O2	Balance	%LEL	Init. Static	Static Init. Diff.	Gas T. Init.	Gas T. Adj.	Gas T. Init.	Flow Adj.	Flow SCFM	Flow SCFM	Flow BTU	Int. Powe Adj.	Powe Baro.	Pres Sys.	Press Inst.	Tech	Latitude	Longitude	Altitude	UTC	SatsUsed	Error m	Verror m	HDOP	Status
KING0000	6/12/2014 9:39	0	0.1	20.9	79	0	-0.03	-0.03	-0.004	-0.006	87.3	87.5	0	0	0	0	N/A	N/A	BM	37.67117	-76.7608	102	6	13	16	1.9			
KING0000	6/12/2014 9:43	50	35	0	15	>>>>	-100.37	-100.37	>>>>	>>>>	91.1	91	0	0	0	0	N/A	N/A	BM	37.67118	-76.7608	118	6	14	16	1.9			
KINGFLAR	6/12/2014 9:51	51.4	38.1	1.3	9.2	>>>>	6.32	6.34	-6.19	-6.304	85.9	86	2420	2420	75668.5	75668.5	29.87	N/A	BM	37.67094	-76.7607	102	7	14	15	2.1			
KINGPLNT	6/12/2014 9:54	30.6	37.8	1.3	10.3	>>>>	5.06	5.07	-4.998	-5.199	128.8	128.8	2320	2320	77480.7	77480.7	29.88	N/A	BM	37.67096	-76.7607	111	7	13	15	2.5			
KINGBLRI	6/12/2014 9:59	51.2	38.4	1.2	9.2	>>>>	-58.05	-58.73	>>>>	>>>>	93	93	4940	4940	153428	153428	29.88	N/A	BM	37.67096	-76.7606	144	7	14	12	1.5			
KINGHT01	6/12/2014 10:11	57.4	42.6	0	0	>>>>	-8.52	-8.61	1.187	1.253	75.7	75.1	181.8	187	6334.3	6513.6	29.81	-44.64	BM	37.66655	-76.7609	148	7	16	14	1.1			
KINGA09R	6/12/2014 10:19	48.3	40.4	0	11.3	>>>>	-1.49	-1.44	0.05	0.044	96.7	96.3	15.1	14.2	444	417.3	29.78	-46.68	BM	37.66571	-76.7658	194	6	15	9.7	1.3			
KINGA44R	6/12/2014 10:24	54.6	42.5	0.2	2.7	>>>>	-0.23	-0.24	0.153	0.16	113.5	113.6	26.2	26.8	868.1	889.3	29.77	-47.75	BM	37.66597	-76.7651	217	7	15	17	1.7			
KINGEW19	6/12/2014 10:30	52.8	41.4	0.1	5.7	>>>>	-2.13	-2.16	3.494	3.576	117.2	117.1	116.5	117.9	3730.6	3775.1	29.77	-46.77	BM	37.66626	-76.7646	203	4	16	9.7	2.8			
KINGEW50	6/12/2014 10:36	52.5	40.7	0	6.8	>>>>	-36.15	-36.16	0.068	0.068	94.4	93.4	17	18.4	540.7	587.8	29.77	-48.15	BM	37.66703	-76.7638	220	7	12	17	2.5			
KINGE110	6/12/2014 10:39	56.6	43.4	0	0	>>>>	-47.54	-48.15	0.473	0.047	116.4	116.7	39.8	12.1	1368.6	416.6	29.77	-48.27	BM	37.66784	-76.7634	194	7	13	16	1.2			
KINGEW29	6/12/2014 10:43	52.5	41.2	0	6.3	>>>>	-44.86	-44.96	0.371	0.321	112.3	112.3	35.2	32.7	1122.7	1041.8	29.77	-44.65	BM	37.66794	-76.7627	190	7	13	9.4	1			
KINGE38R	6/12/2014 10:53	55.6	40.6	0.6	3.2	>>>>	1.25	-1.32	0.026	0.117	88	88.3	11.2	23.6	377.1	79.76	29.78	-49.13	BM	37.66952	-76.7614	180	7	14	11	1.1			
KINGE33R	6/12/2014 10:56	55.6	42.8	0.3	1.3	>>>>	-2.05	-2.31	0.046	0.047	87.3	87.4	14.8	14.8	498	459.8	29.78	-45.53	BM	37.66953	-76.7614	203	7	14	6.1	1			
KINGE28R	6/12/2014 11:01	56	42.8	0.2	1	>>>>	-50.34	-50.45	0.012	0.016	97.7	97.8	6	7.1	203.1	241.3	29.78	-50.32	BM	37.66998	-76.7623	171	7	15	3	1.4			
KINGE122	6/12/2014 11:08	55.9	41.9	0	2.2	>>>>	-14.05	-15.66	0.09	0.091	124.2	123.9	17.6	17.7	599.2	602	29.79	-51.65	BM	37.67012	-76.7628	148	7	22	26	1			
KINGE125	6/12/2014 11:16	55.1	41.8	0.5	2.1	>>>>	-27.73	-28.56	0.002	0.003	112.2	114.2	2.2	2.8	74.2	94.6	29.79	-50.5	BM	37.67043	-76.7632	197	6	14	15	1.5			
KINGE130	6/12/2014 11:20	54.6	41.8	0	3.6	>>>>	-46.17	-46.11	1.295	1.395	132.6	132.9	65.5	68	2127	2254.7	29.79	-44.79	BM	37.67083	-76.7641	184	7	12	14	0.9			
KINGE130	6/12/2014 11:21	54.5	42.2	0	3.3	>>>>	-46.11	-46.11	0.875	0.897	133.2	133.3	53.6	54.2	1773	1795	29.79	-46.09	BM	37.67086	-76.7641	167	7	15	1.4				
KINGE129	6/12/2014 11:40	54.2	41.1	0	0.1	>>>>	-48.79	-48.9	0.293	0.049	102.7	103.6	31.5	12.6	1036	415.3	29.77	-48.36	BM	37.67033	-76.7639	203	6	13	7.6	1.1			
KINGI132R	6/12/2014 11:45	59.9	40.9	0	5.2	>>>>	36.16	-37.34	0.73	0.834	113.3	113.2	54.8	58.5	1795.8	1916.1	29.77	-49.43	BM	37.67074	-76.7648	207	7	12	16	1			
KINGE149	6/12/2014 11:52	56.2	42.7	0.1	1	>>>>	-48.76	-48.43	0.01	0.021	88.4	88.7	6.4	9.3	218.8	317	29.77	-48.76	BM	37.67131	-76.7658	217	7	14	15	1.4			
KINGE148	6/12/2014 11:55	56	44	0	0	>>>>	-49.46	-49.46	0.039	0.033	86.1	86	12.7	11.6	431.4	395.1	29.78	-49.24	BM	37.67182	-76.7654	144	7	15	11	1.2			
KINGE135	6/12/2014 12:01	57.3	42.5	0	0	>>>>	-45.42	-45.84	0.101	0.097	81.1	83.2	20.7	9.3	723.2	185.1	29.76	-45.4	BM	37.66972	-76.7653	243	7	14	10	2.4			
KINGEK2R	6/12/2014 12:08	55.4	40.2	0.6	3.8	>>>>	-47.27	-47.16	0.563	0.566	120.3	120.4	43.5	43.7	1463.1	1469.4	29.75	-47.35	BM	37.66787	-76.7654	249	7	14	13	1.1			
KINGE0000	6/12/2014 12:17	49.8	34.9	0	15.3	>>>>	-100.37	-100.37	>>>>	>>>>	83.3	79.3	0	0	0	0	0	N/A	BM	37.67116	-76.7608	79	7	16	21	1.2			
KINGE0000	6/12/2014 12:20	0	0.1	20.9	79	0	-0.1	-0.09	-0.013	-0.013	80.5	80.6	0	0	0	0	0	N/A	BM	37.67115	-76.7608	141	6	16	20	1.5			
S0860000	6/12/2014 12:28	0	0.1	20.9	79	0	0	0.01	-0.001	-0.001	81.8	81.8	0	0	0	0	0	29.91	N/A	BM	37.67113	-76.7608	128	7	13	18	1.1		
S0860000	6/12/2014 12:33	49.9	35.1	0	15	>>>>	0	0.01	-0.001	0.003	82.8	82.8	0	0	0	0	0	N/A	BM	37.67114	-76.7608	115	7	16	18	1.1			
KINGFLAR	6/12/2014 12:45	54.2	41.1	0.9	7.1	>>>>	2.8	2.8	-2.625	-2.947	82	81.1	2200	2200	71260	71260	29.86	N/A	BM	37.67092	-76.7608	154	6	15	17	1.2			
S0860G2	6/12/2014 12:51	53.2	39	0.8	7	>>>>	2.68	2.71	-2.656	-2.66	76.2	76.1	2200	2200	71119.3	71119.3	29.87	N/A	BM	37.67095	-76.7605	210	7	16	12	1.2			
KINGPLNT	6/12/2014 12:57	53.1	39.1	0.8	7	>>>>	4.47	4.62	-4.6	-4.647	127	127	2740	2740	88424.1	88424.1	29.88	N/A	BM	37.67101	-76.7606	171	7	14	11	1.4			
S0860G3	6/12/2014 12:59	53.1	39.3	0.8	6.8	>>>>	4.78	4.83	-4.487	-4.756	127	127	2740	2740	88330.8	88330.8	29.88	N/A	BM	37.67102	-76.7607	195	7	14	11	1.2			
S0860G1	6/12/2014 13:04	20.1	14.9	13	52	>>>>	-0.01	0	0	0	76.6	76.5	0	0	0	0	0	29.88	N/A	BM	37.67079	-76.7607	95	7	16	20	1.7		
KINGBLRI	6/12/2014 13:09	52.9	38.7	1	7.4	>>>>	-58.01	-59.07	>>>>	>>>>	92.4	92.4	4940	4940	158599.3	158599.3	29.88	N/A	BM	37.67084	-76.7607	89	7	19	13	1.8			
RICHEL000	6/13/2014 9:14	0	0	0.1	20.9	79	0	0	0	-0.001	82.4	82.4	0	0	0	0	0	N/A	BM	37.50104	-77.3596	161	7	10	6.4	2.8			
RICH0000	6/13/2014 9:20	49.9	35	0	15.1	>>>>	0.03	0.05	>>>>	>>>>	80.5	81.9	0	0	0	0	0	N/A	BM	37.50105	-77.3597	210	7	16	12	1.2			
RICHELWR	6/13/2014 9:30	47.7	38.3	0.8	13.2	>>>>	-0.27	-28.19	>>>>	>>>>	66	66	420	420	12176.5	12176.5	29.73	N/A	BM	37.50114	-77.3598	207	7	11	13	1.1			
RICHELFR	6/13/2014 9:35	48	38.6	0.8	12.6	>>>>	0.92	0.94	-0.895	-1.011	86.7	86.8	420	420	12252.5	12252.5	29.73	N/A	BM	37.50118	-77.3599	171	7	15	13				
RICHE34R	6/13/2014 9:56	41.4	34.7	0	23.9	>>>>	-4.95	-4.71	0.153	0.246	85.6	84.6	24	30.7	603.9	772.3	29.71	-29.55	BM	37.50151	-77.3603	164	6	18	17	1.6			
RICHE33R	6/13/2014 9:58	49.9	35.6	0	14.5	>>>>	-8.92	-8.93	0.096	0.085	86.7	86.7	19.2	17.9	580.3	543.8	29.78	-29.69	BM	37.50184	-77.3609	194	7	18	3.9				



*LSGAM Contact:
e-mail: bheerdink@qedenv.com*

Toll Free: 1-800-624-2026
Web Site: www.landtecna.com