From: Jason Powell <jasonp@metcofs.com>
Sent: Tuesday, March 30, 2021 1:14 PM
To: Delcore, Lee R - DNR
Cc: Ann Polzean; Ron Anderson
Subject: Herriges Oil Bulk Plant South - results of the recent Geoprobe soil sampling project - 230 Prospect Street, Kewaskum WI
Attachments: 0312_001.pdf; 0313_001.pdf; 0314_001.pdf; 0315_001.pdf

Good morning Lee, attached is the updated site layout map, updated soil/residual soil tables, and laboratory document.

In discussions with our client, this area was a former bulk plant from the 1920s or 1930s to 2001 when the bulk plant was dismantled and removed. The only fill material that was known to be brought into the site was a thin layer of gravel prior to the construction of the existing building.

On March 8, 2021, twelve additional Geoprobe soil borings were conducted to 2 or 4 feet below ground surface to further define PVOC and PAH contamination. Six of the borings (G-26, -27, -28, -31, -32, and -33) were used to further define horizontal extent and six of the borings (G-22, -23, -24, -25, -29, and -30) were used to determine if the shallow soil (0-2 feet bgs) could be considered as cap material to address the direct contact exceedances already noted at 3.0-3.5 feet bgs.

The six borings conducted to define horizontal extent showed no direct contact or groundwater pathway exceedances for PAH compounds.

Three of the six borings (G-24, -25, and -30) conducted to 2 feet bgs showed no direct contact exceedances for PAH or PVOC compounds. It should be noted that groundwater RCL exceedances for PVOCs were noted in borings G-24 and G-25.

Three of the six borings (G-22, -23, and -29) conducted at 2 feet bgs showed direct contact exceedances for PAH compounds. Soil boring G-22 was conducted at the eastern property boundary near former monitoring well MW-4 with a sample collected at 1.5 feet bgs and did exceed Non-Industrial Direct Contact standards for PAH compounds, however being this area along with G-12, -20, and -21 are covered by a manicured lawn this could be considered an appropriate cap to address the direct contact PAHs. Soil boring G-29 was conducted on the western property boundary near former monitoring well MW-2 with a sample collected at 1.5 feet bgs and did exceed Non-Industrial Direct Contact standards for PAH compounds, however this area is covered with asphalt and is an appropriate cap to address the direct contact PAHs.

Soil boring G-23 conducted to 2 feet bgs exceeded the Industrial Direct Contact standards. The sample adjacent to it (G-11) collected at 3.5 feet bgs also exceeded the Industrial Direct Contact standards. This area is currently covered with approximately 6 inches of gravel which may not be enough to be considered an appropriate cap. If not, this area of direct contact exceedances will likely be required to be addressed by an appropriate cap. An additional 1-2 feet of clean gravel would not be an option due to the building, adjacent concrete pad, and surface drainage. Thus the area would likely need to be addressed by covering with a concrete/asphalt pad or excavation of contaminated material to approximately 3 feet bgs and backfilled with clean soil/gravel.

If the state determines that the site could be re-submitted for closure at this time, we can prepare the updated/revised closure request. However, if additional work is going to be required (most notably would be the area of G-11/G-23) it would be best to address that issue at this time followed by an updated closure request. After your review of this current information, please contact METCO and our client to discuss moving this site toward "closure". If you have any questions please call or email. Thanks,

Jason Powell
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B.I.b
DETAILED SITE MAP
HERRIGES OIL
BULK PLANT SOUTH

KEWASKUM, WISCONSIN

DRAWN BY: ED
DATE: 01/14/2019

METCO
709 Gillette St, Suite 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893
Excellence through experience

NOTE: INFORMATION BASED ON AVAILABLE DATA ACTUAL CONDITIONS MAY DIFFER

- ● - HAND AUGER BORING LOCATION - ALPHA TERRA - 2012 LOCATIONS ARE APPROXIMATE. BASED ON STREET VIEW PHOTO
- ✕ - GEOPROBE BORING LOCATION
- ⊕ - MONITORING WELL LOCATION
- ■ - SUB SLAB VAPOR SAMPLE LOCATION
- ○ - POLE
- □ - STORM SEWER COVER
- — — — — - PROPERTY BOUNDARY
- — · — · — - WATER LINE
- —— · · · —— - SEWER LINE
- —— · · —— - NATURAL GAS LINE
- — — — — — - BURIED ELECTRIC LINE
- ═══ - OVERHEAD UTILITIES
- ------ - TELEPHONE/FIBER OPTIC

SCALE:
1 INCH = 30 FEET
0 15 30

BOOTLEGGERZ SALOON
215/217 MAIN STREET

RESIDENCE
219/221 MAIN STREET

HAIR ON MAIN
227/229 MAIN STREET

GARAGE
SHED
ASPHALT
GRASS
GRAVEL
FENCE
CONCRETE

FORMER LOADING RACK
FORMER LOADING PLATFORM
FORMER SHED
POLE SHED
230 PROSPECT STREET
PARCEL #: V4-0391;-V4-03092

REMOVED AST'S

HOLY TRINITY CONGREGATIONAL CHURCH & SCHOOL
305 MAIN STREET/
305 PROSPECT STREET

AREA OF GREASE TRAPS

EISENBAHN STATE TRAIL

PROSPECT STREET

SIDEWALK
SIGN

PLAYGROUND FOR HOLY TRINITY CONGREGATIONAL CHURCH & SCHOOL

G-1 G-2 G-3 G-4 G-5 G-6 G-7 G-8 G-9 G-10 G-11 G-12 G-13 G-14 G-15 G-16 G-17 G-18 G-19 G-20 G-21 G-22 G-23 G-24 G-25 G-26 G-27 G-28 G-29 G-30 G-31 G-32 G-33
B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10
MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7
SS-1 SS-2 SS-3 SS-4

A.2 Soil Analytical Results Table
Herriges Oil BP S BRRTS #02-67-111819

Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppb)	DIRECT CONTACT Exeedance Count	DIRECT CONTACT Hazard Index	DIRECT CONTACT Cumulative Cancer Risk
B-1	8-12	U	06/01/12	47.0	NS	NS	NS	<0.2	<0.2	<0.2	**3.87**	0.271J	**1.4**	1	1.281J	NS			
B-2	8-12	U	06/01/12	8.6	NS	NS	NS	NOT SAMPLED											
B-3	8-12	U	06/01/12	1.5	NS	NS	NS	NOT SAMPLED											
B-4	8-12	U	06/01/12	683.0	NS	NS	NS	<2	**12.6**	<2	**50.7**	**4.03**	**(358)***	**169**	**225**	NS			
B-5	8-12	U	06/01/12	44.0	NS	NS	NS	NOT SAMPLED											
B-6	8-12	U	06/01/12	40.0	NS	NS	NS	NOT SAMPLED											
B-7	8-12	U	06/01/12	3.0	NS	NS	NS	NOT SAMPLED											
B-8	8-12	U	06/01/12	1.6	NS	NS	NS	NOT SAMPLED											
B-9	8-12	U	06/01/12	2.5	NS	NS	NS	NOT SAMPLED											
B-10	8-12	U	06/01/12	20.2	NS	NS	NS	NOT SAMPLED											
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

Bold = Groundwater RCL Exceedance
Bold & Underline = Non Industrial Direct Contact RCL Exceedance
(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold & Asteric * = C-sat Exceedance
NS = Not Sampled
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(ppm) = parts per million
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DRO = Diesel Range Organics
GRO = Gasoline Range Organics
PID = Photoionization Detector
PVOC's = Petroleum Volatile Organic Compounds
VOC's = Volatile Organic Compounds
Note: Non-Industrial RCLs apply to this site.

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

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Herriges Oil BP S BRRTS #02-67-111819

Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppb)	DIRECT CONTACT (PVOC & PAH) Exeedance Count	Hazard Index	Cumulative Cancer Risk
G-1-1	3.5	U	03/25/19	0.10	**210.0**	NS	NS	**0.075**	<0.025	<0.025	0.124	0.084	0.056	0.044	0.143	NS	**5**	0.7357	4.2E-05
G-1-2	8.0	S	03/25/19	0.10	NS	NS	NS									NS			
G-1-3	12.0	S	03/25/19	0.20	NOT SAMPLED														
G-2-1	3.5	U	03/25/19	0.30	**49.2**	NS	NS	<0.025	<0.025	<0.025	0.082	<0.025	<0.025	0.0284	0.0294-0.0794	NS	0	0.0017	2.6E-07
G-2-2	6.0	S	03/25/19	1.00	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-2-3	12.0	S	03/25/19	0.80	NOT SAMPLED														
G-2-4	14.0	S	03/25/19	0.70	NOT SAMPLED														
G-2-5	16.0	S	03/25/19	0.60	NOT SAMPLED														
G-3-1	3.5	U	03/25/19	275.20	12.8	NS	NS	<1.25	<1.25	<1.25	**(58)**	**1.4**	**10.7**	**6.1**	**6.65**	NS	**7**	0.6271	3.9E-05
G-3-2	5.0	S	03/25/19	1157.00	NS	2350	4400	**0.51**	0.33	<0.05	**2.78**	<0.032	0.035	<0.032	<0.116	SEE VOC SHEET TCLP LEAD <0.1 TCLP BENZENE <0.05			
G-3-3	10.0	S	03/25/19	1.50	NOT SAMPLED														
G-3-4	12.0	S	03/25/19	1.30	NOT SAMPLED														
G-3-5	14.0	S	03/25/19	1.20	NOT SAMPLED														
G-4-1	3.5	U	03/25/19	2.20	4.1	NS	NS	<0.025	<0.025	<0.025	0.10	<0.025	0.045	<0.025	<0.075	NS	0	0.002	2.8E-07
G-4-2	5.0	U	03/25/19	22.20	NS	NS	NS	<1.25	<1.25	<1.25	**45**	<1.25	**5.1**	**4.0**	**4.73**	NS			
G-4-3	10.0	S	03/25/19	1.90	NOT SAMPLED														
G-4-4	12.0	S	03/25/19	1.00	NOT SAMPLED														
G-4-5	14.0	S	03/25/19	0.90	NOT SAMPLED														
G-5-1	3.0	U	03/25/19	844.00	**316.0**	NS	NS	**2.17**	**3.2**	<0.25	**(26.8)**	**6.1**	**8.9**	**9.6**	**13.8**	NS	**8**	1.3849	7.7E-05
G-5-2	6.0	S	03/25/19	898.00	NS	NS	NS	**0.32**	0.92	<0.025	**4.5**	**1.5**	**0.80**	**2.07**	**4.05**	NS			
G-5-3	10.0	S	03/25/19	61.00	NOT SAMPLED														
G-5-4	12.0	S	03/25/19	4.00	NOT SAMPLED														
G-5-5	14.0	S	03/25/19	1.00	NOT SAMPLED														
G-6-1	3.5	U	03/25/19	4.10	11.9	NS	NS	**0.082**	0.149	<0.025	0.51	0.28	**0.39**	**1.0**	0.761	NS	**1**	0.0549	9.5E-06
G-6-2	6.0	S	03/25/19	50.40	NS	NS	NS	<0.025	0.111	<0.025	**1.71**	<0.025	0.262	0.126	0.385	NS			
G-6-3	10.0	S	03/25/19	2.10	NOT SAMPLED														
G-6-4	12.0	S	03/25/19	3.50	NOT SAMPLED														
G-6-5	16.0	S	03/25/19	3.60	NOT SAMPLED														
G-7-1	3.5	U	03/25/19	13.70	6.3	NS	NS	**0.075**	<0.025	<0.025	0.141	0.061	<0.025	0.0295	<0.075	NS	0	0.0026	3.3E-07
G-7-2	6.0	S	03/25/19	2.40	NS	NS	NS	<0.025	0.077	<0.025	0.42	0.035	0.061	0.0296	0.083	NS			
G-7-3	10.0	S	03/25/19	2.30	NOT SAMPLED														
G-7-4	12.0	S	03/25/19	1.30	NOT SAMPLED														
G-7-5	14.0	S	03/25/19	0.90	NS	NS	NS	<0.025	<0.025	<0.025	0.0277	<0.025	<0.025	<0.025	<0.075	NS			
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

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G-8-1	3.5	U	03/25/19	4.30	25.9	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.0014	2.5E-07
G-8-2	8.0	S	03/25/19	2.70	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-8-3	10.0	S	03/25/19	8.60	NOT SAMPLED														
G-8-4	12.0	S	03/25/19	0.50	NOT SAMPLED														
G-8-5	14.0	S	03/25/19	1.60	NS	NS	NS	<0.025	<0.025	<0.025	0.045	<0.025	<0.025	<0.025	<0.075	NS			
G-9-1	3.5	U	03/25/19	9.70	24.8	NS	NS	<0.025	0.048	<0.025	0.39	0.070	0.14	0.080	0.192	NS	0	0.0056	4.2E-07
G-9-2	8.0	S	03/25/19	8.20	NS	NS	NS	<0.025	0.0281	<0.025	0.251	0.041	0.090	0.055	0.139	NS			
G-9-3	10.0	S	03/25/19	1.10	NOT SAMPLED														
G-9-4	12.0	S	03/25/19	2.60	NOT SAMPLED														
G-9-5	14.0	S	03/25/19	1.40	NS	NS	NS	<0.025	<0.025	<0.025	0.053	<0.025	<0.025	<0.025	<0.075	NS			
G-10-1	3.5	U	03/25/19	1.80	**86.1**	NS	NS	<0.025	<0.025	<0.025	0.128	0.072	0.041	0.045	0.049-0.099	NS	**1**	0.2407	4.9E-06
G-10-2	5.0	U	03/25/19	1.90	NS	NS	NS	**0.030**	0.035	0.044	0.114	0.143	0.067	0.066	0.181	NS			
G-10-3	10.0	S	03/25/19	2.80	NOT SAMPLED														
G-10-4	12.0	S	03/25/19	1.40	NOT SAMPLED														
G-10-5	14.0	S	03/25/19	2.20	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-11-1	3.5	U	03/25/19	2.20	**47.0**	NS	NS	<0.25	<0.25	<0.25	**11.9**	<0.25	<0.25	<0.25	<0.75	NS	**7**	3.5089	6.9E-04
G-11-2	5.0	U	03/25/19	53.80	NS	NS	NS	<1.25	<1.25	<1.25	**58**	<1.25	**2.37**	**1.87**	<3.75	NS			
G-11-3	10.0	S	03/25/19	5.30	NOT SAMPLED														
G-11-4	12.0	S	03/25/19	0.80	NOT SAMPLED														
G-11-5	14.0	S	03/25/19	0.80	NS	NS	NS	<0.025	<0.025	<0.025	0.077	<0.025	<0.025	<0.025	<0.075	NS			
G-12-1	3.5	U	03/25/19	27.50	**274.0**	NS	NS	<0.25	0.42	<0.25	**12.3**	0.308	**4.2**	**3.8**	2.48	NS	**2**	0.7894	3.9E-06
G-12-2	5.0	U	03/25/19	21.90	NS	NS	NS	<1.25	<1.25	<1.25	**60**	<1.25	**5.1**	**5.5**	1.56-4.06	NS			
G-12-3	10.0	S	03/25/19	3.00	NOT SAMPLED														
G-12-4	12.0	S	03/25/19	2.20	NOT SAMPLED														
G-12-5	14.0	S	03/25/19	2.00	NS	NS	NS	<0.025	<0.025	<0.025	0.051	<0.025	<0.025	<0.025	<0.075	NS			
G-13-1	3.5	U	03/26/19	34.40	4.68	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.0029	5.5E-07
G-13-2	5.0	S	03/26/19	74.20	NS	NS	NS	**0.34**	0.289	<0.25	**4.6**	0.62	**1.05**	**0.90**	1.68	NS			
G-13-3	10.0	S	03/26/19	0.60	NOT SAMPLED														
G-13-4	12.0	S	03/26/19	0.80	NOT SAMPLED														
G-13-5	14.0	S	03/26/19	0.70	NS	NS	NS	<0.025	<0.025	<0.025	0.041	<0.025	<0.025	<0.025	<0.075	NS			
G-14-1	3.5	U	03/26/19	1.00	**351.0**	NS	NS	<0.025	0.0311	<0.025	0.284	0.080	0.112	0.055	0.224	NS	**2**	0.9333	1.1E-05
G-14-2	8.0	S	03/26/19	1.10	NS	NS	NS	<0.025	0.032	<0.025	0.161	0.040	0.063	0.032	0.186	NS			
G-14-3	10.0	S	03/26/19	0.70	NOT SAMPLED														
G-14-4	12.0	S	03/26/19	0.60	NOT SAMPLED														
G-14-5	14.0	S	03/26/19	0.70	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-15-1	3.5	U	03/26/19	91.10	**146.0**	NS	NS	<0.025	<0.025	<0.025	0.40	<0.025	0.048	0.035	0.091	NS	0	0.3701	3.3E-07
G-15-2	5.0	S	03/26/19	342.90	NS	NS	NS	**0.29**	<0.25	<0.25	**9.2**	0.37	**1.19**	**1.28**	1.17	NS			
G-15-3	10.0	S	03/26/19	3.60	NOT SAMPLED														
G-15-4	12.0	S	03/26/19	2.00	NOT SAMPLED														
G-15-5	14.0	S	03/26/19	1.20	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
MW-1-1	3.5	U	03/26/19	381.00	NOT SAMPLED												0		
MW-1-2	8.0	S	03/26/19	852.00	NOT SAMPLED														
MW-1-3	10.0	S	03/26/19	12.50	NOT SAMPLED														
MW-1-4	12.0	S	03/26/19	6.10	NOT SAMPLED														
MW-1-5	14.0	S	03/26/19	4.00	NS	NS	NS	<0.025	<0.025	<0.025	0.0267	<0.025	<0.025	<0.025	<0.075	NS			
MW-2-1	3.5	U	03/26/19	1.90	**261.0**	NS	NS	**0.0268**	<0.025	<0.025	0.262	0.034	0.077	0.042	0.054-0.071	NS	**5**	1.2972	1.3E-04
MW-2-2	5.0	S	03/26/19	1.40	NS	NS	NS	<0.025	<0.025	<0.025	0.201	0.034	0.064	0.037	0.104	NS			
MW-2-3	10.0	S	03/26/19	1.60	NOT SAMPLED														
MW-2-4	12.0	S	03/26/19	1.70	NOT SAMPLED														
MW-2-5	14.0	S		1.20	NS	NS	NS	<0.025	<0.025	<0.025	0.0273	<0.025	<0.025	<0.025	<0.075	NS			
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

Bold = Groundwater RCL Exceedance
Bold & Underline = Non Industrial Direct Contact RCL Exceedance
(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold & Asteric * = C-sat Exceedance
NS = Not Sampled
(ppm) = parts per million
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
PID = Photoionization Detector
PVOC's = Petroleum Volatile Organic Compounds
VOC's = Volatile Organic Compounds
Note: Non-Industrial RCLs apply to this site.

NM = Not Measured
ND = No Detects

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

A.2 Soil Analytical Results Table
Herriges Oil BP S BRRTS #02-67-111819

																DIRECT CONTACT (PVOC & PAH)		
Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppb)	Exeedance Count	Hazard Index	Cumulative Cancer Risk
MW-3-1	3.5	U	03/26/19	2.60	3.69	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.0014	2.7E-07
MW-3-2	5.0	U	03/26/19	2.60	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
MW-3-3	10.0	S	03/26/19	2.10	NOT SAMPLED														
MW-3-4	12.0	S	03/26/19	2.10	NOT SAMPLED														
MW-3-5	14.0	S	03/26/19	2.00	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
MW-4-1	0-4	U	03/26/19	2.80	**51.0**	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0261-0.0761	NS	**3**	0.0877	1.8E-05
MW-4-2	4-8	S	03/26/19	2.70	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
MW-4-3	8.0	S	03/26/19	2.00	NOT SAMPLED														
MW-4-4	12.0	S	03/26/19	2.40	NOT SAMPLED														
MW-4-5	14.0	S	03/26/19	1.70	NS	NS	NS	<0.025	<0.025	<0.025	0.044	<0.025	<0.025	<0.025	<0.075	NS			
MW-5-1	3.5	U	03/26/19	2.60	5.79	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.0014	2.5E-07
MW-5-2	8.0	S	03/26/19	2.50	NS	NS	NS	<0.025	<0.025	<0.025	0.071	<0.025	<0.025	<0.025	<0.075	NS			
MW-5-3	10.0	S	03/26/19	1.90	NOT SAMPLED														
MW-5-4	12.0	S	03/26/19	1.80	NOT SAMPLED														
MW-5-5	14.0	S	03/26/19	1.60	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
MW-6-1	3.5	U	12/09/19	0.80	NOT SAMPLED														
MW-6-2	8.0	S	12/09/19	0.60	NOT SAMPLED														
MW-6-3	12.0	S	12/09/19	0.50	NOT SAMPLED														
MW-6-4	NO RECOVERY																		
MW-7-1	3.5	U	12/09/19	0.70	NOT SAMPLED												0		
MW-7-2	8.0	S	12/09/19	0.60	NOT SAMPLED														
MW-7-3	12.0	S	12/09/19	0.30	NOT SAMPLED														
MW-7-4	14.0	S	12/09/19	0.40	NOT SAMPLED														
G-16-1	3.5	U	12/09/19	2.80	NOT SAMPLED												0		
G-17-1	3.5	U	12/09/19	1.20	NOT SAMPLED												0		
G-18-1	3.5	U	12/09/19	1.20	NOT SAMPLED												0		
G-19-1	3.5	U	12/09/19	1.10	NOT SAMPLED												0		
G-20-1	3.5	U	12/09/19	0.20	NOT SAMPLED												0		
G-21-1	3.5	U	12/09/19	0.40	NOT SAMPLED												0		
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

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DRO = Diesel Range Organics
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PID = Photoionization Detector
PVOC's = Petroleum Volatile Organic Compounds
VOC's = Volatile Organic Compounds
Note: Non-Industrial RCLs apply to this site.

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
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A.2 Soil Analytical Results Table
Herriges Oil BP S BRRTS #02-67-111819

Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppb)	DIRECT CONTACT (PVOC & PAH) Exeedance Count	Hazard Index	Cumulative Cancer Risk
G-22-1	1.5	U	03/08/21	0.50	NOT SAMPLED												**1**	0.0389	8.1E-06
G-23-1	1.5	U	03/08/21	0.87	NOT SAMPLED												**6**	2.772	5.7E-04
G-24-1	1.5	U	03/08/21	65.0	NS	NS	NS	**0.061**	0.159	<0.025	**0.68**	0.111	**8.1**	**2.93**	0.92	NS	0	0.0458	1.3E-06
G-25-1	1.5	U	03/08/21	7.80	NS	NS	NS	**0.046**	0.069	<0.025	0.097	0.244	0.279	0.136	0.682	NS	0	0.0074	8.7E-07
G-26-1	3.0	U	03/08/21	0.73	NOT SAMPLED												0	0.0009	2.8E-07
G-27-1	3.0	U	03/08/21	0.63	NOT SAMPLED												0	0.0009	2.8E-07
G-28-1	3.0	U	03/08/21	1.30	NOT SAMPLED												0	0.0009	2.8E-07
G-29-1	1.5	U	03/08/21	0.78	NOT SAMPLED												**1**	0.0503	1.1E-05
G-30-1	1.5	U	03/08/21	1.70	NOT SAMPLED												0		
G-31-1	3.0	U	03/08/21	1.30	NOT SAMPLED												0	0.0035	8.0E-07
G-32-1	3.0	U	03/08/21	1.30	NOT SAMPLED												0	0.0009	2.8E-07
G-33-1	3.0	U	03/08/21	1.00	NOT SAMPLED												0	0.0009	2.8E-07
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

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PVOC's = Petroleum Volatile Organic Compounds
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Note: Non-Industrial RCLs apply to this site.

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A.2 Soil Analytical Results Table
(PAH)
Herriges Oil BP S BRRTS #02-67-111819

																					DIRECT CONTACT (PVOC & PAH)		
Sample	Depth (feet)	Saturation U/S	Date	Acenaph-thene (ppm)	Acenaph-thylene (ppm)	Anthracene (ppm)	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) fluoranthene (ppm)	Benzo(g,h,I) perylene (ppm)	Benzo(k) fluoranthene (ppm)	Chrysene (ppm)	Dibenzo(a,h) anthracene (ppm)	Fluoranthene (ppm)	Fluorene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)	1-Methyl-naphthalene (ppm)	2-Methyl-naphthalene (ppm)	Naph-thalene (ppm)	Phenan-threne (ppm)	Pyrene (ppm)	Exeedance Count	Hazard Index	Cumulative Cancer Risk
G-1-1	3.5	U	03/25/19	0.16	0.54	0.91	**2.46**	**(3.60)**	**5.00**	3.50	1.59	**3.70**	**0.239**	6.00	0.301	**2.61**	0.166	0.198	0.172	2.60	5.40	**5**	0.7357	4.2E-05
G-2-1	3.5	U	03/25/19	<0.0163	0.01	<0.0043	<0.016	<0.0124	<0.0109	0.0111	<0.0091	<0.006	<0.0101	0.0057	<0.0086	<0.0082	<0.0086	<0.0147	<0.0153	<0.0071	<0.0067	0	0.0017	2.6E-07
G-3-1	3.5	U	03/25/19	0.44	0.65	0.73	**1.71**	**(2.22)**	**3.30**	2.37	1.03	**2.43**	**0.13**	3.60	1.28	**1.57**	**19.6**	24	**12.6**	2.56	3.50	**7**	0.6271	3.9E-05
G-4-1	3.5	U	03/25/19	<0.0163	0.0124	0.0049	<0.016	<0.0124	0.0154	0.0106	<0.0091	0.0102	<0.0101	0.0173	<0.0086	<0.0082	0.164	0.038	0.059	0.0164	0.0143	0	0.002	2.8E-07
G-5-1	3.0	U	03/25/19	1.87	1.94	1.69	**2.83**	**(5.00)**	**7.40**	6.40	1.98	**4.00**	**1.33**	6.70	3.06	**4.60**	**33.0**	13.2	**8.20**	4.30	7.40	**8**	1.3849	7.7E-05
G-6-1	3.5	U	03/25/19	0.0203	0.06	0.262	0.68	**0.79**	**1.10**	0.66	0.35	**0.84**	0.042	1.62	0.044	0.53	0.071	0.097	0.079	0.73	1.32	**1**	0.0549	9.5E-06
G-7-1	3.5	U	03/25/19	<0.0163	<0.0086	<0.0043	0.0195	0.0134	0.0209	0.0122	<0.0091	0.0172	<0.0101	0.0214	<0.0086	<0.0082	0.0278	0.0232	<0.0153	0.0242	0.0182	0	0.0026	3.3E-07
G-8-1	3.5	U	03/25/19	<0.0163	<0.0086	<0.0043	<0.016	<0.0124	<0.0109	<0.0084	<0.0091	<0.006	<0.0101	<0.0054	<0.0086	<0.0082	<0.0086	<0.0147	<0.0153	<0.0071	<0.0067	0	0.0014	2.5E-07
G-9-1	3.5	U	03/25/19	<0.0163	0.036	0.037	0.0283	0.0167	0.039	0.0229	0.01	0.0294	<0.0101	0.036	0.0089	0.0166	0.274	0.293	0.102	0.148	0.037	0	0.0056	4.2E-07
G-10-1	3.5	U	03/25/19	0.037	0.07	0.122	0.39	0.41	**0.61**	0.306	0.192	**0.45**	0.0255	0.70	0.038	0.235	0.094	0.109	0.076	0.53	0.67	**1**	0.2407	4.9E-06
G-11-1	3.5	U	03/25/19	14.1	2.35	59.0	**(66.0)**	**(58.0)**	**(78.0)**	29.5	**27.0**	**65.0**	**(2.89)**	**166**	**26.0**	**(28.1)**	6.00	4.10	**4.60**	158	**130**	**7**	3.5089	6.9E-04
G-12-1	3.5	U	03/25/19	<0.0163	0.068	0.056	0.101	**0.116**	0.169	0.129	0.056	0.102	<0.0101	0.165	0.032	0.091	0.071	0.136	0.0192	0.135	0.141	**2**	0.7894	3.9E-06
G-13-1	3.5	U	03/26/19	<0.0163	0.0293	0.0166	0.04	0.038	0.054	0.044	0.018	0.036	<0.0101	0.052	0.0098	0.0253	<0.0086	<0.0147	<0.0153	0.038	0.046	0	0.0029	5.5E-07
G-14-1	3.5	U	03/26/19	<0.0163	0.32	0.202	0.61	**0.92**	**1.38**	0.86	0.42	**0.79**	0.052	0.95	0.045	0.61	0.113	0.142	0.078	0.40	0.91	**2**	0.9333	1.1E-05
G-15-1	3.5	U	03/26/19	<0.0163	0.0171	0.06	<0.016	<0.0124	<0.0109	0.022	<0.0091	<0.006	<0.0101	0.0062	0.0209	0.0088	0.154	0.36	0.141	0.05	0.0107	0	0.3701	3.3E-07
MW-2-1	3.5	U	03/26/19	0.97	0.273	6.70	**11.9**	**(11.0)**	**15.5**	5.90	5.10	**11.8**	**0.59**	25.7	2.12	**5.60**	0.172	0.173	0.097	15.8	20.6	**5**	1.2972	1.3E-07
MW-3-1	3.5	U	03/26/19	<0.0163	<0.0086	0.0079	0.0192	0.0134	0.0201	<0.0084	<0.0091	0.0146	<0.0101	0.0247	<0.0086	<0.0082	<0.0086	<0.00147	<0.0153	0.0177	0.0205	0	0.0014	2.7E-07
MW-4-1	0-4	U	03/26/19	0.34	0.039	0.94	**1.52**	**1.47**	**2.42**	0.90	0.65	**1.85**	0.061	4.70	0.45	0.85	0.045	0.053	0.042	4.40	3.50	**3**	0.0877	1.8E-05
MW-5-1	3.5	U	03/26/19	<0.0163	<0.0086	<0.0043	<0.016	<0.0124	<0.0109	<0.0084	<0.0091	0.0064	<0.0101	0.0102	<0.0086	<0.0082	<0.0086	<0.0147	<0.0153	0.0098	0.0093	0	0.0014	2.5E-07
G-16-1	3.5	U	12/09/19	<0.0163	0.21	0.094	0.36	**0.62**	**0.74**	0.64	0.262	**0.42**	0.109	0.51	0.0151	0.48	0.0098	<0.0147	0.022	0.185	0.50	**1**	0.0355	7.7E-06
G-17-1	3.5	U	12/09/19	<0.0163	0.067	0.0311	0.088	**0.125**	0.183	0.139	0.058	0.116	0.0239	0.128	0.0095	0.107	0.0086	<0.0147	<0.0153	0.063	0.122	**1**	0.0073	1.6E-06
G-18-1	3.5	U	12/09/19	<0.0163	0.0104	0.042	0.109	**0.116**	0.159	0.084	0.056	0.123	0.0134	0.293	0.0187	0.077	<0.0086	<0.0147	<0.0153	0.227	0.243	**1**	0.0069	1.4E-06
G-19-1	3.5	U	12/09/19	<0.0163	0.0228	0.0125	0.04	0.048	0.074	0.054	0.0203	0.046	<0.0101	0.058	<0.0086	0.042	<0.0086	<0.0147	<0.0153	0.0279	0.055	0	0.0029	6.5E-07
G-20-1	3.5	U	12/09/19	0.0294	<0.0086	0.103	0.303	**0.298**	0.45	0.237	0.133	**0.35**	0.043	0.82	0.035	0.21	<0.0086	<0.0147	<0.0153	0.49	0.64	**1**	0.0176	3.8E-06
G-21-1	3.5	U	12/09/19	<0.0163	0.0198	0.058	0.231	**0.267**	0.38	0.211	0.127	**0.267**	0.039	0.52	0.0132	0.185	<0.0086	<0.0147	<0.0153	0.221	0.44	**1**	0.0156	3.4E-06
Groundwater RCL				---	---	**197**	---	**0.47**	**0.4781**	---	---	**0.1442**	---	**88.8**	**14.8**	---	---	---	**0.6582**	---	**54.5**			
Non-Industrial Direct Contact RCL				**3590**	---	**17900**	**1.14**	**0.115**	**1.15**	---	**11.5**	**115**	**0.115**	**2390**	**2390**	**1.15**	**17.6**	**239**	**5.52**	---	**1790**		**1.00E+00**	**1.00E-05**
Industrial Direct Contact RCL				**(45200)**	---	**(100000)**	**(20.8)**	**(2.11)**	**(21.1)**	---	**(211)**	**(2110)**	**(2.11)**	**(30100)**	**(30100)**	**(21.1)**	**(72.7)**	**(3010)**	**(24.1)**	---	**(22600)**			
Soil Saturation Concentration (C-sat)*				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			

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Bold &Asteric * = C-sat Exceedance
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PAH = Polynuclear Aromatic Hydrocarbons
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VOC's = Volatile Organic Compounds
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ND = No Detects

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A.2 Soil Analytical Results Table
(PAH)
Herriges Oil BP S BRRTS #02-67-111819

Sample	Depth (feet)	Saturation U/S	Date	Acenaph-thene (ppm)	Acenaph-thylene (ppm)	Anthracene (ppm)	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) fluoranthene (ppm)	Benzo(g,h,I) perylene (ppm)	Benzo(k) fluoranthene (ppm)	Chrysene (ppm)	Dibenzo(a,h) anthracene (ppm)	Fluoranthene (ppm)	Fluorene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)	1-Methyl-naphthalene (ppm)	2-Methyl-naphthalene (ppm)	Naph-thalene (ppm)	Phenan-threne (ppm)	Pyrene (ppm)	DIRECT CONTACT (PVOC & PAH) Exeedance Count	Hazard Index	Cumulative Cancer Risk
G-22-1	1.5	U	03/08/21	0.064	0.034	0.306	0.76	**0.66**	**0.88**	0.294	0.283	**0.74**	0.067	1.87	0.069	0.37	<0.0101	<0.0138	<0.0096	0.99	1.47	**1**	0.0389	8.1E-06
G-23-1	1.5	U	03/08/21	8.90	2.45	36.0	**(50.0)**	**(47.0)**	**(53.0)**	26.3	**19.6**	**45.0**	**(5.50)**	**114**	13.9	**(29.5)**	2.22	1.39	**2.62**	88.0	**94.0**	**6**	2.772	5.7E-04
G-24-1	1.5	U	03/08/21	0.44	0.263	0.269	0.059	0.064	0.085	0.046	0.0258	0.066	<0.0142	0.128	0.64	0.051	4.70	1.09	**0.68**	0.99	0.199	0	0.0458	1.3E-06
G-25-1	1.5	U	03/08/21	<0.0132	0.044	0.037	0.0289	0.062	0.074	0.065	0.0179	0.0314	<0.0142	0.033	0.0135	0.057	0.126	0.192	0.097	0.079	0.07	0	0.0074	8.7E-07
G-26-1	3.0	U	03/08/21	<0.0132	0.0165	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	<0.0091	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	0.008	<0.0091	0	0.0009	2.8E-07
G-27-1	3.0	U	03/08/21	<0.0132	0.0124	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	<0.0091	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	<0.0077	<0.0091	0	0.0009	2.8E-07
G-28-1	3.0	U	03/08/21	<0.0132	0.0116	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	0.0115	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	0.0103	0.0111	0	0.0009	2.8E-07
G-29-1	1.5	U	03/08/21	0.0145	0.052	0.155	0.80	**0.87**	**1.14**	0.41	0.38	**0.81**	0.097	1.39	0.0198	0.51	0.0221	0.0198	0.0155	0.28	1.19	**1**	0.0503	1.1E-05
G-30-1	1.5	U	03/08/21	<0.0132	<0.0092	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	<0.0091	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	<0.0077	<0.0091	0		
G-31-1	3.0	U	03/08/21	<0.0132	0.0237	0.0148	0.051	0.059	0.087	0.036	0.0266	0.051	<0.0142	0.075	<0.0094	0.043	<0.0101	<0.0138	<0.0096	0.0249	0.07	0	0.0035	8.0E-07
G-32-1	3.0	U	03/08/21	<0.0132	<0.0092	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	0.0095	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	<0.0077	0.0109	0	0.0009	2.8E-07
G-33-1	3.0	U	03/08/21	<0.0132	<0.0092	<0.0073	<0.0158	<0.0142	<0.0099	<0.0118	<0.0091	<0.0124	<0.0142	0.0159	<0.0094	<0.0126	<0.0101	<0.0138	<0.0096	0.011	0.0129	0	0.0009	2.8E-07
Groundwater RCL				---	---	**197**	---	**0.47**	**0.4781**	---	---	**0.1442**	---	**88.8**	**14.8**	---	---	---	**0.6582**	---	**54.5**			
Non-Industrial Direct Contact RCL				**3590**	---	**17900**	**1.14**	**0.115**	**1.15**	---	**11.5**	**115**	**0.115**	**2390**	**2390**	**1.15**	**17.6**	**239**	**5.52**	---	**1790**		**1.00E+00**	**1.00E-05**
Industrial Direct Contact RCL				**(45200)**	---	**(100000)**	**(20.8)**	**(2.11)**	**(21.1)**	---	**(211)**	**(2110)**	**(2.11)**	**(30100)**	**(30100)**	**(21.1)**	**(72.7)**	**(3010)**	**(24.1)**	---	**(22600)**			
Soil Saturation Concentration (C-sat)*				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			

Bold = Groundwater RCL Exceedance
Bold & Underline = Non Industrial Direct Contact RCL Exceedance
(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold &Asteric * = C-sat Exceedance
NS = Not Sampled
NM = Not Measured
(ppm) = parts per million
ND = No Detects
PAH = Polynuclear Aromatic Hydrocarbons
PID = Photoionization Detector
VOC's = Volatile Organic Compounds

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

A.3 Residual Soil Analytical Results Table
Herriges Oil BP S BRRTS #02-67-111819

																DIRECT CONTACT		
Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppb)	Exeedance Count	Hazard Index	Cumulative Cancer Risk
B-1	8-12	S	06/01/12	47.0	NS	NS	NS	<0.2	<0.2	<0.2	**3.87**	0.271J	**1.4**	**1**	1.281J	NS			
B-4	8-12	S	06/01/12	683.0	NS	NS	NS	<2	**12.6**	<2	**50.7**	**4.03**	**358***	**169**	**225**	NS			
G-1-1	3.5	U	03/25/19	0.10	**210.0**	NS	NS	**0.075**	<0.025	<0.025	0.124	0.084	0.056	0.044	0.143	NS	**5**	0.7357	4.2E-05
G-2-1	3.5	U	03/25/19	0.30	**49.2**	NS	NS	<0.025	<0.025	<0.025	0.082	<0.025	<0.025	0.0284	0.0294-0.0794	NS	0	0.0017	2.6E-07
G-3-1	3.5	U	03/25/19	275.20	12.8	NS	NS	<1.25	<1.25	<1.25	**(58)**	**1.4**	**10.7**	**6.1**	**6.65**	NS	**7**	0.6271	3.9E-05
G-3-2	5.0	S	03/25/19	1157.00	NS	2350	4400	**0.51**	0.33	<0.05	**2.78**	<0.032	0.035	<0.032	<0.116	SEE VOC SHEET TCLP LEAD <0.1 TCLP BENZENE <0.05			
G-4-2	5.0	U	03/25/19	22.20	NS	NS	NS	<1.25	<1.25	<1.25	**45**	<1.25	**5.1**	**4.0**	**4.73**	NS			
G-5-1	3.0	U	03/25/19	844.00	**316.0**	NS	NS	**2.17**	**3.2**	<0.25	**(26.8)**	**6.1**	**8.9**	**9.6**	**13.8**	NS	**8**	1.3849	7.7E-05
G-5-2	6.0	S	03/25/19	898.00	NS	NS	NS	**0.32**	0.92	<0.025	**4.5**	**1.5**	**0.80**	**2.07**	**4.05**	NS			
G-6-1	3.5	U	03/25/19	4.10	11.9	NS	NS	**0.082**	0.149	<0.025	0.51	0.28	**0.39**	**1.0**	0.761	NS	**1**	0.0549	9.5E-06
G-6-2	6.0	S	03/25/19	50.40	NS	NS	NS	<0.025	0.111	<0.025	**1.71**	<0.025	0.262	0.126	0.385	NS			
G-7-1	3.5	U	03/25/19	13.70	6.3	NS	NS	**0.075**	<0.025	<0.025	0.141	0.061	<0.025	0.0295	<0.075	NS	0	0.0026	3.3E-07
G-10-1	3.5	U	03/25/19	1.80	**86.1**	NS	NS	<0.025	<0.025	<0.025	0.128	0.072	0.041	0.045	0.049-0.099	NS	**1**	0.2407	4.9E-06
G-10-2	5.0	U	03/25/19	1.90	NS	NS	NS	**0.030**	0.035	**0.044**	0.114	0.143	0.067	0.066	0.181	NS			
G-11-1	3.5	U	03/25/19	2.20	**47.0**	NS	NS	<0.25	<0.25	<0.25	**11.9**	<0.25	<0.25	<0.25	<0.75	NS	**7**	3.5089	6.9E-04
G-11-2	5.0	U	03/25/19	53.80	NS	NS	NS	<1.25	<1.25	<1.25	**58**	<1.25	**2.37**	**1.87**	<3.75	NS			
G-12-1	3.5	U	03/25/19	27.50	**274.0**	NS	NS	<0.25	0.42	<0.25	**12.3**	0.308	**4.2**	**3.8**	2.48	NS	**2**	0.7894	3.9E-06
G-12-2	5.0	U	03/25/19	21.90	NS	NS	NS	<1.25	<1.25	<1.25	**60**	<1.25	**5.1**	**5.5**	1.56-4.06	NS			
G-13-2	5.0	S	03/26/19	74.20	NS	NS	NS	**0.34**	0.289	<0.25	**4.6**	0.62	**1.05**	**0.90**	1.68	NS			
G-14-1	3.5	U	03/26/19	1.00	**351.0**	NS	NS	<0.025	0.0311	<0.025	0.284	0.080	0.112	0.055	0.224	NS	**2**	0.9333	1.1E-05
G-15-1	3.5	U	03/26/19	91.10	**146.0**	NS	NS	<0.025	<0.025	<0.025	0.40	<0.025	0.048	0.035	0.091	NS	0	0.3701	3.3E-07
G-15-2	5.0	S	03/26/19	342.90	NS	NS	NS	**0.29**	<0.25	<0.25	**9.2**	0.37	**1.19**	**1.28**	1.17	NS			
MW-2-1	3.5	U	03/26/19	1.90	**261.0**	NS	NS	**0.0268**	<0.025	<0.025	0.262	0.034	0.077	0.042	0.054-0.071	NS	**5**	1.2972	1.3E-04
MW-4-1	0-4	U	03/26/19	2.80	**51.0**	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0261-0.0761	NS	**3**	0.0877	1.8E-05
G-24-1	1.5	U	03/08/21	65.0	NS	NS	NS	**0.061**	0.159	<0.025	**0.68**	0.111	**8.1**	**2.93**	0.92	NS	0	0.0458	1.3E-06
G-25-1	1.5	U	03/08/21	7.80	NS	NS	NS	**0.046**	0.069	<0.025	0.097	0.244	0.279	0.136	0.682	NS	0	0.0074	8.7E-07
Groundwater RCL					**27**	-	-	**0.0051**	**1.57**	**0.027**	**0.6582**	**1.1072**	**1.3787**		**3.96**	-			
Non-Industrial Direct Contact RCL					**400**	-	-	**1.6**	**8.02**	**63.8**	**5.52**	**818**	**219**	**182**	**260**	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					**(800)**	-	-	**(7.07)**	**(35.4)**	**(282)**	**(24.1)**	**(818)**	**(219)**	**(182)**	**(260)**	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	**1820***	**480***	**8870***	-	**818***	**219***	**182***	**260***	-			

Bold = Groundwater RCL Exceedance
Bold & Underline = Non Industrial Direct Contact RCL Exceedance
(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold & Asteric * = C-sat Exceedance
NS = Not Sampled
NM = Not Measured
(ppm) = parts per million
ND = No Detects
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
PID = Photoionization Detector
PVOC's = Petroleum Volatile Organic Compounds
VOC's = Volatile Organic Compounds
Note: Non-Industrial RCLs apply to this site.

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

A.3 Residual Soil Analytical Results Table
(PAH)
Herriges Oil BP S BRRTS #02-67-111819

																					DIRECT CONTACT (PVOC & PAH)		
Sample	Depth (feet)	Saturation U/S	Date	Acenaph-thene (ppm)	Acenaph-thylene (ppm)	Anthracene (ppm)	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) fluoranthene (ppm)	Benzo(g,h,I) perylene (ppm)	Benzo(k) fluoranthene (ppm)	Chrysene (ppm)	Dibenzo(a,h) anthracene (ppm)	Fluoranthene (ppm)	Fluorene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)	1-Methyl-naphthalene (ppm)	2-Methyl-naphthalene (ppm)	Naph-thalene (ppm)	Phenan-threne (ppm)	Pyrene (ppm)	Exeedance Count	Hazard Index	Cumulative Cancer Risk
G-1-1	3.5	U	03/25/19	0.16	0.54	0.91	**2.46**	**(3.60)**	**5.00**	3.50	1.59	**3.70**	**0.239**	6.00	0.301	**2.61**	0.166	0.198	0.172	2.60	5.40	**5**	0.7357	4.2E-05
G-3-1	3.5	U	03/25/19	0.44	0.65	0.73	**1.71**	**(2.22)**	**3.30**	2.37	1.03	**2.43**	**0.13**	3.60	1.28	**1.57**	**19.6**	24	**12.6**	2.56	3.50	**7**	0.6271	3.9E-05
G-5-1	3.0	U	03/25/19	1.87	1.94	1.69	**2.83**	**(5.00)**	**7.40**	6.40	1.98	**4.00**	**1.33**	6.70	3.06	**4.60**	**33.0**	13.2	**8.20**	4.30	7.40	**8**	1.3849	7.7E-05
G-6-1	3.5	U	03/25/19	0.0203	0.06	0.262	0.68	**0.79**	**1.10**	0.66	0.35	**0.84**	0.042	1.62	0.044	0.53	0.071	0.097	0.079	0.73	1.32	**1**	0.0549	9.5E-06
G-10-1	3.5	U	03/25/19	0.037	0.07	0.122	0.39	**0.41**	**0.61**	0.306	0.192	**0.45**	0.0255	0.70	0.038	0.235	0.094	0.109	0.076	0.53	0.67	**1**	0.2407	4.9E-06
G-11-1	3.5	U	03/25/19	14.1	2.35	59.0	**(66.0)**	**(58.0)**	**(78.0)**	29.5	**27.0**	**65.0**	**(2.89)**	**166**	**26.0**	**(28.1)**	6.00	4.10	**4.60**	158	**130**	**7**	3.5089	6.9E-04
G-12-1	3.5	U	03/25/19	<0.0163	0.068	0.056	0.101	**0.116**	0.169	0.129	0.056	0.102	<0.0101	0.165	0.032	0.091	0.071	0.136	0.0192	0.135	0.141	**2**	0.7894	3.9E-06
G-14-1	3.5	U	03/26/19	<0.0163	0.32	0.202	0.61	**0.92**	**1.38**	0.86	0.42	**0.79**	0.052	0.95	0.045	0.61	0.113	0.142	0.078	0.40	0.91	**2**	0.9333	1.1E-05
MW-2-1	3.5	U	03/26/19	0.97	0.273	6.70	**11.9**	**(11.0)**	**15.5**	5.90	5.10	**11.8**	**0.59**	25.7	2.12	**5.60**	0.172	0.173	0.097	15.8	20.6	**5**	1.2972	1.3E-07
MW-4-1	0-4	U	03/26/19	0.34	0.039	0.94	**1.52**	**1.47**	**2.42**	0.90	0.65	**1.85**	0.061	4.70	0.45	0.85	0.045	0.053	0.042	4.40	3.50	**3**	0.0877	1.8E-05
G-16-1	3.5	U	12/09/19	<0.0163	0.21	0.094	0.36	**0.62**	**0.74**	0.64	0.262	**0.42**	0.109	0.51	0.0151	0.48	0.0098	<0.0147	0.022	0.185	0.50	**1**	0.0355	7.7E-06
G-17-1	3.5	U	12/09/19	<0.0163	0.067	0.0311	0.088	**0.125**	0.183	0.139	0.058	0.116	0.0239	0.128	0.0095	0.107	0.0086	<0.0147	<0.0153	0.063	0.122	**1**	0.0073	1.6E-06
G-18-1	3.5	U	12/09/19	<0.0163	0.0104	0.042	0.109	**0.116**	0.159	0.084	0.056	0.123	0.0134	0.293	0.0187	0.077	<0.0086	<0.0147	<0.0153	0.227	0.243	**1**	0.0069	1.4E-06
G-20-1	3.5	U	12/09/19	0.0294	<0.0086	0.103	0.303	**0.298**	0.45	0.237	0.133	**0.35**	0.043	0.82	0.035	0.21	<0.0086	<0.0147	<0.0153	0.49	0.64	**1**	0.0176	3.8E-06
G-21-1	3.5	U	12/09/19	<0.0163	0.0198	0.058	0.231	**0.267**	0.38	0.211	0.127	**0.267**	0.039	0.52	0.0132	0.185	<0.0086	<0.0147	<0.0153	0.221	0.44	**1**	0.0156	3.4E-06
G-22-1	1.5	U	03/08/21	0.064	0.034	0.306	0.76	**0.66**	**0.88**	0.294	0.283	**0.74**	0.067	1.87	0.069	0.37	<0.0101	<0.0138	<0.0096	0.99	1.47	**1**	0.0389	8.1E-06
G-23-1	1.5	U	03/08/21	8.90	2.45	36.0	**(50.0)**	**(47.0)**	**(53.0)**	26.3	**19.6**	**45.0**	**(5.50)**	**114**	13.9	**(29.5)**	2.22	1.39	**2.62**	88.0	**94.0**	**6**	2.772	5.7E-04
G-29-1	1.5	U	03/08/21	0.0145	0.052	0.155	0.80	**0.87**	**1.14**	0.41	0.38	**0.81**	0.097	1.39	0.0198	0.51	0.0221	0.0198	0.0155	0.28	1.19	**1**	0.0503	1.1E-05
Groundwater RCL				---	---	**197**	---	**0.47**	**0.4781**	---	---	**0.1442**	---	**88.8**	**14.8**	---	---	---	**0.6582**	---	**54.5**			
Non-Industrial Direct Contact RCL				**3590**	---	**17900**	**1.14**	**0.115**	**1.15**	---	**11.5**	**115**	**0.115**	**2390**	**2390**	**1.15**	**17.6**	**239**	**5.52**	---	**1790**		**1.00E+00**	**1.00E-05**
Industrial Direct Contact RCL				**(45200)**	---	**(100000)**	**(20.8)**	**(2.11)**	**(21.1)**	---	**(211)**	**(2110)**	**(2.11)**	**(30100)**	**(30100)**	**(21.1)**	**(72.7)**	**(3010)**	**(24.1)**	---	**(22600)**			
Soil Saturation Concentration (C-sat)*				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			

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(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold &Asteric * = C-sat Exceedance
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S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)
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NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :
02-67-11819 Herriges Oil BP South G-22-1 1.5'

# of Soil-Concentration Entries: 18

Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
1	0.0389	8.1E-06

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.66	E	0.0371	5.7E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.064		0.	
Acenaphthylene	208-96-8	-	-				0.034			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.306		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.76			8.7E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.88			7.7E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.294			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.283			2.5E-08
Chrysene	218-01-9	-	115.	115.	ca		0.74			6.4E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.067			5.8E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		1.87		0.0008	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.069		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.37			3.2E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.99			
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.47		0.0008	

NR 720 Direct-Contact *Exceedance* - *Hazard* - *Risk* Calculation Summary from Soil Data

BRRTS #:
02-67-11619 Herriges Oil BP South G-23-1 1.5'

# of Soil-Concentration Entries: 18

Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
6	2.772	5.7E-04

Bottom-Line: **NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		2.62		0.0147	4.7E-07
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		47.	E	2.6404	4.1E-04
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		8.9		0.0025	
Acenaphthylene	208-96-8	-	-				2.45			
Anthracene	120-12-7	17,900.	-	17,900.	nc		36.		0.002	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		50.	E		4.4E-05
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		53.	E		4.6E-05
Benzo[g,h,i]perylene	191-24-2	-	-				26.3			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		19.6	E		1.7E-06
Chrysene	218-01-9	-	115.	115.	ca		45.			3.9E-07
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		5.5	E		4.8E-05
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		114.		0.0477	
Fluorene	86-73-7	2,390.	-	2,390.	nc		13.9		0.0058	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		29.5	E		2.6E-05
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		2.22		0.0005	1.3E-07
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		1.39		0.0058	
Phenanthrene	85-01-8	-	-				88.			
Pyrene	129-00-0	1,790.	-	1,790.	nc		94.		0.0525	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :
02-67-11819 Herriges Oil BP South G-24-1 1.5'

# of Soil-Concentration Entries: 25

Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
0	0.0458	1.3E-06

Bottom-Line: Yes, levels are below direct-contact concern.

Date of Entry: 3/29/2021. List below only has contaminants with data.
Date of Workaheet Used: 11/20/2018.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	108.	1.6	1.6	ca		0.061		0.0006	3.8E-08
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca		0.159		0.	2.0E-08
Toluene	108-88-3	5,240.	-	818.	Csat		0.111		0.	
Xylenes	1330-20-7	818.	-	260.	Csat		0.92		0.0011	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca		0.025		0.	3.9E-10
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat		8.1		0.0217	
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat		2.93		0.0086	
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.68		0.0038	1.2E-07
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.064		0.0036	5.6E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.44		0.0001	
Acenaphthylene	208-96-8	-	-				0.263			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.269		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.059			5.2E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.085			7.4E-08
Benzo[g,h,i]perylene	191-24-2	-	-				0.046			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0258			2.2E-09
Chrysene	218-01-9	-	115.	115.	ca		0.066			5.7E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.128		0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.64		0.0003	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.051			4.4E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		4.7		0.0011	2.7E-07
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		1.09		0.0046	
Phenanthrene	85-01-8	-	-				0.99			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.199		0.0001	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS #:	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-25-1 1.5'	25	0	0.0074	8.7E-07
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 3/29/2021. List below only has contaminants with data.
Date of Worksheet Used: 11/20/2018.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca		0.046		0.0004	2.9E-08
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca		0.069		0.	8.6E-09
Toluene	108-88-3	5,240.	-	818.	Csat		0.244		0.	
Xylenes	1330-20-7	818.	-	260.	Csat		0.682		0.0008	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca		0.025		0.	3.9E-10
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat		0.279		0.0007	
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat		0.136		0.0004	
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.097		0.0005	1.8E-08
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.062		0.0035	5.4E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.044			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.037		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0289			2.5E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.074			6.4E-08
Benzo[g,h,i]perylene	191-24-2	-	-				0.065			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0179			1.6E-09
Chrysene	218-01-9	-	115.	115.	ca		0.0314			2.7E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.033		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0135		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.057			5.0E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.126		0.	7.2E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.192		0.0008	
Phenanthrene	85-01-8	-	-				0.079			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.07		0.	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-26-1 3'	18	0	0.0009	2.8E-07

Bottom-Line: Yes, levels are below direct-contact concern.

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0142		0.0006	1.2E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0165			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0073		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0158			1.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0099			8.6E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0118			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0091			7.9E-10
Chrysene	218-01-9	-	115.	115.	ca		0.0124			1.1E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0091		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0126			1.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.008			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0091		0.	

NR 720 Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # :
02-67-11819 Herriges Oil BP South G-27-1 3'

# of Soil-Concentration Entries: 18

Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
0	0.0009	2.8E-07

Bottom-Line: Yes, levels are below direct-contact concern.

Date of Entry: 3/29/2021
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0142		0.0008	1.2E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0124			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0073		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0158			1.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0099			8.6E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0118			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0091			7.9E-10
Chrysene	218-01-9	-	115.	115.	ca		0.0124			1.1E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0091		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0126			1.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.0077			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0091		0.	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-28-1 3'	18	0	0.0009	2.8E-07
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0142		0.0006	1.2E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0116			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0073		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0158			1.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0099			8.6E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0118			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0091			7.9E-10
Chrysene	218-01-9	-	115.	115.	ca		0.0124			1.1E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0115		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0126			1.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.0103			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0111		0.	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-29-1 1.5	18	1	0.0503	1.1E-05

Bottom-Line: **NOI This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.**

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0155		0.0001	2.8E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.87	E	0.0489	7.6E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0145		0.	
Acenaphthylene	208-96-8	-	-				0.052			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.155		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.8			7.0E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.14			9.9E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.41			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.38			3.3E-08
Chrysene	218-01-9	-	115.	115.	ca		0.81			7.0E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.097			8.4E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		1.39		0.0006	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0198		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.51			4.4E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0221		0.	1.3E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0198		0.0001	
Phenanthrene	85-01-8	-	-				0.28			
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.19		0.0007	

NR 720 Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-31-1 3'	18	0	0.0035	8.0E-07
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 3/29/2021. List below only has contaminants with data.
Date of Worksheet Used: 11/20/2018.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.059		0.0033	5.1E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0237			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0148		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.051			4.5E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.087			7.6E-08
Benzo[g,h,i]perylene	191-24-2	-	-				0.036			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0266			2.3E-09
Chrysene	218-01-9	-	115.	115.	ca		0.051			4.4E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.075		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.043			3.7E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.0249			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.07		0.	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-32-1 3'	18	0	0.0009	2.8E-07
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 3/29/2021.
Date of Worksheet Used: 11/20/2018.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0142		0.0006	1.2E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0092			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0073		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0158			1.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0099			8.6E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0118			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0091			7.9E-10
Chrysene	218-01-9	-	115.	115.	ca		0.0124			1.1E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0095		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0126			1.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.0077			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0109		0.	

NR 720 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
02-67-11819 Herriges Oil BP South G-33-1 3'	18	0	0.0009	2.8E-07
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 3/29/2021. List below only has contaminants with data.
Date of Worksheet Used: 11/20/2018.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0096		0.0001	1.7E-09
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0142		0.0006	1.2E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0132		0.	
Acenaphthylene	208-96-8	-	-				0.0092			
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0073		0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0158			1.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0099			8.6E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0118			
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0091			7.9E-10
Chrysene	218-01-9	-	115.	115.	ca		0.0124			1.1E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0142			1.2E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0159		0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0094		0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0126			1.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0101		0.	5.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0138		0.0001	
Phenanthrene	85-01-8	-	-				0.011			
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0129		0.	

Synergy Environmental Lab,

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

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709 GILLETTE ST
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Report Date *18-Mar-21*

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147A
Sample ID G-22-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result		Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General											
General											
Solids Percent	86.5		%			1	5021		3/10/2021	NJC	I
Organic											
PAH SIM											
Acenaphthene	0.064		mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	I
Acenaphthylene	0.034 "J"		mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	I
Anthracene	0.306		mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	I
Benzo(a)anthracene	0.76		mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	I
Benzo(a)pyrene	0.66		mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	I
Benzo(b)fluoranthene	0.88		mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	I
Benzo(g,h,i)perylene	0.294		mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	I
Benzo(k)fluoranthene	0.283		mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	I
Chrysene	0.74		mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	I
Dibenzo(a,h)anthracene	0.067		mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	I
Fluoranthene	1.87		mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	I
Fluorene	0.069		mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	I
Indeno(1,2,3-cd)pyrene	0.37		mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	I
1-Methyl naphthalene		< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	I
2-Methyl naphthalene		< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	I
Naphthalene		< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	I
Phenanthrene	0.99		mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	I
Pyrene	1.47		mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	I

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147B
Sample ID G-23-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.3	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	8.90	mg/kg	0.66	2.55	50	M8270C	3/16/2021	3/17/2021	NJC	1
Acenaphthylene	2.45	mg/kg	0.46	1.75	50	M8270C	3/16/2021	3/17/2021	NJC	1
Anthracene	36.0	mg/kg	0.365	1.4	50	M8270C	3/16/2021	3/17/2021	NJC	1
Benzo(a)anthracene	50.0	mg/kg	0.79	3.05	50	M8270C	3/16/2021	3/17/2021	NJC	1
Benzo(a)pyrene	47.0	mg/kg	0.71	2.75	50	M8270C	3/16/2021	3/17/2021	NJC	1
Benzo(b)fluoranthene	53.0	mg/kg	0.495	1.9	50	M8270C	3/16/2021	3/17/2021	NJC	1
Benzo(g,h,i)perylene	26.3	mg/kg	0.59	2.25	50	M8270C	3/16/2021	3/17/2021	NJC	1
Benzo(k)fluoranthene	19.6	mg/kg	0.455	1.75	50	M8270C	3/16/2021	3/17/2021	NJC	1
Chrysene	45.0	mg/kg	0.62	2.4	50	M8270C	3/16/2021	3/17/2021	NJC	1
Dibenzo(a,h)anthracene	5.50	mg/kg	0.71	2.75	50	M8270C	3/16/2021	3/17/2021	NJC	1
Fluoranthene	114	mg/kg	0.455	1.75	50	M8270C	3/16/2021	3/17/2021	NJC	1
Fluorene	13.9	mg/kg	0.47	1.8	50	M8270C	3/16/2021	3/17/2021	NJC	1
Indeno(1,2,3-cd)pyrene	29.5	mg/kg	0.63	2.4	50	M8270C	3/16/2021	3/17/2021	NJC	1
1-Methyl naphthalene	2.22	mg/kg	0.505	1.95	50	M8270C	3/16/2021	3/17/2021	NJC	1
2-Methyl naphthalene	1.39 "J"	mg/kg	0.69	2.65	50	M8270C	3/16/2021	3/17/2021	NJC	1
Naphthalene	2.62	mg/kg	0.48	1.85	50	M8270C	3/16/2021	3/17/2021	NJC	1
Phenanthrene	88.0	mg/kg	0.385	1.5	50	M8270C	3/16/2021	3/17/2021	NJC	1
Pyrene	94.0	mg/kg	0.455	1.75	50	M8270C	3/16/2021	3/17/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147C
Sample ID G-24-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	92.4	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.44	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.263	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	0.269	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	0.059 "J"	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	0.064	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	0.085	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	0.046	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	0.0258 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	0.066	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.128	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	0.64	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	0.051	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	4.70	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	1.09	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	0.68	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.99	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.199	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
PVOC										
Benzene	0.061 "J"	mg/kg	0.016	0.062	1	GRO95/8021		3/17/2021	CJR	1
Ethylbenzene	0.159	mg/kg	0.015	0.059	1	GRO95/8021		3/17/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		3/17/2021	CJR	1
Toluene	0.111	mg/kg	0.016	0.061	1	GRO95/8021		3/17/2021	CJR	1
1,2,4-Trimethylbenzene	8.1	mg/kg	0.013	0.052	1	GRO95/8021		3/17/2021	CJR	1
1,3,5-Trimethylbenzene	2.93	mg/kg	0.017	0.066	1	GRO95/8021		3/17/2021	CJR	1
m&p-Xylene	0.44	mg/kg	0.039	0.15	1	GRO95/8021		3/17/2021	CJR	1
o-Xylene	0.48	mg/kg	0.014	0.055	1	GRO95/8021		3/17/2021	CJR	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147D
Sample ID G-25-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	90.3	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.044	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	0.037	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	0.0289 "J"	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	0.062	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	0.074	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	0.065	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	0.0179 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	0.0314 "J"	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.033 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	0.0135 "J"	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	0.057	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	0.126	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	0.192	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	0.097	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.079	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.07	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
PVOC										
Benzene	0.046 "J"	mg/kg	0.016	0.062	1	GRO95/8021		3/17/2021	CJR	1
Ethylbenzene	0.069	mg/kg	0.015	0.059	1	GRO95/8021		3/17/2021	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.018	0.071	1	GRO95/8021		3/17/2021	CJR	1
Toluene	0.244	mg/kg	0.016	0.061	1	GRO95/8021		3/17/2021	CJR	1
1,2,4-Trimethylbenzene	0.279	mg/kg	0.013	0.052	1	GRO95/8021		3/17/2021	CJR	1
1,3,5-Trimethylbenzene	0.136	mg/kg	0.017	0.066	1	GRO95/8021		3/17/2021	CJR	1
m&p-Xylene	0.49	mg/kg	0.039	0.15	1	GRO95/8021		3/17/2021	CJR	1
o-Xylene	0.192	mg/kg	0.014	0.055	1	GRO95/8021		3/17/2021	CJR	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147E
Sample ID G-26-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.0	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.0165 "J"	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.008 "J"	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147F
Sample ID G-27-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.3	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.0124 "J"	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	< 0.0077	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147G
Sample ID G-28-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.1	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.0116 "J"	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.0115 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.0103 "J"	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.0111 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147H
Sample ID G-29-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.5	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	0.0145 "J"	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.052	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	0.155	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	0.80	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	0.87	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	1.14	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	0.41	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	0.38	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	0.81	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	0.097	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	1.39	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	0.0198 "J"	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	0.51	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	0.0221 "J"	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	0.0198 "J"	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	0.0155 "J"	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.28	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	1.19	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147I
Sample ID G-30-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.8	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	< 0.0092	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	< 0.0077	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147J
Sample ID G-31-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	72.6	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	0.0237 "J"	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	0.0148 "J"	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	0.051 "J"	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	0.059	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	0.087	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	0.036 "J"	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	0.0266 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	0.051	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.075	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	0.043 "J"	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.0249 "J"	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.07	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147K
Sample ID G-32-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.3	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	< 0.0092	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.0095 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	< 0.0077	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.0109 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

Project Name HERRIGES OIL BULK PLANT **Invoice #** E39147
Project #

Lab Code 5039147L
Sample ID G-33-1
Sample Matrix Soil
Sample Date 3/8/2021

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.0	%			1	5021		3/10/2021	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0132	mg/kg	0.0132	0.051	1	M8270C	3/16/2021	3/16/2021	NJC	1
Acenaphthylene	< 0.0092	mg/kg	0.0092	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Anthracene	< 0.0073	mg/kg	0.0073	0.028	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)anthracene	< 0.0158	mg/kg	0.0158	0.061	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(a)pyrene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(b)fluoranthene	< 0.0099	mg/kg	0.0099	0.038	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(g,h,i)perylene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	3/16/2021	3/16/2021	NJC	1
Benzo(k)fluoranthene	< 0.0091	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Chrysene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.055	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluoranthene	0.0159 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1
Fluorene	< 0.0094	mg/kg	0.0094	0.036	1	M8270C	3/16/2021	3/16/2021	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0126	mg/kg	0.0126	0.048	1	M8270C	3/16/2021	3/16/2021	NJC	1
1-Methyl naphthalene	< 0.0101	mg/kg	0.0101	0.039	1	M8270C	3/16/2021	3/16/2021	NJC	1
2-Methyl naphthalene	< 0.0138	mg/kg	0.0138	0.053	1	M8270C	3/16/2021	3/16/2021	NJC	1
Naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	3/16/2021	3/16/2021	NJC	1
Phenanthrene	0.011 "J"	mg/kg	0.0077	0.03	1	M8270C	3/16/2021	3/16/2021	NJC	1
Pyrene	0.0129 "J"	mg/kg	0.0091	0.035	1	M8270C	3/16/2021	3/16/2021	NJC	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature Michael Ricker

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

www.synergy-lab.net
1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • mrsynergy@wi.twcbc.com

Chain # No 40457

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Sample Handling Request

___ Rush Analysis Date Required: ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #	
QUOTE # :	
Project #:	
Sampler: (signature)	C. T. Powell
Project (Name / Location):	Herriges 0.1 Bulk Plant South - Kewaskum

Reports To:	Invoice To:
Company METCO	Company METCO
Address	Address
City State Zip La Crosse WI	City State Zip La Crosse WI
Phone 608-781-8879	Phone
Email	Email

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/ FID
S037147A	G-22-1	3/8/21	9:30A		1	S	—						✓										
B	G-23-1		9:40A		1		—						✓										
C	G-24-1		9:45A		3		MeOH						✓		✓								
D	G-25-1		9:50A		3		MeOH						✓		✓								
E	G-26-1		10:10A		1		—						✓										
F	G-27-1		10:20A		1		—						✓										
G	G-28-1		10:30A		1		—						✓										
H	G-29-1		10:40A		1		—						✓										
I	G-30-1		10:50A		1		—						✓										
J	G-31-1		11:00A		1		—						✓										
K	G-32-1		11:10A		1		—						✓										
L	G-33-1		11:20A		1		—						✓										

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: GC

Temp. of Temp. Blank: ____ °C On Ice: X

Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
C. T. Powell	9:00 AM.	3/9/21			

Received in Laboratory By: [signature] Time: 8:00 Date: 3/10/21