



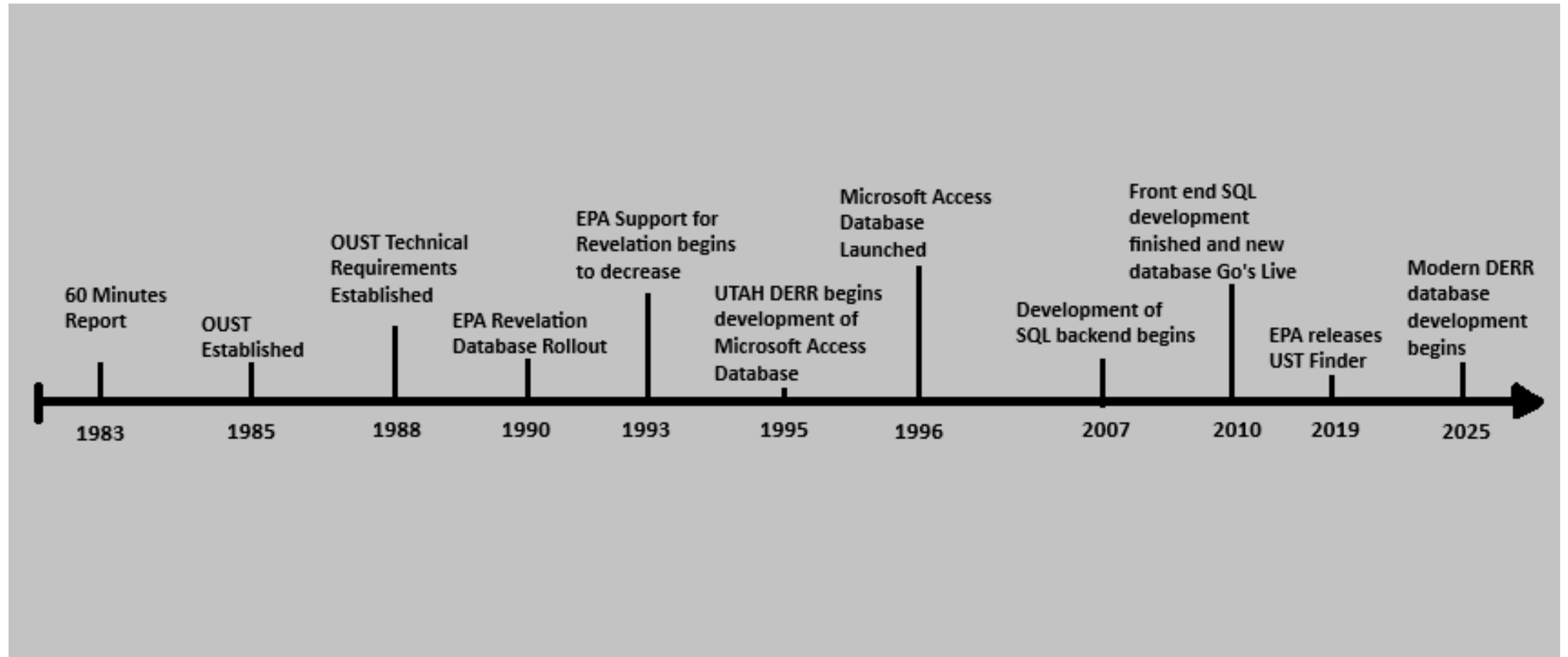
UTAH DEPARTMENT of
ENVIRONMENTAL QUALITY

**ENVIRONMENTAL RESPONSE
& REMEDIATION**

AN AGING DATABASE

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The Revelation Database



A Universal Problem

- Currently there are **39 states** running their own UST programs and all of them run a database either formerly or currently based on this original EPA database model
- Through the years states have evolved and created systems to fit their specific needs
- Despite the ingenuity, state agencies may find themselves in a similar situation as Utah's DERR

Our Situation (DERR)

- Our database works great as it is!
- How likely is our database to fail?
- Who can help us fix things?
- What type of employee will be available for hire in the future?
- Every year employees leave and with them goes institutional knowledge of our current system
- We can no longer bear the burden of maintaining a database

A Broken Database

Power surges

Aging Hardware

Data Corruption

Disc Failure



Human Error

Cyber Attacks

Poor Design

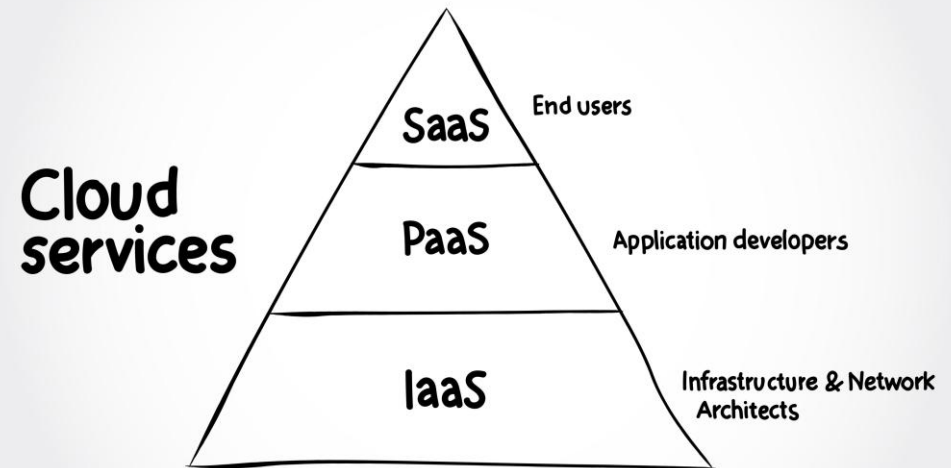
Hamstringing

What Database Options Are Available In 2025?

ON-PREMISE SYSTEMS

- Full responsibility
- Full control
- Can we hire a company to build our database like the DERR did in 2008-2010?
 - Would this be wise?

SERVICE SYSTEMS



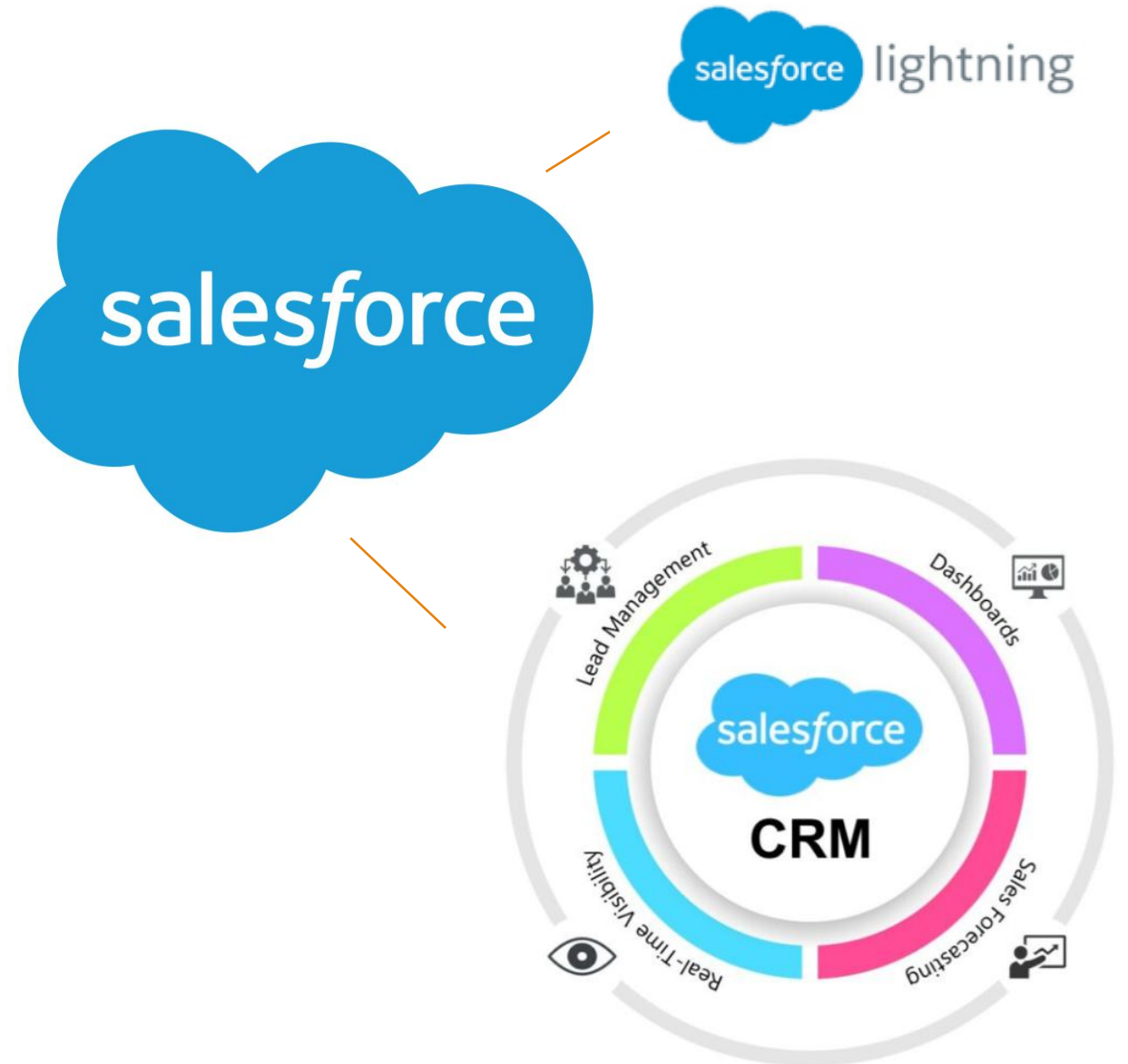
The Workforce

- What kind of people, internally, do we need on this project?
- How many people do we need?
- How much time do they need a week to work on this project?



Customer Relationship Management (CRM)

A unique blend of solutions



How Are We Paying For This?

- Will the legislators give us a lump sum to fund this project?
- The EPA Exchange Network grant
- How did we approach this problem?
- Is this worth it, are there any other options?



Choosing a Vendor

1. Experience and Expertise

2. Methodology and Process

3. Architecture and Best Practices

**4. Post-Implementation
Support and Training**

Statement of Work

Ensuring clarity and avoiding ambiguity -

Use specific language to define task, timelines, and acceptance criteria

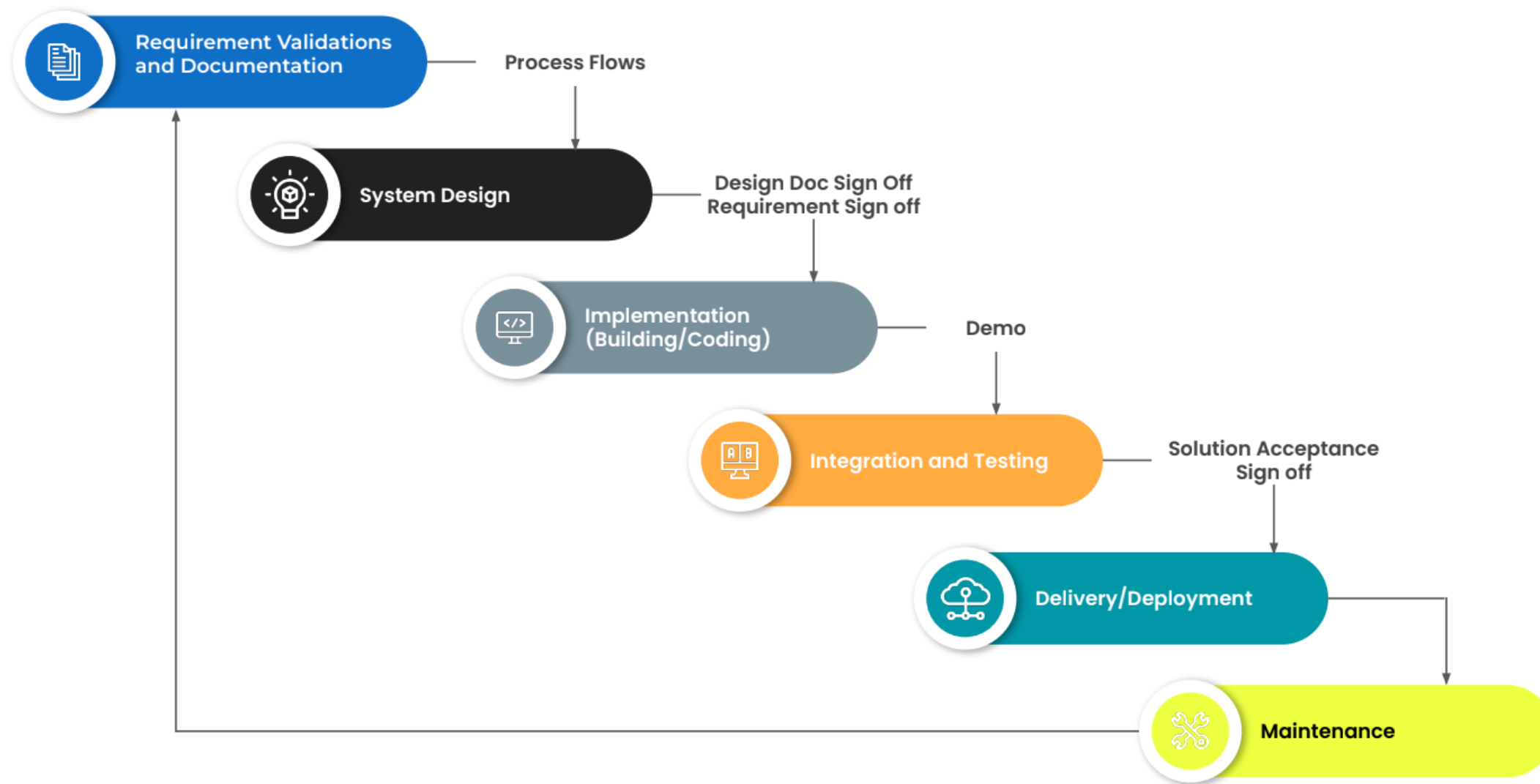
Managing scope creep -

Define clear boundaries with your internal team to create solid expectations

Preventing budget overruns -

In the public sector this could be a project ender

Delivery Methodology



Discovery

SYSTEM FAMILIARIZATION

- For the DERR, this took two months
- Minimum 2 hour meetings 4 days a week
- Meetings are recorded by MTX (the Salesforce Vendor) for back referencing

BUILDING RELATIONSHIPS

- What is an “object”?
- How does Salesforce relate “objects” to one another?

Getting Our Story Straight



Story
S-82247

▼ Detail Information

Description

As an PST Scientist, I want to add the details of the Piping on a Tank/Compartment record installed at a Facility so that the system maintains accurate and up-to-date information on the Piping installed.

Acceptance Criteria

Ability to add a Pipe to a Tank or a Compartment

The PST Scientist can access a tank record and view all related piping information. The information on the Piping record can be edited to update the necessary details.

- The tank record displays a list of all associated piping.
- The ability to edit individual piping records is available.

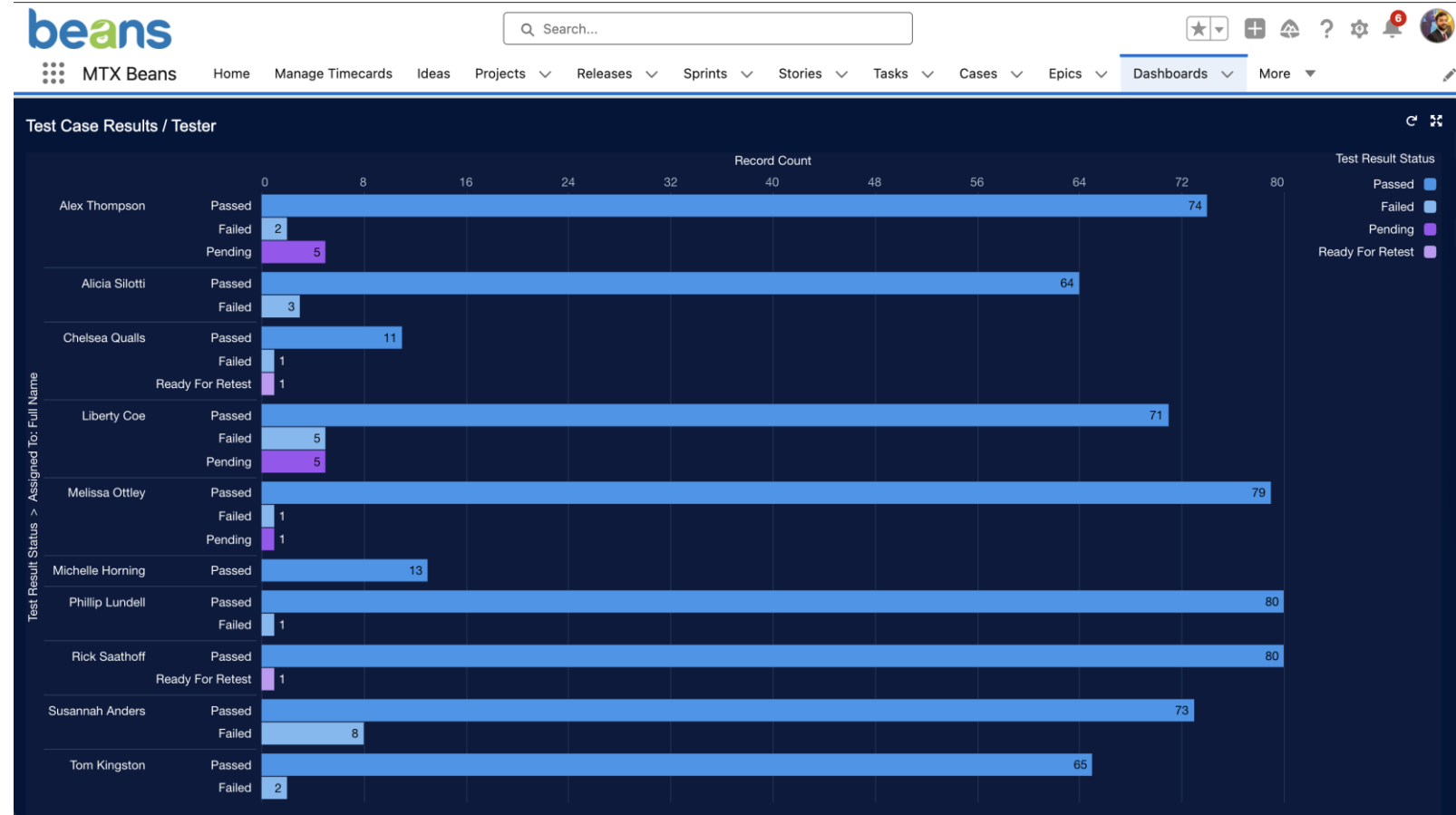
The following information can be available for each piping record:

Sprinting



User Acceptance Testing

The Marathon



A Tank Record in Sales Force

UATPartial

Search...

★ + ? ⚙️ 🔔

DERR Tank Databa...

Facilities

Nephi Oil | Account

Nephi Oil | Acco...

Nephi Oil ...

T-0002...

Tank 4

+ Follow Add Test Data Edit New Note

Tank Id 4 Tank Capacity 10,000 Substance Diesel

TESTING OVERDUE

Related Details

Tank Number	T-000284	Testing Overdue	☒
Facility	Nephi Oil #1	Tank Id	4
Alt Facility ID	2003172	Alt Tank Id	4
Date Installed	7/9/2025	Tank Owner	Nephi Oil
Tank Capacity	10,000	Tank Loc. Id	Center
Status	Currently in Use		
Combined Compartment Capacity	5,000		
Tank Base Capacity	5,000		

▼ Status of Tank

Tank Type	Federally Regulated UST	Emergency Generator	☐
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▼ Substance Currently or Last Stored in Greatest Quantity by Volume

Substance	Diesel	Substance Type	Diesel #1
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Testing Due Dates

Automatic Tank Gauge (ATG) Test Due Date 9/10/2025	Pressure Vent Valve Due Date 9/10/2025
Flex Connector CP Due Date 9/10/2025	Spill Bucket Test Due Date 9/10/2025
Overfill Prevention Test Due Date 9/10/2025	Tank Cathodic Protection Test Due Date 9/10/2025
Tank Test Due Date 9/10/2025	

Piping (2)

P-0316

Piping Material: Fiberglass Reinforced Plastic
Release Detection... SIR

P-0317

Piping Material: Fiberglass Reinforced Plastic
Release Detection... Interstitial Double Wall Monitor

[View All](#)

History

List View

DERR Tank Databa...

Facilities

▼

Nephi Oil | Account

▼

×

Nephi Oil | Acco...

×

Nephi Oil ...

▼

×

T-0002...

▼

×

Tank Certifications (2)

New

Tank Certification Name	Certification Date	Revocation Date	Created Date	
TC-0049	7/10/2025		9/10/2025, 12:47 PM	▼
TC-0050	9/10/2025		9/10/2025, 1:44 PM	▼
View All				

PST Fund Coverage (2)

New

PST Fund Coverage Name	Site Check	Site Check Date	Date On	
PFC-0046	Not Needed		7/9/2025	▼
PFC-0047	Yes	9/11/2025	9/10/2025	▼
View All				

Red Tag (0)

New

Compartments (1)

New

Compartment Name	Compartment Capacity (Gallons)	Substance	Substance Type	
C-0067	5,000	Diesel	Diesel #1	▼
View All				

Closure Items (0)

New

Tank History (1)

Piping Material: Fiberglass Reinforced Plastic

Release Detection... SIR

[P-0317](#)

Piping Material: Fiberglass Reinforced Plastic

Release Detection... Interstitial Double Wall Monitor

[View All](#)

Compartments (1)

▼

[C-0067](#)

Compartment Cap... 5,000

Substance: Diesel

Substance Type: Diesel #1

[View All](#)

Notes (0)

▼

DIVISION OF ENVIRONMENTAL RESPONSE AND REMEDIATION

Compartments and Piping

DERR Tank Databa... Facilities Nephi Oil | Account

Nephi Oil | Acco... Nephi Oil ... T-0002...

Tank Certifications (2)

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View All

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View All

Red Tag (0)

Compartments (1)

Compartment Name	Compartment Capacity (Gallons)	Substance	Substance Type
C-0067	5,000	Diesel	Diesel #1

View All

Piping Material: Fiberglass Reinforced Plastic
Release Detection... SIR
P-0317
Piping Material: Fiberglass Reinforced Plastic
Release Detection... Interstitial Double Wall Monitor
View All

Notes (0)

DERR Tank Databa... Facilities Nephi Oil | Account

Nephi Oil | Acco... Nephi Oil ... T-00028... C-00671...

Compartment 4a

Compartment Id 4a

TESTING OVERDUE

Related Details

Information

Compartment Name	C-0067	Status	Currently in Use
Compartment Id	4a	Tank	T-000284
Alt Compartment Id	4a	Tank Id	4
Compartment Capacity (Gallons)	5,000	Date Last Used	
Substance	Diesel	Date Temp. Closed	
Substance Type	Diesel #1		
Substance Comments			
Testing Overdue	☒		
Facility	Nephi Oil #1		
Alt Facility Id	2003172		

Status of Compartment

Tank Details

Facility	Nephi Oil #1	Status	Currently in Use
Alt Tank Id	4	Tank Material	Impressed Current Cathodic Protection
Tank Capacity	10,000	Tank Loc. Id	Center

Piping (1)

P-0317
Piping Material: Fiberglass Reinforced Plastic
Sec. Piping Materi... Above Ground Piping
Date Closed Loc:
View All

Pain Points



Building Systems Together



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