



RemTech 2024

October 15, 2024



Intellekt^{EiG}

*Using Intellekt^{EiG} to
Support Regulatory
Closure
in Saskatchewan*

Outline

- Environmental Setting
- Saskatchewan Regulatory Framework Overview
- Case Study Using IntelleKtEIG Natural Attenuation Tool
- Overview of IntelleKt-EIG
- Questions

Natural Attenuation – Model

Potential Benefits of Using NA as a Method



Efficiency of Regulatory Compliance



Optimizing Data Collection/Monitoring Requirements/Safety



Provides a standard level of acceptable compliance with Code

Natural Attenuation – Model

Accepted Science



- Integrated as basis of contaminant transport
- Accepted across all regions of Canada
- Integrated into the PHC risk based guidelines

Natural Attenuation – Model

Review of NA Technical Guidance



Scientific level of documentation



Need for QP Acceptance



Process of Access and Understanding

Natural Attenuation – Model

Potential Benefits of Using NA as a Method

Natural Attenuation Benefits

- Efficiency of Regulatory **Approval**
- Reduction in Brownfield Monitoring Requirements
- **Standard level** of compliance

Focus Resources on **Unique Cases**

- **Delineation** based on data (**consistent and systematic**)
- **Technology use** of technology to **standardize interpretation**
- **Consistent approach** to risk /exposure reduction
- **Reduces the timely environmental limitations**
- Reduce oversight: **Standardize** practice – focus risk reduction and prioritization
- Enable portfolio tools to identify **actual risks (vs. potential scenarios)**

Potential Benefits of Using NA as a Method

- A structured approach to delineate sites that pose no risk
- Use of technology to do the heavy lifting, enhance quality, and increase productivity
- Reduce workload
- Enable operators to deal with their sites faster, more sites per year
- Alternative to intrusive investigation in areas with access difficulties or safety concerns (utilities, railways, roadways)
- Identify sites with no issues and drive focus to sites that require further work to understand risk

Ultimate objective is to optimize spend/time on dealing with high potential adverse outcomes



Quick Filters

Client

Sites

Projects

DEFINE CSM

Additional Filters

Province

Municipalities

Introducing IntelleKt^{EIG}

IntelleKt^{EIG} is a secure, open Environmental Information Governance solution that **enables environmental applications.**

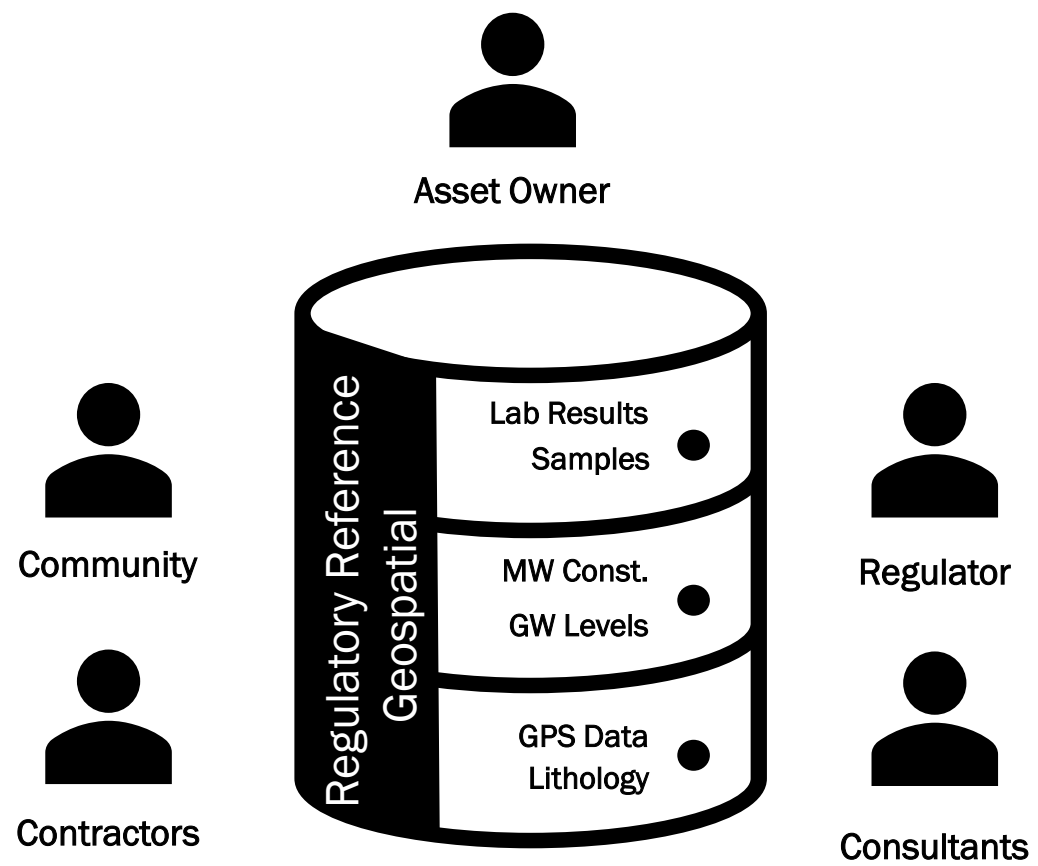
Our focus is delivering business value to **both owners and consultants**



Foundation On Environmental Information Governance

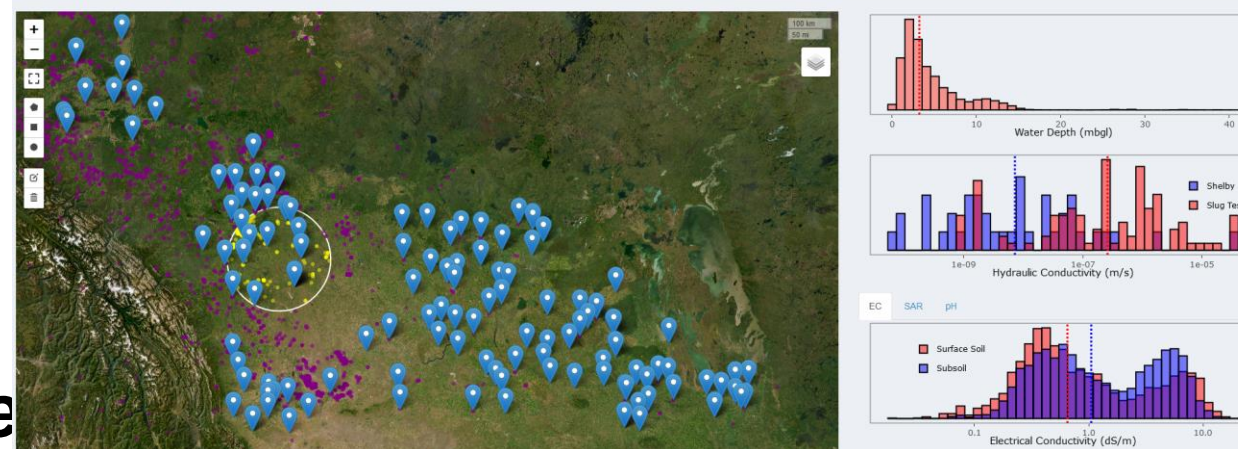
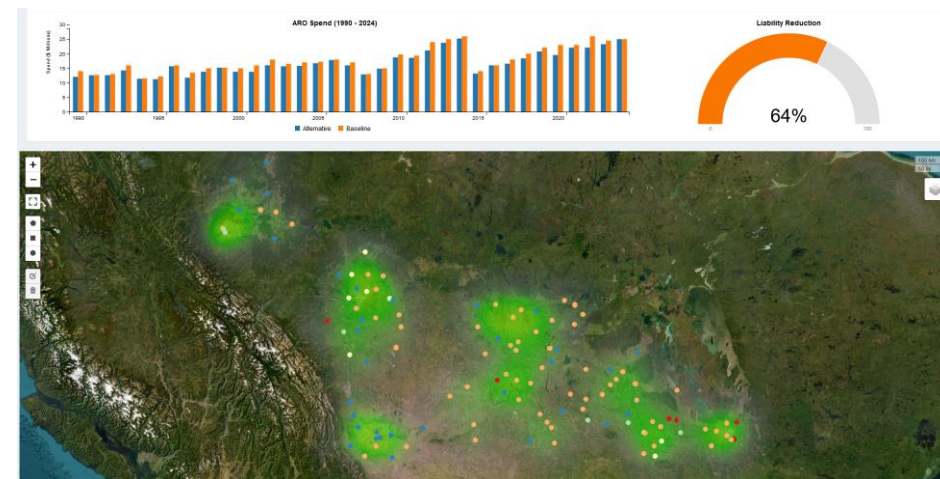
Single Version of the Truth:

- Eliminate PDFs & use AI to import
- Reduce cost of file reviews
- Accelerate project timelines with instant access to usable data
- Expanding base of analytical and business tools built on standardized data



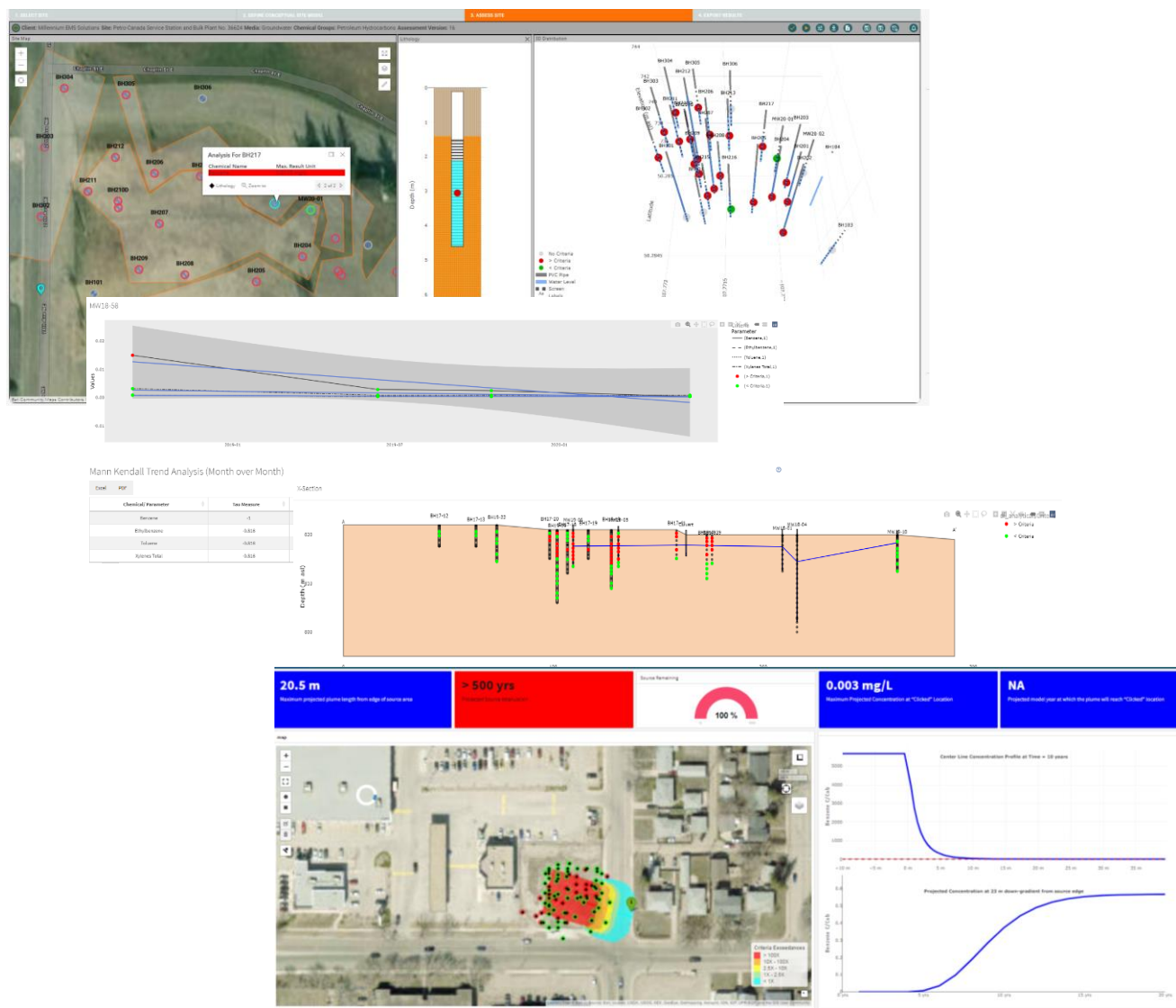
New Insights With Portfolio Level Visibility

- ✓ Track all your assets and liabilities
- ✓ Conduct regional analytics
- ✓ Portfolio analytical ***notifications***
- ✓ Roll up & track site-level status and performance



Move from reactive to proactive

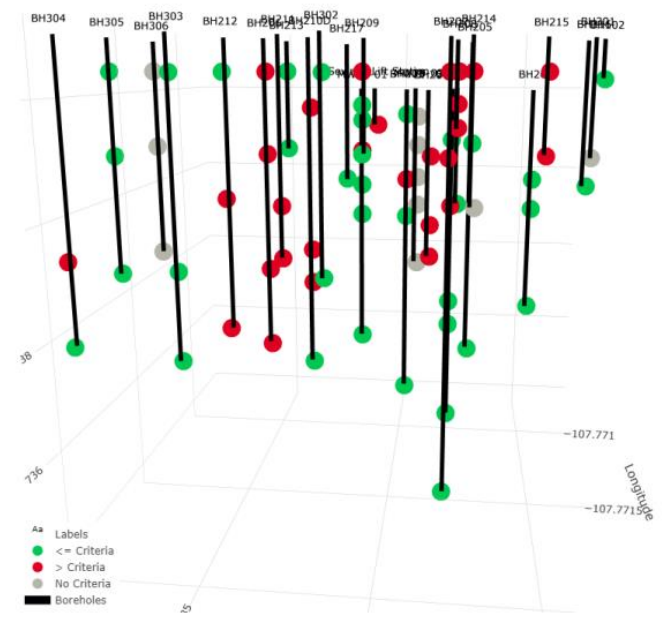
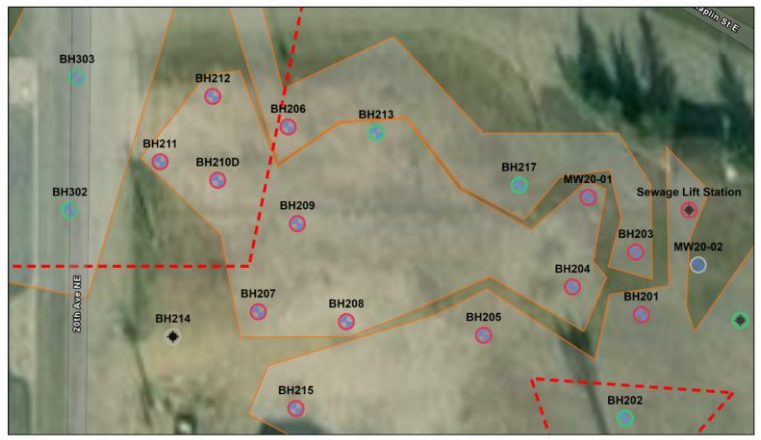
Look At Your Sites In A Standardized Way



- ✓ Quickly define site models & include historical data for a full picture
- ✓ Standardize the application of compliance objectives & assessment
- ✓ Delineate faster & reduce volumes
- ✓ Reduce project costs and environmental spend
- ✓ Supported by analytics based on science and regulatory guidelines

Streamline Meetings & Reports

- ✓ Standardized reporting formats
- ✓ Better, more consistent reports submitted to the regulator
- ✓ Visuals for more effective meetings



Borehole: MW20-01
 Site Name: Petro-Canada Service Station and Bulk Plant No. 36624
 Monitoring Zone: AST - Tank Farm
 Easting: 302597 Northing: 5573977
 UTM Zone: 13N Coordinate System: NAD 83

FI (0 - 2.8 m)
 F.F. SAND, SILT AND CLAY
 Some gravel, loose, light brown, moist, oxidized, soft
 @ 0.5 m: Dark brown

Clay (1.8 - 6.1 m)
 Trace silt, firm, dark brown, moist, oxidized
 @ 4.1 m: Some silt, light brown, brown/grey mottle, very soft
 @ 4.6 m: Very wet

APEC	Point Name	Point Type	Latitude	Longitude	Easting	Northing	UTM Zone	Coordinate System
AST - Bulk Oil Storage	BH101	Monitoring Well	50.28466743	-107.7718404	302539.805	5573957.514	13	NAD 83
AST - Bulk Oil Storage	BH208	Monitoring Well	50.28471098	-107.7715116	302563.405	5573961.483	13	NAD 83
AST - Bulk Oil Storage	BH209	Monitoring Well	50.28482905	-107.7716037	302557.3329	5573974.853	13	NAD 83
AST - Bulk Oil Storage	BH214	Borehole	50.28469287	-107.7718381	302540.075	5573960.336	13	NAD 83
AST - Bulk Oil Storage	BH301	Monitoring Well	50.28455502	-107.771642	302553.469	5573944.491	13	NAD 83
AST - Tank Farm	BH104	Monitoring Well	50.2847172	-107.7707423	302618.222	5573960.134	13	NAD 83
AST - Tank Farm	BH201	Monitoring Well	50.2847197	-107.770954	302603.1561	5573960.974	13	NAD 83
AST - Tank Farm	BH201D	Monitoring Well	50.2847107	-107.770944	302603.831	5573959.946	13	NAD 83
AST - Tank Farm	BH202	Monitoring Well	50.28459455	-107.7709859	302600.366	5573947.146	13	NAD 83
AST - Tank Farm	BH203	Monitoring Well	50.28479553	-107.770649	302602.692	5573969.432	13	NAD 83
AST - Tank Farm	BH204	Monitoring Well	50.28475352	-107.7710845	302594.003	5573965.079	13	NAD 83
AST - Tank Farm	BH217	Monitoring Well	50.28487562	-107.7711847	302587.371	5573978.919	13	NAD 83
AST - Tank Farm	BH218	Borehole	50.28471308	-107.7707681	302616.367	5573959.744	13	NAD 83
AST - Tank Farm	MW20-01	Monitoring Well	50.28486126	-107.7710545	302596.584	5573976.976	13	NAD 83
AST - Tank Farm	MW20-02	Monitoring Well	50.28478004	-107.7708475	302610.987	5573967.399	13	NAD 83
Background	BH103	Monitoring Well	50.28438311	-107.7707628	302615.382	5573923.05	13	NAD 83
Boundary Point	B1	Boundary Point	50.28498	-107.771917	302535.6401	5573992.465	13	NAD 83
Boundary Point	B2	Boundary Point	50.284992	-107.771427	302570.591	5573992.499	13	NAD 83
Boundary Point	B3	Boundary Point	50.28476	-107.770769	302616.499	5573964.963	13	NAD 83
Boundary Point	B4	Boundary Point	50.284352	-107.770786	302613.599	5573919.652	13	NAD 83
Boundary Point	B5	Boundary Point	50.28465	-107.771939	302532.707	5573955.838	13	NAD 83
Garage - UST	BH305	Monitoring Well	50.28512779	-107.7717238	302550.011	5574008.381	13	NAD 83
N/A	P1	unknown						Other
N/A	unknown	unknown						
Office/Warehouse	BH207	Monitoring Well	50.28472307	-107.7716775	302551.639	5573963.267	13	NAD 83
Offsite	BH302	Monitoring Well	50.28484561	-107.7720325	302526.856	5573977.831	13	NAD 83
Offsite	BH303	Monitoring Well	50.28500628	-107.7720195	302528.447	5573995.658	13	NAD 83

Thank You And Q&A

MEMS Tier 2 Training

- MEMS hosting Tier 2 Training utilizing Intellect^{EIG} to illustrate
- Sign Up sheet @ Intellect^{EIG} booth
- Edmonton (Dec 11-12) - Open

MEMS: 306.518.2442

Email: Info@mems.ca

Contact Us:

Visit Intellect^{EIG} us at booth #9

Intellect-EIG: 888.395.2151

Email: hello@intellect-eig.com

