Waterfield Energy Software Release 8.0

July 2019



RELEASE NOTES

WE Software 8.0

- Overview
- Gas & Liquids Transport/Mgmt
- Midstream
- Upstream
- Cross Functional Modules
  - Financial Accounting
  - AFE/PO/Fixed Assets/Inventory
  - Land/GIS
- Technical Requirements

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RELEASE 8.0 OVERVIEW

- **Waterfield Energy Software Release 8.0** is an integrated software solution for the oil & gas industry, offering a full product suite across the Midstream, Upstream, and Transportation/Liquids Management segments

- Release 8.0 continues to build upon the highly successful prior releases and offers:
  - **Even faster processing -** Waterfield's batch processes set the standard for performance in the industry. In 8.0, additional batch processes have been converted to the high performance engine, while existing processes were analyzed for additional opportunities for performance improvement.
  - **Even faster user interface -** Waterfield's web-based software already loads very quickly; new partitioning technology takes that to the next level.
  - **Continued investment across the entire product suite…**

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RELEASE 8.0 OVERVIEW

Waterfield 8.0 Product Suite

1	Accruals
2	AFE
3	Check Inputs
4	Contract Management
5	Division Order Midstream
6	Drilling & Well Work
7	Field Data Capture
8	Financials
9	First Purchaser
10	Fixed Assets
11	Forecasting
12	Gathering
13	GIS
14	Joint Interest Billing
15	Land

16	Liquid Transportation
17	Marketing
18	Materials Inventory
19	ONRR
20	Payouts
21	Purchase Order
22	Production Accounting
23	Production Operations
24	Revenue Accounting
25	Stabilizer
26	Terminal Management
27	Transportation
28	Upstream Division Order
29	Upstream Revenue
30	Volume Balancing

31	State Taxes - Kansas
32	State Taxes - Kentucky
33	State Taxes - North Dakota
34	State Taxes - New Mexico
35	State Taxes - Oklahoma
36	State Taxes - Texas / GLO
37	State Taxes - West Virginia

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RELEASE 8.0 OVERVIEW

- **New Grids Architecture**
  - Waterfield has developed new back-end grid technology that enables grids to return large amounts of data even more rapidly; sort, filter, & analyze data even faster! The architecture has been tested against a table with *one billion* records.
  - In this release, the new architecture has been applied to asset level results screens, owner amounts, DO journal results, & GL transactions, and will be rolled out to all large data grids in the coming releases.
- **E-Mail Approval System**
  - For Revenue, Cost, and Financial objects that utilize workflow, items can now be approved from mobile devices via e-mail; a link takes the user directly into a secure location to view/approve the object
  - Expanded notification system to inform users when an object (Invoice, Journal Entry, AFE etc) is pending approval, has been approved, etc.
- **Contracts** Enhancements
  - New auto-numbering functionality for contracts
  - New Related Parties screen & functionality
  - New security / grants / access controls by Contract Type
  - New Contracts Document screen for uploading/storing/downloading attachments

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GAS & LIQUID TRANSPORT/MGMT

Waterfield Gas & Liquid Transportation & Management Modules

1	Field Data Capture
2	First Purchaser
3	Liquid Transportation
4	Terminal Management
5	Transportation
6	Marketing

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GAS & LIQUID TRANSPORT/MGMT

- **Transport Allocate** converted to the WE High Performance Engine
  - The Gas and Liquids product suite is now entirely in the Waterfield High Performance Engine

1	Data Prep
2	Transport Allocate
3	Transport Value
4	Transport Imbalance
5	ARAP
6	Journal
7	Tank Management
8	Terminal Schedule

- **Run Tickets** Enhancements
  - Added viscosity to run tickets, formulas, & shipper allocations; added a warning when a ticket does not generate a shipper allocation; added the ability to use the analysis date on run tickets in batch processing; added the ability to import analysis for multiple dates; added the ability for ticket number to flow through to journal results
- **Tariffs** Enhancements
  - New tariff allowance sharing; new copy functionality for tariffs; added Tariff Type code table with additional fields, formula abilities, and valuation results updates

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GAS & LIQUID TRANSPORT/MGMT

- New **Book Inventory Transactions** screen for a simplified view of Inventory Transactions
- Added **View All Nominations s**creen for CAW users
- **Nominations** Enhancements
  - Added the ability to copy a row on the nominations grid; simplified the entry of nominations w/o downstream contracts; added nomination quantity to notifications; added the ability to automatically convert barrels-per-day to a monthly quantity
- **Gain & Loss** Enhancements
  - Added ability to allocate G/L to pipeline or affiliate using either receipt or delivery share; added option to use current month less prior month physical closing; added backup G/L allocation method; enhanced AFS G/L functionality
- **Meter Group** Enhancements
  - Added meter groups to nominations & PDAs (which flow through to the results grids)
- **And More…**
  - Additional functionality, validations, warning messages, and fields available for importing & exporting across the Waterfield NGL & Gas Transportation & Management Product Suite

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MIDSTREAM

Waterfield Midstream Modules

1	Accruals
2	AFE
3	Contract Management
4	Division Order
5	Field Data Capture
6	Financials
7	Fixed Assets
8	Forecasting
9	Gathering
10	Land / Right of Way

11	Marketing
12	Purchase Order
13	Revenue Accounting
14	Volume Balancing
15	State Taxes - Kansas
16	State Taxes - Kentucky
17	State Taxes - North Dakota
18	State Taxes - New Mexico
19	State Taxes - Oklahoma
20	State Taxes - Texas

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MIDSTREAM

- **BA Statement Export & Daily Volume Balancing** converted to the WE High Performance Engine
- **Midstream Batch Processing** in the WE High Performance Engine:

1	Data Prep
2	Allocate
3	Value
4	Imbalance
5	Cashout
6	Calculate Taxes
7	ARAP
8	Journal
9	BA Statement Export
A	Clear DO
B	Apply DO
C	DO Journal
+	Accruals
+	AFE
+	Forecasting
+	Marketing

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MIDSTREAM

- **Revenue Recognition** enhancements for recent changes to US GAAP
- **Regulatory** enhancements for recent changes to state tax laws
- Significant enhancements to **Trucking** functionality
  - Invoice Adjustments allows users to check accuracy of invoiced truck tickets against calculated Waterfield results, then determine which value to use for settlement
- Expanded the use of **Daily Prices** in product settlement & the ability to import and process negative prices
- Enhanced **Formulas** to reference volumes from allocated results & the ability to utilize H2S PPM in formulas
- Added **GPEX** export file mapping and creation process
- Significant enhancements to the **Midstream Financial Accounting** interface from Plant Processing to the WE Financials module

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MIDSTREAM

- Added the ability to define **Tax Exemption Volumes**
- **BU/WH** enhancements to give users the ability to determine base amounts used in calculations, configurable BUWH basis, new BUWH source field, & the ability to exempt an owner from escheat when in due diligence status
- Added **CPFA** ability to allocate multiple products, usages, & units of measure to child meters
- Added ability to limit **Disbursement Reversals** by asset timeline
- Added ability to show inactive records in owner amounts grid
- Added new **Contract Level Overrides** screen to allow for easier PPA handling for DOs
- Added **Latitude and Longitude** on legal description of DOs
- **And More...** Additional functionality, validations, warning messages, and fields available for importing & exporting across the Waterfield Midstream Product Suite

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UPSTREAM

Waterfield Upstream ERP Modules

1	Accruals
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UPSTREAM

- **Fully Integrated Upstream ERP solution -** modules are designed to work together seamlessly in a single code stream
- Upstream **Batch Processing** is in the Waterfield High Performance Engine
- Release 8.0 includes enhancements across the Upstream ERP Product Suite:

Module	Enhancements
AFE	43
Check Input	46
DO	16
Financials	146
Fixed Assets	87
General	55
JIB	60
Land	55
Materials Inv	47
ONRR	21
Purchasing	49
Regulatory	46
Revenue	24
TOTAL	**695**

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UPSTREAM

- **Revenue Accounting** enhancements include:
  - New *asset level* owner distribution process/results screens
  - Enhanced **Check Input** to allow custom formats for different 3rd party checks; enhanced integration with DO to calculate gross from net check input; XPS and DAT attachments can be used in Check Input
  - Cost Center auto-numbering functionality & new cost center type access grants by user
  - Ability to update attributes from well completion master
  - Ability to distribute on GWI
  - Upload PAVs with API Gravity
  - Allow multiple BAs to be set as Company Business Associate
  - Updated Rebuild from DO Process when 'Keep Tax Groups' is chosen
  - Tax floor can calculate at the well level, rather than the individual record level
  - Added flip sign flag on DO Journal Components to allow credits to flip from (+) to (-)
  - New product specific marketing costs functionality
  - Added wet/dry conversion factors
  - New Accrual Payable screen & product settlement override rates

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UPSTREAM

- **Division Order** enhancements include:
  - Logic to consider LOI time-slices when opening DOs
  - Ability to link LOI's to Burden Group Items & updated Interest Types on BG Items
  - Ability to copy Burden Groups and keep their values
  - Updated Fee Exemption Group functionality & validations
  - Added Royalty Balancing Interest Calculation
  - Suspense Approval Overview Screen now includes Suspense Funds Actions
  - Added Termination Transfer Link to LOI
  - Core architecture to interface to PRA/SAP; added ISQ to Burden Groups, LOIs and System Calculations; Created new Special Maintenance Request Screens for Netting, ISQ split, and LOI updates
  - New Lifecycle LOI Validation
  - PPI Burden Groups
  - DO grid export functionality
  - Updated Base Contract validations
  - Significant DO Aggregator enhancements
  - Added the ability to back date a DO after creation

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UPSTREAM

- **Cost Accounting** enhancements include:
  - JIB Invoice with supporting Detail; updated to handle JIBLink Outbound Interface
  - Added JIB Invoice summarization control screen for JIB statements
  - New audit screen for unbilled transactions
  - JIB Minimum Suspense logic
  - Added JIB Statement Types code table
  - Updated JIB Billing logic to allow users to set JIB Minimum Billing amounts by owner
  - Added Producing Overhead volume restrictions
  - JADE screen for Rebills
  - Owner netting logic to enable netting at the well level
  - Ability to bypass minimum billing if owner has cash call balance
  - *See 'Cross-Functional Modules' for additional information on Waterfield Cost Accounting modules*

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UPSTREAM/CROSS-FUNCTIONAL

- **Financial Accounting** enhancements include:
  - Open Invoice integration – core functionality in place to retrieve AP Invoices & associated documents; sync AFEs, cost centers and users; ability to schedule the interface to run at specific times; process to retrieve single AP Invoices
  - Significant enhancements to Sales & Use Tax functionality
  - New AP Discount Functionality, including functionality to work with partial pays, and discount due date override functionality
  - New AP Invoice Reclass functionality
  - Accounting logic for accrual reversal when JE Header is set to Accrual
  - Remittance Comments to AP Invoices & Payments
  - Ability for a role to be changed on open AP invoices
  - Added Auto-Intercompany transactions
  - Enhancements to Bank Recon functionality
  - Enhancements to the Detailed Trial Balance Inquiry
  - Ability to release payments by remittance type
  - Optional validation to ensure Activity Date < Accounting Date

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CROSS-FUNCTIONAL

- **AFE** enhancements include:
  - Notifications for AFEs pending approval & Added in-app notifications for supplements
  - AFE integration with Global Well Completions
  - Ability to reclass processed AFEs
  - Ability to disallow AFE deletion after Actuals exist
  - Generate AFE Form button from AFE edit page
- **Fixed Assets** enhancements include:
  - New functionality to automatically maintain Book/Tax differences
  - Automatic totals on multiple Fixed Assets screens
  - Schedule updates now take place in the background
  - Reduced Staging Interface Process performance time from ~30 mins to ~1 min
  - Added Tax Detail Mass Update
  - Added Tax Final Year Pro-Rate Depreciation
  - New ability to view asset balances and transactions that make that up the balance
  - UOP Pool Level Depletion and Negative Assets
  - Approval & change history for Fixed Assets Transactions
  - Automatic Schedule Recalculations for Fully Depreciated Transactions

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CROSS-FUNCTIONAL

- **Purchase Order** enhancements include:
  - Updated the creation of PO Receipt Lines to include Line Splits
  - Allow users to override PO matching quantity and amount tolerances
  - Updated the reclass function for AP Invoices with matched GL lines
  - Added a Generate PO Report button from the application
  - Made the PO field in the AP Invoice header a picker, auto-populate the vendor from the PO selected
  - Added additional Tolerance fields
- **Materials Inventory** enhancements include:
  - Full Integration with the Purchase Order module
  - Approval Location to allow users to select specific chains
  - Allow users to override Average Cost
  - Enable transfers to create transaction lines which turn into Journal Entries
  - Easy of use enhancements when determining if the Item Catalog requires a Serial Number
  - Enhancement to allow for the setup of specific inventory yards

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CROSS-FUNCTIONAL

- **Land, Lease Admin, Right of Way, & GIS** enhancements include:
  - Added **Land Inquiry** Functionality – create, save, and share Agreement searches
  - New Remarks tab & updated Remarks grid entry/view
  - Agreement stages for Land workflow
  - Configurable Land validations
  - Ability to suspend a payee
  - New Participation Ownership graph
  - New Pop-up Agreement Summary
  - Added Split Obligation Rates
  - Tract level obligations summary at agreement
  - Added Formations grid
  - Separate GIS Linker Staging GDB per user
  - New & updated importers

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TECHNICAL REQUIREMENTS

- **Linux Virtual Machines:** RedHat 7
- **Windows Virtual Machines:** Windows 2016
- **Database:** Microsoft SQL Server 2016 (Standard or Enterprise)
- **IBM Cognos:** 11.1.0
- **Web Browser:** Internet Explorer 11 or Google Chrome

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PROCESS / DOCUMENTATION

Please contact we.support@waterfield.com to schedule your upgrade today!

Additional documentation available upon request:

- Waterfield Configuration Settings

- Waterfield Schema Changes

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