APPENDIX B

Table 2. Analytical Methods and Associated Requirements to Analyze Water Samples					
Analytical method	**Chemical Group**	**Container**	**Preservative**	**Minimum Sample [3]**	**Maximum Holding Time**
8021B	BTEX, MTBE, TBA, Lead Scavengers	G-TLS	HCl to pH<2 4°C	2x40 ml.	14 days 7 days if pH>2
8260B [1,2]	BTEX, MTBE, TBA, Lead Scavengers	G-TLS	H_2SO_4 or HCl or $NaHSO_4$ to pH<2, 0.1% Irisodium phosphate to ph>10. 4°c	2x40 ml.	14 days 7 days if pH>2
8270C	PAHs	G-TLC (amber)	4°c	1000ML.	7 days until extraction and 40 days after extraction
8310	PAHs	G-TLC (amber)	4°C	1000ml.	7 days until extraction and 40 days after extraction
6010B	metals (except mercury)	P, G	HNO_3 to pH<2 4°C	500 ml.	6 months
6020	metals (except mercury)	P, G	HNO_3 to pH<2 4°C	500 ml.	6 months
7470	Mercury	P, G	H_2SO_4 or HCl to pH < 2, 4° C	500 ml	28 days
8015	Solvents	G – TLC	H_2SO_4 or HCl to pH<2, 4° C	1000 ml	48 hours
1664	TPH	G – TLC	H_2SO_4 or HCl to pH<2, 4° C	1000 ml	28 days

1. BTEX, MTBE, and TBA can be analyed from a single sample provided that the sample is not preserved with acid.
2. Preservation of MTBE samples with HCl to prevent biodegradation may cause hydrolysis. As a result, trisodium phosphate 12 hydrate is preferred for MTBE sample preservation. This works out to 0.4 g/40 ml VOA vial to increase the pH to pH>10. Dry granular powder added to vial in lab. Do not be concerned about potential blue floc.
3. This minimum sampling does not include various quality control samples.

G– TLS = Glass with Teflon (pTFE)lined septum
G- TLC = Glass with Teflon (PTFE) lined cap
G- TLC (amber) = Amber glass with Teflon (PTFE) lined cap
G = Glass
P = Polyethylene
PTFE = Teflon

Table 2. Analytical Methods and Associated Requirements to Analyze Soil Samples					
Analytical method	**Chemical Group**	**Container**	**Preservative**	**Minimum Sample [3]**	**Maximum Holding Time**
8021B	BTEX, MTBE, TBA, Lead Scavengers	G-TLS	HCl to pH<2 4°C	2x40 ml.	14 days 7 days if pH>2
8260B [1, 2]	BTEX, MTBE, TBA, Lead Scavengers	G-TLS	H_2SO_4 or HCl or $NaHSO_4$ to pH<2, 0.1% Irisodium phosphate to ph>10. 4°c	2x40 ml.	14 days 7 days if pH>2
8270C	PAHs	G-TLC (amber)	4°c	1000ML.	7 days until extraction and 40 days after extraction
8310	PAHs	G-TLC (amber)	4°C	1000ml.	7 days until extraction and 40 days after extraction
6010B	metals (except mercury)	P, G	HNO_3 to pH<2 4°C	500 ml.	6 months
6020	metals (except mercury)	P, G	HNO_3 to pH<2 4°C	500 ml.	6 months
7471A	Mercury	P, G	HNO_3 to pH<2	500 ml	28 days
8015	Solvents, TPH	G – TLC	H_2SO_4 or HCl to pH<2, 4° C	1000 ml	48 hours
1664	TPH	G – TLC	H_2SO_4 or HCl to pH<2, 4° C	1000 ml	28 days

1. BTEX, MTBE, and TBA can be analyed from a single sample provided that the sample is not preserved with acid.
2. Preservation of MTBE samples with HCl to prevent biodegradation may cause hydrolysis. As a result, trisodium phosphate 12 hydrate is preferred for MTBE sample preservation. This works out to 0.4 g/40 ml VOA vial to increase the pH to pH>10. Dry granular powder added to vial in lab. Do not be concerned about potential blue floc.
3. This minimum sampling does not include various quality control samples.

G– TLS = Glass with Teflon (pTFE)lined septum
G- TLC = Glass with Teflon (PTFE) lined cap
G- TLC (amber) = Amber glass with Teflon (PTFE) lined cap
G = Glass
P = Polyethylene
PTFE = Teflon