

# ***SDMS & MICRO ELN***

NEXT LEVEL INNOVATIVE LABORATORY DATA MANAGEMENT  
**GRAVIMETRIC ANALYSES MADE EASY**



***BTSOFT***  
LABORATORY MANAGEMENT MADE EFFICIENT

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# Data Entry Automation in Wet Chemistry Analyses

- ✓ Import data directly from instrumentation
- ✓ Intelligent method criteria, calculations and control limits built in
- ✓ Centralized location of historical data
- ✓ Standard and reagent tracking
- ✓ Date and time stamps for every action available in audit summary
- ✓ Ability to build and modify data entry templates
- ✓ Raw data report generation
- ✓ No need to continue use of paper bench sheets



# SDMS / MICRO ELN Features Overview

Overall Dashboard	Link Batch to LIMS	Result Submission to LIMS	Media Preparation	SDMS Result Entry
Backlog View	Batch Set up	Data Review Checklist	Organism Preparation	Raw Data Batch Review
Sample / Analytical Status	Analysis Readback	Result Approval	Media QC Review & Approval	Maintenance & Settings
Audit Trail	Result Review & Validation	Access to Historical Data	Media QC Tracking	Security & User Permission



# Home Control Panel

The screenshot displays the SDMS Home Control Panel interface. At the top, the window title is 'SDMS' and the navigation bar includes 'Home' and 'Help Viewer'. The user information section shows 'Username : admin', 'Date : 07/12/2024', and 'Time : 08:26:55'. A left-hand navigation menu lists 'Dashboard', 'Analysis', 'Analysis Review', 'Data Center', and 'Settings'. The main content area, titled 'Desktop', features a 2x6 grid of dashboard tiles. The top row contains: 'Batch Setup-Micro' (with a plus sign and test tubes icon), 'Batch Readback' (with a grid icon), 'Review-Micro' (with a grey checkmark icon), 'Validate-Micro' (with a green checkmark icon), 'Reporting' (with a clipboard icon), and 'Completed Packages' (with a document and green checkmark icon). The bottom row contains: 'BatchSetup-WetChem' (with a plus sign and calendar icon), 'Analysis-WetChem' (with a calendar and pencil icon), 'Review-WetChem' (with a calendar and green checkmark icon), 'Verify-WetChem' (with a green grid and blue checkmark icon), 'Media QC Check' (with a German flag icon), and 'Utility' (with a briefcase icon).



# Wet Chem Workflow – Select Test & LIMS Batch, via backlog

AnalysisQueue Username : admin | SDMS Version : 24.06.01.25115


Home Analysis - WetChem ...

Prev Next Home Refresh

Navigation Refresh

MTF Collert Review MTF Review Collert Validate MTF Validate Collert Utility

Test	Batch Number	Number Of Samples	Method
#0:	#0:	=	#0:
TDS	12363	26	SM 2540 C
TDS	12366	10	SM 2540 C
TSS	12294	26	SM 2540 D
TSS	12295	33	SM 2540 D



# Wet Chem Workflow – Select Test & LIMS Batch, from module

Mode: View Edit Enter Test TSS LIMS Batch ID

Navigation: Home Back Refresh Start Drying Save Delete Retrieve Edit Clear Link Unbatched Samples Go to setup Additional Document

Menu: MTF Collert Review MTF Review Collert Validate MTF Validate Collert Utility

Test:

Method:

Setup Date/Time:

Setup Analyst:

Assistant:

Oven ID:

OvenTemp °C:

Balance ID:

DIH2O #:

Batch Number	Status	NoSx
12884	Pending Prep Batch	26
12883	Pending Prep Batch	50
12879	Pending Prep Batch	33
12878	Pending Prep Batch	26
12877	Pending Prep Batch	26

FilterWeight(g) VolFiltered(ml) pH Appearance Comment

Record 0 of 0



# Wet Chem Workflow – Select Sample Run Sequence

Desktop

Sample Run Sequence

Test: TSS LIMS Batch ID: 12875  
Created By: admin Instrument: [dropdown]

Reset


Add QC: MB

Add Samples: TSS

<input checked="" type="checkbox"/>	LabID	SampleID	SampleType	Sort	DateCollected
<input checked="" type="checkbox"/>	721800	LFB	QC	1	07/05/2024 08:57
<input checked="" type="checkbox"/>	721801	MB	QC	2	07/05/2024 08:57
<input checked="" type="checkbox"/>	C2407050021	PES04	SAMPLE	3	07/05/2024 06:39
<input checked="" type="checkbox"/>	721802	PES04-DUP	QC	4	07/05/2024 06:39
<input checked="" type="checkbox"/>	C2407050020	PES03	SAMPLE	5	07/05/2024 06:36
<input checked="" type="checkbox"/>	C2407050019	PES02	SAMPLE	6	07/05/2024 06:32
<input checked="" type="checkbox"/>	C2407050018	PES01	SAMPLE	7	07/05/2024 06:30
<input checked="" type="checkbox"/>	C2407050016	CENTRATE WW	SAMPLE	8	07/05/2024 06:29
<input checked="" type="checkbox"/>	C2407050015	AB08	SAMPLE	9	07/05/2024 06:22
<input checked="" type="checkbox"/>	C2407050014	AB07	SAMPLE	10	07/05/2024 06:20
<input checked="" type="checkbox"/>	721803	BC1	QC	11	07/05/2024 08:57
<input checked="" type="checkbox"/>	C2407050013	AB06	SAMPLE	12	07/05/2024 06:16
<input checked="" type="checkbox"/>	C2407050012	AB05	SAMPLE	13	07/05/2024 06:18
<input checked="" type="checkbox"/>	C2407050011	AB04	SAMPLE	14	07/05/2024 06:14
<input checked="" type="checkbox"/>	C2407050010	AB03	SAMPLE	15	07/05/2024 06:12
<input checked="" type="checkbox"/>	C2407050009	AB02	SAMPLE	16	07/05/2024 06:09
<input checked="" type="checkbox"/>	C2407050008	SCE	SAMPLE	17	07/05/2024 06:17
<input checked="" type="checkbox"/>	C2407050007	CABI	SAMPLE	18	07/05/2024 06:09
<input checked="" type="checkbox"/>	C2407050006	AB14	SAMPLE	19	07/05/2024 06:14
<input checked="" type="checkbox"/>	C2407050005	AB10	SAMPLE	20	07/05/2024 06:12
<input checked="" type="checkbox"/>	C2407050004	OUTFALL 001A	SAMPLE	21	07/05/2024 06:53
<input checked="" type="checkbox"/>	721804	BC2	QC	22	07/05/2024 08:57
<input checked="" type="checkbox"/>	C2407050003	OUTFALL 002A	SAMPLE	23	07/05/2024 06:41
<input checked="" type="checkbox"/>	C2407050002	INF-A	SAMPLE	24	07/05/2024 06:35
<input checked="" type="checkbox"/>	C2407050001	INF-BW	SAMPLE	25	07/05/2024 06:33

Record 1 of 35

OK



# Wet Chem Workflow – Enter Analytical Batch Information

The screenshot displays the 'Analytical Batch' software interface. The window title is 'Analytical Batch'. The top menu bar includes 'Home', 'Back', 'Refresh', 'Start Drying', 'Save', 'Delete', 'Retrieve', 'Edit', 'Clear', 'Link Unbatched Samples', 'Go to setup', and 'Additional Document'. Below the menu bar, there are radio buttons for 'Mode' (View, Edit, Enter, Test) and a dropdown for 'LIMS Batch ID' (12880). The main interface is divided into two panes: 'Analytical Information' on the left and 'Sample Prep Details' on the right. The 'Analytical Information' pane shows fields for Test (TDS), Method (SM 2540 C), Setup Date/Time (07/10/2024 12:54), Setup Analyst (admin), Assistant, Oven ID, OvenTemp °C, Balance ID, and DIH2O#. The 'Sample Prep Details' pane is a table with columns: AnalysisDate, LabID, SampleID, DishID, TARE (gm), VolFiltered(ml), and pH. The table contains 30 rows of data, with the second row (LabID 722666, SampleID MB) highlighted in yellow. A status bar at the bottom indicates 'Record 2 of 30'.

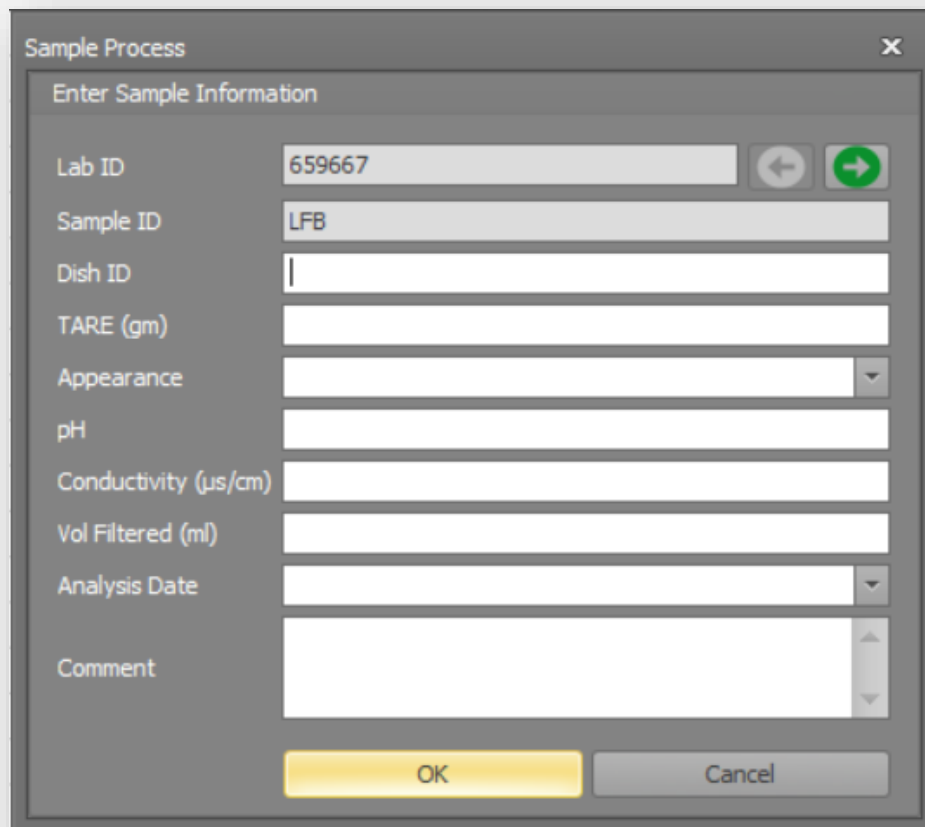
AnalysisDate	LabID	SampleID	DishID	TARE (gm)	VolFiltered(ml)	pH
	722665	LFB				
	722666	MB				
	C2407090018	INF-BW				
	722667	INF-BW-DUP				
	C2407090019	INF-A				
	C2407090020	OUTFALL 002A				
	C2407090021	OUTFALL 001A				
	C2407090049	BB3E-Q				
	C2407090050	BB3M-Q				
	C2407090051	BB3H-Q				
	722668	BC 1				
	C2407090055	WQS-BLANK				
	C2407090052	CR350.0E-Q				
	C2407090053	CR350.0M-Q				
	C2407090054	CR350.0H-Q				
	C2407090043	LWLVB1.2E				
	C2407090044	LWLVB1.2M				
	C2407090045	LWLVB1.2H				
	C2407090046	LWLVB1.85E				
	C2406040029	Karellova Svetlana				
	C2407090047	LWLVB1.85M				
	722669	BC2				
	C2407090048	LWLVB1.85H				
	722670	LFB				
	722671	MB				





# Wet Chem Workflow – Enter Sample Information

## Sample 1 in Batch



Sample Process

Enter Sample Information

Lab ID: 659667

Sample ID: LFB

Dish ID:

TARE (gm):

Appearance:

pH:

Conductivity (µs/cm):

Vol Filtered (ml):

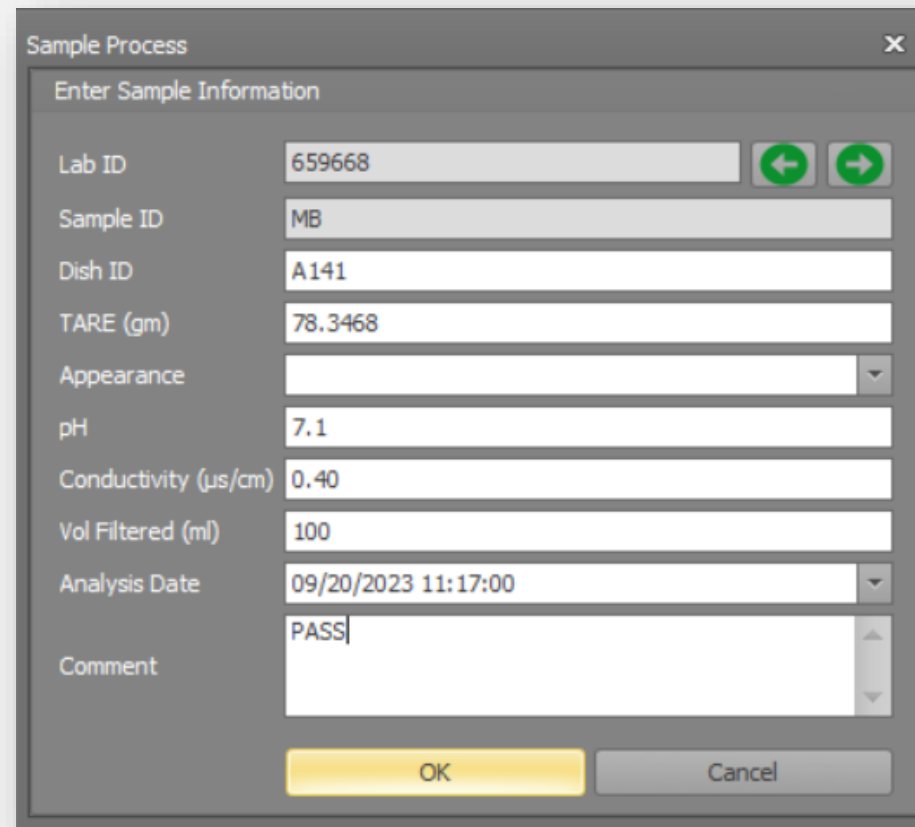
Analysis Date:

Comment:

OK Cancel

Use green arrows to move between samples.

## Sample 2 in Batch



Sample Process

Enter Sample Information

Lab ID: 659668

Sample ID: MB

Dish ID: A141

TARE (gm): 78.3468

Appearance:

pH: 7.1

Conductivity (µs/cm): 0.40

Vol Filtered (ml): 100

Analysis Date: 09/20/2023 11:17:00

Comment: PASS

OK Cancel

Click "OK" to view data in grid view.



# Wet Chem Workflow –Analytical Information & Sample Prep Details

Analytical Batch

Home

Back Refresh Start Drying Save Delete Retrieve Edit Clear Link Unbatched Samples Go to setup Additional Document Time Left Min 00:00:00 Max 00:00:00

Mode View Edit Enter Test TDS LIMS Batch ID 12363

**Total Dissolved Solids Analytical Information**

Batch Information

File LBID0010253

Batch # 12363

Setup Date 09/20/2023 11:14

Setup Analyst admin

Initial Analyst user1

Batch Information

SOP Number SOP\_TDS

Revision Number\_TDS

Method SM 2540 C

Equipment Information

Balance ID BL001

Balance Check Datetime 09/20/2023 16:06

Balance Cal Due Date 08/01/2024

Oven ID OVN001

Oven Check Datetime 09/01/2023 16:07

Oven Temperature 178

Desiccator ID DessicatorID

Desiccator Check Datetime 09/11/2023 16:07

Weight Set ID WS123456

Weight Set Cal Check Due Date 09/09/2024

Water Bath ID

Water Bath Check Datetime 09/13/2023 16:08

**Total Dissolved Solids Sample Prep Details**

AnalysisDate	LabID	SampleID	DishID	TARE (gm)	VolFiltered(ml)	pH	Conductivity	Appearance	Comment
09/20/2023 11:16:00	659667	LFB	B033	76.7327	100	7.2	1800	1	<input checked="" type="checkbox"/>
09/20/2023 11:17:00	659668	MB	A141	78.3468	100	7.1	0.40	1	<input checked="" type="checkbox"/>
09/20/2023 11:18:00	659669	LWLVB3.5E-DUP	B058	86.5426	100	7.2	640	1	<input checked="" type="checkbox"/>
09/20/2023 11:20:00	C2309190039	LWLVB3.5E	B064	84.9577	100	7.2	640	1	<input checked="" type="checkbox"/>
09/20/2023 11:21:00	C2309190005	INF-BW	A220	77.5269	50	7.2	1800	1	<input checked="" type="checkbox"/>
09/20/2023 11:22:22	C2309190006	INF-A	A195	81.3229	50	7.0	1800	1	<input checked="" type="checkbox"/>
09/20/2023 11:23:23	C2309190007	OUTFALL 002A	B039	78.2998	100	7.1	1600	1	<input checked="" type="checkbox"/>
09/20/2023 11:24:24	C2309190008	OUTFALL 001A	B028	82.0674	100	7.1	1600	1	<input checked="" type="checkbox"/>
09/20/2023 11:26:34	C2309190029	WQS-BLANK	A090	78.2278	100	7.2	720	1	<input checked="" type="checkbox"/>
09/20/2023 11:27:58	C2309190030	LWLVB1.2E	A088	76.3315	25	7.2	3200	1	<input checked="" type="checkbox"/>
09/20/2023 11:16:00	659670	BC1	vfso2	49.9997	50	7.2	1258	1	<input checked="" type="checkbox"/>
09/20/2023 11:28:34	C2309190031	LWLVB1.2M	A232	76.7152	50	7.1	1700	1	<input checked="" type="checkbox"/>
09/20/2023 11:30:16	C2309190032	LWLVB1.2H	B060	85.8172	100	7.3	1600	1	<input checked="" type="checkbox"/>
09/20/2023 11:31:18	C2309190033	LWLVB1.85E	B043	76.5076	100	7.0	960	1	<input checked="" type="checkbox"/>
09/20/2023 11:32:16	C2309190034	LWLVB1.85M	A235	77.9441	100	7.1	940	1	<input checked="" type="checkbox"/>
09/20/2023 11:33:24	C2309190035	LWLVB1.85H	B057	86.5426	100	7.1	640	1	<input checked="" type="checkbox"/>
09/20/2023 11:35:35	C2309190036	LWLVB2.7E	B063	84.9577	100	7.0	640	1	<input checked="" type="checkbox"/>
09/20/2023 11:36:27	C2309190037	LWLVB2.7M	A221	77.5269	50	7.2	1800	1	<input checked="" type="checkbox"/>
09/20/2023 11:37:01	C2309190038	LWLVB2.7H	A196	81.3229	50	7.0	1800	1	<input checked="" type="checkbox"/>
09/20/2023 11:38:46	C2309190040	LWLVB3.5M	B040	78.2998	100	7.1	1600	1	<input checked="" type="checkbox"/>
09/20/2023 11:16:00	659671	BC2	vfso2	99.9994	50	7.2	1258	1	<input checked="" type="checkbox"/>
09/20/2023 11:40:10	C2309190041	LWLVB3.5H	B027	82.0674	100	7.2	1600	1	<input checked="" type="checkbox"/>
09/20/2023 11:42:01	C2309190042	Well 11G	A089	78.2278	100	7.2	720	1	<input checked="" type="checkbox"/>
09/20/2023 11:43:23	C2309190043	Well 13T	A087	76.3315	25	7.0	3200	1	<input checked="" type="checkbox"/>
09/20/2023 11:45:07	C2309190044	Well 11T	A231	76.7152	50	7.1	1700	1	<input checked="" type="checkbox"/>
09/20/2023 11:16:00	659694	BC1	vfso2	49.9997	50	7.2	1258	1	<input checked="" type="checkbox"/>

Record 26 of 26



# Wet Chem Workflow – Start Drying Process

Desktop

The dashboard consists of the following panels:

- Batch Setup-Micro
- Batch Readback
- Review-Micro
- Validate-Micro
- Reporting
- Completed Packages
- BatchSetup-WetChem
- Analysis-WetChem
- Review-WetC
- lia QC Check
- Utility

Batch Number	Status	NoSx
12366	Drying Process	10
12363	Drying Process	26



# Wet Chem Workflow – Drying Process Details

SDMS ResultEntry

Home File Edit Insert Page Layout Formulas

Export To Excel Exit Complete Save Roll Back Delete Clear Edit Refresh Bind Grid Retrieve Analytical Batch Import Files ApplyFormula Generate Reports

File Data Exchange Reporting

Mode View Edit Enter Test TDS Batch Number 12363 Analytical Batch 23092001

Analytical Information TDS Bench sheet Analytical Batch Results

Batch Information	Drying 1 Process	Drying 2 Process	Drying 3 Process
File: LBID0010253	Chemist: admin	Chemist: admin	Chemist: admin
Batch #: 12363	Oven Temp (°C): 178	Oven Temp (°C): 178	Oven Temp (°C): 178
Setup Date: 09/20/2023 11:14	Date Time In: 09/20/2023 07:00	2nd Drying Start	3rd Drying Start
Analysis Date: 09/20/2023 11:16	Date Time Out: 09/20/2023 15:00	Date Time In: 09/20/2023 17:24	Date Time In:
Setup Analyst: admin	Date Time Out: 09/20/2023 15:00	Date Time Out: 09/20/2023 18:10	Date Time Out:
Initial Analyst: user1	Total Drying Time (min): 8:00	Total Drying Time (min): 0:45	Total Drying Time (min):
SOP Number: SOP_TDS	Desiccator ID: DessicatorID	Desiccator ID: DessicatorID	Desiccator ID:
Revision: Number_TDS	Desiccator Date Time In: 09/20/2023 15:01	Desiccator Date Time In: 09/20/2023 18:11	Desiccator Date Time In:
Method: SM 2540 C	Desiccator Date Time Out: 09/20/2023 17:20	Desiccator Date Time Out: 09/20/2023 18:47	Desiccator Date Time Out:
Balance ID: BL001	Desiccation Time (min): 2:19	Desiccation Time (min): 0:36	Desiccation Time (min):
Balance Check Datetime: 09/20/2023 16:06	Readback 1 Start	Readback 2 Start	Readback 3 Start
Balance Cal Due Date: 08/01/2024	Readback1 Date Time: 09/20/2023 17:21	Readback2 Date Time: 09/20/2023 19:00	Readback3 Date Time:
Oven ID: OVN001	Comment: System Testing.	Comment:	Comment:
Oven Check Datetime: 09/01/2023 16:07			
Desiccator ID: DessicatorID			
Desiccator Check Datetime: 09/11/2023 16:07			
Oven Temperature: 178			
Weight Set ID: WS123456			
Weight Set Cal Check Due Date: 09/09/2024			
Water Bath ID:			
Water Bath Check Datetime: 09/13/2023 16:08			



# Wet Chem Workflow – SDMS Result Entry

SDMS ResultEntry

Home File Edit Insert Page Layout Formulas

Export To Excel | Exit | Complete | Save | Roll Back | Delete | Clear | Edit | Refresh | Bind Grid | Retrieve | Analytical Batch | Import Files | ApplyFormula | Generate Reports

File | Data Exchange | Reporting

Mode: View Edit Enter Test: TDS Batch Number: 12363 Analytical Batch: 23092001

Analytical Information TDS Bench sheet Analytical Batch Results

H42

Clark County Water Reclamation District

### Analytical BenchSheet

	Date/Time	DishID	LabID	SampleID	VOL(ml)	Tare(gm)	Weighback #1 (gm)	Weighback #2 (gm)	Weighback #3 (gm)	Residue Wt.(mg)	Result (mg/L)	Cond	TDS/ Cond Ratio	% Rec / % Dif	WtBack Pass Fail
14	9/20/23 11:16	B033	659667	LFB	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557	100.2%	PASS
15	9/20/23 11:17	A141	659668	MB	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
16	9/20/23 11:18	B058	659669	LWLVB3.5E-DUP	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813	200.0%	PASS
17	9/20/23 11:19	B064	C2309190039	LWLVB3.5E	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
18	9/20/23 11:20	A220	C2309190005	INF-BW	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
19	9/20/23 11:22	A195	C2309190006	INF-A	50	81.3229	81.3828	81.3829		59.900	1198.000	1800	0.666		PASS
20	9/20/23 11:23	B039	C2309190007	OUTFALL 002A	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
21	9/20/23 11:04	B028	C2309190008	OUTFALL 001A	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
22	9/20/23 11:26	A090	C2309190029	WQS-BLANK	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
23	9/20/23 11:27	A088	C2309190030	LWLVB1.2E	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
24	9/20/23 11:28		659670	BC1	1	49.9997	49.9997	49.9998			50.000				PASS
25	9/20/23 11:30	A232	C2309190031	LWLVB1.2M	50	76.7152	76.7675	76.7677		52.300	1046.000	1700	0.615		PASS
26	9/20/23 11:31	B060	C2309190032	LWLVB1.2H	100	85.8172	85.9257	85.9257		108.500	1085.000	1600	0.678		PASS
27	9/20/23 11:32	B043	C2309190033	LWLVB1.85E	100	76.5076	76.5721	76.5724		64.500	645.000	960	0.672		PASS
28	9/20/23 11:33	A235	C2309190034	LWLVB1.85M	100	77.9441	78.0084	78.0082		64.300	643.000	940	0.684		PASS
29	9/20/23 11:34	B032	C2309190035	LWLVB1.85H	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557		PASS
30	9/20/23 11:36	A140	C2309190036	LWLVB2.7E	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
31	9/20/23 11:37	B057	C2309190037	LWLVB2.7M	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813		PASS
32	9/20/23 11:38	B063	C2309190038	LWLVB2.7H	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
33	9/20/23 11:39	A219	C2309190040	LWLVB3.5M	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
34	9/20/23 11:40		659671	BC2	1	99.9994	99.9994	99.9995			99.999				PASS
35	9/20/23 11:41	B038	C2309190041	LWLVB3.5H	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
36	9/20/23 11:42	B027	C2309190042	Well 11G	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
37	9/20/23 11:43	A089	C2309190043	Well 13T	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
38	9/20/23 11:44	A087	C2309190044	Well 11T	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
39	9/20/23 11:45		659694	BC1	1	49.9997	49.9997	49.9998			50.000				PASS

Sheet1



# Wet Chem Workflow – Complete Batch Results

SDMS ResultEntry

Home File Edit Insert Page Layout Formulas

Export To Excel | Exit | Complete | Save | Roll Back | Delete | Clear | Edit | Refresh | Bind Grid | Retrieve | Analytical Batch | Import Files | ApplyFormula | Generate Reports

Mode: View Edit Enter Test: TDS Batch Number: 12363 Analytical Batch: 23092001

Analytical Information TDS Bench sheet Analytical Batch Results

H42

Clark County Water Reclamation District

### Analytical BenchSheet

Date/Time	DishID	LabID	SampleID	VOL(ml)	Tare(gm)	Weighback #1 (gm)	Weighback #2 (gm)	Weighback #3 (gm)	Residue Wt.(mg)	Result (mg/L)	Cond	TDS/ Cond Ratio	% Rec / % Dif	WtBack Pass Fail
9/20/23 11:16	B033	659667	LFB	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557	100.2%	PASS
9/20/23 11:17	A141	659668	MB	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:18	B058	659669	LWLVB3.5E-DUP	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813	200.0%	PASS
9/20/23 11:19	B064	C2309190039	LWLVB3.5E	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
9/20/23 11:20	A220	C2309190005	INF-BW	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
9/20/23 11:22	A195	C2309190006	INF-A	50	81.9994	81.9994	81.9995		59.900	1198.000	1800	0.666		PASS
9/20/23 11:23	B039	C2309190007	OUTFALL 002A	100	78.3468	78.3468	78.3470		108.500	1085.000	1600	0.678		PASS
9/20/23 11:04	B028	C2309190008	OUTFALL 001A	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
9/20/23 11:26	A090	C2309190029	WQS-BLANK	100	78.3468	78.3468	78.3470		55.900	559.000	720	0.776		PASS
9/20/23 11:27	A088	C2309190030	LWLVB1.2E	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
9/20/23 11:28		659670	BC1	1	49.9997	49.9997	49.9998			50.000				PASS
9/20/23 11:30	A232	C2309190031	LWLVB1.2M	50	76.7152	76.7675	76.7677		52.300	1046.000	1700	0.615		PASS
9/20/23 11:31	B060	C2309190032	LWLVB1.2H	100	85.8172	85.9257	85.9257		108.500	1085.000	1600	0.678		PASS
9/20/23 11:32	B043	C2309190033	LWLVB1.85E	100	76.5076	76.5721	76.5724		64.500	645.000	960	0.672		PASS
9/20/23 11:33	A235	C2309190034	LWLVB1.85M	100	77.9441	78.0084	78.0082		64.300	643.000	940	0.684		PASS
9/20/23 11:34	B032	C2309190035	LWLVB1.85H	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557		PASS
9/20/23 11:36	A140	C2309190036	LWLVB2.7E	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:37	B057	C2309190037	LWLVB2.7M	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813		PASS
9/20/23 11:38	B063	C2309190038	LWLVB2.7H	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
9/20/23 11:39	A219	C2309190040	LWLVB3.5M	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
9/20/23 11:40		659671	BC2	1	99.9994	99.9994	99.9995			99.999				PASS
9/20/23 11:41	B038	C2309190041	LWLVB3.5H	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
9/20/23 11:42	B027	C2309190042	Well 11G	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
9/20/23 11:43	A089	C2309190043	Well 13T	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
9/20/23 11:44	A087	C2309190044	Well 11T	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
9/20/23 11:45		659694	BC1	1	49.9997	49.9997	49.9998			50.000				PASS

Save

Readback process completed.Do you want to complete the batch results?

Yes No

Sheet1





# Wet Chem Workflow – Send to Review

SDMS ResultEntry

Home File Edit Insert Page Layout Formulas

Export To Excel | Exit | Complete | Save | Roll Back | Delete | Clear | Edit | Refresh | Bind Grid | Retrieve | Analytical Batch | Import Files | ApplyFormula | Generate Reports

Mode: View Edit Enter Test: TDS Batch Number: 12363 Analytical Batch: 23092001

Analytical Information TDS Bench sheet Analytical Batch Results

H42

Clark County Water Reclamation District														
Analytical BenchSheet														
Date/Time	DishID	LabID	SampleID	VOL(ml)	Tare(gm)	Weighback #1 (gm)	Weighback #2 (gm)	Weighback #3 (gm)	Residue Wt.(mg)	Result (mg/L)	Cond	TDS/Cond Ratio	% Rec / % Dif	WtBack Pass Fail
9/20/23 11:16	B033	659667	LFB	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557	100.2%	PASS
9/20/23 11:17	A141	659668	MB	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:18	B058	659669	LWLVB3.5E-DUP	100					52.000	520.000	640	0.813	200.0%	PASS
9/20/23 11:19	B064	C2309190039	LWLVB3.5E	100					52.000	520.000	640	0.812		PASS
9/20/23 11:20	A220	C2309190005	INF-BW	50					54.400	1088.000	1800	0.604		PASS
9/20/23 11:22	A195	C2309190006	INF-A	50					59.900	1198.000	1800	0.666		PASS
9/20/23 11:23	B039	C2309190007	OUTFALL 002A	100					108.500	1085.000	1600	0.678		PASS
9/20/23 11:04	B028	C2309190008	OUTFALL 001A	100					123.400	1234.000	1600	0.771		PASS
9/20/23 11:26	A090	C2309190029	WQS-BLANK	100					55.900	559.000	720	0.776		PASS
9/20/23 11:27	A088	C2309190030	LWLVB1.2E	25					62.700	2508.000	3200	0.784		PASS
9/20/23 11:28		659670	BC1	1						50.000				PASS
9/20/23 11:30	A232	C2309190031	LWLVB1.2M	50	76.7152	76.7675	76.7677		52.300	1046.000	1700	0.615		PASS
9/20/23 11:31	B060	C2309190032	LWLVB1.2H	100	85.8172	85.9257	85.9257		108.500	1085.000	1600	0.678		PASS
9/20/23 11:32	B043	C2309190033	LWLVB1.85E	100	76.5076	76.5721	76.5724		64.500	645.000	960	0.672		PASS
9/20/23 11:33	A235	C2309190034	LWLVB1.85M	100	77.9441	78.0084	78.0082		64.300	643.000	940	0.684		PASS
9/20/23 11:34	B032	C2309190035	LWLVB1.85H	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557		PASS
9/20/23 11:36	A140	C2309190036	LWLVB2.7E	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:37	B057	C2309190037	LWLVB2.7M	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813		PASS
9/20/23 11:38	B063	C2309190038	LWLVB2.7H	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
9/20/23 11:39	A219	C2309190040	LWLVB3.5M	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
9/20/23 11:40		659671	BC2	1	99.9994	99.9994	99.9995			99.999				PASS
9/20/23 11:41	B038	C2309190041	LWLVB3.5H	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
9/20/23 11:42	B027	C2309190042	Well 11G	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
9/20/23 11:43	A089	C2309190043	Well 13T	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
9/20/23 11:44	A087	C2309190044	Well 11T	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
9/20/23 11:45		659694	BC1	1	49.9997	49.9997	49.9998			50.000				PASS

SDMS

LIMS Batch ID 12363 Completed successfully. Do you want to open it in review form?

Yes No

Sheet1



# Wet Chem Workflow – Pending Batch Review

Result - Review

Home

Export Roll Back Review Update Edit Cancel Clear Audit Summary

Mode View Enter LIMS Batch ID 12363 Date Query 07/10/2023 07/10/2024 Text Search

Result Pending to Review

Detail

frmResultBatchReviewSpreadsheet

Clark County Water Reclamation District

## Analytical BenchSheet

Date/Time	DishID	LabID	SampleID	VOL(ml)	Tare(gm)	Weighback #1 (gm)	Weighback #2 (gm)	Weighback #3 (gm)	Residue Wt.(mg)	Result (mg/L)	Cond	TDS/ Cond Ratio	% Rec / % Dif	WtBack Pass Fail
9/20/23 11:16	B033	659667	LFB	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557	100.2%	PASS
9/20/23 11:17	A141	659668	MB	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:18	B058	659669	LWLVB3.5E-DUP	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813	200.0%	PASS
9/20/23 11:19	B064	C2309190039	LWLVB3.5E	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
9/20/23 11:20	A220	C2309190005	INF-BW	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
9/20/23 11:22	A195	C2309190006	INF-A	50	81.3229	81.3828	81.3829		59.900	1198.000	1800	0.666		PASS
9/20/23 11:23	B039	C2309190007	OUTFALL 002A	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
9/20/23 11:04	B028	C2309190008	OUTFALL 001A	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
9/20/23 11:26	A090	C2309190029	WQS-BLANK	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
9/20/23 11:27	A088	C2309190030	LWLVB1.2E	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS
9/20/23 11:28		659670	BC1	1	49.9997	49.9997	49.9998			50.000				PASS
9/20/23 11:30	A232	C2309190031	LWLVB1.2M	50	76.7152	76.7675	76.7677		52.300	1046.000	1700	0.615		PASS
9/20/23 11:31	B060	C2309190032	LWLVB1.2H	100	85.8172	85.9257	85.9257		108.500	1085.000	1600	0.678		PASS
9/20/23 11:32	B043	C2309190033	LWLVB1.85E	100	76.5076	76.5721	76.5724		64.500	645.000	960	0.672		PASS
9/20/23 11:33	A235	C2309190034	LWLVB1.85M	100	77.9441	78.0084	78.0082		64.300	643.000	940	0.684		PASS
9/20/23 11:34	B032	C2309190035	LWLVB1.85H	100	76.7327	76.8329	76.8328		100.200	1002.000	1800	0.557		PASS
9/20/23 11:36	A140	C2309190036	LWLVB2.7E	100	78.3468	78.3468	78.3470		0.000	0.000	0	0.000		PASS
9/20/23 11:37	B057	C2309190037	LWLVB2.7M	100	86.5426	86.5946	86.5947		52.000	520.000	640	0.813		PASS
9/20/23 11:38	B063	C2309190038	LWLVB2.7H	100	84.9577	85.0097	85.0101		52.000	520.000	640	0.812		PASS
9/20/23 11:39	A219	C2309190040	LWLVB3.5M	50	77.5269	77.5813	77.5812		54.400	1088.000	1800	0.604		PASS
9/20/23 11:40		659671	BC2	1	99.9994	99.9994	99.9995			99.999				PASS
9/20/23 11:41	B038	C2309190041	LWLVB3.5H	100	78.2998	78.4083	78.4083		108.500	1085.000	1600	0.678		PASS
9/20/23 11:42	B027	C2309190042	Well 11G	100	82.0674	82.1908	82.1907		123.400	1234.000	1600	0.771		PASS
9/20/23 11:43	A089	C2309190043	Well 13T	100	78.2278	78.2837	78.2837		55.900	559.000	720	0.776		PASS
9/20/23 11:44	A087	C2309190044	Well 11T	25	76.3315	76.3942	76.3941		62.700	2508.000	3200	0.784		PASS

Sheet1





# Wet Chem Workflow – Batch Roll Back

The screenshot displays a software window titled "Result - Review". The interface includes a top navigation bar with a "Home" tab and a toolbar with icons for "Export", "Roll Back", "Review", "Update", "Edit", "Cancel", "Clear", and "Audit Summary". Below the toolbar, there are input fields for "Mode" (set to "View"), "Enter", "LIMS Batch ID" (12363), "Date Query" (07/09/2023 to 07/09/2024), and a "Text Search" field. A table below shows a "Result Pending to Review" with two rows, each having a checked checkbox and a "Detail" link. A central dialog box with a question mark icon asks: "Do you want to rollback the LIMS Batch ID12363to pending submission?". The dialog has "Yes" and "No" buttons. At the bottom left, a status bar shows "Record 1 of 1".

Result Pending to Review

		Detail
<input checked="" type="checkbox"/>		...
<input checked="" type="checkbox"/>		...

Do you want to rollback the LIMS Batch ID12363to pending submission?

Yes No

Record 1 of 1



# Wet Chem Workflow – Roll Back Reason (Required)

The screenshot displays a software window titled "Result - Review". The interface includes a top navigation bar with icons for "Export", "Roll Back", "Review", "Update", "Edit", "Cancel", "Clear", and "Audit Summary". Below this is a filter section with "Mode" (set to "View"), "Enter" button, "LIMS Batch ID" (12363), "Date Query" (07/09/2023 to 07/09/2024), and a "Text Search" field. The main area shows a table with a "Detail" column and a "Result Pending to Review" status. A modal dialog box is open in the center, titled "Do you want to rollback the LIMS Batch ID". It contains a "Reason" label and a text area with the text: "Incorrect Date/ Time entry for individual sample results, times should vary between each sample in a batch." The dialog has "Cancel" and "OK" buttons at the bottom.

	Detail
<input checked="" type="checkbox"/>	...
<input checked="" type="checkbox"/>	...

Record 1 of 1



# Wet Chem Workflow – Returned to Readback

The screenshot displays a software interface for reviewing results. At the top, there is a toolbar with icons for 'Export', 'Roll Back', 'Review', 'Update', 'Edit', 'Cancel', 'Clear', and 'Audit Summary'. Below the toolbar, a status bar shows 'Mode View', 'Enter', 'LIMS Batch ID 12363', 'Date Query 07/09/2023', and a search field. The main area contains a table with the header 'Result Pending to Review' and a 'Detail' column. A dialog box titled 'SDMS' is centered on the screen, containing a question mark icon and the text: 'Sample rollbacked succesfully. Do you want to open sample in sample entry form?'. The dialog has 'Yes' and 'No' buttons.

	Detail
<input checked="" type="checkbox"/>	...
<input checked="" type="checkbox"/>	...

SDMS

? Sample rollbacked succesfully. Do you want to open sample in sample entry form?

Yes No

Record 1 of 1



# Wet Chem Workflow – Correction made, Review Batch

The screenshot shows a software window titled "Result - Review". The interface includes a top toolbar with buttons for "Export", "Roll Back", "Review", "Update", "Edit", "Cancel", "Clear", and "Audit Summary". Below the toolbar, there are input fields for "Mode" (set to "View"), "Enter", "LIMS Batch ID" (12363), "Date Query" (07/10/2023 to 07/10/2024), and a "Text Search" field. The main content area displays a table with a header "Result Pending to Review" and a "Detail" column. A modal dialog box is centered on the screen, containing a question mark icon and the text "Do you want to Review and open it on upload to lims form?". The dialog has "Yes" and "No" buttons. At the bottom left, there is a pagination control showing "Record 1 of 1".

Result Pending to Review	Detail
<input checked="" type="checkbox"/>	...
<input checked="" type="checkbox"/>	...



# Wet Chem Workflow – File Sent to LIMS, (user preference)

Upload to LIMS

Home

Upload to LIMS Cancel Additional Document

File

Mode View Enter

Upload to LIMS

LabID	SampleID	LIMSBatchID	Result	Volume	Weighback1	ReadbackDate	Weighback2	ReadbackBy	Weighback3
659667	LFB	12363	1002.000000000001	100	76.8329	09/20/2023 11:14	76.8328	admin	
659668	MB	12363	0	100	78.3468	09/20/2023 11:14	78.347	admin	
659669	LWLB3.5E-DUP	12363	520.0000000000067	100	86.5946	09/20/2023 11:14	86.5947	admin	
659670	BC 1	12363	49.9997	1	49.9997	09/20/2023 11:14	49.9998	admin	
659671	BC2	12363	99.9994	1	99.9994	09/20/2023 11:14	99.9995	admin	
659694	BC 1	12363	49.9997	1	49.9997	09/20/2023 11:14	49.9998	admin	
C2309190005	INF-BW	12363	1088.000000000002	50	77.5813	09/20/2023 11:14	77.5812	admin	
C2309190006	INF-A	12363	1197.999999999998	50	81.3828	09/20/2023 11:14	81.3829	admin	
C2309190007	OUTFALL 002A	12363	1084.999999999992	100	78.4083	09/20/2023 11:14	78.4083	admin	
C2309190008	OUTFALL 001A	12363	1233.999999999999	100	82.1908	09/20/2023 11:14	82.1907	admin	
C2309190029	WQS-BLANK	12363	558.9999999999941	100	78.2837	09/20/2023 11:14	78.2837	admin	
C2309190030	LWLB1.2E	12363	2507.99999999997	25	76.3942	09/20/2023 11:14	76.3941	admin	
C2309190031	LWLB1.2M	12363	1046.000000000005	50	76.7675	09/20/2023 11:14	76.7677	admin	
C2309190032	LWLB1.2H	12363	1085.000000000006	100	85.9257	09/20/2023 11:14	85.9257	admin	
C2309190033	LWLB1.85E	12363	645.0000000000096	100	76.5721	09/20/2023 11:14	76.5724	admin	
C2309190034	LWLB1.85M	12363	642.9999999999887	100	78.0084	09/20/2023 11:14	78.0082	admin	
C2309190035	LWLB1.85H	12363	1002.000000000001	100	76.8329	09/20/2023 11:14	76.8328	admin	
C2309190036	LWLB2.7E	12363	0	100	78.3468	09/20/2023 11:14	78.347	admin	
C2309190037	LWLB2.7M	12363	520.0000000000067	100	86.5946	09/20/2023 11:14	86.5947	admin	
C2309190038	LWLB2.7H	12363	519.9999999999925	100	85.0097	09/20/2023 11:14	85.0101	admin	
C2309190039	LWLB3.5E	12363	519.9999999999925	100	85.0097	09/20/2023 11:14	85.0101	admin	
C2309190040	LWLB3.5M	12363	1088.000000000002	50	77.5813	09/20/2023 11:14	77.5812	admin	
C2309190041	LWLB3.5H	12363	1084.999999999992	100	78.4083	09/20/2023 11:14	78.4083	admin	
C2309190042	Well 11G	12363	1233.999999999999	100	82.1908	09/20/2023 11:14	82.1907	admin	
C2309190043	Well 13T	12363	558.9999999999941	100	78.2837	09/20/2023 11:14	78.2837	admin	
C2309190044	Well 11T	12363	2507.99999999997	25	76.3942	09/20/2023 11:14	76.3941	admin	

Record 1 of 1

Record 1 of 26



# Wet Chem Workflow – LIMS Parser Folder

The screenshot shows the 'Upload to LIMS' application interface. A 'Save As' dialog box is open, displaying the file path: `This PC > Windows (C:) > BTSOFT > Photos > CCWRD Micro ELN`. The file name is `12363_TDS_1_20240710151019.csv` and the save type is `CSV File(.csv)`. The background application shows a 'Batch Information' table with the following data:

LIMSBatchID	Test
#C	#C
12363	TDS

At the bottom of the application, a data table is visible with the following columns and values:

Well	Well ID	Batch ID	Sample ID	Volume	Concentration	Date/Time	Operator		
<input checked="" type="checkbox"/>	C2309190042	Well 11G	12363	1233.9999999999	100	82.1908	09/20/2023 11:14	82.1907	admin

Record 1 of 1 | Record 1 of 26



# Wet Chem Workflow – Verify Batch Results

Result - Verify Username : admin | SDMS Version : 24.06.01.25115

Home Analysis Review - W...

Navigation: Prev, Next, Home, Export, Roll Back, **Verify**, Update, Edit, Cancel, Clear, Audit Summary

Files: Analytical Batch, MTF, Coliert, Review MTF, Review Coliert, Validate MTF, Validate Coliert, Utility


Mode:  Mode  View  Enter

LIMS Batch ID: 12363 Date Query: 07/10/2023 - 07/10/2024 Text Search: Enter text to search...

Result Pending to Verify **Verify**

<input checked="" type="checkbox"/>	Detail	Test	Remark	Template	ABID	Reviewed By	Date Reviewed
<input checked="" type="checkbox"/>	...	TDS		TDS	23092001	admin	07/10/2024 15:11

Record 1 of 1



# Wet Chem Workflow – Confirmation of Validation

The screenshot displays the SDMS software interface. At the top, the window title is "Result - Verify". The user is logged in as "admin" and the version is "SDMS Version : 24.06.01.25115". The interface includes a navigation bar with buttons for "Prev", "Next", "Home", "Export", "Roll Back", "Verify", "Update", "Edit", "Cancel", and "Clear". There is also an "Audit Summary" button. A menu bar contains options like "Analytical Batch", "MTF", "Colliert", "Review MTF", "Review Colliert", "Validate MTF", "Validate Colliert", and "Utility". The main area shows a table with the following data:

Detail	Test	Remark	Template	ABID	Reviewed By	Date Reviewed
<input checked="" type="checkbox"/>	TDS		TDS	23092001	admin	07/10/2024 15:11

A modal dialog box titled "SDMS" is centered on the screen, asking "Do you want to Verify?". It has "Yes" and "No" buttons.

At the bottom left, it says "Record 1 of 1".





# Wet Chem Workflow – Batch Complete

Result - Verify Username : admin | SDMS Version : 24.06.01.25115

Home Analysis Review - W...

Prev Next Home Export Roll Back Verify Update Edit Cancel Clear Audit Summary

Navigation Files

Mode View Enter LIMS Batch ID 12363 Date Query 07/10/2023 07/10/2024 Text Search

Result Pending to Verify


	Detail	Test	Remark	Template	ABID	Reviewed By	Date Reviewed
<input checked="" type="checkbox"/>	...	TDS		TDS	23092001	admin	07/10/2024 15:11

SDMS

**i** Verified successfully.

OK

Record 1 of 1



# Wet Chem Test Configuration – Test Code

Test Setup Username : admin | SDMS Version : 24.06.01.25115


Settings - Test   Settings - Utility

Navigation: Home, Next, Home, Export Excel, New, Save, Update, Delete, Cancel

Tools: Analytical Batch, MTF, Collert, Review MTF, Review Collert, Validate MTF, Validate Collert, Utility

Test Code	Parameter	QC Code	Test	Matrix	Method	Parameter	HoldTime	Category	SOP Number	Revision	Hold	Remark
MTF			Water	Water	SM 9221 B,E,F	E.coli,Fecal Coliforms,Total ...	08:00	Micro			<input type="checkbox"/>	
Chlorophyll			Water	Water	SM 10200 H	Chlorophyll-a,Pheophytin	08:00	WetChemistry			<input type="checkbox"/>	
Collert 18			Water	Water	SM 9223 B	E.coli,Fecal Coliforms,Total ...	08:00	Micro			<input type="checkbox"/>	
Turbidity			Water	Water	SM 2130 B	Turbidity		WetChemistry			<input type="checkbox"/>	
Color			Water	Water	SM 2120B	True Color		WetChemistry			<input type="checkbox"/>	
Sulfide			Water	Water	SM 4500 S2	Sulfide (Total/Dissolved)		WetChemistry			<input type="checkbox"/>	
TDS			Water	Water	SM 2540 C	TDS		WetChemistry	SOP_TDS	Number_TDS	<input type="checkbox"/>	
TSS			Water	Water	SM 2540 D	TSS		WetChemistry	SOP_TSS	Number_TSS	<input type="checkbox"/>	

Record 7 of 8



# Wet Chem Test Configuration – Parameter

Test Setup Username : admin | SDMS Version : 24.06.01.25115


Settings - Test   Settings - Utility

Navigation: Settings - Utility, Next, Home, Export Excel, New, Save, Edit, Delete, Cancel

Tools: Analytical Batch, MTF, Colliert, Review MTF, Review Colliert, Validate MTF, Validate Colliert, Utility

Test Code	Parameter	QC Code	Remarks
	Parameter		
	Total Coliforms		
	Fecal Coliforms		
	E.coli		
	Chlorophyll-a		
	Pheophytin		
	Presumptive Coliforms		
	Turbidity		
	True Color		
	Sulfide (Total/Dissolved)		
	TDS		
	TSS		

Record 10 of 11



# Wet Chem Test Configuration – QC Code

Test Setup Username : admin | SDMS Version : 24.06.01.25115

Settings - Utility Settings - Test | Settings - Utility

Navigation: Settings - Utility, Next, Home, Export Excel, New, Save, Update, Delete, Cancel

Tools: Analytical Batch, MTF, Colliert, Review MTF, Review Colliert, Validate MTF, Validate Colliert, Utility

Test Name	Method	QC Type	Sort	Default Result	Default Unit	RPT Limit	MDL	LOQ	UQL	Sluke Amount	Spike Amount	Rec LLimit	Rec HLimit	RPDL Limit	RPDH Limit
MTF	SM 9221 B,E,F	MB	1	BRL	mg/L	5	n/a					90	110		
Chlorophyll	SM 10200 H	Dup	2	BRL	mg/L	5	n/a							-10	10
Colliert 18	SM 9223 B	BC1	4	BRL	mg/L		n/a								
Turbidity	SM 2130 B	BC2	5	BRL	mg/L		n/a								
Color	SM 2120B	LFB	6	BRL	mg/L	5	n/a					90	110		
Sulfide	SM 4500 S2														
TDS	SM 2540 C														
TSS	SM 2540 D														

Record 5 of 5



# Wet Chem Test Configuration – Instrument Setup

Utility Username : admin | SDMS Version : 24.06.01.25115

Home Settings - Utility

Navigation: Prev, Next, Home, New, Save, Delete, Edit, Clear, Copy Permission

Tools: Copy Permission

Menu: Analytical Batch, MTF, Colliert, Review MTF, Review Colliert, Validate MTF, Validate Colliert

	Equipment	InstrumentName	ShelfLocation	InstrumentType	Test	Default	Unit	ControlLimit	Comment
Appearance	WB-02	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Buffer	WB-03	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Checklist Category	WB-04	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Confirm Checklist Setup	INC-14	Incubator 14	NA	Incubator	Colliert 18,MTF	35.4		34.5-35.5	
Comparator	INC-15	Incubator 15	LS,MS,US	Incubator	Colliert 18,MTF	35.4		34.5-35.5	
Default Folder Path	WB-05	Waterbath 05	None	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Department	INC-08	Incubator 08	LS,US	Incubator	Colliert 18,MTF	25		21.0-29.0	
Force Readback / RealTime Break Logic User Permission	WB-06	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Import Fields into LIMS Configuration	MD-02	Dispenser	NA	Dispenser	Colliert 18,MTF				
Incubation Sample Limit	FRG-015	Refrigerator	NA	Refrigerator	Colliert 18,MTF	6.0		0-8	
Instrument	BAL-07	Balance	NA	Balance	Colliert 18,MTF				
Instrument Check/Due Date	WB-07	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Media	WB-08	Waterbath Incub...	NA	Waterbath	Colliert 18,MTF	44.5		44.3-44.7	
Media Action	INC-16	Incubator 16	LS,US	Incubator	Colliert 18,MTF	35.2		34.5-35.5	
Media QC	INC-09	Incubator 09	LS,US	Incubator	Colliert 18,MTF	35.5		34.5 - 35.5	
Media Type	INC-11	Incubator 11	LS,US	Incubator	Colliert 18,MTF	35.5		34.5 - 35.5	
MTF Tube Type	INC-12	Incubator 12	LS,US	Incubator	Colliert 18,MTF	34.5		34.5 - 35.5	
Organism	INC-13	Incubator 13	LS,US	Incubator	Colliert 18,MTF	35.2		34.5 - 35.5	
Permission	INC-10	Incubator 10	LS,US	Incubator	Colliert 18,MTF	35.1		34.5 - 35.5	
pH/Volume	AC-03	Autoclave-02	Location 1	Autoclave	Colliert 18,MTF	15			
QC Role	AC-04	Autoclave-02	Location 2	Autoclave	MTF	15			
	15	Refrigerator		Refrigerator	MTF				
	002	Refrigerator		Refrigerator	MTF				
	C_INC	CINC001		Incubator	Chlorophyll				
	OVEN08	Solids Oven 08	LS,US	Incubator	Chlorophyll,TDS	180		178-182	
	OVEN07	Solids Oven 07	LS,US	Incubator	Chlorophyll,TSS	103		102-105	
	OVEN05	Solids Oven 05	LS,MS,US	Incubator	Chlorophyll,TSS	103		102-105	
	WS123456	Weight Set ID		WeightSetID	TDS				

Record 1 of 32



# Wet Chem Test Configuration – QC Types

Utility Username : admin | SDMS Version : 24.06.01.25115

Home Settings - Utility

Department	QCType	QCRole	QCSource	QCRootRole	SpecialType
Force Readback / RealTime Break Logic User Permission	BC1	Standard	Prep Standard	Standard	<input checked="" type="checkbox"/>
Import Fields into LIMS Configuration	BC2	Standard	Prep Standard	Standard	<input checked="" type="checkbox"/>
Incubation Sample Limit	Blank	Blank	Sample	Blank	<input type="checkbox"/>
Instrument	Bottle Blank Rack	Blank	Sample	Blank	<input type="checkbox"/>
	Buffer Blank	Blank	Sample	Blank	<input type="checkbox"/>
Instrument Check/Due Date	Cal Check	Standard	Method Blank	Duplicate	<input type="checkbox"/>
	Calibration	Standard	Method Blank	Duplicate	<input type="checkbox"/>
Media	CCB	Blank	Prep Blank	Blank	<input type="checkbox"/>
	CCV	Standard	Prep Standard	Standard	<input type="checkbox"/>
Media Action	Cert	PTC	PTC	PTC	<input type="checkbox"/>
Media QC	DC1	Standard	Prep Standard	Standard	<input type="checkbox"/>
	DC2	Standard	Prep Standard	Standard	<input type="checkbox"/>
Media Type	DCS	Spike	LCS	Standard	<input type="checkbox"/>
MTF Tube Type	DOC	Standard	LCS	Standard	<input type="checkbox"/>
Organism	Dup	Duplicate	Sample	Duplicate	<input type="checkbox"/>
	Dup Blank	Duplicate	Method Blank	Blank	<input type="checkbox"/>
Permission	Field Duplicate	Duplicate	Sample	Duplicate	<input type="checkbox"/>
pH/Volume	GGA	Standard	Prep Standard	Duplicate	<input type="checkbox"/>
	ICB	Blank	Method Blank	Blank	<input type="checkbox"/>
QC Role	ICSA	Standard	Sample	Duplicate	<input type="checkbox"/>
QC Root Role	ICSAB	Standard	Sample	Duplicate	<input type="checkbox"/>
	ICV	Standard	Prep Standard	Standard	<input type="checkbox"/>
QC Source	Inter Dup	Duplicate	Sample	Duplicate	<input type="checkbox"/>
	LFB	Spike	LCS	Standard	<input type="checkbox"/>
Rack	LFBD	Duplicate	LCS	Standard	<input type="checkbox"/>
Review/Validate and Datacenter Column settings	LLCCV	Standard	Sample	Duplicate	<input type="checkbox"/>
	LOD	Standard	Prep Standard	Standard	<input type="checkbox"/>
Template Type	LOQ	Standard	Prep Standard	Standard	<input type="checkbox"/>
Users	MB	Blank	Prep Blank	Blank	<input type="checkbox"/>
	MDL Check	Spike	LCS	Standard	<input type="checkbox"/>
Validation Checklist Setup	MDL	Spike	LCS	Standard	<input type="checkbox"/>
	MS	Spike	Sample	Spike	<input type="checkbox"/>
	MSD	Spike	MS	Duplicate	<input type="checkbox"/>

Record 1 of 42





## Summary

- ✓ Seamless integration with our current LIMS
- ✓ A great achievement with automation and data quality
- ✓ Visualized process makes it obvious and easy to work
- ✓ Improved productivity and data quality
- ✓ Interface access based on user roles and permissions
- ✓ Reached the goal of paperless



# ***THANK YOU***

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