

Achieving Strategic Site Progress

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Air & Water Quality

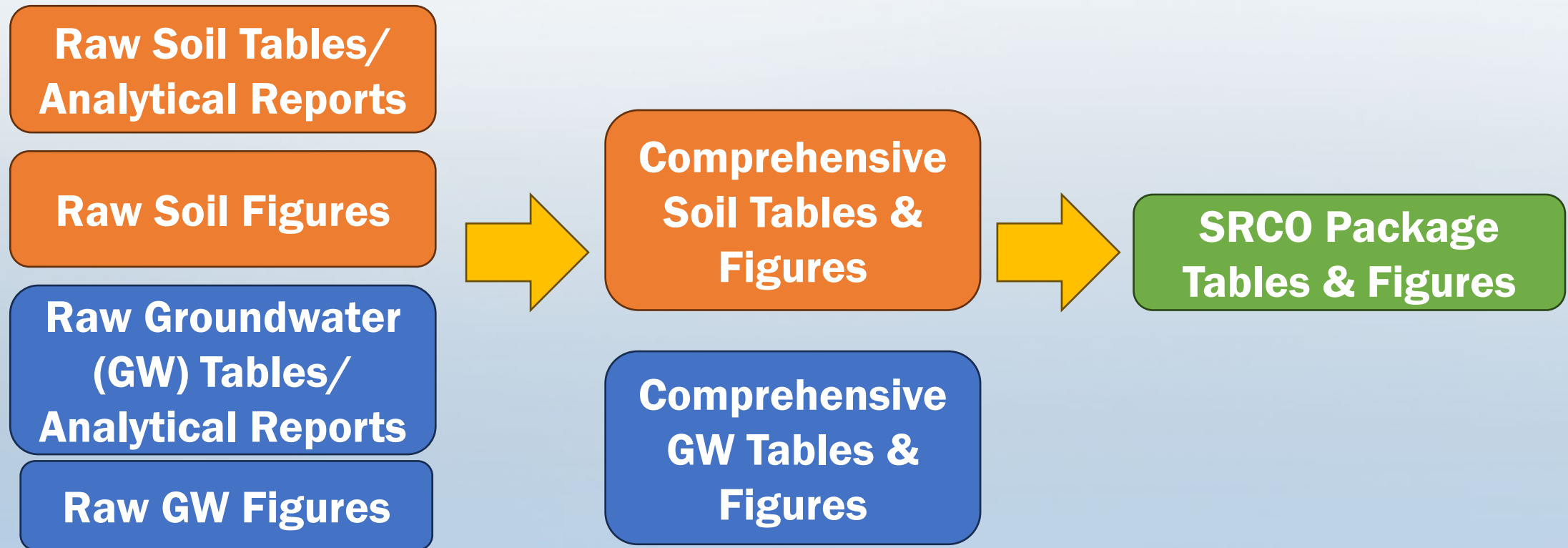
Why Strategic Progress Matters

- **Avoids mis-steps, blind alleys, and rework.**
- **Makes the most out of every dollar spent.**
- **Keeps one's eyes on the prize of Site Rehabilitation Completion Order (SRCO), aka...**

“Always be closing.”

Working Site Summary/Conceptual Site Model

- Propose organization of this effort based on a stock Petroleum Restoration Program (PRP) end-product: the SRCO package.



Hallmarks of a Solid File Review

- **Strategy starts at file review by the Site Manager (SM) – the default Subject Matter Expert.**
- **Initial characterization of release and impacted media from many information sources that winnow down to a more refined data product over time.**

File Review Archaeology



General Site Information

- **Address – Reconcile Storage Tank and Contamination Monitoring (STCM) with Program Administrator (PA) Record; assemble full set of site contact information.**
- **Site Access Agreement – Assure Signatory remains applicable (SunBiz)**
- **Release Dates/Eligibility – Reconcile STCM with Eligibility findings in OCULUS**
- **Outstanding Non-Program Releases – Solicit Limited Contamination Assessment Report (LCAR)/Site Rehabilitation Funding Allocation (SRFA) for any releases that have not explicitly been rolled into a Program eligible release**

Assessment Information - Soil

- **Organic Vapor Analyzer (OVA) Assessment – Flawed evidence but often useful to evaluate assessment area sufficiency & contaminant mass.**
- **Source/Tank Removals – where and when**
- **All historical soil analytical sample locations.**
- **Firm groundwater elevation at time of soil samples.**

Assessment Information - Soil

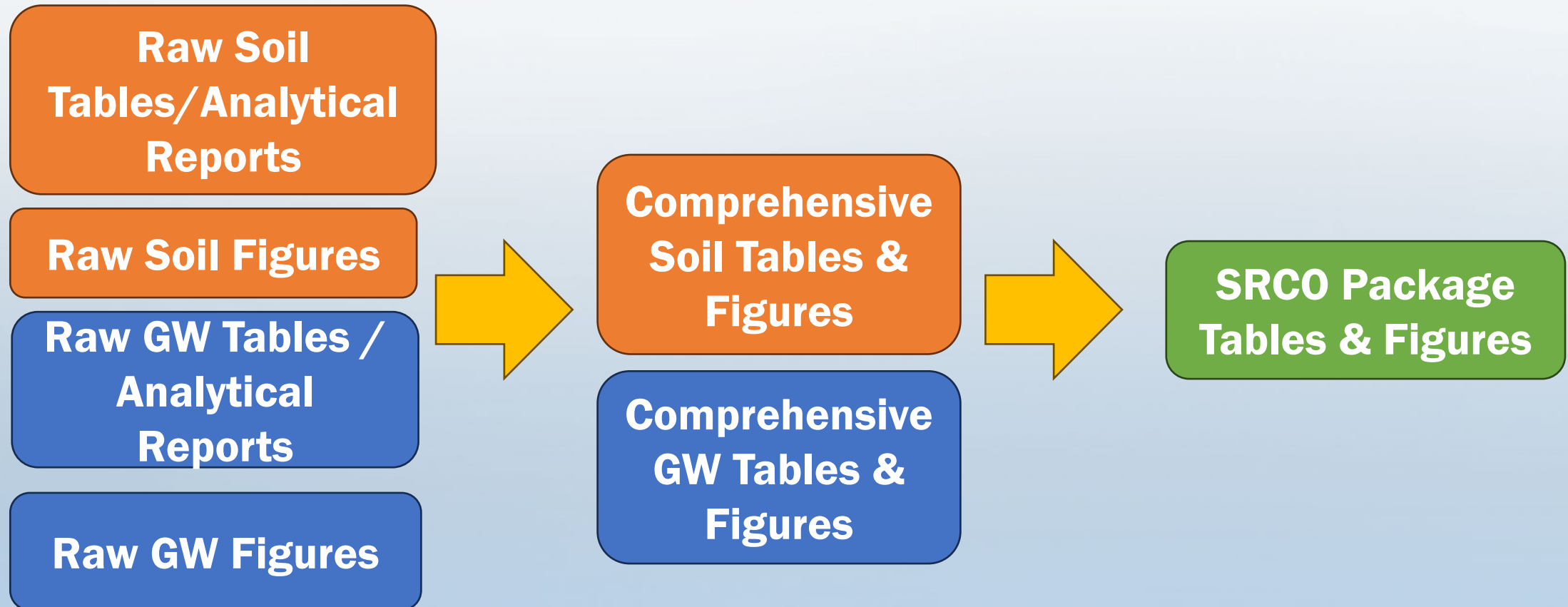
- ***Typically found in:*** Tank Removal Reports, Contamination Assessment Report (CAR), LCAR, Site Assessment Report (SAR), Supplemental Site Assessment Report (SSAR), Source Removal Report.
- ***Can be found in:*** General Remediation Reports, Post Active Remedial Monitoring (PARM), Natural Attenuation Monitoring (NAM).

Assessment Information - Groundwater

- **Current and historic GW Flow Direction interpretations.**
- **All historical monitoring well, GW grab, and temporary monitoring well analytical sample locations.**
- **Assure sufficiency of analyte slate based on documented release.**
- ***Typically* found in: CAR, LCAR, SAR, SSAR, PARM, NAM**
- ***Can be* found in: Tank Removal Reports, General Remediation Reports**

Working Site Summary/Conceptual Site Model

- Propose organization of this effort based on a stock PRP end-product: the SRCO package.



Site Summary Advantages

An effective, standardized, *shared* summary document:

- **Minimizes pick-up/put down time for SM and stakeholders.**
- **Informs decision making consultation with tech reviewers.**
- **Guides site transition to future Site Managers or Agency Term Contractors (ATCs).**

Site Summary Advantages

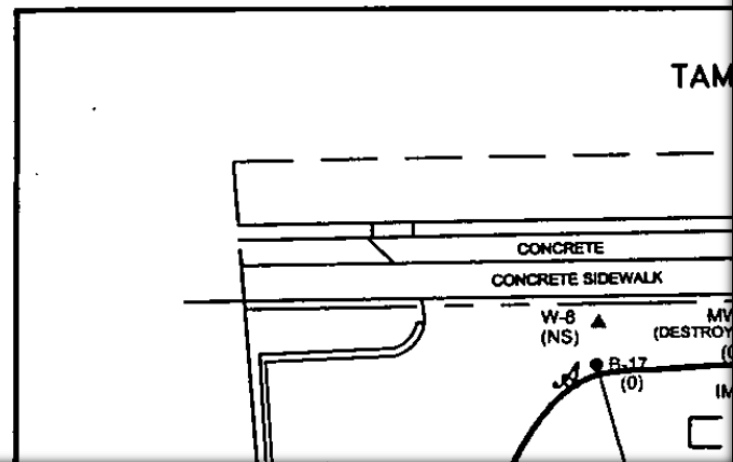
- **Such a document can track closure goals with concrete, site-specific objectives.**
- **Keeping an archive of periodically updated, iterative summary documents can pinpoint when changes in strategy occur.**

Examples of Site Summary Documents

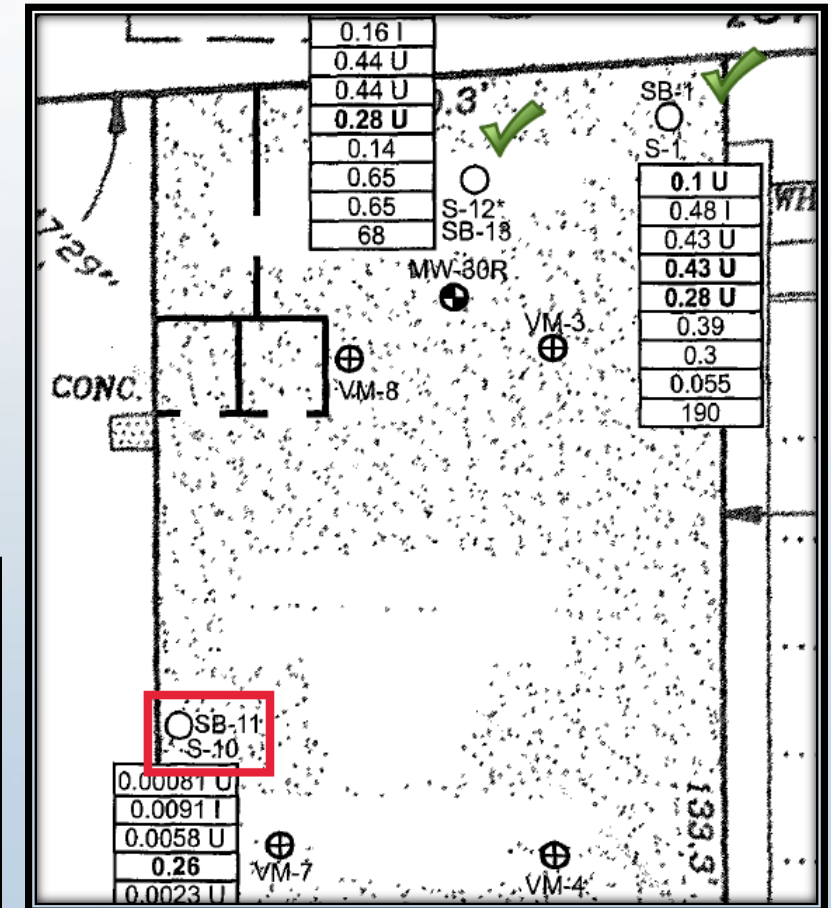


Early Strategic Summary

SOURCE: SAR, 2001



Sample				OVA	Laboratory Analyses					
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl- benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)
S-1	8/18/2009	7.26	6'	396	0.1 U	0.48 I	0.43 U	0.43 U	0.28 U	190
S-2	8/18/2009	7.26	8'	3488	1.3	110	0.59 U	300	0.4 U	160
S-3	8/18/2009	7.26	10'	354	0.14 I	0.56 I	0.0091 I	0.032	0.0049 U	7.9 I
S-4	8/18/2009	7.26	10'	255	0.11 U	2.7	0.54 I	18	0.33 U	310
S-5	8/18/2009	7.26	6'	3325	0.14 U	66	0.37 U	270	0.41 U	2800
S-8	8/18/2009	7.26	6'	1695	0.0016 U	0.19	0.0067 U	0.31	0.0044 U	5.6 U
S-9	8/18/2009	7.26	10'	1326	0.0016 U	0.19	0.0067 U	0.31	0.0044 U	5.6 U



Early Strategic Summary

PARM
REQ

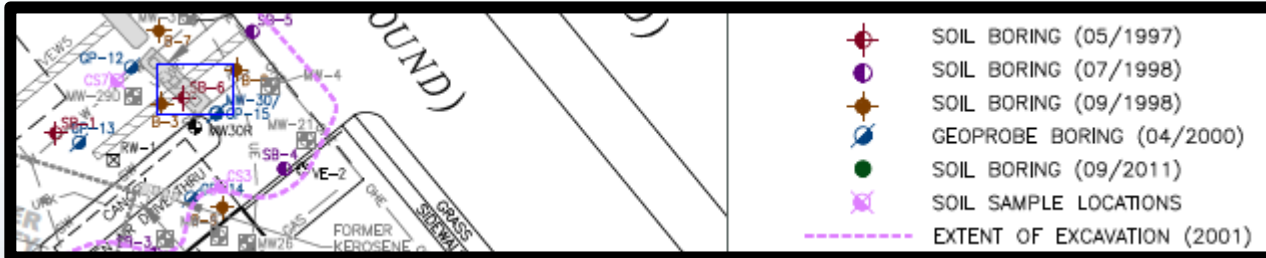
	7/30/2008	9.1	560.0	2700.0	5500.0	8769.1	0.5 (K)	NS	NS	NS	NS	NS	NS
MW-31R	10/13/2008	5.0 (K)	6000.0	3000.0	15000.0	24000.0	2.5 (K)	NS	NS	NS	NS	NS	NS
	1/30/2009	1.0	5800.0	2600.0	12000.0	20401.0	<0.05	NS	NS	NS	NS	NS	NS
	4/29/2009	5 U	2500.0	1300.0	5200.0	9000.0	2.5 U	NS	NS	NS	NS	NS	NS
	7/27/2009	0.93	2800.0	2200.0	8500.0	13500.9	2.5 U	NS	NS	NS	NS	NS	NS
MW-32	9/27/2002	<1.0	<1.0	<1.0	<3.0	NA	<3.0	NS	NS	NS	NS	NS	NS
MW-33	9/27/2002	12.0	29.3	202.0	1132.0	1375.3	<3.0	NS	NS	NS	NS	NS	NS
	2/12/2004	<1.0	<1.0	<1.0	<3.0	NA	<3.0	NS	NS	NS	NS	NS	NS
MW-34	2/12/2004	<1.0	<1.0	<1.0	<3.0	NA	<3.0	NS	NS	NS	NS	NS	NS

TMW-4 (2012) is a one-off successor to MW-31R; first of two clearances..

Maps to
TMW-8
(2012)



Mature Strategic Summary



SB-4	7/6/1998	2	500	0.0232 U	0.0288 U	149	0.0493 U	0.0586 U	23 U	Cleared by 2001 SR. - PF
SB-6	7/6/1998	2	>8500	0.021 U	0.227	1.69	14.66	0.0529 U	190	Cleared by 2001 SR. - PF

Outstanding Scope -
NONE - as of 11/2023.

Mature Strategic Summary

MW-4	7/8/1987	110.0	4.0	8.00	3.0	1.0 U	NS	NS
	7/5/1988	75	1.2	ND	ND	11	NS	ND
G-MW-4R	8/9/2023	0.30 U	0.33 U	0.30 U	2.1 U	1.2 U	NS	NS
MW-4R	7/30/2024	0.30 U	0.33 U	0.30 U	2.1 U	1.2 U	NS	NS
MW-5	7/8/1987	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.00	NS
	7/5/1988	ND	ND	ND	ND	ND	NS	ND
	1/15/1990	18	ND	1.5	2.3	50	NS	NS
MW-6	7/8/1987	51.0	1.0 U	1.0 U	2.0 U	1.0 U	NS	NS
	7/5/1988	89.0	2.9	ND	ND	480.0	NS	ND
	12/4/1997	3140	936	2930	5,340	BDL		
G-MW-6R	8/9/2023	171	1.4	17.9	2.1 U	1.2 U	NS	NS
MW-6R	7/31/2024	8	0.33 U	5.6	2.1 U	1.2 U	NS	57

PENDING S/W - DRILLING:
MW-22R, MW-23/23R SPLIT, MW-34, MW-35

Point Clearance Proxy Table

If 'connecting the dots' on table annotation becomes cumbersome, consider forking this element of clearance rationale out to a separate file included as part of the site summary.

SOIL SAMPLE - CHAIN OF PROXY SUBSTITUTIONS										
LOCATION	DEPTH	DATE		LOCATION	DEPTH	DATE		LOCATION	DEPTH	DATE
SB-8	4	2002	→	SB-1	4' - 5'	2005	→	SB-1R (2005)	4' - 5'	2023
SB-9	4	2002	→	SB-9R (2002)	3' - 4'	2023				
SB-1	4' - 5'	2005	→	SB-1 (2005)	4' - 5'	2023				
SB-2	1	2002	→	SB-2 (2002)	0 - 1'	2023				
SB-2	3' - 4'	2005	→	SB-2 (2005)	3' - 4'	2023				
SB-3	3' - 4'	2005	→	SB-3R (2005)	3' - 4'	2023				
SB-4	3	2002	→	SB-4R (2002)	3' - 4'	2023				
SB-4	3' - 4'	2005	→	SB-4R (2005)	3' - 4'	2023				
SB-5	5'	2002	→	SB-5R	2'	2012	→	SB-5/SB-5R	3	2020
SB-5	3' - 4'	2005	→	SB-5R (2005)	3' - 4'	2023				
SB-6	4.5	2002	→	SB-6R (2002)	4' - 5'	2023				
SB-7	4.5	2002	→	SB-7R (2002)	4' - 5'	2023				
SB-7	4' - 5'	2005	→	SB-7R (2005)	4' - 5'	2023				
SB-8	3' - 4'	2005	→	SB-8 (2005)	3' - 4'	2023				
SB-9	3' - 4'	2005	→	SB-9R (2005)	3' - 4'	2023				
SB-10	3' - 4'	2005	→	SB-10R (2005)	3' - 4'	2023				
MW-19	3' - 4'	2006	→	MES-1	3' - 4'	2023				
MW-20	1' - 2'	2006	→	MES-2	1' - 2'	2023				

Point Clearance Proxy Table

Scalable as a 'punch list' for point clearance scope development.

Can also capture analyte slates needed.

2	GROUNDWATER SAMPLE - CHAIN OF PROXY SUBSTITUTIONS				
3					
4	LOCATION	LOCATION	LOCATION	LOCATION	LOCATION
6	MW-1	→ G-MW-1R	→ MW-1R		
7					
8	MW-2	→ G-MW-2R	→ MW-2R		
9					
10	MW-3	→ MW-3R			
11					
12	OS-MW3	→ G-OS-MW-3R			
13					
14	OSMW-4	→ G-OS-MW-4R	→ MW-4R		
15					
16	MW-5				
17					
18	MW-6	→ G-OS-MW6R	→ MW-6R		
19					
20	MW-9	→ G-MW-9R	→ MW-25		
21					
22	MW-10	→ MW-25			
23					
24	MW-11	→ MW-11R			
25					
26	MW-13	→ MW-19	→ MW-32R		
27					
28	MW-20	→ MW-30			
29					
30	MW-21R	→ MW-4R			

Tell Us About Your Experiences

15-3.a. Traffic Bearing Trench Plates (materials): [Reimbursable].



Questions?



THANK YOU

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