FinTrak HASS - User Manual

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Getting Started

Accessing the System

1. **Login Page**: Navigate to the application URL and enter your credentials
   - **Email**: Your registered email address
   - **Password**: Your secure password
   - Click “Sign In” to access the system

2. **First-Time Users**: Contact your system administrator for account creation

Navigation

- **Sidebar Menu**: Located on the left side, provides access to all main features
- **User Profile**: Click your name/avatar in the sidebar to:

- View profile information
- Sign out of the system

User Roles & Permissions

Administrator

- **Full System Access**: Complete control over all features
- **User Management**: Create, edit, and delete user accounts
- **Data Management**: Create, edit, and delete all records
- **System Configuration**: Manage settings and correction factors
- **Reports**: Generate and manage all report types

Operator

- **Data Entry**: Create and edit production data, well tests, and allocations
- **View Access**: View all data and reports
- **Reports**: Generate reports and save templates
- **Limited Deletion**: Cannot delete records or manage users

Viewer

- **Read-Only Access**: View all dashboards, data, and reports
- **No Editing**: Cannot create, edit, or delete any records
- **Reports**: Can view and generate reports only

Dashboard

Overview

The Dashboard provides a comprehensive overview of your hydrocarbon operations.

Key Features

1. Welcome Banner

- Personalized greeting with your name
- Current date and time
- Quick action buttons for common tasks

2. Key Performance Indicators (KPIs)

Month-to-Date (MTD) Metrics:
- **Total Oil Production**: Cumulative oil produced (BBL)
- **Total Gas Production**: Cumulative gas produced (MSCF)
- **Total Water Production**: Cumulative water produced (BBL)
- **Active Wells**: Number of currently producing wells
- **Average GOR**: Gas-to-oil ratio across all wells
- **Water Cut**: Percentage of water in total fluid production
- **Efficiency**: Overall operational efficiency percentage

Year-to-Date (YTD) Summary:
- Displays total production volumes for oil, gas, and water
- Located below the MTD metrics for quick annual reference

3. Interactive Charts

Production Trend Chart:
- Line chart showing oil, gas, and water production over time
- Filter by date range to analyze trends
- Hover over data points for exact values

Top Wells Performance:
- Bar chart displaying highest-producing wells
- Ranked by oil production volume
- Click on bars for detailed well information

Field Distribution:
- Pie chart showing production distribution across fields
- Percentage breakdown of contributions
- Color-coded for easy identification

Well Status Overview:
- Donut chart showing active, inactive, and shut-in wells
- Real-time status monitoring
- Click sections for filtered well lists

GOR & Water Cut Trends:
- Dual-axis chart tracking GOR and water cut over time
- Identify production quality changes
- Essential for reservoir management

Usage Tips

- **Refresh Data**: Dashboard automatically updates; manually refresh if needed
- **Date Filters**: Use chart-specific date filters for detailed analysis
- **Export Data**: Use the Reports section for downloadable data

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Wells Management

Overview

Manage all well information, including well details, status, and operational data.

Page Features

1. Wells Overview Cards

- **Total Wells**: Count of all wells in the system
- **Active Wells**: Currently producing wells
- **Inactive Wells**: Wells not currently producing
- **Shut-In Wells**: Wells temporarily closed

2. Wells Data Table

Displayed Information:
- Well Name
- Well ID (unique identifier)
- Field name
- Associated Facility
- Well Type (Oil, Gas, Water Injection)
- Status (Active, Inactive, Shut-In)
- Completion Date

Table Features:
- **Search**: Find wells by name, ID, or field
- **Sort**: Click column headers to sort data
- **Pagination**: Navigate through multiple pages
- **Actions**: Edit or delete wells (Admin only)

3. Adding a New Well

Steps:
1. Click “Add Well” button (top-right)
2. Fill in required fields:
- **Well Name**: Descriptive name for the well
- **Well ID**: Unique identifier (required)
- **Field**: Field where the well is located
- **Facility**: Associated production facility
- **Status**: Current operational status
- **Type**: Well classification (Oil/Gas/Water Injection)
- **Latitude/Longitude**: GPS coordinates (optional)
- **Spud Date**: Date drilling began (optional)
- **Completion Date**: Date well was completed (optional)
3. Click “Create Well” to save

4. Editing a Well

Steps:
1. Click the “Edit” (pencil) icon in the Actions column
2. Modify the required fields
3. Click “Update Well” to save changes

Note: Only Admins and Operators can edit wells

5. Deleting a Well

Steps:
1. Click the “Delete” (trash) icon in the Actions column
2. Confirm deletion in the popup dialog

Warning:
- Only Admins can delete wells
- Deletion is permanent and will affect associated production data

Best Practices

- Use consistent naming conventions for wells
- Keep well status updated for accurate reporting

- Regularly update GPS coordinates for mapping features
- Document significant well events in notes (if available)

Facilities Management

Overview

Manage production, processing, and storage facilities.

Page Features

1. Facilities Overview Cards

- **Total Facilities**: Count of all facilities
- **Production Facilities**: Facilities for production
- **Processing Facilities**: Facilities for processing
- **Storage Facilities**: Storage infrastructure

2. Facilities Data Table

Displayed Information:
- Facility Name
- Facility ID (unique identifier)
- Field name
- Type (Production, Processing, Storage)
- Operator name
- Capacity (volume)
- Status (Active, Inactive)

Table Features:
- Search, sort, and pagination
- Color-coded facility type icons
- Status badges for quick identification

3. Adding a New Facility

Steps:
1. Click “Add Facility” button
2. Fill in required fields:
- **Facility Name**: Descriptive name
- **Facility ID**: Unique identifier (required)
- **Field**: Associated field
- **Type**: Facility classification
- **Operator**: Operating company name
- **Location**: Geographic location (optional)
- **Capacity**: Maximum capacity in appropriate units
- **Status**: Current operational status
3. Click “Create Facility” to save

4. Editing and Deleting Facilities

- Same process as Wells Management
- Admin-only deletion rights
- Edit permissions for Admins and Operators

Best Practices

- Keep capacity information updated for planning
- Update facility status when maintenance occurs
- Use standardized facility naming conventions

Products Configuration

Overview

Define and manage hydrocarbon product properties used in calculations.

Page Features

1. Products Overview

- **Total Products**: Count of configured products
- Product list with properties

2. Products Data Table

Displayed Information:
- Product Name (Oil, Gas, Water, etc.)
- Product Code (unique identifier)
- Unit of Measurement (BBL, MSCF, etc.)
- Standard Temperature (°F)
- Standard Pressure (PSIA)
- Density (specific gravity)
- API Gravity (for oil products)

3. Adding a New Product

Steps:
1. Click “Add Product” button
2. Fill in required fields:
- **Product Name**: Type of hydrocarbon
- **Product Code**: Unique code (e.g., “OIL”, “GAS”)
- **Unit**: Measurement unit
- **Standard Temperature**: Reference temperature
- **Standard Pressure**: Reference pressure
- **Density**: Product density at standard conditions
- **API Gravity**: API gravity for oil (optional)
3. Click “Create Product” to save

4. Product Usage

- Products are used in production data entry
- Properties are used for volume corrections
- Essential for accurate reporting and calculations

Best Practices

- Use industry-standard product codes
- Ensure accurate density and API gravity values
- Review and update product properties periodically

Production Data

Overview

Record and manage daily production data for all wells.

Page Features

1. Production Summary Cards

- **Total Entries**: Count of production records
- **Total Oil**: Sum of oil production (current view)
- **Total Gas**: Sum of gas production (current view)
- **Total Water**: Sum of water production (current view)

2. Filters

Available Filters:
- **Well**: Filter by specific well (dropdown)
- **Start Date**: Beginning of date range
- **End Date**: End of date range

How to Use:
1. Select a well from the dropdown (optional)
2. Choose start and end dates
3. Click “Apply Filters” or filter automatically applies
4. Click “Clear Filters” to reset

3. Production Data Table

Displayed Information:
- Production Date
- Well Name and ID
- Field
- Gross Oil (BBL)
- Net Oil (BBL)
- Gas (MSCF)
- Water (BBL)
- GOR (Gas-to-Oil Ratio)
- Water Cut (%)
- Operating Hours

Calculated Fields:
- **Net Oil**: Gross Oil - (Gross Oil × BSW)
- **GOR**: Gas Production / Oil Production
- **Water Cut**: (Water / Total Fluid) × 100

4. Adding Production Data

Steps:
1. Click “New Entry” button
2. Fill in the production form:
- **Date**: Production date (required)
- **Well**: Select from dropdown (required)
- **Gross Oil**: Total oil produced including water

- **Gas**: Gas production volume
- **Water**: Water production volume
- **BSW (%)**: Basic Sediment and Water percentage
- **Operating Hours**: Hours well was producing (0-24)
- **Test Separator Pressure**: Separator pressure (optional)
- **Test Temperature**: Test temperature (optional)
- **Comments**: Additional notes (optional)
3. Click “Save Production Data”

Validation:
- Date cannot be in the future
- Oil, gas, and water must be non-negative
- BSW must be between 0-100%
- Operating hours must be between 0-24

5. Editing Production Data

Steps:
1. Click the “Edit” icon in the Actions column
2. Modify the required fields
3. Click “Update” to save changes

Note: Only Admins and Operators can edit production data

6. Deleting Production Data

Steps:
1. Click the “Delete” icon in the Actions column
2. Confirm deletion

Warning: Admin-only action, permanent deletion

7. Data Import/Export

Export Production Data:
1. Click “Export” button at the top
2. Current filtered data exports as Excel file
3. File includes all visible columns

Import Production Data:
1. Click “Template” button to download import template
2. Fill in the template with production data:
- Use exact column headers
- Follow date format: YYYY-MM-DD
- Ensure well IDs match existing wells
3. Click “Import” button
4. Select your completed Excel/CSV file
5. Review validation messages
6. Successful records are imported immediately

Import Validation:
- Well ID must exist in the system
- Date format must be valid
- Numeric fields must be valid numbers
- Duplicate date/well combinations are rejected

Best Practices

- Enter production data daily for accuracy
- Use consistent time zones for all entries
- Review calculated fields (GOR, Water Cut) for anomalies
- Export data regularly for backup purposes
- Validate well IDs before bulk imports

Well Tests

Overview

Record and manage well test data used for production allocation.

Page Features

1. Well Test Statistics

- **Total Tests**: Count of all well tests
- **Average Oil Rate**: Mean oil production rate (BOPD)
- **Average Gas Rate**: Mean gas production rate (MSCFD)
- **Latest Test Date**: Most recent test performed

2. Filters

Available Filters:
- **Well**: Filter by specific well
- **Test Type**: Filter by test type
- Production Test
- Flow Test
- Pressure Buildup
- Interference Test
- Drill Stem Test

3. Well Test Data Table

Displayed Information:
- Test Date
- Well Name
- Test Type
- Duration (hours)
- Oil Rate (BOPD)
- Gas Rate (MSCFD)
- Water Rate (BWPD)
- GOR (SCF/BBL)
- Water Cut (%)
- Actions

4. Adding a Well Test

Steps:
1. Click “New Test” button
2. Fill in the test form:
- **Test Date**: Date test was performed (required)

- **Well**: Select from dropdown (required)
- **Test Type**: Select test type (required)
- **Duration**: Test duration in hours (required)
- **Oil Rate**: Oil production rate in BOPD
- **Gas Rate**: Gas production rate in MSCFD
- **Water Rate**: Water production rate in BWPD
- **Test Pressure**: Separator pressure (optional)
- **Test Temperature**: Test temperature (optional)
- **Comments**: Additional notes (optional)

3. **Auto-Calculations**:
- GOR = (Gas Rate / Oil Rate) × 1000
- Water Cut = (Water Rate / (Oil Rate + Water Rate)) × 100
4. Click “Create Well Test”

5. Editing and Deleting Well Tests

- Edit: Click pencil icon (Admin/Operator)
- Delete: Click trash icon (Admin only)
- Changes update allocation calculations automatically

Test Type Descriptions

- **Production Test**: Standard production rate measurement
- **Flow Test**: Measure well flow characteristics
- **Pressure Buildup**: Measure reservoir pressure recovery
- **Interference Test**: Evaluate well interaction
- **Drill Stem Test**: Initial well evaluation during drilling

Best Practices

- Conduct regular well tests (monthly recommended)
- Record test conditions accurately (pressure, temperature)
- Use consistent test durations for comparison
- Review calculated GOR and water cut for anomalies
- Update tests when well performance changes

Production Allocations

Overview

Distribute commingled production to individual wells using various allocation methods.

Page Features

1. Allocation Statistics

- **Total Allocations**: Count of allocation records
- **Total Allocated Oil**: Sum of allocated oil (BBL)
- **Total Allocated Gas**: Sum of allocated gas (MSCF)

2. Allocation Methods

Test-Based Allocation:
- Uses latest well test data

- Proportionally allocates based on test rates
- Most accurate method
- Requires up-to-date well tests

Pro-Rata Allocation:
- Equal distribution among wells
- Simple calculation: Total Production / Number of Wells
- Used when test data is unavailable

Manual Allocation:
- User-defined allocation factors
- Enter custom percentages for each well
- Must sum to 100%
- Used for special circumstances

3. Creating an Allocation

Steps:
1. Click “New Allocation” button
2. Fill in allocation details:
- **Allocation Date**: Date of allocation (required)
- **Facility**: Select facility (required)
- **Allocation Method**: Choose method (required)
- **Total Oil**: Total oil to allocate (BBL)
- **Total Gas**: Total gas to allocate (MSCF)
- **Total Water**: Total water to allocate (BBL)
3. Select wells to include in allocation
4. **For Test-Based**: Latest test rates auto-populate
5. **For Manual**: Enter allocation factors (must sum to 100%)
6. Review calculated allocated volumes in the preview table
7. Click “Create Allocation”

4. Allocation Calculations

Test-Based Formula:

```
Well Allocation = (Well Test Rate / Sum of All Test Rates) × Total Production
```

Pro-Rata Formula:

```
Well Allocation = Total Production / Number of Wells
```

Manual Formula:

```
Well Allocation = Total Production × (Allocation Factor / 100)
```

5. Viewing Allocation Details

Steps:
1. Click on any allocation row in the table
2. View dialog shows:
- Allocation summary

- Method used
- Individual well allocations
- Volumes per well (oil, gas, water)

6. Deleting Allocations

- Click trash icon (Admin only)
- Confirm deletion
- Permanently removes allocation record

Best Practices

- Use test-based allocation when well tests are current
- Perform allocations daily or per shift
- Verify total volumes match facility readings
- Review allocation factors for manual allocations
- Keep well test data up-to-date for accurate allocations

Metering & Calibration

Overview

Track and manage all measurement devices including flow meters, tank gauges, and custody transfer meters. Maintain calibration records and proving results to ensure measurement accuracy.

Key Features

1. Meter Management

- **Add New Meter**: Click “Add Meter” button
- Enter meter name and serial number
- Select meter type (flow, level, pressure, temperature, multiphase)
- Assign to facility
- Specify manufacturer and model
- Enter measurement range and accuracy
- Set installation and last calibration dates
- **View Meters**: Data table showing all meters with details
- Search and filter by name, type, or facility
- View calibration status and due dates
- Quick access to meter readings and calibration history

2. Meter Readings

- **Record Reading**: Log daily or periodic meter readings
- Select meter from dropdown
- Enter reading date and time
- Input raw and corrected values
- Apply meter factor and temperature corrections
- Add notes for anomalies

- **Reading History**: View historical readings per meter
- Trend analysis for meter drift
- Compare raw vs corrected values

3. Calibrations

- **Record Calibration**: Document calibration activities
- Enter calibration date and technician
- Record before/after values
- Calculate meter factor
- Set next calibration due date
- Attach calibration certificates

4. Meter Provings

- **Record Proving**: Track meter proving results
- Enter proving date and prover serial number
- Record proving runs and volumes
- Calculate meter factor from proving data
- Document repeatability results

Best Practices

- Schedule regular calibrations based on meter criticality
- Review proving results against historical data
- Track meter drift over time
- Maintain calibration certificate records
- Document all meter changes and maintenance

Tank/Inventory Management

Overview

Manage storage tanks, record gauging measurements, and track stock movements between facilities.

Key Features

1. Tank Management

- **Add New Tank**: Click “Add Tank” button
- Enter tank name and unique identifier
- Select tank type (fixed roof, floating roof, spherical, bullet, pressurized)
- Assign to facility and product type
- Enter capacity, diameter, and height
- Specify reference height and dead stock volume
- **Tank List**: View all tanks with current status
- Search by name or facility
- View current inventory levels
- Monitor tank status (in-service, out-of-service, under maintenance)

2. Tank Gaugings

- **Record Gauging**: Document tank measurements
- Select tank and enter gauging date/time
- Input liquid level and free water level
- Record temperature and observed API gravity
- System calculates gross and net volumes automatically
- Add gauger name and comments
- **Gauging History**: View historical tank levels
- Track inventory changes over time
- Identify discrepancies or losses

3. Stock Movements

- **Record Movement**: Track product transfers
- Select movement type (receipt, transfer, delivery, adjustment)
- Choose source and destination tanks
- Enter volume, date, and reference number
- Add supporting documentation
- **Movement Register**: View all stock movements
- Filter by date range, tank, or movement type
- Reconcile with custody transfer tickets

Best Practices

- Perform gauging before and after transfers
- Verify tank strapping tables are current
- Document all adjustments with proper authorization
- Reconcile inventory daily
- Monitor tank temperature for accurate calculations

Custody Transfer

Overview

Manage fiscal metering points and custody transfer transactions for accurate sales and purchase accounting.

Key Features

1. Fiscal Metering Points

- **Add Fiscal Point**: Define custody transfer locations
- Enter point name and unique identifier
- Select point type (sales, purchase, inter-company, royalty)
- Assign to facility and meter
- Configure volume correction factors
- **Point Configuration**: Manage metering station setup

- Define connected meters
- Set up correction factor calculations
- Configure backup measurement procedures

2. Custody Transfers

- **Record Transfer**: Document custody change events
- Select fiscal metering point
- Enter transfer date and time
- Input gross observed volume (GOV)
- Record temperature, pressure, and density
- System applies corrections for:
  - Temperature (CTL)
  - Pressure (CPL)
  - Meter factor (MF)
  - Sediment & Water (S&W)
- Calculate gross standard volume (GSV) and net standard volume (NSV)
- **Transfer Register**: View all custody transfers
- Filter by date, point, or counterparty
- Generate transfer tickets
- Export for invoicing

3. Correction Factors

- **Configure Factors**: Set up volume correction tables
- API Correction Table (CTL)
- Pressure Correction (CPL)
- Product-specific factors
- Seasonal temperature adjustments

Best Practices

- Verify meter factors before each transfer
- Document witnessed measurements
- Reconcile with buyer/seller tickets promptly
- Archive correction factor documentation
- Review discrepancies within 24 hours

Balance Reconciliation

Overview

Perform material balance reconciliation to identify and investigate volume discrepancies between measured and calculated values.

Key Features

1. Reconciliation Periods

- **Create Reconciliation**: Start new balance period

- Select facility and date range
- Define product type
- Set reconciliation type (daily, weekly, monthly)
- **Reconciliation List**: View all reconciliation records
- Filter by facility, status, or date
- Track pending vs completed reconciliations

2. Material Balance

- **Input Volumes**:
- Opening inventory
- Receipts (production, purchases, transfers in)
- Disposals (sales, transfers out, fuel usage)
- Closing inventory
- **Calculate Balance**: System computes theoretical vs actual
- Expected closing = Opening + Receipts - Disposals
- Imbalance = Actual Closing - Expected Closing
- Imbalance % = (Imbalance / Total Throughput) × 100

3. Imbalance Analysis

- **Record Imbalances**: Document discrepancy investigations
- Categorize by type (measurement error, evaporation, spillage, theft, unaccounted)
- Enter volume and value impact
- Assign investigation status
- Document root cause and resolution
- **Imbalance Reports**: Analyze trends
- View by category, facility, or time period
- Compare against acceptable tolerance limits

Best Practices

- Perform daily reconciliations for active facilities
- Investigate imbalances exceeding 0.5% immediately
- Document all adjusting entries
- Review measurement systems when patterns emerge
- Maintain audit trail for all adjustments

Nominations & Lifting

Overview

Manage cargo nominations, vessel schedules, and lifting operations for crude oil exports and product deliveries.

Key Features

1. Lifting Agreements

- **Add Agreement**: Define contractual arrangements
- Enter agreement name and number
- Specify buyer/seller details
- Set volume commitment (monthly, annual)
- Define lifting tolerance (±%)
- Configure pricing basis
- **Agreement Management**: Track contract performance
- Monitor nominated vs lifted volumes
- View remaining entitlement

2. Nominations

- **Create Nomination**: Submit cargo requests
- Select lifting agreement
- Enter nomination date and period
- Specify nominated volume
- Select loading facility
- Add vessel preference
- **Nomination Workflow**: Track nomination status
- Draft → Submitted → Accepted → Confirmed
- View nomination history
- Manage nomination changes

3. Liftings

- **Record Lifting**: Document cargo operations
- Link to nomination
- Enter vessel name, IMO number
- Record laycan period (loading window)
- Input Bill of Lading details
- Document loaded volume
- Record quality parameters (API, S&W)
- **Lifting Register**: Track all lifting operations
- View by date, vessel, or buyer
- Monitor demurrage calculations
- Track lifting performance vs nomination

Best Practices

- Submit nominations within contractual deadlines
- Verify vessel vetting before acceptance
- Document all communication with charterers
- Reconcile B/L quantities with shore tanks

- Track demurrage exposure in real-time

Regulatory Compliance

Overview

Generate and submit regulatory reports required by government agencies including DPR, NNPC, and environmental authorities.

Key Features

1. Report Templates

- **Available Templates**:
- DPR Monthly Production Report
- DPR Quarterly Report
- DPR Annual Report
- NNPC Production Report
- Gas Flare Report
- Royalty Report
- JV Production Report
- PSC Report
- Environmental Compliance Report
- **Template Management**: Configure report parameters
- Set required fields per template
- Define calculation rules
- Configure submission deadlines

2. Report Generation

- **Create Report**: Generate regulatory submission
- Select report type and period
- System auto-populates from operational data
- Review and edit calculated values
- Add comments and attachments
- **Report Workflow**: Track submission status
- Draft → Pending Review → Submitted → Accepted
- View submission history
- Track agency feedback

3. Compliance Tracking

- **Deadline Management**: Monitor submission due dates
- View upcoming deadlines
- Receive alerts for approaching due dates
- Track late submissions

Best Practices

- Generate draft reports early in reporting period
- Verify data accuracy before submission
- Maintain backup of all submissions
- Document agency correspondence
- Review compliance requirements annually

Loss Accounting

Overview

Track and report hydrocarbon losses including flaring, venting, spillage, theft, and shrinkage.

Key Features

1. Loss Events

- **Record Loss Event**: Document loss incidents
- Select loss type (spillage, theft, leakage, venting, other)
- Enter event date, facility, and well (if applicable)
- Input loss volume and product type
- Set severity level (low, medium, high, critical)
- Add event description and root cause
- **Loss Register**: View all loss events
- Filter by type, severity, or date
- Track investigation status
- Monitor corrective actions

2. Flaring Records

- **Record Flaring**: Document gas flaring activities
- Enter flaring date and facility
- Input flared volume
- Specify reason (routine, non-routine, emergency)
- Calculate CO2 equivalent emissions
- Add flare permit reference
- **Flaring Analysis**: Track flaring performance
- Compare against targets
- Monitor regulatory compliance
- View trend analysis

3. Shrinkage Records

- **Record Shrinkage**: Track processing losses
- Select facility and product
- Enter input and output volumes
- System calculates shrinkage factor

- Document shrinkage type (evaporation, processing, transport)

Best Practices

- Report all loss events within 24 hours
- Investigate high-severity events immediately
- Track root causes for recurring issues
- Monitor flaring against reduction targets
- Maintain shrinkage factor accuracy

Decline Curve Analysis

Overview

Analyze well production decline and forecast future production using exponential, hyperbolic, and harmonic decline models.

Key Features

1. Decline Analysis

- **Create Analysis**: Define decline parameters
- Select well and analysis period
- Choose decline model type:
  - Exponential (constant % decline)
  - Hyperbolic (decreasing % decline)
  - Harmonic (special case of hyperbolic)
- Input initial rate and decline rate
- Set b-factor for hyperbolic decline
- **Analysis Results**: View calculated metrics
- Current production rate
- Decline rate (Dn, Di)
- Estimated Ultimate Recovery (EUR)
- Remaining reserves
- Economic limit date

2. Production Forecasts

- **Create Forecast**: Project future production
- Select well and analysis
- Define forecast period
- Choose scenario (base, upside, downside)
- Generate production profile
- **Forecast Comparison**: Compare scenarios
- Overlay multiple forecasts
- View cumulative production curves
- Analyze P10, P50, P90 cases

Best Practices

- Use sufficient production history for analysis
- Validate model with actual production data
- Update analyses monthly
- Consider reservoir engineering input
- Document assumptions and limitations

Injection Wells

Overview

Manage injection well operations including water injection, gas injection, WAG (Water Alternating Gas), and enhanced oil recovery programs.

Key Features

1. Injection Well Management

- **Add Injection Well**: Register new wells
- Enter well name and identifier
- Select injection type (water, gas, WAG, steam, polymer, CO2)
- Assign to facility
- Set target injection rate and pressure
- Enter maximum wellhead pressure
- **Well List**: View all injection wells
- Monitor injection status
- Track cumulative injection volumes
- View well performance

2. Injection Data

- **Record Injection**: Log daily injection volumes
- Select well and date
- Enter injection volume and rate
- Record wellhead pressure
- Input water quality (TDS, pH) for water injection
- Add injection notes
- **Injection History**: View injection trends
- Daily/monthly summaries
- Rate vs pressure analysis
- Cumulative injection tracking

3. Injection Tests

- **Record Test**: Document injectivity tests
- Enter test date and duration
- Record injection rate at multiple pressures

- Calculate injectivity index (II)
- Determine maximum injection rate
- Add test interpretation

Best Practices

- Monitor injection rates against targets
- Track wellhead pressure trends
- Perform regular injectivity tests
- Document water quality for source wells
- Coordinate injection with production operations

Audit Trail

Overview

Comprehensive logging of all system activities for compliance, security, and troubleshooting purposes.

Key Features

1. Activity Logging

- **Tracked Actions**: All user activities logged
- Create, update, delete operations
- Login/logout events
- Report generation
- Data exports
- Configuration changes
- **Log Details**: Each entry captures
- Timestamp
- User name and ID
- Action performed
- Entity type and ID affected
- Previous and new values (for updates)
- IP address
- Session identifier

2. Log Viewing

- **Search & Filter**: Find specific activities
- Filter by date range
- Search by user
- Filter by action type
- Filter by entity type
- **Log Details**: View complete audit information
- Expandable entries for full details
- JSON diff view for data changes

- Export capability for investigations

3. Statistics

- **Activity Summary**: Dashboard of audit metrics
- Total activities by action type
- Most active users
- Entity modification counts
- Activity trends over time

Best Practices

- Review audit logs regularly
- Investigate unusual activity patterns
- Archive logs per retention policy
- Use for troubleshooting and support
- Maintain log integrity for compliance

Reports & Analytics

Overview

Generate custom reports with various filters and download as PDF.

Page Layout

Two-Column Layout:
- **Left Side (2/3 width)**: Report Builder and Results
- **Right Side (1/3 width)**: Saved Templates

Report Builder Section

1. Report Configuration

Report Types (16 Total):

1. **Production Summary**
   - Total production volumes (oil, gas, water)
   - Average operating hours
   - Time-series production data
   - Summary by field

2. **Well Test Report**
   - Test results by well
   - Oil, gas, water rates
   - GOR and water cut calculations
   - Test type analysis

3. **Well Performance**
   - Individual well metrics
   - Efficiency ratings
   - Uptime percentages
   - Performance comparisons

4. **Facilities Report**
   - Facility status overview
   - Capacity utilization
   - Facility type breakdown
   - Operator analysis

5. **Field Analysis**
   - Field-level aggregations
   - Well count per field
   - Production distribution
   - Field rankings

6. **Allocation Report**
   - Allocation history
   - Method breakdown (test-based, pro-rata, manual)
   - Well-by-well allocations
   - Validation summaries

7. **Decline Curve Analysis**
   - Decline type analysis
   - EUR calculations
   - Forecast comparisons
   - Reserves estimates

8. **Metering Report**
   - Meter readings summary
   - Calibration history
   - Meter factor trends
   - Proving results

9. **Tank/Inventory Report**
   - Tank gauging records
   - Stock movements
   - Inventory levels
   - Tank capacity utilization

10. **Custody Transfer Report**
    - Transfer transactions
    - Fiscal point data
    - Correction factors applied
    - Volume reconciliation

11. **Reconciliation Report**
    - Imbalance analysis
    - Variance tracking
    - Resolution status
    - Trend analysis

12. **Nominations & Lifting**
    - Nomination status
    - Lifting schedules

- Vessel tracking
- Agreement compliance

13. **Regulatory Compliance**
    - Submission status
    - Report type breakdown
    - DPR/NNPC submissions
    - Compliance timeline
14. **Loss Accounting**
    - Loss events summary
    - Flaring records
    - Shrinkage analysis
    - Loss by category
15. **Injection Wells**
    - Injection data summary
    - Injectivity test results
    - Well performance
    - Cumulative injection
16. **Audit Trail**
    - System activity logs
    - User actions
    - Entity changes
    - Access history

2. Filter Configuration

Available Filters:
- **Report Type**: Select report category (required)
- **Start Date**: Beginning of analysis period (required)
- **End Date**: End of analysis period (required)
- **Well**: Filter by specific well (optional)
- **Field**: Filter by field name (optional for Field Analysis)

Steps to Generate Report:
1. Select Report Type from dropdown
2. Choose Start and End dates
3. (Optional) Select specific Well
4. (Optional) Enter Field name if analyzing fields
5. Click “Generate Report” button
6. Wait for processing (loading indicator shows progress)
7. View results below the filters

3. Report Results

Summary Statistics:
- Displays key metrics at the top
- Auto-calculated based on filtered data
- Formatted for easy reading

Data Preview:
- Shows record count
- Table with detailed data (if applicable)
- Formatted values with proper units

Download PDF:
- Click “Download PDF” button
- Generates professionally formatted PDF
- Includes:
- Report header with title and dates
- Summary statistics
- Detailed data table
- Auto-generated filename with report type and date

4. Saving Report Templates

Purpose: Save your filter configurations for future use

Steps:
1. Configure your desired filters in Report Builder
2. Click “Save as Template” button
3. Enter Template Name (required)
4. Enter Description (optional)
5. Click “Save Template”
6. Template appears in “Saved Templates” section

Permissions:
- Admin and Operator roles can save templates
- Viewers can only load and use existing templates

Saved Templates Section

1. Template Management

Template List:
- Shows all saved templates
- Displays: Name, Report Type, Created Date
- Sortable and paginated

Actions:

1. **Load Template** (All Users)
   - Click on any template row
   - Filters auto-populate in Report Builder
   - Notification confirms template loaded

2. **Download Template** (All Users)
   - Click blue download icon
   - Exports template as JSON file
   - Use for backup or sharing

3. **Upload Template** (Admin/Operator)
   - Click “Upload” button at top
   - Select JSON template file

- File is validated and imported
- Template appears in list immediately

4. **Delete Template** (Admin Only)
   - Click red trash icon
   - Confirm deletion
   - Permanently removes template

2. Template File Format

JSON Structure:

```
{
  "name": "Monthly Oil Summary",
  "description": "Standard monthly oil production report",
  "reportType": "production_summary",
  "filters": {
    "startDate": "2024-01-01",
    "endDate": "2024-01-31",
    "wellId": "",
    "field": "North Field"
  }
}
```

Required Fields:
- `name`: Template name (string)
- `reportType`: Must be valid report type

Optional Fields:
- `description`: Template description
- `filters`: Filter configuration object

Valid Report Types:
- `production_summary`
- `well_test_report`
- `well_performance`
- `facilities_report`
- `field_analysis`
- `allocation_report`
- `decline_curve`
- `metering_report`
- `tank_inventory_report`
- `custody_transfer_report`
- `reconciliation_report`
- `nominations_lifting_report`
- `regulatory_report`
- `loss_accounting_report`
- `injection_wells_report`
- `audit_trail_report`

3. Uploading Templates

Steps:
1. Prepare JSON file following the format above
2. Click “Upload” button in Saved Templates section

3. Select your JSON file
4. System validates:
- File format (must be .json)
- Required fields present
- Valid report type
5. Success: Template added to list
6. Error: Notification shows what needs to be fixed

Common Upload Errors:
- “Please upload a JSON file” - File extension must be .json
- “Invalid template format” - Missing required fields
- “Invalid report type” - Report type not recognized
- “Failed to upload template” - Server error or network issue

Best Practices

- Save frequently used filter combinations as templates
- Use descriptive template names (e.g., “Monthly Oil - North Field”)
- Export templates regularly for backup
- Review generated reports before downloading PDF
- Use consistent date ranges for period comparisons
- Share templates with team members via JSON export

Performance Monitoring

Overview

Monitor well performance, track alerts, and record downtime events.

Page Features

1. Performance KPI Cards

Displayed Metrics:
- **Active Alerts**: Count of unresolved alerts
- **Critical Alerts**: Count of critical severity alerts
- **Avg Efficiency**: Average efficiency across all wells (%)
- **Total Downtime**: Cumulative downtime hours

2. Filters

Available Filters:
- **Well**: Filter by specific well
- **Alert Status**: Filter alerts by status
- All Alerts
- Active
- Acknowledged
- Resolved

How to Use:
1. Select well from dropdown (optional)
2. Select alert status (optional)

3. Data tables update automatically
4. Select “All Wells” or “All Alerts” to clear filter

3. Active Alerts Table

Displayed Information:
- Detection Time
- Well Name
- Alert Message
- Severity Badge (Info, Warning, Critical)
- Status Badge (Active, Acknowledged, Resolved)
- Actions

Alert Types:
- **Low Production**: Production below threshold
- **High Water Cut**: Excessive water in production
- **High GOR**: Elevated gas-to-oil ratio
- **Pressure Drop**: Unexpected pressure decline
- **Equipment Failure**: Equipment malfunction
- **Downtime**: Well not producing

Severity Levels:
- **Info** (Blue): Informational, no immediate action needed
- **Warning** (Yellow): Requires attention soon
- **Critical** (Red): Immediate action required

4. Managing Alerts

Acknowledge Alert:
1. Click “Acknowledge” button in Actions column
2. Alert status changes to “Acknowledged”
3. Your username and time are recorded
4. Alert remains visible until resolved

Resolve Alert:
1. Click “Resolve” button in Actions column
2. Alert status changes to “Resolved”
3. Your username and resolution time are recorded
4. Alert moves to resolved filter view

Permissions:
- Only Admins and Operators can acknowledge/resolve alerts
- Viewers can only view alert information

5. Downtime Log Table

Displayed Information:
- Start Time
- Well Name
- Duration (hours)
- Reason badge
- Actions (if any)

Downtime Reasons:
- Scheduled Maintenance

- Unscheduled Maintenance
- Equipment Failure
- Weather
- Operator Decision
- Other

6. Recording Downtime

Steps:
1. Click “Record Downtime” button
2. Fill in downtime form:
- **Well**: Select well (required)
- **Start Time**: When downtime began (required)
- **End Time**: When downtime ended (optional if ongoing)
- **Reason**: Select reason category (required)
- **Description**: Detailed notes about the downtime
- **Impact**: Estimated production loss (optional)
3. Click “Record Downtime”
4. Duration auto-calculated if end time provided

Ongoing Downtime:
- Leave End Time blank if well still down
- Update record later with end time
- Duration shows “Ongoing” until end time entered

Permissions:
- Only Admins and Operators can record downtime
- All users can view downtime logs

Understanding Performance Metrics

Efficiency Calculation:

```
Efficiency = (Actual Production / Potential Production) × 100
```

- Based on well test rates and operating hours
- Lower efficiency indicates performance issues
- Target: >85% efficiency for healthy wells

Uptime Percentage:

```
Uptime = ((Total Hours - Downtime Hours) / Total Hours) × 100
```

- Measures well availability
- Critical for planning and optimization
- Target: >95% uptime for mature wells

Best Practices

- Review alerts daily at shift start
- Acknowledge alerts immediately when seen
- Resolve alerts promptly with detailed notes
- Record all downtime events, including short ones

- Use consistent downtime reason categories
- Investigate efficiency drops below 80%
- Set up alert thresholds based on well performance baseline
- Track downtime trends for maintenance planning

Settings

Overview

Configure system-wide settings for calculations and correction factors.

Page Layout

Tabbed Interface:
- **Correction Factors Tab**: Manage volume correction factors
- **Calculations Tab**: Configure calculation settings

Correction Factors Tab

1. Purpose

Correction factors adjust measured volumes to standard conditions:
- Account for temperature and pressure variations
- Ensure accurate volume reporting
- Meet regulatory requirements

2. Correction Factors Table

Displayed Information:
- Factor Name (e.g., “North Field VCF”)
- Product (Oil, Gas, Water)
- Value (numeric correction factor)
- Unit (BBL/BBL, MSCF/MSCF)
- Effective Date
- Status (Active/Inactive)
- Actions

3. Adding a Correction Factor

Steps:
1. Click “Add Factor” button
2. Fill in the form:
- **Factor Name**: Descriptive name (required)
- **Product**: Select product (Oil/Gas/Water)
- **Factor Value**: Numeric value (e.g., 0.985)
- **Unit**: Correction unit (e.g., BBL/BBL)
- **Effective Date**: When factor becomes active
- **Description**: Notes about the factor (optional)
3. Click “Create Factor”

Common Correction Factors:
- **Shrinkage Factor**: Typically 0.98-0.99 for oil
- **Temperature Correction**: Varies by temperature difference

- **Pressure Correction**: Based on pressure differential
- **BSW Correction**: Basic sediment and water adjustment

4. Editing Correction Factors

Steps:
1. Click “Edit” icon in Actions column
2. Modify values as needed
3. Update effective date if creating new version
4. Click “Update Factor”

Best Practice: Create new factor with new effective date rather than modifying historical factors

5. Deleting Correction Factors

- Click “Delete” icon (Admin only)
- Confirm deletion
- Warning: May affect historical calculations

Calculations Tab

1. Calculation Settings

Purpose: Configure default values and enable/disable automatic calculations

Available Settings:

Volume Corrections:
- ☑ Enable BSW Correction
- ☑ Enable Shrinkage Factor
- ☑ Enable VCF (Volume Correction Factor)

Default Values:
- **Standard Temperature**: 60°F (default)
- **Standard Pressure**: 14.7 PSIA (default)
- **Default Shrinkage Factor**: 0.985 (typical for crude oil)
- **Default BSW**: 0% (can be overridden per entry)

Calculation Options:
- ☑ Auto-Calculate GOR
- ☑ Auto-Calculate Water Cut
- ☑ Apply Corrections on Data Entry

2. Saving Calculation Settings

Steps:
1. Toggle checkboxes for desired calculations
2. Enter default values in input fields
3. Click “Save Settings” button
4. Settings apply immediately to new data entries

Note:
- Changes do not affect historical data
- Recalculate existing data if needed

How Correction Factors Are Applied

Net Oil Calculation:

```
Gross Oil → Apply BSW → Apply Shrinkage → Apply VCF → Net Oil
```

Example:
- Gross Oil: 1000 BBL
- BSW: 2% → 1000 × (1 - 0.02) = 980 BBL
- Shrinkage: 0.985 → 980 × 0.985 = 965.3 BBL
- VCF: 0.995 → 965.3 × 0.995 = 960.5 BBL
- **Net Oil: 960.5 BBL**

Best Practices

- Update correction factors when measurement conditions change
- Use effective dates to track factor history
- Document reasons for correction factor changes
- Review calculated vs. actual volumes monthly
- Coordinate with measurement department for factor values
- Test new factors with sample calculations before activation
- Keep inactive factors for historical reference

User Management

Overview

Manage user accounts, roles, and permissions (Admin-only feature).

Page Features

1. User Statistics

Overview Cards:
- **Total Users**: Count of all user accounts
- **Administrators**: Count of admin users
- **Operators**: Count of operator users
- **Viewers**: Count of viewer users

2. Users Data Table

Displayed Information:
- User avatar (auto-generated initials)
- First Name
- Last Name
- Email address
- Role badge with icon
- Joined date
- Actions

Role Badges:
- **Administrator** (Green, Shield icon): Full access
- **Operator** (Blue, Pencil icon): Data entry access
- **Viewer** (Yellow, Eye icon): Read-only access

3. Creating a New User

Steps:
1. Click “Create New User” button
2. Fill in user information:
- **Email**: User’s email address (required, must be unique)
- **First Name**: User’s first name (required)
- **Last Name**: User’s last name (required)
- **Password**: Initial password (required, min 8 characters)
- **Role**: Select user role (required)
3. Click “Create User”
4. User receives credentials (depending on email setup)

Important:
- Email addresses must be unique in the system
- User names (First + Last) must be unique - prevents duplicate “Test User” entries
- Users can change their password after first login
- New users are active immediately

Validation:
- Email format must be valid (contains @)
- Password must be at least 8 characters
- First and last name cannot be empty
- Cannot create duplicate email addresses
- **New**: Cannot create duplicate user names (prevents “Test User” duplicates)

4. Editing User Roles

Steps:
1. Click “Edit” icon in Actions column
2. Select new role from dropdown
3. Click “Update Role”
4. Changes take effect on next login

Note:
- Only Admins can edit user roles
- Cannot edit your own role
- Role changes are logged

5. Deleting User Accounts

Steps:
1. Click “Delete” icon in Actions column
2. Review warning about data impacts
3. Confirm deletion
4. User account is permanently removed

Warning:
- Deletion is permanent and irreversible
- User’s created data (production entries, well tests) remains
- User cannot log in after deletion
- Cannot delete your own account

Roles & Permissions Matrix

Feature Access by Role:

Feature	Admin	Operator	Viewer
View Dashboard	✅	✅	✅
View Data	✅	✅	✅
Create/Edit Data	✅	✅	❌
Delete Data	✅	❌	❌
Generate Reports	✅	✅	✅
Save Templates	✅	✅	❌
User Management	✅	❌	❌
System Settings	✅	✅	❌
Delete Templates	✅	❌	❌
Manage Alerts	✅	✅	❌

Best Practices

- Use strong passwords for all accounts
- Assign minimum required role for each user
- Regularly review active user accounts
- Remove accounts for departed employees immediately
- Use consistent naming conventions (FirstName LastName)
- Document role assignments and changes
- Conduct periodic access reviews
- Create separate accounts for different users (no shared logins)
- **NEW**: Ensure unique user names to avoid confusion in the system

---

Troubleshooting

Common Issues and Solutions

Login Issues

Problem: Cannot log in

Solutions:
1. Verify email address is correct
2. Check password (case-sensitive)
3. Ensure account is active (contact admin)

4. Clear browser cache and cookies
5. Try different browser

Problem: “User not found” error

Solutions:
1. Verify email spelling
2. Contact administrator to verify account exists
3. Check if account was deleted

Data Entry Issues

Problem: Cannot save production data

Solutions:
1. Check all required fields are filled
2. Verify date format (YYYY-MM-DD)
3. Ensure well exists in system
4. Check numeric values are valid (non-negative)
5. Verify you have Operator or Admin role

Problem: Import fails

Solutions:
1. Download and use the template file
2. Check column headers match exactly
3. Verify well IDs exist in system
4. Check date formats (YYYY-MM-DD)
5. Ensure no duplicate date/well combinations
6. Validate numeric fields contain numbers only

Report Issues

Problem: Report Builder not responding

Solutions:
1. Ensure all required filters are selected:
- Report Type (required)
- Start Date (required)
- End Date (required)
2. Click “Generate Report” button
3. Wait for loading indicator (may take a few seconds)
4. Check browser console for errors
5. Try refreshing the page

Problem: PDF download fails

Solutions:
1. Generate report first before clicking Download PDF
2. Check browser popup blocker settings
3. Ensure sufficient disk space
4. Try different browser
5. Check report has data (not empty)

Problem: Cannot upload template

Solutions:
1. Verify file is JSON format (.json extension)
2. Check JSON syntax is valid
3. Ensure required fields present (name, reportType)
4. Verify reportType is valid value
5. Check you have Admin or Operator role

Performance Issues

Problem: Page loads slowly

Solutions:
1. Reduce date range in filters
2. Clear browser cache
3. Check internet connection
4. Limit number of wells in queries
5. Contact administrator if persistent

Problem: Charts not displaying

Solutions:
1. Refresh the page
2. Check if data exists for selected period
3. Try different date range
4. Clear browser cache
5. Update browser to latest version

Permission Issues

Problem: “Insufficient permissions” error

Solutions:
1. Check your role (Profile menu)
2. Contact administrator for role upgrade
3. Verify feature requires your role level
4. Re-login to refresh permissions

Problem: Cannot delete records

Solutions:
1. Verify you have Admin role (required for deletion)
2. Check record is not protected
3. Ensure no dependent records exist
4. Contact administrator for assistance

Error Messages

“Email already registered”
- Email address already exists in system
- Use different email or contact admin to reset existing account

“A user with this name already exists”
- **NEW**: Another user has the same first and last name
- Use middle initial or different name variant
- Ensures unique identification in the system

“Invalid date range”
- Start date must be before end date
- Check date formats are correct
- Ensure dates are not in the future

“Well not found”
- Well ID doesn’t exist in system
- Check spelling of well ID
- Create well first, then add data

“Validation failed”
- One or more required fields missing
- Check field requirements
- Review error message for specific field

Getting Help

Contact Administrator:
- Account issues
- Permission requests
- System configuration changes
- Data corrections

Technical Support:
- Application errors
- Performance issues
- Browser compatibility
- Feature questions

Documentation:
- Re-read relevant section of this manual
- Check tooltips and help icons in app
- Review example data and templates

System Requirements

Browser Compatibility

Recommended Browsers:
- Google Chrome (latest version)
- Mozilla Firefox (latest version)
- Microsoft Edge (latest version)
- Safari 14+ (macOS)

Minimum Screen Resolution:
- 1366 × 768 pixels
- Tablet support: 1024 × 768 minimum

Internet Connection

- Broadband connection recommended
- Minimum: 1 Mbps download, 512 Kbps upload

- Stable connection required for real-time updates

Security

- HTTPS encryption for all connections
- Session timeout: 8 hours of inactivity
- Password requirements: Minimum 8 characters
- Two-factor authentication (if enabled)

Glossary

API Gravity: Measure of oil density relative to water

BBL: Barrel, unit of oil volume (42 US gallons)

BOPD: Barrels of Oil Per Day

BSW: Basic Sediment and Water, percentage in produced oil

BWPD: Barrels of Water Per Day

Commingled Production: Combined production from multiple wells

Facility: Production, processing, or storage infrastructure

GOR: Gas-to-Oil Ratio, volume of gas per barrel of oil (SCF/BBL)

Gross Production: Total fluid produced before processing

MSCF: Thousand Standard Cubic Feet, unit of gas volume

MSCFD: Thousand Standard Cubic Feet per Day

Net Production: Production after removing water and sediment

Pro-Rata: Equal distribution method

Separator: Equipment that separates oil, gas, and water

Shrinkage: Volume loss due to temperature/pressure changes

Shut-In: Well temporarily closed, not producing

Standard Conditions: Reference conditions for volume measurement (60°F, 14.7 PSIA)

VCF: Volume Correction Factor

Water Cut: Percentage of water in total liquid production

Well Test: Measurement of individual well production rates

Quick Reference

Common Tasks

Add Production Data:
Dashboard → Production → New Entry → Fill Form → Save

Run a Report:
Reports → Select Type → Set Dates → Generate → Download PDF

Create Well Test:
Well Tests → New Test → Select Well → Enter Rates → Save

Create Allocation:
Allocations → New Allocation → Select Method → Choose Wells → Save

Record Downtime:
Monitoring → Record Downtime → Fill Form → Save

Export Data:
Production → Set Filters → Export Button → Save Excel File

Import Data:
Production → Template (download) → Fill Template → Import → Select File

Keyboard Shortcuts

(If implemented in future versions)

- `Ctrl+S` : Save current form
- `Ctrl+F` : Focus search box
- `Esc` : Close dialog/modal

Version History

Version 1.0 - Initial Release
- Core production tracking
- Wells and facilities management
- Basic reporting

Version 2.0 - Advanced Features
- Well tests and allocations
- Enhanced data tables
- Import/export functionality

Version 3.0 - Calculations & Data Management
- Volume corrections
- Correction factors
- Batch import/export
- Calculation settings

Version 4.0 - Analytics & Monitoring
- Advanced reporting with PDF export

- Report templates with upload/download
- Performance monitoring
- Alert management
- Downtime tracking
- **Enhanced Report Builder** (more visible and interactive)
- **Template Upload Feature** (CSV/Excel import)

Version 5.0 - Enterprise Modules (Current)
- Metering & Calibration management
- Tank/Inventory management
- Custody Transfer operations
- Balance Reconciliation
- Nominations & Lifting
- Regulatory Compliance reports (DPR, NNPC)
- Loss Accounting (flaring, shrinkage)
- Decline Curve Analysis
- Injection Wells management
- Audit Trail & Change Log
- Expanded report types (16 total):
- Production Summary, Well Test, Well Performance, Facilities
- Field Analysis, Allocation, Decline Curve, Metering
- Tank/Inventory, Custody Transfer, Reconciliation
- Nominations & Lifting, Regulatory, Loss Accounting
- Injection Wells, Audit Trail

Support & Feedback

Report Issues:
- Contact your system administrator
- Provide detailed error messages
- Include screenshots if possible
- Note what you were trying to do

Feature Requests:
- Submit through your organization’s feedback channel
- Describe the desired functionality
- Explain the business benefit

Training:
- On-site training available
- Video tutorials (if available)
- This user manual
- Administrator guidance

Document Version: 5.0
Last Updated: January 2026
For Technical Support: Contact your system administrator

This manual covers all features of the FinTrak HASS system. For additional help, please contact your system administrator or IT support team.