From: Pawlina, Joanna (DEM)

To: Marie Knapp

Cc: Blauvelt, Ashley (DEM); Owens, Kelly (DEM)

Subject: FW: Roger"s High School

Date: Friday, April 14, 2023 4:09:00 PM

Attachments: <u>image003.png</u>

Stockpile Characterization Table rev.pdf Summary Data Tables and Site Plan.pdf

RHS Compliance Sampling Plan - Building Excavation.pdf

Hi Maria,

It was a pleasure speaking with you on the phone yesterday. I'm forwarding this email that I've received from Tim Thies where he addresses some of the concerns you had mentioned. The results from the sampling has been attached to this email where he briefly summarizes the finding and it looks like Tim will be there for the Monday meeting you had mentioned. The latest data does not look to be out of line with last year's pre-characterization data, which I have attached to this email as "Summary Data Tables and Site Plan".

Tim did not confirm if the same lab did both this years and last year's sampling. I do know for certain that last year's analysis was done at New England Testing Laboratory Inc. 59 Greenhill St, West Warwick, RI 02893. He did not address my question of what the future use of the dug up soil will be and I will make sure to follow up with him about it. I will also continue to look into a plan to better contain the dust and inform you of any updates that I receive.

I wanted to clarify some questions that I may not have sufficiently answered after discussing with my supervisor:

- 1. As we discussed, the Dig and Haul Policy states that excavations are to sampled at a frequency of 1 sample per 625 sqft of bottom area, 1 sample per 25 linear feet of wall length, and 1 sample per 5 feet of wall depth. However, the Dig and Haul Policy does not apply to this site since its area is greater than 1000 cubic yards. Therefore, due its size, we modified and approved the confirmatory sampling frequency to be 1 sample per 2500 sqft of bottom area, 1 sample per 100 linear feet of wall length, and 1 sample per 5 feet of wall depth. I've attached a pdf of the sampling plan to this email which shows all 94 sampling locations.
- 2. I remember you expressing concern regarding the site's history and what that could mean for the contamination. As you mentioned, the site operated as a Former Defense Site/Anti-Aircraft Battery and as a landfill in a different area of the site. Currently the excavation is being done in the area where the battery was and not where the landfill was. The landfill area will be addressed separately.

If you wish to reach Tim Thies directly, his contact information is below. I will relay your name and contact information to Tim Thies in the meantime. Please feel free to let me know if you have any other questions.

Thank you,

Joanna



Joanna Pawlina, Environmental Scientist
RI Department of Environmental Management
Office of Land Revitalization and Sustainable Materials Management
Site Remediation Program
235 Promenade Street
Providence, RI 02908
(401) 222-2797 ext. 2777177
Joanna.pawlina@dem.ri.gov

**From:** Tim Thies <TThies@parecorp.com> **Sent:** Friday, April 14, 2023 2:42 PM

**To:** Pawlina, Joanna (DEM) <Joanna.Pawlina@dem.ri.gov>

**Cc:** Blauvelt, Ashley (DEM) <ashley.blauvelt@dem.ri.gov>; Owens, Kelly (DEM)

<kelly.owens@dem.ri.gov>; skozuch@downesco.com; Cathie Ellithorpe

<CEllithorpe@slamcoll.com>; Joe Desanti <jdesanti@downesco.com>; Theodore Tolis

<ttolis@slamcoll.com>; David Potter < DPotter@parecorp.com>; Victoria Howland

<vhowland@parecorp.com>; Arianne Barton <ABarton@parecorp.com>

**Subject:** RE: Roger's High School

### This Message Is From an External Sender

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Joanna,

Thank you for alerting me to the recent call you received. Here are a few updates on the soil stockpile and dust mitigation.

- 1. We received the data from the stockpile characterization yesterday afternoon. We have tabulated it and have attached a copy to this email. Overall, the data looks generally pretty good. We took 19 samples across the pile and at varying depths. We had a handful or R-DEC exceedances for lead and PAHs, but the vast majority of samples were below R-DEC for lead and PAHs. We had one contaminant (benzo(a)pyrene) that was above I/C DEC, but that was in only one of the 19 samples. The average concentration of contaminants across the pile was well below any R-DEC threshold (except for arsenic).
- 2. Arsenic was present in most of the samples above 7 mg/kg, with an average concentration of about 8.6 mg/kg. I would like to discuss our arsenic data with RIDEM at some point in the near future. We have strong evidence to suggest that the arsenic in the stockpile is naturally occurring. The concentration in native samples we collected from beneath the former building average around 8 mg/kg, very close to the stockpile concentration. I would like to discuss this with you further.

- 3. A member of the project team examined the stockpile this afternoon (after receiving of your email). The stockpile appears to be very stable with very little evidence of dust migration from the pile. However, the seeds have not germinated yet, probably because it has been very dry these last few weeks. We expect some rain this weekend, which will hopefully get the seeds to germinate. We will keep an eye on the pile to see if it's condition changes. If we start to see bare spots or other signs the its no longer stable, we will have the contractor address it.
- 4. If dust is coming off the site, it's likely from other areas where the contractor is doing excavation or other earthwork. While the contractor has been watering the area to keep dust down, it sounds like they need to increase their efforts. We will discuss with the contractor about increasing their watering efforts.
- 5. The City has invited neighbors and concerned citizens to the Monday night School Building Committee meeting. I plan on attending that meeting and will be prepared to answer any questions relative to the characterization of the stockpile and the site remediation process for the project as a whole.

In the meantime, please don't hesitate to contact me if you have any questions.

-Tim

#### Timothy P. Thies, P.E.

Senior Vice President/Division Manager Environmental Division

#### **Pare Corporation**

8 Blackstone Valley Place Lincoln, RI 02865 (401) 334-4100 Ext.4137 www.parecorp.com [parecorp.com]



C ENGINEERS & SCIENTISTS & PLANNERS

From: Pawlina, Joanna (DEM) < Joanna. Pawlina@dem.ri.gov >

**Sent:** Friday, April 14, 2023 11:44 AM **To:** Tim Thies < <a href="mailto:Thies@parecorp.com">Thies@parecorp.com</a>>

**Cc:** Blauvelt, Ashley (DEM) <a href="mailto:ashlev.blauvelt@dem.ri.gov">ashlev.blauvelt@dem.ri.gov</a>; Owens, Kelly (DEM)

<<u>kelly.owens@dem.ri.gov</u>> **Subject:** Roger's High School

[EXTERNAL]

Hi Tim,

Yesterday I received a call from a neighbor regarding the excavation happening at Roger's High School in Newport. They called me on behalf of several concerned neighbors because they are still seeing dirt getting onto their property. I understand the soil stockpile was hydroseeded April 3<sup>rd</sup> but neighbors were looking for new growth and they haven't seen any. I'm not familiar with how long it would take to germinate, has the pile been tended to or reseeded since then? We had discussed a possible solution through the installation of a long-term watering system to keep the dirt from drying and blowing onto their property, especially as the summer approaches.

Have you received the results from the sampling that was done last week? The neighborhood is having a meeting on Monday and asked if they would be available by then. They would also like to know what the future intentions are for the dug up soil? Additionally, can you confirm if they were sent to the same lab as the samples that were analyzed last year (New England Testing Lab)?

Please let me know as soon as you can. Thank you,



Joanna Pawlina, Environmental Scientist
RI Department of Environmental Management
Office of Land Revitalization and Sustainable Materials Management
Site Remediation Program
235 Promenade Street
Providence, RI 02908
(401) 222-2797 ext. 2777177
Joanna.pawlina@dem.ri.gov

Attachment(s):

# **Stockpile Characterization Summary Table**

# Proposed School Building Excavation

## **Rogers High School**

Newport, RI

Sample ID:		DISP-1	01.0	DISP-	101B	DIED	-101C	DIED	P-101D	nien	-102A	DISP-	102D	DISP	1024	DISP-	402D	DISP-1	1044	DISP-1	040	DISP-1	ne A	DISP-10	nen.	DISP-1	1064	DISP-1	106B	DISP-	1060	DISP-1	IUED	DISP-1	07B	DIED	P-107C	DIE	P-201	RII	DEM Method 1 Stan	dards
Sample ID.	STOCKPILE AVERAGE	Disr-1	UIA	DISF-	1016	Disr	-1010	DISF	-1010	DISP	-102A	DISF-	-1020	DISF	-103A	DISF-	103D	DISF-	1044	DISF-1	040	DISF-I	USA	DISF-IC	JSD	DISF-I	IUUA	DISF-	1000	DISF-	1000	DISF-	1000	DISF-I	076	DISF	-1070	Dis	F-201	Direct Exp	osure Criteria	GA Groundwater
Date Sampled:		3/30/202	3 9:50	3/30/202	23 9:55	3/30/20	23 10:05	3/30/20	23 10:15	3/30/20	23 10:35	3/30/202	23 10:50	3/30/202	23 11:00	3/30/202	3 11:15	3/30/2023	3 11:25	3/30/2023	11:35	3/30/2023	11:50	3/30/2023	12:10	3/30/2023	3 12:20	3/30/202	3 12:30	3/30/202	3 12:45	3/30/2023	3 12:55	3/30/2023	3 13:05	3/30/20	023 13:20	3/30/20	023 13:35	Residential	Industrial / Commercial	Leachability Criteria
Parameter	Average Concentration	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	(R-DEC)	(I/C-DEC)	(GA-LC)
General Chemistry																															-											
Flashpoint (°F) Specific Conductance (µS/cm) pH (S.U.)	  	> 200 12.6 6.40	70.0 2.00	> 200 5.80 6.70	70.0 2.00	> 200 8.80 6.50	70.0				70.0	> 200 50.3 8.20	70.0	> 200 31.6 7.30	70.0	> 200 6.40 6.50	70.0 2.00	> 200 26.9 6.70	70.0 2.00	> 200 43.2 8.60	70.0 2.00	> 200 6.00 6.10	70.0 2.00		70.0 2.00		70.0 2.00	> 200 36.9 7.40	70.0 2.00	> 200 5.80 6.70	70.0 2.00		70.0 2.00	> 200 33.0 6.60	70.0 2.00	> 200 6.00 6.20	70.0	> 200 42.8 5.90		NE NE NE	NE NE NE	NE NE NE
Chlorophenoxy Herbicides via	a EPA 8151 (µg/kg	)																																								
Dalapon Dicamba Dichloroprop 2,4-D 2,4,5-TP (Silvex) 2,4,5-T 2,4-DB Dinoseb	55.8 27.9 27.9 27.9 27.9 27.9 27.9 55.8	ND	110 55.0 55.0 55.0 55.0 55.0 55.0 110	ND ND ND ND ND ND ND	111 55.0 55.0 55.0 55.0 55.0 55.0 111	ND ND ND ND ND ND ND	107 54.0 54.0 54.0 54.0 54.0 54.0 107	ND ND ND ND ND ND ND	114 57.0 57.0 57.0 57.0 57.0 57.0 114		112 56.0 56.0 56.0 56.0 56.0 56.0	ND ND ND ND ND ND ND	112 56.0 56.0 56.0 56.0 56.0 56.0 112	ND ND ND ND ND ND ND	109 54.0 54.0 54.0 54.0 54.0 54.0 109	ND ND ND ND ND ND ND	112 56.0 56.0 56.0 56.0 56.0 56.0 112	ND ND ND ND ND ND ND	113 57.0 57.0 57.0 57.0 57.0 57.0 113	ND N	110 55.0 55.0 55.0 55.0 55.0 55.0 110	ND	113 57.0 57.0 57.0 57.0 57.0 57.0 113	ND ND ND	113 57.0 57.0 57.0 57.0 57.0 57.0 113	ND	109 55.0 55.0 55.0 55.0 55.0 55.0	ND ND ND ND ND ND ND	112 56.0 56.0 56.0 56.0 56.0 56.0	ND ND ND ND ND ND ND	112 56.0 56.0 56.0 56.0 56.0 56.0	ND ND ND ND ND ND ND	111 55.0 55.0 55.0 55.0 55.0 55.0	ND ND ND ND ND ND ND	115 57.0 57.0 57.0 57.0 57.0 57.0 115	ND ND ND ND ND ND ND	113 56.0 56.0 56.0 56.0 56.0 56.0 113	ND ND ND ND ND ND ND	119 60.0 60.0 60.0 60.0 60.0 60.0 119	NE NE NE NE NE NE NE NE NE	NE NE NE NE NE NE NE NE NE	NE
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Semi-Volatile Organic Comport Acenaphthene	111	363	286	172	145	ND	144	ND	297	ND	146	ND	291	ND	142	ND	146	ND	151	ND	289	ND	147	ND	304	ND	145	ND	146	ND	147	ND	145	ND	149	ND	147	ND	310	43,000	10,000,000	NE.
Acenaphrinene Anthracene Benzo(a)anthracene Benzo(b)ffluoranthene Benzo(b)ffluoranthene Benzo(b)ffluoranthene Chrysene Dibenz(a,h)anthracene Dibenz(a,h)anthracene Dibenzofuran Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene Total RCRA 8 Metals via EPA	156 266 246 317 205 153 276 110 104 574 109 188 113 440	850 2,030 1,980 2,600 1,570 981 2,230 432 329 4,100 417 1,480 496 3,390 4,350	286 286 286 286 286 286 286 286 286 286	328 532 427 588 287 214 520 ND ND 1,450 ND 273 ND 1,350 1,270	145 145 145 145 145 145 145 145 145 145	ND N	144 144 144 144 144 144 144 144 144 144	ND ND 481 428 563 321 ND 470 ND ND 1,020 ND ND ND ND ND ND ND 624 983	297 297 297 297 297 297 297 297 297 297	ND N	146 146 146 146 146 146 146 146 146 146	ND N	291 291 291 291 291 291 291 291 291 291	ND N	142 142 142 142 142 142 142 142 142 142	ND N	146 146 146 146 146 146 146 146 146 146	ND ND 169 ND 158 ND ND 175 ND ND 428 ND ND 428 ND ND 212 389	151 151 151 151 151 151 151 151 151 151	ND N	289 289 289 289 289 289 289 289 289 289	ND N	147 147 147 147 147 147 147 147 147 147	ND N	304 304 304 304 304 304 304 304 304 304	ND N	145 145 145 145 145 145 145 145 145 145	ND N	146 146 146 146 146 146 146 146 146 146	ND N	147 147 147 147 147 147 147 147 147 147	ND N	145 145 145 145 145 145 145 145 145 145	237 411 347 465 264 162 405 ND ND 1,120 ND 246 ND 993 996	149 149 149 149 149 149 149 149 149 149	ND N	147 147 147 147 147 147 147 147 147 147	ND ND 394 359 496 ND ND 436 ND ND 464 875	310 310 310 310 310 310 310 310 310 310	43,000 900 400 900 800 900 400 400 NE 20,000 28,000 900 54,000 40,000 13,000	10,000,000 10,000,000 7,800 800 7,800 10,000,000 78,000 800 NE 10,000,000 10,000,000 10,000,000 10,000,00	NE NE NE AU
Arsenic	8.57	3.84	1.13	10.9	1.15	9.99	1.14	10.7	1.18	8.87	1.16	8.38	1.15	5.58	1.17	8.33	1.17	10.3	1.18	8.21	1.15	10.1	1.15		1.20	8.60	1.15	4.74	1.19	7.55	1.18	8.00	1.14	8.31	1.21	7.53	1.17	9.91	1.24	7.0	7.0	NE
Barium Cadmium Chromium Lead Lead (TCLP; mg/L) Selenium Silver Mercury Total Patroleum Hydrocarbony	60.71 2.67 18.62 73.90  0.58 0.58 0.09		0.37 0.56 0.56 0.56  1.13 1.13 0.157	36.8 2.53 15.5 18.0 NA ND ND	0.38 0.58 0.58 0.58  1.15 1.15 0.158	34.5 2.80 15.9 14.8 NA ND ND	0.37 0.57 0.57 0.57  1.14 1.14 0.16		1.18 1.18	25.4 NA ND ND	0.38 0.58 0.58 0.58  1.16 1.16 0.16	85.6 2.36 17.6 276 0.289 ND ND ND	0.38 0.57 0.57 0.57 0.025 1.15 1.15 0.16	41.6 2.12 32.4 19.5 NA ND ND	0.39 0.59 0.59 0.59  1.17 1.17 0.158	37.8 2.77 18.2 14.2 NA ND ND ND	0.39 0.59 0.59 0.59  1.17 1.17 0.16	42.4 3.19 21.5 23.4 NA ND ND ND	0.39 0.59 0.59 0.59  1.18 1.18 0.164	46.4 2.53 23.1 51.2 NA ND ND ND	0.38 0.57 0.57 0.57  1.15 1.15 0.157	39.4 3.22 17.6 20.1 NA ND ND ND	0.38 0.58 0.58 0.58  1.15 1.15 0.164	ND	0.4 0.6 0.6 0.6 0.025 1.20 1.20 0.167	42.0 2.59 20.1 19.6 NA ND ND ND	0.38 0.57 0.57 0.57  1.15 1.15 0.159	38.8 2.18 14.0 29.4 NA ND ND ND	0.39 0.59 0.59 0.59  1.19 0.163	57.2 3.04 19.6 15.6 NA ND ND	0.39 0.59 0.59 0.59  1.18 1.18 0.162		0.37 0.57 0.57 0.57  1.14 1.14 0.159	89.2 2.45 14.5 62.1 NA ND ND	0.4 0.61 0.61 0.61  1.21 1.21 0.164	39.0 2.87 20.0 30.4 NA ND ND	0.39 0.58 0.58 0.58  1.17 1.17 0.159	2.00 13.4 69.0 NA ND ND	0.62	5,500 39 390 150 NE 390 200 23	10,000 1,000 10,000 500 NE 10,000 10,000 610	NE NE NE 0.04 NE NE NE
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1,2-Dibromoethane (EDB) Vinyl Chloride	2.92 2.92			ND ND	5.00 5.00	ND ND	8.00 8.00	ND ND	5.00 5.00		6.00 6.00	ND ND	8.00 8.00	ND ND	5.00 5.00	ND ND	6.00 6.00	ND ND	5.00 5.00	ND ND	6.00 6.00	ND ND	5.00 5.00		6.00 6.00	ND ND	6.00 6.00	ND ND	5.00 5.00	ND ND	6.00 6.00	ND ND	5.00 5.00	ND ND	6.00 6.00	ND ND	6.00 6.00	ND ND	82.0 82.0	10 20	70 3,000	0.5 300

 $\label{eq:key:power} \mbox{$\mu$g/kg$} = \mbox{Concentrations reported in micrograms per kilogram, equivalent to parts per billion.}$ 

mg/kg = Concentrations reported in milligrams per kilogram, equivalent to parts per million.

mg/L = Concentrations reported in milligrams per kilogram, equivalent to p
mg/L = Concentrations reported in milligrams per liter.

NA = Sample not analyzed for this constituent.

ND = Not detected above the laboratory reporting limit (RL).

NE = No regulatory limit has been established for the specified analyte.

### = The result or reporting limit exceeds the RIDEM R-DEC.

### = The result or reporting limit exceeds the RIDEM I/C-DEC.

### = The result or reporting limit exceeds the RIDEM GA-LC.

GA Leachability Criteria for metals are expressed as the limits applied to an extract of a solid sample analyzed through the Toxicity Characteristic Leaching Procedure (TCLP) or Synthethic Precipitation Leaching Procedure (SPLP) and are only applicable to those metals on which the analysis was performed. The Stockplile Average consists of the sum of each analyte's reported concentration (or 1/2 the laboratory reporting limit where the analyte was not detected) divided by the number of samples from the Main Stockplile (18 of the 19 total samples). The average does not include the results of DISP-201, which was collected from a separate Stockpile. The average is provided for informational purposes as a rough representation of the overall stockpile conditions. Values in italics consist only of compounds that were not detected in any samples. Certain analyses are not applicable to average sadenoted by "--" in the average column.

# **TABLE 1: SUMMARY DATA TABLE - TEST PIT SAMPLES**

	TP-3		TP-3	TP-		TP-		TP-6	TP-10	TP-1		TP-11		TP-11	TP-11 (		TP-12		-12	TP-13		TP-13		-14	TP-14		P-17	TP-17		TP-21		TP-21		
Lab Sample Number: Date Sampled:	<b>2C02068</b> -3/1/202		2 <b>C02068-02</b> 3/1/2022	<b>2C0206</b> 3/1/20		2 <b>B0202</b> 2/1/2		<b>2B02020-07</b> 2/1/2022	<b>2B01034-06</b> 2/1/2022	<b>2B010</b> 3 2/1/2		<b>2C02068-0</b> -3/1/2022		2 <b>C02068-05</b> 3/1/2022	<b>2C0206</b> 8 3/1/20		<b>2B01034-04</b> 2/1/2022		2022	<b>2B01034</b> - 1/31/20		<b>2B01034-03</b> 1/31/2022	<b>2C02</b> 3/1/	068-07 (2022	<b>2C02068-08</b> 3/1/2022		2 <b>020-08</b> 2/2022	<b>2B02020-0</b> 9 2/2/2022		<b>2B03031-01</b> 2/2/2022		2 <b>B03031-02</b> 2/2/2022		
Depth (inches)	17 inche		2.5 FT	1.5 F		1.5		3 FT	1.5 FT	37 inc		26 inches		58 inches	58 inch		38 inches		ches	28 inch		32 inches		5 FT	28 inches		3 inches	47 Inches		17 inches		44 inches		
			Native					Native Fine		Native	e Fine	Fill with buil	ding			Fill	with buildi	ing		Fine Sar	nd Fill	l with buildir	ng		Native	Dark	fill with	Dark fill wit	th	Dark fill with		Dark Fill		
Ctratum	Black F	darl	and cobbled	Black	Fill	Parking L	Of FIII	Silt Loam	Black Fill	Loa		debris	۱ ۵	Native, Loamy	with high fir	nes	debris	<b>6</b>	ill	(Small Poc		debris	Brow	n Fill	Fine Loam		ng debris	building deb		building debris		ith Refuse		
Stratum				Courtyard b		_					_																							
Location		urtyard bet		buildings, 3				veen student		•	_	Coi		en circular bui	•			h of gym, old			North of Gy	•			en Eastern Ce	II N	ear Louis H	Dobbs Courts		Centerline				
	buildin	gs, 30 FT fro	om Canopy	Cano			parking and	exit	between w	alkway and w	woods		breezev	vay to auditori	ium		qua	arry location		Nort	thern edge o	of field		Tower and	Building					near stripir	ng and ru	ubtec		
PID**	0.00		0.00	0.10	0	0.0	0	0.00	0.10	0.1	10	0.00		0.00	0.00	)	0.10	0	10	0.20		0.10	0.	10	0.00		0.20	0.10		0.00		0.00		
	Sample	Reporti	alo Poporting	Samplo	Poporting	Sample F	Poporting San	nple Reportin	ng Sample Repo	ting Sample	Reporting	Sample Por	orting Sam	unlo Poporting	Sample	Poporting	mnlo Ponort	ting Sample	Poporting	Sample Re	oporting Sa	imple Report	ting Sample	Poporting	Sample Report	ing Sample	Poporting	Samplo Pon	orting S	amplo Poportin	ng Samr	nlo Poporting	RIDEM Method 1 Residential	RIDEM Method 1 Industrial/Commerial Direct
Parameter		ng Samı Limit Resu		Sample Result	Limit	•		nple Reportin sult Limit	Result Lim		Limit		imit Res			Reporting Sa Limit Re	mple Report esult Limi		Reporting Limit	· · · · · · · · · · · · · · · · · · ·		imple Report esult Limi		Reporting Limit	Sample Report Result Limit			Sample Rep Result Li	_	ample Reportin Result Limit		ple Reporting ult Limit	Direct Exposure Criteria	Exposure Criteria
General Chemistry																							222											
Flashpoint Specific Conductance	> 200 <b>3.3</b>	70 > 20	00 70 R 2	> 200 <b>3.2</b>	70 2	> 200 <b>6.9</b>		200 70 . <b>5</b> 2	> 200 70 <b>8.3</b> 2	> 200 <b>16</b>	70	> 200	70 > 2 2 <b>4</b> .		> 200 <b>5.8</b>		200 70 <b>1.7</b> 2	> 200 <b>7.2</b>	70 2	> 200 <b>36.7</b>		200 70 . <b>8.7</b> 2	> 200 <b>2.1</b>	70 2	> 200 70 <b>2.9</b> 2	> 200 <b>4.8</b>		> 200 7		200 70 <b>6.2</b> 2	> 20 <b>24.</b>	00 70 1 2		
pH	5.9	5.9	) 2	5.5	۷	6.5	2   9	.s <sub>2</sub> 6	7.4	7.1	2	6.5		8	6		7.1	7.2	۷	8.5	2 1	8	5.3	۷	5.5	6.1	۷	6.2		6.6	8.1			
ľ																				-														
Polychlorinated Biphenyls (PCBs) ug/kg								_																										
Aroclor-1260 Aroclor-1262	ND ND	78 NI		ND ND	77 77	ND		ID 74 ID 74	ND 7:	L ND	72	ND 496	70 N		ND ND	77	ND 75		76	ND ND		ND 73 ND 73		75 75	ND 72	ND ND	71	,		ND 75	90 NE		see PCBs (Total)	see PCBs (Total)
Aroclor-1262 Aroclor-1268	ND ND	78 NI	) 74 ) 74	ND ND	77 77	ND ND		ID 74 ID 74	ND 7:	L ND L ND	72	486 ND	70 N 70 N		ND ND	77	ND 75 ND 75		76 76	ND ND		ND 73 ND 73		75 75	ND 72 ND 72	ND ND	71 71	ND 8		ND 75 ND 75	NE NE		see PCBs (Total) see PCBs (Total)	see PCBs (Total) see PCBs (Total)
PCBs (Total)	ND	78 NI	74	ND	77	ND		ID 74	ND 7:	L ND	72	486	70 N		ND	77	ND 75	ND	76	ND		ND 73		75	ND 72	ND				ND 75	90		10000	10000
Semivolatile organic compounds* ug/kg	NB	454	445	ND	454	ND	140	ID 444	ND 44	0 ND	1.15	ND		D 460	ND	455	10 444	C ND	452	ND	202	ND 44	7	452	ND 444	, NB	424	ND 4	62	ND 444	40	1.12	422000	4.005.07
2-Methylnaphthalene Acenaphthylene	ND ND	154 NI 154 NI	9	ND ND	154 154	ND ND		D 144 D 144	ND 14 ND 14		146 146	ND 2	.90 N		ND ND		ND 146 ND 146		152 152			ND 147 ND 147		153 153	ND 149					ND 144 <b>178</b> 144	190 NE	00 143 D 143	123000 23000	1.00E+07 1.00E+07
Anthracene	ND	154 NI		ND ND	154 154	ND ND		D 144	ND 14		146		.90 N		ND		ND 140		152	<b>568</b>		228 147		153	ND 14:					<b>173</b> 144	NE		35000	1.00E+07
Benzo(a)anthracene	ND	154 NI	145	ND	154	ND	149 N	ID 144			146	ND 2	.90 N		ND		ND 146			2250		<b>761</b> 147		153	ND 149					<b>144</b>	36		900	7800
Benzo(a)pyrene	ND	154 NI		ND	154	ND	149 N		ND 14		146	ND 2	.90 N		ND	155	ND 146		152	1670	303 <b>7</b>	<b>731</b> 147		153	ND 149	9 ND	134	ND 1	.62 1	<b>L370</b> 144	464		400	800
Benzo(b)fluoranthene	ND	154 NI		ND	154	ND	149 N				146		.90 N		ND	155	ND 146					030 147		153	ND 149				.0_	144	580		900	7800
Benzo(g,h,i)perylene Benzo(k)fluoranthene	ND ND	154 NI		ND ND	154 154	ND ND	149 N	ID 144 ID 144	ND 14 ND 14		146	ND 2	.90 N		ND ND		ND 146 ND 146		152 152	1080 885		5 <b>94</b> 147 3 <b>68</b> 147		153 153	ND 149			ND 1 ND 1	.02	<b>979</b> 144 <b>762</b> 144	218	143 18 143	800 900	1.00E+07 78000
Chrysene	ND	154 NI		ND ND	154	ND	149 N		ND 14		146	ND 2	.90 N		ND ND		ND 146		152			770 147		153	ND 14:					144 14400 144		27 143	400	780000
Dibenz(a,h)anthracene	ND	154 NI	145	ND	154	ND	149 N	ID 144	ND 14		146	ND 2	.90 N	D 160	ND	155	ND 146		152		303 <b>1</b>	<b>156</b> 147		153	ND 149				.62	<b>253</b> 144	NE	D 143	400	800
Fluoranthene	ND	154 N	145	ND	154	ND	149 N	D 144	ND 14		146	383	.90 N		ND	155	ND 146	l l	152			<b>340</b> 147		153	ND 149			<b>174</b> 1		<b>2010</b> 144	593		20000	1.00E+07
Indeno(1,2,3-cd)pyrene	ND	154 NI		ND	154	ND	149 N		ND 14		146	ND 2	.90 N		ND		ND 146		152			5 <b>72</b> 147		153	ND 149				-	L050 144	447		900	7800
Naphthalene Phenanthrene	ND ND	154 NI 154 NI		ND ND	154 154	ND ND	149 N	ID 144 ID 144	ND 14 ND 14		146	ND 2	.90 N		ND ND		ND 146 ND 146		152 152			ND 147 <b>918</b> 147		153 153	ND 149					ND 144 <b>716</b> 144	NE <b>30</b> 1		54000 40000	1.00E+07 1.00E+07
Pyrene	ND	154 NI		ND	154	ND		ID 144			146		90 N		ND		ND 146		152			510 147		153	ND 149					2100 144	662		13000	1.00E+07
Total Metals	2.20	0.26	0.07		0.75	0.1	1.05	2 00	2.52	1 0.55	1.00	F.4	F0 -	24 0 70	4.04	0.7	26 00	4 0 70	0.00	7.70	1.03	1.3		0.66	40 00		4.04	10.1	22	27.0	4.0	0.07	7	_
Arsenic Barium		0.36 <b>7.4</b> 0.12 <b>42</b> .		5.65 19.5				0.9 0.9			1.06 0.35		.59 <b>5.</b> 3				<ul><li>.26 0.9</li><li>8.5 0.3</li></ul>		0.98 0.32	<b>7.78</b> 209		.1.2 1.0 156 0.3			<b>4.9</b> 0.9 <b>23</b> 0.3		1.01 0.33	<b>10.1</b> 1 <b>100</b> 0		<b>37.8</b> 0.92 <b>51.1</b> 0.3		0.97 0.32	7 5500	7 10000
Cadmium		0.12 <b>42</b> .		2.11	0.25		0.53 <b>3</b> 0 <b>2</b> .				0.53		.19 <b>34</b>				<b>.35</b> 0.4		0.32			3.01 0.5		0.22	<b>2.08</b> 0.4			<b>0.87</b> 0		<b>2.98</b> 0.46		31 0.48	39	10000
Chromium		0.18 12.		11.6	0.37		0.53				0.53		.29 12			0.35			0.49			1 <b>5.7</b> 0.5			<b>14.4</b> 0.4					<b>16.5</b> 0.46		.3 0.48	1400	10000
Lead		0.18 <b>18</b> .		176	0.37			<b>0.1</b> 0.45			0.53			<b>.8</b> 0.39			<b>7.4</b> 0.4		0.49			<b>706</b> 0.5		0.33	<b>10.7</b> 0.4	_				<b>167</b> 0.46		0.48	150	500
Selenium	ND	0.36 NI		ND	0.75	ND	1.05 N		ND 1.0		1.06		.59 N		ND		ND 0.9		0.98			ND 1.0		0.66	ND 0.9			ND 1		ND 0.92	. NE		390	10000
Silver		0.36 NI 0.01 NI		ND ND	0.75 0.032		1.05 N 0.041 N	D 0.9 D 0.038			1.06	ND 0 <b>0.505</b> 0.	.59 N 037 <b>0.0</b>		ND <b>0.327</b>	0.7	ND 0.9 ND 0.03		0.98 0.041	1.83 0.328 (		ND 1.0 . <b>341</b> 0.03		0.66 0.038	ND 0.9 ND 0.04			ND 1 <b>0.056</b> 0.0		ND 0.92 <b>0.188</b> 0.039	NE 25	D 0.97 <b>53</b> 0.195	200 23	10000 610
Mercury	0.028	O.OI INI	0.028	NU	0.032	0.007	U.U41   N	0.038 م	ט.ט טאו	טאו כל	0.032	0.303 0.	0.0	0.055	0.327	0.053	U.U3	0.100	0.041	U.320 (	U.	. <b></b> U.U3	,, 0.038	0.036	110 0.02	IND	0.034	<b>0.030</b> 0.0	U+2 U	0.039	2.5	0.133	23	010
TCLP Metals																																		
Lead	NT	N <sup>-</sup>	•	0.139	0.025	NT	١	IT	NT	NT		ND 0.	025 N	Т	NT		NT	0.225	0.025	0.034	0.025 0.	.578 0.02	25 NT		NT	NT		NT	0	0.059 0.025	5 2.5	5 0.025		
Total Petroleum Hydrocarhons																																		
Total Petroleum Hydrocarbons Total Petroleum Hydrocarbons	ND	32 NI	30	ND	31	ND	31 N	ID 29	ND 25	) ND	29	<b>237</b> 1	.45 N	D 33	ND	31	ND 31	L 75	32	106	30 1	<b>136</b> 30	ND	31	ND 31	. ND	29	ND 3	36	<b>150</b> 31	520	. <mark>9</mark> 30	500	2500
. Star. Carolean Hydrocarbons	1,10	<u> </u>	- 30	110	31	.,5			2.	110	23		10			Ŭ.	.5 51	,,,	32				140	51	.,5 31	145	23	.10 .			J2.	30	300	2500
Volatile Organic Compounds	ND	NI	)	ND		ND	Ν	D	ND	ND		ND	N	D	ND	1	ND	ND		ND	N	ND	ND		ND	ND		ND		ND	NE	D		

Qualifier	Description
All Entries	Data is summarized above for convenience purposes only. Refer to complete laboratory analytical reports for all data.
ug/kg	Concentrations reported in micrograms per kilograms equivalent to parts per billion.
mg/kg	Concentrations reported in milligrams per kilograms equivalent to parts per million
*	Only those compounds which were detected in at least one sample were summarized above. See laboratory report for a complete list of target analytes.
**	Recorded in parts per million (volume basis), maximum PID value recorded at depth.
>	Greater than.
NS	No standard established.
NT	Not tested.
ND	Not detected. Detection limit detected to the right.
Bold	Reported value is detected above laboratory Method Reporting Limit (MRL).
Yellow	Reported above RIDEM RDEC but below I/C DEC.
Orange	Reported above RIDEM I/C DEC.

TABLE 2: SUMMARY TABLE DATA - BORINGS

	B2	2-3	B22-	6 S-3	B2:	2-6 S-5	B2	22-6	B22	-8 S-3	B22-	-8 S-5		
Lab Sample Number:	2B010	034-01	2B020	020-01	2B0	2020-02	2B02	020-03	2B02	020-04	2B02	020-05		
Date Sampled:	1/31,	/2022	2/1/	2022	2/2	1/2022	2/1,	/2022	2/1,	/2022	8 -1	.0 FT		
Depth (FT)	0 -	6 FT	4 -	6 FT	8	-10 FT	0 -:	10 FT	2/2/20	22 13:02	2/2/20	22 13:02		
Stratum	Topso	oil/Fill	F	ill	Nati	ive Soils	Homo	geneous		Fill	Nativ	e Soils		
PID**	31	.80	N	/A		N/A	N	I/A	N	I/A	N	/A		
	Cample	Donorting	Cample	Reporting	Cample	Donartina	Cample	Donorting	Cample	Donorting	Cample	Donarting	RIDEM Method 1 Residential	RIDEM Method 1 Industrial/Commerial Direct
Parameter	Sample Result	Reporting Limit	Sample Result	Limit	Result	Reporting Limit	Sample Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Direct Exposure Criteria	Exposure Criteria
Turumeter	resure	2	ricoure	Little	riesure	2	riesait	2	riesure	Little	Result	2	Birect Exposure circent	Exposure efficient
General Chemistry														
Flashpoint	> 200	70					> 200	70	> 200	70	> 200	70		
Specific Conductance	2.6	2					36.1	2	7.9	2	13.6	2		
рН	5.3						7		6		6.4			
Polychlorinated Biphenyls (PCBs) ug/kg														
Semivolatile organic compounds* ug/kg														
Acenaphthene	ND	144					ND	142	360	150	ND	139	43000	1.00E+07
Anthracene	ND	144					ND	142	535	150	ND	139	35000	1.00E+07
Benzo(a)anthracene	ND	144					ND	142	690	150	ND	139	900	7800
Benzo(a)pyrene	ND	144					ND	142	586	150	ND	139	400	800
Benzo(b)fluoranthene	ND	144					ND	142	739	150	ND	139	900	7800
Benzo(g,h,i)perylene	ND	144					ND	142	444	150	ND	139	800	1.00E+07
Benzo(k)fluoranthene	ND	144					ND	142	294	150	ND	139	900	78000
Chrysene	ND	144					ND	142	645	150	ND	139	400	780000
Fluoranthene	ND	144					ND	142	1730	150	ND	139	20000	1.00E+07
Fluorene	ND	144					ND	142	266	150	ND	139	28000	1.00E+07
Indeno(1,2,3-cd)pyrene	ND	144					ND	142	434	150	ND	139	900	7800
Phenanthrene	ND	144					ND	142	1970	150	ND	139	40000	1.00E+07
Pyrene	ND	144					ND	142	1860	150	ND	139	13000	1.00E+07
Total Metals mg/kg														
Arsenic	7.24	0.73					8.68	0.81	4.46	1.02	7.7	0.83	7	7
Barium	28.3	0.24					35.2	0.27	27.1	0.34	31.1	0.28	5500	10000
Cadmium	2.7	0.36					2.64	0.4	1.49	0.51	2.52	0.42	39	1000
Chromium	14.5	0.36					15.6	0.4	16	0.51	14	0.42	1400	10000
Lead	86.3	0.36					19.9	0.4	6.13	0.51	9.71	0.42	150	500
Selenium	ND	0.73					ND	0.81	ND	1.02	ND	0.83	390	10000
Silver	ND	0.73					ND	0.81	ND	1.02	ND	0.83	200	10000
Mercury	0.054	0.039					ND	0.033	ND	0.039	ND	0.039	23	610
Total Petroleum Hydrocarbons mg/kg														
Total Petroleum Hydrocarbons	33	29					ND	30	61	30	ND	29	500	2500
Volatile Organic Compounds* ug/kg														
Naphthalene	ND	5	ND	7	ND	6			28	5	30	4	54000	1.00E+07

Qualifier	Description
All Entries	Data is summarized above for convenience purposes only. Refer to complete laboratory analytical reports for all data.
ug/kg	Concentrations reported in micrograms per kilograms equivalent to parts per billion.
mg/kg	Concentrations reported in milligrams per kilograms equivalent to parts per million
*	Only those compounds which were detected in at least one sample were summarized above. See laboratory report for a complete list of target analytes.
**	Recorded in parts per million (volume basis), maximum PID value recorded at depth.
>	Greater than.
NS	No standard established.
ND	Not detected. Detection Limit presented to the right.
Yellow	Reported above RIDEM RDEC but below I/C DEC.
Orange	Reported above RIDEM I/C DEC.

# TABLE 3: SUMMARY DATA TABLE - SURFACE SOIL

	S-:	1		S-2		S-3		5-4		S-5	S	-5D		S-6		S-7		S-8	:	S-9	S	5-10		
Lab Sample Number:	2C020	69-04	2C0	2069-05	2C02	069-06	2C02	069-07	2C02	2069-08	2C02	2069-09	2C02	2069-10	2C02	2069-11	2C02	2069-12	2C02	069-13	2C02	2069-14		
Date Sampled:	3/2/2	2022	3/2	2/2022	3/2	/2022	3/2	/2022	3/2	2/2022	3/2	/2022	3/2	/2022	3/2	2/2022	3/2	2/2022	3/2	/2022	3/2	/2022		
Depth	0-0.5	5 FT	0-	0.5 FT	0-0	).5 FT	0-0	.5 FT	0-0	0.5 FT	0-0	).5 FT	0-0	).5 FT	0-0	0.5 FT	0-0	0.5 FT	0-0	).5 FT	0-0	).5 FT		
																								RIDEM Method 1
																							RIDEM Method 1	Industrial/Commercial
	Sample	Reporting	Residential	Direct																				
Parameter	Result	Limit	Direct Exposure Criteria	Exposure Criteria																				
Polychlorinated Biphenyls*																								
(PCBs) (ug/kg)																								
Aroclor-1254	397	78	ND	80	3450	990	ND	84	93	87	95	88	225	78	ND	87	ND	86	ND	78	ND	86	see PCBs (Total)	see PCBs (Total)
Aroclor-1260	315	78	ND	80	ND	99	ND	84	ND	87	ND	88	ND	78	ND	87	ND	86	ND	78	ND	86	see PCBs (Total)	see PCBs (Total)
PCBs (Total)	713	78	ND	80	3450	990	ND	84	93	87	95	88	225	78	ND	87	ND	86	ND	78	ND	86	10000	10000
Total Metals (mg/kg)																								
Lead	208	0.4	91.9	0.34	350	0.43	151	0.41	175	0.53	157	0.37	61.4	0.49	50.9	0.56	197	0.48	51.3	0.45	433	0.48	150	500
TCLP LEAD Metals (mg/L)																								
Lead	0.044	0.025			0.189	0.025					ND	0.025									0.13	0.025	150	500

Qualifier	Description
All Entries	Data is summarized above for convenience purposes only. Refer to complete laboratory analytical reports for all data.
ug/kg	Concentrations reported in micrograms per kilograms, equivalent to parts per billion.
mg/kg	Concentrations reported in milligrams per kilograms equivalent to parts per million
*	Only those compounds which were detected in at least one sample were summarized above. See laboratory report for a complete list of target analytes.
ND	Not detected. Detection limit presented to the right.
Bold	Reported value is detected above laboratory Method Reporting Limit (MRL).
Yellow	Reported above RIDEM RDEC but below I/C DEC.

TABLE 4: SUMMARY DATA TABLE - GROUNDWATER

		DLL 11.00111							
	B22	2-6	B22-	-6D	B22	2-8			
Lab Sample Number:	2C020	69-01	2C020	69-02	2C020	69-03			
Date Sampled:	3/2/202	3/2/2022 14:10		2 14:15	3/2/202	2 15:15			
PID**	1.2	20	1.2	20	0.6	50			
	Sample	Reporting	Sample	Reporting	Sample	Reporting	RIDEM Method 1	RIDEM Method 1	RIDEM GB Groundwater
Parameter	Result	Limit	Result	Limit	Result	Limit	GA Groundwater Objectives	GB Groundwater Objectives	Upper Concentration Limits
Total Petroleum Hydrocarbons UG/L									
Total Petroleum Hydrocarbons	ND	1000	ND	1000	ND	1000			3.00E+07
Volatile Organic Compounds	ND		ND		ND				

 Qualifier
 Description

 \*\*
 Recorded in parts per million (volume basis), maximum PID value recorded at depth.

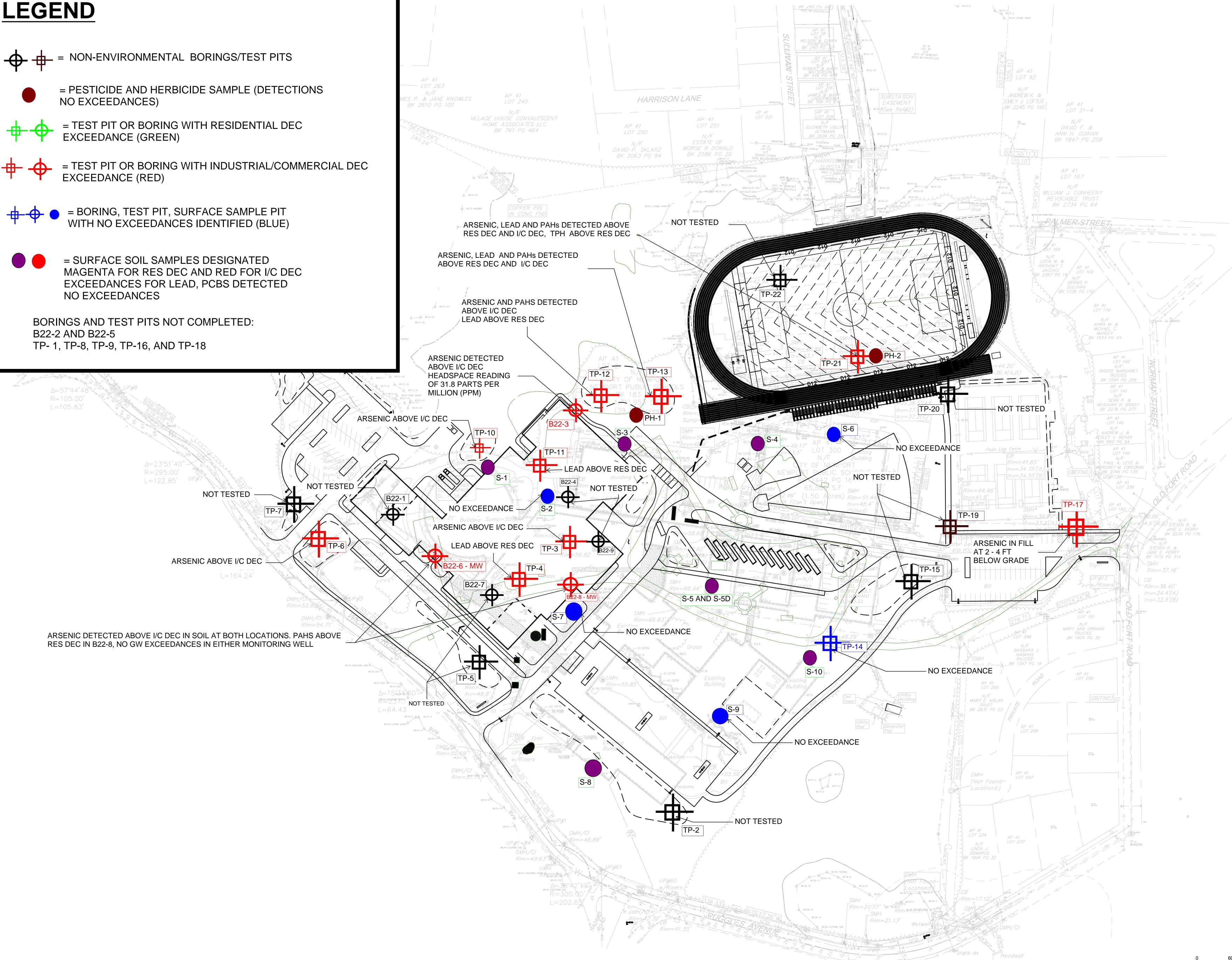
 ND
 Not detected. Detection limit presented to the right.

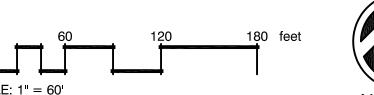
RIDEM GB Groundwater Upper Concentration Limits			
3.00E+07			

TABLE 5: SUMMARY DATA TABLE - PESTICIDE AND HERBICIDES

	PH	-1	PH	-2		
Lab Sample Number:	2C020	70-01	2C020	70-02		
Date Sampled:	3/2/202	2 12:00	3/2/202	2 12:15		
Depth	0-6 in	ches	0-6 in	ches		
	Sample	Reporting	Sample	Reporting	RIDEM Method 1 Residential	RIDEM Method 1 Industrial/Commercial Direct
Parameter	Result	Limit	Result	Limit	Direct Exposure Criteria	Exposure Criteria
Herbicides	ND		ND			
Pesticides* ug/kg						
4,4'-DDE	6.48	4.54	ND	4.32	NS	NS
4,4'-DDT	7.08	4.54	ND	4.32	NS	NS

Qualifier	Description
All Entries	Data is summarized above for convenience purposes only. Refer to complete laboratory analytical reports for all data.
mg/kg	Concentrations reported in milligrams per kilograms equivalent to parts per million
*	Only those compounds which were detected in at least one sample were summarized above. See laboratory report for a complete list of target analytes.
NS	No standard established.
ND	Not detected. Detection limit is presented to the right.
Bold	Reported value is detected above laboratory Method Reporting Limit (MRL).





\\_ Δ= 40°00'47

L=219.98'



