Tel: 608-838-9120



March 14, 2019

Mr. John Mason Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Madison, Wisconsin 53711

RE: Change Order/Variance Request Frei Oil (BRRTs 02-14-287206, PECFA 53032-9999-07) 207 Highway Street Horicon, Wisconsin 53032

Mr. Mason:

Seymour Environmental Services, Inc. is requesting a budget approval to excavate 1,400 tons of contaminated soil from the former Frei Oil site in Horicon. Our budget request total is \$77,284.58. The budget request includes items from the PECFA U&C schedule (non-variance) and items not included on the cost schedule (variance). The non-variance items are included on the attached U&C schedule. This includes the costs to abandon and reinstall a well, conduct post-remedial monitoring, and to prepare a letter report of the results. The remedial excavation costs are included in the variance activities and are described below.

VARIANCE COSTS

Contaminated Soil Remediation Cost

This includes the contracting costs for the contaminated soil excavation, disposal, and backfilling (details of the variance are tabulated below). The estimated contracting costs related to the contaminated soil remediation are \$56,910. Consulting costs are \$5,026.45. Both costs are lower than the rate allowed in the U&C Schedule (LE24).

Contamina	ted Soil Remedia	tion Costs						
ITEM	Amount	Unit Cost	Total					
Contractor Mobilization	1	\$1,000	\$ 1,000					
Contaminated Soil Excavation/Load	1,400 ton	\$2.20	\$ 3,080					
Haul to landfill	1,400 ton	\$3.30	\$ 4,620					
Provide Backfill	1,200	8.25	\$9,900					
Provide Gravel	200	8.60	\$1,720					
Compact	1,400	2.10	\$2,940					
Landfill Tipping Fees	1,400 ton	\$24.00	\$33,600					
Landfill Profile Fee			\$50					
Total S	ost (Contractor)	\$56,910						
Consultant Oversight	55 hours	\$91.39	\$5,026.45					
Total Soil Remediation Cost\$61,936.45								

John Mason WDNR - Bureau of R&R March 14, 2019 Page 2

Clean Soil Handling

Contaminated soils in a portion of the work area are overlain by clean soil which will be moved to access the underlying soil contamination. The total cost related to handling of the clean soils is \$1,249.56. This includes the contracting costs for the excavation and stockpiling (details of the variance are tabulated below). It also includes hours of consultant oversight/field screening during the removal of the overburden.

Clean Overbu	Clean Overburden Removal and Replacement									
ITEM	ITEM Amount Unit Cost									
Clean Overburden Excavation	200 ton	\$2.20	\$440							
Backfilling of the Overburden	200 ton	\$2.20	\$440							
Total Cle	an Overburden C	ost (Contractor)	\$880							
Consultant Oversight	Consultant Oversight 4 hours \$91.39									
	\$1,249.56									

Pumping Contaminated Water from Excavation

We believe that pumping the contaminated water will improve the groundwater quality faster during the post-remedial monitoring. I contacted Environmental Specialist from Watertown to pump the water from the excavation. They will send a vacuum truck for \$275 per hour. The water will be taken to Horicon's Wastewater Treatment Plant.

Pumping Excavation										
ITEM	Amount	Unit Cost	Total							
Pumping Excavation	Pumping Excavation 6 \$275 \$ 1,650									
Disposal Charges (est.)	Disposal Charges (est.) \$100									
Total \$1,750.00										

Thank You, Seymour Environmental Service, Inc.

Rokyn Sugnow

Robyn Seymour

U&C Form W.D. Navis Bid Proposed Excavation Map

Usual and Customary Standardized Invoice #25 January 2019 - June 2019



PECFA #: 53032-9999-07	Vendor Name:	Seymour		
BRRT's #: 02-14-287206	Invoice #:	Cost Request	U&C Total \$	12,348.57
Site Name: Frei Oil Company-former	Invoice Date:		Variance to U&C Total \$	64,936.01
Site Address: 207 Highway St., Horicon	Check #:		Grand Total \$	77,284.58

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	AX UNIT COST	UNITS	TOTAL MAX
1	GW Sampling		GS05	Sample Collection	Well	\$ 72.45	16 3	5 1,159.20
1	GW Sampling		GS06	Sample Collection in well w/LNAPL	Well	\$ 87.45	:	- 6
1	GW Sampling		GS10	Incremental Sample Collection (natural attenuation)	Well	\$ 47.67	:	- 3
1	GW Sampling		GS15	Incremental Sample Collection (cadmium & lead)	Well	\$ 26.25	:	- S
1	GW Sampling		GS20	Measure Water Levels (for wells not being sampled)	Well	\$ 14.70	:	- 6
1	GW Sampling		GS25	Primary Mob/Demob	Site	\$ 690.92	4 3	2,763.68
1	GW Sampling		GS30	Temporary Well Abandonment	Well	\$ 26.99	:	- S
2	O & M Reporting		OMR05	Semi-Annual GW Monitoring (Form 4400-194)	Report	\$ 823.73	:	- 6
2	O & M Reporting		OMR10	Semi-Annual GW Monitoring (Form 4400-194) with LNAPL Removal per RR-628	Report	\$ 1,040.45	:	-
3	LNAPL Assessment & Removal		LAR06	LNAPL Sample Collection (1 per site, unless otherwise direct	Site	\$ 68.25	:	- S
3	LNAPL Assessment & Removal		LAR10	Primary Mob/Demob	Site	\$ 569.88	:	- S
4	Waste Disposal	Consultant	WD05	Consultant Coordination	Site	\$ 137.13	2 3	274.26
4	Waste Disposal	Commodity	WD10	GW Sample and/or Purge	Drum	\$ 42.11	5 \$	210.55
4	Waste Disposal	Commodity	WD15	Drill Cuttings	Drum	\$ 108.15	1 :	6 108.15
4	Waste Disposal	Commodity	WD17	Landfill Environmental Fee (provide documentation)	ACTUAL COST			
4	Waste Disposal	Commodity	WD20	Free Product	Drum	\$ 118.76	:	- 6
4	Waste Disposal	Commodity	WD25	Primary Mob/Demob	Site	\$ 316.47	5 \$	5 1,582.35
5	Closure Request		CR05	Primary Closure Request	Submittal	\$ 2,700.00	:	· -
5	Closure Request		CR15	Continuing Obligation Packet Submittal (For Source Property	Packet	\$ 507.36	:	-
5	Closure Request		CR20	Continuing Obligation Packet Submittal (For off-site Propertie	Per Additional Property	\$ 222.71	:	-
5	Closure Request		CR25	Closure Request Concurrent with SIR	Submittal	\$ 1,250.00	:	G -
6	Letter Report/Addendum		LRA05	Letter Report/Addendum	Letter	\$ 1,039.29	1 \$	5 1,039.29

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
7	Regulatory Correspondence		RC05	Regulatory Correspondence	Letter/Status Update	\$ 128.94	\$	-
8	Well Abandonment	Consultant	WAB05	Coordination	Site	\$ 162.86	1 \$	162.86
8	Well Abandonment	Consultant	WAB10	Water column < 30 ft	Ft	\$ 2.52	15 \$	37.80
8	Well Abandonment	Consultant	WAB15	Water column > 30 ft (requires pumping [s. NR 141.25 (2) (d)]	Ft	\$ 8.82	\$	-
8	Well Abandonment	Consultant	WAB20	Bentonite Pellets (50lb bag - 1/4" pellet)	Bag	\$ 10.82	0.5 \$	5.41
8	Well Abandonment	Consultant	WAB25	Portland Cement (94lb bag)	Bag	\$ 8.19	\$	-
8	Well Abandonment	Consultant	WAB30	Primary Mob/Demob	Site	\$ 398.48	1 \$	398.48
8	Well Abandonment	Consultant	WAB31	Primary Mob/Demob w/ vapor point abandonment	Site	\$ 563.48	\$	-
8	Well Abandonment	Consultant	WAB32	Vapor Point Abandonment	Point	\$ 81.58	\$	-
8	Well Abandonment	Commodity	WAB35	Well Abandonment Mob/Demob	Site	\$ 453.81	\$	-
8	Well Abandonment	Commodity	WAB40	Well Abandonment (2 inch)	Ft	\$ 5.57	\$	-
8	Well Abandonment	Commodity	WAB45	Well Abandonment (4 inch)	Ft	\$ 6.51	\$	-
8	Well Abandonment	Commodity	WAB50	Well Abandonment (6 inch)	Ft	\$ 7.98	\$	-
9	Investigation Workplan Preparation		IWP05	Investigation Workplan Preparation	Report	\$ 1,451.63	\$	-
10	Initial Site Survey	Consultant	IS05	Coordination of Initial Site Survey (features + well elevations)	Survey	\$ 117.18	\$	-
10	Initial Site Survey	Consultant	IS10	Subsequent Surveys	Well	\$ 110.15	1 \$	110.15
10	Initial Site Survey	Commodity	IS15	Initial Survey	Survey	\$ 1,171.70	\$	-
11	Potable Well Field Reconnaissance	9	PWFR05	Potable Well Field Reconnaissance	Site	\$ 583.50	\$	-
12	Direct Push	Consultant	DP05	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 5.36	\$	-
12	Direct Push	Consultant	DP10	> 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 5.99	\$	-
12	Direct Push	Consultant	DP15	GW Profiling (No Soil Sampling)	Ft	\$ 2.31	\$	-
12	Direct Push	Consultant	DP20	GW Sample Collection	Each	\$ 36.10	\$	-
12	Direct Push	Consultant	DP25	Temporary Well Installation	Each	\$ 49.90	\$	-
12	Direct Push	Consultant	DP30	Primary Mob/Demob	Site	\$ 563.31	\$	-
12	Direct Push	Commodity	DP35	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 6.93	\$	-
12	Direct Push	Commodity	DP40	> 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 9.03	\$	-
12	Direct Push	Commodity	DP45	GW Profiling (no soil sampling)	Ft	\$ 6.51	\$	-
12	Direct Push	Commodity	DP50	GW Sample Collection (cost for tubing)	Ft	\$ 0.42	\$	-
12	Direct Push	Commodity	DP55	Expendable Drive Point	Each	\$ 14.49	\$	-
12	Direct Push	Commodity	DP60	Borehole Abandonment	Ft	\$ 1.26	\$	-
12	Direct Push	Commodity	DP65	Concrete Penetration	Each	\$ 20.10	\$	-

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
12	Direct Push	Commodity	DP70	GW Sample Collection	Each	\$ 39.27	\$	-
12	Direct Push	Commodity	DP75	Temporary Well Installation	Ft	\$ 5.25	\$	-
12	Direct Push	Commodity	DP80	Mob/Demob (Includes decon)	Site	\$ 578.66	\$	-
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR05	0 - 25 ft bgs	Ft	\$ 5.40	\$	-
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR10	26 - 50 ft bgs	Ft	\$ 5.67	\$	-
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR15	51 - 75 ft bgs	Ft	\$ 7.30	\$	-
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR20	Primary Mob/Demob	Site	\$ 652.34	\$	-
13.b	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Consultant	DR25	Consultant Oversight	Ft	\$ 1.58	15 \$	23.70
13.b	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Consultant	DR30	Primary Mob/Demob	Site	\$ 555.68	1 \$	555.68
13.c	Drilling In Bedrock	Consultant	DR35	Consultant Oversight	Ft	\$ 6.20	\$	-
13.c	Drilling In Bedrock	Consultant	DR40	Primary Mob/Demob	Site	\$ 652.34	\$	-
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR45	0 - 25 ft bgs	Ft	\$ 16.70	\$	-
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR50	26 - 50 ft bgs	Ft	\$ 18.38	\$	-
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR55	51 - 75 ft bgs	Ft	\$ 21.53	\$	-
13.e	Drilling In Unconsolidated Soils - Without Soil And/Or GW Sampling	Commodity	DR60	Drilling in Unconsolidated Soils	Ft	\$ 11.97	15 \$	179.55
13.f	Drilling In Bedrock	Commodity	DR65	Drilling in Bedrock	Ft	\$ 33.18	\$	-
13.f	Drilling In Bedrock	Commodity	DR70	Bedrock Drilling Setup Charge	Each	\$ 162.02	\$	-
13.f	Drilling In Bedrock	Commodity	DR75	Air Compressor	Day	\$ 426.41	\$	-
14	Monitoring Well Installation	Consultant	MW105	0 - 25 ft bgs	Ft	\$ 3.89	15 \$	58.35
14	Monitoring Well Installation	Consultant	MWI10	26 - 75 ft bgs	Ft	\$ 2.73	\$	-
14	Monitoring Well Installation	Commodity	MWI15	2 inch PVC Casing	Ft	\$ 16.70	15 \$	250.50
14	Monitoring Well Installation	Commodity	MWI20	Well Development	Well	\$ 147.63	1 \$	147.63
14	Monitoring Well Installation	Commodity	MWI25	Mob/Demob (For development of grout or slurry sealed wells	Site	\$ 603.49	\$	-
15	Misc. Drilling Activities & Supplies		MDT05	Drill Rig Mob/Demob	Mob/Demob	\$ 1,059.72	1 \$	1,059.72
15	Misc. Drilling Activities & Supplies		MDT10	Well Cover/flushmount	Each	\$ 202.65	1 \$	202.65
15	Misc. Drilling Activities & Supplies		MDT15	Stickup Well Cover	Each	\$ 163.91	\$	-

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS		TOTAL MAX
15	Misc. Drilling Activities & Supplies		MDT20	Bumper Guard Posts	Each	\$ 69.30		\$	-
15	Misc. Drilling Activities & Supplies		MDT21	Drum, 55 gal. DOT steel	Each	\$ 55.13		1 \$	55.13
15	Misc. Drilling Activities & Supplies		MDT25	Commodity Service Provider Per Diem (drilling and direct push)	Person	\$ 203.28		\$	-
15	Misc. Drilling Activities & Supplies		MDT30	Well Repair	Well	\$ 84.42		\$	-
15	Misc. Drilling Activities & Supplies		MDT35	Borehole Abandonment	Foot	\$ 5.46		\$	-
15	Misc. Drilling Activities & Supplies		MDT40	Concrete Penetration	Each	\$ 72.87		\$	-
15	Misc. Drilling Activities & Supplies		MDT41	Private Utility Locate	ACTUAL COST			\$	-
15	Misc. Drilling Activities & Supplies		MDT45	Padlocks	Each	\$ 7.98		1 \$	7.98
16	Hand Auger Boring		HA05	Hand Augering	Boring	\$ 89.99		\$	-
16	Hand Auger Boring		HA10	Primary Mob/Demob	Site	\$ 611.12		\$	-
17	Surface Soil/Sediment/Water Sampling		SSWS05	Sampling	Sample Location	\$ 21.53		\$	-
17	Surface Soil/Sediment/Water Sampling		SSWS10	Primary Mob/Demob	Site	\$ 497.70		\$	-
19	Hydraulic Conductivity Testing		HCT05	Hydraulic Conductivity Testing	Well	\$ 58.59		\$	-
19	Hydraulic Conductivity Testing		HCT10	Primary Mob/Demob	Site	\$ 718.07		\$	-
20	Soil Boring/Monitoring Well Permits		SBMWP05	Soil Boring/Monitoring Well Permit	Permit	\$ 246.12		\$	-
20	Soil Boring/Monitoring Well Permits	:	SBMWP10	Permit Fee (copy of permit & fee receipt required)	Permit Fee				
21	Access Agreements		AA05	Access Agreements	Property	\$ 401.94		\$	-
22	Soil Investigation Report		SIR05	Soil Investigation Report	Report	\$ 3,330.92		\$	-
23	Soil And GW Investigation Report		SGIR05	Soil and GW Investigation Report	Report	\$ 4,965.35		\$	-
24	Limited Soil Excavation	Consultant	LSE05	Consultant Oversight for Limited Soil Excavation	Ton	\$ 4.94		\$	-
24	Limited Soil Excavation	Consultant	LSE10	Primary Mob/Demob	Site	\$ 915.11		\$	-
24	Limited Soil Excavation	Commodity	LSE13	Laboratory (see task 24 total on Lab Schedule)	Lab Schedule		:	22 \$	1,088.12
24	Limited Soil Excavation	Commodity	LSE15	Limited Soil Excavation	Ton	\$ 60.00		\$	-
24	Limited Soil Excavation	Commodity	LSE16	Landfill Environmental Fee (provide documentation)	ACTUAL COST				
25	Remediation System Shut Down		SSD05	Permanent	Site	\$ 1,095.47		\$	-
25	Remediation System Shut Down		SSD10	Temporary	Site	\$ 329.28		\$	-
25	Remediation System Shut Down		SSD15	Primary Mob/Demob	Site	\$ 520.91		\$	-
27	Claim Submittal		CS05	Claim Submittal	Claim	\$ 585.90		\$	-
28	Standardized Invoice		SI05	Standardized Invoice	Invoice	\$ 17.64		\$	-
30	Meeting With Regulators		MR05	Meeting with Regulators	Meeting	\$ 349.23		\$	-
31	Consultant Overnight Per Diem		COPD05	Overnight	Night	\$ 125.09		\$	-

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	AX UNIT COST	UNITS		FOTAL MAX
33	Schedule Of Laboratory Maximums	Commodity		Laboratory (see task 33 total on Lab Schedule)	Lab Schedule			\$	485.60
34	Consultant Incremental Mob/Demob		IMD05	Incremental Mob/Demob	Site	\$ 287.18		\$	-
35	Cap Maintenance Plan		CMP05	Cap Maintenance Plan	Plan	\$ 320.04		\$	-
36	Change Order Request		COR05	Change Order Request (cost cap exceedance requests)	Change Order	\$ 381.78	1	\$	381.78
37	Vapor Point Installation & Sampling		VIS05	Installation & Sampling (up to 5 points)	Point	\$ 510.26		\$	-
37	Vapor Point Installation & Sampling		VIS10	Mob/Demob (up to 5 points)	Site	\$ 813.95		\$	-
Variance		Commodity		Excavation of Contaminated Soil				\$!	56,910.00
Variance		Consultant		Excavation of Contaminated Soil				\$	5,026.45
		Both		Handling Clean Overburden			:	\$	1,249.56
				Pumping Groundwater			:	\$	1,750.00

Usual and Customary Standardized Invoice #25 January 2019 - June 2019

SOILS

SOILS

SOILS

SOILS

SOILS

SOILS

SOILS

PVOC

VOC

PAH

Lead

PVOC + 1,2 DCA + Naphthalene

PVOC + Naphthalene

SPLP Extraction VOC only

S4

S5

S6

S7

S8

S9

S10



		TOTAL LAB CHARGE	S \$ 1,573.72		TASK 33	16	\$	485.60	TA	SK 24	22	\$	1,088.12
MATRIX	REF CODE	REIMBURSABLE ANALYTE	UNITS		MAX COST	SAMPLES		TOTAL	MAX	K COST	SAMPLES		TOTAL
AIR	A1	Benzene	SAMPLE	\$	44.94		\$	-					
AIR	A2	BETX	SAMPLE	\$	49.46		\$	-					
AIR	A3	GRO	SAMPLE	\$	46.10		\$	-					
AIR	A4	VOC's	SAMPLE	\$	71.93		\$	-					
WATER	W1	GRO/PVOC	SAMPLE	\$	29.19		\$	-					
WATER	W2	PVOC	SAMPLE	\$	26.99		\$	-					
WATER	W3	PVOC + 1,2 DCA	SAMPLE	\$	43.79		\$	-					
WATER	W4	PVOC + Naphthalene	SAMPLE	\$	30.35	16	\$	485.60					
WATER	W5	VOC	SAMPLE	\$	71.93		\$	-					
WATER	W6	PAH	SAMPLE	\$	72.98		\$	-					
WATER	W7	Lead	SAMPLE	\$	12.39		\$	-					
WATER	W8	Cadmium	SAMPLE	\$	13.55		\$	-					
WATER	W9	Hardness	SAMPLE	\$	12.39		\$	-					
WATER	W10	BOD, Total	SAMPLE	\$	23.63		\$	-					
WATER	W11	Nitrate	SAMPLE	\$	11.24		\$	-					
WATER	W12	Total Kjeldahl	SAMPLE	\$	20.27		\$	-					
WATER	W13	Ammonia	SAMPLE	\$	16.91		\$	-					
WATER	W14	Sulfate	SAMPLE	\$	10.19		\$	-					
WATER	W15	Iron	SAMPLE	\$	10.19		\$	-					
WATER	W16	Manganese	SAMPLE	\$	10.19		\$	-					
WATER	W17	Alkalinity	SAMPLE	\$	10.19		\$	-					
WATER	W18	methane	SAMPLE	\$	46.10		\$	-					
WATER	W19	Phosphorous	SAMPLE	\$	18.06		\$	-					
WATER	W20	VOC Method 524.2	SAMPLE	\$	176.30		\$	-					
WATER	W21	EDB Method 504	SAMPLE	\$	95.45		\$	-	MAX	(COST	SAMPLES		TOTAL
SOILS	S1	GRO	SAMPLE	\$	24.78		\$	-	\$	24.78		\$	-
SOILS	S2	DRO	SAMPLE	\$	30.35		\$	-	\$	30.35		\$	-
SOILS	S3	GRO/PVOC	SAMPLE	\$	28.14		\$	-	\$	28.14		\$	-
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72.98

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14 \$

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504.28

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583.84

MATRIX	REF CODE	REIMBURSABLE ANALYTE	UNITS	MAX COST S	AMPLES	TOTAL	MAX COST	SAMPLES	TOTAL
SOILS	S11	Cadmium	SAMPLE	\$ 14.60		\$ -	TA	SK 24 TOTAL \$	1,088.12
SOILS	S12	Free Liquid	SAMPLE	\$ 11.24		\$ -			
SOILS	S13	Flash Point	SAMPLE	\$ 25.83		\$-			
SOILS	S14	Grain Size - dry	SAMPLE	\$ 42.74		\$-			
SOILS	S15	Grain Size - wet	SAMPLE	\$ 57.33		\$-			
SOILS	S16	Bulk Density	SAMPLE	\$ 13.55		\$ -			
SOILS	S17	Permeability	SAMPLE	\$ 41.58		\$ -			
SOILS	S18	Nitrogen as Total Kjeldahl	SAMPLE	\$ 20.27		\$ -			
SOILS	S19	Nitrogen as Ammonia	SAMPLE	\$ 16.91		\$ -			
SOILS	S20	% Organic Matter	SAMPLE	\$ 29.19		\$-			
SOILS	S21	TOC as NPOC	SAMPLE	\$ 57.33		\$-			
SOILS	S22	Soil Moisture Content	SAMPLE	\$ 6.83		\$-			
SOILS	S23	Air Filled Porosity	SAMPLE	\$ 25.83		\$-			
SOILS	S24	% Total Solids	SAMPLE	\$ 6.83		\$-			
SOILS	S25	Field Capacity	SAMPLE	\$ 28.14		\$-			
SOILS	S26	TCLP Lead	SAMPLE	\$ 83.16		\$-			
SOILS	S27	Cation Exchange (Ca, MG, & K)	SAMPLE	\$ 26.99		\$ -			
SOILS	S28	TCLP Cadmium	SAMPLE	\$ 83.16		\$ -			
SOILS	S29	TCLP Benzene	SAMPLE	\$ 83.16		\$ -			
		Viscosity + Density							
LNAPL	LFPS01	Interfacial tension I (LNAPL/water [dyne/cm]) Interfacial tension II (LNAPL/air [dyne/cm])	SAMPLE	\$ 561.33		\$ -			
		Interfacial tension III (water/air) [dyne/cm])							
				TASK	33 TOTAL	\$ 485.60			

BID ESTIMATE SHEET

Former Frei Oil, Horicon, Wisconsin

Excavation and Removal of Petroleum-Contaminated Soil

ITEM	UNIT COST		ESTIMATED TOTAL
Mobilization		(lump sum)	<u>\$1,000.00</u>
Excavate and stockpile clean soil	onsite (per ton = $\$2.20$)	(200 tons)	<u></u> \$440.00
Excavate/load soil (per ton = $\frac{2.2}{2}$	20)	(1,400 tons)	<u>\$3,080.00</u>
Haul soil (per ton = 3.30)	(1,400 tons)	<u>\$</u> 4,620.00
Provide backfill material (per ton source of your choice)	= <u>\$ 8.25</u>)	(1,200 tons)	§9,900.00
Provide gravel backfill for surface	(per ton-\$ <u>8.60)</u>	(200 tons)	<u>§</u> 1,720.00
Compact imported backfill (per to	on = \$ <u>2.10</u>)	(1,400 tons)	<u>\$2,940.00</u>
Backfill and compact stockpiled s	oil (per ton = (2.20))	(200 tons)	\$

Total Eligible Site Work Cost \$_24,140.00

Alternate 1A: Mobilize and excavate sample hole

ADD = \$520.00

WD Navis, Inc/

Dennis Navis

2/11/19 Date

