

Inspection and Materials Management System (I2MS) Version 3.2

User Manual

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SECTION 1 – INTRODUCTION

TxDOT developed Inspection and Materials Management System (I2MS) to manage data workflow, data analysis and data reports on design-build projects. It is a web-based software program that is best used on Google Chrome or Microsoft Edge. The program can be accessed with a computer, tablet, or a smartphone.

This manual describes the functionality of features within I2MS and is written to provide users instructions on how to use each of the features. It describes the version of I2MS currently being implemented. Previous versions of I2MS will function in a similar manner but may not completely match what is shown in this manual.

I2MS provides a systematic workflow process that enables users to enter, review, approve, or reject reports. It also includes robust search functionality that allows users to retrieve test results using selected search criteria. A schematic diagram of the workflow process is included in Appendix A.

Key features of I2MS include the following:

- 1. Role-Based Dashboards
- 2. Record Workflow Data Entry, Review, and Approval
- 3. Robust Search Capabilities
- 4. Statistical and Verification Analyses
- 5. Robust search functionality
- 6. Reporting
- 7. Technician Qualifications
- 8. System and Project Administration

These tools allow the user to analyze various materials using a risk-based approach as described in TxDOT's *Quality Assurance Program CDA/Design-Build Projects*, also referred to as the "DB QAP." The basic premise in using these analysis techniques is to focus resources on key material properties related to performance and to provide the Materials Manager (known as the OVF Testing Manager role in I2MS) with the ability to analyze data on a near real-time basis, thus providing increased active materials management.

1.0 Acronyms

A listing of acronyms used throughout this manual is provided in Table 1-1 below.

Table 1-1: Acronyms

Acronym	Description
CQAF	Construction Quality Acceptance Firm. This term is the predecessor to the term IQF (which is currently in use).
CQMP	Construction Quality Management Plan
CSJ	Control Section Job
CVL	Controlled Vocabulary List (This is a list of allowable entries for a given field in the test records.)
DB	Design-Build
FHWA	Federal Highway Administration
GIF	Graphics Interchange Format
НМА	Hot-mix asphalt
IA	Independent Assurance
ID	Identification
IP Address	Internet Protocol address
I2MS	Inspection and Materials Management System
IQ	Independent Quality. This is the current term that supersedes the previous term QA which was used at the time I2MS was developed.
IQF	Independent Quality Firm. This is the current term that supersedes the previous term CQAF which was used at the time I2MS was developed.
MTD	Materials and Tests Division
OV	Owner Verification
OVF	Owner Verification Firm
OVTIP	Owner Verification Testing and Inspection Plan
PDF	Portable Document Format
PM	Project Manager

Acronym	Description
p-value	Probability of observing a sample statistic that is at least as extreme as the sample statistic, given that the null hypothesis is true
QA	Quality Acceptance. This term is the predecessor to the term IQ (which is currently in use).
QAP	Quality Assurance Program
TxDOT	Texas Department of Transportation
XML	Extensible Markup Language
UI	User Interface

SECTION 2 – LOGIN AND NAVIGATION

2.1 Login Procedures

- Step 1. To begin using I2MS, the user will send a request to the TxDOT Project Manager or designee with their name, email, and description of their role on the project so the appropriate user rights will be assigned. The user will receive an email from the system administrator with their username login and temporary password.
- Step 2. Type the following web address into the web browser:

https://i2ms1.txdot.gov/

Step 3. Select your project from the "Active Projects" list shown in Figure 2-1.

3 I2MS - Inspection and Material IV × +		·	_	C]
· · · · C 🔒 i2ms1.txdot.gov	e 1	k	*		1
I2MS					
ctive Projects					
DFW Connector Harbor Bridge SH288 Southern Gateway SH249 in Houston SH99 in Houston I-2/L-69C Interchange (PHR) NTE Seg. 3C (3A-3B) (FTW) I635 LBJ East (DAL) North Tarrant Express (NTE 1 & 2 O&M) Oak Hill Parkway I35E Phase2 IH35NEX					
North Tarrant Express (NTE) LBJ635 Segment 1 LBJ635 Segments 2-3 Grand Parkway Horseshoe (35E (Dallas and Denton Counties) US77 (Kingsville to Driscoll Project) LP1604 (San Antonio) [35W 3A (Fort Worth) SH130 Segments 5-6 SH71 US 183 Fort Worth Border West Exp in El Paso SH360 in Fort Worth					
ISER Guides					

Figure 2-1: I2MS Project List

Step 4. Using the cursor, type in the username and temporary password as assigned to the user in the boxes shown and select Log In (Figure 2-2). Entries are case sensitive.

Figure 2-2: I2MS Login Webpage

🚯 I2MS - Login	×	+				~		j.
← → C 🔒 i2n	ns1.txdot.gov/n	ite.seg3c/				0- [B	☆
III I2N Inspection		rials Managemen	ut System			4		
Entries a	re case se	nsitive.	Username Password	OVFdataentry				
				Log In				

Step 5. Once successfully logged in, the user will see the Home Page with the default dashboard (Figure 2-3). The major menu options at the top of the page will show only the assigned functionality that the user has access to based on their assigned role.

Figure 2-3: I2MS Navigation Bar

Dashboard	Search	Select Form	Analysis	Reporting Admi	nistration					
Dashboard										
		My Inbox	Queue Explorer	Search Results	Today's Concrete					
	Queue OVF Testing Queue +									
	Sam	ple ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis		

Step 6. The user should change their temporary password by selecting the Administration menu as shown in Figure 2-3. See <u>Section 6.2.5</u> for more information on changing a user password.

2.2 Roles and Access

Various user rights have been established in I2MS. These rights range from "System Administrator" rights which gives the user all user rights within I2MS to limited "Read-Only

Access" rights which limits the access to viewing technician qualifications (certifications and IA evaluations) and test results. A full description of I2MS rights is provided in Table 2-1.

Role Name	Role Abilities	Menus that can be accessed in I2MS
	Has rights listed in all roles listed below.	
System Administrators	Can configure system users and roles.	All menus listed below
System Administrators	Can configure project settings.	All menus listed below
	Can configure analysis applications.	
	Can configure samplers and inspectors.	Dashboard
IA Manager	Can configure proficiency samplings.	Search
	Can configure technicians' qualifications.	Administration
	Can configure suppliers/producers.	Dashboard
CVL Administrators	Can configure materials header information.	Search Select Form
	Can configure material codes.	Administration
Read Only	Read only access.	Dashboard Search Administration
	Can enter data and submit reports.	Dashboard
OVF Data Entry		Search
	Read only access on remaining menus.	Select Form Administration
OVF Data Entry	Can review and reject OVF reports.	Dashboard
Reviewers	Read only access on administration.	Search Administration
	Can create trend/data analysis reports.	
	Can create continuous analysis reports.	
I2MS Testing	Can create independent verifications reports.	Dashboard
Managers (aka OVF Materials	Can create observation verification reports.	Search Analysis
Manager)	Can configure suppliers/producers.	Reporting Administration
	Can approve and quarantine OVF and IQF reports.	Administration
	Can configure CVL information.	
	Can enter data and submit reports.	Dashboard Search
IQF Data Entry	Read only access on remaining menus.	Select Form Administration
IQF Data Entry	Can review and reject IQF reports.	Dashboard
Reviewers	Read only access on administration.	Search

Table 2-1: I2MS Roles, Descriptions and User Access Rights

Role Name	Role Abilities	Menus that can be accessed in I2MS
		Reporting Administration
DB Reviewer (aka IQF Manager)	Can review IQF reports.	Dashboard Search Reporting Administration

2.3 Navigating the User Interface (UI)

After logging into the system, the user will see the landing page, which is also the I2MS Dashboard. Certain options may not appear if the user has insufficient user rights. Table 2-1 in Section 2.2 lists the different project roles and their associated user access rights.

2.3.1 Navigation Bar Functions

The Navigation Bar (Figure 2-4) appears in the upper left corner of the screen and each item is dependent on the user's rights.

Figure 2-4: Navigation Bar

Dashboard	Search	Select Form	Analysis	Reporting	Administration
Dashboard					-

The comprehensive Navigation Bar allows quick access to the following modules:

- **Dashboard** Displays the current Sample IDs for action by user group. It also serves as a point to navigate to other functionality (e.g. Analysis).
- Search Provides access to OVF and/or CQAF (IQF) test forms by selecting header fields and/or certain fields in the body of the form. Test records are returned based on the search criteria.
- Select Form Allows the user to select and create test forms.
- **Analysis** Allows user to view current and historical Level 1 and Level 2 analyses, and Level 3 observations (available only for I2MS Testing Manager and System Administrator roles).
- **Reporting** Allows the selection of two functions:
 - **My Reports** Allows the user to access output files for viewing, re-running, or deleting.

 Create Report - Allows the user to perform typical trend and data analyses, on a set of selected data. Allows the user to create Quarterly Federal Reports for the continuous analysis, independent verification, and observation verification analyses. Also, allows the user to Export test data. Selecting Print All under Create Report results in an error message. This is a known glitch in I2MS. Use Print All from the Search menu.

This module is available only for OVF Testing Manager, Read-only Access, and System Administrators.

- Submission This is not functional and will no longer be viewable.
- Administration Allows administrators to populate drop-downs fields in test forms and to manage the qualifications of technicians as part of an Independent Assurance Program. See Section 6 for more information on the functions within the Administration module.

2.3.2 Dashboard Functions

The dashboard module has the following four menus shown in the middle of the screen (Figure 2-5):

Figure 2-5: Dashboard Functions

м	y Inbox	Queue Explorer	Search Results	Today's Concrete
Queue	OVF Testing A	pproval Queue	¥	

- **My Inbox** The Dashboard, by default, will present records that require action from the user as part of specific workflow duties.
- **Queue Explorer** Expands the queue to not only user specific records but also other records.
- Search Results Provides records that were queried using the "Search" feature in the Navigation Bar.
- **Today's Concrete** A search tool that displays sample IDs for concrete test specimens due for testing on a Break Date selected by the user.

2.3.2.1 Dashboard Queues

Within the Dashboard, a queue drop-down menu is available. The options that are available in the drop-down menu are different for each role. For comparison, the role that represents the I2MS Testing Manager, is shown in Figure 2-6 and the OVF Data Entry role is shown in Figure 2-7.

Dashb	oard	Search Ar	nalysis	Reporting	Administration			iii]	[2M
ashboard							Lo	gged in: OVF Ma	nager Log
M	ly Inbox	Queue Explorer	Sear	rch Results	Today's Concrete				
Queue	OVF Testing A	pproval Queue	*						
	OVF Testing A	pproval Queue					1	1	
Sample ID	OVF Data Ent	ry Queue	n N	lame	Assignee	Status	Notes	For Analysis	
OVF22032	2 OVF Data Ent	ry Review Queue	17	-E		Pending			Options
IQF211214	4 OVF Quaranti	ne	04	-6		Pending			Options
IQF211214	CQAF Data E	ntry Queue	40	-E		Pending			Options
OVF21121	CQAF Data E	ntry Review Queue	07	-FPL		Pending			Options
QF211213	DB Review Qu	leue		/07/36		Pending			Options
	CQAF Quaran	tine	10			. onang		0	Options

Figure 2-6: Dashboard Queues (I2MS Testing Manager User)

Figure 2-7: Dashboard Queues (OVF Data Entry User)

Dashbo	bard	Search Select	Form Administrat	ion			ut (I2MS
ashboard						Log	ged in: OVF Data	Entry Logo
My	Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue	OVF Data Entry	Queue	-					
	OVF Data Entry	Queue					1	
Sample ID	OVF Quarantine	:	n Name	Assignee	Status	Notes	For Analysis	
OVF21121			207-FPL	OVF Data Entry	Draft			Options
OVF21121			406-A	OVF Data Entry	Draft			Options
OVF21121			104-6	OVF Data Entry	Draft			Options

Each queue group represent different test group and function, as explained below:

- **OVF Data Entry Queue** List of OVF test records in Draft or Rejected status.
- **OVF Data Entry Review Queue** List of OVF test records in Submitted status that need to be reviewed.
- **OVF Testing Approval Queue** List of OVF tests records in Pending status that need to be approved by the I2MS Testing Manager.
- **OVF Quarantine** List OVF test records that have been quarantined by the Testing I2MS Testing Manager and need further action by data entry personnel.
- CQAF Data Entry Queue List of CQAF (IQF) test records in Draft or Rejected status. This is only used if CQAF's (IQF's) records are entered directly into I2MS instead of using an XML transfer.

- CQAF Data Entry Review Queue List of CQAF (IQF) test reports in Submitted status that need to be reviewed. This is only used if CQAF's (IQF's) records are entered directly into I2MS instead of using an XML transfer.
- **DB Review Queue** List of CQAF (IQF) test reports in Pending status that need to be approved by the I2MS Testing Manager. This is only used if CQAF's (IQF's) records are entered directly into I2MS instead of using an XML transfer.
- **CQAF Quarantine** Consists of CQAF (IQF) test records that have been quarantined by the OVF Testing Manager and need further action by data entry personnel.

2.3.2.2 Sorting

I2MS allows the user to sort information in the columns under the four menus in the Dashboard by selecting any of the headings in the table. Figure 2-8 shows the Dashboard as it first appears.

My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue OVF Testing Ap	proval Queue	*					
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis	
IQF2112140915	12/14/2021	DB-104-6		Pending			Option
IQF2112141230	12/14/2021	DB-140-E		Pending			Option
IQF2112141100	12/14/2021	DB-418-A		Pending			Option
IQF2112141430	12/14/2021	DB-418-A		Pending			Option
OVF2112140800	12/14/2021	DB-418-A		Pending			Option
OVF2112141115	12/14/2021	DB-418-A		Pending			Option
OVF2112141700	12/14/2021	DB-207-FPL		Pending			Option
IQF2112131530	12/13/2021	DB-200/07/36		Pending			Option
OVF2112131400	12/13/2021	DB-110-E		Pending	4		Option
OVF2112131630	12/13/2021	DB-101-E, Part III		Pending			Option

If user selects the Sample ID column header (Figure 2-9) a triangle will appear in the heading next to Sample ID. The Sample IDs will sort in ascending order indicated by the triangle pointing up.

Search Results Today's Concrete	My Inbox				
•	OVF Testing App				
te Form Name Assignee	le ID	Status	Notes	For Analysis	
DB-200/07/36	12131530	Pending			Option
DB-104-6	12140915	Pending			Option
DB-418-A	12141100	Pending			Option
DB-140-E	12141230	Pending			Option
DB-418-A	12141430	Pending			Option
DB-110-E	112131400	Pending	4		Option
DB-101-E, Part III	112131630	Pending			Option
DB-418-A	112140800	Pending			Option
DB-418-A	112141115	Pending			Option
DB-207-FPL	112141700	Pending			Option

Figure 2-9: Dashboard – Sort by Sample ID – Ascending

If the user selects the Sample ID column header again, the test record order will be reversed and shown in descending order with the triangle pointing down (Figure 2-10).

My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue OVF Testing /	Approval Queue	-					
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis	
OVF2112141700	12/14/2021	DB-207-FPL		Pending			Option
OVF2112141115	12/14/2021	DB-418-A		Pending			Option
OVF2112140800	12/14/2021	DB-418-A		Pending			Option
OVF2112131630	12/13/2021	DB-101-E, Part III		Pending			Option
OVF2112131400	12/13/2021	DB-110-E		Pending	4		Option
IQF2112141430	12/14/2021	DB-418-A		Pending			Option
IQF2112141230	12/14/2021	DB-140-E		Pending			Option
IQF2112141100	12/14/2021	DB-418-A		Pending			Option
QF2112140915	12/14/2021	DB-104-6		Pending			Option
QF2112131530	12/13/2021	DB-200/07/36		Pending			Option

Figure 2-10: Dashboard - Sort by Sample ID - Descending

This list of test records can be sorted by any of the column headers. If another column header is selected the triangle will appear in the heading and user will be able to sort that column. Figure 2-11 shows the Sampled Date column sorted in ascending order indicated by the triangle pointing up.

My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue OVF Testing Ap	proval Queue	•					
Sample ID	Sampled Date	△ Form Name	Assignee	Status	Notes	For Analysis	
IQF2112131530	12/13/2021	DB-200/07/36	· · · · · · · · · · · · · · · · · · ·	Pending			Optio
OVF2112131400	12/13/2021	DB-110-E		Pending	4		Optio
OVF2112131630	12/13/2021	DB-101-E, Part III		Pending			Optio
QF2112140915	12/14/2021	DB-104-6		Pending			Optio
IQF2112141230	12/14/2021	DB-140-E		Pending			Optio
IQF2112141100	12/14/2021	DB-418-A		Pending			Optio
IQF2112141430	12/14/2021	DB-418-A		Pending			Optio
OVF2112140800	12/14/2021	DB-418-A		Pending			Optio
OVF2112141115	12/14/2021	DB-418-A		Pending			Optio
OVF2112141700	12/14/2021	DB-207-FPL		Pending			Optio

Figure 2-11: Dashboard - Sort by Sampled Date - Ascending

2.3.2.30 ptions

For any of the drop-down queues listed above, selecting the "Options" button on the righthand side of the entry line of a test record will give the user the access to various capabilities (Figure 2-12) based on user rights:

Dashboard	d Search	Analysis	Reporting Admir	nistration				III I2M
ashboard							Logg	ed in: OVF Manager Logo
	My Inbox	Queue Explorer	Search Results	Today's Concrete				
ſ		pproval Queue	v					
	Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis	
	OVF2203231200	03/23/2022	DB-117-E		Pending			Options View Form
	IQF2112140915	12/14/2021	DB-104-6		Pending			Options Add Note
	IQF2112141230	12/14/2021	DB-140-E		Pending			Options History
	OVF2112141700	12/14/2021	DB-207-FPL		Pending			Options Notes
	IQF2112131530	12/13/2021	DB-200/07/36		Pending			Options Analysis Level
	OVF2112131400	12/13/2021	DB-110-E		Pending	4		Options Print View

• View Form – Allows a user to view a record but does not allow a user to edit the record (Figure 2-13). At the bottom of the form there are few action options available depending on user roles – e.g., Approve for Analysis, CQAF Test Review, Quarantine, Print View and Dashboard (to return to the dashboard menu).

Figure 2-13: Options - View Form

Remarks:		_
Reviewed By:	Completed Date:	_
Authorized By:	Authorized Date:	
	Reviewer's Signature:	_
Firm Name: Vulcan Logistical Builders		
Firm Number: 82103		
Approve for	r Analysis CQAF Test Review Quarantine Print View Dashboard	

• Edit Form – Allows Data Entry users to edit the form (Figure 2-14). Four options are available; Save Draft (saves the report for further editing), Submit Final (sends the record for review), Update Calculations (updates screen values) and Dashboard (returns user to the dashboard menu without any changes being saved).

Figure 2-14: Options – Edit Form

Remarks:	
Reviewed By:	Completed Date:
	× III
Authorized By:	Authorized Date:
	Authorized By Signature:
Firm Name: USS Federation Enterprises Firm Number: 84541	
	Save Draft Submit Final Update Calculations Dashboard

• Add Note – Allows user to add a note to the form and to view previous notes made by others (Figure 2-15). A note can be added by the Data Entry Reviewer or OVF Testing Manager to provide guidance for the Data Entry clerk regarding corrections needed on the test form. The Data Entry clerk can also add a note that corrections were performed or that the entry was reviewed and were correct. After adding notes, select the Submit button to add the note to the record.

DB-207-FPL OVF211	2141700		×
🤛 Notes			
Date	From	Note	
Add a Note			
add a note in	this space		
		Submit	~

Figure 2-15: Options - Add Note

• **History** – Allows the user to view the history of the form and the actions that were taken by various users (Figure 2-16). A separate window will appear with the history (actual names will be shown instead of the roles as shown below). Once history is viewed, simply close the window by selecting the "X" in the upper right-hand corner to return to Dashboard screen.

DB-200/07/36 IQF21121	131530	×
History		
Date	Description	
02/03/2022 09:48 PM	IQF Manager performed data entry review for CQAF form.	
02/03/2022 09:47 PM	IQF Reviewer performed data entry review for CQAF form.	
02/03/2022 09:46 PM	IQF Data Entry submitted final copy.	
02/03/2022 09:30 PM	OVF Manager quarantined CQAF form.	
05/13/2021 03:56 PM	OVF Manager approved CQAF form for analysis.	
05/13/2021 03:53 PM	IQF Manager performed data entry review for CQAF form.	
05/13/2021 03:51 PM	IQF Reviewer performed data entry review for CQAF form.	
05/13/2021 03:20 PM	IQF Data Entry submitted final copy.	
1		

- **Notes** Allows the user to view the notes added to the form. This feature works the same as Add Note. Please see <u>Add Note</u> above.
- **Analysis Levels** Allows the User to view level of analysis for each test in the record (Figure 2-17). Once Analysis Levels are viewed, simply close the window by selecting the "X" in the upper right-hand corner to return to Dashboard screen.

0B-418-A OVF2112130800			×
🧊 Analysis Levels			
Analysis Group	Material Application	Value Field	Level of Analysis
Hydraulic Cement Concrete	HCC - Structural Complete Mixture	Corrected Air Content	1 - Continuous Analysis
Hydraulic Cement Concrete	HCC - Structural Complete Mixture	Average Strength	1 - Continuous Analysis
Hydraulic Cement Concrete	HCC - Structural Complete Mixture	Slump	2 - Independent Verification
Hydraulic Cement Concrete	HCC - Structural Complete Mixture	Concrete Temperature	2 - Independent Verification
Hydraulic Cement Concrete	HCC - Structural Complete Mixture	Concrete Temperature	3 - Observation Verification

Figure 2-17: Options - Analysis Levels

• **Print View** – Allows the user to print a PDF of the form. A separate window will appear allowing the user to save or print the PDF file created.

2.3.2.4 Today's Concrete

Allows users to search and display concrete test specimens due for testing on a Break Date selected by the user (Figure 2-18). I2MS will only allow the user to see the list of Sample IDs with concrete test specimens due for a specific date (Figure 2-19). It will not allow the Data Entry clerk to view or edit the test records from this screen.

My Inbox	Queue Explorer	Search Res	sults	Today's	Concr	ete												
Queue OVF Data Entry Queue +												Bre	ak Da	ite	01/10	/2022		
Sample ID Sampled Date Form Name As				ee s	₽						er 2021	1 - Jan	uary					►
				Hooigilee op	-		Dece	ember	2021					Jan	uary 2	2022		
OVF2112130800	12/13/2021	DB-418-A		2	8 S	М	т	W	Т 2	F	S 4	S	М	т	w	т	F	S
					5	6	7	8	9	10	11	2	3	4	5	6	7	8
					12	13	14	15	16	17	18	9	10	11	12	13	14	15
					19	20	21	22	23	24	25	16	17	18	19	20	21	22
					26	27	28	29	30	31		23	24	25	26	27	28	29
												30	31					
										Т	oday	No	ne					

Figure 2-18: Today's Concrete – Select Date

Figure 2-19: Today's Concrete Results

My Inbox	Queue Explorer	Search Results	5 Today	y's Concrete				
Queue OVF Data Entry Queue • Break Date 01/10/2022								
Sample ID	Sampled Date	Form Name	Assignee	Specimen Age	Status	Notes	For Analysi	
OVF2112130800	12/13/2021	DB-418-A	'	28	Reviewed	0		Options

SECTION 3 - RECORD WORKFLOW - DATA ENTRY, REVIEW, AND APPROVAL

3.1 General Comments

The Materials Module provides web-based test forms which allow users to enter laboratory and field testing results. It also allows the CQAF (IQF) to transmit the data directly into I2MS from their own testing management software. This section explains the basic functions of how to access test forms, general rules for entering data, how to print test reports, and reviewing, approving and searching for records. The test forms typically function in the same manner as their corresponding TxDOT Site Manager forms. There are specific smart header fields that have pull-down menus and required inputs that the user "must enter" before continuing. Please note the importance of using CVL (Controlled Vocabulary List) as definitive descriptive alpha and numeric entries that allow for consistency in header field records for both the OVF and CQAF (IQF).

3.2 Entering Materials Testing Data (OVF)

The steps below describe entering materials testing data for the OVF. Similar steps are used to enter CQAF (IQF) testing data.

- Step 1. From the Dashboard screen, choose the Select Form button on the Navigation Bar.
- Step 2. Choose OVF to initiate the form selection.
- Step 3. Select the test form needed from the drop down by selecting and clicking on the form number (Figure 3-1). As the user scrolls through the list of test forms, the selected form will have a blue background.

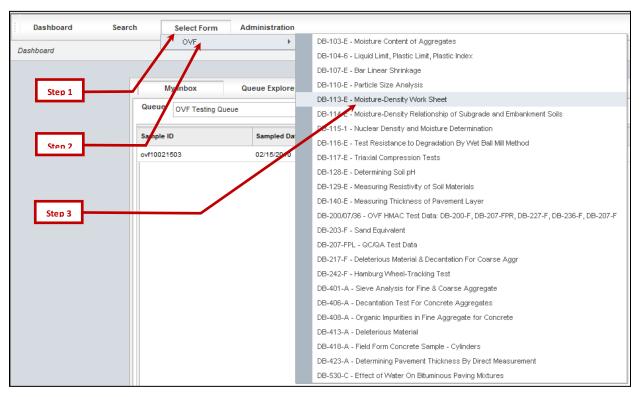


Figure 3-1: Test Form Selection

Step 4. Figure 3-2 shows a typical test form with the header, body and footer sections shown.

User will enter sample information into the record header (Figure 3-3). For fields with a drop-down list (where an upside-down triangle is shown), select the appropriate entry from the list. For the fields without drop down lists, type in the entry for that field.

Contraction	OAK HILL PARI Determining So DB-128-E	oil PH		Owner:OVF Revision Date:06/0	-	
SAMPLE ID:		SAMPLED DA	ATE:		I	Record
SAMPLE TYPE:	•	SPLIT SAMPI	LE ID:			
REPORT TYPE:	Original -	SECTION:			•	Header
SAMPLED/INSPECTED BY:	•	SPEC YEAR:		2014		
MATERIAL:		SPEC ITEM:			-	
SUPPLIER/PRODUCER:	•	SPECIAL PR	OVISION:		-	
STRUCTURE NUMBER:	-	GRADE:			-	
SAMPLE LOCATION:			FEATURE:		•	
COURSE/LIFT:	DIRECTION:	-	ROADWAY:		•	
STATION:	DIST FROM CL, FT.:		MISC:			
Test Method: DB-128-E Remarks:	Tested By:	Teste	d Date:	Stamp Code:		Body
Reviewed By: Authorized By:	Completed Date: Completed Date: Authorized Date:					Record Footer
Firm Name: USS Federat Firm Number: 84541	ion Enterprises		A	uthorized By Signature:		
				Save Draft Submit Fin	update Ca	alculations Dashboard

Figure 3-3: Header Drop-Down Example

Toxas Department of Transportation	P/	OAK HILL PARK ARTICLE SIZE AN DB-110-E	Owner:OVF Testing Revision Date:06/01/2009		
SAMPLE ID:			SAMPLED DA	TE:	
SAMPLE TYPE:		-	SPLIT SAMPL	.E ID:	
REPORT TYPE:	Original	SECTION:		▼	
SAMPLED/INSPECTED BY:			SPEC YEAR:		2014
MATERIAL:	SPEC ITEM:			•	
SUPPLIER/PRODUCER:		-	SPECIAL PRO	OVISION:	•
STRUCTURE NUMBER:		•	GRADE:		
SAMPLE LOCATION:				FEATURE:	1
COURSE/LIFT:		ROADWAY:		1	
STATION:		DIST FROM CL, FT.:		MISC:	2 3
					SHOWN_ON_PLANS

Step 5. Once all the required data (see <u>Section 3.2.1</u> below for required header information) is entered into the form, press Update Calculations button at the bottom of the form to update the calculated fields in the test form (Figure 3-4). If the form is ready for review and approval go to Step 6, if any information is still missing, update the information and press Update Calculations again.

Reviewed By:		Completed Date:		
	•	I		
Authorized By:		Authorized Date:		
				Authorized By Signature:
Firm Name: USS Federation Enterp Firm Number: 84541	rises			
	Save Dra	ft Submit Final	Update Calculations	Dashboard

Figure 3-4: Updating Calculations

Step 6. Once the form has been updated and the results reviewed, each form has a footer below the test results where values for Tested By, Tested Date and the Stamp Code are recorded, as shown in Figure 3-5.

Figure 3-5: Stamp Codes

Test Method		Tested By:		Tested Date	e:	Stamp Code:	
DB-401-A	Owen Van Field		٠	03/23/2021		1 - Pass	4
						0 - Not Assigned	
Remarks:						1 - Pass	
						2 - Engineering Decision	on 🔤
						5 - Fail	
Reviewed By:		Completed Date:				9 - Informational	
	-						
Authorized By:		Authorized Date:					

The following stamp codes are available.

• Stamp Code #0 – Not Assigned, should not be used.

- Stamp Code #1 Pass, indicates a test report with results that meet specification requirements.
- Stamp Code #2 Engineering Decision (Judgment), indicates a test report with results that do not meet specification, but Engineering Judgment was used to accept the material.
- Stamp Code #5 Fail, indicates a test report with results that failed to meet specifications.
- Stamp Code #9 Informational, indicates a tests report that is used for informational purposes only and is not for acceptance or included in the analysis.

If the Stamp Code is set to Engineering Decision or Informational, the Remarks field can be used to capture any corresponding information, such as the context of acceptance and the Engineer exercising acceptance.

Step 7. Once form has been fully updated, including Stamp Code, the user can either "Submit Final" for the I2MS Testing Manager to review or "Save as Draft" using the buttons, as shown in Figure 3-6. "Save Draft" allows the technician to save the test data entered so far, and access it later after completion of the test, to complete the form.

Reviewed By:	Completed Date:	
		
Authorized By:	Authorized Date:	
		Authorized By Signature:
Firm Name: USS Federation Enterprises		
Firm Number: 84541		
Save Dr	aft Submit Final Update	Calculations Dashboard

Figure 3-6: Final Submittal or Save Draft

The OVF and CQAF (IQF) forms have different functionality. The OVF forms includes the ability to enter raw data and calculate results. For the CQAF (IQF), the calculations have been turned off and all the fields, including test results, need to be filled in manually. Correspondingly, the "Update Calculations" button (reference Section 3.2, Step 5) is also not available on the CQAF (IQF) forms. Examples provided in this manual use the OVF version of the web-based forms.

3.2.1 Header Information

One of the primary reasons for defining specific header information on a test report is to define "buckets" for which the data will be grouped and analyzed (Figure 3-7). As an example, the concrete Material Code (i.e., mix ID), Supplier/Producer, Spec Item, and Grade in the header field not only identifies the material being tested but also serves as a method to group various test results pertaining to the same mix design. Once grouped, CQAF (IQF) and OVF test results can be analyzed for verification purposes.

Toxas Department of Transportation	FIELD FORM DB-418-A, 414		Re	Owner:OVF Tes evision Date:06/01/20	-			
SAMPLE ID:	TestSample#1		SAMPLED DA	TE:	12/14/2021			
SAMPLE TYPE:	Random Independent			SPLIT SAMPL	E ID:			
REPORT TYPE:	Original			SECTION:				+
SAMPLED/INSPECTED BY:	Owen Van Field		-	SPEC YEAR:		2014		
MATERIAL:	CON.ClassC		٠	SPEC ITEM:		416		4
SUPPLIER/PRODUCER:	Concrete Supplier 1		-	SPECIAL PRO	VISION:			4
STRUCTURE NUMBER:			-	GRADE:		С		+
SAMPLE LOCATION:					FEATURE:	Drilled Shaft		•
COURSE/LIFT:	DIRECTION:			•	ROADWAY:			•
STATION:	DIST FROM CL, FT.:				MISC:			

Figure 3-7: Header	Example
--------------------	---------

All the forms have fields in the header that are required and others that are optional. The **required fields** are shown in Figure 3-7 above and include:

- Sample ID
- Sampled Date
- Sample Type
- Report Type
- Sampled/Inspected By
- Material
- Supplier/Producer
- Spec Item
- Grade
- Feature

Within the test form itself, the shaded fields are inputs, and the clear fields are calculated or filled in automatically by the application. Below is an explanation of the different required header functions.

Sample ID - The Sample ID is a numeric or alphanumeric label that is used by the respective testing firms to track individual samples. A sample with multiple tests does not need separate Sample IDs for each test. Web-based forms which utilize multiple tests include DB 104-106. DB 200/07/36, and DB 418. A sample is taken by the field technician and a single Sample ID is assigned. The aforementioned forms allow the laboratory to perform multiple tests on a single sample. The same Sample ID can be used for a material that will have multiple tests that use different I2MS forms. For example, the following tests can be performed on the same concrete sand sample using the same Sample ID: DB-203-F, DB-401-A, DB-402-A, DB-408-A, DB-413-A. However, two identical same Sample IDs cannot be used for the same I2MS form. An error message will appear at the top of the test form if a Sample ID has previously been used for that I2MS form. The Sample ID format should be consistent for each testing group (i.e. within OVF Sample IDs or within CQAF (IQF) Sample IDs) and should clearly indicate the Sampled Date and the technician taking the sample or performing the test. An example format is YYMMDDFML-## where "YYMMDD" represents the date, "FML" represents the technician's first, middle and last initials, and "##" represents the sequential number of a sample/test taken on a given date.

Sampled Date - The sampled date is the date the material was sampled in the field and/or the field test was performed. Enter the date by selecting the calendar or typing in the date.

Sample Type – The sample type is used to differentiate how a sample or test location was determined. It is important to determine if a sample/test location was randomly determined and/or independently determined based on the descriptions below.

- **Random sample** The sample location was identified by applying a random number methodology to the entire sample lot such that each identifiable portion of the lot has an equal opportunity to be sampled/tested (Figure 3-8). The method used to determine random samples should be described in the Owner Construction Quality Management Plan (CQMP) and Verification Testing and Inspection Plan (OVTIP).
- Independent sample OVF and CQAF (IQF) test samples are obtained independent of one another.

A brief explanation of each sample type available in I2MS is given below.

- Random Independent Sample/test location that was obtained independent of either the OVF or CQAF (IQF) sample with the sample location identified by applying a random number methodology.
- **Random Split** Sample/test location where a random number was used to obtain the location for a sample to be tested by the CQAF (IQF) and OVF.
- **Fixed Independent** Sample/test location was not determined by applying a random number methodology. For example, the location may have been selected to address a localized area of concern.

- **Fixed Split** Sample/test location of a split sample is determined by any method other than applying a random number methodology.
- Internal Sample/test that is performed for a firm's internal use, such as periodic quality control of testing methods or equipment.
- Not Incorporated Sample/test designation used when a test report has been previously entered into I2MS, but the material has been removed and replaced. In this case, the sample type needs to be changed to Not Incorporated to exclude the record from analyses. Also, the Sample Type should be changed to Correction.

Toxas Department of Transportation	OAK HILL PAR PARTICLE SIZE A DB-110-E	N/			Owner:OVF Test Revision Date:06/01/200			
SAMPLE ID:			SAMPLED DA	TE:				
SAMPLE TYPE:			SPLIT SAMPL	E ID:				
REPORT TYPE:			SECTION:				-	
SAMPLED/INSPECTED BY:	Fixed Independent		SPEC YEAR:		2014			
MATERIAL:	Fixed Split		SPEC ITEM:				*	
SUPPLIER/PRODUCER:	- Internal		SPECIAL PRO	VISION:			-	
STRUCTURE NUMBER:	Not Incorporated Random Independent		GRADE:				-	
SAMPLE LOCATION:	Random Split	_		FEATURE:			-	
COURSE/LIFT:	Sample Type Example		+	ROADWAY:			*	
STATION:				MISC:				

Figure 3-8: Sample Type

When the CQAF (IQF) obtains a sample randomly, and the OVF desires to split the sample, then the Sample Type for the CQAF (IQF) should be designated as "Random Split" and the OVF should designate their sample as "Fixed Split." To be included in the statistical analysis for verification, the sample must be designated as a random Sample Type in I2MS. Based on the example above, it is imperative that both laboratories have a clear understanding on how to designate the sample type well before production begins.

Report Type – Report type is defaulted to original. If there is a retest or correction of an original test, this will need to be changed to indicate the appropriate report type. The default original report type is shown in Figure 3-9. This is the test as it is first submitted to I2MS.

Correction is used if a correction needs to be made to any information in the test form. Correction should also be used for hydraulic concrete test forms for submitting 28-day strengths when 7-day strengths were already submitted in an original test form.

Retest is used when the sample is retested. It can also be used when a Fixed-Independent test is used to retest a location that previously failed a random-independent test (original random-independent test).

Only the latest version of a test is used in analyses.

Texas Department of Transportation	PA	OAK HILL PARK RTICLE SIZE AN DB-110-E			Owner:OVF Testin Revision Date:06/01/2009	0
SAMPLE ID:			SAMPLED DA	TE:		
SAMPLE TYPE:		*	SPLIT SAMPL	E ID:		
REPORT TYPE:	Original		SECTION:			*
SAMPLED/INSPECTED BY:			SPEC YEAR:		2014	
MATERIAL:	Correction		SPEC ITEM:			-
SUPPLIER/PRODUCER:	Original		SPECIAL PRO	VISION:		-
STRUCTURE NUMBER:	- Retest		GRADE:			-
SAMPLE LOCATION:			•	FEATURE:		-
COURSE/LIFT:		DIRECTION:	•	ROADWAY:		-
STATION:		DIST FROM CL, FT.:		MISC:		

Figure 3-9: Report Type

Sampled/Inspected By - This field is used to identify the certified technician who sampled the material or performed the field tests.

Material – This field is used to identify the Material Code for a definable material, which is controlled by CVL and agreed upon by the CQAF (IQF) and OVF. It can vary from the proctor number for a soil or base course, a mix ID for hydraulic cement or hot-mix asphalt, or material code for a particular supplier's aggregate.

Supplier/Producer - This field is used to identify the supplier or producer of the material that is being sampled and/or tested.

Spec Item - This field is used to identify the specification item that calls for the test to be performed and the specifications of the material.

Grade – This field is used to identify the grade, mix type, or class of a material as defined by the specification or the CVL agreed upon between the CQAF (IQF) and OVF. It is a drop down and will often trigger and populate other fields in the forms, such as the sieve sizes and specification requirements.

Feature – This field is a dropdown and is used to identify the feature of work where the material is incorporated. Typically, it is used to describe the type of structure, such as a drilled shaft backfill or footing, or may be used to designate the stationing used to locate the sample, such as a mainlane or frontage road.

The remaining header fields that are not required also serve a purpose in identifying the sample/test location and should be filled out to the best of one's ability. This makes it easier

to track down the sample/test location should the need arise to identify material impacted by a failing test or if a further investigation is needed in the future.

3.2.2 Ad Hoc Form Features

Ad Hoc forms have recently been added to the current version of I2MS to reduce/eliminate manual analyses done outside I2MS. Only the final results for the test are entered into these forms. These forms do not have any other test information or calculations. Examples below are the DB-145-E, Sulfate Content (Figure 3-10) and DB-148-E, Organic Content (Figure 3-11).

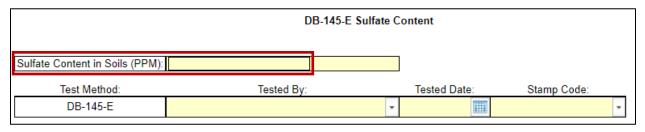


Figure 3-10: DB-145-E Example

Figure 3-11: DB-148-E Example

	E)B-148-E Organic	c Content	
Organic Content in Soils (%):				
Test Method:	Tested By:		Tested Date:	Stamp Code:
DB-148-E		*		*

3.3 Approval Workflow

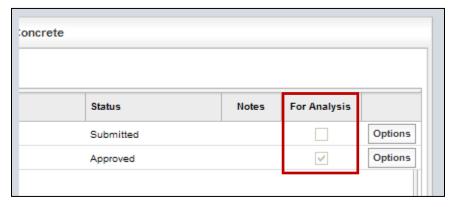
The approval workflow process, as shown in Appendix A (Figure A-1), is for OVF test reports. There are three steps in the workflow.

- **Data Entry:** Once a test report is entered by the Data Entry clerk or technician, the Submit Final button is selected and the status of the report is assigned as Submitted. The test report is now in the Data Entry Review Queue.
- Data Review: Upon review by the Data Entry Reviewer, the test report may be reviewed and sent to the OVF Testing Manager for approval or rejected back to the Data Entry clerk for corrections. If the test report is sent to the OVF Testing Manager

for approval, the status is changed from Submitted to Pending and the form is moved from the Data Entry Review queue to the OVF Testing Approval queue.

• Data Approval: At this point, the I2MS Testing Manager has the option of including the data in the analysis or quarantining the report for further action. If quarantined, the report is sent back to the Data Entry clerk for review, correction, and submittal back to the I2MS Testing Manager. The Data Entry Reviewer does not review quarantined reports.

For concrete strength testing, the approval workflow allows the I2MS Testing Manager to cycle the report back to the Data Entry clerk to enter remaining data (i.e., 2-day, 7-day, 28-day strengths). The "For Analysis" box is automatically checked (Figure 3-12), so that the test report can be included in the database for future analysis. This option allows the Materials I2MS Testing Manager to analyze data while the report is cycled back through the workflow process. As an example, 7-day strengths can be analyzed while the 28-day information is pending. See Appendix A for a graphical representation of the DB-418-A approval workflow. If the I2MS Testing Manager does not want the data automatically included in the database for analysis, the box can be manually unchecked.





If the user has edited a test form, they will not be able to review or approve it. Likewise, if the user has approved a test form and if it is rejected later, they cannot edit it.

3.3.1 Reviewing and Submitting Test Reports

The following steps allow the Data Entry clerk or technician to view reports for correction and to submit reports for review/approval.

Step 1. Select Dashboard from the Home Screen. Select either the Data Entry or Quarantine queue as shown in Figure 3-13. These queues are populated with

records that have been either saved as a draft by the Data Entry clerk, rejected during the review process by the Data Entry Reviewer or quarantined by the I2MS Testing Manager.

Figure 3-13: Step 1 – Dashboard, Select OVF Data Entry Queue or OVF Quarantine

Dashboard	Search Select	Form Administratio	on			ull]	[2M
ashboard			Log	ged in: OVF Data	Entry Log		
My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue OVF Data Entr		•					
Sample ID OVF Data Entr		n Name	Assignee	Status	Notes	For Analysis	
OVF21121		207-FPL	OVF Data Entry	Draft			Options
OVF21121		406-A	OVF Data Entry	Draft			Options
		104-6	OVF Data Entry	Draft			Options

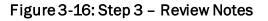
Step 2. Choose a record to view by selecting the Options button on the far right-hand side of the report and select View Form (Figure 3-14).

My Inbox	Queue Explorer	Search Results	Today's Concrete					
Queue OVF Data Entry C	lueue	•						
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis		
OVF2112151600	12/15/2021	DB-207-FPL	OVF Data Entry	Draft			Option	iew Form
OVF2112141430	12/14/2021	DB-406-A	OVF Data Entry	Draft			Options E	dit Form
OVF2112101545	12/10/2021	DB-104-6	OVF Data Entry	Draft			Options A	dd Note
							H	istory
							N	otes
							A	nalysis Level
								rint View

Step 3. Review any notes from the I2MS Testing Manager or Data Entry Reviewer by selecting Notes under Options or select the number under the Notes column (Figures 3-15 and 3-16).

					*	Queue	Queue OVF Data Entry
	nalysis	Notes	Status	Assignee	Form Name	Sampled Date	Sample ID
s View Form		1	Rejected		DB-101-E, Part III	12/09/2021	OVF2112091645
s Edit Form			Draft	OVF Data Entry	DB-104-6	12/10/2021	OVF2112101545
Add Note	 O 		Reviewed		DB-418-A	12/13/2021	OVF2112130800
	0		Draft	OVF Data Entry	DB-406-A	12/14/2021	OVF2112141430
Notes Analysis Le	0		Draft	OVF Data Entry	DB-207-FPL	12/15/2021	OVF2112151600

Figure 3-15: Step 3 - Select Options - View Notes



DB-101-E, Part III OVF211	12091645		×
Notes			
Date	From	Note	
02/04/2022 08:36 PM	OVF Manager	Verify that Material Code is correct for this material.	
Add a Note			
			//
		Submit	

Step 4. If corrections are necessary, select the Options button on the far right and choose Edit Form and complete necessary fields (Figure 3-17).

Figure 3-17: Step 4 – Select Options – Edit Form

			Today's Concrete	Search Results	Queue Explorer	My Inbox
				•	lueue	Queue OVF Data Entry
es For Analysis	Notes	Status	Assignee	Form Name	Sampled Date	Sample ID
Options View Form	1	Rejected	· · · · · · · · · · · · · · · · · · ·	DB-101-E, Part III	12/09/2021	OVF2112091645
Options Edit Form		Draft	OVF Data Entry	DB-104-6	12/10/2021	OVF2112101545
Options Add Note		Reviewed		DB-418-A	12/13/2021	OVF2112130800
Options History		Draft	OVF Data Entry	DB-406-A	12/14/2021	OVF2112141430
Options		Draft	OVF Data Entry	DB-207-FPL	12/15/2021	OVF2112151600
Analysis Lev						

Step 5. Select the Submit Final button at the bottom of the form (Figure 3-18).

Figure 3-18: Step 5 – Submit Final

Aut	horized By Signa	ature:	
Save Draft	Submit Final	Update Calculations	Dashboard

Step 6. The Data Entry Clerk can add a note to the I2MS Testing Manager or Data Entry Reviewer regarding the correctness of the data entry. To add a note select the Option button at the far right, enter the comment, then select Submit at the bottom of the form (Figure 3-19 and 3-20).

Figure 3-19: Step 6 – Add Note

Queue OVF Data Er	try Queue	•					
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis	
OVF2112091645	12/09/2021	DB-101-E, Part III		Rejected	1		Options View Form
OVF2112101545	12/10/2021	DB-104-6	OVF Data Entry	Draft			Options Edit Form
OVF2112130800	12/13/2021	DB-418-A		Reviewed		~	Options Add Note
OVF2112141430	12/14/2021	DB-406-A	OVF Data Entry	Draft			Options History
OVF2112151600	12/15/2021	DB-207-FPL	OVF Data Entry	Draft			Options Analysis Le

Figure 3-20: Step 6 – Enter Note and Select Submit

DB-101-E, Part III OVF211	2091645		×
Notes			
Date	From	Note	
02/04/2022 09:40 PM	OVF Data Entry	Correct Material Code was verified and entered.	
02/04/2022 08:36 PM	OVF Manager	Verify that Material Code is correct for this material.	
Add a Note			=
		Submit	

3.3.2 Approving or Quarantining Test Reports

The I2MS Testing Manager has the user rights to either approve a test report to be included in the analysis or to quarantine a report for further correction. The drop-down queues available to the I2MS Testing Manager are shown in Figure 3-21.

Му	Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue	OVF Testing Approv	al Queue	*					
	OVF Testing Approv						1	
Sample ID (OVF Data Entry Que	eue	n Name	Assignee	Status	Notes	For Analysis	
OVF21121	OVF Data Entry Rev	iew Queue	110-E		Pending	4		Options
	OVF Quarantine		I01-E, Part III		Pending			Option
IQF211213	CQAF Data Entry Q	ueue	200/07/36		Pending			Option
IQF211214	CQAF Data Entry Re	eview Queue	104-6		Pending			Option
IQF211214	DB Review Queue		140-E		Pending			Option
QF211214	CQAF Quarantine	×	418-A		Pending			Option
OVF211214	1700	12/14/2021	DB-207-FPL		Pending			Option

Figure 3-21: I2MS Testing Manager's Queues

- Step 1. To approve or reject test records, access either the OVF or CQAF (IQF) testing approval queue from the Dashboard shown as OVF Testing Approval Queue and DB Review Queue. Notice the Status of the records is Pending (Figure 3-22).
- Step 2. Choose a record to view by selecting the Option button on the far right-hand side of the report and select View Form. Select Notes if the reviewer wants to see all of the notes attached to the form.

My Inbox	Queue Explorer	Search Results	Today's	Concrete					
Queue OVF Testing App	roval Queue	•				_			
Sample ID	Sampled Date	Form Name		Assignee	Status	Notes	For Analysis		
OVF2112131400	12/13/2021	DB-110-E			Pending	4		Options Vi	ew Form
OVF2112131630	12/13/2021	DB-101-E, Part III			Pending			Options Ad	dd Note
IQF2112131530	12/13/2021	DB-200/07/36			Pending			Options Hi	story
IQF2112140915	12/14/2021	DB-104-6			Pending			Options No	
IQF2112141230	12/14/2021	DB-140-E			Pending			Options Ar	
IQF2112141100	12/14/2021	DB-418-A			Pending			Options	int View
OVF2112141700	12/14/2021	DB-207-FPL			Pending			Options	

Figure 3-22: I2MS Testing Manager's Queues

Step 3. (All Forms except DB-418-A) After reviewing the form select the Approve for Analysis button at the bottom of the page to approve the form (Figure 3-23).

Figure 3-23: I2MS Testing Manager's Approve Buttons -	- All Forms Except DB-418-A
---	-----------------------------

Authorized By Signature:			
Approve for Analysis	Quarantine	Print View	Dashboard

Step 4. For DB-418-A only: After reviewing the form including the field test results, select the Review button to approve the field tests for analysis (Figure 3-24). The test record will return to the Data Entry clerk for future strength test results while the test results will be available for analysis. If 7-day breaks are entered and submitted for review, the Review button can be selected again to return to the Data Entry clerk for future strength test results will be available for analysis. Once the final breaks are entered (typically 28-day breaks), the I2MS Testing Manager can then select Approve for Analysis. The new test results are made available for analysis, but the test record will not return to the Data Entry clerk.

Figure 3-24: I2MS Testing Manager's Review Buttons - OVF Form DB-418-A Only

]	

Step 5. If the I2MS Testing Manager wants to reject the record, a note can be added in the Add Notes. See <u>Section 2.3.2.3 Options – Add Notes</u>. Select the Quarantine button to send the report back to the Data Entry clerk for correction. Step 6. Once the Data Entry clerk makes the correction, the test record will go back through the workflow.

3.4 Searching for Test Reports

I2MS allows the user to search for test reports using a number of filters.

Step 1. Access the Search Module by selecting Search from the Navigation Bar and selecting the "Search Testing Forms" option (Figure 3-25).

Figure 3-25: Select Search Testing Forms

Dashboard	Search	Analysis	Reporting	Administration
Dashboard	Search Testing	Forms		
	L	ogged in: Materials I	Manager Logout	

Step 2. Use the drop-down menus to complete as many fields as desired (Figure 3-26).

Search Testing Fo	orms	
Owner	•	Special Prov. equals 👻
Sampled Date	>= • • <= • •	Structure No. No Selection
Form Name	•	Grade
Sample ID	equals 🔻 🕂	Sample Location equals +
Sample Type	No Selection	Direction equals v
		
Split Sample ID	equals 💌	Dist. from CL equals +
Approval Status	No Selection	Misc equals +
	•	
Segment	•	Roadway
Section	•	Modified By
Sampled By	•	Test No. equals 👻
Material	No Selection	Start Station equals +
	•	
Feature	•	End Station equals *
Spec Item	•	Tested By v
Supplier	•	Tested Date >= v minimum and v
		<= •
		Run Query

Figure 3-26: Search Testing Forms

If a field is left blank, the search will return all combinations for that field. For example, if the Owner is left blank, the search will return both OVF and CQAF (IQF) forms (Figure 3-27). However, if the OVF is selected, then only OVF test reports will be returned in the search results. Another example is that if Form DB-418-A is selected, all tests DB-418-A tests will be returned. However, if Grade (Class) C is also selected, all concrete tests that have Grade C will be returned.

Search Testing Fo	rms		
Owner		•	s
Sampled Date	OVF CQAF	and ▼	S
Form Name			G
Sample ID	equals 👻	+	s
Sample Type	No Selection	•	۵

Figure 3-27: Search Testing Forms – Option to Select Owner

Sample Date can be included as part of the search. The user can enter a date or choose a date from the calendar. In addition, there are options to search test records that are greater than and equal to the date or less than the date. The user can also select a date range by choosing the "and" or "or" option (Figure 3-28).

Figure 3-28: Search	Testing Forms	- Option to Se	elect Date Range
---------------------	---------------	----------------	------------------

orms	
•	Special
>= 🔻 🔠 and 👻	Structur
<	
<= or	Grade
	Sample
	Directio
<> •	
equals v	Dist. fro
	>= Image: Constraint of the second

Below is an example of how to search for test records within a date range (Figure 3-29.)

Figure 3-29: Search Testing Forms – Option to Select Date Range

Search Testing For	ms				
Owner				•	
Sampled Date	>= <=	•	10/01/2021	and 👻	
Form Name				•	
Sample ID	equ	als	-	+	
Sample Type			No Selection		

The user may select a Form Name from the drop-down menu (Figure 3-30).

Figure 3-30: Search Testing Forms – Option to Select Form Name

Search Testing Fo	rms	
Owner		*
Sampled Date	>= •	and 👻
	<= •	
Form Name		*
Sample ID		A
o	ASTM-DCP	
Sample Type	DB-101-E, Part III	
	DB-103-E	
Split Sample ID	DB-104-6	
Approval Status	DB-107-E	1
	DB-110-E	
	DB-113-E	
Segment	DB-114-E	
Section	DB-115-1	-

The user may search for a specific Sample ID using "equals" from the dropdown menu. In addition, there are other options to search for a Sample ID(s) by using one of the alternatives in the drop-down menu as shown below (Figure 3-31).

Owner		*
Sampled Date	>= v <= v	and +
Form Name		Ŧ
Sample ID	equals 🔹	+
Sample Type	equals	tion
Split Sample ID	begins with not like	
Approval Status	not equals	tion
	not begins	•

Figure 3-31: Search Testing Forms – Option to Select Sample ID

Sample ID, Sample Location, Direction, Dist. from CL, Misc., Test No., Start Station, and End Station have similar search options as shown below (Figure 3-32).

Figure 3-32: Search Testing Forms – Other Search Criteria Options like Sample ID

Owner		*		Special Prov.	equals	-	
		· ·			equals	· ·	
Sampled Date	>= *	i and	*	Structure No.	N	lo Selection	
	<= •	==					-
Form Name		•		Grade			•
Sample ID	equals 👻		+	Sample Location	equals	-	
Sample Type	like	ion		Direction	equals	*	
	equals	-			-		
	begins with						
Split Sample ID	not like			Dist. from CL	equals	-	
Approval Status	not equals	ion		Misc	equals	*	
	not begins	-		L			
Segment		•		Roadway			•
Section		•		Modified By			•
Sampled By		•		Test No.	equals	-	
Vaterial	No Select	ion		Start Station	equals	•	
		*					

By selecting the "plus" sign, the user can add another Sample ID option to search (Figures 3-33 and 3-34).

Search Testing Fo	rms	
Owner		•
Sampled Date	>= v <= v	and v
Form Name		•
Sample ID	equals 👻	+
Sample Type	No Selection	

Figure 3-33: Search Testing Forms - Sample ID using the "+"

Figure 3-34: Search Testing Forms - Sample ID using the "+"

Search Testing For	ms					
Owner					•	
Sampled Date	>=	Ŧ			and 👻	
	<=	Ŧ				
Form Name					•	
Sample ID	equa	als		Ŧ		and 👻
	like			٠		× +
Sample Type			No S	Sele	ction	

The user may choose the "+" sign to add as many Sample ID criteria as needed. If a Sample ID search criteria is not needed select the "X" to remove the bottom Sample ID criteria (Figure 3-35).

Owner		v					
Sampled Date	>= *		and 💌				
Form Name			•				
Sample ID	equals	-		and 🔻			
	like	-		× +			
	like	-					

Figure 3-35: Search Testing Forms - Sample ID using the "+"

For Sample Type, Approval Status, Material, and Structures there is an option to select multiple entries. To select multiple entries, use the left mouse button to select the drop-down menu and make a selection with the left mouse button. Then select the drop-down menu again to make another selection (e.g., Random Independent and Random Split). These fields will be used as filters during the search routine (Figure 3-36).

Owner		•	Special Prov.	equals 👻
Sampled Date	>= •	and 👻	Structure No.	BR 001 X
	<= v			BR 009 ×
				▼
Form Name	DB-418-A	•	Grade	C •
Sample ID	equals 🔹	+	Sample Location	equals 🔹
Sample Type	Not Incorporated	×	Direction	equais 🔹
	Random Independent	×		
	Random Split	×		
		•		
Split Sample ID	equals 👻		Dist. from CL	equals 👻
Approval Status	Approved	×	Misc	equals 👻
	Reviewed	×		
	Pending	×		
		•		
Segment	Segment 1	Ŧ	Roadway	SH 249 🔻
Section	A	v	Modified By	v
Sampled By	Anthony L. Sienkiewich	v	Test No.	equals 🔹
Material	0224902-MSETyAS	×	Start Station	equals 🔻
	0AGG.COARSETCS	×		
	0050445G4	×		
		v		
Feature	Abutment	•	End Station	equals 👻
Spec Item	421	•	Tested By	v
Supplier	Concrete Supplier 1	•	Tested Date	>= • 03/19/2022 🔠 and •
				<= •

Figure 3-36: Search Testing Forms

After all desired criteria are chosen, then select Run Query.

Step 3. When the Run Query button is selected, the user is automatically taken to the Search Results tab on the Dashboard to view the records returned from the search (Figure 3-37).

My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue All Queues		*			Print	All Return	to Search
Sample ID	Sampled Date	Sorm Name	Assignee	Status	Notes	For Analysis	
OVF2112130800	12/13/2021	DB-418-A	Search Results	Pending			Options
IQF2112130815	12/13/2021	DB-418-A	Search Results	Pending			Options
IQF2112141100	12/14/2021	DB-418-A	Search Results	Pending			Options
IQF2112141430	12/14/2021	DB-418-A	Search Results	Pending			Options
OVF2112140800	12/14/2021	DB-418-A	Search Results	Pending			Options
OVF2112141115	12/14/2021	DB-418-A	Search Results	Pending			Options

Figure 3-37: Search Results

Step 4. The user can then select Options and then select View Form. The search window will open the form in the same window (Figure 3-38).

Figure 3-38: Search -	Test Record Options
-----------------------	---------------------

My Inbox	Queue Explorer	Search Results	Today's	s Concrete					
Queue OVF Testing Ap	proval Queue	•				Print	All Return	to Search	
Sample ID	Sampled Date	Form Name		Assignee	Status	Notes	For Analysis		
OVF2112130800	12/13/2021	DB-418-A		Search Results	Pending			Options Vie	w Form
IQF2112130815	12/13/2021	DB-418-A		Search Results	Pending			Options Ad	d Note
IQF2112141100	12/14/2021	DB-418-A		Search Results	Pending			Options His	story
IQF2112141430	12/14/2021	DB-418-A		Search Results	Pending			Options No	
OVF2112140800	12/14/2021	DB-418-A		Search Results	Pending			Options An	
OVF2112141115	12/14/2021	DB-418-A		Search Results	Pending			Options	nt View

3.5 Printing Reports

Step 1. From the Search Results menu, the user has two options to print a record. Use the Options button to select the Print View command (Figure 3-39). A PDF file of the selected record will open in a new window that can be printed.

My Inbox	Queue Explorer	Search Results	Today's Concrete					
Queue All Queues		•			Print	All Return	to Search	
Sample ID	Sampled Date V	Form Name	Assignee	Status	Notes	For Analysis		
IQF2112141100	12/14/2021	DB-418-A	Search Results	Pending			Options Vi	ew Form
IQF2112141430	12/14/2021	DB-418-A	Search Results	Pending			Options Ad	dd Note
OVF2112140800	12/14/2021	DB-418-A	Search Results	Pending			Options Hi	
OVF2112141115	12/14/2021	DB-418-A	Search Results	Pending			Options	otes
OVF2112130800	12/13/2021	DB-418-A	Search Results	Reviewed		<	Options Ar	
IQF2112130815	12/13/2021	DB-418-A	Search Results	Quarantined			Option	rint View

Figure 3-39: Options - Print View

To select multiple records for printing, select the Print All button (Figure 3-40). A PDF file of the selected records will either be downloaded into the "Downloads" folder or open in a new window or in a pdf program. The number of records will be limited to a maximum of between 200 to 300 records (dependent the number of records that can be printed before the system times out).

Figure 3-40: Print All

My Inbox	Queue Explorer	Search Results	Today's Concrete				
Queue All Queues		-			Print	All Return	to Search
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis	
OVF21010701	01/07/2021	DB-418-A	Search Results	Submitted		~	Options
OVF2112130800	12/13/2021	DB-418-A	Search Results	Reviewed		<	Options
IQF2112130815	12/13/2021	DB-418-A	Search Results	Quarantined			Options
IQF2112141100	12/14/2021	DB-418-A	Search Results	Pending			Options
						_	

SECTION 4 – STATISTICAL AND VERIFICATION ANALYSES

4.1 General

TxDOT's verification is divided into three tiers or approaches based on the material being tested and the test method. Each test method in each material category is associated with a level of analysis. The System Administrator will set the levels of analysis as approved in the project-specific materials risk assessment workshop. These levels of analysis should not be changed during the project. More information on modifying the levels of analysis can be found in <u>Section 6.2.3.4.1 Analysis Configurations</u>.

4.2 Level 1 Analysis

Level 1 continuous statistical analysis is a key component in the FHWA quarterly report. It compares the means and variances of OVF and CQAF (IQF) test results . The p-values (from the F- and t- tests) are reported for each analysis and tracked over time. This approach enables TxDOT to efficiently monitor the validation status of each analysis category daily and allows for more timely action to address non-validation.

Additional information on how the Level 1 continuous analysis works can be found in Section 4 of the DB QAP Implementation Guide.

4.2.1 Performing a Level 1 Statistical Analysis with a Manual Trigger

The manual analysis trigger functionality is for the I2MS Testing Manager role only. To manually trigger the analysis, the I2MS Testing Manager will need to select the I2MS manual trigger link. Once the link has been selected and the I2MS Testing Manager is logged in, the manual trigger view will be shown (Figure 4-1). The I2MS Testing Manager will choose a date from the calendar for the analysis run. This date can be a previous date from the current date. If the I2MS Testing Manager wants to run analyses on all categories (Asphalt, Hydraulic Cement Concrete, and Soils and Aggregates), select Run. Triggering the analyses for all categories is recommended since it will run all available Level 1 analysis runs.

Dashboard	Search	Analysis	Reporting	Administration	III I2MS
Test Continuous Analysi	s				Logged in: OVF Manager Logout
12/14/2021	Run	Delete Runs Hydrau	lic Cement Concrete	~	Run by Category

Figure 4-1: Manual Analysis Trigger

A message at the top of the page will display how many runs were analyzed as shown in Figure 4-2.

	Dashboard	Search	Analysis	Reporting	Administration	ett 1	[2MS
Test	Continuous Analysis			 2 runs analyzed. 		Logged in: OVF Mar	ager Logout
12/1	4/2021	Run Dele	te Runs	Hydraulic Cement Concret	e 🗸	Run by Category	

Figure 4-2: Manual Analysis Trigger – 2 Runs Analyzed

If there are no new OVF tests to trigger an analysis, then the message will state that there were "0 runs analyzed" as shown in Figure 4-3.

Figure 4-3: Manual Analysis Trigger – 0 Runs Analyzed

8	Dashboard	Search	Analysis	Reporting	Administration	III I2MS
Tes	t Continuous Analysis			🚺 0 runs analyzed.		Logged in: OVF Manager Logout
12/*	15/2021	Run De	elete Runs H	ydraulic Cement Concre	te 🗸	Run by Category

If an analysis needs to be run on just one category, then the I2MS Testing Manager can choose the drop-down menu and select the appropriate category (Figure 4-4). Choose only one of the three categories: Asphalt, Hydraulic Cement Concrete, and Soils and Aggregates. This feature is available but should not be used unless the I2MS Testing Manager is confident this is the only category with available data for analyses.

Figure 4-4: Manual Analysis Trigger – Run By Category

Dashboard	Search	Analysi	is Reporting	Administration	1	III I2MS
Test Continuous Analysis					Logged in:	OVF Manager Logout
12/14/2021	Run	Delete Runs	Hydraulic Cement Concret Hydraulic Cement Concret Unit Testing Applications Unit Testing Applications - Soils and Aggregates Asphalt	te	Run by Category]

If the review of analyses indicates that test results were included in an incorrect analysis category, analyses for a given day may be deleted (Figure 4-5). The I2MS Testing Manager can delete the runs performed for a specific date, get the affected test results corrected and reapproved, and then re-run the analyses.

Dashboard	Search	Analysis	Reporting	Administration	III I2MS
Test Continuous Analysis	;				Logged in: OVF Manager Logout
12/14/2021	Run	Delete Runs Hydraulid	c Cement Concrete	~	Run by Category

Figure 4-5: Manual Analysis Trigger – Delete Analysis Runs

4.2.2 Reviewing a Level 1 Statistical Analysis

Step 1. From the Navigation Bar, select Level 1- Continuous Analysis from the Analysis drop down menu (Figure 4-6).

Figure 4-6: Analysis - Level 1 Continuous Analysis

		I2MS
Continuous Analysis	Logged in: OVE	Manager Legeut
	Logged III. OVI	Manager Logour
endent Verification		
rvation Verification	Today's Concrete	
e	endent Verification	Logged in: OVF endent Verification Today's Concrete

Step 2. The Current Analysis tab will be displayed showing results of the continuous analysis that was performed for each material application in which new data was analyzed. Figure 4-7 indicates "No data" for Asphalt and Hydraulic Cement Concrete which indicates that no new data was analyzed, however previous analyses can be found under the Historical Analyses tab.

> The Current Analysis tab provides the I2MS Testing Manager with a snapshot of the most current analyses and those analyses that require attention. Analyses that will appear on this tab are:

• Analyses performed yesterday

- Analyses that require a comment from the I2MS Testing Manager
 - o Non-validating analyses
 - Analyses that indicate continuously decreasing p-values (occurring three or more times in a row indicated by three downward red arrows)

When the results listed in the Current Analysis are addressed by entering a comment, those reports will no longer be shown under Current Analysis. They can be found under the Historical Analyses tab for future reference. Analyses that do not require a comment from the I2MS Testing Manager are automatically removed from the Current Analysis after one day and can be found under Historical Analyses.

Below, the only current analyses are in the Soils and Aggregates Analysis Group. Once the analyses have been reviewed and a comment added, then the analysis will no longer be shown under the Current Analyses but can be found under Historical Analyses.

Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
											No da
Hydraulic	Cement Concrete										
									1		
Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No da
Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No da
-		Test Method	Value Field		Supplier	Grade	Grade	Alpha	F p-value	t p-value	No da
 Soils and A 	Aggregates	_		Spec Item 5							No da

Figure 4-7: Current Analyses Tab

The OVF Testing Manager can monitor the status of validation for Level 1 analysis categories and record any action taken. Each line represents an analysis run for a given analysis category.

The green numbers represent F- and t-test p-values for analyses where the OV test results validate the CQAF (IQF) test results at the specified level of significance, and red numbers represent analyses that do not validate. Default levels of significance for each material

category can be found in the TxDOT DB QAP. These levels of significance were developed based on practical experience and are consistent with practices around the country.

The arrows to the left of the p-values indicate the trending of the moving F- and t- test analyses. Green upward arrows indicate a positive validation trend (increasing confidence in validation) and red downward arrows indicate a negative validation trend (decreasing confidence in validation). The number of arrows indicates how many times the analysis has moved in that direction, with a maximum of three arrows representing three or more movements in that direction. For example, a red number with one red downward arrow indicates that the material category is not validating and the last analysis indicated a decrease in the level of validation. I2MS enables TxDOT to evaluate these Level 1 tests practically in "real time" and take the necessary actions to proactively manage the project and minimize non-validation. The "details" button at the right of the screen allows TxDOT's Materials Manager to record comments on the current analysis, view historical F- and t- test analysis results and comments, view a plot of the IQF and OV tests results against the date of each test, and view specific test identification (sample date, tested by, material code, etc.) for each test in the analysis.

The Table 4-1 below describes various scenarios that indicates the p-values validation status and trending of F and t test analyses.

Icon	Description
Up arrow(s)	Up arrows are used to indicate the calculated p- value is trending up over time.
Down arrow(s)	Down arrows are used to indicate the calculated p-value is trending down over time.
Green calculated values	Indicates that the p-value is greater than the Level of Significance(α value).
Red calculated values	Indicates that the p-value is less than the Level of Significance (α value).

Step 3. Notice that the values shown in green (3.2%, 33.5% and 2.0%, 52.8%) with red arrow icons pointing down for each test value. To view the results of a specific analysis, select the Details button at the far right of each analysis run (Figure 4-8).

Figure 4-8: Current Analyses –	Select Details
--------------------------------	----------------

Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Alpha	F p-value	t p-value	
4/08/2022	Untreated Base Course	DB-106-E	Plastic Index	247	Martin Marietta - Jerico Pit	4	0.01	¥ 3.2 %	▼ 33.5 %	Details
4/08/2022	Untreated Base Course	DB-140-E	Average Depth:	247	Martin Marietta - Jerico Pit	4	0.01	2.0 %	▼ 52.8 %	Details

Step 4. The Details page (Figure 4-9) provides a general material description in the upper portion of the display and two tabs (Last 10 Analyses and the Data Sets) in the lower portion of the display.

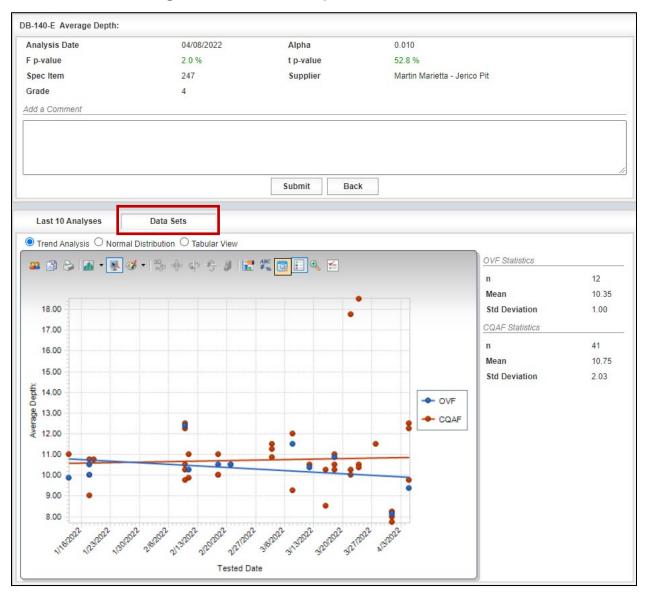
Note – The general material description provides CVL information to indicate which analysis category is shown in the analysis run.

The Last 10 Analyses is shown in Figure 4-9 and represents an overview of the last ten analyses that were performed for the material application. In this example, the α value for this material application is 0.010 or 1.0%. All analysis runs show validating results with p-values above the Alpha value. Since there are three down red arrows for the F-p-value (Figure 4-8), a comment must be entered for the analysis to be removed from the Current Analysis table. The I2MS Testing Manager will need to review the Data Sets tab to evaluate why this analysis is trending downward.

dd a Comment	2.0 % 247 4	Alpha t p-va Supp Submit	lue	52.8 % Martin Marietta - Jerico Pit	
dd a Comment				Martin Marietta - Jerico Pit	
	4	Submit	Back		
Add a Comment		Submit	Back		
Last 10 Analyses		Submit	Back		
Last 10 Analyses E		Submit	Back		
Last 10 Analyses E					
	Data Sets				
Analysis Date	nOV	nCQAF	F p-value	t p-value	Comments
04/08/2022	12	41	2.0 %	52.8 %	
03/22/2022	10	28	28.4 %	96.9 %	
03/17/2022	10	25	43.0 %	61.0 %	
03/12/2022	9	24	53.2 %	65.6 %	
02/23/2022	12	26	31.4 %	61.6 %	
02/17/2022	10	24	30.9 %	74.9 %	
01/19/2022	8	21	40.2 %	98.0 %	
01/14/2022	6	18	64.4 %	93.8 %	
01/03/2022	5	20	53.6 %	96.5 %	
12/13/2021	4	20	65.4 %	91.5 %	

Figure 4-9: Level 1 Analysis – Detail View – Last 10 Analyses

Step 5. To view various statistical parameters for the selected analysis run, the user can select the Data Sets tab as shown Figure 4-10.





Step 6. This Data Sets view provides the user with graphical results of:

• Trend Analysis – OVF and CQAF (IQF) test results graphed over time. OVF and CQAF (IQF) statistics are also displayed to the right of the graph (Figure 4-11).

Figure 4-11: Level 1 Analysis - Details – Data Sets – Trend Analysis

nalysis Date	04/08/2022	Alaba	0.010		
p-value	2.0 %	Alpha	52.8 %		
- Marken and a starter		t p-value			
pec Item rade	247	Supplier	Martin Marietta - Jerico	Pit	
	4				
ld a Comment					
		Submit Bac	k		
Last 10 Analyses	Data Sets				
1					
	Distribution O Tabular View				
🚨 🖹 🍃 🌆 🔹 💺 🚳	🌮 🎭 🐵 🗣 🖇 🚼	#% 🔽 🗄 🔧 🖆		OVF Statistics	
				n	12
			1 1	Mean	10.3
18.00				Mean Std Deviation	10.3
18.00				Contraction and the second	
17.00				Std Deviation	
				Std Deviation	1.00
17.00 16.00 15.00				Std Deviation CQAF Statistics n	1.00
17.00 16.00 15.00				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00			- OVF	Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00			- OVF CQAF	Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00 14.00 13.00 12.00 11.00				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00 14.00 13.00 12.00 10.00				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00 15.00 13.00 13.00 11.00 ●				Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00 14.00 13.00 12.00 11.00 9.00 8.00			CQAF	Std Deviation CQAF Statistics n Mean	1.00 41 10.75
17.00 16.00 15.00 15.00 13.00 13.00 11.00 10.00 9.00 8.00	12 215002 212002 202002 2021020		CQAF	Std Deviation CQAF Statistics n Mean	41 10.75

 Normal Distribution – Normalized distribution of OVF and CQAF (IQF) data (Figure 4-12).

DB-140-E Average Depth: 04/08/2022 0.010 Analysis Date Alpha F p-value 2.0 % t p-value 52.8 % Spec Item 247 Supplier Martin Marietta - Jerico Pit 4 Grade Add a Comment Submit Back Last 10 Analyses Data Sets 🚨 🔁 🔈 🔺 🖲 🧭 • 🤧 🔶 💠 🕂 🖉 🔚 🗞 😫 **OVF** Statistics 12 n 10.35 Mean 10 Std Deviation 1.00 9 CQAF Statistics n 41 8 Mean 10.75 7 Std Deviation 2.03 6 Frequency OVF 5 CQAF 4 3 2 1 0 9 12 10 11 13 14 15 16 17 18

Figure 4-12: Level 1 Analysis - Details - Data Sets - Normal Distribution

• Tabular View – Displays the raw OVF and CQAF (IQF) data used in the statistical analysis. A scroll bar is provided to view the data to the right of the screen as well as a "next" page feature at the bottom of the screen (Figure 4-13).

DB-140-	E Average D	epth:								
Analys	sis Date		04/08/2022	2 Alp	ha	0.010				
F p-va	lue		2.0 %	t p-	value	52.8 %				
Spec I	tem		247	Sup	oplier	Martin Mariet	ta - Jerico Pit			
Grade			4							
Add a C	Comment									
										1.
				Subn	nit Back					
		De	ta Sets							
	t 10 Analyses									
O Trer	nd Analysis	O Normal Distribu	ition 🔍 Tabular	View						
Owner	Tested Date	Average Depth:	Sample ID	Sampled Date	Sample Type	Split Sample ID	Report Type	Section	Sampled By	Spec Year
OVF	04/05/2022	9.375	JG220405-03A	4/5/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	04/01/2022	8.125	JG220401-04A	4/1/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	03/18/2022	10.875	JG220318-04A	3/18/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	03/12/2022	10.375	JG220312-01A	3/12/2022 12:00:00 AM	Random Independ		Original	Segmen	Juan J. Garcia	2004
OVF	03/08/2022	11.5	JG220308-01A	3/8/2022 12:00:00 AM	Random Independ		Original		Juan C Cast	2004
OVF	02/21/2022	10.5	JG220221-01A	2/21/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	02/18/2022	10.5	JG220218-03A	2/18/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	02/11/2022	10.25	JG220211-01A	2/11/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	02/10/2022	12.375	JG220210-04A	2/10/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	01/18/2022	10.5	JG220118-01A	1/18/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
OVF	01/18/2022	10	JG220118-03A	1/18/2022 12:00:00 AM	Random Independ		Original	Segmen	Juan J. Garcia	2004
OVF	01/13/2022	9.875	JG220113-02A	1/13/2022 12:00:00 AM	Random Independ		Original		Juan J. Garcia	2004
CQAF	04/05/2022	9.75	JAX2204050	4/5/2022 2:12:13 PM	Random Independ		Original	Segmen	Jocsan Pecero	2004
CQAF	04/05/2022	12.25	Scroll ba	022 2:13:18 PM	Random Independ		Original	Segmen	Jocsan Pecero	2004
CQAF	04/05/2022	2.5		022 2:14:05 PM		1	Original	Segmen	Jocsan Pecero	2004
•		/			Next page					F
14]		• •		-			Page 1 of 4 (5	3 items)

Step 7. The user can add a comment in the box in the upper portion of the display. Once the Submit key is selected, the comment will appear for the selected analysis run. The comment may discuss the trend in analysis status, actions taken as a result of this analysis run, or other relevant information to this analysis category. In the example shown in Figure 4-14, if the user entered a comment, it would be displayed for the 04/08/2022 analysis. Select the Submit key to save the results.

When the comment is added to the record, the BACK button on the I2MS user interface should be selected to navigate back to the Current Analysis tab. The user may not see the most recent actions/updates reflected if the web browser back arrow is used instead of the Back button in the I2MS user interface.

DB-140-E Average D	epth:								
Analysis Date		04/08/2022	2 Alpł	ha	0.010				
F p-value		2.0 %	t p-v	value	52.8 %				
Spec Item		247	Sup	plier	Martin Mariet	ta - Jerico Pit			
Grade		4							
Add a Comment									
Add Comment He									
			Subm	nit Back					
Last 10 Analyses	Da	ta Sets							
O Trend Analysis) Normal Distribu	tion 흐 Tabular	View						
Owner Tested Date	Average Depth:	Sample ID	Sampled Date	Sample Type	Split Sample ID	Report Type	Section	Sampled By	Spec Year

Figure 4-14: Level 1 Analysis - Details - Add a Comment

4.2.3 Reviewing a Level 1 Historical Analysis

Step 1. To view historical analyses, select the Historical Analysis Tab (Figure 4-15).

Current Anal	yses	Historical Ana	lyses									
Asphalt												
Analysis Date	Materia	al Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
												No data
 Hydraulic C Analysis Date 		Concrete al Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
-			Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No data
Analysis Date	Materia	al Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No data
Analysis Date	Materia	al Application	Test Method	·····			Grade	Material	Alpha	F p-value	t p-value	No data

Figure 4-15: Historical Analyses

Step 2. Then select the desired Analysis Group from the drop-down menu. If an analysis has run for an Analysis Group, the Analysis Group will show up in the drop down menu. In the example in Figure 4-16, the only analysis available is the Asphalt Analysis Group.

Current A	nalys	es	Historical	Analyse	8	
Analysis Gr	oup	Asphalt		-]	
Analysis Dat	Mater	Asphalt			hoi	Value Field
08/09/2021	مدم				=	Lab Molded Densit

Figure 4-16: Historical Analyses Tab – Select Analysis Group – Example 1

In the example in Figure 4-17, all three analysis groups are available to review since analyses have been performed for Asphalt, Hydraulic Cement Concrete, and Soils and Aggregates.

Analysis Gro	oup	Asphalt	*										Search
Analysis Dat	Mate	Asphalt Hydraulic Cement C	Concrete	ethoc	Value Field	Spec Iten	Supplier	Grade	Materia	Alpha	F p-value	t p-value	
04/08/2022	QCQ	Soils and Aggregate	es	7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	80.8 %	66.3 %	Details
04/08/2022	QCQ			5-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	4.1 %	53.4 %	Details
04/05/2022	QCQ			5-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	5.1 %	96.2 %	Details
04/05/2022	QCQ			7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	78.3 %	89.2 %	Details
03/30/2022	QCQ			7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	50.6 %	58.6 %	Details
03/30/2022	QCQ			6-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	4.3 %	69.4 %	Details
03/28/2022	QCQ			3-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	3.4 %	65.5 %	Details
03/28/2022	QCQ	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	66.5 %	57.6 %	Details
03/22/2022	QCQ/	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	97.4 %	89.0 %	Details
03/22/2022	QCQ/	AACP - Complete Mix.	DB-23	6-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	62.7 %	65.0 %	Details
03/17/2022	QCQ	AACP - Complete Mix.	DB-23	6-F	Asphalt Content, %:	344	DPJV A-1	344MixS	D#14	0.025	19.7 %	16.7 %	Details
03/17/2022	QCQ	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	344	DPJV A-1	344MixS	D#14	0.025	73.0 %	73.2 %	Details
01/31/2022	QCQ/	AACP - Complete Mix.	DB-20	7-F	In Place Air Void, %	341	Texas Cordia P	341MixT	D#03	0.025	6.0 %	33.3 %	Details
01/27/2022	QCQ	AACP - Complete Mix.	DB-20	7-F	In Place Air Void, %	341	Texas Cordia P	341MixT	D#03	0.025	74.9 %	80.8 %	Details
01/27/2022	QCQ	AACP - Complete Mix.	DB-23	6-F	Asphalt Content, %:	341	Texas Cordia P	341MixT	D#03	0.025	25.8 %	100.0 %	Details
01/27/2022	QCQ/	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	341	Texas Cordia P	341MixT	D#03	0.025	44.6 %	82.2 %	Details
01/05/2022	QCQ/	AACP - Complete Mix.	DB-20	7-F	In Place Air Void, %	341	Texas Cordia P	341MixT	110	0.025	72.0 %	82.8 %	Details
01/04/2022	QCQ	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	341	Texas Cordia P	341MixT	110	0.025	11.1 %	1.8 %	Details
01/04/2022	QCQ	AACP - Complete Mix.	DB-23	6-F	Asphalt Content, %:	341	Texas Cordia P	341MixT	110	0.025	70.0 %	2.7 %	Details
01/03/2022	QCQ	AACP - Complete Mix.	DB-20	7-F	Lab Molded Density	341	Texas Cordia P	341MixT	110	0.025	23.5 %	3.1 %	Details
14	•	0										Page 1 of	2 (32 item

Figure 4-17: Historical Analyses Tab – Select Analysis Group – Example 2

Step 3. To view the results of a specific analysis, select the Details button at the far right of the desired analysis run (Figure 4-18). Then follow Steps 3 through 7 as shown in <u>Section 4.2.2 Reviewing a Level 1 Statistical Analysis</u>.

01/27/2022 QCQAACP - Complete Mix... DB-236-F 341 Texas Cordia P.,. 341MixT.,. D#03 0.025 25.8 % 100.0 % Asphalt Content, %: Details 01/27/2022 QCQAACP - Complete Mix... DB-207-F... Lab Molded Density... 341 Texas Cordia P... 341MixT... D#03 0.025 44.6 % 82.2 % Details 01/05/2022 QCQAACP - Complete Mix... DB-207-F... In Place Air Void, % 0.025 72.0 % 82.8 % 341 Texas Cordia P... 341MixT... 110 Details Details 01/04/2022 QCQA ACP - Complete Mix... DB-207-F... Lab Molded Density... 341 Texas Cordia P.,. 341MixT.,. 110 0.025 11.1 % 1.8 % 01/04/2022 QCQA ACP - Complete Mix... DB-236-F Asphalt Content, %: 341 Texas Cordia P.,. 341MixT.,. 110 0.025 70.0 % 2.7 % Details 01/03/2022 QCQAACP - Complete Mix... DB-207-F... Lab Molded Density... 341 Texas Cordia P... 341MixT... 110 0.025 23.5 % 3.1 % Details -14 ▲] []= → | → | Page 1 of 2 (32 items)

Figure 4-18: Historical Analyses Tab – Select Details

4.2.4 Searching a Level 1 Statistical Analysis

A search tool is available for Level 1 Historical Analyses.

Step 1. From the Navigation Bar, select Level 1 – Continuous Analysis from the Analysis drop down menu (Figure 4-19).

Figure 4-19: Analysis -> Level 1 - Continuous Analysis

Dashboard Search	Analysis	Reporting Administ	ration				- III]	I2MS
Dashboard	Level 1 - Continuo	us Analysis				Logge	d in: OVF Mar	nager Logout
	Level 2 - Independent V	erification						
My Inbox	Level 3 - Observation Ve	Results	Today's Concrete					
Queue OVF Testing	Approval Queue	-						
Sample ID	Sampled Date	Form Name	Assignee	Status	Notes	For Analysis		
IQF2112140915	12/14/2021	DB-104-6	I	Pending			Options	
IQF2112141230	12/14/2021	DB-140-E		Pending			Options	
OVF2112141700	12/14/2021	DB-207-FPL		Pending			Options	
IQF2112131530	12/13/2021	DB-200/07/36		Pending			Options	
OVF2112131400	12/13/2021	DB-110-E		Pending	4		Options	
OVF2112131630	12/13/2021	DB-101-E, Part III		Pending			Options	

Step 2. Select Historical Analyses (Figure 4-20).

Dashboa	ard Sear	rch Analysis	Report	ting A	Administratio	n						at i	I2MS
Level 1 - Cont	inuous Analysis										Ŀ	ogged in: OVF Ma	inager Logout
	Current Analys	ses Historical An	alyses										
	Asphalt												
	Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value		
		1										No data	
	⊟ Hydraulic Ce	ment Concrete											
	Analysis Date	Material Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value		
												No data	
	Soils and Age	gregates											
	Analysis Date	Material Application	Test Method	Value Fi	ield Spe	c Item	Supplier	Grade	Alpha	F p-value	t p-value		
	-											No data	

Figure 4-20: Level 1 Historical Analyses

Step 3. Select Search (Figure 4-21).

Figure 4-21: Level 1 Historical Analyses - Search

Current A	nalyses Historica	l Analyses									
Analysis Gr	oup Asphalt	•	_							[Search
Analysis Dat	Material Application	Test Metho	Value Field	Spec Iten	Supplier	Grade	Material	Alpha	F p-value	t p-value	
03/31/2022	QCQAACP - Complete	DB-236-F	Asphalt Content, %:	3224	Austin Bridge & Road	341MixTyB	BP1B	0.025	87.5 %	9.2 %	Details
03/31/2022	QCQAACP - Complete	DB-207	Lab Molded Densi	346	Reynolds Asphalt Sa	346MixS	1914F	0.025	26.8 %	55.1 %	Details
03/31/2022	QCQAACP - Complete	DB-207	Lab Molded Densi	3224	Austin Bridge & Road	341MixTyB	FT1B	0.025	95.6 %	25.8 %	Details
03/31/2022	QCQAACP - Complete	DB-207	Lab Molded Densi	3224	Austin Bridge & Road	341MixTyB	BP1B	0.025	19.4 %	74.5 %	Details
03/31/2022	QCQAACP - Complete	DB-236-F	Asphalt Content, %:	3224	Austin Bridge & Road	341MixTyC	FT1C	0.025	0.0 %	0.0 %	Details
03/31/2022	QCQAACP - Complete	DB-207	Lab Molded Densi	3224	Reynolds Asphalt Sa	341MixTyC	1114C	0.025	92.6 %	100.0 %	Details

Step 4. The Search Continuous Analysis tool has several different parameters the user can select from drop-down menus to define the search (Figure 4-22).

Analysis Group	sphalt	*			
Analysis Date	>= •	and -	t p-value	>= •	and -
Material Application		•	Spec Item		•
Test Method		-	Supplier		*
Value Field		-	Grade		*
Alpha	< •		Material		*
F p-value	>= •	and -			
	<= •				

Figure 4-22: Level 1 Historical Analyses – Search Continuous Analysis

Step 5. Once the user has chosen the parameters, select the Search button to perform the search (Figure 4-23).

Figure 4-23: Level 1 Historical Analyses – Search Continuous Analysis

Search Continuous A	nalysis		
Analysis Group	Hydraulic Cement Concrete		
Analysis Date	< • and •	t p-value < +	and 👻
Material Application	•	Spec Item 416	¥
Test Method	DB-418-A 🔹	Supplier	•
Value Field	Average Strength	Grade	v
Alpha	< •	Material	*
F p-value	< • and •		
	< *		
		Search	

Step 6. The search will return all results that match the parameters selected. Even if the Analysis Group "Hydraulic Cement Concrete" or "Soils and Aggregates" is

selected as one of the parameters, the search result shows the Analysis Group as Asphalt. The display will show "Asphalt" for the analysis group regardless of which analysis group is listed in the search results. This is a known glitch in I2MS (Figure 4-24).

The user may select "Details" as shown in Step 3 of 4.2.2 Reviewing a Level 1 Statistical Analysis to review the analysis run.

The user may also select "Return to Search" to change any of the search parameters and resubmit the search. A third option is that the user may choose "Clear Search" which clears the parameters of the previous search and takes the user back to the Historical Analyses page. To perform another search the user will need to select "Search."

Analysis Gro	up Asphalt									Clear Searc	h Retur	n to Searc
Analysis Date	Material Applic	cation	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
06/02/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	74.3 %	9.2 %	Details
06/03/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	75.3 %	7.7 %	Details
06/05/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	89.2 %	11.9 %	Details
06/08/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	87.0 %	10.2 %	Details
06/09/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	37.1 %	33.0 %	Details
06/11/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	46.6 %	41.3 %	Details
06/16/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	34.9 %	25.8 %	Details
06/26/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	44.3 %	14.9 %	Details
06/30/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	47.9 %	9.7 %	Details
06/30/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	34.9 %	5.3 %	Details
07/01/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	25.3 %	2.8 %	Details
07/08/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	21.8 %	14.0 %	Details
07/10/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	31.0 %	27.4 %	Details
07/15/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	52.5 %	12.3 %	Details
07/15/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	4674 CB	0.025	36.1 %	48.7 %	Details
07/17/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	81.7 %	13.8 %	Details
07/21/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	46.0 %	10.6 %	Details
07/22/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	58.1 %	15.9 %	Details
07/24/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCLG5	0.025	58.5 %	61.8 %	Details
07/28/2020	HCC - Structura	al Complete Mix	DB-418-A	Average Strength (28	416	Argos-128	С	8558 AAC	0.025	45.8 %	14.0 %	Details

Figure 4-24: Level 1 Historical Analyses – Search Results

Step 7. If the user selects "Details" and then decides to perform another search the user selects "Back" (Figure 4-25).

DB-418-A Average Strength				
Analysis Date		06/02/2020	Alpha	0.025
F p-value		74.3 %	t p-value	9.2 %
Spec Item		416	Supplier	Redi-Mix-71
Grade		С	Material	DTCIG5E2
Add a Comment		Submit	Back	
Last 10 Analyses	Data Sets			

Figure 4-25: Level 1 Historical Analyses – Select Back

Step 8. This will take the user back to the "Current Analyses" page. The user will need to select "Historical Analyses" which will show the user the search results that was previously performed (Figure 4-26).

Figure 4-26: Level 1 Historical Analyses

Current Anal		Historical Ana										
Asphalt												
Analysis Date	Material /	Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
												No data
	ement Co	liciete										
Hydraulic C Analysis Date			Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p.value	t p-value	
		Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No dat
Analysis Date			Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No dat
	Material J	Application	Test Method	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	No dat

Step 9. To change search parameters, select "Return to Search" (Figure 4-27).

Current A	nalyses Histo	rical Anal	/ses									
Analysis Gro	Hydraulic Ceme	ent Concret	e							Clear Sea	rch Retu	irn to Seard
Analysis Date	Material Application		Test Methoc	Value Field	Spec Item	Supplier	Grade	Material	Alpha	F p-value	t p-value	
06/02/2020	HCC - Structural Com	plete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	74.3 %	9.2 %	Details
06/03/2020	HCC - Structural Com	plete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	75.3 %	7.7 %	Details
06/05/2020	HCC - Structural Com	plete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	89.2 %	11.9 %	Details
06/08/2020	HCC - Structural Com	plete Mix	DB-418-A	Average Strength (28	416	Redi-Mix	С	DTCIG5E2	0.025	87.0 %	10.2 %	Details

Figure 4-27: Level 1 Historical Analyses – Return to Search and Clear Search

Step 10. As mentioned, the user may choose "Clear Search" which clears the parameters of the previous search and takes the user back to the Historical Analyses page. To perform another search the user will need to select "Search."

4.3 Level 2 Analysis

Level 2 analysis provides independent verification for those materials that are secondary indicators of performance. An example is the slump test for hydraulic cement concrete. The CQAF (IQF) testing frequency is required to be in compliance with the DB Guide schedule and the OVF testing frequency should be in accordance with the project-specific OV Levels for Materials Testing Validation/Verification in Appendix D of the DB QAP.

The Level 2 analysis in I2MS utilizes an independent verification approach. The OVF and CQAF (IQF) test results are plotted on a graph for the I2MS Testing Manager to review and make an independent determination whether the results are verified. This feature is available in I2MS and is further explained below.

4.3.1 Performing a Level 2 Independent Verification Analysis

Step 1. From the Navigation Bar, select Level 2- Independent Verification from the Analysis drop down menu (Figure 4-28).

Dashboard	Search	Analysis	Reporting	Administration
		Level 1 - Conti	nuous Analysis	
Dashboard		Level 2 - Indep	endent Verification	•
		Level 3 - Obse	rvation Verification	

Figure 4-28: Level 2 Independent Verification

Step 2. The Current Categories page will be displayed for each material category for which data has been approved. Also displayed is the Date Last Verified field which provides useful information on when the particular analysis category was last analyzed (Figure 4-29).

Figure 4-29: Level 2 Independent Verification – Current Analysis Categories

Asphalt												
Naterial Application	Test Meth	No Value Field		Spec Iten	Supplier	Grade	Materia	nCQAF	nOV	Dat	e Last Verifie	
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(1-1	/2" sieve	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(1" s	sieve size)	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(3/4	sieve s	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(No.	.8 sieve	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(No.	.16 sieve	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(No.	.30 sieve	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(No.	.50 sieve	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-200-F	Cumulative Percent Passing(No.	.200 siev	344	DPJV	344Mix	D#14	5	2	04/0	06/2022	Details
QCQA ACP - Complete M	. DB-227-F	Rice Specific Gravity (Gr):		344	DPJV	344Mix	D#14	5	2	04/0	6/2022	Details
∃ Hydraulic Cement (Concrete								2			
		Value Field	Spec Ite	Supplier		Grade	Materia		nCQA	nOV		f 1 (9 items)
 Hydraulic Cement (Material Application HCC - Coarse Aggregate 	Test Meth	Value Field Cumulative Percent Passing(3/4"	Spec Ite 421	Supplier Hanson - Se	ervtex	Grade CoA			nCQA		Page 1 o	
Material Application	Test Meth DB-401-A						Grade	al	nCQA 1	nOV	Page 1 o Date Last Ver	f 1 (9 items)
Material Application HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A	Cumulative Percent Passing(3/4"	421	Hanson - Se	ervtex	CoA	Grade Grade	al 6 Ag	nCQA 1 1	nOV 0	Page 1 o Date Last Ver 04/07/2022	f 1 (9 items)
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Metr DB-401-A DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2"	421 421	Hanson - Se Hanson - Se	ervtex ervtex	CoA	Grade Grade Grade	al 6 Ag 6 Ag	nCQA 1 1	nOV 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022	Details
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2" Cumulative Percent Passing(3/8"	421 421 421	Hanson - Se Hanson - Se Hanson - Se	ervtex ervtex ervtex	CoA CoA CoA	Grade Grade Grade Grade	al 6 Ag 6 Ag 6 Ag	nCQA 1 1 1 1	nOV 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022	Details Details
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2" Cumulative Percent Passing(3/8" Cumulative Percent Passing(No	421 421 421 421 421	Hanson - Se Hanson - Se Hanson - Se Hanson - Se	ervtex ervtex ervtex ervtex	CoA CoA CoA CoA	Grade Grade Grade Grade Grade	al 6 Ag 6 Ag 6 Ag 6 Ag	nCQA 1 1 1 1 1	nov 0 0 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022 04/07/2022	f 1 (9 items) Details Details Details Details Details
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2" Cumulative Percent Passing(3/8" Cumulative Percent Passing(No Cumulative Percent Passing(No	421 421 421 421 421 421	Hanson - Se Hanson - Se Hanson - Se Hanson - Se Hanson - Se	ervtex ervtex ervtex ervtex ervtex	СоА СоА СоА СоА СоА	Grade	al 6 Ag 6 Ag 6 Ag 6 Ag 6 Ag	nCQA 1 1 1 1 1 1 1	nOV 0 0 0 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022 04/07/2022 04/07/2022	Details Details Details Details Details Details Details
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2" Cumulative Percent Passing(3/8" Cumulative Percent Passing(No Cumulative Percent Passing(No Cumulative Percent Passing(1-1/	421 421 421 421 421 421 421 421	Hanson - Se Hanson - Se Hanson - Se Hanson - Se Hanson - Se	ervtex ervtex ervtex ervtex ervtex ervtex	СоА СоА СоА СоА СоА СоА	Grade	al 6 Ag 6 Ag 6 Ag 6 Ag 6 Ag 4 Ag	nCQA 1 1 1 1 1 1 1 1	nOV 0 0 0 0 0 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022 04/07/2022 04/07/2022 04/07/2022	f 1 (9 items) Details Details Details Details Details Details Details
Material Application HCC - Coarse Aggregate HCC - Coarse Aggregate	Test Meth DB-401-A DB-401-A	Cumulative Percent Passing(3/4" Cumulative Percent Passing(1/2" Cumulative Percent Passing(3/8" Cumulative Percent Passing(No Cumulative Percent Passing(No Cumulative Percent Passing(1-1/ Cumulative Percent Passing(1" si	421 421 421 421 421 421 421 421 421	Hanson - Se Hanson - Se Hanson - Se Hanson - Se Hanson - Se Hanson - Se	ervtex ervtex ervtex ervtex ervtex ervtex ervtex	СоА СоА СоА СоА СоА СоА СоА	Grade	al 6 Ag 6 Ag 6 Ag 6 Ag 6 Ag 6 Ag 4 Ag	nCQA 1 1 1 1 1 1 1 1 1 1 1	nOV 0 0 0 0 0 0 0 0 0	Page 1 o Date Last Ver 04/07/2022 04/07/2022 04/07/2022 04/07/2022 04/07/2022 04/07/2022 04/07/2022	Details

Step 3. To view the test results in a given analysis category, select the Details link on the far right each of run (Figure 4-30).

nOV	Date Last Verific	
2	04/06/2022	Details
2	04/06/2022	Details
2	04/06/2022	Details

Figure 4-30: Level 2 Independent Verification – Details

Step 4. The Details view appears as shown in Figure 4-31. The Details page provides a general material description in the upper portion of the display and two tabs (Data Sets and Last 10 Verifications) in the lower portion of the display.

DB-227-F Rice Specific G	iravity (Gr):								
Date Last Verified			04/06/20	22					
Spec Item			344		Supplier			DPJV A-1	
Grade			344MixS	PB	Material			D#14	
Add a Comment									
○ Verified ○ Not Verified (Commen	nt Required)								
			Su	bmit Back					
Data Sets	Last 10 Verit	fications	1						
Tested Date Rice Specif	fic Gravity (Gr):	Sample ID	Sampled Date	Sample Type	Split Sample ID	Report Type	Section	Sampled By	Spec Year
Owner: OVF				1					
04/04/2022	2.414	JA220404-01	04/04/2022	Random Independ		Original	Segmen	John Aleman	2004
04/01/2022	2.42	JA220401-01	04/01/2022	Random Independ		Original		John Aleman	2004
Owner: CQAF									
04/01/2022	2.424	HOC22040101A	04/01/2022	Random Independ		Original	Segmen	Hector Carmona	2004
04/01/2022	2.416	HOC22040102A	04/01/2022	Random Independ		Original	Segmen	Hector Carmona	2004
04/01/2022	2.414	HOC22040103A	04/01/2022	Random Independ		Original	Segmen	Hector Carmona	2004
04/03/2022	2.433	HOC22040309A	04/03/2022	Random Independ		Original	Segmen	Hector Carmona	2004
04/04/2022	2.415	HOC22040401A	04/04/2022	Random Independ		Original	Segmen	Hector Carmona	2004
								Page 1 of 1	Þ

Figure 4-31: Level 2 Independent Verification – Current Categories - Details

Step 5. The Data Sets tab is shown above in Figure 4-31 with the Tabular View option selected. This view displays the OVF and CQAF (IQF) data for a quick comparison.

Step 6. Trend Analysis can also be selected by the user as shown in Figure 4-32.

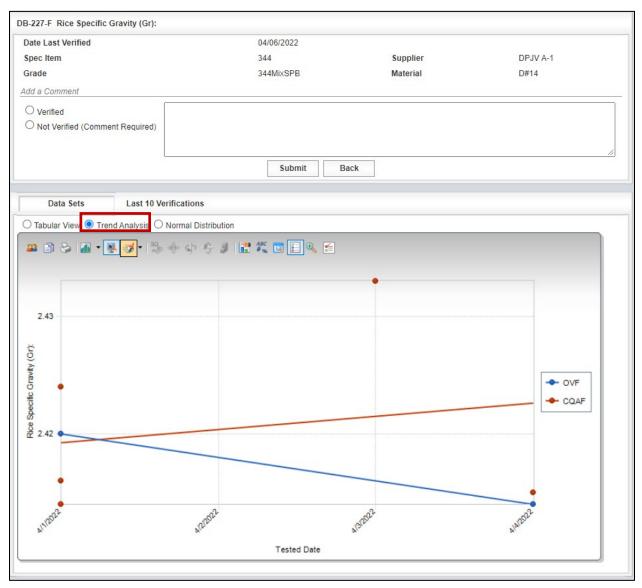
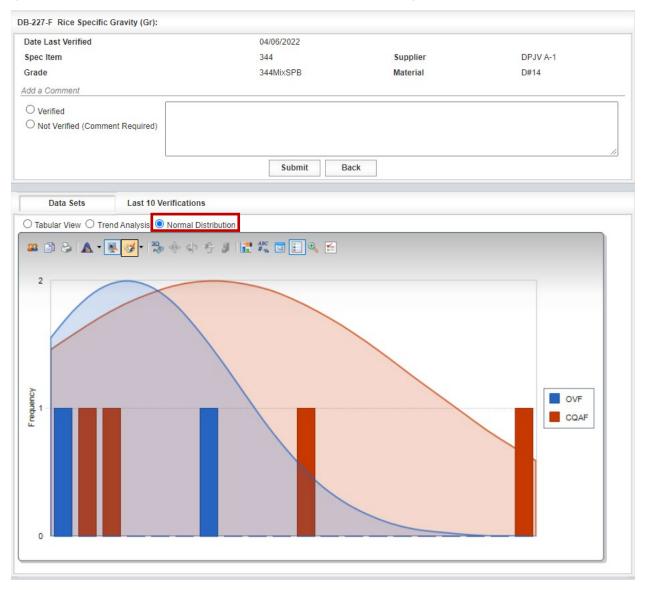


Figure 4-32: Level 2 Independent Verification – Current Categories – Trend Analysis

Step 7: Normal Distribution can also be selected by the user as shown in Figure 4-33.

Figure 4-33: Level 2 Independent Verification – Current Categories – Normal Distribution



Step 8. Based on the results obtained, the user has the option of selecting "Verified" or "Not Verified" in the upper portion of the display (Figure 4-34). Note that a comment is optional when selecting "Verified," but required when selecting "Not Verified." Select the Submit key to save the results.

Note: Records will remain in the Current Categories display (see Step 2 above) until the Level 2 verification process is completed (either Verified or Not Verified) and the submit key is selected. Once the verification process is

completed, the record is transferred to the Historical Analysis tab for future reference.

DB-227-F Rice Specific Gravity (Gr):			
Date Last Verified	04/06/2022		
Spec Item	344	Supplier	DPJV A-1
Grade	344MixSPB	Material	D#14
Add a Cerniment	Insert Comment Here Submit Back		A

Figure 4-34: Level 2 Independent Verification – Current Categories – Verification

4.3.2 Reviewing a Level 2 Independent Verification Historical Analysis

Step 1. From the Navigation Bar, select Level 2- Independent Verification from the Analysis drop down menu. To view historical analyses, select the Historical Analyses Tab (Figure 4-35).

Asphalt										
		1					1	1		
laterial Application	Test Metho	Value Field	Spec It	en Supplier	Grade	Materia	nCQAF	nOV	Date Last Verifie	
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(1-1/2" si	eve 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(1" sieve	size) 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(3/4" siev	/es 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(No.8 sie	ve 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(No.16 si	eve 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(No.30 si	eve 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(No.50 si	eve 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(No.200	siev 344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
CQA ACP - Complete M	DB-227-F	Rice Specific Gravity (Gr):	344	DPJV	344Mix	D#14	5	2	04/06/2022	Details
									Page 1	of 1 (9 items)
Hydraulic Cement Co										

Figure 4-35: Historical Analyses

Step 2. Then select the desired Analysis Group from the drop-down menu (Figure 4-36). If an analysis has run for an Analysis Group, the Analysis Group will show up in the drop down menu. In the example below, all three analysis groups are available to review since analyses have been performed for Asphalt, Hydraulic Cement Concrete, and Soils and Aggregates.

Analysis Gr	roup		Cement Concret	e -									Search
ate Verifie	Materi	Asphalt Hydraulic	Cement Concre	te	Field	Spec Iten	Supplier	Grade	Material	Status	nCQAF	nOV	
4/07/2022	нсс -	Soils and	Aggregates	ſ	of the Supernatant Liquid	421	Hanson - Ar	FA	Fine Aggre	Verif	3	3	Details
4/07/2022	HCC -			r	of the Supernatant Liquid	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -			1	ess Modulus	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -			1	ess Modulus	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -			I	ulative Percent Passing(No.200 siev	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -			I	ulative Percent Passing(No.100 siev	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -				ulative Percent Passing(No.50 sieve	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.30 sieve	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.16 sieve	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.8 sieve s	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.4 sieve s	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(3/8" sieve si	421	Hanson - Ar	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.200 siev	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.100 siev	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.50 sieve	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.30 sieve	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.16 sieve	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.8 sieve s	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(No.4 sieve s	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details
4/07/2022	HCC -	Fine Aggre.	DB-401-A	Cum	ulative Percent Passing(3/8" sieve si	421	Fordyce - Bri	FA	Fine Aggre	Verif	4	3	Details

Figure 4-36: Historical Analyses Tab – Select Analysis Group

The user may select "Details" as shown in Step 3 of <u>4.3.1 Performing a Level</u> Step 3. <u>2 Independent Verification Analysis</u> to review the analysis (Figure 4-37).

Figure 4-37: Historical Analyses Tab – Select Details

Current Categories Historical Analyses											
Analysis Gr	Hydraulic Ce	ment Concre	te 👻								Search
Date Verifie Material Applicatio Test Method Value Field Spec Iten Supplier Grade Material Status nCQAF nOV											
04/07/2022	HCC - Fine Aggre	DB-408-A	Color of the Supernatant Liquid	421	Hanson - Ar	FA	Fine Aggre	Verif	3	3	Details
04/07/2022 HCC - Fine Aggre DB-408-A Color of the Supernatant Liquid 421 Fordyce - Bri FA Fine Aggre Verif 4 3 De										Details	
04/07/2022 HCC - Fine Aggre DB-402-A Fineness Modulus 421 Hanson - Ar FA Fine Aggre Verif 4 3											

4.3.3 Searching a Level 2 Independent Verification Analysis

A search tool is available for Level 2 Historical Analyses.

Step 1. To use the tool, select Historical Analyses and then select Search (Figure 4-38).

Figure 4-38: Level 2 Independent Verification – Historical Analyses – Search

Current Ca	ategories Historica	I Analyses									
Analysis Gr	oup Asphalt	*									Search
Date Verifie	Material Application	Test Metho	Value Field	Spec Iten	Supplier	Grade	Material	Status	nCQAF	nOV	
08/11/2021	Surface Treatment - Agg	DB-217-F	Percent Deleterious Material	316	Williams Br	1	DanST	Verified	2	1	Details
08/11/2021	QCQA ACP - Complete	DB-227-F	Rice Specific Gravity (Gr):	341	Williams Br	341MixT	DanHM	Verified	3	3	Details
08/11/2021	QCQAACP - Complete	DB-200-F	Cumulative Percent Passing(No.200 si	341	Williams Br	341MixT	DanHM	Verified	3	3	Details
08/11/2021	QCQA ACP - Complete	DB-200-F	Cumulative Percent Passing(No.50 sie	341	Williams Br	341MixT	DanHM	Verified	3	3	Details
08/11/2021	QCQAACP - Complete	DB-200-F	Cumulative Percent Passing(No.30 sie	341	Williams Br	341MixT	DanHM	Verified	3	3	Details
08/11/2021	QCQAACP - Complete	DB-200-F	Cumulative Percent Passing(No.8 siev	341	Williams Br	341MixT	DanHM	Verified	3	3	Details
08/11/2021	QCQAACP - Complete	DB-200-F	Cumulative Percent Passing(No.4 siev	341	Williams Br	341MixT	DanHM	Verified	3	3	Details

Step 2. The Search Independent Verification tool has several different parameters the user can select from drop-down menus to define the search (Figure 4-39).

Search Independent \	/erification				
Analysis Group	sphalt	¥			
Date Verified	>= •	and 🔹	nOVF	>= •	and 👻
Material Application		*	Spec Item		•
Test Method		¥	Supplier		•
Value Field		•	Grade		•
Status		•	Material		•
nCQAF	>= v <= v	and 💌			
			Search		

Figure 4-39: Level 2 Independent Verification – Historical Analyses – Search

Step 3. Once the user has chosen the parameters, select the Search button to perform the search (Figure 4-40).

Search Independent V	erification				
Analysis Group	draulic Cement Concrete	~			
Date Verified	>= • <= •	and +	nOVF	>= v <= v	and 💌
Material Application		•	Spec Item	416	•
Test Method	DB-418-A	•	Supplier		•
Value Field	Concrete Temperature	•	Grade		•
Status		•	Material		•
nCQAF	>= 👻	and 👻			
	<= •				
			Search		

Figure 4-40: Level 2 Independent Verification – Search Independent Verification

Step 4. The search will return all results that match the parameters selected except for the Analysis Group. Even if the Analysis Group "Hydraulic Cement Concrete" or "Soils and Aggregates" is selected as one of the parameters, the search result shows the Analysis Group as Asphalt. The displaying showing "Asphalt" regardless of which analysis group is listed in the search results is a known glitch in I2MS (Figure 4-41).

Analysis G	roup Asphalt								Clear	Search	Return	n to Searc
Date Verifie	Material Appli	cation	Test Metho	Value Field	Spec Iten	Supplier	Grade	Material	Status	nCQAF	nOV	
)4/11/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	F	1618475	Veri	3	1	Details
04/11/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	79	38	Details
06/22/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	F	1618475	Veri	0	1	Details
07/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	с	2336493	Veri	1	0	Details
07/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	55	20	Details
07/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	с	1618506	Veri	6	4	Details
04/06/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Dragados-Pulice CTAH-120	SS	\$75USS	Veri	2	0	Details
01/11/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	7	4	Details
01/11/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2436493	Veri	33	22	Details
01/11/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Dragados-Pulice CTAH-120	SS	\$75USS	Veri	1	0	Details
01/11/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Dragados-Pulice CTAH-120	с	S75UC361	Veri	6	3	Details
04/06/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Dragados-Pulice CTAH-120	с	S75UC362	Veri	1	1	Details
04/06/2022	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2436493	Veri	21	9	Details
07/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2436493	Veri	41	18	Details
)7/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	с	1620039	Veri	9	2	Details
10/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	с	1620039	Veri	9	1	Details
10/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	65	23	Details
10/12/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2436493	Veri	8	4	Details
10/13/2021	HCC - Structure	al Complete	DB-418-A	Concrete Temper	416	Dragados-Pulice CTAH-120	с	S75UC361	Veri	2	0	Details

Figure 4-41: Level 2 Independent Verification – Historical Analyses – Search Results

Step 5. The user may select "Details" as shown in Step 3 of <u>4.3.1 Performing a Level 2</u> <u>Independent Verification Analysis</u> to review the analysis. The user may also select "Return to Search" to change any of the search parameters and resubmit the search (Figure 4-42).

Figure 4-42: Level 2 Independent Verification – Historical Analyses – Details

Current C	Current Categories Historical Analyses												
Analysis G	Analysis Group Hydraulic Cement Concrete Clear Search Return to Search												
Date Verifie	erifie Material Application Test Metho Value Field Spec Iten Supplier Grade Material							Status	nCQAF	nOV			
04/11/2021	HCC - Structural Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	F	1618475	Veri	3	1	Details		
04/11/2021	HCC - Structural Complete	DB-418-A	Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	79	38	Details		

Step 6. Selecting "Back" will take the user to the "Current Categories" page (Figure 4-43).

DB-418-A Concrete Temperatu	ire								
Date Verified	04/11/2021								
Spec Item	416	Su	Ipplier	Cemex - Miss	sion Plant 420	9A			
Grade	F	Ma	aterial	1618475					
Add a Comment									_
O Verified									
O Not Verified (Comment Red	quired)								
				_				//	
			Submit Bac	:k					
Data Sets La	ast 10 Verifications								
● Tabular View ○ Trend Ana	lysis 🔿 Normal Distribu	tion							
Tested Date Concrete Tempe	erature Sample ID	Sampled Date	Sample Type	Split Sample ID	Report Type	Section	Sampled By	Spec Year	м

Figure 4-43: Level 2 Independent Verification – Historical Analyses – Back

Step 7. Select Historical Analyses to return to the Search which will show the user the search results that was previously performed (Figure 4-44).

Figure 4-44: Level 2 Independent Verification – Select Historical Analyses

Current Categories	Historical	Analyses												
Asphalt	Asphalt													
Material Application	Test Metho	Value Field	Spec Iten	Supplier	Grade	Materia	nCQAF	nOV	Date Last Verifie					
QCQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(1-1/2" sieve	344	DPJV	344Mix	D#14	5	2	04/06/2022	Details				
QCQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(1" sieve size)	344	DPJV	344Mix	D#14	5	2	04/06/2022	Details				
QCQA ACP - Complete M	DB-200-F	Cumulative Percent Passing(3/4" sieve s	344	DPJV	344Mix	D#14	5	2	04/06/2022	Details				
0001100 0	00.000.5	Consulation Descent Descient/Mark Animum		00.04		0444		2	0.4/00/00000	Detaile				

Step 8. To change search parameters, select "Return to Search" (Figure 4-45).

Figure 4-45: Level 2 Independent Verification – Historical Analyses – Clear Search and Return to Search

Current C	Current Categories Historical Analyses												
Analysis G	Analysis Group Hydraulic Cement Concrete Clear Search Return to												
Date Verifie	Material Application	Test Metho	Value Field	Spec Iten	Supplier	Grade	Material	Status	nCQAF	nOV			
04/11/2021	HCC - Structural Complete	DB-418-A	Concrete Temper	416	Cemex - Mission Plant 4209A	F	1618475	Veri	3	1	Details		
04/11/2021	4/11/2021 HCC - Structural Complete DB-41		Concrete Temper	416	Alamo Concrete Products - Pl	SS	2336493	Veri	79	38	Details		
06/00/0004	NCC - Structural Complete	DD 449 A	Concrete Temper	440	Comey Mission Plant 42004	c	4040475	Mari	0	4	Dotaile		

Step 9. Another option is that the user may choose "Clear Search" which clears the parameters of the previous search and takes the user back to the Historical Analyses page. To perform another search the user will need to select "Search" (Figure 4-46).

Figure 4-46: Level 2 Independent Verification – Historical Analyses – Perform another Search

Current (Categories	Historical Analyse	5								
Analysis G	Group Hydraul	ic Cement Concrete	•								Search
Date Verifit	Material Applica	tion Test Met	he Value Field	Spec Iten	Supplier	Grade	Material	Status	nCQAF	nOV	
04/07/2022	HCC - Fine Ager	DB-408-	Color of the Sun	421	Hanson - Ar	FA	Fine Agore	Verified	3	3	Details

4.4 Level 3 Analysis

Level 3 provides observation verification for those materials that only require very few CQAF (IQF) tests for compliance with the DB Guide Schedule or tests on materials whose risk of failure does not affect the long- term performance of the facility past the contractual maintenance obligations. An example is the acid insoluble test (Tex-612-J) for fine aggregate in hydraulic cement for concrete pavements, which has a DB Guide Schedule defined frequency of once per project per source, where risk of failure does not affect the long- term performance of the facility past the contractual maintenance obligations. Under the Level 3 approach, OV does not perform tests but observes the CQAF (IQF) test performance for equipment and procedural compliance with the test procedure. The frequency of this testing is a minimum of once per project per test method during start-up operations and periodically as needed during ongoing production operations to verify compliance with test procedures.

An observation verification is required for those analysis categories identified in TxDOT's DB QAP as Level 3. For Level 3, the OV observing the CQAF (IQF) technician performing the test enters his observation findings into I2MS for record keeping purposes. This requires close coordination between both laboratories. After the verification is performed, the OVF enters the observation into I2MS. These comments are tracked within I2MS and a reporting feature allows the I2MS Testing Manager to include those observations into the OV Report. More information on this feature is explained below.

4.4.1 Performing a Level 3 Observation Verification

Step 1. From the Navigation Bar, select Level 3 - Observation Verification from the Analysis drop down menu (Figure 4-47).

Dashboard	Search		Analysis	Reporting	Submission	Administration
Dashboard			Level 1 - Conti	nuous Analysis		
		Lev	el 2 - Independer	nt Verification		
		Lev	el 3 - Observatio	n Verification		

Figure 4-47: Level 3 Observation Verification

Step 2. The Current Calendar Quarter page will be displayed. This screen provides the user with the number of Level 3 CQAF (IQF) records (nCQAF) that have been approved since the date last observed (Figure 4-48).

alendar Quarter J	an 2022 to Mar 2022				
est Method	Value Field	Date Last Observed	Last Observed By	nCQAF *	
B-203-F	Average Sand Equivalent		I	4	Observe
B-116-E	Wet Ball Mill Value			3	Observe
B-116-E	Percent Soil Binder Increase			3	Observe
B-217-F	Percent Deleterious Material			3	Observe
B-114-E	Optimum Moisture			2	Observe
B-401-A	Cumulative Percent Passing			2	Observe
B-418-A	Corrected Air Content			2	Observe
B-242-F	Number of Passes			1	Observe
B-113-E	Max Density (pcf)			0	Observe
B-113-E	Optimum Moisture			0	Observe
B-114-E	Max Density (kg)			0	Observe
B-204-F	Mix Design			0	Observe
B-207-F, Part V	Highest to Lowest Density Difference			0	Observe
B-207-F, Part VII	Correlated Joint Density			0	Observe
B-217-F	Percent Loss By Decantation			0	Observe
B-224-F	Flakiness Index			0	Observe
B-226-F	Indirect Tensile Strength			0	Observe
B-235-F	Average Percent of Draindown for Two Samples			0	Observe
B-244-F	Temperature Differential			0	Observe
				Page 1	of 2 (34 iten

Figure 4-48: Level 3 Observation Verification – Current Quarter

To be compliant with TxDOT's DB QAP, the OVF is required to perform Observation Verification of the CQAF (IQF) during initial start-up testing operations and periodically during ongoing production operations to verify compliance with test procedures. Step 3. Select the Observe key to enter observations (Figure 4-49).

			1	00451	
est Method	Value Field	Date Last Observed	Last Observed By	nCQAF *	
)B-245-F	Cantabro Loss			0	Observe
DB-246-F	Permeability (Items 342, 347 and 348)			0	Observe
DB-280-F	Percent Failing 5 to 1 Ratio			0	Observe
DB-408-A	Color of the Supernatant Liquid			0	Observe
DB-410-A	La Abrasion Value			0	Observe
DB-411-M	Soundness Loss			0	Observe
DB-413-A	Deleterious Material Retained			0	Observe
DB-460-A	Percent Crushed Particles			0	Observe
DB-530-C	Estimated Percent of Stripping			0	Observe
DB-418-A	Concrete Temperature	06/21/2021	Owen Van Field	5	Observe
DB-107-E	Linear Shrinkage	08/04/2021	James Kirk	1	Observe
DB-461-A	Micro-Deval Abrasion	10/01/2021	Not Observed	0	Observe
DB-207-F	Voids in Mineral Aggregate (VMA)	10/20/2021	Not Observed	1	Observe
DB-212-F,Part II	Moisture Content	10/20/2021	James Kirk	0	Observe
DB-200-F	Cumulative Percent Passing	11/01/2021	Jean Luc Picard	0	Observe

Figure 4-49: Level 3 Observation Verification - Observe

Step 4. A separate window appears (shown below for form DB-418-A Concrete Temperature in Figure 4-50) allowing the user to enter the Observation Date, Observed By name, and Comment. Note that if a CQAF (IQF) test was not observed during the current calendar quarter, then a comment can still be added with the Observed By name being "Not Observed" though that is not necessary. It is understood that an observation verification was not performed if it does not show an observation verification in the report.

Note: The Observer that is performing the observation verification should be a certified OVF technician who observes the CQAF (IQF) certified technician performing the test. If an Observer is not in the drop-down menu, go to 6.2.3.4.2 Level 3 Observers to see how to add a qualified observer to the list.

Observation Date	01/06/2022	Observed By	Owen Van Field	*	
dd a Comment			James Kirk		
du a comment			Jean Luc Picard		
			Not Observed		
			Owen Van Field		

Figure 4-50: Level 3 Observation Verification – Performing an Observation

The I2MS Testing Manager can enter the observation provided by the OVF technician. The observation can be a simple statement that the OVF technician observed the IQF technician performing the test according to (or not according to) the test procedures and verification of the use of calibrated equipment. Select Submit to save the results (Figure 4-51).

Figure 4-51: Level 3 Observation Verification – Entering Observation Comment

DB-418-A Concrete Temperature	×
Observation Date 01/06/2022 Observed By Owen Van Field •	
Observation Date 01/06/2022 Observed By Owen Van Field Image: Comment Add a Comment Owen Van Field observed Ian Quinn Ford perform DB-418-A according to procedures. Image: Comment of the perform DB-418-A according to procedures. Submit	
Owen Van Field observed Ian Quinn Ford perform DB-418-A according to procedures.	
Submit	

Step 5. After submitting the observation, the top of the screen shows a "Observation recorded" notification. The observation for DB-418-A, Concrete Temperature is updated with the Date Last Observed, Last Observed By and the nCQAF resets to zero since there will not have been any tests approved since the observation was recorded (Figure 4-52).

Current Quarter	Historical Observations				
Calendar Quarter Ja	in 2022 to Mar 2022				
est Method	Value Field	Date Last Observed	Last Observed By	nCQAF *	
B-245-F	Cantabro Loss		I	0	Observe
DB-246-F	Permeability (Items 342, 347 and 348)			0	Observe
)B-280-F	Percent Failing 5 to 1 Ratio			0	Observe
DB-408-A	Color of the Supernatant Liquid			0	Observe
DB-410-A	La Abrasion Value			0	Observe
DB-411-M	Soundness Loss			0	Observe
DB-413-A	Deleterious Material Retained			0	Observe
DB-460-A	Percent Crushed Particles			0	Observe
DB-530-C	Estimated Percent of Stripping			0	Observe
DB-107-E	Linear Shrinkage	08/04/2021	James Kirk	1	Observe
DB-461-A	Micro-Deval Abrasion	10/01/2021	Not Observed	0	Observe
DB-207-F	Voids in Mineral Aggregate (VMA)	10/20/2021	Not Observed	1	Observe
DB-212-F,Part II	Moisture Content	10/20/2021	James Kirk	0	Observe
DB-200-F	Cumulative Percent Passing	11/01/2021	Jean Luc Picard	0	Observe
DB-418-A	Concrete Temperature	01/06/2022	Owen Van Field	0	Observe

Figure 4-52: Level 3 Observation Verification – Observation Recorded

4.4.2 Reviewing a Level 3 Observation Verification

There are two options to review a Level 3 observation verification.

Step 1. The first option is selecting the Historical Observations.

If no observations have been performed in the current quarter, Historical Observations will show the previous quarter as shown in Figure 4-53.

Current Quarter Historical Observations							
Calendar Quarter Oct	Calendar Quarter Oct 2021 to Dec 2021 *						
Test Method	Value Field	Date Observed	Observed By	Comments			
DB-200-F	Cumulative Percent Passing	11/01/2021	Jean Luc Picard	1	Comment		
DB-207-F	Voids in Mineral Aggregate (VMA)	10/20/2021	Not Observed	4	Comment		
DB-212-F,Part II	Moisture Content	10/20/2021	James Kirk	2	Comment		
DB-461-A	Micro-Deval Abrasion	10/01/2021	Not Observed	1	Comment		

Figure 4-53: Level 3 Observation Verification – Historical Observations

Step 2. If an observation has been performed in the current quarter, Historical Observations will only show the current quarter. The observation can be reviewed by selecting either the number under the Comments column or selecting the Comment button (Figure 4-54).

Figure 4-54: Level 3 Observation Verification – Historical Observations Comment

Current Quarter Historical Observations								
	Calendar Quarter Jan 2022 to Mar 2022 *							
	Test Method Value Field		Date Observed	Observed By	Comments			
	DB-418-A	Concrete Temperature	01/06/2022	Owen Van Field	1 Comment			

Step 3. The comment pop up can be reviewed and closed by selecting the "X" (Figure 4-55).

01/06/2022 DB-418-A Cor	01/06/2022 DB-418-A Concrete Temperature				
Date	Comment By	Comment			
01/08/2022 12:06 PM	OVF Manager	Owen Van Field observed Ian Quinn Ford perform DB-418-A according to test procedures.			
Add a Comment					
			_//		
		Submit			

Step 4. If upon review, the user wants to add a comment, enter the comment into the box as shown in Figure 4-56 and select Submit.

01/06/2022 DB-418-A Cor	ncrete Temperature		×
Date	Comment By	Comment	
01/08/2022 12:06 PM	OVF Manager	Owen Van Field observed Ian Quinn Ford perform DB-418-A according to test procedures.	
Add a Comment			_
This observation w	was performed on 1/6/2022.		
			11
		Submit	

Figure 4-56: Level 3 Observation Verification – Additional Comments

Step 5. After selecting the Submit button the screen will update showing the additional comment. To exit the screen, select "X" (Figure 4-57).

Figure			hoom otion \	larification	Listarias	Observations	Commont	Deserded
FIGULE	24-0/:L	everst	oservation	venncanion –	HISIORCAL	Observations	Comment	Recorded
		0.0.00				0.000110.00110	•••••••	

01/06/2022 DB-418-A C	oncrete Temperature		×
Date	Comment By	Comment	
01/08/2022 12:06 PM	OVF Manager	Owen Van Field observed Ian Quinn Ford perform DB-418-A according to test procedures.	
01/08/2022 01:36 PM	OVF Manager	This observation was performed on 1/6/2022.	
Add a Comment			
			/
		Submit	

Step 6. Selecting a previous Calendar Quarter will not show the previous observations performed (Figure 4-58). This is a known glitch in I2MS.

Figure 4-58: Level 3 Observation Verification – Historical Observations by Calendar Quarter

Current Quarter	Historical Observatio	าร				
Calendar Quarter	Apr 2021 to Jun 2021					
Test Method	Oct 2021 to Dec 2021		Date Observed	Observed By	Comments	
DB-418-A	Jul 2021 to Sep 2021		01/06/2022	Owen Van Field	1	Comme
	Apr 2021 to Jun 2021					

Step 7. Another option to review previous observations is to create a Level 3 Report as described in <u>5.5 Observation Verification (Level 3) Reporting</u>. A report can be created for just one quarter or for the entire project time.

SECTION 5 – REPORTING

I2MS provides the ability for users to perform analysis of data over time on a single material category to compare OVF and CQAF (IQF) test results. This feature allows the flexibility to generate a customized analysis based on user-selected parameters. The analysis parameters for the OVF and CQAF (IQF) must be the same to generate a comparative analysis.

5.1 Performing a Trend Analysis

A trend analysis is typically run on a single category to compare the historical trends between OVF and CQAF (IQF) test results. This analysis can produce an Excel or PDF output file that contains data for both the OVF and CQAF (IQF) along with a graphical trend line based on the analysis parameters and timeframe defined by the user.

Step 1. From the Navigation Bar, select Create Report from the Analysis drop down menu (Figure 5-1).

Figure 5-1: Select Create Report

	Dashboard	Search	Analysis	Reporting	Administrati	III I2MS
	v Departa			My Reports		Loggad in: OVE Managar Logget
M	y Reports			Create Report		Logged in: OVF Manager Logout

Step 2. Select Trend Analysis (Figure 5-2).

Figure 5-2: Select Trend Analysis

New Report		
Step 1 - Choose a Report		
Report	Description	
Trend Analysis	Trend Analysis Report	Select
Data Analysis	Data Analysis Report	Select
Quarterly Federal Report - Continuous Analysis	Quarterly Federal Report - Continuous Analysis	Select
Quarterly Federal Report - Independent Verification	Quarterly Federal Report - Independent Verification	Select
Quarterly Federal Report - Observation Verification	Quarterly Federal Report - Observation Verification	Select
Print All	Print all search results	Select
Export Test	Export test data	Select

Step 3. The New Report screen will appear with two tabs – Data Set 1 and Data Set 2 (Figure 5-3). Select the desire trend analysis parameters on the Data Set 1 tab that will be used to create the trend analysis and assign the Owner as OVF.

Maximum Records I Owner O Sampled Date C Test Method D	Data Set 2 Returned DVF	• • • • •	Supplier Special Prov. Structure No.	Copy Para Series Legend No Selection No Selection No Selection	ameters ×
Image: Data Set 1 Image: Data Set 1 Maximum Records I Owner O Sampled Date Test Method	Data Set 2 Returned DVF = = > DB-418-A	and •	Special Prov.	Series Legend No Selection No Selection No Selection	ameters v
Maximum Records I Owner O Sampled Date C Test Method D	Returned DVF = + = + DB-418-A	and •	Special Prov.	Series Legend No Selection No Selection No Selection	ameters
Owner O Sampled Date > Test Method D	DVF = + = + DB-418-A	and •	Special Prov.	No Selection No Selection No Selection	•
Sampled Date >:	= + = + B-418-A	and •	Special Prov.	No Selection	
Test Method D	28-418-A			No Selection	
Test Method D	28-418-A			No Selection	
			Structure No.		
Value Field A	werage Strength			· ·	
Value Field A	werage Strength	-			
			Grade	No Selection	
					
	Random Independent	×	Sample Location	equals 🔹	
R	Random Split	× •			
Approval Status A	Approved	×	Direction	equals 🔹	
		•			
Segment	No Selection		Dist. from CL	equais 👻	
		•			
Section	No Selection	•	Misc	equals 👻	
Sampled Dr			Baadway		
Sampled By		•	Roadway	No Selection	
Material	No Selection		Test No.	equals 🔹	
		•			
Feature	No Selection		Start Station	equals 👻	
		*			
Spec Item	No Selection		End Station	equals 👻	
DB-418-A Criteria		•			
Average Age 2	8	•			
			ack Run Report		

Figure 5-3: Create Report – Trend Analysis – Data Set 1

Step 4. Select Copy Parameters. Data Set 1 parameters are copied to Data Set 2 (Figure 5-4).

		🚺 Data	Set 1 parameters copied to Data S	Set 2.	
New Report	rt				
Step 2 - Select Pa	rameters				
Report Trend A	nalysis				
🍺 Data Set 1	🧊 Data Set 2				Copy Parameters
Maximum Recor	rds Returned			Series Legend	•
Owner	OVF -		Supplier	No Selection	
				•	
Sampled Date		and 🔻	Special Prov.	•	
	<= +	5			
Test Method	DB-418-A -		Structure No.	No Selection	
		1		•	
Value Field	Average Strength *		Grade	No Selection	
a 1 T		1			
Sample Type	Random Independent X Random Split X		Sample Location	equals +	
	-				
Approval Status	Approved X		Direction	equais +	
Segment	No Selection]	Dist. from CL	equals 🔹	
	•				
Section	No Selection]	Misc	equals v	
	•				
Sampled By	*		Roadway	No Selection	
		7		•	
Material	No Selection		Test No.	equals •	
-	•	1			
Feature	No Selection		Start Station	equals +	
Spec Item		1	End Station		
opeonem	No Selection		End Station	equals v	
DB-418-A Criter					
Average Age	28 *				
			Back Run Report		
		L	· · ·		

Figure 5-4: Create Report – Trend Analysis – Data Set 2 – Copy Parameters

Step 5. Select Data Set 2 (Figure 5-5). All parameters will be copied except when there are multiple selections. In this example, Random Independent and Random Split were originally selected for the Sample Type. However, only Random Independent was copied so the user will have to select Random Split from the drop-down menu to add to the Data Set 2 tab. This is a known glitch in the system.

Figure 5-5: Create Report – Trend Analysis – Data Set 1 parameters copied to Data Set	t2

		Data Set 1 parameters copied to Data	Set 2.
New Repor	t		
Step 2 - Select Pa	rameters		
Report Trend Ar	nalysis		
🝺 Data Set 1	🧊 Data Set 2		Copy Parameters
Maximum Recor	ds Returned		
Owner	OVF -	Supplier	No Selection
			▼
Sampled Date	< • • and	* Special Prov.	
	< 🔻 🔛		
Test Method	DB-418-A 👻	Structure No.	No Selection
			•
Value Field	Average Strength 🔹	Grade	No Selection
			v
Sample Type	Random Independent X	Sample Location	like 🔹
Approval Status		Direction	like v
Approvar Status	Approved X	Direction	like 🔻
Segment	No Selection	Dist. from CL	like v
	•		
Section	No Selection	Misc	like 🔹
	•		
Sampled By	~	Roadway	No Selection
			v
Material	No Selection	Test No.	like •
Feature	•	Start Station	
reature	No Selection	Start Station	like 🔻
Spec Item	No Selection	End Station	like 🔹
	▼		
DB-418-A Criter	a		
Average Age	28 🔹		
		Back Run Report	

Step 6. Change the Owner from OVF to CQAF (IQF). Select any parameters that were not copied (Figure 5-6). In this example, select Random Split.

New Report	rt				
Step 2 - Select Pa	arameters				
Report Trend A	nalysis				
🧊 Data Set 1	🧊 Data Set 2				Copy Parameters
Maximum Recor	rds Returned				
Owner	OVF -		Supplier	No Selection	
				•	
Sampled Date	COAE	and 🗸	Special Prov.	▼	
Test Method	DB-418-A 🔻		Structure No.	No Selection	
Value Field	Average Strength •		Grade	No Selection	
Sample Type	Random Independent		Sample Location	like v	
Approval Status	Not Incorporated		Direction	like 🔹	
Segment	Sample Type Example		Dist. from CL	like 💌	
	Random Independent Random Split				
Section	Fixed Independent Fixed Split		Misc	like	
Sampled By	Internal		Roadway	No Selection	
Material	No Selection		Test No.	like 🔹	
Feature	No Selection		Start Station	like 🔹	
Spec Item	No Selection		End Station	like •	
DB-418-A Criter					
Average Age	28 🔹				
L	L	В	ack Run Report		

Figure 5-6: Create Report – Trend Analysis – Data Set 2

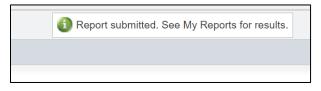
Step 7. Select Run Report to generate the report (Figure 5-7).

New Repo					
Step 2 - Select Pa	arameters				
Report Trend A	nalysis				
🝺 Data Set 1	🧊 Data Set 2				Copy Parameters
Maximum Reco	rds Returned				
Owner	CQAF	*	Supplier	No Selection	
				•	
Sampled Date	< •	and 💌	Special Prov.		
	< •				
Test Method	DB-418-A	-	Structure No.	No Selection	
				•	
Value Field	Average Strength	•	Grade	No Selection	
				•	
Sample Type	Random Independent	×	Sample Location	like •	
	Random Split	X			
Approval Status	Approved	×	Direction	like 💌	
		•	Dist from Ol		
Segment	No Selection	*	Dist. from CL	like •	
Section	No Coloria		Misc	like 💌	
Section	No Selection	•	IVIISC	like	
Sampled By			Roadway	No Selection	
ounpion by		·		NO SELECION	
Material	No Selection		Test No.	like -	
		•			
Feature	No Selection		Start Station	like 👻	
		•			
Spec Item	No Selection		End Station	like •	
		-			
	ia				
DB-418-A Criter	Id				

Figure 5-7: Create Report – Trend Analysis – Run Report

A message at the top of the page will appear as shown in Figure 5-8 indicating that the report has been submitted and is being generated.

Figure 5-8: Trend Analysis - Report Submitted



Step 8. Select My Reports from Reporting Menu (Figure 5-9).

Figure 5-9: Reporting – My Reports

Dashboard	Search	Analysis	Reporting	Administrati	on
Orreste Densert			My Reports		
Create Report			Create Report		I. See My Reports for results.

Step 9. The My Reports page displays with the list of reports that are available for viewing. Note that in this example, the report has a status of "Queued" (Figure 5-10). Periodically select the Refresh button at the bottom of the screen until the report status indicates "Completed."

end Analysis		Completed	Status	Message	Delete	
	02/14/2022 3:30 PM		Queued			Options
end Analysis	02/14/2022 12:34 PM	02/14/2022 12:34 PM	Completed			Options
end Analysis	01/25/2022 7:13 PM	01/25/2022 7:13 PM	Completed			Options
end Analysis	12/18/2021 10:53 AM	12/18/2021 10:54 AM	Completed			Options
kport Test	11/18/2021 3:41 PM	11/18/2021 3:41 PM	Completed			Options
end Analysis	11/12/2021 11:49 AM	11/12/2021 12:27 PM	Completed			Options
end Analysis	11/01/2021 10:59 AM	11/01/2021 10:59 AM	Completed			Options
end Analysis	10/28/2021 4:27 PM	10/28/2021 4:28 PM	Completed			Options
end Analysis	10/28/2021 9:40 AM	10/28/2021 9:40 AM	Completed			Options
end Analysis	10/07/2021 3:45 PM	10/07/2021 3:45 PM	Completed			Options
end Analysis	08/09/2021 3:52 PM	08/09/2021 3:52 PM	Completed			Options
kport Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
kport Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
ata Analysis	06/21/2021 10:54 PM	06/21/2021 10:55 PM	Completed			Options
end Analysis	06/21/2021 10:49 PM	06/21/2021 10:49 PM	Completed			Options
end Analysis	06/21/2021 10:48 PM	06/21/2021 10:48 PM	Completed			Options
end Analysis	05/27/2021 2:47 PM	05/27/2021 2:47 PM	Completed			Options

Figure 5-10: My Reports page

Step 10. Once the report status is changed to Completed, select the Options button and then View (Figure 5-11).

Figure 5-11: My Reports - View Completed Report

My Reports							
Report	Submitted	Completed	Status	Message	Delete		
Trend Analysis	02/14/2022 3:30 PM	02/14/2022 3:30 PM	Completed			Option View	
Trend Analysis	02/14/2022 12:34 PM	02/14/2022 12:34 PM	Completed			Options Rerun	
Trend Analysis	01/25/2022 7:13 PM	01/25/2022 7:13 PM	Completed			Options Delete	
Trend Analysis	12/18/2021 10:53 AM	12/18/2021 10:54 AM	Completed			Options	

Step 11. The Excel file will download. After the file is finished downloading select the file to open and review it (Figure 5-12).

Report	Submitted	Completed	Status	Message	Delete	
Trend Analysis	02/14/2022 3:30 PM	02/14/2022 3:30 PM	Completed			Options
Trend Analysis	02/14/2022 12:34 PM	02/14/2022 12:34 PM	Completed			Options
Trend Analysis	01/25/2022 7:13 PM	01/25/2022 7:13 PM	Completed			Options
Trend Analysis	12/18/2021 10:53 AM	12/18/2021 10:54 AM	Completed			Options
Export Test	11/18/2021 3:41 PM	11/18/2021 3:41 PM	Completed			Options
Trend Analysis	11/12/2021 11:49 AM	11/12/2021 12:27 PM	Completed			Options
Trend Analysis	11/01/2021 10:59 AM	11/01/2021 10:59 AM	Completed			Options
Trend Analysis	10/28/2021 4:27 PM	10/28/2021 4:28 PM	Completed			Options
Trend Analysis	10/28/2021 9:40 AM	10/28/2021 9:40 AM	Completed			Options
Trend Analysis	10/07/2021 3:45 PM	10/07/2021 3:45 PM	Completed			Options
Trend Analysis	08/09/2021 3:52 PM	08/09/2021 3:52 PM	Completed			Options
Export Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
Export Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
Data Analysis	06/21/2021 10:54 PM	06/21/2021 10:55 PM	Completed			Options
Trend Analysis	06/21/2021 10:49 PM	06/21/2021 10:49 PM	Completed			Options
Trend Analysis	06/21/2021 10:48 PM	06/21/2021 10:48 PM	Completed			Options
Trend Analysis	05/27/2021 2:47 PM	05/27/2021 2:47 PM	Completed			Options
rend Analysis	05/27/2021 2:47 PM	05/27/2021 2:47 PM	Completed			Options
	` •	Delete Checked Re	fresh		Page 1 o	f 1 (17 item:

Figure 5-12: My Reports – Downloaded Report

Step 12. The Excel file will open on the Trend Analysis tab. The file will show the parameters that were selected to generate the Trend Analysis. Figure 5-13 shows the parameters and a graph of the OVF and CQAF (IQF) data.

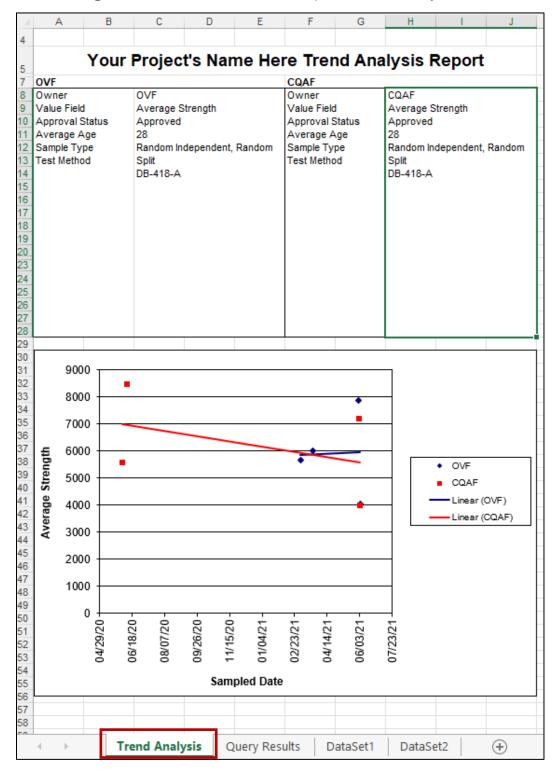


Figure 5-13: Downloaded Excel Report - Trend Analysis

Step 13. The Trend Analysis report is generated within Windows Excel as shown on the next tab (Figure 5-14).

The data used to generate the trend line is also included within the Excel file as shown directly below. This data is separated by the OVF (Dataset 1) and CQAF (IQF) (Dataset 2) and includes Header information and test results for each data point collected and analyzed. If desired, the I2MS Testing Manager can use this data to generate other types of graphs within Excel.

×	🗴 AutoSave 🔵 Off) 📙 🎸 🖉 👻 🖘 Trend Analysis.xls - Compatibility Mode 🕶								
F	ile	Home Ins	ert Draw	Page	e Layout 🛛 Formula	s Data Review	View I		
	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								
	Undo	Clipboard	Γ <u>ν</u>		Font	Alig کا	nment		
J3	30	~ : [$\times \checkmark f_x$						
		А	В		С	D	E		
1	Datase	et 1 Date	Dataset 1 Va	alue	Dataset 2 Date	Dataset 2 Value			
2		6/3/2021		4030	6/3/2021	3980			
3		6/1/2021		7880	6/2/2021	7170			
4		3/23/2021		6020	06/10/2020	8460			
5		3/4/2021		5670	06/03/2020	5550			
6									
	• •	Trer	nd Analysis	Que	ry Results DataS	et1 DataSet2	+		

Figure 5-14: Downloaded Excel Report – Query Results

Step 14. The DataSet1 tab will show the details related to the OVF test records in the Trend Analysis and the DataSet2 tab will show the details the CQAF (IQF) test records in the Trend Analysis. The user will be able to sort and search the data as needed (Figure 5-15).

Figure 5-15: Downloaded Excel Report - DataSet1 and DataSet2 Tabs



5.2 Performing a Data Analysis

The Data Analysis procedure allows the user to create a customized data graph to compare two Value Fields (e.g., compressive strength versus slump), for both OVF and CQAF (IQF) data with one assigned to the x-axis and the other to the y-axis.

Step 1. From the Navigation Bar, select Create Report from the Analysis drop down menu (Figure 5-16).

Figure 5-16: Select Create Report

Dashboard	Search	Analysis	Reporting	Administrati	III I2MS
Mix Dependen			My Reports		
My Reports			Create Repor	t	Logged in: OVF Manager Logout

Step 2. The New Report screen will appear with five report types to choose as shown below. To generate a Data Analysis report, choose the Select button (Figure 5-17).

New Report							
Step 1 - Choose a Report							
Report	Description						
Trend Analysis	Trend Analysis Report	Select					
Data Analysis	Data Analysis Report	Select					
Quarterly Federal Report - Continuous Analysis	Quarterly Federal Report - Continuous Analysis	Select					
Quarterly Federal Report - Independent Verification	Quarterly Federal Report - Independent Verification	Select					
Quarterly Federal Report - Observation Verification	Quarterly Federal Report - Observation Verification	Select					
Print All	Print all search results	Select					
Export Test	Export test data	Select					

Figure 5-17: Select Data Analysis

Step 3. Complete the form for the owner being either OVF or CQAF (IQF). In this example, the data analysis will be performed to compare asphalt content versus lab molded density (Figure 5-18).

New Report	t				
Step 2 - Select Pa	rameters				
Report Data Ana	alysis				
🧊 Data Set 1	🍺 Data Set 2				Copy Parameters
Maximum Record	ds Returned			Series Legend	•
Owner	OVF *		Special Prov.	•	
Sampled Date		and 👻	Structure No.	No Selection	
	<= •			•	
Sample Type	No Selection		Grade	No Selection	
	•			T	
Approval Status	Approved X		Sample Location	equals 👻	
	•				
Segment	No Selection		Direction	equals 👻	
	•				
Section	No Selection		Dist. from CL	equals 👻	
	•				
Sampled By	-		Misc	equals 👻	
Material	No Selection		Roadway	No Selection	
	•			•	
Feature	No Selection		Test No.	equals -	
	•				
Spec Item	No Selection		Start Station	equals -	
	•				
Supplier	No Selection		End Station	equals -	
	•				
Data Analysis X					
	B-236-F 🔹		Value Field As	sphalt Content, %:	
Data Analysis Y			Value Field La	h Maldad Danaity (V)	
	B-207-FPR *			b Molded Density, %: •	
		Back	Run Report		

Figure 5-18: Data Analysis – Data Set 1

Step 4. Select Copy Parameters. A message will appear at the top of the page indicating that Data Set 1 parameters were copied to Data Set 2 (Figure 5-19).

		Data Set 1 parameters copied to Data Set 2.		
New Repor	t			
Step 2 - Select Pa	rameters			
Report Data Ana	alysis			
🍺 Data Set 1	🍺 Data Set 2			Copy Parameters
Maximum Recor	ds Returned		Series Legend	•
Owner	OVF *	Special Prov.	•	
Sampled Date	>= • and •	Structure No.	No Selection	
	<= •		-	
Sample Type	No Selection	Grade	No Selection	
	~		*	
Approval Status	Approved X	Sample Location equ	ials 👻	
0t	•	Disseling		
Segment	No Selection	Direction equ	ials 💌	
Section	No Selection	Dist. from CL equ	ials -	
	•			
Sampled By	•	Misc equ	ials 🔹	
Material	No Selection	Roadway	No Selection	
	v		v	
Feature	No Selection	Test No. equ	ials 👻	
	Ψ			
Spec Item	No Selection	Start Station equ	uals 👻	
	•			
Supplier	No Selection	End Station equ	ials 💌	
Data Analysis X	Axis			
Test Method D	B-236-F 🔹	Value Field Asphalt	Content, %:	
Data Analysis Y	Axis			
Test Method D	B-207-FPR *	Value Field Lab Mol	Ided Density, %: 👻	
		Back Run Report		

Figure 5-19: Create Report – Data Analysis – Data Set 2 – Copy Parameters

Step 5. Select Data Set 2. All parameters will be copied except when there are multiple selections (Figure 5-20). If there are multiple selections such as Random Independent and Random Split for the Sample Type be sure to add the missing selection to Data Set 2. This is a known glitch in I2MS.

New Report	t		
Step 2 - Select Pa	rameters		
Report Data Ana	alysis		
🍺 Data Set 1	팅 Data Set 2		Copy Parameters
Maximum Record	ds Returned		
Owner	OVF +	Special Prov.	
Sampled Date	OVF	Structure No. No Selection	
Sample Type	CQAF No-	Grade No Selection	
		•	
Approval Status	Approved ×	Sample Location like +	
	~		
Segment	No Selection	Direction like -	
	•		
Section	No Selection	Dist. from CL like 👻	
Oursele d Du	▼		
Sampled By		Misc like +	
Material	No Selection	Roadway No Selection	
Feature			
reature	No Selection	Test No.	
Spec Item	No Selection	Start Station like +	
	·····		
Supplier	No Selection	End Station like +	
Data Analysis X	Axis		
	B-236-F *	Value Field Asphalt Content, %:	
Data Analysis Y		Value Field Lab Molded Density %: +	
Test Method D	B-207-FPR *		
		Back Run Report	

Figure 5-20: Create Report – Data Analysis – Data Set 2

Step 6. Select Run Report to generate the report. A message will appear at the top of the page indicating that the report has been submitted and is being generated (Figure 5-21).

Figure 5-21: Data Analysis – Report Submitted



Step 7. Select My Reports from Reporting Menu (Figure 5-22).

Figure 5-22: Data Analysis – Select My Reports

	Search	Select Form	Analysis	Reporting My Reports	Administration
Create Report				Create Report	

Step 8. The My Reports page displays with the listing of reports that are available for viewing. If the desired report has a status of "Queued," periodically select the Refresh button at the bottom of the screen until the report status indicates "Completed." Select Options then View to download the report (Figure 5-23).

	Completed	Status	Message	Delete	
02/14/2022 5:10 PM	02/14/2022 5:10 PM	Completed			Options View
02/14/2022 5:02 PM	02/14/2022 5:02 PM	Completed			Options Reru
02/14/2022 3:30 PM	02/14/2022 3:30 PM	Completed			Options Dele
02/14/2022 12:34 PM	02/14/2022 12:34 PM	Completed			Options
01/25/2022 7:13 PM	01/25/2022 7:13 PM	Completed			Options
12/18/2021 10:53 AM	12/18/2021 10:54 AM	Completed			Options
11/18/2021 3:41 PM	11/18/2021 3:41 PM	Completed			Options
11/12/2021 11:49 AM	11/12/2021 12:27 PM	Completed			Options
11/01/2021 10:59 AM	11/01/2021 10:59 AM	Completed			Options
10/28/2021 4:27 PM	10/28/2021 4:28 PM	Completed			Options
10/28/2021 9:40 AM	10/28/2021 9:40 AM	Completed			Options
10/07/2021 3:45 PM	10/07/2021 3:45 PM	Completed			Options
08/09/2021 3:52 PM	08/09/2021 3:52 PM	Completed			Options
06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
06/21/2021 10:54 PM	06/21/2021 10:55 PM	Completed			Options
06/21/2021 10:49 PM	06/21/2021 10:49 PM	Completed			Options
06/21/2021 10:48 PM	06/21/2021 10:48 PM	Completed			Options
05/27/2021 2:47 PM	05/27/2021 2:47 PM	Completed			Options
	02/14/2022 3:30 PM 02/14/2022 12:34 PM 01/25/2022 7:13 PM 12/18/2021 10:53 AM 11/18/2021 3:41 PM 11/12/2021 11:49 AM 11/01/2021 10:59 AM 10/28/2021 4:27 PM 10/28/2021 9:40 AM 10/07/2021 3:52 PM 06/09/2021 3:52 PM 06/21/2021 11:03 PM 06/21/2021 11:03 PM 06/21/2021 10:54 PM 06/21/2021 10:54 PM	02/14/2022 3:30 PM 02/14/2022 3:30 PM 02/14/2022 12:34 PM 02/14/2022 12:34 PM 01/25/2022 7:13 PM 01/25/2022 7:13 PM 12/18/2021 10:53 AM 12/18/2021 10:54 AM 11/18/2021 3:41 PM 11/18/2021 3:41 PM 11/12/2021 11:49 AM 11/12/2021 12:27 PM 11/01/2021 10:59 AM 11/01/2021 10:59 AM 10/28/2021 9:40 AM 10/28/2021 9:40 AM 10/28/2021 9:40 AM 10/07/2021 3:45 PM 08/09/2021 3:52 PM 08/09/2021 3:52 PM 06/21/2021 11:03 PM 06/21/2021 11:03 PM 06/21/2021 10:54 PM 06/21/2021 10:55 PM 06/21/2021 10:54 PM 06/21/2021 10:55 PM 06/21/2021 10:49 PM 06/21/2021 10:48 PM	02/14/2022 3:30 PM 02/14/2022 3:30 PM Completed 02/14/2022 12:34 PM 02/14/2022 12:34 PM Completed 01/25/2022 7:13 PM 01/25/2022 7:13 PM Completed 12/18/2021 10:53 AM 12/18/2021 10:54 AM Completed 11/18/2021 3:41 PM 11/18/2021 3:41 PM Completed 11/12/2021 11:49 AM 11/12/2021 12:27 PM Completed 11/01/2021 10:59 AM 11/01/2021 10:59 AM Completed 10/28/2021 4:27 PM 10/28/2021 4:28 PM Completed 10/28/2021 9:40 AM 10/28/2021 9:40 AM Completed 10/07/2021 3:45 PM 10/07/2021 3:45 PM Completed 06/09/2021 3:52 PM 08/09/2021 3:52 PM Completed 06/21/2021 11:03 PM 06/21/2021 11:03 PM Completed 06/21/2021 10:34 PM 06/21/2021 10:55 PM Completed 06/21/2021 10:49 PM 06/21/2021 10:49 PM Completed 06/21/2021 10:49 PM 06/21/2021 10:49 PM Completed	02/14/2022 3:30 PM 02/14/2022 3:30 PM Completed 02/14/2022 12:34 PM 02/14/2022 12:34 PM Completed 01/25/2022 7:13 PM 01/25/2022 7:13 PM Completed 12/18/2021 10:53 AM 12/18/2021 10:54 AM Completed 11/18/2021 3:41 PM 11/18/2021 3:41 PM Completed 11/12/2021 11:49 AM 11/12/2021 12:27 PM Completed 11/01/2021 10:59 AM 11/01/2021 10:59 AM Completed 10/28/2021 4:27 PM 10/28/2021 4:28 PM Completed 10/28/2021 9:40 AM 10/28/2021 9:40 AM Completed 10/07/2021 3:45 PM 10/07/2021 3:45 PM Completed 06/09/2021 3:52 PM 08/09/2021 3:52 PM Completed 06/21/2021 11:03 PM 06/21/2021 11:03 PM Completed 06/21/2021 11:03 PM 06/21/2021 11:03 PM Completed 06/21/2021 10:49 PM 06/21/2021 10:49 PM Completed	02/14/2022 3:30 PM 02/14/2022 3:30 PM Completed

Figure 5-23: Data Analysis - My Reports - Select Options -> View

Step 9. The Excel file will download (Figure 5-24). After the file is finished downloading select the file to open and review it.

	Submitted	Completed	Status	Message	Delete	
ata Analysis	02/14/2022 5:10 PM	02/14/2022 5:10 PM	Completed			Options
xport Test	02/14/2022 5:02 PM	02/14/2022 5:02 PM	Completed			Options
rend Analysis	02/14/2022 3:30 PM	02/14/2022 3:30 PM	Completed			Options
rend Analysis	02/14/2022 12:34 PM	02/14/2022 12:34 PM	Completed			Options
end Analysis	01/25/2022 7:13 PM	01/25/2022 7:13 PM	Completed			Options
end Analysis	12/18/2021 10:53 AM	12/18/2021 10:54 AM	Completed			Options
xport Test	11/18/2021 3:41 PM	11/18/2021 3:41 PM	Completed			Options
end Analysis	11/12/2021 11:49 AM	11/12/2021 12:27 PM	Completed			Options
end Analysis	11/01/2021 10:59 AM	11/01/2021 10:59 AM	Completed			Options
end Analysis	10/28/2021 4:27 PM	10/28/2021 4:28 PM	Completed			Options
end Analysis	10/28/2021 9:40 AM	10/28/2021 9:40 AM	Completed			Options
end Analysis	10/07/2021 3:45 PM	10/07/2021 3:45 PM	Completed			Options
end Analysis	08/09/2021 3:52 PM	08/09/2021 3:52 PM	Completed			Options
xport Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
xport Test	06/21/2021 11:03 PM	06/21/2021 11:03 PM	Completed			Options
ata Analysis	06/21/2021 10:54 PM	06/21/2021 10:55 PM	Completed			Options
end Analysis	06/21/2021 10:49 PM	06/21/2021 10:49 PM	Completed			Options
end Analysis	06/21/2021 10:48 PM	06/21/2021 10:48 PM	Completed			Options
end Analysis	05/27/2021 2:47 PM	05/27/2021 2:47 PM	Completed			Options

Figure 5-24: Data Analysis - Downloaded Excel File

Step 10. The Data Analysis report is generated within Windows Excel as shown below (Figure 5-25).

Similar to the Custom Reports, the data used to generate the trend line is also included within the Excel file. This data is separated by the OVF and CQAF (IQF) and includes Header information and test results for each data point collected and analyzed.

The Excel file will open on the Report tab. The file will show the parameters that were selected to generate the Data Analysis. Below the parameters is a graph of the OVF and CQAF (IQF) data.

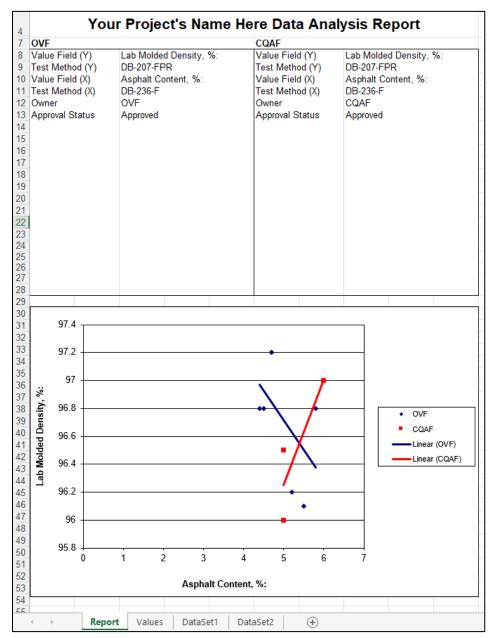


Figure 5-25: Data Analysis – Excel Report – Report Tab

Step 11. The Values tab will show the values used to generate the graph on the Report tab. The values will be sorted into Dataset 1 and Dataset 2 (Figure 5-26).

	A	В	С	D
1	Dataset 1 Xvalue	Dataset 1 YValue	Dataset 2 Xvalue	Dataset 2 YValue
2	4.7	97.2	6	97
3	5.8	96.8	5	96.5
4	5.2	96.2	5	96
5	5.5	96.1		
6	4.4	96.8		
7	4.7	97.2		
8	4.5	96.8		
9				

Figure 5-26: Data Analysis – Excel Report – Values Tab

Step 12. The DataSet1 tab will show the details related to the OVF test records in the Data Analysis and the DataSet2 tab will show the details the CQAF (IQF) test records in the Data Analysis. The user will be able to sort and search the data as needed (Figure 5-27).

Figure 5-27: Data Analysis - Excel Report - DataSet1 and DataSet2 tabs

Γ		А	В	С	D	E	F	G	Н	1	J
	1		OVF								
	2	Sample ID	Sampled_Date	Sample Type	Split Sample ID	Report Type	Section	Inspected By	Material	Spec Item	Supplier
	2 01	150110001500	10/00/0001	Developed and a second cost		National I		Ower Man Field	ALIMA TOOLIMAACA	544	TOOLIMACOurselised

5.3 Continuous Analysis (Level 1) Reporting

Step 1. From the Navigation Bar, select Create Report from the Reporting drop down menu (Figure 5-28).

Figure 5-28: Reporting – Create Report

Dashboard Search	Analysis	Reporting Administrati		III I2MS	
And Read		My Reports Create Report		Logged in: OVF Manager Logout	
Create Report					

Step 2. The New Report screen will appear with five report types to choose as shown below. To generate a Level 1 Continuous Analysis report for the Quarterly Federal Report, choose the Select button (Figure 5-29).

Figure 5-29: Select Quarterly Federal Report – Continuous Analysis

New Report									
Step 1 - Choose a Report									
Report	Description	Description							
Trend Analysis	Trend Analysis Report	Select							
Data Analysis	Data Analysis Report	Select							
Quarterly Federal Report - Continuous Analysis	Quarterly Federal Report - Continuous Analysis	Select							
Quarterly Federal Report - Independent Verification	Quarterly Federal Report - Independent Verification	Select							
Quarterly Federal Report - Observation Verification	Quarterly Federal Report - Observation Verification	Select							
Print All	Print all search results	Select							
Export Test	Export test data	Select							

Step 3. Select the desired start and end dates and select Run Report to generate the report (Figure 5-30).

Figure 5-30: Quarterly Federal Report – Continuous Analysis – Select Start Date and End Date

								Ne	w Re					
							Step	02-3						
							Report Quarterly Federal Report - Continuous Analysis							
							Sta	tart Date 10/01/2021						End Date 12/31/2021
October 2021 - November 2021									2021				►	Back Run Report
		Oct	ober 2	2021					Nove	mber	2021			
S	Μ	Т	W	Т	F	S	S	Μ	Т	W	Т	F	S	
					1	2		1	2	3	4	5	6	
3	4	5	6	7	8	9	7	8	9	10	11	12	13	
10	11	12	13	14	15	16	14	15	16	17	18	19	20	
						23			23					
17	18	19	20	21	22		21	22		24	25	26	27	
24	25	26	27	28	29	30	28	29	30					
31														
					Т	oday	No	ne						

Step 4. After the Run Report button is selected, Quarterly Report – Continuous
 Statistical Analysis Reports will be generated as shown in Figure 5-31.
 Statistical Analysis reports will be generated across all materials categories
 where there is data approved for analysis for the selected time range.

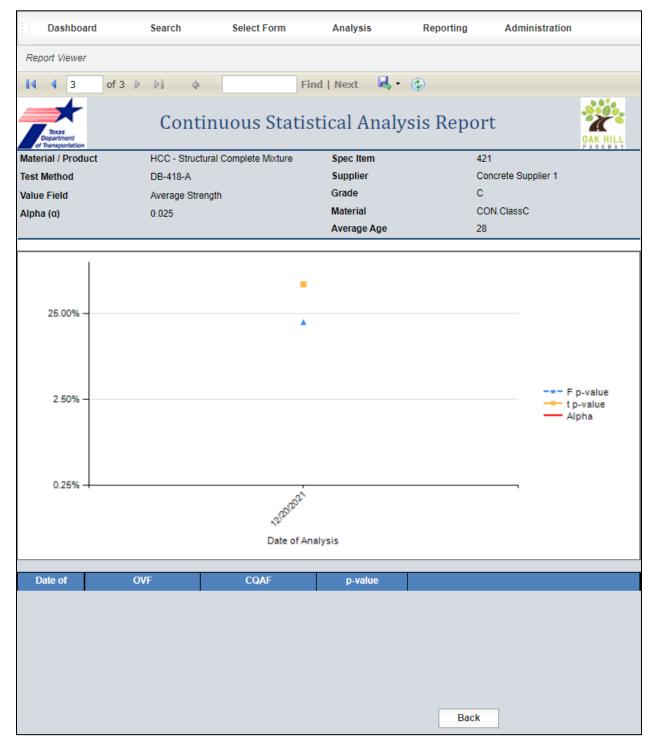


Figure 5-31: Quarterly Federal Report – Continuous Analysis Report

Step 5. The user has the option to Print and/or Export the report using the options shown in Figure 5-32.

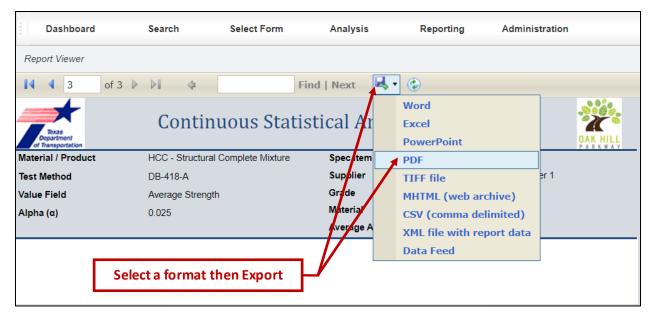


Figure 5-32: Quarterly Federal Report – Exporting Continuous Analysis Report

5.4 Independent Verification (Level 2) Reporting

Level 2 reports are generated using data obtained from the Level 2 Historical Analysis tab. Analyses on materials that were "Verified" or "Not Verified" are included within the report. The following steps will guide the user in generating a Level 2 report.

Step 1. From the Navigation Bar, select Create Report from the Reporting drop down menu (Figure 5-33).

Figure 5-33: Select C	reate Report
-----------------------	--------------

Dashboard	Search	Analysis	Reporting	Administrati			
Orante Desert			My Reports		Learned in OVE Manager Languet		
Create Report			Create Repo	t	Logged in: OVF Manager Logout		

Step 2. The New Report screen will appear with five report types to choose as shown below. To generate a Level 2 Independent Verification report for the Quarterly Federal Report, choose the Select button (Figure 5-34).

Figure 5-34: Select Quarterly Federal Report – Independent Verification

New Report										
Step 1 - Choose a Report										
Report Description										
Trend Analysis	Trend Analysis Report	Select								
Data Analysis	Data Analysis Report	Select								
Quarterly Federal Report - Continuous Analysis	Quarterly Federal Report - Continuous Analysis	Select								
Quarterly Federal Report - Independent Verification	Quarterly Federal Report - Independent Verification	Select								
Quarterly Federal Report - Observation Verification	Quarterly Federal Report - Observation Verification	Select								
Print All	Print all search results	Select								
Export Test	Export test data	Select								

Step 3. Enter the start and end Dates for the Quarterly Federal Report and select Run Report to generate the report (Figure 5-35).

Figure 5-35: Quarterly Federal Report – Independent Verification – Select Start and End Date

								Ne	w Re	port				
Step 2 - Select Parameters							02-3	Select	Para	meter	s			
							Re	port	Quar	terly F	edera	al Rep	port - Ir	dependent Verification
							Sta	rt Dat	e (01/01/	2022			End Date 03/31/2022
•				Jan	uary	2022 -	Febru	ary 2	022				►	Back Run Report
		Jan	uary 2	2022					Febr	ruary 3	2022			
S	Μ	Т	W	Т	F	S	S	Μ	Т	W	Т	F	S	
						1			1	2	3	4	5	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	
9	10	11	12	13	14	15	13	14	15	16	17	18	19	
16	17	18	19	20	21	22	20	21	22	23	24	25	26	
23	24	25	26	27	28	29	27	28						
30	31													
					Т	oday	No	ne						

Step 4. After the Run Report key is selected, a Quarterly Report – Independent Verification Reports will be generated as shown in Figure 5-36.

	Search	Select Form	Analysis	Reporting	Administration	
Report Viewer						
4 3 of 6	5 🕨 🕅 💠	Find	d Next 🔓	4 · ③		
Texas Department of Transportation		Indepen	dent Ve	erification R	leport	
Material / Product	HCC - Stru	uctural Complete Mixture	e	Spec Item	421	
est Method	DB-418-A			Supplier	Concrete Supplier 1	
/alue Field	Concrete 7	Temperature		Grade	С	
				Material	CON.ClassC	
80 - 75 - 70 - 66 - 60 - 66 - 60 - 66 - 60 - 66 - 6					: •	
40						OVF CQAF
5				· · · ·		
5	a' hereas	NEDRORI	1232021	2802021	22092021 221022021	
5-	al water	, 1892.22	ND ^{DDDD} Tested Da		-2892.021 .2192.021	
5		n, OVF n, CQAF	Tested Da		Comments	
5			Tested Da			- SA 3/22/20
5	Status	n, OVF n, CQAF	Tested Da			- SA 3/22/20
5 0 Date Verified	Status	n, OVF n, CQAF	Tested Da			- SA 3/22/20
5 0 Date Verified	Status	n, OVF n, CQAF	Tested Da			- SA 3/22/20
5 0 Date Verified	Status	n, OVF n, CQAF	Tested Da			- SA 3/22/20

Figure 5-36: Quarterly Federal Report – Independent Verification Report

Step 5. The user has the option to print the report and/or export the report using the options shown in Figure 5-37.

Dashboard	Search	Select Form	Analysis		Reporting	Administ	tration
Report Viewer							
14 4 3	of 6 🕨 🔰 💠	Fi	ind Next	Ы,	•		
			1	Γ	Word		
Texas		Indeper	ndent y		Excel		**
Department of Transportation				4	PowerPoint		OAK HILL PARKWAY
Material / Product	HCC - Stru	uctural Complete Mixtu	ure		PDF		21
Test Method	DB-418-A			/	TIFF file		oncrete Supplier 1
Value Field	Concrete T	Temperature			MHTML (web arch	nive)	
			- 17		CSV (comma deli	mited)	ON.ClassC
				1	XML file with repo	ort data	
80			_//_		Data Feed		
75 - 70 - 65 - 60 -	Select a format	then Expor	t				

Figure 5-37: Quarterly Federal Report – Exporting Independent Verification Report

5.5 Observation Verification (Level 3) Reporting

Step 1. From the Navigation Bar, select Create Report from the Reporting drop down menu (Figure 5-38).

Figure 5-38: Select Create Report

	Dashboard	Search	Analysis	Reporting Administration		II I2MS	
0	unde Denert			My Reports		Logged in: OVF Manager Logout	
Ch	reate Report			Create Report			

Step 2. The New Report screen will appear with five report types to choose as shown below. To generate a Level 3 Observation Verification report for the Quarterly Federal Report, choose the Select button (Figure 5-39).

Figure 5-39: Select Quarterly Federal Report – Observation Verification

New Report										
Step 1 - Choose a Report										
Report Description										
Trend Analysis	Trend Analysis Report	Select								
Data Analysis	Data Analysis Report	Select								
Quarterly Federal Report - Continuous Analysis	Quarterly Federal Report - Continuous Analysis	Select								
Quarterly Federal Report - Independent Verification	Quarterly Federal Report - Independent Verification	Select								
Quarterly Federal Report - Observation Verification	Quarterly Federal Report - Observation Verification	Select								
Print All	Print all search results	Select								
Export Test	Export test data	Select								

Step 3. Enter the start and end dates for the Quarterly Federal Report and select Run Report to generate the report (Figure 5-40).

Figure 5-40: Quarterly Federal Report – Observation Verification – Select Start and End Date

New F	Report															
Step 2 - Select Parameters																
Report Qu	arterly Federal Re	port - Ob	servat	ion V	erifica	tion										
Start Date 01/01/2022 End Date 03/31/2022																
		•				Jan	uary	2022 -	Febr	uary 2	022				►	
				Jan	uary 2	2022					Febr	uary :	2022			
		S	Μ	Т	W	т	F	S	S	Μ	т	W	т	F	S	
								1			1	2	3	4	5	
		2	3	4	5	6	7	8	6	7	8	9	10	11	12	
		9	10	11	12	13	14	15	13	14	15	16	17	18	19	
		16	17	18	19	20	21	22	20	21	22	23	24	25	26	
		23	24	25	26	27	28	29	27	28						
		30	31													
							Т	oday	No	one						

Step 4. After the Run Report key is selected, a Quarterly Report – Observation Verification Report will be generated as shown below (Figure 5-41).

Figure 5-41: Quarterly Federal Report – Observation Verification Report

:	Dashboard	Search	Analysis	Reporting A	Administration						
Re,	port Viewer										
14	4 1	of 1 ▷ ▷ □ Φ	Fi	nd Next 🛛 🔍 🗸 🤆	Ð						
	Observation Verification Report										
Te	st Method	Value Field	Observed On	Observed By	Comments						
C)B-418-A	Concrete Temperature	1/6/2022	Owen Van Field	Owen Van Field observed Ian Quinn Ford perform DB-418-A according to test procedures. - OVFM 1/8/2022						
					This observation was performed on 1/6/2022. - OVFM 1/8/2022						
C)B-418-A	Corrected Air Content	1/6/2022	Owen Van Field	On 1/6/2022, Owen Van Field observed Ian Quinn Ford perform DB-418-A according to test procedures.						
					- OVFM 3/22/2022						
Re		lendar Quarter o 3/31/2022		port Date /22/2022	Page 1 of 1						
				Back							

Step 5. The user has the option to print the report and/or export the report using the options shown below (Figure 5-42).

Figure 5-42: Quarterly Federal Report – Exporting Observation Verification Report

Dashboar	Dashboard Search Analysis		Reporting	Adm	ninistration	
Report Viewer						
I4 4 1	of 1 🕨 🕅 🗄 🖕	Fi	ind Next 🔍 -	٢		
Texas Department of Transportation	Obse	ervation V	'erificat	Word Excel Powe	-	DAK HILL
Test Method	Value Field	Observed On	Observe	TEF	file	nts
DB-418-A	Concrete Temperature	1/6/2022	Ower Van		the found month in a literal	Quinn Ford perform ocedures.
ļ		'		CSV ((comma delimited)	- OVFM 1/8/2022
		'		XML	file with report data	ed on 1/6/2022.
		'		Data	Feed	- OVFM 1/8/2022
Sele	ect a format then	Export	ven Van Field	F	on 1/6/2022, Owen Van Field ord perform DB-418-A acco rocedures.	
						- OVFM 3/22/2022
	Calendar Quarter to 3/31/2022		port Date /22/2022			Page 1 of 1 –
			Back			

5.6 Print All

This feature currently does not work and if selected an error message will be returned. This is a known glitch in I2MS.

5.7 Export Test

Step 1. From the Navigation Bar, select Create Report from the Reporting drop down menu (Figure 5-43).

Figure 5-43: Select Create Report

Dashboard	Search	Analysis	Reporting	Administrati	IIIIIII	
Oracto Descert		My Reports				
Create Report		Create Report	t	Logged in: OVF Manager Logout		

Step 2. The Report screen will appear with an option to choose Export Test as shown below. To generate an Export Test report, choose the Select button (Figure 5-44).

Figure 5-44: Select Export Test

Step 1 - Choose a Report								
Description								
Trend Analysis Report	Select							
Data Analysis Report	Select							
Quarterly Federal Report - Continuous Analysis	Select							
Quarterly Federal Report - Independent Verification	Select							
Quarterly Federal Report - Observation Verification	Select							
Print all search results	Select							
Export test data	Select							
	Trend Analysis Report Data Analysis Report Quarterly Federal Report - Continuous Analysis Quarterly Federal Report - Independent Verification Quarterly Federal Report - Observation Verification Print all search results							

Step 3. Select Parameters as needed. As a minimum, one Test Method must be selected for the Export Test Report to run successfully (Figure 5-45).

New Repo	ort	
Step 2 - Select P	arameters	
Report Export	Test	
Export Test Par	ameters	
Owner	Ψ	Test Method 🗸
Sampled Date	>= • and •	
		Back Run Report

Figure 5-45: Export Test-Select Parameters

Step 4. After the parameters have been chosen, select Run Report (Figure 5-46). A message will appear at the top of the screen showing that the report was submitted and is being generated. See My Reports for results.

Figure 5-46: Select Run Report

		 Report submitted. See My Reports for results. 	
New Repo	ort		
Step 2 - Select P	arameters		
Report Export	Test		
Export Test Par	ameters		
Owner	v	Test Method DB-418-A	-
Sampled Date	>= • and •	*	
	<= •		
		Back Run Report	

Step 5. The My Reports page displays with the listing of reports that are available for viewing (Figure 5-47). If the desired report has a status of "Queued," periodically select the Refresh button at the bottom of the screen until the report status indicates "Completed." Select Options then View to download the report.

Figure 5-47: My Reports – Export Text – Select Options -> View

My Reports									
Report	Submitted	Completed	Status	Message	Delete				
Export Test	02/17/2022 10:28 PM	02/17/2022 10:28 PM	Completed			Options View			
Export Test	02/17/2022 10:27 PM	02/17/2022 10:27 PM	Completed			Options Rerun			
Export Test	02/17/2022 10:27 PM		Error	Unknown error.		Options Delete			
Data Analysis	02/16/2022 12:46 PM	02/16/2022 12:46 PM	Completed			Options			

Step 6. The Excel file will download. After the file is finished downloading, select the file to open and review it (Figure 5-48).

My Reports									
Report	Submitted	Completed	Status	Message	Delete				
Export Test	02/17/2022 10:28 PM	02/17/2022 10:28 PM	Completed			Options			
Export Test	02/17/2022 10:27 PM	02/17/2022 10:27 PM	Completed			Options			
Export Test	02/17/2022 10:27 PM		Error	Unknown error.		Options			
Data Analysis	02/16/2022 12:46 PM	02/16/2022 12:46 PM	Completed			Options			
Export Test	02/16/2022 12:45 PM	02/16/2022 12:45 PM	Completed			Options			
Export Test.xls	^					Show a			

Step 7. The Excel file only has one tab. The file will show the parameters that were selected to generate the Export Test report. For the DB-418-A tests, there will be one line per each strength test. All associated data will be included such as concrete temperature, slump, and air content. The user will be able to sort and search the data as needed (Figure 5-49).

	A		В		U		U		E		F	0	,	
1	file_version_id	samp	ole_id	sample	type		report_type	e sam	pled_by	materia	I	supplier		
95	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
96	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
97	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
98	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
99	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
100	320239	OVF2	2112140800	Randon	n Independ	ent	Original	Owe	en Van Field	CON.CI	assC	Concrete Su	ippl	ier 1
- 24	AJ		AK	AL	AM		AN		AO		AP	AQ		AR
	concrete_temperation	ature			unit_weight	agg	_correction_			content	class_of_concrete	specimen_s		req_stren
98	62.00000000			6.50000000					3.00000000		C	4x8		3600
99	62.00000000			6.50000000					3.00000000		C	4x8		3600
100	62.00000000			6.50000000					3.00000000		С	4x8		3600
101	62.00000000			6.50000000					3.00000000		С	4x8		3600
102	60.00000000		57	5.75000000					3.25000000		С	4x8		3600

Figure 5-49: Export Text – Excel File

SECTION 6 – ADMINISTRATION

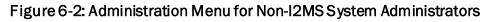
6.1 General

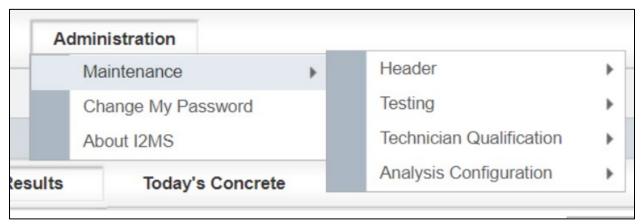
The Administration menu allows I2MS System administrators to set global and specific settings for each project. There are some views and commands that are granted only to I2MS System administrators and are not accessible to daily users. I2MS System Administrators have the following menu under Administration as shown in Figure 6-1.

Repo	orting	Submission	A	dministration	
				Form Submission Log	
				Upload Signature Images	
				Maintenance	×
				Project Settings	
			1	System Admin	F
				Change My Password	
hod	Value Field	Spec Item	:	About I2MS	

Figure 6-1: Administration Menu for I2MS System Administrators

All other users have the following menu (Figure 6-2) under Administration except for the I2MS Testing Managers (I2MS Testing Manager) who is also able to view and search the Form Submission Log. There are some user roles that will allow the user to view, enter, and edit values. Some user roles only allow the user to view the values to verify what CVLs are available and to ensure Technician Qualifications are current. Refer to <u>2.2 Roles and Access</u> for user roles and access rights for more details on which users can view or edits items in this menu.





6.2 I2MS System Administration Commands

The following administrative commands can be accessed from the Administration menu (Figure 6-3). Based on the user's access rights, one may be able to view records or have the ability to add, edit, and delete records. Each of these commands will be discussed in greater detail below.

Figure 6-3: Administration Menu for I2MS Testing Managers

Reporting Submissi	ion	A	dministration			III I2MS
	_		Form Submission Log Maintenance			
					Þ	Logged in: OVF Manager Logout
			Change My Password			
Search Results Today's Co	ncrete		About I2MS			

6.2.1 Form Submission Log

The Form Submission Log (Figure 6-4) is used to view all test forms that have been submitted in the system. The OVF Testing Manager has access to view this log.

Step 1. Search capabilities are provided using filters for Date, IP Address, Owner, Form Key, and Status. If no parameters are selected and the user selects "Run Query" all submitted forms from the beginning of the project are returned (Figure 6-5).

Search				
Date	>= • 12 < •	/14/2021 🔠 a	nd 💌	Form Key like +
IP Address	like	•	+	Status 👻
Owner	No	Selection		
				Run Query
Submitted Fo	rms			
Date		IP	Owner	Form Key Status

Figure 6-4: Form Submission Log

Figure 6-5: Form Submission Log Search Results

07/19/2021	Web Form	OVF	AGH210625040113E	Success	Details
07/19/2021	Web Form	OVF	AGH210625040117E	Error	Details
07/19/2021	23.98.217.35	CQAF	0468210621010418A	Success	Details
07/19/2021	23.98.217.35	CQAF	7035210621010418A	Success	Details
07/19/2021	23.98.217.35	CQAF	1578210618010418A	Success	Details

Step 2. Any combination of the parameters can be selected to narrow the search for the submitted forms (Figure 6-6).

Search					
Date		and •	Form Key	like	+
IP Address	like 🔹	and 🝷	Status	·	
	not like 🔹	× +			
Owner	No Selection			Success	
	· ·			Error	
	OVF		Run Query		
	CQAF				
Submitted Fo	n N/A				

Figure 6-6: Form Submission Log Search Results from Selected Parameters

The IP Address and Form Key can be searched by selecting from the dropdown menu "like," "equals," "begins with," "not like," "not equals," and "not begin" and then entering a value in the box to the right of the drop-down menu. Selecting the plus sign "+" allows the user further search options. Form Key is the combination of the Sample ID and test method. If the user knows that a form has been submitted but the form has not shown under the I2MS Testing Manager's review, then the Sample ID can be searched using Form Key to determine if there was an XML transmission error for this form (Figure 6-7).

Figure 6-7: Form Submission	Log Search Parameters
-----------------------------	-----------------------

Search		
Date	>= • Form F	Key like +
	< 🔹	like
IP Address	like - + Status	
Owner	like action equals to begins with	not like not equals
	not like Run Query	not begins
	not equals	
Submitted For	not begins	

If the Owner is left blank, then OVF and CQAF (IQF) submitted forms will be returned. The user can also select either OVF or CQAF (IQF) and only the submitted forms from the selected Owner will be returned.

There are two search options for Status: "Success" and "Error." If neither is selected, the Query will return submitted forms with both statuses. If "Error" is selected, the Query will return submitted forms with an error message.

Step 3. To view the error message, the user will need to select "Details" (Figure 6-8). Typically, the error message indicates either a technician's is not qualified to perform a test or the qualification has expired. Other error messages include that a form with the provided key already exists in the database, a CVL is not valid, or transport-level error has occurred.

IP Address	like	•	+	Status	Error	-		
Owner	No S	election						
		•						
				Run Query				
Submitted For	ms							
Date		IP	Owner	Form Key		Sta	atus	
10/26/2021		Web Form	OVF	OVF21102215000341F		Err	ror	Details

Figure 6-8: Form Submission Log – Select Details

Step 4. If needed to research what caused the error, the XML code can be copied and viewed by either the user or XML programmer. The user may choose "Back" to go to the previous view (Figure 6-9).

Log Details	
Date	10/22/2021
IP Address	Web Form
Owner	OVF
Form Key	OVF21102215000341F
Status	Error
XML	<pre><?xml version='1.0' encoding='UTF-8'?><form <br="" action_name="OVTSubmitFinal" first_version="false" key="OVF21102215000341F" name="DB-200/07/36">date="2021-10-22T00:00:00" display_key="OVF2110221500" ><owner_id eebcc6c5-7913.4b7d-9afd-affcbd8a9461"="" value="110'/2<security user_guid="></owner_id>header> <column name="sample_id" value="OVF2110221500"></column>column name="sampled_date" value="10/22/2021 12:00:00 AM" />column name="sample_jtype" value="Random Independent" />column name="split_sample_id" />column name="report_type" value="10'/22/2021 12:00:00 AM" />column name="sample_jtype" value="Sampled_by" value="Own Van Field" />column name="spec_year" value="2004" />column name="material" value="0HMA TCSHMAC1" />column name="sampled_by" value="341" />column name="spec_year" value="2004" />column name="sample_jtype" value="0'/>column name="sec_year" value="2014" />column name="sample_jtype" value="0'/>column name="sec_year" value="2014" />column name="sample_jtype" value="0'/>column name="sec_year" value="340HMAC1" />column name="sec_year" value="341" />column name="ged" value="341" />column name="fatiral" value="0'/>column name="fatiral" value="10//>column name="fatiral" value="10// column name="fatiral" value="100" />column name="fatiral" value="100" />column name="size" value="1348qut", />column name="size" value="348qut", />column name="fatiral" value="10//>column name="size" value="1348qut", />column name="current_JMF" />column name="fatiral" value="100" />c/row><row>column name="size" value="348qut", /> column name="fatiral" value="3455</row></form></pre>
Response	Owen Van Field's qualification for Tex-229-F has expired or is not yet valid. (Test Date: 10/22/2021) Back
	Back

6.2.2 Upload Signature Images

Allows the digital images of user signatures to be uploaded providing the ability to electronically sign each form. The Administration module within I2MS allows the user to upload signatures. However, this module is rarely used if at all. Typically, forms have been accepted without a signature since the manager's login credentials are captured and recorded as the person who approved a form. If the OVF Testing Manager wants to use an approved signature on each test record, then a request with a signature saved as a gif will need to be sent to MTD. The System Administrator will need to follow the directions below to upload a signature image.

Step 1. Select Administration -> Upload Signature Images (Figures 6-10 and 6-11).

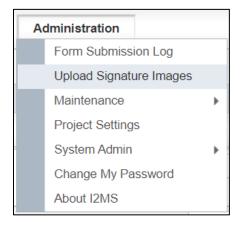


Figure 6-10: Administration -> Upload Signature Images

Figure 6-11: Upload a Signature Image

Upload a Signature Ima	ge
Choose a user and sele	ct the image file to upload. Images should be in .GIF format and smaller than 20 KB.
Select a User	v
Select an Image File	Choose File No file chosen
	Upload

Step 2. Select a User from the drop-down menu (Figure 6-12).

Upload a Signature Ima	ge	
Choose a user and sele	ct the image file to upload. Images shou	Id be in .GIF format and smaller than 20 KB.
Select a User		*
Select an Image File	James T Kirk	
	Jean-Luc Picard	
	Jeffery Joal Annon	Upload
	Joel Randolph	
	John Archer	
	Kathryn Janeway	
	Mark Jameson	
	Matt Decker	
	Monico C. Aguayo	
	Montgomery Scott	•

Figure 6-12: Upload a Signature Image – Select User

Step 3. Then select an image file saved as shown below. The image will need to be in GIF format and less than 20 KB (Figure 6-13).

Upload a Signature Image Choose a user and select the image	e file to upload. Images should be in .GIF format and smaller than 20 KB
Select a User James T K	irk
Select an Image File Choose	File No file chosen
	Upload
🔓 Open	×
← → ✓ ↑ • OVF Managers S	
Quick access Desktop Downloads Documents Pictures OVF Managers Signatures	James T. Kirk James T Kirk.GIF Jean-Cuc Picard.GIF
File name:	All Files (*.*) Open Cancel

Figure 6-13: Upload a Signature Image – Select an Image File

Step 4. After the file is chosen the text to the right of "Choose File" will change from "No file chosen" to the file that was selected (Figure 6-14). Now choose "Upload" the upload the GIF file.

Figure 6-14: Upload a Signature Image – Select Upload

Upload a Signature Ima	ıge		
Choose a user and sele	ct the image file to	o upload. Images sho	uld be in .GIF format and smaller than 20 KB.
Select a User	James T Kirk		•
Select an Image File	Choose File	James T Kirk.Gll	F
			Upload

Step 5. A message will be displayed indicating that the signature image was successfully uploaded (Figure 6-15).

Figure 6-15: Upload a Signature Image – Signature image uploaded successfully

		Signature image uploaded successfully.
Upload a Signature Ima	age	
Choose a user and sele	ect the image file to upload. Images shou	d be in .GIF format and smaller than 20 KB.
Select a User	James T Kirk]
Select an Image File	Choose File No file chosen	
		Upload

Step 6. When the I2MS Testing Manager reviews a test and selects "Approve for Analysis" the signature image is added to the test (Figure 6-16). The I2MS Testing Manager will not immediately see the signature because I2MS will navigate the manager back to the dashboard after the form is approved.

Figure 6-16: Approve for Analysis - Signature image added

ĺ		DB-207	F DETERMIN	IING VMA				
Specific Gravity of	Asphalt Binder (Gs):			1.032				
Voids in Mineral Ag	ggregate (VMA):			13.5				
Test Method:	Tested By:	Те	ested Date:	Stamp Code:				
DB-207-F	Owen Van Field II	1	10/22/2021	1 - Pass				
Remarks:								
Reviewed By:	C	Completed Date:	_					
Authorized By:	A	Authorized Date:						
]					
				Author	ized By Signature:			
Eine Namer 1100	Federation Federations							
Firm Name: USS Firm Number: 8454	Federation Enterprises							
r inn ridinber. o fo f								
					Approve for Analysis	Quarantine	Print View	Dashboa

Step 7. To verify the signature image has been added the test will have to be selected again (Figure 6-17).

		DB-20	07-F DETERMIN				
	f Asphalt Binder (Gs):			1.032			
Voids in Mineral A	ggregate (VMA):			13.5			
Test Method:	Tested By:		Tested Date:	Stamp Code:			
DB-207-F	Owen Van Field II		10/22/2021	1 - Pass			
Remarks:							
Reviewed By:		Completed Dat	e:				
James T Kirk		11/17/2021					
Authorized By:		Authorized Dat	e:				
		Au	thorized By Sign	ature:			
			\sim			1	1211
			1 10	mes 7	- J.	1/2	1
			au	mos	. Kar		
		3	T				
		1	V				
					en sin de Selecte	222232000	201
Firm Name: USS	Federation Enterprises						
Firm Number: 8454							
					Approve for Analysis	Quarantine	Pri
					Approve for Analysis	quanditatie	

Figure 6-17: Signature image added to test record

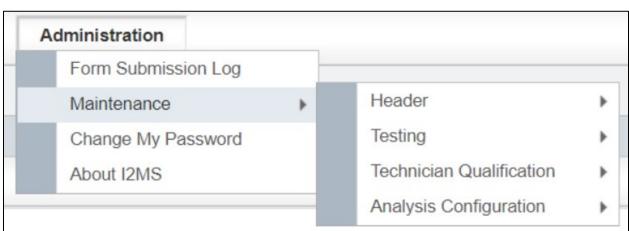
Step 8. If another I2MS Testing Manager reviews and approves a test record that is different from the original I2MS Testing Manager, then the user who approved the test record last will have their name show as Authorized By even though a previous I2MS Testing Manager may have reviewed the record (Figure 6-18). This happens whether it is a signature image or the digital signature.

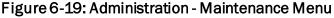
Figure 6-18: Second Approval by another I2MS Testing Manager will show second I2MS Testing Manager signature image added to test record

Remarks:	
Reviewed By:	Completed Date:
Jean-Luc Picard	11/17/2021
Authorized By:	Authorized Date:
	Authorized By Signature: Jean-Auc Picard
Firm Name: USS Federation Enterprises Firm Number: 84541	
	Approve for Analysis Quarantine Print View Dashboard

6.2.3 Maintenance

The drop-down menus that are provided in the various materials test forms are maintained and/or created in this portion of I2MS (Figure 6-19). Only those individuals that have access rights to make changes can update the various fields shown below. Maintenance has four sub menus: Header, Testing, Technician Qualification and Analysis Configuration.





Adding, Editing, or Deleting Header and Testing CVLs. – Once an area is selected for Maintenance (example shown below is for Maintenance, Testing, Concrete Mix ID), there are three options the user can take.

- Add a new record. A screen will appear where new concrete mixtures, for example, can be added.
- Edit an existing record. A new window appears with the existing record information which can be edited and saved upon completion.
- Delete an existing record.

6.2.3.1 Header

Various header fields are used in the materials test forms. As shown in the outlined box below, the options the user can select include CSJ, Directions, Features, Material Codes, Report Types, etc. (Figure 6-20). It should be noted that not all Maintenance CVLs need to be populated. For example, the CVLs for Directions and Report Types are the same for all projects. Project-specific conditions will dictate the use of other CVL fields. As an example, the project limits may not be divided by "Section" and/or by "Segment." In such cases, the CVLs for these items do not need to be edited. Once the Header CVLs are populated, they are available in the drop-down menus where applicable in the system.

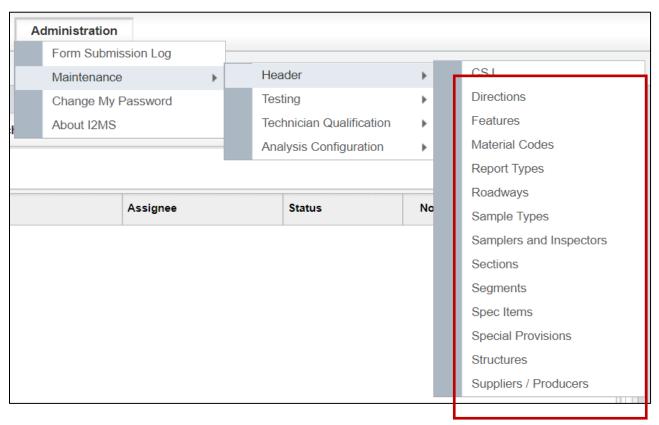


Figure 6-20: Administration - Maintenance - Header

6.2.3.1.1 CSJ

The CSJ CVL is for project information only and is not used on any test records or reports.

Step 1. The I2MS System Administrator or the I2MS Testing Manager can enter CSJ CVL related information by selecting "Add" (Figure 6-21).

Figure 6-21: Administration - Maintenance - Header - CSJ

CSJ		Search		
	_		A	dd
CSJ	Limits	Estimated Construction Cost		

Step 2. The project CSJ, Limits, and Estimated Construction Cost can be entered in this window. Once information is entered select Submit (Figure 6-22).

Add New CSJ	
ID	New Entry
csJ	1234-56-789
Limits	SH 123 to SH 456
Estimated Construction Cost	1,250,500,000.00
	Submit Cancel

Figure 6-22: Add CSJ and Submit

Step 3. After selecting submit, I2MS will return to the screen as shown in Figure 6-23.

Figure 6-23: Header - CSJ Added

CSJ	Search		
			Add
CSJ	Limits	Estimated Construction Cost	
1234-56-789	SH 123 to SH 456	\$1,250,500,000.00	Options

Step 4. Once the CSJ has been added, the user has the option to Add an additional CSJ or Edit or Delete existing entries (Figure 6-24).

Figure 6-24: Header - Edit or Delete CSJ

CSJ Search						
Add						
CSJ	Δ	Limits	Estimated Construction Cost			
1234-56-789		SH 123 to SH 456	\$1,250,500,000.00	Options	Edit	
					Delete	e

Step 5. Select "Edit" to make modifications and then select "Submit" to accept the changes (Figure 6-25).

Edit CSJ	
ID	17
CSJ	1234-56-789
Limits	SH 123 to SH 456
Estimated Construction Cost	1,250,500,000.00
	Submit Cancel

Figure 6-25: Edit CSJ

Step 6. Select "Delete" to remove the entry.

6.2.3.1.2 Directions

The CVLs for directions are standard for all projects (Figure 6-26). However, the option is available for the user to add or edit the directions CVLs. The process for adding Direction CVLs is essentially the same as for adding or editing the Features CVL in <u>Section 6.2.3.1.3</u> <u>Features</u>.

Figure 6-26: Directions

Directions	Search	
		Add
Direction		۷.
EB		Options
NB		Options
SB		Options
WB		Options

6.2.3.1.3 Features

The CVLs for Features are pre-populated with typical construction features (Figure 6-27). However, the user may choose to add, edit, or delete any feature to be project specific. All existing and added features are in alphabetical order. Step 1. To add a feature select "Add."

Features	Search	
		Add
Features		۷.
Abutment		Options
Abutment Cap		Options
Approach Slab		Options
Asphalt Paving		Options
Attenuator		Options
Backfill		Options
Backwall		Options
Barricades		Options
Beams		Options
Bearing Seats		Options
Bent		Options

Figure 6-27: Administration - Maintenance - Features

Step 2. The "Add New Features" screen will appear (Figure 6-28).

Figure 6-28: Add New Features

Add New Features	
ID	New Entry
Features	
	Submit Cancel

Step 3. Feature is an alphanumeric field in the system. After entering the feature name, select "Submit" to add it to the Features table (Figure 6-29).

Figure 6-29: Add New Features - Submit

Add New Features	
ID	New Entry
Features	Safety End Treatment
	Submit Cancel

Step 4. There is a Search function to help the user quickly find a feature. Existing features can be edited or deleted. If a feature has been used in previous test records, do not edit or delete the feature (Figure 6-30).

Figure 6-30: Search Features

Features	Search		
		Add	
Features		۷.	
Abutment		Options	
Abutment Cap		Options	Edit
Approach Slab		Options	Delete
Asphalt Paving		Options	
Attenuator		Options	

Step 5. The Search tool has selections in a drop-down menu to assist in quickly finding a feature(s) (Figure 6-31). Enter the alphanumeric text to search for a Feature and select "Run Query."

Figure 6-31: Search Features Criteria

Features			Search
Search Cr	iteria		
Features	like	-	
	like equals		Run Query
	begins w	vith	
	not like		
	not equa	ls	
	not begir	ns	

Step 6. In the example below, "begins with" and the alphanumeric text "s" was selected and entered (Figure 6-32).

Figure 6-32: Search Features Criteria Example

Features		Search	
Search Criteria			
Features be	egins with 👻 s		
		Run	Query

Step 7. Figure 6-33 are the query results from the search that was performed above.

Features	Search	
		Add
Features		۷
Safety End Treatment		Options
SBFR		Options
SBML		Options
Shear Key		Options
Shoulder		Options
Sidewalk		Options
Signs		Options
Sound Wall		Options
Stockpile		Options
Striping		Options

Figure 6-33: Features Search Example Results

Step 8. Select "Delete" to remove a feature. A message will appear at the top of the screen indicating a feature was deleted (Figure 6-34).

Figure 6-34: Features – Delete Message

	A record was deleted in the Features table.	
Features	Search	
		Add
Features		7
Abutment		Options
Abutment Cap		Options
Approach Slab		Options
Asphalt Paving		Options

6.2.3.1.4 Material Codes

Material Codes are project specific and when the project begins there will not be any Material Code CVLs listed. Material Codes are alphanumeric. Some projects have used prefixes to place like materials together to quickly help find and select the material needed. Below are three examples.

CON.1234C – Concrete Mix Design

CPDC130 – Depth Check for 13" Concrete Pavement

HMA.5678B.RW - HMAC Mix Design

Once a Material Code has been used, do not edit or delete the Material Code name or Material Application. If a new Material Code is necessary, create a new Material Code.

Step 1. To add a Material Code select "Add" (Figure 6-35).

Figure 6-35: Administration - Maintenance - Material Codes - Select Add

Material Codes	Search					
						Add
Material Code	Δ	Material Application		Supplier	Description	

Step 2. Enter a unique material code (Figure 6-36).

Figure 6-36: Material Codes – Enter Material Code

Add New Material Codes		
ID	New Entry	
Material Code		
Material Application	Asphalt Stabilized Base - Aggregate	•
Supplier		-
Description		
	Submit Cancel	

Step 3. Choose a Material Application by selecting the pull-down menu. There is a list of Material Applications below this figure. Ensure that the correct Material Application is selected for the Material Code. There have been instances where the user enters a material code for concrete and the default Material Application "Asphalt Stabilized Base – Aggregate" was used (Figure 6-37). In this instance no analysis will run for this material code.

ID	New Entry
Material Code	CON.4567C
Material Application	Asphalt Stabilized Base - Aggregate
Supplier	Asphalt Stabilized Base - Aggregate
	Asphalt Stabilized Base - Complete Mixture
Description	Asphalt Stabilized Base - Roadway
	Embankment - Cuts and Fills
	HCC - Coarse Aggregate
	HCC - Fine Aggregate
	HCC - Mineral Filler
	HCC - Non-Structural Complete Mixture
	HCC - Pavement Complete Mixture
	HCC - Structural Complete Mixture

Figure 6-37: Material Codes – Select Material Application

Below is the current Material Application List showing material applications in I2MS.

- Asphalt Stabilized Base Aggregate
- Asphalt Stabilized Base Complete Mixture
- Asphalt Stabilized Base Roadway
- Embankment Cuts and Fills
- HCC Coarse Aggregate
- HCC Fine Aggregate
- HCC Mineral Filler
- HCC Non-Structural Complete Mixture
- HCC Pavement Complete Mixture
- HCC Structural Complete Mixture
- QCQA ACP Coarse Aggregate
- QCQA ACP Combined Aggregate

- QCQA ACP Complete Mixture
- QCQA ACP RAP
- QCQA ACP Roadway
- Recycled Material RAP Crushed Concrete
- Retaining Wall Non-Select
- Retaining Wall Select
- Surface Treatment Aggregate
- Treated Subgrade / Base Course Complete Mixture
- Treated Subgrade / Base Course New
- Untreated Base Course

The material applications are listed in the Analysis Applications for your project, as further described in 6.2.3.4.1 Analysis Applications.

Step 4. Select a Supplier from the pull-down menu (Figure 6-38). If the desired Supplier is not listed, the user can go to the Suppliers/Producers to add a new supplier. See <u>6.2.3.1.14 Suppliers/Producers</u> on how to add a supplier. Once the supplier has been added, the user can edit the material code and add the new supplier.

Add New Material Codes		
ID	New Entry	
Material Code	CON.4567C	
Material Application	HCC - Structural Complete Mixture	•
Supplier		•
Description		^
	BASF	
	Bluebonnet Materials	
	Boral	
	Campbell Concrete & Materials	
	Cemex	
	Colt Concrete	
	Hanson	
	Hanson-Lake Bridgeport	
	Holcim	-

Figure 6-38: Material Codes – Select Supplier

Step 5. Enter a description of the material that best represents the material (Figure 6-39).

Figure 6-39	· Material	Codes -	Enter	Description
i iguico oo	. Wateria	ooucs	LIICO	Description

Add New Material Codes	
ID	New Entry
Material Code	CON.4567C
Material Application	HCC - Structural Complete Mixture
Supplier	Colt Concrete
Description	3600 PSI Class C
	Submit Cancel

Step 6. Select "Submit" to add to the Material Codes table (Figure 6-39). There is no notification message at the top that the material code has been added to the "Material Codes" table. The material code can be found by selecting the forward button at the bottom of the page as shown below to forward to the next page (Figure 6-40).

Material Code Material Application Supplier Description AGG.CC Untreated Base Course Big City Crushed Concrete - Big City AGG.CC NGC Untreated Base Course Northgate Constructors Crushed Concrete Flex Base AGG.CLFB Treated Subgrade / Base Course - Complete Mixt Martin Marietta Chico Quarry Crushed Limestone Flex Base	Options
AGG.CC NGC Untreated Base Course Northgate Constructors Crushed Concrete Flex Base	
	0.1
AGG.CLFB Treated Subgrade / Base Course - Complete Mixt Martin Marietta Chico Quarry Crushed Limestone Flex Base	Options
	Options
AGG.COMB.TXIBP QCQA.ACP - Combined Aggregate TXI - Bridgeport, TX COMBINED AGGREGATE	Options
CON. 110FBB.LEW HCC - Non-Structural Complete Mixture TXI - Lewisville 3000 PSI Class A	Options
CON.110FMB HCC - Non-Structural Complete Mixture TXI -Plant # 128 3000 PSI, Class A	Options
CON.1506IB.105 HCC - Structural Complete Mixture Southern Star - Plant 105 (Irving) 6000 PSI, CLASS F	Options
CON.1506IB.110 HCC - Structural Complete Mixture Southern Star - Plant 110 (Coppell) 6000 PSI, CLASS F	Options

Figure 6-40: Material Codes – Forward Button

Step 7. The Material Code search has four criteria items to help narrow the search: Material Code, Material Application, Supplier, and Description (Figure 6-41). Material Code and Description have the options of like, equals, begins with, not like, not equals, and not begins to assist in the search. Material Application has a drop-down menu with all of the Material Applications as choices. Supplier has a drop-down menu with all of the Supplier/Producers as choices. Once the search information has been entered, select "Run Query" to perform the search.

ſ	Material Codes	Search
ĺ	Search Criteria	
	Material Code	ce • Supplier •
	Material Application	Description like Ike
		Run Query

Step 8. The user has the option of editing or deleting the material code. As previously mentioned, once a Material Code has been used, do not edit or delete the Material Code (Figure 6-42).

Material Codes		Search			
				Add	
Material Code	Material Application	Supplier	Description		
AGG.CC	Untreated Base Course	Big City	Crushed Concrete - Big City	Options	Edit
AGG.CC NGC	Untreated Base Course	Northgate Constructors	Crushed Concrete Flex Base	Options	Delete
AGG.CLFB	Treated Subgrade / Base Course - Complete Mixt	Martin Marietta Chico Quarry	Crushed Limestone Flex Base	Options	
AGG.COMB.TXIBP	QCQAACP - Combined Aggregate	TXI - Bridgeport, TX	COMBINED AGGREGATE	Options	

Figure 6-42: Material Codes – Option to Edit or Delete

Step 9. If a Material Code is deleted, there will be a notification at the top of the table immediately following the deletion (Figure 6-43). Again, Material Codes should not be deleted after they have been used.

Figure 6-43: Material Codes – Record Deleted Message

			 A record was 	deleted in the Material Co	des table.	
	Material Codes		Search			
ĺ						Add
	Material Code	Material Application		Supplier	Description	
	005044504	Deteining Mall, New Onlast		DAOE	Martin Mariata Materiala Mill Oceals Lineaters	Ontions

6.2.3.1.5 Report Types

Report Types are the same for each project and only TxDOT MTD (I2MS System Administrators) should add, edit, or delete these CVLs. The process for adding Report Types CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3</u> <u>Features</u>. Note that Report Types is a field that drives I2MS processes and should not be added, edited, or deleted without consulting I2MS support programmers. Report type is an alphanumeric field in the system.

6.2.3.1.6 Roadways

Roadways are project specific and when the project begins there will not be any Roadway CVLs listed. The process for adding Roadways CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Roadway is an alphanumeric field in the system and has no spaces.

6.2.3.1.7 Sample Types

Sample Types are the same for each project and only MTD (I2MS System Administrators) should add, edit, or delete this CVL. The process for adding Sample Types CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Note that Sample Types is a field that drives I2MS processes and should not be added, edited, or deleted without consulting I2MS support programmers. Sample type is an alphanumeric field in the system.

6.2.3.1.8 Samplers and Inspectors

Samplers and Inspectors are project specific and when the project begins there will not be any Samplers and Inspectors CVLs listed. Samplers and Inspectors is an alphanumeric field in the system.

Step 1. To add a sampler and inspector select "Add" (Figure 6-44).

Figure 6-44: Administration - Maintenance - Samplers and Inspectors - Select Add

Samplers and Inspectors			Search					
						Add		
1	Name 🗳	Initials	Is Tester	Is Inspector	Owner	Guid		

Step 2. Enter the name and initials of the Sampler and Inspector (Figure 6-45). If the same name and/or initials exists in in the table, the best practice is to add a number behind the name and/or initials to distinguish between the two samplers and inspectors. Select "Y" for both "Is Tester" and "Is Inspector." From the pull-menu, select OVF or CQAF (IQF) based on who the sampler/inspector's firm role on the project. Once all information has been entered select "Submit" to add the Sampler/Inspector to the Samplers and Inspectors table or choose Cancel to return to the Samplers and Inspectors table.

imary Key	New Entry	
ame	Owen Van Field	
itials	OVF	
Tester	Y	-
Inspector	Y	•
wner	OVF	*
uid		

Figure 6-45: Samplers and Inspectors – Add

Step 3. There is no notification message at the top that the Samplers and Inspectors has been added to the Samplers and Inspectors table. The Sampler/Inspector can be found by selecting the forward button at the bottom of the page as shown in Figure 6-46 to forward to the next page. The new Sampler/Inspector can also be found by selecting "Search."

Figure 6-46: Samplers and Inspectors – Search with Forward Arrow

Samplers and Inspectors		Search			
					Add
Name	Initials	Is Tester	Is Inspector	Owner	Guid
Ian Quinn Ford	IQF	Υ	Υ	CQAF	Options
Owen Van Field	OVF	Υ	Υ	OVF	Options
Owen Van Field II	OVF	Y	Y	OVF	Options
	H]			Page 2 of 3 (52 items)

Step 4. To search the sampler/inspector just enter the first few letters of the name or the full name of the sampler/inspector as shown below (Figure 6-47). Select "Run Query" to perform the search.

Figure 6-47: Samplers and Inspectors – Search

Sample	ers and Insp	ectors	Search				
Search	Criteria						
Name	like	- Owen		Is Inspector			Ŧ
Initials	like	•		Owner			•
Is Teste	r	•		Guid	like	*	
			Rur	Query			

Step 5. Below are the search results for this example. The Samplers and Inspectors can be edited or deleted (Figure 6-48).

Figure 6-48: Samplers and Inspectors – Edit or Delete

Samplers and Inspectors	Search						
Add							
Name 🔟	Initials	Is Tester	Is Inspector	Owner	Guid		
Owen Van Field	OVF	Y	Y	OVF		Options	Edit
Owen Van Field II	OVF	Y	Y	OVF		Options	Delete

Step 6. The "Edit Samplers and Inspectors" screen will show if edit is selected (Figure 6-49). Once modifications are made select "Submit" to apply the changes or "Cancel" to exit the "Edit Samplers and Inspectors" screen.

Figure 6-49: Samplers and Inspectors - Edit

Edit Samplers and Inspectors		
Primary Key	673	
Name	Owen Van Field	
Initials	OVF	
ls Tester	Υ	•
Is Inspector	Υ	•
Owner	OVF	•
Guid		
	Sut	omit Cancel

Step 7. There is a notification message at the top of the "Samplers and Inspectors" table if a record is deleted (Figure 6-50).

		 A reco 	A record was deleted in the Samplers and Inspectors table.				
	Samplers and Inspectors		Search		-		
[Add
	Name $ agence$	Initials	Is Tester	Is Inspector	Owner	Guid	

Figure 6-50: Samplers and Inspectors – Delete

6.2.3.1.9 Sections

A section is a part of a segment. A segment can be broken down to smaller lengths which are sections. The process for adding Section CVLs is essentially the same as for adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. A section is an alphanumeric field in the system.

6.2.3.1.10 Segments

Segments are project specific and when the project begins there will not be any Segments CVLs listed. The process for adding Segment CVLs is essentially the same as adding or editing the Features CVL in Section <u>6.2.3.1.3 Features</u>. A segment is an alphanumeric field in the system.

6.2.3.1.11 Spec Items

The CVLs for Spec Items are pre-populated with typical spec items used for all projects. However, the user may choose to add, edit, or delete any spec item to be project specific. All existing and added features are in alphanumeric order. The process for adding Spec Item CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3</u> <u>Features</u>. Spec Items is an alphanumeric field in the system.

6.2.3.1.12 Special Provisions

Special Provisions are project specific and when the project begins there will not be any Special Provision CVLs listed. The process for adding Special Provision CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Special Provisions is an alphanumeric field in the system.

6.2.3.1.13 Structures

Structures are project specific and when the project begins there will not be any Structure CVLs listed. The process for adding Structure CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Structures is an alphanumeric field in the system.

6.2.3.1.14 Suppliers/Producers

Suppliers and Producers are project specific and when the project begins there will not be any Suppliers and Producers CVLs listed. The process for adding Supplier/Producer CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Suppliers and Producers is an alphanumeric field in the system.

6.2.3.2 Testing

Various fields are used in the materials test forms. These CVLs include Aggregate Correction Factors, Concrete Classes, etc. as shown within the outlined box below (Figure 6-51).

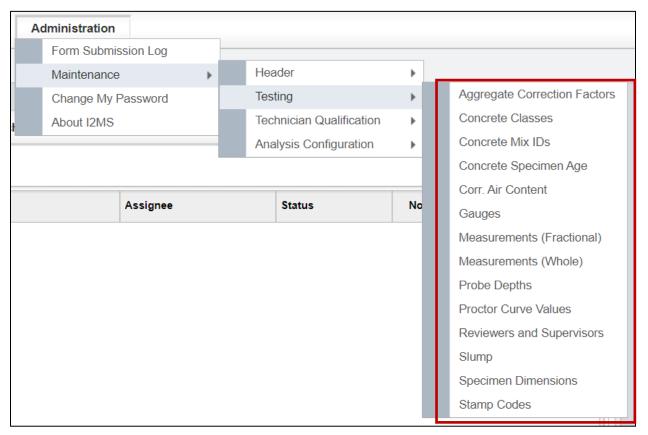


Figure 6-51: Administration – Maintenance – Testing

6.2.3.2.1 Aggregate Correction Factors

The aggregate correction factors are standard for all projects (Figure 6-52). However, the option is available for the user to add or edit the aggregate correction factors. The aggregate correction factors can be used in the DB-418-A test form. The factors range from 0.1 to 1.5. The process for adding Aggregate Correction Factor CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. The Aggregate Correction Factor is a numeric field in the system.

Aggregate Correction Factors Search	
	Add
Agg. Correction Factor	۷.
0.1	Options
0.2	Options
0.3	Options
0.4	Options
0.5	Options
0.6	Options
0.7	Options
0.8	Options
0.9	Options
1	Options
1.1	Options
1.2	Options
1.3	Options
1.4	Options
1.5	Options

Figure 6-52: Administration – Maintenance – Testing – Aggregate Correction Factors

FIELD TEST RESULTS					
Concrete Temperature, (°F):	Slump, in.:		Agg. Correction Factor:	*	
Air Temperature, (°F):	Unit Wt,:		Corrected Air Content:		

6.2.3.2.2 Concrete Classes

The CVLs for Concrete Classes are pre-populated with concrete classes used for all projects. There are classes of concrete that have strength requirements as shown on the plans. If these classes of concrete will be used then the strength requirements will need to be added by adding or editing the class of concrete. All existing and added concrete classes are in alphanumerical order. The process for adding Concrete Class CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Concrete Classes is an alphanumeric field in the system.

6.2.3.2.3 Concrete Mix IDs

Concrete Mix IDs are project specific and when the project begins there will not be any Concrete Mix IDs CVLs listed (Figure 6-53). Currently, there is not a drop-down menu on form DB-418-A to select the Concrete Mix IDs nor the Design Water. The Mix IDs and Design Water values must be entered on the form instead of chosen from a drop-down menu. This table can be used for documenting of the design water for each Mix ID. Projects often use the same information for Material Code and Mix ID. The process for adding Concrete Mix ID CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3</u> Features. Concrete Mix IDs is an alphanumeric field in the system.

	BATCH IN	FORMATI	ON			PUMPED PLA	CEMENT RESULTS
Truck #:			Batch Si	ze:		Pump Slump Loss	
Sample Time:			Agg. Si	ze:	-	Placement Slump:	-
Design Water:			Actual Wat	er:		Pump Air Loss:	
Water Added:			Total Wat	er: 0		Placement Air:	
Batch Time:			Ticke	t #:			
			FIELD	TEST	RESULTS		
Concrete Temperature,	(°F):		Slump, in.:			Agg. Correction Factor:	
Air Temperature,	(°F):		Unit Wt,:			Corrected Air Content:	
	CONCRETE CYLINDERS INFORMATION						
Class of Concrete:				-	Req. Strengt	n, psi:	
Specimen Size:		•			N	lix ID:	

Figure 6-53: Administration – Maintenance – Testing – Concrete Mix IDs

6.2.3.2.4 Concrete Specimen Age

The CVLs for Concrete Specimen Age are pre-populated with concrete specimen ages from days 1 to 56 (Figure 6-54). The process for adding Concrete Specimen Age CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. The Concrete Specimen Age is a numeric field in the system. These numbers are used on the DB-418-A form drop-down menu for "Age(Days)".

		CONCRETE CYLINDERS INFORMATION						
Class of	Concrete:				-	F	Req. Strength, ps	si:
Speci	men Size:		•				Mix IE):
Specimen	Test Date	e Age(Days)	A	rea	Load(lbs)	Strength(psi)	Ţ
-			-					
-		1 '						
-		2						
-		3						
-		4						
-		5						
		6						
		7						
Diameter=6.00	unless note	ed. 3	end: Ty		one, Type racture, T		ne and Split, Typ Pointed	be 3
Aver	rage 7 Day	Con 10	:i,psi				Average 28	Day

Figure 6-54: Testing - Concrete Specimen Age - DB-418-A Form

6.2.3.2.5 Corrected Air Content

The CVLs for Corrected Air Content are pre-populated with values from 0.5 to 10 (Figure 6-55). These values were intended for the DB-418-A form. However, there is not a drop-down menu for the Corrected Air Content and these values must be entered directly in the form. Therefore, this CVL can be ignored.

FIELD	TEST RESULTS		
Slump, in.:		Agg. Correction Factor:	*
Unit Wt,:		Corrected Air Content:	

6.2.3.2.6 Gauges

The Gauges CVL are project specific and when the project begins there will not be any Gauges CVLs listed. Currently, there is not a drop-down menu on form DB-115-1 to use for the gauges. The gauge number must be entered on the form instead of chosen from a drop-down menu. This table can be used for documentation of the gauges used on the project.

The process for adding Gauge CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. Gauges is an alphanumeric field in the system (Figure 6-56).

Probe Depth:	Gauge No.:	
Wet Density,pcf:		
Dry Density,pcf:		
Moisture Content,%:	Pass/Fail:	
Density,%:	Pass/Fail:	

Figure 6-56: Administration – Maintenance – Testing – Gauges

6.2.3.2.7 Measurements (Fractional)

The Measurements (Fractional) CVL is not used in the current version of I2MS and can be ignored.

6.2.3.2.8 Measurements (Whole)

The Measurements (Whole) CVL is not used in the current version of I2MS and can be ignored.

6.2.3.2.9 Probe Depths

Probe Depths can be entered but it is not used in any drop-down menu in I2MS therefore, this CVL can be ignored. As shown in the snip of form DB-115-E, the probe depth must be entered manually instead of selected from a drop-down menu (Figure 6-57).

Figure 6-57: Testing – Probe Depth – DB-115-E Form

Probe Depth:	Gauge No.:	
Wet Density,pcf:		
Dry Density,pcf:		
Moisture Content,%:	Pass/Fail:	
Density,%:	Pass/Fail:	

6.2.3.2.10 Proctor Curve Values

Proctor Curve Values are unique to each project and can be added but it is not used in any drop-down menu in I2MS. Proctor curve values can be stored for reference or this CVL can be ignored. The process for adding Proctor Curve Value CVLs is essentially the same as

adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. The Proctor Curve Values CVL has five different entries. The Description and Location are an alphanumeric field in the system. The date can be selected by the calendar. This date is when the proctor curve was determined. The Max Density and Optimum Moisture are numeric fields in the system.

6.2.3.2.11 Reviewers and Supervisors

Reviewers and Supervisors are not used in the current version of I2MS. The user roles define who can review and approve tests. The Reviewers and Supervisors CVL can be ignored.

6.2.3.2.12 Slump

The Slump CVLs are pre-populated with values from 0 to 12. There should not be a reason to modify these values. These values are intended for the DB-418-A form for the Placement Slump under the Pumped Placement Results (Figure 6-58). The Slump under Field Test Results does not have a drop-menu for this entry (Figure 6-58). The slump for Field Test Results must be entered directly in the box.

	BATCH INFORMATION					PUMPED PLACEMENT RESULTS		
Truck #:		Batch Size:			Pump Slump Loss:			
Sample Time:	Ħ	Agg. Size:	-	 Placement Slump: 		-		
Design Water:		Actual Water:	ctual Water:		Pump Air Loss:			
Water Added:		Total Water: 0.00		Placement Air:				
Batch Time:	Ħ	Ticket #:	Ticket #:					
	FIELD TEST RESULTS							
Concrete Temperature,	re, (°F): Slump, in.:		Agg. Correction Factor:		g. Correction Factor:	-		
Air Temperature,	, (°F):	Unit Wit;		С	orrected Air Content:			

Figure 6-58: Administration - Maintenance - Testing - Slump on DB-418-A

6.2.3.2.13 Specimen Dimensions

The Specimen Dimension CVLs are the same for each project. This CVL is used in the DB-418-A form. Currently, 4x8 and 6x12 specimen dimensions have been pre-populated (Figure 6-59). Additionally, the process for adding Specimen Dimension CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>. The Dimensions and Type are an alphanumeric field in the system.

		(co	NCRETE	CYLINDE	RS IN	FORMATION
Class of	Concrete:				4	F	Req. Strength,
Spec	imen Size:		Ŧ				Mix
imen	Test Dat			rea	Load(I	bs)	Strength(psi
-		4x8					
-		6x12					

Figure 6-59: Administration – Maintenance – Testing – Specimen Dimensions – DB-418-A

6.2.3.2.14 Stamp Codes

The Stamp Codes CVLs are the same for each project and only TxDOT MTD (I2MS System Administrators) should add, edit, or delete this CVL (Figure 6-60). The process for adding CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3</u> <u>Features</u>. Note that Stamp Codes is a field that drives I2MS processes and should not be added, edited, or deleted without consulting I2MS support programmers.

Figure 6-60: Administration – Maintenance –	Testing – Stamp Codes
---	-----------------------

Stamp Codes	Search		
1			
Stamp Code	∆ Description		
0	Not Assigned		
1	Pass		
2	Engineering Decision		
5	Fail		
9	Informational		

6.2.3.3. Technician Qualifications

This I2MS module allows those granted access rights to view the results of Technician Qualifications and Proficiency Samples as part of the Independent Assurance Program.

6.2.3.3.1 Proficiency Sampling and Testing

This I2MS module is used to document proficiency sampling and testing as part of the Independent Assurance Program. The original intent for the Proficiency Samplings module was to allow or deny a test record based on whether a technician passed the proficiency tests or to ignore the proficiency sampling requirements until the technician could perform the proficiency tests. However, this version of I2MS ignores the proficiency sampling entries and has no effect on test records. The Independent Assurance (IA) firm may use this module to document the proficiency results or use another tool for documentation. Access this module through the Administration menu as shown below in Figure 6-61.

Figure 6-61: Administration – Maintenance – Technician Qualification – Proficiency Samplings

Administration	_			
Maintenance	×.	Header	•	
Project Settings		Testing	►	
Change My Password		Technician Qualification	•	Proficiency Samplings
About I2MS		Analysis Configuration	×.	Technician Qualification

Step 1. Opening screen for Proficiency Samplings is shown below. Depending on the user's access rights, a record can be added, edited, or deleted (Figure 6-62).

Figure 6-62: T	echnician Oualific	ation - Proficiency	Samplings - Select Add
1 19410 0 0001	oonnolan quanno		oumphiligo obloctitutu

Proficiency Samplings Search							
				Add			
Proficiency Type	_ I	Effective Date	Expiration Date				
Tex-104-E	1	2/7/2021	2/7/2022	Options			
Tex-105-E	2	2/7/2021	2/7/2022	Options			
Tex-106-E	2	2/7/2021	2/7/2022	Options			
Tex-415-A	1	1/10/2021	1/10/2022	Options			
Tex-416-A	1	1/10/2021	1/10/2022	Options			
Tex-418-A	1	1/10/2021	1/10/2022	Options			

Step 2. Adding or Editing Proficiency Samplings – when adding or editing proficiency records, multiple Participating Technicians can be selected. Once all fields have been populated, select Submit to enter the record into I2MS (Figure 6-63).

Add New Proficiency Samplings		
ID	New Entry	
Proficiency Type	Tex-415-A 🔹	
Effective Date	01/10/2021	
Expiration Date	01/10/2022	
Participating Technicians	Ian Quinn Ford	×
	Owen Van Field	×
		-
Comments	Slump of Hydraulic Cement	
	Submit Cancel	

Step 3. Searching for Proficiency Samplings – populate the filters below and select Run Query (Figure 6-64).

Figure 6-64: Technician Qualification – Proficiency Samplings - Enter Criteria and Select Run Query

Proficiency Sam	plings		Search			
Search Criteria				_		
Proficiency Type		Ŧ		Expiration Date	< • 02/01/2022	and •
Effective Date	<= v <	and v				
			Rur	Query		

Step 4. There is an option to edit or delete the "Proficiency Samplings" (Figure 6-65).

Proficiency Samplings		Search			
				Add	
Proficiency Type	7	Effective Date	Expiration Date		
Tex-104-E		2/2/2022	2/2/2023	Options	Edit
Tex-104-E		2/7/2021	2/7/2022	Options	Delete
Tex-105-E		2/7/2021	2/7/2022	Options	
Tex-106-E		2/7/2021	2/7/2022	Options	
Tex-415-A		1/10/2021	1/10/2022	Options	
Tex-416-A		1/10/2021	1/10/2022	Options	
Tex-418-A		1/10/2021	1/10/2022	Options	

Figure 6-65: Technician Qualification – Proficiency Samplings – Edit or Delete

Step 5. The "Edit Proficiency Samplings" screen will show if edit is selected. Once modifications are made select "Submit" to apply the changes or "Cancel" to exit the "Edit Proficiency Samplings" screen (Figure 6-66).

Figure 6-66: Technician Qualification – Proficiency Samplings – Edit

Edit Proficiency Samplings		
ID	124	
Proficiency Type	Tex-104-E	
Effective Date	02/07/2021	
Expiration Date	02/07/2022	
Participating Technicians	Ian Quinn Ford	
	Owen Van Field X	
	· · · · · · · · · · · · · · · · · · ·	
Comments	Determining the Bar Linear :	
	Submit Cancel	

Step 6. There is a notification message at the top of the "Proficiency Samplings" table if a proficiency sampling is deleted (Figure 6-67).

Figure 6-67: Technician Qualification – Proficiency Samplings – Delete Message

	A record was deleted in the Pro	ficiency Samplings table.	
Proficiency Samplings	Search		
			Add
Proficiency Type	△ Effective Date	Expiration Date	
Tox 104 E	2/7/2021	2/7/2022	Ontions

6.2.3.3.2 Technician Qualifications

Selecting the Technician Qualification menu provides a listing of all technician certifications on the project along with their Authorized Date, Expiration Date, and whether they have been excluded from the Independent Assurance Proficiency Program. If technician's qualification information is in I2MS, test forms cannot be submitted into I2MS for that technician. Before a technician qualification can be entered, the technician's name must be entered first as a Sampler and Inspector. See <u>6.2.3.1.8 Samplers and Inspectors</u> for details.

If a technician's qualification has not been entered or is expired, an error message will appear at the top of a test record as shown below (Figure 6-68). Figure 6-69 shows how to navigate to the Technician Qualification screen.

		wen Van Field's qualification for Tex-117-E has e	expired or is not yet valid. (Test Date: 03/11/2021)
OAK HILL PARKWA TRIAXIAL COMPRESSION DB-117-E		Owner:OVF Testing Revision Date:06/01/2009	
117 SA	MPLED DATE:	03/08/2021	H

Figure 6-68: Technician Qualification – Technician Qualification – Error Message

Figure 6-69: Administration – Maintenance - Technician Qualification – Technician Qualification

A	dministration					
-	Form Submission Lo	g			_	
	Maintenance	×.	Header	Þ		
	Change My Passwor	ď	Testing	►		
	About I2MS		Technician Qualification	Þ		Proficiency Samplings
			Analysis Configuration	Þ		Technician Qualification

Step 1. To add a Technician Qualification, select "Add" (Figure 6-70).

Figure 6-70: Technician Qualification – Technician Qualification – Select Add

Technician Quali	fication	Search					
							Add
Technician 🛆	Qualifying Agency	Qualification	Authorized Date	Expiration Date	Override	Ignore Proficiency	
Ian Quinn Ford	ACI	Field Testing Technician Grade I	1/1/2020	1/1/2025		No	Options
Ian Quinn Ford	HMAC	Level IA	1/1/2020	12/31/2025		No	Options
Ian Quinn Ford	HMAC	Level IB	1/1/2020	12/31/2025		No	Options
Ian Quinn Ford	HMAC	Level II	1/1/2020	12/31/2025		No	Options

Step 2. Select the Technician from the drop-down menu (Figure 6-71). This menu is populated from the technicians in the Samplers and Inspectors list.

Add New Technician Qualification	
ID	New Entry
Technician	Ian Quinn Ford
Qualifying Agency	Frank Velez Ghanem Aridi
Qualification	Gregerz Joseph
	Gregory Lynn Trevino
Authorized Date	Hatem Fayyadh
	Henry Templo
Expiration Date	Humam Al Hilali
Override	Ian Quinn Ford
Ignore Proficiency	Jason Manangan
	Jorge Velez
Comments	
	Submit Cancel

Step 3. Select the Qualifying Agency (Figure 6-72).

Figure 6-72: Technician Qualification – Technician Qualification – Select Qualifying Agency

D	New Entry	
Fechnician	Ian Quinn Ford	Edit
Qualifying Agency	ACI	*
Qualification	ACI	
	HMAC	n
	TxDOT	
Authorized Date		
Expiration Date		
Dverride		v
gnore Proficiency	No	•
Comments		

Step 4. Select the Qualification related to the Qualifying Agency (Figure 6-73). Multiple qualifications can be selected if the qualification has the same Authorized Date and Expiration Date.

Add New Technician Qualification		
ID	New Entry	
Technician	Ian Quinn Ford	▼ Edit
Qualifying Agency	ACI	•
Qualification	Field Testing Technician G	rade I 🗙
		•
Authorized Date		
Expiration Date		
Override		*
Ignore Proficiency	No	•
Comments		
	Sub	mit Cancel

Figure 6-73: Technician Qualification – Technician Qualification – Select Qualification

Below are the Qualifications for the Qualifying Agencies ACI, HMAC, TTI, and TxDOT (Figure 6-74). TxDOT's list extends beyond what is shown in the Figure 6-73. TxDOT's qualifications should only be used if a technician is given a temporary provision to perform testing on the project until a certification can be acquired or for those tests that are not covered by the other approved qualifying agencies. If the ACI or HMAC qualifications do not appear to be working, please submit a ticket so the link can be repaired. To submit a ticket, please see <u>7.1 I2MS Help Desk</u> for further details.

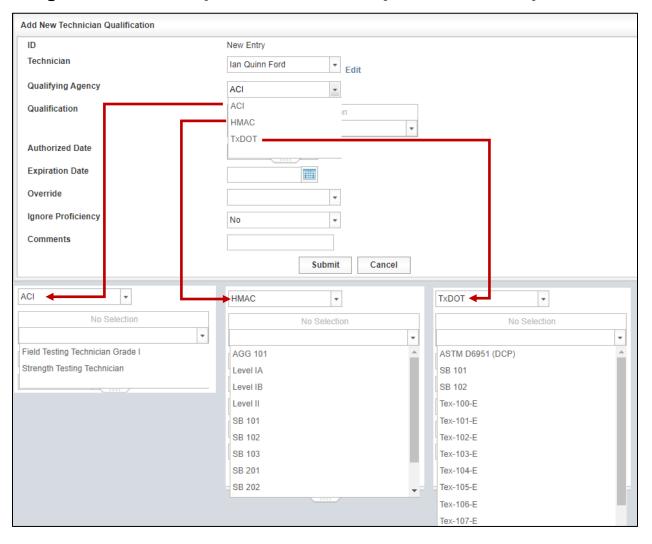


Figure 6-74: Technician Qualification - Technician Qualification - Select Qualification

Step 5. Select the Authorized Date (Figure 6-75). The Expiration Date is the expiration date of the certification date. If the technician is no longer working on the project this date can be edited to the last day the technician worked on the project.

)	New Entry
Technician	Ian Quinn Ford
Qualifying Agency	ACI
Qualification	Field Testing Technician Grade I
	*
Authorized Date	01/10/2022
Expiration Date	01/09/2027
Override	•
gnore Proficiency	No 👻
Comments	

Figure 6-75: Technician Qualification – Select Authorized and Expiration Dates

Step 6. Select Override and choose one of the options: Allow or Deny (Figure 6-76). When the testing technician enters data into the web-based forms, a cross check is performed to verify that the technician has the appropriate credentials (a current qualification/certification in that particular test method). If the technician credentials are not verified, then the technician will receive an error message when submitting test results performed by that technician.

> Special circumstances may require the use of the Override feature on the Technician Qualification interface as shown below. When the Override is set to "Allow," the technician is allowed to submit test results using web-based forms regardless of whether they are qualified/certified. Authority by administrator of the Independent Assurance (IA) Program must be granted and documented to use this feature.

Submit

Cancel

Add New Technician Qualification	
ID	New Entry
Technician	Ian Quinn Ford 💌 Edit
Qualifying Agency	ACI 🔹
Qualification	Field Testing Technician Grade I
	·
Authorized Date	01/10/2022
Expiration Date	01/09/2027
Override	•
Ignore Proficiency	
Comments	Allow
	Deny
	Supmit Cancel

Figure 6-76: Technician Qualification – Select Override Option

The original intent for the Proficiency Sampling module was to allow or deny a Step 7. test record based on whether a technician passed the proficiency tests or to ignore the proficiency sampling requirements until the technician could perform the proficiency tests. However, this version of I2MS ignores the proficiency sampling entries and has no effect on test records. IA may use this module to document the proficiency results or use another tool for documentation. If IA chooses to use the Proficiency Sampling module for documentation, then select Ignore Proficiency and choose one of the options: Yes or No (Figure 6-77). When a technician arrives on a project without proof of participation in the Annual Split Sample/Proficiency program or when the Program has already been administered on the project, the IA Manager has the ability to select the Ignore Proficiency feature. If this feature is set to "Yes," then a technician is allowed to Submit testing. After the technician has participated in the Annual program, then the qualification record can be revised. The default is automatically set to "No." Please note that whether the setting is Yes or No, I2MS will not check the proficiency results.

ID	New Entry
Technician	Ian Quinn Ford
Qualifying Agency	ACI
Qualification	Field Testing Technician Grade I
	-
Authorized Date	01/10/2022
Expiration Date	01/09/2027
Override	•
Ignore Proficiency	No
Comments	Yes
	No

Figure 6-77: Technician Qualification – Select Ignore Proficiency Option

Step 8. The IA Manager can add comments related to the technician qualification (Figure 6-78). The comment can include any documentation including about an override, ignoring a proficiency, or that the expiration date was revised to the technician's last day on the project.

Figure 6-78: Technician Qualification – Add Comments

Add New Technician Qualification	
ID	New Entry
Technician	Ian Quinn Ford 🗾 Edit
Qualifying Agency	ACI
Qualification	Field Testing Technician Grade I
	•
Authorized Date	01/10/2022
Expiration Date	01/09/2027
Override	Deny -
Ignore Proficiency	No
Comments	
	Submit Cancel

Step 9. There is an option to edit or delete the "Technician Qualification." To edit a particular technician certification record, select the Options button on the farright side, then the Edit command (Figure 6-79).

Technician Quali		Search						
							Add	
Technician 🛆	Qualifying Agency	Qualification	Authorized Date	Expiration Date	Override	Ignore Proficiency		
lan Quinn Ford	ACI	Field Testing Technician Grade I	1/1/2020	1/1/2025		No	Options	Edit
lan Quinn Ford	HMAC	Level IA	1/1/2020	12/31/2025		No	Options	Delet
lan Quinn Ford	HMAC	Level IB	1/1/2020	12/31/2025		No	Options	
lan Quinn Ford	HMAC	Level II	1/1/2020	12/31/2025		No	Options	
lan Quinn Ford	HMAC	SB 101	1/1/2020	12/31/2025		No	Options	

Figure 6-79: Technician Qualification – Edit or Delete Option

Step 10. The "Edit Technician Qualification" screen will show if edit is selected (Figure 6-80). Once modifications are made select "Submit" to apply the changes or "Cancel" to exit the "Edit Technician Qualification" screen.

Edit Technician Qualification	
ID	4699
Technician	Ian Quinn Ford 💌 Edit
Qualifying Agency	ACI
Qualification	Field Testing Technician Grade I
Authorized Date	01/01/2020
Expiration Date	01/01/2025
Override	Deny
Ignore Proficiency	No
Comments	
	Submit Cancel

Figure 6-80: Technician Qualification - Edit

Step 11. If the Delete option is selected the Technician Qualification will be immediately deleted and there is a notification message at the top of the "Technician Qualification" table if a technician qualification is deleted (Figure 6-81). Unless the technician qualification has not been used for any test records, do not delete technician qualifications. If the technician is no longer

on the project, the user can inactivate the technician's qualification by changing the expiration date instead of deleting the qualification.

Figure 6-81: Technician Qualification – Delete Message

		A record was deleted	d in the Technician Qu	ualification table.			
Technician Qualifica	tion	Search					
							Add
Technician $ riangleq$	Qualifying Agency	Qualification	Authorized Date	Expiration Date	Override	Ignore Proficiency	

Step 12. Searching for Technician Qualifications – to search for the qualifications of technicians, complete the various filters below and select Run Query (Figure 6-82). A page will then display all of the proficiency information based on the filters selected. These features can be used, for example, to flag certificates that have expired or will be expiring in 30 days, say.

Figure 6-82: Technician Qualification – Search

Technician Qualifi	cation	Search			
Search Criteria					
Technician	¥		Expiration Date	< • •	and -
Qualifying Agency	•		Override		Ŧ
Qualification		•	Ignore Proficiency		*
Authorized Date	< • • · · · · · · · · · · · · · · · · ·	and 💌			
		F	Run Query		

6.2.3.4. Analysis Configurations

6.2.3.4.1 Analysis Applications

The Analysis Configuration is used to set the level of analysis and the alpha level for all the Material Applications used on the project. When a material code is entered in I2MS, it is linked to a material application. I2MS uses that link to assign tests on a material code to the proper analysis. The configuration is accessed by selecting the Administration tab, followed by the Maintenance heading on the dropdown and finally the Analysis Configuration as shown in Figure 6-83.

Figure 6-83: Administration – Maintenance – Analysis Configuration – Analysis Applications

A	dministration				
	Form Submission Log				
	Maintenance	×	Header	►	
	Change My Password		Testing	►	
	About I2MS		Technician Qualification	►	
1		=	Analysis Configuration	►	Analysis Applications
	•				Level 3 Observers

The Analysis Application screen lists the various Material Applications and the applicable values and fields associated with them (Figure 6-84). The entries can only be modified by the system administrator. However, they can be viewed on this screen. The associated level of analysis and alpha values are determined for each project during the Project's Inspection and Materials Risk Workshop which is conducted prior to construction. Only the System Administrators can add, edit, or delete analysis applications.

nalysis Group	Material Application	Test Method	Value Field	Subc	Level of Analysis	Alpha	
sphalt	Asphalt Stabilized Base - Aggregate	DB-104-E	Liquid Limit		2 - Independent Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-106-E	Plastic index		1 - Continuous Analysis	0.01	Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-107-E	Linear Shrinkage		2 - Independent Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-110-E	Cumulative Percent Retained		2 - Independent Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-116-E	Percent Soll Binder Increase		3 - Observation Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-116-E	Wet Ball Mill Value		3 - Observation Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-203-F	Average Sand Equivalent		3 - Observation Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-217-F	Percent Loss By Decantation		2 - Independent Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-410-A	La Abrasion Value		3 - Observation Verification		Options
sphalt	Asphalt Stabilized Base - Aggregate	DB-460-A	Percent Crushed Particles		3 - Observation Verification		Options
sphalt	Asphalt Stabilized Base - Complete MI	DB-126-E	Minimum Specimen Unconfined Compressiv		1 - Continuous Analysis	0.01	Options
sphalt	Asphalt Stabilized Base - Complete MI	DB-140-E	Average Depth:		1 - Continuous Analysis	0.01	Options
sphalt	Asphalt Stabilized Base - Complete MI	DB-207-F	In Place Air Vold, %		1 - Continuous Analysis	0.01	Options
sphalt	Asphalt Stabilized Base - Complete MI	DB-236-F	Asphalt Content, %:		1 - Continuous Analysis	0.01	Options
sphalt	Asphalt Stabilized Base - Complete MI	DB-530-C	Estimated Percent of Stripping		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-200-F	Cumulative Percent Passing		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-217-F	Percent Deleterious Material		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-217-F	Percent Loss By Decantation		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-410-A	La Abrasion Value		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-411-M	Soundness Loss		3 - Observation Verification		Options
sphalt	LRA/HMCL ACP - Coarse Aggregate	DB-460-A	Percent Crushed Particles		3 - Observation Verification		Options

Figure 6-84: Analysis Configuration – Analysis Applications

Step 1. To add an Analysis Application, select "Add" (Figure 6-85).

Analysis Applications Search							
							Add
Analysis Group	Material Application	Test Method	Value Field	Subcategorize E	Level of Analysis	Alpha	
Asphalt	Asphalt Stabilized Base - Aggregate	DB-104-E	Liquid Limit		2 - Independent Verifi		Options
Asphalt	Asphalt Stabilized Base - Aggregate	DB-106-E	Plastic Index		1 - Continuous Analysis	0.01	Options
Asphalt	Asphalt Stabilized Base - Aggregate	DB-107-E	Linear Shrinkage		2 - Independent Verifi		Options
Asphalt	Asphalt Stabilized Base - Aggregate	DB-110-E	Cumulative Percent Retained	Sieve Size	2 - Independent Verifi		Options

Figure 6-85: Analysis Configuration – Analysis Applications – Select Add

Step 2. The Add New Analysis Applications screen will open with the first selection in each drop-down menu except for Subcategorize By and Alpha (Figure 6-86).

Add New Analysis Applications		
ID	New Entry	
Analysis Group	Asphalt	-
Material Application	Asphalt Stabilized Base - Aggregate	•
Test Method	DB-101-E, Part III	-
Value Field	Cumulative Percent Passing	-
Subcategorize By		-
Level of Analysis	1 - Continuous Analysis	-
Alpha		
	Submit Cancel	

Figure 6-86: Analysis Configuration – Analysis Applications – Add

Step 3. Choose one of the Analysis Groups: Asphalt, Hydraulic Cement Concrete, or Soils and Aggregates (Figure 6-87). The other selections are for programmer testing and are not used on projects. Figure 6-87: Analysis Configuration – Analysis Applications – Select Analysis Group

Add New Analysis Applications		
ID	New Entry	
Analysis Group	Asphalt	*
Material Application	Asphalt	
Test Method	Hydraulic Cement Concrete	
lest metriod	Soils and Aggregates	
Value Field	Unit Testing Applications	
Subcategorize By	Asphalt Asphalt Hydraulic Cement Concrete Soils and Aggregates	
Level of Analysis		
Alpha		
	4	

Step 4. Choose a Material Application from the drop-down menu that is appropriate for the Analysis Group (Figure 6-88).

Figure 6-88: Analysis Configuration – Analysis Applications – Select Material Application

D	New Entry							
Analysis Group	Soils and Aggregates							
Material Application	Asphalt Stabilized Base - Aggregate	T						
Test Method	Asphalt Stabilized Base - Aggregate							
Value Field Subcategorize By	Asphalt Stabilized Base - Complete Mixture							
	Asphalt Stabilized Base - Roadway							
	Embankment - Cuts and Fills							
Level of Analysis	HCC - Coarse Aggregate							
	HCC - Fine Aggregate							
Ipha	HCC - Mineral Filler							
	HCC - Non-Structural Complete Mixture							
	HCC - Pavement Complete Mixture							
	HCC - Structural Complete Mixture							

Step 5. Choose a Test Method from the drop-down menu that is appropriate for the Material Application (Figure 6-89).

Add New Analysis Applications					
ID	New Entry				
Analysis Group	Soils and Aggregates	*			
Material Application	Embankment - Cuts and Fills	٠			
Test Method	DB-101-E, Part III	*			
Value Field	DB-101-E, Part III	•			
Subcategorize By	DB-103-E				
Subcategorize By	DB-104-E				
Level of Analysis	DB-105-E				
Alpha	DB-106-E				
	DB-107-E				
	DB-110-E				
	DB-113-E				
	DB-114-E				
	DB-115-1				

Figure 6-89: Analysis Configuration – Analysis Applications – Select Test Method

Step 6. Choose a Value Field from the drop-down menu (Figure 6-90). There are Test Methods that will only have one Value Field selection and others that more than one selection.

D	New Entry	
Analysis Group	Soils and Aggregates	-
Aterial Application	Embankment - Cuts and Fills	
est Method	DB-115-1	
alue Field		
ubcategorize By	Density Count	
evel of Analysis	Density, %	
	density_standard	
lpha	Dry Density, pcf	
	Gauge No.	
	Maximum Dry Density	
	Moisture Content, %	
	Moisture Count	
	Moisture Standard	
	Optimum Moisture Content	
	Probe Depth	

Figure 6-90: Analysis Configuration – Analysis Applications – Select Value Field

Step 7. Choose a Subcategory from the drop-down menu that is appropriate for the Value Field (Figure 6-91). The only subcategory is Sieve Size. If the Test Method is not a sieve analysis, then a subcategory will not be available in the drop-down menu, as shown below. Figure 6-91: Analysis Configuration – Analysis Applications – Select Subcategorize By

Add New Analysis Applications					
ID	New Entry				
Analysis Group	Soils and Aggregates				
Material Application	Embankment - Cuts and Fills	•			
Test Method	DB-115-1				
Value Field	Moisture Content, %	•			
Subcategorize By		•			
Level of Analysis	1 - Continuous Analysis	•			
Alpha					
	Submit Cancel				

Since the Test Method shown below is a sieve analysis then the subcategory for sieve size will be available (Figure 6-92). This will allow each sieve to be analyzed for Level 2 Independent Verifications.

Figure 6-92: Analysis Configuration – Analysis Applications – Select Subcategorize By

ID	New Entry	
Analysis Group	Soils and Aggregates	•
Material Application	Embankment - Cuts and Fills	-
Test Method	DB-101-E, Part III	-
Value Field	Cumulative Percent Passing	-
Subcategorize By		•
Level of Analysis		
Alpha	Sieve Size	

Step 8. Select the Level of Analysis based on the approved project-specific OV Levels for Materials Testing Validation/Verification in Appendix D of the DB QAP for the Analysis Application (Figure 6-93).

Add New Analysis Applications					
ID	New Entry				
Analysis Group	Soils and Aggregates	*			
Material Application	Embankment - Cuts and Fills	*			
Test Method	DB-115-1	-			
Value Field	Moisture Content, %	-			
Subcategorize By		-			
Level of Analysis	1 - Continuous Analysis	-			
Alpha	1 - Continuous Analysis				
	2 - Independent Verification				
	3 - Observation Verification				

Figure 6-93: Analysis Configuration – Analysis Applications – Select Level of Analysis

Step 9. If the Level of Analysis is Level 1 – Continuous Analysis, enter a numerical value for Alpha based on the approved project's DB QAP Appendix D for the Analysis Application (Figure 6-94).

Figure 6-94: Analysis Configuration – Analysis Applications – Enter Alpha value if applicable

Add New Analysis Applications					
ID	New Entry				
Analysis Group	Soils and Aggregates				
Material Application	Embankment - Cuts and Fills	-			
Test Method	DB-115-1	-			
Value Field	Moisture Content, %	•			
Subcategorize By		-			
Level of Analysis	1 - Continuous Analysis	*			
Alpha	0.010				
	Submit Cancel				

Step 10. Select Submit to add the Analysis Application to the analysis application list or Cancel to return to the analysis application list (Figure 6-95).

Fig	ure 6-95: Anal	lvsis Configuration	– Analysis Applications -	- Select Submit or Cancel
		iyolo ooningaraaon	/ maryolo / apprioaciono	

ID	New Entry	
Analysis Group	Soils and Aggregates	-
Material Application	Embankment - Cuts and Fills	-
Test Method	DB-115-1	-
Value Field	Moisture Content, %	-
Subcategorize By		*
Level of Analysis	2 - Independent Verification	-
Alpha		

Step 11. There is an option to edit or delete the "Analysis Application" (Figure 6-96). To edit a particular analysis application record, select the Options button on the far-right side, then the Edit command.

Figure 6-96: Analysis Configuration – Analysis Applications – Select Edit or Delete

Analysis Application	ns	Search						_
							Add	
Analysis Group	Material Application	Test Metho	Value Field	Subcategorize By	Level of Analysis	Alpha		
Soils and Aggregates	Embankment - Cuts and Fills	DB-115-1	Density, %		1 - Continuous Analysis	0.025	Options	
Soils and Aggregates	Embankment - Cuts and Fills	DB-115-1	Density, %		1 - Continuous Analysis	0.001	Options	
Soils and Aggregates	Embankment - Cuts and Fills	DB-115-1	Moisture Content, %		2 - Independent Verification		Options	Edit
Soils and Aggregates	Retaining Wall - Non-Select	DB-115-1	Density, %		1 - Continuous Analysis	0.01	Options	Delet
Soils and Aggregates	Retaining Wall - Select	DB-115-1	Density, %		1 - Continuous Analysis	0.01	Options	
Soils and Aggregates	Treated Subgrade / Base Course	DB-115-1	Density, %		1 - Continuous Analysis	0.01	Options	
Soils and Aggregates	Untreated Base Course	DB-115-1	Density, %		1 - Continuous Analysis	0.01	Options	

Step 12. The "Edit Analysis Applications" screen will show if edit is selected (Figure 6-97). Once modifications are made select "Submit" to apply the changes or "Cancel" to exit the "Edit Analysis Applications" screen.

Edit Analysis Applications		
ID	206	
Analysis Group	Soils and Aggregates	•
Material Application	Embankment - Cuts and Fills	*
Test Method	DB-115-1	-
Value Field	Moisture Content, %	•
Subcategorize By		•
Level of Analysis	2 - Independent Verification	•
Alpha		
	Submit Cano	el

Figure 6-97: Analysis Configuration – Analysis Applications – Edit

Step 13. If the Analysis Application has never been used in an analysis and the Delete option is selected, the Analysis Application will be immediately deleted and there is a notification message at the top of the "Analysis Applications" table if an analysis application is deleted as shown below (Figure 6-98).

Figure 6-98: Analysis Configuration – Analysis Applications – Delete

A record was deleted in the Analysis Applications table.							
Analysis Applications Search							
Add					Add		
Analysis Group	Material Application	Test Method	Value Field	Subcategorize By	Level of Analysis	Alpha	

Note that if the analysis application has been used in an analysis, the analysis application cannot be deleted and a notification message at the top of the table will indicate that the analysis application is already in use as shown below (Figure 6-99).

			🛕 Th	is analysis application is alread	ly in use.				
_									
	Analysis Application	ıs	Se	arch					
		Add							
	Analysis Group	Material Application	Test Method	Value Field	Subcategorize By	Level of Analysis	Alpha		

Step 14. Searching for Analysis Applications – to search for the analysis applications, complete the various filters below and select Run Query (Figure 6-100). A page will then display all of the analysis applications based on the filters selected.

Figure 6-100: Analysis Configuration – Analysis Applications – Search

Analysis Applications	Search	
Search Criteria		
Analysis Group	*	Subcategorize By
Material Application	-	Level of Analysis 🔹
Test Method	~	Alpha < 💌
Value Field	-	
	Rur	n Query

Step 15. The Analysis Applications table can also be sorted by any of the headers. The table is automatically sorted by Analysis Group then Material Application and by Test Method. In the example below, the table has been sorted by Test Method as indicated by the triangle (Figure 6-101). The upward pointing triangle also indicates the column is sorted in ascending order.

Figure 6-101: Analysis Configuration – Analysis Applications – Sorting by Test Method Ascending

						Ad
Analysis Group	Material Application	Test Method	Value Field	Subcategorize By	Level of Analysis	Alpha
Soils and Aggregates	Retaining Wall - Non-Select	DB-101-E, Part III	Cumulative Percent Passing	Sieve Size	2 - Independent Verificat	Option
Soils and Aggregates	Retaining Wall - Select	DB-101-E, Part III	Cumulative Percent Passing	Sieve Size	2 - Independent Verificat	Option
Soils and Aggregates	Treated Subgrade / Base Course	DB-101-E, Part III	Cumulative Percent Passing	Sieve Size	2 - Independent Verificat	Option
Soils and Aggregates	Treated Subgrade / Base Course	DB-101-E, Part III	Cumulative Percent Passing	Sieve Size	2 - Independent Verificat	Option
Soils and Aggregates	Treated Subgrade / Base Course	DB-103-E	Moisture Content		2 - Independent Verificat	Option
Soils and Aggregates	Treated Subgrade / Base Course	DB-103-E	Moisture Content		2 - Independent Verificat	Option
Soils and Aggregates	Untreated Base Course	DB-103-E	Moisture Content		2 - Independent Verificat	Option
Asphalt	Asphalt Stabilized Base - Aggregate	DB-104-E	Liquid Limit		2 - Independent Verificat	Option
Soils and Aggregates	Embankment - Cuts and Fills	DB-104-E	Liquid Limit		2 - Independent Verificat	Option

If the header Test Method is selected again the table will reverse the order and the triangle will point downward indicating the column is sorted in descending order (Figure 6-102).

Figure 6-102: Analysis Configuration – Analysis Applications – Sorting by Test Method Descending

Analysis Group	Material Application	Test Method 🛛 🗸	Value Field	Subcategorize By	Level of Analysis	Alpha		
Unit Testing Applicat	Unanalyzed Material	UnitTest	Unit Testing Result A		1 - Continuous Analysis	0.1	Options	
Unit Testing Applicat	Unanalyzed Material	UnitTest	Unit Testing Result B		2 - Independent Verificat		Options	
Asphalt	Asphalt Stabilized Base - Complete	DB-530-C	Estimated Percent of Strip		3 - Observation Verificati		Options	
Asphalt	QCQA ACP - Complete Mixture	DB-530-C	Estimated Percent of Strip		3 - Observation Verificati		Options	
Asphalt	QCQA ACP - Coarse Aggregate	DB-461-A	Micro-Deval Abrasion		3 - Observation Verificati		Options	
Asphalt	Surface Treatment - Aggregate	DB-461-A	Micro-Deval Abrasion		3 - Observation Verificati		Options	
Hydraulic Cement C	HCC - Coarse Aggregate	DB-461-A	Micro-Deval Abrasion		3 - Observation Verificati		Options	

In the example below, the table has been sorted by Level of Analysis (Figure 6-103).

Figure 6-103: Analysis Configuration – Analysis Applications – Sorting by Level of Analysis

Analysis Applications Search								
							Add	
Analysis Group	Material Application	Test Method	Value Field	Subcategorize B	Level of Analysis	Alpha		
Unit Testing A	Unanalyzed Material	UnitTest	Unit Testing Result A		1 - Continuous Analysis	0.1	Options	
Asphalt	QCQA ACP - Complete Mixture	DB-207-FPL	In Place Air Void, %		1 - Continuous Analysis	0.025	Options	
Asphalt	QCQA ACP - Complete Mixture	DB-207-FPR	Lab Molded Density, %:		1 - Continuous Analysis	0.025	Options	
Asphalt	QCQA ACP - Complete Mixture	DB-236-F	Asphalt Content, %:		1 - Continuous Analysis	0.025	Options	
Asphalt	QCQA ACP - Roadway	DB-207-FPL	In Place Air Void, %		1 - Continuous Analysis	0.025	Options	
Hydraulic Ce	HCC - Pavement Complete Mixture	DB-418-A	Average Strength	Average Age	1 - Continuous Analysis	0.025	Options	
Hydraulic Ce	HCC - Pavement Complete Mixture	DB-418-A	Corrected Air Content		1 - Continuous Analysis	0.025	Options	

6.2.3.4.2 Level 3 Observers

To add users to the drop-down menu of Observers, use the Administration commands as shown below. Navigate to the Maintenance/Analysis Configuration/Level 3 Observers screen to add a list of qualified individuals that will be performing Observation Verifications (Figure 6-104). The process for adding Level 3 Observer CVLs is essentially the same as adding or editing the Features CVL in <u>Section 6.2.3.1.3 Features</u>.

Figure 6-104: Administration – Maintenance – Analysis Configuration – Level 3 Observers

Administration				
Form Submission Log	_			-
Maintenance	•	Header	►	
Change My Password		Testing	►	
About I2MS		Technician Qualification	►	
		Analysis Configuration	►	Analysis Applications
				Level 3 Observers

6.2.4 Project Settings

The System Administrator has the ability to modify the Project Settings. These settings should be discussed at the beginning of the project and changed prior to any data being entered into the system since the settings selected affect the business rules for the continuous analysis algorithm. The default settings will be applied by MTD unless a request for modifications is approved by MTD.

Step 1. Select Administration -> Project Settings (Figure 6-105).

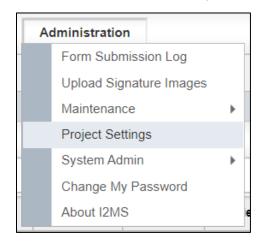


Figure 6-105: Administration - Project Settings

Step 2. The Maximum Number of Days Per Analysis and Maximum Number of OVF Records Per Analysis for most projects are 90 and 25, respectively (Figure 6-106). However, the Risk Workshop may identify a need to change these programmatic default values.

Enter the OVF and CQAF (IQF) Firm Name and Firm Number.

For Workflow Settings, there is an option to choose Yes or No to Automatically Approve CQAF (IQF) Records. If the CQAF (IQF) are submitting records through XML then this is set to Yes so that the records are immediately available for the I2MS Testing Manager to review and approve for analysis.

Select Save Changes.

Figure 6-106: Project Settings – Update Project Settings

Update Project	Settings			
Continuous Ana	lysis Settings			
Maximum* Nu	mber of Days Per Analysis	90]	
Maximum* Nu	mber of OV Records Per Analysis	25]	
	s are targets. Certain analysis condit	ions can result i	n larger data s	sets.
OVF Settings				
Firm Name	USS Federation Enterprises			
Firm Number	84541			
CQAF Settings				
Firm Name	Vulcan Logistical Builders			
Firm Number	82103			
Workflow Setting	gs			
Automatically	Approve CQAF Records Yes	•		
			:	Save Changes

Step 3. There will be a notification message at the top of the screen indicating that the settings were updated as shown below (Figure 6-107).

		 Settings updated.
Update Project	Settings	
Continuous Ana	lysis Settings	
Maximum* Nu	mber of Days Per Analysis	90
Maximum* Nu	mber of OV Records Per Analysis	25
* These number	s are targets. Certain analysis conditi	tions can result in larger data sets.
OVF Settings		
Firm Name	USS Federation Enterprises	
Firm Number	84541	
CQAF Settings		
Firm Name	Vulcan Logistical Builders	
Firm Number	82103	
Workflow Setting	gs	
Automatically	Approve CQAF Records Yes	•
		Save Changes

Figure 6-107: Project Settings – Project Settings Updated

6.2.5 Changing User Password

Step 1. Log into I2MS entering the user's Username and password as assigned to the user in the boxes shown and select submit. Entries are case sensitive (Figures 6-108 and 6-109).

Figure 6-108: I2MS Log In

III I2	MS	XA	A
		laterials Manag	ement System
L	og In		
	Username	ovfield	
	Password		
		Log In	

Step 2. At the Home page, select Change My Password from the Admin menu.

Figure 6-109: Administration -> Change My Password

	Dashboard	Search	Select Form	A	dministration	
					Maintenance	•
D	ashboard				Change My Password	
					About I2MS	

Step 3. Enter a new password and then re-enter the password to confirm (Figures 6-110 and 6-111).

Note – Passwords must contain at least one uppercase letter, one lowercase letter, one numeric character, contain at least one special character (e.g. !, @, #, \$, etc....), and be at least eight characters in length.

Figure 6-110: Change My Password

Change My Password	
Password:	
New Password:	
Confirm New Password:	
Change Password Cancel	

Step 4. Select Change Password at the bottom of the form to accept the new password into I2MS.

Figure 6-111: Password has been changed

Change My Password
Your password has been changed!
Continue

6.2.6 About I2MS

This manual is based and updated to the I2MS Version 3.2.8105 as shown in Figure 6-112. New projects will be using this or a similar version.

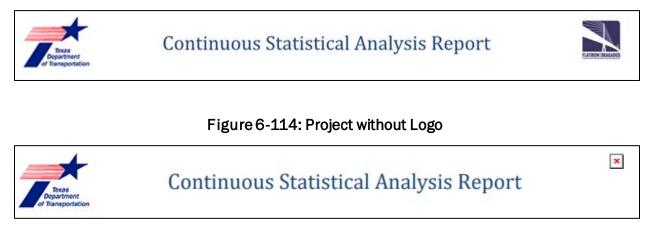
Figure	6-112: At	bout I2MS
--------	-----------	-----------

12MS Version 3.2	2
Build Number	3.2.8105
Build Date	3/11/2022

6.2.7 Project Logos

Project logos can be embedded into I2MS and is used as part of the Quarterly Federal Reports as shown in Figure 6-113. If a project logo has not been sent to MTD to include in the project's I2MS instance a boxed red x will appear where the logo is supposed to be as shown in Figure 6-114. The TxDOT Project Manager can submit a logo as an attachment through TxDOTNOW. Please see <u>Section 7 – I2MS Support</u> for more information about submitting a ticket.

Figure 6-113: Project Logo



SECTION 7 - I2MS Support

7.1 I2MS Help Desk

Technical support for I2MS may be required for a variety of issues. These issues may involve local internet connectivity, application (I2MS Software) related issues and engineering or application functionality related issues. TxDOT will be the clearinghouse for all support requests. TxDOT will log all support requests and respond in writing to the user submitting the request. These logs will serve as a means of documentation for future system administrators concerning frequency of issues, re-occurrence of similar issues, and development of a knowledge base of how issues are resolved.

I2MS users who require technical support are requested to contact their TxDOT PM or TxDOT designee who needs to submit a ticket to TxDOTNow through TxDOT Crossroads website. Instructions for the TxDOT PM or TxDOT designee on how to submit a ticket are below.

Step 1. Login to TxDOTNow through TxDOT Crossroads (Figure 7-1):

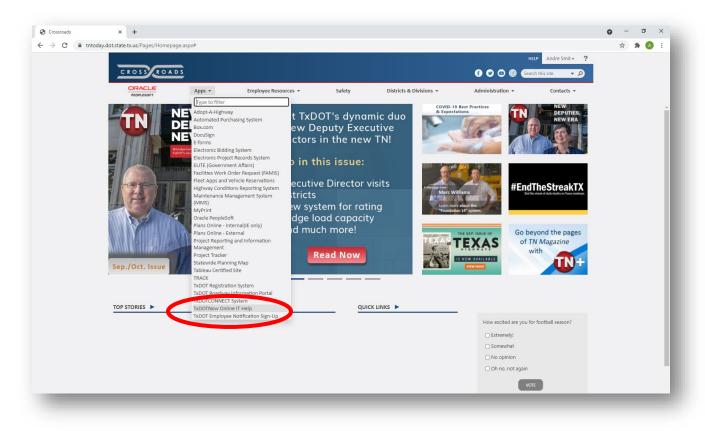


Figure 7-1: Crossroads Webpage

Step 2. Click on the Something's Broken link (Figure 7-2):

	Service Portal - TxDOTNow Servic × +			o – ø
\rightarrow C \textcircled{a} txdotnow.service-no	pw.com/ess/			९ 🕁 🛸 🔕
	on issues with several applications. Affected applications include artience and support as we work to restore access to these applic		technical experts to troubleshoot the issue as quickly as possible. Please check	1 of 2 k the TxDOTNow homepage
* Texas Department of Transportation			Knowledge Service Catalog Requests	s 🏽 Cart Tours 🔵 👫 Andre S
	(Good Morning, An	dre!	
	Type here to search the Servi	ice Catalog or Knowledge Base	٩	
		ويتعاديها ويوجهن التقالي وتفلع وتوجع		
والعالي				
	Order Something Browse the catalog for services and items you need	Knowledge Base Browse and search for articles, rate or submit a feedback	Contact Support to reset a password	
	Browse the catalog for services	Browse and search for articles, rate or submit a feedback	Contact Support to reset a password	
	Browne the catalog for services and items you need	Browse and search for articles, rate or submit a feedback	Contact Support to reset a password	
	Browne the catalog for services and items you need	Browse and search for articles, rate or submit a feedback	My Approvals You have no pending approvals	
	Browne the catalog for services and items you need	Browse and search for articles, rate or submit a feedback Service Desk Chat Click here to chat with IT	My Approvals You have no pending approvals My Open Incidents	
	Browne the catalog for services and items you need	Browse and search for articles, rate or submit a feedback Broken Center Sug Service Desk Chat Click here to chat with IT	Contact Support to reset a password My Approvals You have no pending approvals My Open Incidents I2MS Route to: APPS_12MSAttr: Naresh Ethinsjan/Ashish Kumar Description of the issue: TCS 702: On form DB- 1295_158 (Bio Federa Calculated to nearest whole	
	Browne the catalog for services and items you need	Browse and search for articles, rate or submit a feedback Broken Center Sug Service Desk Chat Click here to chat with IT	My Approvals My Open Incidents IXIS Route to: APPS_J2MSAttr. Nareah Ethinipin/Ashish Kumar Description of the issue: TCS 702: On form DB-	
	Browse the catalog for services and items you need \$12Announcements Sign On Failures Tr.DOTNow New Update September 1, 2021 IT Systems Status/Guest Wi-Fi Pasaword Most Viewed Articles Cellular How To and Setting Up Guides	Prowse and search for articles, rete or aubmit a feedback Service Desk Chat Click here to chat with IT Avg wait 7 Second	Contact Support to reset a password My Approvals You have no pending approvals My Open Incidents I2MS Route to: APPS_12MSAttr: Naresh Ethirajan/Ashish Kumar Description of the isaue TCS with One DB 128-5, Edit Sattr: Naresh Ethirajan/Ashish 128-5, Edit Sattr: Naresh Ethirajan/As	

Figure 7-2: Link to Report I2MS Issue

Step 3. Fill out the form providing info on the problem (Figure 7-3).

Requested for		
Andre Smit (ASMIT)	¢	•
mpact		
3 - Low (Individual)		*
Please select the category that best describes your issue 🔞		
Software		*
Additional description or information 🔞		
 Route to: ADMNET_Custom Attn: Ramanjaneya Gajjela (rgajje-c@txdot.gov); Siddartha Boreddy (SBORED-C@txdot.gov) Description of the issue: as detailed as possible. You can include attachments if needed to better explain the issue Contact Info.: Project Name and a contact person's name and e-mail. 		

Figure 7-3: Form to Report I2MS Issue

Note: Impact should be marked as "3-Low (Individual)" regardless of who is impacted.

Add the following block to the description:

- Route to: ADM_.NET_Custom
- Attn: Ramanjaneya Gajjela (rgajje-c@txdot.gov); Siddartha Boreddy (SBORED-C@txdot.gov)
- **Description of the issue:** as detailed as possible. You can include attachments if needed to better explain the issue
- Contact Info.: Project Name and a contact person's name and e-mail.

Step 4. Add attachments – scroll to the bottom of the page (Figure 7-4):

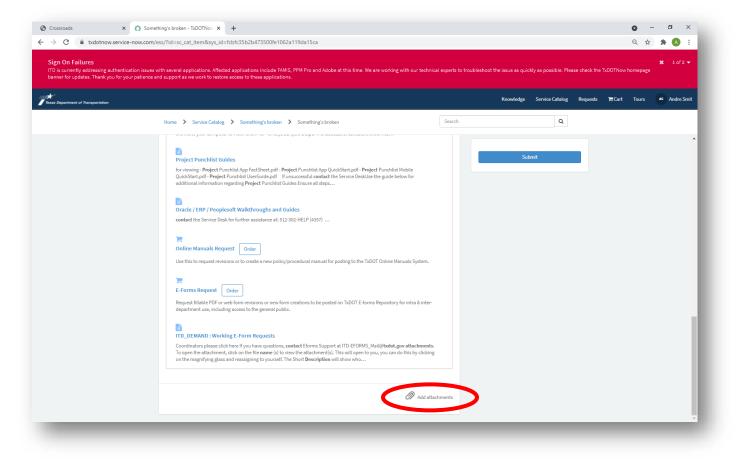


Figure 7-4: Link to Add Attachments

Step 5. Click on the Submit button (Figure 7-5):

Crossroads × O Somether	hing's broken - TxDOTNo:: X G word document layout for webp:: X +	0	-	Ø >
← → C	ss/?id=sc_cat_item&sys_id=fcbfc35b2b473500fe1062a119da15ca	Q 1	1	A
	ith several applications. Affected applications include FAMIS, PPM Pro and Adobe at this time. We are working with our technical experts to troubleshoot the issue as quickly as possible. Please check the TxDOTNo id support as we work to restore access to these applications.	w homepag		
Texas Department of Transportation	Knowledge Service-Catalog Requests WCart	Tours	AS	Andre Sm
	Home > Service Catalog > Something's broken > Something's broken Q			
	Something's broken Contact Support to report an issue.			
	Thank you for contacting the service desk. Please describe the nature of your problem in the fields below. Upon receipt, the service desk will categorize and prioritize your problem in the fields below. Upon receipt, the service desk will categorize and prioritize your problem update.			
	Requestor Information			
	* Requested for			
	Andre Smit (ASMIT) K *			
	Impact 3-Low (Individual) v			
	* Please select the category that best describes your issue 😧			
	* Prease select the category that best describes your issue 🔮			
	*Additional description or information 😧			
	Route to: APPS_12MS Attr. Naresh Ethinajan (RETHIR-C@budot.gov) and Ashish Yumar (AKUMA2-C@budot.gov) Description of the issues a defaulted as possible. You can include attachments if needed to better explain the issue Contact Info:: Project name and a contact person's name and e-mail.			

Figure 7-5: Button to Submit Ticket

Step 6. Email ticket number:

When you hit the Submit button, an incident ticket is created with a tracking number INCXXXXXX (Figure 7-6).

Please email the ticket number to MTD:

Andre.Smit@TxDOT.gov; Claudia.lzzo@TxDOT.gov

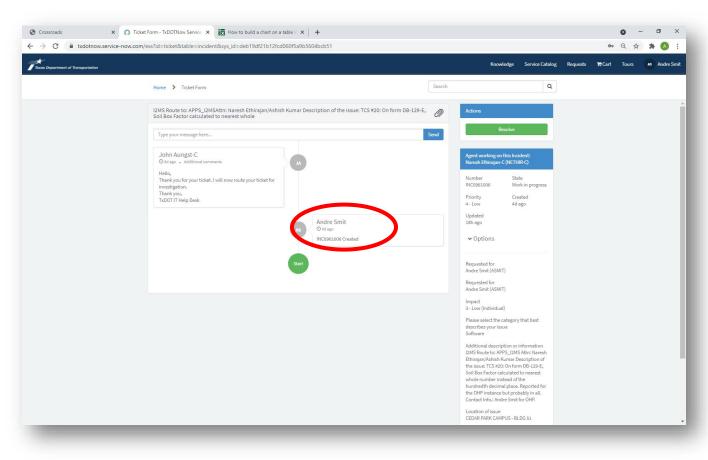


Figure 7-6: Tracking Number for Ticket

Step 7: Resolve the ticket:

ITD will update the ticket as needed and notify the user when the issue is fixed. If the issue is indeed resolved, login to TxDOTNow. Click on the "Requests" link on the top of the page for a listing of your tickets (Figures 7-7).

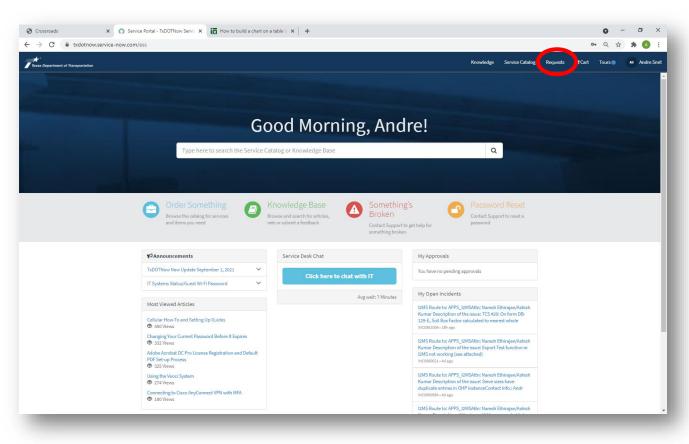


Figure 7-7: Login to See Current Tickets

Select the ticket to be resolved and press the Resolve button (Figure 7-8).

Figure 7-8: Resolve Ticket

7.2 System Maintenance

Scheduled system maintenance on I2MS will be performed periodically. These planned outages include operating system upgrades, security patches, code promotions, etc. Normal system maintenance will occur on weekends or during weekday evening hours. If emergency system maintenance is required during normal working hours, users will receive an e-mail notification explaining when the maintenance will occur and the expected duration.

SECTION 8 – SYSTEM ADMINISTRATION

8.1 General

There are two menus available within the System Admin window – Access Permissions and Manage Users as shown in Figure 8-1. Delete Samples has been disabled.

8.2 Access Permissions

Access Permissions allows the System Administrator to modify the settings and permissions for various functions within I2MS (Figure 8-1).

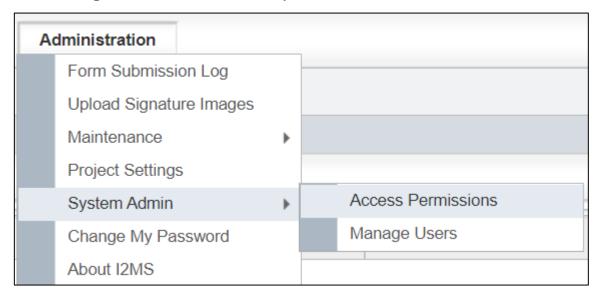


Figure 8-1: Administration – System Admin – Access Permissions

- Step 1. The "View by Type" has seven different drop-down menu options (Figure 8-2):
 - 1. Action,
 - 2. I2MS CVL,
 - 3. I2MS Form,
 - 4. I2MS Form Owner,
 - 5. I2MS Form Type,
 - 6. Page/Menu Item, and
 - 7. Queue.

Selecting an item from the drop-down menu will show the related access permissions for that item.

Secured Objects				
View by Type	Action -			
	Action			
Name	I2MS CVL			
Observation Verifi	I2MS Form			
Set "For Analysis"	I2MS Form Owner			
View Analysis Lev	I2MS Form Type			
	Page / Menu Item			
	Queue			

Figure 8-2: System Admin – Access Permissions – Secured Objects

Step 2. After choosing an item from the "View by Type" drop-down menu, I2MS will show the related permissions for that item. For the "View By Type" Action item there are three related permissions as shown below. The System Administrator can select Options and Edit which will bring up the permissions table (Figure 8-3).

Figure 8-3: System Admin – Access Permissions – Secured Objects - Edit

Secured Objects			
View by Type Action			
Name	Description	GUID	
Observation Verification - Observe / Add Comment	Permission to create an observation verification or add a comment.	66b44ff4-6e08-df11	Options
Set "For Analysis"	Permission to toggle the For Analysis checkbox for testing forms.	39e856d6-24d8-43	Options
View Analysis Levels	Permission to choose the menu item Analysis Levels for dashboard records.	7779f97f-964d-df11	Options

Step 3. The System Administrator can select the Not Set and toggle between the three options – Not Set, Deny, and Allow (Figure 8-4). Allow gives permission to the role to perform task shown in the header. Not Set and Deny do not give permission to the role to perform the task shown. Tasks will vary in the permission tables but the different options will be View, Add, Edit, Delete, Execute, Approve, Add Form, Edit Form, Add Notes, Search, and Approve/Review Form.

Edit Permissions	×
Secured Object Observation Verification - Observe / Add Comment Description Permission to create an observation verification or add a comment. Permissions Permission comment	
Role	Execute
CQAF Data Entry	Deny
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Allow
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

Figure 8-4: Access Permissions – Secured Objects – Not Set, Allow, Deny

8.2.1 Secured Object Types and Tables - Action Permissions

This section describes the Action Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-5 shows the Action Permissions.

Figure 8-5: Access Permissions – Secured Objects – Action Permissions

Secured Objects			
View by Type Action +			
Name	Description	GUID	
Observation Verification - Observe / Add Comment	Permission to create an observation verification or add a comment.	66b44ff4-6e08-df11-a808-0017a4ebc398	Options
Set "For Analysis"	Permission to toggle the For Analysis checkbox for testing forms.	39e856d6-24d8-4333-b71c-a106cafa36a4	Options
View Analysis Levels	Permission to choose the menu item Analysis Levels for dashboard recor	7779f97f-964d-df11-b74f-415645000030	Options

Figures 8-6 through 8-8 show the permissions tables under Actions.

Figure 8-6: Action Permissions – Observation Verification – Observe/Add Comment

Edit Permissions	
Secured Object Observation Verification - Observe / Add Comment Description Permission to create an observation verification or add a comment. Permissions Permission to create an observation verification or add a comment.	
Role	Execute
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Allow
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

Figure 8-7: Action Permissions – Set For Analysis

Edit Permissions				
Secured Object Set "For Analysis" Description Permission to toggle the For Analysis checkbox for testing forms. Permissions Comparison				
Role	Execute			
CQAF Data Entry	Not Set			
CQAF Data Entry Reviewers	Not Set			
CVL Administrators	Not Set			
DB Reviewer	Not Set			
I2MS Testing Managers	Allow			
IA Manager	Not Set			
OVF Data Entry	Not Set			
OVF Data Entry Reviewers	Not Set			
Read-only Access	Not Set			
System Administrators	Not Set			
Save Changes				

Figure 8-8: Action Permissions -	View A	Analysis l	Levels
----------------------------------	--------	------------	--------

Secured Object	View Analysis Levels	
Description Dermissions	Permission to choose the menu item Analysis Levels for dashboard records.	
Role	Execute	
CQAF Data Entry		Allow
CQAF Data Entry	Reviewers	Allow
CVL Administrator	5	Allow
DB Reviewer		Allow
I2MS Testing Man	agers	Allow
IA Manager		Not Set
OVF Data Entry		Allow
OVF Data Entry R	eviewers	Allow
Read-only Access		Allow
System Administra	tors	Allow

8.2.2 Secured Object Types and Tables - I2MS CVL Permissions

This section describes the I2MS CVL Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-9 shows the I2MS CVL Permissions.

Se	Secured Objects					
'	View by Type I2MS CVL	- ·				
N	Name	Description	GUID			
A	Analysis Applications	Project-wide levels of analysis for tests on different material types.	9d725462-7b06-df11-a808-0017a4ebc398	Options		
h	nspection - Activities	Scheduled Activities	8a0f61a5-1e89-de11-86b8-0017a4ebc398	Options		
h	nspection CVLs	Permission for all Inspection CVLs other than Activities	65404cb1-3c17-df11-a808-0017a4ebc398	Options		
Т	Fechnician Qualification	Qualifications and Proficiency Participation for Technicians	caa5df3f-bad3-de11-926c-0017a4ebc398	Options		
Т	Festing CVLs	All Testing CVLs	f517c68e-f085-de11-86b8-0017a4ebc398	Options		

Figure 8-9: Access Permissions – I2MS CVL Permissions

Figures 8-10 through 8-14 show the permissions tables under I2MS CVL.

Figure 8-10: Access Permissions - I2MS CVL Permissions - Analysis Applications

Secured Object Analysis Applications Description Project-wide levels of analysis for tests on different material types. Permissions Project-wide levels of analysis for tests on different material types.					
Role	View	Add	Edit	Delete	
CQAF Data Entry	Allow	Not Set	Not Set	Not Set	
CQAF Data Entry Reviewers	Allow	Not Set	Not Set	Not Set	
CVL Administrators	Allow	Not Set	Not Set	Not Set	
DB Reviewer	Allow	Not Set	Not Set	Not Set	
I2MS Testing Managers	Allow	Not Set	Not Set	Not Set	
IA Manager	Allow	Not Set	Not Set	Not Set	
OVF Data Entry	Allow	Not Set	Not Set	Not Set	
OVF Data Entry Reviewers	Allow	Not Set	Not Set	Not Set	
Read-only Access	Allow	Not Set	Not Set	Not Set	
System Administrators	Allow	Allow	Allow	Allow	

Figure 8-11: Access Permissions - I2MS CVL Permissions - Inspection Activities (Not Used)

Secured Object Inspection - Activitie Description Scheduled Activities Permissions				
Role	View	Add	Edit	Delete
CQAF Data Entry	Not Set	Not Set	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set	Not Set	Not Set
CVL Administrators	Not Set	Not Set	Not Set	Not Set
DB Reviewer	Not Set	Not Set	Not Set	Not Set
I2MS Testing Managers	Not Set	Not Set	Not Set	Not Set
IA Manager	Not Set	Not Set	Not Set	Not Set
OVF Data Entry	Not Set	Not Set	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set	Not Set	Not Set
Read-only Access	Not Set	Not Set	Not Set	Not Set
System Administrators	Not Set	Not Set	Not Set	Not Set

Figure 8-12: Access Permissions - I2MS CVL Permissions - Inspection CVLs (Not Used)

Secured Object Inspection CVLs Description Permission for all Inspection CVLs other than Activities Permissions Permission for all Inspection CVLs other than Activities				
Role	View	Add	Edit	Delete
CQAF Data Entry	Not Set	Not Set	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set	Not Set	Not Set
CVL Administrators	Not Set	Not Set	Not Set	Not Set
DB Reviewer	Not Set	Not Set	Not Set	Not Set
12MS Testing Managers	Not Set	Not Set	Not Set	Not Set
IA Manager	Not Set	Not Set	Not Set	Not Set
OVF Data Entry	Not Set	Not Set	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set	Not Set	Not Set
Read-only Access	Not Set	Not Set	Not Set	Not Set
System Administrators	Not Set	Not Set	Not Set	Not Set

Figure 8-13: Access Permissions - I2MS CVL Permissions - Technician Qualification

Edit Permissions				
Secured Object Technician Qualification Description Qualifications and Proficiency Pa Permissions	rticipation for Technicians			
Role	View	Add	Edit	Delete
CQAF Data Entry	Allow	Not Set	Not Set	Not Set
CQAF Data Entry Reviewers	Allow	Not Set	Not Set	Not Set
CVL Administrators	Allow	Not Set	Not Set	Not Set
DB Reviewer	Allow	Not Set	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set	Not Set	Not Set
IA Manager	Allow	Allow	Allow	Allow
OVF Data Entry	Allow	Not Set	Not Set	Not Set
OVF Data Entry Reviewers	Allow	Not Set	Not Set	Not Set
Read-only Access	Allow	Not Set	Not Set	Not Set
System Administrators	Allow	Allow	Allow	Allow
		Save Changes		

Secured Object Testing CVLs Description All Testing CVLs Permissions Permissions				
Role	View	Add	Edit	Delete
CQAF Data Entry	Allow	Not Set	Not Set	Not Se
CQAF Data Entry Reviewers	Allow	Not Set	Not Set	Not Se
CVL Administrators	Allow	Allow	Allow	Allow
DB Reviewer	Allow	Not Set	Not Set	Not Se
I2MS Testing Managers	Allow	Allow	Allow	Allow
IA Manager	Allow	Allow	Not Set	Not Se
OVF Data Entry	Allow	Not Set	Not Set	Not Se
OVF Data Entry Reviewers	Allow	Not Set	Not Set	Not Se
Read-only Access	Allow	Not Set	Not Set	Not Se
System Administrators	Allow	Allow	Allow	Allow

Figure 8-14: Access Permissions - I2MS CVL Permissions - Inspection CVLs (Not Used)

8.2.3 Secured Object Types and Tables - I2MS Forms Permissions

This section describes the I2MS Forms Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-15 shows the I2MS Form Permissions.



Secured Objects			
View by Type	MS Form		
Name	Description	GUID	
Testing Forms - All	Permissions for testing forms are currently not broken out by individual form. Permissions set here will affect all testing forms.	240764bd	Options

Figure 8-16 shows the permissions tables under I2MS Forms.

Secured Object Testing Forms - All Description Permissions for test Permissions	ing forms are currently not broken out t	oy individual form. Permissions s	et here will affect all testing form	15.
Role	View	Add	Edit	Approve
CQAF Data Entry	Allow	Allow	Allow	Not Set
CQAF Data Entry Reviewers	Allow	Not Set	Not Set	Allow
CVL Administrators	Allow	Not Set	Not Set	Not Set
DB Reviewer	Allow	Not Set	Not Set	Not Set
I2MS Testing Managers	Allow	Allow	Allow	Allow
IA Manager	Allow	Not Set	Not Set	Not Set
OVF Data Entry	Allow	Allow	Allow	Not Set
OVF Data Entry Reviewers	Allow	Not Set	Allow	Allow
Read-only Access	Allow	Not Set	Not Set	Not Set
System Administrators	Allow	Allow	Allow	Allow

Figure 8-16: Access Permissions - Testing Forms All

8.2.4 Secured Object Types and Tables - I2MS Form Owner Permissions

This section describes the I2MS Form Owner Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-17 shows the I2MS Form Permissions.

Secured Objects			
View by Type	1S Form Owner		
Name	Description	GUID	
Form Owner - CQAF	Permissions for CQAF Forms	17784344-8389-4394-bffd-c1660b4ae9c0	Options
Form Owner - OVF	Permissions for OVF Forms	ad69ac57-2889-4a67-8d5b-0362715fc81f	Options

Figure 8-17: Access Permissions - I2MS Form Owner

Figures 8-18 and 8-19 show the permissions tables under I2MS Form Owner.

Secured Object Form Owner - CQAF Description Permissions for CQAF For	rms		
Permissions Role	Add Form	Edit Form	Add Notes
CQAF Data Entry	Allow	Allow	Allow
CQAF Data Entry Reviewers	Not Set	Not Set	Allow
CVL Administrators	Not Set	Not Set	Not Set
DB Reviewer	Not Set	Not Set	Allow
I2MS Testing Managers	Not Set	Not Set	Allow
IA Manager	Not Set	Not Set	Not Set
OVF Data Entry	Not Set	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set	Not Set
Read-only Access	Not Set	Not Set	Not Set
System Administrators	Allow	Allow	Allow
	Save Change	es	

Figure 8-18: Access Permissions - Form Owner CQAF

Figure 8-19: Access Permissions – Form Owner OVF

Secured Object Form Owner - OVF Description Permissions for OVF Forms Permissions Permissions for OVF Forms			
Role	Add Form	Edit Form	Add Notes
CQAF Data Entry	Not Set	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set	Not Set
CVL Administrators	Not Set	Not Set	Not Set
DB Reviewer	Not Set	Not Set	Not Set
I2MS Testing Managers	Not Set	Not Set	Allow
IA Manager	Not Set	Not Set	Not Set
OVF Data Entry	Allow	Allow	Allow
OVF Data Entry Reviewers	Not Set	Not Set	Allow
Read-only Access	Not Set	Not Set	Not Set
System Administrators	Allow	Allow	Allow

8.2.5 Secured Object Types and Tables - I2MS Form Type Permissions

This section describes the I2MS CVL Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-20 shows the I2MS Form Type Permissions.

Secured Objects			
View by Type	2MS Form Type	•	
Name	Description	GUID	
Inspection Forms	Inspection Forms	adae724c-22d4-de11-926c-0017a4ebc398	Options
Testing Forms	Testing Forms	13a5ff3e-22d4-de11-926c-0017a4ebc398	Options

Figure 8-20: Access Permissions – I2MS Form Type

Figures 8-21 and 8-22 show the permissions tables under I2MS Form Type.

Figure 8-21: Access Permissions – I2MS Form Type - Inspection Forms (Not Used)

Edit Permissions	
Secured Object Inspection Forms Description Inspection Forms Permissions	
Role	Search
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Not Set
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Not Set
Save Changes	

Edit Permissions			
Secured Object Testing Forms Description Testing Forms Permissions			
Role		Search	
CQAF Data Entry			Allow
CQAF Data Entry Reviewers			Allow
CVL Administrators			Allow
DB Reviewer			Allow
I2MS Testing Managers			Allow
IA Manager			Allow
OVF Data Entry			Allow
OVF Data Entry Reviewers			Allow
Read-only Access			Allow
System Administrators			Allow
	Save Changes		

Figure 8-22: Access Permissions – I2MS Form Type - Testing Forms

8.2.6 Secured Object Types and Tables - Page / Menu Item Permissions

This section describes the Page/Menu Item Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-23 shows the I2MS Page/Menu Item Permissions.

Page / Menu Item			
lame	Description	GUID $ agence$	
Administration -> About I2MS	Permission to see the About I2MS screen.	73a0ff55-f4fd-de11-ad9b-0017a4	Options
Administration -> Change Password	Permission to see the Change Password screen.	4beaa142-f4fd-de11-ad9b-0017a	Options
Administration -> Delete Samples	Delete Samples from submission/history	40f25e69-ca83-4ee2-ae86-977cf	Options
Administration -> Form Submission Log	Permission to see the Form Submission Log screen.	aadcf449-e2fd-de11-ad9b-0017a	Options
Administration -> Maintenance	Permission to see the Maintenance menu and screen.	669dc496-e2fd-de11-ad9b-0017	Options
Administration -> Make a request	Permission to allow someone to make a request.	40bcdf2b-06ab-df11-925a-00248	Options
Administration -> Project Settings	Permission to edit project-specific settings for analysis, forms, and workflow.	7f23fb68-ec14-df11-a808-0017a	Options
Administration -> System Admin -> Access Permissi	Permission to see the Access Permissions screen.	59162689-e2fd-de11-ad9b-0017	Options
Administration -> System Admin -> Manage Users	Permissions for the Manage Users screen.	11cb8ae0-f2fd-de11-ad9b-0017a	Options
Administration -> Upload Signature Images	Permission to see the Upload Signature Images screen.	db8ad059-e2fd-de11-ad9b-0017	Options
Analysis -> Level 1 - Continuous Analysis	Permissions for the Continuous Analysis screen.	96de9601-e2fd-de11-ad9b-0017	Options
Analysis -> Level 2 - Independent Verification	Permissions for the Independent Verification screen.	5cd8ae0c-e2fd-de11-ad9b-0017	Options
Analysis -> Level 3 - Observation Verification	Permissions for the Observation Verification screen.	0ab6bc19-e2fd-de11-ad9b-0017	Options
Analysis Trigger	Permission to create analysis points for a specific date.	4f33d4aa-d49d-e011-b0a0-0021	Options
Dashboard	Permission to see the Dashboard screen.	ae992bc1-e1fd-de11-ad9b-0017	Options
Form Submission -> Download Excel Form	Permission to download the excel forms for electronic submission	8aeec927-2a5c-42dc-a9cd-d070	Options
Form Submission -> Submit Excel Form	Permission to submit any excel form for electronic submission	a96838ba-a98c-45da-95aa-ca1e	Options
Reporting -> Create Report	Permission to see the Create Report screen.	d6777e34-e2fd-de11-ad9b-0017	Options
Reporting -> My Reports	Permission to see the My Reports screen.	1d4b9d2c-e2fd-de11-ad9b-0017	Options
Search	Permission to see the Search menu and the search screen. Specific searc	af992bc1-e1fd-de11-ad9b-0017a	Options

Secured Objects			
View by Type Page / Menu Item +			
Name Description GUID			
Search -> Search by Sample Id	Permission to open a sample given sample id and test method	cb98342a-3018-4dd3-b4bc-4446c82	Options
Select Form	Permission to see the Select Form menu.	c7d023d9-e1fd-de11-ad9b-0017a4e	Options

Figures 8-24 through 8-45 show the permissions tables under Page/Menu Item.

Edit Permissions		
Secured Object Administration -> About I2MS Description Permission to see the About I2MS screen. Permissions Permission to see the About I2MS screen.		
Role		View
CQAF Data Entry		Allow
CQAF Data Entry Reviewers		Allow
CVL Administrators		Allow
DB Reviewer		Allow
I2MS Testing Managers		Allow
IA Manager		Allow
OVF Data Entry		Allow
OVF Data Entry Reviewers		Allow
Read-only Access		Allow
System Administrators		Allow
	Save Changes	

Figure 8-24: Permissions by Page/Menu Item - Administration -> About I2MS

Figure 8-25: Permissions by Page/Menu Item – Administration -> Change Password

Edit Permissions		
Secured Object Administration -> Change Password Description Permission to see the Change Password screen.		
Permissions		
Role	View	
CQAF Data Entry	Allow	
CQAF Data Entry Reviewers	Allow	
CVL Administrators	Allow	
DB Reviewer	Allow	
I2MS Testing Managers	Allow	
IA Manager	Allow	
OVF Data Entry	Allow	
OVF Data Entry Reviewers	Allow	
Read-only Access	Allow	
System Administrators	Allow	
Save	Changes	

Figure 8-26: Permissions by Page/Menu Item – Administration -> Delete Samples (disabled)

Edit Permissions		
Secured Object Administration -> Delete Samples		
Description Delete Samples from submission/history Permissions		
Permissions		
Role View		
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Not Set	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Allow	
Save Changes		

Figure 8-27: Permissions by Page/Menu Item – Administration -> Form Submission Log

Edit Permissions		
Secured Object Administration -> Form Submission Log Description Permission to see the Form Submission Log screen. Permissions Permission to see the Form Submission Log screen.		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Allow	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Allow	
System Administrators	Allow	
Save Changes		

Figure 8-28: Permissions by Page/Menu Item – Administration -> Maintenance Menu

Edit Permissions		
Secured Object	Administration -> Maintenance	
Description Permissions	Permission to see the Maintenance menu and screen.	
Role		View
CQAF Data Entry		Allow
CQAF Data Entry	Reviewers	Allow
CVL Administrators	5	Allow
DB Reviewer		Allow
I2MS Testing Mana	agers	Allow
IA Manager		Allow
OVF Data Entry		Allow
OVF Data Entry Re	eviewers	Allow
Read-only Access		Allow
System Administra	tors	Allow
	Save Changes	

Figure 8-29: Permissions by Page/Menu Item – Administration -> Make a request (not available)

Edit Permissions		
Secured Object Administration -> Make a request Description Permission to allow someone to make a request. Permissions Permission to allow someone to make a request.		
Role View		
CQAF Data Entry	Deny	
CQAF Data Entry Reviewers	Deny	
CVL Administrators	Deny	
DB Reviewer	Deny	
I2MS Testing Managers	Deny	
IA Manager	Deny	
OVF Data Entry	Deny	
OVF Data Entry Reviewers	Deny	
Read-only Access	Deny	
System Administrators	Deny	
Save Changes		

Figure 8-30: Permissions by Page/Menu Item – Administration -> Project Settings

Edit Permissions		
Secured Object Description Permissions	ject Administration -> Project Settings Permission to edit project-specific settings for analysis, forms, and workflow.	
Role		View
CQAF Data Entry		Not Set
CQAF Data Entry F	Reviewers	Not Set
CVL Administrators		Not Set
DB Reviewer		Not Set
I2MS Testing Mana	gers	Not Set
IA Manager		Allow
OVF Data Entry		Not Set
OVF Data Entry Re	viewers	Not Set
Read-only Access		Not Set
System Administrat	ors	Allow
	Save Changes	

Figure 8-31: Perms. by Page/Menu Item – Administration ->System Admin ->Access Permissions

Edit Permissions	
Secured Object Administration -> System Admin -> Access Permissions Description Permission to see the Access Permissions screen. Permissions	
Role View	
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Not Set
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

Figure 8-32: Permissions by Page/Menu Item – Administration -> System Admin -> Manage Users

Edit Permissions	
Secured Object Administration -> System Admin -> Manage Users Description Permissions for the Manage Users screen. Permissions Permissions	
Role	View
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Not Set
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

Figure 8-33: Permissions by Page/Menu Item – Administration -> Upload Signature Images

Edit Permissions		
Secured Object Administration -> Upload Signature Images Description Permission to see the Upload Signature Images screen. Permissions Permission to see the Upload Signature Images screen.		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Not Set	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Allow	
Save Changes		

Figure 8-34: Permissions by Page/Menu Item – Analysis -> Level 1-Continuous Analysis

Edit Permissions		
Secured Object Analysis -> Level 1 - Continuous Analysis Description Permissions for the Continuous Analysis screen. Permissions Permissions		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Allow	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Allow	
Save Changes		

Figure 8-35: Permissions by Page/Menu Item – Analysis -> Level 2-Independent Verification

Edit Permissions		
Secured Object Analysis -> Level 2 - Independent Verification Description Permissions for the Independent Verification screen. Permissions Permissions		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Allow	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Allow	
Save Changes		

Figure 8-36: Permissions by Page/Menu Item – Analysis -> Level 3-Observation Verification

Edit Permissions		
Secured Object Analysis -> Level 3 - Observation Verification Description Permissions for the Observation Verification screen. Permissions Permission screen.		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Allow	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Allow	
Save Changes		

Figure 8-37: Permissions by Page/Menu Item – Analysis Trigger

Edit Permissions	
Secured Object Analysis Trigger Description Permission to create analysis points for a specific date. Permissions Permission to create analysis points for a specific date.	
Role Vie	ew
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Allow
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

Edit Permissions		
Secured Object Dashboard Description Permission to see the Dashboard screen.		
Permissions		
Role	View	
CQAF Data Entry	Allow	
CQAF Data Entry Reviewers	Allow	
CVL Administrators	Not Set	
DB Reviewer	Allow	
I2MS Testing Managers	Allow	
IA Manager	Allow	
OVF Data Entry	Allow	
OVF Data Entry Reviewers	Allow	
Read-only Access	Allow	
System Administrators	Allow	
Sau	re Changes	

Figure 8-38: Permissions by Page/Menu Item - Dashboard

Figure 8-39: Permissions by Page/Menu Item – Form Submission-> Download Excel File (Not Working)

Edit Permissions			
Description	Secured Object Form Submission -> Download Excel Form Description Permission to download the excel forms for electronic submission		
Permissions			
Role		View	
CQAF Data Entry			Not Set
CQAF Data Entry F	Reviewers		Not Set
CVL Administrators			Not Set
DB Reviewer			Not Set
12MS Testing Mana	gers		Not Set
IA Manager			Not Set
OVF Data Entry			Not Set
OVF Data Entry Re	viewers		Not Set
Read-only Access			Not Set
System Administra	lors		Not Set
	Save Change	25	

Figure 8-40: Permissions by Page/Menu Item – Form Submission->Submit Excel File (Not Working)

Edit Permissions		
Secured Object Form Submission -> Submit Excel Form Description Permission to submit any excel form for electronic submission Permissions Permission		
Role	View	
CQAF Data Entry	Not Set	
CQAF Data Entry Reviewers	Not Set	
CVL Administrators	Not Set	
DB Reviewer	Not Set	
I2MS Testing Managers	Not Set	
IA Manager	Not Set	
OVF Data Entry	Not Set	
OVF Data Entry Reviewers	Not Set	
Read-only Access	Not Set	
System Administrators	Not Set	
Save Changes		

Figure 8-41: Permissions by Page/Menu Item - Reporting -> Create Report

Edit Permissions	
Secured Object Reporting -> Create Report Description Permission to see the Create Report screen. Permissions Permission to see the Create Report screen.	
Role View	
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
12MS Testing Managers	Allow
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Allow
System Administrators	Allow
Save Changes	

Figure 8-42: Permissions by Page/Menu Item – Reporting -> Create Report

Edit Permissions	
Secured Object Reporting -> My Reports Description Permission to see the My Reports screen. Permissions Permission to see the My Reports screen.	
Role View	
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Allow
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Allow
System Administrators	Allow
Save Changes	

Figure 8-43: Permissions by Page/Menu Item – Search

Edit Permissions		
Secured Object Description Permissions		
Role		View
CQAF Data Entry		Allow
CQAF Data Entry	Reviewers	Allow
CVL Administrators		Allow
DB Reviewer		Allow
I2MS Testing Mana	igers	Allow
IA Manager		Allow
OVF Data Entry		Allow
OVF Data Entry Re	viewers	Allow
Read-only Access		Allow
System Administra	tors	Allow
	Save Changes	

Figure 8-44: Permissions by Page/Menu Item – Search -> Search by Sample ID

Edit Permissions	
Secured Object Search -> Search by Sample Id Description Permission to open a sample given sample id and test method Permissions Permission to open a sample given sample id and test method	
Role	View
CQAF Data Entry	Not Set
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
12MS Testing Managers	Not Set
IA Manager	Not Set
OVF Data Entry	Not Set
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Not Set
Save Changes	

Figure 8-45: Permissions by Page/Menu Item – Select Form

Edit Permissions	
Secured Object Select Form Description Permission to see the Select Form menu. Permissions Permission for the select Form menu.	
Role View	
CQAF Data Entry	Allow
CQAF Data Entry Reviewers	Not Set
CVL Administrators	Not Set
DB Reviewer	Not Set
I2MS Testing Managers	Not Set
IA Manager	Not Set
OVF Data Entry	Allow
OVF Data Entry Reviewers	Not Set
Read-only Access	Not Set
System Administrators	Allow
Save Changes	

8.2.7 Secured Object Types and Tables – Queue Permissions

This section describes the Queue Permissions from Figure 8-2 and the tables associated with those permissions. Figure 8-46 shows the Queue Permissions.

Secured Objects			
View by Type	*		
Name	Description	GUID	
CQAF Data Entry Queue		6ba3858e-ec81-4f29-948f-bca169e86bba	Options
CQAF Data Entry Review Queue		a2007340-328c-40a5-a6f3-28de8606bf6f	Options
CQAF Quarantine		2d502833-8689-435c-8de7-486f884fb4c5	Options
CQAF Testing Approval Queue		d5a7f166-7f8a-4db8-95b6-dda8d0ef6e0a	Options
DB Review Queue		615d6b3e-03b2-4b26-bf80-a90a3a4b83af	Options
OVF Data Entry Queue		0d2793fb-3b38-4d0a-8f0e-52cf8df3b70a	Options
OVF Data Entry Review Queue		b667a042-df01-453a-b594-e09dd3199	Options
OVF Inspection Approval Queue		b61a3f24-bd4e-4d08-8476-4e8678733	Options
OVF Inspection Queue		97f6164f-f680-4916-aff1-2c4905377927	Options
OVF Quarantine		bdb5fa8d-d110-416f-bb7f-6c5b8f2a10e4	Options
OVF Testing Approval Queue		ba029120-f148-41f9-9782-dd54e74edf1d	Options

Figure 8-46: Permissions by Queue

Figures 8-47 through 8-57 show the permissions tables under Queue.

Edit Permissions		
Secured Object CQAF Data Entry Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Allow	Not Set
CQAF Data Entry Reviewers	Allow	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Allow	Not Set
System Administrators	Allow	Not Set
	Save Changes	

Figure 8-47: Permissions by Queue - CQAF Data Entry Queue

Figure 8-48: Permissions by Queue - CQAF Data Entry Review Queue

Edit Permissions		
Secured Object CQAF Data Entry Review Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Allow	Not Set
CQAF Data Entry Reviewers	Allow	Allow
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Not Set	Not Set
System Administrators	Allow	Allow
	Save Changes	

Secured Object CQAF Quarantine Description Permissions		
Role	View Ap	prove/Review Form
CQAF Data Entry	Allow	Not Set
CQAF Data Entry Reviewers	Allow	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Allow	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Allow	Not Set
System Administrators	Allow	Not Set

Figure 8-49: Permissions by Queue - CQAF Quarantine

Figure 8-50: Permissions by Queue - CQAF Testing Approval Queue

Edit Permissions		
Secured Object CQAF Testing Approval Queue		
Description		
Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Deny	Deny
CQAF Data Entry Reviewers	Deny	Deny
CVL Administrators	Deny	Deny
DB Reviewer	Deny	Deny
I2MS Testing Managers	Deny	Deny
IA Manager	Deny	Deny
OVF Data Entry	Deny	Deny
OVF Data Entry Reviewers	Deny	Deny
Read-only Access	Deny	Deny
System Administrators	Deny	Deny
	Save Changes	

Secured Object DB Review Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Allow	Allow
I2MS Testing Managers	Allow	Not Se
IA Manager	Not Set	Not Se
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Allow	Not Se
System Administrators	Allow	Allow

Figure 8-51: Permissions by Queue – DB Review Queue

Figure 8-52: Permissions by Queue – OVF Data Entry Queue

Secured Object OVF Data Entry Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Allow	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Allow	Not Set
System Administrators	Allow	Not Set

Figure 8-53: Permissions by Queue – OVF Data Entry Review Queue

Edit Permissions Secured Object OVF Data Entry Review Queu Description Permissions	e	
Role	View Ap	prove/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Allow	Allow
Read-only Access	Allow	Not Set
System Administrators	Allow	Allow
	Save Changes	

Figure 8-54: Permissions by Queue - OVF Inspection Review Queue (Not available)

Edit Permissions		
Secured Object OVF Inspection Approval Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Not Set	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Not Set	Not Set
System Administrators	Not Set	Not Set
	Save Changes	

Figure 8-55: Permissions by Queue – OVF Inspection Queue (Not available)

Secured Object OVF Inspection Queue Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Not Set	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Not Set	Not Set
System Administrators	Not Set	Not Set

Figure 8-56: Permissions by Queue - OVF Quarantine

Edit Permissions		
Secured Object OVF Quarantine Description Permissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Not Set
IA Manager	Not Set	Not Set
OVF Data Entry	Allow	Not Set
OVF Data Entry Reviewers	Allow	Not Set
Read-only Access	Allow	Not Set
System Administrators	Allow	Not Set
	Save Changes	

Secured Object OVF Testing Approval Queue Description Remissions		
Role	View	Approve/Review Form
CQAF Data Entry	Not Set	Not Set
CQAF Data Entry Reviewers	Not Set	Not Set
CVL Administrators	Not Set	Not Set
DB Reviewer	Not Set	Not Set
I2MS Testing Managers	Allow	Allow
IA Manager	Not Set	Not Set
OVF Data Entry	Not Set	Not Set
OVF Data Entry Reviewers	Not Set	Not Set
Read-only Access	Allow	Not Set
System Administrators	Allow	Allow

Figure 8-57: Permissions by Queue - OVF Testing Approval Queue

8.3 Manage Users

This feature allows the System Administrator to Add users to I2MS. Selecting Edit will provide the ability to modify settings for existing users.

Step 1. To manage users, select Administration -> System Admin -> Manage Users (Figure 8-58).

Figure 8-58: Administration – System Admin – Manage Users

A	dministration		II I2MS
	Form Submission Log Upload Signature Images		Logged in: System Administrators Logout
	Maintenance	×	
	Project Settings		
	System Admin	+	Access Permissions
	Change My Password		Manage Users
	About I2MS		

Step 2. To add a User, select the Add key (Figure 8-59).

Figure 8-59: Manage Users – Select Add

Users			
			Add
Username	First Name	Last Name	

Step 3. The Add and Edit User has the same page layout (Figure 8-60).

Enter the following for the User: Username, First Name, Last Name, Initials, and E-mail address.

Check Enabled to allow the User to have access to I2MS. If this box is not checked, the User will not be able to login to I2MS.

Check the Role(s) the User will need to perform their I2MS tasks.

Select Submit to add the User or Back to return to the main User page.

Figure 8-60: Manage Users – Adding a User

Edit User	
Username	ovfield
First Name	Owen Van
Last Name	Field
Initials	OVF
Email	owenvanfield@company.com
Enabled?	
Locked Out?	
Roles	CQAF Data Entry
	CQAF Data Entry Reviewers
	CVL Administrators
	DB Reviewer
	I2MS Testing Managers
	□ IA Manager
	☑ OVF Data Entry
	OVF Data Entry Reviewers
	Read-only Access
	System Administrators
	Submit Reset Password Back

Step 4. Once Submit has been selected, I2MS will generate a random password as shown in the figure below. The System Admin will need to copy the password and email the User the Username and temporary password (Figure 8-61).

Edit User	
Username	ovfield
First Name	Owen Van
Last Name	Field
Initials	OVF
Email	owenvanfield@company.com
Enabled?	
Locked Out?	
Roles Randomly Generated Pa	CQAF Data Entry CQAF Data Entry Reviewers CVL Administrators DB Reviewer I2MS Testing Managers IA Manager VVF Data Entry OVF Data Entry OVF Data Entry Reviewers Read-only Access System Administrators
	Submit Reset Password Back

Figure 8-61: Manage Users – Submitting User and Randomly Generated Password

Step 5. To edit a User, select Edit (Figure 8-62).

Figure 8-62: Manage Users – Select Edit

Users			
			Add
Username	First Name	Last Name	
abailey	Angel	Bailey	Edit
acheesman	Amy	Cheesman	Edit
Admin	I2MS	Admin	Edit
ahamzah	Ahmed	Hamzah	Edit

Step 6. To edit a User, select Edit. Once the changes are completed select Submit. A message at the top of the page will indicate that the User was updated (Figure 8-63). Select Back to return to the main User page.

	1	User updated.
Edit User		
Username	ovfield	
First Name	Owen Van	
Last Name	Field	
Initials	OVF	
Email	owenvanfield@company.com	
Enabled?		
Locked Out?	?	
Roles	CQAF Data Entry	
	CQAF Data Entry Reviewers	
	CVL Administrators	
	DB Reviewer	
	I2MS Testing Managers	
	IA Manager	
	OVF Data Entry	
	OVF Data Entry Reviewers	
	Read-only Access	
	System Administrators	
	Submit	Reset Password Back

Figure 8-63: Manage Users – User Updated

Step 7. To reset the password for a User, select Edit and the Edit User page will be shown (Figure 8-64).

Edit User				
Username	ovfield			
First Name	Owen Van			
Last Name	Field]		
Initials	OVF			
Email	owenvanfield@company.com			
Enabled?				
Locked Out?				
Roles	CQAF Data Entry			
	CQAF Data Entry Reviewers			
	CVL Administrators			
	DB Reviewer			
	I2MS Testing Managers			
	🗆 IA Manager			
	OVF Data Entry			
	OVF Data Entry Reviewers			
	Read-only Access			
	System Administrators			
		Submit	Reset Password	Back

Figure 8-64: Manage Users – Edit User

Step 8. Select Reset Password. I2MS will generate a random password as shown in the figure below. A message at the top of the page will indicate that the password is reset (Figure 8-65). The System Admin will need to copy the password and email the User the Username and temporary password.

		(Password reset.	
Edit User				
Username	ovfield			
First Name	Owen Van			
Last Name	Field			
Initials	OVF			
Email	owenvanfield@company.com			
Enabled?	Z			
Locked Out?				
Roles				
	CQAF Data Entry			
	CQAF Data Entry Reviewers			
	CVL Administrators			
	DB Reviewer			
	I2MS Testing Managers			
	IA Manager			
	OVF Data Entry			
	OVF Data Entry Reviewers			
	Read-only Access			
	System Administrators			
Randomly Generated Password	-			
itanuoniny ocherateu rassword				
	S	ubmit	Reset Password	Back

Figure 8-65: Manage Users – Reset Password

Step 9. If a user changes companies and has a new role, the best approach is to create a new username for the user and adding a number to the end of the username, last name, and initials to distinguish between the distinct roles. If the role switch is within the same company, then the user can keep the same username and the administrator can just revise the role (Figure 8-66).

Figure 8-66: Manage Users – Adding current User who changed companies with new username

Edit User	
Username	ovfield2
First Name	Owen Van
Last Name	Field2
Initials	OVF2
Email	owenvanfield@newcompany.com
Enabled?	
Locked Out?	
Roles	CQAF Data Entry
	CQAF Data Entry Reviewers
	CVL Administrators
	I2MS Testing Managers
	IA Manager
	OVF Data Entry
	OVF Data Entry Reviewers
	Read-only Access
	System Administrators
	Submit Reset Password Back

Step 10. Once Submit has been selected, I2MS will generate a random password as shown in the Figure 8-67. The System Admin will need to copy the password and email the User the Username and temporary password.

Edit User			[User created. 	
	Edit User				
	Username	ovfield2			
	First Name	Owen Van			
	Last Name	Field2			
	Initials	OVF2			
	Email	ownevanfield@newcompany	.com		
	Enabled?				
	Locked Out?				
	Roles	CQAF Data Entry			
		CQAF Data Entry Review	/ers		
		CVL Administrators			
		DB Reviewer			
		I2MS Testing Managers			
		IA Manager			
		OVF Data Entry			
		OVF Data Entry Reviewe	rs		
		Read-only Access			
		System Administrators			
	Randomly Generated Password	g5nujP\$x			
			Submit	Reset Password	Back

Figure 8-67: Manage Users – User with Randomly Generated Password

Step 11. Currently, if a user enters the incorrect password ten times or more then the user is "Locked Out" of I2MS (Figure 8-68).

Log In					
Your login attempt was not successful. Please try again.					
Username	ovfield				
Password	•••••				
	Log In				

Figure 8-68: Manage Users - User Locked Out

There is no indication to the user that they are locked out but after the tenth attempt of incorrectly entering a password they will be locked out. The user will need to contact MTD to have their password reset.

Step 12. Note that there is a check mark next to "Locked Out?" The administrator will need to select "Unlock" at the bottom of the screen (Figure 8-69).

Edit User	
Username	ovfield
First Name	Owen Van
Last Name	Field
Initials	OVF
Email	owenvanfield@company.com
Enabled?	
Locked Out?	
Roles	CQAF Data Entry
	CQAF Data Entry Reviewers
	CVL Administrators
	DB Reviewer
	I2MS Testing Managers
	IA Manager
	✓ OVF Data Entry
	OVF Data Entry Reviewers
	Read-only Access
	System Administrators
	Submit Reset Password Unlock Back

Figure 8-69: Manage Users – Locked Out

Step 13. I2MS will provide a message at the top of the "Edit User" screen that indicates that the User is unlocked and the check mark next to "Locked Out?" will no longer be visible also indicating the user is unlocked (Figure 8-70).

			 User unlocked. 	
Edit User				
Username	ovfield			
First Name	Owen Van]		
Last Name	Field]		
Initials	OVF	a		
Email	owenvanfield@company.com]		
Enabled?				
Locked Out?				
Roles	CQAF Data Entry			
	CQAF Data Entry Reviewers			
	CVL Administrators			
	DB Reviewer			
	I2MS Testing Managers			
	🗆 IA Manager			
	OVF Data Entry			
	OVF Data Entry Reviewers			
	Read-only Access			
	System Administrators			
		Submit	Reset Password	Back

Figure 8-70: Manage Users – Unlocking User

Step 14. The I2MS Administrator can then select "Reset Password" and I2MS will randomly generate a password. The top of the screen will show that the password is reset (Figure 8-71). The I2MS Administrator will then need to email the user with the new temporary password.

			Pase	sword reset.	
Edit User					
Username	ovfield				
First Name	Owen Van				
Last Name	Field]	
Initials	OVF			1	
Email	owenvanfield@company.com	ı]	
Enabled?					
Locked Out?					
Roles	CQAF Data Entry				
	CQAF Data Entry Review	ers			
	CVL Administrators				
	DB Reviewer				
	I2MS Testing Managers				
	IA Manager				
	OVF Data Entry				
	OVF Data Entry Reviewer	rs			
	Read-only Access				
	System Administrators				
Randomly Generated Password	zoqH\$da0				
-	[Submit	Pas	et Password	Back
		Submit	Res	errassword	Dack

Figure 8-71: Manage Users - User Unlocked and Password Reset

8.4 Delete Samples

Delete Samples is a function that has been disabled. Selecting this will result in the below error message. For new projects, this menu item has been removed (Figure 8-72). If a test record has been created in error, then the Sample Type can be changed to Internal or Quarantined and comments can be added in the Remarks box of the test record to explain

the reason the test record is not being used. For example, the reason could simply be that the record was entered twice.

Figure 8-72: Delete Samples – Forbidden: Access is denied

Server Error

403 - Forbidden: Access is denied.

You do not have permission to view this directory or page using the credentials that you supplied.

APPENDIX A - Diagram of OVF Workflow Process

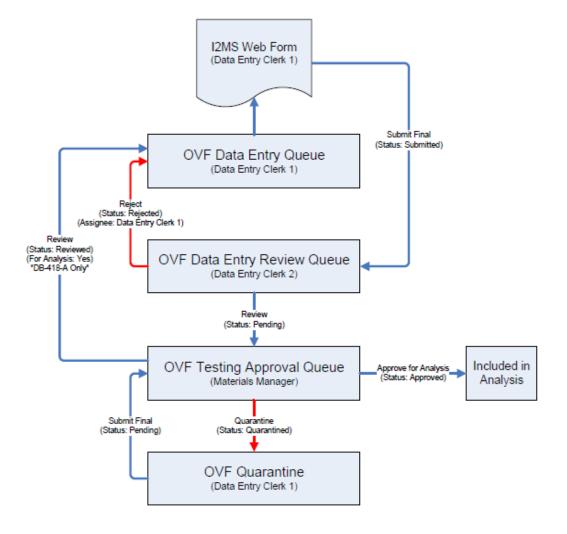


Figure A-1. Diagram of OVF Workflow Process