Column #	Column Name	Data Type	Description	Required / Not Required	Allowed Values
1	Row ID	Integer	A sequential number, unique for each row of data in each worksheet.csv. This will be used to tie back reporting and status for your loads. In each file, the RowID starts at 1 and goes up +1 for each row.	Required	Positive integers, starting with 1
2	Customer ID	4-digit char	**IF you upload a file with CustomerID and DriverID as two separate columns:** Exactly 4-digits in length, all numerals 0 through 9, leading zeros are significant. This identifies a trucking company generally. If value comes in the CSV as an integer (no leading zeros and less than 4 digits), Portal will zeros left-pad the CustomerID. **IF you upload a file with CustomerID and DriverID in a single, shared column:** The Customer ID column must be blank. The combined 8-digit code will go into the DriverID column.	Required. IF Customer ID and Driver ID are combined in the same column, they need to be placed in the Driver ID column and so the Customer ID column will need to be blank.	0000 through 9999 0 through 9999
3	Driver ID	4-digit char OR 5 to 8-digit char	**IF you upload a file with CustomerID and DriverID in a single, shared column:** Driver ID column comprises both the customer and driver information. The driver portion is the rightmost 4 characters of the string, and the customer portion is the left-most characters of the string. All combination customer-driver numbers will be split at the 4-digit marker and have left-zero padded added (if necessary) by the upload process. **IF you upload a file with CustomerID and DriverID as two separate columns:** DriverID is exactly 4-digits in length, all numerals 0	Required	0000 through 9999 0 through 9999 OR 00001 through 99999999

			through 9, leading zeros are significant. This identifies a specific driver of a trucking company.		
4	Ticket Number	Integer	This is typically a sequential integer, but the only requirement is that this value does not contribute to a duplicate situation described at page bottom below.	Required	1 through integer max
5	Lease Number	String	This is a 5- or 6-digit integer; For manual transactions, if sending in 99999 or 999999, care should be taken so that this value does not contribute to a duplicate situation described at page bottom below. Values less than 5-digits will be zero-padded and treated as OIL (in absence of OIL/GAS indicator). Leading zeros are significant	Required	5- and 6-digit numbers

Cannot be zero (0). |
| 6 | Oil Gas (Lease Type) | String | This is an indicator as to how the transaction ticket Lease Type should be identified: Gas vs. Oil. However, it is not required. If it is left blank, then the following rule applies: If the incoming Lease Number is **5-digits** long or shorter, the field will be coded as an **OIL** Lease. If Lease Number **is 6-digits** long, this field will be coded as a **GAS** lease. | Not required (value is not required, but the column in the CSV is required). It is highly recommended you supply this Lease Type information. | Allowed Values: G, Gas, gas, GAS, O, Oil, oil, OIL.

Blanks are allowed. |
| 7 | RRC District | 2-digit String

OR

Integer | This is a valid RRC District Number. If this is not supplied, the ticket will be uploaded with the default RRC District for the site as configured in the TankLogix Portal under the menu Disposals > Disposal Location Management for the specific site you are uploading tickets to. Leading zeros are significant; If any of the values: 1, 2, 3, 4, 5, 6, 8, or 9 are entered as integers, the Portal will translate them to: 01, 02, 03, 04, 05, 06, 08, and 09 two-digit strings respectively. | Not required (value is not required, but the column placeholder in the CSV is required) | Allowed values: 01, 1, 02, 2, 03, 3, 04, 4, 05, 5, 06, 6, 6E, 7B, 7C, 08, 8, 8A, 09, 9, 10 Leading zeros are significant.

Blanks are allowed. |

8	Well Number	String 32-char max length	Valid RRC Well Number, associated with a specific Lease.	Not required (value is not required, but the column placeholder in the CSV is required)	Examples: 126 107 65AW 162AW Blanks are allowed.
9	Produced Water	String	This value is used in the P18 and elsewhere to indicate produced water status	Required	**1** (yes), **0** (no), **Y**, N, **YES**, **NO**, **yes**, **no**, **y**, **n**, T, F, TRUE, FALSE, true, and false are allowed. This field is required, so no blanks are allowed
10	Ticket Batch ID	String 64-char max length	This value is used as a tag/marker for any row or batch uploaded, in the event you want/need to search/filter the Ticket Management grid by a specific batch value. You can also delete an entire loaded manual batch using this qualifier (careful!) if you've uploaded something incorrectly that affects the entire batch.	Not required (value is not required, but the column placeholder in the CSV is required)	Examples: A1123 123456789012345 A-33.1 Blanks are allowed.
11	Start Date/Time	DateTime Local Time	This must be a valid datetime format. Preferred format is MM/DD/YYYY. With or without leading zeros in MM and DD. Local time (more on this later in this document)	Required	Examples: 06/05/2017 6/5/2017 2017-06-05 12:04:05.222 6/12/2017 19:36
12	Start Time	Time Local Time	This must be valid time format if supplied. Preferred format is hh:mm:ss in military time, or hh:mm:ss pm or hh:mm:ss am. This is not a required field. If omitted, the time portion will be 11:00 am UTC (which for central time is either 6:00 am or 5:00 am, depending on daylight savings / standard time). This is an overriding value. More on	Not required (value is not required, but the column placeholder in the CSV is required)	Examples: 12:05:00 am 18:14:00 05:10:00 AM 05:10:00 PM 19:05

			this below in full description. Local time (more on this later in this document)		Blanks are allowed.
13	Volume	Integer	Decimal values not allowed; Amount is in BBL (barrels). 0 not allowed. **Commas or other formatting not allowed. Make sure only integers are in this column.**	Required	Examples: 1, 100, 22333 Zero (0) is not allowed. **Commas not allowed.**
14	Notes/Reference	String 64-char maximum	64-character maximum string. Commas not allowed in the reference string.	Not required (value is not required, but the column in the CSV is required). **Commas are NOT allowed in this string.**	Example: Note about this ticket…
15	Water Type	Integer	Enumerated list of integer values: 0=Unidentified (default) 1=Pit 2=Flow Back 3=Produced 4=Other 5=Dirty Water 6=Fresh Water 7=Mud 8=Pipeline 9=Scavenger 10=Brine Water	Not required (value is not required, but the column in the CSV is required). If no value found, default will be: 0 (unidentified).	Allowed Values: 0,1,2,3,4,5,6,7, 8, 9, or 10 Blanks/spaces are allowed but will be defaulted to 0 (unidentified).

Formatting Hints and Guidelines:

COMMAS:

Commas are not allowed in individual columns in the .csv files, even though technically if surrounded by double quotes they are OK. However, in this specific CSV uploader, they are not allowed. Putting commas in any column (such as Notes, or formatting barrels with commas at the thousands place) will result in a column number error.

ROW ID:

Place "1" in your first Row ID cell A1. Then, in cell below, place formula "=A2+1" and replicate down the A column:

RowID	CustomerID	DriverID	Ticket Number	Lease Number
1	1001	1002	1	16285
2	1001	1002	2	99999
3	1001	1002	3	272796
4	1001	1002	4	16278
5	1001	1002	5	18138
6	1001	1002	6	16285
7	1001	1002	7	16285
8	1001	1002	8	16285
9	1001	1002	9	16285
10	1001	1002	10	16285
11	1001	1002	11	16285
12	1001	1002	12	16285
13	1001	1002	13	270082
14	1001	1002	14	3356
15	1001	1002	15	4464

CUSTOMER ID and DRIVER ID:

Customer ID and Driver ID may be formatted as TEXT with leading zeros, or the CSV upload program will prepend leading zeros where necessary. These two pieces of data may come in as two separate columns (with leading zeros or not), or as a combined column (all data is in the Driver ID column and Customer ID is blank). Part of the UI shows these options:

Time Zone America/Denver ▼

Ticket Batch Tag [   ]

File

[   ] 📄 SELECT FILE

CustomerID Driver ID Mode

○ Separate columns   ◉ Shared column

☐ Allow duplicates

⬆ UPLOAD

If you select Two Separate Columns, here is a sample of what would be permissible in your .CSV file: (leading zeros may or may not be present in both the Customer ID column and the Driver ID Column).

B	C
CustomerID	DriverID
25	0012
0025	12
9999	9999
89	8991
7	0001
5	1251
12	3456
123	4567
1234	5678
6	1
5	1251
12	3456
123	4567
1234	5678
0025	0012

B	C
CustomerID	DriverID
	250012
	00250012
	99999999
	898991
	70001
	51251
	123456
	1234567
	12345678
	60001
	51251
	123456
	1234567
	12345678
	00250012

If you select One Combined Column, here is a sample of what would be permissible: (leading zeros are always required for the right-most 4 characters representing the Driver info. The left-most 4 characters may or may not be zero leading). Customer ID must be blank. In a One Combine Column configuration, both Customer and Driver are always combined in the Driver ID column. If you have fewer than 8 characters in the Driver ID column, the default programming will left-pad all zeros to fill out to 8 characters. Then the left-most 4 will represent Customer ID, the right-most 4 Driver ID. So, for a value like 234, the programming would format this as 00000234 and assume customer id = 0000 and driver id = 0234.

TICKET NUMBER:

- Integer Type

- Leading zeros will be ignored

- Cannot be blanks

LEASE NUMBER:

- Integer Type

- Leading zeros will be ignored on inputs, but eventually will be zero-padded (if necessary) by the programming inside to match up against the RRC values. Lease values within the RRC are zero-padded. The RRC provides a GAS/OIL markers for each record. Thus, 00001 and 000001 can potentially be two different types of leases – the first OIL (5-digits) and second GAS (6-digits). If you supply a single digit, for example "1", the value will be coded as '00001' by the uploader program. It could then possibly be a recognized lease in the RRC tables 😊 Other possibilities several customers choose may be 99999, or 999999, or other derivations of 9's. Since the lease number is considered in what constitutes a "duplicate lease", you will want to choose carefully what arbitrary value you use for Lease Number.

- Length cannot be greater than 6

- If length is less than 5, the OIL/GAS marker will be used to determine the lease type.

- If length is less than 5 and no OIL/GAS marker is supplied in manual spreadsheet, then transaction will be coded as OIL.

- Cannot be zero (0).

OIL / GAS (Lease Type):

- String Type

- Although not technically required, this indicator is the surest way to ensure that lease types are properly coded; apart from this, we go through the logic described in LEASE NUMBER description.

RRC DISTRICT:

- String Type (must be valid code if supplied)

- In the case of the leading zero values (01, 02, 03, 04, 05, 06, 08, and 09): If the leading zero is omitted in the CSV, the Portal will pad-prefix 1, 2, 3, 4, 5, 6, 8, or 9 with a leading zero. The final results of any RRC District is a two-digit string.

- If RRC District is not supplied, the entire batch will be coded with the default value listed for the specific site being uploaded to. This is found (and can be edited) in Ignition Menu at Tickets > Locations

WELL NUMBER:

- String Type

- Used to further distinguish a lease and more finely define where water has come from. Not currently in full use in Portal, but the placeholder field is required to be in the worksheet and plumbed for future use.

TICKET BATCH TAG:

- String Type (64-digits maximum length)

- Used to mark or tag a batch (optional) from a .CSV load. In the load page of the Portal, there is allowance to use a global Batch Tag to distinguish a load. This ticket batch tag can be used for search/filter on the Ticket Management grid, and can be used in both Bulk Editing and Bulk Delete (for example, you may remove/delete an entire loaded batch if something is found incorrect with it, fix your .CSV file, and reload.

- The Ticket Batch Tag (if supplied in the web page) will be globally applied to all rows in the CSV batch; however, if there is a value in the individual Ticket Batch Tag CSV rows, that value will override the global value highlighted in red:

START DATE and START TIME:

The Start Date is required; the Start Time is optional.

- The **Start Date/Time** must be a valid datetime format. Examples may include the following. As you can see, either just the Date or both DateTime formats can be used in this field.
    - 06/05/2017
    - 6/5/2017
    - 2017-06-05 12:04:05.222
    - 6/12/2017 19:36

- The **Start Time** must be a valid time format if supplied (this is optional). Examples may include the following:

  - 12:05:00 am
  - 18:14:00
  - 05:10:00 AM
  - 05:10:00 PM
  - 19:05

- The **Start Time** is an overriding TIME value. If populated, it will be used to form the TIME portion of the **Start Date/Time** field.
  - If **Start Time** is left blank, then the original TIME component of **Start Date/Time** will be preserved and used
  - If there is no TIME component found in **Start Date/Time** AND if there are blank values in **Start Time**, then the Portal will supply a default Start Time

The Water Type value is not required; If it is left blank, a zero (0) will be supplied by the loading program.

- Valid values (integer enumeration) are:

    - 0=Unidentified (default)
    - 1=Pit
    - 2=Flow Back
    - 3=Produced
    - 4=Other
    - 5=Dirty Water
    - 6=Fresh Water
    - 7=Mud
    - 8=Pipeline
    - 9=Scavenger

Required and Non-Required Fields Note:

Although some columns/fields are required and others non-required, the presence of ALL the 15 columns in the worksheet/spreadsheet/CSV file is required. If any column is missing, the file load will fail.

Partial CSV Loads:

A .CSV file will **not** be partially loaded. It will only load after ALL rows have been checked for adhering to all formatting rules.

CustomerID and DriverID that are not a full 4-digit Value:

If a customer ID or driver ID has a value with leading zeros, for example, "0025", and if that value comes in the CSV as "25", the Portal will left zero-pad these two fields, and allow to load without error.
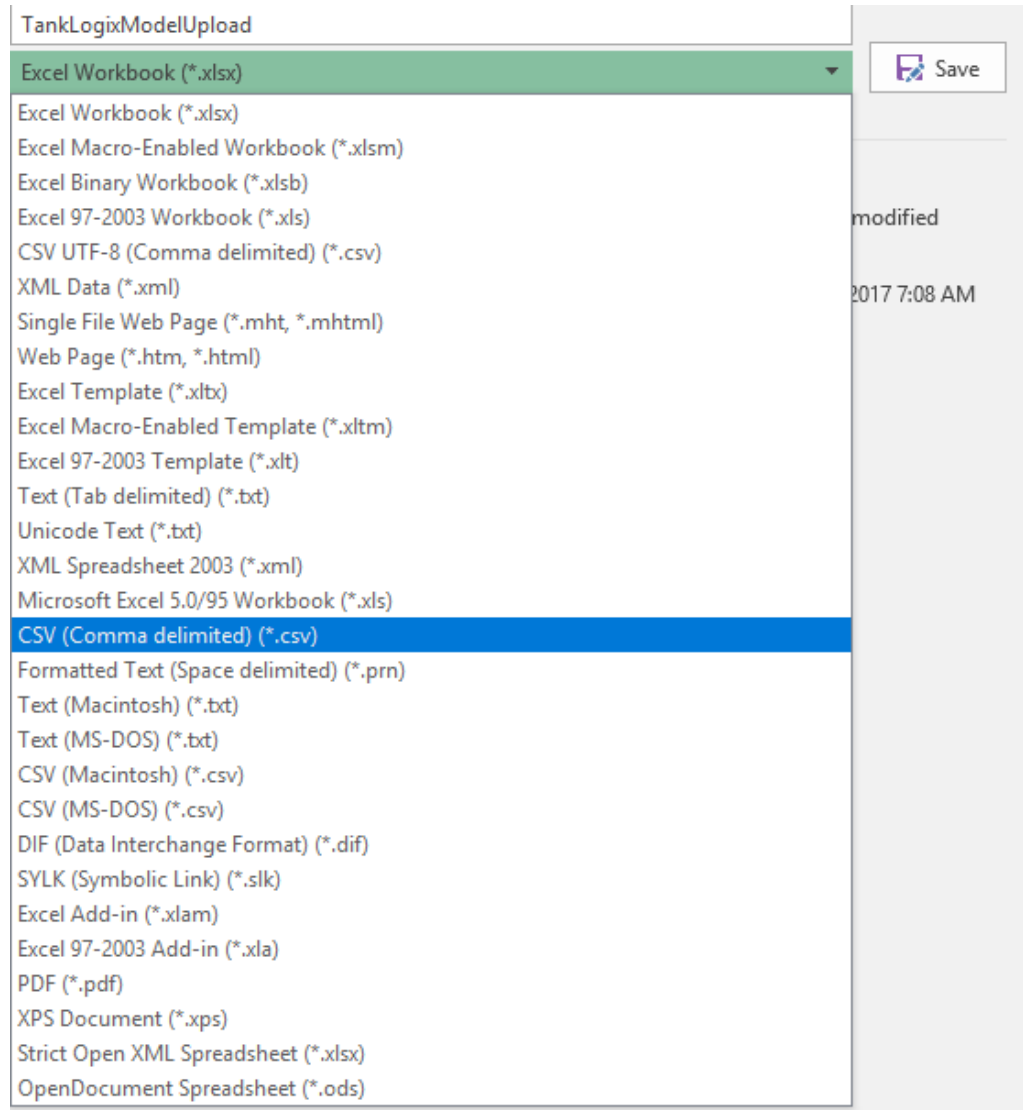
Transactions Ticket Duplicates Definition:

The combination of **Ticket Number** + **Lease Number** + **Oil/Gas** + **Produced Water** + **Start Date** + **Volume** is compared 1) within the incoming file itself, and 2) against the already-loaded transactions for the existing site. The assumption is that the same ticket number will not be used twice in the same day.

If duplicates are found in either of these two scenarios, the file load will be aborted as an error and not be loaded until corrections are made. Exact reasons will be formatted into the email of record of the submitting TankLogix Portal user and sent. The status on the web page will also reflect the status of the load, whether pending, or errors found, or completed successfully.
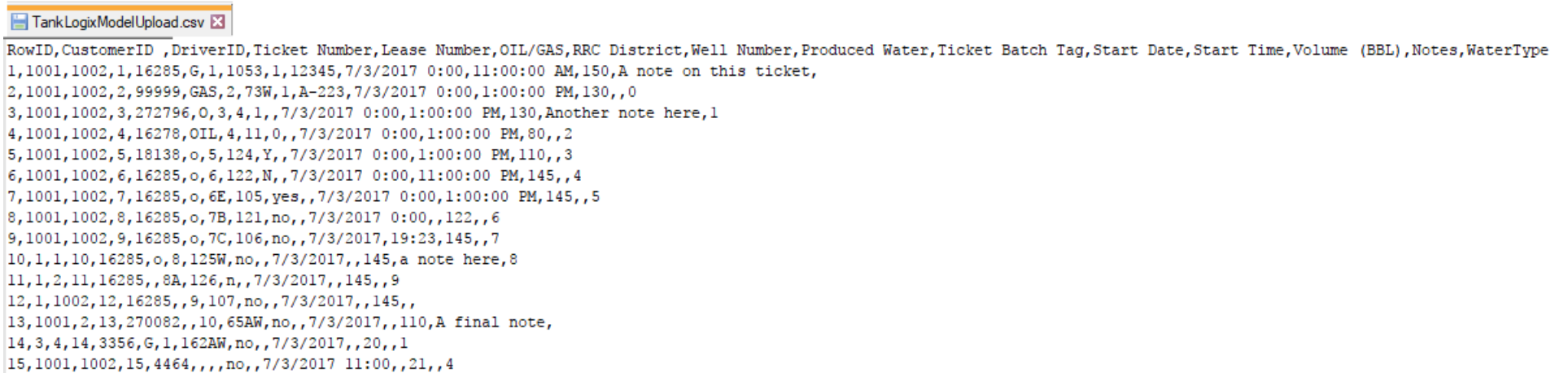
Although some fields are listed at "Not Required", only the values are not required; the spreadsheet column / CSV *is always required.* Thus, each csv file will have exactly fifteen (15) columns.

Saving CSV file from Other Formats (.xlsx or google sheets, etc.):

Please save your original spreadsheet as a CSV(comma delimited) file:

TankLogixModelUpload

Excel Workbook (*.xlsx)	Save

Excel Workbook (*.xlsx)
Excel Macro-Enabled Workbook (*.xlsm)
Excel Binary Workbook (*.xlsb)
Excel 97-2003 Workbook (*.xls)   modified
CSV UTF-8 (Comma delimited) (*.csv)
XML Data (*.xml)   2017 7:08 AM
Single File Web Page (*.mht, *.mhtml)
Web Page (*.htm, *.html)
Excel Template (*.xltx)
Excel Macro-Enabled Template (*.xltm)
Excel 97-2003 Template (*.xlt)
Text (Tab delimited) (*.txt)
Unicode Text (*.txt)
XML Spreadsheet 2003 (*.xml)
Microsoft Excel 5.0/95 Workbook (*.xls)
CSV (Comma delimited) (*.csv)
Formatted Text (Space delimited) (*.prn)
Text (Macintosh) (*.txt)
Text (MS-DOS) (*.txt)
CSV (Macintosh) (*.csv)
CSV (MS-DOS) (*.csv)
DIF (Data Interchange Format) (*.dif)
SYLK (Symbolic Link) (*.slk)
Excel Add-in (*.xlam)
Excel 97-2003 Add-in (*.xla)
PDF (*.pdf)
XPS Document (*.xps)
Strict Open XML Spreadsheet (*.xlsx)
OpenDocument Spreadsheet (*.ods)

After the save, if you opened up this .CSV file in a text editor, it would look like this:

```
TankLogixModelUpload.csv [X]
RowID,CustomerID ,DriverID,Ticket Number,Lease Number,OIL/GAS,RRC District,Well Number,Produced Water,Ticket Batch Tag,Start Date,Start Time,Volume (BBL),Notes,WaterType
1,1001,1002,1,16285,G,1,1053,1,12345,7/3/2017 0:00,11:00:00 AM,150,A note on this ticket,
2,1001,1002,2,99999,GAS,2,73W,1,A-223,7/3/2017 0:00,1:00:00 PM,130,,0
3,1001,1002,3,272796,O,3,4,1,,7/3/2017 0:00,1:00:00 PM,130,Another note here,1
4,1001,1002,4,16278,OIL,4,11,0,,7/3/2017 0:00,1:00:00 PM,80,,2
5,1001,1002,5,18138,o,5,124,Y,,7/3/2017 0:00,1:00:00 PM,110,,3
6,1001,1002,6,16285,o,6,122,N,,7/3/2017 0:00,11:00:00 PM,145,,4
7,1001,1002,7,16285,o,6E,105,yes,,7/3/2017 0:00,1:00:00 PM,145,,5
8,1001,1002,8,16285,o,7B,121,no,,7/3/2017 0:00,,122,,6
9,1001,1002,9,16285,o,7C,106,no,,7/3/2017,19:23,145,,7
10,1,1,10,16285,o,8,125W,no,,7/3/2017,,145,a note here,8
11,1,2,11,16285,,8A,126,n,,7/3/2017,,145,,9
12,1,1002,12,16285,,9,107,no,,7/3/2017,,145,,
13,1001,2,13,270082,,10,65AW,no,,7/3/2017,,110,A final note,
14,3,4,14,3356,G,1,162AW,no,,7/3/2017,,20,,1
15,1001,1002,15,4464,,,,no,,7/3/2017 11:00,,21,,4
```

You can see the 15 placeholding columns, even though some are blanks. With the 15 columns on each row, there should be 14 separating commas on each row as well, acting as column delimiters.

BLANK ROWS:

If any blank rows are encountered (typically seen as 14 commas ,,,,,,,,,,,,,,), these rows will be discarded when the file uploads.

LOCAL DateTime vs. Required and Non-Required Fields Note:

Although some columns/fields are required and others non-required, the presence of ALL the 15 columns in the worksheet/spreadsheet/CSV file is required. If any column is missing, the file load will fail.

Date and Time fields must be entered as Local Time (and then during upload you will select which time zone these local times belong to).